

APÉNDICE: 7.1 TRAZADO Y REPLANTEO

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1. OBJETO

El presente documento tiene por objeto definir el trazado y replanteo de las conducciones y elementos que componen el presente proyecto.

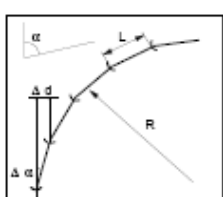
2. CRITERIOS DE DISEÑO

2.1. TUBERÍAS

- Con carácter general se utilizará tubería de acero conforme a norma UNE-EN 10224 según normativa vigente, helicosoldada, de diámetro nominal y espesor mínimo determinado por los cálculos hidráulicos y mecánicos.
- La tubería será con revestimiento interior de 500 micras de pintura epoxi, apta para el contacto con agua para consumo humano y exterior de 3 mm de polietileno extruido en caliente o 1.000 micras de poliuretano, previa preparación de ambas superficies a grado SA 2 ½ con manga termorretráctil de protección exterior, pintado interior de las mismas
- Para timbrajes menores a 20 Atm se utilizará tubería de acero de calidad mínima L275 conforme a la norma UNE-EN 10224 de acero helicosoldada.
- Para timbrajes mayores o iguales a 20 Atm se utilizará tubería de acero de calidad mínima L355.

2.2. ÁNGULOS Y PIEZAS ESPECIALES

- Para el presente proyecto se estiman longitudes comprendidas entre 6 y 14 m, siendo preferencial la longitud de 14 m por su optimización de costes en la puesta obra. Por otro lado, las optimizaciones de los radios de giro vienen condicionadas por la menor longitud del tubo, adoptándose una longitud mínima de 6 m.
- La unión de la tubería será abocardada y soldada con una deflexión de 2° y cuyos valores máximos según fabricante son de 6°.

	Radio de curvatura	Nº de tubos para un cambio de dirección
	$R = \frac{L}{2 \cdot \text{Sen} \frac{\Delta\alpha}{2}}$ <p>α = Ángulo del cambio de dirección Δα = Desviación máxima admisible .</p>	$N = \frac{\alpha}{\Delta\alpha}$ <p>L = Longitud del tubo. Δd = Desplazamiento máximo. C = Longitud del cambio de dirección: C = N · L</p>

- Se establece un ángulo de diseño de 2° con lo que resulta un radio mínimo de 172 m para tuberías de 6,00 m de largo y 400 m para tuberías de 14 m de largo.

- Las alineaciones circulares con radios mayores o iguales a 400 m, tanto en planta como en alzado, se intentarán resolver sin necesidad de piezas especiales mediante el giro permitido por las juntas de las tuberías. La longitud de la tubería será de 14,0 m.
- Las alineaciones circulares con radios comprendidas entre 200 m y 400 m, tanto en planta como en alzado, se resolverán mediante tuberías de longitud 6,0 m.
- En los radios menores se recurrirá a la colocación de piezas especiales o corte de tuberías con longitudes adecuadas, cada una de las cuales con ángulo variable de la alineación. Mediante el acople de una o varias de estas piezas se consiguen los cambios requeridos de azimut de las alineaciones. En cualquier caso, esta solución se considera puntual en puntos de entronques de hincas o zonas localizadas.
- Se minimizarán las piezas especiales, para lo que se aprovecharán los ángulos permitidos en la desviación de las juntas.

2.3. DISEÑO DEL TRAZADO EN PLANTA

El trazado de las conducciones se ha desarrollado teniendo en cuenta las siguientes consideraciones:

- **Condicionantes Geológicos-geotécnicos:**
 - La sección tipo a adoptar considerará los parámetros de diseño geotécnico en referencia a la sostenibilidad, excavabilidad, presencia freática y agresividad entre otros.
 - En la medida de lo posible se han evitado las zonas geológicamente conflictivas y las dificultades topográficas, tales como laderas o pendientes excesivas.
 - La caracterización geotécnica de las excavaciones obliga a que en gran parte del trazado sea necesario el uso de bombeos continuados, tanto por la alta presencia freática como por las condiciones temporales en las que se ejecutarán las obras en presencia de riego.
 - La variabilidad de los espesores de tierra vegetal o rellenos antrópicos requerirá taludes de 1H/1V en el primer metro de excavación.
 - Se intentará siempre que la totalidad del material excavado sea utilizado en los rellenos de la zanja. Será necesario prever en la excavación la utilización de martillo o ripper en suelos cementados, lutitas o tramos con presencia de yesos.
 - Para la reutilización de suelos de riñoneras o cobertura será necesario realizar operaciones de selección, machaqueo o cribado. Igualmente se adoptarán acopios intermedios que permitan el aprovechamiento de los materiales.
- **Condicionantes Orográficos.**
 - El encaje definitivo y la modelización de la red se realiza con la información cartográfica correspondiente al MDT obtenido del vuelo y trabajos cartográficos desarrollados.

- El trazado ha sido ajustado y modificado según las correspondientes visitas de campo realizadas, así como los condicionantes exigidos por terceros (ambientales, arqueológicos, etc.)

- Condicionantes hidráulicos:

- El trazado debe cumplir inexorablemente la condición relativa a que la pendiente de la línea de energía nunca se sitúe en presiones negativas en ningún punto de la tubería y que la presión residual disponible aguas abajo sea suficiente.

Este condicionado ha sido expuesto en el Anejo 6: Cálculos hidráulicos en el escenario de cota de explotación mínima de 399,70 m.s.n.m.

Los puntos de la conducción en los que ha sido necesario ajustar la rasante de la tubería para evitar que corte la piezométrica con la geométrica son:

TRAMO	P.K. TRAMO aprox.	P.K. TOTAL	Cota T.N.	Cota roja ajustada por piezométrica	Cota piezométrica	Presión dinámica	Cota clave tubería-cota piezom.	Altura excavación mín
CN1-PK0+00	0,00	0,00	468,00	462,80	468,00	5,20	3,20	5,2
CN1-PK0+00	20,00	20,00	468,87	462,77	467,97	5,20	3,20	6,1
T12-T13	760,00	26.890,00	429,45	424,73	429,73	5,00	3,20	4,7
T12-T13	780,00	26.910,00	431,93	424,70	429,70	5,00	3,20	7,2
T12-T13	800,00	26.930,00	433,84	424,67	429,67	5,00	3,20	9,2
T12-T13	820,00	26.950,00	433,77	424,63	429,63	5,00	3,20	9,1
T12-T13	840,00	26.970,00	434,69	424,60	429,60	5,00	3,20	10,1
T12-T13	860,00	26.990,00	436,41	424,56	429,56	5,00	3,20	11,8
T12-T13	880,00	27.010,00	439,36	424,53	429,53	5,00	3,20	14,8
T12-T13	900,00	27.030,00	439,66	424,50	429,50	5,00	3,20	15,2
T12-T13	920,00	27.050,00	437,31	424,46	429,46	5,00	3,20	12,8
T12-T13	940,00	27.070,00	433,86	424,43	429,43	5,00	3,20	9,4
T12-T13	960,00	27.090,00	430,19	424,39	429,39	5,00	3,20	5,8
T12-T13	2.940,00	29.070,00	425,95	421,02	426,02	5,00	3,20	4,9
T12-T13	2.960,00	29.090,00	427,99	420,99	425,99	5,00	3,20	7,0
T12-T13	2.980,00	29.110,00	427,09	420,95	425,95	5,00	3,20	6,1
T12-T13	3.000,00	29.130,00	425,20	420,92	425,92	5,00	3,20	4,3
T13-T13BIS	1.940,00	40.560,00	406,07	402,32	407,32	5,00	3,20	3,8
T13-T13BIS	1.960,00	40.580,00	407,09	402,29	407,29	5,00	3,20	4,8
T13-T13BIS	1.980,00	40.600,00	407,51	402,27	407,27	5,00	3,20	5,2
T13-T13BIS	2.000,00	40.620,00	407,58	402,24	407,24	5,00	3,20	5,3
T13-T13BIS	2.020,00	40.640,00	407,71	402,22	407,22	5,00	3,20	5,5
T13-T13BIS	2.040,00	40.660,00	407,75	402,19	407,19	5,00	3,20	5,6
T13-T13BIS	2.060,00	40.680,00	407,65	402,17	407,17	5,00	3,20	5,5
T13-T13BIS	2.080,00	40.700,00	407,59	402,14	407,14	5,00	3,20	5,5
T13-T13BIS	2.100,00	40.720,00	407,59	402,12	407,12	5,00	3,20	5,5
T13-T13BIS	2.120,00	40.740,00	407,64	402,09	407,09	5,00	3,20	5,5
T13-T13BIS	2.140,00	40.760,00	407,69	402,07	407,07	5,00	3,20	5,6
T13-T13BIS	2.160,00	40.780,00	407,87	402,04	407,04	5,00	3,20	5,8
T13-T13BIS	2.180,00	40.800,00	408,05	402,02	407,02	5,00	3,20	6,0
T13-T13BIS	2.200,00	40.820,00	408,22	401,99	406,99	5,00	3,20	6,2
T13-T13BIS	2.220,00	40.840,00	408,50	401,96	406,96	5,00	3,20	6,5
T13-T13BIS	2.240,00	40.860,00	408,56	401,94	406,94	5,00	3,20	6,6
T13-T13BIS	2.260,00	40.880,00	408,60	401,91	406,91	5,00	3,20	6,7

TRAMO	P.K. TRAMO aprox.	P.K. TOTAL	Cota T.N.	Cota roja ajustada por piezométrica	Cota piezométrica	Presión dinámica	Cota clave tubería-cota piezom. Altura	excavación min
T13-T13BIS	2.280,00	40.900,00	408,17	401,89	406,89	5,00	3,20	6,3
T13-T13BIS	2.300,00	40.920,00	407,81	401,86	406,86	5,00	3,20	6,0
T13-T13BIS	2.320,00	40.940,00	406,88	401,84	406,84	5,00	3,20	5,0

Dichos puntos además han sido ajustados conforme a los requerimientos de trazado en alzado y radios de giro anteriormente expuestos.

- También se establecen unas pendientes mínimas de subida como de bajada (ver apartados posteriores).
- Mínimo coste de primera instalación, de explotación y mantenimiento:
 - Longitud optimizada (tramos del menor coste posible).
 - Evitar puntos muy bajos (reducir timbraje).
 - Buena accesibilidad. Siempre que sea posible el trazado discurre paralelo a caminos existentes y con la mínima afección a parcelas.
 - Evitar sistemas constructivos difíciles o costosos.
 - Evitar puntos muy altos.
- Mínima expropiación e impacto en parcelas:
 - La conducción supone unas afecciones en el terreno por donde discurre, por lo que se adopta que la red de distribución discurra paralela a los caminos existentes siempre que sea posible y se puedan aprovechar dichos caminos como caminos de servicio y mantenimiento, y que a su vez y en la medida de lo posible, suponga a los servicios existentes afecciones de poca cuantía.
 - Cuando no existan caminos de servicio, se discurrirá por medianerías de parcela siempre que sea posible. En su defecto se establecerá un camino paralelo a la conducción que permita el acceso a la misma y sus elementos.
 - Siempre que sea posible discurrirá por suelos públicos.
- Mínimo impacto ambiental :
 - Evitar alterar los ecosistemas, sobre todo los protegidos.
 - En aquellas zonas definidas como de alta alteración del suelo o de gran pendiente, se planteará la ejecución mediante un único frente de excavación, minimizando la afección en superficie. (ej: PK 3+500

a 3+800). Adicionalmente se incluirán medidas de contención del terreno mediante geomallas, albarradas y cadenas de arrastre ejecutadas con gaviones.

- Cruces:

- a) Cauces:

- Cruces enterrados:

- Los cruces de cauces y arroyos se ejecutarán por debajo del mismo ejecutados mediante excavación en zanja. La obras se realizarán en periodo de estiaje mediante ataguías siempre que exista escorrentía superficial permanente.
 - El cruzamiento de cauce no generará afección al mismo y a su flujo preferente. Se evitará la alteración del terreno natural que pueda provocar obstáculos a las corrientes o afecciones a terceros.
 - Se respetará una franja de 5,0 m de ancho libre para servidumbre de paso conforme a lo establecido en la Ley de Aguas. Por lo que se evitará disponer de vallados o elementos en dicha franja.
 - Los cruces del río Aragón y río Ebro se ejecutarán mediante hincas para minimizar la afección ambiental.
 - El cruce del río Queiles se prevé a cielo abierto. La sección de la zanja contemplará una sección hormigonada con al menos 1 m de relleno de cobertura de hormigón y protección de escollera. El macizado se extenderá a lo largo de la zona inundable cuando así se requiera. La escollera se extenderá por el pie de talud de cauce para proteger el mismo frente a erosiones generadas por avenidas.

En la franja superior (0,5 m) del relleno de las zanjas se contempla la reposición del material del lecho, sin provocar sobrelevaciones en el mismo.

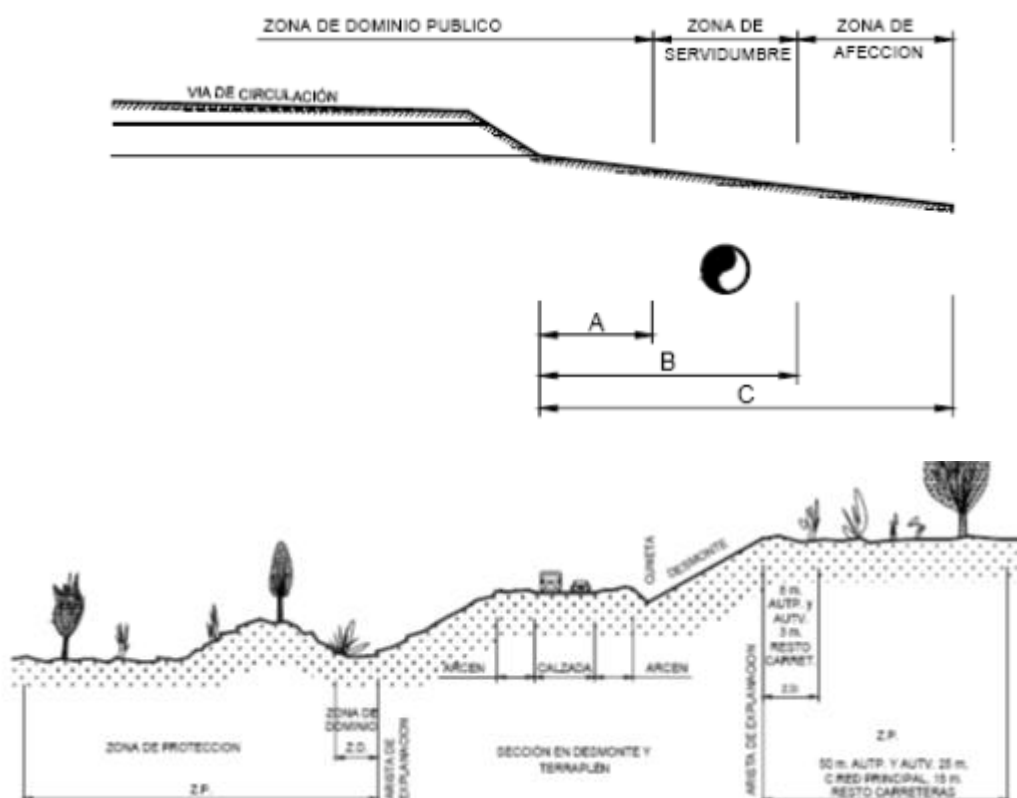
- Los cruces de arroyos erosivos se ejecutarán a cielo abierto adoptándose la sección tipo-Z6 en zanja trapezoidal hormigonada hasta 30 cm por encima de la clave del tubo, y con el posterior relleno de cobertura y reposición de lecho.
 - La conducción se diseñará a profundidad y distancia del cauce suficiente para garantizar su protección frente a corrientes, con objeto de evitar procesos de erosión en los taludes del cauce.
 - La conducción no deberá producir obstáculo al cauce.
 - En caso de disponerse arquetas de desagüe se ubicarán fuera del DPH y de servidumbre, a una distancia mínima de 5,0 m.

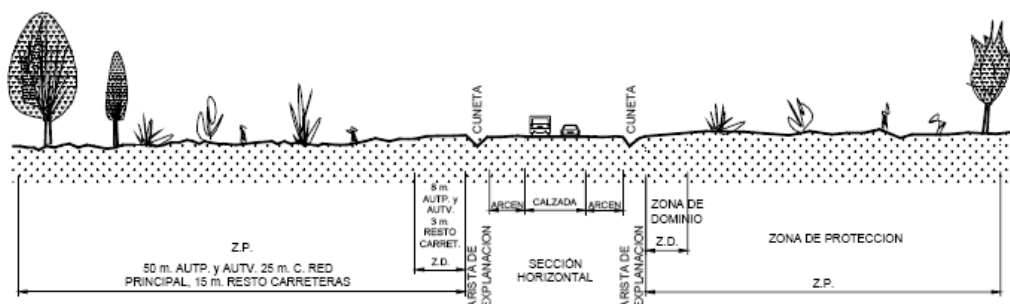
- Paralelismos y afección al D.P.H.:

- Los paralelismos por la zona de policía del cauce público, siempre que sea posible se realizarán respetando la zona de servidumbre de uso público de 5 m.
 - En el caso de que sea imprescindible llevarlas por esta zona, deberán ir adecuadamente protegidas, sin que sobresalga elemento alguno por encima de la cota del terreno natural.
 - La protección prevista corresponderá a zanja hormigonada en previsión de daños provocados por avenidas.
- b) Carreteras: El trazado paralelo discurrirá fuera de la zona de dominio público.

Tipo de carretera	Distancia		
	A	B	C
Autopista, autovías y vías rápidas	8 m	25 m	100 m
Resto de carreteras	3 m	8 m	50 m

Tipo de carretera	Distancia	
	Zona de dominio público	Zona de protección
Autopista y autovías	8 m	50 m
Carreteras red principal	3 m	25 m
Resto de carreteras	3 m	15 m





c) Caminos rurales y vías pecuarias

Se evitará la ejecución de la tubería a lo largo de vías rurales. El trazado discurrirá paralelo a las mismas.

Como norma general el cruce de caminos se realizará mediante zanja abierta incluyéndose las instalaciones provisionales para el paso de vehículos. Cuando sean necesarios desvíos provisionales de tráfico, se seguirán las prescripciones indicadas en la Norma 8.3-I.C. “*Señalización, balizamiento, limpieza, defensa y terminación de obras fijas en vías fuera de poblado*” (Orden de 31 de agosto de 1987, publicada en el B.O.E. núm. 224, de 18 de septiembre de 1987) y en la Orden Circular Nº 300/89 P.P.

La señalización de las obras deberá estudiarse para cada caso particular, según las circunstancias concurrentes: Tipo de vía, intensidad y velocidad de circulación, visibilidad disponible, importancia de la ocupación de la plataforma, duración de la ocupación y peligrosidad.

El detalle de los desvíos previstos se adjunta en el Documento nº2 Planos.

d) Carreteras Vecinales

En los cruces vecinales y calles, de forma general, se realizará en zanja, debiéndose proceder dividiendo el cruce en dos mitades, no siendo necesarias hincas. Con anterioridad a la realización de la obra deberá solicitarse permiso, y se estudiará en cada caso particular, según las circunstancias concurrentes, la señalización correspondiente.

e) Carreteras y Autovías Autonómicas

- El cruce con carreteras autonómicas de más de tres números (NA-XXXX), tales como NA-1240; NA-8712, NA-6830, NA-6900, NA-6810 y NA-3042 se ejecutará a cielo abierto y mediante desvío de tráfico.

La sección tipo a adoptar en los cruces de la NA-1240; NA-8712, NA-6830 y NA-6900 será la Z4 considerándose zanja hormigonada. La cobertura mínima prevista es de 1,5 m desde la clave de la tubería a calzada, hormigonándose con HM-20 desde la base hasta la coronación de la calzada.

El cruce de la NA-3042 corresponde al desagüe de la toma-21 que será ejecutado a cielo abierto.

Para el caso particular de la NA-6900, debido a la gran altura de excavación, se opta por ejecutar una zanja del tipo Z4 hormigonada, siendo el relleno de cobertura con explanada de suelo seleccionado.

La longitud mínima de sección en cruces de carreteras dependerá de la anchura de la calzada y cunetas existentes. Se contempla adicionalmente el fresado y corte de pavimento para la ejecución de transición en la puesta en obra de mezclas bituminosas conforme a la correspondiente instrucción de firmes.

Los trabajos incluirán la reposición completa con una longitud mínima de 25,0 m en todo el ancho del pavimento.

La ejecución de este tipo de cruzamientos se realizará con desvíos de tráfico en fases consecutivas.

Para el caso particular de la NA-6810 al estar próxima a la AP-68 y por ausencia de espacio, se ejecutará en hinca conforme se describe en apartados posteriores.

- El cruce de la carreteras autonómicas con tres o menos números (NA-XYZ), Carreteras de Interés de la Comunidad Foral, NA-128, Peralta-Carcastillo-Lte. Zaragoza; NA-134, Eje del Ebro; y NA-160, Tudela-Cintruénigo, se realizará mediante una perforadora horizontal o similar, de forma que no sea necesario romper el firme de la carretera, con la introducción posterior de la tubería de revestimiento de la excavación de suficiente resistencia para que no disminuya la capacidad portante del firme o explanación en ningún punto.
 - o La generatriz superior de la conducción se ubicará a una profundidad superior al menos en el máximo de 1,5 veces el diámetro de la hinca o 2,00 metros a la superficie del pavimento.
 - o La conducción a colocar deberá reunir las condiciones precisas de resistencia para soportar las cargas que circulen por la carretera.
 - o En cruces y paralelismos, debe intentarse quedar fuera del dominio público, así como la situación de las arquetas, y en cualquier caso siempre fuera de la explanación.
 - o Los cruces deben realizarse los más perpendiculares posible al trazado de la vía.
 - o En caso de tener que realizar la conducción paralela y que afecte a la cuneta de la carretera, ésta deberá ser revestida de hormigón.
 - o Siempre se tendrá en cuenta lo definido en el artículo 44 de la Ley 8/2006, de 13 de noviembre, de Carreteras y la Ley Foral de 5/2007 de 23 de marzo de Carreteras y la Ley Foral 11/1986, de 10 de octubre, de Defensa de las Carreteras de Navarra.
 - En el presente proyecto no se contempla la ejecución de arquetas de corte a ambos lados del cruce.
- f) Carreteras Nacionales, Autopistas y autovías
- El presente proyecto contempla el cruce de las siguientes carreteras / autopistas de carácter nacional: N-121C, N-113, A68 y AP68.

Con carácter general:

- Las condiciones que se deben cumplir son las dispuestas en la Ley Foral de 5/2007 de 23 de marzo de Carreteras, Ley de Carreteras (Ley 37/2015 de 29 de septiembre) y su Reglamento (Real Decreto 1812/1994 de 2 de septiembre), en particular los artículos 20 al 28 del Capítulo II “Uso y Defensa de las Carreteras” de la citada Ley y los artículos 71 a 95 del Título III “Uso y Defensa de las Carreteras” del citado artículo.
- Para la ejecución de la obra será necesario obtener la resolución favorable de obras, por lo que previa a la misma se presentará la necesaria solicitud conforme al procedimiento indicado en los artículos 92 y 93 del Reglamento. Se deberá presentar proyecto o separata de proyecto suficientemente definitiva de todas aquellas obras situadas dentro de las zonas de protección definidas para las carreteras nacionales.
- El cruce de la carretera seguirá en planta, en la medida de lo posible, una dirección normal al eje de la calzada y la generatriz superior de la canalización estará situada a un metro como mínimo por debajo de la rasante.
- En el presente proyecto no se contempla la ejecución de arquetas de corte a ambos lados del cruce.
- En cruces y paralelismos, debe intentarse quedar fuera del dominio público, así como la situación de las arquetas, y en cualquier caso siempre fuera de la explanación.
- Los cruces deben realizarse los más perpendiculares posible al trazado de la vía.
- Los paralelismos deberán cumplir con el artículo 94.d del Reglamento de Carreteras:

“d) Conducciones subterráneas. No se autorizarán por la zona de dominio público salvo que, excepcionalmente y con la debida justificación, la prestación de un servicio público de interés general así lo exigiere.

[...] Las de interés privado sólo se autorizarán por la zona de afección. Excepcionalmente y donde no haya otra solución, se podrán autorizar en la zona de servidumbre, lo más lejos posible de la carretera.”

Por lo tanto, todos los elementos de los paralelismos deberán quedar ubicados fuera de la zona de servidumbre, es decir, a una distancia mínima de 25 metros medidos horizontal y paralelamente a la arista exterior de explanación de la autopista.

- Al respecto se informa que el Reglamento General de Carreteras establece en su artículo 94.j sobre movimientos de tierras y explanaciones lo siguiente:

“j) Movimiento de tierras y explanaciones. Se podrán autorizar en las zonas de servidumbre y afección, siempre que no sean perjudiciales para la carretera o su explotación, por modificación del curso de las aguas, reducción de la visibilidad, o cualquier otro motivo.”

Por lo tanto, no podrán realizarse movimientos de tierras si éstas contemplan modificar el curso de las aguas.

- Cualquier construcción solicitada deberá cumplir con la Ley 37/2015 de 29 de septiembre de Carreteras y el Reglamento de Carreteras RD 1812/1994 sobre las zonas de protección de la carretera.
- Para el caso particular de la carretera N-121C Tudela-Tarazona, se cruzará a cielo abierto ejecutándose con zanja tipo Z4 hormigonada y con desvío de tráfico.
- Para el caso particular del cruce de la A68, el trazado de la infraestructura proyectada se ejecuta con dos conducciones paralelas de 1.600 mm que cruzarán bajo la autovía a través del paso inferior de fauna, no siendo necesario la ejecución con hinca. La sección tipo adoptada será hormigonada desde su excavación hasta la clave de excavación.

La ejecución se realizará sin afectar a la cimentación y mediante una pantalla de micropilotes que contendrá el recinto excavado.

- El cruce de la N-113 y AP68 se realizará en hinca conforme a las siguientes condiciones:
 - El cruce de la carretera se realizará mediante una perforadora horizontal o hinca, de forma que no sea necesario romper el firme de la carretera, con la introducción simultánea de la tubería de revestimiento de la excavación de suficiente resistencia para que no disminuya la capacidad portante del firme o explanación en ningún punto.
 - Cuando el conducto tenga un diámetro exterior superior a 20 cm (como es el caso de todos los cruces del presente proyecto), deberá ir alojado dentro de otro tubo de suficiente resistencia cuyo diámetro interior tenga 15 centímetros más, como mínimo que el diámetro exterior del conducto principal.
 - La generatriz superior de la conducción se ubicará a una profundidad superior al menos en el máximo de 2,5 veces el diámetro de la hinca o 2,00 metros a la superficie del pavimento o lo que imponga el Departamento de Carreteras.
 - La conducción a colocar deberá reunir las condiciones precisas de resistencia para soportar las cargas que circulen por la carretera.

Para el caso particular de la AP-68 se tienen en cuenta además los condicionantes expuestos por la Demarcación de Carreteras del Estado en Aragón en escrito con referencia 2021/012 AP-68 IRB/mab.

- La hinca también deberá estar separada transversalmente al menos 5 metros respecto al pórtico existente a la altura del P.K. 210+073 en dirección Bilbao.
 - La hinca deberá ser ejecutada perpendicularmente al eje de la autopista, de forma y manera que en nada afecte a los elementos, instalaciones y servicios existentes de la autopista (red de drenaje subterráneo y superficial, canalizaciones, cimentaciones, caminos, cerramiento, etc...).
 - La parte superior de la hinca mantendrá una distancia mínima respecto a la generatriz inferior de la cuneta de 2 metros.
 - El titular de la instalación se hará cargo de la conservación, mantenimiento, vigilancia, etc. y, en caso de tener que realizar actuaciones sobre ésta, deberá informar y pedir la correspondiente autorización.
- El presente proyecto contempla el futuro trazado de la AP-15 sin contemplar su ejecución en hinca por desconocerse la fecha de ejecución del mismo. No obstante, el trazado que discurre paralelo a la traza se ha desarrollado fuera de la banda de desmonte y terraplenado prevista a fecha de reacción del presente proyecto.

En el año 2018 se solicitó información digital relativa a la traza de la AP15 que fue enviada para acometer los ajustes necesarios en la traza de la conducción del Canal de Navarra fase-2. Una vez interpuesta la traza se analizaron varias alternativas para minimizar la afección y que así fueron consideradas en el estudio de alternativas del proyecto.

Conforme a conversaciones mantenidas con el Gobierno de Navarra se nos indicó que la traza en el tramo de interferencia de Cascante se desplazaría hacia el Este, por lo que entendemos que las afecciones e interferencias se minimizarían.

Con carácter general se consideró que la ejecución del Canal de Navarra de la fase-2 se realizaría con anterioridad a la A-15, por lo que la actuación de reposición correspondería al proyecto de la A-15 mediante un refuerzo en los cruzamientos, etc.

El proyecto corresponde a la construcción de un tramo de la autovía A-15, entre Ágreda y Tudela, que queda englobado dentro del Estudio Informativo «Autovía A-15: Soria (Este)-Tudela», el cual ya fue sometido al procedimiento de evaluación de impacto ambiental, obteniendo Declaración de Impacto Ambiental (DIA) positiva por Resolución de 30 de mayo de 2007, de la Secretaría General para la Prevención de la Contaminación y el Cambio Climático. Esta DIA perdió su vigencia el 28 de junio de 2012, al no haber dado comienzo en esa fecha las obras comprendidas en el Estudio Informativo, lo que ha conllevado la necesidad de someter el proyecto a un nuevo procedimiento de evaluación de impacto ambiental.

Posteriormente, por Resolución de 28 de mayo de 2020, de la Dirección General de Calidad y Evaluación Ambiental, se ha formulado Declaración de Impacto Ambiental del proyecto "Autovía A-15, Tramo: Agreda (Este)-Tudela (Navarra)".

A la vista de dicha circunstancia se estableció una conversación telefónica con la Demarcación de Carreteras de Aragón y con INECO como autores del EIA con objeto de confirmar la traza propuesta en 2018 indicada anteriormente. Posteriormente se nos indica que la traza (digitalmente) difiere ligeramente de la anterior y entendemos que se debe a que contempla las alegaciones al EIA.

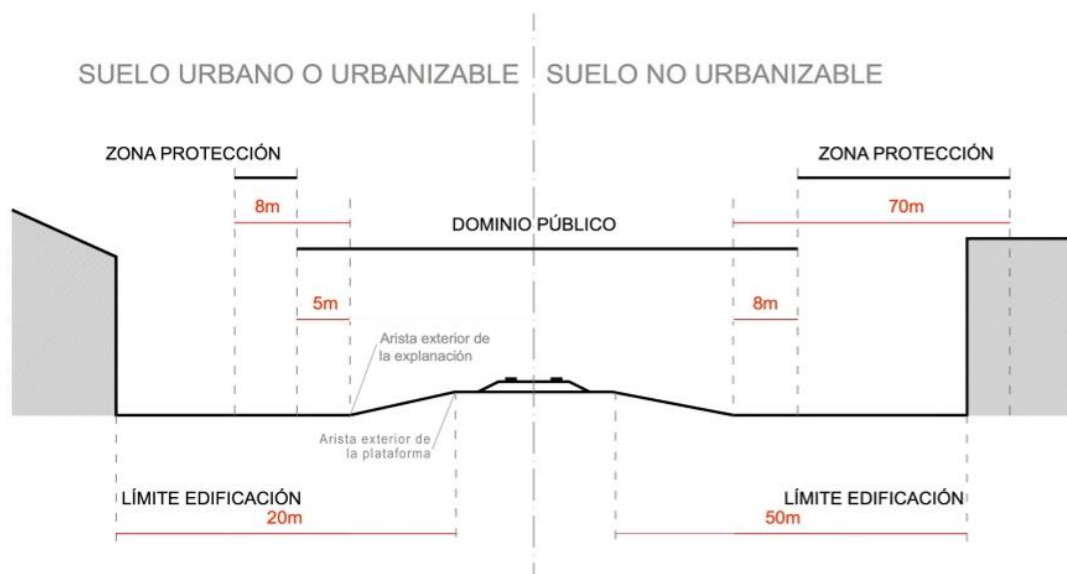
En base a esto, se procedió a reajuste del nuevo trazado del Canal de Navarra fase-2 para minimizar las afecciones. La traza utilizada ha sido la aportada por INECO y Demarcación de Carreteras de Aragón.

g) Ferrocarriles

El presente proyecto contempla el cruce de la línea de FFCC de Alsasua-Zaragoza, y futuro corredor de alta velocidad Cantábrico-Mediterráneo de alta velocidad - Tramo Zaragoza-Castejón.

En relación al cruce de FFCC Alsasua-Zaragoza está previsto un ajuste de trazado de la línea férrea, si bien se desconoce la fecha prevista para su ejecución y el estado de avance de la redacción del proyecto (no disponible durante la redacción del presente proyecto). Es por ello que a efectos de definición del trazado de la conducción se preverá su cruce mediante hinca con una tubería considerando el trazado existente en la actualidad, y debiéndose cumplir los siguientes requisitos:

- De conformidad con el Art. 26 del Reglamento del Sector Ferroviario, aprobado por RD 2387/2004 de 30 diciembre, por el que se define la zona de protección, toda obra que se realice dentro de ella (70 metros medidos desde la arista exterior de la explanación ferroviaria), precisa autorización de ADIF.



- Los cruces serán en hinca y al ser su diámetro superior a 800 mm, se adopta una profundidad mínima sobre generatriz de 2,70 metros, o 1,5 veces el diámetro de la hinca. La profundidad se considera medida desde la

cabeza de carril hasta la clave de la perforación o generatriz superior de ésta. En caso de ser necesarios, los pozos de ataque deberán estar fuera de la zona de propiedad del ADIF.

- En la zona del ferrocarril la tubería será de un material al que no le afecten las corrientes eléctricas; el cruce bajo la vía deberá llevar una pendiente mínima del 2% (siempre que sea posible) y la tubería deberá ir protegida por una vaina en toda la explanación del ferrocarril.
- Cortes de paso de agua en caso de avería. Se establece como criterio de diseño conforme dicta el Director de Proyecto, y debido a la dimensión de las conducciones la no necesidad de ejecutar arquetas de corte anteriores y posteriores al cruce en hinca. Los cortes serán realizados desde las obras de toma.
- En el caso de que la conducción proyectada deba discurrir en paralelo, deberá respetarse como mínimo la zona de dominio público (8 metros a partir de la última), si bien si discurriera por la zona de protección precisará, tal y como se ha definido en párrafos anteriores, autorización del ADIF.
- Con anterioridad al inicio de las obras se deberá remitir a la Jefatura de Área de Mantenimiento, para su aprobación, una separata individualizada de cada afección, documentada con planos que definan suficientemente las obras, referenciados, acotados y kilometrados respecto al ferrocarril. Una vez recibida la documentación solicitada el ADIF dará inicio, si procede al expediente de autorización de obra.

En relación al Corredor Cantábrico-Mediterráneo de alta velocidad. Tramo Zaragoza-Castejón:

- El cruce con el corredor Cantábrico-Mediterráneo de alta velocidad: Tramo Zaragoza-Castejón se encuentra durante la redacción del presente proyecto en fase de planificación, es por ello que se ejecutará teniendo en cuenta la banda de afección prevista para su construcción.
- Al preverse el cruce con el trazado de la línea férrea en desmante y encontrarse dicho proyecto en fase de planificación (Estudio Informativo), se asumirá que la conducción del Canal de Navarra será repuesta mediante conducción aérea o enterrada. Es por ello por lo que a efectos de trazado se considerará que la conducción se construirá con anterioridad a la L.A.V.

2.4. CRITERIOS DE DISEÑO DEL TRAZADO EN ALZADO

Los criterios adoptados para el alzado se condicionan al perfil longitudinal. El perfil longitudinal será aquel que genere los mínimos problemas de explotación, y suponga el mínimo coste económico en ejecución y explotación. Por ello se adoptarán pendientes ascendentes y descendentes mínimas encajadas en una banda de profundidad entre 1,3 y 3,0 m, respetando este máximo en la medida de lo posible, minimizando así las excavaciones.

Los criterios generales seguidos son:

- Relleno de tierras sobre la tubería, contando desde la generatriz superior e interior del tubo:
 - Mínimo 1,5 m en terreno agrícola.
 - Mínimo de 1,3 m en cruces de caminos, carreteras y bajo acera.

- Media de excavación 2,5 m sobre clave.
- Pendientes mínimas de la conducción:
 - Descendente en dirección del flujo: 5‰
 - Ascendente en dirección del flujo: 2‰
- Los cambios de pendientes en alzado se ejecutarán mediante acuerdos y radios de giro circulares formados por la unión de tuberías con un ángulo óptimo de giro de 2°.
- Las pendientes superiores al 30% requerirá la incorporación de anclajes y medidas de protección frente a erosión con la inclusión de albarradas, geomallas y/o cadenas de sedimentos ejecutadas con gaviones.
- Puntos bajos de la conducción: preferentemente en los puntos con mayor facilidad para realizar el desagüe.
- Puntos altos de la conducción: preferentemente en cambios de alineación de la conducción en zonas altas.

2.5. HINCAS

El presente proyecto contempla la ejecución mediante hincas de los cruces de carreteras nacionales o del Gobierno Foral de Navarra con tres o menos cifras de nominación, la línea de FFCC y autovía A68. Adicionalmente los cruces del río Aragón y río Ebro serán cruzados mediante hincas debido a los condicionantes ambientales establecidos.

La tipología de hincas será estudiada en cada caso según el tipo de material a atravesar:

- Para suelos no cohesivos de baja resistencia a compresión, sin presencia de nivel freático (o de baja permeabilidad), se utilizarán hincas de escudo abierto por la facilidad de su manejo en la configuración, permitiendo un buen rendimiento.
- Para suelos no cohesivos hasta rocas con resistencia a compresión inferior a 70 MPa y genéricamente cuando hay presencia de nivel freático se utilizarán hincas hidráulicas con escudo cerrado.

Con carácter general en terrenos excavados en suelos terciarios sin problemas freáticos se opta por hincas con escudos abiertos y en suelos aluviales y con presencia freática se ejecutará con hincas con escudo cerrado.

El diámetro de la hincas será 2.500 mm o 2.000 mm por condicionante de fabricación.

La ejecución de la hincas se realizará en sentido ascendente de la conducción, a partir del pozo de ataque, mediante sistema de empuje hidráulico que transmita las reacciones al muro de empuje.

En ningún caso se permitirá la sobre-excavación perimetral mayor que la sección del escudo de corte, en su punto de contacto con el frente de ataque.

Los errores de alineación admisibles no deben superar:

- Desviación en planta: ± 75 mm
- Desviación en alzado: ± 50 mm

La introducción de la conducción en el tubo de hinca se hará mediante rodillos de deslizamiento y empuje manual o con gatos hidráulicos (nunca con el cazo de una retro o similar, que pueda dañar las juntas y bordes exteriores del tubo).

Para el caso de la hinca de escudo cerrado de diámetro DN 3.000 referido al cruce del río Ebro y río Aragón se ha establecido un radio mínimo de curvatura de 600 m capaz de introducir en el interior de la hinca la tubería de acero de diámetro DN 2.000 mm.

En todo momento se ha diseñado una cobertura mínima correspondiente a 1,5 veces el diámetro exterior de la tubería hincada y un valor mínimo de 5,4 m.

En el caso de hincas dobles la separación entre tubos es de 5,0 m garantizando así la no interferencia de esfuerzos y empujes.

En casi todos los casos y especialmente en suelos aluviales, se ha de contemplar la existencia freática y la necesidad de tratamientos del terreno mediante inyección de lechada cemento o gel de silicatos según el caso durante el avance de la hinca. Una vez finalizada la hinca y durante el proceso de avance se deberá realizar el relleno del gap de excavación.

Para el caso particular de los cruces del río Aragón y río Ebro, que han sido desarrollados por condicionantes ambientales, el trazado de la hinca ha contemplado la necesidad de ejecutar los pozos de ataque y extracción fuera de los espacios naturales.

El alzado de la hinca del río Aragón se ha diseñado teniendo en cuenta los requerimientos mínimos de cobertura y además que la hinca se extrae en un punto (margen derecha del río Aragón) donde la cota del terreno sube bruscamente y por lo tanto se genera una gran altura de excavación para la que deben ejecutarse pantallas. En este caso el radio mínimo es de 600 m.

La alternativa de ejecución a cielo abierto fue desechada por la existencia de bolos sin matriz que imposibilitan la ejecución mediante tablestacas, así como la necesidad de minimizar la afección ambiental, la hidroeléctrica y de riegos ubicados aguas abajo del cruce.

Para el caso del cruce del río Ebro los radios mínimos de diseño son siempre muy superiores a 1.000 m, criterio establecido para la ejecución de hinca de escudo cerrado.

Para el resto de las hincas siempre se tienen en cuenta pendientes mínimas de 0,5% y la necesidad de disponer el pozo de ataque en el punto bajo de la traza.

El pozo de ataque o extracción de las hincas se diseña teniendo en cuenta que será necesario conectar con la excavación en zanja de la tubería y los criterios de proximidad a pie de talud de carreteras o FFCC.

La necesidad de ejecución de la hinca del tramo T12-T13 denominado “cerro” entre el PK 8+890 y 9+390 se justifica por la necesidad de ajuste por condicinante de piezométrica expuesto en el Anejo 6.- Cálculos Hidráulicos. Al ser las excavaciones a realizar superiores a 20,0 m, se opta por su ejecución en hinca.

A continuación se incluye la caracterización de las hincas:

Nº Hinca	TRAMO	ELEMENTO DE CRUCE	PK INICIO-Tramo	Pozo	PK FINAL-Tramo	Pozo	LONGITUD HINCA (m)	Nº de tubos	DN TUBO ACERO (mm)	DN TUBO HINCA MIN (mm)	TIPO TUBO HINCA	DN EXT. TUBO HINCA (mm)	Clase tubo hinca	Espesor tubo hinca (m)	Separación entre carass exteriores tubos hincados >= (m)	Coef cobertura min.	Cobertura mínima (m)	Altura máxima (m)	Radio mínimo (m)	Pte %	Tipo de hinca-escudo	Nivel geotécnico	Observación-1
1	CN-T11	Río Aragón	5.513	Salida	5.666	Ataque	153	2	2.000	2.500	HA	3.000	180	0,25	5,00	1,50	5,25	11,09	>600	Variable	Cerrado	QYa1-Tol	Arcillas y arenas. Unidad Qab. NF a cota 324
1	CN-T11	NA-128	7.435	Ataque	7.470	Salida	35	2	2.000	2.500	HA	3.000	135	0,25	5,00	1,50	5,25	5,95	N/A	0,5%	Cerrado	QYa1-Tol	N.F. Somero (3,07m). Bombeo continuado
2	T12-13	CERRO	760	Salida	960	Ataque	200	2	1.800	2.500	HA	3.000	180	0,25	5,00	1,50	5,25	14,88	N/A	-0,5%	Abierto	Qg+Ty	Nivel freático aproximadamente entre cotas 420-422 m. Contacto Qg-Ty. Afloran Gravas con frecuentes bolos en toda la hinca (GM). Unidad Qg
3	T12-13	NA-134	5.701	Salida	5.751	Ataque	50	2	1.800	2.500	HA	3.000	135	0,25	5,00	1,50	5,25	7,13	N/A	-0,5%	Cerrado	Qte	N.F. Somero (2,4m). Bombeo continuado
4	T12-13	RÍO EBRO	8.890	Ataque	9.390	Salida	500	2	1.800	2.500	HA	3.000	180	0,25	5,00	1,50	5,25	15,72	>1000	Variable	Cerrado	Qal	Aluvial con presencia freática función del nivel del río Ebro . Tratamiento del terreno junto a pozo de ataque en los primeros 10,0m para evitar arrastres con pilotes DN 650 mm de mortero e inyecciones con lechada de silicatos o cemento a lo largo de la hinca s/ necesidad
5	T12-13	F.F.C.C. ALSASUA ZARAGOZA	9.570	Ataque	9.620	Salida	50	2	1.800	2.500	HA	3.000	180	0,25	5,00	1,50	5,25	10,73	N/A	10,0%	Cerrado	Qte	Presencia de bolos. Hinca con tratamiento localizado de lechada de cemento.
6	T13BIS-BALSA TUDELA	AP-68	5.394	Salida	5.509	ataque	115	2	1.600	2.000	HA	2.400	135	0,25	5,00	1,50	4,35	9,28	N/A	-2,0%	Abierto	Tal	Lutitas con frecuentes intercalaciones de areniscas. Sustrato Terciario (TAL). No hay freático. Niveles de areniscas con resistencia a compresión simple > 150 kg/cm2
7	D.C. -T17	NA-160	40	Salida	80	ataque	40	2	1.800	2.500	HA	3.000	135	0,25	5,00	1,50	5,25	6,45	N/A	-2,0%	Abierto	Tc	Alternancia de areniscas y lutitas, predominio areniscoso. Sustrato Terciario (TC). resencia de niveles de areniscas con resistencia a compresión simple > 150 kg/cm2.
8	T16 - T14 y T15	N-113	3.082	Ataque	3.132	Salida	50	1	1.600	2.000	HA	2.400	135	0,24	0,00	1,50	4,32	6,02	N/A	1,0%	Abierto	Tc	Bombeos a partit de la cota 372,5. Afloran gravas y bolos a tramos fuertemente cementados. En la hinca se requerirá inyecciones de consolidación en avance

2.6. SERVICIOS AFECTADOS

A lo largo del desarrollo del proyecto se han identificado numerosos servicios existentes, los cuales han sido representados en las plantas de los planos desarrollados. Con carácter general siempre que ha sido posible se ha desarrollado la traza minimizando los servicios afectados.

En los casos de cruzamientos con tuberías de abastecimiento o riego, conducciones de hidrocarburo o líneas eléctricas enterradas el trazado diseñado pasa por debajo de las mismas, si bien con carácter general no será posible el cruce con sostenimiento por la anchura resultante de la zanja.

En el caso de líneas aéreas eléctricas, el trazado ha sido desarrollado evitando la afección a las torres eléctricas. Se establece una distancia de cabeza de talud a torre mayor de 5,0 m a excepción del PK 4+602 que pasa muy próxima de la torre y vivienda colindante, donde se requerirá la ejecución de pantalla de micropilotes para protección de la torre eléctrica.

La afección a grandes canales (acequia de Navarra y canal de Lodosa) se ejecutará en periodo de intrariego, con la demolición y reconstrucción del mismo y su camino de servicio.

El trazado e interferencia con la red acequias, drenajes, etc., requerirá la reposición de los mismos, sin contemplar ajustes particulares al trazado.

En el caso particular del tramo CN-T11, el trazado discurre paralelamente a las conducciones del Sector-10 Aguacanal. El trazado ha sido desarrollado a una distancia tal que la excavación ejecutada no afecte a la conducción existente ni a las arquetas asociadas, si bien existirán ciertos cruzamientos.

2.7. CONDICIONANTES AMBIENTALES

El trazado desarrollado ha contemplado los condicionantes ambientales requeridos por el Gobierno de Navarra y conforme con lo acordado en las reuniones y escritos enviados y recibidos a lo largo del desarrollo del presente proyecto, y cuyo detalle se adjunta en el Anejo 13: Integración Ambiental y en el propio Estudio de Impacto Ambiental del proyecto (Documento N°5)..

A continuación se exponen los principales aspectos contemplados:

2.7.1. Cursos de agua

2.7.1.1. Río Aragón.

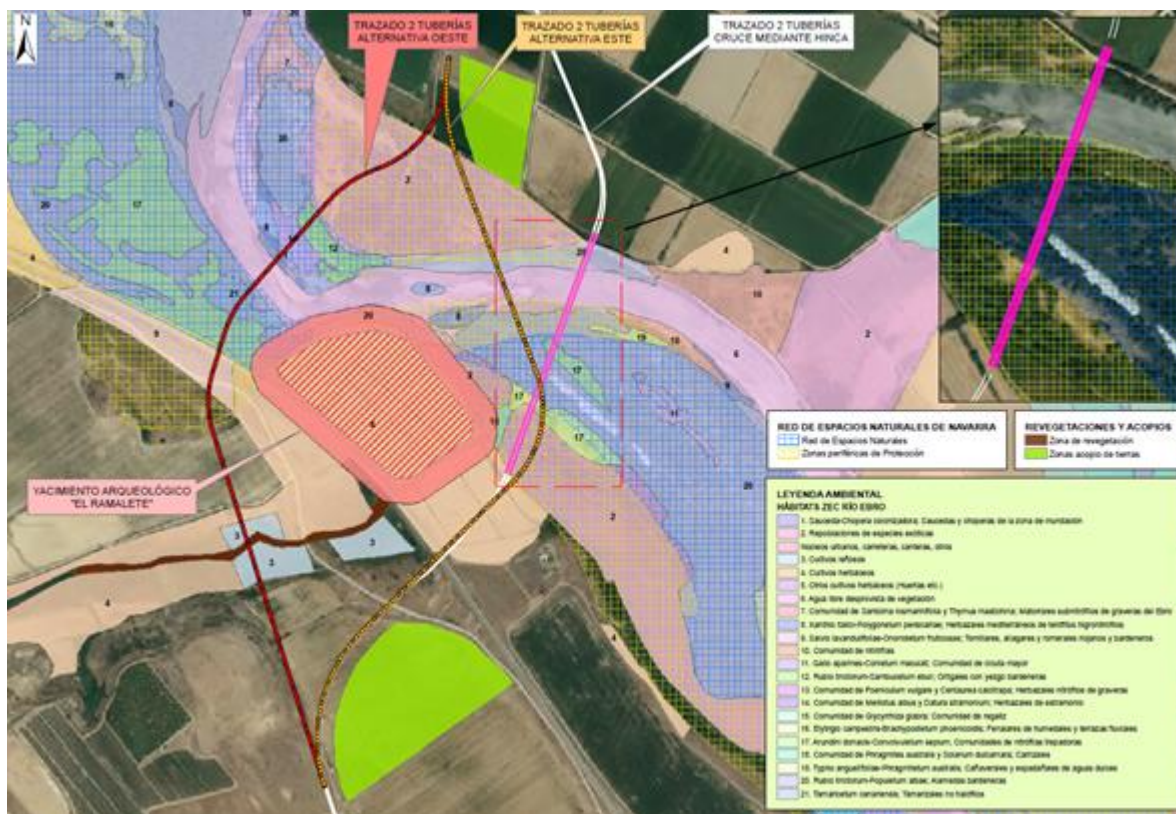
Si bien el planteamiento original del estudio de alternativas era la ejecución a cielo abierto con ejecución con zanja hormigonada y mediante cruce en fases con ataguías, tras conversaciones mantenidas y a la vista de la caracterización geotécnica (existencia de bolos sin matriz) que imposibilita su ejecución con tablestacas, se opta finalmente por su ejecución mediante hinca con escudo cerrado minimizando la afección al curso de agua.

Esta solución contempla la mínima afección a los espacios naturales del río Aragón.

2.7.1.2. Río Ebro

Tras estudio de alternativas, en lo relativo al cruce del río Ebro se opta por ejecutar el cruce mediante hinca por la margen este de las analizadas, disponiendo los pozos de ataque y extracción fuera de los límites de espacios naturales. Adicionalmente el trazado se ejecuta por la margen este evitando la afección al yacimiento arqueológico de El Ramalete y su perímetro de protección.

De esta forma se solventan los problemas planteados en relación a la dificultad de implantar medidas compensatorias e integrar paisajísticamente la obra, así como las afecciones al Enclave Natural (EN 10) “Sotos de Murillo de las Limas”, , el Enclave Natural (EN 10) “Soto de Sardavilla”, la Reserva Natural RN32 “Soto del Ramalete”, diversos hábitats de interés comunitario no prioritarios en muy buen estado de conservación (92D0, 92A0, 6430), además de a otros de carácter prioritario fuera de la citada Reserva Natural.



2.7.1.3. Río Queiles

El punto de cruce ha sido modificado conforme Informe de 5 de septiembre de 2018, desplazando unos metros al norte el trazado para evitar la afección a chopos de la orla fluvial. Adicionalmente se contemplan medidas de integración ambiental.

2.7.2. Zonas con alto riesgo de erosión

Los procesos erosivos van a tener un papel importante por la poca resistencia de algunas rocas, arcillas y margas, por las lluvias intensas de tormenta, por la presencia de extremos térmicos y por la escasa vegetación.

En el tramo CN-T11, el presente proyecto contempla la necesidad de ejecutar el trazado por el cortado de Santacara. Para ello se ha contemplado minimizar la excavación en zanja y afección al cortado adoptando medidas especiales de integración paisajística y estabilización de la erosión incluyendo la tubería del Sector X que se encuentra en la actualidad al descubierto.

Con carácter general y con aplicación a toda la traza, el proyecto contempla la ejecución de macizos de anclaje en tramos con pendiente superior a 30%, así como la ejecución de anclaje con muros de contención cada 38 m aproximadamente de forma que se contengan deslizamientos de rellenos. Complementariamente se ejecutará la estabilización del relleno de cobertura mediante la ejecución de geomallas dispuestas cada 1,5 m en altura y abarcando la anchura de relleno. Finalmente se dispondrá de fajinas cada 5,0 m y se procederá a la plantación de especies arbustivas y arbóreas en el talud.

Para el caso de particular del tramo T12-T13, entre los PKs 3+000 y 4+800, el trazado discurre por el barranco de la Fuente. Desde el PK 3+300 hasta el 4+250 el terreno está dedicado al cultivo agrícola.

Una vez realizado el relleno de zanja, y para evitar procesos erosivos se dispondrá transversalmente a la traza cadenas de retención de sólidos conformada por celdas de gaviones de 1,0 x 1,0 m en un ancho de 15 m y una separación de 50 m.

Desde el PK 4+250 hasta el 4+800 la zanja será hormigonada de tipo Z6 con relleno de lecho móvil. La anchura de la banda de afección se reduce siendo su ejecución mediante ataque en frente, minimizando así la afección ambiental del entorno.

Finalmente la actuación será regenerada ambientalmente mediante la plantación de especies arbustivas y arbóreas seleccionadas.

2.7.3. Trazado a lo largo de las Bardenas Reales

El presente proyecto contempla un estudio de alternativas de trazado que evitara el paso por el parque natural de las Bardenas Reales, eliminando así una posible afección a este espacio desde el punto de vista ambiental, y estudiando una posible variante que discurriera de forma contigua a las carreteras NA-128 y N-121.

El resultado de la valoración de la viabilidad técnica, económica y ambiental muestra una ventaja muy considerable de la Alternativa de paso por Bardenas Reales frente a la Alternativa de trazado en paralelo a las carreteras NA-129 y N-121, debida fundamentalmente a su menor coste económico (derivado principalmente de su menor longitud global).

Se considera asimismo que la solución de trazado que discurre por el alto de Bardenas puede clasificarse como compatible desde el punto de vista medioambiental, adoptando las medidas preventivas adecuadas.

En consecuencia el presente proyecto contempla la ejecución del trazado a lo largo de las Bardenas Reales. Dicho trazado ha sido desarrollado en paralelo al camino de servicio y por el lado contrario al que discurren las redes de distribución, minimizando los servicios afectados.

Igualmente el proyecto contempla la adopción de medidas preventivas, correctivas y la integración ambiental de la zona afectada.

2.8. AFECCIÓN ARQUEOLÓGICA

Partiendo de la información de ubicación de yacimientos arqueológicos y su categorización, se ha desarrollado el trazado para que éste discurra siempre fuera de la banda de protección. Se ha tenido especial cuidado en los elementos “El Saso III” y “El Ramalete”, de categorías 2 y 1, respectivamente.

A partir de la derivación de Corella el trazado discurre hacia la Laguna de Lor en el Término Municipal de Cascante donde son numerosos los yacimientos arqueológicos. El trazado discurre serpenteando alrededor de los yacimientos sin afección a los mismos. De igual forma se ha reducido la banda de ocupación temporal de forma que será necesario la ejecución de procesos de excavación de forma seleccionada con acopios de tierra desplazados.

2.9. SECCIÓN TIPO

Se distinguen los siguientes tipos de zanja:

2.9.1. Sección tipo Z1: Zanja trapezoidal en terreno natural con altura de excavación menor $H_t \leq 6,0$ m

Con carácter general, será de aplicación para alturas de hasta 6,0 m en terrenos naturales y agrícolas. Puntualmente, cuando la longitud afecta a una altura inferior a 6,5 m esta zanja será adoptada en vez de la definida como Z2.

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z1-1 o Z1-2 respectivamente.

Cumplirá los siguientes requisitos:

- La zanja será trapezoidal con ancho de base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la tubería será de 1,50 m.
- Los taludes a adoptar para la excavación de las zanjas de alojamiento de las tuberías, serán los especificados por el estudio geotécnico, si bien se ha adoptado un talud 1H/3V como talud mínimo. Además, donde así lo defina el Anejo geotécnico, se ejecutará una excavación con talud 1H/1V en el primer metro de excavación debido al alto espesor de tierra vegetal o presencia freática.

A lo largo de la traza está prevista la presencia freática superficial condicionada en gran medida a la proximidad del río Aragón, río Ebro, cauces atravesados y existencia de zonas regables. Es por ello que será necesario contemplar bombeos continuados durante la ejecución de las obras.

Función del terreno atravesado y especialmente en suelos terciarios afectados (lutitas con intercalaciones de areniscas, presencias de yesos, ..) será necesario el uso de martillo localizado y ripper.

- Se dispondrá de cama de apoyo granular. El espesor de la cama de apoyo será de 20 cm para todos los diámetros siendo el apoyo de 120°.
- Los rellenos de riñonera en tuberías se realizarán mediante suelo seleccionado procedente de excavación o préstamo con tamaño máximo 3 cm y cobertura mínima sobre clave de 0,3 m. El material se compactará al 95% del Proctor Normal.

Para proceder a la reutilización del material en suelos con presencia de bolos, gravas o rocas, será necesario su selección, cribado y machaqueo.

- El relleno de cobertura estará conformado por material adecuado procedente de la excavación, de tamaño máximo 15 cm, y compactado al 95% del Próctor Normal.

Para la utilización del material excavado como suelo de cobertura y en función del tramo atravesado será necesario realizar operaciones de selección, cribado y/o machaqueo.

- En superficie se procederá a la reposición de tierra vegetal que previamente ha sido excavada y acopiada. Dicho espesor podrá ser variable en función de las zonas definidas en el Anejo geotécnico entre 0,2 y 0,8 m. Se estima un valor medio de 50 cm en todo el proyecto.

En aquellos tramos en que se cruce un camino, éste se repondrá con 30 cm de zahorra artificial compactada al 95% del Próctor Normal, así como las cunetas laterales del camino afectado. Se estima una longitud mínima de reposición de 5,0 m y 10,0 m de ancho en camino.

2.9.2. Sección tipo Z2: Zanja trapezoidal en terreno natural con altura de excavación mayor $H_t > 6,0\text{m}$ y menor de $H_t < 10,0\text{m}$

Será de aplicación para alturas de excavación superiores a 6,0 m. Las características de la zanja serán similares a las anteriormente descritas en la zanja Z1, si bien se dispondrá de una berma intermedia que permita estabilizar el talud y realizar las operaciones necesarias para la colocación de la tubería y acceso de camiones.

Con carácter general se adopta una berma de 1,0 m y otra lateral de 3,0 m ejecutada a una altura de excavación de 6,0 m.

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z2-1 o Z2-2 respectivamente.

Especial importancia tiene en este tipo de zanjas, y debido a su altura, la utilización de un suelo seleccionado de relleno de riñoneras no cohesivo y conforme a lo especificado en el cálculo mecánico.

2.9.3. Sección tipo Z3: Zanja trapezoidal en terreno natural con altura de excavación mayor $H_t \geq 10,0\text{m}$

Será de aplicación para alturas de excavación superiores a 10,0 m. Las características de la zanja serán similares a las anteriormente descritas en la zanja Z2 con una una berma intermedia que permita estabilizar el

talud y realizar las operaciones necesarias para la colocación de la tubería y acceso de camiones. Con carácter general se adopta una berma de 1,0 m y otra lateral de 3,0 m ejecutada a una altura de excavación de 6,0 m.

En este caso, tanto la cama de apoyo de 20 cm como el relleno de riñoneras hasta 30 cm sobre la clave de la tubería, se ejecutará con hormigón HM-20. De esta forma se garantizará la capacidad portante de la tubería en zanja ancha o terraplenada.

El relleno de cobertura cumplirá las características descritas para la zanja tipo Z1.

Se distinguen, en función de la instalación de una o dos tuberías, denominándose Z3-1 o Z3-2 respectivamente.

2.9.4. Sección tipo Z4: Zanja trapezoidal en cruces de carreteras

Se corresponde con la tipología de zanja que se aplicará con carácter general a los cruces de carreteras autonómicos de 4 cifras (NA-XXXX).

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z4-1 o Z4-2 respectivamente.

- La zanja será trapezoidal hormigonada hasta coronación del pavimento a reponer con ancho de base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la tubería será de 1,50 m.
- Los taludes a adoptar serán los especificados por el estudio geotécnico, si bien se ha adoptado un talud 1H/3V como talud mínimo.
- Se dispondrá de cama de 20 cm siendo el apoyo de 120° que se ejecutará con hormigón HM-20.
- Los rellenos de riñonera en tuberías se realizarán mediante hormigón HM-20 que se extenderá hasta la altura de la sección de pavimento, de forma que la reposición se circunscribirá a la mezcla bituminosa.

La categorización de las carreteras atravesadas conforme a la Norma 6.1. IC es variable estimando una categoría de tráfico pesado de las carreteras atravesadas de tipo T1, T2 y T3.

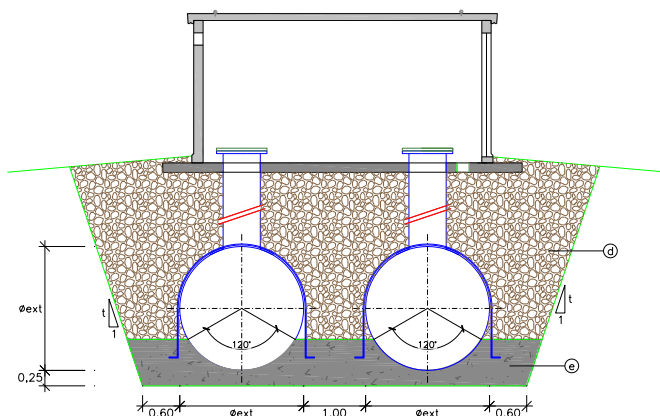
Al ejecutarse la reposición sobre hormigón con espesor superior o igual a 1,5 m, se puede estimar una explanada de categoría E1, por lo que se adopta una reposición de 20 cm de mezcla bituminosa a ejecutar sobre la sección hormigonada.

- La longitud mínima de sección en cruces de carreteras dependerá de la anchura de la calzada y cunetas afectadas. Para la reposición se procederá al fresado y corte de pavimento para la ejecución de transición en la puesta en obra de mezclas bituminosas conforme a la correspondiente instrucción de firmes.
- La ejecución de este tipo de cruzamientos se realizará con desvío de tráfico ejecutado en fases consecutivas conforme se adjunta en el Documento nº2: Planos.

2.9.5. Sección tipo Z5: Trapezoidal bajo arquetas

Se corresponde al relleno de la zanja a ejecutar bajo las arquetas de desagüe o ventosa.

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z5-1 o Z5-2 respectivamente.



- La zanja será trapezoidal con ancho de base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la tubería será de 1,50 m. Para el caso de las arquetas de desagüe de tipo A, B y E, el recubrimiento normalmente está condicionado por la necesidad de pasar por debajo del cauce natural donde se verterá, por lo que este valor será considerablemente mayor.
- Los taludes a adoptar serán los especificados por el estudio geotécnico, si bien se ha adoptado un talud 1H/3V como talud mínimo.
- Se dispondrá de cama hormigonada de espesor mínimo 20 cm y un apoyo de 120° de la tubería. La tubería se anclará a dicho hormigón mediante una pletina de acero S275 JR.
- El relleno de riñoneras y de cobertura sobre el que asentará la arqueta se ejecutará con garbancillo 5/15 garantizando un relleno drenante.
- La longitud de la zanja donde se apoyará la arqueta se estima en 10,0 m.

2.9.6. Sección tipo Z6: Zanja trapezoidal en cruces de arroyos erosivos

A lo largo de la traza se atravesarán numerosos cauces. Dicha sección se aplicará a aquellos barrancos o cauces que se consideran erosivos y requieren una protección especial de la tubería. Para ello se ejecutará una zanja con cama y riñonera hormigonada hasta 30 cm sobre clave de tubería.

Para el caso de cunetas o zanjas de desagües de zonas regables que, en general, están ejecutadas como excavación a cielo abierto en tierras, se adoptará la sección tipo Z1.

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z6-1 o Z6-2 respectivamente.

- La zanja será trapezoidal hormigonada y dispondrá de un ancho en la base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la tubería será de 1,50 m.
- Los taludes a adoptar serán los especificados por el estudio geotécnico, si bien se ha adoptado un talud 1H/3V como talud mínimo.
- Se dispondrá de cama hormigonada de espesor mínimo 20 cm.
- Los rellenos de riñonera en tuberías se realizarán mediante hormigón HM-20 con cobertura mínima sobre clave de 0,3 m.
- El relleno de cobertura estará conformado por material granular procedente de excavación siendo preferente del lecho de cauce. La ejecución de dicho relleno de cobertura será tal que no se formarán arrastres y flujos preferentes.

2.9.7. Sección tipo Z7: Zanja trapezoidal en cruces de cauces singulares

Se corresponde con los cruces de ríos de gran magnitud.

Tal y como se ha expuesto en apartados anteriores, el río Aragón y el río Ebro se cruzarán mediante hinca, por lo que dicha sección Z7 será de aplicación exclusiva al río Queiles.

- La zanja será trapezoidal hormigonada y dispondrá de un ancho en la base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la clave de la tubería será de 2,0 m.
- Los taludes a adoptar serán los especificados por el estudio geotécnico, si bien como mínimo se ha adoptado un talud 1H/1V
- Se dispondrá de cama hormigonada de espesor mínimo 20 cm.
- Los rellenos de riñonera en tuberías se realizarán mediante hormigón HM-20 con cobertura mínima sobre clave de 1,0 m.
- El relleno de cobertura estará conformado por material granular procedente del lecho de cauce. La ejecución de dicho relleno de cobertura será tal que no se formarán arrastres y flujos preferentes.
- Se dispondrá de una protección de manto de escollera de 0,5 m de espesor mínimo y bloques de peso mayor a 500 kg, cuyo ancho mínimo será de 15,0 m, y se extenderá por los taludes.

2.9.8. Sección Z8: Zanja trapezoidal en cruces de canales singulares

El trazado de la conducción cruzará el canal de Lodosa y la acequia de Navarra. La zanja tipo Z8 se ha desarrollado para la ejecución del cruce a cielo abierto de dichos canales.

Se distingue, en función de la instalación de una o dos tuberías, denominándose Z8-1 o Z8-2 respectivamente.

La sección tipo será la siguiente:

- La zanja será trapezoidal hormigonada y dispondrá de un ancho en la base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- Los taludes a adoptar serán los especificados por el estudio geotécnico, si bien se ha adoptado un talud 1H/3V como talud mínimo.
- Se dispondrá de cama hormigonada de espesor mínimo 20 cm.
- Los rellenos de riñonera en tuberías se realizarán mediante hormigón HM-20 con cobertura sobre clave hasta conectar con la losa inferior del canal, y siendo el recubrimiento mínimo de 1,0 m.
- La longitud de la zanja será como mínimo el ancho del canal más dos metros correspondientes a un metro a cada lado del borde exterior del canal.
- La longitud de reposición mínima de canal será de 20 m ejecutándose ésta con losas de hormigón armadas y juntas cada 10 m.

2.9.9. Sección tipo Z9: Hinca

Se corresponde con los tramos a ejecutar en hinca y cuyos criterios han sido expuestos en apartados anteriores.

2.9.10. Sección tipo Z10: Rellenos entre pantallas

Se corresponde con la sección de relleno de la tubería entre pantallas de pozos de ataque o salida de las hincas. Con carácter general una vez ejecutada la pantalla e hinca se demuele la cara exterior de la pantalla y muro de empuje para realizar la transición de la tubería e introducirla en el interior de la hinca mediante patines.

El hueco y diferencia entre la solera de la hinca y 30 cm sobre la clave de la tubería se rellenará con grava 5/15 generando así un apoyo flexible y transición adecuada.

El relleno de cobertura se ejecutará entre pantallas con suelo adecuado con tamaño máximo 150 mm compactado al 95% del Próctor Normal.

Finalmente se repondrá la tierra vegetal con un espesor mínimo de 30 cm.

Para el caso de la arqueta de desagüe del río Ebro y del río Aragón que se superpone en el recinto apantallado, se rellenará hasta la coronación entre pantallas con grava 5/15 de forma que se realice un apoyo estable y drenado de la arqueta de características similares a las descritas en la sección tipo Z5

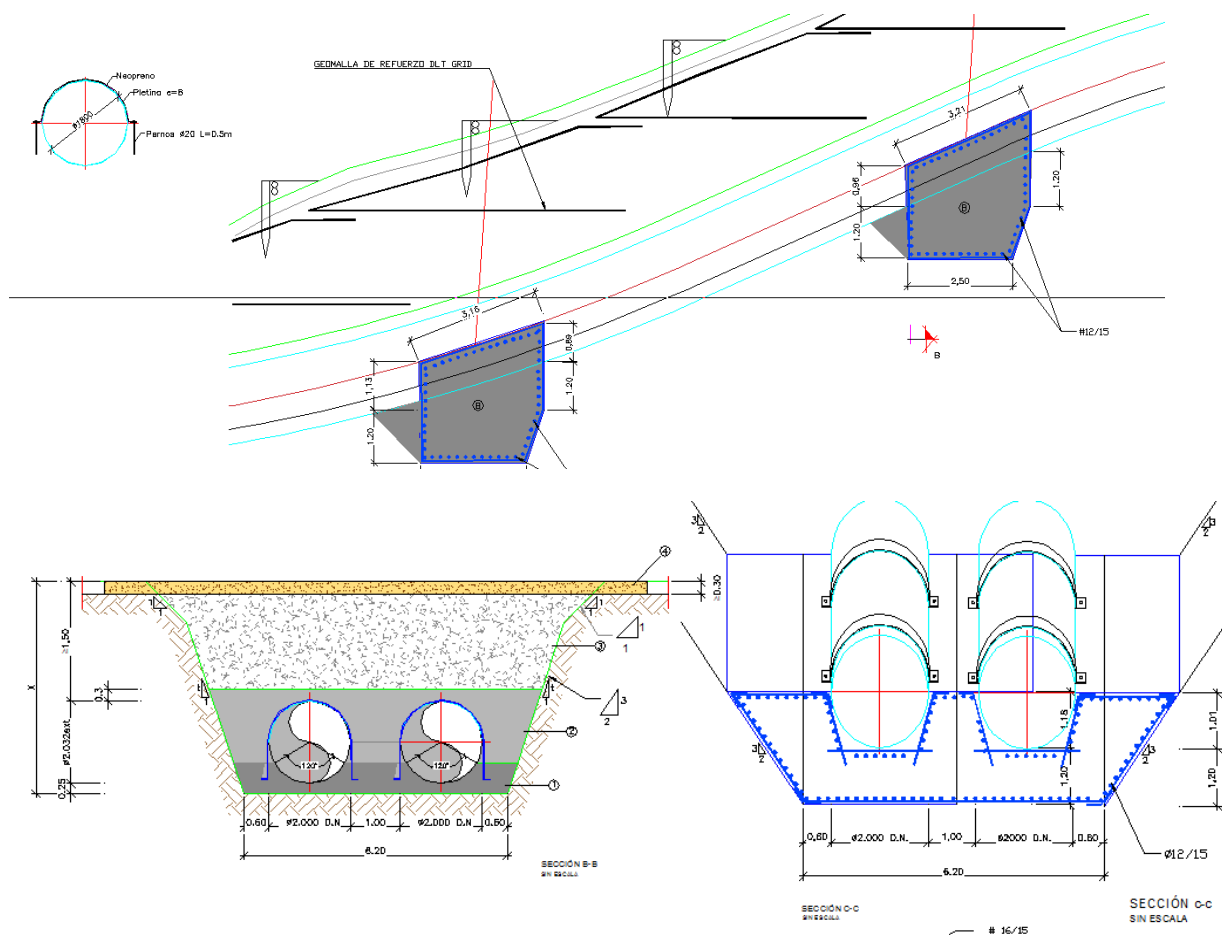
En este caso, el apoyo se realizará sobre una base de hormigón ejecutada entre la losa y la cota roja de la tubería, con un apoyo de 120°.

2.9.11. Sección tipo Z11: zanja en tramos con pendiente superior a 30%

A lo largo del proyecto se han identificado tres tramos con pendiente superior a 30% donde será necesario disponer de anclajes verticales.

Para garantizar la adecuada colocación de la tubería se dispondrá de una sección trapezoidal con base hormigonada de las siguientes características:

- La zanja será trapezoidal hormigonada y dispondrá de un ancho en la base:
 - Para dos tuberías de diámetro DN: Ancho de zanja = $0,6 + DN + 1,0 + DN + 0,6$
 - Para una tubería de diámetro DN: Ancho de zanja = $0,6 + DN + 0,6$
- El recubrimiento mínimo sobre la tubería será de 1,50 m.
- Los taludes a adoptar será de 2H/3V.
- Se dispondrá de cama hormigonada de espesor mínimo 25 cm con apoyo de 120° de la tubería disponiendo de anclajes de arrioste metálicos cada 5,0 m.
- El relleno de riñoneras se ejecutará con suelo seleccionado de tamaño máximo 33 mm compactado en tongadas de 25 cm al 95% del Proctor Normal. Dicho relleno se ejecutará hasta 30 cm por encima de la clave de la tubería.
- El relleno de cobertura se ejecutará con suelo adecuado de tamaño máximo 15 mm procedente de la excavación compactado al 95% del Proctor Normal.
- Complementariamente se ejecutará la estabilización del relleno de cobertura mediante la ejecución de geomallas dispuestas cada 1,5 m en altura y abarcando la anchura de relleno.
- Finalmente se repondrá una capa de al menos 30 cm de espesor de tierra vegetal y se dispondrá de fajas cada 5,0 m.
- Sobre la cobertura se procederá a la ejecución de una hidrosiembra, la plantación de especies arbustivas y arbóreas en el talud.



2.10. TOMAS

El presente proyecto contempla las siguientes tomas o elementos singulares de derivación:

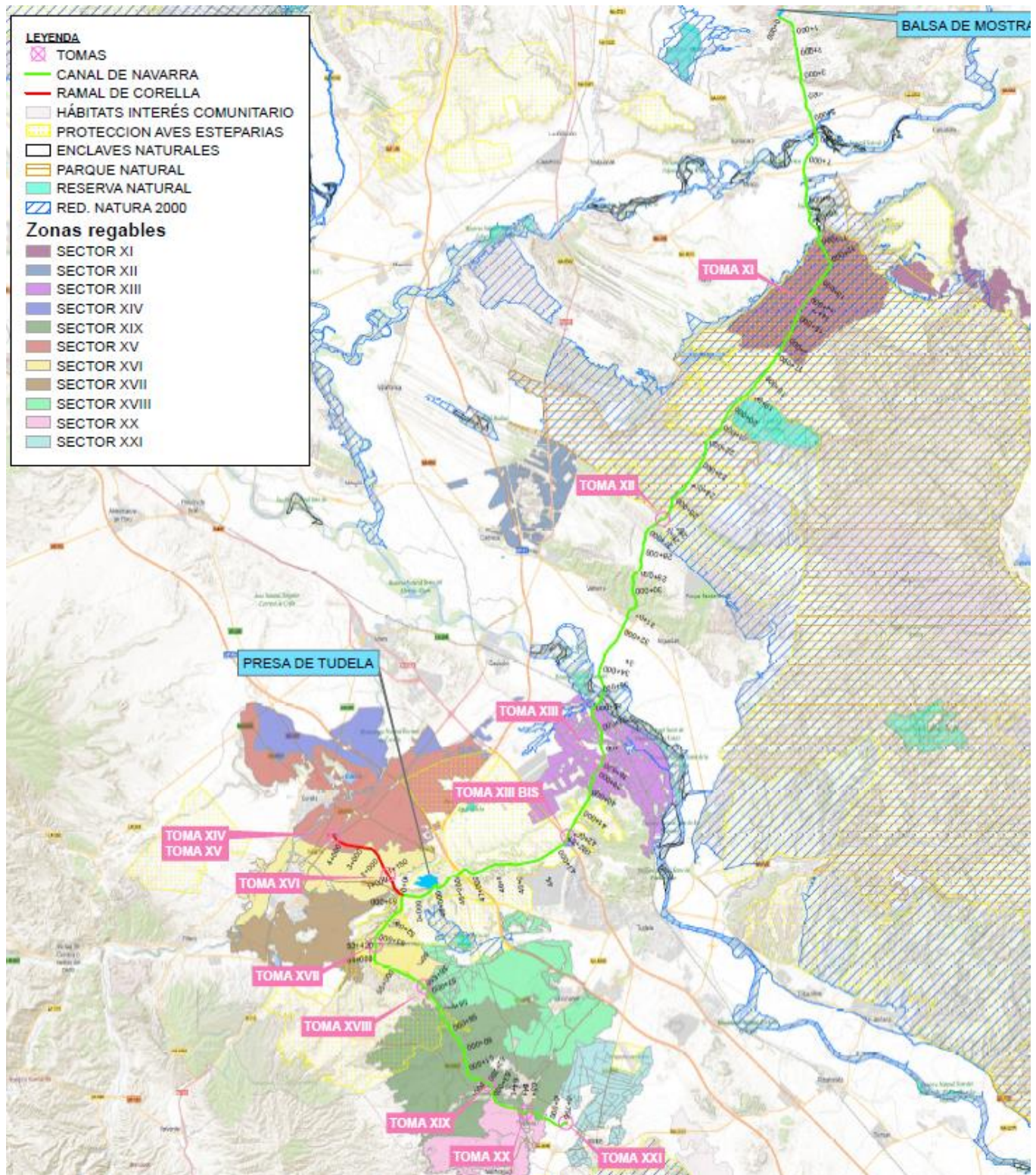
Tramo	P.K. tramo	Toma	Nº tuberías	DN tuberías (mm)
CN-T11	0,00	INICIO	2	2.000
CN-T11	14.290,00	TOMA 11	2	2.000
T11-T12	0,00	TOMA 11	2	1.800
T11-T12	11.840,00	TOMA 12	2	1.800
T12-T13	0,00	TOMA 12	2	1.800
T12-T13	12.500,00	TOMA 13	2	1.800
T13-T13B	0,00	TOMA 13	2	1.800
T13-T13B	3.640,00	DESAGÜE Y TOMA 13BIS	2	1.800
T13B-BT	0,00	DESAGÜE Y TOMA 13BIS	2	1.600
T13B-BT	6.927,73	Derivación Tudela	2	1.600
BT-DC	0,00	Derivación Tudela	2	1.900
BT-DC	1.644,48	Derivación Corella	2	1.900
DC-T17	0,00	Derivación Corella	2	1.800
DC-T17	2.730,00	TOMA 17	2	1.800
T17-T18	0,00	TOMA 17	2	1.600
T17-T18	3.230,00	TOMA 18	2	1.600

Tramo	P.K. tramo	Toma	Nº tuberías	DN tuberías (mm)
T18-T19	0,00	TOMA 18	1	1.800
T18-T19	5.610,00	TOMA 19	1	1.800
T19-T20	0,00	TOMA 19	1	1.500
T19-T20	2.440,00	TOMA 20	1	1.500
T20-T21	0,00	TOMA 20	1	1.300
T20-T21	2.055,00	TOMA 21	1	1.300
DC-T16	0,00	Derivación Corella	1	1.800
DC-T16	1.150,00	TOMA 16	1	1.800
T16-T14	0,00	TOMA 16	1	1.600
T16-T14	3.241,37	TOMA 14 Y TOMA 15	1	1.600

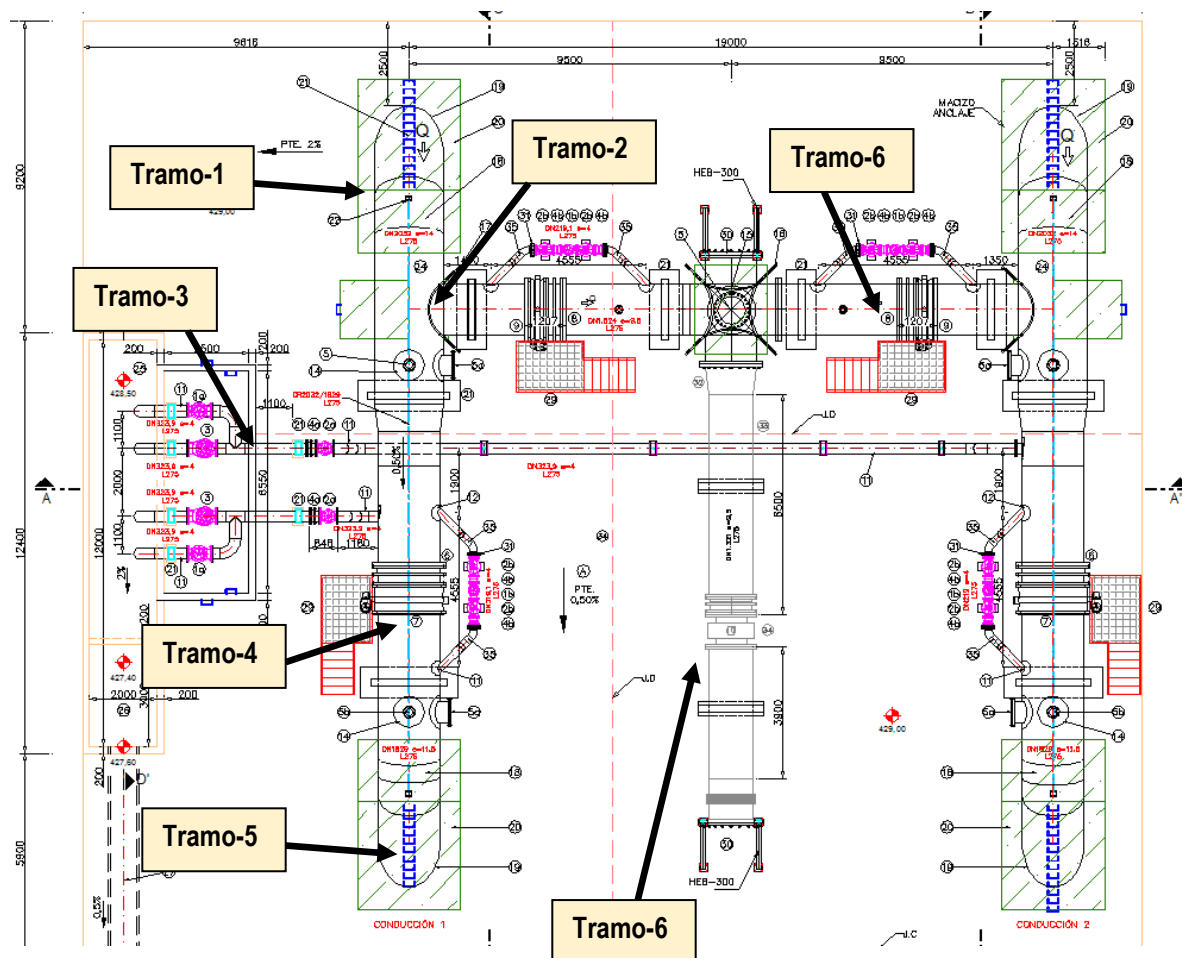
Nota: El diámetro DN de la tuberías se corresponde con el nominal, y no con el diámetro exterior de la tubería de acero.

La ubicación de las tomas ha sido consensuada con los responsables de INTIA conforme a los siguientes criterios:

- Una vez definida la superficie y zonificación regable, la toma se ubica en el punto más próximo al centro de gravedad de la zona regable asociada o punto estimado de entronque. El desarrollo de las zonas regables supondrá conexiones futuras y necesidad de bombeos intermedios tal y como se expone en el Anejo-5: Estudio de Caudales y Anejo-6: Cálculos Hidráulicos.
- Una vez definida la zona de ubicación de la toma, ésta debe situarse siempre fuera de los cerros y orografías que disminuyan la presión y pueda hipotecar el funcionamiento hidráulico global del sistema. Tal es el caso de la toma-16 y toma-17 que han requerido ser desplazadas. Ver comentarios expuestos en el Anejo-6: Cálculos Hidráulicos.
- Las tomas deben estar ubicadas en puntos con fácil accesibilidad y punto de desagüe que permita el vaciado controlado en situación normal de explotación y vertido espontáneo que se pueda producir en un escenario de transitorios.



Las tomas estarán configuradas continuando el criterio desarrollado en el RAE y obras del Canal de Navarra fase-1 y se describen en el siguiente esquema:



- Tramo-1: La tubería principal de diámetro DN1 sobresale del terreno mediante un cuello cisne conformado por gajos estructurales. En dicha pieza angular se dispondrá de un macizo de anclaje adecuado a la presión estática y golpe de ariete correspondiente. A la salida de la tubería se dispondrá de una ventosa con válvula de corte de DN 200 mm o 250 mm según el caso y estudio hidráulico realizado.
- Tramo-2: En la conducción principal se dispone de una pieza en T de diámetros DN1/DN3 de derivación a la toma de riego.
- Tramo-3: Tras la derivación a la toma de riego y transversalmente a la conducción principal se dispone el desagüe y alivio de la toma de DN 300 mm que estará conformado por una válvula de corte de tipo compuerta y válvula de alivio de pistón con pilotos y sostenedora de presión (tarada con la presión de transitorios). Paralelamente y bypassando a la válvula pilotada se dispone el conducto de desagüe con válvula de corte.

El desagüe se realizará a una arqueta de descarga con dimensión suficiente para derivar el caudal máximo vertido al cauce más próximo. En el caso de que el cauce se encuentre lejano, se procederá a la ejecución de una zanja trapezoidal que tenga su origen en la arqueta de descarga y que conecte con el punto de vertido correspondiente.

- Tramo-4: En la conducción principal tras la derivación a toma se dispone de carrete de desmontaje y válvula de mariposa motorizada con accionamiento manual de diámetro DN2. Tras la válvula mariposa se dispondrá de una ventosa DN 200 mm o DN 250 mm según el caso.
Paralelo a la conducción principal y para el accionamiento seguro de la válvula de corte, se dispondrá de un bypass de DN 200 mm conformado por una válvula mariposa, carrete de desmontaje y válvula multiorificio. En dicho bypass se dispondrá de picajes para medida de presiones.
- Tramo-5: La conducción principal de diámetro nominal DN2 se enterrará en el terreno, por lo que se dispondrá de un macizo de anclaje y el correspondiente cuello cisne.
- Tramo-6: Se corresponde al tramo de tubería de diámetro DN3 de la toma de riego que parte desde la pieza en T de derivación de la conducción principal.
 - o El presente proyecto contempla un carrete de desmontaje y válvula de corte tipo mariposa, con bypass de diámetro DN 200 con carrete de desmontaje y válvula multiorificio en la derivación a toma.
 - o Tras la toma se dispondrá una reducción y un caudalímetro electromagnético. Posteriormente se instalará una brida ciega donde se conectará la futura conducción de riego.
 - o El presente proyecto no contempla el cono de transición futuro de diámetro DN3, valvulería de corte, ni juntas arpo de protección catódica para conexión de la futura zona regable.

Las tomas podrán ser dobles o simples en función del número de tuberías que las conforman.

A continuación se adjunta un reportaje fotográfico de una toma doble desarrollada en la fase-1, donde se puede observar los elementos que componen la toma.



Vista general de la obra de toma



2.11. ELEMENTOS DE LA CONDUCCIÓN

2.11.1. Elementos de aireación

A lo largo de la conducción se han ubicado ventosas trifuncionales de aireación. Estas ventosas son de diámetro 200 mm y 250 mm, simples o dobles.

La ubicación de las ventosas ha sido realizada conforme el diseño de aireación incluido en el Anejo-6: Cálculos hidráulicos y los siguientes criterios:

- Al principio y al final de tramos horizontales o con poca pendiente y en intervalos máximos de 1000 m.
- En tramos con pendiente continua prolongados en intervalos de 1000 m.
- Puntos altos relativos de cada tramo de la conducción, para expulsar aire mientras la instalación se está llenando y durante el funcionamiento normal de la instalación, así como para admitir aire durante el vaciado.
- En los cambios marcados de pendiente, aunque no formen puntos altos, tanto en la rama descendente como ascendente de los sifones, se colocarán ventosas, ya que el aire, en su ascensión a favor o en contra de la corriente, aumentará su volumen por pérdida de presión y perderá velocidad al disminuir la pendiente.
- En los tramos largos de pequeña pendiente. El número y situación de los purgadores estarán en función de la longitud del tramo.
- Si el trazado de la tubería es ascendente, al existir una válvula de seccionamiento, al cerrarla se concentrará junto a ella todo el aire del tramo que esté más bajo. En un punto del extremo superior de ese tramo se

colocará una ventosa trifuncional.

- En las tomas de riego:
 - o Aguas abajo de la válvula de corte cuando el sentido es descendente
 - o Aguas arriba cuando la válvula está en pendiente ascendente
 - o A ambos lados de la válvula de corte cuando esté localizada en punto alto

 - o Junto a las válvulas principales de la instalación para facilitar el vaciado de la tubería.
 - o Inmediatamente antes de cada válvula de corte en los tramos ascendentes e inmediatamente después en los descendentes, según el sentido de recorrido del agua.

La arqueta para alojamiento de ventosas se ejecutará conforme al siguiente criterio:

- En los puntos de ubicación de la ventosa se ejecutará una base de hormigón para apoyo y anclaje de la tubería.
- Se rellenará la zanja con material granular filtrante.
- Se dispondrá de un collarín de calderería con boca de hombre de DN 800 mm sobre el que se alojará el carrete simple o doble, válvula de corte de tipo compuerta y la ventosa de diámetro mínimo DN 200 mm . Según los cálculos de aireación se instalará una o dos ventosas.
- La arqueta para alojamiento de la ventosa será prefabricada estando apoyada sobre el material granular.
- La arqueta dispondrá de rejilla de ventilación para entrada y salida de aire y evitar riesgos de condensaciones.

2.11.2. Desagües

En los puntos bajos de la conducción se dispondrá de arquetas de desagüe para vaciado de la conducción. El diámetro del desagüe tiene que permitir un vaciado suficientemente rápido, lo que dependerá de la longitud del tramo a evacuar y del diámetro de la tubería. Además, se limita la velocidad de salida para evitar fallos en válvulas, depresiones en la conducción y daños en las zonas de recepción de los caudales desaguados.

Dichos desagües deben llevar asociados una serie de ventosas en los puntos altos de la red, ya que, al abrirse la válvula de vaciado, aguas arriba, debe abrirse inmediatamente la válvula de admisión de aire, para no generar depresiones indeseables en la tubería.

Para el dimensionamiento de los desagües, se ha considerado que el caudal máximo a desaguar por un punto, es función tanto de la tipología del desagüe instalado, como de la cantidad de aire que puedan admitir las ventosas más próximas así como del caudal admisible en el cauce de descarga.

Se han definido 5 tipos de válvulas a instalar según el tipo de desagüe.

TIPO	DN (mm)	VALVULA	
A	250	MULTIORIFICIOS con protección anticavitación.	<p>Serán los desagües principales a utilizar para el vaciado de la conducción. La válvula multifunción permitirá una mayor regulación en la descarga controlada.</p> <p>Se instalará en los puntos de grandes presiones diferenciales; es decir, gran presión aguas arriba y presión atmosférica aguas abajo de ella y además donde el cauce receptor lo permita.</p> <p>Los principales puntos (río Queiles).</p> <p>El diferencial máximo de presión vendrá determinado por la cota de la balsa de Mostrakas y el punto de instalación del desagüe, si bien será deseable realizar vaciados por tramos para bajar siempre la cota de presión y por lo tanto la regulación de caudal.</p> <p>La descarga del desagüe se realizará a una arqueta de rotura que a su vez se conectará con el cauce receptor. La arqueta de rotura será de tipo-2.</p>
B	200	MULTIORIFICIOS con protección anticavitación.	<p>Serán los desagües secundarios a utilizar para el vaciado de la conducción. Se dispondrá de válvula multifunción para permitir una mayor regulación en la descarga controlada.</p> <p>Se instalará en arroyos importantes. La descarga del desagüe se realizará a una arqueta de rotura que a su vez se conectará con el cauce receptor.</p> <p>El caudal máximo de desagüe puede venir determinado por la cota de la balsa de Mostrakas.</p>
C	150	MARIPOSA con protección anticavitación.	<p>Serán los desagües terciarios a utilizar para el vaciado de la conducción. Se dispondrá de válvula mariposa, realizándose el vaciado de forma parcial.</p> <p>Se instalará en azarbes. La descarga del desagüe se realizará a una arqueta de rotura que a su vez se conectará con el cauce receptor.</p> <p>Este tipo de desagües normalmente se utilizarán una vez abiertos los tramos y desagües del tipo A y B, y por lo tanto cubrirán los vaciados intermedios.</p>
D	100	COMPUERTA	<p>Serán desagües de puntos bajos de la conducción que no tienen posibilidad de descarga en arroyos o cauces receptores. La descarga se realiza de forma controlada entre tramos y arquetas de desagüe y siempre una vez vaciados los tramos largos con los desagües de tipo A, B y C.</p> <p>El desagüe se realiza enchufando una manguera y vertiendo a la cuneta del camino o azarbe cercano. Una vez alcanzada la cota máxima de desagüe y para vaciar completamente la conducción será necesario abrir la tapa de paso de hombre e introducir una bomba de achique para el vaciado total de la conducción.</p>
E	500	MULTIORIFICIOS con protección	Serán los desagües instalados con válvula multichorro en el río Aragón y Ebro que serán utilizados como desagües principales para

TIPO	DN (mm)	VALVULA	
		anticavitación.	<p>el vaciado de la conducción.</p> <p>Se diseñan hasta un total de 5 m³/s de caudal para dos conducciones en previsión de que en el futuro se instale un turbinaje y este punto sea utilizado como punto de desagüe.</p> <p>Se dispondrá de una válvula multichorro DN 500 mm en cada tubería de forma que el vaciado se realice independientemente.</p> <p>La válvula multifunción permitirá una regulación en la descarga controlada, debiéndose disponer de accionamiento multivuelas con cierre de la misma de forma controlada que evite el golpe de ariete. Para ello el tiempo de cierre se establecerá en 600 segundos.</p> <p>El diferencial máximo de presión vendrá determinado por la cota de la balsa de Mostrakas y el punto de instalación del desagüe, si bien será deseable realizar vaciados por tramos para bajar siempre la cota de presión y por lo tanto la regulación de caudal.</p> <p>La descarga común de las conducciones del desagüe se realizará a una arqueta de rotura que a su vez se conectará con el cauce receptor. La arqueta de rotura será de tipo-4.</p>

2.11.3. Válvulas de corte intermedias

Los tramos CN-T11, T11-T12 y T12-T13 disponen de longitudes entre tomas de 14.290, 11.840 y 12.500 m, respectivamente.

Para la gestión de averías de las conducciones es recomendable disponer de válvulas de corte intermedias a distancias medias de entre 5.000 - 6.000 m, si bien debido a su alto coste y siguiendo los criterios de diseño establecidos en el Canal de Navarra fase-1 y R.A.E., se opta por no disponer de dichos elementos.

2.12. CAMINOS

El presente proyecto contempla la ejecución de caminos de 5,0 m de ancho para el acceso a las tomas y 3,0m de ancho para el acceso a ventosas y desagües. Los caminos se ejecutan con 30 cm de espesor de zahorra artificial y cunetas laterales.

Como criterio general, siempre que existen caminos existentes éstos serán utilizados por lo que no se requerirá la ejecución de nuevos caminos. Los nuevos caminos sólo serán necesarios cuando no exista vía de acceso disponible.

Estos caminos partirán de la red de caminos agrícolas existentes hasta el punto donde se ubique el elemento de la conducción.

El trazado del camino será siempre paralelo a la conducción y/o desde el camino existente hasta el elemento objeto de acceso. La rasante del camino se ajustará en lo posible a la rasante del terreno natural minimizando el movimiento de tierras al máximo.

Cuando la pendiente del camino es superior a 15% se hormigonará con una losa de 20 cm de HM-20.

Los caminos dispondrán de drenaje longitudinal ejecutado mediante cunetas laterales excavadas en tierra y obra de drenaje transversal siempre que proceda. Con carácter general, se evitarán grandes marcos u obras de drenaje singulares optándose por pasos con vado en arroyos o barrancos secos no permanentes.

3. DESCRIPCIÓN DEL TRAZADO

3.1. TRAMIFICACIÓN

El trazado de las conducciones ha sido tramificado partiendo desde la conexión al Canal de Navarra en un PK 0+00 ubicado a unos 250 m de la citada conexión

La conducción se ha dividido por tramos entre tomas con inicio siempre en la toma con su propio PK 0+00 y final en la toma siguiente con el PK correspondiente. El tramo consecutivo volverá a empezar con PK 0+00, y así sucesivamente. Adicionalmente se adjunta una relación de Pks acumulados que permite correlacionar la conducción del tramo y longitud parcial o total de la obra proyectada.

Tramo	P.Ki. tramo	P.Kf. tramo	P.K. Acumulado	Toma	Nº tuberías	DN tuberías (mm)	Long. tramo (m)	Long. tubería (m)	Long. Total tuberías(m)	Hincas	Hincas	Long (m) hincas
Conexión	0	137	137	CN. Picarana	2	2.000	137	274	52.534	N/A	N/A	--
CN-T11	0	14.290	14.427	TOMA 11	2	2.000	14.290	28.580		Río Aragón	2x2500 mm HA. esc. Cerrado	153
										NA-128	2x2500 mm HA. esc. Cerrado	35
T11-T12	0	11.840	26.267	TOMA 12	2	1.800	11.840	23.680		N/A	N/A	--

Tramo	P.Ki. tramo	P.Kf. tramo	P.K. Acumulado	Toma	Nº tuberías	DN tuberías (mm)	Long. tramo (m)	Long. tubería (m)	Long. Total tuberías(m)	Hincas	Hincas	Long (m) hincas
T12-T13		12.500	38.767	TOMA 13	2	1.800	12.500	25.000	49.424	Cerro	2x2500 mm HA. esc. Abierto	200
										NA-134	2x2500 mm HA. esc. Cerrado	50
										Río Ebro	2x2500 mm HA. esc. Cerrado	500
										FFCC Alsasua-Zaragoza	2x2500 mm HA. esc. Cerrado	50
T13-T13B		3.640	42.407	TOMA 13BIS	2	1.800	3.640	7.280		AP68	2x2000 mm HA. esc. Abierto	115
T13B-BT		6.928	49.335	Derivación Tudela	2	1.600	6.928	13.855		N/A	N/A	--
BT-DC		1.644	50.979	Deriv Corella	2	1.900	1.644	3.289		N/A	N/A	--
DC-T17		2.730	53.709	TOMA 17	2	1.800	2.730	5.460	26.416	NA-160	2x2500 mm HA. Esc. Abierto	40
T17-T18		3.230	56.939	TOMA 18	2	1.600	3.230	6.460		N/A	N/A	--
T18-T19		5.610	62.549	TOMA 19	1	1.800	5.610	5.610		N/A	N/A	--
T19-T20		2.440	64.989	TOMA 20	1	1.500	2.440	2.440		N/A	N/A	--
T20-T21		2.055	67.044	TOMA 21	1	1.300	2.055	2.055		N/A	N/A	--
DC-T16		1.150	1.150	TOMA 16	1	1.800	1.150	1.150		N/A	N/A	--
T16-T14		3.241	4.391	TOMA 14 Y TOMA 15	1	1.600	3.241	3.241		N-113	1x2000 mm HA. Exc. Abierto	50

Por otro lado, la conducción queda tramificada internamente por el número de tuberías y diámetro, el espesor de las tuberías, el timbraje de la valvulería, las secciones tipo y el talud de excavación adoptados.

El detalle de la tramificación completa se adjunta en el Apéndice 7.1.1

A continuación se adjunta una descripción de cada uno de los tramos:

3.2. TRAMO CN-T11

El tramo CN—T11 se corresponde a la conducción a presión de acero helicoidal 2 x 2.000 mm que parte desde la conexión al Canal de Navarra fase 1 hasta la toma-11 (sector XI de riego: Carcastillo, Mélida y Plano de la Bardena) con una longitud de 14.290 m.

La conducción se inicia desde la obra de desagüe del Canal que será remodelada mediante la incorporación de filtros, reja de desbaste y ataguías necesarias para ejecutar la derivación/conexión a la balsa de Mostrakas.



Vista de la Obra de Toma



Vista de la ubicación de la Balsa de Mostrakas

Tramo comprendido entre el PK 0+00 y 3+300: La traza se diseña paralela al camino de servicio existente, en la margen derecha de la conducción existente del tramo 10B que dispone de una franja de expropiación permanente de 35 m de ancho.

El trazado discurre por zonas de relleno cuaternario y sustrato terciario de lutitas con intercalaciones de areniscas. El suelo se considera excavable, si bien se presentarán tramos ripables con empleo de martillo. Para el aprovechamiento de los materiales se han de prever operaciones de machaqueo y cribado.

A lo largo de dicho tramo se cruzará el barranco de Mostrakas en el PK +440 y en el PK 1+650 y 1+700 se cruza el Barranco Fondo donde se adoptará una sección en zanja hormigonada de tipo Z6.

En el PK 1+200 se cruza un polígono de recinto arqueológico de categoría-3 debiéndose adoptar las precauciones y medidas correctoras previstas.

A la altura del PK 0+650 se cruza la conducción existente del Sector X de riego de Aguacanal, y posteriormente hasta el PK 3+300 se interfieren diversos desagües de la conducción que serán repuestos.



Vista de la traza paralela a camino de servicio existente

En el PK 3+030 a 3+200 será necesario salvar la diferencia de cota del cortado del río Aragón mediante una sección anclada y hormigonada. En dicho tramo se adopta la sección tipo Z11.

Complementariamente se ejecutará la estabilización del relleno de cobertura mediante la ejecución de geomallas dispuestas cada 1,5 m en altura y abarcando la anchura de relleno. Finalmente, se dispondrá de fajinas cada 5,0 m y se procederá a la plantación de especies arbustivas y arbóreas en el talud.



Vista de la terminación del camino de servicio y cortado del río Aragón en el PK 3+300



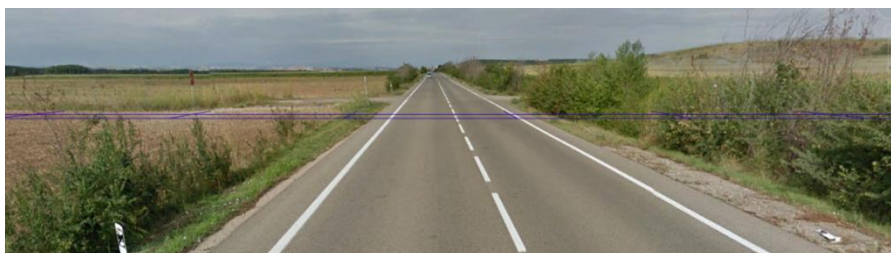
Vista del "cortado" del río Aragón

Desde el PK 3+200 hasta el 5+500 el trazado discurre por la vega del río Aragón por suelo de cultivo y por la margen izquierda del camino de servicio existente (Camino de los Aragoneses) en dirección al Rinconar y río Aragón, a suficiente distancia para no afectar a la conducción de riego del Sector X. Durante la ejecución de la

obra se deberán tomar las pertinentes precauciones para minimizar la afección a la zona regable y sus infraestructuras.

A lo largo del tramo se discurre por suelo cuaternario (arcillas y arenas endorreicas) y sustrato terciario con alta presencia freática debiéndose prever achiques continuados durante la ejecución de las obras. En la proximidad al río Aragón aparecen bolos y gravas aluviales.

En el PK 5+130 se cruza a cielo abierto con una sección tipo Z4 la carretera NA-1240.



Desde el PK 5+513 al 5+666 se ejecuta el cruce del río Aragón mediante hinca de escudo cerrado (2 x 2.500mm HA) introduciéndose la conducción (2 x 2000 mm AH) en su interior mediante patines.

El pozo de ataque se ejecuta en la margen izquierda del río y el de extracción en la margen derecha. Los pozos de ataque se prevén mediante pantallas continuas de dimensión interior 15,0 x 13,0 m.



Estación de bombeo fuera de servicio en las proximidades del cruce del río Aragón



Vista del cruce del río Aragón



Vista del ámbito del cruce del río Aragón



Vista del azud del río Aragón.

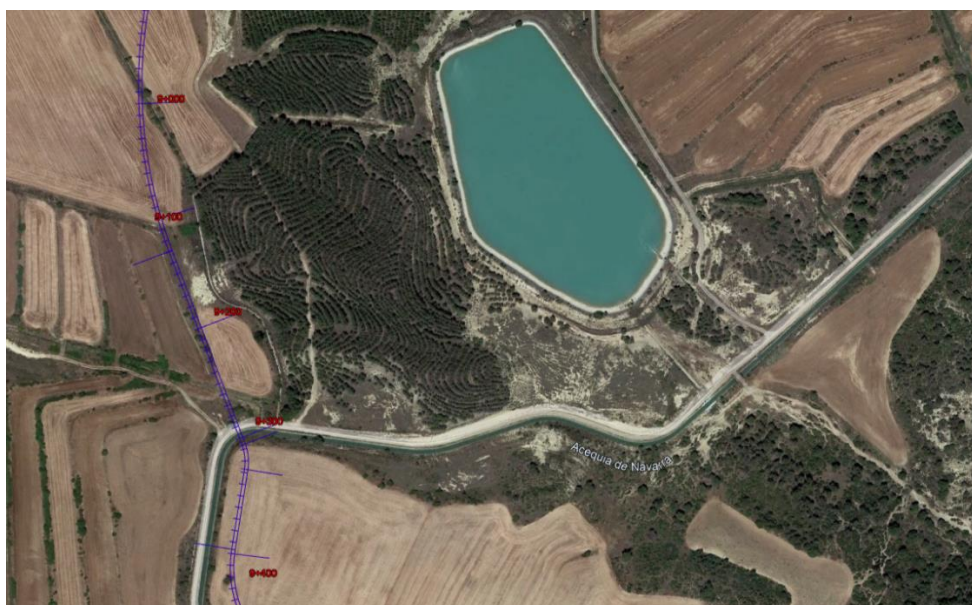


Desde el PK 5+660 hasta el PK 7+851 el trazado discurre por parcelas de cultivo. Todo el trazado discurre por terrenos de coluvial y sustrato terciario con alto nivel freático.

A la altura del PK 7+450 se cruzará en hincapié de escudo cerrado (2 x 2.500 HA) la carretera NA-128 introduciéndose la conducción (2 x 2000 mm) en su interior mediante patines. Los pozos de ataque y extracción se ejecutarán en recinto apantallado continuo de dimensión interior 15,0 x 13,0 m.

Entre el PK 7+900 y el 8+130 el trazado se ajusta a la orografía y cruce del barranco siendo necesario el desmoche parcial del cerro sin afectar a la torre eléctrica de la línea de media tensión. El cruce del barranco se ejecutará con una sección tipo Z6.

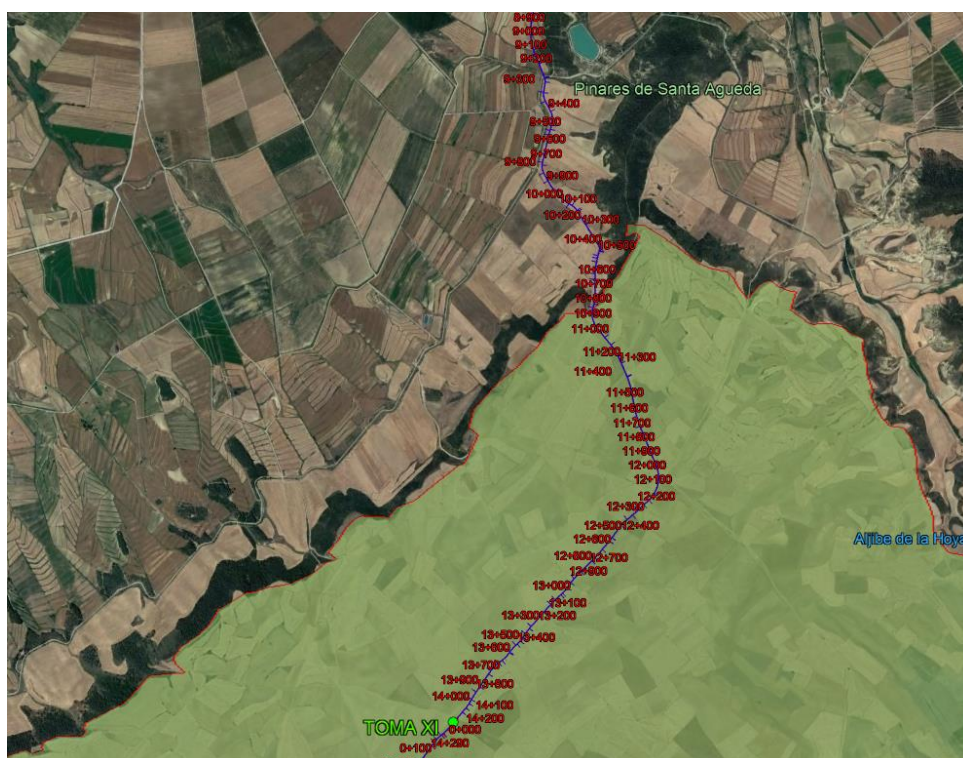
Desde el PK 8+130 el trazado discurre a través de suelo rústico y parcelas agrícolas con cruces de caminos, acequias y diversos servicios. Dicho trazado rodea la balsa existente.



En el PK 9+300 se cruza la acequia de Navarra con sección tipo Z8, siendo necesaria la reposición completa del camino de servicio y canal. Desde el PK 9+300 hasta el PK 9+900 el trazado discurre paralelo a dicho canal para desviarse posteriormente en paralelo al camino de las Bardenas Reales hasta llegar a la toma-11.

En el PK 10+900 el trazado se introduce en las Bardenas Reales paralelo al camino de servicio y por la margen izquierda del mismo para minimizar las afecciones a la conducción existente.

A lo largo del trazado se discurre por suelos aluviales con sustrato terciario siendo el terreno excavable con empleo puntual de martillo o ripper en niveles de arenisca. A partir del PK 8+400 los niveles freáticos disminuyen.





Desde el PK 0+00 (toma-11) hasta el PK 11+840 (toma-12) el trazado discurre paralelo al camino de las Bardenas Reales en el interior del parque natural a través de parcelas dedicadas fundamentalmente a la labor agrícola y por la margen contraria por la que discurren las conducciones existentes.

Con carácter casi general el trazado discurre por terrazas aluviales y suelo coluvial con presencia muy puntual de nivel freático. El suelo se considera excavable siendo necesario el cribado y machaqueo para su reutilización puntual como suelo seleccionada y de relleno por presentarse, en varias zonas, con bolos centrimétricos. Igualmente existen zonas con lentejones arcillosos. En sustrato arcilloso será necesario el uso de ripper y localizadamente martillo.

A partir del PK 6+800 la presencia de nódulos de yeso hace necesario el uso de cementos sulforresistentes.

En el PK 2+290 se dispondrá de un desagüe D2A con vertido a la Fuente del Ferial.

En el PK 7+230 y PK 11+600 el trazado rodea a los yacimientos arqueológicos catalogados de categoría 3 y 2 respectivamente sin generar afección.

3.4. TRAMO T12-T13

El tramo T12 a T13 corresponde a la conducción a presión de acero helicoidal 2 x 1.800 mm que parte de la toma-12 hasta la toma-13 (sector XIII de riego: Comunal de Tudela Montes de Cierzo I y II) con una longitud de 12.500 m.

Desde el PK 0+00 hasta el PK 0+760 el trazado discurre por suelo agrícola y de repoblación forestal rodeando los yacimientos arqueológicos de Bornas de categoría 3.

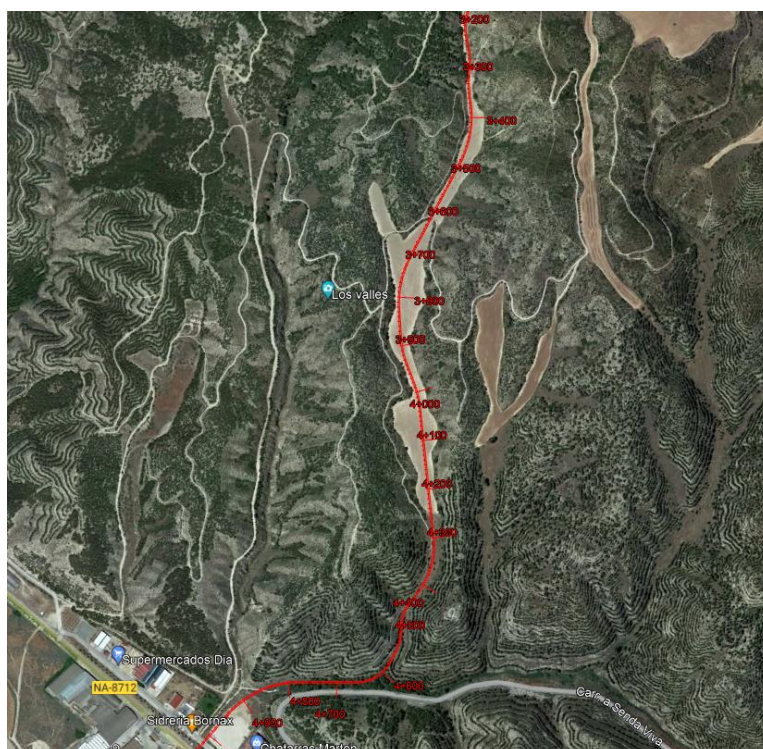
Desde el PK 0+760 hasta el 0+960 el trazado se ejecuta en hinca con escudo abierto de 2 x 2.500 HA. Dicha hinca se ejecuta condicionada por la cota piezométrica y para salvar el cerro evitando así excavaciones superiores a 20 m. Además, mediante la hinca, se pretende minimizar la afección ambiental generada por dicha excavación.



Tras la hinca del cerro el trazado discurre por suelo de cultivo hasta el PK 3+000 donde el trazado atraviesa una zona de repoblación forestal para incorporarse en el barranco de la Fuente.

Desde el PK 3+300 hasta el 4+250 el terreno está dedicado al cultivo agrícola, donde para evitar procesos erosivos se dispondrá transversalmente a la traza de cadenas de retención de sólidos conformadas por celdas de gaviones de 1,0 x 1,0 m en un ancho de 15 m y una separación de 50 m.

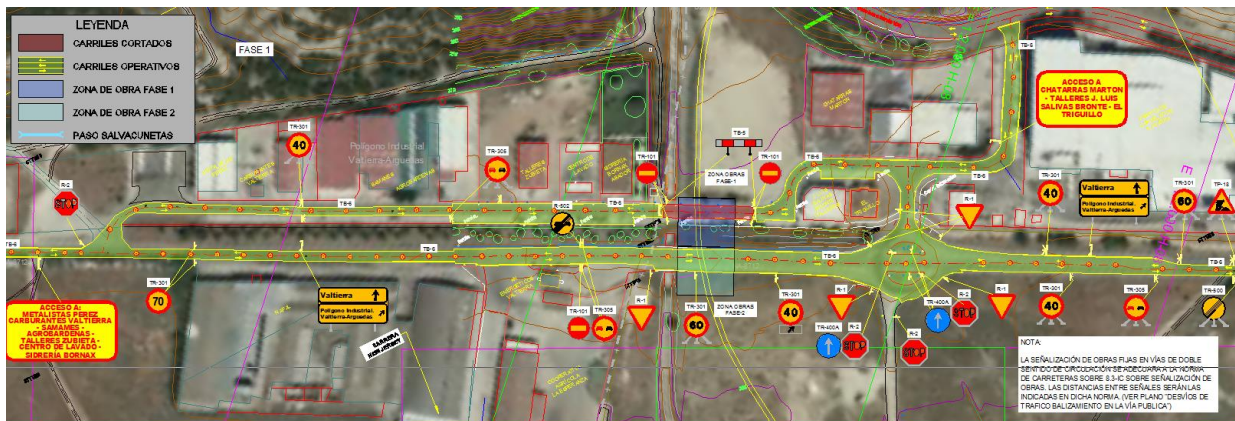
Desde el PK 4+260 hasta el PK 4+800 se adoptará la sección hormigonada tipo Z6 para proteger la conducción en el cruce del barranco. Tras la ejecución de las obras se realizarán trabajos de integración ambiental del terreno afectado.





Vista de la orografía entre el PK 4+800

En el PK 4+900 se cruza el polígono de Valtierra por la banda habilitada para el Canal de Navarra. Tras dicho cruce, e inmediatamente después se cruza la carretera NA-8712 a cielo abierto y mediante desvíos de tráfico.



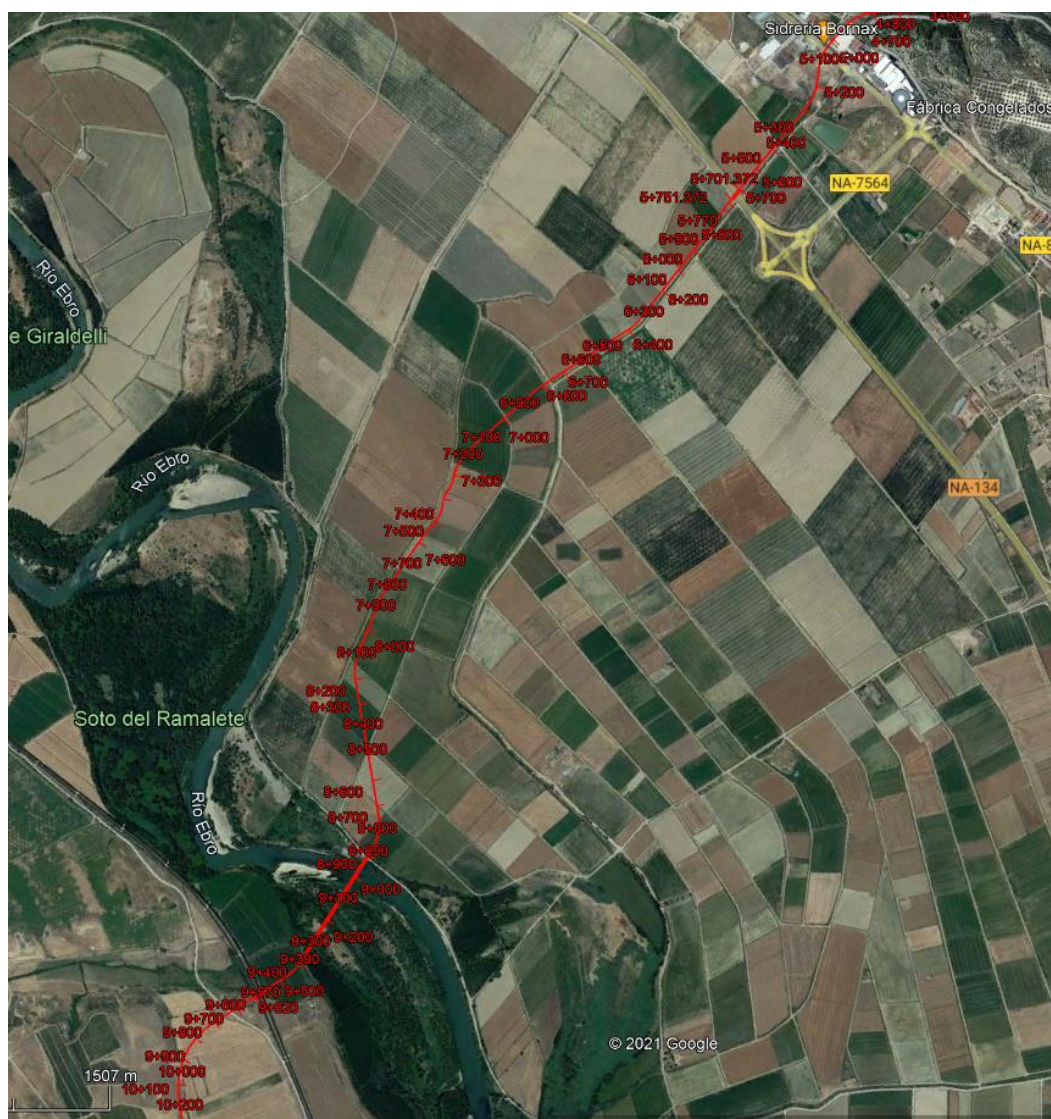


Vista del tramo de cruce del polígono de Valtierra



Vista de traza de la Tubería antes del Polígono

Desde el PK 5+100 hasta el 8+890 (cruce del río Ebro) el trazado discurre paralelo a caminos de servicio y a lo largo de la vega del río Ebro afectando a parcelas en cultivo.





Vista general de la zona regable

El terreno atravesado corresponde a las terrazas aluviales del Ebro con presencia de arcillas arenosas sobre gravas con alto nivel freático. A medida que nos acercamos al río Ebro se presentan bolos que deben ser considerados en las excavaciones.

Con carácter general a lo largo del trazado de la vega del río Ebro serán necesario bombeos continuados condicionados adicionalmente a los periodos de riego.

A lo largo de todo el tramo la conducción cruzará acequias, redes de drenajes y conducciones de riego que deberán ser repuestas.

En el PK 5+700 se cruza la carretera NA-134 (Eje del Ebro) mediante hinca de escudo cerrado (2 x 2.500 mm HA) introduciéndose la conducción (2 x 2000 mm) en su interior mediante patines. Para la ejecución de la hinca será necesario realizar el pozo de ataque y extracción en recintos apantallados continuos de dimensión interior 15,0 x 13,0 m.



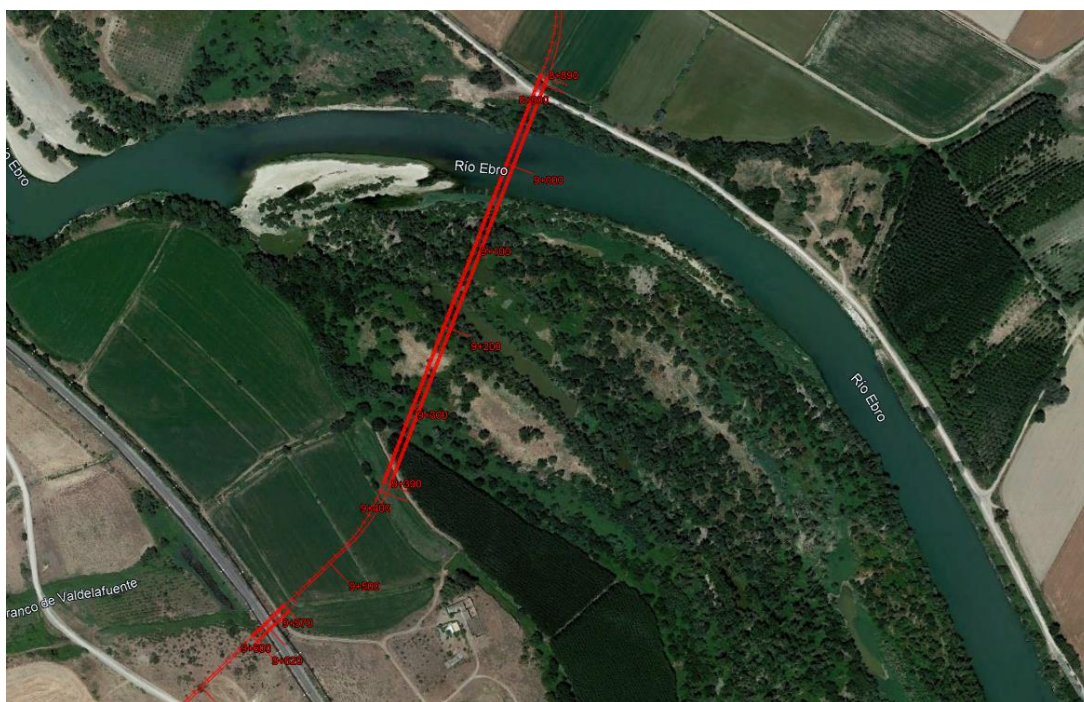
Vista de la zona regable del valle del Ebro tras cruzar la N-134. Se observan canales y red de riegos a lo largo de toda la traza.



Vista del cruce de la NA-134

Entre el PK 8+900 y 9+390 se cruza el río Ebro mediante hinca con escudo cerrado (2 x 2.500 mm HA) introduciéndose la conducción (2 x 2000 mm) en su interior mediante patines. Para la ejecución de la hinca será necesario realizar el pozo de ataque y extracción en recintos apantallados continuos de dimensión interior 15,0 x 13,0 m.

La hinca ha sido proyectada con los pozos de ataque y extracción fuera de los espacios naturales y alejada de la banda de protección del yacimiento arqueológico de El Ramalete con objeto de minimizar las afecciones.



Cruce del río Ebro

Tras cruzar el río Ebro, en el PK 9+570, será necesario cruzar la línea de ferrocarril Alsasua a Zaragoza mediante hinca de escudo cerrado (2 x 2.500 mm HA) introduciéndose la conducción (2 x 2000 mm) en su interior mediante patines. Para la ejecución de la hinca será necesario realizar el pozo de ataque y extracción en recintos apantallados continuos de dimensión interior 15,0 x 13,0 m.

La ejecución de los pozos de ataque y extracción se ha diseñado teniendo en cuenta las distancias de servidumbre y necesidad de mantener el camino en servicio.

Posteriormente la traza discurre a lo largo de campos de cultivo de secano y riego hasta la toma 13 ubicada en la proximidad del Canal de Lodosa.

A lo largo de dicho tramo se cruzan caminos agrícolas, azarbes, acequias de riego y el barranco de Lizar.



3.5. TRAMO T13-T13BIS

El tramo T13-T13bis corresponde al tramo de conducción 2 x 1.800 mm de acero helicoidal que parte de la toma-13 (sector XIII de riego) hasta la toma13bis (derivación de la conducción de abastecimiento a la ETAP de Canraso, Tudela) con una longitud de 3.640 m.

Tras el PK 0+00 se cruza el canal de Lodosa con sección tipo hormigonada Z8 que contempla la reconstrucción del propio Canal y el camino de servicio. Dicho cruce se ejecutará en periodo de intrarriego y con cumplimiento de los requerimientos de la C.H.E.

Tras el cruce del canal de Lodosa, el trazado discurre paralelo a caminos agrícolas y atravesando parcelas de cultivo hasta el PK 1+500 en que penetra en suelo de repoblación forestal, próximo a la balsa de Romerales, hasta el PK 2+280. Posteriormente vuelve a discurrir por suelo de secano hasta la toma-13bis.

El trazado discurre por suelos de gravas y bolos superficialmente cementados con sustrato terciario (lutitas intercaladas con arcillas). No se aprecian niveles freáticos.

El suelo será excavable con uso localizado de martillo y ripper en gravas cementadas y areniscas más potentes. Para la reutilización de suelos será necesario la selección, machaqueo y cribado del material excavado.



Desde el PK 1+670 hasta el 1+713 la pendiente es superior al 30% por lo que se dispone de una sección tipo Z11 con anclajes y medidas de contención de terrenos con geomalla y fajinas. En este tramo la banda de ocupación se ha reducido siendo necesario operaciones de excavación con frente y carga y transporte de materiales a un acopio intermedio. De esta forma se evita la afección en terrenos erosivos.

Desde el PK 1+720 hasta el PK 1+864 el trazado atraviesa un cerro con excavaciones máximas de 12,8 m de altura por lo que se requiere una sección Z3 homigonada y ejecutada con bermas. Dicho alzado ha sido ejecutado condicionado por la línea piezométrica. A lo largo de dicha excavación se realizará un control de los taludes de excavación por proximidad a la balsa de Romerales.

En el PK 2+800 se cruza la carretera de acceso a la central solar que será ejecutada con la sección tipo Z4 a cielo abierto. Se procederá a la reposición del pavimento de la calzada así como la acometida de DN 90 PE.

El trazado siempre discurre alejado de los yacimientos arqueológicos inventariados.



Vista del cruce con el Canal de Lodosa



Vista general de la traza

3.6. TRAMO 13 BIS – BT

El tramo T13Bis-BT corresponde al tramo de conducción 2 x 1.600 mm de acero helicoidal que parte de la toma-13Bis (derivación de la conducción de abastecimiento a la ETAP de Canraso, Tudela) hasta la arqueta de la balsa de Tudela con una longitud de 6.927 m.

Desde el PK 0+00 (Toma-13Bis) hasta el PK 0+166 la conducción cruzará la conducción impulsada de DN 300 mm y línea eléctrica enterrada que discurre en paralelo al camino de servicio de la A68 (autovía del Ebro).

En el PK 0+166 será necesario cruzar la autovía del Ebro A-68 a través del paso inferior existente para lo que se adoptarán todas las medidas necesarias de sostenimiento. El presente proyecto contempla la ejecución de un recinto con pantalla de micropilotes en cuyo interior se alojará la tubería. Posteriormente la sección completa se hormigonará (sección tipo Z4).

A la salida del paso inferior se cruzará la vía de servicio de la autovía a cielo abierto con sección hormigonada tipo Z4.

Tras el cruce de la vía de servicio se cruzará una conducción de hidrocarburos que requerirá operaciones localizadas de sostenimiento adoptando medidas de seguridad específicas.



Vista de pasos inferiores en la AP-68



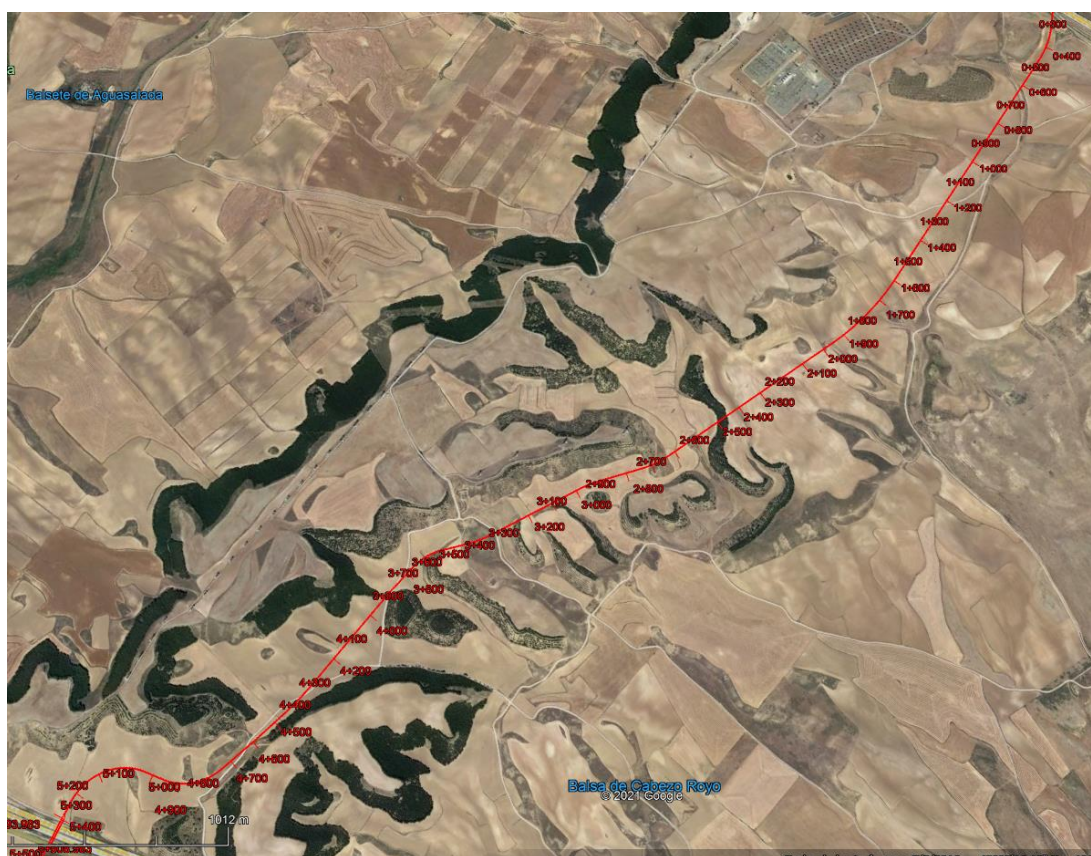
Vista de paso inferior en la A- 68

Tras el cruce de la A68 el trazado discurre sinuosamente a lo largo de suelo de secano hasta llegar a la AP-68 y NA-6810 en el PK 5+393 que se cruzará en hinca con escudo abierto (2 x2.000 mm HA).

Todo el tramo discurre por suelo terciario de lutitas con arenisca y lutitas con intercalaciones de yeso. Puntualmente se atraviesan tramos de gravas con limos arenosos. No es previsible la presencia freática a lo largo del tramo. El tramo es excavable con empleo de martillo en los niveles de arenisca más potentes.

A lo largo del tramo se cruzan numerosas líneas eléctricas dejándose postes a ambas márgenes de la traza. Con carácter general, los postes quedarán a más de 5,0 m de la cabeza de talud por lo que se adoptarán las medidas de jalonamiento y protección oportunas durante las operaciones de excavación. Puntualmente se ha previsto una pantalla de micropilotes para el sostenimiento de la cimentación de la torre eléctrica en el PK 4+600 y la ejecución de la tubería en zanja estrecha.

A lo largo del tramo se cruzarán diversos caminos agrícolas.





Vista de la traza



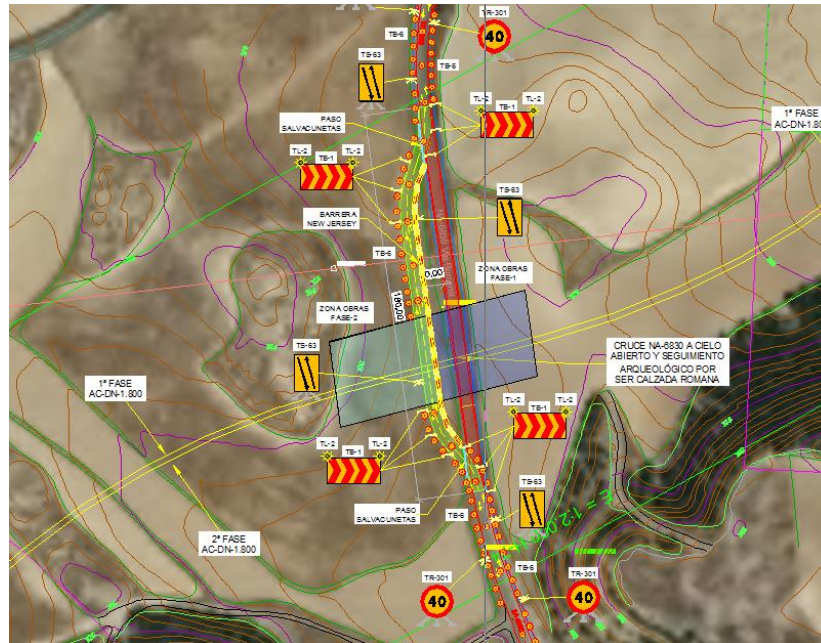
Vista de la traza



En el PK 5+393 se cruzará en hinca con escudo abierto (2 x 2.000 mm HA) la autovía AP-68 y la carretera NA-6810. La tubería de 2 x 1.600 mm se instalará en el interior de la tubería hincada mediante patines.



Tras el cruce de la AP-68 la conducción cruzará la carretera NA-6830 a cielo abierto mediante la sección tipo Z4 y con la implantación de desvíos provisionales. Dicha carretera corresponde a la antigua calzada romana por lo que se requerirá implantar las correspondientes medidas descritas para el seguimiento arqueológico.



En el PK 6+900 la conducción se conectará con la arqueta de regulación y obra de desagüe de fondo de la balsa de Tudela.



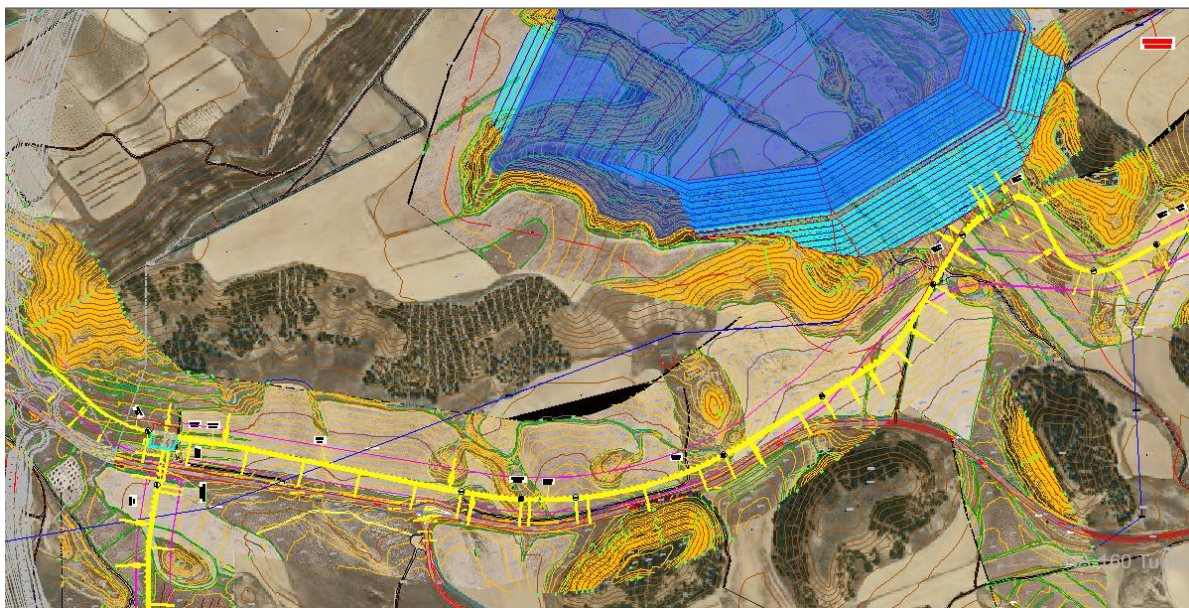


Vista del vaso de la presa de Tudela

3.7. TRAMO BT-DC

El tramo BT-DC corresponde al tramo de conducción 2 x 1.900 mm de acero helicoidal que parte de la balsa de Tudela hasta la derivación de Corella en el cruce de la NA-160, con una longitud de 1.644 m.

El trazado discurre, en todo momento, paralelo a la carretera NA-160. Al final del tramo se dispondrá de una derivación de las conducciones en dirección oeste hacia Corella (tomas 14, 15 y 16) con diámetro DN 1 x 1.800 mm y en dirección sur hacia Cascante con tuberías de 2 x 1.800 mm.



3.8. TRAMO DC-T17

El tramo DC-T17 se corresponde con la conducción de acero helicoidal de 2 x 1.800 que conecta la derivación de Corella con la toma 17 (Zona de riego XVII: Sindicato de Riegos de la Nava, Cintruénigo) con una longitud de 2.730 m.

El cruce de la carretera NA-160 se ejecutará mediante hinca con escudo abierto (2 x 2.500 HA) donde se introducirán las tuberías de acero helicoidal (2 x 1.800 mm) mediante patines.



Vista del cruce de la carretera NA-16 en hinca.

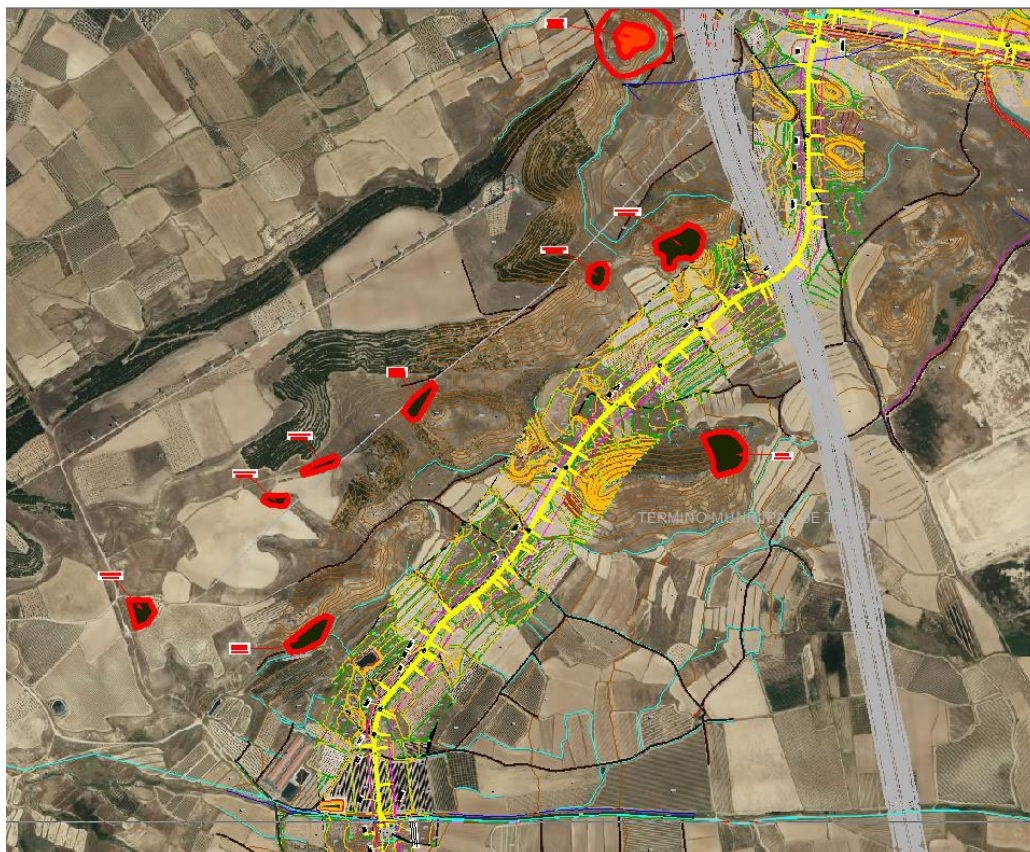
Durante la ejecución de las obras se minimizarán los daños a la obra de drenaje de la carretera que se encuentra próxima a la hinca.

Tras la ejecución de la hinca el trazado discurre en dirección sur atravesando parcelas de cultivo de secano hasta llegar a la toma 17 ubicada en el camino, tras el cruce del río Boquerón. El trazado discurre paralelo a caminos siempre que ha sido posible.

A lo largo de la traza se cruzan caminos, acequias y pequeños cauces de barrancos.

El trazado ha sido diseñado teniendo en cuenta la última información disponible del trazado de la AP-15 y siempre fuera de las zonas de afección de los yacimientos arqueológicos catalogados.

En el caso del cruce con la AP-15 se asume que dicha construcción se ejecutará posteriormente a la conducción del Canal de Navarra fase 2 objeto de proyecto.



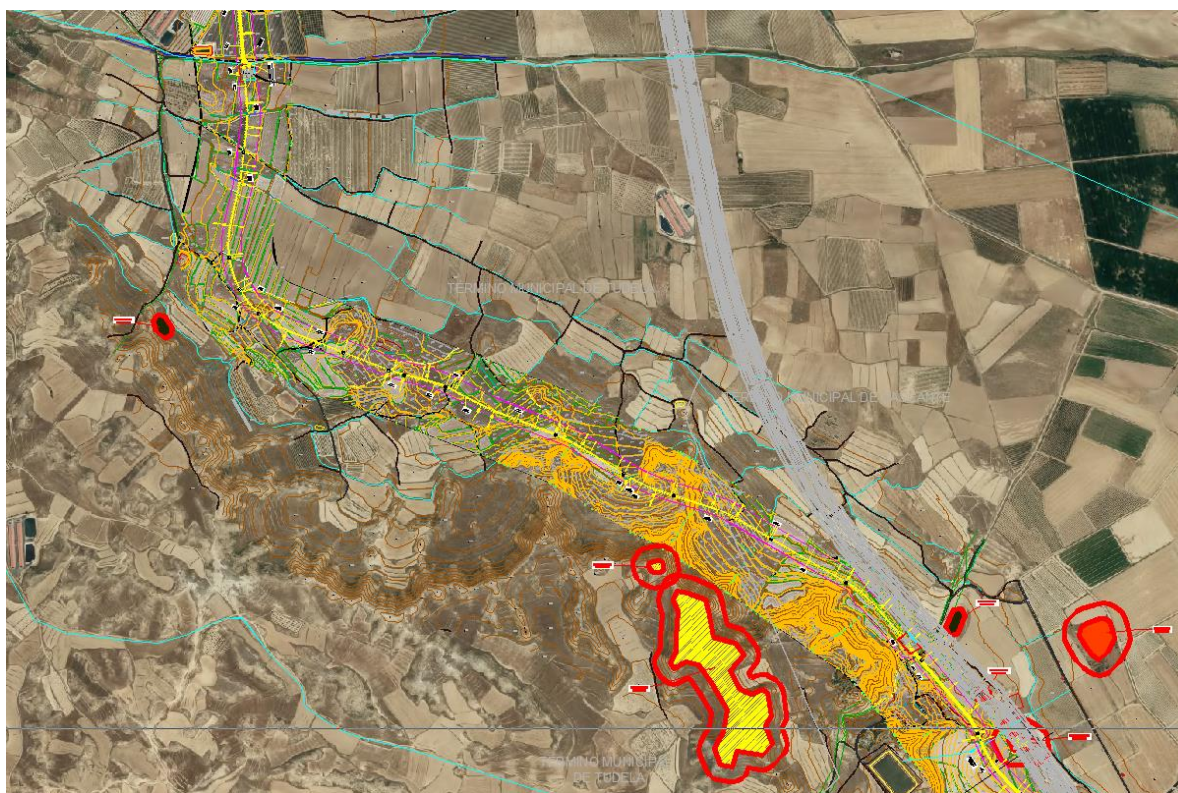
3.9. TRAMO T17-T18

El tramo T17-T18 se corresponde con la conducción de acero helicoidal de 2 x 1.600 que conecta la derivación de la toma-17 (Zona de riego XVII: Sindicato de Riegos de la Nava, Cintruénigo) con la toma-18 (Zona de riego XVIII: Sindicato de Riegos de Cascante (presión natural); CR Murchante (presión natural); CR La Encomienda de Urzante (presión natural); comunal Camponuevo; comunal La Torre) con una longitud de 3.230 m.

El trazado parte de la toma-17 y discurre ajustándose a la orografía del terreno y siempre que ha sido posible paralelo a caminos agrícolas. A lo largo de la traza se cortan pequeños barrancos erosivos, la acequia de los Hijuelos, la acequia de Luasía y pequeños azarbes donde se ha adoptado la sección tipo Z6.

El trazado se ha diseñado teniendo en cuenta la última información disponible de la futura AP-15, siempre fuera del pie de talud de los terraplenes o desmontes.

Una vez el trazado entra en el municipio de Cascante los yacimientos arqueológicos catalogados son numerosos. El trazado se ha desarrollado siempre fuera de la zona de protección de dichos yacimientos.



A lo largo de todo el tramo se prevé alternancias de gravas y bolos correspondientes a la unidad Qg y lutitas con yeso y areniscas correspondientes al sustrato terciario.

En cuanto a la excavabilidad el cuaternario será excavable mientras que para el terciario se prevé el uso de ripper y martillo de forma localizada.

Para el aprovechamiento de materiales se prevé el cribado y machaqueo de los bolos y gravas centimétricos.

Puntualmente la rasante de la conducción ha sido ajustada por condicionantes de piezométrica. Es por ello que los pequeños cerros atravesados requerirán ser excavados a mayor profundidad.

Entre el PK 2+360 y el 2+390 la pendiente será superior a 30% por lo que se adoptará la sección tipo Z11 con anclajes verticales. Adicionalmente se adoptarán medidas frente a la erosión.

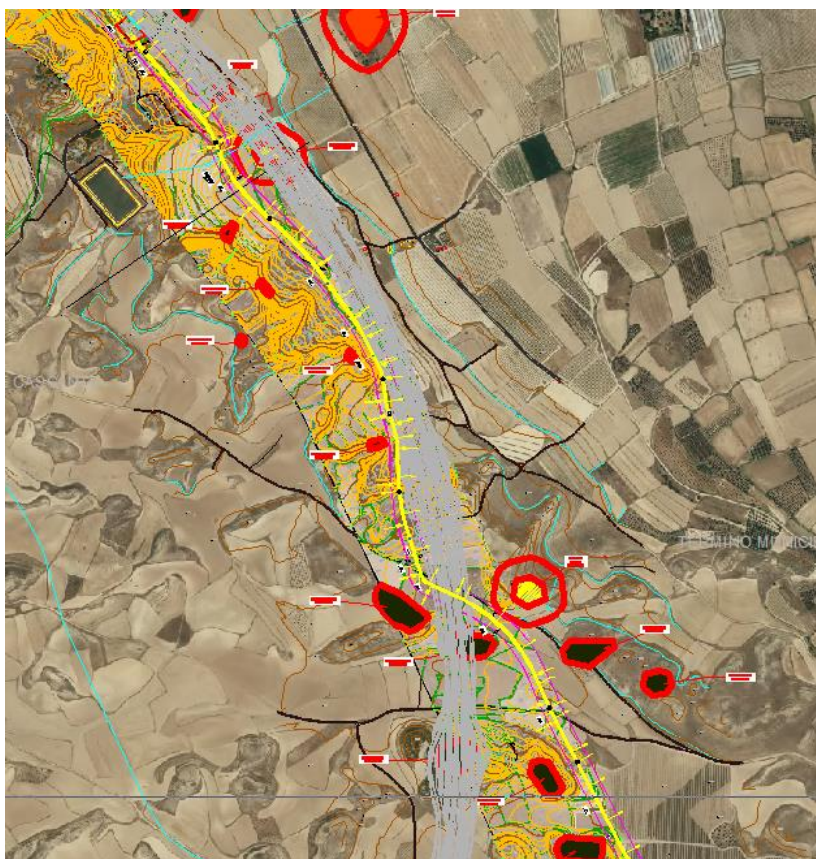
3.10. TRAMO T18-T19

El tramo T18-T19 se corresponde con la conducción de acero helicoidal de 1 x 1.800 mm que conecta la derivación de la toma 18 (Zona de riego XVIII: Sindicato de Riegos de Cascante (presión natural); CR Murchante (presión natural); CR La Encomienda de Urzante (presión natural); comunal Camponuevo; comunal La Torre) con la toma 19 (Zona de riego XIX: Sindicato de Riegos de Cascante: CR Murchante; CR La Encomienda de Urzante) con una longitud de 5.610 m.

El trazado parte de la toma-18 y discurre por el municipio de Cascante ajustándose a la orografía del terreno.

A lo largo de todo el trazado por el municipio de Cascante los yacimientos arqueológicos catalogados son numerosos. Es por ello que el trazado se ha desarrollado serpenteando y siempre fuera de la zona de protección de dichos yacimientos donde además la ocupación temporal para la ejecución de la obra ha sido ajustada para tener en cuenta dicho condicionante.

Desde el PK 0+00 hasta el PK 1+800 discurre paralelo a la futura AP-15 y fuera del pie de talud de desmontes y terraplenados.



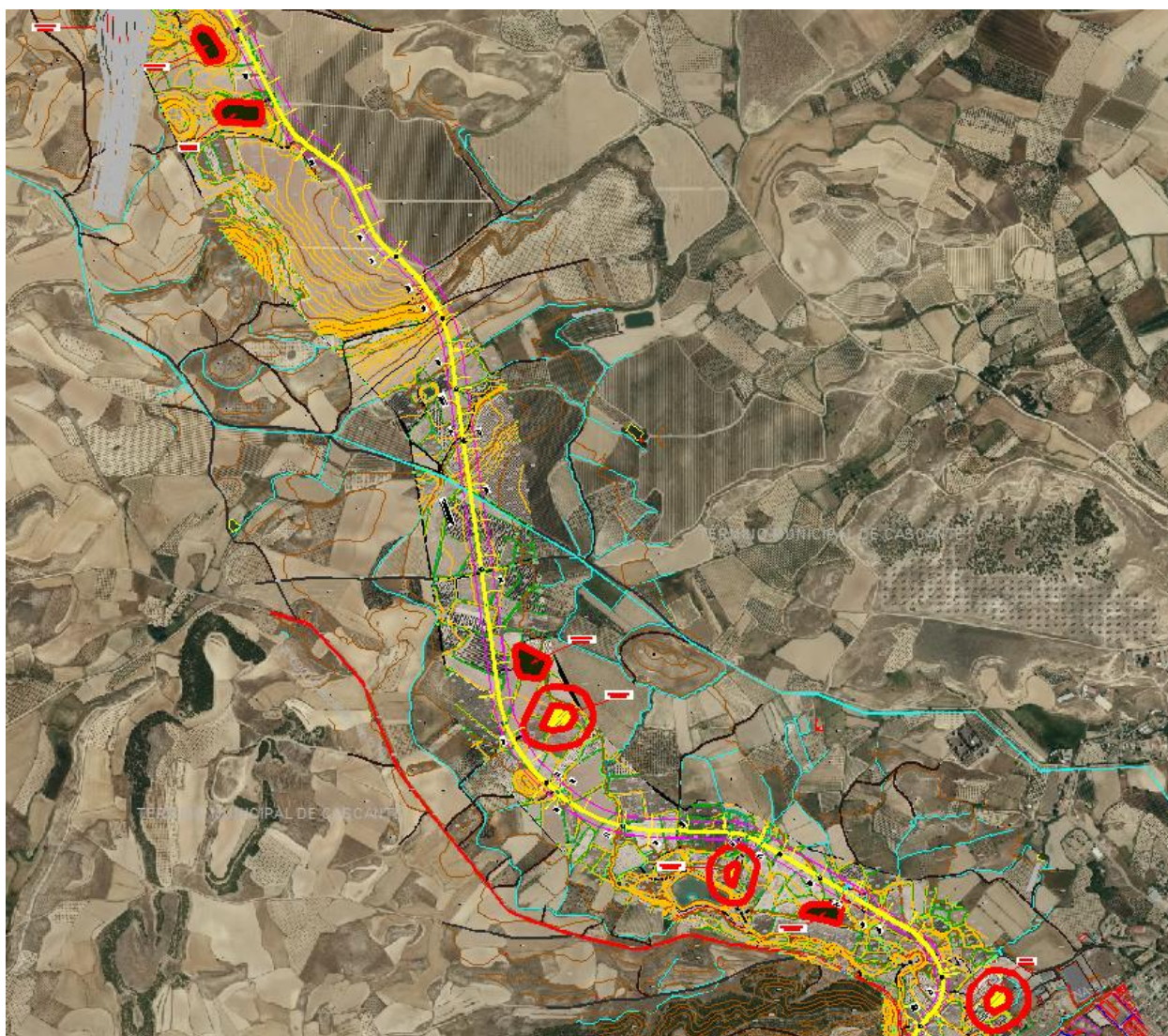
El cruce de la AP-15 se ha realizado teniendo en cuenta que la ejecución de las obras del Canal de Navarra fase-2 se ejecutarán con anterioridad a las de la AP-15, y por lo tanto se ejecutará con excavación a cielo abierto.

A lo largo del trazado es necesario cruzar caminos, varios barrancos, el azarbe Escorredero, y acequias de riego. En el PK 3+820 (aprox.) se cruza la conducción de aguas de la Mancomunidad de aguas de Cascante, Citruénigo y Fitero, previéndose su reposición..

Desde el PK 3+279 hasta el 3+324 ha sido necesario ajustar el alzado de la conducción por condicionantes de cota piezométrica por lo que las excavaciones alcanzan casi los 10,5 m de altura.

A lo largo de todo el tramo se prevé en superficie alternancias de materiales coluviales (arcillas arenosas, gravas y bolos) mientras que el sustrato es terciario (alternancia de lutitas con vetas de yeso y areniscas).

En cuanto a la excavabilidad el cuaternario será excavable mientras que para el terciario se prevé el uso de ripper y martillo. Para el aprovechamiento de materiales se prevé el cribado y machaqueo de suelos.

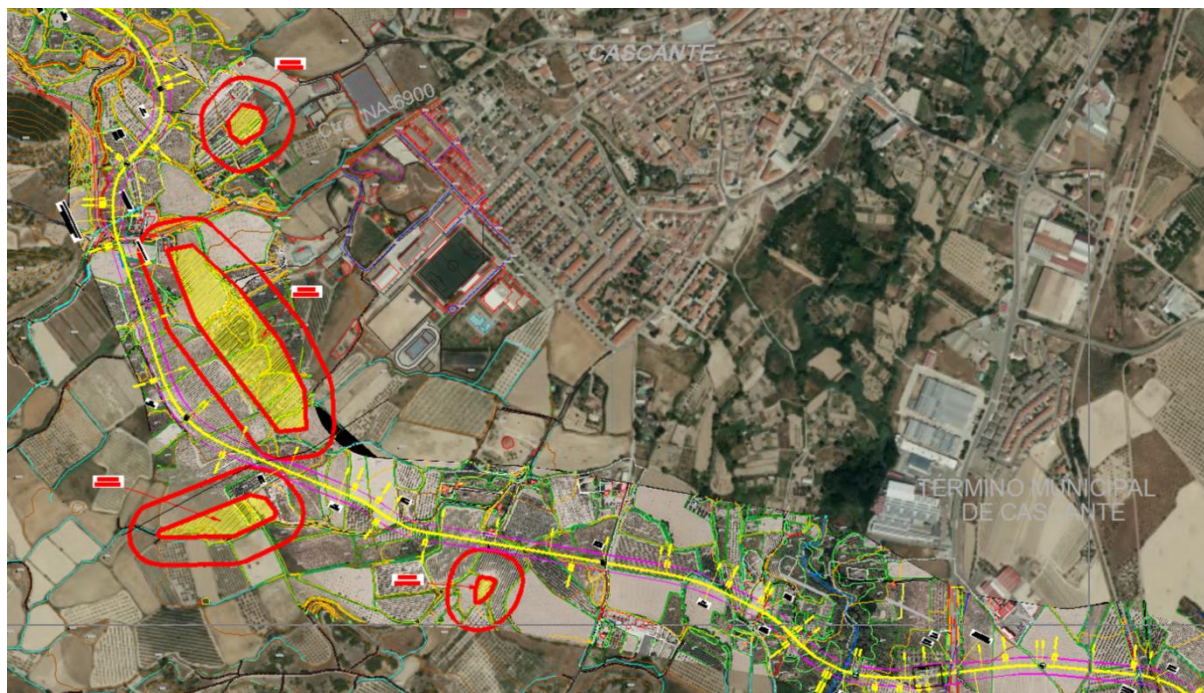


3.11. TRAMO T19-T20

El tramo T19-T20 se corresponde con la conducción de acero helicoidal de 1 x 1.500 mm que conecta la toma 19 (Zona de riego XIX: Sindicato de Riegos de Cascante (presión natural); CR Murchante (presión natural); CR La Encomienda de Urzante (presión natural); comunal Camponuevo; comunal La Torre) con la toma 20 (Zona de riego XX: C.R. Tulebras; C.R. Monteagudo) con una longitud de 2.440 m.

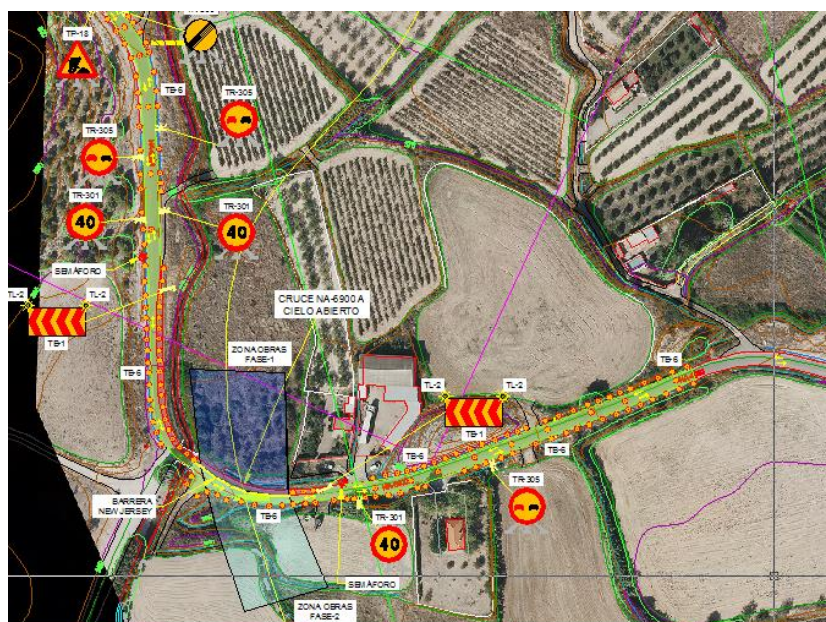
El trazado parte de la toma-19 y discurre por el municipio de Cascante ajustándose a la orografía del terreno y siempre evitando los yacimientos arqueológicos catalogados que son numerosos. Es por ello que el trazado se ha desarrollado serpenteando y siempre fuera de la zona de protección de dichos yacimientos donde además la ocupación temporal para la ejecución de la obra ha sido ajustada para tener en cuenta dicho condicionante.

A lo largo de toda la traza se afecta a parcelas de riego, caminos, redes de drenaje y diversos elementos asociados.



Ha sido necesario ajustar la rasante por condicionantes de cota piezométrica entre los PK's 0+505 y 0+918 resultando excavaciones elevadas y ligeramente superiores a 10,0 m.

La conducción cruza la carretera N-6900 a cielo abierto entre los PK's 0+630 y 0+650 donde además la altura de excavación es superior a 10,0 m, por lo que se opta por una sección tipo Z3. Para la ejecución de las obras del cruce será necesario realizar un desvío de tráfico en dos fases consecutivas teniendo en cuenta además la necesidad de mantener el acceso a las fincas, viviendas, los drenajes transversales del río Matafuegos, drenaje de la carretera N-6900 y el de la zona regable.



Los terrenos atravesados disponen de una montera de suelo coluvial siendo todo el sustrato terciario. Para minimizar la afección en la banda de excavación del cruce se opta por berma de 1,0 m, si bien debido a la profundidad de excavación y presencia freática será necesario mantener bombeos continuados durante el desvío y la ejecución de la zanja.

Para ejecutar el cruce de la carretera de forma segura se ha optado por la utilización de entibación monocodal.



Vista de la traza en el cruce de la NA-6900.



Vista de cruce NA-69900.



Vista de cruce NA-69900.



Vista de red de drenajes a desviar.

Entre el PK 2+280 y el PK 2+295 se cruza el río Queiles a cielo abierto y adoptando la sección tipo Z7 conforme a los requerimientos establecidos por los técnicos de Medioambiente del Gobierno de Navarra.



Desde el PK 0+00 hasta el PK 1+400 (aprox.) se discurre de forma casi genérica por sustrato terciario (alternancia de lutitas con vetas de yeso y areniscas) donde se prevé el uso de ripper y martillo y para el aprovechamiento de materiales se prevé el cribado y machaqueo de suelos.

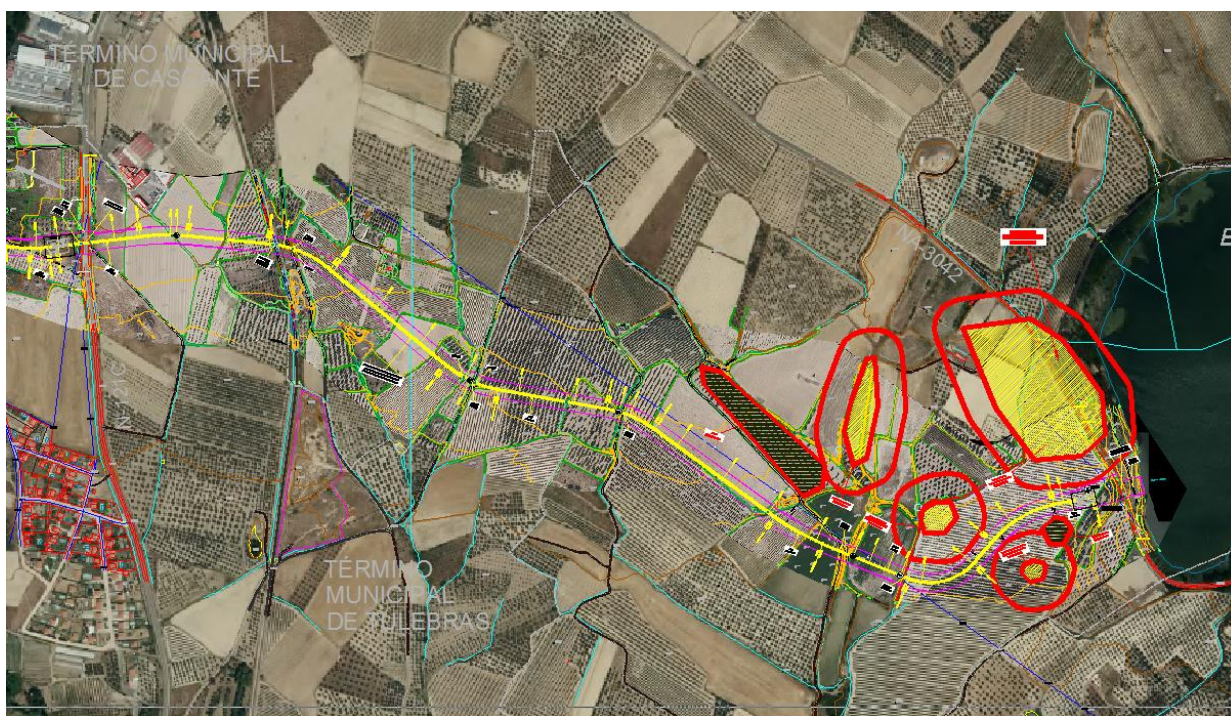
Desde el PK 1+400 hasta el final se discurre por suelo aluvial de arcillas con arenas y gravas donde será necesario tender los taludes. A partir del PK 1+900 será necesario el uso de bombeos continuados por presencia freática.

3.12. TRAMO T20-T21

El tramo T20-T21 se corresponde con la conducción de acero helicoidal de 1 x 1.300 mm que conecta la toma 20 (Zona de riego XX: C.R. Tulebras; C.R. Monteagudo) con la toma-21 (Zona de riego XXI: C.R. Ablitas; C.R. Saso Pedriz) con una longitud de 2.055 m.

El trazado parte de la toma 20 pasado el río Queiles y discurre por el municipio de Cascante y por el de Tulebras ajustándose a la orografía del terreno y siempre evitando los yacimientos arqueológicos catalogados que son numerosos. Es por ello que el trazado se ha desarrollado serpenteando y siempre fuera de la zona de protección de dichos yacimientos, donde además la ocupación temporal para la ejecución de la obra ha sido ajustada para tener en cuenta dicho condicionante.

El trazado termina en la Toma 21 que dispondrá de una obra de descarga y alivio que permitirá realizar el vertido de desagüe a la Laguna de Lor.

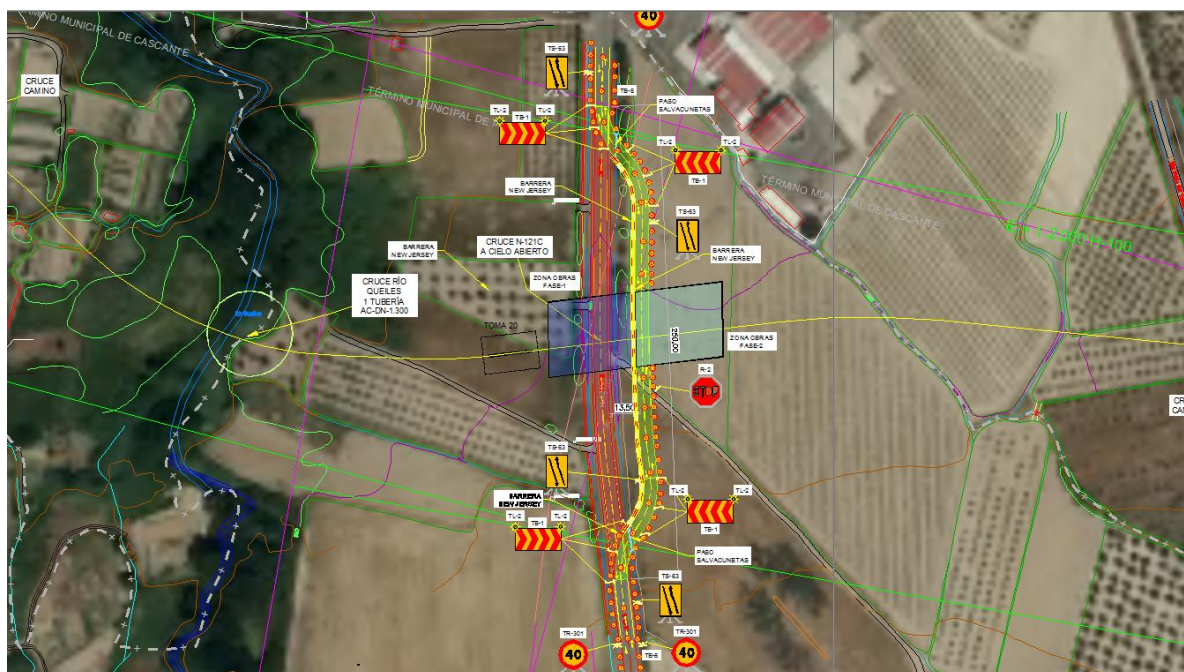


A lo largo de toda la traza se afecta a parcelas de riego, caminos, redes de drenaje y diversos elementos asociados.

En el PK 0+040 se cruza la carretera N-121C a cielo abierto y con desvío de tráfico en dos fases constructivas. Se adoptará la sección tipo Z4.



Vista de la traza en el cruce de la NA-121C



En el PK 0+390 se cruza la vía verde del Tarazonica.



Entre el PK 1+654 y 1+848 se realiza un ajuste en alzado por condicionantes de la cota piezométrica con alturas de excavación máximas de 7,4 m.

El trazado termina en la Toma 21 ubicada en la proximidad a la carretera NA-3040 ubicada entre olivar y viñedo.

Desde la toma partirá una conducción de desagüe por gravedad que conectará con la Laguna de Lor. El trazado de dicha conducción salvará la diferencia de cota existente mediante resaltos y cruzará la carretera NA-3042 a cielo abierto mediante ejecución con desvío de tráfico, con corte de carriles.

El acceso a la toma se ha diseñado en el acceso a la parcela existente fuera del riesgo de la curva de la NA-3042 además de evitar su desmonte. Por otro lado la conducción de desagüe irá en paralelo a dicho camino vertiendo en el punto de menor impacto en la conexión a la Laguna de Lor.



Vista de las proximidades de la Toma 21



Vista del cruce de la carretera NA-3042 y conexión de desagüe a la Laguna de Lor.

Desde el inicio hasta el final se discurre por suelo aluvial de gravas con intercalaciones de arcillas en techo donde será necesario el cribado de finos y machaqueo de bolos mayores de 3 cm para uso en rellenos. Puntualmente en el sustrato será necesario el uso de ripper y martillo en niveles de areniscas más potentes.

3.13. TRAMO DC-T16

El tramo DC-T16 se corresponde con la conducción de acero helicoidal de 1 x 1.800 mm que parte de la derivación de Corella y conecta con la toma-16 (Zona XVI: CR Cintruénigo (BBP)) con una longitud de 1.150 m.

El trazado de la conducción discurre en el término municipal de Cintruénigo paralelo a la carretera NA-160 para posteriormente discurrir en paralelo a un camino agrícola sin afectar al yacimiento arqueológico de Clavijas.

El trazado atraviesa la futura autovía AP-15 por detrás del estribo del puente del enlace previsto. A efectos de proyecto se considera que la ejecución de las obras de la conducción del Canal de Navarra Fase-2 se ejecutará con anterioridad a la de la AP-15.



Desde el PK 0+574 hasta el 0+884 el alzado se ha ajustado por condicionantes piezométricos para salvar un pequeño cerro existente. Entre los PK's 0+672 y 0+741 será necesario disponer de zanja trapezoidal hormigonada al superarse los 10,0 m de excavación.

Tal y como se expone en el Anejo-6: Cálculos Hidráulicos, la toma 16 fue desplazada para evitar verse afectada por el condicionante piezométrico de dicho cerro.

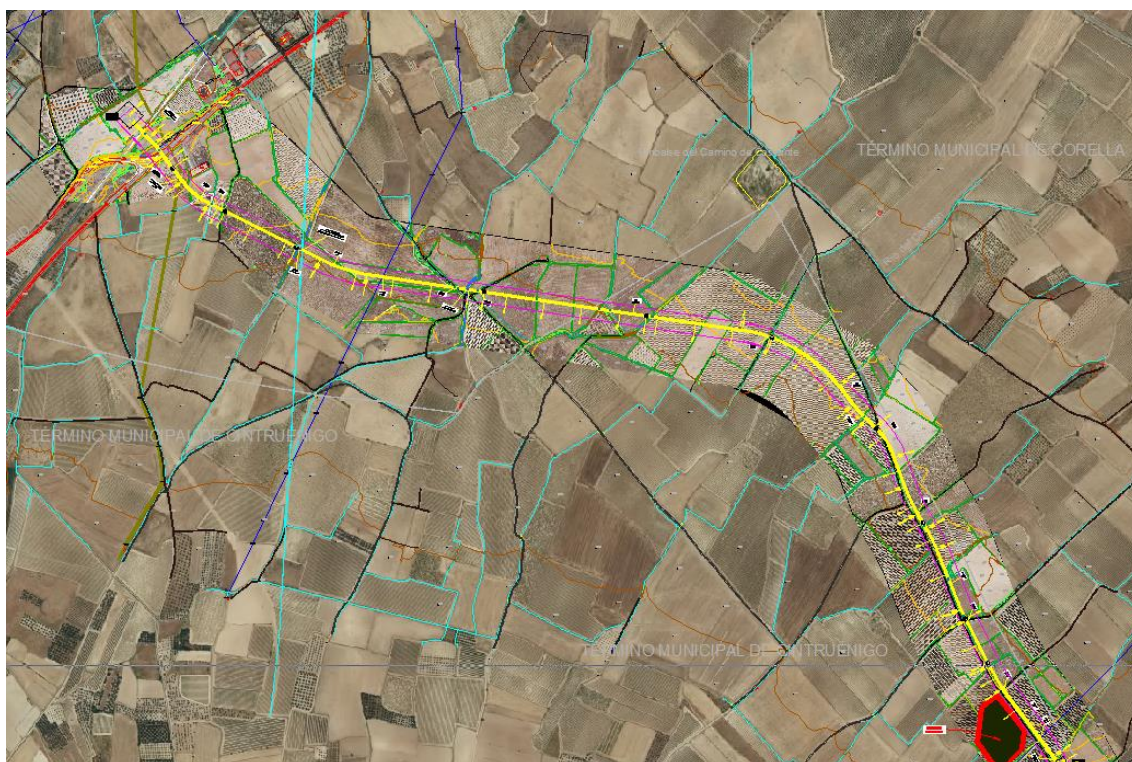
A lo largo del tramo se atraviesan gravas con arenas cementadas en superficie. El terreno es excavable siendo necesario el machaqueo y cribado de bolos y material terciario excavado.



Vista del cerro a salvar

3.14. TRAMO T16-T14/T15

El tramo T16 –T14/15 se corresponde con la conducción de acero helicoidal de 1 x 1.600mm que parte de la toma 16 (Zona XVI: CR Cintruénigo (BBP)) hasta la toma-14 (Zona regable XIV: Sindicato de Riegos de Corella (presión natural)) y toma-15 (Sindicato de Riegos de Corella (BBP)) ubicadas conjuntamente, y con una longitud de 3.241 m.



El trazado de la conducción discurre en el término municipal de Cintruénigo y en el de Corella a lo largo de parcelas de riego sin afectar al yacimiento arqueológico del Gancho.

El trazado cruza caminos agrícolas, desagües de riego, el río Berdín y la conducción de la Mancomunidad de Aguas del Moncayo.

El cruce de la carretera N-113 (Pamplona-Madrid) se realizará con hinca con escudo abierto ejecutándose los pozos de ataque y salida con recinto de pantallas continuas de 15,0 x 13,0 m interior.



Tras el cruce de la carretera N-113, será necesario cruzar a cielo abierto la línea de ferrocarril en desuso hasta llegar a la toma 14 y 15.



4. APÉNDICE -7.1.1: TRAMIFICACIÓN

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	Zanja tipo asignada	Talud HV
Conex	0,00	0,00	2	2.000	275	15,00	16	Z1	0,33
Conex	136,82	136,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	0,00	136,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	214,00	350,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	215,00	351,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	289,00	425,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	290,00	426,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	409,00	545,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	410,00	546,82	2	2.000	275	15,00	16	Z6	1,00
CN-T11	430,00	566,82	2	2.000	275	15,00	16	Z6	1,00
CN-T11	431,00	567,82	2	2.000	275	15,00	16	Z1	1,00
CN-T11	434,00	570,82	2	2.000	275	15,00	16	Z1	1,00
CN-T11	435,00	571,82	2	2.000	275	15,00	16	Z5	1,00
CN-T11	444,00	580,82	2	2.000	275	15,00	16	Z5	1,00
CN-T11	445,00	581,82	2	2.000	275	15,00	16	Z1	1,00
CN-T11	475,00	611,82	2	2.000	275	15,00	16	Z1	1,00
CN-T11	476,00	612,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	564,00	700,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	565,00	701,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	575,00	711,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	576,00	712,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	869,00	1.005,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	870,00	1.006,82	2	2.000	275	15,00	16	Z6	0,33
CN-T11	890,00	1.026,82	2	2.000	275	15,00	16	Z6	0,33
CN-T11	891,00	1.027,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	979,00	1.115,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	980,00	1.116,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	990,00	1.126,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	990,50	1.127,32	2	2.000	275	15,00	16	Z6	0,33
CN-T11	1.000,00	1.136,82	2	2.000	275	15,00	16	Z6	0,33
CN-T11	1.001,00	1.137,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.042,00	1.178,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.043,00	1.179,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	1.165,00	1.301,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	1.166,00	1.302,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.324,00	1.460,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.325,00	1.461,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	1.335,00	1.471,82	2	2.000	275	15,00	16	Z5	0,33
CN-T11	1.336,00	1.472,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.426,00	1.562,82	2	2.000	275	15,00	16	Z1	0,33
CN-T11	1.427,00	1.563,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	1.569,00	1.705,82	2	2.000	275	15,00	16	Z2	0,33
CN-T11	1.570,00	1.706,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.640,00	1.776,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.641,00	1.777,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.660,00	1.796,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.661,00	1.797,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.699,00	1.835,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.700,00	1.836,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.720,00	1.856,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.721,00	1.857,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.889,00	2.025,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	1.890,00	2.026,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.919,50	2.056,32	2	2.000	275	14,00	16	Z6	0,33
CN-T11	1.920,00	2.056,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	1.930,00	2.066,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	1.931,00	2.067,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	2.144,00	2.280,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	2.145,00	2.281,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	2.155,00	2.291,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	2.156,00	2.292,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	2.359,00	2.495,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	2.360,00	2.496,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	2.370,00	2.506,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	2.371,00	2.507,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	2.380,00	2.516,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	2.381,00	2.517,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	3.024,00	3.160,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	3.025,00	3.161,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	3.035,00	3.171,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	3.035,50	3.172,32	2	2.000	275	14,00	16	Z11	0,67
CN-T11	3.200,00	3.336,82	2	2.000	275	14,00	16	Z11	0,67
CN-T11	3.201,00	3.337,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	3.409,00	3.545,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	3.410,00	3.546,82	2	2.000	275	14,00	16	Z6	1,00
CN-T11	3.440,00	3.576,82	2	2.000	275	14,00	16	Z6	1,00
CN-T11	3.441,00	3.577,82	2	2.000	275	14,00	16	Z1	1,00
CN-T11	3.764,94	3.901,76	2	2.000	275	14,00	16	Z1	1,00
CN-T11	3.765,00	3.901,82	2	2.000	275	14,00	16	Z5	1,00
CN-T11	3.775,00	3.911,82	2	2.000	275	14,00	16	Z5	1,00
CN-T11	3.776,00	3.912,82	2	2.000	275	14,00	16	Z1	1,00
CN-T11	3.984,00	4.120,82	2	2.000	275	14,00	16	Z1	1,00
CN-T11	3.985,00	4.121,82	2	2.000	275	14,00	16	Z5	1,00
CN-T11	3.995,00	4.131,82	2	2.000	275	14,00	16	Z5	1,00
CN-T11	3.996,00	4.132,82	2	2.000	275	14,00	16	Z1	1,00
CN-T11	4.300,00	4.436,82	2	2.000	275	14,00	16	Z1	1,00
CN-T11	4.301,00	4.437,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	4.514,00	4.650,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	4.515,00	4.651,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	4.525,00	4.661,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	4.526,00	4.662,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.124,00	5.260,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.125,00	5.261,82	2	2.000	275	14,00	16	Z4	0,33
CN-T11	5.145,00	5.281,82	2	2.000	275	14,00	16	Z4	0,33
CN-T11	5.146,00	5.282,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.254,00	5.390,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.255,00	5.391,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	5.265,00	5.401,82	2	2.000	275	14,00	16	Z5	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
CN-T11	5.266,00	5.402,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.455,00	5.591,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	5.456,00	5.592,82	2	2.000	275	14,00	16	Z3	0,33
CN-T11	5.471,00	5.607,82	2	2.000	275	14,00	16	Z3	0,33
CN-T11	5.472,00	5.608,82	2	2.000	355	14,00	25	Z3	0,33
CN-T11	5.496,00	5.632,82	2	2.000	355	14,00	25	Z3	0,33
CN-T11	5.497,00	5.633,82	2	2.000	355	14,00	25	Z10	0,00
CN-T11	5.512,00	5.648,82	2	2.000	355	14,00	25	Z10	0,00
CN-T11	5.513,00	5.649,82	2	2.000	355	14,00	25	Z9	Hinca
CN-T11	5.666,00	5.802,82	2	2.000	355	14,00	25	Z9	Hinca
CN-T11	5.667,00	5.803,82	2	2.000	355	14,00	25	Z10	0,00
CN-T11	5.679,00	5.815,82	2	2.000	355	14,00	25	Z10	0,00
CN-T11	5.680,00	5.816,82	2	2.000	355	14,00	25	Z2	1,50
CN-T11	5.700,00	5.836,82	2	2.000	355	14,00	25	Z2	1,50
CN-T11	5.701,00	5.837,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.134,00	6.270,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.135,00	6.271,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.145,00	6.281,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.146,00	6.282,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.334,00	6.470,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.335,00	6.471,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.345,00	6.481,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.346,00	6.482,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.934,00	7.070,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	6.935,00	7.071,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.945,00	7.081,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	6.946,00	7.082,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.396,00	7.532,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.397,00	7.533,82	2	2.000	355	14,00	25	Z2	1,50
CN-T11	7.398,00	7.534,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.404,00	7.540,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.405,00	7.541,82	2	2.000	355	15,00	25	Z5	1,50
CN-T11	7.415,00	7.551,82	2	2.000	355	15,00	25	Z5	1,50
CN-T11	7.416,00	7.552,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.418,00	7.554,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.419,00	7.555,82	2	2.000	355	15,00	25	Z10	0,00
CN-T11	7.434,00	7.570,82	2	2.000	355	15,00	25	Z10	0,00
CN-T11	7.435,00	7.571,82	2	2.000	355	15,00	25	Z9	Hinca
CN-T11	7.470,00	7.606,82	2	2.000	355	15,00	25	Z9	Hinca
CN-T11	7.471,00	7.607,82	2	2.000	355	15,00	25	Z10	0,00
CN-T11	7.485,00	7.621,82	2	2.000	355	15,00	25	Z10	0,00
CN-T11	7.486,00	7.622,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.507,00	7.643,82	2	2.000	355	15,00	25	Z2	1,50
CN-T11	7.508,00	7.644,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.634,00	7.770,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.635,00	7.771,82	2	2.000	355	14,00	25	Z6	1,50
CN-T11	7.645,00	7.781,82	2	2.000	355	14,00	25	Z6	1,50
CN-T11	7.646,00	7.782,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.676,00	7.812,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.677,00	7.813,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	7.687,00	7.823,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	7.688,00	7.824,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.846,00	7.982,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.847,00	7.983,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	7.857,00	7.993,82	2	2.000	355	14,00	25	Z5	1,50
CN-T11	7.858,00	7.994,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.875,00	8.011,82	2	2.000	355	14,00	25	Z1	1,50
CN-T11	7.876,00	8.012,82	2	2.000	355	14,00	25	Z1	0,33
CN-T11	7.911,00	8.047,82	2	2.000	355	14,00	25	Z1	0,33
CN-T11	7.912,00	8.048,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	7.934,00	8.070,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	7.935,00	8.071,82	2	2.000	275	14,00	16	Z2	0,33
CN-T11	7.989,00	8.125,82	2	2.000	275	14,00	16	Z2	0,33
CN-T11	7.990,00	8.126,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.008,00	8.144,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.009,00	8.145,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	8.140,00	8.276,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	8.141,00	8.277,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.294,00	8.430,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.295,00	8.431,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.305,00	8.441,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.306,00	8.442,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.679,00	8.815,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.680,00	8.816,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	8.690,00	8.826,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	8.691,00	8.827,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.804,00	8.940,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.805,00	8.941,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.815,00	8.951,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.816,00	8.952,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.867,00	9.003,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	8.868,00	9.004,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.878,00	9.014,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	8.879,00	9.015,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.250,00	9.386,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.251,00	9.387,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	9.265,00	9.401,82	2	2.000	275	14,00	16	Z6	0,33
CN-T11	9.266,00	9.402,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.279,50	9.416,32	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.280,00	9.416,82	2	2.000	275	14,00	16	Z8	0,33
CN-T11	9.310,00	9.446,82	2	2.000	275	14,00	16	Z8	0,33
CN-T11	9.311,00	9.447,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.464,00	9.600,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	9.465,00	9.601,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	9.475,00	9.611,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	9.476,00	9.612,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	10.215,00	10.351,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	10.216,00	10.352,82	2	2.000	275	14,00	16	Z5	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
CN-T11	10.226,00	10.362,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	10.227,00	10.363,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	10.914,00	11.050,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	10.915,00	11.051,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	10.925,00	11.061,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	10.926,00	11.062,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	11.489,00	11.625,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	11.490,00	11.626,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	11.500,00	11.636,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	11.501,00	11.637,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.014,00	12.150,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.015,00	12.151,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.025,00	12.161,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.026,00	12.162,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.294,00	12.430,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.295,00	12.431,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.305,00	12.441,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.306,00	12.442,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.794,00	12.930,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	12.795,00	12.931,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.805,00	12.941,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	12.806,00	12.942,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	13.024,00	13.160,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	13.025,00	13.161,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	13.035,00	13.171,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	13.036,00	13.172,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	13.604,00	13.740,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	13.605,00	13.741,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	13.615,00	13.751,82	2	2.000	275	14,00	16	Z5	0,33
CN-T11	13.616,00	13.752,82	2	2.000	275	14,00	16	Z1	0,33
CN-T11	14.290,00	14.426,82	2	2.000	275	14,00	16	Z1	0,33
T11-T12	0,00	14.426,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	169,00	14.595,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	170,00	14.596,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	180,00	14.606,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	181,00	14.607,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	774,00	15.200,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	775,00	15.201,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	785,00	15.211,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	786,00	15.212,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	1.444,00	15.870,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	1.445,00	15.871,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	1.455,00	15.881,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	1.456,00	15.882,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	1.946,00	16.372,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	1.947,00	16.373,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	1.957,00	16.383,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	1.958,00	16.384,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.084,00	16.510,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.085,00	16.511,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.095,00	16.521,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.096,00	16.522,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.284,00	16.710,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.285,00	16.711,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.295,00	16.721,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.296,00	16.722,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	2.305,00	16.731,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	2.306,00	16.732,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.807,00	17.233,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	2.808,00	17.234,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.818,00	17.244,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	2.819,00	17.245,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.217,00	17.643,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.218,00	17.644,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.228,00	17.654,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.229,00	17.655,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.377,00	17.803,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.378,00	17.804,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.388,00	17.814,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.389,00	17.815,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.580,00	18.006,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.581,00	18.007,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.591,00	18.017,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.592,00	18.018,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.924,00	18.350,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	3.925,00	18.351,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.935,00	18.361,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	3.936,00	18.362,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.167,00	18.593,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.168,00	18.594,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.178,00	18.604,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.179,00	18.605,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.469,00	18.895,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.470,00	18.896,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.480,00	18.906,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.481,00	18.907,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.729,00	19.155,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.730,00	19.156,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.740,00	19.166,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.741,00	19.167,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.837,00	19.263,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	4.838,00	19.264,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.848,00	19.274,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	4.849,00	19.275,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	5.259,00	19.685,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	5.260,00	19.686,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.270,00	19.696,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.271,00	19.697,82	2	1.800	275	11,50	16	Z1	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T11-T12	5.504,00	19.930,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	5.505,00	19.931,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.515,00	19.941,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.516,00	19.942,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	5.981,00	20.407,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	5.982,00	20.408,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.992,00	20.418,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	5.993,00	20.419,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	6.195,00	20.621,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	6.196,00	20.622,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	6.206,00	20.632,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	6.207,00	20.633,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	6.438,00	20.864,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	6.439,00	20.865,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	6.449,00	20.875,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	6.450,00	20.876,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	7.104,00	21.530,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	7.105,00	21.531,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	7.115,00	21.541,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	7.116,00	21.542,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	7.844,00	22.270,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	7.845,00	22.271,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	7.855,00	22.281,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	7.856,00	22.282,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	8.250,00	22.676,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	8.251,00	22.677,82	2	1.800	275	11,50	16	Z1	1,00
T11-T12	8.319,00	22.745,82	2	1.800	275	11,50	16	Z1	1,00
T11-T12	8.320,00	22.746,82	2	1.800	275	11,50	16	Z6	1,00
T11-T12	8.327,00	22.753,82	2	1.800	275	11,50	16	Z6	1,00
T11-T12	8.328,00	22.754,82	2	1.800	275	11,50	16	Z5	1,00
T11-T12	8.338,00	22.764,82	2	1.800	275	11,50	16	Z5	1,00
T11-T12	8.339,00	22.765,82	2	1.800	275	11,50	16	Z1	1,00
T11-T12	8.400,00	22.826,82	2	1.800	275	11,50	16	Z1	1,00
T11-T12	8.401,00	22.827,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	8.644,00	23.070,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	8.645,00	23.071,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	8.655,00	23.081,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	8.656,00	23.082,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	9.233,00	23.659,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	9.234,00	23.660,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	9.244,00	23.670,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	9.245,00	23.671,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	9.255,00	23.681,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	9.256,00	23.682,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	9.554,00	23.980,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	9.555,00	23.981,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	9.565,00	23.991,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	9.566,00	23.992,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.054,00	24.480,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.055,00	24.481,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	10.065,00	24.491,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	10.066,00	24.492,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.764,00	25.190,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.765,00	25.191,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	10.775,00	25.201,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	10.776,00	25.202,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.818,00	25.244,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.819,00	25.245,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	10.831,00	25.257,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	10.832,00	25.258,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.965,00	25.391,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	10.966,00	25.392,82	2	1.800	275	14,00	16	Z1	0,33
T11-T12	10.967,00	25.393,82	2	1.800	275	14,00	16	Z2	0,33
T11-T12	10.984,00	25.410,82	2	1.800	275	14,00	16	Z2	0,33
T11-T12	10.985,00	25.411,82	2	1.800	275	14,00	16	Z5	0,33
T11-T12	10.995,00	25.421,82	2	1.800	275	14,00	16	Z5	0,33
T11-T12	10.996,00	25.422,82	2	1.800	275	14,00	16	Z6	0,33
T11-T12	11.015,00	25.441,82	2	1.800	275	14,00	16	Z6	0,33
T11-T12	11.016,00	25.442,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.214,00	25.640,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.215,00	25.641,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	11.225,00	25.651,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	11.226,00	25.652,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.371,00	25.797,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.372,00	25.798,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	11.384,00	25.810,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	11.385,00	25.811,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.432,00	25.858,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.433,00	25.859,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	11.444,00	25.870,82	2	1.800	275	11,50	16	Z6	0,33
T11-T12	11.445,00	25.871,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	11.455,00	25.881,82	2	1.800	275	11,50	16	Z5	0,33
T11-T12	11.456,00	25.882,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.650,00	26.076,82	2	1.800	275	11,50	16	Z1	0,33
T11-T12	11.651,00	26.077,82	2	1.800	275	11,50	16	Z1	1,00
T11-T12	11.840,00	26.266,82	2	1.800	275	11,50	16	Z1	1,00
T12-T13	0,00	26.266,82	2	1.800	275	11,50	16	Z1	1,00
T12-T13	100,00	26.366,82	2	1.800	275	11,50	16	Z1	1,00
T12-T13	101,00	26.367,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	559,00	26.825,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	560,00	26.826,82	2	1.800	275	11,50	16	Z6	0,33
T12-T13	734,00	27.000,82	2	1.800	275	11,50	16	Z6	0,33
T12-T13	735,00	27.001,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	745,00	27.011,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	745,20	27.012,03	2	1.800	275	11,50	16	Z6	0,33
T12-T13	750,00	27.016,82	2	1.800	275	11,50	16	Z6	0,33
T12-T13	751,00	27.017,82	2	1.800	275	11,50	16	Z6	1,00
T12-T13	759,00	27.025,82	2	1.800	275	11,50	16	Z6	1,00

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T12-T13	760,00	27.026,82	2	1.800	275	11,50	16	Z9	Hinca
T12-T13	960,00	27.226,82	2	1.800	275	11,50	16	Z9	Hinca
T12-T13	961,00	27.227,82	2	1.800	275	14,00	16	Z2	0,33
T12-T13	973,00	27.239,82	2	1.800	275	14,00	16	Z2	0,33
T12-T13	974,00	27.240,82	2	1.800	275	14,00	16	Z1	0,33
T12-T13	975,00	27.241,82	2	1.800	275	14,00	16	Z1	0,33
T12-T13	976,00	27.242,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.234,00	27.500,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.235,00	27.501,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.245,00	27.511,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.246,00	27.512,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.302,00	27.568,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.303,00	27.569,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.313,00	27.579,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.314,00	27.580,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.834,00	28.100,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	1.835,00	28.101,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.845,00	28.111,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	1.846,00	28.112,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.414,00	28.680,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.415,00	28.681,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.425,00	28.691,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.426,00	28.692,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.574,00	28.840,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.575,00	28.841,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.585,00	28.851,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.586,00	28.852,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.904,00	29.170,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.905,00	29.171,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.915,00	29.181,82	2	1.800	275	11,50	16	Z5	0,33
T12-T13	2.916,00	29.182,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.930,00	29.196,82	2	1.800	275	11,50	16	Z1	0,33
T12-T13	2.931,00	29.197,82	2	1.800	275	15,00	16	Z1	0,33
T12-T13	2.932,00	29.198,82	2	1.800	275	15,00	16	Z2	0,33
T12-T13	3.012,00	29.278,82	2	1.800	275	15,00	16	Z2	0,33
T12-T13	3.012,82	29.279,64	2	1.800	275	15,00	16	Z1	0,33
T12-T13	3.251,00	29.517,82	2	1.800	275	15,00	16	Z1	0,33
T12-T13	3.252,00	29.518,82	2	1.800	275	15,00	16	Z2	0,33
T12-T13	3.270,00	29.536,82	2	1.800	275	15,00	16	Z2	0,33
T12-T13	3.271,00	29.537,82	2	1.800	275	15,00	16	Z1	0,33
T12-T13	3.282,00	29.548,82	2	1.800	275	15,00	16	Z1	0,33
T12-T13	3.283,00	29.549,82	2	1.800	275	12,50	16	Z1	0,33
T12-T13	3.604,00	29.870,82	2	1.800	275	12,50	16	Z1	0,33
T12-T13	3.605,00	29.871,82	2	1.800	275	12,50	16	Z5	0,33
T12-T13	3.615,00	29.881,82	2	1.800	275	12,50	16	Z5	0,33
T12-T13	3.616,00	29.882,82	2	1.800	275	12,50	16	Z1	0,33
T12-T13	3.829,00	30.095,82	2	1.800	275	12,50	16	Z1	0,33
T12-T13	3.830,00	30.096,82	2	1.800	355	12,50	25	Z1	0,33
T12-T13	4.259,00	30.525,82	2	1.800	355	12,50	25	Z1	0,33
T12-T13	4.260,00	30.526,82	2	1.800	355	12,50	25	Z6	0,33
T12-T13	4.284,00	30.550,82	2	1.800	355	12,50	25	Z6	0,33
T12-T13	4.285,00	30.551,82	2	1.800	355	12,50	25	Z5	0,33
T12-T13	4.295,00	30.561,82	2	1.800	355	12,50	25	Z5	0,33
T12-T13	4.296,00	30.562,82	2	1.800	355	12,50	25	Z6	0,33
T12-T13	4.600,00	30.866,82	2	1.800	355	12,50	25	Z6	0,33
T12-T13	4.601,00	30.867,82	2	1.800	355	12,50	25	Z6	1,00
T12-T13	4.676,00	30.942,82	2	1.800	355	12,50	25	Z6	1,00
T12-T13	4.677,00	30.943,82	2	1.800	355	13,00	25	Z6	1,00
T12-T13	4.799,00	31.065,82	2	1.800	355	13,00	25	Z6	1,00
T12-T13	4.800,00	31.066,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	4.884,00	31.150,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	4.885,00	31.151,82	2	1.800	355	13,00	25	Z5	1,00
T12-T13	4.895,00	31.161,82	2	1.800	355	13,00	25	Z5	1,00
T12-T13	4.896,00	31.162,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	5.013,00	31.279,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	5.014,00	31.280,82	2	1.800	355	13,00	25	Z4	1,00
T12-T13	5.060,00	31.326,82	2	1.800	355	13,00	25	Z4	1,00
T12-T13	5.061,00	31.327,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	5.200,00	31.466,82	2	1.800	355	13,00	25	Z1	1,00
T12-T13	5.201,00	31.467,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.234,00	31.500,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.235,00	31.501,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.245,00	31.511,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.246,00	31.512,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	5.270,00	31.536,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	5.271,00	31.537,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.454,00	31.720,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.455,00	31.721,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.465,00	31.731,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.466,00	31.732,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.665,00	31.931,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	5.666,00	31.932,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	5.685,00	31.951,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	5.686,00	31.952,82	2	1.800	355	13,00	25	Z10	0,00
T12-T13	5.701,00	31.967,82	2	1.800	355	13,00	25	Z10	0,00
T12-T13	5.701,37	31.968,20	2	1.800	355	13,00	25	Z9	Hinca
T12-T13	5.751,37	32.018,20	2	1.800	355	13,00	25	Z9	Hinca
T12-T13	5.752,00	32.018,82	2	1.800	355	13,00	25	Z10	0,00
T12-T13	5.766,00	32.032,82	2	1.800	355	13,00	25	Z10	0,00
T12-T13	5.767,00	32.033,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.775,00	32.041,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	5.776,00	32.042,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	5.791,00	32.057,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	5.792,00	32.058,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	6.330,00	32.596,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	6.331,00	32.597,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.341,00	32.607,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.342,00	32.608,82	2	1.800	355	13,00	25	Z1	1,50

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T12-T13	6.779,00	33.045,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	6.780,00	33.046,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	6.791,00	33.057,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	6.792,00	33.058,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.802,00	33.068,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.803,00	33.069,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	6.974,00	33.240,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	6.975,00	33.241,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.985,00	33.251,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	6.986,00	33.252,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.244,00	33.510,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.245,00	33.511,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.255,00	33.521,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.256,00	33.522,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	7.262,00	33.528,82	2	1.800	355	13,00	25	Z6	1,50
T12-T13	7.263,00	33.529,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.568,00	33.834,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.569,00	33.835,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.579,00	33.845,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.580,00	33.846,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.869,00	34.135,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	7.870,00	34.136,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.880,00	34.146,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	7.881,00	34.147,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.124,00	34.390,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.125,00	34.391,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.135,00	34.401,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.136,00	34.402,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.434,00	34.700,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.435,00	34.701,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.445,00	34.711,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.446,00	34.712,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.723,00	34.989,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.724,00	34.990,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.734,00	35.000,82	2	1.800	355	13,00	25	Z5	1,50
T12-T13	8.735,00	35.001,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.855,00	35.121,82	2	1.800	355	13,00	25	Z1	1,50
T12-T13	8.856,00	35.122,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	8.864,00	35.130,82	2	1.800	355	13,00	25	Z2	1,50
T12-T13	8.865,00	35.131,82	2	1.800	355	14,00	25	Z2	1,50
T12-T13	8.874,00	35.140,82	2	1.800	355	14,00	25	Z2	1,50
T12-T13	8.875,00	35.141,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	8.879,00	35.145,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	8.880,00	35.146,82	2	1.800	355	14,00	25	Z10	1,50
T12-T13	8.881,00	35.147,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	8.889,00	35.155,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	8.890,00	35.156,82	2	1.800	355	14,00	25	Z9	Hinca
T12-T13	9.390,00	35.656,82	2	1.800	355	14,00	25	Z9	Hinca
T12-T13	9.391,00	35.657,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.403,00	35.669,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.404,00	35.670,82	2	1.800	355	14,00	25	Z2	1,50
T12-T13	9.553,00	35.819,82	2	1.800	355	14,00	25	Z2	1,50
T12-T13	9.554,00	35.820,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.569,00	35.835,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.570,00	35.836,82	2	1.800	355	14,00	25	Z9	Hinca
T12-T13	9.620,00	35.886,82	2	1.800	355	14,00	25	Z9	Hinca
T12-T13	9.621,00	35.887,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.635,00	35.901,82	2	1.800	355	14,00	25	Z10	0,00
T12-T13	9.636,00	35.902,82	2	1.800	355	14,00	25	Z2	0,33
T12-T13	9.663,00	35.929,82	2	1.800	355	14,00	25	Z2	0,33
T12-T13	9.664,00	35.930,82	2	1.800	355	14,00	25	Z1	0,33
T12-T13	9.704,00	35.970,82	2	1.800	355	14,00	25	Z1	0,33
T12-T13	9.705,00	35.971,82	2	1.800	355	14,00	25	Z5	0,33
T12-T13	9.717,00	35.983,82	2	1.800	355	14,00	25	Z5	0,33
T12-T13	9.718,00	35.984,82	2	1.800	355	14,00	25	Z1	0,33
T12-T13	9.908,00	36.174,82	2	1.800	355	14,00	25	Z1	0,33
T12-T13	9.909,00	36.175,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.174,00	36.440,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.175,00	36.441,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.185,00	36.451,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.186,00	36.452,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.374,00	36.640,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.375,00	36.641,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.385,00	36.651,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.386,00	36.652,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.644,00	36.910,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.645,00	36.911,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.655,00	36.921,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.656,00	36.922,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.854,00	37.120,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	10.855,00	37.121,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.865,00	37.131,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	10.866,00	37.132,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	11.083,00	37.349,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	11.084,00	37.350,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	11.094,00	37.360,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	11.095,00	37.361,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	11.450,00	37.716,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	11.451,00	37.717,82	2	1.800	355	11,50	25	Z1	1,50
T12-T13	11.544,00	37.810,82	2	1.800	355	11,50	25	Z1	1,50
T12-T13	11.545,00	37.811,82	2	1.800	355	11,50	25	Z5	1,50
T12-T13	11.555,00	37.821,82	2	1.800	355	11,50	25	Z5	1,50
T12-T13	11.556,00	37.822,82	2	1.800	355	11,50	25	Z6	1,50
T12-T13	11.565,00	37.831,82	2	1.800	355	11,50	25	Z6	1,50
T12-T13	11.566,00	37.832,82	2	1.800	355	11,50	25	Z1	1,50
T12-T13	11.600,00	37.866,82	2	1.800	355	11,50	25	Z1	1,50
T12-T13	11.601,00	37.867,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	11.964,00	38.230,82	2	1.800	355	11,50	25	Z1	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T12-T13	11.965,00	38.231,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	11.975,00	38.241,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	11.976,00	38.242,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	12.314,00	38.580,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	12.315,00	38.581,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	12.325,00	38.591,82	2	1.800	355	11,50	25	Z5	0,33
T12-T13	12.326,00	38.592,82	2	1.800	355	11,50	25	Z1	0,33
T12-T13	12.500,00	38.766,82	2	1.800	355	11,50	25	Z1	0,33
T13-T13B	0,00	38.766,82	2	1.800	355	11,50	25	Z1	1,00
T13-T13B	36,00	38.802,82	2	1.800	355	11,50	25	Z1	1,00
T13-T13B	37,00	38.803,82	2	1.800	355	11,50	25	Z8	1,00
T13-T13B	102,00	38.868,82	2	1.800	355	11,50	25	Z8	1,00
T13-T13B	103,00	38.869,82	2	1.800	355	11,50	25	Z1	1,00
T13-T13B	150,00	38.916,82	2	1.800	355	11,50	25	Z1	1,00
T13-T13B	151,00	38.917,82	2	1.800	355	11,50	25	Z1	0,33
T13-T13B	574,00	39.340,82	2	1.800	355	11,50	25	Z1	0,33
T13-T13B	575,00	39.341,82	2	1.800	355	11,50	25	Z5	0,33
T13-T13B	585,00	39.351,82	2	1.800	355	11,50	25	Z5	0,33
T13-T13B	586,00	39.352,82	2	1.800	355	11,50	25	Z1	0,33
T13-T13B	881,00	39.647,82	2	1.800	355	11,50	25	Z1	0,33
T13-T13B	882,00	39.648,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.105,00	39.871,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.106,00	39.872,82	2	1.800	275	11,50	16	Z2	0,33
T13-T13B	1.129,00	39.895,82	2	1.800	275	11,50	16	Z2	0,33
T13-T13B	1.130,00	39.896,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.144,00	39.910,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.145,00	39.911,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	1.155,00	39.921,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	1.156,00	39.922,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.244,00	40.010,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.245,00	40.011,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	1.255,00	40.021,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	1.256,00	40.022,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.671,00	40.437,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.672,00	40.438,82	2	1.800	275	11,50	16	Z11	0,67
T13-T13B	1.713,00	40.479,82	2	1.800	275	11,50	16	Z11	0,67
T13-T13B	1.714,00	40.480,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.720,00	40.486,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	1.721,00	40.487,82	2	1.800	275	11,50	16	Z3	0,33
T13-T13B	1.863,00	40.629,82	2	1.800	275	11,50	16	Z3	0,33
T13-T13B	1.864,00	40.630,82	2	1.800	275	11,50	16	Z6	0,33
T13-T13B	1.889,00	40.655,82	2	1.800	275	11,50	16	Z6	0,33
T13-T13B	1.890,00	40.656,82	2	1.800	275	11,50	16	Z3	0,33
T13-T13B	1.900,00	40.666,82	2	1.800	275	11,50	16	Z3	0,33
T13-T13B	1.901,00	40.667,82	2	1.800	275	11,50	16	Z3	1,00
T13-T13B	2.365,00	41.131,82	2	1.800	275	11,50	16	Z3	1,00
T13-T13B	2.366,00	41.132,82	2	1.800	275	11,50	16	Z1	1,00
T13-T13B	2.379,00	41.145,82	2	1.800	275	11,50	16	Z1	1,00
T13-T13B	2.380,00	41.146,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.524,00	41.290,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.525,00	41.291,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	2.535,00	41.301,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	2.536,00	41.302,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.802,00	41.568,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.802,74	41.569,57	2	1.800	275	11,50	16	Z4	0,33
T13-T13B	2.820,00	41.586,82	2	1.800	275	11,50	16	Z4	0,33
T13-T13B	2.821,00	41.587,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.964,00	41.730,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	2.965,00	41.731,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	2.975,00	41.741,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	2.976,00	41.742,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.194,00	41.960,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.195,00	41.961,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.205,00	41.971,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.206,00	41.972,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.374,00	42.140,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.375,00	42.141,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.385,00	42.151,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.386,00	42.152,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.495,00	42.261,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.496,00	42.262,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.506,00	42.272,82	2	1.800	275	11,50	16	Z5	0,33
T13-T13B	3.507,00	42.273,82	2	1.800	275	11,50	16	Z1	0,33
T13-T13B	3.640,00	42.406,82	2	1.800	275	11,50	16	Z1	0,33
T13B-BT	0,00	42.406,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	18,00	42.424,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	19,00	42.425,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	55,00	42.461,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	56,00	42.462,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	74,00	42.480,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	75,00	42.481,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	85,00	42.491,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	86,00	42.492,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	157,00	42.563,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	158,00	42.564,82	2	1.600	275	12,50	16	Z4	0,33
T13B-BT	254,00	42.660,82	2	1.600	275	12,50	16	Z4	0,33
T13B-BT	255,00	42.661,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	290,00	42.696,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	291,00	42.697,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	292,00	42.698,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	594,00	43.000,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	595,00	43.001,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	605,00	43.011,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	606,00	43.012,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	644,00	43.050,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	645,00	43.051,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	655,00	43.061,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	656,00	43.062,82	2	1.600	275	10,00	16	Z1	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T13B-BT	854,00	43.260,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	855,00	43.261,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	865,00	43.271,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	866,00	43.272,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	1.224,00	43.630,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	1.225,00	43.631,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	1.235,00	43.641,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	1.236,00	43.642,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	1.494,00	43.900,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	1.495,00	43.901,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	1.505,00	43.911,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	1.506,00	43.912,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	1.507,00	43.913,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.510,00	43.916,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.511,00	43.917,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	1.595,00	44.001,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	1.596,00	44.002,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.864,00	44.270,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.865,00	44.271,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	1.875,00	44.281,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	1.876,00	44.282,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.955,00	44.361,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	1.956,00	44.362,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	1.966,00	44.372,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	1.967,00	44.373,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	2.018,00	44.424,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	2.019,00	44.425,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.324,00	44.730,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.325,00	44.731,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	2.335,00	44.741,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	2.336,00	44.742,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.550,00	44.956,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.551,00	44.957,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	2.604,00	45.010,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	2.605,00	45.011,82	2	1.600	275	10,00	16	Z5	1,00
T13B-BT	2.615,00	45.021,82	2	1.600	275	10,00	16	Z5	1,00
T13B-BT	2.616,00	45.022,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	2.700,00	45.106,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	2.701,00	45.107,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.824,00	45.230,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	2.825,00	45.231,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	2.835,00	45.241,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	2.836,00	45.242,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	3.020,00	45.426,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	3.021,00	45.427,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.024,00	45.430,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.025,00	45.431,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	3.072,00	45.478,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	3.073,00	45.479,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.154,00	45.560,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.155,00	45.561,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.165,00	45.571,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.166,00	45.572,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.284,00	45.690,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.285,00	45.691,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.295,00	45.701,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.296,00	45.702,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.404,00	45.810,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.405,00	45.811,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.415,00	45.821,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.416,00	45.822,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.594,00	46.000,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.595,00	46.001,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.605,00	46.011,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.606,00	46.012,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.915,00	46.321,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	3.916,00	46.322,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.926,00	46.332,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	3.927,00	46.333,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	4.141,00	46.547,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	4.142,00	46.548,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	4.177,00	46.583,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	4.178,00	46.584,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	4.179,00	46.585,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	4.180,00	46.586,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.224,00	46.630,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.225,00	46.631,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.235,00	46.641,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.236,00	46.642,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.604,00	47.010,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.605,00	47.011,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.615,00	47.021,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.616,00	47.022,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.955,00	47.361,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	4.956,00	47.362,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.966,00	47.372,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	4.967,00	47.373,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.084,00	47.490,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.085,00	47.491,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	5.095,00	47.501,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	5.096,00	47.502,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.346,00	47.752,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.347,00	47.753,82	2	1.600	275	16,00	16	Z1	0,33
T13B-BT	5.348,00	47.754,82	2	1.600	275	16,00	16	Z1	0,33
T13B-BT	5.349,00	47.755,82	2	1.600	275	16,00	16	Z2	0,33
T13B-BT	5.371,00	47.777,82	2	1.600	275	16,00	16	Z2	0,33
T13B-BT	5.372,00	47.778,82	2	1.600	275	16,00	16	Z3	0,33
T13B-BT	5.393,00	47.799,82	2	1.600	275	16,00	16	Z3	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T13B-BT	5.393,98	47.800,81	2	1.600	275	12,50	16	Z9	Hinca
T13B-BT	5.508,98	47.915,81	2	1.600	275	12,50	16	Z9	Hinca
T13B-BT	5.509,00	47.915,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	5.524,00	47.930,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	5.525,00	47.931,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	5.535,00	47.941,82	2	1.600	275	12,50	16	Z5	0,33
T13B-BT	5.536,00	47.942,82	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	5.544,69	47.951,51	2	1.600	275	12,50	16	Z2	0,33
T13B-BT	5.545,00	47.951,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	5.774,00	48.180,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	5.775,00	48.181,82	2	1.600	275	12,50	16	Z4	0,33
T13B-BT	5.781,00	48.187,82	2	1.600	275	12,50	16	Z4	0,33
T13B-BT	5.782,00	48.188,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	5.875,00	48.281,82	2	1.600	275	12,50	16	Z1	0,33
T13B-BT	5.876,00	48.282,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.984,00	48.390,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	5.985,00	48.391,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	5.995,00	48.401,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	5.996,00	48.402,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.274,00	48.680,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.275,00	48.681,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.285,00	48.691,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.286,00	48.692,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.554,00	48.960,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.555,00	48.961,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.565,00	48.971,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.566,00	48.972,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.674,00	49.080,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.675,00	49.081,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.685,00	49.091,82	2	1.600	275	10,00	16	Z5	0,33
T13B-BT	6.686,00	49.092,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.750,00	49.156,82	2	1.600	275	10,00	16	Z1	0,33
T13B-BT	6.751,00	49.157,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	6.890,00	49.296,82	2	1.600	275	10,00	16	Z1	1,00
T13B-BT	6.890,62	49.297,44	2	1.600	275	10,00	16	Z5	1,00
T13B-BT	6.927,73	49.334,55	2	1.600	275	10,00	16	Z5	1,00
BT-DC	0,00	49.334,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	64,00	49.398,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	65,00	49.399,55	2	1.900	275	13,00	16	Z5	1,00
BT-DC	75,00	49.409,55	2	1.900	275	13,00	16	Z5	1,00
BT-DC	76,00	49.410,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	120,00	49.454,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	121,00	49.455,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	164,00	49.498,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	165,00	49.499,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	175,00	49.509,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	176,00	49.510,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	444,00	49.778,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	445,00	49.779,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	455,00	49.789,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	456,00	49.790,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	644,00	49.978,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	645,00	49.979,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	655,00	49.989,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	656,00	49.990,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	914,00	50.248,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	915,00	50.249,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	925,00	50.259,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	926,00	50.260,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	974,00	50.308,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	975,00	50.309,55	2	1.900	275	13,00	16	Z6	0,33
BT-DC	990,00	50.324,55	2	1.900	275	13,00	16	Z6	0,33
BT-DC	991,00	50.325,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	1.009,00	50.343,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	1.010,00	50.344,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	1.020,00	50.354,55	2	1.900	275	13,00	16	Z5	0,33
BT-DC	1.021,00	50.355,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	1.060,00	50.394,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	1.061,00	50.395,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	1.114,00	50.448,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	1.115,00	50.449,55	2	1.900	275	13,00	16	Z5	1,00
BT-DC	1.125,00	50.459,55	2	1.900	275	13,00	16	Z5	1,00
BT-DC	1.126,00	50.460,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	1.150,00	50.484,55	2	1.900	275	13,00	16	Z1	1,00
BT-DC	1.151,00	50.485,55	2	1.900	275	13,00	16	Z1	0,33
BT-DC	1.644,48	50.979,03	2	1.900	275	13,00	16	Z1	0,33
DC-T17	0,00	50.979,03	2	1.800	275	14,00	16	Z1	0,33
DC-T17	10,00	50.989,03	2	1.800	275	14,00	16	Z1	0,33
DC-T17	11,00	50.990,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	39,00	51.018,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	40,00	51.019,03	2	1.800	275	14,00	16	Z9	Hinca
DC-T17	80,00	51.059,03	2	1.800	275	14,00	16	Z9	Hinca
DC-T17	81,00	51.060,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	84,00	51.063,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	85,00	51.064,03	2	1.800	275	14,00	16	Z5	0,33
DC-T17	95,00	51.074,03	2	1.800	275	14,00	16	Z5	0,33
DC-T17	96,00	51.075,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	103,00	51.082,03	2	1.800	275	14,00	16	Z2	0,33
DC-T17	104,00	51.083,03	2	1.800	275	14,00	16	Z1	0,33
DC-T17	106,00	51.085,03	2	1.800	275	14,00	16	Z1	0,33
DC-T17	107,00	51.086,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	344,00	51.323,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	345,00	51.324,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	355,00	51.334,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	356,00	51.335,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	529,00	51.508,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	530,00	51.509,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	540,00	51.519,03	2	1.800	275	11,50	16	Z5	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
DC-T17	541,00	51.520,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	550,00	51.529,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	551,00	51.530,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.014,00	51.993,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.015,00	51.994,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.025,00	52.004,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.026,00	52.005,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.164,00	52.143,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.165,00	52.144,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.175,00	52.154,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.176,00	52.155,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.325,00	52.304,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.326,00	52.305,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	1.336,00	52.315,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	1.337,00	52.316,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.544,00	52.523,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.545,00	52.524,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.555,00	52.534,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.556,00	52.535,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.744,00	52.723,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	1.745,00	52.724,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.755,00	52.734,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	1.756,00	52.735,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	1.800,00	52.779,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	1.801,00	52.780,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.177,00	53.156,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.178,00	53.157,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.184,00	53.163,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.185,00	53.164,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.195,00	53.174,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.196,00	53.175,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.374,00	53.353,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.375,00	53.354,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.384,00	53.363,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.385,00	53.364,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.395,00	53.374,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.396,00	53.375,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.454,00	53.433,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.455,00	53.434,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.465,00	53.444,03	2	1.800	275	11,50	16	Z5	0,33
DC-T17	2.466,00	53.445,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.472,00	53.451,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.473,00	53.452,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.674,00	53.653,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.675,00	53.654,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.690,00	53.669,03	2	1.800	275	11,50	16	Z6	0,33
DC-T17	2.691,00	53.670,03	2	1.800	275	11,50	16	Z1	0,33
DC-T17	2.730,00	53.709,03	2	1.800	275	11,50	16	Z1	0,33
T17-T18	0,00	53.709,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	129,00	53.838,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	130,00	53.839,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	141,00	53.850,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	142,00	53.851,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	254,00	53.963,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	255,00	53.964,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	265,00	53.974,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	266,00	53.975,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	349,00	54.058,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	350,00	54.059,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	357,00	54.066,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	358,00	54.067,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	604,00	54.313,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	605,00	54.314,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	615,00	54.324,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	616,00	54.325,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	714,00	54.423,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	715,00	54.424,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	725,00	54.434,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	726,00	54.435,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	732,00	54.441,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	733,00	54.442,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	814,00	54.523,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	815,00	54.524,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	825,00	54.534,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	826,00	54.535,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	839,00	54.548,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	840,00	54.549,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.049,00	54.758,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.050,00	54.759,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.060,00	54.769,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.061,00	54.770,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.121,00	54.830,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.122,00	54.831,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.132,00	54.841,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.133,00	54.842,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.281,00	54.990,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.282,00	54.991,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.292,00	55.001,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.293,00	55.002,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.301,00	55.010,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.302,00	55.011,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.334,00	55.043,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.335,00	55.044,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.345,00	55.054,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.346,00	55.055,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.474,00	55.183,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.475,00	55.184,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.485,00	55.194,03	2	1.600	275	10,00	16	Z5	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T17-T18	1.486,00	55.195,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.549,00	55.258,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.550,00	55.259,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.561,00	55.270,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.562,00	55.271,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.739,00	55.448,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.740,00	55.449,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.751,00	55.460,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	1.752,00	55.461,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.867,00	55.576,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	1.868,00	55.577,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.878,00	55.587,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	1.879,00	55.588,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.124,00	55.833,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.125,00	55.834,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.135,00	55.844,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.136,00	55.845,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.149,00	55.858,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.150,00	55.859,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.160,00	55.869,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.161,00	55.870,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.304,00	56.013,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.305,00	56.014,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.315,00	56.024,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.316,00	56.025,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.319,00	56.028,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.320,00	56.029,03	2	1.600	275	12,50	16	Z1	0,33
T17-T18	2.322,00	56.031,03	2	1.600	275	12,50	16	Z1	0,33
T17-T18	2.323,00	56.032,03	2	1.600	275	12,50	16	Z2	0,33
T17-T18	2.351,00	56.060,03	2	1.600	275	12,50	16	Z2	0,33
T17-T18	2.352,00	56.061,03	2	1.600	275	12,50	16	Z1	0,33
T17-T18	2.353,00	56.062,03	2	1.600	275	12,50	16	Z1	0,33
T17-T18	2.354,00	56.063,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.359,00	56.068,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.360,00	56.069,03	2	1.600	275	10,00	16	Z11	0,67
T17-T18	2.390,00	56.099,03	2	1.600	275	10,00	16	Z11	0,67
T17-T18	2.391,00	56.100,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.459,00	56.168,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.460,00	56.169,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.471,00	56.180,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.472,00	56.181,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.644,00	56.353,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.645,00	56.354,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.654,00	56.363,03	2	1.600	275	10,00	16	Z6	0,33
T17-T18	2.655,00	56.364,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.665,00	56.374,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.666,00	56.375,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.938,00	56.647,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	2.939,00	56.648,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.949,00	56.658,03	2	1.600	275	10,00	16	Z5	0,33
T17-T18	2.950,00	56.659,03	2	1.600	275	10,00	16	Z1	0,33
T17-T18	3.230,00	56.939,03	2	1.600	275	10,00	16	Z1	0,33
T18-T19	0,00	56.939,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	64,00	57.003,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	65,00	57.004,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	75,00	57.014,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	76,00	57.015,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	367,00	57.306,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	368,00	57.307,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	378,00	57.317,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	379,00	57.318,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	614,00	57.553,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	615,00	57.554,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	625,00	57.564,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	626,00	57.565,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.064,00	58.003,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.065,00	58.004,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	1.075,00	58.014,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	1.076,00	58.015,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.134,00	58.073,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.135,00	58.074,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.145,00	58.084,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.146,00	58.085,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.227,00	58.166,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.228,00	58.167,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.238,00	58.177,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.239,00	58.178,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.420,00	58.359,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	1.421,00	58.360,03	1	1.800	275	11,50	16	Z11	0,67
T18-T19	1.437,00	58.376,03	1	1.800	275	11,50	16	Z11	0,67
T18-T19	1.438,00	58.377,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.445,00	58.384,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	1.446,00	58.385,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	2.164,00	59.103,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	2.165,00	59.104,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	2.175,00	59.114,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	2.176,00	59.115,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	2.324,00	59.263,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	2.325,00	59.264,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	2.335,00	59.274,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	2.336,00	59.275,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.106,00	60.045,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.107,00	60.046,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.117,00	60.056,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.118,00	60.057,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.278,00	60.217,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.279,00	60.218,03	1	1.800	275	18,00	16	Z1	0,33
T18-T19	3.280,00	60.219,03	1	1.800	275	18,00	16	Z2	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T18-T19	3.324,00	60.263,03	1	1.800	275	18,00	16	Z2	0,33
T18-T19	3.325,00	60.264,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.335,00	60.274,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.336,00	60.275,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.400,00	60.339,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.401,00	60.340,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	3.524,00	60.463,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	3.525,00	60.464,03	1	1.800	275	11,50	16	Z5	1,00
T18-T19	3.535,00	60.474,03	1	1.800	275	11,50	16	Z5	1,00
T18-T19	3.536,00	60.475,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	3.625,00	60.564,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	3.626,00	60.565,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.669,00	60.608,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	3.670,00	60.609,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.680,00	60.619,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	3.681,00	60.620,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.029,00	60.968,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.030,00	60.969,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.040,00	60.979,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.041,00	60.980,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.665,00	61.604,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.666,00	61.605,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.676,00	61.615,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.677,00	61.616,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.706,00	61.645,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.707,00	61.646,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	4.717,00	61.656,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	4.717,54	61.656,57	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.905,00	61.844,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	4.906,00	61.845,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	4.914,00	61.853,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	4.915,00	61.854,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.925,00	61.864,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	4.926,00	61.865,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.000,00	61.939,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.001,00	61.940,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	5.211,00	62.150,03	1	1.800	275	11,50	16	Z1	1,00
T18-T19	5.212,00	62.151,03	1	1.800	275	11,50	16	Z6	1,00
T18-T19	5.225,00	62.164,03	1	1.800	275	11,50	16	Z6	1,00
T18-T19	5.226,00	62.165,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.304,00	62.243,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.305,00	62.244,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.315,00	62.254,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.316,00	62.255,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.364,00	62.303,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.365,00	62.304,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	5.375,00	62.314,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	5.376,00	62.315,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.484,00	62.423,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.485,00	62.424,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.494,00	62.433,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.495,00	62.434,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	5.505,00	62.444,03	1	1.800	275	11,50	16	Z5	0,33
T18-T19	5.506,00	62.445,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.559,00	62.498,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.560,00	62.499,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.570,00	62.509,03	1	1.800	275	11,50	16	Z6	0,33
T18-T19	5.571,00	62.510,03	1	1.800	275	11,50	16	Z1	0,33
T18-T19	5.610,00	62.549,03	1	1.800	275	11,50	16	Z1	0,33
T19-T20	0,00	62.549,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	71,00	62.620,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	72,00	62.621,03	1	1.500	275	10,50	16	Z6	0,33
T19-T20	82,00	62.631,03	1	1.500	275	10,50	16	Z6	0,33
T19-T20	83,00	62.632,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	225,00	62.774,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	226,00	62.775,03	1	1.500	275	10,50	16	Z2	0,33
T19-T20	267,00	62.816,03	1	1.500	275	10,50	16	Z2	0,33
T19-T20	268,00	62.817,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	334,00	62.883,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	335,00	62.884,03	1	1.500	275	10,50	16	Z5	0,33
T19-T20	345,00	62.894,03	1	1.500	275	10,50	16	Z5	0,33
T19-T20	346,00	62.895,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	416,00	62.965,03	1	1.500	275	10,50	16	Z1	0,33
T19-T20	417,00	62.966,03	1	1.500	275	10,50	16	Z2	0,33
T19-T20	450,00	62.999,03	1	1.500	275	10,50	16	Z2	0,33
T19-T20	451,00	63.000,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	485,00	63.034,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	486,00	63.035,03	1	1.500	275	16,00	16	Z6	0,33
T19-T20	492,00	63.041,03	1	1.500	275	16,00	16	Z6	0,33
T19-T20	493,00	63.042,03	1	1.500	275	16,00	16	Z5	0,33
T19-T20	503,00	63.052,03	1	1.500	275	16,00	16	Z5	0,33
T19-T20	504,00	63.053,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	509,00	63.058,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	510,00	63.059,03	1	1.500	275	16,00	16	Z3	0,33
T19-T20	659,00	63.208,03	1	1.500	275	16,00	16	Z3	0,33
T19-T20	660,00	63.209,03	1	1.500	275	16,00	16	Z6	0,33
T19-T20	690,00	63.239,03	1	1.500	275	16,00	16	Z6	0,33
T19-T20	691,00	63.240,03	1	1.500	275	16,00	16	Z3	0,33
T19-T20	772,00	63.321,03	1	1.500	275	16,00	16	Z3	0,33
T19-T20	773,00	63.322,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	896,00	63.445,03	1	1.500	275	16,00	16	Z2	0,33
T19-T20	897,00	63.446,03	1	1.500	275	16,00	16	Z1	0,33
T19-T20	918,00	63.467,03	1	1.500	275	16,00	16	Z1	0,33
T19-T20	919,00	63.468,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	984,00	63.533,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	985,00	63.534,03	1	1.500	275	9,50	16	Z5	0,33
T19-T20	995,00	63.544,03	1	1.500	275	9,50	16	Z5	0,33
T19-T20	996,00	63.545,03	1	1.500	275	9,50	16	Z1	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Tímbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T19-T20	1.182,00	63.731,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	1.183,00	63.732,03	1	1.500	275	9,50	16	Z6	0,33
T19-T20	1.193,00	63.742,03	1	1.500	275	9,50	16	Z6	0,33
T19-T20	1.194,00	63.743,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	1.430,00	63.979,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	1.431,00	63.980,03	1	1.500	275	9,50	16	Z1	1,00
T19-T20	1.750,00	64.299,03	1	1.500	275	9,50	16	Z1	1,00
T19-T20	1.751,00	64.300,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	1.794,00	64.343,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	1.795,00	64.344,03	1	1.500	275	9,50	16	Z5	0,33
T19-T20	1.805,00	64.354,03	1	1.500	275	9,50	16	Z5	0,33
T19-T20	1.806,00	64.355,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	2.199,00	64.748,03	1	1.500	275	9,50	16	Z1	0,33
T19-T20	2.200,00	64.749,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.279,00	64.828,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.280,00	64.829,03	1	1.500	275	9,50	16	Z7	1,50
T19-T20	2.295,00	64.844,03	1	1.500	275	9,50	16	Z7	1,50
T19-T20	2.296,00	64.845,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.304,00	64.853,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.305,00	64.854,03	1	1.500	275	9,50	16	Z5	1,50
T19-T20	2.315,00	64.864,03	1	1.500	275	9,50	16	Z5	1,50
T19-T20	2.316,00	64.865,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.400,00	64.949,03	1	1.500	275	9,50	16	Z1	1,50
T19-T20	2.401,00	64.950,03	1	1.500	275	9,50	16	Z1	1,00
T19-T20	2.440,00	64.989,03	1	1.500	275	9,50	16	Z1	1,00
T20-T21	0,00	64.989,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	39,00	65.028,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	40,00	65.029,03	1	1.300	275	8,00	16	Z4	1,00
T20-T21	55,00	65.044,03	1	1.300	275	8,00	16	Z4	1,00
T20-T21	56,00	65.045,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	204,00	65.193,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	205,00	65.194,03	1	1.300	275	8,00	16	Z5	1,00
T20-T21	215,00	65.204,03	1	1.300	275	8,00	16	Z5	1,00
T20-T21	216,00	65.205,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	575,00	65.564,03	1	1.300	275	8,00	16	Z1	1,00
T20-T21	576,00	65.565,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	804,00	65.793,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	805,00	65.794,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	815,00	65.804,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	816,00	65.805,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.074,00	66.063,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.075,00	66.064,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	1.085,00	66.074,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	1.086,00	66.075,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.564,00	66.553,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.565,00	66.554,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	1.575,00	66.564,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	1.576,00	66.565,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.654,00	66.643,03	1	1.300	275	8,00	16	Z1	0,33
T20-T21	1.655,00	66.644,03	1	1.300	275	8,00	16	Z5	0,33
T20-T21	1.656,00	66.645,03	1	1.300	275	10,00	16	Z5	0,33
T20-T21	1.665,00	66.654,03	1	1.300	275	10,00	16	Z5	0,33
T20-T21	1.666,00	66.655,03	1	1.300	275	10,00	16	Z2	0,33
T20-T21	1.837,00	66.826,03	1	1.300	275	10,00	16	Z2	0,33
T20-T21	1.838,00	66.827,03	1	1.300	275	10,00	16	Z1	0,33
T20-T21	2.055,00	67.044,03	1	1.300	275	10,00	16	Z1	0,33
DC-T16	0,00	0,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	25,00	25,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	26,00	26,00	1	1.800	275	11,50	16	Z5	0,33
DC-T16	36,00	36,00	1	1.800	275	11,50	16	Z5	0,33
DC-T16	37,00	37,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	572,00	572,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	573,00	573,00	1	1.800	275	18,00	16	Z1	0,33
DC-T16	575,00	575,00	1	1.800	275	18,00	16	Z1	0,33
DC-T16	576,00	576,00	1	1.800	275	18,00	16	Z2	0,33
DC-T16	651,00	651,00	1	1.800	275	18,00	16	Z2	0,33
DC-T16	652,00	652,00	1	1.800	275	18,00	16	Z3	0,33
DC-T16	742,00	742,00	1	1.800	275	18,00	16	Z3	0,33
DC-T16	743,00	743,00	1	1.800	275	18,00	16	Z2	0,33
DC-T16	879,00	879,00	1	1.800	275	18,00	16	Z2	0,33
DC-T16	880,00	880,00	1	1.800	275	18,00	16	Z1	0,33
DC-T16	883,00	883,00	1	1.800	275	18,00	16	Z1	0,33
DC-T16	884,00	884,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	954,00	954,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	955,00	955,00	1	1.800	275	11,50	16	Z5	0,33
DC-T16	965,00	965,00	1	1.800	275	11,50	16	Z5	0,33
DC-T16	966,00	966,00	1	1.800	275	11,50	16	Z1	0,33
DC-T16	1.150,00	1.150,00	1	1.800	275	11,50	16	Z1	0,33
T16-T14	0,00	1.150,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	28,00	1.178,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	29,00	1.179,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	36,00	1.186,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	37,00	1.187,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	339,00	1.489,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	340,00	1.490,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	350,00	1.500,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	351,00	1.501,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	469,72	1.619,72	1	1.600	275	10,00	16	Z1	0,33
T16-T14	470,00	1.620,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	480,00	1.630,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	481,00	1.631,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	744,00	1.894,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	745,00	1.895,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	755,00	1.905,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	756,00	1.906,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.021,00	2.171,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.022,00	2.172,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	1.032,00	2.182,00	1	1.600	275	10,00	16	Z5	0,33

TABLA DE TRAMIFICACIÓN COMPUESTA: CONDUCCIÓN Y TIPO DE ZANJA									
Tramo	P.K. tramo	P.K. Acumulado	Nº tuberías	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	Zanja tipo asignada	Talud HV
T16-T14	1.033,00	2.183,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.066,00	2.216,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.067,00	2.217,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	1.077,00	2.227,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	1.078,00	2.228,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.389,00	2.539,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.390,00	2.540,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	1.400,00	2.550,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	1.401,00	2.551,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.724,00	2.874,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	1.725,00	2.875,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	1.735,00	2.885,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	1.736,00	2.886,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.154,00	3.304,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.155,00	3.305,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.165,00	3.315,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.166,00	3.316,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.199,00	3.349,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.200,00	3.350,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	2.210,00	3.360,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	2.211,00	3.361,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.654,00	3.804,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.655,00	3.805,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	2.664,00	3.814,00	1	1.600	275	10,00	16	Z6	0,33
T16-T14	2.665,00	3.815,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.675,00	3.825,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.676,00	3.826,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.874,00	4.024,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	2.875,00	4.025,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.885,00	4.035,00	1	1.600	275	10,00	16	Z5	0,33
T16-T14	2.886,00	4.036,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	3.048,00	4.198,00	1	1.600	275	10,00	16	Z1	0,33
T16-T14	3.049,00	4.199,00	1	1.600	275	12,50	16	Z1	0,33
T16-T14	3.054,00	4.204,00	1	1.600	275	12,50	16	Z1	0,33
T16-T14	3.055,00	4.205,00	1	1.600	275	12,50	16	Z5	0,33
T16-T14	3.067,00	4.217,00	1	1.600	275	12,50	16	Z5	0,33
T16-T14	3.068,00	4.218,00	1	1.600	275	12,50	16	Z10	0,00
T16-T14	3.082,00	4.232,00	1	1.600	275	12,50	16	Z10	0,00
T16-T14	3.082,06	4.232,06	1	1.600	275	12,50	16	Z9	Hinca
T16-T14	3.132,06	4.282,06	1	1.600	275	12,50	16	Z9	Hinca
T16-T14	3.133,00	4.283,00	1	1.600	275	12,50	16	Z10	0,00
T16-T14	3.134,00	4.284,00	1	1.600	275	12,50	16	Z10	1,00
T16-T14	3.146,00	4.296,00	1	1.600	275	12,50	16	Z10	1,00
T16-T14	3.147,00	4.297,00	1	1.600	275	12,50	16	Z1	1,00

5. APÉNDICE -7.1.2: LISTADO DE REPLANTEO DE LA CONDUCCIÓN

Nota: Se adjunto listado de replanteo c/ 20 m por considerarse suficientemente representativo ya que el listado de todos los puntos y sus curvaturas daría lugar a listados demasiados extensos . La información completa por metro se adjunta digitalmente. Adicionalmente se han incluido elementos y puntos singulares.

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	C. Rasante Hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadura tipo	Altura de excavación a TN (m)	Zanja tipo asignada	
CN-T11	0.00	0.00	Rec	620.841.80	4.698.029.18	0	456.56	453.06	3.50	-7.79%	128.45908									INICIO	INICIO		2	2.000	2.032	275	15.00	16						3.70	Z1		
CN-T11	20.00	20.00	Rec	620.859.84	4.698.020.54	0	455.78	451.50	4.28	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						4.48	Z1		
CN-T11	40.00	40.00	Rec	620.877.87	4.698.011.89	0	455.05	449.95	5.10	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						5.30	Z1		
CN-T11	60.00	60.00	Rec	620.895.90	4.698.003.24	0	454.17	448.39	5.79	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						5.99	Z1		
CN-T11	80.00	80.00	Rec	620.913.94	4.697.994.60	0	450.39	446.83	3.56	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						3.76	Z1		
CN-T11	100.00	100.00	Rec	620.931.97	4.697.985.95	0	449.28	445.27	4.00	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						4.20	Z1		
CN-T11	120.00	120.00	Rec	620.950.01	4.697.977.31	0	448.24	443.72	4.52	-7.79%	128.45908												2	2.000	2.032	275	15.00	16						4.72	Z1		
CN-T11	140.00	140.00	Rec	620.968.04	4.697.968.66	0	446.85	442.42	4.44	-4.14%	128.45908	V.				0.15	N/A						2	2.000	2.032	275	15.00	16						4.64	Z1		
CN-T11	160.00	160.00	Rec	620.986.08	4.697.960.01	0	447.08	442.06	5.02	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						5.22	Z1		
CN-T11	180.00	180.00	Rec	621.004.11	4.697.951.37	0	448.04	441.96	6.08	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						6.28	Z1		
CN-T11	200.00	200.00	Rec	621.022.15	4.697.942.72	0	446.50	441.86	4.64	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						4.84	Z1		
CN-T11	214.00	214.00	Rec	621.034.77	4.697.936.67	0	447.66	441.79	5.87	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						6.07	Z1		
CN-T11	215.00	215.00	Rec	621.035.67	4.697.936.24	0	447.80	441.79	6.02	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						6.22	Z2		
CN-T11	220.00	220.00	Rec	621.040.18	4.697.934.08	0	448.24	441.76	6.48	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						6.68	Z2		
CN-T11	240.00	240.00	Rec	621.058.22	4.697.925.43	0	450.01	441.66	8.35	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						8.55	Z2		
CN-T11	260.00	260.00	Rec	621.076.25	4.697.916.78	0	449.71	441.56	8.15	-0.50%	128.45908												2	2.000	2.032	275	15.00	16						8.35	Z2		
CN-T11	280.00	280.00	Rec	621.094.29	4.697.908.14	0	448.21	441.42	6.79	-2.50%	128.45908												2	2.000	2.032	275	15.00	16						6.99	Z2		
CN-T11	280.00	280.00	Rec	621.102.40	4.697.904.25	0	447.03	440.99	5.04	-7.01%	128.45908												2	2.000	2.032	275	15.00	16						6.24	Z2		
CN-T11	280.00	280.00	Rec	621.103.30	4.697.903.82	0	446.84	440.92	5.92	-7.51%	128.45908												2	2.000	2.032	275	15.00	16						6.12	Z1		
CN-T11	300.00	300.00	Rec	621.112.32	4.697.899.49	0	444.30	439.92	4.39	-12.52%	128.45908												2	2.000	2.032	275	15.00	16						4.59	Z1		
CN-T11	320.00	320.00	Rec	621.130.36	4.697.890.85	0	440.80	437.05	3.75	-14.53%	128.45908												2	2.000	2.032	275	15.00	16						3.95	Z1		
CN-T11	340.00	340.00	Rec	621.148.39	4.697.882.20	0	438.88	434.34	4.54	-11.71%	128.45908	V.					0.11	N/A					2	2.000	2.032	275	15.00	16						4.74	Z1		
CN-T11	360.00	360.00	Rec	621.166.42	4.697.873.56	0	437.22	432.37	4.85	-8.89%	128.45908												2	2.000	2.032	275	15.00	16						5.05	Z1		
CN-T11	380.00	380.00	Rec	621.184.46	4.697.864.91	0	435.65	430.59	5.06	-8.89%	128.45908												2	2.000	2.032	275	15.00	16						5.26	Z1		
CN-T11	400.00	400.00	Rec	621.202.49	4.697.856.26	0	434.54	428.83	5.71	-8.07%	128.45908												2	2.000	2.032	275	15.00	16						5.91	Z1		
CN-T11	409.00	409.00	Rec	621.210.61	4.697.852.37	0	432.30	428.18	4.11	-6.22%	128.45908												2	2.000	2.032	275	15.00	16						4.31	Z1		
CN-T11	410.00	410.00	Rec	621.211.61	4.697.851.94	0	431.67	428.12	3.55	-6.01%	128.45908	V.					0.12	N/A				Barranco Mostrakas	2	2.000	2.032	275	15.00	16						3.75	Z6		
CN-T11	420.00	420.00	Rec	621.220.53	4.697.847.62	0	431.90	427.63	4.27	-3.95%	128.45908												2	2.000	2.032	275	15.00	16						4.47	Z6		
CN-T11	430.00	430.00	Rec	621.229.55	4.697.843.30	0	431.05	427.33	3.72	-1.34%	128.45908												2	2.000	2.032	275	15.00	16						3.92	Z6		
CN-T11	431.00	431.00	Rec	621.230.45	4.697.842.86	0	430.99	427.32	3.67	-0.89%	128.45908												2	2.000	2.032	275	15.00	16						3.87	Z1		
CN-T11	434.00	434.00	Rec	621.233.15	4.697.841.57	0	430.67	427.31	3.36	0.45%	128.45908												2	2.000	2.032	275	15.00	16						3.56	Z1		
CN-T11	435.00	435.00	Rec	621.234.05	4.697.841.13	0	430.74	427.32	3.42	0.90%	128.45908												2	2.000	2.032	275	15.00	16						3.62	Z5		
CN-T11	440.00	440.00	Rec	621.238.56	4.697.838.97	0	431.47	427.42	4.05	3.13%	128.45908	V.					0.26	N/A				Desagüe	D2C	2	2.000	2.032	275	15.00	16			2	150	Mariposa	1	4.25	Z5
CN-T11	444.00	444.00	Rec	621.242.17	4.697.837.24	0	431.89	427.58	4.31	4.92%	128.45908												2	2.000	2.032	275	15.00	16						4.51	Z5		
CN-T11	445.00	445.00	Rec	621.243.07	4.697.836.81	0	431.98	427.63	4.35	5.37%	128.45908												2	2.000	2.032	275	15.00	16						4.55	Z1		
CN-T11	460.00	460.00	Rec	621.256.60	4.697.830.33	0	433.05	428.86	4.19	9.40%	128.45908												2	2.000	2.032	275	15.00	16						4.39	Z1		
CN-T11	475.00	475.00	Rec	621.270.12	4.697.823.84	0	434.22	430.27	3.94	9.40%	128.45908												2	2.000	2.032	275	15.00	16						4.14	Z1		
CN-T11	476.00	476.00	Rec	621.271.03	4.697.823.41	0	434.30	430.37	3.93	9.40%	128.45908												2	2.000	2.032	275	15.00	16						4.13	Z1		
CN-T11	480.00	480.00	Rec	621.274.63	4.697.821.68	0	434.66	430.74	3.92	9.40%	128.45908												2	2.000	2.032	275	15.00	16						4.12	Z1		
CN-T11	500.00	500.00	Rec	621.292.67	4.697.813.03	0	435.29	432.62	3.67	9.40%	128.45908												2	2.000	2.032	275	15.00	16						3.87	Z1		
CN-T11	510.00	510.00	Rec	621.309.80	4.697.804.82	0	438.73	435.01	3.72	1.68%	128.45908												2	2.000	2.032	275	15.00	16						3.40	Z1		
CN-T11	537.00	537.00	Cur	621.325.81	4.697.796.61	200	443.50	438.70	4.80	19.43%	132.88770												2	2.000	2.032	275	15.00	16						3.00	Z1		
CN-T11	557.00	557.00	Cur	621.342.88	4.697.785.89	200	447.11	441.31	5.80	6.63%	139.23390												2	2.000	2.032	275	15.00	16						6.00	Z1		
CN-T11	564.00	564.00	Cur	621.348.33	4.697.781.74	200	446.83	441.61	5.22	2.14%	141.46206												2	2.000	2.032	275	15.00	16						5.42	Z1		
CN-T11	565.00	565.00	Cur	621.349.12	4.697.781.13	200	446.75	441.63	5.12	1.50%	141.78037												2	2.000	2.032	275	15.00	16						5.32	Z5		
CN-T11	570.00	570.00	Cur	621.353.04	4.697.778.03	200	446.35																														

Tramo	P.K. Tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azmut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo andaje horizontal	Angulo vertical	Angulo (°) macizo andaje vertical	Macizos Pn → A %	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje válvula (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada	
CN-T11	2.205.00	2.205.00	Rec	621.668.19	4.696.185.52	0	420.03	416.53	3.51	-4.28%	189.34243												2	2.000	2.032	275	14.00	16						3.71	Z1		
CN-T11	2.225.00	2.225.00	Rec	621.671.53	4.696.185.80	0	419.77	416.53	3.78	-1.27%	189.34243												2	2.000	2.032	275	14.00	16						3.98	Z1		
CN-T11	2.245.00	2.245.00	Rec	621.674.86	4.696.186.08	0	419.68	416.73	3.94	-1.27%	189.34243												2	2.000	2.032	275	14.00	16						4.15	Z1		
CN-T11	2.265.00	2.265.00	Rec	621.678.19	4.696.126.36	0	419.05	415.48	3.57	-1.27%	189.34243												2	2.000	2.032	275	14.00	16						3.77	Z1		
CN-T11	2.285.00	2.285.00	Rec	621.681.52	4.696.106.64	0	418.76	414.43	4.33	-9.61%	189.34243												2	2.000	2.032	275	14.00	16						4.53	Z1		
CN-T11	2.305.00	2.305.00	Rec	621.684.86	4.696.086.92	0	416.01	412.00	4.01	-11.35%	189.34243												2	2.000	2.032	275	14.00	16						4.21	Z1		
CN-T11	2.325.00	2.325.00	Rec	621.688.19	4.696.067.20	0	414.85	410.22	4.64	-6.71%	189.34243												2	2.000	2.032	275	14.00	16						4.84	Z1		
CN-T11	2.345.00	2.345.00	Rec	621.691.52	4.696.047.48	0	413.48	408.97	4.50	-4.49%	189.34243												2	2.000	2.032	275	14.00	16						4.70	Z1		
CN-T11	2.359.00	2.359.00	Rec	621.693.85	4.696.033.67	0	413.09	408.59	4.50	-1.03%	189.34243												2	2.000	2.032	275	14.00	16						4.70	Z1		
CN-T11	2.360.00	2.360.00	Rec	621.694.02	4.696.032.69	0	413.06	408.58	4.49	-0.79%	189.34243												2	2.000	2.032	275	14.00	16						4.69	Z5		
CN-T11	2.365.00	2.365.00	Rec	621.694.85	4.696.027.76	0	412.73	408.57	4.16	0.20%	189.34243										Desagüe	D2D	Apoyo arqueta	2	2.000	2.032	275	14.00	16			2	100	Compuerta	N/A	4.36	Z5
CN-T11	2.370.00	2.370.00	Rec	621.695.69	4.696.022.83	0	412.24	408.58	3.66	0.20%	189.34243												2	2.000	2.032	275	14.00	16						3.86	Z5		
CN-T11	2.371.00	2.371.00	Rec	621.695.85	4.696.021.84	0	412.15	408.58	3.57	0.20%	189.34243											Salida O. Drenaje	2	2.000	2.032	275	14.00	16						3.77	Z6		
CN-T11	2.380.00	2.380.00	Rec	621.697.35	4.696.012.97	0	413.08	408.60	4.49	0.20%	189.34243											Salida O. Drenaje	2	2.000	2.032	275											

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadura tipo	Altura de excavación a 1N (m)	Zanja tipo asignada
CN-T11	4.934,00	4.934,00	Rec	622 243.09	4.693 583.77	0	347.21	343.52	3.69	-2.44%	181.42866												2	2.000	2.032	275	14,00	16						3,89	Z1	
CN-T11	4.954,00	4.954,00	Rec	622 248.84	4.693 564.61	0	346.85	343.03	3.82	-2.44%	181.42866												2	2.000	2.032	275	14,00	16						4,02	Z1	
CN-T11	4.974,00	4.974,00	Rec	622 254.59	4.693 545.46	0	346.55	342.55	4.00	-2.44%	181.42866												2	2.000	2.032	275	14,00	16						4,20	Z1	
CN-T11	4.994,00	4.994,00	Rec	622 260.34	4.693 526.30	0	346.06	342.06	4.01	-2.44%	181.42866												2	2.000	2.032	275	14,00	16						4,21	Z1	
CN-T11	5.014,00	5.014,00	Rec	622 266.10	4.693 507.15	0	345.74	341.81	3.93	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,13	Z1	
CN-T11	5.034,00	5.034,00	Rec	622 271.85	4.693 487.99	0	345.48	341.67	3.81	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,01	Z1	
CN-T11	5.054,00	5.054,00	Rec	622 277.60	4.693 468.84	0	345.21	341.52	3.68	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						3,88	Z1	
CN-T11	5.074,00	5.074,00	Rec	622 283.35	4.693 449.68	0	344.95	341.38	3.57	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						3,77	Z1	
CN-T11	5.094,00	5.094,00	Rec	622 289.10	4.693 430.53	0	344.76	341.24	3.52	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						3,72	Z1	
CN-T11	5.114,00	5.114,00	Rec	622 294.86	4.693 411.37	0	344.84	341.10	3.74	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						3,94	Z1	
CN-T11	5.124,00	5.124,00	Rec	622 297.73	4.693 401.79	0	344.99	341.02	3.97	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,17	Z1	
CN-T11	5.125,00	5.125,00	Rec	622 298.02	4.693 400.84	0	345.00	341.02	3.98	-0.72%	181.42866													2	2.000	2.032	275	14,00	16						4,18	Z4
CN-T11	5.134,00	5.134,00	Rec	622 300.61	4.693 392.22	0	345.13	340.95	4.18	-0.72%	181.42866											NA-1240	2	2.000	2.032	275	14,00	16						4,38	Z4	
CN-T11	5.145,00	5.145,00	Rec	622 303.77	4.693 381.68	0	344.90	340.87	4.02	-0.72%	181.42866											NA-1240	2	2.000	2.032	275	14,00	16						4,22	Z4	
CN-T11	5.146,00	5.146,00	Rec	622 304.06	4.693 380.72	0	344.87	340.87	4.01	-0.72%	181.42866											NA-1240	2	2.000	2.032	275	14,00	16						4,21	Z1	
CN-T11	5.154,00	5.154,00	Rec	622 306.36	4.693 373.06	0	344.71	340.81	3.90	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,10	Z1	
CN-T11	5.174,00	5.174,00	Rec	622 312.11	4.693 353.91	0	344.55	340.67	3.88	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,08	Z1	
CN-T11	5.194,00	5.194,00	Rec	622 317.86	4.693 334.75	0	344.55	340.52	4.03	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,23	Z1	
CN-T11	5.214,00	5.214,00	Rec	622 323.62	4.693 315.60	0	344.47	340.38	4.09	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,29	Z1	
CN-T11	5.234,00	5.234,00	Rec	622 329.37	4.693 296.44	0	344.30	340.24	4.07	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,27	Z1	
CN-T11	5.254,00	5.254,00	Rec	622 335.12	4.693 277.29	0	344.08	340.09	3.99	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,19	Z1	
CN-T11	5.255,00	5.255,00	Rec	622 335.41	4.693 276.33	0	344.07	340.09	3.98	-0.72%	181.42866												2	2.000	2.032	275	14,00	16						4,18	Z5	
CN-T11	5.260.78	5.260.78	Cur	622 337.07	4.693 270.79	-400	343.99	340.04	3.95	-0.72%	181.42866	P.S.	V.	0.00	N/A	0.30	N/A			Ventosa	V2S-200	Apoyo arqueta	2	2.000	2.032	275	14,00	16	1	200				4,15	Z5	
CN-T11	5.265,00	5.265,00	Cur	622 338.30	4.693 266.76	-400	343.96	339.99	3.97	-1.24%	180.75744											Apoyo arqueta	2	2.000	2.032	275	14,00	16						4,17	Z5	
CN-T11	5.266,00	5.266,00	Cur	622 338.60	4.693 265.80	-400	343.96	339.98	3.98	-1.24%	180.59828												2	2.000	2.032	275	14,00	16						4,18	Z1	
CN-T11	5.273,00	5.273,00	Cur	622 340.76	4.693 259.15	-400	343.93	339.89	4.04	-1.24%	179.48420												2	2.000	2.032	275	14,00	16						4,24	Z1	
CN-T11	5.293,00	5.293,00	Cur	622 347.57	4.693 240.34	-400	343.75	339.64	4.10	-1.24%	176.30110												2	2.000	2.032	275	14,00	16						4,30	Z1	
CN-T11	5.313,00	5.313,00	Cur	622 355.30	4.693 221.90	-400	343.54	339.40	4.15	-1.24%	173.11800												2	2.000	2.032	275	14,00	16						4,35	Z1	
CN-T11	5.333,00	5.333,00	Cur	622 363.95	4.693 203.87	-400	343.28	339.15	4.13	-1.24%	169.93490												2	2.000	2.032	275	14,00	16						4,33	Z1	
CN-T11	5.352,00	5.352,00	Rec	622 372.91	4.693 187.11	0	343.01	338.91	4.10	-1.24%	168.34988												2	2.000	2.032	275	14,00	16						4,30	Z1	
CN-T11	5.372,00	5.372,00	Rec	622 382.44	4.693 169.53	0	342.68	338.66	4.02	-1.24%	168.34988												2	2.000	2.032	275	14,00	16						4,22	Z1	
CN-T11	5.391,00	5.391,00	Cur	622 391.04	4.693 152.59	200	342.17	338.43	3.74	-1.24%	172.98089												2	2.000	2.032	275	14,00	16						3,94	Z1	
CN-T11	5.411,00	5.411,00	Cur	622 398.35	4.693 133.99	200	341.56	337.95	3.61	-3.00%	179.34709												2	2.000	2.032	275	14,00	16						3,81	Z1	
CN-T11	5.431,00	5.431,00	Cur	622 403.76	4.693 114.74	200	341.22	337.35	3.86	-3.00%	185.71329												2	2.000	2.032	275	14,00	16						4,06	Z1	
CN-T11	5.451,00	5.451,00	Cur	622 407.23	4.693 095.05	200	340.99	335.79	5.21	-19.12%	192.07948												2	2.000	2.032	275	14,00	16						5,41	Z1	
CN-T11	5.455,00	5.455,00	Rec	622 407.70	4.693 091.08	0	340.76	334.91	5.85	-24.49%	192.77857												2	2.000	2.032	275	14,00	16						6,05	Z1	
CN-T11	5.456,00	5.456,00	Rec	622 407.81	4.693 090.09	0	340.71	334.66	6.05	-25.84%	192.77857												2	2.000	2.032	275	14,00	16						6,25	Z3	
CN-T11	5.470,00	5.470,00	Rec	622 409.40	4.693 076.18	0	339.81	329.79	10.02	-40.61%	192.77857								X				2	2.000	2.032	275	14,00	16						10,22	Z3	
CN-T11	5.471,00	5.471,00	Rec	622 409.51	4.693 075.18	0	339.57	329.38	10.19	-40.61%	192.77857								X				2	2.000	2.032	275	14,00	16						10,39	Z3	
CN-T11	5.472,00	5.472,00	Rec	622 409.62	4.693 074.19	0	339.33	328.98	10.36	-40.61%	192.77857								X				2	2.000	2.032	355	14,00	25						10,56	Z3	
CN-T11	5.490,00	5.490,00	Rec	622 411.66	4.693 056.31	0	333.95	322.14	11.82	-30.13%	192.77857								X	X			2	2.000	2.032	355	14,00	25						12,02	Z3	
CN-T11	5.493,00	5.493,00	Rec	622 412.00	4.693 053.32	0	333.90	321.29	12.62	-26.64%	192.77857												2	2.000	2.032	355	14,00	25						12,82	Z3	
CN-T11	5.494,00	5.494,00	Rec	622 412.11	4.693 052.33	0	334.01	321.02	12.98	-25.47%	192.77857												2	2.000	2.032	355	14,00	25						13,18	Z3	
CN-T11	5.496,00	5.496,00	Rec	622 412.34	4.693 050.34	0	333.81	320.54	13.27	-23.14%	192.77857												2	2.000	2.032	355	14,00	25						13,47	Z3	
CN-T11	5.497,00	5.497,00	Rec	622 412.45	4.693 049.35	0	333.65	320.31	13.34	-21.98%																										

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a 1m (m)	Zanja tipo asignada	
CN-T11	7.315,00	7.315,00	Cur	621.932.07	4.691.434.53	-200	325,10	320,59	4,51	-0,50%	207.40124											2	2.000	2.032	355	14,00	25						4,71	Z1		
CN-T11	7.334,00	7.334,00	Rec	621.930.08	4.691.415.64	0	325,09	320,49	4,60	-0,50%	206.60357											2	2.000	2.032	355	14,00	25						4,80	Z1		
CN-T11	7.354,00	7.354,00	Rec	621.928.01	4.691.395.75	0	325,07	320,39	4,68	-0,50%	206.60357											2	2.000	2.032	355	14,00	25						4,88	Z1		
CN-T11	7.374,00	7.374,00	Rec	621.925.94	4.691.375.85	0	325,08	320,29	4,79	-0,50%	206.60357											2	2.000	2.032	355	14,00	25						4,99	Z1		
CN-T11	7.394,00	7.394,00	Rec	621.923.87	4.691.355.96	0	325,16	319,57	5,59	-11,75%	206.60357											2	2.000	2.032	355	14,00	25						5,79	Z1		
CN-T11	7.396,00	7.396,00	Rec	621.923.66	4.691.353.97	0	325,17	319,32	5,85	-13,80%	206.60357											2	2.000	2.032	355	14,00	25						6,05	Z1		
CN-T11	7.397,00	7.397,00	Rec	621.923.56	4.691.352.98	0	325,17	319,17	6,00	-14,82%	206.60357											2	2.000	2.032	355	14,00	25						6,20	Z2		
CN-T11	7.398,00	7.398,00	Rec	621.923.46	4.691.351.98	0	325,18	319,03	6,15	-14,82%	206.60357												2	2.000	2.032	355	15,00	25						6,35	Z2	
CN-T11	7.404,00	7.404,00	Rec	621.922.83	4.691.346.01	0	325,15	318,14	7,01	-13,73%	206.60357										Aprox. Hinca		2	2.000	2.032	355	15,00	25						7,21	Z2	
CN-T11	7.405,00	7.405,00	Rec	621.922.73	4.691.345.02	0	325,15	318,01	7,14	-12,63%	206.60357										Apoyo arqueta		2	2.000	2.032	355	15,00	25						7,34	Z5	
CN-T11	7.410,00	7.410,00	Rec	621.922.21	4.691.340.05	0	325,12	317,52	7,60	-17,16%	206.60357				0,62	N/A			Desagüe	D2D		2	2.000	2.032	355	15,00	25			2	100	Compuerta	N/A	7,80	Z5	
CN-T11	7.414,00	7.414,00	Rec	621.921.80	4.691.336.07	0	325,10	317,32	7,78	-2,78%	206.60357										Apoyo arqueta		2	2.000	2.032	355	15,00	25						7,98	Z5	
CN-T11	7.415,00	7.415,00	Rec	621.921.70	4.691.335.07	0	325,09	317,29	7,80	-1,69%	206.60357										Apoyo arqueta		2	2.000	2.032	355	15,00	25						8,00	Z5	
CN-T11	7.416,00	7.416,00	Rec	621.921.59	4.691.334.08	0	325,09	317,28	7,80	-0,99%	206.60357										Apoyo arqueta		2	2.000	2.032	355	15,00	25						8,00	Z2	
CN-T11	7.418,00	7.418,00	Rec	621.921.38	4.691.332.09	0	325,08	317,29	7,79	0,50%	206.60357											2	2.000	2.032	355	15,00	25						7,99	Z2		
CN-T11	7.419,00	7.419,00	Rec	621.921.28	4.691.331.09	0	325,09	317,29	7,79	0,50%	206.60357									Pozo ataque	Pantalla continua en pozo	2	2.000	2.032	355	15,00	25							8,95	Z10	
CN-T11	7.434,00	7.434,00	Rec	621.919.73	4.691.316.18	0	325,16	317,37	7,80	0,50%	206.60357									Pozo ataque	Pantalla continua en pozo	2	2.000	2.032	355	15,00	25							8,95	Z10	
CN-T11	7.435,00	7.435,00	Rec	621.919.62	4.691.315.18	0	325,17	317,37	7,80	0,50%	206.60357								Hinca	Pozo ataque	NA-128	2	2.000	2.032	355	15,00	25							8,95	Z9	
CN-T11	7.454,00	7.454,00	Rec	621.917.66	4.691.296.28	0	326,08	317,47	8,61	0,50%	206.60357								Hinca	NA-128	2	2.000	2.032	355	15,00	25								8,81	Z9	
CN-T11	7.470,00	7.470,00	Rec	621.916.00	4.691.280.37	0	325,40	317,55	7,85	0,50%	206.60357								Hinca	Pozo salida	NA-128	2	2.000	2.032	355	15,00	25								8,05	Z9
CN-T11	7.471,00	7.471,00	Rec	621.915.90	4.691.279.37	0	325,39	317,55	7,84	0,50%	206.60357									Pozo salida	Pantalla continua en pozo	2	2.000	2.032	355	15,00	25								8,04	Z10
CN-T11	7.473,13	7.473,13	Cur	621.915.68	4.691.277.26	-400	325,39	317,56	7,83	0,50%	206.60357	P.S.	0,00	N/A									2	2.000	2.032	355	15,00	25						8,03	Z10	
CN-T11	7.485,00	7.485,00	Cur	621.914.62	4.691.265.43	-400	325,44	317,64	7,80	1,99%	204.71409												2	2.000	2.032	355	15,00	25						8,00	Z10	
CN-T11	7.486,00	7.486,00	Cur	621.914.55	4.691.264.44	-400	325,44	317,66	7,78	2,73%	204.55494												2	2.000	2.032	355	15,00	25						7,98	Z2	
CN-T11	7.493,00	7.493,00	Cur	621.914.11	4.691.257.45	-400	325,49	318,03	7,45	7,93%	203.44085										Aprox. Hinca		2	2.000	2.032	355	15,00	25							7,65	Z2
CN-T11	7.507,00	7.507,00	Cur	621.913.60	4.691.243.46	-400	325,57	319,50	6,07	10,90%	201.21269										Aprox. Hinca		2	2.000	2.032	355	15,00	25							6,27	Z2
CN-T11	7.508,00	7.508,00	Cur	621.913.58	4.691.242.46	-400	325,57	319,61	5,96	10,90%	201.05353											2	2.000	2.032	355	14,00	25							6,16	Z1	
CN-T11	7.513,00	7.513,00	Cur	621.913.53	4.691.237.46	-400	325,60	320,15	5,45	10,90%	200.25776											2	2.000	2.032	355	14,00	25							5,65	Z1	
CN-T11	7.533,00	7.533,00	Cur	621.913.95	4.691.217.47	-400	325,63	321,26	4,37	0,20%	197.07466											2	2.000	2.032	355	14,00	25							4,57	Z1	
CN-T11	7.553,00	7.553,00	Cur	621.915.37	4.691.197.52	-400	325,58	321,30	4,28	0,20%	193.89156											2	2.000	2.032	355	14,00	25							4,48	Z1	
CN-T11	7.573,00	7.573,00	Cur	621.917.78	4.691.177.67	-400	325,58	321,34	4,24	0,20%	190.70846											2	2.000	2.032	355	14,00	25							4,44	Z1	
CN-T11	7.592,00	7.592,00	Rec	621.920.93	4.691.158.93	0	325,67	321,38	4,29	0,20%	188.72810											2	2.000	2.032	355	14,00	25							4,49	Z1	
CN-T11	7.612,00	7.612,00	Rec	621.924.46	4.691.139.24	0	325,47	321,42	4,05	0,20%	188.72810											2	2.000	2.032	355	14,00	25							4,25	Z1	
CN-T11	7.632,00	7.632,00	Rec	621.927.98	4.691.119.56	0	325,17	321,46	3,71	0,20%	188.72810											2	2.000	2.032	355	14,00	25							3,91	Z1	
CN-T11	7.634,00	7.634,00	Rec	621.928.33	4.691.117.59	0	325,13	321,47	3,67	0,20%	188.72810											2	2.000	2.032	355	14,00	25							3,87	Z1	
CN-T11	7.635,00	7.635,00	Rec	621.928.51	4.691.116.60	0	325,12	321,47	3,65	0,20%	188.72810											2	2.000	2.032	355	14,00	25							3,85	Z6	
CN-T11	7.645,00	7.645,00	Rec	621.930.27	4.691.106.76	0	325,16	321,56	3,62	1,60%	188.72810											2	2.000	2.032	355	14,00	25							3,82	Z6	
CN-T11	7.646,00	7.646,00	Rec	621.930.45	4.691.105.78	0	325,23	321,57	3,65	1,60%	188.72810											2	2.000	2.032	355	14,00	25							3,85	Z1	
CN-T11	7.652,00	7.652,00	Rec	621.931.50	4.691.099.87	0	325,53	321,67	3,86	1,60%	188.72810											2	2.000	2.032	355	14,00	25							4,06	Z1	
CN-T11	7.672,00	7.672,00	Rec	621.935.03	4.691.080.18	0	325,66	321,99	3,67	1,60%	188.72810											2	2.000	2.032	355	14,00	25							3,87	Z1	
CN-T11	7.676,00	7.676,00	Rec	621.935.73	4.691.076.24	0	325,68	322,06	3,62	1,60%	188.72810											2	2.000	2.032	355	14,00	25							3,82	Z1	
CN-T11	7.677,00	7.677,00	Rec	621.935.91	4.691.075.26	0	325,68	322,07	3,61	1,60%	188.72810											2	2.000	2.032	355	14,00	25							3,81	Z5	
CN-T11	7.681,63	7.681,63	Cur	621.936.72	4.691.070.70	-400	325,68	322,15	3,54	1,60%	188.72810	P.S.	V.	0,00	N/A	1,21	N/A		Ventosa	V2S-200		2	2.000	2.032	355	14,00	25	1	200					3,74	Z5	
CN-T11	7.687,00	7.687,00	Cur	621.937.70	4.691.065.42	-400	325,68	322,12	3,56	-0,50%	187.87399											2	2.000	2.032	355	14,00	25							3,76	Z5	
CN-T11	7.688,00	7.688,00	Cur	621.937.89	4.																															

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a 1m (m)	Zanja tipo asignada
CN-T11	9.265,00	9.265,00	Rec	622.107,09	4.689.550,75	0	378,63	374,10	4,52	8,51%	169.42025										Azarbe Escorredero	2	2.000	2.032	275	14,00	16						4,72	Z6		
CN-T11	9.266,00	9.266,00	Rec	622.107,55	4.689.549,86	0	378,78	374,19	4,59	9,05%	169.42025												2	2.000	2.032	275	14,00	16					4,79	Z1		
CN-T11	9.278,00	9.278,00	Rec	622.113,10	4.689.539,22	0	381,30	375,51	5,79	11,47%	169.42025												2	2.000	2.032	275	14,00	16					5,99	Z1		
CN-T11	9.279,50	9.279,50	Rec	622.113,79	4.689.537,89	0	381,77	375,69	6,09	11,47%	169.42025		T.E.										2	2.000	2.032	275	14,00	16					6,29	Z1		
CN-T11	9.280,00	9.280,00	Rec	622.114,02	4.689.537,45	0	381,93	375,74	6,19	11,22%	169.42025											Acequia Navarra	2	2.000	2.032	275	14,00	16					6,39	Z8		
CN-T11	9.297,00	9.297,00	Rec	622.121,88	4.689.522,37	0	383,02	376,93	6,09	2,75%	169.42025											Acequia Navarra	2	2.000	2.032	275	14,00	16					6,29	Z8		
CN-T11	9.310,00	9.310,00	Cur	622.127,73	4.689.510,77	40	383,79	377,20	6,59	4,04%	175.37266		V.			0,25	N/A					Acequia Navarra	2	2.000	2.032	275	14,00	16					6,79	Z8		
CN-T11	9.311,00	9.311,00	Cur	622.128,09	4.689.509,84	40	383,84	377,24	6,60	4,47%	176.96421												2	2.000	2.032	275	14,00	16					6,80	Z1		
CN-T11	9.315,00	9.315,00	Cur	622.129,32	4.689.506,03	40	383,92	377,45	6,47	6,21%	183.33041												2	2.000	2.032	275	14,00	16					6,67	Z1		
CN-T11	9.333,00	9.333,00	Rec	622.130,41	4.689.488,16	0	384,32	378,70	5,63	5,93%	202.63593												2	2.000	2.032	275	14,00	16					5,83	Z1		
CN-T11	9.352,00	9.352,00	Rec	622.129,62	4.689.469,17	0	384,80	379,24	5,56	0,20%	202.63593												2	2.000	2.032	275	14,00	16					5,76	Z1		
CN-T11	9.372,00	9.372,00	Rec	622.128,79	4.689.449,19	0	384,88	379,28	5,60	0,20%	202.63593												2	2.000	2.032	275	14,00	16					5,80	Z1		
CN-T11	9.392,00	9.392,00	Rec	622.127,96	4.689.429,21	0	384,96	379,32	5,64	0,20%	202.63593												2	2.000	2.032	275	14,00	16					5,84	Z1		
CN-T11	9.411,00	9.411,00	Cur	622.128,26	4.689.410,23	-100	384,90	379,35	5,55	0,20%	193.25444												2	2.000	2.032	275	14,00	16					5,75	Z1		
CN-T11	9.431,00	9.431,00	Cur	622.132,35	4.689.390,69	-100	384,80	379,39	5,41	0,20%	180.52204												2	2.000	2.032	275	14,00	16					5,61	Z1		
CN-T11	9.451,00	9.451,00	Cur	622.140,23	4.689.372,34	-100	384,62	379,43	5,19	0,20%	167.78965												2	2.000	2.032	275	14,00	16					5,39	Z1		
CN-T11	9.464,00	9.464,00	Rec	622.147,13	4.689.361,33	0	384,56	379,46	5,10	0,20%	162.97516												2	2.000	2.032	275	14,00	16					5,30	Z1		
CN-T11	9.465,00	9.465,00	Rec	622.147,68	4.689.360,49	0	384,55	379,46	5,09	0,20%	162.97516												2	2.000	2.032	275	14,00	16					5,29	Z5		
CN-T11	9.470,00	9.470,00	Rec	622.150,43	4.689.356,31	0	384,56	379,47	5,09	0,20%	162.97516												2	2.000	2.032	275	14,00	16					5,29	Z5		
CN-T11	9.475,00	9.475,00	Rec	622.153,17	4.689.352,14	0	384,53	379,48	5,05	0,20%	162.97516												2	2.000	2.032	275	14,00	16					5,25	Z5		
CN-T11	9.476,00	9.476,00	Rec	622.153,72	4.689.351,30	0	384,51	379,48	5,02	0,20%	162.97516												2	2.000	2.032	275	14,00	16					5,22	Z1		
CN-T11	9.490,00	9.490,00	Rec	622.161,41	4.689.339,60	0	383,93	379,51	4,42	0,20%	162.97516												2	2.000	2.032	275	14,00	16					4,62	Z1		
CN-T11	9.510,00	9.510,00	Rec	622.172,40	4.689.322,89	0	383,28	379,55	3,73	0,20%	162.97516												2	2.000	2.032	275	14,00	16					3,93	Z1		
CN-T11	9.530,00	9.530,00	Rec	622.183,39	4.689.306,18	0	383,44	379,59	3,85	0,20%	162.97516												2	2.000	2.032	275	14,00	16					4,05	Z1		
CN-T11	9.549,00	9.549,00	Cur	622.193,05	4.689.289,84	100	383,65	379,63	4,02	0,20%	171.52876												2	2.000	2.032	275	14,00	16					4,22	Z1		
CN-T11	9.569,00	9.569,00	Cur	622.199,84	4.689.271,07	100	384,14	379,67	4,47	0,20%	184.26116												2	2.000	2.032	275	14,00	16					4,67	Z1		
CN-T11	9.589,00	9.589,00	Cur	622.202,77	4.689.251,32	100	384,54	379,71	4,83	0,20%	196.99355												2	2.000	2.032	275	14,00	16					5,03	Z1		
CN-T11	9.608,00	9.608,00	Rec	622.202,15	4.689.232,34	0	384,51	379,75	4,77	0,20%	204.30679												2	2.000	2.032	275	14,00	16					4,97	Z1		
CN-T11	9.627,52	9.627,52	Cur	622.200,83	4.689.212,87	200	384,07	379,79	4,29	0,20%	204.30679	P.S.		0,00	N/A								2	2.000	2.032	275	14,00	16					4,49	Z1		
CN-T11	9.647,00	9.647,00	Cur	622.198,57	4.689.193,52	200	384,08	379,83	4,25	0,20%	210.50864												2	2.000	2.032	275	14,00	16					4,45	Z1		
CN-T11	9.665,00	9.665,00	Cur	622.195,06	4.689.175,87	400	384,57	379,86	4,71	0,20%	213.01474												2	2.000	2.032	275	14,00	16					4,91	Z1		
CN-T11	9.685,00	9.685,00	Cur	622.191,49	4.689.156,19	400	385,14	379,90	5,24	0,20%	209.83164												2	2.000	2.032	275	14,00	16					5,44	Z1		
CN-T11	9.704,00	9.704,00	Rec	622.188,93	4.689.137,37	0	385,23	379,94	5,29	0,20%	208.15433												2	2.000	2.032	275	14,00	16					5,49	Z1		
CN-T11	9.724,00	9.724,00	Rec	622.186,37	4.689.117,53	0	385,02	379,98	5,04	0,20%	208.15433												2	2.000	2.032	275	14,00	16					5,24	Z1		
CN-T11	9.744,00	9.744,00	Rec	622.183,82	4.689.097,70	0	385,18	380,02	5,16	0,20%	208.15433												2	2.000	2.032	275	14,00	16					5,36	Z1		
CN-T11	9.764,00	9.764,00	Rec	622.181,26	4.689.077,86	0	384,89	380,06	4,83	0,20%	208.15433												2	2.000	2.032	275	14,00	16					5,03	Z1		
CN-T11	9.784,00	9.784,00	Rec	622.178,71	4.689.058,02	0	384,49	380,10	4,39	0,20%	208.15433												2	2.000	2.032	275	14,00	16					4,59	Z1		
CN-T11	9.804,00	9.804,00	Rec	622.176,15	4.689.038,19	0	384,06	380,14	3,92	0,20%	208.15433												2	2.000	2.032	275	14,00	16					4,12	Z1		
CN-T11	9.824,00	9.824,00	Rec	622.173,60	4.689.018,35	0	383,94	380,18	3,76	0,20%	208.15433												2	2.000	2.032	275	14,00	16					3,96	Z1		
CN-T11	9.844,00	9.844,00	Rec	622.171,04	4.688.998,52	0	383,84	380,22	3,72	0,20%	208.15433												2	2.000	2.032	275	14,00	16					3,92	Z1		
CN-T11	9.864,00	9.864,00	Rec	622.168,49	4.688.978,68	0	384,13	380,26	3,87	0,20%	208.15433												2	2.000	2.032	275	14,00	16					4,19	Z1		
CN-T11	9.883,00	9.883,00	Cur	622.168,07	4.688.959,83	-100	383,85	380,30	3,55	0,20%	207.38000												2	2.000	2.032	275	14,00	16					3,75	Z1		
CN-T11	9.903,00	9.903,00	Cur	622.165,76	4.688.939,87	-100	384,07	380,42	3,65	2,91%	194.62761												2	2.000	2.032	275	14,00	16					3,85	Z1		
CN-T11	9.923,00	9.923,00	Cur	622.169,42	4.688.920,24	-100	384,52	381,00	3,52	2,91%	181.89521												2	2.000	2.032	275	14,00	16					3,72	Z1		
CN-T11	9.943,00	9.943,00	Cur	622.176,91	4.688.901,73	-100	385,37	381,58	3,79	2,91%	169.16281												2	2.000	2.032	275	14,00	16					3,99	Z1		
CN-T11	9.962,00	9.962,00	Rec	622.186,98	4.688.885,64	0																														

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
CN-T11	12.098.00	12.098.00	Rec	623.104.29	4.687.064.79	0	436.52	432.33	4.19	0.20%	168.59305											2	2.000	2.032	275	14.00	16						4.39	Z1	
CN-T11	12.117.00	12.117.00	Cur	623.113.25	4.687.048.04	-200	436.56	432.37	4.19	0.20%	169.92854											2	2.000	2.032	275	14.00	16						4.39	Z1	
CN-T11	12.137.00	12.137.00	Cur	623.121.44	4.687.029.80	-200	436.57	432.41	4.15	0.20%	176.29474											2	2.000	2.032	275	14.00	16						4.35	Z1	
CN-T11	12.157.00	12.157.00	Cur	623.127.77	4.687.010.84	-200	436.65	432.45	4.19	0.20%	182.66093											2	2.000	2.032	275	14.00	16						4.39	Z1	
CN-T11	12.177.00	12.177.00	Cur	623.132.18	4.686.991.34	-200	436.66	432.49	4.17	0.20%	189.02713											2	2.000	2.032	275	14.00	16						4.37	Z1	
CN-T11	12.197.00	12.197.00	Cur	623.134.62	4.686.971.50	-200	436.69	432.53	4.16	0.20%	195.39333											2	2.000	2.032	275	14.00	16						4.36	Z1	
CN-T11	12.217.00	12.217.00	Cur	623.135.07	4.686.951.51	-200	436.52	432.57	3.94	0.20%	201.75953											2	2.000	2.032	275	14.00	16						4.14	Z1	
CN-T11	12.237.00	12.237.00	Cur	623.133.52	4.686.931.58	-200	436.25	432.61	3.64	0.20%	208.12572											2	2.000	2.032	275	14.00	16						3.84	Z1	
CN-T11	12.257.00	12.257.00	Cur	623.129.99	4.686.911.91	-200	436.17	432.65	3.51	0.20%	214.49192											2	2.000	2.032	275	14.00	16						3.71	Z1	
CN-T11	12.277.00	12.277.00	Cur	623.124.51	4.686.892.68	-200	436.28	432.69	3.59	0.20%	220.85812											2	2.000	2.032	275	14.00	16						3.79	Z1	
CN-T11	12.294.00	12.294.00	Cur	623.118.36	4.686.876.84	-200	436.30	432.73	3.58	0.20%	226.26939											2	2.000	2.032	275	14.00	16						3.78	Z1	
CN-T11	12.295.00	12.295.00	Cur	623.117.96	4.686.875.92	-200	436.31	432.73	3.58	0.20%	226.58770											2	2.000	2.032	275	14.00	16						3.78	Z5	
CN-T11	12.297.00	12.297.00	Cur	623.117.14	4.686.874.10	-200	436.31	432.73	3.58	0.20%	227.22432											2	2.000	2.032	275	14.00	16				1	200	3.78	Z5	
CN-T11	12.300.00	12.300.00	Cur	623.115.87	4.686.871.38	-200	436.32	432.74	3.58	0.20%	228.17925	V.			0.41	N/A		Ventosa	V2S-200		Apoyo arqueta	2	2.000	2.032	275	14.00	16						3.78	Z5	
CN-T11	12.305.00	12.305.00	Cur	623.113.67	4.686.866.88	-200	436.29	432.71	3.58	-0.51%	229.77080										Apoyo arqueta	2	2.000	2.032	275	14.00	16						3.78	Z5	
CN-T11	12.306.00	12.306.00	Cur	623.113.22	4.686.865.99	-200	436.29	432.71	3.58	-0.51%	230.08911										Apoyo arqueta	2	2.000	2.032	275	14.00	16						3.78	Z1	
CN-T11	12.317.00	12.317.00	Cur	623.107.95	4.686.855.34	-200	436.36	432.65	3.71	-0.51%	233.59052											2	2.000	2.032	275	14.00	16						3.91	Z1	
CN-T11	12.337.00	12.337.00	Cur	623.097.03	4.686.839.59	-200	436.49	432.55	3.94	-0.51%	239.95671											2	2.000	2.032	275	14.00	16						4.14	Z1	
CN-T11	12.356.00	12.356.00	Rec	623.085.16	4.686.824.77	0	436.37	432.45	3.92	-0.51%	245.96437											2	2.000	2.032	275	14.00	16						4.12	Z1	
CN-T11	12.376.00	12.376.00	Rec	623.071.94	4.686.809.76	0	436.19	432.35	3.84	-0.51%	245.96437											2	2.000	2.032	275	14.00	16						4.04	Z1	
CN-T11	12.396.00	12.396.00	Rec	623.058.72	4.686.794.75	0	436.15	432.25	3.90	-0.51%	245.96437											2	2.000	2.032	275	14.00	16						4.10	Z1	
CN-T11	12.416.00	12.416.00	Rec	623.045.51	4.686.779.74	0	436.06	432.15	3.91	-0.51%	245.96437											2	2.000	2.032	275	14.00	16						4.11	Z1	
CN-T11	12.436.00	12.436.00	Rec	623.032.29	4.686.764.73	0	435.99	432.04	3.95	-0.51%	245.96437											2	2.000	2.032	275	14.00	16						4.15	Z1	
CN-T11	12.455.00	12.455.00	Rec	623.019.68	4.686.750.51	0	435.75	431.95	3.80	-0.51%	248.73779											2	2.000	2.032	275	14.00	16						4.00	Z1	
CN-T11	12.475.00	12.475.00	Rec	623.005.82	4.686.736.09	0	435.67	431.84	3.83	-0.51%	248.73779											2	2.000	2.032	275	14.00	16						4.03	Z1	
CN-T11	12.495.00	12.495.00	Rec	622.991.97	4.686.721.67	0	435.52	431.74	3.78	-0.51%	248.73779											2	2.000	2.032	275	14.00	16						3.98	Z1	
CN-T11	12.515.00	12.515.00	Rec	622.978.11	4.686.707.25	0	435.43	431.64	3.79	-0.51%	248.73779											2	2.000	2.032	275	14.00	16						3.99	Z1	
CN-T11	12.535.00	12.535.00	Rec	622.964.25	4.686.692.83	0	435.32	431.54	3.79	-0.51%	248.73779											2	2.000	2.032	275	14.00	16						3.99	Z1	
CN-T11	12.554.00	12.554.00	Cur	622.951.15	4.686.679.07	-400	435.26	431.44	3.82	-0.51%	247.33290											2	2.000	2.032	275	14.00	16						4.02	Z1	
CN-T11	12.574.00	12.574.00	Cur	622.937.99	4.686.664.01	-400	435.23	431.34	3.89	-0.51%	244.14981											2	2.000	2.032	275	14.00	16						4.09	Z1	
CN-T11	12.594.00	12.594.00	Cur	622.925.59	4.686.648.32	-400	435.19	431.23	3.95	-0.51%	240.96671											2	2.000	2.032	275	14.00	16						4.15	Z1	
CN-T11	12.614.00	12.614.00	Cur	622.914.00	4.686.632.03	-400	435.03	431.13	3.90	-0.51%	237.78361											2	2.000	2.032	275	14.00	16						4.10	Z1	
CN-T11	12.634.00	12.634.00	Cur	622.903.23	4.686.615.18	-400	434.86	431.03	3.83	-0.51%	234.60051											2	2.000	2.032	275	14.00	16						4.03	Z1	
CN-T11	12.653.00	12.653.00	Rec	622.893.50	4.686.598.86	0	434.72	430.93	3.79	-0.51%	234.21614											2	2.000	2.032	275	14.00	16						3.99	Z1	
CN-T11	12.673.00	12.673.00	Rec	622.883.26	4.686.581.68	0	434.73	430.83	3.90	-0.51%	234.21614											2	2.000	2.032	275	14.00	16						4.10	Z1	
CN-T11	12.693.00	12.693.00	Rec	622.873.02	4.686.564.50	0	434.67	430.73	3.94	-0.51%	234.21614											2	2.000	2.032	275	14.00	16						4.14	Z1	
CN-T11	12.712.00	12.712.00	Cur	622.863.17	4.686.548.25	-400	434.62	430.63	3.99	-0.51%	235.94716											2	2.000	2.032	275	14.00	16						4.19	Z1	
CN-T11	12.731.00	12.731.00	Rec	622.852.64	4.686.532.44	0	434.60	430.53	4.07	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.27	Z1	
CN-T11	12.751.00	12.751.00	Cur	622.841.34	4.686.515.94	0	434.56	430.43	4.13	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.33	Z1	
CN-T11	12.771.00	12.771.00	Rec	622.830.03	4.686.499.44	0	434.62	430.33	4.29	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.45	Z1	
CN-T11	12.791.00	12.791.00	Rec	622.818.72	4.686.482.94	0	434.65	430.23	4.42	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.62	Z1	
CN-T11	12.794.00	12.794.00	Rec	622.817.03	4.686.480.47	0	434.65	430.21	4.44	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.64	Z1	
CN-T11	12.795.00	12.795.00	Rec	622.816.46	4.686.479.64	0	434.65	430.21	4.45	-0.51%	238.24833											2	2.000	2.032	275	14.00	16						4.65	Z5	
CN-T11	12.800.00	12.800.00	Rec	622.813.64	4.686.475.52	0	434.66	430.18	4.48	-0.51%	238.24833	V.			0.41	N/A		Desagüe	D2D	Apoyo arqueta	2	2.000	2.032	275	14.00	16				2	100	Compuerta	N/A	4.68	Z5
CN-T11	12.805.00	12.805.00	Rec	622.810.81	4.686.471.39	0	434.66	430.19	4.47	0.20%	238.24833											2	2.000	2.032	275	14.00	1								

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadortipo	Altura de excavación a TN (m)	Zanja tipo asignada
T11-T12	666.00	14.956.00	Rec	621.629.23	4.684.691.18	0	426.13	422.00	4.13	-0.50%	222.14953												2	1.800	1.829	275	11.50	16						4.33	Z1	
T11-T12	666.00	14.976.00	Rec	621.622.41	4.684.672.38	0	426.11	421.90	4.22	-0.50%	222.14953												2	1.800	1.829	275	11.50	16						4.42	Z1	
T11-T12	706.00	14.996.00	Rec	621.615.59	4.684.653.58	0	426.06	421.80	4.26	-0.50%	222.14953												2	1.800	1.829	275	11.50	16						4.46	Z1	
T11-T12	725.00	15.015.00	Cur	621.608.44	4.684.635.98	200	426.03	421.70	4.32	-0.50%	227.56593												2	1.800	1.829	275	11.50	16						4.52	Z1	
T11-T12	744.00	15.034.00	Rec	621.599.67	4.684.619.13	0	425.67	421.61	4.06	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.26	Z1	
T11-T12	764.00	15.054.00	Rec	621.589.77	4.684.601.75	0	425.51	421.51	4.01	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.21	Z1	
T11-T12	774.00	15.064.00	Rec	621.584.83	4.684.593.06	0	425.36	421.46	3.90	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.10	Z1	
T11-T12	775.00	15.065.00	Rec	621.584.33	4.684.592.19	0	425.34	421.45	3.89	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.09	Z5	
T11-T12	780.00	15.070.00	Rec	621.581.86	4.684.587.85	0	425.24	421.43	3.81	-0.50%	232.95063										Ventosa	V2S-200	Apoyo arqueta	2	1.800	1.829	275	11.50	16	1	200				4.01	Z5
T11-T12	784.00	15.074.00	Rec	621.579.88	4.684.584.37	0	425.16	421.41	3.75	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						3.95	Z5	
T11-T12	785.00	15.075.00	Rec	621.579.38	4.684.583.50	0	425.14	421.40	3.73	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						3.93	Z5	
T11-T12	786.00	15.076.00	Rec	621.578.89	4.684.582.64	0	425.12	421.40	3.72	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						3.92	Z1	
T11-T12	804.00	15.094.00	Rec	621.569.98	4.684.566.99	0	425.29	421.31	3.99	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.19	Z1	
T11-T12	824.00	15.114.00	Rec	621.560.09	4.684.549.61	0	425.29	421.21	4.08	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.28	Z1	
T11-T12	844.00	15.134.00	Rec	621.550.19	4.684.532.23	0	425.14	421.11	4.03	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.23	Z1	
T11-T12	864.00	15.154.00	Rec	621.540.29	4.684.514.85	0	425.08	421.01	4.07	-0.50%	232.95063												2	1.800	1.829	275	11.50	16						4.27	Z1	
T11-T12	883.00	15.173.00	Cur	621.531.08	4.684.498.24	-400	424.97	420.91	4.06	-0.50%	230.84844												2	1.800	1.829	275	11.50	16						4.26	Z1	
T11-T12	903.00	15.193.00	Cur	621.522.21	4.684.480.31	-400	424.59	420.81	3.78	-0.50%	227.66534												2	1.800	1.829	275	11.50	16						3.98	Z1	
T11-T12	923.00	15.213.00	Cur	621.514.25	4.684.461.97	-400	424.59	420.71	3.88	-0.50%	224.48224												2	1.800	1.829	275	11.50	16						4.08	Z1	
T11-T12	942.00	15.232.00	Rec	621.507.29	4.684.444.29	0	424.45	420.62	3.83	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						4.03	Z1	
T11-T12	962.00	15.252.00	Rec	621.499.99	4.684.425.67	0	424.34	420.52	3.82	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						4.02	Z1	
T11-T12	982.00	15.272.00	Rec	621.492.68	4.684.407.05	0	424.17	420.42	3.75	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						3.95	Z1	
T11-T12	1.002.00	15.292.00	Rec	621.485.38	4.684.388.43	0	424.11	420.32	3.79	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						3.99	Z1	
T11-T12	1.022.00	15.312.00	Rec	621.478.07	4.684.369.82	0	424.07	420.22	3.85	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						4.05	Z1	
T11-T12	1.042.00	15.332.00	Rec	621.470.77	4.684.351.20	0	424.03	420.12	3.92	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						4.12	Z1	
T11-T12	1.062.00	15.352.00	Rec	621.463.46	4.684.332.58	0	423.62	420.02	3.60	-0.50%	223.80192												2	1.800	1.829	275	11.50	16						3.80	Z1	
T11-T12	1.081.00	15.371.00	Cur	621.456.72	4.684.314.82	-400	423.56	419.92	3.64	-0.50%	221.74630												2	1.800	1.829	275	11.50	16						3.84	Z1	
T11-T12	1.101.00	15.391.00	Cur	621.450.49	4.684.295.81	-400	423.28	419.82	3.46	-0.50%	218.56320												2	1.800	1.829	275	11.50	16						3.66	Z1	
T11-T12	1.121.00	15.411.00	Cur	621.445.22	4.684.276.52	-400	423.39	419.72	3.67	-0.50%	215.38011												2	1.800	1.829	275	11.50	16						3.87	Z1	
T11-T12	1.141.00	15.431.00	Cur	621.440.93	4.684.256.99	-400	423.29	419.62	3.67	-0.50%	212.19701												2	1.800	1.829	275	11.50	16						3.87	Z1	
T11-T12	1.161.00	15.451.00	Cur	621.437.61	4.684.237.27	-400	423.19	419.52	3.66	-0.50%	209.01391												2	1.800	1.829	275	11.50	16						3.86	Z1	
T11-T12	1.180.00	15.470.00	Cur	621.435.12	4.684.218.43	0	423.13	419.20	3.93	-2.10%	208.27941												2	1.800	1.829	275	11.50	16						4.13	Z1	
T11-T12	1.200.00	15.490.00	Rec	621.432.53	4.684.198.60	0	422.61	418.78	3.83	-2.10%	208.27941												2	1.800	1.829	275	11.50	16						4.03	Z1	
T11-T12	1.220.00	15.510.00	Rec	621.429.93	4.684.178.77	0	422.34	418.36	3.98	-2.10%	208.27941												2	1.800	1.829	275	11.50	16						4.18	Z1	
T11-T12	1.239.00	15.529.00	Cur	621.426.89	4.684.160.02	200	421.94	417.96	3.98	-2.10%	213.13474												2	1.800	1.829	275	11.50	16						4.18	Z1	
T11-T12	1.259.00	15.549.00	Cur	621.421.83	4.684.140.68	200	421.36	417.54	3.81	-2.10%	219.50094												2	1.800	1.829	275	11.50	16						4.01	Z1	
T11-T12	1.279.00	15.569.00	Cur	621.414.85	4.684.121.95	200	420.80	417.12	3.68	-2.10%	225.86714												2	1.800	1.829	275	11.50	16						3.88	Z1	
T11-T12	1.298.00	15.588.00	Rec	621.406.75	4.684.104.76	0	420.35	416.84	3.51	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.71	Z1	
T11-T12	1.318.00	15.608.00	Rec	621.398.04	4.684.086.76	0	420.19	416.63	3.55	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.75	Z1	
T11-T12	1.338.00	15.628.00	Rec	621.389.32	4.684.068.76	0	419.84	416.43	3.51	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.71	Z1	
T11-T12	1.358.00	15.648.00	Rec	621.380.50	4.684.050.76	0	419.64	416.23	3.41	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.61	Z1	
T11-T12	1.378.00	15.668.00	Rec	621.371.89	4.684.032.76	0	419.36	416.03	3.33	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.53	Z1	
T11-T12	1.398.00	15.688.00	Rec	621.363.17	4.684.014.76	0	419.20	415.83	3.37	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.57	Z1	
T11-T12	1.418.00	15.708.00	Rec	621.354.45	4.683.996.76	0	419.05	415.63	3.42	-1.01%	228.70776												2	1.800	1.829	275	11.50	16						3.62	Z1	
T11-T12	1.438.00	15.728.00	Rec	621.345.74	4.683.978.76	0	418.94	415.43	3.52	-1.01%	228.70776																									

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T11-T12	3.377,00	17.667,00	Cur	620.318,52	4.682.349.71	400	419,35	416,00	3,35	0,20%	246.14671												2	1.800	1.829	275	11,50	16						3,55	Z1	
T11-T12	3.378,00	17.668,00	Cur	620.317,85	4.682.348,96	400	419,35	416,00	3,35	0,20%	246.30586												2	1.800	1.829	275	11,50	16						3,55	Z5	
T11-T12	3.383,17	17.673,17	Rec	620.314,39	4.682.345,12	0	419,33	416,01	3,31	0,20%	247.12939	P.S.	V.	0,02	N/A	0,48	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.800	1.829	275	11,50	16	1	200				3,51	Z5	
T11-T12	3.386,00	17.676,00	Rec	620.312,48	4.682.343,03	0	419,31	416,00	3,31	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,51	Z5	
T11-T12	3.386,00	17.676,00	Rec	620.311,13	4.682.341,56	0	419,29	415,98	3,31	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,51	Z5	
T11-T12	3.389,00	17.679,00	Rec	620.310,46	4.682.340,82	0	419,28	415,98	3,30	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,50	Z1	
T11-T12	3.406,00	17.696,00	Rec	620.298,99	4.682.328,27	0	419,21	415,87	3,34	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,54	Z1	
T11-T12	3.426,00	17.716,00	Rec	620.285,50	4.682.313,50	0	419,32	415,74	3,58	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,78	Z1	
T11-T12	3.446,00	17.736,00	Rec	620.272,01	4.682.298,74	0	419,21	415,62	3,60	-0,63%	247.12939												2	1.800	1.829	275	11,50	16						3,80	Z1	
T11-T12	3.465,00	17.755,00	Cur	620.259,87	4.682.284,13	-200	419,19	415,50	3,70	-0,63%	241.12387												2	1.800	1.829	275	11,50	16						3,90	Z1	
T11-T12	3.485,00	17.775,00	Cur	620.248,65	4.682.267,59	-200	419,33	415,37	3,96	-0,63%	234.75768												2	1.800	1.829	275	11,50	16						4,16	Z1	
T11-T12	3.505,00	17.795,00	Cur	620.239,13	4.682.250,00	-200	419,24	415,24	4,00	-0,63%	228.39148												2	1.800	1.829	275	11,50	16						4,20	Z1	
T11-T12	3.524,00	17.814,00	Cur	620.231,23	4.682.232,72	0	419,16	415,12	4,04	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						4,24	Z1	
T11-T12	3.544,00	17.834,00	Rec	620.222,94	4.682.214,52	0	418,77	415,00	3,77	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						3,97	Z1	
T11-T12	3.564,00	17.854,00	Rec	620.214,66	4.682.196,32	0	418,17	414,87	3,30	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						3,50	Z1	
T11-T12	3.580,00	17.870,00	Rec	620.208,03	4.682.181,76	0	418,11	414,77	3,34	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						3,54	Z1	
T11-T12	3.581,00	17.871,00	Rec	620.207,82	4.682.180,85	0	418,11	414,76	3,34	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						3,54	Z5	
T11-T12	3.584,00	17.874,00	Rec	620.206,37	4.682.178,12	0	418,09	414,74	3,35	-0,63%	227.19533												2	1.800	1.829	275	11,50	16						3,55	Z5	
T11-T12	3.586,35	17.876,35	Cur	620.205,40	4.682.175,98	200	418,08	414,73	3,35	-0,63%	227.19533	P.S.	V.	0,00	N/A	0,48	N/A			Desagüe	D2D	Apoyo arqueta	2	1.800	1.829	275	11,50	16						3,55	Z5	
T11-T12	3.591,00	17.881,00	Cur	620.203,42	4.682.171,77	200	418,05	414,74	3,31	0,20%	228.67491												2	1.800	1.829	275	11,50	16						3,51	Z5	
T11-T12	3.592,00	17.882,00	Cur	620.202,99	4.682.170,87	200	418,04	414,74	3,31	0,20%	228.39322												2	1.800	1.829	275	11,50	16						3,51	Z1	
T11-T12	3.603,00	17.893,00	Cur	620.197,88	4.682.161,13	200	418,15	414,76	3,38	0,20%	232.49463												2	1.800	1.829	275	11,50	16						3,58	Z1	
T11-T12	3.623,00	17.913,00	Cur	620.187,25	4.682.144,19	200	418,52	414,80	3,72	0,20%	238.86083												2	1.800	1.829	275	11,50	16						3,92	Z1	
T11-T12	3.643,00	17.933,00	Cur	620.174,99	4.682.128,41	200	419,12	414,90	4,22	0,62%	245.22703												2	1.800	1.829	275	11,50	16						4,42	Z1	
T11-T12	3.663,00	17.953,00	Cur	620.161,21	4.682.113,92	200	419,10	415,02	4,08	0,62%	251.59322												2	1.800	1.829	275	11,50	16						4,28	Z1	
T11-T12	3.682,00	17.972,00	Rec	620.146,84	4.682.101,50	0	419,31	415,14	4,18	0,62%	257.21303												2	1.800	1.829	275	11,50	16						4,38	Z1	
T11-T12	3.702,00	17.992,00	Rec	620.131,19	4.682.089,04	0	419,42	415,26	4,17	0,62%	257.21303												2	1.800	1.829	275	11,50	16						4,37	Z1	
T11-T12	3.722,00	18.012,00	Rec	620.115,54	4.682.076,59	0	419,55	415,38	4,16	0,62%	257.21303												2	1.800	1.829	275	11,50	16						4,36	Z1	
T11-T12	3.742,00	18.032,00	Rec	620.099,89	4.682.064,14	0	419,54	415,51	4,03	0,62%	257.21303												2	1.800	1.829	275	11,50	16						4,23	Z1	
T11-T12	3.761,00	18.051,00	Cur	620.085,41	4.682.051,85	-200	419,63	415,56	4,08	0,20%	252.30890												2	1.800	1.829	275	11,50	16						4,28	Z1	
T11-T12	3.781,00	18.071,00	Cur	620.071,47	4.682.037,53	-200	419,85	415,60	4,25	0,20%	245.94270												2	1.800	1.829	275	11,50	16						4,45	Z1	
T11-T12	3.800,00	18.090,00	Cur	620.059,53	4.682.022,75	0	419,77	415,64	4,13	0,20%	241.87411												2	1.800	1.829	275	11,50	16						4,33	Z1	
T11-T12	3.820,00	18.110,00	Rec	620.047,31	4.682.006,92	0	419,76	415,68	4,09	0,20%	241.87411												2	1.800	1.829	275	11,50	16						4,29	Z1	
T11-T12	3.840,00	18.130,00	Rec	620.035,08	4.681.991,09	0	419,41	415,72	3,70	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,90	Z1	
T11-T12	3.860,00	18.150,00	Rec	620.022,85	4.681.975,26	0	419,31	415,76	3,55	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,75	Z1	
T11-T12	3.880,00	18.170,00	Rec	620.010,62	4.681.959,44	0	419,26	415,80	3,47	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,67	Z1	
T11-T12	3.900,00	18.190,00	Rec	619.998,40	4.681.943,61	0	419,21	415,84	3,37	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,57	Z1	
T11-T12	3.920,00	18.210,00	Rec	619.986,17	4.681.927,78	0	419,45	415,88	3,58	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,78	Z1	
T11-T12	3.924,00	18.214,00	Rec	619.983,73	4.681.924,62	0	419,44	415,88	3,55	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,75	Z1	
T11-T12	3.925,00	18.215,00	Rec	619.983,11	4.681.923,83	0	419,40	415,89	3,51	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,74	Z5	
T11-T12	3.930,00	18.215,00	Rec	619.980,06	4.681.919,87	0	419,36	415,80	3,56	0,20%	241.87411												2	1.800	1.829	275	11,50	16						3,67	Z5	
T11-T12	3.935,00	18.225,00	Rec	619.977,00	4.681.915,91	0	419,24	415,79	3,45	-2,07%	241.87411												2	1.800	1.829	275	11,50	16						3,65	Z5	
T11-T12	3.936,00	18.226,00	Rec	619.976,39	4.681.915,12	0	419,21	415,77	3,44	-2,07%	241.87411												2	1.800	1.829	275	11,50	16						3,64	Z1	
T11-T12	3.940,00	18.230,00	Rec	619.973,94	4.681.911,96	0	419,16	415,69	3,47	-2,07%	241.87411												2	1.800	1.829	275	11,50	16						3,67	Z1	
T11-T12	3.960,00	18.250,00	Rec	619.961,72																																

Tramo	P.K. Tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Resante Hidráulica	Altura resaste hidráulica (m)	Pendiente	Azmut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje vertical	Macizos Pa -> %	Tramos inclinados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adobijado (mm)	PN Tímbera vavulera (dm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desagüe	Tipo de válvula	Águeta rotura tipo	Altura de excavación ± TM (m)	Zanja tipo asignada
T11-T12	5.934,00	20.224,00	Rec	618.612,87	4.680.486,74	0	413.05	409,37	3,68	-0,78%	240.19523											2	1.800	1.829	275	11,50	16						3,88	Z1
T11-T12	5.954,00	20.244,00	Rec	618.601,07	4.680.470,80	0	413.02	409,22	3,80	-0,78%	240.19523											2	1.800	1.829	275	11,50	16						4,00	Z1
T11-T12	5.974,00	20.264,00	Rec	618.589,26	4.680.454,46	0	412.55	409,06	3,49	-0,78%	240.19523											2	1.800	1.829	275	11,50	16						3,69	Z1
T11-T12	5.981,00	20.271,00	Cur	618.585,13	4.680.448,61	0	412,38	409,01	3,38	-0,78%	240.19523											2	1.800	1.829	275	11,50	16						3,58	Z1
T11-T12	5.982,00	20.272,00	Rec	618.584,54	4.680.448,00	0	412,37	409,00	3,37	-0,78%	240.19523											2	1.800	1.829	275	11,50	16						3,57	Z5
T11-T12	5.987,37	20.277,37	Cur	618.581,37	4.680.443,67	400	412,34	408,96	3,36	-1,28%	240.19523			0,00	N/A	0,78	N/A	Ventosa	V2S-200	Apoyo arqueta	Apoyo arqueta	2	1.800	1.829	275	11,50	16	1	200				3,57	Z5
T11-T12	5.992,00	20.282,00	Cur	618.578,66	4.680.439,91	400	412,22	408,86	3,37	-2,14%	239.45779											2	1.800	1.829	275	11,50	16						3,57	Z5
T11-T12	5.993,00	20.283,00	Cur	618.578,08	4.680.439,10	400	412,20	408,84	3,36	-2,14%	239.29863											2	1.800	1.829	275	11,50	16						3,56	Z1
T11-T12	6.013,00	20.303,00	Cur	618.566,91	4.680.422,50	400	411,73	408,41	3,32	-2,14%	236.11553											2	1.800	1.829	275	11,50	16						3,52	Z1
T11-T12	6.033,00	20.323,00	Cur	618.556,59	4.680.405,38	400	411,38	407,98	3,40	-2,14%	232.93243											2	1.800	1.829	275	11,50	16						3,60	Z1
T11-T12	6.052,00	20.342,00	Rec	618.547,48	4.680.388,71	0	411,22	407,74	3,48	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,68	Z1
T11-T12	6.072,00	20.362,00	Rec	618.537,97	4.680.371,11	0	410,98	407,64	3,35	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,55	Z1
T11-T12	6.092,00	20.382,00	Rec	618.528,46	4.680.353,52	0	410,96	407,54	3,42	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,62	Z1
T11-T12	6.112,00	20.402,00	Rec	618.518,95	4.680.335,92	0	410,99	407,44	3,55	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,75	Z1
T11-T12	6.132,00	20.422,00	Rec	618.509,44	4.680.318,33	0	410,74	407,34	3,40	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,60	Z1
T11-T12	6.152,00	20.442,00	Rec	618.499,93	4.680.300,73	0	410,67	407,24	3,44	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,64	Z1
T11-T12	6.172,00	20.462,00	Rec	618.490,42	4.680.283,14	0	410,64	407,14	3,50	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,70	Z1
T11-T12	6.192,00	20.482,00	Rec	618.480,91	4.680.265,54	0	410,67	407,04	3,63	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,83	Z1
T11-T12	6.195,00	20.485,00	Rec	618.479,49	4.680.262,90	0	410,67	407,02	3,65	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,85	Z1
T11-T12	6.196,00	20.486,00	Rec	618.479,01	4.680.262,02	0	410,67	407,02	3,66	-0,50%	231.54244											2	1.800	1.829	275	11,50	16						3,86	Z5
T11-T12	6.200,85	20.490,85	Cur	618.476,71	4.680.257,75	800	410,68	406,99	3,69	-0,50%	231.54244	P.S.	V.	0,00	N/A	1,77	N/A	Desagüe	D2D	Apoyo arqueta	Apoyo arqueta	2	1.800	1.829	275	11,50	16		2	100	Compuerta	N/A	3,89	Z5
T11-T12	6.206,00	20.496,00	Cur	618.474,24	4.680.253,23	800	410,77	407,13	3,65	2,59%	231.95203											2	1.800	1.829	275	11,50	16						3,85	Z5
T11-T12	6.207,00	20.497,00	Cur	618.473,76	4.680.252,36	800	410,79	407,15	3,64	2,59%	232.03161											2	1.800	1.829	275	11,50	16						3,84	Z1
T11-T12	6.211,00	20.501,00	Cur	618.471,82	4.680.248,86	800	410,84	407,26	3,58	2,59%	232.34992											2	1.800	1.829	275	11,50	16						3,78	Z1
T11-T12	6.231,00	20.521,00	Cur	618.461,88	4.680.231,51	800	411,37	407,78	3,60	2,59%	233.94147											2	1.800	1.829	275	11,50	16						3,80	Z1
T11-T12	6.250,00	20.540,00	Rec	618.452,17	4.680.215,18	0	412,41	408,59	3,83	4,58%	234.16573											2	1.800	1.829	275	11,50	16						4,03	Z1
T11-T12	6.270,00	20.560,00	Rec	618.441,94	4.680.197,99	0	413,54	409,51	4,04	4,58%	234.16573											2	1.800	1.829	275	11,50	16						4,24	Z1
T11-T12	6.280,00	20.570,00	Rec	618.431,97	4.680.181,23	0	414,23	410,40	3,83	4,58%	234.16573											2	1.800	1.829	275	11,50	16						4,25	Z1
T11-T12	6.309,00	20.599,00	Rec	618.422,00	4.680.164,47	0	414,53	410,90	3,64	0,51%	234.16573											2	1.800	1.829	275	11,50	16						3,84	Z1
T11-T12	6.328,00	20.618,00	Rec	618.412,29	4.680.148,14	0	414,48	410,94	3,55	0,20%	234.16573											2	1.800	1.829	275	11,50	16						3,75	Z1
T11-T12	6.348,00	20.638,00	Rec	618.402,06	4.680.130,95	0	414,69	410,98	3,72	0,20%	234.16573											2	1.800	1.829	275	11,50	16						3,92	Z1
T11-T12	6.367,00	20.657,00	Cur	618.392,23	4.680.114,70	200	414,63	411,01	3,62	0,20%	236.51622											2	1.800	1.829	275	11,50	16						3,82	Z1
T11-T12	6.386,00	20.676,00	Rec	618.381,29	4.680.099,17	0	414,64	411,05	3,59	0,20%	240.22575											2	1.800	1.829	275	11,50	16						3,79	Z1
T11-T12	6.405,66	20.695,66	Cur	618.369,67	4.680.083,30	-200	414,65	411,09	3,56	0,20%	240.22575	P.S.		0,00	N/A							2	1.800	1.829	275	11,50	16						3,76	Z1
T11-T12	6.425,00	20.715,00	Cur	618.359,02	4.680.067,17	-200	414,52	411,13	3,39	0,20%	234.07001											2	1.800	1.829	275	11,50	16						3,59	Z1
T11-T12	6.438,00	20.728,00	Rec	618.352,69	4.680.055,82	0	414,60	411,15	3,44	0,20%	231.71539											2	1.800	1.829	275	11,50	16						3,64	Z1
T11-T12	6.439,00	20.729,00	Rec	618.352,21	4.680.054,94	0	414,60	411,16	3,45	0,20%	231.71539											2	1.800	1.829	275	11,50	16						3,65	Z5
T11-T12	6.444,00	20.734,00	Rec	618.349,82	4.680.050,55	0	414,63	411,17	3,47	0,20%	231.71539											2	1.800	1.829	275	11,50	16						3,67	Z5
T11-T12	6.444,31	20.734,31	Cur	618.349,68	4.680.050,28	200	414,63	411,17	3,46	0,20%	231.71539	P.S.	V.	0,00	N/A	1,13	N/A	Ventosa	V2D-200	Apoyo arqueta	Apoyo arqueta	2	1.800	1.829	275	11,50	16	2	200				3,66	Z5
T11-T12	6.449,00	20.739,00	Cur	618.347,39	4.680.046,18	200	414,55	411,08	3,47	-1,77%	233.20835											2	1.800	1.829	275	11,50	16						3,67	Z5
T11-T12	6.450,00	20.740,00	Cur	618.346,89	4.680.045,32	200	414,54	411,07	3,47	-1,77%	233.52666											2	1.800	1.829	275	11,50	16						3,67	Z1
T11-T12	6.463,00	20.753,00	Cur	618.339,99	4.680.034,30	200	414,20	410,84	3,37	-1,77%	237.66469											2	1.800	1.829	275	11,50	16						3,67	Z1
T11-T12	6.483,00	20.773,00	Cur	618.328,03	4.680.018,28	200	413,90	410,48	3,41	-1,77%	244.03088											2	1.800	1.829	275	11,50	16						3,61	Z1
T11-T12	6.501,00	20.791,00	Cur	618.315,99	4.680.004,91	-200	413,63	410,16	3,47	-1,77%	247.52540											2	1.800	1.829	275	11,50	16						3,67	Z1
T11-T12	6.521,00	20.811,00	Cur	618.303,16	4.679.989,57	-200	413,44	409,81	3,63	-1,77%	241.15921											2	1.800	1.829										

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T11-T12	8.644,00	22.934,00	Rec	617.379,79	4.678.226,82	0	347,68	343,94	3,74	4,14%	236.83884											2	1.800	1.829	275	11,50	16						3,94	Z1	
T11-T12	8.645,00	22.935,00	Rec	617.379,25	4.678.225,98	0	347,74	343,98	3,76	3,45%	236.83884												2	1.800	1.829	275	11,50	16						3,96	Z5
T11-T12	8.650,00	22.940,00	Rec	617.376,51	4.678.221,80	0	348,11	344,07	4,04	0,00%	236.83884	V			0,40	N/A		Ventosa	V2S-200	Apoyo arqueta	Apoyo arqueta	2	1.800	1.829	275	11,50	16	1	200				4,24	Z5	
T11-T12	8.655,00	22.945,00	Rec	617.373,78	4.678.217,61	0	347,75	343,98	3,78	-3,45%	236.83884												2	1.800	1.829	275	11,50	16						3,98	Z5
T11-T12	8.656,00	22.946,00	Rec	617.373,23	4.678.216,77	0	347,62	343,94	3,67	-4,14%	236.83884												2	1.800	1.829	275	11,50	16						3,87	Z1
T11-T12	8.657,00	22.947,00	Rec	617.372,68	4.678.215,93	0	347,48	343,90	3,58	-4,83%	236.83884												2	1.800	1.829	275	11,50	16						3,78	Z1
T11-T12	8.676,00	22.966,00	Rec	617.362,29	4.678.200,03	0	346,56	342,28	4,28	-8,23%	236.83884												2	1.800	1.829	275	11,50	16						4,48	Z1
T11-T12	8.695,00	22.985,00	Rec	617.351,90	4.678.184,12	0	345,18	341,09	4,09	-5,03%	236.83884												2	1.800	1.829	275	11,50	16						4,29	Z1
T11-T12	8.715,00	23.005,00	Rec	617.340,96	4.678.167,38	0	343,96	340,08	3,87	-5,03%	236.83884												2	1.800	1.829	275	11,50	16						4,07	Z1
T11-T12	8.735,00	23.025,00	Rec	617.330,02	4.678.150,63	0	342,95	339,08	3,87	-5,03%	236.83884												2	1.800	1.829	275	11,50	16						4,07	Z1
T11-T12	8.755,00	23.045,00	Rec	617.319,09	4.678.133,89	0	341,89	338,07	3,82	-5,03%	236.83884												2	1.800	1.829	275	11,50	16						4,02	Z1
T11-T12	8.775,00	23.065,00	Rec	617.308,15	4.678.117,15	0	341,05	337,54	3,51	-1,90%	236.83884												2	1.800	1.829	275	11,50	16						3,71	Z1
T11-T12	8.795,00	23.085,00	Rec	617.297,21	4.678.100,40	0	340,51	337,16	3,36	-1,90%	236.83884												2	1.800	1.829	275	11,50	16						3,56	Z1
T11-T12	8.815,00	23.105,00	Rec	617.286,27	4.678.083,66	0	340,12	336,78	3,34	-1,90%	236.83884												2	1.800	1.829	275	11,50	16						3,54	Z1
T11-T12	8.835,00	23.125,00	Rec	617.275,33	4.678.066,91	0	340,05	336,40	3,65	-1,90%	236.83884												2	1.800	1.829	275	11,50	16						3,85	Z1
T11-T12	8.855,00	23.145,00	Rec	617.264,40	4.678.050,17	0	339,62	335,95	3,67	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,87	Z1
T11-T12	8.875,00	23.165,00	Rec	617.253,46	4.678.033,43	0	339,14	335,48	3,67	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,87	Z1
T11-T12	8.895,00	23.185,00	Rec	617.242,52	4.678.016,68	0	338,61	335,00	3,61	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,81	Z1
T11-T12	8.915,00	23.205,00	Rec	617.231,58	4.677.999,94	0	338,11	334,53	3,58	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,78	Z1
T11-T12	8.935,00	23.225,00	Rec	617.220,64	4.677.983,19	0	337,72	334,06	3,66	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,86	Z1
T11-T12	8.955,00	23.245,00	Rec	617.209,70	4.677.966,45	0	337,33	333,59	3,74	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						3,94	Z1
T11-T12	8.975,00	23.265,00	Rec	617.198,77	4.677.949,71	0	336,97	333,11	3,86	-2,37%	236.83884												2	1.800	1.829	275	11,50	16						4,06	Z1
T11-T12	8.995,00	23.285,00	Rec	617.187,83	4.677.932,96	0	336,67	332,72	3,94	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,14	Z1
T11-T12	9.015,00	23.305,00	Rec	617.176,89	4.677.916,22	0	336,45	332,59	3,87	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,07	Z1
T11-T12	9.035,00	23.325,00	Rec	617.165,95	4.677.899,48	0	336,33	332,45	3,87	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,07	Z1
T11-T12	9.055,00	23.345,00	Rec	617.155,01	4.677.882,73	0	336,17	332,32	3,85	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,05	Z1
T11-T12	9.075,00	23.365,00	Rec	617.144,08	4.677.865,99	0	336,03	332,19	3,84	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,04	Z1
T11-T12	9.095,00	23.385,00	Rec	617.133,14	4.677.849,24	0	336,02	332,05	3,97	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,17	Z1
T11-T12	9.115,00	23.405,00	Rec	617.122,20	4.677.832,50	0	335,70	331,92	3,78	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,98	Z1
T11-T12	9.135,00	23.425,00	Rec	617.111,26	4.677.815,76	0	335,38	331,78	3,60	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,80	Z1
T11-T12	9.155,00	23.445,00	Rec	617.100,32	4.677.799,01	0	335,15	331,65	3,50	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,70	Z1
T11-T12	9.175,00	23.465,00	Rec	617.089,39	4.677.782,27	0	335,05	331,51	3,53	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,73	Z1
T11-T12	9.195,00	23.485,00	Rec	617.078,45	4.677.765,52	0	334,97	331,38	3,59	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,79	Z1
T11-T12	9.215,00	23.505,00	Rec	617.067,51	4.677.748,78	0	334,91	331,24	3,67	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,87	Z1
T11-T12	9.235,00	23.525,00	Rec	617.057,66	4.677.733,71	0	335,00	331,12	3,88	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,08	Z1
T11-T12	9.234,00	23.524,00	Rec	617.057,12	4.677.732,87	0	334,98	331,12	3,86	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,06	Z6
T11-T12	9.235,00	23.525,00	Rec	617.056,57	4.677.732,04	0	334,93	331,11	3,82	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						4,02	Z6
T11-T12	9.244,00	23.534,00	Rec	617.051,65	4.677.724,50	0	334,71	331,05	3,66	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,86	Z5
T11-T12	9.245,00	23.535,00	Rec	617.051,10	4.677.723,66	0	334,72	331,04	3,68	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,88	Z5
T11-T12	9.250,00	23.540,00	Rec	617.048,37	4.677.719,48	0	334,78	331,01	3,77	-0,67%	236.83884												2	1.800	1.829	275	11,50	16						3,91	Z5
T11-T12	9.255,00	23.545,00	Rec	617.045,63	4.677.715,29	0	334,81	331,02	3,81	-0,30%	236.83884												2	1.800	1.829	275	11,50	16						4,02	Z5
T11-T12	9.256,00	23.546,00	Rec	617.045,09	4.677.714,46	0	334,85	331,03	3,82	0,30%	236.83884												2	1.800	1.829	275	11,50	16						4,02	Z1
T11-T12	9.275,00	23.565,00	Rec	617.034,89	4.677.698,55	0	335,09	331,08	4,01	0,30%	236.83884												2	1.800	1.829	275	11,50	16						4,21	Z1
T11-T12	9.295,00	23.585,00	Rec	617.023,76	4.677.681,80	0	335,02	331,14	3,88	0,30%	236.83884												2	1.800	1.829	275	11,50	16						4,08	Z1
T11-T12	9.315,00	23.605,00	Rec	617.012,82	4.677.665,06	0	334,99	331,20	3,79	0,30%	236.83884																								

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T11-T12	11.244.00	25.534.00	Cur	615.961.79	4.676.112.49	-200	368.18	363.93	4.24	-13.94%	210.34074											2	1.800	1.829	275	11.50	16						4.44	Z1		
T11-T12	11.263.00	25.553.00	Rec	615.959.55	4.676.093.62	0	365.85	361.29	4.57	-13.94%	206.97627											2	1.800	1.829	275	11.50	16						4.77	Z1		
T11-T12	11.283.00	25.573.00	Rec	615.957.67	4.676.073.71	0	363.04	358.87	4.17	-9.56%	206.97627											2	1.800	1.829	275	11.50	16						4.37	Z1		
T11-T12	11.303.00	25.593.00	Rec	615.955.80	4.676.053.80	0	361.17	357.37	3.81	-6.73%	206.97627											2	1.800	1.829	275	11.50	16						4.01	Z1		
T11-T12	11.322.00	25.612.00	Cur	615.954.01	4.676.034.88	200	359.95	356.09	3.86	-6.73%	206.24763											2	1.800	1.829	275	11.50	16						4.06	Z1		
T11-T12	11.342.00	25.632.00	Cur	615.951.06	4.676.015.11	200	359.49	355.20	4.28	-2.91%	212.61383											2	1.800	1.829	275	11.50	16						4.48	Z1		
T11-T12	11.362.00	25.652.00	Cur	615.946.15	4.675.995.73	200	359.22	354.62	4.60	-2.91%	218.98002											2	1.800	1.829	275	11.50	16						4.80	Z1		
T11-T12	11.371.00	25.661.00	Rec	615.943.33	4.675.987.19	0	358.38	354.36	4.02	-2.91%	221.15244											2	1.800	1.829	275	11.50	16						4.22	Z1		
T11-T12	11.372.00	25.662.00	Rec	615.943.00	4.675.986.24	0	358.28	354.33	3.95	-2.91%	221.15244											Barranco	2	1.800	1.829	275	11.50	16						4.15	Z6	
T11-T12	11.381.00	25.671.00	Rec	615.940.07	4.675.977.73	0	358.18	354.07	4.11	-2.91%	221.15244											Barranco	2	1.800	1.829	275	11.50	16						4.31	Z6	
T11-T12	11.384.00	25.674.00	Rec	615.939.09	4.675.974.90	0	359.14	353.98	5.16	-2.91%	221.15244											Barranco	2	1.800	1.829	275	11.50	16						5.36	Z6	
T11-T12	11.385.00	25.675.00	Cur	615.938.76	4.675.973.95	0	359.21	353.95	5.26	-2.91%	221.15244												2	1.800	1.829	275	11.50	16						5.46	Z1	
T11-T12	11.400.00	25.690.00	Cur	615.933.83	4.675.959.79	400	358.59	353.51	5.08	-2.91%	222.02986												2	1.800	1.829	275	11.50	16						5.28	Z1	
T11-T12	11.420.00	25.710.00	Cur	615.926.58	4.675.941.15	400	357.54	352.93	4.61	-2.91%	225.21296												2	1.800	1.829	275	11.50	16						4.81	Z1	
T11-T12	11.432.00	25.722.00	Cur	615.921.79	4.675.930.15	400	357.08	352.58	4.50	-2.91%	227.12282												2	1.800	1.829	275	11.50	16						4.70	Z1	
T11-T12	11.433.00	25.723.00	Cur	615.921.37	4.675.929.24	400	357.01	352.55	4.46	-2.91%	227.28197											Barranco	2	1.800	1.829	275	11.50	16						4.66	Z6	
T11-T12	11.440.00	25.730.00	Cur	615.918.41	4.675.922.90	400	356.21	352.35	3.86	-2.91%	228.39606											Barranco	2	1.800	1.829	275	11.50	16						4.66	Z6	
T11-T12	11.444.00	25.734.00	Cur	615.916.57	4.675.919.30	400	355.88	352.23	3.74	-2.21%	229.03268											Barranco	2	1.800	1.829	275	11.50	16						4.66	Z6	
T11-T12	11.445.00	25.735.00	Cur	615.916.22	4.675.918.40	400	356.07	352.22	3.86	-1.50%	229.19183											Apoyo arqueta	2	1.800	1.829	275	11.50	16						4.66	Z6	
T11-T12	11.450.00	25.740.00	Cur	615.913.98	4.675.913.93	400	356.55	352.73	4.23	2.02%	229.98761											Apoyo arqueta	2	1.800	1.829	275	11.50	16						4.52	Z6	
T11-T12	11.455.00	25.745.00	Cur	615.911.69	4.675.909.49	400	356.71	352.42	4.29	5.55%	230.78338											Apoyo arqueta	2	1.800	1.829	275	11.50	16						4.49	Z6	
T11-T12	11.456.00	25.746.00	Cur	615.911.22	4.675.908.61	400	356.72	352.48	4.24	6.25%	230.94254												2	1.800	1.829	275	11.50	16						4.44	Z1	
T11-T12	11.460.00	25.750.00	Cur	615.909.33	4.675.905.08	400	356.89	352.75	4.13	6.96%	231.57916												2	1.800	1.829	275	11.50	16						4.33	Z1	
T11-T12	11.480.00	25.770.00	Cur	615.899.38	4.675.887.73	400	358.25	354.14	4.11	6.96%	234.76225												2	1.800	1.829	275	11.50	16						4.31	Z1	
T11-T12	11.500.00	25.790.00	Cur	615.888.57	4.675.870.91	400	359.49	354.88	4.61	0.41%	237.94535												2	1.800	1.829	275	11.50	16						4.81	Z1	
T11-T12	11.519.00	25.809.00	Rec	615.877.79	4.675.855.26	0	359.82	354.96	4.86	0.41%	238.43514												2	1.800	1.829	275	11.50	16						5.06	Z1	
T11-T12	11.539.00	25.829.00	Rec	615.866.44	4.675.838.80	0	359.69	355.04	4.65	0.41%	238.43514												2	1.800	1.829	275	11.50	16						4.85	Z1	
T11-T12	11.559.00	25.849.00	Rec	615.855.08	4.675.822.33	0	359.25	355.12	4.12	0.41%	238.43514												2	1.800	1.829	275	11.50	16						4.32	Z1	
T11-T12	11.579.00	25.869.00	Rec	615.843.73	4.675.805.87	0	358.66	355.21	3.45	0.41%	238.43514												2	1.800	1.829	275	11.50	16						3.65	Z1	
T11-T12	11.599.00	25.889.00	Rec	615.832.38	4.675.789.40	0	359.02	355.29	3.73	0.41%	238.43514												2	1.800	1.829	275	11.50	16						3.93	Z1	
T11-T12	11.618.00	25.908.00	Cur	615.821.36	4.675.773.92	200	359.41	355.63	3.78	2.86%	241.79252												2	1.800	1.829	275	11.50	16						3.98	Z1	
T11-T12	11.638.00	25.928.00	Cur	615.808.38	4.675.758.72	200	359.88	356.20	3.68	2.86%	248.15871												2	1.800	1.829	275	11.50	16						3.88	Z1	
T11-T12	11.650.00	25.940.00	Cur	615.799.89	4.675.750.24	200	360.42	356.54	3.87	2.86%	251.97843												2	1.800	1.829	275	11.50	16						4.07	Z1	
T11-T12	11.651.00	25.941.00	Cur	615.799.16	4.675.749.56	200	360.45	356.57	3.88	2.86%	252.29674												2	1.800	1.829	275	11.50	16						4.08	Z1	
T11-T12	11.658.00	25.948.00	Cur	615.793.95	4.675.744.88	200	360.63	356.77	3.85	2.86%	254.52491												2	1.800	1.829	275	11.50	16						4.05	Z1	
T11-T12	11.678.00	25.968.00	Cur	615.778.21	4.675.732.56	200	361.09	357.34	3.75	2.86%	260.89111												2	1.800	1.829	275	11.50	16						3.95	Z1	
T11-T12	11.698.00	25.988.00	Cur	615.761.32	4.675.721.86	200	361.63	357.92	3.71	2.86%	267.25731												2	1.800	1.829	275	11.50	16						3.91	Z1	
T11-T12	11.718.00	26.008.00	Cur	615.743.45	4.675.712.91	200	362.06	358.49	3.57	2.86%	273.62350												2	1.800	1.829	275	11.50	16						3.77	Z1	
T11-T12	11.737.00	26.027.00	Cur	615.726.01	4.675.705.37	0	362.48	359.03	3.44	2.86%	274.03734												2	1.800	1.829	275	11.50	16						3.64	Z1	
T11-T12	11.757.00	26.047.00	Rec	615.707.65	4.675.697.44	0	362.85	359.15	3.69	0.20%	274.03734												2	1.800	1.829	275	11.50	16						3.85	Z1	
T11-T12	11.777.00	26.067.00	Rec	615.689.28	4.675.689.51	0	363.17	359.19	3.97	0.20%	274.03734												2	1.800	1.829	275	11.50	16						4.17	Z1	
T11-T12	11.797.00	26.087.00	Rec	615.670.93	4.675.681.58	0	363.04	359.22	3.80	0.20%	274.03734												2	1.800	1.829	275	11.50	16						4.00	Z1	
T11-T12	11.817.00	26.107.00	Rec	615.652.57	4.675.673.64	0	363.04	359.40	3.64	2.00%	274.03734												2	1.800	1.829	275	11.50	16						3.84	Z1	
T11-T12	11.837.00	26.127.00	Rec	615.634.21	4.675.665.71	0	363.51	359.80	3.71	2.00%	274.03734												2	1.800	1.829	275	11.50	16						3.91	Z1	
T11-T12	11.840.00	26.130.00	Rec	615.631.45																																

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T12-T13	1.885,00	28.015,00	Rec	614.727.80	4.674.178.97	0	417.20	413.85	3.34	0.64%	212.72532											2	1.800	1.829	275	11,50	16						3,54	Z1	
T12-T13	1.905,00	28.035,00	Rec	614.723.82	4.674.159.37	0	417.41	413.98	3.43	0.64%	212.72532											2	1.800	1.829	275	11,50	16						3,63	Z1	
T12-T13	1.925,00	28.055,00	Rec	614.719.85	4.674.139.77	0	417.69	414.11	3.58	0.64%	212.72532											2	1.800	1.829	275	11,50	16						3,78	Z1	
T12-T13	1.944,00	28.074,00	Cur	614.716.03	4.674.121.15	1.000	417.94	414.20	3.74	0.33%	213.35691											2	1.800	1.829	275	11,50	16						3,94	Z1	
T12-T13	1.964,00	28.094,00	Cur	614.711.67	4.674.101.64	1.000	418.56	414.26	4.29	0.33%	214.63015											2	1.800	1.829	275	11,50	16						4,49	Z1	
T12-T13	1.984,00	28.114,00	Cur	614.706.92	4.674.082.21	1.000	419.13	414.33	4.80	0.33%	215.90339											2	1.800	1.829	275	11,50	16						5,00	Z1	
T12-T13	2.004,00	28.134,00	Cur	614.701.78	4.674.062.88	1.000	419.47	414.40	5.07	0.33%	217.17663											2	1.800	1.829	275	11,50	16						5,27	Z1	
T12-T13	2.024,00	28.154,00	Cur	614.696.26	4.674.043.66	1.000	419.29	414.46	4.83	0.33%	218.44987											2	1.800	1.829	275	11,50	16						5,03	Z1	
T12-T13	2.043,00	28.173,00	Cur	614.690.66	4.674.025.50	0	418.99	414.52	4.46	0.33%	219.56672											2	1.800	1.829	275	11,50	16						4,66	Z1	
T12-T13	2.063,00	28.193,00	Rec	614.684.61	4.674.006.44	0	418.63	414.59	4.04	0.33%	219.56672											2	1.800	1.829	275	11,50	16						4,24	Z1	
T12-T13	2.083,00	28.213,00	Rec	614.678.56	4.673.987.38	0	418.21	414.66	3.55	0.33%	219.56672											2	1.800	1.829	275	11,50	16						3,75	Z1	
T12-T13	2.103,00	28.233,00	Rec	614.672.51	4.673.968.32	0	418.15	414.72	3.43	0.33%	219.56672											2	1.800	1.829	275	11,50	16						3,63	Z1	
T12-T13	2.123,00	28.253,00	Rec	614.666.46	4.673.949.25	0	418.35	414.79	3.56	0.33%	219.56672											2	1.800	1.829	275	11,50	16						3,76	Z1	
T12-T13	2.143,00	28.273,00	Rec	614.660.41	4.673.930.19	0	418.55	414.85	3.70	0.33%	219.56672											2	1.800	1.829	275	11,50	16						3,90	Z1	
T12-T13	2.162,00	28.292,00	Cur	614.654.67	4.673.912.08	-300	418.65	414.93	3.71	1.06%	219.00261											2	1.800	1.829	275	11,50	16						3,91	Z1	
T12-T13	2.182,00	28.312,00	Cur	614.649.43	4.673.892.78	-300	418.79	415.15	3.65	1.06%	214.75848											2	1.800	1.829	275	11,50	16						3,85	Z1	
T12-T13	2.202,00	28.332,00	Cur	614.645.48	4.673.873.18	-300	418.91	415.36	3.55	1.06%	210.51435											2	1.800	1.829	275	11,50	16						3,75	Z1	
T12-T13	2.222,00	28.352,00	Cur	614.642.86	4.673.853.35	-300	419.07	415.57	3.50	1.06%	202.21702											2	1.800	1.829	275	11,50	16						3,70	Z1	
T12-T13	2.242,00	28.372,00	Cur	614.641.55	4.673.833.40	-300	419.45	415.78	3.67	1.06%	202.02608											2	1.800	1.829	275	11,50	16						3,87	Z1	
T12-T13	2.262,00	28.392,00	Cur	614.641.88	4.673.813.40	-300	419.60	415.99	3.61	1.06%	197.78195											2	1.800	1.829	275	11,50	16						3,81	Z1	
T12-T13	2.282,00	28.412,00	Cur	614.642.95	4.673.793.45	-300	419.77	416.20	3.57	1.06%	193.53782											2	1.800	1.829	275	11,50	16						3,77	Z1	
T12-T13	2.302,00	28.432,00	Cur	614.645.63	4.673.773.64	-300	419.91	416.41	3.49	1.06%	189.29369											2	1.800	1.829	275	11,50	16						3,69	Z1	
T12-T13	2.321,00	28.451,00	Rec	614.649.41	4.673.755.02	0	420.14	416.61	3.53	0.90%	185.36667											2	1.800	1.829	275	11,50	16						3,73	Z1	
T12-T13	2.341,00	28.471,00	Rec	614.653.96	4.673.735.54	0	420.43	416.79	3.64	0.90%	185.36667											2	1.800	1.829	275	11,50	16						3,84	Z1	
T12-T13	2.361,00	28.491,00	Cur	614.658.52	4.673.716.07	0	420.82	416.97	3.85	0.90%	185.36667											2	1.800	1.829	275	11,50	16						4,05	Z1	
T12-T13	2.380,00	28.510,00	Rec	614.662.78	4.673.697.56	300	421.31	417.14	4.17	0.90%	186.73715											2	1.800	1.829	275	11,50	16						4,37	Z1	
T12-T13	2.400,00	28.530,00	Cur	614.666.26	4.673.677.86	300	421.74	417.32	4.42	0.90%	190.98128											2	1.800	1.829	275	11,50	16						4,62	Z1	
T12-T13	2.414,00	28.544,00	Cur	614.667.91	4.673.663.96	300	422.03	417.45	4.58	0.90%	193.95217											2	1.800	1.829	275	11,50	16						4,78	Z1	
T12-T13	2.415,00	28.545,00	Cur	614.668.01	4.673.662.97	300	422.04	417.46	4.58	0.90%	194.16438											2	1.800	1.829	275	11,50	16						4,78	Z5	
T12-T13	2.420,00	28.550,00	Cur	614.668.42	4.673.657.99	300	422.07	417.50	4.57	0.90%	195.22541											2	1.800	1.829	275	11,50	16						4,77	Z5	
T12-T13	2.425,00	28.555,00	Cur	614.668.76	4.673.653.00	300	422.08	417.43	4.65	-1.32%	196.28644											2	1.800	1.829	275	11,50	16						4,85	Z5	
T12-T13	2.426,00	28.556,00	Cur	614.668.81	4.673.652.00	300	422.08	417.42	4.66	-1.32%	196.49865											2	1.800	1.829	275	11,50	16						4,86	Z1	
T12-T13	2.440,00	28.570,00	Cur	614.669.26	4.673.638.01	300	422.01	417.24	4.77	-1.32%	199.46954											2	1.800	1.829	275	11,50	16						4,97	Z1	
T12-T13	2.460,00	28.590,00	Cur	614.668.76	4.673.618.02	300	421.88	416.97	4.91	-1.32%	203.71367											2	1.800	1.829	275	11,50	16						5,11	Z1	
T12-T13	2.480,00	28.610,00	Cur	614.666.93	4.673.598.10	300	421.75	416.71	5.04	-1.32%	207.95781											2	1.800	1.829	275	11,50	16						5,24	Z1	
T12-T13	2.499,00	28.629,00	Rec	614.663.96	4.673.579.34	0	421.48	416.46	5.02	-1.32%	211.88114											2	1.800	1.829	275	11,50	16						5,22	Z1	
T12-T13	2.519,00	28.649,00	Rec	614.660.25	4.673.559.69	0	421.19	416.20	4.99	-1.32%	211.88114											2	1.800	1.829	275	11,50	16						5,19	Z1	
T12-T13	2.539,00	28.669,00	Rec	614.656.54	4.673.540.03	0	421.00	415.93	5.07	-1.32%	211.88114											2	1.800	1.829	275	11,50	16						5,27	Z1	
T12-T13	2.559,00	28.689,00	Rec	614.652.83	4.673.520.38	0	420.72	415.67	5.05	-1.32%	211.88114											2	1.800	1.829	275	11,50	16						5,25	Z1	
T12-T13	2.574,00	28.704,00	Cur	614.649.77	4.673.505.70	300	420.36	415.47	4.89	-1.32%	214.65872											2	1.800	1.829	275	11,50	16						5,39	Z1	
T12-T13	2.575,00	28.705,00	Cur	614.649.54	4.673.504.73	300	420.33	415.45	4.87	-1.32%	214.67092											2	1.800	1.829	275	11,50	16						5,07	Z5	
T12-T13	2.578,00	28.708,00	Cur	614.648.63	4.673.501.81	300	420.24	415.42	4.83	-1.32%	215.50754											2	1.800	1.829	275	11,50	16						5,03	Z5	
T12-T13	2.580,00	28.710,00	Cur	614.648.34	4.673.499.87	300	420.18	415.39	4.79	-1.32%	215.93196											2	1.800	1.829	275	11,50	16						4,99	Z5	
T12-T13	2.585,00	28.715,00	Cur	614.647.06	4.673.495.04	300	420.03	415.40	4.63	0.20%	216.92929											2	1.800	1.829	275	11,50	16						4,83	Z5	
T12-T13	2.586,00	28.716,00	Cur	614.646.80	4.673.494.07	300	420.00	415.40	4.60	0.20%	217.20520											2	1.800	1.829	275	11,50	16						4,80	Z1	
T12-T13																																			

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	C. Rasante Hidráulica (m)	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetá rotura tipo	Altura de excavación a 1m (m)	Zanja tipo asignada
T12-T13	4.497.00	30.627.00	Rec	614.426.01	4.671.792.37	0	289.90	284.90	5.00	-11.36%	192.32032											Barranco	2	1.800	1.829	355	12.50	25					5.20	Z6		
T12-T13	4.516.00	30.646.00	Cur	614.428.29	4.671.773.51	100	288.04	282.77	5.27	-9.21%	193.09639											Barranco	2	1.800	1.829	355	12.50	25					5.47	Z6		
T12-T13	4.536.00	30.666.00	Cur	614.428.45	4.671.753.54	100	286.26	280.92	5.34	-9.21%	205.82879											Barranco	2	1.800	1.829	355	12.50	25					5.54	Z6		
T12-T13	4.555.00	30.685.00	Rec	614.424.94	4.671.734.90	0	284.72	279.17	5.54	-9.21%	217.18754											Barranco	2	1.800	1.829	355	12.50	25					5.74	Z6		
T12-T13	4.575.00	30.705.00	Rec	614.419.61	4.671.715.62	0	283.16	277.33	5.83	-9.21%	217.18754											Barranco	2	1.800	1.829	355	12.50	25					6.03	Z6		
T12-T13	4.593.00	30.723.00	Cur	614.413.11	4.671.698.88	75	279.55	275.70	3.86	-8.00%	231.13598											Barranco	2	1.800	1.829	355	12.50	25					4.06	Z6		
T12-T13	4.600.00	30.730.00	Cur	614.409.54	4.671.692.86	75	278.86	275.22	3.64	-5.57%	237.07777		V.			0.20	N/A					Barranco	2	1.800	1.829	355	12.50	25					3.84	Z6		
T12-T13	4.601.00	30.731.00	Cur	614.408.99	4.671.692.03	75	278.96	275.17	3.79	-5.23%	237.92659											Barranco	2	1.800	1.829	355	12.50	25					3.99	Z6		
T12-T13	4.612.00	30.742.00	Cur	614.402.17	4.671.683.41	75	279.29	274.80	4.49	-1.94%	247.26368											Barranco	2	1.800	1.829	355	12.50	25					4.69	Z6		
T12-T13	4.632.00	30.762.00	Cur	614.386.85	4.671.670.64	75	278.19	274.41	3.78	-1.94%	264.24021											Barranco	2	1.800	1.829	355	12.50	25					3.98	Z6		
T12-T13	4.652.00	30.782.00	Cur	614.368.71	4.671.662.35	75	278.11	274.02	4.09	-1.94%	281.21674											Barranco	2	1.800	1.829	355	12.50	25					4.29	Z6		
T12-T13	4.671.00	30.801.00	Rec	614.350.21	4.671.658.05	0	277.66	273.65	4.01	-1.94%	286.24395											Barranco	2	1.800	1.829	355	12.50	25					4.21	Z6		
T12-T13	4.676.00	30.806.00	Rec	614.345.33	4.671.656.98	0	277.51	273.56	3.96	-1.94%	286.24395											Barranco	2	1.800	1.829	355	12.50	25					4.16	Z6		
T12-T13	4.677.00	30.807.00	Rec	614.344.35	4.671.656.77	0	277.50	273.54	3.97	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					4.17	Z6		
T12-T13	4.691.00	30.821.00	Rec	614.330.68	4.671.653.77	0	277.09	273.26	3.83	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					4.03	Z6		
T12-T13	4.711.00	30.841.00	Rec	614.311.14	4.671.649.48	0	276.81	272.88	3.93	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					4.13	Z6		
T12-T13	4.731.00	30.851.00	Rec	614.291.61	4.671.645.19	0	276.70	272.49	4.21	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					4.41	Z6		
T12-T13	4.751.00	30.861.00	Rec	614.272.07	4.671.640.90	0	275.66	272.10	3.66	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					3.76	Z6		
T12-T13	4.771.00	30.901.00	Rec	614.252.54	4.671.636.61	0	275.19	271.71	3.47	-1.94%	286.24395											Barranco	2	1.800	1.829	355	13.00	25					3.67	Z6		
T12-T13	4.790.00	30.920.00	Cur	614.234.11	4.671.632.01	-200	276.37	271.16	5.21	-3.15%	281.52535											Barranco	2	1.800	1.829	355	13.00	25					5.41	Z6		
T12-T13	4.799.00	30.929.00	Cur	614.225.55	4.671.629.24	-200	275.95	270.88	5.07	-3.15%	278.66056											Barranco	2	1.800	1.829	355	13.00	25					5.27	Z6		
T12-T13	4.800.00	30.930.00	Cur	614.224.60	4.671.628.91	-200	275.93	270.85	5.08	-3.15%	278.34225											Barranco	2	1.800	1.829	355	13.00	25					5.28	Z1		
T12-T13	4.810.00	30.940.00	Cur	614.215.27	4.671.625.34	-200	275.71	270.53	5.18	-3.15%	275.15915												2	1.800	1.829	355	13.00	25					5.38	Z1		
T12-T13	4.830.00	30.960.00	Cur	614.197.18	4.671.616.82	-200	274.89	269.90	4.99	-3.15%	268.79295												2	1.800	1.829	355	13.00	25					5.19	Z1		
T12-T13	4.850.00	30.980.00	Cur	614.180.03	4.671.606.54	-200	275.06	269.27	5.79	-3.15%	262.42675												2	1.800	1.829	355	13.00	25					5.99	Z1		
T12-T13	4.870.00	31.000.00	Cur	614.164.00	4.671.594.59	-200	273.19	268.64	4.55	-3.15%	256.06056												2	1.800	1.829	355	13.00	25					4.75	Z1		
T12-T13	4.884.00	31.014.00	Cur	614.153.53	4.671.585.31	-200	273.34	268.20	5.14	-3.15%	251.60422												2	1.800	1.829	355	13.00	25					5.34	Z1		
T12-T13	4.885.00	31.015.00	Cur	614.152.80	4.671.584.62	-200	273.27	268.17	5.10	-3.15%	251.28591											Apoyo arqueta	2	1.800	1.829	355	13.00	25					5.30	Z5		
T12-T13	4.890.00	31.020.00	Cur	614.149.24	4.671.581.11	-200	272.88	268.01	4.87	-3.15%	249.69436		V.			0.29	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.800	1.829	355	13.00	25	1	200			5.07	Z5		
T12-T13	4.895.00	31.025.00	Cur	614.145.77	4.671.577.51	-200	272.47	267.88	4.59	-2.64%	248.10281											Apoyo arqueta	2	1.800	1.829	355	13.00	25					4.79	Z5		
T12-T13	4.896.00	31.026.00	Cur	614.145.08	4.671.576.78	-200	272.40	267.86	4.54	-2.64%	247.78450												2	1.800	1.829	355	13.00	25					4.74	Z1		
T12-T13	4.910.00	31.040.00	Cur	614.135.90	4.671.566.22	-200	271.96	267.49	4.47	-2.64%	243.32816												2	1.800	1.829	355	13.00	25					4.67	Z1		
T12-T13	4.930.00	31.060.00	Cur	614.124.11	4.671.550.07	-200	271.71	266.96	4.75	-2.64%	236.96196												2	1.800	1.829	355	13.00	25					4.95	Z1		
T12-T13	4.949.00	31.079.00	Cur	614.114.44	4.671.533.73	0	271.20	266.46	4.74	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.94	Z1		
T12-T13	4.969.00	31.099.00	Rec	614.104.84	4.671.516.18	0	270.57	265.93	4.64	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.84	Z1		
T12-T13	4.989.00	31.119.00	Rec	614.095.24	4.671.498.64	0	270.16	265.40	4.76	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.96	Z1		
T12-T13	5.009.00	31.139.00	Rec	614.085.64	4.671.481.09	0	269.40	264.87	4.52	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.72	Z1		
T12-T13	5.013.00	31.143.00	Rec	614.083.72	4.671.477.58	0	269.36	264.77	4.59	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.79	Z1		
T12-T13	5.014.00	31.144.00	Rec	614.083.24	4.671.476.71	0	269.35	264.74	4.61	-2.64%	231.87617												2	1.800	1.829	355	13.00	25					4.81	Z4		
T12-T13	5.028.00	31.158.00	Cur	614.076.94	4.671.464.21	-200	269.10	264.37	4.73	-2.64%	221.48114											Via de Servicio NA-8712	2	1.800	1.829	355	13.00	25					4.93	Z1		
T12-T13	5.048.00	31.178.00	Cur	614.069.49	4.671.445.65	-200	268.01	263.84	4.18	-2.64%	221.11495											Via de Servicio NA-8712	2	1.800	1.829	355	13.00	25					4.36	Z4		
T12-T13	5.060.00	31.190.00	Cur	614.065.93	4.671.434.20	-200	267.89	263.53	4.36	-2.64%	217.28523											NA-8712	2	1.800	1.829	355	13.00	25					4.56	Z4		
T12-T13	5.061.00	31.191.00	Cur	614.065.86	4.671.433.23	-200	267.81	263.50	4.30	-2.64%	216.97692												2	1.800	1.829	355	13.00	25					4.50	Z1		
T12-T13	5.068.00	31.198.00	Cur	614.063.94	4.671.426.45	-200	267.32	263.32	4.00	-2.64%	214.74875												2	1.800	1.829	355	13.00	25					4.20	Z1		
T12-T13	5.088.00	31.218.00	Cur	614.060.32	4.671.406.79	-200	266.77	262.79	3.98	-2.64%	208.38255																									

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T12-T13	6.797.05	32.927.05	Cur	613.274.97	4.669.931.79	-400	259.06	254.56	4.51	-0.50%	249.63609	P.S.	V.	0.00	N/A	0.74	N/A		Desagüe	D2D	Apoyo arqueta	2	1.800	1.829	355	13.00	25		2	100	Compuerta	N/A	4.71	Z5	
T12-T13	6.802.00	32.932.00	Cur	613.271.51	4.669.928.25	-400	259.10	254.59	4.51	0.79%	248.84845										Apoyo arqueta	2	1.800	1.829	355	13.00	25						4.71	Z5	
T12-T13	6.803.00	32.933.00	Cur	613.270.82	4.669.927.53	-400	259.11	254.60	4.51	0.79%	248.68930											2	1.800	1.829	355	13.00	25						4.71	Z1	
T12-T13	6.810.00	32.940.00	Cur	613.266.02	4.669.922.44	-400	259.16	254.66	4.50	0.79%	247.57521											2	1.800	1.829	355	13.00	25						4.70	Z1	
T12-T13	6.830.00	32.960.00	Cur	613.252.80	4.669.907.44	-400	259.28	254.82	4.47	0.79%	244.39211											2	1.800	1.829	355	13.00	25						4.67	Z1	
T12-T13	6.850.00	32.980.00	Cur	613.240.34	4.669.891.79	-400	259.27	254.97	4.30	0.79%	241.20901											2	1.800	1.829	355	13.00	25						4.50	Z1	
T12-T13	6.869.00	32.999.00	Rec	613.229.16	4.669.876.43	0	259.27	255.12	4.15	0.79%	239.69953											2	1.800	1.829	355	13.00	25						4.35	Z1	
T12-T13	6.889.00	33.019.00	Rec	613.217.48	4.669.860.20	0	259.28	255.28	4.00	0.79%	239.69953											2	1.800	1.829	355	13.00	25						4.20	Z1	
T12-T13	6.909.00	33.039.00	Rec	613.205.80	4.669.843.96	0	259.27	255.44	3.83	0.79%	239.69953											2	1.800	1.829	355	13.00	25						4.03	Z1	
T12-T13	6.929.00	33.059.00	Rec	613.194.12	4.669.827.72	0	259.26	255.60	3.67	0.79%	239.69953											2	1.800	1.829	355	13.00	25						3.87	Z1	
T12-T13	6.949.00	33.079.00	Rec	613.182.44	4.669.811.49	0	259.27	255.76	3.52	0.79%	239.69953											2	1.800	1.829	355	13.00	25						3.72	Z1	
T12-T13	6.969.00	33.099.00	Rec	613.170.76	4.669.795.25	0	259.28	255.92	3.36	0.79%	239.69953											2	1.800	1.829	355	13.00	25						3.56	Z1	
T12-T13	6.974.00	33.104.00	Rec	613.167.84	4.669.791.19	0	259.28	255.96	3.32	0.79%	239.69953											2	1.800	1.829	355	13.00	25						3.52	Z1	
T12-T13	6.975.00	33.105.00	Rec	613.167.26	4.669.790.38	0	259.30	255.96	3.33	0.79%	239.69953											Apoyo arqueta	2	1.800	1.829	355	13.00	25						3.53	Z5
T12-T13	6.980.00	33.106.00	Rec	613.164.34	4.669.786.32	0	259.53	256.00	3.53	0.79%	239.69953				0.74	N/A		Ventosa	V2S-200	Apoyo arqueta	2	1.800	1.829	355	13.00	25		1	200			3.73	Z5		
T12-T13	6.985.00	33.115.00	Rec	613.161.42	4.669.782.26	0	259.76	255.98	3.78	-0.50%	239.69953											Apoyo arqueta	2	1.800	1.829	355	13.00	25						3.96	Z5
T12-T13	6.986.00	33.116.00	Rec	613.160.83	4.669.781.45	0	259.81	255.97	3.84	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.04	Z1	
T12-T13	6.989.00	33.119.00	Rec	613.159.98	4.669.779.02	0	259.96	255.96	4.00	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.20	Z1	
T12-T13	7.009.00	33.139.00	Rec	613.147.40	4.669.762.78	0	259.96	255.86	4.10	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.30	Z1	
T12-T13	7.029.00	33.159.00	Rec	613.135.72	4.669.746.55	0	259.88	255.76	4.12	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.32	Z1	
T12-T13	7.049.00	33.179.00	Rec	613.124.04	4.669.730.31	0	259.84	255.66	4.18	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.38	Z1	
T12-T13	7.069.00	33.199.00	Rec	613.112.36	4.669.714.08	0	259.87	255.56	4.31	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.51	Z1	
T12-T13	7.089.00	33.219.00	Rec	613.100.68	4.669.697.84	0	259.90	255.46	4.45	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.65	Z1	
T12-T13	7.109.00	33.239.00	Rec	613.089.01	4.669.681.60	0	259.93	255.36	4.57	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.77	Z1	
T12-T13	7.129.00	33.259.00	Rec	613.077.33	4.669.665.37	0	259.93	255.26	4.67	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.87	Z1	
T12-T13	7.149.00	33.279.00	Rec	613.065.65	4.669.649.13	0	259.93	255.16	4.77	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						4.97	Z1	
T12-T13	7.169.00	33.299.00	Rec	613.053.97	4.669.632.90	0	259.92	255.06	4.87	-0.50%	239.69953											2	1.800	1.829	355	13.00	25						5.07	Z1	
T12-T13	7.189.00	33.318.00	Cur	613.043.01	4.669.617.38	-200	259.92	254.96	4.96	-0.50%	237.08769											2	1.800	1.829	355	13.00	25						5.16	Z1	
T12-T13	7.209.00	33.338.00	Cur	613.032.86	4.669.600.15	-200	259.92	254.86	5.05	-0.50%	230.72150											2	1.800	1.829	355	13.00	25						5.25	Z1	
T12-T13	7.228.00	33.358.00	Cur	613.024.48	4.669.582.00	-200	259.92	254.76	5.16	-0.50%	224.35530											2	1.800	1.829	355	13.00	25						5.36	Z1	
T12-T13	7.244.00	33.374.00	Cur	613.019.11	4.669.566.94	-200	259.98	254.68	5.29	-0.50%	219.26234											2	1.800	1.829	355	13.00	25						5.49	Z1	
T12-T13	7.245.00	33.375.00	Cur	613.018.81	4.669.565.98	-200	259.98	254.68	5.30	-0.50%	218.94403											Apoyo arqueta	2	1.800	1.829	355	13.00	25						5.50	Z5
T12-T13	7.248.00	33.378.00	Cur	613.017.95	4.669.563.11	-200	259.99	254.66	5.33	-0.50%	217.98910											Apoyo arqueta	2	1.800	1.829	355	13.00	25						5.53	Z5
T12-T13	7.250.00	33.380.00	Cur	613.017.40	4.669.561.18	-200	259.99	254.65	5.34	-0.50%	217.35248				1.05	N/A		Desagüe	D2D	Apoyo arqueta	2	1.800	1.829	355	13.00	25						5.54	Z5		
T12-T13	7.255.00	33.385.00	Cur	613.016.12	4.669.556.35	-200	260.18	254.72	5.46	1.33%	215.76093											Apoyo arqueta	2	1.800	1.829	355	13.00	25						5.66	Z5
T12-T13	7.256.00	33.386.00	Cur	613.015.88	4.669.555.38	-200	259.60	254.73	4.87	1.33%	215.44262											Azarbe Escomedero	2	1.800	1.829	355	13.00	25						5.07	Z6
T12-T13	7.262.00	33.392.00	Cur	613.014.52	4.669.549.54	-200	260.23	254.81	5.42	1.33%	213.53276											Azarbe Escomedero	2	1.800	1.829	355	13.00	25						5.62	Z6
T12-T13	7.263.00	33.393.00	Cur	613.014.31	4.669.548.56	-200	260.24	254.82	5.41	1.33%	213.21445											2	1.800	1.829	355	13.00	25						5.61	Z1	
T12-T13	7.268.00	33.398.00	Cur	613.013.34	4.669.543.05	-200	260.23	254.89	5.34	1.33%	211.62290											2	1.800	1.829	355	13.00	25						5.54	Z1	
T12-T13	7.268.00	33.418.00	Cur	613.010.70	4.669.523.84	-200	260.19	255.16	5.04	1.33%	205.25671											2	1.800	1.829	355	13.00	25						5.34	Z1	
T12-T13	7.305.00	33.438.00	Cur	613.010.95	4.669.503.86	-200	260.17	255.42	4.75	1.33%	198.89051											2	1.800	1.829	355	13.00	25						4.95	Z1	
T12-T13	7.326.00	33.456.00	Cur	613.009.95	4.669.485.87	100	260.23	255.66	4.57	1.33%	205.32002											2	1.800	1.829	355	13.00	25						4.77	Z1	
T12-T13	7.346.00	33.476.00	Cur	613.006.30	4.669.466.24	100	260.18	255.93	4.26	1.33%	218.06242											2	1.800	1.829	355	13.00	25						4.46	Z1	
T12-T13	7.365.00	33.495.00	Rec	612.999.44	4.669.448.54	0	260.22	256.11	4.11	0.20%	226.43616											2	1.800	1.829	355	13.00	25						4.31	Z1	
T12-T13	7.384.00	33.514.00	Cur	612.983.14	4.669.430.64	-100	260.17	256.15	4.02	0.20%	215.55122																								

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadura tipo	Altura de excavación a 1m (m)	Zanja tipo asignada
T12-T13	9.194,00	35.324,00	Rec	612.901,17	4.667.720,58	0	257,48	241,33	16,15	0,96%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						16,35	Z9	
T12-T13	9.214,00	35.344,00	Rec	612.894,32	4.667.701,78	0	260,00	241,53	18,47	1,00%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						18,67	Z9	
T12-T13	9.234,00	35.364,00	Rec	612.887,48	4.667.682,99	0	259,48	241,73	17,75	1,00%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						17,95	Z9	
T12-T13	9.254,00	35.384,00	Rec	612.880,64	4.667.664,20	0	259,04	241,93	17,11	1,00%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						17,31	Z9	
T12-T13	9.274,00	35.404,00	Rec	612.873,79	4.667.645,41	0	259,02	242,28	16,73	2,71%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						16,93	Z9	
T12-T13	9.294,00	35.424,00	Rec	612.866,95	4.667.626,61	0	258,85	243,02	15,83	4,62%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						16,03	Z9	
T12-T13	9.314,00	35.444,00	Rec	612.860,10	4.667.607,82	0	258,85	244,13	14,72	6,52%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						14,92	Z9	
T12-T13	9.334,00	35.464,00	Rec	612.853,26	4.667.589,03	0	259,26	245,63	13,63	8,43%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						13,83	Z9	
T12-T13	9.354,00	35.484,00	Rec	612.846,41	4.667.570,24	0	259,63	247,41	12,22	9,00%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						12,42	Z9	
T12-T13	9.374,00	35.504,00	Rec	612.839,57	4.667.551,44	0	259,74	249,21	10,53	9,00%	222.23522									Hinca		Cruce Ebro	2	1.800	1.829	355	14,00	25						10,73	Z9	
T12-T13	9.390,00	35.520,00	Rec	612.834,09	4.667.536,41	0	259,88	250,65	9,23	9,00%	222.23522									Hinca	Pozo salida	Cruce Ebro	2	1.800	1.829	355	14,00	25						9,43	Z9	
T12-T13	9.391,00	35.521,00	Rec	612.833,75	4.667.535,47	0	259,90	250,74	9,16	9,00%	222.23522										Pozo salida			2	1.800	1.829	355	14,00	25						9,36	Z2
T12-T13	9.392,00	35.522,00	Rec	612.833,41	4.667.534,53	0	259,91	250,83	9,09	9,00%	222.23522											Pantalla continua lineal	2	1.800	1.829	355	14,00	25						9,29	Z2	
T12-T13	9.394,00	35.524,00	Rec	612.832,73	4.667.532,65	0	259,93	251,01	8,92	9,00%	222.23522												2	1.800	1.829	355	14,00	25						9,12	Z2	
T12-T13	9.410,00	35.540,00	Cur	612.826,87	4.667.517,76	200	260,10	252,14	7,96	4,60%	226.28752		V.		0,18	N/A							2	1.800	1.829	355	14,00	25						8,16	Z2	
T12-T13	9.413,00	35.543,00	Cur	612.825,65	4.667.515,02	200	260,17	252,27	7,90	3,66%	227.22425												2	1.800	1.829	355	14,00	25						8,10	Z2	
T12-T13	9.433,00	35.563,00	Cur	612.816,45	4.667.497,27	200	260,63	252,50	8,13	0,20%	233.69864												2	1.800	1.829	355	14,00	25						8,33	Z2	
T12-T13	9.453,00	35.583,00	Cur	612.805,53	4.667.480,53	200	260,95	252,54	8,42	0,20%	239.97484												2	1.800	1.829	355	14,00	25						8,62	Z2	
T12-T13	9.473,00	35.603,00	Cur	612.792,99	4.667.464,93	200	261,01	252,58	8,43	0,20%	246.34104												2	1.800	1.829	355	14,00	25						8,63	Z2	
T12-T13	9.492,00	35.622,00	Cur	612.779,78	4.667.451,31	0	261,21	252,61	8,59	0,20%	250.24456											Conex. Hinca	2	1.800	1.829	355	14,00	25						8,79	Z2	
T12-T13	9.512,00	35.642,00	Rec	612.765,58	4.667.437,22	0	261,53	252,65	8,87	0,20%	250.24456											Conex. Hinca	2	1.800	1.829	355	14,00	25						9,07	Z2	
T12-T13	9.532,00	35.662,00	Rec	612.751,38	4.667.423,14	0	261,77	252,69	9,07	0,20%	250.24456											Conex. Hinca	2	1.800	1.829	355	14,00	25						9,27	Z2	
T12-T13	9.552,00	35.682,00	Rec	612.737,19	4.667.409,05	0	261,91	253,18	8,73	-5,80%	250.24456											Conex. Hinca	2	1.800	1.829	355	14,00	25						8,93	Z2	
T12-T13	9.553,00	35.683,00	Rec	612.736,48	4.667.408,34	0	261,92	253,24	8,68	6,15%	250.24456											Conex. Hinca	2	1.800	1.829	355	14,00	25						8,88	Z2	
T12-T13	9.554,00	35.684,00	Rec	612.735,77	4.667.407,64	0	261,93	253,30	8,63	6,50%	250.24456											Pozo ataque	Pantalla continua en pozo	2	1.800	1.829	355	14,00	25						8,98	Z10
T12-T13	9.569,00	35.699,00	Rec	612.725,12	4.667.397,07	0	262,50	254,63	7,87	10,00%	250.24456											Pozo ataque	Pantalla continua en pozo	2	1.800	1.829	355	14,00	25						8,98	Z10
T12-T13	9.570,00	35.700,00	Rec	612.724,41	4.667.396,37	0	262,56	254,73	7,83	10,00%	250.24456										Hinca	Pozo ataque	FFCC	2	1.800	1.829	355	14,00	25						8,03	Z9
T12-T13	9.572,00	35.702,00	Rec	612.722,99	4.667.394,96	0	262,67	254,93	7,74	10,00%	250.24456										Hinca		FFCC	2	1.800	1.829	355	14,00	25						7,94	Z9
T12-T13	9.592,00	35.722,00	Rec	612.708,80	4.667.380,87	0	269,15	256,93	12,22	10,00%	250.24456										Hinca		FFCC	2	1.800	1.829	355	14,00	25						12,42	Z9
T12-T13	9.612,00	35.742,00	Rec	612.694,60	4.667.366,79	0	266,75	258,93	7,83	10,00%	250.24456										Hinca		FFCC	2	1.800	1.829	355	14,00	25						8,03	Z9
T12-T13	9.620,00	35.750,00	Rec	612.688,92	4.667.361,15	0	268,12	259,73	6,39	10,00%	250.24456										Hinca		FFCC	2	1.800	1.829	355	14,00	25						8,59	Z9
T12-T13	9.621,00	35.751,00	Rec	612.688,21	4.667.360,45	0	268,01	259,83	6,18	10,00%	250.24456											Pozo salida	Pantalla continua lineal	2	1.800	1.829	355	14,00	25						8,38	Z2
T12-T13	9.625,00	35.755,00	Rec	612.685,37	4.667.357,63	0	267,83	260,23	7,60	10,00%	250.24456											Pozo salida		2	1.800	1.829	355	14,00	25						7,80	Z2
T12-T13	9.626,00	35.756,00	Rec	612.684,66	4.667.356,92	0	267,89	260,33	7,56	10,00%	250.24456												2	1.800	1.829	355	14,00	25						7,76	Z2	
T12-T13	9.632,00	35.762,00	Rec	612.680,40	4.667.352,70	0	268,34	260,93	7,41	10,00%	250.24456												2	1.800	1.829	355	14,00	25						7,61	Z2	
T12-T13	9.652,00	35.782,00	Rec	612.666,21	4.667.338,61	0	269,69	262,93	6,76	10,00%	250.24456												2	1.800	1.829	355	14,00	25						6,96	Z2	
T12-T13	9.653,00	35.793,00	Rec	612.658,40	4.667.330,86	0	270,04	263,97	6,07	8,35%	250.24456												2	1.800	1.829	355	14,00	25						6,27	Z2	
T12-T13	9.654,00	35.794,00	Rec	612.657,69	4.667.330,16	0	270,05	264,05	6,00	8,11%	250.24456												2	1.800	1.829	355	14,00	25						6,20	Z1	
T12-T13	9.672,00	35.812,00	Rec	612.652,01	4.667.324,52	0	270,14	265,63	5,51	6,22%	250.24456												2	1.800	1.829	355	14,00	25						5,71	Z1	
T12-T13	9.692,00	35.822,00	Rec	612.637,81	4.667.310,44	0	270,36	265,46	4,89	3,56%	250.24456												2	1.800	1.829	355	14,00	25						5,09	Z1	
T12-T13	9.712,00	35.842,00	Rec	612.623,82	4.667.296,35	0	270,70	266,15	4,55	3,39%	250.24456												2	1.800	1.829	355	14,00	25						4,75	Z1	
T12-T13	9.714,00	35.844,00	Rec	612.622,20	4.667.294,94	0	270,75	266,22	4,53	3,39%	250.24456												2	1.800	1.829	355	14,00	25						4,73	Z1	
T12-T13	9.715,00	35.845,00	Rec	612.621,49	4.667.294,23	0	270,77	266,26	4,52	3,39%	250.24456												2	1.800	1.829	355	14,00	25						4,72	Z5	
T12-T13	9.720,00	35.850,00	Rec	612.617,94	4.667.290,71	0	270,87	266,43	4,44	3,39%	250.24456																									

Tramo	P.K. Tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Resante Hidráulica	Altura resante hidráulica (m)	Pendiente	Azmut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pa -> %	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoplado (mm)	PN Timbraje válvula (mm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TH (m)	Zanja tipo asignada
T12-T13	11.555,00	37.685,00	Cur	612.858,35	4.665.623,83	-400	289,00	284,41	4,59	8,79%	202.13810										Apoyo arqueta	2	1.800	1.829	355	11,50	25							4,79	25	
T12-T13	11.556,00	37.686,00	Cur	612.858,31	4.665.622,83	-400	288,72	284,51	4,21	9,70%	201.97894										Barranco de Lizar	2	1.800	1.829	355	11,50	25							4,41	25	
T12-T13	11.559,50	37.689,50	Cur	612.858,22	4.665.619,33	-400	288,93	284,87	4,06	10,61%	201.42190										Barranco de Lizar	2	1.800	1.829	355	11,50	25							4,26	25	
T12-T13	11.565,00	37.695,00	Cur	612.859,14	4.665.613,83	-400	290,89	285,94	5,35	13,61%	200.54655										Barranco de Lizar	2	1.800	1.829	355	11,50	25							5,55	25	
T12-T13	11.566,00	37.696,00	Cur	612.858,13	4.665.612,83	-400	290,88	285,68	5,21	14,16%	200.38739											2	1.800	1.829	355	11,50	25							5,41	21	
T12-T13	11.579,00	37.709,00	Cur	612.858,26	4.665.599,83	-400	293,20	287,98	5,22	24,36%	198.31838											2	1.800	1.829	355	11,50	25							5,42	21	
T12-T13	11.598,00	37.728,00	Cur	612.859,21	4.665.580,86	-400	297,37	291,97	5,40	17,54%	195.29444											2	1.800	1.829	355	11,50	25							5,60	21	
T12-T13	11.600,00	37.730,00	Cur	612.859,37	4.665.578,86	-400	297,66	292,31	5,35	16,53%	194.97613											2	1.800	1.829	355	11,50	25							5,53	21	
T12-T13	11.601,00	37.731,00	Cur	612.859,45	4.665.577,86	-400	297,80	292,47	5,33	16,02%	194.81697											2	1.800	1.829	355	11,50	25							5,53	21	
T12-T13	11.618,00	37.748,00	Cur	612.861,19	4.665.560,96	-400	299,10	294,46	4,64	7,43%	192.11134											2	1.800	1.829	355	11,50	25							4,84	21	
T12-T13	11.638,00	37.768,00	Cur	612.864,16	4.665.541,18	-400	299,56	295,06	4,50	0,86%	188.92824											2	1.800	1.829	355	11,50	25							4,70	21	
T12-T13	11.658,00	37.788,00	Cur	612.868,11	4.665.521,58	-400	299,76	295,23	4,53	0,86%	185.74514											2	1.800	1.829	355	11,50	25							4,73	21	
T12-T13	11.678,00	37.808,00	Cur	612.873,03	4.665.502,19	-400	299,81	295,41	4,41	0,86%	182.56204											2	1.800	1.829	355	11,50	25							4,61	21	
T12-T13	11.698,00	37.828,00	Cur	612.878,92	4.665.483,08	-400	299,85	295,58	4,27	0,86%	179.37894																									

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azmut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desague	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T13-T13B	1.569,00	40.199,00	Cur	612.366,92	4.663.312,63	400	357,21	351,87	5,34	9,12%	203,42049											2	1.800	1.829	275	11,50	16						5,54	Z1	
T13-T13B	1.589,00	40.219,00	Cur	612.365,34	4.663.292,70	400	357,54	353,71	3,83	9,97%	206,60358											2	1.800	1.829	275	11,50	16						4,03	Z1	
T13-T13B	1.609,00	40.239,00	Cur	612.362,78	4.663.272,87	400	359,97	356,27	3,70	15,59%	209,78668											2	1.800	1.829	275	11,50	16						3,90	Z1	
T13-T13B	1.629,00	40.259,00	Cur	612.359,22	4.663.253,19	400	363,99	359,63	4,35	17,00%	212,96978											2	1.800	1.829	275	11,50	16						4,55	Z1	
T13-T13B	1.649,00	40.279,00	Cur	612.354,69	4.663.233,71	400	368,18	363,03	5,15	17,00%	216,15288											2	1.800	1.829	275	11,50	16						5,35	Z1	
T13-T13B	1.669,00	40.299,00	Cur	612.349,19	4.663.214,48	400	371,64	367,50	4,14	28,26%	219,33598											2	1.800	1.829	275	11,50	16						4,34	Z1	
T13-T13B	1.671,00	40.301,00	Cur	612.348,58	4.663.212,58	400	372,07	368,08	3,99	29,44%	219,65429	V.			0,31	N/A						2	1.800	1.829	275	11,50	16						4,19	Z1	
T13-T13B	1.672,00	40.302,00	Cur	612.348,28	4.663.211,62	400	372,35	368,38	3,97	30,04%	219,81344						X	X				2	1.800	1.829	275	11,50	16						4,17	Z11	
T13-T13B	1.689,00	40.319,00	Cur	612.342,73	4.663.195,56	400	378,64	374,34	4,30	40,11%	222,51908						X					2	1.800	1.829	275	11,50	16						4,50	Z11	
T13-T13B	1.709,00	40.339,00	Cur	612.335,33	4.663.176,98	400	387,12	382,62	4,50	37,42%	225,70218						X					2	1.800	1.829	275	11,50	16						4,70	Z11	
T13-T13B	1.713,00	40.343,00	Cur	612.333,75	4.663.173,31	400	388,90	384,00	4,90	31,46%	226,33880						X	X				2	1.800	1.829	275	11,50	16						5,10	Z11	
T13-T13B	1.714,00	40.344,00	Cur	612.333,34	4.663.172,39	400	389,39	384,31	5,08	29,97%	226,49795											2	1.800	1.829	275	11,50	16						5,28	Z1	
T13-T13B	1.720,00	40.350,00	Cur	612.330,88	4.663.166,92	400	392,05	385,84	6,21	21,04%	227,45288	V.			0,82	N/A						2	1.800	1.829	275	11,50	16						6,41	Z1	
T13-T13B	1.721,00	40.351,00	Cur	612.330,46	4.663.166,01	400	392,42	386,04	6,38	19,55%	227,61204												2	1.800	1.829	275	11,50	16						6,58	Z3
T13-T13B	1.723,00	40.353,00	Cur	612.329,61	4.663.164,20	400	393,07	386,40	6,67	16,58%	227,93035												2	1.800	1.829	275	11,50	16						6,87	Z3
T13-T13B	1.724,00	40.354,00	Cur	612.329,18	4.663.163,30	400	393,40	386,56	6,84	15,09%	228,08950												2	1.800	1.829	275	11,50	16						7,04	Z3
T13-T13B	1.729,00	40.359,00	Cur	612.327,02	4.663.158,79	400	394,88	387,13	7,75	7,64%	228,88528												2	1.800	1.829	275	11,50	16						7,96	Z3
T13-T13B	1.745,00	40.379,00	Cur	612.317,81	4.663.141,04	400	399,17	387,35	11,81	0,20%	232,06837												2	1.800	1.829	275	11,50	16						12,01	Z3
T13-T13B	1.769,00	40.399,00	Cur	612.307,72	4.663.123,77	400	399,24	387,39	11,84	0,20%	235,25147												2	1.800	1.829	275	11,50	16						12,04	Z3
T13-T13B	1.788,00	40.418,00	Rec	612.297,61	4.663.107,69	0	397,45	387,43	10,02	0,20%	235,78409												2	1.800	1.829	275	11,50	16						10,72	Z3
T13-T13B	1.808,00	40.438,00	Rec	612.286,95	4.663.090,76	0	395,62	387,47	8,15	0,20%	235,78409												2	1.800	1.829	275	11,50	16						8,35	Z3
T13-T13B	1.828,00	40.458,00	Rec	612.276,29	4.663.073,84	0	395,02	387,51	7,51	0,20%	235,78409												2	1.800	1.829	275	11,50	16						7,71	Z3
T13-T13B	1.848,00	40.478,00	Rec	612.265,63	4.663.056,92	0	395,22	387,55	7,67	0,20%	235,78409												2	1.800	1.829	275	11,50	16						7,87	Z3
T13-T13B	1.863,00	40.493,00	Rec	612.257,64	4.663.044,23	0	393,64	387,58	6,06	0,20%	235,78409												2	1.800	1.829	275	11,50	16						6,26	Z3
T13-T13B	1.864,00	40.494,00	Rec	612.257,10	4.663.043,38	0	393,49	387,58	5,91	0,20%	235,78409												2	1.800	1.829	275	11,50	16						6,11	Z6
T13-T13B	1.868,00	40.498,00	Rec	612.254,97	4.663.040,00	0	393,05	387,60	5,45	1,01%	235,78409												2	1.800	1.829	275	11,50	16						5,65	Z6
T13-T13B	1.888,00	40.518,00	Rec	612.244,31	4.663.023,07	0	394,28	388,61	5,67	9,07%	235,78409												2	1.800	1.829	275	11,50	16						5,87	Z6
T13-T13B	1.889,00	40.519,00	Rec	612.243,78	4.663.022,23	0	394,50	388,70	5,80	9,48%	235,78409												2	1.800	1.829	275	11,50	16						6,00	Z6
T13-T13B	1.890,00	40.520,00	Rec	612.243,25	4.663.021,38	0	394,72	388,80	5,92	9,88%	235,78409												2	1.800	1.829	275	11,50	16						6,12	Z3
T13-T13B	1.900,00	40.530,00	Rec	612.237,92	4.663.012,92	0	397,44	389,91	7,52	11,49%	235,78409												2	1.800	1.829	275	11,50	16						7,72	Z3
T13-T13B	1.901,00	40.531,00	Rec	612.237,38	4.663.012,07	0	397,71	390,03	7,68	11,49%	235,78409												2	1.800	1.829	275	11,50	16						7,88	Z3
T13-T13B	1.908,00	40.538,00	Rec	612.233,65	4.663.006,15	0	399,75	390,83	8,92	11,49%	235,78409												2	1.800	1.829	275	11,50	16						9,12	Z3
T13-T13B	1.928,00	40.558,00	Rec	612.222,99	4.662.989,23	0	404,31	393,13	11,18	11,49%	235,78409												2	1.800	1.829	275	11,50	16						11,38	Z3
T13-T13B	1.948,00	40.578,00	Rec	612.212,33	4.662.972,30	0	406,56	395,43	11,13	11,49%	235,78409												2	1.800	1.829	275	11,50	16						11,33	Z3
T13-T13B	1.968,00	40.598,00	Rec	612.201,67	4.662.955,38	0	407,29	397,42	9,87	6,35%	235,78409												2	1.800	1.829	275	11,50	16						10,07	Z3
T13-T13B	1.970,00	40.600,00	Rec	612.200,61	4.662.953,69	0	407,34	397,54	9,80	5,50%	235,78409	V.			0,24	N/A			Ventosa	V2D-200		2	1.800	1.829	275	11,50	16	2	200				10,00	Z3	
T13-T13B	1.988,00	40.618,00	Rec	612.191,02	4.662.938,46	0	407,50	397,87	9,63	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						9,83	Z3
T13-T13B	2.008,00	40.638,00	Rec	612.180,36	4.662.921,54	0	407,63	397,77	9,86	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,06	Z3
T13-T13B	2.028,00	40.658,00	Rec	612.169,70	4.662.904,61	0	407,74	397,67	10,07	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,27	Z3
T13-T13B	2.048,00	40.678,00	Rec	612.159,94	4.662.887,69	0	407,71	397,57	10,14	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,34	Z3
T13-T13B	2.068,00	40.698,00	Rec	612.148,38	4.662.870,77	0	407,61	397,47	10,14	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,34	Z3
T13-T13B	2.088,00	40.718,00	Rec	612.137,72	4.662.853,84	0	407,59	397,37	10,22	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,42	Z3
T13-T13B	2.108,00	40.738,00	Rec	612.127,06	4.662.836,92	0	407,61	397,27	10,34	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,54	Z3
T13-T13B	2.128,00	40.758,00	Rec	612.116,40	4.662.820,00	0	407,66	397,17	10,49	-0,50%	235,78409												2	1.800	1.829	275	11,50	16						10,69	Z3
T13-T13B	2.148,00	40.778,00	Rec	612.																															

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>>X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T13B-BT	138.00	42 408.00	Cur	611.386.38	4.661.366.22	200	381.98	375.95	6.03	-5.13%	227.84203											2	1.600	1.626	275	12.50	16						6.23	Z1	
T13B-BT	157.00	42 427.00	Cur	611.377.53	4.661.349.41	200	380.99	374.98	6.02	-5.13%	233.88992											2	1.600	1.626	275	12.50	16						6.22	Z1	
T13B-BT	158.00	42 428.00	Cur	611.377.02	4.661.348.55	200	380.82	374.92	5.89	-5.13%	234.20823											Paso inferior A-68	2	1.600	1.626	275	12.50	16						6.09	Z4
T13B-BT	177.00	42 447.00	Rec	611.366.78	4.661.332.55	0	382.74	374.16	8.58	-3.21%	236.80519											Paso inferior A-68	2	1.600	1.626	275	12.50	16						5.50	Z4
T13B-BT	197.00	42 467.00	Rec	611.355.85	4.661.315.80	0	383.36	373.52	9.85	-3.21%	236.80519											Paso inferior A-68	2	1.600	1.626	275	12.50	16						5.50	Z4
T13B-BT	217.00	42 487.00	Rec	611.344.92	4.661.299.05	0	379.50	372.87	6.63	-3.21%	236.80519											Via servicio A68	2	1.600	1.626	275	12.50	16						5.50	Z4
T13B-BT	237.00	42 507.00	Rec	611.333.99	4.661.282.30	0	375.99	372.42	3.57	-0.50%	236.80519											Via servicio A68	2	1.600	1.626	275	12.50	16						3.77	Z4
T13B-BT	254.00	42 524.00	Rec	611.324.70	4.661.268.07	0	378.12	372.34	5.79	-0.50%	236.80519											Via servicio A68	2	1.600	1.626	275	12.50	16						5.99	Z4
T13B-BT	255.00	42 525.00	Rec	611.324.15	4.661.267.23	0	378.60	372.33	6.27	-0.50%	236.80519												2	1.600	1.626	275	12.50	16						6.47	Z2
T13B-BT	257.00	42 527.00	Rec	611.323.06	4.661.265.55	0	379.60	372.32	7.28	-0.50%	236.80519												2	1.600	1.626	275	12.50	16						7.48	Z2
T13B-BT	277.00	42 547.00	Rec	611.312.13	4.661.248.81	0	380.06	372.22	7.84	-0.50%	236.80519												2	1.600	1.626	275	12.50	16						8.04	Z2
T13B-BT	290.00	42 560.00	Rec	611.305.03	4.661.237.92	0	378.07	372.01	6.06	-4.74%	236.80519												2	1.600	1.626	275	12.50	16						6.26	Z2
T13B-BT	291.00	42 561.00	Rec	611.304.48	4.661.237.08	0	377.70	371.96	5.74	-5.36%	236.80519												2	1.600	1.626	275	12.50	16						5.94	Z1
T13B-BT	292.00	42 562.00	Rec	611.303.94	4.661.236.24	0	377.33	371.90	5.43	-5.97%	236.80519												2	1.600	1.626	275	10.00	16						5.63	Z1
T13B-BT	295.00	42 565.00	Cur	611.302.29	4.661.233.73	400	376.31	371.70	4.61	-7.83%	237.01796												2	1.600	1.626	275	10.00	16						4.81	Z1
T13B-BT	313.00	42 583.00	Cur	611.292.07	4.661.218.92	400	372.72	369.56	3.16	-11.34%	239.88275												2	1.600	1.626	275	10.00	16						3.36	Z1
T13B-BT	332.00	42 602.00	Cur	611.280.57	4.661.203.80	400	372.21	368.52	3.69	-0.50%	242.93670												2	1.600	1.626	275	10.00	16						3.85	Z1
T13B-BT	352.00	42 622.00	Cur	611.267.70	4.661.188.49	400	372.40	368.42	3.98	-0.50%	246.08980												2	1.600	1.626	275	10.00	16						4.18	Z1
T13B-BT	372.00	42 642.00	Cur	611.254.09	4.661.173.84	400	372.59	368.32	4.27	-0.50%	249.27290												2	1.600	1.626	275	10.00	16						4.47	Z1
T13B-BT	392.00	42 662.00	Cur	611.239.76	4.661.159.89	400	372.82	368.22	4.60	-0.50%	252.45599												2	1.600	1.626	275	10.00	16						4.80	Z1
T13B-BT	412.00	42 682.00	Cur	611.224.75	4.661.146.68	400	372.59	368.12	4.47	-0.50%	255.63909												2	1.600	1.626	275	10.00	16						4.67	Z1
T13B-BT	432.00	42 702.00	Cur	611.209.09	4.661.134.23	400	371.86	368.02	3.84	-0.50%	258.82219												2	1.600	1.626	275	10.00	16						4.04	Z1
T13B-BT	452.00	42 722.00	Cur	611.192.84	4.661.122.58	400	371.23	367.73	3.51	-2.93%	262.00529												2	1.600	1.626	275	10.00	16						3.71	Z1
T13B-BT	471.00	42 741.00	Rec	611.176.89	4.661.112.25	0	370.37	366.93	3.44	-4.74%	264.20003												2	1.600	1.626	275	10.00	16						3.64	Z1
T13B-BT	491.00	42 761.00	Rec	611.159.97	4.661.101.59	0	370.04	365.98	4.06	-4.74%	264.20003												2	1.600	1.626	275	10.00	16						4.26	Z1
T13B-BT	511.00	42 781.00	Rec	611.143.05	4.661.090.93	0	368.65	365.04	3.62	-4.74%	264.20003												2	1.600	1.626	275	10.00	16						3.82	Z1
T13B-BT	531.00	42 801.00	Rec	611.126.13	4.661.080.26	0	367.74	364.09	3.65	-4.74%	264.20003												2	1.600	1.626	275	10.00	16						3.85	Z1
T13B-BT	551.00	42 821.00	Rec	611.109.21	4.661.069.60	0	366.84	363.52	3.31	-1.24%	264.20003												2	1.600	1.626	275	10.00	16						3.51	Z1
T13B-BT	571.00	42 841.00	Rec	611.092.29	4.661.058.94	0	366.82	363.28	3.54	-1.24%	264.20003												2	1.600	1.626	275	10.00	16						3.74	Z1
T13B-BT	591.00	42 861.00	Rec	611.075.37	4.661.048.27	0	367.11	363.05	4.06	-0.27%	264.20003												2	1.600	1.626	275	10.00	16						4.26	Z1
T13B-BT	594.00	42 864.00	Rec	611.072.83	4.661.046.67	0	367.16	363.05	4.11	0.31%	264.20003												2	1.600	1.626	275	10.00	16						4.31	Z1
T13B-BT	595.00	42 865.00	Rec	611.071.99	4.661.046.14	0	367.18	363.06	4.12	0.50%	264.20003												2	1.600	1.626	275	10.00	16						4.32	Z5
T13B-BT	600.00	42 870.00	Rec	611.067.76	4.661.043.48	0	367.47	363.10	4.37	1.46%	264.20003		V.		0.11	N/A			Desagüe	D2D	Apoyo arqueta	2	1.600	1.626	275	10.00	16		2	100	Compuerta	N/A	4.57	Z5	
T13B-BT	605.00	42 875.00	Rec	611.063.53	4.661.040.81	0	367.42	363.20	4.22	2.43%	264.20003											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.42	Z5
T13B-BT	606.00	42 876.00	Rec	611.062.68	4.661.040.28	0	367.39	363.23	4.16	2.62%	264.20003											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.36	Z1
T13B-BT	611.00	42 881.00	Rec	611.058.45	4.661.037.61	0	367.19	363.38	3.81	3.59%	264.20003												2	1.600	1.626	275	10.00	16						4.01	Z1
T13B-BT	631.00	42 901.00	Rec	611.041.53	4.661.026.95	0	367.61	364.21	3.40	4.17%	264.20003												2	1.600	1.626	275	10.00	16						3.60	Z1
T13B-BT	644.00	42 914.00	Rec	611.030.53	4.661.020.02	0	368.19	364.73	3.46	3.12%	264.20003												2	1.600	1.626	275	10.00	16						3.66	Z1
T13B-BT	645.00	42 915.00	Rec	611.029.69	4.661.019.48	0	368.19	364.76	3.43	2.88%	264.20003												2	1.600	1.626	275	10.00	16						3.63	Z5
T13B-BT	650.00	42 920.00	Rec	611.025.46	4.661.016.82	0	368.29	364.87	3.42	1.71%	264.20003		V.		0.13	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.600	1.626	275	10.00	16		1	200			3.62	Z5	
T13B-BT	658.00	42 928.00	Rec	611.021.23	4.661.014.15	0	368.35	364.93	3.42	0.54%	264.20003											Apoyo arqueta	2	1.600	1.626	275	10.00	16						3.63	Z5
T13B-BT	656.00	42 926.00	Rec	611.020.38	4.661.013.62	0	368.36	364.93	3.43	0.31%	264.20003												2	1.600	1.626	275	10.00	16						3.63	Z1
T13B-BT	669.00	42 939.00	Rec	611.009.38	4.661.006.69	0	368.44	364.86	3.58	-0.75%	264.20003												2	1.600	1.626	275	10.00	16						3.78	Z1
T13B-BT	689.00	42 959.00	Rec	610.992.46	4.660.996.02	0	368.46	364.71	3.75	-0.75%	264.20003												2	1.600	1.626	275	10.00	16						3.95	Z1
T13B-BT	709.00	42 979.00	Rec	610.975.54	4.660.985.36	0	368.46	364.56	3.90	-0.75%	264.20003																								

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetu rotura tipo	Altura de excavación a 1m (m)	Zanja tipo asignada
T13B-BT	2.523.00	44.793.00	Rec	609.335.66	4.660.272.26	0	359.19	355.03	4.16	-7.93%	287.75615											2	1.600	1.626	275	10.00	16						4.36	Z1		
T13B-BT	2.543.00	44.813.00	Rec	609.316.03	4.660.268.44	0	357.77	354.02	3.75	-4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.95	Z1		
T13B-BT	2.550.00	44.820.00	Rec	609.309.16	4.660.267.10	0	357.29	353.72	3.57	-4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.77	Z1		
T13B-BT	2.551.00	44.821.00	Rec	609.308.18	4.660.266.91	0	357.22	353.68	3.55	-4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.75	Z1		
T13B-BT	2.563.00	44.833.00	Rec	609.296.40	4.660.264.61	0	356.69	353.16	3.54	-4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.74	Z1		
T13B-BT	2.583.00	44.853.00	Rec	609.276.77	4.660.260.79	0	355.87	352.29	3.58	-4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.78	Z1		
T13B-BT	2.603.00	44.873.00	Rec	609.257.14	4.660.256.97	0	354.84	351.50	3.34	-2.17%	287.75615											2	1.600	1.626	275	10.00	16						3.54	Z1		
T13B-BT	2.604.00	44.874.00	Rec	609.256.16	4.660.256.78	0	354.84	351.48	3.36	-1.86%	287.75615											2	1.600	1.626	275	10.00	16						3.56	Z1		
T13B-BT	2.605.00	44.875.00	Rec	609.255.18	4.660.256.59	0	354.85	351.46	3.39	-1.55%	287.75615											2	1.600	1.626	275	10.00	16						3.59	Z5		
T13B-BT	2.610.00	44.880.00	Rec	609.250.27	4.660.255.63	0	354.98	351.42	3.55	0.00%	287.75615						0.18	N/A		Desagüe	D2D	Apoyo arqueta	2	1.600	1.626	275	10.00	16			2	100	Compuerta	N/A	3.75	Z5
T13B-BT	2.615.00	44.885.00	Rec	609.245.36	4.660.254.68	0	354.87	351.46	3.41	1.55%	287.75615											2	1.600	1.626	275	10.00	16						3.61	Z5		
T13B-BT	2.616.00	44.886.00	Rec	609.244.38	4.660.254.48	0	354.79	351.48	3.32	1.86%	287.75615											2	1.600	1.626	275	10.00	16						3.52	Z1		
T13B-BT	2.623.00	44.893.00	Rec	609.237.51	4.660.253.15	0	354.84	351.68	3.16	4.03%	287.75615											2	1.600	1.626	275	10.00	16						3.36	Z1		
T13B-BT	2.643.00	44.913.00	Rec	609.217.88	4.660.249.32	0	356.07	352.55	3.52	4.34%	287.75615											2	1.600	1.626	275	10.00	16						3.72	Z1		
T13B-BT	2.663.00	44.933.00	Rec	609.198.25	4.660.245.50	0	356.16	353.03	3.12	1.37%	287.75615											2	1.600	1.626	275	10.00	16						3.32	Z1		
T13B-BT	2.683.00	44.953.00	Rec	609.178.61	4.660.241.68	0	356.34	353.31	3.23	1.37%	287.75615											2	1.600	1.626	275	10.00	16						3.43	Z1		
T13B-BT	2.700.00	44.970.00	Rec	609.161.93	4.660.238.43	0	357.31	353.68	3.62	2.97%	287.75615											2	1.600	1.626	275	10.00	16						3.82	Z1		
T13B-BT	2.701.00	44.971.00	Rec	609.160.95	4.660.238.24	0	357.36	353.71	3.64	2.97%	287.75615											2	1.600	1.626	275	10.00	16						3.84	Z1		
T13B-BT	2.703.00	44.973.00	Rec	609.159.98	4.660.237.86	0	357.44	353.77	3.67	2.97%	287.75615											2	1.600	1.626	275	10.00	16						3.87	Z1		
T13B-BT	2.721.00	44.991.00	Cur	609.141.31	4.660.234.42	400	358.12	354.61	3.51	6.75%	288.02716											2	1.600	1.626	275	10.00	16						3.71	Z1		
T13B-BT	2.740.00	45.010.00	Cur	609.122.57	4.660.231.31	400	360.17	356.27	3.90	9.72%	291.05110											2	1.600	1.626	275	10.00	16						4.10	Z1		
T13B-BT	2.760.00	45.030.00	Cur	609.102.71	4.660.229.00	400	361.76	358.21	3.55	9.72%	294.23420											2	1.600	1.626	275	10.00	16						3.75	Z1		
T13B-BT	2.780.00	45.050.00	Cur	609.082.75	4.660.227.69	400	364.11	360.15	3.95	9.72%	297.41730											2	1.600	1.626	275	10.00	16						4.15	Z1		
T13B-BT	2.800.00	45.070.00	Cur	609.062.76	4.660.227.38	400	366.70	362.10	4.61	9.72%	300.60040											2	1.600	1.626	275	10.00	16						4.81	Z1		
T13B-BT	2.820.00	45.090.00	Cur	609.042.77	4.660.228.07	400	368.73	364.01	4.73	7.93%	303.78350											2	1.600	1.626	275	10.00	16						4.93	Z1		
T13B-BT	2.824.00	45.094.00	Cur	609.038.78	4.660.228.33	400	368.88	364.29	4.59	6.15%	304.42012											2	1.600	1.626	275	10.00	16						4.79	Z1		
T13B-BT	2.825.00	45.095.00	Cur	609.037.78	4.660.228.40	400	369.90	364.35	4.55	5.71%	304.57927											2	1.600	1.626	275	10.00	16						4.75	Z5		
T13B-BT	2.830.00	45.100.00	Cur	609.032.80	4.660.228.79	400	369.94	364.58	4.36	3.48%	305.37504											2	1.600	1.626	275	10.00	16			1	200		4.56	Z5		
T13B-BT	2.835.00	45.105.00	Cur	609.027.82	4.660.229.24	400	369.92	364.69	4.23	1.26%	306.17082											2	1.600	1.626	275	10.00	16						4.43	Z5		
T13B-BT	2.836.00	45.106.00	Cur	609.026.82	4.660.229.34	400	369.92	364.71	4.21	0.81%	306.32997											2	1.600	1.626	275	10.00	16						4.41	Z1		
T13B-BT	2.840.00	45.110.00	Cur	609.022.84	4.660.229.76	400	369.90	364.70	4.20	-0.97%	306.96659											2	1.600	1.626	275	10.00	16						4.40	Z1		
T13B-BT	2.859.00	45.129.00	Cur	609.003.99	4.660.232.11	0	368.63	364.22	4.41	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						4.61	Z1		
T13B-BT	2.879.00	45.149.00	Rec	608.984.15	4.660.234.66	0	367.96	363.67	4.29	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						4.49	Z1		
T13B-BT	2.899.00	45.169.00	Rec	608.964.32	4.660.237.20	0	367.14	363.12	4.02	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						4.22	Z1		
T13B-BT	2.919.00	45.189.00	Rec	608.944.48	4.660.239.75	0	366.45	362.57	3.89	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						4.09	Z1		
T13B-BT	2.939.00	45.209.00	Rec	608.924.64	4.660.242.30	0	365.41	362.02	3.39	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						3.59	Z1		
T13B-BT	2.959.00	45.229.00	Rec	608.904.81	4.660.244.84	0	364.61	361.47	3.15	-2.75%	308.12823											2	1.600	1.626	275	10.00	16						3.35	Z1		
T13B-BT	2.979.00	45.249.00	Rec	608.884.97	4.660.247.39	0	364.26	361.12	3.14	-0.50%	308.12823											2	1.600	1.626	275	10.00	16						3.34	Z1		
T13B-BT	2.999.00	45.269.00	Rec	608.865.13	4.660.249.94	0	364.80	361.02	3.78	-0.50%	308.12823											2	1.600	1.626	275	10.00	16						3.96	Z1		
T13B-BT	3.018.00	45.288.00	Cur	608.846.26	4.660.252.18	-400	365.29	360.93	5.37	-0.50%	305.23425											2	1.600	1.626	275	10.00	16						5.57	Z1		
T13B-BT	3.020.00	45.289.00	Cur	608.844.27	4.660.252.37	-400	365.48	360.92	5.67	-0.50%	305.51594											2	1.600	1.626	275	10.00	16						5.77	Z1		
T13B-BT	3.021.00	45.291.00	Cur	608.843.28	4.660.252.46	-400	366.58	360.91	5.66	-0.50%	305.75678											2	1.600	1.626	275	12.50	16						5.86	Z1		
T13B-BT	3.024.00	45.294.00	Cur	608.840.29	4.660.252.72	-400	366.83	360.90	5.94	-0.50%	305.27332											2	1.600	1.626	275	12.50	16						6.14	Z1		
T13B-BT	3.025.00	45.295.00	Cur	608.839.29	4.660.252.80	-400	366.92	360.89	6.03	-0.50%	305.12016											2	1.600	1.626	275	12.50	16						6.23	Z2		
T13B-BT	3.038.00	45.308.00	Cur	608.826.32	4.660.253.64	-400	368.13	360.83	7.30	-0.50%	303.05115											2	1.600	1.626	275	12.50	16									

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T13B-BT	4.740.00	47.010.00	Rec	607.214.14	4.659.842.50	0	371.83	368.51	3.32	-2.21%	280.44979											2	1.600	1.626	275	10.00	16						3.52	Z1		
T13B-BT	4.750.00	47.020.00	Cur	607.195.80	4.659.837.57	200	371.49	368.09	3.41	-2.21%	286.31369											2	1.600	1.626	275	10.00	16						3.61	Z1		
T13B-BT	4.779.00	47.049.00	Cur	607.176.08	4.659.834.29	200	371.56	367.69	3.87	-0.96%	292.67989											2	1.600	1.626	275	10.00	16						4.07	Z1		
T13B-BT	4.799.00	47.069.00	Cur	607.156.13	4.659.832.99	200	371.27	367.50	3.77	-0.96%	299.04609											2	1.600	1.626	275	10.00	16						3.97	Z1		
T13B-BT	4.819.00	47.089.00	Cur	607.136.15	4.659.833.69	200	371.01	367.31	3.69	-0.96%	305.41228											2	1.600	1.626	275	10.00	16						3.89	Z1		
T13B-BT	4.839.00	47.109.00	Cur	607.116.34	4.659.836.38	200	370.80	367.12	3.68	-0.96%	311.77848											2	1.600	1.626	275	10.00	16						3.88	Z1		
T13B-BT	4.859.00	47.129.00	Cur	607.096.90	4.659.841.04	200	370.43	366.93	3.50	-0.96%	318.14468											2	1.600	1.626	275	10.00	16						3.70	Z1		
T13B-BT	4.879.00	47.149.00	Cur	607.078.02	4.659.847.61	200	370.02	366.74	3.28	-0.96%	324.51088											2	1.600	1.626	275	10.00	16						3.48	Z1		
T13B-BT	4.899.00	47.169.00	Cur	607.059.89	4.659.856.04	200	369.72	366.55	3.18	-0.96%	330.87707											2	1.600	1.626	275	10.00	16						3.38	Z1		
T13B-BT	4.919.00	47.189.00	Cur	607.042.69	4.659.866.23	200	369.55	366.36	3.19	-0.96%	337.24327											2	1.600	1.626	275	10.00	16						3.39	Z1		
T13B-BT	4.939.00	47.209.00	Cur	607.026.60	4.659.878.09	200	369.47	366.17	3.31	-0.96%	343.60947											2	1.600	1.626	275	10.00	16						3.51	Z1		
T13B-BT	4.955.00	47.225.00	Cur	607.014.62	4.659.888.69	200	369.50	366.01	3.49	-0.96%	348.70243											2	1.600	1.626	275	10.00	16						3.69	Z1		
T13B-BT	4.956.00	47.226.00	Cur	607.013.90	4.659.889.39	200	369.50	366.00	3.50	-0.96%	349.02074											Apoyo arqueta	2	1.600	1.626	275	10.00	16						3.70	Z5	
T13B-BT	4.959.00	47.229.00	Cur	607.011.77	4.659.891.49	200	369.51	365.98	3.54	-0.96%	349.97567											Apoyo arqueta	2	1.600	1.626	275	10.00	16						3.74	Z5	
T13B-BT	4.960.86	47.230.86	Rec	607.010.45	4.659.892.82	0	369.52	365.96	3.57	-0.96%	350.56822	P.S.	V.	0,25	N/A	1,37	N/A			Desagüe	D2D	Apoyo arqueta	2	1.600	1.626	275	10.00	16		2	100	Compuerta	N/A	3.77	Z5	
T13B-BT	4.960.00	47.236.00	Rec	607.006.85	4.659.896.48	0	369.54	366.03	3.51	1.44%	350.56822											Apoyo arqueta	2	1.600	1.626	275	10.00	16						3.71	Z5	
T13B-BT	4.967.00	47.237.00	Rec	607.006.15	4.659.897.19	0	369.54	366.05	3.51	1.44%	350.56822											2	1.600	1.626	275	10.00	16						3.70	Z1		
T13B-BT	4.978.00	47.248.00	Cur	606.998.44	4.659.905.04	0	369.56	365.20	3.36	1.44%	350.56822											2	1.600	1.626	275	10.00	16						3.65	Z1		
T13B-BT	4.988.00	47.268.00	Cur	606.984.43	4.659.919.31	0	369.53	366.49	3.23	1.44%	350.56822											2	1.600	1.626	275	10.00	16						3.43	Z1		
T13B-BT	5.018.00	47.288.00	Rec	606.970.41	4.659.933.58	0	370.10	366.78	3.32	1.44%	350.56822											2	1.600	1.626	275	10.00	16						3.52	Z1		
T13B-BT	5.036.00	47.306.00	Cur	606.957.74	4.659.946.36	-200	370.50	367.18	3.32	3.85%	348.75133											2	1.600	1.626	275	10.00	16						3.52	Z1		
T13B-BT	5.056.00	47.326.00	Cur	606.942.66	4.659.959.48	-200	371.24	367.95	3.30	3.85%	342.38514											2	1.600	1.626	275	10.00	16						3.50	Z1		
T13B-BT	5.076.00	47.346.00	Cur	606.926.34	4.659.971.03	-200	372.71	368.72	4.00	3.85%	336.01894		T.E.									2	1.600	1.626	275	10.00	16						4.20	Z1		
T13B-BT	5.084.00	47.354.00	Cur	606.919.50	4.659.975.18	-200	373.06	368.95	4.11	2.03%	333.47246											2	1.600	1.626	275	10.00	16						4.31	Z1		
T13B-BT	5.085.00	47.355.00	Cur	606.918.63	4.659.975.68	-200	373.06	368.97	4.09	1.81%	333.15415											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.29	Z5	
T13B-BT	5.090.00	47.360.00	Cur	606.914.27	4.659.978.11	-200	373.04	369.03	4.01	0.67%	331.56260		V.		0,13	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.600	1.626	275	10.00	16		1	200			4.21	Z5		
T13B-BT	5.095.00	47.365.00	Cur	606.909.84	4.659.980.44	-200	372.84	369.04	3.80	-0.46%	329.97105											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.00	Z5	
T13B-BT	5.096.00	47.366.00	Cur	606.908.95	4.659.980.89	-200	372.85	369.03	3.82	-0.69%	329.65274											2	1.600	1.626	275	10.00	16						4.02	Z1		
T13B-BT	5.116.00	47.386.00	Cur	606.890.66	4.659.988.96	-200	371.81	368.60	3.21	-2.50%	323.28654											2	1.600	1.626	275	10.00	16						3.41	Z1		
T13B-BT	5.136.00	47.406.00	Cur	606.871.65	4.659.995.17	-200	371.39	368.10	3.29	-2.50%	316.92034											2	1.600	1.626	275	10.00	16						3.49	Z1		
T13B-BT	5.156.00	47.426.00	Cur	606.852.13	4.659.999.45	-200	371.07	367.60	3.47	-2.50%	310.55415											2	1.600	1.626	275	10.00	16						3.67	Z1		
T13B-BT	5.176.00	47.446.00	Cur	606.832.27	4.660.001.76	-200	370.57	367.10	3.47	-2.50%	304.18795											2	1.600	1.626	275	10.00	16						3.67	Z1		
T13B-BT	5.196.00	47.466.00	Cur	606.812.28	4.660.002.08	-200	370.08	366.60	3.48	-2.50%	297.82175											2	1.600	1.626	275	10.00	16						3.68	Z1		
T13B-BT	5.216.00	47.486.00	Cur	606.792.36	4.660.000.39	-200	369.93	366.10	3.83	-2.50%	291.45555											2	1.600	1.626	275	10.00	16						4.03	Z1		
T13B-BT	5.236.00	47.506.00	Cur	606.772.71	4.659.996.73	-200	369.57	365.60	3.97	-2.50%	285.08936											2	1.600	1.626	275	10.00	16						4.17	Z1		
T13B-BT	5.256.00	47.526.00	Cur	606.753.52	4.659.991.13	-200	369.04	365.10	3.94	-2.50%	278.72316											2	1.600	1.626	275	10.00	16						4.14	Z1		
T13B-BT	5.276.00	47.546.00	Cur	606.734.98	4.659.983.63	-200	368.18	364.52	3.66	-3.81%	272.35696											2	1.600	1.626	275	10.00	16						3.86	Z1		
T13B-BT	5.296.00	47.566.00	Cur	606.717.29	4.659.974.33	-200	367.29	363.76	3.53	-3.81%	265.99076											2	1.600	1.626	275	10.00	16						3.73	Z1		
T13B-BT	5.316.00	47.586.00	Cur	606.700.61	4.659.963.30	-200	366.44	363.00	3.45	-3.81%	259.62456											2	1.600	1.626	275	10.00	16						3.65	Z1		
T13B-BT	5.336.00	47.606.00	Cur	606.685.86	4.659.951.33	-200	365.49	361.76	3.74	-12.30%	253.57668											2	1.600	1.626	275	10.00	16						3.94	Z1		
T13B-BT	5.346.00	47.616.00	Rec	606.677.73	4.659.943.93	0	365.46	359.98	5.48	-20.04%	252.96545											2	1.600	1.626	275	10.00	16						5.68	Z1		
T13B-BT	5.347.00	47.617.00	Rec	606.676.99	4.659.943.26	0	365.43	359.78	5.65	-20.74%	252.96545											Entronque hinc	2	1.600	1.626	275	16.00	16						5.85	Z1	
T13B-BT	5.348.00	47.618.00	Rec	606.676.25	4.659.942.68	0	365.40	359.57	5.84	-21.48%	252.96545											Entronque hinc	2	1.600	1.626	275	16.00	16						6.04	Z1	
T13B-BT	5.349.00	47.619.00	Rec	606.675.51	4.659.941.91	0	365.38	359.35	6.04	-22.15%	252.96545											Entronque hinc	2	1.600	1.626	275	16.00	16						6.24	Z2	
T13B-BT	5.353.00	47.623.00	Rec	606.672.55	4.659.939.22	0	365.29	358.42	6.8																											

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbrado valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada	
BT-DC	64.00	49.261.73	Cur	605.405.73	4.659.244.31	-150	372.45	368.83	3.62	-1.13%	243.49733												2	1.900	1.930	275	13.00	16						3.82	Z1		
BT-DC	65.00	49.262.73	Cur	605.405.10	4.659.243.53	-150	372.46	368.82	3.64	-0.88%	243.07292												2	1.900	1.930	275	13.00	16						3.84	Z5		
BT-DC	70.00	49.267.73	Cur	605.402.04	4.659.239.58	-150	372.49	368.81	3.69	0.40%	240.95085	V.				0,15	N/A			Desagüe	D2D	Apoyo arqueta	2	1.900	1.930	275	13.00	16			2	100	Compuerta	N/A		3.89	Z5
BT-DC	75.00	49.272.73	Cur	605.399.11	4.659.235.53	-150	372.61	368.86	3.75	1.68%	238.82878											Apoyo arqueta	2	1.900	1.930	275	13.00	16						3.95	Z5		
BT-DC	76.00	49.273.73	Cur	605.398.54	4.659.234.71	-150	372.63	368.88	3.75	1.93%	238.40437											2	1.900	1.930	275	13.00	16						3.95	Z1			
BT-DC	83.00	49.280.73	Cur	605.394.70	4.659.228.85	-150	372.78	369.07	3.70	3.72%	236.43348											2	1.900	1.930	275	13.00	16						3.90	Z1			
BT-DC	102.00	49.299.73	Rec	605.385.07	4.659.212.48	0	373.49	369.83	3.66	3.98%	233.65825											2	1.900	1.930	275	13.00	16						3.86	Z1			
BT-DC	120.00	49.317.73	Rec	605.375.99	4.659.196.94	0	374.70	370.55	4.16	3.98%	233.65825											2	1.900	1.930	275	13.00	16						4.36	Z1			
BT-DC	121.00	49.318.73	Rec	605.375.48	4.659.196.07	0	374.78	370.58	4.20	3.98%	233.65825											2	1.900	1.930	275	13.00	16						4.40	Z1			
BT-DC	122.00	49.319.73	Rec	605.374.98	4.659.195.21	0	374.86	370.62	4.23	3.98%	233.65825											2	1.900	1.930	275	13.00	16						4.43	Z1			
BT-DC	142.00	49.339.73	Rec	605.364.89	4.659.177.94	0	375.86	371.42	4.44	3.98%	233.65825											2	1.900	1.930	275	13.00	16						4.64	Z1			
BT-DC	162.00	49.359.73	Rec	605.354.80	4.659.160.67	0	376.11	372.17	3.93	2.63%	233.65825											2	1.900	1.930	275	13.00	16						4.13	Z1			
BT-DC	164.00	49.361.73	Rec	605.353.79	4.659.158.94	0	376.44	372.22	4.22	2.18%	233.65825											2	1.900	1.930	275	13.00	16						4.42	Z1			
BT-DC	165.00	49.362.73	Rec	605.353.29	4.659.158.08	0	376.59	372.24	4.35	1.96%	233.65825											Apoyo arqueta	2	1.900	1.930	275	13.00	16						4.55	Z5		
BT-DC	170.00	49.367.73	Rec	605.350.77	4.659.153.76	0	376.45	372.31	4.14	0.84%	233.65825	V.				0,13	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.900	1.930	275	13.00	16	1	200				4.34	Z5		
BT-DC	175.00	49.372.73	Rec	605.348.25	4.659.149.45	0	376.26	372.33	3.94	-0.28%	233.65825											Apoyo arqueta	2	1.900	1.930	275	13.00	16						4.14	Z5		
BT-DC	176.00	49.373.73	Rec	605.347.74	4.659.148.58	0	376.23	372.32	3.91	-0.51%	233.65825											2	1.900	1.930	275	13.00	16						4.11	Z1			
BT-DC	182.00	49.379.73	Rec	605.344.71	4.659.143.40	0	376.10	372.25	3.85	-1.85%	233.65825											2	1.900	1.930	275	13.00	16						4.05	Z1			
BT-DC	202.00	49.399.73	Rec	605.334.63	4.659.126.13	0	375.51	371.80	3.72	-2.30%	233.65825											2	1.900	1.930	275	13.00	16						3.92	Z1			
BT-DC	222.00	49.419.73	Rec	605.324.54	4.659.108.86	0	374.97	371.34	3.63	-2.30%	233.65825											2	1.900	1.930	275	13.00	16						3.83	Z1			
BT-DC	242.00	49.439.73	Rec	605.314.45	4.659.091.59	0	374.51	370.88	3.64	-2.30%	233.65825											2	1.900	1.930	275	13.00	16						3.84	Z1			
BT-DC	261.00	49.458.73	Cur	605.304.83	4.659.075.21	200	374.47	370.44	4.03	-2.30%	235.04251											2	1.900	1.930	275	13.00	16						4.23	Z1			
BT-DC	281.00	49.478.73	Cur	605.293.53	4.659.058.72	200	374.15	369.98	4.17	-2.30%	241.40871											2	1.900	1.930	275	13.00	16						4.37	Z1			
BT-DC	301.00	49.498.73	Cur	605.280.64	4.659.043.43	200	373.43	369.54	3.89	-0.50%	247.77491											2	1.900	1.930	275	13.00	16						4.09	Z1			
BT-DC	321.00	49.518.73	Cur	605.266.30	4.659.029.51	200	373.33	369.44	3.89	-0.50%	254.14110											2	1.900	1.930	275	13.00	16						4.09	Z1			
BT-DC	341.00	49.538.73	Cur	605.250.63	4.659.017.09	200	373.47	369.34	4.13	-0.50%	260.50730											2	1.900	1.930	275	13.00	16						4.33	Z1			
BT-DC	360.00	49.557.73	Rec	605.234.70	4.659.006.75	0	375.00	369.24	5.76	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						5.96	Z1			
BT-DC	380.00	49.577.73	Rec	605.217.64	4.658.996.31	0	373.55	369.14	4.41	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						4.61	Z1			
BT-DC	400.00	49.597.73	Rec	605.200.57	4.658.985.88	0	373.22	369.04	4.18	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						4.38	Z1			
BT-DC	420.00	49.617.73	Rec	605.183.51	4.658.975.45	0	372.72	368.94	3.78	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.98	Z1			
BT-DC	440.00	49.637.73	Rec	605.166.45	4.658.965.01	0	372.44	368.84	3.60	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.80	Z1			
BT-DC	444.00	49.641.73	Rec	605.163.04	4.658.962.92	0	372.42	368.82	3.60	-0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.80	Z1			
BT-DC	445.00	49.642.73	Rec	605.162.18	4.658.962.40	0	372.42	368.82	3.60	-0.50%	265.05775											Apoyo arqueta	2	1.900	1.930	275	13.00	16						3.80	Z5		
BT-DC	450.00	49.647.73	Rec	605.157.92	4.658.959.79	0	372.43	368.79	3.64	-0.50%	265.05775	V.				0,57	N/A			Desagüe	D2D	Apoyo arqueta	2	1.900	1.930	275	13.00	16			2	100	Compuerta	N/A		3.84	Z5
BT-DC	455.00	49.652.73	Rec	605.153.65	4.658.957.18	0	372.47	368.82	3.66	0.50%	265.05775											Apoyo arqueta	2	1.900	1.930	275	13.00	16						3.86	Z5		
BT-DC	456.00	49.653.73	Rec	605.152.80	4.658.956.66	0	372.49	368.82	3.67	0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.87	Z1			
BT-DC	460.00	49.657.73	Rec	605.149.39	4.658.954.58	0	372.53	368.84	3.69	0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.89	Z1			
BT-DC	480.00	49.677.73	Rec	605.132.32	4.658.944.14	0	372.73	368.94	3.79	0.50%	265.05775											2	1.900	1.930	275	13.00	16						3.99	Z1			
BT-DC	500.00	49.697.73	Rec	605.115.26	4.658.933.71	0	373.32	369.32	4.00	3.32%	265.05775											2	1.900	1.930	275	13.00	16						4.20	Z1			
BT-DC	520.00	49.717.73	Rec	605.098.20	4.658.923.27	0	373.92	369.99	3.93	3.32%	265.05775											2	1.900	1.930	275	13.00	16						4.13	Z1			
BT-DC	540.00	49.737.73	Rec	605.081.14	4.658.912.84	0	374.59	370.65	3.94	3.32%	265.05775											2	1.900	1.930	275	13.00	16						4.14	Z1			
BT-DC	560.00	49.757.73	Rec	605.064.08	4.658.902.40	0	375.31	371.32	4.00	3.32%	265.05775											2	1.900	1.930	275	13.00	16						4.20	Z1			
BT-DC	580.00	49.777.73	Rec	605.047.01	4.658.891.97	0	375.92	371.98	3.94	3.32%	265.05775											2	1.900	1.930	275	13.00	16						4.14	Z1			
BT-DC	599.00	49.796.73	Cur	605.030.80	4.658.882.06	700	376.85	372.61	4.23	3.32%	265.22871											2	1.900	1.930	275	13.00	16						4.43	Z1			
BT-DC	619.00	49.816.73	Cur	605.013.57	4.658.871.92	700	376.99	373.28	3.71	3.32%	267.04762											2	1.900	1.930	275	13.00	16						3.91	Z1			
BT-DC	639.00	49.836.73	Cur	604.996.																																	

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación 1°N (m)	Zanja tipo asignada
DC-T17	529.00	51.371 21	Rec	603.985.06	4.658.367.00	0	366.97	362.76	4.20	-0.98%	199.45394											2	1.800	1.829	275	11.50	16						4.40	Z1	
DC-T17	530.00	51.372 21	Rec	603.985.07	4.658.366.00	0	366.98	362.75	4.22	-0.98%	199.45394											2	1.800	1.829	275	11.50	16						4.42	Z5	
DC-T17	535.00	51.377 21	Rec	603.985.12	4.658.361.00	0	366.68	362.70	3.98	-0.98%	199.45394	V			0,68	N/A			Desagüe	D2D	Apoyo arqueta	2	1.800	1.829	275	11.50	16		2	100	Compuerta	N/A	4.18	Z5	
DC-T17	540.00	51.382 21	Rec	603.985.16	4.658.356.00	0	366.32	362.71	3.61	0.20%	199.45394										Apoyo arqueta	2	1.800	1.829	275	11.50	16						3.81	Z5	
DC-T17	541.00	51.383 21	Rec	603.985.17	4.658.355.00	0	366.33	362.72	3.61	0.20%	199.45394										Barranco	2	1.800	1.829	275	11.50	16						3.81	Z6	
DC-T17	545.00	51.387 21	Rec	603.985.20	4.658.351.00	0	366.32	362.72	3.60	0.20%	199.45394										Barranco	2	1.800	1.829	275	11.50	16						3.80	Z6	
DC-T17	550.00	51.392 21	Rec	603.985.24	4.658.346.00	0	366.28	362.73	3.55	0.20%	199.45394										Barranco	2	1.800	1.829	275	11.50	16						3.75	Z6	
DC-T17	551.00	51.393 21	Rec	603.985.25	4.658.345.00	0	366.28	362.74	3.54	0.20%	199.45394											2	1.800	1.829	275	11.50	16						3.74	Z1	
DC-T17	565.00	51.407 21	Rec	603.985.37	4.658.331.00	0	366.35	362.76	3.59	0.20%	199.45394											2	1.800	1.829	275	11.50	16						3.79	Z1	
DC-T17	584.00	51.426 21	Cur	603.985.16	4.658.312.01	200	366.20	362.80	3.40	0.20%	203.37120											2	1.800	1.829	275	11.50	16						3.60	Z1	
DC-T17	604.00	51.446 21	Cur	603.983.10	4.658.292.12	200	366.36	362.84	3.52	0.20%	209.73740											2	1.800	1.829	275	11.50	16						3.72	Z1	
DC-T17	624.00	51.466 21	Cur	603.979.07	4.658.272.54	200	366.45	362.88	3.57	0.20%	216.10360											2	1.800	1.829	275	11.50	16						3.77	Z1	
DC-T17	644.00	51.486 21	Cur	603.973.11	4.658.253.46	200	366.42	363.05	3.37	1.12%	222.46980											2	1.800	1.829	275	11.50	16						3.57	Z1	
DC-T17	664.00	51.506 21	Cur	603.965.27	4.658.235.07	200	366.83	363.28	3.55	1.12%	228.83599											2	1.800	1.829	275	11.50	16						3.75	Z1	
DC-T17	684.00	51.526 21	Cur	603.955.63	4.658.217.55	200	368.06	363.74	4.32	3.82%	235.20219											2	1.800	1.829	275	11.50	16						4.52	Z1	
DC-T17	704.00	51.546 21	Cur	603.944.30	4.658.201.09	200	368.72	364.73	3.99	5.31%	241.56839											2	1.800	1.829	275	11.50	16						4.19	Z1	
DC-T17	724.00	51.566 21	Cur	603.931.37	4.658.185.84	200	369.27	365.79	3.48	5.31%	247.93459											2	1.800	1.829	275	11.50	16						3.68	Z1	
DC-T17	744.00	51.586 21	Cur	603.916.99	4.658.171.95	200	370.70	366.00	3.80	9.41%	254.30078											2	1.800	1.829	275	11.50	16						4.00	Z1	
DC-T17	764.00	51.606 21	Cur	603.901.29	4.658.159.57	200	371.86	368.46	3.41	9.14%	260.66698											2	1.800	1.829	275	11.50	16						3.61	Z1	
DC-T17	784.00	51.626 21	Cur	603.884.44	4.658.148.82	200	375.63	370.28	5.34	9.14%	267.03318											2	1.800	1.829	275	11.50	16						5.54	Z1	
DC-T17	803.00	51.645 21	Cur	603.867.51	4.658.140.21	200	376.05	372.01	4.04	8.40%	273.08107											2	1.800	1.829	275	11.50	16						4.24	Z1	
DC-T17	822.00	51.664 21	Rec	603.849.88	4.658.133.12	0	376.55	373.03	3.52	2.33%	276.79291											2	1.800	1.829	275	11.50	16						3.72	Z1	
DC-T17	841.00	51.683 21	Rec	603.832.13	4.658.126.35	0	376.65	373.14	3.51	0.20%	276.79291											2	1.800	1.829	275	11.50	16						3.71	Z1	
DC-T17	860.00	51.702 21	Cur	603.814.63	4.658.118.97	-200	376.91	373.46	3.45	1.96%	271.64935											2	1.800	1.829	275	11.50	16						3.65	Z1	
DC-T17	880.00	51.722 21	Cur	603.797.04	4.658.109.47	-200	377.99	373.85	4.13	1.96%	265.28315											2	1.800	1.829	275	11.50	16						4.33	Z1	
DC-T17	900.00	51.742 21	Cur	603.780.49	4.658.098.26	-200	378.11	374.25	3.86	1.96%	258.91696											2	1.800	1.829	275	11.50	16						4.06	Z1	
DC-T17	919.00	51.761 21	Rec	603.765.87	4.658.086.13	0	378.24	374.59	3.65	0.20%	253.42360											2	1.800	1.829	275	11.50	16						3.85	Z1	
DC-T17	939.00	51.781 21	Rec	603.750.99	4.658.072.77	0	379.15	374.63	4.52	0.20%	253.42360											2	1.800	1.829	275	11.50	16						4.72	Z1	
DC-T17	959.00	51.801 21	Rec	603.736.11	4.658.059.41	0	379.15	374.67	4.48	0.20%	253.42360											2	1.800	1.829	275	11.50	16						4.68	Z1	
DC-T17	979.00	51.821 21	Rec	603.721.22	4.658.046.05	0	379.24	374.71	4.53	0.20%	253.42360											2	1.800	1.829	275	11.50	16						4.73	Z1	
DC-T17	999.00	51.841 21	Rec	603.706.34	4.658.032.69	0	379.25	374.75	4.50	0.20%	253.42360											2	1.800	1.829	275	11.50	16						4.70	Z1	
DC-T17	1.014.00	51.856 21	Rec	603.695.18	4.658.022.66	0	378.64	374.75	3.89	-0.56%	253.42360											2	1.800	1.829	275	11.50	16						4.09	Z1	
DC-T17	1.015.00	51.857 21	Rec	603.694.44	4.658.022.00	0	378.59	374.74	3.85	-0.66%	253.42360										Apoyo arqueta	2	1.800	1.829	275	11.50	16						4.05	Z5	
DC-T17	1.019.00	51.861 21	Rec	603.691.46	4.658.019.32	0	378.39	374.71	3.68	-1.04%	253.42360										Apoyo arqueta	2	1.800	1.829	275	11.50	16						3.88	Z5	
DC-T17	1.020.00	51.862 21	Rec	603.690.72	4.658.018.66	0	378.35	374.70	3.65	-1.13%	253.42360										Apoyo arqueta	2	1.800	1.829	275	11.50	16		1	200			3.85	Z5	
DC-T17	1.025.00	51.867 21	Rec	603.687.00	4.658.015.32	0	378.09	374.63	3.46	-1.61%	253.42360				0,05	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.800	1.829	275	11.50	16						3.66	Z5	
DC-T17	1.026.00	51.868 21	Rec	603.686.25	4.658.014.65	0	378.04	374.61	3.43	-1.70%	253.42360										Apoyo arqueta	2	1.800	1.829	275	11.50	16						3.63	Z1	
DC-T17	1.039.00	51.881 21	Rec	603.676.58	4.658.005.96	0	377.65	374.32	3.33	-2.46%	253.42360											2	1.800	1.829	275	11.50	16						3.53	Z1	
DC-T17	1.059.00	51.901 21	Rec	603.661.70	4.657.992.60	0	377.38	373.83	3.55	-2.46%	253.42360											2	1.800	1.829	275	11.50	16						3.75	Z1	
DC-T17	1.079.00	51.921 21	Rec	603.646.82	4.657.979.24	0	376.68	373.34	3.34	-2.46%	253.42360											2	1.800	1.829	275	11.50	16						3.54	Z1	
DC-T17	1.099.00	51.941 21	Rec	603.631.83	4.657.965.88	0	376.46	372.85	3.62	-2.46%	253.42360											2	1.800	1.829	275	11.50	16						3.82	Z1	
DC-T17	1.119.00	51.961 21	Rec	603.617.95	4.657.952.52	0	376.26	372.35	3.91	-2.48%	253.42360											2	1.800	1.829	275	11.50	16						4.11	Z1	
DC-T17	1.139.00	51.981 21	Rec	603.602.17	4.657.939.15	0	376.07	371.86	4.21	-2.48%	253.42360											2	1.800	1.829	275	11.50	16						4.41	Z1	
DC-T17	1.159.00	52.001 21	Rec	603.587.29	4.657.925.79	0	375.85	371.38	4.47	-1.92%	253.42360											2	1.800	1.829	275	11.50	16						4.67	Z1	
DC-T17	1.164.00	52.006 21	Rec	603.583.57	4.657.922.45	0	375.81	371.30	4.51	-1.02%	253.42360											2	1.800	1.829	275	11.50	16						4.71	Z1	
DC-T17	1.165.00	52.007 21	Rec	603.582.82	4																														

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	C. Rasante Hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desague	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T17-T18	93,00	53.665.21	Rec	602.827.33	4.656.550.63	0	378,40	373.68	4.72	-0,50%	194.73496												2	1.600	1.626	275	10,00	16						4,92	Z1	
T17-T18	112,00	53.684.21	Cur	602.828.62	4.656.531.67	400	378,15	373.59	4.57	-0,50%	197.13343												2	1.600	1.626	275	10,00	16						4,77	Z1	
T17-T18	129,00	53.701.21	Cur	602.829.02	4.656.514.68	400	378,04	373.50	4,54	-0,50%	199.83907												2	1.600	1.626	275	10,00	16						4,74	Z1	
T17-T18	130,00	53.702.21	Cur	602.829.02	4.656.513.68	400	378,01	373.50	4,51	-0,50%	199.99822											Acequia de los Herrenillos	2	1.600	1.626	275	10,00	16							4,71	Z6
T17-T18	132,00	53.704.21	Cur	602.829.02	4.656.511.68	400	377,48	373.49	4,00	-0,50%	200.31653											Acequia de los Herrenillos	2	1.600	1.626	275	10,00	16							4,20	Z6
T17-T18	141,00	53.713.21	Cur	602.828.87	4.656.502.68	400	376,88	373.44	3,44	-0,50%	201,74893											Acequia de los Herrenillos	2	1.600	1.626	275	10,00	16							3,64	Z6
T17-T18	142,00	53.714.21	Cur	602.828.84	4.656.501.68	400	376,98	373.44	3,54	-0,50%	201.90808												2	1.600	1.626	275	10,00	16						3,74	Z1	
T17-T18	152,00	53.724.21	Cur	602.828.42	4.656.491.69	400	377,01	373.39	3,63	-0,50%	203.49963												2	1.600	1.626	275	10,00	16						3,83	Z1	
T17-T18	172,00	53.744.21	Cur	602.826.82	4.656.471.76	400	377,02	373.29	3,73	-0,50%	206.68273												2	1.600	1.626	275	10,00	16						3,93	Z1	
T17-T18	191,00	53.763.21	Rec	602.824.70	4.656.452.87	0	377,02	373.06	3,96	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						4,16	Z1	
T17-T18	211,00	53.783.21	Rec	602.822.46	4.656.433.00	0	377,01	372.79	4,21	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						4,41	Z1	
T17-T18	231,00	53.803.21	Rec	602.820.22	4.656.413.13	0	377,00	372.53	4,48	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						4,68	Z1	
T17-T18	251,00	53.823.21	Rec	602.817.98	4.656.393.25	0	376,89	372.26	4,63	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						4,83	Z1	
T17-T18	254,00	53.826.21	Rec	602.817.64	4.656.390.27	0	376,98	372.22	4,76	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						4,96	Z1	
T17-T18	255,00	53.827.21	Rec	602.817.53	4.656.389.28	0	377,03	372.21	4,82	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						5,02	Z6	
T17-T18	260,00	53.832.21	Rec	602.816.97	4.656.384.31	0	377,12	372.14	4,97	-1,33%	207.14722												2	1.600	1.626	275	10,00	16						5,17	Z6	
T17-T18	265,00	53.837.21	Rec	602.816.41	4.656.379.34	0	377,16	372.15	5,00	0,20%	207.14722			V.		0,87	N/A			Desague	D2D	Apoyo arqueta	2	1.600	1.626	275	10,00	16							5,20	Z6
T17-T18	266,00	53.838.21	Rec	602.816.30	4.656.378.35	0	377,17	372.16	5,02	0,20%	207.14722											Apoyo arqueta	2	1.600	1.626	275	10,00	16							5,22	Z1
T17-T18	271,00	53.843.21	Rec	602.815.74	4.656.373.38	0	377,26	372.17	5,09	0,20%	207.14722												2	1.600	1.626	275	10,00	16						5,29	Z1	
T17-T18	291,00	53.863.21	Rec	602.813.50	4.656.353.50	0	377,44	372.21	5,23	0,20%	207.14722												2	1.600	1.626	275	10,00	16						5,43	Z1	
T17-T18	311,00	53.883.21	Rec	602.811.26	4.656.333.63	0	377,13	372.25	4,88	0,20%	207.14722												2	1.600	1.626	275	10,00	16						5,08	Z1	
T17-T18	330,00	53.902.21	Cur	602.809.08	4.656.314.76	400	377,36	372.28	5,07	0,20%	208.14468												2	1.600	1.626	275	10,00	16						5,27	Z1	
T17-T18	349,00	53.921.21	Cur	602.806.21	4.656.295.98	400	377,13	372.32	4,80	0,20%	211.16862												2	1.600	1.626	275	10,00	16						5,00	Z1	
T17-T18	350,00	53.922.21	Cur	602.806.04	4.656.294.99	400	377,09	372.32	4,77	0,20%	211.32777												2	1.600	1.626	275	10,00	16						4,97	Z6	
T17-T18	357,00	53.929.21	Cur	602.804.74	4.656.288.11	400	377,07	372.34	4,73	0,20%	212.44186											Acequia de Lusia	2	1.600	1.626	275	10,00	16							4,93	Z6
T17-T18	358,00	53.930.21	Cur	602.804.54	4.656.287.13	400	377,10	372.34	4,76	0,20%	212.60101											Acequia de Lusia	2	1.600	1.626	275	10,00	16							4,96	Z1
T17-T18	369,00	53.941.21	Rec	602.802.27	4.656.276.37	0	377,22	372.36	4,86	0,20%	213.39754												2	1.600	1.626	275	10,00	16						5,06	Z1	
T17-T18	389,00	53.961.21	Rec	602.798.10	4.656.256.81	0	377,28	372.40	4,88	0,20%	213.39754												2	1.600	1.626	275	10,00	16						5,08	Z1	
T17-T18	409,00	53.981.21	Rec	602.793.92	4.656.237.25	0	377,32	372.44	4,88	0,20%	213.39754												2	1.600	1.626	275	10,00	16						5,08	Z1	
T17-T18	429,00	54.001.21	Rec	602.789.74	4.656.217.69	0	377,29	372.48	4,81	0,20%	213.39754												2	1.600	1.626	275	10,00	16						5,01	Z1	
T17-T18	449,00	54.021.21	Rec	602.785.56	4.656.198.13	0	377,18	372.52	4,66	0,20%	213.39754												2	1.600	1.626	275	10,00	16						4,86	Z1	
T17-T18	469,00	54.041.21	Rec	602.781.38	4.656.178.57	0	377,18	372.56	4,62	0,20%	213.39754												2	1.600	1.626	275	10,00	16						4,82	Z1	
T17-T18	489,00	54.061.21	Rec	602.777.21	4.656.159.02	0	377,20	372.60	4,60	0,20%	213.39754												2	1.600	1.626	275	10,00	16						4,80	Z1	
T17-T18	508,00	54.080.21	Cur	602.773.25	4.656.140.43	-300	377,22	372.64	4,59	0,20%	212.86529												2	1.600	1.626	275	10,00	16						4,79	Z1	
T17-T18	528,00	54.100.21	Cur	602.769.89	4.656.120.72	-300	377,23	372.68	4,55	0,20%	208.62116												2	1.600	1.626	275	10,00	16						4,75	Z1	
T17-T18	548,00	54.120.21	Cur	602.767.85	4.656.100.83	-300	377,12	372.72	4,40	0,20%	204.37703												2	1.600	1.626	275	10,00	16						4,60	Z1	
T17-T18	568,00	54.140.21	Cur	602.767.14	4.656.080.84	-300	376,87	372.76	4,11	0,20%	203.13290												2	1.600	1.626	275	10,00	16						4,31	Z1	
T17-T18	580,00	54.160.21	Cur	602.767.77	4.656.060.86	-300	376,52	372.80	3,73	0,20%	195.68877												2	1.600	1.626	275	10,00	16						3,91	Z1	
T17-T18	604,00	54.176.21	Cur	602.769.22	4.656.044.93	-300	376,10	372.83	3,27	0,20%	192.49346												2	1.600	1.626	275	10,00	16						3,47	Z1	
T17-T18	605,00	54.177.21	Cur	602.769.34	4.656.043.93	-300	376,07	372.83	3,24	0,20%	192.28126												2	1.600	1.626	275	10,00	16						3,44	Z6	
T17-T18	608,00	54.180.21	Cur	602.769.72	4.656.040.96	-300	376,00	372.84	3,16	0,20%	191.64464												2	1.600	1.626	275	10,00	16						3,36	Z6	
T17-T18	610,00	54.182.21	Cur	602.769.99	4.656.038.98	-300	375,98	372.84	3,13	0,20%	191.22022			V.		0,95	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.600	1.626	275	10,00	16		1	200			3,33	Z6	
T17-T18	615,00	54.187.21	Cur	602.770.72	4.656.034.03	-300	375,93	372.77	3,16	-1,45%	190.15919												2	1.600	1.626	275	10,00	16						3,36	Z6	
T17-T18	616,00	54.188.21	Cur	602.770.87	4.656.033.04	-300	375,92	372.76	3,16	-1,45%	189.94698												2	1.600	1.626	275	10,00	16						3,36	Z1	
T17-T18	628,00	54.200.21	Cur	602.773.00	4.656.021.23	-300																														

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T17-T18	2.111,00	55.683.21	Rec	604.043.59	4.655.341.94	0	372.23	367.46	4.77	-0.50%	135.18188												2	1.600	1.626	275	10.00	16						4.97	Z1	
T17-T18	2.124,00	55.696.21	Rec	604.054.65	4.655.335.12	0	372.00	367.46	4.54	1.19%	135.18188												2	1.600	1.626	275	10.00	16						4.74	Z1	
T17-T18	2.125,00	55.697.21	Rec	604.055.51	4.655.334.59	0	372.01	367.47	4.54	1.40%	135.18188												2	1.600	1.626	275	10.00	16						4.74	Z5	
T17-T18	2.130,00	55.702.21	Rec	604.059.76	4.655.331.97	0	371.99	367.57	4.42	2.45%	135.18188		V.			0.12	N/A			Desagüe	D2D	Apoyo arqueta	2	1.600	1.626	275	10.00	16		2	100	Compuerta	N/A	4.62	Z5	
T17-T18	2.131,00	55.703.21	Rec	604.060.61	4.655.331.44	0	372.05	367.59	4.46	2.66%	135.18188											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.66	Z5	
T17-T18	2.135,00	55.707.21	Rec	604.064.02	4.655.329.34	0	372.12	367.72	4.40	3.50%	135.18188											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.60	Z5	
T17-T18	2.136,00	55.708.21	Rec	604.064.87	4.655.328.82	0	372.13	367.75	4.38	3.71%	135.18188												2	1.600	1.626	275	10.00	16						4.58	Z1	
T17-T18	2.149,00	55.721.21	Rec	604.075.93	4.655.321.99	0	372.39	368.39	4.01	5.40%	135.18188												2	1.600	1.626	275	10.00	16						4.21	Z1	
T17-T18	2.150,00	55.722.21	Rec	604.076.78	4.655.321.47	0	372.44	368.44	3.99	5.40%	135.18188												2	1.600	1.626	275	10.00	16						4.19	Z6	
T17-T18	2.151,00	55.723.21	Rec	604.077.63	4.655.320.95	0	372.48	368.50	3.96	5.40%	135.18188												2	1.600	1.626	275	10.00	16						4.18	Z6	
T17-T18	2.160,00	55.732.21	Cur	604.085.33	4.655.316.27	-400	372.90	368.98	3.92	5.40%	134.06482												2	1.600	1.626	275	10.00	16						4.12	Z6	
T17-T18	2.161,00	55.733.21	Cur	604.086.19	4.655.315.76	-400	372.96	369.04	3.92	5.40%	133.90567												2	1.600	1.626	275	10.00	16						4.12	Z1	
T17-T18	2.170,00	55.742.21	Cur	604.093.99	4.655.311.28	-400	373.37	369.52	3.85	5.40%	132.47327												2	1.600	1.626	275	10.00	16						4.05	Z1	
T17-T18	2.190,00	55.762.21	Cur	604.111.68	4.655.301.96	-400	374.45	370.60	3.85	5.40%	129.29018												2	1.600	1.626	275	10.00	16						4.05	Z1	
T17-T18	2.210,00	55.782.21	Cur	604.129.82	4.655.293.53	-400	375.57	371.68	3.89	5.40%	126.10708												2	1.600	1.626	275	10.00	16						4.09	Z1	
T17-T18	2.230,00	55.802.21	Cur	604.148.35	4.655.286.02	-400	376.39	372.76	3.63	5.40%	122.92398												2	1.600	1.626	275	10.00	16						3.83	Z1	
T17-T18	2.249,00	55.821.21	Rec	604.166.28	4.655.279.75	0	377.05	373.80	3.25	6.88%	120.06859												2	1.600	1.626	275	10.00	16						3.45	Z1	
T17-T18	2.269,00	55.841.21	Rec	604.185.30	4.655.273.54	0	378.72	375.18	3.54	6.88%	120.06859												2	1.600	1.626	275	10.00	16						3.74	Z1	
T17-T18	2.289,00	55.861.21	Rec	604.204.31	4.655.267.34	0	379.94	376.56	3.39	6.88%	120.06859												2	1.600	1.626	275	10.00	16						3.59	Z1	
T17-T18	2.304,00	55.876.21	Rec	604.218.57	4.655.262.69	0	381.22	377.50	3.71	4.77%	120.06859												2	1.600	1.626	275	10.00	16						3.91	Z1	
T17-T18	2.305,00	55.877.21	Rec	604.219.52	4.655.262.38	0	381.36	377.55	3.82	4.51%	120.06859											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.02	Z5	
T17-T18	2.309,00	55.881.21	Rec	604.223.33	4.655.261.14	0	381.99	377.71	4.28	3.46%	120.06859											Apoyo arqueta	2	1.600	1.626	275	10.00	16						4.48	Z5	
T17-T18	2.310,00	55.882.21	Rec	604.224.28	4.655.260.83	0	382.14	377.74	4.40	3.19%	120.06859		V.		0.15	N/A			Ventosa	V2S-200	Apoyo arqueta	2	1.600	1.626	275	10.00	16		1	200			4.60	Z5		
T17-T18	2.315,00	55.887.21	Rec	604.229.03	4.655.259.28	0	382.93	377.87	5.07	1.87%	120.06859											Apoyo arqueta	2	1.600	1.626	275	10.00	16						5.27	Z5	
T17-T18	2.316,00	55.888.21	Rec	604.229.98	4.655.258.97	0	383.08	377.89	5.19	1.61%	120.06859												2	1.600	1.626	275	10.00	16						5.39	Z1	
T17-T18	2.319,00	55.891.21	Rec	604.232.84	4.655.258.04	0	383.47	377.92	5.54	0.82%	120.06859												2	1.600	1.626	275	10.00	16						5.74	Z1	
T17-T18	2.320,00	55.892.21	Rec	604.233.79	4.655.257.73	0	383.60	377.93	5.67	0.56%	120.06859												2	1.600	1.626	275	12.50	16						5.87	Z1	
T17-T18	2.322,00	55.894.21	Rec	604.235.69	4.655.257.11	0	383.85	377.94	5.92	0.03%	120.06859												2	1.600	1.626	275	12.50	16						6.12	Z1	
T17-T18	2.323,00	55.895.21	Rec	604.236.64	4.655.256.80	0	383.98	377.93	6.04	-0.24%	120.06859												2	1.600	1.626	275	12.50	16						6.24	Z2	
T17-T18	2.329,00	55.901.21	Rec	604.242.34	4.655.254.94	0	384.43	377.91	6.53	-0.50%	120.06859												2	1.600	1.626	275	12.50	16						6.73	Z2	
T17-T18	2.349,00	55.921.21	Rec	604.261.36	4.655.248.74	0	384.13	377.76	6.38	-3.75%	120.06859												2	1.600	1.626	275	12.50	16						6.58	Z2	
T17-T18	2.351,00	55.923.21	Rec	604.263.26	4.655.248.12	0	383.80	377.66	6.14	-5.92%	120.06859												2	1.600	1.626	275	12.50	16						6.34	Z2	
T17-T18	2.352,00	55.924.21	Rec	604.264.21	4.655.247.81	0	383.58	377.60	5.98	-7.01%	120.06859												2	1.600	1.626	275	12.50	16						6.18	Z1	
T17-T18	2.353,00	55.925.21	Rec	604.265.16	4.655.247.50	0	383.36	377.52	5.84	-8.09%	120.06859												2	1.600	1.626	275	12.50	16						6.04	Z1	
T17-T18	2.354,00	55.926.21	Rec	604.266.11	4.655.247.19	0	383.14	377.43	5.71	-9.18%	120.06859												2	1.600	1.626	275	10.00	16						5.91	Z1	
T17-T18	2.359,00	55.931.21	Rec	604.270.86	4.655.245.64	0	382.14	376.84	5.30	-14.60%	120.06859												2	1.600	1.626	275	10.00	16						5.50	Z1	
T17-T18	2.360,00	55.932.21	Rec	604.271.81	4.655.245.33	0	381.90	376.69	5.21	-15.69%	120.06859		V.			0.61	N/A						2	1.600	1.626	275	10.00	16						5.41	Z11	
T17-T18	2.369,00	55.941.21	Rec	604.280.37	4.655.242.54	0	380.36	374.84	5.53	-25.45%	120.06859												2	1.600	1.626	275	10.00	16						5.73	Z11	
T17-T18	2.375,00	55.947.21	Rec	604.286.08	4.655.240.68	0	378.77	373.12	5.65	-30.87%	120.06859												2	1.600	1.626	275	10.00	16						5.85	Z11	
T17-T18	2.376,00	55.948.21	Rec	604.287.03	4.655.240.37	0	378.33	372.81	5.52	-30.87%	120.06859												2	1.600	1.626	275	10.00	16						5.72	Z11	
T17-T18	2.380,00	55.960.21	Rec	604.298.43	4.655.236.65	0	373.72	369.48	4.25	-0.19%	120.06859												2	1.600	1.626	275	10.00	16						6.45	Z11	
T17-T18	2.390,00	55.962.21	Rec	604.300.34	4.655.236.03	0	372.87	369.05	3.82	-20.18%	120.06859		V.			0.56	N/A						2	1.600	1.626	275	10.00	16						4.02	Z11	
T17-T18	2.391,00	55.963.21	Rec	604.301.29	4.655.235.72	0	372.44	368.86	3.58	-19.13%	120.06859												2	1.600	1.626	275	10.00	16						3.78	Z1	
T17-T18	2.407,00	55.979.21	Rec	604.316.50	4.655.230.76	0	371.42	366.89	4.53	-8.43%	120.06859												2	1.600	1.626	275	10.00	16						4.73	Z1	
T17-T18	2.427,00	55.999																																		

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a 1N (m)	Zanja tipo asignada
T18-T19	3.625.00	60.427.21	Rec	606.786.21	4.651.767.48	0	371.29	367.43	3.86	3.87%	191.13942											1	1.800	1.829	275	11.50	16						4.06	Z1		
T18-T19	3.626.00	60.428.21	Rec	606.786.35	4.651.766.49	0	371.33	367.47	3.86	3.87%	191.13942											1	1.800	1.829	275	11.50	16						4.06	Z1		
T18-T19	3.643.00	60.445.21	Rec	606.788.71	4.651.749.65	0	371.89	368.15	3.74	5.43%	191.13942											1	1.800	1.829	275	11.50	16						3.94	Z1		
T18-T19	3.662.00	60.464.21	Rec	606.791.35	4.651.730.83	0	373.64	369.98	3.67	12.72%	191.13942											1	1.800	1.829	275	11.50	16						3.87	Z1		
T18-T19	3.669.00	60.471.21	Rec	606.792.32	4.651.723.90	0	375.29	370.75	4.54	9.29%	191.13942											1	1.800	1.829	275	11.50	16						4.74	Z1		
T18-T19	3.670.00	60.472.21	Rec	606.792.46	4.651.722.91	0	375.77	370.84	4.93	8.80%	191.13942											1	1.800	1.829	275	11.50	16						5.13	Z5		
T18-T19	3.675.00	60.477.21	Rec	606.793.15	4.651.717.96	0	376.51	371.22	5.29	6.36%	191.13942		V.			0.28	N/A			Ventosa	V1S-200	Apoyo arqueta	1	1.800	1.829	275	11.50	16	1	200			5.49	Z5		
T18-T19	3.680.00	60.482.21	Rec	606.793.84	4.651.713.01	0	376.66	371.47	5.19	3.91%	191.13942											1	1.800	1.829	275	11.50	16						5.39	Z5		
T18-T19	3.681.00	60.483.21	Rec	606.793.98	4.651.712.02	0	376.70	371.51	5.19	3.42%	191.13942											1	1.800	1.829	275	11.50	16						5.39	Z1		
T18-T19	3.682.00	60.484.21	Rec	606.794.12	4.651.711.03	0	376.73	371.54	5.19	2.93%	191.13942											1	1.800	1.829	275	11.50	16						5.39	Z1		
T18-T19	3.702.00	60.504.21	Rec	606.796.89	4.651.691.22	0	377.13	371.56	5.57	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						5.77	Z1		
T18-T19	3.722.00	60.524.21	Rec	606.799.67	4.651.671.42	0	376.71	371.46	5.25	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						5.45	Z1		
T18-T19	3.742.00	60.544.21	Rec	606.802.44	4.651.651.61	0	376.03	371.36	4.67	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.87	Z1		
T18-T19	3.762.00	60.564.21	Rec	606.805.22	4.651.631.80	0	374.91	370.98	3.93	-4.01%	191.13942											1	1.800	1.829	275	11.50	16						4.13	Z1		
T18-T19	3.782.00	60.584.21	Rec	606.807.99	4.651.612.00	0	373.22	369.81	3.41	-6.65%	191.13942											1	1.800	1.829	275	11.50	16						3.61	Z1		
T18-T19	3.802.00	60.604.21	Rec	606.810.77	4.651.592.19	0	371.87	368.48	3.39	-6.65%	191.13942											1	1.800	1.829	275	11.50	16						3.59	Z1		
T18-T19	3.822.00	60.624.21	Rec	606.813.54	4.651.572.38	0	371.38	367.89	3.49	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						3.69	Z1		
T18-T19	3.842.00	60.644.21	Rec	606.816.32	4.651.552.58	0	371.32	367.79	3.53	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						3.73	Z1		
T18-T19	3.862.00	60.664.21	Rec	606.819.09	4.651.532.77	0	371.28	367.69	3.60	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						3.80	Z1		
T18-T19	3.882.00	60.684.21	Rec	606.821.87	4.651.512.96	0	371.28	367.59	3.69	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						3.89	Z1		
T18-T19	3.902.00	60.704.21	Rec	606.824.64	4.651.493.16	0	371.32	367.49	3.84	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.04	Z1		
T18-T19	3.922.00	60.724.21	Rec	606.827.42	4.651.473.35	0	371.55	367.39	4.16	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.36	Z1		
T18-T19	3.942.00	60.744.21	Rec	606.830.19	4.651.453.54	0	371.70	367.29	4.41	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.61	Z1		
T18-T19	3.962.00	60.764.21	Rec	606.832.97	4.651.433.74	0	371.65	367.19	4.47	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.67	Z1		
T18-T19	3.982.00	60.784.21	Rec	606.835.74	4.651.413.93	0	371.69	367.09	4.60	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.80	Z1		
T18-T19	4.002.00	60.804.21	Rec	606.838.51	4.651.394.12	0	371.70	366.99	4.71	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.91	Z1		
T18-T19	4.022.00	60.824.21	Rec	606.841.29	4.651.374.32	0	371.63	366.89	4.74	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.94	Z1		
T18-T19	4.029.00	60.831.21	Rec	606.842.26	4.651.367.38	0	371.58	366.85	4.73	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.93	Z1		
T18-T19	4.030.00	60.832.21	Rec	606.842.40	4.651.366.39	0	371.57	366.85	4.73	-0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.93	Z5		
T18-T19	4.035.00	60.837.21	Rec	606.843.09	4.651.361.44	0	371.53	366.82	4.71	-0.50%	191.13942		V.			0.57	N/A			Desagüe	D1D	Apoyo arqueta	1	1.800	1.829	275	11.50	16			1	100	Compuerta	N/A	4.91	Z5
T18-T19	4.040.00	60.842.21	Rec	606.843.79	4.651.356.49	0	371.49	366.85	4.64	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.84	Z5		
T18-T19	4.041.00	60.843.21	Rec	606.843.93	4.651.355.50	0	371.48	366.85	4.63	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.83	Z1		
T18-T19	4.042.00	60.844.21	Rec	606.844.06	4.651.354.51	0	371.47	366.86	4.61	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.81	Z1		
T18-T19	4.062.00	60.864.21	Rec	606.846.84	4.651.334.70	0	371.75	366.96	4.79	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.99	Z1		
T18-T19	4.082.00	60.884.21	Rec	606.849.61	4.651.314.90	0	371.79	367.06	4.74	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.94	Z1		
T18-T19	4.102.00	60.904.21	Rec	606.852.39	4.651.295.09	0	371.80	367.16	4.64	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.84	Z1		
T18-T19	4.122.00	60.924.21	Rec	606.855.16	4.651.275.28	0	371.65	367.26	4.39	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.59	Z1		
T18-T19	4.142.00	60.944.21	Rec	606.857.94	4.651.255.48	0	372.01	367.36	4.65	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.85	Z1		
T18-T19	4.162.00	60.964.21	Rec	606.860.71	4.651.235.67	0	372.08	367.46	4.62	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.82	Z1		
T18-T19	4.182.00	60.984.21	Rec	606.863.49	4.651.215.86	0	372.07	367.56	4.51	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.71	Z1		
T18-T19	4.202.00	61.004.21	Rec	606.866.26	4.651.196.06	0	372.01	367.66	4.35	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.55	Z1		
T18-T19	4.222.00	61.024.21	Rec	606.869.04	4.651.176.25	0	372.00	367.76	4.24	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.44	Z1		
T18-T19	4.242.00	61.044.21	Rec	606.871.81	4.651.156.44	0	371.99	367.86	4.14	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.34	Z1		
T18-T19	4.262.00	61.064.21	Rec	606.874.59	4.651.136.64	0	372.00	367.96	4.05	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.25	Z1		
T18-T19	4.282.00	61.084.21	Rec	606.877.36	4.651.116.83	0	372.02	368.06	3.97	0.50%	191.13942											1	1.800	1.829	275	11.50	16						4.17	Z1</		

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T19-T20	267,00	62 679.21	Cur	608.095.62	4.650.296.09	200	375.30	369.09	6,21	0.20%	164.32994											1	1.500	1.524	275	10,50	16						6,41	Z2	
T19-T20	268,00	62 680.21	Cur	608.096.15	4.650.295.24	200	375.03	369.09	5,94	0.20%	164.64825											1	1.500	1.524	275	10,50	16						6,14	Z1	
T19-T20	282,00	62 694.21	Cur	608.103.11	4.650.283.10	200	374.50	369.12	5,38	0.20%	169.10459											1	1.500	1.524	275	10,50	16						5,58	Z1	
T19-T20	302,00	62 714.21	Cur	608.111.54	4.650.264.97	200	373.81	369.16	4,65	0.20%	175.47078											1	1.500	1.524	275	10,50	16						4,85	Z1	
T19-T20	322,00	62 734.21	Cur	608.118.12	4.650.246.09	200	373.38	369.20	4,18	0.20%	181.83698											1	1.500	1.524	275	10,50	16						4,38	Z1	
T19-T20	334,00	62 746.21	Rec	608.121.36	4.650.234.54	0	372.97	369.22	3,75	0.20%	182.70850											1	1.500	1.524	275	10,50	16						3,95	Z1	
T19-T20	335,00	62 747.21	Rec	608.121.62	4.650.233.57	0	372.97	369.23	3,74	0.20%	182.70850											1	1.500	1.524	275	10,50	16						3,94	Z5	
T19-T20	340,27	62 752.48	Cur	608.123.04	4.650.228.50	100	372.92	369.24	3,68	0.20%	182.70850	P.S.	V.	0,00	N/A	0,63	N/A		Ventosa	V1S-200	Apoyo arqueta	1	1.500	1.524	275	10,50	16	1	200				3,88	Z5	
T19-T20	345,00	62 757.21	Cur	608.124.20	4.650.223.91	100	372.88	369.20	3,69	-0.89%	185.71985											1	1.500	1.524	275	10,50	16						3,89	Z5	
T19-T20	346,00	62 758.21	Cur	608.124.42	4.650.222.93	100	372.87	369.19	3,69	-0.89%	186.35647											1	1.500	1.524	275	10,50	16						3,89	Z1	
T19-T20	360,00	62 772.21	Cur	608.126.43	4.650.209.09	100	372.83	369.06	3,77	-0.89%	195.26915											1	1.500	1.524	275	10,50	16						3,97	Z1	
T19-T20	380,00	62 792.21	Cur	608.125.92	4.650.189.13	100	374.06	368.88	5,18	-0.89%	208.00154											1	1.500	1.524	275	10,50	16						5,38	Z1	
T19-T20	400,00	62 812.21	Cur	608.121.45	4.650.169.67	100	374.73	368.70	6,02	-0.89%	220.73394											1	1.500	1.524	275	10,50	16						6,22	Z1	
T19-T20	416,00	62 828.21	Cur	608.115.14	4.650.154.98	100	374.55	368.56	5,99	-0.89%	230.91985											1	1.500	1.524	275	10,50	16						6,19	Z1	
T19-T20	417,00	62 829.21	Cur	608.114.67	4.650.154.10	100	374.58	368.55	6,03	-0.89%	231.55647											1	1.500	1.524	275	10,50	16						6,23	Z2	
T19-T20	420,00	62 832.21	Cur	608.113.20	4.650.151.49	100	374.73	368.52	6,21	-0.89%	233.46633											1	1.500	1.524	275	10,50	16						6,41	Z2	
T19-T20	440,00	62 852.21	Cur	608.101.51	4.650.135.30	100	375.35	368.35	7,01	-0.89%	246.15873											1	1.500	1.524	275	10,50	16						7,21	Z2	
T19-T20	450,00	62 862.21	Rec	608.094.82	4.650.127.87	0	375.70	368.25	7,45	-0.89%	246.63969											1	1.500	1.524	275	10,50	16						7,65	Z2	
T19-T20	451,00	62 863.21	Rec	608.094.15	4.650.127.12	0	375.76	368.25	7,52	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						7,72	Z2	
T19-T20	459,00	62 871.21	Cur	608.088.80	4.650.121.17	0	378.00	368.18	9,83	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						10,03	Z2	
T19-T20	479,00	62 891.21	Rec	608.075.43	4.650.106.31	0	376.99	368.00	8,99	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						9,19	Z2	
T19-T20	485,00	62 897.21	Rec	608.071.41	4.650.101.85	0	377.50	367.94	9,55	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						9,75	Z2	
T19-T20	486,00	62 898.21	Rec	608.070.75	4.650.101.10	0	377.39	367.93	9,46	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						9,66	Z6	
T19-T20	492,00	62 904.21	Rec	608.066.73	4.650.096.64	0	376.35	367.88	8,47	-0.89%	246.63969											1	1.500	1.524	275	16,00	16						8,67	Z6	
T19-T20	493,00	62 905.21	Rec	608.066.06	4.650.095.90	0	376.64	367.87	8,77	-0.89%	246.63969	P.S.	V.	0,00	N/A	0,63	N/A		Desagüe	D1D	Apoyo arqueta	1	1.500	1.524	275	16,00	16						8,97	Z5	
T19-T20	497,66	62 909.87	Cur	608.062.95	4.650.092.95	-100	377.13	367.83	9,30	-0.89%	246.63969											1	1.500	1.524	275	16,00	16			1	100	Compuerta	N/A	9,50	Z5
T19-T20	498,00	62 910.21	Cur	608.062.72	4.650.092.18	-100	377.14	367.83	9,31	0.20%	246.42411											1	1.500	1.524	275	16,00	16						9,51	Z5	
T19-T20	503,00	62 915.21	Cur	608.059.48	4.650.088.37	-100	377.36	367.84	9,52	0.20%	243.24101											1	1.500	1.524	275	16,00	16						9,72	Z5	
T19-T20	504,00	62 916.21	Cur	608.058.86	4.650.087.59	-100	377.40	367.84	9,56	0.20%	242.60439											1	1.500	1.524	275	16,00	16						9,76	Z2	
T19-T20	509,00	62 921.21	Cur	608.055.86	4.650.083.59	-100	377.62	367.85	9,77	0.20%	239.42129											1	1.500	1.524	275	16,00	16						9,97	Z2	
T19-T20	510,00	62 922.21	Cur	608.055.28	4.650.082.77	-100	377.72	367.85	9,87	0.20%	238.78467											1	1.500	1.524	275	16,00	16						10,07	Z3	
T19-T20	518,00	62 930.21	Cur	608.050.97	4.650.076.04	-100	378.31	367.87	10,44	0.20%	233.69171											1	1.500	1.524	275	16,00	16						10,64	Z3	
T19-T20	538,00	62 950.21	Cur	608.042.66	4.650.057.88	-100	378.89	367.91	10,98	0.20%	220.95932											1	1.500	1.524	275	16,00	16						11,18	Z3	
T19-T20	558,00	62 970.21	Cur	608.038.12	4.650.038.44	-100	378.80	367.95	10,85	0.20%	208.22692											1	1.500	1.524	275	16,00	16						11,05	Z3	
T19-T20	577,00	62 989.21	Rec	608.037.12	4.650.019.48	0	378.94	367.99	10,95	0.20%	201.51944											1	1.500	1.524	275	16,00	16						11,15	Z3	
T19-T20	596,00	63.008.21	Cur	608.037.37	4.650.000.48	-200	378.93	368.03	10,90	0.20%	196.15418											1	1.500	1.524	275	16,00	16						11,10	Z3	
T19-T20	616,00	63.028.21	Cur	608.039.57	4.649.980.61	-200	378.86	368.07	10,79	0.20%	189.78798											1	1.500	1.524	275	16,00	16						10,99	Z3	
T19-T20	636,00	63.048.21	Cur	608.043.75	4.649.961.06	-200	378.93	368.11	10,83	0.20%	183.42178											1	1.500	1.524	275	16,00	16						11,03	Z3	
T19-T20	655,00	63.067.21	Rec	608.049.38	4.649.942.92	0	378.89	368.14	10,75	0.20%	179.69302											1	1.500	1.524	275	16,00	16						10,95	Z3	
T19-T20	659,00	63.071.21	Rec	608.050.64	4.649.939.12	0	379.38	368.15	11,23	0.20%	179.69302											1	1.500	1.524	275	16,00	16						11,43	Z3	
T19-T20	660,00	63.072.21	Rec	608.050.95	4.649.938.17	0	379.00	368.15	10,85	0.20%	179.69302											1	1.500	1.524	275	16,00	16						11,05	Z6	
T19-T20	675,00	63.087.21	Rec	608.055.65	4.649.923.93	0	378.95	368.18	10,77	0.20%	179.69302											1	1.500	1.524	275	16,00	16						10,97	Z6	
T19-T20	690,00	63.102.21	Rec	608.060.36	4.649.909.69	0	378.99	368.21	10,77	0.20%	179.69302											1	1.500	1.524	275	16,00	16						10,97	Z6	
T19-T20	691,00	63.103.21	Rec	608.060.67	4.649.908.74	0	379.01	368.22	10,79	0.20%	179.69302											1	1.500	1.524	275	16,00	16						10,99	Z3	
T19-T20	695,00	63.107.21	Rec	608.061.92	4.649.904.94	0	379.05	368.22	10,82	0.20%	179.69302											1	1.500	1.524	275	16,00	16						11,02	Z3	
T1																																			

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Raño	C. Terreno	C. Rasante Hidráulica	Pendiente	Azímut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desagüe	Tipo de válvula	Aquetda rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T20-T21	0.00	64.852.21	Rec	609.511.75	4.649.165.27	0	359.81	356.55	3.27	-0.50%	92.61141								Toma	TOMA 20	TOMA 20	1	1.300	1.321	275	8.00	16	1	200				3.47	Z1	
T20-T21	17.00	64.869.21	Rec	609.528.64	4.649.167.24	0	359.95	356.46	3.49	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					3.69	Z1		
T20-T21	37.00	64.889.21	Rec	609.548.50	4.649.169.56	0	360.24	356.36	3.88	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.08	Z1		
T20-T21	39.00	64.891.21	Rec	609.550.49	4.649.169.79	0	360.32	356.35	3.97	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.17	Z1		
T20-T21	40.00	64.892.21	Rec	609.551.48	4.649.169.91	0	359.99	356.35	3.65	-0.50%	92.61141										N-121C	1	1.300	1.321	275	8.00	16					3.85	Z4		
T20-T21	55.00	64.907.21	Rec	609.566.38	4.649.171.64	0	359.97	356.27	3.69	-0.50%	92.61141										N-121C	1	1.300	1.321	275	8.00	16					3.89	Z4		
T20-T21	56.00	64.908.21	Rec	609.567.38	4.649.171.76	0	359.71	356.27	3.44	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					3.64	Z1		
T20-T21	57.00	64.909.21	Rec	609.568.37	4.649.171.88	0	359.70	356.26	3.44	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					3.64	Z1		
T20-T21	77.00	64.929.21	Rec	609.588.23	4.649.174.19	0	360.19	356.16	4.03	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.23	Z1		
T20-T21	97.00	64.949.21	Rec	609.608.10	4.649.176.51	0	360.13	356.06	4.07	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.27	Z1		
T20-T21	117.00	64.969.21	Rec	609.627.96	4.649.178.82	0	360.14	355.96	4.18	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.38	Z1		
T20-T21	137.00	64.989.21	Rec	609.647.83	4.649.181.14	0	360.28	355.86	4.41	-0.50%	92.61141											1	1.300	1.321	275	8.00	16					4.61	Z1		
T20-T21	156.00	65.008.21	Cur	609.666.72	4.649.183.21	400	360.26	355.77	4.50	-0.50%	94.25811											1	1.300	1.321	275	8.00	16					4.70	Z1		
T20-T21	176.00	65.028.21	Cur	609.686.67	4.649.184.51	400	360.15	355.67	4.48	-0.50%	97.44121											1	1.300	1.321	275	8.00	16					4.68	Z1		
T20-T21	196.00	65.048.21	Cur	609.706.67	4.649.184.81	400	360.09	355.57	4.52	-0.50%	100.62431											1	1.300	1.321	275	8.00	16					4.72	Z1		
T20-T21	204.00	65.056.21	Cur	609.714.67	4.649.184.65	400	359.98	355.53	4.45	-0.50%	101.89755											1	1.300	1.321	275	8.00	16					4.65	Z1		
T20-T21	205.00	65.057.21	Cur	609.715.67	4.649.184.62	400	359.97	355.52	4.45	-0.50%	102.05670											1	1.300	1.321	275	8.00	16					4.65	Z5		
T20-T21	210.00	65.062.21	Cur	609.720.66	4.649.184.43	400	359.93	355.50	4.43	-0.50%	102.85248											1	1.300	1.321	275	8.00	16					4.63	Z5		
T20-T21	215.00	65.067.21	Cur	609.725.66	4.649.184.18	400	359.89	355.52	4.37	-0.50%	103.64825											1	1.300	1.321	275	8.00	16					4.57	Z1		
T20-T21	216.00	65.068.21	Cur	609.726.65	4.649.184.12	400	359.89	355.53	4.36	-0.50%	103.80741											1	1.300	1.321	275	8.00	16					4.56	Z1		
T20-T21	235.00	65.087.21	Rec	609.745.59	4.649.182.65	0	359.88	355.62	4.26	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					4.46	Z1		
T20-T21	255.00	65.107.21	Rec	609.765.49	4.649.180.62	0	359.76	355.72	4.03	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					4.23	Z1		
T20-T21	275.00	65.127.21	Rec	609.785.40	4.649.178.69	0	359.78	355.82	3.96	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					4.16	Z1		
T20-T21	295.00	65.147.21	Rec	609.805.31	4.649.176.75	0	360.00	355.92	4.08	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					4.28	Z1		
T20-T21	315.00	65.167.21	Rec	609.825.21	4.649.174.82	0	359.94	356.02	3.92	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					4.12	Z1		
T20-T21	335.00	65.187.21	Rec	609.845.12	4.649.172.88	0	359.81	356.12	3.69	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					3.89	Z1		
T20-T21	355.00	65.207.21	Rec	609.865.03	4.649.170.95	0	359.65	356.22	3.43	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					3.63	Z1		
T20-T21	375.00	65.227.21	Rec	609.884.93	4.649.169.02	0	359.92	356.32	3.59	-0.50%	106.16534											1	1.300	1.321	275	8.00	16					3.79	Z1		
T20-T21	394.00	65.246.21	Cur	609.903.73	4.649.166.32	200	359.98	356.42	3.57	-0.50%	112.08421											1	1.300	1.321	275	8.00	16					3.77	Z1		
T20-T21	414.00	65.266.21	Cur	609.923.15	4.649.161.57	200	359.92	356.52	3.40	-0.50%	118.45041											1	1.300	1.321	275	8.00	16					3.60	Z1		
T20-T21	434.00	65.286.21	Cur	609.942.00	4.649.154.91	200	359.99	356.62	3.37	-0.50%	124.81661											1	1.300	1.321	275	8.00	16					3.57	Z1		
T20-T21	454.00	65.306.21	Cur	609.960.09	4.649.146.40	200	360.04	356.72	3.32	-0.50%	131.18280											1	1.300	1.321	275	8.00	16					3.52	Z1		
T20-T21	474.00	65.326.21	Cur	609.977.24	4.649.136.12	200	360.15	356.82	3.33	-0.50%	137.54900											1	1.300	1.321	275	8.00	16					3.53	Z1		
T20-T21	494.00	65.346.21	Cur	609.993.28	4.649.124.19	200	360.36	356.92	3.44	-0.50%	143.91520											1	1.300	1.321	275	8.00	16					3.64	Z1		
T20-T21	513.00	65.365.21	Rec	610.007.91	4.649.112.06	0	360.52	357.01	3.51	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					3.71	Z1		
T20-T21	533.00	65.385.21	Rec	610.023.30	4.649.099.30	0	360.64	357.11	3.53	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					3.73	Z1		
T20-T21	553.00	65.405.21	Rec	610.038.70	4.649.086.54	0	361.00	357.21	3.79	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					3.99	Z1		
T20-T21	573.00	65.425.21	Rec	610.054.10	4.649.073.78	0	361.13	357.31	3.82	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.02	Z1		
T20-T21	575.00	65.427.21	Rec	610.055.64	4.649.072.50	0	361.14	357.32	3.82	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.02	Z1		
T20-T21	576.00	65.428.21	Rec	610.056.41	4.649.071.86	0	361.14	357.33	3.82	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.02	Z1		
T20-T21	593.00	65.448.21	Rec	610.069.30	4.649.061.01	0	361.21	357.41	3.80	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.00	Z1		
T20-T21	613.00	65.465.21	Rec	610.084.90	4.649.048.25	0	361.36	357.51	3.85	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.05	Z1		
T20-T21	633.00	65.485.21	Rec	610.100.30	4.649.035.49	0	361.61	357.61	4.00	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.20	Z1		
T20-T21	653.00	65.505.21	Rec	610.115.70	4.649.022.73	0	361.81	357.71	4.10	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.30	Z1		
T20-T21	673.00	65.525.21	Rec	610.131.10	4.649.009.96	0	361.86	357.81	4.05	-0.50%	144.05679											1	1.300	1.321	275	8.00	16					4.25	Z1		
T20-T21	693.00	65.545.21	Rec	610.146.50	4.649.997.20	0	361.91	358.03	3.88	-1.42%	144.05679											1	1.300	1.321	275	8.00	16					4.08	Z1		
T20-T21	713.00	65.565.21	Rec	610.161.89	4.648.984.44	0	361.98	358.32																											

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Pendiente	Azmut	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizo Pie >> X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desague	DN Desague	Tipo de válvula	Arqueta rotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
DC-T16	563.00	563.00	Rec	603.621.92	4.659.260.07	0	387.05	381.85	5.20	0.20%	389.64958											1	1.800	1.829	275	11.50	16						5.40	Z1	
DC-T16	572.00	572.00	Rec	603.620.46	4.659.268.95	0	387.64	381.86	5.78	0.20%	389.64958											1	1.800	1.829	275	11.50	16						5.98	Z1	
DC-T16	573.00	573.00	Rec	603.620.30	4.659.269.94	0	387.73	381.87	5.87	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.07	Z1	
DC-T16	575.00	575.00	Rec	603.619.98	4.659.271.92	0	387.86	381.87	5.99	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.19	Z1	
DC-T16	576.00	576.00	Rec	603.619.81	4.659.272.90	0	387.95	381.87	6.08	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.28	Z2	
DC-T16	583.00	583.00	Rec	603.618.68	4.659.279.81	0	388.02	381.89	6.13	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.33	Z2	
DC-T16	603.00	603.00	Rec	603.615.44	4.659.299.55	0	389.07	381.93	7.15	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						7.35	Z2	
DC-T16	623.00	623.00	Rec	603.612.21	4.659.319.28	0	389.87	381.97	7.90	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						8.10	Z2	
DC-T16	643.00	643.00	Rec	603.608.97	4.659.339.02	0	391.24	382.01	9.23	0.20%	389.64958										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						9.43	Z2	
DC-T16	651.00	651.00	Cur	603.607.58	4.659.346.90	-200	391.71	382.02	9.69	0.20%	387.72798										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						9.89	Z2	
DC-T16	652.00	652.00	Cur	603.607.39	4.659.347.88	-200	391.83	382.02	9.81	0.20%	387.40967										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.01	Z3	
DC-T16	662.00	662.00	Cur	603.605.18	4.659.357.63	-200	392.09	382.04	10.05	0.20%	384.22658										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.25	Z3	
DC-T16	682.00	682.00	Cur	603.599.32	4.659.376.74	-200	393.21	382.08	11.13	0.20%	377.86038										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						11.33	Z3	
DC-T16	702.00	702.00	Cur	603.591.57	4.659.395.17	-200	392.87	382.12	10.75	0.20%	371.49418										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.95	Z3	
DC-T16	722.00	722.00	Cur	603.582.03	4.659.412.74	-200	392.27	382.16	10.11	0.20%	365.12798										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.31	Z3	
DC-T16	741.00	741.00	Rec	603.571.50	4.659.428.55	0	392.09	382.20	9.88	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.08	Z3	
DC-T16	742.00	742.00	Rec	603.570.93	4.659.429.37	0	392.05	382.20	9.84	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.04	Z3	
DC-T16	743.00	743.00	Rec	603.570.36	4.659.430.19	0	392.00	382.21	9.81	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						10.00	Z2	
DC-T16	761.00	761.00	Rec	603.560.13	4.659.445.00	0	391.17	382.24	8.93	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						9.13	Z2	
DC-T16	781.00	781.00	Rec	603.548.76	4.659.461.46	0	390.71	382.28	8.43	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						8.63	Z2	
DC-T16	801.00	801.00	Rec	603.537.39	4.659.477.91	0	390.31	382.32	7.99	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						8.19	Z2	
DC-T16	821.00	821.00	Rec	603.526.02	4.659.494.36	0	389.89	382.36	7.53	0.20%	361.50530										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						7.73	Z2	
DC-T16	840.00	840.00	Cur	603.515.53	4.659.510.21	400	389.58	382.40	7.18	0.20%	364.27472										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						7.38	Z2	
DC-T16	860.00	860.00	Cur	603.505.31	4.659.527.40	400	389.01	382.44	6.57	0.20%	367.45782										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.77	Z2	
DC-T16	879.00	879.00	Cur	603.496.42	4.659.544.18	400	388.49	382.48	6.01	0.20%	370.48176										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.21	Z2	
DC-T16	880.00	880.00	Cur	603.495.97	4.659.545.08	400	388.44	382.48	5.96	0.20%	370.64092										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.16	Z1	
DC-T16	883.00	883.00	Cur	603.494.64	4.659.547.77	400	388.31	382.49	5.83	0.20%	371.11838										Ajuste piezométrica	1	1.800	1.829	275	18.00	16						6.03	Z1	
DC-T16	884.00	884.00	Cur	603.494.21	4.659.548.67	400	388.29	382.49	5.80	0.20%	371.27753										Ajuste piezométrica	1	1.800	1.829	275	11.50	16						6.00	Z1	
DC-T16	899.99	899.99	Rec	603.487.52	4.659.563.19	0	387.86	382.52	5.34	0.20%	373.82252	P.S.	0.14	N/A								1	1.800	1.829	275	11.50	16						5.54	Z1	
DC-T16	919.00	919.00	Rec	603.479.93	4.659.580.62	0	387.37	382.56	4.82	0.20%	373.82252											1	1.800	1.829	275	11.50	16						5.02	Z1	
DC-T16	939.00	939.00	Rec	603.471.93	4.659.598.95	0	387.15	382.60	4.56	0.20%	373.82252											1	1.800	1.829	275	11.50	16						4.76	Z1	
DC-T16	954.00	954.00	Rec	603.465.94	4.659.612.70	0	386.73	382.63	4.10	0.20%	373.82252											1	1.800	1.829	275	11.50	16						4.30	Z1	
DC-T16	955.00	955.00	Rec	603.465.54	4.659.613.62	0	386.69	382.63	4.06	0.20%	373.82252											1	1.800	1.829	275	11.50	16						4.26	Z5	
DC-T16	959.00	959.00	Rec	603.463.94	4.659.617.29	0	386.53	382.64	3.89	0.20%	373.82252											1	1.800	1.829	275	11.50	16						4.09	Z5	
DC-T16	960.00	960.00	Rec	603.463.54	4.659.618.20	0	386.48	382.64	3.84	0.20%	373.82252											1	1.800	1.829	275	11.50	16						4.04	Z5	
DC-T16	965.00	965.00	Rec	603.461.54	4.659.622.79	0	386.27	382.53	3.74	-2.17%	373.82252	V.			1.36	N/A		Ventosa	V1S-200		Apoyo arqueta	1	1.800	1.829	275	11.50	16		1	200			3.94	Z5	
DC-T16	966.00	966.00	Rec	603.461.14	4.659.623.70	0	386.23	382.51	3.72	-2.17%	373.82252										Apoyo arqueta	1	1.800	1.829	275	11.50	16						3.92	Z1	
DC-T16	979.00	979.00	Rec	603.455.94	4.659.635.62	0	385.91	382.23	3.68	-2.17%	373.82252										Apoyo arqueta	1	1.800	1.829	275	11.50	16						3.88	Z1	
DC-T16	999.00	999.00	Rec	603.447.95	4.659.653.95	0	385.53	381.79	3.73	-2.17%	373.82252											1	1.800	1.829	275	11.50	16						3.93	Z1	
DC-T16	1.016.00	1.016.00	Rec	603.439.96	4.659.672.28	0	385.18	381.36	3.82	-2.17%	373.82252											1	1.800	1.829	275	11.50	16						4.02	Z1	
DC-T16	1.039.00	1.039.00	Rec	603.431.96	4.659.690.62	0	384.66	380.93	3.73	-2.17%	373.82252											1	1.800	1.829	275	11.50	16						4.10	Z1	
DC-T16	1.059.00	1.059.00	Rec	603.423.97	4.659.708.95	0	383.93	380.49	3.44	-2.17%	373.82252											1	1.800	1.829	275	11.50	16						3.64	Z1	
DC-T16	1.079.00	1.079.00	Rec	603.415.97	4.659.727.28	0	384.04	380.06	3.98	-2.17%	373.82252											1	1.800	1.829	275	11.50	16						4.18	Z1	
DC-T16	1.098.00	1.098.00	Cur	603.408.25	4.659.744.64	-200	384.04	379.49	4.55	-4.27%	371.43281											1	1.800	1.829	275	11.50	16						4.75	Z1	
DC-T16	1.117.00	1.117.00	Rec	603.399.24	4.659.761.36	0	382.96	378.68	4.28	-4.27%	366.63196											1	1.800	1.829	275	11.50	16						4.48	Z1	
DC-T16	1.137.00	1.137.00	Rec	603.389.23	4																														

Tramo	P.K. tramo	P.K. Acumulado	Alineación	Coord. X	Coord. Y	Radio	C. Terreno	C. Rasante Hidráulica	Altura rasante hidráulica (m)	Pendiente	Azímuth	Vertice en Planta	Vertice en Alzado	Angulo horizontal	Angulo (°) macizo anclaje horizontal	Angulo vertical	Angulo (°) macizo anclaje vertical	Macizos Pie >>-X%	Tramos anclados por pie	Elemento	Arqueta	Observación	N° tuberías	DN tuberías (mm)	DN ext (mm)	Acero tipo S-	espesor adoptado (mm)	PN Timbraje valvulería (atm)	N° ventosas por tubería	DN ventosa (mm)	N° válvulas desagüe	DN Desagüe	Tipo de válvula	Aquetadotura tipo	Altura de excavación a TN (m)	Zanja tipo asignada
T16-T14	1.750.00	2.900.00	Rec	602.271.68	4.660.985.53	0	379.49	375.95	3.55	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.75	Z1	
T16-T14	1.770.00	2.920.00	Rec	602.251.90	4.660.988.47	0	379.53	376.01	3.52	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.72	Z1	
T16-T14	1.790.00	2.940.00	Rec	602.232.12	4.660.991.41	0	379.54	376.08	3.46	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.66	Z1	
T16-T14	1.810.00	2.960.00	Rec	602.212.34	4.660.994.35	0	379.57	376.14	3.42	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.62	Z1	
T16-T14	1.830.00	2.980.00	Rec	602.192.55	4.660.997.29	0	379.50	376.21	3.29	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.49	Z1	
T16-T14	1.850.00	3.000.00	Rec	602.172.77	4.661.000.23	0	379.60	376.27	3.32	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.52	Z1	
T16-T14	1.870.00	3.020.00	Rec	602.152.99	4.661.003.17	0	380.01	376.34	3.67	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.87	Z1	
T16-T14	1.890.00	3.040.00	Rec	602.133.20	4.661.006.11	0	380.02	376.40	3.62	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.82	Z1	
T16-T14	1.910.00	3.060.00	Rec	602.113.42	4.661.009.04	0	380.03	376.47	3.56	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.76	Z1	
T16-T14	1.930.00	3.080.00	Rec	602.093.64	4.661.011.98	0	380.05	376.53	3.51	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.71	Z1	
T16-T14	1.950.00	3.100.00	Rec	602.073.86	4.661.014.92	0	380.05	376.60	3.45	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.65	Z1	
T16-T14	1.970.00	3.120.00	Rec	602.054.07	4.661.017.86	0	380.09	376.67	3.42	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.62	Z1	
T16-T14	1.990.00	3.140.00	Rec	602.034.29	4.661.020.80	0	380.12	376.73	3.39	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.59	Z1	
T16-T14	2.010.00	3.160.00	Rec	602.014.51	4.661.023.74	0	380.12	376.80	3.32	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.52	Z1	
T16-T14	2.030.00	3.180.00	Rec	601.994.72	4.661.026.68	0	380.14	376.86	3.28	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.48	Z1	
T16-T14	2.050.00	3.200.00	Rec	601.974.94	4.661.029.62	0	380.25	376.93	3.33	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.53	Z1	
T16-T14	2.070.00	3.220.00	Rec	601.955.16	4.661.032.56	0	380.29	376.99	3.29	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.49	Z1	
T16-T14	2.090.00	3.240.00	Rec	601.935.38	4.661.035.50	0	380.33	377.06	3.27	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.47	Z1	
T16-T14	2.110.00	3.260.00	Rec	601.915.59	4.661.038.44	0	380.39	377.12	3.27	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.47	Z1	
T16-T14	2.130.00	3.280.00	Rec	601.895.81	4.661.041.38	0	380.49	377.19	3.30	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.50	Z1	
T16-T14	2.150.00	3.300.00	Rec	601.876.03	4.661.044.32	0	380.43	377.25	3.17	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.37	Z1	
T16-T14	2.154.00	3.304.00	Rec	601.872.07	4.661.044.91	0	380.42	377.27	3.15	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.35	Z1	
T16-T14	2.155.00	3.305.00	Rec	601.871.08	4.661.045.05	0	380.42	377.27	3.15	0.33%	309.39041											1	1.600	1.626	275	10.00	16							3.35	Z5	
T16-T14	2.160.00	3.310.00	Rec	601.866.14	4.661.045.79	0	380.42	377.29	3.13	0.33%	309.39041		V.		0.71	N/A			Ventosa	V1S-200	Apoyo arqueta	1	1.600	1.626	275	10.00	16		1	200				3.33	Z5	
T16-T14	2.165.00	3.315.00	Rec	601.861.19	4.661.046.52	0	380.40	377.24	3.16	-0.91%	309.39041										Apoyo arqueta	1	1.600	1.626	275	10.00	16							3.36	Z5	
T16-T14	2.166.00	3.316.00	Rec	601.860.20	4.661.046.67	0	380.40	377.23	3.17	-0.91%	309.39041											1	1.600	1.626	275	10.00	16							3.37	Z1	
T16-T14	2.170.00	3.320.00	Rec	601.856.24	4.661.047.26	0	380.44	377.20	3.24	-0.91%	309.39041											1	1.600	1.626	275	10.00	16							3.44	Z1	
T16-T14	2.190.00	3.340.00	Rec	601.836.46	4.661.050.20	0	380.44	377.01	3.43	-0.91%	309.39041											1	1.600	1.626	275	10.00	16							3.63	Z1	
T16-T14	2.199.00	3.349.00	Rec	601.827.56	4.661.051.52	0	380.85	376.93	3.92	-0.91%	309.39041											1	1.600	1.626	275	10.00	16							4.12	Z1	
T16-T14	2.200.00	3.350.00	Rec	601.826.57	4.661.051.67	0	380.91	376.92	3.99	-0.91%	309.39041											Rio de la Garrabera	1	1.600	1.626	275	10.00	16							4.19	Z6
T16-T14	2.210.00	3.360.00	Rec	601.816.68	4.661.053.14	0	380.07	376.83	3.24	-0.91%	309.39041		V.		0.24	N/A					Rio de la Garrabera	1	1.600	1.626	275	10.00	16							3.44	Z6	
T16-T14	2.211.00	3.361.00	Rec	601.815.69	4.661.053.28	0	380.08	376.83	3.26	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.46	Z1	
T16-T14	2.230.00	3.380.00	Rec	601.796.90	4.661.056.08	0	380.26	376.73	3.53	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.73	Z1	
T16-T14	2.250.00	3.400.00	Rec	601.777.11	4.661.059.01	0	379.97	376.63	3.34	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.54	Z1	
T16-T14	2.270.00	3.420.00	Rec	601.757.33	4.661.061.95	0	379.93	376.53	3.40	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.60	Z1	
T16-T14	2.290.00	3.440.00	Rec	601.737.55	4.661.064.89	0	379.94	376.43	3.51	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.71	Z1	
T16-T14	2.310.00	3.460.00	Rec	601.717.76	4.661.067.83	0	379.66	376.33	3.33	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.53	Z1	
T16-T14	2.330.00	3.480.00	Rec	601.697.98	4.661.070.77	0	379.57	376.23	3.34	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.54	Z1	
T16-T14	2.350.00	3.500.00	Rec	601.678.20	4.661.073.71	0	379.53	376.13	3.40	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.60	Z1	
T16-T14	2.370.00	3.520.00	Rec	601.658.42	4.661.076.65	0	379.52	376.03	3.49	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.69	Z1	
T16-T14	2.390.00	3.540.00	Rec	601.638.63	4.661.079.59	0	379.56	375.93	3.63	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.83	Z1	
T16-T14	2.410.00	3.560.00	Rec	601.618.85	4.661.082.53	0	379.61	375.83	3.78	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							3.98	Z1	
T16-T14	2.430.00	3.580.00	Rec	601.599.07	4.661.085.47	0	379.65	375.73	3.92	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							4.12	Z1	
T16-T14	2.450.00	3.600.00	Rec	601.579.29	4.661.088.41	0	379.60	375.63	3.97	-0.50%	309.39041											1	1.600	1.626	275	10.00	16							4.17	Z1	
T16-T14	2.470.00	3.620.00	Rec	601.559.50	4.661.091.35	0	379.61	375.53	4.08	-0.50%	309.39041																									

6. APÉNDICE -7.1.3: LISTADO DE REPLANTEO DE LOS DESAGÜES

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	621.237,70	4.697.837,17	228,459082	431,37	430,57	0,80	-0,09		V.	ACØ600	Z-1 1Ø600
1,000	Rec	621.237,27	4.697.836,27	228,459082	431,27	430,48	0,80	-0,09			ACØ600	Z-1 1Ø600
2,000	Rec	621.236,83	4.697.835,37	228,459082	431,18	430,38	0,80	-0,09			ACØ600	Z-1 1Ø600
2,750	Rec	621.236,51	4.697.834,69	228,459082	431,11	430,31	0,80	-0,09			AR Tipo-1	Cielo Abierto
3,000	Rec	621.236,40	4.697.834,46	228,459082	431,09	430,29	0,80	-0,09		V.	AR Tipo-1	Cielo Abierto
						430,04	1,05	Vertical			AR Tipo-1	Cielo Abierto
4,000	Rec	621.235,97	4.697.833,56	228,459082	430,96	430,04	0,92	0,00			AR Tipo-1	Cielo Abierto
5,000	Rec	621.235,54	4.697.832,66	228,459082	430,68	430,04	0,65	0,00		V.	AR Tipo-1	Cielo Abierto
						430,29	0,40	Vertical			AR Tipo-1	Cielo Abierto
5,250	Rec	621.235,43	4.697.832,43	228,459082	430,63	430,29	0,34	0,00		V.	AR Tipo-1	Cielo Abierto
6,000	Rec	621.235,10	4.697.831,76	228,459082	430,26	430,28	-0,01	-0,02			esc 200kg e=0,5m	Cielo Abierto
7,000	Rec	621.234,67	4.697.830,86	228,459082	430,23	430,26	-0,03	-0,02			esc 200kg e=0,5m	Cielo Abierto
8,000	Rec	621.234,24	4.697.829,95	228,459082	430,23	430,24	-0,02	-0,02			esc 200kg e=0,5m	Cielo Abierto
8,608		621.233,98	4.697.829,41	228,459082	430,23	430,23	0,00	-0,02		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	621.466,84	4.697.388,79	289,477287	424,04	423,24	0,80	-0,34		V.	ACØ600	Z-1 1Ø600
1,000	Rec	621.465,85	4.697.388,62	289,477287	423,69	422,89	0,80	-0,34			ACØ600	Z-1 1Ø600
2,000	Rec	621.464,86	4.697.388,46	265,097834	423,35	422,55	0,80	-0,34	P.S.		ACØ600	Z-1 1Ø600
3,000	Rec	621.464,27	4.697.387,65	240,718380	423,20	422,20	0,99	-0,34			ACØ600	Z-1 1Ø600
4,000	Rec	621.463,67	4.697.386,85	240,718380	423,03	421,86	1,17	-0,34		V.	ACØ600	Z-1 1Ø600
5,000	Rec	621.463,07	4.697.386,05	240,718380	422,96	421,82	1,14	-0,04			ACØ600	Z-1 1Ø600
6,000	Rec	621.462,48	4.697.385,25	240,718380	422,91	421,78	1,13	-0,04			ACØ600	Z-1 1Ø600
7,000	Rec	621.461,88	4.697.384,44	240,718380	422,84	421,74	1,10	-0,04			ACØ600	Z-1 1Ø600
8,000	Rec	621.461,28	4.697.383,64	240,718380	422,77	421,70	1,07	-0,04			ACØ600	Z-1 1Ø600
8,844	Rec	621.460,78	4.697.382,97	240,718380	422,71	421,67	1,05	-0,04			AR Tipo-1	Cielo Abierto
9,094	Rec	621.460,63	4.697.382,76	240,718380	422,68	421,66	1,02	-0,04		V.	AR Tipo-1	Cielo Abierto
						421,41	1,27	Vertical			AR Tipo-1	Cielo Abierto
10,000	Rec	621.460,09	4.697.382,04	240,718380	422,55	421,41	1,15	0,00			AR Tipo-1	Cielo Abierto
11,000	Rec	621.459,49	4.697.381,24	240,718380	422,37	421,41	0,97	0,00			AR Tipo-1	Cielo Abierto
11,094	Rec	621.459,44	4.697.381,16	240,718380	422,34	421,41	0,94	0,00		V.	AR Tipo-1	Cielo Abierto
						421,66	0,69	Vertical			AR Tipo-1	Cielo Abierto
11,344	Rec	621.459,29	4.697.380,96	240,718380	422,19	421,66	0,54	0,00		V.	AR Tipo-1	Cielo Abierto
12,000	Rec	621.458,89	4.697.380,43	240,718380	421,92	421,62	0,29	-0,05			esc 200kg e=0,5m	Cielo Abierto
13,000	Rec	621.458,30	4.697.379,63	240,718380	421,57	421,57	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
14,000	Rec	621.457,70	4.697.378,83	240,718380	421,52	421,52	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
15,000	Rec	621.457,10	4.697.378,03	240,718380	421,47	421,47	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
16,000	Rec	621.456,51	4.697.377,22	240,718380	421,42	421,42	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
17,000	Rec	621.455,91	4.697.376,42	240,718380	421,37	421,36	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
18,000	Rec	621.455,31	4.697.375,62	240,718380	421,31	421,31	0,00	-0,05			esc 200kg e=0,5m	Cielo Abierto
18,255		621.455,16	4.697.375,41	240,718380	421,30	421,30	0,00	-0,05		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	621.620,30	4.696.461,39	289,477287	416,71	415,91	0,80	-0,02		V.	ACØ600	Z-1 1Ø600
1,000	Rec	621.619,31	4.696.461,22	289,477287	416,63	415,89	0,74	-0,02			ACØ600	Z-1 1Ø600
2,000	Rec	621.618,32	4.696.461,06	289,477287	416,59	415,87	0,71	-0,02			ACØ600	Z-1 1Ø600
2,405	Rec	621.617,93	4.696.460,99	316,702458	416,57	415,86	0,70	-0,02	P.S.		ACØ600	Z-1 1Ø600
3,000	Rec	621.617,35	4.696.461,15	316,702458	416,55	415,85	0,70	-0,02			ACØ600	Z-1 1Ø600
4,000	Rec	621.616,38	4.696.461,41	316,702458	416,46	415,83	0,63	-0,02			ACØ600	Z-1 1Ø600
5,000	Rec	621.615,42	4.696.461,67	316,702458	416,37	415,81	0,56	-0,02			ACØ600	Z-1 1Ø600
6,000	Rec	621.614,45	4.696.461,93	316,702458	416,28	415,79	0,49	-0,02			ACØ600	Z-1 1Ø600
7,000	Rec	621.613,49	4.696.462,19	316,702458	416,19	415,77	0,42	-0,02			ACØ600	Z-1 1Ø600
7,258	Rec	621.613,24	4.696.462,25	316,702458	416,17	415,77	0,40	-0,02			AR Tipo-1	Cielo Abierto
7,508	Rec	621.613,00	4.696.462,32	316,575199	416,14	415,76	0,38	-0,02		V.	AR Tipo-1	Cielo Abierto
						415,51	0,63	Vertical			AR Tipo-1	Cielo Abierto
8,000	Rec	621.612,52	4.696.462,44	316,575199	416,10	415,51	0,59	0,00			AR Tipo-1	Cielo Abierto
9,000	Rec	621.611,56	4.696.462,70	316,575199	416,01	415,51	0,49	0,00			AR Tipo-1	Cielo Abierto
9,508	Rec	621.611,06	4.696.462,83	316,575199	415,96	415,51	0,45	0,00		V.	AR Tipo-1	Cielo Abierto
						415,76	0,20	Vertical			AR Tipo-1	Cielo Abierto
9,758	Rec	621.610,82	4.696.462,90	316,575199	415,94	415,76	0,18	0,00		V.	AR Tipo-1	Cielo Abierto
10,000	Rec	621.610,59	4.696.462,96	316,575199	415,92	415,75	0,17	-0,05			esc 200kg e=0,5m	Cielo Abierto
11,000	Rec	621.609,62	4.696.463,22	316,575199	415,82	415,69	0,13	-0,05			esc 200kg e=0,5m	Cielo Abierto
12,000	Rec	621.608,66	4.696.463,47	316,575199	415,73	415,64	0,09	-0,05			esc 200kg e=0,5m	Cielo Abierto
13,000	Rec	621.607,69	4.696.463,73	316,575199	415,64	415,59	0,06	-0,05			esc 200kg e=0,5m	Cielo Abierto
14,000	Rec	621.606,72	4.696.463,99	316,575199	415,55	415,53	0,02	-0,05			esc 200kg e=0,5m	Cielo Abierto
14,539		621.606,20	4.696.464,13	316,575199	415,50	415,50	0,00	-0,05		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
85,000	Rec	620.842,37	4.683.269,01	305,833115	414,79	413,61	1,19	-0,01			ACØ600	Z-1 1Ø600
86,000	Rec	620.841,37	4.683.269,10	305,833115	414,64	413,60	1,04	-0,01			ACØ600	Z-1 1Ø600
86,696	Rec	620.840,68	4.683.269,17	305,833115	414,58	413,60	0,99	-0,01			AR Tipo-1	Cielo Abierto
86,946	Rec	620.840,43	4.683.269,19	305,833115	414,55	413,60	0,96	-0,01		V.	AR Tipo-1	Cielo Abierto
					414,55	413,35	1,21				AR Tipo-1	Cielo Abierto
87,000	Rec	620.840,38	4.683.269,19	305,833115	414,54	413,35	1,19	0,00			AR Tipo-1	Cielo Abierto
88,000	Rec	620.839,38	4.683.269,29	305,833115	414,48	413,35	1,13	0,00			AR Tipo-1	Cielo Abierto
88,946	Rec	620.838,44	4.683.269,37	305,833115	414,32	413,35	0,98	0,00		V.	AR Tipo-1	Cielo Abierto
					414,32	413,60	0,73				AR Tipo-1	Cielo Abierto
89,196	Rec	620.838,19	4.683.269,40	305,833115	414,30	413,60	0,70	0,00		V.	AR Tipo-1	Cielo Abierto
90,000	Rec	620.837,39	4.683.269,47	305,833115	414,26	413,59	0,67	-0,01			esc 200kg e=0,5m	Cielo Abierto
91,000	Rec	620.836,39	4.683.269,56	305,833115	414,06	413,59	0,47	-0,01			esc 200kg e=0,5m	Cielo Abierto
92,000	Rec	620.835,40	4.683.269,65	305,833115	414,02	413,58	0,44	-0,01			esc 200kg e=0,5m	Cielo Abierto
93,000	Rec	620.834,40	4.683.269,74	305,833115	413,90	413,58	0,32	-0,01			esc 200kg e=0,5m	Cielo Abierto
94,000	Rec	620.833,40	4.683.269,84	305,833115	413,82	413,57	0,24	-0,01			esc 200kg e=0,5m	Cielo Abierto
95,000	Rec	620.832,41	4.683.269,93	305,833115	413,74	413,57	0,17	-0,01			esc 200kg e=0,5m	Cielo Abierto
96,000	Rec	620.831,41	4.683.270,02	305,833115	413,66	413,56	0,10	-0,01			esc 200kg e=0,5m	Cielo Abierto
97,000	Rec	620.830,42	4.683.270,11	305,833115	413,60	413,56	0,04	-0,01			esc 200kg e=0,5m	Cielo Abierto
97,877		620.829,54	4.683.270,19	305,833115	413,55	413,55	0,00	-0,01		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	616.028,02	4.676.354,03	319,628514	363,50	362,70	0,80	-0,34		V.	ACØ600	Z-1 1Ø600
1,000	Rec	616.027,07	4.676.354,33	319,628514	363,38	362,36	1,02	-0,34			ACØ600	Z-1 1Ø600
2,000	Rec	616.026,12	4.676.354,63	319,628514	363,22	362,02	1,20	-0,34			ACØ600	Z-1 1Ø600
3,000	Rec	616.025,16	4.676.354,94	319,628514	363,03	361,68	1,35	-0,34			ACØ600	Z-1 1Ø600
4,000	Rec	616.024,21	4.676.355,24	319,628514	362,90	361,33	1,57	-0,34			ACØ600	Z-1 1Ø600
5,000	Rec	616.023,26	4.676.355,54	319,628514	362,78	360,99	1,79	-0,34		V.	ACØ600	Z-1 1Ø600
6,000	Rec	616.022,31	4.676.355,85	319,628514	362,67	360,98	1,69	-0,01			ACØ600	Z-1 1Ø600
7,000	Rec	616.021,35	4.676.356,15	319,628514	362,57	360,97	1,60	-0,01			ACØ600	Z-1 1Ø600
8,000	Rec	616.020,40	4.676.356,45	319,628514	362,46	360,96	1,50	-0,01			ACØ600	Z-1 1Ø600
9,000	Rec	616.019,45	4.676.356,76	319,628514	362,35	360,95	1,40	-0,01			ACØ600	Z-1 1Ø600
10,000	Rec	616.018,49	4.676.357,06	319,628514	362,23	360,94	1,29	-0,01			ACØ600	Z-1 1Ø600
11,000	Rec	616.017,54	4.676.357,36	319,628514	362,13	360,93	1,20	-0,01			ACØ600	Z-1 1Ø600
12,000	Rec	616.016,59	4.676.357,67	319,628514	362,08	360,92	1,16	-0,01			ACØ600	Z-1 1Ø600
12,472	Rec	616.016,14	4.676.357,81	285,000383	362,07	360,92	1,15	-0,01	P.S.		ACØ600	Z-1 1Ø600
13,000	Rec	616.015,63	4.676.357,69	285,000383	362,03	360,91	1,12	-0,01			ACØ600	Z-1 1Ø600
13,222	Rec	616.015,41	4.676.357,64	285,000383	362,01	360,91	1,10	-0,01			AR Tipo-1	Cielo Abierto
13,472	Rec	616.015,17	4.676.357,58	285,000383	361,97	360,91	1,06	-0,01		V.	AR Tipo-1	Cielo Abierto
						360,66	1,31	Vertical			AR Tipo-1	Cielo Abierto
14,000	Rec	616.014,65	4.676.357,45	285,000383	361,80	360,66	1,14	0,00			AR Tipo-1	Cielo Abierto
15,000	Rec	616.013,68	4.676.357,22	285,000383	361,48	360,66	0,83	0,00			AR Tipo-1	Cielo Abierto
15,472	Rec	616.013,22	4.676.357,11	285,000383	361,38	360,66	0,72	0,00		V.	AR Tipo-1	Cielo Abierto
						360,91	0,47	Vertical			AR Tipo-1	Cielo Abierto
15,722	Rec	616.012,98	4.676.357,05	285,000383	361,31	360,91	0,41	0,00		V.	AR Tipo-1	Cielo Abierto
16,000	Rec	616.012,71	4.676.356,99	285,000383	361,24	360,89	0,35	-0,04			esc 200kg e=0,5m	Cielo Abierto
17,000	Rec	616.011,74	4.676.356,75	285,000383	361,01	360,86	0,16	-0,04			esc 200kg e=0,5m	Cielo Abierto
18,000	Rec	616.010,76	4.676.356,52	285,000383	361,00	360,82	0,18	-0,04			esc 200kg e=0,5m	Cielo Abierto
19,000	Rec	616.009,79	4.676.356,29	285,000383	361,05	360,78	0,27	-0,04			esc 200kg e=0,5m	Cielo Abierto
20,000	Rec	616.008,82	4.676.356,05	285,000383	361,24	360,74	0,50	-0,04			esc 200kg e=0,5m	Cielo Abierto
21,000	Rec	616.007,85	4.676.355,82	285,000383	361,39	360,70	0,68	-0,04			esc 200kg e=0,5m	Cielo Abierto
22,000	Rec	616.006,87	4.676.355,59	285,000383	361,35	360,67	0,68	-0,04			esc 200kg e=0,5m	Cielo Abierto
23,000	Rec	616.005,90	4.676.355,35	285,000383	361,33	360,63	0,71	-0,04			esc 200kg e=0,5m	Cielo Abierto
24,000	Rec	616.004,93	4.676.355,12	285,000383	361,28	360,59	0,69	-0,04			esc 200kg e=0,5m	Cielo Abierto
25,000	Rec	616.003,96	4.676.354,89	285,000383	361,14	360,55	0,59	-0,04			esc 200kg e=0,5m	Cielo Abierto
26,000	Rec	616.002,98	4.676.354,65	285,000383	361,08	360,51	0,57	-0,04			esc 200kg e=0,5m	Cielo Abierto
27,000	Rec	616.002,01	4.676.354,42	285,000383	360,90	360,48	0,43	-0,04			esc 200kg e=0,5m	Cielo Abierto
28,000	Rec	616.001,04	4.676.354,19	285,000383	360,51	360,44	0,07	-0,04			esc 200kg e=0,5m	Cielo Abierto
28,143		616.000,90	4.676.354,15	285,000383	360,43	360,43	0,00	-0,04		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	620.923,41	4.683.246,75	325,215396	415,96	415,16	0,80	-0,23		V.	ACØ600	Z-1 1Ø600
1,000	Rec	620.922,48	4.683.247,13	325,215396	415,97	414,93	1,04	-0,23			ACØ600	Z-1 1Ø600
2,000	Rec	620.921,56	4.683.247,52	325,215396	415,98	414,70	1,28	-0,23			ACØ600	Z-1 1Ø600
3,000	Rec	620.920,64	4.683.247,90	325,215396	415,99	414,47	1,52	-0,23			ACØ600	Z-1 1Ø600
4,000	Rec	620.919,72	4.683.248,29	325,215396	415,99	414,24	1,76	-0,23			ACØ600	Z-1 1Ø600
5,000	Rec	620.918,79	4.683.248,68	325,215396	416,00	414,01	1,99	-0,23		V.	ACØ600	Z-1 1Ø600
6,000	Rec	620.917,87	4.683.249,06	325,215396	416,01	414,00	2,01	-0,01			ACØ600	Z-1 1Ø600
7,000	Rec	620.916,95	4.683.249,45	325,215396	416,00	414,00	2,01	-0,01			ACØ600	Z-1 1Ø600
8,000	Rec	620.916,03	4.683.249,83	325,215396	416,01	413,99	2,02	-0,01			ACØ600	Z-1 1Ø600
9,000	Rec	620.915,10	4.683.250,22	325,215396	416,01	413,99	2,03	-0,01			ACØ600	Z-1 1Ø600
10,000	Rec	620.914,18	4.683.250,61	325,215396	416,00	413,98	2,02	-0,01			ACØ600	Z-1 1Ø600
11,000	Rec	620.913,26	4.683.250,99	325,215396	415,97	413,98	1,99	-0,01			ACØ600	Z-1 1Ø600
12,000	Rec	620.912,34	4.683.251,38	325,215396	415,95	413,97	1,98	-0,01			ACØ600	Z-1 1Ø600
13,000	Rec	620.911,41	4.683.251,76	325,215396	415,92	413,97	1,95	-0,01			ACØ600	Z-1 1Ø600
14,000	Rec	620.910,49	4.683.252,15	325,215396	415,88	413,96	1,92	-0,01			ACØ600	Z-1 1Ø600
15,000	Rec	620.909,57	4.683.252,53	325,215396	415,85	413,96	1,89	-0,01			ACØ600	Z-1 1Ø600
16,000	Rec	620.908,64	4.683.252,92	325,215396	415,81	413,95	1,86	-0,01			ACØ600	Z-1 1Ø600
17,000	Rec	620.907,72	4.683.253,31	325,215396	415,78	413,95	1,83	-0,01			ACØ600	Z-1 1Ø600
18,000	Rec	620.906,80	4.683.253,69	325,215396	415,74	413,94	1,80	-0,01			ACØ600	Z-1 1Ø600
19,000	Rec	620.905,88	4.683.254,08	325,215396	415,70	413,94	1,77	-0,01			ACØ600	Z-1 1Ø600
20,000	Rec	620.904,95	4.683.254,46	325,215396	415,67	413,93	1,74	-0,01			ACØ600	Z-1 1Ø600
21,000	Rec	620.904,03	4.683.254,85	325,215396	415,63	413,93	1,71	-0,01			ACØ600	Z-1 1Ø600
22,000	Rec	620.903,11	4.683.255,23	325,215396	415,60	413,92	1,68	-0,01			ACØ600	Z-1 1Ø600
23,000	Rec	620.902,19	4.683.255,62	325,215396	415,56	413,92	1,64	-0,01			ACØ600	Z-1 1Ø600
24,000	Rec	620.901,26	4.683.256,01	325,215396	415,52	413,91	1,61	-0,01			ACØ600	Z-1 1Ø600
25,000	Rec	620.900,34	4.683.256,39	325,215396	415,58	413,91	1,67	-0,01			ACØ600	Z-1 1Ø600
26,000	Rec	620.899,42	4.683.256,78	325,215396	415,47	413,90	1,57	-0,01			ACØ600	Z-1 1Ø600
27,000	Rec	620.898,50	4.683.257,16	325,215396	415,39	413,90	1,49	-0,01			ACØ600	Z-1 1Ø600
28,000	Rec	620.897,57	4.683.257,55	325,215396	415,34	413,89	1,45	-0,01			ACØ600	Z-1 1Ø600
29,000	Rec	620.896,65	4.683.257,94	325,215396	415,35	413,89	1,47	-0,01			ACØ600	Z-1 1Ø600
30,000	Rec	620.895,73	4.683.258,32	325,215396	415,35	413,88	1,47	-0,01			ACØ600	Z-1 1Ø600
31,000	Rec	620.894,81	4.683.258,71	325,215396	415,34	413,88	1,46	-0,01			ACØ600	Z-1 1Ø600
32,000	Rec	620.893,88	4.683.259,09	325,215396	415,35	413,87	1,48	-0,01			ACØ600	Z-1 1Ø600
33,000	Rec	620.892,96	4.683.259,48	325,215396	415,35	413,87	1,48	-0,01			ACØ600	Z-1 1Ø600
34,000	Rec	620.892,04	4.683.259,86	325,215396	415,33	413,86	1,47	-0,01			ACØ600	Z-1 1Ø600
35,000	Rec	620.891,12	4.683.260,25	325,215396	415,31	413,86	1,45	-0,01			ACØ600	Z-1 1Ø600
36,000	Rec	620.890,19	4.683.260,64	325,215396	415,29	413,85	1,44	-0,01			ACØ600	Z-1 1Ø600
37,000	Rec	620.889,27	4.683.261,02	325,215396	415,27	413,85	1,42	-0,01			ACØ600	Z-1 1Ø600
38,000	Rec	620.888,35	4.683.261,41	325,215396	415,25	413,84	1,41	-0,01			ACØ600	Z-1 1Ø600
39,000	Rec	620.887,43	4.683.261,79	325,215396	415,23	413,84	1,39	-0,01			ACØ600	Z-1 1Ø600
40,000	Rec	620.886,50	4.683.262,18	325,215396	415,21	413,83	1,38	-0,01			ACØ600	Z-1 1Ø600
41,000	Rec	620.885,58	4.683.262,57	325,215396	415,19	413,83	1,36	-0,01			ACØ600	Z-1 1Ø600
42,000	Rec	620.884,66	4.683.262,95	325,215396	415,17	413,82	1,35	-0,01			ACØ600	Z-1 1Ø600
43,000	Rec	620.883,74	4.683.263,34	325,215396	415,15	413,82	1,33	-0,01			ACØ600	Z-1 1Ø600
44,000	Rec	620.882,81	4.683.263,72	325,215396	415,16	413,81	1,35	-0,01			ACØ600	Z-1 1Ø600
45,000	Rec	620.881,89	4.683.264,11	325,215396	415,16	413,81	1,35	-0,01			ACØ600	Z-1 1Ø600
46,000	Rec	620.880,97	4.683.264,49	325,215396	415,11	413,80	1,31	-0,01			ACØ600	Z-1 1Ø600
47,000	Rec	620.880,04	4.683.264,88	325,215396	415,08	413,80	1,28	-0,01			ACØ600	Z-1 1Ø600
48,000	Rec	620.879,12	4.683.265,27	325,215396	415,04	413,79	1,25	-0,01			ACØ600	Z-1 1Ø600
49,000	Rec	620.878,20	4.683.265,65	325,215396	415,01	413,79	1,22	-0,01			ACØ600	Z-1 1Ø600
49,226	Rec	620.877,99	4.683.265,74	305,833115	415,00	413,78	1,22	-0,01	P.S.		ACØ600	Z-1 1Ø600
50,000	Rec	620.877,22	4.683.265,81	305,833115	415,00	413,78	1,22	-0,01			ACØ600	Z-1 1Ø600
51,000	Rec	620.876,22	4.683.265,90	305,833115	414,99	413,78	1,22	-0,01			ACØ600	Z-1 1Ø600
52,000	Rec	620.875,23	4.683.265,99	305,833115	414,99	413,77	1,22	-0,01			ACØ600	Z-1 1Ø600
53,000	Rec	620.874,23	4.683.266,08	305,833115	414,99	413,77	1,22	-0,01			ACØ600	Z-1 1Ø600
54,000	Rec	620.873,24	4.683.266,18	305,833115	414,98	413,76	1,22	-0,01			ACØ600	Z-1 1Ø600
55,000	Rec	620.872,24	4.683.266,27	305,833115	414,98	413,76	1,23	-0,01			ACØ600	Z-1 1Ø600
56,000	Rec	620.871,25	4.683.266,36	305,833115	414,98	413,75	1,23	-0,01			ACØ600	Z-1 1Ø600
57,000	Rec	620.870,25	4.683.266,45	305,833115	414,98	413,75	1,23	-0,01			ACØ600	Z-1 1Ø600
58,000	Rec	620.869,25	4.683.266,54	305,833115	414,97	413,74	1,23	-0,01			ACØ600	Z-1 1Ø600
59,000	Rec	620.868,26	4.683.266,63	305,833115	414,97	413,74	1,24	-0,01			ACØ600	Z-1 1Ø600
60,000	Rec	620.867,26	4.683.266,72	305,833115	414,97	413,73	1,24	-0,01			ACØ600	Z-1 1Ø600
61,000	Rec	620.866,27	4.683.266,82	305,833115	414,97	413,73	1,25	-0,01			ACØ600	Z-1 1Ø600
62,000	Rec	620.865,27	4.683.266,91	305,833115	414,98	413,72	1,26	-0,01			ACØ600	Z-1 1Ø600
63,000	Rec	620.864,27	4.683.267,00	305,833115	414,98	413,72	1,26	-0,01			ACØ600	Z-1 1Ø600
64,000	Rec	620.863,28	4.683.267,09	305,833115	414,98	413,71	1,27	-0,01			ACØ600	Z-1 1Ø600
65,000	Rec	620.862,28	4.683.267,18	305,833115	414,98	413,71	1,27	-0,01			ACØ600	Z-1 1Ø600
66,000	Rec	620.861,29	4.683.267,27	305,833115	414,98	413,70	1,28	-0,01			ACØ600	Z-1 1Ø600
67,000	Rec	620.860,29	4.683.267,36	305,833115	414,98	413,70	1,29	-0,01			ACØ600	Z-1 1Ø600
68,000	Rec	620.859,30	4.683.267,46	305,833115	414,99	413,69	1,30	-0,01			ACØ600	Z-1 1Ø600
69,000	Rec	620.858,30	4.683.267,55	305,833115	414,99	413,69	1,30	-0,01			ACØ600	Z-1 1Ø600
70,000	Rec	620.857,30	4.683.267,64	305,833115	414,99	413,68	1,31	-0,01			ACØ600	Z-1 1Ø600
71,000	Rec	620.856,31	4.683.267,73	305,833115	415,00	413,68	1,32	-0,01			ACØ600	Z-1 1Ø600
72,000	Rec	620.855,31	4.683.267,82	305,833115	415,00	413,67	1,33	-0,01			ACØ600	Z-1 1Ø600
73,000	Rec	620.854,32	4.683.267,91	305,833115	415,00	413,67	1,34	-0,01			ACØ600	Z-1 1Ø600
74,000	Rec	620.853,32	4.683.268,01	305,833115	415,00	413,66	1,34	-0,01			ACØ600	Z-1 1Ø600
75,000	Rec	620.852,33	4.683.268,10	305,833115	415,01	413,66	1,35	-0,01			ACØ600	Z-1 1Ø600
76,000	Rec	620.851,33	4.683.268,19	305,833115	415,00	413,65	1,35	-0,01			ACØ600	Z-1 1Ø600
77,000	Rec	620.850,33	4.683.268,28	305,833115	415,00	413,65	1,36	-0,01			ACØ600	Z-1 1Ø600
78,000	Rec	620.849,34	4.683.268,37	305,833115	415,00	413,64	1,36	-0,01			ACØ600	Z-1 1Ø600
79,000	Rec	620.848,34	4.683.268,46	305,833115	415,00	413,64	1,36	-0,01			ACØ600	Z-1 1Ø600
80,000	Rec	620.847,35	4.683.268,55	305,833115	415,00	413,63	1,37	-0,01			ACØ600	Z-1 1Ø600
81,000	Rec	620.846,35	4.683.268,65	305,833115	415,01	413,63	1,38	-0,01			ACØ600	Z-1 1Ø600
82,000	Rec	620.845,35	4.683.268,74	305,833115	415,01	413,62	1,39	-0,01			ACØ600	Z-1 1Ø600
83,000	Rec	620.844,36	4.683.268,83	305,833115	414,95	413,62	1,34	-0,01			ACØ600	Z-1 1Ø600
84,000	Rec	620.843,36	4.683.268,92	305,833115	414,84	413,61	1,23	-0,01			ACØ600	Z-1 1Ø600

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	615.912,02	4.675.914,93	329,987606	356,62	355,82	0,80	-0,18		V.	ACØ600	Z-1 1Ø600
1,000	Rec	615.911,13	4.675.915,38	329,987606	356,60	355,63	0,97	-0,18			ACØ600	Z-1 1Ø600
2,000	Rec	615.910,24	4.675.915,84	329,987606	356,59	355,45	1,14	-0,18			ACØ600	Z-1 1Ø600
3,000	Rec	615.909,35	4.675.916,29	329,987606	356,58	355,27	1,31	-0,18			ACØ600	Z-1 1Ø600
3,477	Rec	615.908,92	4.675.916,51	374,007882	356,57	355,18	1,39	-0,18	P.S.	V.	ACØ600	Z-1 1Ø600
4,000	Rec	615.908,72	4.675.916,99	374,007882	356,55	355,18	1,38	-0,01			ACØ600	Z-1 1Ø600
5,000	Rec	615.908,32	4.675.917,91	374,007882	356,52	355,17	1,35	-0,01			ACØ600	Z-1 1Ø600
6,000	Rec	615.907,92	4.675.918,82	374,007882	356,49	355,17	1,32	-0,01			ACØ600	Z-1 1Ø600
7,000	Rec	615.907,53	4.675.919,74	374,007882	356,45	355,16	1,29	-0,01			ACØ600	Z-1 1Ø600
8,000	Rec	615.907,13	4.675.920,66	374,007882	356,42	355,16	1,26	-0,01			ACØ600	Z-1 1Ø600
9,000	Rec	615.906,73	4.675.921,58	374,007882	356,38	355,15	1,23	-0,01			ACØ600	Z-1 1Ø600
10,000	Rec	615.906,33	4.675.922,49	374,007882	356,35	355,15	1,20	-0,01			ACØ600	Z-1 1Ø600
11,000	Rec	615.905,94	4.675.923,41	374,007882	356,31	355,14	1,17	-0,01			ACØ600	Z-1 1Ø600
12,000	Rec	615.905,54	4.675.924,33	374,007882	356,28	355,14	1,14	-0,01			ACØ600	Z-1 1Ø600
13,000	Rec	615.905,14	4.675.925,25	374,007882	356,25	355,13	1,12	-0,01			ACØ600	Z-1 1Ø600
14,000	Rec	615.904,75	4.675.926,17	374,007882	356,21	355,13	1,09	-0,01			ACØ600	Z-1 1Ø600
15,000	Rec	615.904,35	4.675.927,08	374,007882	356,18	355,12	1,06	-0,01			ACØ600	Z-1 1Ø600
16,000	Rec	615.903,95	4.675.928,00	374,007882	356,14	355,12	1,03	-0,01			ACØ600	Z-1 1Ø600
17,000	Rec	615.903,56	4.675.928,92	374,007882	356,11	355,11	1,00	-0,01			ACØ600	Z-1 1Ø600
18,000	Rec	615.903,16	4.675.929,84	374,007882	356,07	355,11	0,97	-0,01			ACØ600	Z-1 1Ø600
19,000	Rec	615.902,76	4.675.930,75	374,007882	356,04	355,10	0,94	-0,01			ACØ600	Z-1 1Ø600
19,609	Rec	615.902,52	4.675.931,31	374,007882	356,03	355,10	0,93	-0,01			AR Tipo-1	Cielo Abierto
19,859	Rec	615.902,42	4.675.931,54	374,007882	356,02	355,10	0,92	-0,01		V.	AR Tipo-1	Cielo Abierto
						354,85	1,17	Vertical			AR Tipo-1	Cielo Abierto
20,000	Rec	615.902,36	4.675.931,67	374,007882	356,02	354,85	1,17	0,00			AR Tipo-1	Cielo Abierto
21,000	Rec	615.901,97	4.675.932,59	374,007882	355,97	354,85	1,12	0,00			AR Tipo-1	Cielo Abierto
21,859	Rec	615.901,63	4.675.933,38	374,007882	355,89	354,85	1,04	0,00		V.	AR Tipo-1	Cielo Abierto
						355,10	0,79	Vertical			AR Tipo-1	Cielo Abierto
22,109	Rec	615.901,53	4.675.933,61	374,007882	355,86	355,10	0,77	0,00		V.	AR Tipo-1	Cielo Abierto
23,000	Rec	615.901,17	4.675.934,43	374,007882	355,78	355,09	0,69	0,00			esc 200kg e=0,5m	Cielo Abierto
24,000	Rec	615.900,78	4.675.935,34	374,007882	355,69	355,09	0,60	0,00			esc 200kg e=0,5m	Cielo Abierto
25,000	Rec	615.900,38	4.675.936,26	374,007882	355,61	355,08	0,53	0,00			esc 200kg e=0,5m	Cielo Abierto
26,000	Rec	615.899,98	4.675.937,18	374,007882	355,53	355,08	0,45	0,00			esc 200kg e=0,5m	Cielo Abierto
27,000	Rec	615.899,58	4.675.938,10	374,007882	355,46	355,07	0,39	0,00			esc 200kg e=0,5m	Cielo Abierto
28,000	Rec	615.899,19	4.675.939,01	374,007882	355,40	355,07	0,33	0,00			esc 200kg e=0,5m	Cielo Abierto
29,000	Rec	615.898,79	4.675.939,93	374,007882	355,33	355,06	0,26	0,00			esc 200kg e=0,5m	Cielo Abierto
30,000	Rec	615.898,39	4.675.940,85	374,007882	355,24	355,06	0,18	0,00			esc 200kg e=0,5m	Cielo Abierto
31,000	Rec	615.898,00	4.675.941,77	374,007882	355,14	355,05	0,08	0,00			esc 200kg e=0,5m	Cielo Abierto
31,724		615.897,71	4.675.942,43	374,007882	355,05	355,05	0,00	0,00		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	614.058,37	4.671.255,91	313,382769	263,61	262,81	0,80	-0,68		V.	ACØ600	Z-1 1Ø600
0,800	Rec	614.057,59	4.671.256,08	274,647646	263,57	262,27	1,30	-0,68	P.S.		ACØ600	Z-1 1Ø600
1,000	Rec	614.057,40	4.671.256,00	274,647646	263,46	262,13	1,33	-0,68			ACØ600	Z-1 1Ø600
2,000	Rec	614.056,48	4.671.255,61	274,647646	262,93	261,45	1,48	-0,68			ACØ600	Z-1 1Ø600
3,000	Rec	614.055,56	4.671.255,23	274,647646	262,44	260,77	1,67	-0,68		V.	ACØ600	Z-1 1Ø600
3,719	Rec	614.054,90	4.671.254,95	274,647646	262,09	260,74	1,35	-0,04			AR Tipo-1	Cielo Abierto
3,969	Rec	614.054,67	4.671.254,85	274,647511	261,96	260,73	1,23	-0,04		V.	AR Tipo-1	Cielo Abierto
						260,48	1,48	Vertical			AR Tipo-1	Cielo Abierto
4,000	Rec	614.054,64	4.671.254,84	274,647511	261,94	260,48	1,46	0,00			AR Tipo-1	Cielo Abierto
5,000	Rec	614.053,72	4.671.254,45	274,647511	261,39	260,48	0,91	0,00			AR Tipo-1	Cielo Abierto
5,969	Rec	614.052,83	4.671.254,08	274,647511	260,99	260,48	0,51	0,00		V.	AR Tipo-1	Cielo Abierto
						260,73	0,26	Vertical			AR Tipo-1	Cielo Abierto
6,219	Rec	614.052,59	4.671.253,98	274,647511	260,97	260,73	0,24	0,00		V.	AR Tipo-1	Cielo Abierto
7,000	Rec	614.051,87	4.671.253,68	274,647511	260,94	260,72	0,22	-0,01			esc 200kg e=0,5m	Cielo Abierto
8,000	Rec	614.050,95	4.671.253,29	274,647511	260,91	260,71	0,20	-0,01			esc 200kg e=0,5m	Cielo Abierto
8,500	Rec	614.050,49	4.671.253,09	274,647511	260,91	260,71	0,20	-0,01		V.	esc 200kg e=0,5m	Cielo Abierto
9,000	Rec	614.050,03	4.671.252,90	274,647511	260,90	260,71	0,19	0,01			esc 200kg e=0,5m	Cielo Abierto
10,000	Rec	614.049,11	4.671.252,51	274,647511	260,89	260,72	0,17	0,01			esc 200kg e=0,5m	Cielo Abierto
11,000	Rec	614.048,19	4.671.252,12	274,647511	260,89	260,73	0,15	0,01		V.	esc 200kg e=0,5m	Cielo Abierto
12,000	Rec	614.047,27	4.671.251,74	274,647511	261,44	261,43	0,01	0,70			esc 200kg e=0,5m	Cielo Abierto
13,000	Rec	614.046,34	4.671.251,35	274,647511	262,26	262,14	0,12	0,70			esc 200kg e=0,5m	Cielo Abierto
14,000	Rec	614.045,42	4.671.250,96	274,647511	262,86	262,84	0,02	0,70			esc 200kg e=0,5m	Cielo Abierto
14,198		614.045,24	4.671.250,88	274,647511	262,98	262,98	0,00	0,70		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	611.405,58	4.661.504,32	93,155310	376,35	375,55	0,80	-0,62		V.	ACØ600	Z-1 1Ø600
1,000	Rec	611.406,58	4.661.504,43	93,155310	376,35	374,94	1,42	-0,62			ACØ600	Z-1 1Ø600
2,000	Rec	611.407,57	4.661.504,54	93,155310	376,35	374,32	2,03	-0,62			ACØ600	Z-1 1Ø600
3,000	Rec	611.408,57	4.661.504,64	93,155310	375,86	373,70	2,15	-0,62			ACØ600	Z-1 1Ø600
4,000	Rec	611.409,56	4.661.504,75	93,155310	375,19	373,09	2,10	-0,62		V.	ACØ600	Z-1 1Ø600
5,000	Rec	611.410,55	4.661.504,86	93,155310	374,52	373,08	1,45	-0,01			ACØ600	Z-1 1Ø600
6,000	Rec	611.411,55	4.661.504,97	93,155310	373,86	373,07	0,79	-0,01			ACØ600	Z-1 1Ø600
6,893	Rec	611.412,44	4.661.505,06	93,155310	373,70	373,06	0,64	-0,01		V.	AR Tipo-2	Cielo Abierto
7,193	Rec	611.412,73	4.661.505,09	93,182663	373,68	373,06	0,63	-0,01		V.	AR Tipo-2	Cielo Abierto
						372,71	0,98	Vertical			AR Tipo-2	Cielo Abierto
8,000	Rec	611.413,54	4.661.505,18	93,182663	373,65	372,71	0,94	0,00			AR Tipo-2	Cielo Abierto
9,000	Rec	611.414,53	4.661.505,29	93,182663	373,60	372,71	0,90	0,00			AR Tipo-2	Cielo Abierto
10,000	Rec	611.415,53	4.661.505,39	93,182663	373,56	372,71	0,85	0,00			AR Tipo-2	Cielo Abierto
10,193	Rec	611.415,72	4.661.505,41	93,182664	373,55	372,71	0,85	0,00		V.	AR Tipo-2	Cielo Abierto
						373,06	0,50	Vertical			AR Tipo-2	Cielo Abierto
10,493	Rec	611.416,02	4.661.505,45	93,182663	373,54	373,06	0,49	0,00		V.	AR Tipo-2	Cielo Abierto
11,000	Rec	611.416,52	4.661.505,50	93,182663	373,48	373,05	0,43	-0,01			esc 200kg e=0,5m	Cielo Abierto
12,000	Rec	611.417,51	4.661.505,61	93,182663	373,37	373,05	0,33	-0,01			esc 200kg e=0,5m	Cielo Abierto
13,000	Rec	611.418,51	4.661.505,71	93,182663	373,26	373,04	0,22	-0,01			esc 200kg e=0,5m	Cielo Abierto
14,000	Rec	611.419,50	4.661.505,82	93,182663	373,15	373,04	0,11	-0,01			esc 200kg e=0,5m	Cielo Abierto
15,000	Rec	611.420,50	4.661.505,93	93,182663	373,04	373,03	0,01	-0,01			esc 200kg e=0,5m	Cielo Abierto
15,041		611.420,54	4.661.505,93	93,182663	373,03	373,03	0,00	-0,01		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	604.544,72	4.655.122,73	33,447708	360,10	359,30	0,80	0,00		V.	ACØ600	Z-1 1Ø600
1,000	Rec	604.545,22	4.655.123,59	33,447708	360,07	359,30	0,78	0,00			ACØ600	Z-1 1Ø600
2,000	Rec	604.545,72	4.655.124,46	63,047630	360,05	359,29	0,75	0,00	P.S.		ACØ600	Z-1 1Ø600
3,000	Rec	604.546,72	4.655.124,57	92,647552	360,05	359,29	0,76	0,00			ACØ600	Z-1 1Ø600
4,000	Rec	604.547,71	4.655.124,69	92,647552	360,05	359,28	0,77	0,00			ACØ600	Z-1 1Ø600
5,000	Rec	604.548,70	4.655.124,81	92,647552	360,06	359,28	0,78	0,00			ACØ600	Z-1 1Ø600
6,000	Rec	604.549,70	4.655.124,92	92,647552	360,06	359,27	0,79	0,00			ACØ600	Z-1 1Ø600
7,000	Rec	604.550,69	4.655.125,04	92,647552	360,06	359,27	0,79	0,00			ACØ600	Z-1 1Ø600
8,000	Rec	604.551,68	4.655.125,15	92,647552	360,07	359,27	0,80	0,00			ACØ600	Z-1 1Ø600
9,000	Rec	604.552,68	4.655.125,27	92,647552	360,07	359,26	0,80	0,00			ACØ600	Z-1 1Ø600
10,000	Rec	604.553,67	4.655.125,38	92,647552	360,06	359,26	0,81	0,00			ACØ600	Z-1 1Ø600
11,000	Rec	604.554,66	4.655.125,50	92,647552	360,06	359,25	0,81	0,00			ACØ600	Z-1 1Ø600
12,000	Rec	604.555,66	4.655.125,61	92,647552	360,06	359,25	0,81	0,00			ACØ600	Z-1 1Ø600
13,000	Rec	604.556,65	4.655.125,73	92,647552	360,06	359,24	0,81	0,00			ACØ600	Z-1 1Ø600
14,000	Rec	604.557,64	4.655.125,84	92,647552	360,05	359,24	0,81	0,00			ACØ600	Z-1 1Ø600
15,000	Rec	604.558,64	4.655.125,96	92,647552	360,05	359,23	0,82	0,00			ACØ600	Z-1 1Ø600
16,000	Rec	604.559,63	4.655.126,07	92,647552	360,05	359,23	0,82	0,00			ACØ600	Z-1 1Ø600
17,000	Rec	604.560,62	4.655.126,19	92,647552	360,05	359,23	0,82	0,00			ACØ600	Z-1 1Ø600
18,000	Rec	604.561,62	4.655.126,30	92,647552	360,04	359,22	0,82	0,00			ACØ600	Z-1 1Ø600
19,000	Rec	604.562,61	4.655.126,42	92,647552	360,04	359,22	0,83	0,00			ACØ600	Z-1 1Ø600
20,000	Rec	604.563,60	4.655.126,53	92,647552	360,04	359,21	0,83	0,00			ACØ600	Z-1 1Ø600
21,000	Rec	604.564,60	4.655.126,65	92,647552	359,98	359,21	0,77	0,00			ACØ600	Z-1 1Ø600
21,149	Rec	604.564,74	4.655.126,67	92,647552	359,97	359,21	0,76	0,00			AR Tipo-1	Cielo Abierto
21,399	Rec	604.564,99	4.655.126,70	92,647552	359,96	359,21	0,75	0,00		V.	AR Tipo-1	Cielo Abierto
						358,96	1,00	Vertical			AR Tipo-1	Cielo Abierto
22,000	Rec	604.565,59	4.655.126,76	92,647552	359,92	358,96	0,96	0,00			AR Tipo-1	Cielo Abierto
23,000	Rec	604.566,58	4.655.126,88	92,647552	359,86	358,96	0,90	0,00			AR Tipo-1	Cielo Abierto
23,399	Rec	604.566,98	4.655.126,93	92,647552	359,84	358,96	0,88	0,00		V.	AR Tipo-1	Cielo Abierto
						359,21	0,63	Vertical			AR Tipo-1	Cielo Abierto
23,649	Rec	604.567,23	4.655.126,95	92,647552	359,82	359,21	0,62	0,00		V.	AR Tipo-1	Cielo Abierto
24,000	Rec	604.567,58	4.655.126,99	92,647552	359,80	359,20	0,60	-0,01			esc 200kg e=0,5m	Cielo Abierto
25,000	Rec	604.568,57	4.655.127,11	92,647552	359,74	359,20	0,54	-0,01			esc 200kg e=0,5m	Cielo Abierto
26,000	Rec	604.569,56	4.655.127,23	92,647552	359,68	359,19	0,49	-0,01			esc 200kg e=0,5m	Cielo Abierto
27,000	Rec	604.570,56	4.655.127,34	92,647552	359,62	359,19	0,43	-0,01			esc 200kg e=0,5m	Cielo Abierto
28,000	Rec	604.571,55	4.655.127,46	92,647552	359,56	359,18	0,38	-0,01			esc 200kg e=0,5m	Cielo Abierto
29,000	Rec	604.572,54	4.655.127,57	92,647552	359,50	359,18	0,32	-0,01			esc 200kg e=0,5m	Cielo Abierto
30,000	Rec	604.573,54	4.655.127,69	92,647552	359,44	359,17	0,27	-0,01			esc 200kg e=0,5m	Cielo Abierto
31,000	Rec	604.574,53	4.655.127,80	92,647552	359,38	359,17	0,21	-0,01			esc 200kg e=0,5m	Cielo Abierto
32,000	Rec	604.575,52	4.655.127,92	92,647552	359,32	359,16	0,16	-0,01			esc 200kg e=0,5m	Cielo Abierto
33,000	Rec	604.576,52	4.655.128,03	92,647552	359,26	359,16	0,10	-0,01			esc 200kg e=0,5m	Cielo Abierto
34,000	Rec	604.577,51	4.655.128,15	92,647552	359,20	359,15	0,05	-0,01			esc 200kg e=0,5m	Cielo Abierto
34,836		604.578,34	4.655.128,24	92,647552	359,15	359,15	0,00	-0,01		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimet	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	607.235,83	4.650.646,28	273,543522	369,66	368,86	0,80	-0,20		V.	ACØ600	Z-1 1Ø600
1,000	Rec	607.234,91	4.650.645,88	273,543522	369,70	368,66	1,04	-0,20			ACØ600	Z-1 1Ø600
1,805	Rec	607.234,18	4.650.645,56	273,543522	369,72	368,49	1,23	-0,20			AR Tipo-1	Cielo Abierto
2,055	Rec	607.233,95	4.650.645,45	273,543523	369,73	368,44	1,29	-0,20		V.	AR Tipo-1	Cielo Abierto
						368,19	1,54	Vertical			AR Tipo-1	Cielo Abierto
3,000	Rec	607.233,08	4.650.645,07	273,543523	369,72	368,19	1,53	0,00			AR Tipo-1	Cielo Abierto
4,000	Rec	607.232,17	4.650.644,67	273,543523	369,71	368,19	1,52	0,00			AR Tipo-1	Cielo Abierto
4,055	Rec	607.232,12	4.650.644,65	273,543523	369,71	368,19	1,52	0,00		V.	AR Tipo-1	Cielo Abierto
						368,44	1,27	Vertical			AR Tipo-1	Cielo Abierto
4,305	Rec	607.231,89	4.650.644,55	273,543523	369,71	368,44	1,26	0,00		V.	AR Tipo-1	Cielo Abierto
5,000	Rec	607.231,25	4.650.644,27	273,543523	369,65	368,42	1,24	-0,04			esc 200kg e=0,5m	Cielo Abierto
6,000	Rec	607.230,34	4.650.643,86	273,543523	369,41	368,38	1,03	-0,04			esc 200kg e=0,5m	Cielo Abierto
7,000	Rec	607.229,42	4.650.643,46	273,543523	369,11	368,34	0,77	-0,04			esc 200kg e=0,5m	Cielo Abierto
8,000	Rec	607.228,51	4.650.643,05	273,543523	368,77	368,30	0,47	-0,04			esc 200kg e=0,5m	Cielo Abierto
9,000	Rec	607.227,59	4.650.642,65	273,543523	368,42	368,26	0,17	-0,04			esc 200kg e=0,5m	Cielo Abierto
9,556		607.227,09	4.650.642,43	273,543523	368,23	368,23	0,00	-0,04		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	609.382,12	4.649.170,75	392,590906	358,69	357,89	0,80	-0,15		V.	ACØ600	Z-1 1Ø600
1,000	Rec	609.382,00	4.649.171,75	392,590906	358,67	357,74	0,93	-0,15			ACØ600	Z-1 1Ø600
2,000	Rec	609.381,89	4.649.172,74	392,590906	358,65	357,59	1,05	-0,15			ACØ600	Z-1 1Ø600
2,700	Rec	609.381,80	4.649.173,44	392,590906	358,57	357,49	1,08	-0,15			AR Tipo-2	Cielo Abierto
3,000	Rec	609.381,77	4.649.173,73	392,590906	358,54	357,45	1,10	-0,15		V.	AR Tipo-2	Cielo Abierto
						357,10	1,45	Vertical			AR Tipo-2	Cielo Abierto
4,000	Rec	609.381,65	4.649.174,73	392,590906	358,45	357,10	1,35	0,00			AR Tipo-2	Cielo Abierto
5,000	Rec	609.381,54	4.649.175,72	392,590906	358,35	357,10	1,25	0,00			AR Tipo-2	Cielo Abierto
6,000	Rec	609.381,42	4.649.176,71	392,590906	358,24	357,10	1,15	0,00		V.	AR Tipo-2	Cielo Abierto
						357,45	0,80	Vertical			AR Tipo-2	Cielo Abierto
6,300	Rec	609.381,39	4.649.177,01	392,590906	358,21	357,45	0,76	0,00		V.	AR Tipo-2	Cielo Abierto
7,000	Rec	609.381,30	4.649.177,71	392,590906	358,11	357,42	0,69	-0,04			esc 200kg e=0,5m	Cielo Abierto
8,000	Rec	609.381,19	4.649.178,70	392,590906	357,95	357,38	0,57	-0,04			esc 200kg e=0,5m	Cielo Abierto
9,000	Rec	609.381,07	4.649.179,69	392,590906	357,78	357,34	0,44	-0,04			esc 200kg e=0,5m	Cielo Abierto
10,000	Rec	609.380,96	4.649.180,69	392,590906	357,61	357,30	0,31	-0,04			esc 200kg e=0,5m	Cielo Abierto
11,000	Rec	609.380,84	4.649.181,68	392,590906	357,45	357,26	0,19	-0,04			esc 200kg e=0,5m	Cielo Abierto
12,000	Rec	609.380,72	4.649.182,67	392,590906	357,28	357,22	0,06	-0,04			esc 200kg e=0,5m	Cielo Abierto
12,483		609.380,67	4.649.183,15	392,590906	357,20	357,20	0,00	-0,04		V.	esc 200kg e=0,5m	Cielo Abierto

P.K.	Alineación	Coord. X	Coord. Y	Azimut	Cota Terreno	Cota Rasante Hidráulica	Cota Roja Rasante Hidráulica	Pendiente	Vertice en Planta	Vertice en Alzado	Elemento	Zanja Tipo
0,000	Rec	601.375,47	4.661.162,55	81,449029	379,48	378,68	0,80	-0,05		V.	ACØ600	Z-1 1Ø600
1,000	Rec	601.376,43	4.661.162,83	81,449029	379,48	378,63	0,85	-0,05			ACØ600	Z-1 1Ø600
2,000	Rec	601.377,38	4.661.163,12	81,449029	379,48	378,58	0,90	-0,05			ACØ600	Z-1 1Ø600
3,000	Rec	601.378,34	4.661.163,41	81,449029	379,48	378,52	0,95	-0,05			ACØ600	Z-1 1Ø600
4,000	Rec	601.379,30	4.661.163,69	81,449029	379,47	378,47	1,00	-0,05			ACØ600	Z-1 1Ø600
5,000	Rec	601.380,26	4.661.163,98	81,449029	379,47	378,42	1,05	-0,05			ACØ600	Z-1 1Ø600
6,000	Rec	601.381,22	4.661.164,27	81,449029	379,44	378,37	1,07	-0,05			ACØ600	Z-1 1Ø600
6,617	Rec	601.381,81	4.661.164,45	81,449029	379,31	378,34	0,98	-0,05			AR Tipo-1	Cielo Abierto
6,867	Rec	601.382,05	4.661.164,52	81,449029	379,27	378,32	0,94	-0,05		V.	AR Tipo-1	Cielo Abierto
						378,07	1,19				AR Tipo-1	Cielo Abierto
7,000	Rec	601.382,17	4.661.164,56	81,449029	379,24	378,07	1,16	0,00			AR Tipo-1	Cielo Abierto
8,000	Rec	601.383,13	4.661.164,84	81,449029	379,00	378,07	0,93	0,00			AR Tipo-1	Cielo Abierto
8,867	Rec	601.383,96	4.661.165,09	81,449029	378,81	378,07	0,73	0,00		V.	AR Tipo-1	Cielo Abierto
						378,32	0,48				AR Tipo-1	Cielo Abierto
9,117	Rec	601.384,20	4.661.165,16	81,449029	378,75	378,32	0,42	0,00		V.	AR Tipo-1	Cielo Abierto
10,000	Rec	601.385,05	4.661.165,42	81,449029	378,58	378,31	0,28	-0,02			esc 200kg e=0,5m	Cielo Abierto
11,000	Rec	601.386,01	4.661.165,71	81,449029	378,33	378,29	0,05	-0,02			esc 200kg e=0,5m	Cielo Abierto
11,180		601.386,18	4.661.165,76	81,449029	378,28	378,28	0,00	-0,02		V.	esc 200kg e=0,5m	Cielo Abierto

7. APÉNDICE -7.1.4: LISTADO DE REPLANTEO DE LOS CAMINOS

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO CN-T11 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	621340,349	4697695,464	446,391	446,391	0,000	389,0551	0	5,05%			
Rec	1,000	621340,178	4697696,449	446,815	446,441	-0,374	389,0551	0	5,05%			
Rec	2,000	621340,007	4697697,434	447,600	446,492	-1,108	389,0551	0	5,05%			
Rec	3,000	621339,836	4697698,419	447,592	446,542	-1,050	389,0551	0	5,05%			
Rec	4,000	621339,665	4697699,405	447,567	446,593	-0,974	389,0551	0	5,05%			
Rec	5,000	621339,494	4697700,39	447,542	446,643	-0,899	389,0551	0	5,05%			
Rec	6,000	621339,323	4697701,375	447,521	446,694	-0,827	389,0551	0	5,05%			
Rec	7,000	621339,152	4697702,36	447,510	446,744	-0,766	389,0551	0	5,05%			
Rec	8,000	621338,981	4697703,346	447,500	446,795	-0,705	389,0551	0	5,05%			
Rec	9,000	621338,81	4697704,331	447,490	446,845	-0,645	389,0551	0	5,05%			
Cur	9,503	621338,724	4697704,826	447,485	446,871	-0,614	389,0551	30	5,05%	P.S.		
Cur	10,000	621338,643	4697705,317	447,479	446,896	-0,583	390,1100	30	5,05%			
Cur	11,000	621338,505	4697706,307	447,466	446,946	-0,520	392,2321	30	5,05%			
Cur	12,000	621338,399	4697707,302	447,455	446,997	-0,458	394,3542	30	5,05%			
Cur	13,000	621338,327	4697708,299	447,467	447,047	-0,420	396,4762	30	5,05%			
Cur	14,000	621338,289	4697709,298	447,474	447,098	-0,376	398,5983	30	5,05%			
Cur	15,000	621338,283	4697710,298	447,460	447,148	-0,312	0,7204	30	5,05%			
Cur	16,000	621338,311	4697711,298	447,444	447,199	-0,245	2,8424	30	5,05%			
Cur	16,096	621338,316	4697711,394	447,445	447,204	-0,241	3,0462	30	5,05%		T.E.	
Cur	17,000	621338,373	4697712,296	447,451	447,247	-0,204	4,9645	30	4,60%			
Cur	18,000	621338,467	4697713,291	447,470	447,291	-0,179	7,0866	30	4,10%			
Cur	19,000	621338,595	4697714,283	447,448	447,329	-0,119	9,2086	30	3,60%			
Cur	20,000	621338,755	4697715,27	447,430	447,363	-0,067	11,3307	30	3,10%			
Cur	21,000	621338,949	4697716,251	447,410	447,391	-0,019	13,4528	30	2,60%			
Cur	22,000	621339,175	4697717,225	447,389	447,415	0,026	15,5748	30	2,10%			
Cur	23,000	621339,433	4697718,191	447,364	447,433	0,069	17,6969	30	1,60%			
Rec	23,787	621339,659	4697718,945	447,342	447,444	0,102	19,3677	0	1,20%	P.S.	V.	
Rec	24,000	621339,723	4697719,148	447,336	447,447	0,111	19,3677	0	1,10%			
Rec	25,000	621340,022	4697720,102	447,308	447,455	0,147	19,3677	0	0,60%			
Rec	26,000	621340,322	4697721,056	447,279	447,459	0,180	19,3677	0	0,10%			
Rec	27,000	621340,622	4697722,01	447,249	447,457	0,208	19,3677	0	-0,40%			
Rec	28,000	621340,921	4697722,964	447,220	447,450	0,230	19,3677	0	-0,90%			
Rec	29,000	621341,221	4697723,919	447,190	447,439	0,249	19,3677	0	-1,40%			
Rec	30,000	621341,52	4697724,873	447,161	447,422	0,261	19,3677	0	-1,90%			
Rec	31,000	621341,82	4697725,827	447,131	447,401	0,270	19,3677	0	-2,40%			
Rec	31,478	621341,963	4697726,283	447,117	447,389	0,272	19,3677	0	-2,64%		T.S.	
Rec	32,000	621342,119	4697726,781	447,101	447,375	0,274	19,3677	0	-2,64%			
Rec	33,000	621342,419	4697727,735	447,071	447,349	0,278	19,3677	0	-2,64%			
Rec	34,000	621342,718	4697728,689	447,041	447,322	0,281	19,3677	0	-2,64%			
Rec	35,000	621343,018	4697729,643	447,011	447,296	0,285	19,3677	0	-2,64%			
Rec	36,000	621343,318	4697730,597	446,967	447,270	0,303	19,3677	0	-2,64%			
Rec	37,000	621343,617	4697731,551	446,915	447,243	0,328	19,3677	0	-2,64%			
Rec	38,000	621343,917	4697732,505	446,865	447,217	0,352	19,3677	0	-2,64%			
Rec	39,000	621344,216	4697733,459	446,815	447,190	0,375	19,3677	0	-2,64%			
Rec	40,000	621344,516	4697734,413	446,760	447,164	0,404	19,3677	0	-2,64%			
Rec	41,000	621344,815	4697735,368	446,716	447,138	0,422	19,3677	0	-2,64%			
Rec	42,000	621345,115	4697736,322	446,660	447,111	0,451	19,3677	0	-2,64%			
Rec	43,000	621345,414	4697737,276	446,615	447,085	0,470	19,3677	0	-2,64%			
Rec	44,000	621345,714	4697738,23	446,560	447,058	0,498	19,3677	0	-2,64%			
Rec	45,000	621346,014	4697739,184	446,521	447,032	0,511	19,3677	0	-2,64%			
Rec	46,000	621346,313	4697740,138	446,480	447,006	0,526	19,3677	0	-2,64%			
Rec	47,000	621346,613	4697741,092	446,429	446,979	0,550	19,3677	0	-2,64%			
Rec	48,000	621346,912	4697742,046	446,389	446,953	0,564	19,3677	0	-2,64%			
Rec	49,000	621347,212	4697743	446,353	446,926	0,573	19,3677	0	-2,64%			
Rec	50,000	621347,511	4697743,954	446,319	446,900	0,581	19,3677	0	-2,64%			
Rec	51,000	621347,811	4697744,908	446,285	446,874	0,589	19,3677	0	-2,64%			
Rec	51,701	621348,021	4697745,577	446,260	446,855	0,595	19,3677	0	-2,64%		T.E.	
Rec	52,000	621348,11	4697745,862	446,250	446,847	0,597	19,3677	0	-2,58%			
Rec	53,000	621348,41	4697746,816	446,216	446,822	0,606	19,3677	0	-2,38%			
Rec	54,000	621348,71	4697747,771	446,181	446,800	0,619	19,3677	0	-2,18%			
Rec	55,000	621349,009	4697748,725	446,146	446,779	0,633	19,3677	0	-1,98%			
Cur	55,660	621349,207	4697749,354	446,117	446,766	0,649	19,3677	-30	-1,85%	P.S.		
Cur	56,000	621349,307	4697749,679	446,103	446,760	0,657	18,6459	-30	-1,78%			
Cur	57,000	621349,579	4697750,641	446,070	446,743	0,673	16,5238	-30	-1,58%			
Cur	58,000	621349,82	4697751,612	446,047	446,728	0,681	14,4017	-30	-1,38%			
Cur	59,000	621350,028	4697752,59	446,033	446,716	0,683	12,2797	-30	-1,18%			
Cur	60,000	621350,203	4697753,574	446,022	446,705	0,683	10,1576	-30	-0,98%		V.	
Cur	61,000	621350,346	4697754,564	446,013	446,696	0,683	8,0355	-30	-0,78%			
Cur	62,000	621350,455	4697755,558	446,005	446,689	0,684	5,9135	-30	-0,58%			
Cur	63,000	621350,531	4697756,555	445,999	446,684	0,685	3,7914	-30	-0,38%			
Cur	64,000	621350,574	4697757,554	445,994	446,682	0,688	1,6693	-30	-0,18%			
Cur	65,000	621350,584	4697758,554	445,991	446,681	0,690	399,5473	-30	0,02%			
Cur	66,000	621350,56	4697759,554	445,993	446,682	0,689	397,4252	-30	0,22%			
Cur	67,000	621350,503	4697760,552	446,015	446,685	0,670	395,3032	-30	0,42%			
Cur	68,000	621350,412	4697761,548	446,009	446,690	0,681	393,1811	-30	0,62%			
Cur	68,299	621350,379	4697761,845	446,025	446,692	0,667	392,5466	-30	0,68%		T.S.	
Cur	69,000	621350,289	4697762,54	446,064	446,697	0,633	391,0590	-30	0,68%			
Cur	70,000	621350,133	4697763,528	446,107	446,704	0,597	388,9370	-30	0,68%			
Cur	71,000	621349,943	4697764,51	446,143	446,711	0,568	386,8149	-30	0,68%			
Cur	72,000	621349,721	4697765,485	446,181	446,717	0,536	384,6928	-30	0,68%			
Cur	73,000	621349,467	4697766,452	446,221	446,724	0,503	382,5708	-30	0,68%			
Cur	74,000	621349,181	4697767,41	446,274	446,731	0,457	380,4487	-30	0,68%			
Cur	75,000	621348,863	4697768,358	446,318	446,738	0,420	378,3266	-30	0,68%			
Cur	76,000	621348,513	4697769,295	446,364	446,744	0,380	376,2046	-30	0,68%			
Cur	77,000	621348,132	4697770,22	446,412	446,751	0,339	374,0825	-30	0,68%			
Cur	78,000	621347,721	4697771,131	446,461	446,758	0,297	371,9604	-30	0,68%			
Cur	79,000	621347,28	4697772,028	446,510	446,765	0,255	369,8384	-30	0,68%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
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REPLANTEO CAMINO TRAMO CN-T11 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	80,000	621346,809	4697772,91	446,561	446,772	0,211	367,7163	-30	0,68%			
Cur	81,000	621346,309	4697773,776	446,614	446,778	0,164	365,5942	-30	0,68%			
Cur	82,000	621345,78	4697774,625	446,666	446,785	0,119	363,4722	-30	0,68%			
Cur	83,000	621345,223	4697775,456	446,717	446,792	0,075	361,3501	-30	0,68%			
Cur	84,000	621344,639	4697776,267	446,774	446,799	0,025	359,2280	-30	0,68%			
Cur	85,000	621344,028	4697777,059	446,844	446,805	-0,039	357,1060	-30	0,68%			
Cur	86,000	621343,392	4697777,83	446,912	446,812	-0,100	354,9839	-30	0,68%			
Cur	87,000	621342,729	4697778,579	446,980	446,819	-0,161	352,8618	-30	0,68%			
Cur	88,000	621342,043	4697779,306	447,036	446,826	-0,210	350,7398	-30	0,68%			
Cur	89,000	621341,332	4697780,01	447,048	446,833	-0,215	348,6177	-30	0,68%			
Cur	89,445	621341,008	4697780,315	447,049	446,836	-0,214	347,6734	-30	0,68%		T.E.	
Cur	60,000	621340,598	4697780,689	447,051	446,837	-0,214	346,4956	-30	-0,25%			O.D.T. ø500 L=5,4m
Cur	91,000	621339,842	4697781,344	447,043	446,826	-0,217	344,3736	-30	-1,91%			
Cur	92,000	621339,065	4697781,973	447,027	446,799	-0,228	342,2515	-30	-3,58%			
Cur	93,000	621338,267	4697782,575	446,990	446,754	-0,236	340,1294	-30	-5,25%			
Cur	94,000	621337,45	4697783,151	446,848	446,694	-0,154	338,0074	-30	-6,91%			
Cur	95,000	621336,614	4697783,7	446,706	446,616	-0,090	335,8853	-30	-8,58%			
Cur	96,000	621335,759	4697784,22	446,567	446,522	-0,045	333,7632	-30	-10,25%			
Cur	97,000	621334,889	4697784,711	446,429	446,411	-0,018	331,6412	-30	-11,91%			
Cur	98,000	621334,002	4697785,173	446,289	446,284	-0,005	329,5191	-30	-13,58%			
Rec	98,500	621333,553	4697785,393	446,217	446,214	-0,003	328,4591	0	-14,41%	P.S.	V.	
Rec	99,000	621333,102	4697785,609	446,145	446,140	-0,005	328,4591	0	-15,25%			
Rec	100,000	621332,2	4697786,041	446,001	445,979	-0,022	328,4591	0	-16,91%			
Rec	101,000	621331,298	4697786,474	445,856	445,801	-0,055	328,4591	0	-18,58%			
Rec	102,000	621330,397	4697786,906	445,719	445,607	-0,112	328,4591	0	-20,25%			
Rec	103,000	621329,495	4697787,338	445,582	445,396	-0,186	328,4591	0	-21,91%			
Rec	104,000	621328,593	4697787,771	445,445	445,169	-0,276	328,4591	0	-23,58%			
Rec	105,000	621327,691	4697788,203	445,309	444,925	-0,384	328,4591	0	-25,25%			
Rec	106,000	621326,79	4697788,635	445,172	444,664	-0,508	328,4591	0	-26,91%			
Rec	107,000	621325,888	4697789,068	445,033	444,386	-0,647	328,4591	0	-28,58%			
Rec	107,555	621325,388	4697789,307	444,909	444,226	-0,684	328,4591	0	-29,51%		T.S.	
Rec	108,000	621324,986	4697789,5	444,810	444,094	-0,716	328,4591	0	-29,50%			
Rec	109,000	621324,085	4697789,932	444,555	443,799	-0,756	328,4591	0	-29,50%			
Rec	110,000	621323,183	4697790,364	444,299	443,504	-0,795	328,4591	0	-29,50%			
Rec	111,000	621322,281	4697790,797	444,044	443,209	-0,835	328,4591	0	-29,50%			
Rec	112,000	621321,379	4697791,229	443,794	442,914	-0,880	328,4591	0	-29,50%			
Rec	113,000	621320,478	4697791,661	443,550	442,619	-0,931	328,4591	0	-29,50%			
Rec	114,000	621319,576	4697792,094	443,299	442,324	-0,975	328,4591	0	-29,50%			
Rec	115,000	621318,674	4697792,526	443,047	442,029	-1,018	328,4591	0	-29,50%			
Rec	116,000	621317,772	4697792,958	442,742	441,734	-1,008	328,4591	0	-29,50%			
Rec	117,000	621316,871	4697793,39	442,424	441,439	-0,985	328,4591	0	-29,50%			
Rec	118,000	621315,969	4697793,823	442,107	441,144	-0,963	328,4591	0	-29,50%			
Rec	118,587	621315,44	4697794,077	441,835	440,971	-0,864	328,4591	0	-29,50%		T.E.	
Rec	119,000	621315,067	4697794,255	441,643	440,850	-0,793	328,4591	0	-28,95%			
Rec	120,000	621314,165	4697794,687	441,110	440,567	-0,543	328,4591	0	-27,62%			
Rec	121,000	621313,264	4697795,12	440,632	440,298	-0,334	328,4591	0	-26,28%			
Rec	122,000	621312,362	4697795,552	440,166	440,042	-0,124	328,4591	0	-24,95%			
Rec	123,000	621311,46	4697795,984	439,777	439,799	0,022	328,4591	0	-23,62%			
Rec	124,000	621310,559	4697796,417	439,431	439,569	0,138	328,4591	0	-22,28%			
Rec	125,000	621309,657	4697796,849	439,079	439,353	0,274	328,4591	0	-20,95%		V.	
Rec	126,000	621308,755	4697797,281	438,936	439,150	0,214	328,4591	0	-19,62%			
Rec	127,000	621307,853	4697797,713	438,854	438,961	0,107	328,4591	0	-18,28%			
Rec	128,000	621306,952	4697798,146	438,777	438,785	0,008	328,4591	0	-16,95%			
Rec	129,000	621306,05	4697798,578	438,720	438,622	-0,098	328,4591	0	-15,62%			
Rec	130,000	621305,148	4697799,01	438,667	438,472	-0,195	328,4591	0	-14,28%			
Rec	131,000	621304,246	4697799,443	438,611	438,336	-0,275	328,4591	0	-12,95%			
Rec	131,413	621303,874	4697799,621	438,587	438,284	-0,303	328,4591	0	-12,40%		T.S.	
Rec	132,000	621303,345	4697799,875	438,553	438,211	-0,342	328,4591	0	-12,40%			
Rec	133,000	621302,443	4697800,307	438,494	438,087	-0,407	328,4591	0	-12,40%			
Rec	134,000	621301,541	4697800,739	438,435	437,963	-0,472	328,4591	0	-12,40%			
Rec	135,000	621300,639	4697801,172	438,375	437,839	-0,536	328,4591	0	-12,40%			
Rec	136,000	621299,738	4697801,604	438,316	437,715	-0,601	328,4591	0	-12,40%			
Rec	137,000	621298,836	4697802,036	438,256	437,591	-0,665	328,4591	0	-12,40%			
Rec	138,000	621297,934	4697802,469	438,197	437,467	-0,730	328,4591	0	-12,40%			
Rec	139,000	621297,033	4697802,901	438,137	437,343	-0,794	328,4591	0	-12,40%			
Rec	140,000	621296,131	4697803,333	438,078	437,219	-0,859	328,4591	0	-12,40%			
Rec	141,000	621295,229	4697803,765	438,018	437,094	-0,924	328,4591	0	-12,40%			
Rec	142,000	621294,327	4697804,198	437,885	436,970	-0,915	328,4591	0	-12,40%			
Rec	143,000	621293,426	4697804,63	437,722	436,846	-0,876	328,4591	0	-12,40%			
Rec	144,000	621292,524	4697805,062	437,565	436,722	-0,843	328,4591	0	-12,40%			
Rec	145,000	621291,622	4697805,495	437,388	436,598	-0,790	328,4591	0	-12,40%			
Rec	146,000	621290,72	4697805,927	437,195	436,474	-0,721	328,4591	0	-12,40%			
Rec	147,000	621289,819	4697806,359	437,001	436,350	-0,651	328,4591	0	-12,40%			
Rec	147,048	621289,775	4697806,38	436,987	436,344	-0,642	328,4591	0	-12,40%		T.E.	
Rec	148,000	621288,917	4697806,792	436,702	436,227	-0,475	328,4591	0	-12,21%			
Rec	149,000	621288,015	4697807,224	436,399	436,106	-0,293	328,4591	0	-12,01%			
Rec	150,000	621287,113	4697807,656	436,095	435,987	-0,108	328,4591	0	-11,81%			
Rec	151,000	621286,212	4697808,088	435,855	435,870	0,015	328,4591	0	-11,61%			
Rec	152,000	621285,31	4697808,521	435,678	435,755	0,077	328,4591	0	-11,41%			
Rec	153,000	621284,408	4697808,953	435,534	435,641	0,107	328,4591	0	-11,21%			
Rec	154,000	621283,507	4697809,385	435,354	435,530	0,176	328,4591	0	-11,01%			
Rec	155,000	621282,605	4697809,818	435,260	435,421	0,161	328,4591	0	-10,81%		V.	
Rec	156,000	621281,703	4697810,25	435,168	435,314	0,146	328,4591	0	-10,61%			
Rec	157,000	621280,801	4697810,682	435,073	435,209	0,136	328,4591	0	-10,41%			
Rec	158,000	621279,9	4697811,114	434,980	435,106	0,126	328,4591	0	-10,21%			
Rec	159,000	621278,998	4697811,547	434,911	435,005	0,094	328,4591	0	-10,01%			

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REPLANTEO CAMINO TRAMO CN-T11 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	160,000	621278,096	4697811,979	434,841	434,906	0,065	328,4591	0	-9,81%			
Rec	161,000	621277,194	4697812,411	434,764	434,808	0,044	328,4591	0	-9,61%			
Rec	162,000	621276,293	4697812,844	434,687	434,713	0,026	328,4591	0	-9,41%			
Rec	162,952	621275,434	4697813,255	434,609	434,625	0,016	328,4591	0	-9,22%		T.S.	
Rec	163,000	621275,391	4697813,276	434,605	434,620	0,015	328,4591	0	-9,22%			
Rec	164,000	621274,489	4697813,708	434,524	434,528	0,004	328,4591	0	-9,22%			
Rec	165,000	621273,587	4697814,141	434,439	434,436	-0,003	328,4591	0	-9,22%			
Rec	166,000	621272,686	4697814,573	434,352	434,344	-0,008	328,4591	0	-9,22%			
Rec	167,000	621271,784	4697815,005	434,265	434,252	-0,013	328,4591	0	-9,22%			
Rec	168,000	621270,882	4697815,437	434,175	434,159	-0,016	328,4591	0	-9,22%			
Rec	169,000	621269,981	4697815,87	434,087	434,067	-0,020	328,4591	0	-9,22%			
Rec	170,000	621269,079	4697816,302	433,994	433,975	-0,019	328,4591	0	-9,22%			
Rec	171,000	621268,177	4697816,734	433,899	433,883	-0,016	328,4591	0	-9,22%			
Rec	172,000	621267,275	4697817,167	433,808	433,791	-0,017	328,4591	0	-9,22%			
Rec	173,000	621266,374	4697817,599	433,718	433,699	-0,019	328,4591	0	-9,22%			
Rec	174,000	621265,472	4697818,031	433,629	433,606	-0,023	328,4591	0	-9,22%			
Rec	175,000	621264,57	4697818,463	433,545	433,514	-0,031	328,4591	0	-9,22%			
Rec	176,000	621263,668	4697818,896	433,464	433,422	-0,042	328,4591	0	-9,22%			
Rec	177,000	621262,767	4697819,328	433,382	433,330	-0,052	328,4591	0	-9,22%			
Rec	178,000	621261,865	4697819,76	433,305	433,238	-0,067	328,4591	0	-9,22%			
Rec	179,000	621260,963	4697820,193	433,227	433,145	-0,082	328,4591	0	-9,22%			
Rec	180,000	621260,061	4697820,625	433,147	433,053	-0,094	328,4591	0	-9,22%			
Rec	180,237	621259,848	4697820,727	433,127	433,031	-0,096	328,4591	0	-9,22%		T.E.	
Rec	181,000	621259,16	4697821,057	433,064	432,963	-0,101	328,4591	0	-8,61%			
Rec	182,000	621258,258	4697821,49	432,970	432,881	-0,089	328,4591	0	-7,81%			
Rec	183,000	621257,356	4697821,922	432,851	432,807	-0,044	328,4591	0	-7,01%			
Rec	184,000	621256,455	4697822,354	432,730	432,741	0,011	328,4591	0	-6,21%			
Rec	185,000	621255,553	4697822,786	432,619	432,683	0,064	328,4591	0	-5,41%			
Rec	186,000	621254,651	4697823,219	432,513	432,633	0,120	328,4591	0	-4,61%		V.	
Rec	187,000	621253,749	4697823,651	432,419	432,591	0,172	328,4591	0	-3,81%			
Rec	188,000	621252,848	4697824,083	432,321	432,557	0,236	328,4591	0	-3,01%			
Rec	189,000	621251,946	4697824,516	432,224	432,531	0,307	328,4591	0	-2,21%			
Rec	190,000	621251,044	4697824,948	432,128	432,512	0,384	328,4591	0	-1,41%			
Rec	191,000	621250,142	4697825,38	432,034	432,502	0,468	328,4591	0	-0,61%			
Rec	191,763	621249,454	4697825,71	431,973	432,500	0,527	328,4591	0	0,00%		T.S.	
Rec	192,000	621249,241	4697825,812	431,954	432,500	0,546	328,4591	0	0,00%			
Rec	193,000	621248,339	4697826,245	431,870	432,500	0,630	328,4591	0	0,00%			
Rec	194,000	621247,437	4697826,677	431,788	432,500	0,712	328,4591	0	0,00%			
Rec	195,000	621246,535	4697827,109	431,715	432,500	0,785	328,4591	0	0,00%			
Rec	196,000	621245,634	4697827,542	431,640	432,500	0,860	328,4591	0	0,00%			
Rec	197,000	621244,732	4697827,974	431,612	432,500	0,888	328,4591	0	0,00%			
Rec	198,000	621243,83	4697828,406	431,603	432,500	0,897	328,4591	0	0,00%			
Rec	199,000	621242,929	4697828,838	431,536	432,500	0,964	328,4591	0	0,00%			
Rec	200,000	621242,027	4697829,271	431,483	432,500	1,017	328,4591	0	0,00%			
Rec	201,000	621241,125	4697829,703	431,424	432,500	1,076	328,4591	0	0,00%			
Rec	202,000	621240,223	4697830,135	431,339	432,500	1,161	328,4591	0	0,00%			
	202,318	621239,937	4697830,273	431,309	432,500	1,191	328,4591		0,00%			

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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO CN-T11 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	622142,768	4691966,444	326,582	326,582	0,000	224,7130	0	-0,41%			
Rec	1,000	622142,389	4691965,518	326,562	326,578	0,016	224,7130	0	-0,41%			O.D.T. Ø300 L=8,8m
Rec	2,000	622142,011	4691964,593	326,547	326,574	0,027	224,7130	0	-0,41%			
Rec	3,000	622141,632	4691963,667	326,535	326,570	0,035	224,7130	0	-0,41%			
Rec	4,000	622141,254	4691962,742	326,544	326,566	0,022	224,7130	0	-0,41%			
Rec	5,000	622140,875	4691961,816	326,539	326,562	0,023	224,7130	0	-0,41%			
Rec	6,000	622140,497	4691960,89	326,545	326,558	0,013	224,7130	0	-0,41%			
Rec	7,000	622140,118	4691959,965	326,551	326,553	0,002	224,7130	0	-0,41%			
Rec	8,000	622139,74	4691959,039	326,557	326,549	-0,008	224,7130	0	-0,41%			
Rec	9,000	622139,361	4691958,114	326,564	326,545	-0,019	224,7130	0	-0,41%			
Rec	10,000	622138,983	4691957,188	326,570	326,541	-0,029	224,7130	0	-0,41%			
Rec	11,000	622138,604	4691956,262	326,576	326,537	-0,039	224,7130	0	-0,41%			
Rec	12,000	622138,226	4691955,337	326,582	326,533	-0,049	224,7130	0	-0,41%			
Rec	13,000	622137,847	4691954,411	326,588	326,529	-0,059	224,7130	0	-0,41%			
Rec	14,000	622137,469	4691953,486	326,594	326,525	-0,069	224,7130	0	-0,41%			
Rec	15,000	622137,09	4691952,56	326,600	326,521	-0,079	224,7130	0	-0,41%			
Rec	16,000	622136,712	4691951,634	326,606	326,517	-0,089	224,7130	0	-0,41%			
Rec	17,000	622136,333	4691950,709	326,612	326,513	-0,099	224,7130	0	-0,41%			
Rec	18,000	622135,955	4691949,783	326,619	326,509	-0,110	224,7130	0	-0,41%			
Rec	19,000	622135,576	4691948,858	326,629	326,505	-0,124	224,7130	0	-0,41%			
Rec	20,000	622135,198	4691947,932	326,620	326,500	-0,120	224,7130	0	-0,41%			
Rec	21,000	622134,819	4691947,006	326,610	326,496	-0,114	224,7130	0	-0,41%			
Rec	22,000	622134,44	4691946,081	326,600	326,492	-0,108	224,7130	0	-0,41%			
Rec	23,000	622134,062	4691945,155	326,590	326,488	-0,102	224,7130	0	-0,41%			
Rec	24,000	622133,683	4691944,23	326,579	326,484	-0,095	224,7130	0	-0,41%			
Rec	25,000	622133,305	4691943,304	326,569	326,480	-0,089	224,7130	0	-0,41%			
Rec	26,000	622132,926	4691942,379	326,559	326,476	-0,083	224,7130	0	-0,41%			
Rec	27,000	622132,548	4691941,453	326,548	326,472	-0,076	224,7130	0	-0,41%			
Rec	28,000	622132,169	4691940,527	326,538	326,468	-0,070	224,7130	0	-0,41%			
Rec	29,000	622131,791	4691939,602	326,528	326,464	-0,064	224,7130	0	-0,41%			
Rec	30,000	622131,412	4691938,676	326,517	326,460	-0,057	224,7130	0	-0,41%			
Rec	30,878	622131,08	4691937,863	326,508	326,456	-0,052	224,7130	0	-0,41%			
Rec	31,000	622131,034	4691937,751	326,507	326,456	-0,051	224,7130	0	-0,40%			
Rec	32,000	622130,655	4691936,825	326,497	326,452	-0,045	224,7130	0	-0,35%			
Rec	33,000	622130,277	4691935,899	326,487	326,449	-0,038	224,7130	0	-0,30%			
Rec	34,000	622129,898	4691934,974	326,476	326,446	-0,030	224,7130	0	-0,25%			
Rec	35,000	622129,52	4691934,048	326,466	326,444	-0,022	224,7130	0	-0,20%			
Rec	36,000	622129,141	4691933,123	326,456	326,442	-0,014	224,7130	0	-0,15%			
Rec	37,000	622128,763	4691932,197	326,445	326,441	-0,004	224,7130	0	-0,10%			
Rec	38,000	622128,384	4691931,271	326,435	326,440	0,005	224,7130	0	-0,05%			
Rec	39,000	622128,006	4691930,346	326,425	326,440	0,015	224,7130	0	0,00%			
Rec	40,000	622127,627	4691929,42	326,415	326,440	0,025	224,7130	0	0,05%			
Rec	41,000	622127,249	4691928,495	326,410	326,441	0,031	224,7130	0	0,10%			
Rec	42,000	622126,87	4691927,569	326,415	326,442	0,027	224,7130	0	0,15%			
Rec	43,000	622126,492	4691926,643	326,421	326,444	0,023	224,7130	0	0,20%			
Rec	44,000	622126,113	4691925,718	326,426	326,446	0,020	224,7130	0	0,25%			
Rec	45,000	622125,735	4691924,792	326,432	326,448	0,016	224,7130	0	0,30%			
Rec	46,000	622125,356	4691923,867	326,437	326,452	0,015	224,7130	0	0,35%			
Rec	47,000	622124,978	4691922,941	326,443	326,455	0,012	224,7130	0	0,40%			
Rec	48,000	622124,599	4691922,015	326,448	326,460	0,012	224,7130	0	0,45%			
Rec	49,000	622124,221	4691921,09	326,453	326,464	0,011	224,7130	0	0,50%			
Rec	49,122	622124,174	4691920,977	326,454	326,465	0,011	224,7130	0	0,50%			
Rec	50,000	622123,842	4691920,164	326,459	326,469	0,010	224,7130	0	0,50%			
Rec	51,000	622123,464	4691919,239	326,464	326,475	0,011	224,7130	0	0,50%			
Rec	52,000	622123,085	4691918,313	326,470	326,480	0,010	224,7130	0	0,50%			
Rec	53,000	622122,707	4691917,387	326,475	326,485	0,010	224,7130	0	0,50%			
Rec	54,000	622122,328	4691916,462	326,481	326,490	0,009	224,7130	0	0,50%			
Rec	55,000	622121,95	4691915,536	326,486	326,495	0,009	224,7130	0	0,50%			
Rec	56,000	622121,571	4691914,611	326,492	326,500	0,008	224,7130	0	0,50%			
Rec	57,000	622121,192	4691913,685	326,497	326,505	0,008	224,7130	0	0,50%			
Rec	58,000	622120,814	4691912,759	326,502	326,510	0,008	224,7130	0	0,50%			
Rec	59,000	622120,435	4691911,834	326,508	326,515	0,007	224,7130	0	0,50%			
Rec	60,000	622120,057	4691910,908	326,513	326,520	0,007	224,7130	0	0,50%			
Rec	61,000	622119,678	4691909,983	326,519	326,525	0,006	224,7130	0	0,50%			
Rec	62,000	622119,3	4691909,057	326,524	326,530	0,006	224,7130	0	0,50%			
Rec	63,000	622118,921	4691908,132	326,530	326,535	0,005	224,7130	0	0,50%			
Rec	64,000	622118,543	4691907,206	326,535	326,540	0,005	224,7130	0	0,50%			
Rec	65,000	622118,164	4691906,28	326,541	326,545	0,004	224,7130	0	0,50%			
Rec	66,000	622117,786	4691905,355	326,546	326,550	0,004	224,7130	0	0,50%			
Rec	67,000	622117,407	4691904,429	326,552	326,555	0,003	224,7130	0	0,50%			
Rec	68,000	622117,029	4691903,504	326,557	326,560	0,003	224,7130	0	0,50%			
Rec	69,000	622116,65	4691902,578	326,562	326,565	0,003	224,7130	0	0,50%			
Rec	70,000	622116,272	4691901,652	326,568	326,570	0,002	224,7130	0	0,50%			
Rec	70,404	622116,119	4691901,278	326,570	326,572	0,002	224,7130	0	0,50%			
Rec	71,000	622115,893	4691900,727	326,573	326,576	0,003	224,7130	0	0,80%			
Rec	72,000	622115,515	4691899,801	326,579	326,587	0,008	224,7130	0	1,30%			
Rec	73,000	622115,136	4691898,876	326,584	326,602	0,018	224,7130	0	1,80%			
Rec	74,000	622114,758	4691897,95	326,590	326,623	0,033	224,7130	0	2,30%			
Rec	75,000	622114,379	4691897,024	326,595	326,648	0,053	224,7130	0	2,80%			
Rec	76,000	622114,001	4691896,099	326,601	326,679	0,078	224,7130	0	3,30%			
Cur	76,256	622113,904	4691895,862	326,602	326,688	0,086	224,7130	20	3,43%	P.S.	V.	
Cur	77,000	622113,609	4691895,179	326,606	326,715	0,109	227,0826	20	3,80%			
Cur	78,000	622113,174	4691894,278	326,611	326,755	0,144	230,2657	20	4,30%			
Cur	79,000	622112,694	4691893,401	326,522	326,801	0,279	233,4488	20	4,80%			
Cur	80,000	622112,171	4691892,549	326,421	326,851	0,430	236,6319	20	5,30%			
Cur	81,000	622111,606	4691891,724	326,440	326,907	0,467	239,8150	20	5,80%			

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REPLANTEO CAMINO TRAMO CN-T11 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	82,000	622111,001	4691890,928	326,459	326,967	0,508	242,9981	20	6,30%			
Cur	82,108	622110,933	4691890,844	326,461	326,974	0,513	243,3419	20	6,36%		T.S.	
Cur	83,000	622110,357	4691890,164	326,479	327,031	0,552	246,1812	20	6,36%			
Cur	84,000	622109,675	4691889,432	326,500	327,094	0,594	249,3643	20	6,36%			
Cur	85,000	622108,957	4691888,736	326,520	327,158	0,638	252,5474	20	6,36%			
Cur	86,000	622108,206	4691888,076	326,541	327,221	0,680	255,7305	20	6,36%			
Cur	86,223	622108,034	4691887,934	326,546	327,236	0,690	256,4403	20	6,36%		T.E.	
Cur	87,000	622107,422	4691887,455	326,562	327,282	0,720	258,9136	20	5,58%			
Cur	88,000	622106,609	4691886,874	326,584	327,333	0,749	262,0967	20	4,58%			
Cur	89,000	622105,767	4691886,334	326,605	327,374	0,769	265,2798	20	3,58%			
Cur	90,000	622104,899	4691885,837	326,627	327,404	0,777	268,4629	20	2,58%			
Rec	90,802	622104,186	4691885,47	326,645	327,422	0,777	271,0166	0	1,78%	P.S.		
Rec	91,000	622104,009	4691885,383	326,649	327,425	0,776	271,0166	0	1,58%			
Rec	92,000	622103,11	4691884,943	326,678	327,436	0,758	271,0166	0	0,58%			
Rec	93,000	622102,212	4691884,503	326,706	327,437	0,731	271,0166	0	-0,42%			
Rec	94,000	622101,314	4691884,064	326,730	327,428	0,698	271,0166	0	-1,42%		V.	O.D.T. ø1000 L=5,3m
Rec	95,000	622100,416	4691883,624	326,710	327,408	0,698	271,0166	0	-2,42%			
Cur	95,400	622100,057	4691883,448	326,681	327,398	0,717	271,0166	-20	-2,82%	P.S.		
Cur	96,000	622099,522	4691883,176	326,637	327,379	0,742	269,1065	-20	-3,42%			
Cur	97,000	622098,649	4691882,688	326,563	327,340	0,777	265,9234	-20	-4,42%			
Cur	98,000	622097,802	4691882,156	326,487	327,291	0,804	262,7403	-20	-5,42%			
Cur	99,000	622096,983	4691881,583	326,409	327,232	0,823	259,5572	-20	-6,42%			
Cur	100,000	622096,193	4691880,97	326,331	327,162	0,831	256,3741	-20	-7,42%			
Cur	101,000	622095,435	4691880,318	326,253	327,083	0,830	253,1910	-20	-8,42%			
Cur	101,777	622094,869	4691879,786	326,230	327,015	0,785	250,7178	-20	-9,20%		T.S.	
Cur	102,000	622094,711	4691879,629	326,223	326,994	0,771	250,0079	-20	-9,20%			
Cur	103,000	622094,021	4691878,905	326,191	326,902	0,711	246,8248	-20	-9,20%			
Cur	104,000	622093,369	4691878,147	326,163	326,810	0,647	243,6417	-20	-9,20%			
Cur	105,000	622092,756	4691877,357	326,140	326,718	0,578	240,4586	-20	-9,20%			
Cur	106,000	622092,182	4691876,538	326,120	326,626	0,506	237,2755	-20	-9,20%			
Cur	107,000	622091,651	4691875,691	326,102	326,534	0,432	234,0924	-20	-9,20%			
Cur	107,847	622091,234	4691874,954	326,088	326,457	0,368	231,3964	-20	-9,20%		T.E.	
Cur	108,000	622091,162	4691874,819	326,086	326,443	0,357	230,9093	-20	-9,04%			
Cur	109,000	622090,718	4691873,923	326,073	326,357	0,284	227,7263	-20	-8,04%			
Cur	110,000	622090,319	4691873,006	326,062	326,282	0,220	224,5432	-20	-7,04%			
Cur	111,000	622089,966	4691872,07	326,054	326,216	0,162	221,3601	-20	-6,04%			
Cur	112,000	622089,661	4691871,118	326,038	326,161	0,123	218,1770	-20	-5,04%			
Rec	112,442	622089,541	4691870,693	326,034	326,140	0,106	216,7687	0	-4,60%	P.S.	V.	
Rec	113,000	622089,396	4691870,154	326,036	326,115	0,079	216,7687	0	-4,04%			
Rec	114,000	622089,135	4691869,189	326,038	326,080	0,042	216,7687	0	-3,04%			
Rec	115,000	622088,875	4691868,223	326,038	326,055	0,017	216,7687	0	-2,04%			
Rec	116,000	622088,614	4691867,258	326,038	326,039	0,001	216,7687	0	-1,04%			
Rec	117,000	622088,354	4691866,292	326,038	326,034	-0,004	216,7687	0	-0,04%			
Rec	117,037	622088,344	4691866,256	326,038	326,034	-0,004	216,7687	0	-0,01%		T.S.	
Rec	118,000	622088,094	4691865,327	326,038	326,034	-0,004	216,7687	0	-0,01%			
Rec	119,000	622087,833	4691864,361	326,038	326,034	-0,004	216,7687	0	-0,01%			
Rec	120,000	622087,573	4691863,396	326,038	326,034	-0,004	216,7687	0	-0,01%			
Rec	121,000	622087,313	4691862,43	326,030	326,034	0,004	216,7687	0	-0,01%			
Rec	121,508	622087,18	4691861,94	326,027	326,033	0,007	216,7687	0	-0,01%		T.E.	
Rec	122,000	622087,052	4691861,465	326,024	326,033	0,009	216,7687	0	0,00%			
Rec	123,000	622086,792	4691860,499	326,024	326,034	0,010	216,7687	0	0,02%			
Rec	124,000	622086,531	4691859,534	326,025	326,034	0,009	216,7687	0	0,04%			
Rec	125,000	622086,271	4691858,568	326,025	326,035	0,010	216,7687	0	0,06%			
Rec	126,000	622086,011	4691857,603	326,026	326,035	0,009	216,7687	0	0,08%			
Rec	127,000	622085,75	4691856,637	326,026	326,036	0,010	216,7687	0	0,10%			
Rec	128,000	622085,49	4691855,672	326,027	326,037	0,010	216,7687	0	0,12%			
Rec	129,000	622085,23	4691854,706	326,027	326,039	0,012	216,7687	0	0,14%			
Rec	130,000	622084,969	4691853,741	326,027	326,040	0,013	216,7687	0	0,16%		V.	
Rec	131,000	622084,709	4691852,775	326,027	326,042	0,015	216,7687	0	0,18%			
Rec	132,000	622084,449	4691851,809	326,007	326,044	0,037	216,7687	0	0,20%			
Rec	133,000	622084,188	4691850,844	326,005	326,046	0,041	216,7687	0	0,22%			
Rec	134,000	622083,928	4691849,878	326,005	326,048	0,043	216,7687	0	0,24%			
Rec	135,000	622083,667	4691848,913	326,005	326,051	0,046	216,7687	0	0,26%			
Rec	136,000	622083,407	4691847,947	326,005	326,054	0,049	216,7687	0	0,28%			
Rec	137,000	622083,147	4691846,982	326,005	326,057	0,052	216,7687	0	0,30%			
Rec	138,000	622082,886	4691846,016	326,005	326,060	0,055	216,7687	0	0,32%			
Rec	138,492	622082,758	4691845,541	326,005	326,061	0,056	216,7687	0	0,33%		T.S.	
Rec	139,000	622082,626	4691845,051	326,005	326,063	0,058	216,7687	0	0,33%			
Rec	140,000	622082,366	4691844,085	326,005	326,066	0,061	216,7687	0	0,33%			
Rec	141,000	622082,105	4691843,12	326,005	326,070	0,065	216,7687	0	0,33%			
Rec	142,000	622081,845	4691842,154	326,005	326,073	0,068	216,7687	0	0,33%			
Rec	143,000	622081,585	4691841,189	326,005	326,076	0,071	216,7687	0	0,33%			
Rec	144,000	622081,324	4691840,223	326,005	326,080	0,075	216,7687	0	0,33%			
Rec	145,000	622081,064	4691839,258	326,005	326,083	0,078	216,7687	0	0,33%			
Rec	146,000	622080,803	4691838,292	326,005	326,086	0,081	216,7687	0	0,33%			
Rec	147,000	622080,543	4691837,327	326,005	326,090	0,085	216,7687	0	0,33%			
Rec	148,000	622080,283	4691836,361	326,005	326,093	0,088	216,7687	0	0,33%			
Rec	149,000	622080,022	4691835,396	326,005	326,096	0,091	216,7687	0	0,33%			
Rec	150,000	622079,762	4691834,43	326,005	326,100	0,095	216,7687	0	0,33%			
Rec	151,000	622079,502	4691833,465	326,005	326,103	0,098	216,7687	0	0,33%			
Rec	152,000	622079,241	4691832,499	326,005	326,106	0,101	216,7687	0	0,33%			
Rec	153,000	622078,981	4691831,534	326,005	326,110	0,105	216,7687	0	0,33%			
Rec	154,000	622078,72	4691830,568	326,005	326,113	0,108	216,7687	0	0,33%			
Rec	155,000	622078,46	4691829,603	326,005	326,116	0,111	216,7687	0	0,33%			
Rec	156,000	622078,2	4691828,637	326,005	326,120	0,115	216,7687	0	0,33%			
Rec	157,000	622077,939	4691827,672	326,005	326,123	0,118	216,7687	0	0,33%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO CN-T11 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	158,000	622077,679	4691826,706	326,008	326,127	0,119	216,7687	0	0,33%			
Rec	159,000	622077,419	4691825,741	326,013	326,130	0,117	216,7687	0	0,33%			
Rec	160,000	622077,158	4691824,775	326,019	326,133	0,114	216,7687	0	0,33%			
Rec	161,000	622076,898	4691823,81	326,024	326,137	0,113	216,7687	0	0,33%			
Rec	162,000	622076,638	4691822,844	326,024	326,140	0,116	216,7687	0	0,33%			
Rec	163,000	622076,377	4691821,879	326,024	326,143	0,119	216,7687	0	0,33%			
Rec	164,000	622076,117	4691820,913	326,024	326,147	0,123	216,7687	0	0,33%			
Rec	165,000	622075,856	4691819,948	326,023	326,150	0,127	216,7687	0	0,33%			
Rec	166,000	622075,596	4691818,982	326,023	326,153	0,130	216,7687	0	0,33%			
Rec	167,000	622075,336	4691818,017	326,023	326,157	0,134	216,7687	0	0,33%			
Rec	168,000	622075,075	4691817,051	326,024	326,160	0,136	216,7687	0	0,33%			
Rec	169,000	622074,815	4691816,086	326,024	326,163	0,139	216,7687	0	0,33%			
Rec	170,000	622074,555	4691815,12	326,024	326,167	0,143	216,7687	0	0,33%			
Rec	171,000	622074,294	4691814,155	326,024	326,170	0,146	216,7687	0	0,33%			
Rec	172,000	622074,034	4691813,189	326,024	326,173	0,149	216,7687	0	0,33%			
Rec	173,000	622073,774	4691812,224	326,025	326,177	0,152	216,7687	0	0,33%			
Rec	174,000	622073,513	4691811,258	326,025	326,180	0,155	216,7687	0	0,33%			
Rec	174,990	622073,255	4691810,302	326,025	326,183	0,158	216,7687	0	0,33%		T.E.	
Rec	175,000	622073,253	4691810,293	326,025	326,183	0,158	216,7687	0	0,33%			
Rec	176,000	622072,992	4691809,327	326,025	326,186	0,161	216,7687	0	0,30%			
Rec	177,000	622072,732	4691808,362	326,025	326,189	0,164	216,7687	0	0,27%			
Rec	178,000	622072,472	4691807,396	326,025	326,192	0,167	216,7687	0	0,23%			
Rec	179,000	622072,211	4691806,431	326,025	326,194	0,169	216,7687	0	0,20%			
Rec	180,000	622071,951	4691805,465	326,025	326,196	0,171	216,7687	0	0,17%		V.	
Rec	181,000	622071,691	4691804,5	326,025	326,197	0,172	216,7687	0	0,13%			
Rec	182,000	622071,43	4691803,534	326,025	326,198	0,173	216,7687	0	0,10%			
Rec	183,000	622071,17	4691802,568	326,024	326,199	0,175	216,7687	0	0,07%			
Rec	184,000	622070,91	4691801,603	326,024	326,200	0,176	216,7687	0	0,03%			
Rec	185,000	622070,649	4691800,637	326,024	326,200	0,176	216,7687	0	0,00%			
Rec	185,010	622070,647	4691800,628	326,024	326,200	0,176	216,7687	0	0,00%		T.S.	
Rec	186,000	622070,389	4691799,672	326,024	326,200	0,176	216,7687	0	0,00%			
Rec	187,000	622070,128	4691798,706	326,024	326,200	0,176	216,7687	0	0,00%			
Rec	188,000	622069,868	4691797,741	326,024	326,200	0,176	216,7687	0	0,00%			
Rec	189,000	622069,608	4691796,775	326,030	326,200	0,170	216,7687	0	0,00%			
Rec	190,000	622069,347	4691795,81	326,038	326,200	0,162	216,7687	0	0,00%			
Rec	191,000	622069,087	4691794,844	326,045	326,200	0,155	216,7687	0	0,00%			
Rec	192,000	622068,827	4691793,879	326,047	326,200	0,153	216,7687	0	0,00%			
Rec	193,000	622068,566	4691792,913	326,047	326,200	0,153	216,7687	0	0,00%			
Rec	194,000	622068,306	4691791,948	326,047	326,200	0,153	216,7687	0	0,00%			
Rec	195,000	622068,045	4691790,982	326,047	326,200	0,153	216,7687	0	0,00%			
Rec	196,000	622067,785	4691790,017	326,047	326,200	0,153	216,7687	0	0,00%			
Rec	197,000	622067,525	4691789,051	326,047	326,200	0,153	216,7687	0	0,00%			
	197,889	622067,293	4691788,193	326,047	326,200	0,153	216,7687		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	618.106,582	4.679.472,793	378,470	378,470	0,000	331,8248	0	-0,30%			
Rec	1,000	618.105,705	4.679.473,272	378,459	378,467	0,008	331,8248	0	-0,30%			ODT Ø500 L=9,5m
Rec	2,000	618.104,827	4.679.473,752	378,452	378,464	0,012	331,8248	0	-0,30%			
Rec	3,000	618.103,949	4.679.474,231	378,445	378,461	0,016	331,8248	0	-0,30%			
Rec	4,000	618.103,072	4.679.474,710	378,438	378,458	0,020	331,8248	0	-0,30%			
Rec	5,000	618.102,194	4.679.475,190	378,431	378,455	0,024	331,8248	0	-0,30%			
Rec	6,000	618.101,317	4.679.475,669	378,424	378,452	0,028	331,8248	0	-0,30%			
Rec	7,000	618.100,439	4.679.476,148	378,417	378,449	0,032	331,8248	0	-0,30%			
Rec	8,000	618.099,561	4.679.476,628	378,411	378,446	0,035	331,8248	0	-0,30%			
Rec	9,000	618.098,684	4.679.477,107	378,404	378,443	0,039	331,8248	0	-0,30%			
Rec	10,000	618.097,806	4.679.477,586	378,396	378,440	0,044	331,8248	0	-0,30%			
Rec	11,000	618.096,928	4.679.478,066	378,389	378,437	0,048	331,8248	0	-0,30%			
Rec	12,000	618.096,051	4.679.478,545	378,386	378,434	0,048	331,8248	0	-0,30%			
Rec	13,000	618.095,173	4.679.479,024	378,380	378,431	0,051	331,8248	0	-0,30%			
Rec	14,000	618.094,295	4.679.479,504	378,391	378,428	0,037	331,8248	0	-0,30%			
Rec	15,000	618.093,418	4.679.479,983	378,420	378,425	0,005	331,8248	0	-0,30%			
Rec	16,000	618.092,540	4.679.480,462	378,437	378,422	-0,015	331,8248	0	-0,30%			
Rec	17,000	618.091,663	4.679.480,942	378,427	378,419	-0,008	331,8248	0	-0,30%			
Rec	18,000	618.090,785	4.679.481,421	378,437	378,416	-0,021	331,8248	0	-0,30%			
Rec	19,000	618.089,907	4.679.481,900	378,418	378,413	-0,005	331,8248	0	-0,30%			
Rec	20,000	618.089,030	4.679.482,380	378,416	378,409	-0,007	331,8248	0	-0,30%			
Rec	21,000	618.088,152	4.679.482,859	378,408	378,406	-0,002	331,8248	0	-0,30%			
Rec	22,000	618.087,274	4.679.483,338	378,399	378,403	0,004	331,8248	0	-0,30%			
Rec	23,000	618.086,397	4.679.483,818	378,392	378,400	0,008	331,8248	0	-0,30%			
Rec	24,000	618.085,519	4.679.484,297	378,388	378,397	0,009	331,8248	0	-0,30%			
Rec	25,000	618.084,642	4.679.484,776	378,383	378,394	0,011	331,8248	0	-0,30%			
Cur	25,625	618.084,093	4.679.485,076	378,381	378,392	0,011	331,8248	-200	-0,30%	P.S.		
Cur	26,000	618.083,764	4.679.485,256	378,382	378,391	0,009	331,7054	-200	-0,30%			
Cur	27,000	618.082,884	4.679.485,731	378,379	378,388	0,009	331,3871	-200	-0,30%			
Cur	28,000	618.082,002	4.679.486,202	378,373	378,385	0,012	331,0687	-200	-0,30%			
Cur	29,000	618.081,118	4.679.486,669	378,370	378,382	0,012	330,7504	-200	-0,30%			
Cur	30,000	618.080,231	4.679.487,131	378,371	378,379	0,008	330,4321	-200	-0,30%			
Cur	31,000	618.079,342	4.679.487,589	378,347	378,376	0,029	330,1138	-200	-0,30%			
Cur	32,000	618.078,450	4.679.488,042	378,352	378,373	0,021	329,7955	-200	-0,30%			
Cur	32,861	618.077,681	4.679.488,429	378,356	378,371	0,014	329,5214	-200	-0,30%		T.E.	
Cur	33,000	618.077,557	4.679.488,491	378,357	378,370	0,013	329,4772	-200	-0,23%			
Cur	34,000	618.076,661	4.679.488,936	378,362	378,370	0,008	329,1589	-200	0,27%			
Cur	35,000	618.075,763	4.679.489,375	378,374	378,376	0,002	328,8406	-200	0,77%			
Cur	36,000	618.074,863	4.679.489,811	378,377	378,386	0,009	328,5223	-200	1,27%			
Cur	37,000	618.073,960	4.679.490,242	378,373	378,401	0,028	328,2040	-200	1,77%			
Cur	38,000	618.073,056	4.679.490,668	378,361	378,421	0,060	327,8856	-200	2,27%			
Cur	39,000	618.072,149	4.679.491,090	378,350	378,446	0,096	327,5673	-200	2,77%			
Cur	40,000	618.071,240	4.679.491,507	378,349	378,476	0,127	327,2490	-200	3,27%		V.	
Cur	41,000	618.070,330	4.679.491,920	378,348	378,512	0,164	326,9307	-200	3,77%			
Cur	42,000	618.069,417	4.679.492,329	378,346	378,552	0,206	326,6124	-200	4,27%			
Cur	43,000	618.068,502	4.679.492,732	378,344	378,597	0,253	326,2941	-200	4,77%			
Cur	44,000	618.067,585	4.679.493,131	378,341	378,647	0,306	325,9758	-200	5,27%			
Cur	45,000	618.066,666	4.679.493,526	378,339	378,702	0,363	325,6575	-200	5,77%			
Cur	46,000	618.065,745	4.679.493,916	378,336	378,762	0,426	325,3392	-200	6,27%			
Cur	47,000	618.064,822	4.679.494,301	378,369	378,828	0,459	325,0209	-200	6,77%			
Cur	47,139	618.064,694	4.679.494,354	378,378	378,837	0,459	324,9766	-200	6,84%		T.S.	
Cur	48,000	618.063,898	4.679.494,682	378,433	378,896	0,463	324,7025	-200	6,84%			
Cur	49,000	618.062,971	4.679.495,058	378,498	378,964	0,466	324,3842	-200	6,84%			
Cur	50,000	618.062,043	4.679.495,429	378,555	379,033	0,478	324,0659	-200	6,84%			
Cur	51,000	618.061,112	4.679.495,796	378,606	379,101	0,495	323,7476	-200	6,84%			
Cur	52,000	618.060,180	4.679.496,158	378,657	379,169	0,512	323,4293	-200	6,84%			
Cur	53,000	618.059,246	4.679.496,515	378,710	379,238	0,528	323,1110	-200	6,84%			
Cur	54,000	618.058,311	4.679.496,868	378,762	379,306	0,544	322,7927	-200	6,84%			
Cur	55,000	618.057,373	4.679.497,216	378,815	379,375	0,560	322,4744	-200	6,84%			
Cur	56,000	618.056,434	4.679.497,560	378,868	379,443	0,575	322,1561	-200	6,84%			
Cur	57,000	618.055,493	4.679.497,898	378,921	379,511	0,590	321,8378	-200	6,84%			
Cur	58,000	618.054,550	4.679.498,232	378,974	379,580	0,606	321,5194	-200	6,84%			
Cur	59,000	618.053,606	4.679.498,562	379,031	379,648	0,617	321,2011	-200	6,84%			
Cur	60,000	618.052,660	4.679.498,886	379,090	379,716	0,626	320,8828	-200	6,84%			
Cur	61,000	618.051,713	4.679.499,206	379,147	379,785	0,638	320,5645	-200	6,84%			
Cur	62,000	618.050,764	4.679.499,521	379,205	379,853	0,648	320,2462	-200	6,84%			
Rec	62,771	618.050,031	4.679.499,761	379,249	379,906	0,657	320,0009	0	6,84%	P.S.		
Rec	63,000	618.049,813	4.679.499,831	379,262	379,921	0,659	320,0009	0	6,84%			
Rec	64,000	618.048,862	4.679.500,140	379,320	379,990	0,670	320,0009	0	6,84%			
Rec	65,000	618.047,911	4.679.500,450	379,378	380,058	0,680	320,0009	0	6,84%			
Rec	66,000	618.046,960	4.679.500,759	379,436	380,127	0,691	320,0009	0	6,84%			
Rec	67,000	618.046,009	4.679.501,068	379,495	380,195	0,700	320,0009	0	6,84%			
Rec	67,949	618.045,106	4.679.501,361	379,550	380,260	0,710	320,0009	0	6,84%		T.E.	
Rec	68,000	618.045,058	4.679.501,377	379,553	380,263	0,710	320,0009	0	6,75%			
Rec	69,000	618.044,107	4.679.501,686	379,611	380,322	0,711	320,0009	0	5,09%			
Rec	70,000	618.043,156	4.679.501,995	379,669	380,365	0,696	320,0009	0	3,42%		V.	
Rec	71,000	618.042,205	4.679.502,304	379,727	380,391	0,664	320,0009	0	1,75%			
Rec	72,000	618.041,254	4.679.502,613	379,785	380,400	0,615	320,0009	0	0,09%			
Rec	72,051	618.041,205	4.679.502,628	379,788	380,400	0,612	320,0009	0	0,00%		T.S.	
Rec	73,000	618.040,303	4.679.502,922	379,844	380,400	0,556	320,0009	0	0,00%			
Rec	74,000	618.039,352	4.679.503,231	379,902	380,400	0,498	320,0009	0	0,00%			
Rec	75,000	618.038,401	4.679.503,540	379,960	380,400	0,440	320,0009	0	0,00%			
Rec	76,000	618.037,449	4.679.503,849	380,012	380,400	0,388	320,0009	0	0,00%			
Rec	77,000	618.036,498	4.679.504,158	380,049	380,400	0,351	320,0009	0	0,00%			
Rec	78,000	618.035,547	4.679.504,467	380,089	380,400	0,311	320,0009	0	0,00%			
Rec	79,000	618.034,596	4.679.504,776	380,130	380,400	0,270	320,0009	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	80,000	618.033,645	4.679.505,085	380,136	380,400	0,264	320,0009	0	0,00%			
Rec	81,000	618.032,694	4.679.505,394	380,143	380,400	0,257	320,0009	0	0,00%			
	81,913	618.031,826	4.679.505,676	380,149	380,400	0,251	320,0009		0,00%			

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REPLANTEO CAMINO TRAMO T11-T12 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	616.871,771	4.677.462,404	335,530	335,530	0,000	36,8388	0	-0,18%			
Rec	1,000	616.872,318	4.677.463,241	335,518	335,528	0,010	36,8388	0	-0,18%			ODT Ø300 L=11,3m
Rec	2,000	616.872,865	4.677.464,079	335,506	335,526	0,020	36,8388	0	-0,18%			
Rec	3,000	616.873,412	4.677.464,916	335,495	335,525	0,030	36,8388	0	-0,18%			
Rec	4,000	616.873,959	4.677.465,753	335,483	335,523	0,040	36,8388	0	-0,18%			
Rec	5,000	616.874,506	4.677.466,590	335,470	335,521	0,051	36,8388	0	-0,18%			
Rec	6,000	616.875,053	4.677.467,427	335,453	335,519	0,066	36,8388	0	-0,18%			
Rec	7,000	616.875,600	4.677.468,265	335,435	335,517	0,082	36,8388	0	-0,18%			
Rec	8,000	616.876,146	4.677.469,102	335,418	335,516	0,098	36,8388	0	-0,18%			
Rec	9,000	616.876,693	4.677.469,939	335,418	335,514	0,096	36,8388	0	-0,18%			
Rec	10,000	616.877,240	4.677.470,776	335,421	335,512	0,091	36,8388	0	-0,18%			
Rec	11,000	616.877,787	4.677.471,613	335,421	335,510	0,089	36,8388	0	-0,18%			
Rec	12,000	616.878,334	4.677.472,451	335,422	335,508	0,086	36,8388	0	-0,18%			
Rec	13,000	616.878,881	4.677.473,288	335,423	335,507	0,084	36,8388	0	-0,18%			
Rec	14,000	616.879,428	4.677.474,125	335,423	335,505	0,082	36,8388	0	-0,18%			
Rec	15,000	616.879,975	4.677.474,962	335,422	335,503	0,081	36,8388	0	-0,18%			
Rec	16,000	616.880,522	4.677.475,799	335,420	335,501	0,081	36,8388	0	-0,18%			
Rec	17,000	616.881,069	4.677.476,636	335,407	335,499	0,092	36,8388	0	-0,18%			
Rec	18,000	616.881,616	4.677.477,474	335,394	335,498	0,104	36,8388	0	-0,18%			
Rec	19,000	616.882,162	4.677.478,311	335,381	335,496	0,115	36,8388	0	-0,18%			
Rec	20,000	616.882,709	4.677.479,148	335,367	335,494	0,127	36,8388	0	-0,18%			
Rec	21,000	616.883,256	4.677.479,985	335,354	335,492	0,138	36,8388	0	-0,18%			
Rec	22,000	616.883,803	4.677.480,822	335,341	335,490	0,149	36,8388	0	-0,18%			
Rec	23,000	616.884,350	4.677.481,660	335,328	335,489	0,161	36,8388	0	-0,18%			
Rec	24,000	616.884,897	4.677.482,497	335,315	335,487	0,172	36,8388	0	-0,18%			
Rec	25,000	616.885,444	4.677.483,334	335,301	335,485	0,184	36,8388	0	-0,18%			
Rec	26,000	616.885,991	4.677.484,171	335,275	335,483	0,208	36,8388	0	-0,18%			
Rec	27,000	616.886,538	4.677.485,008	335,268	335,481	0,213	36,8388	0	-0,18%			
Rec	28,000	616.887,085	4.677.485,846	335,264	335,480	0,216	36,8388	0	-0,18%			
Rec	29,000	616.887,631	4.677.486,683	335,261	335,478	0,217	36,8388	0	-0,18%			
Rec	30,000	616.888,178	4.677.487,520	335,257	335,476	0,219	36,8388	0	-0,18%			
Rec	31,000	616.888,725	4.677.488,357	335,253	335,474	0,221	36,8388	0	-0,18%			
Rec	32,000	616.889,272	4.677.489,194	335,249	335,473	0,224	36,8388	0	-0,18%			
Rec	33,000	616.889,819	4.677.490,032	335,245	335,471	0,226	36,8388	0	-0,18%			
Rec	34,000	616.890,366	4.677.490,869	335,241	335,469	0,228	36,8388	0	-0,18%			
Rec	35,000	616.890,913	4.677.491,706	335,241	335,467	0,226	36,8388	0	-0,18%			
Rec	36,000	616.891,460	4.677.492,543	335,240	335,465	0,225	36,8388	0	-0,18%			
Rec	37,000	616.892,007	4.677.493,380	335,240	335,464	0,224	36,8388	0	-0,18%			
Rec	38,000	616.892,554	4.677.494,218	335,240	335,462	0,222	36,8388	0	-0,18%			
Rec	39,000	616.893,101	4.677.495,055	335,239	335,460	0,221	36,8388	0	-0,18%			
Rec	40,000	616.893,647	4.677.495,892	335,239	335,458	0,219	36,8388	0	-0,18%			
Rec	41,000	616.894,194	4.677.496,729	335,239	335,456	0,217	36,8388	0	-0,18%			
Rec	42,000	616.894,741	4.677.497,566	335,239	335,455	0,216	36,8388	0	-0,18%			
Rec	43,000	616.895,288	4.677.498,404	335,239	335,453	0,214	36,8388	0	-0,18%			
Rec	44,000	616.895,835	4.677.499,241	335,241	335,451	0,210	36,8388	0	-0,18%			
Rec	45,000	616.896,382	4.677.500,078	335,243	335,449	0,206	36,8388	0	-0,18%			
Rec	46,000	616.896,929	4.677.500,915	335,246	335,447	0,201	36,8388	0	-0,18%			
Rec	47,000	616.897,476	4.677.501,752	335,248	335,446	0,198	36,8388	0	-0,18%			
Rec	48,000	616.898,023	4.677.502,590	335,250	335,444	0,194	36,8388	0	-0,18%			
Rec	49,000	616.898,570	4.677.503,427	335,252	335,442	0,190	36,8388	0	-0,18%			
Rec	50,000	616.899,116	4.677.504,264	335,255	335,440	0,185	36,8388	0	-0,18%			
Rec	51,000	616.899,663	4.677.505,101	335,257	335,438	0,181	36,8388	0	-0,18%			
Rec	52,000	616.900,210	4.677.505,938	335,259	335,437	0,178	36,8388	0	-0,18%			
Rec	53,000	616.900,757	4.677.506,775	335,258	335,435	0,177	36,8388	0	-0,18%			
Rec	54,000	616.901,304	4.677.507,613	335,257	335,433	0,176	36,8388	0	-0,18%			
Rec	55,000	616.901,851	4.677.508,450	335,256	335,431	0,175	36,8388	0	-0,18%			
Rec	56,000	616.902,398	4.677.509,287	335,255	335,429	0,174	36,8388	0	-0,18%			
Rec	57,000	616.902,945	4.677.510,124	335,254	335,428	0,174	36,8388	0	-0,18%			
Rec	58,000	616.903,492	4.677.510,961	335,253	335,426	0,173	36,8388	0	-0,18%			
Rec	59,000	616.904,039	4.677.511,799	335,252	335,424	0,172	36,8388	0	-0,18%			
Rec	60,000	616.904,586	4.677.512,636	335,251	335,422	0,171	36,8388	0	-0,18%			
Rec	61,000	616.905,132	4.677.513,473	335,250	335,420	0,170	36,8388	0	-0,18%			
Rec	62,000	616.905,679	4.677.514,310	335,249	335,419	0,170	36,8388	0	-0,18%			
Rec	63,000	616.906,226	4.677.515,147	335,248	335,417	0,169	36,8388	0	-0,18%			
Rec	64,000	616.906,773	4.677.515,985	335,247	335,415	0,168	36,8388	0	-0,18%			
Rec	65,000	616.907,320	4.677.516,822	335,246	335,413	0,167	36,8388	0	-0,18%			
Rec	66,000	616.907,867	4.677.517,659	335,245	335,411	0,166	36,8388	0	-0,18%			
Rec	67,000	616.908,414	4.677.518,496	335,244	335,410	0,166	36,8388	0	-0,18%			
Rec	68,000	616.908,961	4.677.519,333	335,243	335,408	0,165	36,8388	0	-0,18%			
Rec	69,000	616.909,508	4.677.520,171	335,242	335,406	0,164	36,8388	0	-0,18%			
Rec	70,000	616.910,055	4.677.521,008	335,241	335,404	0,163	36,8388	0	-0,18%			
Rec	71,000	616.910,601	4.677.521,845	335,240	335,402	0,162	36,8388	0	-0,18%			
Rec	72,000	616.911,148	4.677.522,682	335,239	335,401	0,162	36,8388	0	-0,18%			
Rec	73,000	616.911,695	4.677.523,519	335,238	335,399	0,161	36,8388	0	-0,18%			
Rec	74,000	616.912,242	4.677.524,357	335,237	335,397	0,160	36,8388	0	-0,18%			
Rec	75,000	616.912,789	4.677.525,194	335,236	335,395	0,159	36,8388	0	-0,18%			
Rec	76,000	616.913,336	4.677.526,031	335,235	335,393	0,158	36,8388	0	-0,18%			
Rec	77,000	616.913,883	4.677.526,868	335,234	335,392	0,158	36,8388	0	-0,18%			
Rec	78,000	616.914,430	4.677.527,705	335,233	335,390	0,157	36,8388	0	-0,18%			
Rec	79,000	616.914,977	4.677.528,543	335,233	335,388	0,155	36,8388	0	-0,18%			
Rec	80,000	616.915,524	4.677.529,380	335,232	335,386	0,154	36,8388	0	-0,18%			
Rec	81,000	616.916,071	4.677.530,217	335,232	335,384	0,152	36,8388	0	-0,18%			
Rec	82,000	616.916,617	4.677.531,054	335,231	335,383	0,152	36,8388	0	-0,18%			
Rec	83,000	616.917,164	4.677.531,891	335,230	335,381	0,151	36,8388	0	-0,18%			
Rec	84,000	616.917,711	4.677.532,729	335,230	335,379	0,149	36,8388	0	-0,18%			
Rec	85,000	616.918,258	4.677.533,566	335,229	335,377	0,148	36,8388	0	-0,18%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	86,000	616.918,805	4.677.534,403	335,229	335,375	0,146	36,8388	0	-0,18%			
Rec	87,000	616.919,352	4.677.535,240	335,228	335,374	0,146	36,8388	0	-0,18%			
Rec	88,000	616.919,899	4.677.536,077	335,227	335,372	0,145	36,8388	0	-0,18%			
Rec	89,000	616.920,446	4.677.536,914	335,227	335,370	0,143	36,8388	0	-0,18%			
Rec	90,000	616.920,993	4.677.537,752	335,226	335,368	0,142	36,8388	0	-0,18%			
Rec	91,000	616.921,540	4.677.538,589	335,226	335,367	0,141	36,8388	0	-0,18%			
Rec	92,000	616.922,086	4.677.539,426	335,225	335,365	0,140	36,8388	0	-0,18%			
Rec	93,000	616.922,633	4.677.540,263	335,224	335,363	0,139	36,8388	0	-0,18%			
Rec	94,000	616.923,180	4.677.541,100	335,224	335,361	0,137	36,8388	0	-0,18%			
Rec	95,000	616.923,727	4.677.541,938	335,216	335,359	0,143	36,8388	0	-0,18%			
Rec	96,000	616.924,274	4.677.542,775	335,204	335,358	0,154	36,8388	0	-0,18%			
Rec	97,000	616.924,821	4.677.543,612	335,208	335,356	0,148	36,8388	0	-0,18%			
Rec	98,000	616.925,368	4.677.544,449	335,216	335,354	0,138	36,8388	0	-0,18%			
Rec	99,000	616.925,915	4.677.545,286	335,224	335,352	0,128	36,8388	0	-0,18%			
Rec	100,000	616.926,462	4.677.546,124	335,230	335,350	0,120	36,8388	0	-0,18%			
Rec	101,000	616.927,009	4.677.546,961	335,230	335,349	0,119	36,8388	0	-0,18%			
Rec	102,000	616.927,556	4.677.547,798	335,230	335,347	0,117	36,8388	0	-0,18%			
Rec	103,000	616.928,102	4.677.548,635	335,230	335,345	0,115	36,8388	0	-0,18%			
Rec	104,000	616.928,649	4.677.549,472	335,230	335,343	0,113	36,8388	0	-0,18%			
Rec	105,000	616.929,196	4.677.550,310	335,230	335,341	0,111	36,8388	0	-0,18%			
Rec	106,000	616.929,743	4.677.551,147	335,230	335,340	0,110	36,8388	0	-0,18%			
Rec	107,000	616.930,290	4.677.551,984	335,230	335,338	0,108	36,8388	0	-0,18%			
Rec	108,000	616.930,837	4.677.552,821	335,230	335,336	0,106	36,8388	0	-0,18%			
Rec	109,000	616.931,384	4.677.553,658	335,230	335,334	0,104	36,8388	0	-0,18%			
Rec	110,000	616.931,931	4.677.554,496	335,230	335,332	0,102	36,8388	0	-0,18%			
Rec	111,000	616.932,478	4.677.555,333	335,230	335,331	0,101	36,8388	0	-0,18%			
Rec	112,000	616.933,025	4.677.556,170	335,230	335,329	0,099	36,8388	0	-0,18%			
Rec	113,000	616.933,572	4.677.557,007	335,229	335,327	0,098	36,8388	0	-0,18%			
Rec	114,000	616.934,118	4.677.557,844	335,229	335,325	0,096	36,8388	0	-0,18%			
Rec	115,000	616.934,665	4.677.558,682	335,229	335,323	0,094	36,8388	0	-0,18%			
Rec	116,000	616.935,212	4.677.559,519	335,229	335,322	0,093	36,8388	0	-0,18%			
Rec	117,000	616.935,759	4.677.560,356	335,227	335,320	0,093	36,8388	0	-0,18%			
Rec	118,000	616.936,306	4.677.561,193	335,225	335,318	0,093	36,8388	0	-0,18%			
Rec	119,000	616.936,853	4.677.562,030	335,222	335,316	0,094	36,8388	0	-0,18%			
Rec	120,000	616.937,400	4.677.562,868	335,220	335,314	0,094	36,8388	0	-0,18%			
Rec	121,000	616.937,947	4.677.563,705	335,218	335,313	0,095	36,8388	0	-0,18%			
Rec	122,000	616.938,494	4.677.564,542	335,216	335,311	0,095	36,8388	0	-0,18%			
Rec	123,000	616.939,041	4.677.565,379	335,213	335,309	0,096	36,8388	0	-0,18%			
Rec	124,000	616.939,587	4.677.566,216	335,211	335,307	0,096	36,8388	0	-0,18%			
Rec	125,000	616.940,134	4.677.567,053	335,209	335,305	0,096	36,8388	0	-0,18%			
Rec	126,000	616.940,681	4.677.567,891	335,206	335,304	0,098	36,8388	0	-0,18%			
Rec	127,000	616.941,228	4.677.568,728	335,204	335,302	0,098	36,8388	0	-0,18%			
Rec	128,000	616.941,775	4.677.569,565	335,202	335,300	0,098	36,8388	0	-0,18%			
Rec	129,000	616.942,322	4.677.570,402	335,199	335,298	0,099	36,8388	0	-0,18%			
Rec	130,000	616.942,869	4.677.571,239	335,197	335,296	0,099	36,8388	0	-0,18%			
Rec	131,000	616.943,416	4.677.572,077	335,195	335,295	0,100	36,8388	0	-0,18%			
Rec	132,000	616.943,963	4.677.572,914	335,192	335,293	0,101	36,8388	0	-0,18%			
Rec	133,000	616.944,510	4.677.573,751	335,190	335,291	0,101	36,8388	0	-0,18%			
Rec	134,000	616.945,057	4.677.574,588	335,188	335,289	0,101	36,8388	0	-0,18%			
Rec	135,000	616.945,603	4.677.575,425	335,185	335,287	0,102	36,8388	0	-0,18%			
Rec	136,000	616.946,150	4.677.576,263	335,183	335,286	0,103	36,8388	0	-0,18%			
Rec	137,000	616.946,697	4.677.577,100	335,181	335,284	0,103	36,8388	0	-0,18%			
Rec	138,000	616.947,244	4.677.577,937	335,178	335,282	0,104	36,8388	0	-0,18%			
Rec	139,000	616.947,791	4.677.578,774	335,176	335,280	0,104	36,8388	0	-0,18%			
Rec	140,000	616.948,338	4.677.579,611	335,174	335,278	0,104	36,8388	0	-0,18%			
Rec	141,000	616.948,885	4.677.580,449	335,172	335,277	0,105	36,8388	0	-0,18%			
Rec	142,000	616.949,432	4.677.581,286	335,169	335,275	0,106	36,8388	0	-0,18%			
Rec	143,000	616.949,979	4.677.582,123	335,167	335,273	0,106	36,8388	0	-0,18%			
Rec	144,000	616.950,526	4.677.582,960	335,165	335,271	0,106	36,8388	0	-0,18%			
Rec	145,000	616.951,072	4.677.583,797	335,162	335,269	0,107	36,8388	0	-0,18%			
Rec	146,000	616.951,619	4.677.584,635	335,160	335,268	0,108	36,8388	0	-0,18%			
Rec	147,000	616.952,166	4.677.585,472	335,157	335,266	0,109	36,8388	0	-0,18%			
Rec	148,000	616.952,713	4.677.586,309	335,153	335,264	0,111	36,8388	0	-0,18%			
Rec	149,000	616.953,260	4.677.587,146	335,148	335,262	0,114	36,8388	0	-0,18%			
Rec	150,000	616.953,807	4.677.587,983	335,144	335,261	0,117	36,8388	0	-0,18%			
Rec	151,000	616.954,354	4.677.588,821	335,139	335,259	0,120	36,8388	0	-0,18%			
Rec	152,000	616.954,901	4.677.589,658	335,135	335,257	0,122	36,8388	0	-0,18%			
Rec	153,000	616.955,448	4.677.590,495	335,130	335,255	0,125	36,8388	0	-0,18%			
Rec	154,000	616.955,995	4.677.591,332	335,125	335,253	0,128	36,8388	0	-0,18%			
Rec	155,000	616.956,542	4.677.592,169	335,121	335,252	0,131	36,8388	0	-0,18%			
Rec	156,000	616.957,088	4.677.593,007	335,116	335,250	0,134	36,8388	0	-0,18%			
Rec	157,000	616.957,635	4.677.593,844	335,112	335,248	0,136	36,8388	0	-0,18%			
Rec	158,000	616.958,182	4.677.594,681	335,107	335,246	0,139	36,8388	0	-0,18%			
Rec	159,000	616.958,729	4.677.595,518	335,103	335,244	0,141	36,8388	0	-0,18%			
Rec	160,000	616.959,276	4.677.596,355	335,098	335,243	0,145	36,8388	0	-0,18%			
Rec	161,000	616.959,823	4.677.597,192	335,094	335,241	0,147	36,8388	0	-0,18%			
Rec	162,000	616.960,370	4.677.598,030	335,089	335,239	0,150	36,8388	0	-0,18%			
Rec	163,000	616.960,917	4.677.598,867	335,085	335,237	0,152	36,8388	0	-0,18%			
Rec	164,000	616.961,464	4.677.599,704	335,080	335,235	0,155	36,8388	0	-0,18%			
Rec	165,000	616.962,011	4.677.600,541	335,075	335,234	0,159	36,8388	0	-0,18%			
Rec	166,000	616.962,557	4.677.601,378	335,071	335,232	0,161	36,8388	0	-0,18%			
Rec	167,000	616.963,104	4.677.602,216	335,066	335,230	0,164	36,8388	0	-0,18%			
Rec	168,000	616.963,651	4.677.603,053	335,062	335,228	0,166	36,8388	0	-0,18%			
Rec	169,000	616.964,198	4.677.603,890	335,057	335,226	0,169	36,8388	0	-0,18%			
Rec	170,000	616.964,745	4.677.604,727	335,053	335,225	0,172	36,8388	0	-0,18%			
Rec	171,000	616.965,292	4.677.605,564	335,048	335,223	0,175	36,8388	0	-0,18%			
Rec	172,000	616.965,839	4.677.606,402	335,044	335,221	0,177	36,8388	0	-0,18%			

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REPLANTEO CAMINO TRAMO T11-T12 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	173,000	616.966,386	4.677.607,239	335,039	335,219	0,180	36,8388	0	-0,18%			
Rec	174,000	616.966,933	4.677.608,076	335,034	335,217	0,183	36,8388	0	-0,18%			
Rec	175,000	616.967,480	4.677.608,913	335,030	335,216	0,186	36,8388	0	-0,18%			
Rec	176,000	616.968,027	4.677.609,750	335,025	335,214	0,189	36,8388	0	-0,18%			
Rec	177,000	616.968,573	4.677.610,588	335,021	335,212	0,191	36,8388	0	-0,18%			
Rec	178,000	616.969,120	4.677.611,425	335,016	335,210	0,194	36,8388	0	-0,18%			
Rec	179,000	616.969,667	4.677.612,262	335,012	335,208	0,196	36,8388	0	-0,18%			
Rec	180,000	616.970,214	4.677.613,099	335,007	335,207	0,200	36,8388	0	-0,18%			
Rec	181,000	616.970,761	4.677.613,936	335,003	335,205	0,202	36,8388	0	-0,18%			
Rec	182,000	616.971,308	4.677.614,774	335,000	335,203	0,203	36,8388	0	-0,18%			
Rec	183,000	616.971,855	4.677.615,611	334,999	335,201	0,202	36,8388	0	-0,18%			
Rec	184,000	616.972,402	4.677.616,448	334,998	335,199	0,201	36,8388	0	-0,18%			
Rec	185,000	616.972,949	4.677.617,285	334,998	335,198	0,200	36,8388	0	-0,18%			
Rec	186,000	616.973,496	4.677.618,122	334,997	335,196	0,199	36,8388	0	-0,18%			
Rec	187,000	616.974,042	4.677.618,960	334,996	335,194	0,198	36,8388	0	-0,18%			
Rec	188,000	616.974,589	4.677.619,797	334,996	335,192	0,196	36,8388	0	-0,18%			
Rec	189,000	616.975,136	4.677.620,634	334,995	335,190	0,195	36,8388	0	-0,18%			
Rec	190,000	616.975,683	4.677.621,471	334,994	335,189	0,195	36,8388	0	-0,18%			
Rec	191,000	616.976,230	4.677.622,308	334,994	335,187	0,193	36,8388	0	-0,18%			
Rec	192,000	616.976,777	4.677.623,146	334,993	335,185	0,192	36,8388	0	-0,18%			
Rec	193,000	616.977,324	4.677.623,983	334,992	335,183	0,191	36,8388	0	-0,18%			
Rec	194,000	616.977,871	4.677.624,820	334,992	335,181	0,189	36,8388	0	-0,18%			
Rec	195,000	616.978,418	4.677.625,657	334,991	335,180	0,189	36,8388	0	-0,18%			
Rec	196,000	616.978,965	4.677.626,494	334,990	335,178	0,188	36,8388	0	-0,18%			
Rec	197,000	616.979,512	4.677.627,332	334,990	335,176	0,186	36,8388	0	-0,18%			
Rec	198,000	616.980,058	4.677.628,169	334,989	335,174	0,185	36,8388	0	-0,18%			
Rec	199,000	616.980,605	4.677.629,006	334,988	335,172	0,184	36,8388	0	-0,18%			
Rec	200,000	616.981,152	4.677.629,843	334,988	335,171	0,183	36,8388	0	-0,18%			
Rec	201,000	616.981,699	4.677.630,680	334,987	335,169	0,182	36,8388	0	-0,18%			
Rec	202,000	616.982,246	4.677.631,517	334,986	335,167	0,181	36,8388	0	-0,18%			
Rec	203,000	616.982,793	4.677.632,355	334,986	335,165	0,179	36,8388	0	-0,18%			
Rec	204,000	616.983,340	4.677.633,192	334,985	335,163	0,178	36,8388	0	-0,18%			
Rec	205,000	616.983,887	4.677.634,029	334,984	335,162	0,178	36,8388	0	-0,18%			
Rec	206,000	616.984,434	4.677.634,866	334,984	335,160	0,176	36,8388	0	-0,18%			
Rec	207,000	616.984,981	4.677.635,703	334,983	335,158	0,175	36,8388	0	-0,18%			
Rec	208,000	616.985,527	4.677.636,541	334,982	335,156	0,174	36,8388	0	-0,18%			
Rec	209,000	616.986,074	4.677.637,378	334,980	335,155	0,175	36,8388	0	-0,18%			
Rec	210,000	616.986,621	4.677.638,215	334,978	335,153	0,175	36,8388	0	-0,18%			
Rec	211,000	616.987,168	4.677.639,052	334,977	335,151	0,174	36,8388	0	-0,18%			
Rec	212,000	616.987,715	4.677.639,889	334,975	335,149	0,174	36,8388	0	-0,18%			
Rec	213,000	616.988,262	4.677.640,727	334,973	335,147	0,174	36,8388	0	-0,18%			
Rec	214,000	616.988,809	4.677.641,564	334,971	335,146	0,175	36,8388	0	-0,18%			
Rec	215,000	616.989,356	4.677.642,401	334,970	335,144	0,174	36,8388	0	-0,18%			
Rec	216,000	616.989,903	4.677.643,238	334,970	335,142	0,172	36,8388	0	-0,18%			
Rec	217,000	616.990,450	4.677.644,075	334,972	335,140	0,168	36,8388	0	-0,18%			
Rec	218,000	616.990,997	4.677.644,913	334,974	335,138	0,164	36,8388	0	-0,18%			
Rec	219,000	616.991,543	4.677.645,750	334,976	335,137	0,161	36,8388	0	-0,18%			
Rec	220,000	616.992,090	4.677.646,587	334,978	335,135	0,157	36,8388	0	-0,18%			
Rec	221,000	616.992,637	4.677.647,424	334,980	335,133	0,153	36,8388	0	-0,18%			
Rec	222,000	616.993,184	4.677.648,261	334,982	335,131	0,149	36,8388	0	-0,18%			
Rec	223,000	616.993,731	4.677.649,099	334,982	335,129	0,147	36,8388	0	-0,18%			
Rec	224,000	616.994,278	4.677.649,936	334,983	335,128	0,145	36,8388	0	-0,18%			
Rec	225,000	616.994,825	4.677.650,773	334,983	335,126	0,143	36,8388	0	-0,18%			
Rec	226,000	616.995,372	4.677.651,610	334,983	335,124	0,141	36,8388	0	-0,18%			
Rec	227,000	616.995,919	4.677.652,447	334,984	335,122	0,138	36,8388	0	-0,18%			
Rec	228,000	616.996,466	4.677.653,285	334,984	335,120	0,136	36,8388	0	-0,18%			
Rec	229,000	616.997,013	4.677.654,122	334,985	335,119	0,134	36,8388	0	-0,18%			
Rec	230,000	616.997,559	4.677.654,959	334,985	335,117	0,132	36,8388	0	-0,18%			
Rec	231,000	616.998,106	4.677.655,796	334,985	335,115	0,130	36,8388	0	-0,18%			
Rec	232,000	616.998,653	4.677.656,633	334,986	335,113	0,127	36,8388	0	-0,18%			
Rec	233,000	616.999,200	4.677.657,471	334,986	335,111	0,125	36,8388	0	-0,18%			
Rec	234,000	616.999,747	4.677.658,308	334,985	335,110	0,125	36,8388	0	-0,18%			
Rec	235,000	617.000,294	4.677.659,145	334,985	335,108	0,123	36,8388	0	-0,18%			
Rec	236,000	617.000,841	4.677.659,982	334,984	335,106	0,122	36,8388	0	-0,18%			
Rec	237,000	617.001,388	4.677.660,819	334,984	335,104	0,120	36,8388	0	-0,18%			
Rec	238,000	617.001,935	4.677.661,656	334,983	335,102	0,119	36,8388	0	-0,18%			
Rec	239,000	617.002,482	4.677.662,494	334,983	335,101	0,118	36,8388	0	-0,18%			
Rec	240,000	617.003,028	4.677.663,331	334,982	335,099	0,117	36,8388	0	-0,18%			
Rec	241,000	617.003,575	4.677.664,168	334,982	335,097	0,115	36,8388	0	-0,18%			
Rec	242,000	617.004,122	4.677.665,005	334,981	335,095	0,114	36,8388	0	-0,18%			
Rec	243,000	617.004,669	4.677.665,842	334,980	335,093	0,113	36,8388	0	-0,18%			
Rec	244,000	617.005,216	4.677.666,680	334,980	335,092	0,112	36,8388	0	-0,18%			
Rec	245,000	617.005,763	4.677.667,517	334,979	335,090	0,111	36,8388	0	-0,18%			
Rec	246,000	617.006,310	4.677.668,354	334,979	335,088	0,109	36,8388	0	-0,18%			
Rec	247,000	617.006,857	4.677.669,191	334,978	335,086	0,108	36,8388	0	-0,18%			
Rec	248,000	617.007,404	4.677.670,028	334,978	335,084	0,106	36,8388	0	-0,18%			
Rec	249,000	617.007,951	4.677.670,866	334,977	335,083	0,106	36,8388	0	-0,18%			
Rec	250,000	617.008,498	4.677.671,703	334,977	335,081	0,104	36,8388	0	-0,18%			
Rec	251,000	617.009,044	4.677.672,540	334,976	335,079	0,103	36,8388	0	-0,18%			
Rec	252,000	617.009,591	4.677.673,377	334,975	335,077	0,102	36,8388	0	-0,18%			
Rec	253,000	617.010,138	4.677.674,214	334,975	335,075	0,100	36,8388	0	-0,18%			
Rec	254,000	617.010,685	4.677.675,052	334,974	335,074	0,100	36,8388	0	-0,18%			
Rec	255,000	617.011,232	4.677.675,889	334,974	335,072	0,098	36,8388	0	-0,18%			
Rec	256,000	617.011,779	4.677.676,726	334,973	335,070	0,097	36,8388	0	-0,18%			
Rec	257,000	617.012,326	4.677.677,563	334,973	335,068	0,095	36,8388	0	-0,18%			
Rec	258,000	617.012,873	4.677.678,400	334,972	335,066	0,094	36,8388	0	-0,18%			
Rec	259,000	617.013,420	4.677.679,238	334,972	335,065	0,093	36,8388	0	-0,18%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	260,000	617.013,967	4.677.680,075	334,971	335,063	0,092	36,8388	0	-0,18%			
Rec	261,000	617.014,513	4.677.680,912	334,973	335,061	0,088	36,8388	0	-0,18%			
Rec	262,000	617.015,060	4.677.681,749	334,977	335,059	0,082	36,8388	0	-0,18%			
Rec	263,000	617.015,607	4.677.682,586	334,980	335,057	0,077	36,8388	0	-0,18%			
Rec	264,000	617.016,154	4.677.683,424	334,984	335,056	0,072	36,8388	0	-0,18%			
Rec	265,000	617.016,701	4.677.684,261	334,987	335,054	0,067	36,8388	0	-0,18%			
Rec	266,000	617.017,248	4.677.685,098	334,990	335,052	0,062	36,8388	0	-0,18%			
Rec	267,000	617.017,795	4.677.685,935	334,993	335,050	0,057	36,8388	0	-0,18%			
Rec	268,000	617.018,342	4.677.686,772	334,996	335,049	0,053	36,8388	0	-0,18%			
Rec	269,000	617.018,889	4.677.687,610	335,000	335,047	0,047	36,8388	0	-0,18%			
Rec	270,000	617.019,436	4.677.688,447	335,009	335,045	0,036	36,8388	0	-0,18%			
Rec	271,000	617.019,983	4.677.689,284	335,018	335,043	0,025	36,8388	0	-0,18%			
Rec	272,000	617.020,529	4.677.690,121	335,027	335,041	0,014	36,8388	0	-0,18%			
Rec	273,000	617.021,076	4.677.690,958	335,035	335,040	0,005	36,8388	0	-0,18%			
Rec	274,000	617.021,623	4.677.691,795	335,042	335,038	-0,004	36,8388	0	-0,18%			
Rec	275,000	617.022,170	4.677.692,633	335,049	335,036	-0,013	36,8388	0	-0,18%			
Rec	276,000	617.022,717	4.677.693,470	335,055	335,034	-0,021	36,8388	0	-0,18%			
Rec	277,000	617.023,264	4.677.694,307	335,061	335,032	-0,029	36,8388	0	-0,18%			
Rec	278,000	617.023,811	4.677.695,144	335,067	335,031	-0,036	36,8388	0	-0,18%			
Rec	279,000	617.024,358	4.677.695,981	335,070	335,029	-0,041	36,8388	0	-0,18%			
Rec	280,000	617.024,905	4.677.696,819	335,073	335,027	-0,046	36,8388	0	-0,18%			
Rec	281,000	617.025,452	4.677.697,656	335,075	335,025	-0,050	36,8388	0	-0,18%			
Rec	282,000	617.025,998	4.677.698,493	335,076	335,023	-0,053	36,8388	0	-0,18%			
Rec	283,000	617.026,545	4.677.699,330	335,073	335,022	-0,051	36,8388	0	-0,18%			
Rec	284,000	617.027,092	4.677.700,167	335,067	335,020	-0,047	36,8388	0	-0,18%			
Rec	285,000	617.027,639	4.677.701,005	335,061	335,018	-0,043	36,8388	0	-0,18%			
Rec	286,000	617.028,186	4.677.701,842	335,054	335,016	-0,038	36,8388	0	-0,18%			
Rec	287,000	617.028,733	4.677.702,679	335,047	335,014	-0,033	36,8388	0	-0,18%			
Rec	288,000	617.029,280	4.677.703,516	335,038	335,013	-0,025	36,8388	0	-0,18%			
Rec	289,000	617.029,827	4.677.704,353	335,027	335,011	-0,016	36,8388	0	-0,18%			
Rec	290,000	617.030,374	4.677.705,191	335,017	335,009	-0,008	36,8388	0	-0,18%			
Rec	290,508	617.030,652	4.677.705,616	335,011	335,008	-0,003	36,8388	0	-0,18%		T.E.	
Rec	291,000	617.030,921	4.677.706,028	335,006	335,007	0,001	36,8388	0	-0,17%			
Rec	292,000	617.031,468	4.677.706,865	334,989	335,006	0,017	36,8388	0	-0,15%			
Rec	293,000	617.032,014	4.677.707,702	334,966	335,004	0,038	36,8388	0	-0,13%			
Rec	294,000	617.032,561	4.677.708,539	334,953	335,003	0,050	36,8388	0	-0,11%			
Rec	295,000	617.033,108	4.677.709,377	334,944	335,002	0,058	36,8388	0	-0,09%		V.	
Rec	296,000	617.033,655	4.677.710,214	334,930	335,001	0,071	36,8388	0	-0,07%			
Rec	297,000	617.034,202	4.677.711,051	334,914	335,001	0,087	36,8388	0	-0,05%			
Rec	298,000	617.034,749	4.677.711,888	334,898	335,000	0,102	36,8388	0	-0,03%			
Rec	299,000	617.035,296	4.677.712,725	334,883	335,000	0,117	36,8388	0	-0,01%			
Rec	299,492	617.035,565	4.677.713,137	334,875	335,000	0,125	36,8388	0	0,00%		T.S.	
Rec	300,000	617.035,843	4.677.713,563	334,867	335,000	0,133	36,8388	0	0,00%			
Rec	301,000	617.036,390	4.677.714,400	334,850	335,000	0,150	36,8388	0	0,00%			
Rec	302,000	617.036,937	4.677.715,237	334,828	335,000	0,172	36,8388	0	0,00%			
Rec	303,000	617.037,483	4.677.716,074	334,812	335,000	0,188	36,8388	0	0,00%			
Rec	304,000	617.038,030	4.677.716,911	334,795	335,000	0,205	36,8388	0	0,00%			
Rec	305,000	617.038,577	4.677.717,749	334,778	335,000	0,222	36,8388	0	0,00%			
Rec	306,000	617.039,124	4.677.718,586	334,765	335,000	0,235	36,8388	0	0,00%			
Rec	307,000	617.039,671	4.677.719,423	334,757	335,000	0,243	36,8388	0	0,00%			
Rec	308,000	617.040,218	4.677.720,260	334,749	335,000	0,251	36,8388	0	0,00%			
Rec	309,000	617.040,765	4.677.721,097	334,741	335,000	0,259	36,8388	0	0,00%			
Rec	309,802	617.041,204	4.677.721,769	334,734	335,000	0,266	36,8388		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	616.719,033	4.677.231,795	336,986	336,986	0,000	236,8388	0	8,27%		T.E.	
Rec	0,809	616.718,591	4.677.231,118	336,999	337,053	0,054	236,8388	0	8,27%			
Rec	1,000	616.718,486	4.677.230,958	337,002	337,068	0,066	236,8388	0	7,79%			
Rec	2,000	616.717,939	4.677.230,121	337,001	337,134	0,133	236,8388	0	5,29%		V.	
Rec	3,000	616.717,333	4.677.229,283	336,734	337,174	0,440	236,8388	0	2,79%			ODT ø500 L=9,0m
Rec	4,000	616.716,846	4.677.228,446	336,803	337,189	0,386	236,8388	0	0,29%			
Rec	5,000	616.716,299	4.677.227,609	336,866	337,180	0,314	236,8388	0	-2,21%		T.S.	
Rec	5,191	616.716,194	4.677.227,449	336,865	337,175	0,310	236,8388	0	-2,69%			
Rec	6,000	616.715,752	4.677.226,772	336,860	337,153	0,293	236,8388	0	-2,69%		T.E.	
Rec	6,027	616.715,737	4.677.226,749	336,860	337,153	0,293	236,8388	0	-2,69%			
Rec	7,000	616.715,205	4.677.225,935	336,843	337,128	0,285	236,8388	0	-2,30%			
Rec	8,000	616.714,658	4.677.225,097	336,838	337,107	0,269	236,8388	0	-1,90%			
Rec	9,000	616.714,111	4.677.224,260	336,842	337,091	0,249	236,8388	0	-1,50%		V.	
Rec	10,000	616.713,564	4.677.223,423	336,852	337,078	0,226	236,8388	0	-1,10%			
Rec	11,000	616.713,017	4.677.222,586	336,865	337,069	0,204	236,8388	0	-0,70%			
Rec	12,000	616.712,470	4.677.221,749	336,878	337,064	0,186	236,8388	0	-0,30%			
Rec	13,000	616.711,923	4.677.220,911	336,892	337,063	0,171	236,8388	0	0,10%		T.S.	
Rec	13,973	616.711,391	4.677.220,097	336,908	337,066	0,158	236,8388	0	0,49%			
Rec	14,000	616.711,377	4.677.220,074	336,908	337,066	0,158	236,8388	0	0,49%			
Rec	15,000	616.710,830	4.677.219,237	336,925	337,071	0,146	236,8388	0	0,49%			
Rec	16,000	616.710,283	4.677.218,400	336,942	337,076	0,134	236,8388	0	0,49%			
Rec	17,000	616.709,736	4.677.217,563	336,960	337,080	0,120	236,8388	0	0,49%			
Rec	18,000	616.709,189	4.677.216,725	336,978	337,085	0,107	236,8388	0	0,49%			
Rec	19,000	616.708,642	4.677.215,888	336,997	337,090	0,093	236,8388	0	0,49%			
Rec	20,000	616.708,095	4.677.215,051	336,986	337,095	0,109	236,8388	0	0,49%			
Rec	21,000	616.707,548	4.677.214,214	336,971	337,100	0,129	236,8388	0	0,49%			
Rec	22,000	616.707,001	4.677.213,377	336,967	337,105	0,138	236,8388	0	0,49%			
Rec	23,000	616.706,454	4.677.212,539	336,966	337,110	0,144	236,8388	0	0,49%			
Rec	24,000	616.705,908	4.677.211,702	336,962	337,115	0,153	236,8388	0	0,49%			
Rec	25,000	616.705,361	4.677.210,865	336,957	337,120	0,163	236,8388	0	0,49%			
Rec	26,000	616.704,814	4.677.210,028	336,953	337,125	0,172	236,8388	0	0,49%			
Rec	27,000	616.704,267	4.677.209,191	336,951	337,130	0,179	236,8388	0	0,49%			
Rec	28,000	616.703,720	4.677.208,353	336,951	337,135	0,184	236,8388	0	0,49%			
Rec	29,000	616.703,173	4.677.207,516	336,950	337,140	0,190	236,8388	0	0,49%			
Rec	30,000	616.702,626	4.677.206,679	336,950	337,144	0,194	236,8388	0	0,49%			
Rec	31,000	616.702,079	4.677.205,842	336,949	337,149	0,200	236,8388	0	0,49%			
Rec	32,000	616.701,532	4.677.205,005	336,949	337,154	0,205	236,8388	0	0,49%			
Rec	33,000	616.700,985	4.677.204,167	336,949	337,159	0,210	236,8388	0	0,49%			
Rec	34,000	616.700,438	4.677.203,330	336,951	337,164	0,213	236,8388	0	0,49%			
Rec	35,000	616.699,892	4.677.202,493	336,953	337,169	0,216	236,8388	0	0,49%			
Rec	36,000	616.699,345	4.677.201,656	336,955	337,174	0,219	236,8388	0	0,49%			
Rec	37,000	616.698,798	4.677.200,819	336,958	337,179	0,221	236,8388	0	0,49%			
Rec	38,000	616.698,251	4.677.199,982	336,962	337,184	0,222	236,8388	0	0,49%			
Rec	39,000	616.697,704	4.677.199,144	336,970	337,189	0,219	236,8388	0	0,49%			
Rec	40,000	616.697,157	4.677.198,307	336,977	337,194	0,217	236,8388	0	0,49%			
Rec	41,000	616.696,610	4.677.197,470	336,983	337,199	0,216	236,8388	0	0,49%			
Rec	42,000	616.696,063	4.677.196,633	336,987	337,204	0,217	236,8388	0	0,49%			
Rec	43,000	616.695,516	4.677.195,796	336,989	337,208	0,219	236,8388	0	0,49%			
Rec	44,000	616.694,969	4.677.194,958	336,992	337,213	0,221	236,8388	0	0,49%			
Rec	45,000	616.694,423	4.677.194,121	336,994	337,218	0,224	236,8388	0	0,49%			
Rec	46,000	616.693,876	4.677.193,284	336,996	337,223	0,227	236,8388	0	0,49%			
Rec	47,000	616.693,329	4.677.192,447	336,998	337,228	0,230	236,8388	0	0,49%			
Rec	48,000	616.692,782	4.677.191,610	337,000	337,233	0,233	236,8388	0	0,49%			
Rec	49,000	616.692,235	4.677.190,772	337,005	337,238	0,233	236,8388	0	0,49%			
Rec	50,000	616.691,688	4.677.189,935	337,011	337,243	0,232	236,8388	0	0,49%			
Rec	51,000	616.691,141	4.677.189,098	337,019	337,248	0,229	236,8388	0	0,49%			
Rec	52,000	616.690,594	4.677.188,261	337,028	337,253	0,225	236,8388	0	0,49%			
Rec	53,000	616.690,047	4.677.187,424	337,038	337,258	0,220	236,8388	0	0,49%			
Rec	54,000	616.689,500	4.677.186,586	337,052	337,263	0,211	236,8388	0	0,49%			
Rec	55,000	616.688,953	4.677.185,749	337,054	337,267	0,214	236,8388	0	0,49%			
Rec	56,000	616.688,407	4.677.184,912	337,055	337,272	0,217	236,8388	0	0,49%			
Rec	57,000	616.687,860	4.677.184,075	337,059	337,277	0,218	236,8388	0	0,49%			
Rec	58,000	616.687,313	4.677.183,238	337,063	337,282	0,219	236,8388	0	0,49%			
Rec	59,000	616.686,766	4.677.182,400	337,068	337,287	0,219	236,8388	0	0,49%			
Rec	60,000	616.686,219	4.677.181,563	337,073	337,292	0,219	236,8388	0	0,49%			
Rec	61,000	616.685,672	4.677.180,726	337,080	337,297	0,217	236,8388	0	0,49%			
Rec	62,000	616.685,125	4.677.179,889	337,090	337,302	0,212	236,8388	0	0,49%			
Rec	63,000	616.684,578	4.677.179,052	337,100	337,307	0,207	236,8388	0	0,49%			
Rec	64,000	616.684,031	4.677.178,214	337,109	337,312	0,203	236,8388	0	0,49%			
Rec	65,000	616.683,484	4.677.177,377	337,119	337,317	0,198	236,8388	0	0,49%			
Rec	66,000	616.682,938	4.677.176,540	337,129	337,322	0,193	236,8388	0	0,49%			
Rec	67,000	616.682,391	4.677.175,703	337,139	337,327	0,188	236,8388	0	0,49%			
Rec	68,000	616.681,844	4.677.174,866	337,149	337,331	0,182	236,8388	0	0,49%			
Rec	69,000	616.681,297	4.677.174,028	337,158	337,336	0,178	236,8388	0	0,49%			
Rec	70,000	616.680,750	4.677.173,191	337,168	337,341	0,173	236,8388	0	0,49%			
Rec	71,000	616.680,203	4.677.172,354	337,178	337,346	0,168	236,8388	0	0,49%			
Rec	72,000	616.679,656	4.677.171,517	337,188	337,351	0,163	236,8388	0	0,49%			
Rec	73,000	616.679,109	4.677.170,680	337,198	337,356	0,158	236,8388	0	0,49%			
Rec	74,000	616.678,562	4.677.169,843	337,207	337,361	0,154	236,8388	0	0,49%			
Rec	75,000	616.678,015	4.677.169,005	337,217	337,366	0,149	236,8388	0	0,49%			
Rec	76,000	616.677,468	4.677.168,168	337,227	337,371	0,144	236,8388	0	0,49%			
Rec	77,000	616.676,922	4.677.167,331	337,237	337,376	0,139	236,8388	0	0,49%			
Rec	78,000	616.676,375	4.677.166,494	337,246	337,381	0,135	236,8388	0	0,49%			
Rec	79,000	616.675,828	4.677.165,657	337,256	337,386	0,130	236,8388	0	0,49%			
Rec	80,000	616.675,281	4.677.164,819	337,266	337,391	0,125	236,8388	0	0,49%			
Rec	81,000	616.674,734	4.677.163,982	337,276	337,395	0,119	236,8388	0	0,49%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	82,000	616.674,187	4.677.163,145	337,286	337,400	0,114	236,8388	0	0,49%			
Rec	83,000	616.673,640	4.677.162,308	337,295	337,405	0,110	236,8388	0	0,49%			
Rec	84,000	616.673,093	4.677.161,471	337,305	337,410	0,105	236,8388	0	0,49%			
Rec	85,000	616.672,546	4.677.160,633	337,315	337,415	0,100	236,8388	0	0,49%		T.E.	
Rec	85,118	616.672,482	4.677.160,535	337,316	337,416	0,100	236,8388	0	0,49%			
Rec	86,000	616.671,999	4.677.159,796	337,325	337,420	0,095	236,8388	0	0,54%			
Rec	87,000	616.671,452	4.677.158,959	337,337	337,426	0,089	236,8388	0	0,59%			
Rec	88,000	616.670,906	4.677.158,122	337,349	337,432	0,083	236,8388	0	0,64%			
Rec	89,000	616.670,359	4.677.157,285	337,362	337,439	0,077	236,8388	0	0,69%			
Rec	90,000	616.669,812	4.677.156,447	337,375	337,446	0,071	236,8388	0	0,74%			
Rec	91,000	616.669,265	4.677.155,610	337,387	337,453	0,066	236,8388	0	0,79%			
Rec	92,000	616.668,718	4.677.154,773	337,400	337,461	0,061	236,8388	0	0,84%			
Rec	93,000	616.668,171	4.677.153,936	337,412	337,470	0,058	236,8388	0	0,89%			
Rec	94,000	616.667,624	4.677.153,099	337,425	337,479	0,054	236,8388	0	0,94%			
Rec	95,000	616.667,077	4.677.152,261	337,437	337,489	0,052	236,8388	0	0,99%			
Rec	96,000	616.666,530	4.677.151,424	337,450	337,499	0,049	236,8388	0	1,04%			
Rec	97,000	616.665,983	4.677.150,587	337,462	337,510	0,048	236,8388	0	1,09%			
Rec	98,000	616.665,437	4.677.149,750	337,475	337,521	0,046	236,8388	0	1,14%			
Rec	99,000	616.664,890	4.677.148,913	337,488	337,532	0,044	236,8388	0	1,19%		V.	
Rec	100,000	616.664,343	4.677.148,075	337,500	337,544	0,044	236,8388	0	1,24%			
Rec	101,000	616.663,796	4.677.147,238	337,513	337,557	0,044	236,8388	0	1,29%			
Rec	102,000	616.663,249	4.677.146,401	337,525	337,570	0,045	236,8388	0	1,34%			
Rec	103,000	616.662,702	4.677.145,564	337,538	337,584	0,046	236,8388	0	1,39%			
Rec	104,000	616.662,155	4.677.144,727	337,550	337,598	0,048	236,8388	0	1,44%			
Rec	105,000	616.661,608	4.677.143,889	337,563	337,612	0,049	236,8388	0	1,49%			
Rec	106,000	616.661,061	4.677.143,052	337,575	337,628	0,053	236,8388	0	1,54%			
Rec	107,000	616.660,514	4.677.142,215	337,588	337,643	0,055	236,8388	0	1,59%			
Rec	108,000	616.659,967	4.677.141,378	337,600	337,659	0,059	236,8388	0	1,64%			
Rec	109,000	616.659,421	4.677.140,541	337,613	337,676	0,063	236,8388	0	1,69%			
Rec	110,000	616.658,874	4.677.139,704	337,626	337,693	0,067	236,8388	0	1,74%			
Rec	111,000	616.658,327	4.677.138,866	337,637	337,711	0,074	236,8388	0	1,79%			
Rec	112,000	616.657,780	4.677.138,029	337,647	337,729	0,082	236,8388	0	1,84%			
Rec	113,000	616.657,233	4.677.137,192	337,656	337,747	0,091	236,8388	0	1,89%			
Rec	114,000	616.656,686	4.677.136,355	337,666	337,766	0,100	236,8388	0	1,94%		T.S.	
Rec	114,882	616.656,204	4.677.135,616	337,674	337,784	0,110	236,8388	0	1,98%			
Rec	115,000	616.656,139	4.677.135,518	337,675	337,786	0,111	236,8388	0	1,98%			
Rec	116,000	616.655,592	4.677.134,680	337,686	337,806	0,120	236,8388	0	1,98%			
Rec	117,000	616.655,045	4.677.133,843	337,698	337,826	0,128	236,8388	0	1,98%			
Rec	118,000	616.654,498	4.677.133,006	337,711	337,846	0,135	236,8388	0	1,98%			
Rec	119,000	616.653,952	4.677.132,169	337,724	337,865	0,141	236,8388	0	1,98%			
Rec	120,000	616.653,405	4.677.131,332	337,738	337,885	0,147	236,8388	0	1,98%			
Rec	121,000	616.652,858	4.677.130,494	337,752	337,905	0,153	236,8388	0	1,98%			
Rec	122,000	616.652,311	4.677.129,657	337,766	337,925	0,159	236,8388	0	1,98%			
Rec	123,000	616.651,764	4.677.128,820	337,779	337,945	0,166	236,8388	0	1,98%			
Rec	124,000	616.651,217	4.677.127,983	337,792	337,965	0,173	236,8388	0	1,98%			
Rec	125,000	616.650,670	4.677.127,146	337,804	337,984	0,180	236,8388	0	1,98%			
Rec	126,000	616.650,123	4.677.126,308	337,817	338,004	0,187	236,8388	0	1,98%			
Rec	127,000	616.649,576	4.677.125,471	337,830	338,024	0,194	236,8388	0	1,98%			
Rec	128,000	616.649,029	4.677.124,634	337,846	338,044	0,198	236,8388	0	1,98%			
Rec	129,000	616.648,482	4.677.123,797	337,862	338,064	0,202	236,8388	0	1,98%			
Rec	130,000	616.647,936	4.677.122,960	337,878	338,083	0,205	236,8388	0	1,98%			
Rec	131,000	616.647,389	4.677.122,122	337,895	338,103	0,208	236,8388	0	1,98%			
Rec	132,000	616.646,842	4.677.121,285	337,912	338,123	0,211	236,8388	0	1,98%			
Rec	133,000	616.646,295	4.677.120,448	337,929	338,143	0,214	236,8388	0	1,98%			
Rec	134,000	616.645,748	4.677.119,611	337,946	338,163	0,217	236,8388	0	1,98%			
Rec	135,000	616.645,201	4.677.118,774	337,963	338,183	0,219	236,8388	0	1,98%			
Rec	136,000	616.644,654	4.677.117,936	337,977	338,202	0,225	236,8388	0	1,98%			
Rec	137,000	616.644,107	4.677.117,099	337,992	338,222	0,230	236,8388	0	1,98%			
Rec	138,000	616.643,560	4.677.116,262	338,008	338,242	0,234	236,8388	0	1,98%			
Rec	139,000	616.643,013	4.677.115,425	338,027	338,262	0,235	236,8388	0	1,98%			
Rec	140,000	616.642,467	4.677.114,588	338,046	338,282	0,236	236,8388	0	1,98%			
Rec	141,000	616.641,920	4.677.113,750	338,066	338,301	0,235	236,8388	0	1,98%			
Rec	142,000	616.641,373	4.677.112,913	338,085	338,321	0,236	236,8388	0	1,98%			
Rec	143,000	616.640,826	4.677.112,076	338,105	338,341	0,236	236,8388	0	1,98%			
Rec	144,000	616.640,279	4.677.111,239	338,124	338,361	0,237	236,8388	0	1,98%			
Rec	145,000	616.639,732	4.677.110,402	338,144	338,381	0,237	236,8388	0	1,98%			
Rec	146,000	616.639,185	4.677.109,565	338,164	338,400	0,236	236,8388	0	1,98%			
Rec	147,000	616.638,638	4.677.108,727	338,183	338,420	0,237	236,8388	0	1,98%			
Rec	148,000	616.638,091	4.677.107,890	338,208	338,440	0,232	236,8388	0	1,98%			
Rec	149,000	616.637,544	4.677.107,053	338,238	338,460	0,222	236,8388	0	1,98%			
Rec	150,000	616.636,997	4.677.106,216	338,267	338,480	0,213	236,8388	0	1,98%			
Rec	151,000	616.636,451	4.677.105,379	338,286	338,500	0,214	236,8388	0	1,98%			
Rec	152,000	616.635,904	4.677.104,541	338,315	338,519	0,204	236,8388	0	1,98%			
Rec	153,000	616.635,357	4.677.103,704	338,345	338,539	0,194	236,8388	0	1,98%			
Rec	154,000	616.634,810	4.677.102,867	338,376	338,559	0,183	236,8388	0	1,98%			
Rec	155,000	616.634,263	4.677.102,030	338,407	338,579	0,172	236,8388	0	1,98%			
Rec	156,000	616.633,716	4.677.101,193	338,439	338,599	0,160	236,8388	0	1,98%			
Rec	157,000	616.633,169	4.677.100,355	338,470	338,618	0,148	236,8388	0	1,98%			
Rec	158,000	616.632,622	4.677.099,518	338,502	338,638	0,136	236,8388	0	1,98%		T.E.	
Rec	158,517	616.632,339	4.677.099,085	338,518	338,648	0,130	236,8388	0	1,98%			
Rec	159,000	616.632,075	4.677.098,681	338,533	338,658	0,125	236,8388	0	2,03%			
Rec	160,000	616.631,528	4.677.097,844	338,564	338,679	0,115	236,8388	0	2,13%			
Rec	161,000	616.630,982	4.677.097,007	338,595	338,701	0,106	236,8388	0	2,23%			
Rec	162,000	616.630,435	4.677.096,169	338,627	338,724	0,097	236,8388	0	2,33%			
Rec	163,000	616.629,888	4.677.095,332	338,658	338,747	0,089	236,8388	0	2,43%			
Rec	164,000	616.629,341	4.677.094,495	338,689	338,772	0,083	236,8388	0	2,53%			
Rec	165,000	616.628,794	4.677.093,658	338,720	338,798	0,078	236,8388	0	2,63%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	166,000	616.628,247	4.677.092,821	338,751	338,825	0,074	236,8388	0	2,73%			
Rec	167,000	616.627,700	4.677.091,983	338,783	338,853	0,070	236,8388	0	2,83%			
Rec	168,000	616.627,153	4.677.091,146	338,814	338,881	0,067	236,8388	0	2,93%			
Rec	169,000	616.626,606	4.677.090,309	338,845	338,911	0,066	236,8388	0	3,03%		V.	
Rec	170,000	616.626,059	4.677.089,472	338,876	338,942	0,066	236,8388	0	3,13%			
Rec	171,000	616.625,512	4.677.088,635	338,907	338,974	0,067	236,8388	0	3,23%			
Rec	172,000	616.624,966	4.677.087,797	338,939	339,007	0,068	236,8388	0	3,33%			
Rec	173,000	616.624,419	4.677.086,960	338,970	339,040	0,070	236,8388	0	3,43%			
Rec	174,000	616.623,872	4.677.086,123	339,001	339,075	0,074	236,8388	0	3,53%			
Rec	175,000	616.623,325	4.677.085,286	339,039	339,111	0,072	236,8388	0	3,63%			
Rec	176,000	616.622,778	4.677.084,449	339,077	339,148	0,071	236,8388	0	3,73%			
Rec	177,000	616.622,231	4.677.083,611	339,114	339,186	0,072	236,8388	0	3,83%			
Rec	178,000	616.621,684	4.677.082,774	339,152	339,224	0,072	236,8388	0	3,93%			
Rec	179,000	616.621,137	4.677.081,937	339,187	339,264	0,077	236,8388	0	4,03%			
Rec	180,000	616.620,590	4.677.081,100	339,224	339,305	0,081	236,8388	0	4,13%			
Rec	181,000	616.620,043	4.677.080,263	339,261	339,347	0,086	236,8388	0	4,23%		T.S.	
Rec	181,483	616.619,779	4.677.079,858	339,279	339,367	0,088	236,8388	0	4,28%			
Rec	182,000	616.619,497	4.677.079,426	339,298	339,389	0,091	236,8388	0	4,28%			
Rec	183,000	616.618,950	4.677.078,588	339,335	339,432	0,097	236,8388	0	4,28%			
Rec	184,000	616.618,403	4.677.077,751	339,372	339,475	0,103	236,8388	0	4,28%			
Rec	185,000	616.617,856	4.677.076,914	339,410	339,518	0,108	236,8388	0	4,28%			
Rec	186,000	616.617,309	4.677.076,077	339,447	339,560	0,113	236,8388	0	4,28%			
Rec	187,000	616.616,762	4.677.075,240	339,484	339,603	0,119	236,8388	0	4,28%			
Rec	188,000	616.616,215	4.677.074,402	339,521	339,646	0,125	236,8388	0	4,28%			
Rec	189,000	616.615,668	4.677.073,565	339,558	339,689	0,131	236,8388	0	4,28%			
Rec	190,000	616.615,121	4.677.072,728	339,595	339,731	0,136	236,8388	0	4,28%			
Rec	191,000	616.614,574	4.677.071,891	339,632	339,774	0,142	236,8388	0	4,28%			
Rec	192,000	616.614,027	4.677.071,054	339,669	339,817	0,148	236,8388	0	4,28%			
Rec	193,000	616.613,481	4.677.070,216	339,706	339,860	0,154	236,8388	0	4,28%			
Rec	194,000	616.612,934	4.677.069,379	339,743	339,903	0,160	236,8388	0	4,28%			
Rec	195,000	616.612,387	4.677.068,542	339,780	339,945	0,165	236,8388	0	4,28%			
Rec	196,000	616.611,840	4.677.067,705	339,818	339,988	0,170	236,8388	0	4,28%			
Rec	197,000	616.611,293	4.677.066,868	339,855	340,031	0,176	236,8388	0	4,28%			
Rec	198,000	616.610,746	4.677.066,030	339,892	340,074	0,182	236,8388	0	4,28%			
Rec	199,000	616.610,199	4.677.065,193	339,930	340,116	0,186	236,8388	0	4,28%			
Rec	200,000	616.609,652	4.677.064,356	339,967	340,159	0,192	236,8388	0	4,28%			
Rec	201,000	616.609,105	4.677.063,519	340,006	340,202	0,196	236,8388	0	4,28%			
Rec	202,000	616.608,558	4.677.062,682	340,057	340,245	0,188	236,8388	0	4,28%			
Rec	203,000	616.608,011	4.677.061,844	340,108	340,287	0,179	236,8388	0	4,28%			
Rec	204,000	616.607,465	4.677.061,007	340,158	340,330	0,172	236,8388	0	4,28%			
Rec	205,000	616.606,918	4.677.060,170	340,209	340,373	0,164	236,8388	0	4,28%			
Rec	206,000	616.606,371	4.677.059,333	340,259	340,416	0,157	236,8388	0	4,28%			
Rec	207,000	616.605,824	4.677.058,496	340,310	340,459	0,149	236,8388	0	4,28%			
Rec	208,000	616.605,277	4.677.057,658	340,357	340,501	0,144	236,8388	0	4,28%			
Rec	209,000	616.604,730	4.677.056,821	340,404	340,544	0,140	236,8388	0	4,28%			
Rec	210,000	616.604,183	4.677.055,984	340,453	340,587	0,134	236,8388	0	4,28%			
Rec	211,000	616.603,636	4.677.055,147	340,502	340,630	0,128	236,8388	0	4,28%			
Rec	212,000	616.603,089	4.677.054,310	340,550	340,672	0,122	236,8388	0	4,28%			
Rec	213,000	616.602,542	4.677.053,472	340,597	340,715	0,118	236,8388	0	4,28%			
Rec	214,000	616.601,996	4.677.052,635	340,643	340,758	0,115	236,8388	0	4,28%			
Rec	215,000	616.601,449	4.677.051,798	340,692	340,801	0,109	236,8388	0	4,28%			
Rec	216,000	616.600,902	4.677.050,961	340,739	340,843	0,104	236,8388	0	4,28%			
Rec	217,000	616.600,355	4.677.050,124	340,785	340,886	0,101	236,8388	0	4,28%			
Rec	218,000	616.599,808	4.677.049,286	340,830	340,929	0,099	236,8388	0	4,28%			
Rec	219,000	616.599,261	4.677.048,449	340,876	340,972	0,096	236,8388	0	4,28%			
Rec	220,000	616.598,714	4.677.047,612	340,923	341,015	0,092	236,8388	0	4,28%			
Rec	221,000	616.598,167	4.677.046,775	340,968	341,057	0,089	236,8388	0	4,28%			
Rec	222,000	616.597,620	4.677.045,938	341,012	341,100	0,088	236,8388	0	4,28%			
Rec	223,000	616.597,073	4.677.045,101	341,053	341,143	0,090	236,8388	0	4,28%			
Rec	224,000	616.596,526	4.677.044,263	341,094	341,186	0,092	236,8388	0	4,28%			
Rec	225,000	616.595,980	4.677.043,426	341,135	341,228	0,093	236,8388	0	4,28%			
Rec	226,000	616.595,433	4.677.042,589	341,176	341,271	0,095	236,8388	0	4,28%			
Rec	227,000	616.594,886	4.677.041,752	341,218	341,314	0,096	236,8388	0	4,28%			
Rec	228,000	616.594,339	4.677.040,915	341,260	341,357	0,097	236,8388	0	4,28%			
Rec	229,000	616.593,792	4.677.040,077	341,302	341,400	0,098	236,8388	0	4,28%			
Rec	230,000	616.593,245	4.677.039,240	341,345	341,442	0,097	236,8388	0	4,28%			
Rec	231,000	616.592,698	4.677.038,403	341,388	341,485	0,097	236,8388	0	4,28%			
Rec	232,000	616.592,151	4.677.037,566	341,428	341,528	0,100	236,8388	0	4,28%			
Rec	233,000	616.591,604	4.677.036,729	341,468	341,571	0,103	236,8388	0	4,28%			
Rec	234,000	616.591,057	4.677.035,891	341,511	341,613	0,102	236,8388	0	4,28%			
Rec	235,000	616.590,511	4.677.035,054	341,554	341,656	0,102	236,8388	0	4,28%			
Rec	236,000	616.589,964	4.677.034,217	341,594	341,699	0,105	236,8388	0	4,28%			
Rec	237,000	616.589,417	4.677.033,380	341,634	341,742	0,108	236,8388	0	4,28%			
Rec	238,000	616.588,870	4.677.032,543	341,673	341,784	0,111	236,8388	0	4,28%			
Rec	239,000	616.588,323	4.677.031,705	341,710	341,827	0,117	236,8388	0	4,28%			
Rec	240,000	616.587,776	4.677.030,868	341,748	341,870	0,122	236,8388	0	4,28%			
Rec	241,000	616.587,229	4.677.030,031	341,785	341,913	0,128	236,8388	0	4,28%			
Rec	242,000	616.586,682	4.677.029,194	341,822	341,956	0,134	236,8388	0	4,28%			
Rec	243,000	616.586,135	4.677.028,357	341,859	341,998	0,139	236,8388	0	4,28%			
Rec	244,000	616.585,588	4.677.027,519	341,896	342,041	0,145	236,8388	0	4,28%			
Rec	245,000	616.585,041	4.677.026,682	341,933	342,084	0,151	236,8388	0	4,28%			
Rec	246,000	616.584,495	4.677.025,845	341,971	342,127	0,156	236,8388	0	4,28%			
Rec	247,000	616.583,948	4.677.025,008	342,012	342,169	0,157	236,8388	0	4,28%			
Rec	248,000	616.583,401	4.677.024,171	342,067	342,212	0,145	236,8388	0	4,28%			
Rec	249,000	616.582,854	4.677.023,333	342,123	342,255	0,132	236,8388	0	4,28%			
Rec	250,000	616.582,307	4.677.022,496	342,176	342,298	0,122	236,8388	0	4,28%			
Rec	251,000	616.581,760	4.677.021,659	342,231	342,340	0,109	236,8388	0	4,28%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	252,000	616.581,213	4.677.020,822	342,286	342,383	0,097	236,8388	0	4,28%			
Rec	253,000	616.580,666	4.677.019,985	342,341	342,426	0,085	236,8388	0	4,28%			
Rec	254,000	616.580,119	4.677.019,147	342,389	342,469	0,080	236,8388	0	4,28%			
Rec	255,000	616.579,572	4.677.018,310	342,442	342,512	0,070	236,8388	0	4,28%			
Rec	256,000	616.579,026	4.677.017,473	342,495	342,554	0,059	236,8388	0	4,28%			
Rec	257,000	616.578,479	4.677.016,636	342,535	342,597	0,062	236,8388	0	4,28%			
Rec	258,000	616.577,932	4.677.015,799	342,586	342,640	0,054	236,8388	0	4,28%			
Rec	259,000	616.577,385	4.677.014,962	342,626	342,683	0,057	236,8388	0	4,28%			
Rec	260,000	616.576,838	4.677.014,124	342,660	342,725	0,065	236,8388	0	4,28%			
Rec	261,000	616.576,291	4.677.013,287	342,696	342,768	0,072	236,8388	0	4,28%			
Rec	262,000	616.575,744	4.677.012,450	342,741	342,811	0,070	236,8388	0	4,28%			
Rec	263,000	616.575,197	4.677.011,613	342,775	342,854	0,079	236,8388	0	4,28%			
Rec	264,000	616.574,650	4.677.010,776	342,816	342,897	0,081	236,8388	0	4,28%			
Rec	265,000	616.574,103	4.677.009,938	342,851	342,939	0,088	236,8388	0	4,28%			
Rec	266,000	616.573,556	4.677.009,101	342,884	342,982	0,098	236,8388	0	4,28%			
Rec	267,000	616.573,010	4.677.008,264	342,918	343,025	0,107	236,8388	0	4,28%			
Rec	268,000	616.572,463	4.677.007,427	342,950	343,068	0,118	236,8388	0	4,28%			
Rec	269,000	616.571,916	4.677.006,590	342,981	343,110	0,129	236,8388	0	4,28%			
Rec	270,000	616.571,369	4.677.005,752	343,015	343,153	0,138	236,8388	0	4,28%			
Rec	271,000	616.570,822	4.677.004,915	343,056	343,196	0,140	236,8388	0	4,28%			
Rec	272,000	616.570,275	4.677.004,078	343,099	343,239	0,140	236,8388	0	4,28%			
Rec	273,000	616.569,728	4.677.003,241	343,142	343,281	0,139	236,8388	0	4,28%			
Rec	274,000	616.569,181	4.677.002,404	343,191	343,324	0,133	236,8388	0	4,28%			
Rec	275,000	616.568,634	4.677.001,566	343,235	343,367	0,132	236,8388	0	4,28%			
Rec	276,000	616.568,087	4.677.000,729	343,277	343,410	0,133	236,8388	0	4,28%			
Rec	277,000	616.567,541	4.676.999,892	343,314	343,453	0,139	236,8388	0	4,28%			
Rec	278,000	616.566,994	4.676.999,055	343,368	343,495	0,127	236,8388	0	4,28%			
Rec	279,000	616.566,447	4.676.998,218	343,421	343,538	0,117	236,8388	0	4,28%			
Rec	280,000	616.565,900	4.676.997,380	343,465	343,581	0,116	236,8388	0	4,28%			
Rec	281,000	616.565,353	4.676.996,543	343,527	343,624	0,097	236,8388	0	4,28%			
Rec	282,000	616.564,806	4.676.995,706	343,587	343,666	0,079	236,8388	0	4,28%			
Rec	283,000	616.564,259	4.676.994,869	343,646	343,709	0,063	236,8388	0	4,28%			
Rec	284,000	616.563,712	4.676.994,032	343,705	343,752	0,047	236,8388	0	4,28%		T.E.	
Rec	284,997	616.563,167	4.676.993,197	343,764	343,795	0,031	236,8388	0	4,28%			
Rec	285,000	616.563,165	4.676.993,194	343,764	343,795	0,031	236,8388	0	4,28%			
Rec	286,000	616.562,618	4.676.992,357	343,823	343,836	0,013	236,8388	0	4,08%			
Rec	287,000	616.562,071	4.676.991,520	343,883	343,876	-0,007	236,8388	0	3,88%			
Rec	288,000	616.561,525	4.676.990,683	343,943	343,914	-0,029	236,8388	0	3,68%			
Rec	289,000	616.560,978	4.676.989,846	344,001	343,950	-0,051	236,8388	0	3,48%			
Rec	290,000	616.560,431	4.676.989,008	344,024	343,984	-0,040	236,8388	0	3,28%			
Rec	291,000	616.559,884	4.676.988,171	344,045	344,015	-0,030	236,8388	0	3,08%			
Rec	292,000	616.559,337	4.676.987,334	344,067	344,045	-0,022	236,8388	0	2,88%			
Rec	293,000	616.558,790	4.676.986,497	344,089	344,073	-0,016	236,8388	0	2,68%			
Rec	294,000	616.558,243	4.676.985,660	344,110	344,099	-0,011	236,8388	0	2,48%	P.S.	V.	
Cur	294,686	616.557,868	4.676.985,085	344,125	344,115	-0,010	236,8388	400	2,34%			
Cur	295,000	616.557,696	4.676.984,823	344,132	344,122	-0,010	236,8888	400	2,28%			
Cur	296,000	616.557,148	4.676.983,987	344,152	344,144	-0,008	237,0480	400	2,08%			
Cur	297,000	616.556,597	4.676.983,152	344,171	344,164	-0,007	237,2071	400	1,88%			
Cur	298,000	616.556,044	4.676.982,318	344,190	344,182	-0,008	237,3663	400	1,68%			
Cur	299,000	616.555,489	4.676.981,487	344,207	344,197	-0,010	237,5254	400	1,48%			
Cur	300,000	616.554,932	4.676.980,656	344,222	344,211	-0,011	237,6846	400	1,28%			
Cur	301,000	616.554,373	4.676.979,827	344,235	344,223	-0,012	237,8438	400	1,08%			
Cur	302,000	616.553,812	4.676.978,999	344,245	344,233	-0,012	238,0029	400	0,88%			
Cur	303,000	616.553,249	4.676.978,173	344,252	344,240	-0,012	238,1621	400	0,68%			
Cur	304,000	616.552,684	4.676.977,348	344,258	344,246	-0,012	238,3212	400	0,48%		T.S.	
Cur	304,375	616.552,471	4.676.977,039	344,260	344,248	-0,012	238,3809	400	0,40%			
Cur	305,000	616.552,116	4.676.976,524	344,262	344,250	-0,012	238,4804	400	0,40%			
Cur	306,000	616.551,547	4.676.975,702	344,267	344,255	-0,012	238,6395	400	0,40%			
Cur	307,000	616.550,976	4.676.974,881	344,275	344,259	-0,016	238,7987	400	0,40%			
Cur	308,000	616.550,402	4.676.974,062	344,283	344,263	-0,020	238,9578	400	0,40%			
Cur	309,000	616.549,827	4.676.973,244	344,291	344,267	-0,024	239,1170	400	0,40%			
Cur	310,000	616.549,249	4.676.972,428	344,288	344,271	-0,017	239,2761	400	0,40%			
Cur	311,000	616.548,670	4.676.971,613	344,283	344,275	-0,008	239,4353	400	0,40%			
Cur	312,000	616.548,088	4.676.970,800	344,278	344,279	0,001	239,5945	400	0,40%			
Cur	313,000	616.547,504	4.676.969,988	344,275	344,283	0,008	239,7536	400	0,40%			
Cur	314,000	616.546,919	4.676.969,177	344,275	344,287	0,012	239,9128	400	0,40%			
Cur	315,000	616.546,331	4.676.968,368	344,277	344,291	0,014	240,0719	400	0,40%			
Cur	316,000	616.545,741	4.676.967,560	344,278	344,295	0,017	240,2311	400	0,40%			
Cur	317,000	616.545,150	4.676.966,754	344,276	344,299	0,023	240,3902	400	0,40%			
Cur	318,000	616.544,556	4.676.965,950	344,272	344,303	0,031	240,5494	400	0,40%			
Cur	319,000	616.543,960	4.676.965,146	344,266	344,307	0,041	240,7085	400	0,40%			
Cur	320,000	616.543,362	4.676.964,345	344,259	344,311	0,052	240,8677	400	0,40%			
Cur	321,000	616.542,763	4.676.963,545	344,252	344,315	0,063	241,0269	400	0,40%			
Cur	322,000	616.542,161	4.676.962,746	344,246	344,319	0,073	241,1860	400	0,40%			
Cur	323,000	616.541,557	4.676.961,949	344,240	344,323	0,083	241,3452	400	0,40%			
Cur	324,000	616.540,951	4.676.961,153	344,233	344,327	0,094	241,5043	400	0,40%			
Cur	325,000	616.540,344	4.676.960,359	344,223	344,331	0,108	241,6635	400	0,40%			
Cur	326,000	616.539,734	4.676.959,566	344,211	344,335	0,124	241,8226	400	0,40%			
Cur	327,000	616.539,122	4.676.958,775	344,203	344,339	0,136	241,9818	400	0,40%			
Cur	328,000	616.538,509	4.676.957,986	344,197	344,343	0,146	242,1409	400	0,40%			
Cur	329,000	616.537,893	4.676.957,198	344,197	344,347	0,150	242,3001	400	0,40%			
Cur	330,000	616.537,275	4.676.956,411	344,197	344,351	0,154	242,4592	400	0,40%			
Cur	331,000	616.536,656	4.676.955,626	344,197	344,355	0,158	242,6184	400	0,40%			
Cur	332,000	616.536,034	4.676.954,843	344,197	344,359	0,162	242,7776	400	0,40%			
Cur	333,000	616.535,411	4.676.954,061	344,196	344,363	0,167	242,9367	400	0,40%			
Cur	334,000	616.534,785	4.676.953,281	344,196	344,367	0,171	243,0959	400	0,40%			
Cur	335,000	616.534,158	4.676.952,502	344,202	344,371	0,169	243,2550	400	0,40%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	336,000	616.533,529	4.676.951,725	344,196	344,375	0,179	243,4142	400	0,40%			
Cur	337,000	616.532,897	4.676.950,949	344,185	344,379	0,194	243,5733	400	0,40%			
Cur	338,000	616.532,264	4.676.950,175	344,176	344,383	0,207	243,7325	400	0,40%			
Cur	339,000	616.531,629	4.676.949,403	344,188	344,387	0,199	243,8916	400	0,40%			
Cur	340,000	616.530,992	4.676.948,632	344,186	344,391	0,205	244,0508	400	0,40%			
Cur	341,000	616.530,353	4.676.947,863	344,200	344,395	0,195	244,2100	400	0,40%			
Cur	342,000	616.529,712	4.676.947,095	344,208	344,399	0,191	244,3691	400	0,40%			
Cur	343,000	616.529,069	4.676.946,329	344,217	344,403	0,186	244,5283	400	0,40%			
Cur	344,000	616.528,424	4.676.945,565	344,219	344,407	0,188	244,6874	400	0,40%			
Cur	345,000	616.527,778	4.676.944,802	344,229	344,411	0,182	244,8466	400	0,40%			
Cur	346,000	616.527,129	4.676.944,041	344,236	344,415	0,179	245,0057	400	0,40%			
Cur	347,000	616.526,479	4.676.943,281	344,245	344,419	0,174	245,1649	400	0,40%			
Cur	348,000	616.525,826	4.676.942,524	344,259	344,423	0,164	245,3240	400	0,40%			
Cur	349,000	616.525,172	4.676.941,767	344,273	344,428	0,155	245,4832	400	0,40%			
Cur	350,000	616.524,516	4.676.941,013	344,295	344,432	0,137	245,6423	400	0,40%			
Cur	351,000	616.523,858	4.676.940,260	344,312	344,436	0,124	245,8015	400	0,40%			
Cur	352,000	616.523,198	4.676.939,508	344,323	344,440	0,117	245,9607	400	0,40%			
Cur	353,000	616.522,536	4.676.938,759	344,353	344,444	0,091	246,1198	400	0,40%			
Cur	354,000	616.521,873	4.676.938,011	344,374	344,448	0,074	246,2790	400	0,40%			
Cur	355,000	616.521,207	4.676.937,264	344,397	344,452	0,055	246,4381	400	0,40%			
Cur	356,000	616.520,540	4.676.936,519	344,403	344,456	0,053	246,5973	400	0,40%			
Cur	357,000	616.519,870	4.676.935,776	344,413	344,460	0,047	246,7564	400	0,40%			
Cur	358,000	616.519,199	4.676.935,035	344,461	344,464	0,003	246,9156	400	0,40%		T.E.	
Cur	358,660	616.518,755	4.676.934,547	344,472	344,466	-0,005	247,0206	400	0,40%			
Cur	359,000	616.518,526	4.676.934,295	344,477	344,468	-0,009	247,0747	400	0,45%			
Cur	360,000	616.517,852	4.676.933,557	344,483	344,473	-0,010	247,2339	400	0,58%			
Cur	361,000	616.517,175	4.676.932,821	344,499	344,479	-0,020	247,3930	400	0,71%			
Cur	362,000	616.516,496	4.676.932,086	344,491	344,487	-0,004	247,5522	400	0,85%			
Cur	363,000	616.515,816	4.676.931,354	344,488	344,496	0,008	247,7114	400	0,98%			
Cur	364,000	616.515,134	4.676.930,622	344,490	344,507	0,017	247,8705	400	1,11%			
Cur	365,000	616.514,450	4.676.929,893	344,492	344,519	0,027	248,0297	400	1,25%			
Cur	366,000	616.513,764	4.676.929,165	344,494	344,532	0,038	248,1888	400	1,38%			
Cur	367,000	616.513,077	4.676.928,439	344,500	344,546	0,046	248,3480	400	1,51%			
Cur	368,000	616.512,387	4.676.927,715	344,505	344,562	0,057	248,5071	400	1,65%			
Cur	369,000	616.511,696	4.676.926,992	344,508	344,579	0,071	248,6663	400	1,78%		V.	
Cur	370,000	616.511,003	4.676.926,271	344,512	344,598	0,086	248,8254	400	1,91%			
Cur	371,000	616.510,308	4.676.925,552	344,522	344,618	0,096	248,9846	400	2,05%			
Cur	372,000	616.509,611	4.676.924,834	344,538	344,639	0,101	249,1438	400	2,18%			
Cur	373,000	616.508,913	4.676.924,119	344,557	344,661	0,104	249,3029	400	2,31%			
Cur	374,000	616.508,213	4.676.923,405	344,582	344,685	0,103	249,4621	400	2,45%			
Cur	375,000	616.507,511	4.676.922,693	344,611	344,710	0,099	249,6212	400	2,58%			
Cur	376,000	616.506,807	4.676.921,982	344,645	344,737	0,092	249,7804	400	2,71%			
Cur	377,000	616.506,101	4.676.921,274	344,680	344,764	0,084	249,9395	400	2,85%			
Cur	378,000	616.505,394	4.676.920,567	344,717	344,794	0,077	250,0987	400	2,98%			
Cur	379,000	616.504,685	4.676.919,862	344,755	344,824	0,069	250,2578	400	3,11%			
Cur	380,000	616.503,974	4.676.919,158	344,794	344,856	0,062	250,4170	400	3,25%			
Cur	381,000	616.503,262	4.676.918,457	344,831	344,889	0,058	250,5761	400	3,38%		T.S.	
Cur	381,340	616.503,019	4.676.918,219	344,844	344,900	0,057	250,6303	400	3,43%			
Cur	382,000	616.502,547	4.676.917,757	344,868	344,923	0,055	250,7353	400	3,43%			
Cur	383,000	616.501,831	4.676.917,059	344,905	344,957	0,052	250,8945	400	3,43%			
Cur	384,000	616.501,113	4.676.916,363	344,942	344,992	0,050	251,0536	400	3,43%			
Cur	385,000	616.500,394	4.676.915,668	344,979	345,026	0,047	251,2128	400	3,43%			
Cur	386,000	616.499,672	4.676.914,976	345,021	345,060	0,039	251,3719	400	3,43%			
Cur	387,000	616.498,949	4.676.914,285	345,069	345,094	0,025	251,5311	400	3,43%			
Cur	388,000	616.498,225	4.676.913,596	345,118	345,129	0,011	251,6902	400	3,43%			
Cur	389,000	616.497,498	4.676.912,909	345,166	345,163	-0,003	251,8494	400	3,43%			
Cur	390,000	616.496,770	4.676.912,223	345,214	345,197	-0,017	252,0085	400	3,43%			
Cur	391,000	616.496,040	4.676.911,540	345,262	345,231	-0,031	252,1677	400	3,43%			
Cur	392,000	616.495,308	4.676.910,858	345,311	345,266	-0,045	252,3269	400	3,43%			
Cur	393,000	616.494,575	4.676.910,178	345,359	345,300	-0,059	252,4860	400	3,43%			
Cur	394,000	616.493,840	4.676.909,500	345,407	345,334	-0,073	252,6452	400	3,43%			
Cur	395,000	616.493,103	4.676.908,824	345,456	345,368	-0,088	252,8043	400	3,43%			
Cur	396,000	616.492,365	4.676.908,150	345,504	345,403	-0,101	252,9635	400	3,43%			
Cur	397,000	616.491,625	4.676.907,477	345,553	345,437	-0,116	253,1226	400	3,43%			
Cur	398,000	616.490,883	4.676.906,806	345,601	345,471	-0,130	253,2818	400	3,43%			
Cur	399,000	616.490,140	4.676.906,138	345,650	345,505	-0,145	253,4409	400	3,43%			
Cur	400,000	616.489,394	4.676.905,471	345,698	345,540	-0,158	253,6001	400	3,43%			
Cur	401,000	616.488,648	4.676.904,806	345,747	345,574	-0,173	253,7592	400	3,43%			
Cur	402,000	616.487,899	4.676.904,142	345,795	345,608	-0,187	253,9184	400	3,43%			
Cur	403,000	616.487,149	4.676.903,481	345,844	345,642	-0,202	254,0776	400	3,43%			
Cur	404,000	616.486,397	4.676.902,822	345,893	345,677	-0,216	254,2367	400	3,43%			
Cur	405,000	616.485,644	4.676.902,164	345,942	345,711	-0,231	254,3959	400	3,43%			
Cur	406,000	616.484,889	4.676.901,508	345,991	345,745	-0,246	254,5550	400	3,43%			
Cur	407,000	616.484,132	4.676.900,855	346,032	345,780	-0,252	254,7142	400	3,43%			
Cur	408,000	616.483,374	4.676.900,203	346,070	345,814	-0,256	254,8733	400	3,43%			
Cur	409,000	616.482,614	4.676.899,553	346,106	345,848	-0,258	255,0325	400	3,43%			
Cur	410,000	616.481,853	4.676.898,905	346,143	345,882	-0,261	255,1916	400	3,43%			
Cur	411,000	616.481,089	4.676.898,258	346,180	345,917	-0,263	255,3508	400	3,43%			
Cur	412,000	616.480,325	4.676.897,614	346,215	345,951	-0,264	255,5100	400	3,43%			
Cur	413,000	616.479,558	4.676.896,972	346,251	345,985	-0,266	255,6691	400	3,43%			
Cur	414,000	616.478,790	4.676.896,331	346,286	346,019	-0,267	255,8283	400	3,43%			
Cur	415,000	616.478,021	4.676.895,693	346,320	346,054	-0,266	255,9874	400	3,43%			
Cur	416,000	616.477,249	4.676.895,056	346,354	346,088	-0,266	256,1466	400	3,43%			
Cur	417,000	616.476,477	4.676.894,421	346,388	346,122	-0,266	256,3057	400	3,43%			
Cur	418,000	616.475,702	4.676.893,789	346,423	346,156	-0,267	256,4649	400	3,43%			
Cur	419,000	616.474,926	4.676.893,158	346,458	346,191	-0,267	256,6240	400	3,43%			
Cur	420,000	616.474,149	4.676.892,529	346,495	346,225	-0,270	256,7832	400	3,43%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	421,000	616.473,370	4.676.891,902	346,531	346,259	-0,272	256,9423	400	3,43%			
Cur	422,000	616.472,589	4.676.891,277	346,568	346,293	-0,275	257,1015	400	3,43%			
Cur	423,000	616.471,807	4.676.890,654	346,604	346,328	-0,276	257,2607	400	3,43%			
Cur	424,000	616.471,023	4.676.890,033	346,640	346,362	-0,278	257,4198	400	3,43%			
Cur	425,000	616.470,238	4.676.889,414	346,676	346,396	-0,280	257,5790	400	3,43%			
Cur	426,000	616.469,451	4.676.888,797	346,712	346,430	-0,282	257,7381	400	3,43%			
Cur	427,000	616.468,663	4.676.888,182	346,748	346,465	-0,283	257,8973	400	3,43%			
Cur	428,000	616.467,873	4.676.887,568	346,785	346,499	-0,286	258,0564	400	3,43%			
Cur	429,000	616.467,081	4.676.886,957	346,821	346,533	-0,288	258,2156	400	3,43%			
Cur	430,000	616.466,288	4.676.886,348	346,857	346,567	-0,290	258,3747	400	3,43%			
Cur	431,000	616.465,494	4.676.885,741	346,894	346,602	-0,292	258,5339	400	3,43%			
Cur	432,000	616.464,698	4.676.885,135	346,930	346,636	-0,294	258,6931	400	3,43%			
Cur	433,000	616.463,900	4.676.884,532	346,966	346,670	-0,296	258,8522	400	3,43%			
Cur	434,000	616.463,101	4.676.883,931	347,002	346,704	-0,298	259,0114	400	3,43%			
Cur	435,000	616.462,301	4.676.883,332	347,031	346,739	-0,292	259,1705	400	3,43%			
Cur	436,000	616.461,499	4.676.882,734	347,061	346,773	-0,288	259,3297	400	3,43%			
Cur	437,000	616.460,695	4.676.882,139	347,089	346,807	-0,282	259,4888	400	3,43%			
Cur	438,000	616.459,890	4.676.881,546	347,118	346,841	-0,277	259,6480	400	3,43%			
Cur	439,000	616.459,084	4.676.880,954	347,147	346,876	-0,271	259,8071	400	3,43%			
Cur	440,000	616.458,276	4.676.880,365	347,176	346,910	-0,266	259,9663	400	3,43%			
Cur	441,000	616.457,466	4.676.879,778	347,204	346,944	-0,260	260,1254	400	3,43%			
Cur	442,000	616.456,655	4.676.879,193	347,231	346,979	-0,252	260,2846	400	3,43%			
Cur	443,000	616.455,843	4.676.878,610	347,259	347,013	-0,246	260,4438	400	3,43%			
Cur	444,000	616.455,029	4.676.878,029	347,286	347,047	-0,239	260,6029	400	3,43%			
Cur	445,000	616.454,214	4.676.877,450	347,313	347,081	-0,232	260,7621	400	3,43%			
Cur	446,000	616.453,397	4.676.876,873	347,341	347,116	-0,225	260,9212	400	3,43%			
Cur	447,000	616.452,579	4.676.876,298	347,368	347,150	-0,218	261,0804	400	3,43%			
Cur	448,000	616.451,759	4.676.875,725	347,395	347,184	-0,211	261,2395	400	3,43%			
Cur	449,000	616.450,938	4.676.875,154	347,423	347,218	-0,205	261,3987	400	3,43%			
Cur	450,000	616.450,116	4.676.874,585	347,452	347,253	-0,199	261,5578	400	3,43%			
Cur	451,000	616.449,292	4.676.874,018	347,481	347,287	-0,194	261,7170	400	3,43%			
Cur	452,000	616.448,467	4.676.873,453	347,511	347,321	-0,190	261,8761	400	3,43%			
Cur	453,000	616.447,640	4.676.872,891	347,541	347,355	-0,186	262,0353	400	3,43%			
Cur	454,000	616.446,812	4.676.872,330	347,571	347,390	-0,181	262,1945	400	3,43%			
Cur	455,000	616.445,982	4.676.871,772	347,600	347,424	-0,176	262,3536	400	3,43%			
Cur	456,000	616.445,152	4.676.871,215	347,630	347,458	-0,172	262,5128	400	3,43%			
Cur	457,000	616.444,319	4.676.870,661	347,659	347,492	-0,167	262,6719	400	3,43%			
Cur	458,000	616.443,486	4.676.870,108	347,689	347,527	-0,162	262,8311	400	3,43%			
Cur	459,000	616.442,651	4.676.869,558	347,718	347,561	-0,157	262,9902	400	3,43%			
Cur	460,000	616.441,814	4.676.869,010	347,747	347,595	-0,152	263,1494	400	3,43%			
Cur	461,000	616.440,976	4.676.868,464	347,773	347,629	-0,144	263,3085	400	3,43%			
Cur	462,000	616.440,137	4.676.867,920	347,799	347,664	-0,135	263,4677	400	3,43%			
Cur	463,000	616.439,297	4.676.867,378	347,827	347,698	-0,129	263,6269	400	3,43%			
Cur	464,000	616.438,455	4.676.866,839	347,856	347,732	-0,124	263,7860	400	3,43%			
Cur	465,000	616.437,612	4.676.866,301	347,886	347,766	-0,120	263,9452	400	3,43%			
Cur	466,000	616.436,767	4.676.865,766	347,916	347,801	-0,115	264,1043	400	3,43%			
Cur	467,000	616.435,921	4.676.865,232	347,945	347,835	-0,110	264,2635	400	3,43%			
Cur	468,000	616.435,074	4.676.864,701	347,974	347,869	-0,105	264,4226	400	3,43%			
Cur	469,000	616.434,226	4.676.864,172	348,003	347,903	-0,100	264,5818	400	3,43%			
Cur	470,000	616.433,376	4.676.863,645	348,035	347,938	-0,097	264,7409	400	3,43%			
Cur	471,000	616.432,525	4.676.863,120	348,064	347,972	-0,092	264,9001	400	3,43%			
Cur	472,000	616.431,672	4.676.862,597	348,088	348,006	-0,082	265,0592	400	3,43%			
Cur	473,000	616.430,818	4.676.862,076	348,114	348,041	-0,073	265,2184	400	3,43%			
Cur	474,000	616.429,963	4.676.861,558	348,141	348,075	-0,066	265,3776	400	3,43%			
Cur	475,000	616.429,107	4.676.861,042	348,167	348,109	-0,058	265,5367	400	3,43%			
Cur	476,000	616.428,249	4.676.860,527	348,194	348,143	-0,051	265,6959	400	3,43%			
Cur	477,000	616.427,390	4.676.860,015	348,221	348,178	-0,043	265,8550	400	3,43%			
Cur	478,000	616.426,530	4.676.859,505	348,251	348,212	-0,039	266,0142	400	3,43%			
Cur	479,000	616.425,669	4.676.858,998	348,279	348,246	-0,033	266,1733	400	3,43%			
Cur	480,000	616.424,806	4.676.858,492	348,308	348,280	-0,028	266,3325	400	3,43%			
Cur	481,000	616.423,942	4.676.857,989	348,339	348,315	-0,024	266,4916	400	3,43%			
Cur	482,000	616.423,077	4.676.857,487	348,369	348,349	-0,020	266,6508	400	3,43%			
Cur	483,000	616.422,210	4.676.856,988	348,397	348,383	-0,014	266,8100	400	3,43%			
Cur	484,000	616.421,342	4.676.856,491	348,426	348,417	-0,009	266,9691	400	3,43%			
Cur	485,000	616.420,473	4.676.855,996	348,453	348,452	-0,001	267,1283	400	3,43%			
Cur	486,000	616.419,603	4.676.855,504	348,481	348,486	0,005	267,2874	400	3,43%			
Cur	487,000	616.418,731	4.676.855,013	348,510	348,520	0,010	267,4466	400	3,43%			
Cur	488,000	616.417,859	4.676.854,525	348,540	348,554	0,014	267,6057	400	3,43%			
Cur	489,000	616.416,985	4.676.854,039	348,570	348,589	0,019	267,7649	400	3,43%			
Cur	490,000	616.416,110	4.676.853,555	348,603	348,623	0,020	267,9240	400	3,43%			
Cur	491,000	616.415,233	4.676.853,073	348,636	348,657	0,021	268,0832	400	3,43%			
Cur	492,000	616.414,356	4.676.852,594	348,668	348,691	0,023	268,2423	400	3,43%			
Cur	493,000	616.413,477	4.676.852,117	348,701	348,726	0,025	268,4015	400	3,43%			
Cur	494,000	616.412,597	4.676.851,641	348,733	348,760	0,027	268,5607	400	3,43%			
Cur	495,000	616.411,716	4.676.851,168	348,765	348,794	0,029	268,7198	400	3,43%			
Cur	496,000	616.410,834	4.676.850,698	348,796	348,828	0,032	268,8790	400	3,43%			
Cur	497,000	616.409,950	4.676.850,229	348,828	348,863	0,035	269,0381	400	3,43%			
Cur	498,000	616.409,066	4.676.849,763	348,860	348,897	0,037	269,1973	400	3,43%			
Cur	499,000	616.408,180	4.676.849,299	348,891	348,931	0,040	269,3564	400	3,43%			
Cur	500,000	616.407,293	4.676.848,837	348,923	348,965	0,042	269,5156	400	3,43%			
Cur	501,000	616.406,405	4.676.848,377	348,955	349,000	0,045	269,6747	400	3,43%			
Cur	502,000	616.405,516	4.676.847,920	348,986	349,034	0,048	269,8339	400	3,43%	P.S.		
Rec	502,713	616.404,881	4.676.847,595	349,010	349,058	0,048	269,9473	0	3,43%			
Rec	503,000	616.404,625	4.676.847,465	349,021	349,068	0,047	269,9473	0	3,43%			
Rec	504,000	616.403,735	4.676.847,010	349,057	349,102	0,045	269,9473	0	3,43%			
Rec	505,000	616.402,844	4.676.846,555	349,093	349,137	0,044	269,9473	0	3,43%			
Rec	506,000	616.401,953	4.676.846,100	349,129	349,171	0,042	269,9473	0	3,43%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	507,000	616.401,063	4.676.845,646	349,165	349,205	0,040	269,9473	0	3,43%			
Rec	508,000	616.400,172	4.676.845,191	349,201	349,240	0,039	269,9473	0	3,43%			
Rec	509,000	616.399,282	4.676.844,736	349,237	349,274	0,037	269,9473	0	3,43%			
Rec	510,000	616.398,391	4.676.844,282	349,273	349,308	0,035	269,9473	0	3,43%			
Rec	511,000	616.397,500	4.676.843,827	349,309	349,342	0,033	269,9473	0	3,43%			
Rec	512,000	616.396,610	4.676.843,372	349,345	349,377	0,032	269,9473	0	3,43%			
Rec	513,000	616.395,719	4.676.842,917	349,381	349,411	0,030	269,9473	0	3,43%			
Rec	514,000	616.394,828	4.676.842,463	349,417	349,445	0,028	269,9473	0	3,43%			
Rec	515,000	616.393,938	4.676.842,008	349,453	349,479	0,026	269,9473	0	3,43%			
Rec	516,000	616.393,047	4.676.841,553	349,489	349,514	0,025	269,9473	0	3,43%			
Rec	517,000	616.392,156	4.676.841,098	349,525	349,548	0,023	269,9473	0	3,43%			
Rec	518,000	616.391,266	4.676.840,644	349,561	349,582	0,021	269,9473	0	3,43%			
Rec	519,000	616.390,375	4.676.840,189	349,597	349,616	0,019	269,9473	0	3,43%			
Rec	520,000	616.389,485	4.676.839,734	349,633	349,651	0,018	269,9473	0	3,43%			
Rec	521,000	616.388,594	4.676.839,280	349,669	349,685	0,016	269,9473	0	3,43%			
Rec	522,000	616.387,703	4.676.838,825	349,705	349,719	0,014	269,9473	0	3,43%			
Rec	523,000	616.386,813	4.676.838,370	349,741	349,753	0,012	269,9473	0	3,43%			
Rec	524,000	616.385,922	4.676.837,915	349,778	349,788	0,010	269,9473	0	3,43%			
Rec	525,000	616.385,031	4.676.837,461	349,814	349,822	0,008	269,9473	0	3,43%			
Rec	526,000	616.384,141	4.676.837,006	349,850	349,856	0,006	269,9473	0	3,43%			
Rec	527,000	616.383,250	4.676.836,551	349,886	349,890	0,004	269,9473	0	3,43%			
Rec	528,000	616.382,360	4.676.836,096	349,921	349,925	0,004	269,9473	0	3,43%			
Rec	529,000	616.381,469	4.676.835,642	349,956	349,959	0,003	269,9473	0	3,43%			
Rec	530,000	616.380,578	4.676.835,187	349,990	349,993	0,003	269,9473	0	3,43%			
Rec	531,000	616.379,688	4.676.834,732	350,014	350,027	0,013	269,9473	0	3,43%			
Rec	532,000	616.378,797	4.676.834,278	350,035	350,062	0,027	269,9473	0	3,43%			
Rec	533,000	616.377,906	4.676.833,823	350,056	350,096	0,040	269,9473	0	3,43%			
Rec	534,000	616.377,016	4.676.833,368	350,076	350,130	0,054	269,9473	0	3,43%			
Rec	535,000	616.376,125	4.676.832,913	350,097	350,164	0,067	269,9473	0	3,43%			
Rec	536,000	616.375,235	4.676.832,459	350,118	350,199	0,081	269,9473	0	3,43%			
Rec	537,000	616.374,344	4.676.832,004	350,138	350,233	0,095	269,9473	0	3,43%			
Rec	538,000	616.373,453	4.676.831,549	350,156	350,267	0,111	269,9473	0	3,43%		T.E.	
Rec	538,838	616.372,707	4.676.831,168	350,171	350,296	0,125	269,9473	0	3,43%			
Rec	539,000	616.372,563	4.676.831,094	350,174	350,301	0,127	269,9473	0	3,40%			
Rec	540,000	616.371,672	4.676.830,640	350,192	350,335	0,143	269,9473	0	3,27%			
Rec	541,000	616.370,781	4.676.830,185	350,210	350,367	0,157	269,9473	0	3,14%			
Rec	542,000	616.369,891	4.676.829,730	350,229	350,398	0,169	269,9473	0	3,00%			
Rec	543,000	616.369,000	4.676.829,276	350,249	350,427	0,178	269,9473	0	2,87%			
Rec	544,000	616.368,109	4.676.828,821	350,282	350,455	0,173	269,9473	0	2,74%			
Rec	545,000	616.367,219	4.676.828,366	350,315	350,482	0,167	269,9473	0	2,60%			
Rec	546,000	616.366,328	4.676.827,911	350,348	350,507	0,159	269,9473	0	2,47%			
Rec	547,000	616.365,438	4.676.827,457	350,381	350,531	0,150	269,9473	0	2,34%			
Rec	548,000	616.364,547	4.676.827,002	350,414	350,554	0,140	269,9473	0	2,20%			
Rec	549,000	616.363,656	4.676.826,547	350,446	350,575	0,129	269,9473	0	2,07%			
Rec	550,000	616.362,766	4.676.826,092	350,479	350,595	0,116	269,9473	0	1,94%	P.S.	V.	
Cur	550,516	616.362,306	4.676.825,858	350,496	350,605	0,109	269,9473	-400	1,87%			
Cur	551,000	616.361,875	4.676.825,637	350,512	350,614	0,102	269,8703	-400	1,80%			
Cur	552,000	616.360,986	4.676.825,181	350,545	350,631	0,086	269,7111	-400	1,67%			
Cur	553,000	616.360,097	4.676.824,721	350,578	350,647	0,069	269,5520	-400	1,54%			
Cur	554,000	616.359,210	4.676.824,260	350,611	350,662	0,051	269,3928	-400	1,40%			
Cur	555,000	616.358,324	4.676.823,796	350,645	350,675	0,030	269,2336	-400	1,27%			
Cur	556,000	616.357,439	4.676.823,331	350,678	350,688	0,010	269,0745	-400	1,14%			
Cur	557,000	616.356,555	4.676.822,863	350,711	350,698	-0,013	268,9153	-400	1,00%			
Cur	558,000	616.355,673	4.676.822,392	350,745	350,708	-0,037	268,7562	-400	0,87%			
Cur	559,000	616.354,791	4.676.821,920	350,759	350,716	-0,043	268,5970	-400	0,74%			
Cur	560,000	616.353,911	4.676.821,445	350,756	350,722	-0,034	268,4379	-400	0,60%			
Cur	561,000	616.353,032	4.676.820,969	350,751	350,728	-0,023	268,2787	-400	0,47%			
Cur	562,000	616.352,154	4.676.820,490	350,749	350,732	-0,017	268,1196	-400	0,34%		T.S.	
Cur	562,194	616.351,984	4.676.820,396	350,749	350,732	-0,017	268,0887	-400	0,31%			
Cur	563,000	616.351,278	4.676.820,008	350,751	350,735	-0,016	267,9604	-400	0,31%			
Cur	564,000	616.350,402	4.676.819,525	350,752	350,738	-0,014	267,8013	-400	0,31%			
Cur	565,000	616.349,528	4.676.819,039	350,743	350,741	-0,002	267,6421	-400	0,31%			
Cur	566,000	616.348,655	4.676.818,552	350,734	350,744	0,010	267,4829	-400	0,31%			
Cur	567,000	616.347,784	4.676.818,062	350,724	350,747	0,023	267,3238	-400	0,31%			
Cur	568,000	616.346,913	4.676.817,570	350,715	350,750	0,035	267,1646	-400	0,31%			
Cur	569,000	616.346,044	4.676.817,075	350,706	350,754	0,048	267,0055	-400	0,31%			
Cur	570,000	616.345,176	4.676.816,579	350,697	350,757	0,060	266,8463	-400	0,31%			
Cur	571,000	616.344,309	4.676.816,080	350,688	350,760	0,072	266,6872	-400	0,31%			
Cur	572,000	616.343,443	4.676.815,579	350,679	350,763	0,084	266,5280	-400	0,31%			
Cur	573,000	616.342,579	4.676.815,076	350,670	350,766	0,096	266,3689	-400	0,31%			
Cur	574,000	616.341,716	4.676.814,571	350,662	350,769	0,107	266,2097	-400	0,31%			
Cur	575,000	616.340,854	4.676.814,064	350,653	350,772	0,119	266,0505	-400	0,31%			
Cur	576,000	616.339,994	4.676.813,555	350,653	350,775	0,122	265,8914	-400	0,31%			
Cur	577,000	616.339,134	4.676.813,043	350,657	350,779	0,122	265,7322	-400	0,31%			
Cur	578,000	616.338,276	4.676.812,529	350,662	350,782	0,120	265,5731	-400	0,31%			
Cur	579,000	616.337,420	4.676.812,013	350,665	350,785	0,120	265,4139	-400	0,31%		T.E.	
Cur	579,816	616.336,722	4.676.811,591	350,669	350,787	0,118	265,2841	-400	0,31%			
Cur	580,000	616.336,564	4.676.811,495	350,670	350,788	0,118	265,2548	-400	0,35%			
Cur	581,000	616.335,710	4.676.810,975	350,675	350,792	0,117	265,0956	-400	0,55%			
Cur	582,000	616.334,858	4.676.810,453	350,680	350,799	0,119	264,9365	-400	0,75%			
Cur	583,000	616.334,006	4.676.809,929	350,688	350,807	0,119	264,7773	-400	0,95%			
Cur	584,000	616.333,156	4.676.809,402	350,699	350,818	0,119	264,6182	-400	1,15%			
Cur	585,000	616.332,307	4.676.808,873	350,714	350,830	0,116	264,4590	-400	1,35%			
Cur	586,000	616.331,460	4.676.808,343	350,732	350,845	0,113	264,2998	-400	1,55%			
Cur	587,000	616.330,613	4.676.807,810	350,753	350,861	0,108	264,1407	-400	1,75%			
Cur	588,000	616.329,769	4.676.807,275	350,774	350,880	0,106	263,9815	-400	1,95%			
Cur	589,000	616.328,925	4.676.806,738	350,794	350,900	0,106	263,8224	-400	2,15%		V.	

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	590,000	616.328,083	4.676.806,198	350,819	350,923	0,104	263,6632	-400	2,35%			
Cur	591,000	616.327,242	4.676.805,657	350,845	350,947	0,102	263,5041	-400	2,55%			
Cur	592,000	616.326,403	4.676.805,114	350,876	350,974	0,098	263,3449	-400	2,75%			
Cur	593,000	616.325,565	4.676.804,568	350,909	351,002	0,093	263,1858	-400	2,95%			
Cur	594,000	616.324,728	4.676.804,020	350,943	351,033	0,090	263,0266	-400	3,15%			
Cur	595,000	616.323,893	4.676.803,471	350,978	351,065	0,087	262,8674	-400	3,35%			
Cur	596,000	616.323,059	4.676.802,919	351,014	351,100	0,086	262,7083	-400	3,55%			
Cur	597,000	616.322,226	4.676.802,365	351,050	351,136	0,086	262,5491	-400	3,75%			
Cur	598,000	616.321,395	4.676.801,809	351,088	351,175	0,087	262,3900	-400	3,95%			
Cur	599,000	616.320,565	4.676.801,251	351,125	351,215	0,090	262,2308	-400	4,15%			
Cur	600,000	616.319,737	4.676.800,691	351,161	351,258	0,097	262,0717	-400	4,35%		T.S.	
Cur	600,184	616.319,584	4.676.800,588	351,168	351,266	0,098	262,0424	-400	4,39%			
Cur	601,000	616.318,910	4.676.800,129	351,198	351,301	0,103	261,9125	-400	4,39%			
Cur	602,000	616.318,084	4.676.799,564	351,235	351,345	0,110	261,7534	-400	4,39%			
Cur	603,000	616.317,260	4.676.798,998	351,272	351,389	0,117	261,5942	-400	4,39%			
Cur	604,000	616.316,437	4.676.798,430	351,307	351,433	0,126	261,4351	-400	4,39%			
Cur	605,000	616.315,616	4.676.797,859	351,341	351,477	0,136	261,2759	-400	4,39%			
Cur	606,000	616.314,796	4.676.797,287	351,372	351,521	0,149	261,1167	-400	4,39%			
Cur	607,000	616.313,977	4.676.796,712	351,407	351,564	0,157	260,9576	-400	4,39%			
Cur	608,000	616.313,160	4.676.796,136	351,444	351,608	0,164	260,7984	-400	4,39%			
Cur	609,000	616.312,345	4.676.795,557	351,484	351,652	0,168	260,6393	-400	4,39%			
Cur	610,000	616.311,530	4.676.794,976	351,525	351,696	0,171	260,4801	-400	4,39%			
Cur	611,000	616.310,718	4.676.794,394	351,568	351,740	0,172	260,3210	-400	4,39%			
Cur	612,000	616.309,906	4.676.793,809	351,611	351,784	0,173	260,1618	-400	4,39%			
Cur	613,000	616.309,097	4.676.793,222	351,654	351,828	0,174	260,0027	-400	4,39%			
Cur	614,000	616.308,288	4.676.792,634	351,697	351,871	0,174	259,8435	-400	4,39%			
Cur	615,000	616.307,482	4.676.792,043	351,740	351,915	0,175	259,6843	-400	4,39%			
Cur	616,000	616.306,676	4.676.791,450	351,784	351,959	0,175	259,5252	-400	4,39%			
Cur	617,000	616.305,872	4.676.790,855	351,827	352,003	0,176	259,3660	-400	4,39%			
Cur	618,000	616.305,070	4.676.790,258	351,870	352,047	0,177	259,2069	-400	4,39%			
Cur	619,000	616.304,269	4.676.789,660	351,914	352,091	0,177	259,0477	-400	4,39%			
Cur	620,000	616.303,470	4.676.789,059	351,960	352,135	0,175	258,8886	-400	4,39%			
Cur	621,000	616.302,672	4.676.788,456	352,007	352,178	0,171	258,7294	-400	4,39%			
Cur	622,000	616.301,875	4.676.787,851	352,072	352,222	0,150	258,5703	-400	4,39%		T.E.	
Cur	622,055	616.301,832	4.676.787,818	352,075	352,225	0,149	258,5615	-400	4,39%			
Cur	623,000	616.301,081	4.676.787,244	352,135	352,267	0,132	258,4111	-400	4,57%			
Cur	624,000	616.300,287	4.676.786,635	352,197	352,314	0,117	258,2520	-400	4,77%			
Cur	625,000	616.299,495	4.676.786,025	352,259	352,362	0,103	258,0928	-400	4,97%			
Cur	626,000	616.298,705	4.676.785,412	352,323	352,413	0,090	257,9336	-400	5,17%			
Cur	627,000	616.297,916	4.676.784,797	352,388	352,466	0,078	257,7745	-400	5,37%			
Cur	628,000	616.297,129	4.676.784,181	352,452	352,521	0,069	257,6153	-400	5,57%			
Cur	629,000	616.296,344	4.676.783,562	352,514	352,577	0,063	257,4562	-400	5,77%		V.	
Cur	630,000	616.295,559	4.676.782,941	352,573	352,636	0,063	257,2970	-400	5,97%			
Cur	631,000	616.294,777	4.676.782,319	352,632	352,697	0,065	257,1379	-400	6,17%			
Cur	632,000	616.293,996	4.676.781,694	352,691	352,760	0,069	256,9787	-400	6,37%			
Cur	633,000	616.293,216	4.676.781,068	352,752	352,824	0,072	256,8196	-400	6,57%			
Cur	634,000	616.292,439	4.676.780,439	352,815	352,891	0,076	256,6604	-400	6,77%			
Cur	635,000	616.291,662	4.676.779,809	352,876	352,960	0,084	256,5012	-400	6,97%			
Cur	636,000	616.290,888	4.676.779,177	352,930	353,031	0,101	256,3421	-400	7,17%			
Cur	637,000	616.290,114	4.676.778,542	352,984	353,103	0,119	256,1829	-400	7,37%		T.S.	
Cur	637,945	616.289,385	4.676.777,941	353,042	353,174	0,132	256,0325	-400	7,56%			
Cur	638,000	616.289,343	4.676.777,906	353,045	353,178	0,133	256,0238	-400	7,56%			
Cur	639,000	616.288,573	4.676.777,268	353,109	353,254	0,145	255,8646	-400	7,56%			
Cur	640,000	616.287,805	4.676.776,628	353,175	353,329	0,154	255,7055	-400	7,56%			
Cur	641,000	616.287,038	4.676.775,986	353,239	353,405	0,166	255,5463	-400	7,56%			
Cur	642,000	616.286,273	4.676.775,342	353,303	353,481	0,178	255,3872	-400	7,56%			
Cur	643,000	616.285,509	4.676.774,697	353,366	353,556	0,190	255,2280	-400	7,56%			
Cur	644,000	616.284,747	4.676.774,049	353,434	353,632	0,198	255,0689	-400	7,56%			
Cur	645,000	616.283,987	4.676.773,399	353,502	353,707	0,205	254,9097	-400	7,56%			
Cur	646,000	616.283,228	4.676.772,748	353,571	353,783	0,212	254,7505	-400	7,56%			
Cur	647,000	616.282,471	4.676.772,094	353,637	353,859	0,222	254,5914	-400	7,56%			
Cur	648,000	616.281,716	4.676.771,439	353,706	353,934	0,228	254,4322	-400	7,56%			
Cur	649,000	616.280,962	4.676.770,782	353,776	354,010	0,234	254,2731	-400	7,56%			
Cur	650,000	616.280,210	4.676.770,123	353,845	354,086	0,241	254,1139	-400	7,56%			
Cur	651,000	616.279,459	4.676.769,462	353,914	354,161	0,247	253,9548	-400	7,56%			
Cur	652,000	616.278,711	4.676.768,799	353,983	354,237	0,254	253,7956	-400	7,56%			
Cur	653,000	616.277,963	4.676.768,135	354,052	354,313	0,261	253,6365	-400	7,56%			
Cur	654,000	616.277,218	4.676.767,468	354,122	354,388	0,266	253,4773	-400	7,56%			
Cur	655,000	616.276,474	4.676.766,800	354,192	354,464	0,272	253,3182	-400	7,56%			
Cur	656,000	616.275,732	4.676.766,130	354,262	354,539	0,277	253,1590	-400	7,56%			
Cur	657,000	616.274,992	4.676.765,457	354,335	354,615	0,280	252,9998	-400	7,56%			
Cur	658,000	616.274,253	4.676.764,784	354,408	354,691	0,283	252,8407	-400	7,56%			
Cur	659,000	616.273,516	4.676.764,108	354,479	354,766	0,287	252,6815	-400	7,56%			
Cur	660,000	616.272,780	4.676.763,430	354,550	354,842	0,292	252,5224	-400	7,56%			
Cur	661,000	616.272,047	4.676.762,751	354,623	354,918	0,295	252,3632	-400	7,56%			
Cur	662,000	616.271,315	4.676.762,069	354,696	354,993	0,297	252,2041	-400	7,56%			
Cur	663,000	616.270,584	4.676.761,386	354,769	355,069	0,300	252,0449	-400	7,56%			
Cur	664,000	616.269,856	4.676.760,701	354,842	355,144	0,302	251,8858	-400	7,56%			
Cur	665,000	616.269,129	4.676.760,015	354,915	355,220	0,305	251,7266	-400	7,56%			
Cur	666,000	616.268,404	4.676.759,326	354,989	355,296	0,307	251,5674	-400	7,56%			
Cur	667,000	616.267,680	4.676.758,636	355,069	355,371	0,302	251,4083	-400	7,56%			
Cur	668,000	616.266,958	4.676.757,943	355,149	355,447	0,298	251,2491	-400	7,56%			
Cur	669,000	616.266,238	4.676.757,249	355,230	355,523	0,293	251,0900	-400	7,56%			
Cur	670,000	616.265,520	4.676.756,554	355,312	355,598	0,286	250,9308	-400	7,56%			
Cur	671,000	616.264,804	4.676.755,856	355,393	355,674	0,281	250,7717	-400	7,56%			
Cur	672,000	616.264,089	4.676.755,157	355,475	355,750	0,275	250,6125	-400	7,56%			
Cur	673,000	616.263,376	4.676.754,455	355,557	355,825	0,268	250,4534	-400	7,56%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	674,000	616.262,665	4.676.753,752	355,639	355,901	0,262	250,2942	-400	7,56%			
Cur	675,000	616.261,955	4.676.753,048	355,721	355,976	0,255	250,1351	-400	7,56%			
Cur	676,000	616.261,248	4.676.752,341	355,805	356,052	0,247	249,9759	-400	7,56%			
Cur	677,000	616.260,542	4.676.751,633	355,888	356,128	0,240	249,8167	-400	7,56%			
Cur	678,000	616.259,837	4.676.750,923	355,971	356,203	0,232	249,6576	-400	7,56%			
Cur	679,000	616.259,135	4.676.750,211	356,058	356,279	0,221	249,4984	-400	7,56%			
Cur	680,000	616.258,434	4.676.749,498	356,146	356,355	0,209	249,3393	-400	7,56%			
Cur	681,000	616.257,736	4.676.748,782	356,233	356,430	0,197	249,1801	-400	7,56%			
Cur	682,000	616.257,038	4.676.748,065	356,321	356,506	0,185	249,0210	-400	7,56%			
Cur	683,000	616.256,343	4.676.747,347	356,409	356,581	0,172	248,8618	-400	7,56%			
Cur	684,000	616.255,650	4.676.746,626	356,497	356,657	0,160	248,7027	-400	7,56%			
Cur	685,000	616.254,958	4.676.745,904	356,586	356,733	0,147	248,5435	-400	7,56%			
Cur	686,000	616.254,268	4.676.745,180	356,674	356,808	0,134	248,3843	-400	7,56%			
Cur	687,000	616.253,580	4.676.744,454	356,763	356,884	0,121	248,2252	-400	7,56%			
Cur	688,000	616.252,894	4.676.743,727	356,851	356,960	0,109	248,0660	-400	7,56%			
Cur	689,000	616.252,210	4.676.742,998	356,939	357,035	0,096	247,9069	-400	7,56%			
Cur	690,000	616.251,527	4.676.742,267	357,029	357,111	0,082	247,7477	-400	7,56%		T.E.	
Cur	690,049	616.251,494	4.676.742,231	357,034	357,115	0,081	247,7399	-400	7,56%			
Cur	691,000	616.250,846	4.676.741,534	357,121	357,187	0,066	247,5886	-400	7,61%			
Cur	692,000	616.250,167	4.676.740,800	357,207	357,263	0,056	247,4294	-400	7,66%			
Cur	693,000	616.249,490	4.676.740,064	357,288	357,340	0,052	247,2703	-400	7,71%			
Cur	694,000	616.248,815	4.676.739,327	357,370	357,417	0,047	247,1111	-400	7,76%			
Cur	695,000	616.248,142	4.676.738,587	357,452	357,495	0,043	246,9520	-400	7,81%			
Cur	696,000	616.247,470	4.676.737,846	357,536	357,574	0,038	246,7928	-400	7,86%			
Cur	697,000	616.246,801	4.676.737,104	357,621	357,652	0,031	246,6336	-400	7,91%			
Cur	698,000	616.246,133	4.676.736,359	357,707	357,732	0,025	246,4745	-400	7,96%			
Cur	699,000	616.245,467	4.676.735,613	357,787	357,812	0,025	246,3153	-400	8,01%			
Cur	700,000	616.244,803	4.676.734,866	357,866	357,892	0,026	246,1562	-400	8,06%			
Cur	701,000	616.244,141	4.676.734,116	357,945	357,973	0,028	245,9970	-400	8,11%			
Cur	702,000	616.243,480	4.676.733,365	358,022	358,054	0,032	245,8379	-400	8,16%	P.S.	V.	
Rec	702,827	616.242,935	4.676.732,743	358,081	358,122	0,041	245,7062	0	8,20%			
Rec	703,000	616.242,822	4.676.732,613	358,094	358,136	0,042	245,7062	0	8,21%			
Rec	704,000	616.242,164	4.676.731,860	358,160	358,218	0,058	245,7062	0	8,26%			
Rec	705,000	616.241,506	4.676.731,107	358,219	358,301	0,082	245,7062	0	8,31%			
Rec	706,000	616.240,848	4.676.730,353	358,265	358,385	0,120	245,7062	0	8,36%			
Rec	707,000	616.240,190	4.676.729,600	358,302	358,468	0,166	245,7062	0	8,41%			
Rec	708,000	616.239,532	4.676.728,847	358,333	358,553	0,220	245,7062	0	8,46%			
Rec	709,000	616.238,875	4.676.728,094	358,358	358,638	0,280	245,7062	0	8,51%			
Rec	710,000	616.238,217	4.676.727,341	358,384	358,723	0,339	245,7062	0	8,56%			
Rec	711,000	616.237,559	4.676.726,588	358,417	358,809	0,392	245,7062	0	8,61%			
Rec	712,000	616.236,901	4.676.725,834	358,468	358,895	0,427	245,7062	0	8,66%			
Rec	713,000	616.236,243	4.676.725,081	358,530	358,982	0,452	245,7062	0	8,71%			
Rec	714,000	616.235,585	4.676.724,328	358,574	359,069	0,495	245,7062	0	8,76%			
Rec	715,000	616.234,928	4.676.723,575	358,641	359,157	0,516	245,7062	0	8,81%		T.S.	
Rec	715,605	616.234,530	4.676.723,119	358,683	359,211	0,527	245,7062	0	8,84%			
Rec	716,000	616.234,270	4.676.722,822	358,711	359,246	0,535	245,7062	0	8,84%			
Rec	717,000	616.233,612	4.676.722,069	358,785	359,334	0,549	245,7062	0	8,84%			
Rec	718,000	616.232,954	4.676.721,316	358,866	359,422	0,556	245,7062	0	8,84%			
Rec	719,000	616.232,296	4.676.720,562	358,952	359,511	0,559	245,7062	0	8,84%			
Rec	720,000	616.231,638	4.676.719,809	359,049	359,599	0,550	245,7062	0	8,84%			
Rec	721,000	616.230,980	4.676.719,056	359,158	359,688	0,530	245,7062	0	8,84%			
Rec	722,000	616.230,323	4.676.718,303	359,268	359,776	0,508	245,7062	0	8,84%			
Rec	723,000	616.229,665	4.676.717,550	359,377	359,864	0,487	245,7062	0	8,84%			
Rec	724,000	616.229,007	4.676.716,797	359,486	359,953	0,467	245,7062	0	8,84%			
Rec	725,000	616.228,349	4.676.716,043	359,595	360,041	0,446	245,7062	0	8,84%			
Rec	726,000	616.227,691	4.676.715,290	359,705	360,130	0,425	245,7062	0	8,84%			
Rec	727,000	616.227,033	4.676.714,537	359,814	360,218	0,404	245,7062	0	8,84%			
Rec	728,000	616.226,376	4.676.713,784	359,923	360,306	0,383	245,7062	0	8,84%			
Rec	729,000	616.225,718	4.676.713,031	360,026	360,395	0,369	245,7062	0	8,84%			
Rec	730,000	616.225,060	4.676.712,278	360,114	360,483	0,369	245,7062	0	8,84%			
Rec	731,000	616.224,402	4.676.711,525	360,202	360,572	0,370	245,7062	0	8,84%			
Rec	732,000	616.223,744	4.676.710,771	360,291	360,660	0,369	245,7062	0	8,84%			
Rec	733,000	616.223,086	4.676.710,018	360,379	360,749	0,370	245,7062	0	8,84%			
Rec	734,000	616.222,429	4.676.709,265	360,467	360,837	0,370	245,7062	0	8,84%			
Rec	735,000	616.221,771	4.676.708,512	360,555	360,925	0,370	245,7062	0	8,84%			
Rec	736,000	616.221,113	4.676.707,759	360,644	361,014	0,370	245,7062	0	8,84%			
Rec	737,000	616.220,455	4.676.707,006	360,731	361,102	0,371	245,7062	0	8,84%			
Rec	738,000	616.219,797	4.676.706,252	360,819	361,191	0,372	245,7062	0	8,84%			
Rec	739,000	616.219,139	4.676.705,499	360,906	361,279	0,373	245,7062	0	8,84%			
Rec	740,000	616.218,481	4.676.704,746	360,993	361,367	0,374	245,7062	0	8,84%			
Rec	741,000	616.217,824	4.676.703,993	361,083	361,456	0,373	245,7062	0	8,84%			
Rec	742,000	616.217,166	4.676.703,240	361,173	361,544	0,371	245,7062	0	8,84%			
Rec	743,000	616.216,508	4.676.702,487	361,263	361,633	0,370	245,7062	0	8,84%			
Rec	744,000	616.215,850	4.676.701,733	361,353	361,721	0,368	245,7062	0	8,84%			
Rec	745,000	616.215,192	4.676.700,980	361,444	361,809	0,365	245,7062	0	8,84%			
Rec	746,000	616.214,534	4.676.700,227	361,534	361,898	0,364	245,7062	0	8,84%			
Rec	747,000	616.213,877	4.676.699,474	361,624	361,986	0,362	245,7062	0	8,84%			
Rec	748,000	616.213,219	4.676.698,721	361,713	362,075	0,362	245,7062	0	8,84%			
Rec	749,000	616.212,561	4.676.697,968	361,802	362,163	0,361	245,7062	0	8,84%			
Rec	750,000	616.211,903	4.676.697,215	361,891	362,251	0,360	245,7062	0	8,84%			
Rec	751,000	616.211,245	4.676.696,461	361,980	362,340	0,360	245,7062	0	8,84%			
Rec	752,000	616.210,587	4.676.695,708	362,074	362,428	0,354	245,7062	0	8,84%			
Rec	753,000	616.209,930	4.676.694,955	362,170	362,517	0,347	245,7062	0	8,84%			
Rec	754,000	616.209,272	4.676.694,202	362,265	362,605	0,340	245,7062	0	8,84%			
Rec	755,000	616.208,614	4.676.693,449	362,360	362,693	0,333	245,7062	0	8,84%			
Rec	756,000	616.207,956	4.676.692,696	362,456	362,782	0,326	245,7062	0	8,84%			
Rec	757,000	616.207,298	4.676.691,942	362,552	362,870	0,318	245,7062	0	8,84%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	758,000	616.206,640	4.676.691,189	362,648	362,959	0,311	245,7062	0	8,84%			
Rec	759,000	616.205,982	4.676.690,436	362,744	363,047	0,303	245,7062	0	8,84%			
Rec	760,000	616.205,325	4.676.689,683	362,840	363,136	0,296	245,7062	0	8,84%			
Rec	761,000	616.204,667	4.676.688,930	362,936	363,224	0,288	245,7062	0	8,84%			
Rec	762,000	616.204,009	4.676.688,177	363,035	363,312	0,277	245,7062	0	8,84%			
Rec	763,000	616.203,351	4.676.687,424	363,138	363,401	0,263	245,7062	0	8,84%			
Rec	764,000	616.202,693	4.676.686,670	363,241	363,489	0,248	245,7062	0	8,84%			
Rec	765,000	616.202,035	4.676.685,917	363,345	363,578	0,233	245,7062	0	8,84%			
Rec	766,000	616.201,378	4.676.685,164	363,448	363,666	0,218	245,7062	0	8,84%			
Rec	767,000	616.200,720	4.676.684,411	363,552	363,754	0,202	245,7062	0	8,84%			
Rec	768,000	616.200,062	4.676.683,658	363,656	363,843	0,187	245,7062	0	8,84%			
Rec	769,000	616.199,404	4.676.682,905	363,761	363,931	0,170	245,7062	0	8,84%			
Rec	770,000	616.198,746	4.676.682,151	363,866	364,020	0,154	245,7062	0	8,84%			
Rec	771,000	616.198,088	4.676.681,398	363,970	364,108	0,138	245,7062	0	8,84%			
Rec	772,000	616.197,430	4.676.680,645	364,068	364,196	0,128	245,7062	0	8,84%			
Rec	773,000	616.196,773	4.676.679,892	364,163	364,285	0,122	245,7062	0	8,84%			
Rec	774,000	616.196,115	4.676.679,139	364,253	364,373	0,120	245,7062	0	8,84%			
Rec	775,000	616.195,457	4.676.678,386	364,346	364,462	0,116	245,7062	0	8,84%			
Rec	776,000	616.194,799	4.676.677,633	364,440	364,550	0,110	245,7062	0	8,84%			
Rec	777,000	616.194,141	4.676.676,879	364,533	364,638	0,105	245,7062	0	8,84%			
Rec	778,000	616.193,483	4.676.676,126	364,626	364,727	0,101	245,7062	0	8,84%			
Rec	779,000	616.192,826	4.676.675,373	364,721	364,815	0,094	245,7062	0	8,84%			
Rec	780,000	616.192,168	4.676.674,620	364,815	364,904	0,089	245,7062	0	8,84%			
Rec	781,000	616.191,510	4.676.673,867	364,910	364,992	0,082	245,7062	0	8,84%			
Rec	782,000	616.190,852	4.676.673,114	365,005	365,081	0,076	245,7062	0	8,84%			
Rec	783,000	616.190,194	4.676.672,360	365,099	365,169	0,070	245,7062	0	8,84%			
Rec	784,000	616.189,536	4.676.671,607	365,194	365,257	0,063	245,7062	0	8,84%			
Rec	785,000	616.188,879	4.676.670,854	365,290	365,346	0,056	245,7062	0	8,84%			
Rec	786,000	616.188,221	4.676.670,101	365,386	365,434	0,048	245,7062	0	8,84%			
Rec	787,000	616.187,563	4.676.669,348	365,482	365,523	0,041	245,7062	0	8,84%			
Rec	788,000	616.186,905	4.676.668,595	365,578	365,611	0,033	245,7062	0	8,84%			
Rec	789,000	616.186,247	4.676.667,842	365,674	365,699	0,025	245,7062	0	8,84%			
Rec	790,000	616.185,589	4.676.667,088	365,771	365,788	0,017	245,7062	0	8,84%			
Rec	791,000	616.184,931	4.676.666,335	365,867	365,876	0,009	245,7062	0	8,84%			
Rec	792,000	616.184,274	4.676.665,582	365,963	365,965	0,002	245,7062	0	8,84%			
Rec	793,000	616.183,616	4.676.664,829	366,070	366,053	-0,017	245,7062	0	8,84%			
Rec	794,000	616.182,958	4.676.664,076	366,185	366,141	-0,044	245,7062	0	8,84%			
Rec	795,000	616.182,300	4.676.663,323	366,299	366,230	-0,069	245,7062	0	8,84%			
Rec	796,000	616.181,642	4.676.662,569	366,414	366,318	-0,096	245,7062	0	8,84%			
Rec	797,000	616.180,984	4.676.661,816	366,528	366,407	-0,121	245,7062	0	8,84%			
Rec	798,000	616.180,327	4.676.661,063	366,643	366,495	-0,148	245,7062	0	8,84%			
Rec	799,000	616.179,669	4.676.660,310	366,755	366,583	-0,172	245,7062	0	8,84%			
Rec	800,000	616.179,011	4.676.659,557	366,868	366,672	-0,196	245,7062	0	8,84%			
Rec	801,000	616.178,353	4.676.658,804	366,980	366,760	-0,220	245,7062	0	8,84%			
Rec	802,000	616.177,695	4.676.658,051	367,072	366,849	-0,223	245,7062	0	8,84%			
Rec	803,000	616.177,037	4.676.657,297	367,159	366,937	-0,222	245,7062	0	8,84%			
Rec	804,000	616.176,379	4.676.656,544	367,247	367,025	-0,222	245,7062	0	8,84%			
Rec	805,000	616.175,722	4.676.655,791	367,322	367,114	-0,208	245,7062	0	8,84%			
Rec	806,000	616.175,064	4.676.655,038	367,389	367,202	-0,187	245,7062	0	8,84%			
Rec	807,000	616.174,406	4.676.654,285	367,450	367,291	-0,159	245,7062	0	8,84%			
Rec	808,000	616.173,748	4.676.653,532	367,503	367,379	-0,124	245,7062	0	8,84%			
Rec	809,000	616.173,090	4.676.652,778	367,552	367,468	-0,084	245,7062	0	8,84%			
Rec	810,000	616.172,432	4.676.652,025	367,628	367,556	-0,072	245,7062	0	8,84%			
Rec	811,000	616.171,775	4.676.651,272	367,712	367,644	-0,068	245,7062	0	8,84%			
Rec	812,000	616.171,117	4.676.650,519	367,783	367,733	-0,050	245,7062	0	8,84%			
Rec	813,000	616.170,459	4.676.649,766	367,838	367,821	-0,017	245,7062	0	8,84%			
Rec	814,000	616.169,801	4.676.649,013	367,904	367,910	0,006	245,7062	0	8,84%			
Rec	815,000	616.169,143	4.676.648,260	367,972	367,998	0,026	245,7062	0	8,84%			
Rec	816,000	616.168,485	4.676.647,506	368,054	368,086	0,032	245,7062	0	8,84%			
Rec	817,000	616.167,828	4.676.646,753	368,137	368,175	0,038	245,7062	0	8,84%			
Rec	818,000	616.167,170	4.676.646,000	368,230	368,263	0,033	245,7062	0	8,84%			
Rec	819,000	616.166,512	4.676.645,247	368,324	368,352	0,028	245,7062	0	8,84%			
Rec	820,000	616.165,854	4.676.644,494	368,387	368,440	0,053	245,7062	0	8,84%			
Rec	821,000	616.165,196	4.676.643,741	368,453	368,528	0,075	245,7062	0	8,84%			
Rec	822,000	616.164,538	4.676.642,987	368,529	368,617	0,088	245,7062	0	8,84%			
Rec	823,000	616.163,880	4.676.642,234	368,614	368,705	0,091	245,7062	0	8,84%			
Rec	824,000	616.163,223	4.676.641,481	368,701	368,794	0,093	245,7062	0	8,84%			
Rec	825,000	616.162,565	4.676.640,728	368,788	368,882	0,094	245,7062	0	8,84%			
Rec	826,000	616.161,907	4.676.639,975	368,876	368,970	0,094	245,7062	0	8,84%			
Rec	827,000	616.161,249	4.676.639,222	368,966	369,059	0,093	245,7062	0	8,84%			
Rec	828,000	616.160,591	4.676.638,469	369,058	369,147	0,089	245,7062	0	8,84%			
Rec	829,000	616.159,933	4.676.637,715	369,152	369,236	0,084	245,7062	0	8,84%			
Rec	830,000	616.159,276	4.676.636,962	369,246	369,324	0,078	245,7062	0	8,84%			
Rec	831,000	616.158,618	4.676.636,209	369,340	369,412	0,072	245,7062	0	8,84%			
Rec	832,000	616.157,960	4.676.635,456	369,434	369,501	0,067	245,7062	0	8,84%			
Rec	833,000	616.157,302	4.676.634,703	369,528	369,589	0,061	245,7062	0	8,84%			
Rec	834,000	616.156,644	4.676.633,950	369,621	369,678	0,057	245,7062	0	8,84%			
Rec	835,000	616.155,986	4.676.633,196	369,714	369,766	0,052	245,7062	0	8,84%			
Rec	836,000	616.155,328	4.676.632,443	369,807	369,855	0,048	245,7062	0	8,84%			
Rec	837,000	616.154,671	4.676.631,690	369,900	369,943	0,043	245,7062	0	8,84%			
Rec	838,000	616.154,013	4.676.630,937	369,993	370,031	0,038	245,7062	0	8,84%			
Rec	839,000	616.153,355	4.676.630,184	370,078	370,120	0,042	245,7062	0	8,84%			
Rec	840,000	616.152,697	4.676.629,431	370,161	370,208	0,047	245,7062	0	8,84%			
Rec	841,000	616.152,039	4.676.628,677	370,244	370,297	0,053	245,7062	0	8,84%			
Rec	842,000	616.151,381	4.676.627,924	370,328	370,385	0,057	245,7062	0	8,84%			
Rec	843,000	616.150,724	4.676.627,171	370,413	370,473	0,060	245,7062	0	8,84%			
Rec	844,000	616.150,066	4.676.626,418	370,498	370,562	0,064	245,7062	0	8,84%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	845,000	616.149,408	4.676.625,665	370,583	370,650	0,067	245,7062	0	8,84%			
Rec	846,000	616.148,750	4.676.624,912	370,668	370,739	0,071	245,7062	0	8,84%			
Rec	847,000	616.148,092	4.676.624,159	370,753	370,827	0,074	245,7062	0	8,84%			
Rec	848,000	616.147,434	4.676.623,405	370,838	370,915	0,077	245,7062	0	8,84%			
Rec	849,000	616.146,777	4.676.622,652	370,923	371,004	0,081	245,7062	0	8,84%			
Rec	850,000	616.146,119	4.676.621,899	371,009	371,092	0,083	245,7062	0	8,84%			
Rec	851,000	616.145,461	4.676.621,146	371,097	371,181	0,084	245,7062	0	8,84%			
Rec	852,000	616.144,803	4.676.620,393	371,185	371,269	0,084	245,7062	0	8,84%			
Rec	853,000	616.144,145	4.676.619,640	371,274	371,357	0,083	245,7062	0	8,84%			
Rec	854,000	616.143,487	4.676.618,886	371,362	371,446	0,084	245,7062	0	8,84%			
Rec	855,000	616.142,829	4.676.618,133	371,451	371,534	0,083	245,7062	0	8,84%			
Rec	856,000	616.142,172	4.676.617,380	371,539	371,623	0,084	245,7062	0	8,84%			
Rec	857,000	616.141,514	4.676.616,627	371,628	371,711	0,083	245,7062	0	8,84%			
Rec	858,000	616.140,856	4.676.615,874	371,716	371,799	0,083	245,7062	0	8,84%			
Rec	859,000	616.140,198	4.676.615,121	371,804	371,888	0,084	245,7062	0	8,84%			
Rec	860,000	616.139,540	4.676.614,368	371,892	371,976	0,084	245,7062	0	8,84%			
Rec	861,000	616.138,882	4.676.613,614	371,980	372,065	0,085	245,7062	0	8,84%			
Rec	862,000	616.138,225	4.676.612,861	372,069	372,153	0,084	245,7062	0	8,84%			
Rec	863,000	616.137,567	4.676.612,108	372,158	372,242	0,084	245,7062	0	8,84%			
Rec	864,000	616.136,909	4.676.611,355	372,247	372,330	0,083	245,7062	0	8,84%			
Rec	865,000	616.136,251	4.676.610,602	372,336	372,418	0,082	245,7062	0	8,84%			
Rec	866,000	616.135,593	4.676.609,849	372,425	372,507	0,082	245,7062	0	8,84%			
Rec	867,000	616.134,935	4.676.609,095	372,515	372,595	0,080	245,7062	0	8,84%			
Rec	868,000	616.134,277	4.676.608,342	372,604	372,684	0,080	245,7062	0	8,84%			
Rec	869,000	616.133,620	4.676.607,589	372,690	372,772	0,082	245,7062	0	8,84%			
Rec	870,000	616.132,962	4.676.606,836	372,775	372,860	0,085	245,7062	0	8,84%			
Rec	871,000	616.132,304	4.676.606,083	372,859	372,949	0,090	245,7062	0	8,84%			
Rec	872,000	616.131,646	4.676.605,330	372,944	373,037	0,093	245,7062	0	8,84%			
Rec	873,000	616.130,988	4.676.604,577	373,031	373,126	0,095	245,7062	0	8,84%			
Rec	874,000	616.130,330	4.676.603,823	373,123	373,214	0,091	245,7062	0	8,84%			
Rec	875,000	616.129,673	4.676.603,070	373,215	373,302	0,087	245,7062	0	8,84%			
Rec	876,000	616.129,015	4.676.602,317	373,307	373,391	0,084	245,7062	0	8,84%			
Rec	877,000	616.128,357	4.676.601,564	373,396	373,479	0,083	245,7062	0	8,84%			
Rec	878,000	616.127,699	4.676.600,811	373,486	373,568	0,082	245,7062	0	8,84%			
Rec	879,000	616.127,041	4.676.600,058	373,576	373,656	0,080	245,7062	0	8,84%			
Rec	880,000	616.126,383	4.676.599,304	373,667	373,744	0,077	245,7062	0	8,84%			
Rec	881,000	616.125,726	4.676.598,551	373,758	373,833	0,075	245,7062	0	8,84%			
Rec	882,000	616.125,068	4.676.597,798	373,846	373,921	0,075	245,7062	0	8,84%			
Rec	883,000	616.124,410	4.676.597,045	373,933	374,010	0,077	245,7062	0	8,84%			
Rec	884,000	616.123,752	4.676.596,292	374,024	374,098	0,074	245,7062	0	8,84%			
Rec	885,000	616.123,094	4.676.595,539	374,124	374,186	0,062	245,7062	0	8,84%			
Rec	886,000	616.122,436	4.676.594,786	374,223	374,275	0,052	245,7062	0	8,84%			
Rec	887,000	616.121,778	4.676.594,032	374,322	374,363	0,041	245,7062	0	8,84%			
Rec	888,000	616.121,121	4.676.593,279	374,421	374,452	0,031	245,7062	0	8,84%			
Rec	889,000	616.120,463	4.676.592,526	374,518	374,540	0,022	245,7062	0	8,84%			
Rec	890,000	616.119,805	4.676.591,773	374,613	374,629	0,016	245,7062	0	8,84%			
Rec	891,000	616.119,147	4.676.591,020	374,708	374,717	0,009	245,7062	0	8,84%			
Rec	892,000	616.118,489	4.676.590,267	374,803	374,805	0,002	245,7062	0	8,84%			
Rec	893,000	616.117,831	4.676.589,513	374,900	374,894	-0,006	245,7062	0	8,84%			
Rec	894,000	616.117,174	4.676.588,760	374,994	374,982	-0,012	245,7062	0	8,84%			
Rec	895,000	616.116,516	4.676.588,007	375,094	375,071	-0,023	245,7062	0	8,84%			
Rec	896,000	616.115,858	4.676.587,254	375,195	375,159	-0,036	245,7062	0	8,84%			
Rec	897,000	616.115,200	4.676.586,501	375,295	375,247	-0,048	245,7062	0	8,84%			
Rec	898,000	616.114,542	4.676.585,748	375,392	375,336	-0,056	245,7062	0	8,84%			
Rec	899,000	616.113,884	4.676.584,995	375,488	375,424	-0,064	245,7062	0	8,84%			
Rec	900,000	616.113,226	4.676.584,241	375,587	375,513	-0,074	245,7062	0	8,84%			
Rec	901,000	616.112,569	4.676.583,488	375,687	375,601	-0,086	245,7062	0	8,84%			
Rec	902,000	616.111,911	4.676.582,735	375,782	375,689	-0,093	245,7062	0	8,84%			
Rec	903,000	616.111,253	4.676.581,982	375,872	375,778	-0,094	245,7062	0	8,84%			
Rec	904,000	616.110,595	4.676.581,229	375,962	375,866	-0,096	245,7062	0	8,84%			
Rec	905,000	616.109,937	4.676.580,476	376,046	375,955	-0,091	245,7062	0	8,84%			
Rec	906,000	616.109,279	4.676.579,722	376,129	376,043	-0,086	245,7062	0	8,84%			
Rec	907,000	616.108,622	4.676.578,969	376,211	376,131	-0,080	245,7062	0	8,84%			
Rec	908,000	616.107,964	4.676.578,216	376,297	376,220	-0,077	245,7062	0	8,84%			
Rec	909,000	616.107,306	4.676.577,463	376,384	376,308	-0,076	245,7062	0	8,84%			
Rec	910,000	616.106,648	4.676.576,710	376,470	376,397	-0,073	245,7062	0	8,84%			
Rec	911,000	616.105,990	4.676.575,957	376,553	376,485	-0,068	245,7062	0	8,84%			
Rec	912,000	616.105,332	4.676.575,204	376,642	376,574	-0,068	245,7062	0	8,84%			
Rec	913,000	616.104,675	4.676.574,450	376,722	376,662	-0,060	245,7062	0	8,84%			
Rec	914,000	616.104,017	4.676.573,697	376,805	376,750	-0,055	245,7062	0	8,84%			
Rec	915,000	616.103,359	4.676.572,944	376,887	376,839	-0,048	245,7062	0	8,84%			
Rec	916,000	616.102,701	4.676.572,191	376,963	376,927	-0,036	245,7062	0	8,84%			
Rec	917,000	616.102,043	4.676.571,438	377,042	377,016	-0,026	245,7062	0	8,84%			
Rec	918,000	616.101,385	4.676.570,685	377,122	377,104	-0,018	245,7062	0	8,84%			
Rec	919,000	616.100,727	4.676.569,931	377,203	377,192	-0,011	245,7062	0	8,84%			
Rec	920,000	616.100,070	4.676.569,178	377,285	377,281	-0,004	245,7062	0	8,84%			
Rec	921,000	616.099,412	4.676.568,425	377,366	377,369	0,003	245,7062	0	8,84%			
Rec	922,000	616.098,754	4.676.567,672	377,450	377,458	0,008	245,7062	0	8,84%			
Rec	923,000	616.098,096	4.676.566,919	377,532	377,546	0,014	245,7062	0	8,84%			
Rec	924,000	616.097,438	4.676.566,166	377,614	377,634	0,020	245,7062	0	8,84%			
Rec	925,000	616.096,780	4.676.565,413	377,697	377,723	0,026	245,7062	0	8,84%			
Rec	926,000	616.096,123	4.676.564,659	377,778	377,811	0,033	245,7062	0	8,84%			
Rec	927,000	616.095,465	4.676.563,906	377,860	377,900	0,040	245,7062	0	8,84%			
Rec	928,000	616.094,807	4.676.563,153	377,939	377,988	0,049	245,7062	0	8,84%			
Rec	929,000	616.094,149	4.676.562,400	378,018	378,076	0,058	245,7062	0	8,84%			
Rec	930,000	616.093,491	4.676.561,647	378,093	378,165	0,072	245,7062	0	8,84%			
Rec	931,000	616.092,833	4.676.560,894	378,174	378,253	0,079	245,7062	0	8,84%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	932,000	616.092,176	4.676.560,140	378,253	378,342	0,089	245,7062	0	8,84%			
Rec	933,000	616.091,518	4.676.559,387	378,332	378,430	0,098	245,7062	0	8,84%		T.E.	
Rec	933,657	616.091,085	4.676.558,892	378,385	378,488	0,104	245,7062	0	8,84%			
Rec	934,000	616.090,860	4.676.558,634	378,412	378,518	0,106	245,7062	0	8,50%			
Rec	935,000	616.090,202	4.676.557,881	378,490	378,598	0,108	245,7062	0	7,50%			
Rec	936,000	616.089,544	4.676.557,128	378,559	378,668	0,109	245,7062	0	6,50%			
Rec	937,000	616.088,886	4.676.556,375	378,630	378,728	0,098	245,7062	0	5,50%			
Rec	938,000	616.088,228	4.676.555,622	378,704	378,778	0,074	245,7062	0	4,50%			
Rec	939,000	616.087,571	4.676.554,868	378,765	378,818	0,053	245,7062	0	3,50%			
Rec	940,000	616.086,913	4.676.554,115	378,832	378,848	0,016	245,7062	0	2,50%			
Rec	941,000	616.086,255	4.676.553,362	378,876	378,868	-0,008	245,7062	0	1,50%			
Rec	942,000	616.085,597	4.676.552,609	378,912	378,878	-0,034	245,7062	0	0,50%			
Rec	943,000	616.084,939	4.676.551,856	378,907	378,878	-0,029	245,7062	0	-0,50%			
Rec	944,000	616.084,281	4.676.551,103	378,931	378,868	-0,063	245,7062	0	-1,50%			
Rec	945,000	616.083,624	4.676.550,349	378,926	378,848	-0,078	245,7062	0	-2,50%			
Rec	946,000	616.082,966	4.676.549,596	378,915	378,818	-0,097	245,7062	0	-3,50%			
Rec	947,000	616.082,308	4.676.548,843	378,897	378,778	-0,119	245,7062	0	-4,50%			
Rec	948,000	616.081,650	4.676.548,090	378,871	378,728	-0,143	245,7062	0	-5,50%			
Rec	949,000	616.080,992	4.676.547,337	378,844	378,668	-0,176	245,7062	0	-6,50%		V.	
Rec	950,000	616.080,334	4.676.546,584	378,804	378,598	-0,206	245,7062	0	-7,50%			
Rec	951,000	616.079,676	4.676.545,830	378,788	378,518	-0,270	245,7062	0	-8,50%			
Rec	952,000	616.079,019	4.676.545,077	378,526	378,427	-0,099	245,7062	0	-9,50%			
Rec	953,000	616.078,361	4.676.544,324	378,296	378,327	0,031	245,7062	0	-10,50%			
Rec	954,000	616.077,703	4.676.543,571	378,293	378,217	-0,076	245,7062	0	-11,50%			
Rec	955,000	616.077,045	4.676.542,818	378,241	378,097	-0,144	245,7062	0	-12,50%			
Rec	956,000	616.076,387	4.676.542,065	377,927	377,967	0,040	245,7062	0	-13,50%			
Rec	957,000	616.075,729	4.676.541,312	377,577	377,827	0,250	245,7062	0	-14,50%			
Rec	958,000	616.075,072	4.676.540,558	377,235	377,677	0,442	245,7062	0	-15,50%	P.S.		
Cur	958,405	616.074,805	4.676.540,254	377,067	377,614	0,547	245,7062	-200	-15,91%			
Cur	959,000	616.074,414	4.676.539,805	376,820	377,517	0,697	245,5168	-200	-16,50%			
Cur	960,000	616.073,761	4.676.539,048	376,427	377,347	0,920	245,1985	-200	-17,50%			
Cur	961,000	616.073,111	4.676.538,288	375,985	377,167	1,182	244,8801	-200	-18,50%			
Cur	962,000	616.072,465	4.676.537,525	375,540	376,977	1,437	244,5618	-200	-19,50%			
Cur	963,000	616.071,822	4.676.536,758	375,114	376,777	1,663	244,2435	-200	-20,50%			
Cur	964,000	616.071,184	4.676.535,989	374,757	376,567	1,810	243,9252	-200	-21,50%			
Cur	965,000	616.070,549	4.676.535,216	374,418	376,347	1,929	243,6069	-200	-22,50%			
Cur	966,000	616.069,919	4.676.534,440	374,083	376,117	2,034	243,2886	-200	-23,50%		T.S.	
Cur	966,343	616.069,703	4.676.534,173	373,971	376,036	2,065	243,1794	-200	-23,85%			
Cur	967,000	616.069,292	4.676.533,661	373,756	375,879	2,123	242,9703	-200	-23,85%			
Cur	968,000	616.068,669	4.676.532,878	373,439	375,641	2,202	242,6520	-200	-23,85%			
Cur	969,000	616.068,050	4.676.532,093	373,119	375,402	2,283	242,3337	-200	-23,85%			
Cur	970,000	616.067,435	4.676.531,304	372,819	375,164	2,345	242,0154	-200	-23,85%			
Cur	971,000	616.066,824	4.676.530,513	372,530	374,926	2,396	241,6970	-200	-23,85%			
Cur	972,000	616.066,217	4.676.529,718	372,235	374,687	2,452	241,3787	-200	-23,85%			
Cur	973,000	616.065,613	4.676.528,921	371,945	374,449	2,504	241,0604	-200	-23,85%			
Cur	974,000	616.065,014	4.676.528,120	371,696	374,210	2,514	240,7421	-200	-23,85%			
Cur	975,000	616.064,419	4.676.527,316	371,447	373,972	2,525	240,4238	-200	-23,85%			
Cur	976,000	616.063,828	4.676.526,510	371,197	373,733	2,536	240,1055	-200	-23,85%			
Cur	977,000	616.063,241	4.676.525,700	370,948	373,495	2,547	239,7872	-200	-23,85%			
Cur	978,000	616.062,658	4.676.524,888	370,749	373,256	2,507	239,4689	-200	-23,85%			
Cur	979,000	616.062,079	4.676.524,073	370,549	373,018	2,469	239,1506	-200	-23,85%			
Cur	980,000	616.061,504	4.676.523,254	370,350	372,779	2,429	238,8323	-200	-23,85%			
Cur	981,000	616.060,933	4.676.522,433	370,151	372,541	2,390	238,5139	-200	-23,85%			
Cur	982,000	616.060,366	4.676.521,609	369,966	372,303	2,337	238,1956	-200	-23,85%			
Cur	983,000	616.059,804	4.676.520,783	369,827	372,064	2,237	237,8773	-200	-23,85%			
Cur	984,000	616.059,245	4.676.519,953	369,688	371,826	2,138	237,5590	-200	-23,85%			
Cur	985,000	616.058,691	4.676.519,121	369,549	371,587	2,038	237,2407	-200	-23,85%			
Cur	986,000	616.058,141	4.676.518,286	369,409	371,349	1,940	236,9224	-200	-23,85%			
Cur	987,000	616.057,595	4.676.517,448	369,270	371,110	1,840	236,6041	-200	-23,85%			
Cur	988,000	616.057,053	4.676.516,607	369,130	370,872	1,742	236,2858	-200	-23,85%			
Cur	989,000	616.056,516	4.676.515,764	368,987	370,633	1,646	235,9675	-200	-23,85%			
Cur	990,000	616.055,983	4.676.514,918	368,794	370,395	1,601	235,6492	-200	-23,85%			
Cur	991,000	616.055,454	4.676.514,069	368,600	370,157	1,557	235,3308	-200	-23,85%			
Cur	992,000	616.054,929	4.676.513,218	368,407	369,918	1,511	235,0125	-200	-23,85%			
Cur	993,000	616.054,408	4.676.512,364	368,212	369,680	1,468	234,6942	-200	-23,85%			
Cur	994,000	616.053,892	4.676.511,508	368,017	369,441	1,424	234,3759	-200	-23,85%			
Cur	995,000	616.053,380	4.676.510,649	367,793	369,203	1,410	234,0576	-200	-23,85%			
Cur	996,000	616.052,872	4.676.509,787	367,567	368,964	1,397	233,7393	-200	-23,85%			
Cur	997,000	616.052,369	4.676.508,923	367,337	368,726	1,389	233,4210	-200	-23,85%			
Cur	998,000	616.051,870	4.676.508,057	367,108	368,487	1,379	233,1027	-200	-23,85%			
Cur	999,000	616.051,375	4.676.507,188	367,016	368,249	1,233	232,7844	-200	-23,85%			
Cur	1.000,000	616.050,885	4.676.506,316	366,921	368,010	1,089	232,4661	-200	-23,85%		T.E.	
Cur	1.000,573	616.050,606	4.676.505,816	366,862	367,874	1,012	232,2837	-200	-23,85%			
Cur	1.001,000	616.050,399	4.676.505,442	366,818	367,773	0,955	232,1477	-200	-23,42%			
Cur	1.002,000	616.049,917	4.676.504,566	366,728	367,544	0,816	231,8294	-200	-22,42%			
Cur	1.003,000	616.049,440	4.676.503,687	366,637	367,325	0,688	231,5111	-200	-21,42%			
Cur	1.004,000	616.048,967	4.676.502,806	366,520	367,115	0,595	231,1928	-200	-20,42%			
Cur	1.005,000	616.048,499	4.676.501,922	366,402	366,916	0,514	230,8745	-200	-19,42%			
Cur	1.006,000	616.048,035	4.676.501,036	366,284	366,727	0,443	230,5562	-200	-18,42%			
Cur	1.007,000	616.047,575	4.676.500,148	366,171	366,548	0,377	230,2379	-200	-17,42%			
Cur	1.008,000	616.047,120	4.676.499,258	366,057	366,379	0,322	229,9196	-200	-16,42%			
Cur	1.009,000	616.046,670	4.676.498,365	365,957	366,220	0,263	229,6013	-200	-15,42%		V.	
Cur	1.010,000	616.046,224	4.676.497,470	365,870	366,070	0,200	229,2830	-200	-14,42%			
Cur	1.011,000	616.045,782	4.676.496,573	365,791	365,931	0,140	228,9647	-200	-13,42%			
Cur	1.012,000	616.045,345	4.676.495,674	365,707	365,802	0,095	228,6463	-200	-12,42%			
Cur	1.013,000	616.044,912	4.676.494,772	365,632	365,683	0,051	228,3280	-200	-11,42%			
Cur	1.014,000	616.044,484	4.676.493,868	365,559	365,574	0,015	228,0097	-200	-10,42%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.015,000	616.044,060	4.676.492,963	365,472	365,474	0,002	227,6914	-200	-9,42%			
Cur	1.016,000	616.043,641	4.676.492,055	365,390	365,385	-0,005	227,3731	-200	-8,42%			
Cur	1.017,000	616.043,226	4.676.491,145	365,306	365,306	0,000	227,0548	-200	-7,42%			
Cur	1.018,000	616.042,816	4.676.490,233	365,219	365,237	0,018	226,7365	-200	-6,42%			
Cur	1.019,000	616.042,411	4.676.489,318	365,140	365,178	0,038	226,4182	-200	-5,42%		T.S.	
Cur	1.019,427	616.042,239	4.676.488,927	365,105	365,155	0,050	226,2823	-200	-4,99%			
Cur	1.020,000	616.042,010	4.676.488,402	365,058	365,127	0,069	226,0999	-200	-4,99%			
Cur	1.021,000	616.041,614	4.676.487,484	364,984	365,077	0,093	225,7816	-200	-4,99%			
Cur	1.022,000	616.041,222	4.676.486,564	364,925	365,027	0,102	225,4632	-200	-4,99%			
Cur	1.023,000	616.040,835	4.676.485,642	364,868	364,977	0,109	225,1449	-200	-4,99%			
Cur	1.024,000	616.040,453	4.676.484,718	364,810	364,927	0,117	224,8266	-200	-4,99%			
Cur	1.025,000	616.040,075	4.676.483,792	364,754	364,877	0,123	224,5083	-200	-4,99%			
Cur	1.026,000	616.039,701	4.676.482,864	364,696	364,827	0,131	224,1900	-200	-4,99%			
Cur	1.027,000	616.039,333	4.676.481,935	364,634	364,777	0,143	223,8717	-200	-4,99%			
Cur	1.028,000	616.038,969	4.676.481,003	364,573	364,727	0,154	223,5534	-200	-4,99%			
Cur	1.029,000	616.038,610	4.676.480,070	364,512	364,678	0,166	223,2351	-200	-4,99%			
Cur	1.030,000	616.038,255	4.676.479,135	364,448	364,628	0,180	222,9168	-200	-4,99%			
Cur	1.031,000	616.037,905	4.676.478,198	364,382	364,578	0,196	222,5985	-200	-4,99%			
Cur	1.032,000	616.037,560	4.676.477,260	364,311	364,528	0,217	222,2801	-200	-4,99%			
Cur	1.033,000	616.037,219	4.676.476,320	364,232	364,478	0,246	221,9618	-200	-4,99%			
Cur	1.034,000	616.036,884	4.676.475,378	364,148	364,428	0,280	221,6435	-200	-4,99%			
Cur	1.035,000	616.036,553	4.676.474,434	364,061	364,378	0,317	221,3252	-200	-4,99%			
Cur	1.036,000	616.036,226	4.676.473,489	363,973	364,328	0,355	221,0069	-200	-4,99%			
Cur	1.037,000	616.035,905	4.676.472,542	363,886	364,278	0,392	220,6886	-200	-4,99%			
Cur	1.038,000	616.035,588	4.676.471,594	363,797	364,228	0,431	220,3703	-200	-4,99%			
Cur	1.039,000	616.035,275	4.676.470,644	363,710	364,178	0,468	220,0520	-200	-4,99%			
Cur	1.040,000	616.034,968	4.676.469,692	363,621	364,128	0,507	219,7337	-200	-4,99%			
Cur	1.041,000	616.034,665	4.676.468,739	363,538	364,078	0,540	219,4154	-200	-4,99%			
Cur	1.042,000	616.034,367	4.676.467,784	363,457	364,029	0,572	219,0970	-200	-4,99%			
Cur	1.043,000	616.034,074	4.676.466,828	363,379	363,979	0,600	218,7787	-200	-4,99%			
Cur	1.044,000	616.033,786	4.676.465,871	363,305	363,929	0,624	218,4604	-200	-4,99%			
Cur	1.045,000	616.033,503	4.676.464,912	363,234	363,879	0,645	218,1421	-200	-4,99%			
Cur	1.046,000	616.033,224	4.676.463,951	363,167	363,829	0,662	217,8238	-200	-4,99%			
Cur	1.047,000	616.032,950	4.676.462,990	363,103	363,779	0,676	217,5055	-200	-4,99%			
Cur	1.048,000	616.032,681	4.676.462,026	363,044	363,729	0,685	217,1872	-200	-4,99%			
Cur	1.049,000	616.032,416	4.676.461,062	362,995	363,679	0,684	216,8689	-200	-4,99%			
Cur	1.050,000	616.032,157	4.676.460,096	362,959	363,629	0,670	216,5506	-200	-4,99%			
Cur	1.051,000	616.031,902	4.676.459,129	362,927	363,579	0,652	216,2323	-200	-4,99%			
Cur	1.052,000	616.031,653	4.676.458,161	362,904	363,529	0,625	215,9139	-200	-4,99%			
Cur	1.053,000	616.031,408	4.676.457,191	362,882	363,479	0,597	215,5956	-200	-4,99%			
Cur	1.054,000	616.031,167	4.676.456,221	362,864	363,430	0,566	215,2773	-200	-4,99%			
Cur	1.055,000	616.030,932	4.676.455,249	362,843	363,380	0,537	214,9590	-200	-4,99%			
Cur	1.056,000	616.030,702	4.676.454,276	362,824	363,330	0,506	214,6407	-200	-4,99%			
Cur	1.057,000	616.030,476	4.676.453,301	362,793	363,280	0,487	214,3224	-200	-4,99%			
Cur	1.058,000	616.030,256	4.676.452,326	362,768	363,230	0,462	214,0041	-200	-4,99%			
Cur	1.059,000	616.030,040	4.676.451,350	362,741	363,180	0,439	213,6858	-200	-4,99%			
Cur	1.060,000	616.029,829	4.676.450,372	362,717	363,130	0,413	213,3675	-200	-4,99%			
Cur	1.061,000	616.029,623	4.676.449,394	362,692	363,080	0,388	213,0492	-200	-4,99%			
Cur	1.062,000	616.029,422	4.676.448,414	362,673	363,030	0,357	212,7308	-200	-4,99%			
Cur	1.063,000	616.029,226	4.676.447,433	362,656	362,980	0,324	212,4125	-200	-4,99%			
Cur	1.064,000	616.029,034	4.676.446,452	362,643	362,930	0,287	212,0942	-200	-4,99%			
Cur	1.065,000	616.028,848	4.676.445,469	362,613	362,880	0,267	211,7759	-200	-4,99%			
Cur	1.066,000	616.028,667	4.676.444,486	362,576	362,831	0,255	211,4576	-200	-4,99%			
Cur	1.067,000	616.028,490	4.676.443,502	362,535	362,781	0,246	211,1393	-200	-4,99%			
Cur	1.068,000	616.028,318	4.676.442,517	362,492	362,731	0,239	210,8210	-200	-4,99%			
Cur	1.069,000	616.028,152	4.676.441,531	362,450	362,681	0,231	210,5027	-200	-4,99%		T.E.	
Cur	1.069,709	616.028,037	4.676.440,831	362,420	362,645	0,226	210,2770	-200	-4,99%			
Cur	1.070,000	616.027,990	4.676.440,544	362,407	362,631	0,224	210,1844	-200	-4,93%			
Cur	1.071,000	616.027,833	4.676.439,556	362,366	362,583	0,217	209,8661	-200	-4,73%			
Cur	1.072,000	616.027,681	4.676.438,568	362,326	362,536	0,210	209,5477	-200	-4,53%			
Cur	1.073,000	616.027,534	4.676.437,579	362,285	362,492	0,207	209,2294	-200	-4,33%			
Cur	1.074,000	616.027,392	4.676.436,589	362,245	362,450	0,205	208,9111	-200	-4,13%			
Cur	1.075,000	616.027,255	4.676.435,598	362,206	362,409	0,203	208,5928	-200	-3,93%			
Cur	1.076,000	616.027,123	4.676.434,607	362,171	362,371	0,200	208,2745	-200	-3,73%			
Cur	1.077,000	616.026,996	4.676.433,615	362,136	362,335	0,199	207,9562	-200	-3,53%			
Cur	1.078,000	616.026,874	4.676.432,622	362,108	362,300	0,192	207,6379	-200	-3,33%			
Cur	1.079,000	616.026,757	4.676.431,629	362,081	362,268	0,187	207,3196	-200	-3,13%			
Cur	1.080,000	616.026,644	4.676.430,636	362,061	362,238	0,177	207,0013	-200	-2,93%			
Cur	1.081,000	616.026,537	4.676.429,641	362,046	362,209	0,163	206,6830	-200	-2,73%			
Cur	1.082,000	616.026,435	4.676.428,647	362,040	362,183	0,143	206,3646	-200	-2,53%			
Cur	1.083,000	616.026,338	4.676.427,651	362,043	362,159	0,116	206,0463	-200	-2,33%			
Cur	1.084,000	616.026,245	4.676.426,656	362,052	362,136	0,084	205,7280	-200	-2,13%			
Cur	1.085,000	616.026,158	4.676.425,660	362,064	362,116	0,052	205,4097	-200	-1,93%			
Cur	1.086,000	616.026,076	4.676.424,663	362,078	362,098	0,020	205,0914	-200	-1,73%			
Cur	1.087,000	616.025,998	4.676.423,666	362,096	362,081	-0,015	204,7731	-200	-1,53%			
Cur	1.088,000	616.025,926	4.676.422,669	362,113	362,067	-0,046	204,4548	-200	-1,33%	P.S.	V.	
Rec	1.088,266	616.025,907	4.676.422,403	362,118	362,063	-0,055	204,3700	0	-1,28%			
Rec	1.089,000	616.025,857	4.676.421,671	362,131	362,055	-0,076	204,3700	0	-1,13%			
Rec	1.090,000	616.025,788	4.676.420,673	362,143	362,044	-0,099	204,3700	0	-0,93%			
Rec	1.091,000	616.025,720	4.676.419,676	362,152	362,036	-0,116	204,3700	0	-0,73%			
Rec	1.092,000	616.025,651	4.676.418,678	362,157	362,029	-0,128	204,3700	0	-0,53%			
Rec	1.093,000	616.025,583	4.676.417,680	362,156	362,025	-0,131	204,3700	0	-0,33%			ODT Ø1000 L=6,1m
Rec	1.094,000	616.025,514	4.676.416,683	362,147	362,023	-0,124	204,3700	0	-0,13%			
Rec	1.095,000	616.025,445	4.676.415,685	362,140	362,022	-0,118	204,3700	0	0,07%			
Rec	1.096,000	616.025,377	4.676.414,687	362,136	362,024	-0,112	204,3700	0	0,27%			
Rec	1.097,000	616.025,308	4.676.413,690	362,134	362,028	-0,106	204,3700	0	0,47%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.098,000	616.025,240	4.676.412,692	362,134	362,033	-0,101	204,3700	0	0,67%			
Rec	1.099,000	616.025,171	4.676.411,695	362,131	362,041	-0,090	204,3700	0	0,87%			
Rec	1.100,000	616.025,102	4.676.410,697	362,128	362,051	-0,077	204,3700	0	1,07%			
Rec	1.101,000	616.025,034	4.676.409,699	362,125	362,062	-0,063	204,3700	0	1,27%			
Rec	1.102,000	616.024,965	4.676.408,702	362,122	362,076	-0,046	204,3700	0	1,47%			
Rec	1.103,000	616.024,897	4.676.407,704	362,122	362,092	-0,030	204,3700	0	1,67%			
Rec	1.104,000	616.024,828	4.676.406,706	362,118	362,109	-0,009	204,3700	0	1,87%			
Rec	1.105,000	616.024,759	4.676.405,709	362,109	362,129	0,020	204,3700	0	2,07%			
Rec	1.106,000	616.024,691	4.676.404,711	362,094	362,151	0,057	204,3700	0	2,27%		T.S.	
Rec	1.106,823	616.024,634	4.676.403,890	362,089	362,170	0,081	204,3700	0	2,43%			
Rec	1.107,000	616.024,622	4.676.403,713	362,088	362,174	0,086	204,3700	0	2,43%			
Rec	1.108,000	616.024,554	4.676.402,716	362,082	362,199	0,117	204,3700	0	2,43%			
Rec	1.109,000	616.024,485	4.676.401,718	362,062	362,223	0,161	204,3700	0	2,43%			
Rec	1.110,000	616.024,417	4.676.400,720	362,049	362,247	0,198	204,3700	0	2,43%			
Rec	1.111,000	616.024,348	4.676.399,723	362,036	362,272	0,236	204,3700	0	2,43%			
Rec	1.112,000	616.024,279	4.676.398,725	362,026	362,296	0,270	204,3700	0	2,43%			
Rec	1.113,000	616.024,211	4.676.397,727	362,025	362,320	0,295	204,3700	0	2,43%			
Rec	1.114,000	616.024,142	4.676.396,730	362,029	362,345	0,316	204,3700	0	2,43%			
Rec	1.115,000	616.024,074	4.676.395,732	362,041	362,369	0,328	204,3700	0	2,43%			
Rec	1.116,000	616.024,005	4.676.394,735	362,072	362,393	0,321	204,3700	0	2,43%			
Rec	1.117,000	616.023,936	4.676.393,737	362,103	362,417	0,314	204,3700	0	2,43%			
Rec	1.118,000	616.023,868	4.676.392,739	362,138	362,442	0,304	204,3700	0	2,43%			
Rec	1.119,000	616.023,799	4.676.391,742	362,179	362,466	0,287	204,3700	0	2,43%			
Rec	1.120,000	616.023,731	4.676.390,744	362,227	362,490	0,263	204,3700	0	2,43%			
Rec	1.121,000	616.023,662	4.676.389,746	362,278	362,515	0,237	204,3700	0	2,43%			
Rec	1.122,000	616.023,593	4.676.388,749	362,328	362,539	0,211	204,3700	0	2,43%			
Rec	1.123,000	616.023,525	4.676.387,751	362,378	362,563	0,185	204,3700	0	2,43%			
Rec	1.124,000	616.023,456	4.676.386,753	362,429	362,588	0,159	204,3700	0	2,43%			
Rec	1.125,000	616.023,388	4.676.385,756	362,480	362,612	0,132	204,3700	0	2,43%			
Rec	1.126,000	616.023,319	4.676.384,758	362,538	362,636	0,098	204,3700	0	2,43%			
Rec	1.127,000	616.023,251	4.676.383,760	362,596	362,661	0,065	204,3700	0	2,43%			
Rec	1.128,000	616.023,182	4.676.382,763	362,620	362,685	0,065	204,3700	0	2,43%			
Rec	1.129,000	616.023,113	4.676.381,765	362,663	362,709	0,046	204,3700	0	2,43%			
Rec	1.130,000	616.023,045	4.676.380,768	362,718	362,733	0,015	204,3700	0	2,43%			
Rec	1.131,000	616.022,976	4.676.379,770	362,777	362,758	-0,019	204,3700	0	2,43%			
Rec	1.132,000	616.022,908	4.676.378,772	362,836	362,782	-0,054	204,3700	0	2,43%			
Rec	1.133,000	616.022,839	4.676.377,775	362,898	362,806	-0,092	204,3700	0	2,43%			
Rec	1.134,000	616.022,770	4.676.376,777	362,964	362,831	-0,133	204,3700	0	2,43%			
Rec	1.135,000	616.022,702	4.676.375,779	363,047	362,855	-0,192	204,3700	0	2,43%			
Rec	1.136,000	616.022,633	4.676.374,782	363,127	362,879	-0,248	204,3700	0	2,43%			
Rec	1.137,000	616.022,565	4.676.373,784	363,171	362,904	-0,267	204,3700	0	2,43%			
Rec	1.138,000	616.022,496	4.676.372,786	363,158	362,928	-0,230	204,3700	0	2,43%			
Rec	1.139,000	616.022,427	4.676.371,789	363,324	362,952	-0,372	204,3700	0	2,43%			
Rec	1.140,000	616.022,359	4.676.370,791	363,443	362,977	-0,466	204,3700	0	2,43%			
Rec	1.141,000	616.022,290	4.676.369,793	363,342	363,001	-0,341	204,3700	0	2,43%			
Rec	1.142,000	616.022,222	4.676.368,796	363,213	363,025	-0,188	204,3700	0	2,43%			
Rec	1.143,000	616.022,153	4.676.367,798	363,098	363,050	-0,048	204,3700	0	2,43%			
Rec	1.144,000	616.022,084	4.676.366,800	362,990	363,074	0,084	204,3700	0	2,43%			
Rec	1.145,000	616.022,016	4.676.365,803	362,921	363,098	0,177	204,3700	0	2,43%			
Rec	1.146,000	616.021,947	4.676.364,805	362,855	363,122	0,267	204,3700	0	2,43%			
Rec	1.147,000	616.021,879	4.676.363,808	362,802	363,147	0,345	204,3700	0	2,43%			
Rec	1.148,000	616.021,810	4.676.362,810	362,759	363,171	0,412	204,3700	0	2,43%			
Rec	1.149,000	616.021,742	4.676.361,812	362,747	363,195	0,448	204,3700	0	2,43%			
Rec	1.150,000	616.021,673	4.676.360,815	362,672	363,220	0,548	204,3700	0	2,43%			
Rec	1.151,000	616.021,604	4.676.359,817	362,620	363,244	0,624	204,3700	0	2,43%			
Rec	1.152,000	616.021,536	4.676.358,819	362,570	363,268	0,698	204,3700	0	2,43%			
Rec	1.153,000	616.021,467	4.676.357,822	362,539	363,293	0,754	204,3700	0	2,43%			
Rec	1.154,000	616.021,399	4.676.356,824	362,553	363,317	0,764	204,3700	0	2,43%			
Rec	1.155,000	616.021,330	4.676.355,826	362,562	363,341	0,779	204,3700	0	2,43%			
Rec	1.156,000	616.021,261	4.676.354,829	362,609	363,366	0,757	204,3700	0	2,43%			
Rec	1.157,000	616.021,193	4.676.353,831	362,682	363,390	0,708	204,3700	0	2,43%			
Rec	1.158,000	616.021,124	4.676.352,833	362,556	363,414	0,858	204,3700	0	2,43%			
Rec	1.159,000	616.021,056	4.676.351,836	362,398	363,438	1,040	204,3700	0	2,43%			
Rec	1.160,000	616.020,987	4.676.350,838	362,201	363,463	1,262	204,3700	0	2,43%			
Rec	1.161,000	616.020,918	4.676.349,841	362,055	363,487	1,432	204,3700	0	2,43%			
Rec	1.162,000	616.020,850	4.676.348,843	360,591	363,511	2,920	204,3700	0	2,43%			
Rec	1.163,000	616.020,781	4.676.347,845	359,454	363,536	4,082	204,3700	0	2,43%			3 MARCOS 2,5m x 2,0m L=9.40m
Rec	1.164,000	616.020,713	4.676.346,848	360,168	363,560	3,392	204,3700	0	2,43%			
Rec	1.165,000	616.020,644	4.676.345,850	360,792	363,584	2,792	204,3700	0	2,43%			
Rec	1.166,000	616.020,575	4.676.344,852	361,859	363,609	1,750	204,3700	0	2,43%			
Rec	1.167,000	616.020,507	4.676.343,855	363,515	363,633	0,118	204,3700	0	2,43%			
Rec	1.168,000	616.020,438	4.676.342,857	363,676	363,657	-0,019	204,3700	0	2,43%			
Rec	1.169,000	616.020,370	4.676.341,859	363,716	363,682	-0,034	204,3700	0	2,43%			
Rec	1.170,000	616.020,301	4.676.340,862	363,706	363,706	0,000	204,3700	0	2,43%			
Rec	1.171,000	616.020,233	4.676.339,864	363,639	363,730	0,091	204,3700	0	2,43%			
Rec	1.172,000	616.020,164	4.676.338,866	363,676	363,754	0,078	204,3700	0	2,43%			
Rec	1.173,000	616.020,095	4.676.337,869	363,722	363,779	0,057	204,3700	0	2,43%			
Rec	1.174,000	616.020,027	4.676.336,871	363,749	363,803	0,054	204,3700	0	2,43%			
Rec	1.175,000	616.019,958	4.676.335,873	363,777	363,827	0,050	204,3700	0	2,43%			
Rec	1.176,000	616.019,890	4.676.334,876	363,782	363,852	0,070	204,3700	0	2,43%			
Rec	1.177,000	616.019,821	4.676.333,878	363,781	363,876	0,095	204,3700	0	2,43%			
Rec	1.178,000	616.019,752	4.676.332,881	363,769	363,900	0,131	204,3700	0	2,43%			
Rec	1.179,000	616.019,684	4.676.331,883	363,771	363,925	0,154	204,3700	0	2,43%		T.E.	
Rec	1.179,116	616.019,676	4.676.331,767	363,772	363,927	0,155	204,3700	0	2,43%			
Rec	1.180,000	616.019,615	4.676.330,885	363,780	363,949	0,169	204,3700	0	2,34%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.181,000	616.019,547	4.676.329,888	363,788	363,971	0,183	204,3700	0	2,24%			
Rec	1.182,000	616.019,478	4.676.328,890	363,762	363,993	0,231	204,3700	0	2,14%			
Rec	1.183,000	616.019,409	4.676.327,892	363,751	364,014	0,263	204,3700	0	2,04%			
Rec	1.184,000	616.019,341	4.676.326,895	363,748	364,034	0,286	204,3700	0	1,94%			
Rec	1.185,000	616.019,272	4.676.325,897	363,744	364,053	0,309	204,3700	0	1,84%			
Rec	1.186,000	616.019,204	4.676.324,899	363,738	364,071	0,333	204,3700	0	1,74%			
Rec	1.187,000	616.019,135	4.676.323,902	363,710	364,088	0,378	204,3700	0	1,64%			
Rec	1.188,000	616.019,067	4.676.322,904	363,685	364,104	0,419	204,3700	0	1,54%			
Rec	1.189,000	616.018,998	4.676.321,906	363,656	364,119	0,463	204,3700	0	1,44%		V.	
Rec	1.190,000	616.018,929	4.676.320,909	363,645	364,133	0,488	204,3700	0	1,34%			
Rec	1.191,000	616.018,861	4.676.319,911	363,634	364,146	0,512	204,3700	0	1,24%			
Rec	1.192,000	616.018,792	4.676.318,914	363,624	364,158	0,534	204,3700	0	1,14%			
Rec	1.193,000	616.018,724	4.676.317,916	363,600	364,169	0,569	204,3700	0	1,04%			
Rec	1.194,000	616.018,655	4.676.316,918	363,607	364,178	0,571	204,3700	0	0,94%			
Rec	1.195,000	616.018,586	4.676.315,921	363,614	364,187	0,573	204,3700	0	0,84%			
Rec	1.196,000	616.018,518	4.676.314,923	363,618	364,195	0,577	204,3700	0	0,74%			
Rec	1.197,000	616.018,449	4.676.313,925	363,603	364,202	0,599	204,3700	0	0,64%			
Rec	1.198,000	616.018,381	4.676.312,928	363,600	364,208	0,608	204,3700	0	0,54%			
Rec	1.199,000	616.018,312	4.676.311,930	363,598	364,213	0,615	204,3700	0	0,44%			
Rec	1.200,000	616.018,243	4.676.310,932	363,601	364,217	0,616	204,3700	0	0,34%		T.S.	
Rec	1.200,884	616.018,183	4.676.310,050	363,605	364,220	0,615	204,3700	0	0,25%			
Rec	1.201,000	616.018,175	4.676.309,935	363,605	364,220	0,615	204,3700	0	0,25%			
Rec	1.202,000	616.018,106	4.676.308,937	363,605	364,222	0,617	204,3700	0	0,25%			
Rec	1.203,000	616.018,038	4.676.307,939	363,609	364,225	0,616	204,3700	0	0,25%			
Rec	1.204,000	616.017,969	4.676.306,942	363,617	364,228	0,611	204,3700	0	0,25%			
Rec	1.205,000	616.017,900	4.676.305,944	363,629	364,230	0,601	204,3700	0	0,25%			
Rec	1.206,000	616.017,832	4.676.304,946	363,654	364,233	0,579	204,3700	0	0,25%			
Rec	1.207,000	616.017,763	4.676.303,949	363,551	364,235	0,684	204,3700	0	0,25%			
Rec	1.208,000	616.017,695	4.676.302,951	363,480	364,238	0,758	204,3700	0	0,25%			
Rec	1.209,000	616.017,626	4.676.301,954	363,325	364,240	0,915	204,3700	0	0,25%			
Rec	1.210,000	616.017,558	4.676.300,956	363,255	364,243	0,988	204,3700	0	0,25%			
Rec	1.211,000	616.017,489	4.676.299,958	363,166	364,245	1,079	204,3700	0	0,25%			
Rec	1.212,000	616.017,420	4.676.298,961	363,195	364,248	1,053	204,3700	0	0,25%			
Rec	1.213,000	616.017,352	4.676.297,963	363,052	364,250	1,198	204,3700	0	0,25%	P.S.		
Cur	1.213,582	616.017,312	4.676.297,383	362,611	364,252	1,641	204,3700	200	0,25%			2 MARCOS 3,0m x 1,5m L=7,30m
Cur	1.214,000	616.017,283	4.676.296,965	362,144	364,253	2,109	204,5032	200	0,25%			
Cur	1.215,000	616.017,210	4.676.295,968	361,881	364,255	2,375	204,8215	200	0,25%			
Cur	1.216,000	616.017,131	4.676.294,971	362,402	364,258	1,856	205,1398	200	0,25%			
Cur	1.217,000	616.017,048	4.676.293,975	363,039	364,261	1,222	205,4581	200	0,25%			
Cur	1.218,000	616.016,960	4.676.292,978	363,174	364,263	1,089	205,7765	200	0,25%			
Cur	1.219,000	616.016,867	4.676.291,983	363,346	364,266	0,920	206,0948	200	0,25%			
Cur	1.220,000	616.016,769	4.676.290,988	363,559	364,268	0,709	206,4131	200	0,25%			
Cur	1.221,000	616.016,666	4.676.289,993	363,562	364,271	0,709	206,7314	200	0,25%			
Cur	1.222,000	616.016,558	4.676.288,999	363,576	364,273	0,697	207,0497	200	0,25%			
Cur	1.223,000	616.016,445	4.676.288,005	363,580	364,276	0,696	207,3680	200	0,25%			
Cur	1.224,000	616.016,327	4.676.287,012	363,588	364,278	0,690	207,6863	200	0,25%			
Cur	1.225,000	616.016,204	4.676.286,020	363,603	364,281	0,678	208,0046	200	0,25%			
Cur	1.226,000	616.016,076	4.676.285,028	363,619	364,283	0,664	208,3229	200	0,25%			
Cur	1.227,000	616.015,943	4.676.284,037	363,631	364,286	0,655	208,6412	200	0,25%			
Cur	1.228,000	616.015,805	4.676.283,046	363,642	364,289	0,647	208,9596	200	0,25%			
Cur	1.229,000	616.015,663	4.676.282,057	363,652	364,291	0,639	209,2779	200	0,25%			
Cur	1.230,000	616.015,515	4.676.281,068	363,663	364,294	0,631	209,5962	200	0,25%			
Cur	1.231,000	616.015,362	4.676.280,079	363,672	364,296	0,624	209,9145	200	0,25%			
Cur	1.232,000	616.015,205	4.676.279,092	363,698	364,299	0,601	210,2328	200	0,25%			
Cur	1.233,000	616.015,042	4.676.278,105	363,716	364,301	0,585	210,5511	200	0,25%			
Cur	1.234,000	616.014,875	4.676.277,119	363,730	364,304	0,574	210,8694	200	0,25%			
Cur	1.235,000	616.014,702	4.676.276,134	363,729	364,306	0,577	211,1877	200	0,25%			
Cur	1.236,000	616.014,525	4.676.275,150	363,744	364,309	0,565	211,5060	200	0,25%			
Cur	1.237,000	616.014,343	4.676.274,167	363,745	364,311	0,566	211,8243	200	0,25%			
Cur	1.238,000	616.014,156	4.676.273,184	363,772	364,314	0,542	212,1427	200	0,25%			
Cur	1.239,000	616.013,964	4.676.272,203	363,776	364,316	0,540	212,4610	200	0,25%			
Cur	1.240,000	616.013,767	4.676.271,223	363,777	364,319	0,542	212,7793	200	0,25%			
Cur	1.241,000	616.013,565	4.676.270,243	363,778	364,322	0,544	213,0976	200	0,25%			
Cur	1.242,000	616.013,358	4.676.269,265	363,785	364,324	0,539	213,4159	200	0,25%			
Cur	1.243,000	616.013,147	4.676.268,287	363,829	364,327	0,498	213,7342	200	0,25%			
Cur	1.244,000	616.012,930	4.676.267,311	363,823	364,329	0,506	214,0525	200	0,25%			
Cur	1.245,000	616.012,709	4.676.266,336	363,831	364,332	0,501	214,3708	200	0,25%			
Cur	1.246,000	616.012,483	4.676.265,362	363,829	364,334	0,505	214,6891	200	0,25%			
Cur	1.247,000	616.012,251	4.676.264,389	363,837	364,337	0,500	215,0074	200	0,25%			
Cur	1.248,000	616.012,015	4.676.263,417	363,834	364,339	0,505	215,3258	200	0,25%			
Cur	1.249,000	616.011,775	4.676.262,447	363,831	364,342	0,511	215,6441	200	0,25%			
Cur	1.250,000	616.011,529	4.676.261,477	363,827	364,344	0,517	215,9624	200	0,25%			
Cur	1.251,000	616.011,278	4.676.260,509	363,823	364,347	0,524	216,2807	200	0,25%			
Cur	1.252,000	616.011,023	4.676.259,542	363,819	364,349	0,530	216,5990	200	0,25%			
Cur	1.253,000	616.010,763	4.676.258,577	363,815	364,352	0,537	216,9173	200	0,25%			
Cur	1.254,000	616.010,498	4.676.257,613	363,814	364,355	0,541	217,2356	200	0,25%			
Cur	1.255,000	616.010,228	4.676.256,650	363,818	364,357	0,539	217,5539	200	0,25%			
Cur	1.256,000	616.009,953	4.676.255,688	363,823	364,360	0,537	217,8722	200	0,25%			
Cur	1.257,000	616.009,674	4.676.254,728	363,827	364,362	0,535	218,1905	200	0,25%			
Cur	1.258,000	616.009,389	4.676.253,769	363,836	364,365	0,529	218,5089	200	0,25%			
Cur	1.259,000	616.009,100	4.676.252,812	363,846	364,367	0,521	218,8272	200	0,25%			
Cur	1.260,000	616.008,807	4.676.251,856	363,856	364,370	0,514	219,1455	200	0,25%			
Cur	1.261,000	616.008,508	4.676.250,902	363,871	364,372	0,501	219,4638	200	0,25%			
Cur	1.262,000	616.008,205	4.676.249,949	363,885	364,375	0,490	219,7821	200	0,25%			
Cur	1.263,000	616.007,896	4.676.248,998	363,905	364,377	0,472	220,1004	200	0,25%			

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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.264,000	616.007,584	4.676.248,048	363,922	364,380	0,458	220,4187	200	0,25%			
Cur	1.265,000	616.007,266	4.676.247,100	363,940	364,383	0,443	220,7370	200	0,25%			
Cur	1.266,000	616.006,944	4.676.246,153	363,958	364,385	0,427	221,0553	200	0,25%			
Cur	1.267,000	616.006,616	4.676.245,208	363,978	364,388	0,410	221,3736	200	0,25%			
Cur	1.268,000	616.006,285	4.676.244,265	363,998	364,390	0,392	221,6920	200	0,25%			
Cur	1.269,000	616.005,948	4.676.243,323	364,020	364,393	0,373	222,0103	200	0,25%			
Cur	1.270,000	616.005,607	4.676.242,383	364,043	364,395	0,352	222,3286	200	0,25%			
Cur	1.271,000	616.005,261	4.676.241,445	364,066	364,398	0,332	222,6469	200	0,25%			
Cur	1.272,000	616.004,910	4.676.240,508	364,084	364,400	0,316	222,9652	200	0,25%			
Cur	1.273,000	616.004,555	4.676.239,573	364,110	364,403	0,293	223,2835	200	0,25%			
Cur	1.274,000	616.004,195	4.676.238,640	364,136	364,405	0,269	223,6018	200	0,25%			
Cur	1.275,000	616.003,830	4.676.237,709	364,170	364,408	0,238	223,9201	200	0,25%			
Cur	1.276,000	616.003,461	4.676.236,780	364,203	364,410	0,207	224,2384	200	0,25%			
Cur	1.277,000	616.003,087	4.676.235,853	364,261	364,413	0,152	224,5567	200	0,25%			
Cur	1.278,000	616.002,709	4.676.234,927	364,334	364,416	0,082	224,8751	200	0,25%			
Cur	1.279,000	616.002,325	4.676.234,003	364,394	364,418	0,024	225,1934	200	0,25%		T.E.	
Cur	1.279,592	616.002,096	4.676.233,457	364,410	364,420	0,010	225,3818	200	0,25%			
Cur	1.280,000	616.001,938	4.676.233,082	364,421	364,421	0,000	225,5117	200	0,34%			
Cur	1.281,000	616.001,545	4.676.232,162	364,420	364,425	0,005	225,8300	200	0,54%			
Cur	1.282,000	616.001,148	4.676.231,244	364,410	364,431	0,021	226,1483	200	0,74%			
Cur	1.283,000	616.000,747	4.676.230,328	364,401	364,440	0,039	226,4666	200	0,94%			
Cur	1.284,000	616.000,341	4.676.229,414	364,391	364,450	0,059	226,7849	200	1,14%			
Cur	1.285,000	615.999,930	4.676.228,503	364,381	364,463	0,082	227,1032	200	1,34%			
Cur	1.286,000	615.999,515	4.676.227,593	364,382	364,477	0,095	227,4215	200	1,54%			
Cur	1.287,000	615.999,095	4.676.226,685	364,387	364,493	0,106	227,7398	200	1,74%			
Cur	1.288,000	615.998,670	4.676.225,780	364,394	364,512	0,118	228,0582	200	1,94%			
Cur	1.289,000	615.998,242	4.676.224,876	364,470	364,532	0,062	228,3765	200	2,14%		V.	
Cur	1.290,000	615.997,808	4.676.223,975	364,589	364,554	-0,035	228,6948	200	2,34%			
Cur	1.291,000	615.997,370	4.676.223,076	364,620	364,579	-0,041	229,0131	200	2,54%			
Cur	1.292,000	615.996,928	4.676.222,179	364,640	364,605	-0,035	229,3314	200	2,74%			
Cur	1.293,000	615.996,481	4.676.221,285	364,679	364,633	-0,046	229,6497	200	2,94%			
Cur	1.294,000	615.996,030	4.676.220,392	364,705	364,664	-0,041	229,9680	200	3,14%	P.S.		
Rec	1.294,006	615.996,027	4.676.220,387	364,705	364,664	-0,041	229,9699	0	3,14%			
Rec	1.295,000	615.995,576	4.676.219,501	364,726	364,696	-0,030	229,9699	0	3,34%			
Rec	1.296,000	615.995,123	4.676.218,610	364,756	364,730	-0,026	229,9699	0	3,54%			
Rec	1.297,000	615.994,669	4.676.217,719	364,764	364,767	0,003	229,9699	0	3,74%			
Rec	1.298,000	615.994,216	4.676.216,827	364,778	364,805	0,027	229,9699	0	3,94%			
Rec	1.299,000	615.993,762	4.676.215,936	364,796	364,846	0,050	229,9699	0	4,14%			
Rec	1.300,000	615.993,308	4.676.215,045	364,823	364,888	0,065	229,9699	0	4,34%		T.S.	
Rec	1.300,408	615.993,123	4.676.214,681	364,838	364,906	0,068	229,9699	0	4,42%			
Rec	1.301,000	615.992,855	4.676.214,154	364,860	364,932	0,072	229,9699	0	4,42%			
Rec	1.302,000	615.992,401	4.676.213,263	364,908	364,976	0,068	229,9699	0	4,42%			
Rec	1.303,000	615.991,948	4.676.212,371	364,966	365,020	0,054	229,9699	0	4,42%			
Rec	1.304,000	615.991,494	4.676.211,480	365,031	365,065	0,034	229,9699	0	4,42%			
Rec	1.305,000	615.991,041	4.676.210,589	365,109	365,109	0,000	229,9699	0	4,42%			
Rec	1.306,000	615.990,587	4.676.209,698	365,187	365,153	-0,034	229,9699	0	4,42%			
Rec	1.307,000	615.990,133	4.676.208,806	365,265	365,197	-0,068	229,9699	0	4,42%			
Rec	1.308,000	615.989,680	4.676.207,915	365,343	365,241	-0,102	229,9699	0	4,42%			
Rec	1.309,000	615.989,226	4.676.207,024	365,421	365,285	-0,136	229,9699	0	4,42%			
Rec	1.310,000	615.988,773	4.676.206,133	365,499	365,330	-0,169	229,9699	0	4,42%			
Rec	1.311,000	615.988,319	4.676.205,242	365,577	365,374	-0,203	229,9699	0	4,42%			
Rec	1.312,000	615.987,866	4.676.204,350	365,654	365,418	-0,236	229,9699	0	4,42%			
Rec	1.313,000	615.987,412	4.676.203,459	365,733	365,462	-0,271	229,9699	0	4,42%			
Rec	1.314,000	615.986,958	4.676.202,568	365,812	365,506	-0,306	229,9699	0	4,42%			
Rec	1.315,000	615.986,505	4.676.201,677	365,888	365,551	-0,337	229,9699	0	4,42%			
Rec	1.316,000	615.986,051	4.676.200,785	365,965	365,595	-0,370	229,9699	0	4,42%			
Rec	1.317,000	615.985,598	4.676.199,894	366,020	365,639	-0,381	229,9699	0	4,42%			
Rec	1.318,000	615.985,144	4.676.199,003	366,057	365,683	-0,374	229,9699	0	4,42%			
Rec	1.319,000	615.984,691	4.676.198,112	366,094	365,727	-0,367	229,9699	0	4,42%			
Rec	1.320,000	615.984,237	4.676.197,221	366,132	365,771	-0,361	229,9699	0	4,42%			
Rec	1.321,000	615.983,783	4.676.196,329	366,169	365,816	-0,353	229,9699	0	4,42%			
Rec	1.322,000	615.983,330	4.676.195,438	366,205	365,860	-0,345	229,9699	0	4,42%			
Rec	1.323,000	615.982,876	4.676.194,547	366,242	365,904	-0,338	229,9699	0	4,42%			
Rec	1.324,000	615.982,423	4.676.193,656	366,277	365,948	-0,329	229,9699	0	4,42%			
Rec	1.325,000	615.981,969	4.676.192,764	366,313	365,992	-0,321	229,9699	0	4,42%			
Rec	1.326,000	615.981,516	4.676.191,873	366,350	366,037	-0,313	229,9699	0	4,42%			
Rec	1.327,000	615.981,062	4.676.190,982	366,390	366,081	-0,309	229,9699	0	4,42%			
Rec	1.328,000	615.980,608	4.676.190,091	366,430	366,125	-0,305	229,9699	0	4,42%			
Rec	1.329,000	615.980,155	4.676.189,200	366,471	366,169	-0,302	229,9699	0	4,42%			
Rec	1.330,000	615.979,701	4.676.188,308	366,512	366,213	-0,299	229,9699	0	4,42%			
Rec	1.331,000	615.979,248	4.676.187,417	366,553	366,257	-0,296	229,9699	0	4,42%			
Rec	1.332,000	615.978,794	4.676.186,526	366,593	366,302	-0,291	229,9699	0	4,42%			
Rec	1.333,000	615.978,341	4.676.185,635	366,634	366,346	-0,288	229,9699	0	4,42%			
Rec	1.334,000	615.977,887	4.676.184,743	366,675	366,390	-0,285	229,9699	0	4,42%			
Rec	1.335,000	615.977,433	4.676.183,852	366,715	366,434	-0,281	229,9699	0	4,42%			
Rec	1.336,000	615.976,980	4.676.182,961	366,724	366,478	-0,246	229,9699	0	4,42%		T.E.	
Rec	1.336,285	615.976,851	4.676.182,707	366,726	366,491	-0,235	229,9699	0	4,42%			
Rec	1.337,000	615.976,526	4.676.182,070	366,731	366,524	-0,207	229,9699	0	4,78%			
Rec	1.338,000	615.976,073	4.676.181,179	366,752	366,574	-0,178	229,9699	0	5,28%			
Rec	1.339,000	615.975,619	4.676.180,287	366,781	366,629	-0,152	229,9699	0	5,78%			
Rec	1.340,000	615.975,166	4.676.179,396	366,811	366,690	-0,121	229,9699	0	6,28%			
Rec	1.341,000	615.974,712	4.676.178,505	366,837	366,755	-0,082	229,9699	0	6,78%			
Rec	1.342,000	615.974,258	4.676.177,614	366,861	366,825	-0,036	229,9699	0	7,28%			
Rec	1.343,000	615.973,805	4.676.176,722	366,883	366,900	0,017	229,9699	0	7,78%			
Rec	1.344,000	615.973,351	4.676.175,831	366,903	366,981	0,078	229,9699	0	8,28%			
Rec	1.345,000	615.972,898	4.676.174,940	366,922	367,066	0,144	229,9699	0	8,78%			
Rec	1.346,000	615.972,444	4.676.174,049	366,940	367,156	0,216	229,9699	0	9,28%	P.S.	V.	

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.346,719	615.972,118	4.676.173,408	366,952	367,224	0,272	229,9699	-200	9,64%			
Cur	1.347,000	615.971,991	4.676.173,158	366,957	367,251	0,294	229,8805	-200	9,78%			
Cur	1.348,000	615.971,541	4.676.172,265	366,974	367,352	0,378	229,5622	-200	10,28%			
Cur	1.349,000	615.971,095	4.676.171,369	366,991	367,457	0,466	229,2438	-200	10,78%			
Cur	1.350,000	615.970,654	4.676.170,472	367,021	367,567	0,546	228,9255	-200	11,28%			
Cur	1.351,000	615.970,217	4.676.169,572	367,066	367,682	0,616	228,6072	-200	11,78%			
Cur	1.352,000	615.969,785	4.676.168,670	367,126	367,803	0,677	228,2889	-200	12,28%			
Cur	1.353,000	615.969,358	4.676.167,766	367,181	367,928	0,747	227,9706	-200	12,78%			
Cur	1.354,000	615.968,934	4.676.166,860	367,240	368,058	0,818	227,6523	-200	13,28%			
Cur	1.355,000	615.968,516	4.676.165,952	367,319	368,194	0,875	227,3340	-200	13,78%			
Cur	1.356,000	615.968,102	4.676.165,042	367,386	368,334	0,948	227,0157	-200	14,28%			
Cur	1.357,000	615.967,692	4.676.164,130	367,449	368,479	1,030	226,6974	-200	14,78%		T.S.	
Cur	1.357,153	615.967,630	4.676.163,990	367,460	368,502	1,041	226,6487	-200	14,85%			
Cur	1.358,000	615.967,288	4.676.163,215	367,524	368,627	1,103	226,3791	-200	14,85%			
Cur	1.359,000	615.966,887	4.676.162,299	367,609	368,776	1,167	226,0607	-200	14,85%			
Cur	1.360,000	615.966,491	4.676.161,380	367,681	368,924	1,243	225,7424	-200	14,85%			
Cur	1.361,000	615.966,100	4.676.160,460	367,762	369,073	1,311	225,4241	-200	14,85%			
Cur	1.362,000	615.965,714	4.676.159,538	367,851	369,221	1,370	225,1058	-200	14,85%			
Cur	1.363,000	615.965,332	4.676.158,614	367,938	369,370	1,432	224,7875	-200	14,85%			
Cur	1.364,000	615.964,955	4.676.157,688	368,050	369,518	1,468	224,4692	-200	14,85%			
Cur	1.365,000	615.964,582	4.676.156,760	368,205	369,667	1,462	224,1509	-200	14,85%			
Cur	1.366,000	615.964,214	4.676.155,830	368,360	369,815	1,455	223,8326	-200	14,85%			
Cur	1.367,000	615.963,851	4.676.154,898	368,514	369,964	1,450	223,5143	-200	14,85%			
Cur	1.368,000	615.963,492	4.676.153,965	368,668	370,112	1,444	223,1960	-200	14,85%			
Cur	1.369,000	615.963,138	4.676.153,029	368,822	370,261	1,439	222,8776	-200	14,85%			
Cur	1.370,000	615.962,789	4.676.152,092	368,976	370,409	1,433	222,5593	-200	14,85%		T.E.	
Cur	1.370,094	615.962,756	4.676.152,004	368,992	370,423	1,431	222,5294	-200	14,85%			
Cur	1.371,000	615.962,444	4.676.151,154	369,145	370,552	1,407	222,2410	-200	13,64%			
Cur	1.372,000	615.962,104	4.676.150,213	369,316	370,682	1,366	221,9227	-200	12,31%			
Cur	1.373,000	615.961,769	4.676.149,271	369,491	370,799	1,308	221,6044	-200	10,98%			
Cur	1.374,000	615.961,438	4.676.148,327	369,667	370,902	1,235	221,2861	-200	9,64%			
Cur	1.375,000	615.961,112	4.676.147,382	369,844	370,991	1,147	220,9678	-200	8,31%			
Cur	1.376,000	615.960,791	4.676.146,435	370,047	371,068	1,021	220,6495	-200	6,98%			
Cur	1.377,000	615.960,475	4.676.145,486	370,475	371,131	0,656	220,3312	-200	5,64%			
Cur	1.378,000	615.960,163	4.676.144,536	370,909	371,181	0,272	220,0129	-200	4,31%			
Cur	1.379,000	615.959,857	4.676.143,584	371,301	371,217	-0,084	219,6945	-200	2,98%			
Cur	1.380,000	615.959,555	4.676.142,631	371,682	371,240	-0,442	219,3762	-200	1,64%		V.	
Cur	1.381,000	615.959,257	4.676.141,676	371,975	371,250	-0,725	219,0579	-200	0,31%			
Cur	1.382,000	615.958,965	4.676.140,720	371,969	371,246	-0,723	218,7396	-200	-1,02%			
Cur	1.383,000	615.958,677	4.676.139,762	371,713	371,230	-0,483	218,4213	-200	-2,36%			
Cur	1.384,000	615.958,394	4.676.138,803	371,421	371,199	-0,222	218,1030	-200	-3,69%			
Cur	1.385,000	615.958,116	4.676.137,843	371,120	371,156	0,036	217,7847	-200	-5,02%			
Cur	1.386,000	615.957,843	4.676.136,881	370,792	371,099	0,307	217,4664	-200	-6,36%			
Cur	1.387,000	615.957,574	4.676.135,917	370,447	371,029	0,582	217,1481	-200	-7,69%			
Cur	1.388,000	615.957,310	4.676.134,953	370,102	370,945	0,843	216,8298	-200	-9,02%			
Cur	1.389,000	615.957,051	4.676.133,987	369,825	370,848	1,023	216,5114	-200	-10,36%			
Cur	1.390,000	615.956,797	4.676.133,020	369,549	370,738	1,189	216,1931	-200	-11,69%			
Cur	1.391,000	615.956,548	4.676.132,051	369,247	370,614	1,367	215,8748	-200	-13,02%		T.S.	
Cur	1.391,906	615.956,327	4.676.131,173	368,971	370,491	1,520	215,5864	-200	-14,23%			
Cur	1.392,000	615.956,304	4.676.131,081	368,942	370,478	1,536	215,5565	-200	-14,23%			
Cur	1.393,000	615.956,064	4.676.130,111	368,948	370,335	1,387	215,2382	-200	-14,23%			
Cur	1.394,000	615.955,830	4.676.129,139	368,695	370,193	1,498	214,9199	-200	-14,23%			
Cur	1.395,000	615.955,600	4.676.128,165	368,475	370,051	1,576	214,6016	-200	-14,23%			
Cur	1.396,000	615.955,375	4.676.127,191	368,457	369,908	1,451	214,2833	-200	-14,23%			
Cur	1.397,000	615.955,155	4.676.126,215	368,381	369,766	1,385	213,9650	-200	-14,23%			
Cur	1.398,000	615.954,940	4.676.125,239	368,187	369,624	1,437	213,6467	-200	-14,23%			
Cur	1.399,000	615.954,729	4.676.124,261	367,999	369,482	1,483	213,3283	-200	-14,23%			
Cur	1.400,000	615.954,524	4.676.123,283	367,839	369,339	1,500	213,0100	-200	-14,23%			
Cur	1.401,000	615.954,324	4.676.122,303	367,709	369,197	1,488	212,6917	-200	-14,23%			
Cur	1.402,000	615.954,128	4.676.121,322	367,548	369,055	1,507	212,3734	-200	-14,23%			
Cur	1.403,000	615.953,937	4.676.120,340	367,433	368,912	1,479	212,0551	-200	-14,23%			
Cur	1.404,000	615.953,752	4.676.119,358	367,299	368,770	1,471	211,7368	-200	-14,23%			
Cur	1.405,000	615.953,571	4.676.118,374	367,224	368,628	1,404	211,4185	-200	-14,23%			
Cur	1.406,000	615.953,395	4.676.117,390	367,145	368,485	1,340	211,1002	-200	-14,23%			
Cur	1.407,000	615.953,224	4.676.116,405	367,050	368,343	1,293	210,7819	-200	-14,23%			
Cur	1.408,000	615.953,058	4.676.115,419	366,950	368,201	1,251	210,4636	-200	-14,23%			
Cur	1.409,000	615.952,896	4.676.114,432	366,847	368,058	1,211	210,1453	-200	-14,23%			
Cur	1.410,000	615.952,740	4.676.113,444	366,740	367,916	1,176	209,8269	-200	-14,23%			
Cur	1.411,000	615.952,589	4.676.112,455	366,640	367,774	1,134	209,5086	-200	-14,23%			
Cur	1.412,000	615.952,443	4.676.111,466	366,538	367,632	1,094	209,1903	-200	-14,23%			
Cur	1.413,000	615.952,301	4.676.110,476	366,445	367,489	1,044	208,8720	-200	-14,23%			
Cur	1.414,000	615.952,165	4.676.109,486	366,347	367,347	1,000	208,5537	-200	-14,23%			
Cur	1.415,000	615.952,033	4.676.108,494	366,249	367,205	0,956	208,2354	-200	-14,23%			
Cur	1.416,000	615.951,907	4.676.107,502	366,149	367,062	0,913	207,9171	-200	-14,23%			
Cur	1.417,000	615.951,785	4.676.106,510	366,044	366,920	0,876	207,5988	-200	-14,23%			
Cur	1.418,000	615.951,669	4.676.105,517	365,934	366,778	0,844	207,2805	-200	-14,23%			
Cur	1.419,000	615.951,557	4.676.104,523	365,822	366,635	0,813	206,9622	-200	-14,23%			
Cur	1.420,000	615.951,450	4.676.103,529	365,691	366,493	0,802	206,6438	-200	-14,23%			
Cur	1.421,000	615.951,349	4.676.102,534	365,577	366,351	0,774	206,3255	-200	-14,23%			
Cur	1.422,000	615.951,252	4.676.101,538	365,437	366,209	0,772	206,0072	-200	-14,23%	P.S.		
Rec	1.422,097	615.951,243	4.676.101,442	365,423	366,195	0,772	205,9763	0	-14,23%			
Rec	1.423,000	615.951,158	4.676.100,543	365,307	366,066	0,759	205,9763	0	-14,23%			
Rec	1.424,000	615.951,065	4.676.099,547	365,172	365,924	0,752	205,9763	0	-14,23%			
Rec	1.425,000	615.950,971	4.676.098,552	365,023	365,782	0,759	205,9763	0	-14,23%			
Rec	1.426,000	615.950,877	4.676.097,556	364,859	365,639	0,780	205,9763	0	-14,23%			
Rec	1.427,000	615.950,783	4.676.096,560	364,652	365,497	0,845	205,9763	0	-14,23%			
Rec	1.428,000	615.950,690	4.676.095,565	364,425	365,355	0,930	205,9763	0	-14,23%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.429,000	615.950,596	4.676.094,569	364,198	365,212	1,014	205,9763	0	-14,23%			
Rec	1.430,500	615.950,455	4.676.093,076	363,794	364,999	1,205	205,9763	0	-14,23%			ODT Ø500 L=9,75m
Rec	1.430,000	615.950,502	4.676.093,574	363,922	365,070	1,148	205,9763	0	-14,23%			
Rec	1.431,000	615.950,408	4.676.092,578	363,665	364,928	1,263	205,9763	0	-14,23%			
Rec	1.432,000	615.950,315	4.676.091,582	363,678	364,785	1,107	205,9763	0	-14,23%			
Rec	1.433,000	615.950,221	4.676.090,587	363,692	364,643	0,951	205,9763	0	-14,23%			
Rec	1.434,000	615.950,127	4.676.089,591	363,672	364,501	0,829	205,9763	0	-14,23%			
Rec	1.435,000	615.950,033	4.676.088,596	363,597	364,359	0,762	205,9763	0	-14,23%			
Rec	1.436,000	615.949,940	4.676.087,600	363,521	364,216	0,695	205,9763	0	-14,23%			
Rec	1.437,000	615.949,846	4.676.086,604	363,451	364,074	0,623	205,9763	0	-14,23%			
Rec	1.438,000	615.949,752	4.676.085,609	363,378	363,932	0,554	205,9763	0	-14,23%			
Rec	1.439,000	615.949,658	4.676.084,613	363,294	363,789	0,495	205,9763	0	-14,23%		T.E.	
Rec	1.439,468	615.949,615	4.676.084,147	363,265	363,723	0,458	205,9763	0	-14,23%			
Rec	1.440,000	615.949,565	4.676.083,618	363,232	363,648	0,416	205,9763	0	-13,96%			
Rec	1.441,000	615.949,471	4.676.082,622	363,142	363,511	0,369	205,9763	0	-13,46%			
Rec	1.442,000	615.949,377	4.676.081,626	363,052	363,378	0,326	205,9763	0	-12,96%			
Rec	1.443,000	615.949,284	4.676.080,631	362,959	363,251	0,292	205,9763	0	-12,46%			
Rec	1.444,000	615.949,190	4.676.079,635	362,860	363,129	0,269	205,9763	0	-11,96%			
Rec	1.445,000	615.949,096	4.676.078,640	362,760	363,012	0,252	205,9763	0	-11,46%			
Rec	1.446,000	615.949,002	4.676.077,644	362,660	362,900	0,240	205,9763	0	-10,96%			
Rec	1.447,000	615.948,909	4.676.076,649	362,559	362,793	0,234	205,9763	0	-10,46%			
Rec	1.448,000	615.948,815	4.676.075,653	362,457	362,691	0,234	205,9763	0	-9,96%			
Rec	1.449,000	615.948,721	4.676.074,657	362,355	362,593	0,238	205,9763	0	-9,46%		V.	
Rec	1.450,000	615.948,627	4.676.073,662	362,255	362,501	0,246	205,9763	0	-8,96%			
Rec	1.451,000	615.948,534	4.676.072,666	362,154	362,414	0,260	205,9763	0	-8,46%			
Rec	1.452,000	615.948,440	4.676.071,671	362,056	362,332	0,276	205,9763	0	-7,96%			
Rec	1.453,000	615.948,346	4.676.070,675	361,965	362,255	0,290	205,9763	0	-7,46%			
Rec	1.454,000	615.948,252	4.676.069,679	361,879	362,183	0,304	205,9763	0	-6,96%			
Rec	1.455,000	615.948,159	4.676.068,684	361,792	362,116	0,324	205,9763	0	-6,46%			
Rec	1.456,000	615.948,065	4.676.067,688	361,713	362,053	0,340	205,9763	0	-5,96%			
Rec	1.457,000	615.947,971	4.676.066,693	361,632	361,996	0,364	205,9763	0	-5,46%			
Rec	1.458,000	615.947,877	4.676.065,697	361,549	361,944	0,395	205,9763	0	-4,96%			
Rec	1.459,000	615.947,784	4.676.064,701	361,473	361,897	0,424	205,9763	0	-4,46%			
Rec	1.460,000	615.947,690	4.676.063,706	361,396	361,855	0,459	205,9763	0	-3,96%		T.S.	
Rec	1.460,532	615.947,640	4.676.063,176	361,356	361,834	0,478	205,9763	0	-3,70%			
Rec	1.461,000	615.947,596	4.676.062,710	361,321	361,817	0,496	205,9763	0	-3,70%			
Rec	1.462,000	615.947,502	4.676.061,715	361,244	361,780	0,536	205,9763	0	-3,70%			
Rec	1.463,000	615.947,409	4.676.060,719	361,164	361,743	0,579	205,9763	0	-3,70%			
Rec	1.464,000	615.947,315	4.676.059,723	361,084	361,706	0,622	205,9763	0	-3,70%			
Rec	1.465,000	615.947,221	4.676.058,728	361,009	361,669	0,660	205,9763	0	-3,70%			
Rec	1.466,000	615.947,128	4.676.057,732	360,952	361,632	0,680	205,9763	0	-3,70%			
Rec	1.467,000	615.947,034	4.676.056,737	360,896	361,595	0,699	205,9763	0	-3,70%			
Rec	1.468,000	615.946,940	4.676.055,741	360,842	361,558	0,716	205,9763	0	-3,70%			
Rec	1.469,000	615.946,846	4.676.054,745	360,787	361,521	0,734	205,9763	0	-3,70%			
Rec	1.470,000	615.946,753	4.676.053,750	360,725	361,484	0,759	205,9763	0	-3,70%			
Rec	1.471,000	615.946,659	4.676.052,754	360,662	361,447	0,785	205,9763	0	-3,70%			
Rec	1.472,000	615.946,565	4.676.051,759	360,599	361,410	0,811	205,9763	0	-3,70%			
Rec	1.473,000	615.946,471	4.676.050,763	360,534	361,373	0,839	205,9763	0	-3,70%			
Rec	1.474,000	615.946,378	4.676.049,767	360,469	361,336	0,867	205,9763	0	-3,70%			
Rec	1.475,000	615.946,284	4.676.048,772	360,401	361,299	0,898	205,9763	0	-3,70%			
Rec	1.476,000	615.946,190	4.676.047,776	360,332	361,262	0,930	205,9763	0	-3,70%			
Rec	1.477,000	615.946,096	4.676.046,781	360,264	361,225	0,961	205,9763	0	-3,70%			
Rec	1.478,000	615.946,003	4.676.045,785	360,195	361,188	0,993	205,9763	0	-3,70%			
Rec	1.479,000	615.945,909	4.676.044,789	360,125	361,151	1,026	205,9763	0	-3,70%			
Rec	1.480,000	615.945,815	4.676.043,794	360,055	361,114	1,059	205,9763	0	-3,70%			
Rec	1.481,000	615.945,721	4.676.042,798	359,986	361,077	1,091	205,9763	0	-3,70%			
Rec	1.482,000	615.945,628	4.676.041,803	359,924	361,040	1,116	205,9763	0	-3,70%			
Rec	1.483,000	615.945,534	4.676.040,807	359,861	361,003	1,142	205,9763	0	-3,70%			
Rec	1.484,000	615.945,440	4.676.039,811	359,797	360,966	1,169	205,9763	0	-3,70%			
Rec	1.485,000	615.945,347	4.676.038,816	359,736	360,929	1,193	205,9763	0	-3,70%			
Rec	1.486,000	615.945,253	4.676.037,820	359,673	360,892	1,219	205,9763	0	-3,70%	P.S.		
Cur	1.486,172	615.945,237	4.676.037,649	359,662	360,886	1,224	205,9763	200	-3,70%			
Cur	1.487,000	615.945,157	4.676.036,825	359,609	360,855	1,246	206,2399	200	-3,70%			
Cur	1.488,000	615.945,057	4.676.035,830	359,547	360,818	1,271	206,5582	200	-3,70%			
Cur	1.489,000	615.944,952	4.676.034,835	359,491	360,781	1,290	206,8765	200	-3,70%			
Cur	1.490,000	615.944,841	4.676.033,841	359,431	360,744	1,313	207,1948	200	-3,70%			
Cur	1.491,000	615.944,726	4.676.032,848	359,370	360,707	1,337	207,5131	200	-3,70%			
Cur	1.492,000	615.944,606	4.676.031,855	359,313	360,670	1,357	207,8314	200	-3,70%			
Cur	1.493,000	615.944,481	4.676.030,863	359,263	360,633	1,370	208,1497	200	-3,70%			
Cur	1.494,000	615.944,351	4.676.029,872	359,237	360,596	1,359	208,4680	200	-3,70%			
Cur	1.495,000	615.944,215	4.676.028,881	359,239	360,559	1,320	208,7863	200	-3,70%			
Cur	1.496,000	615.944,075	4.676.027,891	359,208	360,522	1,314	209,1047	200	-3,70%			
Cur	1.497,000	615.943,930	4.676.026,901	359,157	360,485	1,328	209,4230	200	-3,70%			
Cur	1.498,000	615.943,780	4.676.025,913	359,134	360,448	1,314	209,7413	200	-3,70%			
Cur	1.499,000	615.943,626	4.676.024,925	359,100	360,411	1,311	210,0596	200	-3,70%			
Cur	1.500,000	615.943,466	4.676.023,938	359,063	360,374	1,311	210,3779	200	-3,70%			
Cur	1.501,000	615.943,301	4.676.022,951	359,025	360,337	1,312	210,6962	200	-3,70%			
Cur	1.502,000	615.943,131	4.676.021,966	358,990	360,300	1,310	211,0145	200	-3,70%			
Cur	1.503,000	615.942,957	4.676.020,981	358,965	360,263	1,298	211,3328	200	-3,70%			
Cur	1.504,000	615.942,777	4.676.019,997	358,938	360,226	1,288	211,6511	200	-3,70%			
Cur	1.505,000	615.942,593	4.676.019,015	358,908	360,189	1,281	211,9694	200	-3,70%			
Cur	1.506,000	615.942,403	4.676.018,033	358,877	360,152	1,275	212,2878	200	-3,70%			
Cur	1.507,000	615.942,209	4.676.017,052	358,847	360,115	1,268	212,6061	200	-3,70%			
Cur	1.508,000	615.942,010	4.676.016,072	358,818	360,078	1,260	212,9244	200	-3,70%			
Cur	1.509,000	615.941,806	4.676.015,093	358,790	360,041	1,251	213,2427	200	-3,70%			
Cur	1.510,000	615.941,597	4.676.014,115	358,764	360,004	1,240	213,5610	200	-3,70%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.511,000	615.941,383	4.676.013,138	358,740	359,967	1,227	213,8793	200	-3,70%			
Cur	1.512,000	615.941,164	4.676.012,162	358,717	359,930	1,213	214,1976	200	-3,70%			
Cur	1.513,000	615.940,941	4.676.011,188	358,698	359,893	1,195	214,5159	200	-3,70%			
Cur	1.514,000	615.940,712	4.676.010,214	358,682	359,856	1,174	214,8342	200	-3,70%			
Cur	1.515,000	615.940,479	4.676.009,242	358,669	359,819	1,150	215,1525	200	-3,70%			
Cur	1.516,000	615.940,241	4.676.008,270	358,658	359,782	1,124	215,4709	200	-3,70%			
Cur	1.517,000	615.939,998	4.676.007,300	358,653	359,745	1,092	215,7892	200	-3,70%			
Cur	1.518,000	615.939,750	4.676.006,332	358,650	359,708	1,058	216,1075	200	-3,70%			
Cur	1.519,000	615.939,497	4.676.005,364	358,647	359,671	1,024	216,4258	200	-3,70%			
Cur	1.520,000	615.939,239	4.676.004,398	358,644	359,634	0,990	216,7441	200	-3,70%			
Cur	1.521,000	615.938,977	4.676.003,433	358,645	359,597	0,952	217,0624	200	-3,70%			
Cur	1.522,000	615.938,710	4.676.002,469	358,657	359,560	0,903	217,3807	200	-3,70%			
Cur	1.523,000	615.938,438	4.676.001,507	358,684	359,523	0,839	217,6990	200	-3,70%			
Cur	1.524,000	615.938,161	4.676.000,546	358,748	359,486	0,738	218,0173	200	-3,70%			
Cur	1.525,000	615.937,879	4.675.999,587	358,689	359,449	0,760	218,3356	200	-3,70%			
Cur	1.526,000	615.937,593	4.675.998,628	358,621	359,412	0,791	218,6540	200	-3,70%			
Cur	1.527,000	615.937,302	4.675.997,672	358,553	359,375	0,822	218,9723	200	-3,70%			
Cur	1.528,000	615.937,005	4.675.996,717	358,459	359,338	0,879	219,2906	200	-3,70%			
Cur	1.529,000	615.936,705	4.675.995,763	358,345	359,301	0,956	219,6089	200	-3,70%			
Cur	1.530,000	615.936,399	4.675.994,811	358,297	359,264	0,967	219,9272	200	-3,70%			
Cur	1.531,000	615.936,089	4.675.993,860	358,191	359,227	1,036	220,2455	200	-3,70%			
Cur	1.532,000	615.935,774	4.675.992,911	358,060	359,190	1,130	220,5638	200	-3,70%			
Cur	1.533,000	615.935,454	4.675.991,964	357,914	359,153	1,239	220,8821	200	-3,70%	P.S.		
Rec	1.533,849	615.935,179	4.675.991,160	357,779	359,122	1,343	221,1524	0	-3,70%			
Rec	1.534,000	615.935,130	4.675.991,018	357,755	359,116	1,361	221,1524	0	-3,70%			
Rec	1.535,000	615.934,803	4.675.990,072	357,596	359,079	1,483	221,1524	0	-3,70%			
Rec	1.536,000	615.934,477	4.675.989,127	357,436	359,042	1,606	221,1524	0	-3,70%			
Rec	1.537,000	615.934,151	4.675.988,182	357,277	359,005	1,728	221,1524	0	-3,70%			
Rec	1.538,000	615.933,825	4.675.987,236	357,118	358,968	1,850	221,1524	0	-3,70%			
Rec	1.539,000	615.933,499	4.675.986,291	356,976	358,931	1,955	221,1524	0	-3,70%			
Rec	1.540,000	615.933,172	4.675.985,346	356,809	358,894	2,085	221,1524	0	-3,70%			1 MARCO 3,0m x 1,5m L=6,30m
Rec	1.541,000	615.932,846	4.675.984,400	356,891	358,857	1,966	221,1524	0	-3,70%		T.E.	
Rec	1.541,544	615.932,669	4.675.983,886	356,962	358,837	1,875	221,1524	0	-3,70%			
Rec	1.542,000	615.932,520	4.675.983,455	357,021	358,820	1,799	221,1524	0	-3,67%			
Rec	1.543,000	615.932,194	4.675.982,510	357,332	358,784	1,452	221,1524	0	-3,60%			
Rec	1.544,000	615.931,868	4.675.981,565	357,606	358,748	1,142	221,1524	0	-3,54%			
Rec	1.545,000	615.931,542	4.675.980,619	357,862	358,713	0,851	221,1524	0	-3,47%			
Rec	1.546,000	615.931,215	4.675.979,674	358,081	358,679	0,598	221,1524	0	-3,40%			
Rec	1.547,000	615.930,889	4.675.978,729	358,255	358,645	0,390	221,1524	0	-3,34%			
Rec	1.548,000	615.930,563	4.675.977,783	358,402	358,612	0,210	221,1524	0	-3,27%			
Rec	1.549,000	615.930,237	4.675.976,838	358,484	358,580	0,096	221,1524	0	-3,20%		V.	
Rec	1.550,000	615.929,911	4.675.975,893	358,524	358,548	0,024	221,1524	0	-3,14%			
Rec	1.551,000	615.929,584	4.675.974,947	358,487	358,517	0,030	221,1524	0	-3,07%			
Rec	1.552,000	615.929,258	4.675.974,002	358,415	358,486	0,071	221,1524	0	-3,00%			
Rec	1.553,000	615.928,932	4.675.973,057	358,338	358,457	0,119	221,1524	0	-2,94%			
Rec	1.554,000	615.928,606	4.675.972,111	358,281	358,428	0,147	221,1524	0	-2,87%			
Rec	1.555,000	615.928,280	4.675.971,166	358,223	358,399	0,176	221,1524	0	-2,80%			
Rec	1.556,000	615.927,954	4.675.970,221	358,153	358,372	0,219	221,1524	0	-2,74%			
Rec	1.557,000	615.927,627	4.675.969,276	358,114	358,345	0,231	221,1524	0	-2,67%	P.S.		
Cur	1.557,204	615.927,561	4.675.969,082	358,106	358,339	0,233	221,1524	400	-2,66%			
Cur	1.558,000	615.927,300	4.675.968,331	358,077	358,318	0,241	221,2791	400	-2,60%		T.S.	
Cur	1.558,456	615.927,151	4.675.967,900	358,060	358,306	0,246	221,3516	400	-2,57%			
Cur	1.559,000	615.926,971	4.675.967,386	358,040	358,292	0,252	221,4382	400	-2,57%			
Cur	1.560,000	615.926,640	4.675.966,443	358,004	358,267	0,263	221,5974	400	-2,57%			
Cur	1.561,000	615.926,306	4.675.965,500	357,975	358,241	0,266	221,7565	400	-2,57%			
Cur	1.562,000	615.925,969	4.675.964,559	357,943	358,215	0,272	221,9157	400	-2,57%			
Cur	1.563,000	615.925,631	4.675.963,618	357,911	358,190	0,279	222,0748	400	-2,57%			
Cur	1.564,000	615.925,290	4.675.962,678	357,873	358,164	0,291	222,2340	400	-2,57%			
Cur	1.565,000	615.924,946	4.675.961,738	357,826	358,138	0,312	222,3932	400	-2,57%			
Cur	1.566,000	615.924,601	4.675.960,800	357,784	358,112	0,328	222,5523	400	-2,57%			
Cur	1.567,000	615.924,252	4.675.959,863	357,731	358,087	0,356	222,7115	400	-2,57%			
Cur	1.568,000	615.923,902	4.675.958,926	357,676	358,061	0,385	222,8706	400	-2,57%			
Cur	1.569,000	615.923,549	4.675.957,990	357,621	358,035	0,414	223,0298	400	-2,57%			
Cur	1.570,000	615.923,194	4.675.957,055	357,560	358,010	0,450	223,1889	400	-2,57%			
Cur	1.571,000	615.922,837	4.675.956,121	357,498	357,984	0,486	223,3481	400	-2,57%			
Cur	1.572,000	615.922,477	4.675.955,188	357,427	357,958	0,531	223,5072	400	-2,57%			
Cur	1.573,000	615.922,115	4.675.954,256	357,360	357,932	0,572	223,6664	400	-2,57%			
Cur	1.574,000	615.921,751	4.675.953,325	357,291	357,907	0,616	223,8255	400	-2,57%			
Cur	1.575,000	615.921,384	4.675.952,395	357,224	357,881	0,657	223,9847	400	-2,57%			
Cur	1.576,000	615.921,015	4.675.951,465	357,162	357,855	0,693	224,1439	400	-2,57%			
Cur	1.577,000	615.920,643	4.675.950,537	357,098	357,829	0,731	224,3030	400	-2,57%			
Cur	1.578,000	615.920,270	4.675.949,609	357,035	357,804	0,769	224,4622	400	-2,57%			
Cur	1.579,000	615.919,894	4.675.948,683	356,985	357,778	0,793	224,6213	400	-2,57%			
Cur	1.580,000	615.919,515	4.675.947,757	356,948	357,752	0,804	224,7805	400	-2,57%			
Cur	1.581,000	615.919,135	4.675.946,832	356,915	357,727	0,812	224,9396	400	-2,57%			
Cur	1.582,000	615.918,752	4.675.945,908	356,883	357,701	0,818	225,0988	400	-2,57%			
Cur	1.583,000	615.918,366	4.675.944,986	356,850	357,675	0,825	225,2579	400	-2,57%			
Cur	1.584,000	615.917,979	4.675.944,064	356,822	357,649	0,827	225,4171	400	-2,57%			
Cur	1.585,000	615.917,589	4.675.943,143	356,801	357,624	0,823	225,5763	400	-2,57%			
Cur	1.586,000	615.917,197	4.675.942,223	356,781	357,598	0,817	225,7354	400	-2,57%			
Cur	1.587,000	615.916,802	4.675.941,304	356,764	357,572	0,808	225,8946	400	-2,57%			
Cur	1.588,000	615.916,406	4.675.940,386	356,744	357,546	0,802	226,0537	400	-2,57%			
Cur	1.589,000	615.916,006	4.675.939,469	356,737	357,521	0,784	226,2129	400	-2,57%			
Cur	1.590,000	615.915,605	4.675.938,553	356,699	357,495	0,796	226,3720	400	-2,57%			
Cur	1.591,000	615.915,201	4.675.937,639	356,639	357,469	0,830	226,5312	400	-2,57%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.592,000	615.914,796	4.675.936,725	356,602	357,444	0,842	226,6903	400	-2,57%			
Cur	1.593,000	615.914,387	4.675.935,812	356,564	357,418	0,854	226,8495	400	-2,57%			
Cur	1.594,000	615.913,977	4.675.934,900	356,485	357,392	0,907	227,0086	400	-2,57%			
Cur	1.595,000	615.913,564	4.675.933,989	356,428	357,366	0,938	227,1678	400	-2,57%			
Cur	1.596,000	615.913,149	4.675.933,079	356,346	357,341	0,995	227,3270	400	-2,57%			
Cur	1.597,000	615.912,732	4.675.932,170	356,273	357,315	1,042	227,4861	400	-2,57%			
Cur	1.598,000	615.912,312	4.675.931,263	356,194	357,289	1,095	227,6453	400	-2,57%			
Cur	1.599,000	615.911,890	4.675.930,356	356,114	357,263	1,149	227,8044	400	-2,57%			
Cur	1.600,000	615.911,466	4.675.929,451	356,030	357,238	1,208	227,9636	400	-2,57%			
Cur	1.601,000	615.911,040	4.675.928,546	355,881	357,212	1,331	228,1227	400	-2,57%			
Cur	1.602,000	615.910,611	4.675.927,643	355,689	357,186	1,497	228,2819	400	-2,57%			
Cur	1.602,500	615.910,396	4.675.927,191	355,672	357,173	1,501	228,3615	400	-2,57%			1 MARCO 2,0m x 1,0m L=9,40m
Cur	1.603,000	615.910,180	4.675.926,740	355,655	357,161	1,506	228,4410	400	-2,57%			
Cur	1.604,000	615.909,747	4.675.925,839	355,826	357,135	1,309	228,6002	400	-2,57%			
Cur	1.605,000	615.909,312	4.675.924,939	356,007	357,109	1,102	228,7594	400	-2,57%			
Cur	1.606,000	615.908,874	4.675.924,039	356,152	357,083	0,931	228,9185	400	-2,57%			
Cur	1.607,000	615.908,434	4.675.923,141	356,260	357,058	0,798	229,0777	400	-2,57%			
Cur	1.608,000	615.907,992	4.675.922,244	356,345	357,032	0,687	229,2368	400	-2,57%			
Cur	1.609,000	615.907,547	4.675.921,349	356,389	357,006	0,617	229,3960	400	-2,57%			
Cur	1.610,000	615.907,101	4.675.920,454	356,423	356,981	0,558	229,5551	400	-2,57%			
Cur	1.611,000	615.906,652	4.675.919,560	356,462	356,955	0,493	229,7143	400	-2,57%			
Cur	1.612,000	615.906,201	4.675.918,668	356,475	356,929	0,454	229,8734	400	-2,57%			
Cur	1.613,000	615.905,747	4.675.917,777	356,476	356,903	0,427	230,0326	400	-2,57%			
Cur	1.614,000	615.905,292	4.675.916,886	356,474	356,878	0,404	230,1917	400	-2,57%			
Cur	1.615,000	615.904,834	4.675.915,997	356,471	356,852	0,381	230,3509	400	-2,57%			
Cur	1.616,000	615.904,374	4.675.915,109	356,460	356,826	0,366	230,5101	400	-2,57%			
Cur	1.617,000	615.903,912	4.675.914,223	356,441	356,800	0,359	230,6692	400	-2,57%			
Cur	1.618,000	615.903,447	4.675.913,337	356,420	356,775	0,355	230,8284	400	-2,57%			
Cur	1.619,000	615.902,981	4.675.912,453	356,399	356,749	0,350	230,9875	400	-2,57%			
Cur	1.620,000	615.902,512	4.675.911,569	356,373	356,723	0,350	231,1467	400	-2,57%			
Cur	1.621,000	615.902,041	4.675.910,687	356,337	356,698	0,361	231,3058	400	-2,57%			
Cur	1.622,000	615.901,568	4.675.909,806	356,364	356,672	0,308	231,4650	400	-2,57%		T.E.	
Cur	1.622,419	615.901,369	4.675.909,437	356,381	356,661	0,280	231,5317	400	-2,57%			
Cur	1.623,000	615.901,092	4.675.908,927	356,405	356,648	0,243	231,6241	400	-1,99%			
Cur	1.624,000	615.900,614	4.675.908,048	356,446	356,633	0,187	231,7833	400	-0,99%			
Cur	1.625,000	615.900,135	4.675.907,171	356,487	356,628	0,141	231,9425	400	0,01%			
Cur	1.626,000	615.899,653	4.675.906,294	356,527	356,633	0,106	232,1016	400	1,01%			
Cur	1.627,000	615.899,168	4.675.905,420	356,568	356,648	0,080	232,2608	400	2,01%			
Cur	1.628,000	615.898,682	4.675.904,546	356,597	356,673	0,076	232,4199	400	3,01%			
Cur	1.629,000	615.898,193	4.675.903,673	356,612	356,708	0,096	232,5791	400	4,01%		V.	
Cur	1.630,000	615.897,702	4.675.902,802	356,679	356,753	0,074	232,7382	400	5,01%			
Cur	1.631,000	615.897,209	4.675.901,932	356,723	356,808	0,085	232,8974	400	6,01%			
Cur	1.632,000	615.896,714	4.675.901,063	356,768	356,874	0,106	233,0565	400	7,01%			
Cur	1.633,000	615.896,217	4.675.900,196	356,816	356,949	0,133	233,2157	400	8,01%			
Cur	1.634,000	615.895,718	4.675.899,329	356,864	357,034	0,170	233,3748	400	9,01%			
Cur	1.635,000	615.895,216	4.675.898,464	356,913	357,129	0,216	233,5340	400	10,01%			
Cur	1.636,000	615.894,712	4.675.897,600	356,962	357,234	0,272	233,6932	400	11,01%			
Cur	1.637,000	615.894,206	4.675.896,738	357,029	357,349	0,320	233,8523	400	12,01%		T.S.	
Cur	1.637,581	615.893,911	4.675.896,237	357,137	357,420	0,283	233,9448	400	12,59%			
Cur	1.638,000	615.893,698	4.675.895,877	357,215	357,473	0,258	234,0115	400	12,59%			
Cur	1.639,000	615.893,188	4.675.895,017	357,402	357,599	0,197	234,1706	400	12,59%			
Cur	1.640,000	615.892,675	4.675.894,158	357,586	357,725	0,139	234,3298	400	12,59%			
Cur	1.641,000	615.892,161	4.675.893,300	357,778	357,851	0,073	234,4889	400	12,59%			
Cur	1.642,000	615.891,644	4.675.892,444	357,977	357,977	0,000	234,6481	400	12,59%			
Cur	1.643,000	615.891,125	4.675.891,589	358,108	358,103	-0,005	234,8072	400	12,59%			
Cur	1.644,000	615.890,604	4.675.890,736	358,230	358,229	-0,001	234,9664	400	12,59%		T.E.	
Cur	1.644,194	615.890,503	4.675.890,570	358,253	358,253	0,000	234,9973	400	12,59%			
Cur	1.645,000	615.890,081	4.675.889,884	358,351	358,351	0,000	235,1256	400	11,78%			
Cur	1.646,000	615.889,556	4.675.889,033	358,472	358,464	-0,008	235,2847	400	10,78%			
Cur	1.647,000	615.889,028	4.675.888,183	358,592	358,567	-0,025	235,4439	400	9,78%			
Cur	1.648,000	615.888,499	4.675.887,335	358,710	358,660	-0,050	235,6030	400	8,78%			
Cur	1.649,000	615.887,967	4.675.886,488	358,820	358,743	-0,077	235,7622	400	7,78%		V.	
Cur	1.650,000	615.887,434	4.675.885,642	358,984	358,815	-0,169	235,9213	400	6,78%			
Cur	1.651,000	615.886,898	4.675.884,798	359,035	358,878	-0,157	236,0805	400	5,78%			
Cur	1.652,000	615.886,360	4.675.883,955	359,057	358,931	-0,126	236,2396	400	4,78%			
Cur	1.653,000	615.885,820	4.675.883,113	359,046	358,974	-0,072	236,3988	400	3,78%			
Cur	1.654,000	615.885,278	4.675.882,273	359,054	359,007	-0,047	236,5579	400	2,78%			
Cur	1.655,000	615.884,733	4.675.881,434	359,062	359,030	-0,032	236,7171	400	1,78%		T.S.	
Cur	1.655,806	615.884,293	4.675.880,759	359,068	359,041	-0,028	236,8454	400	0,98%			
Cur	1.656,000	615.884,187	4.675.880,596	359,070	359,043	-0,027	236,8763	400	0,98%			
Cur	1.657,000	615.883,639	4.675.879,760	359,073	359,052	-0,021	237,0354	400	0,98%			
Cur	1.658,000	615.883,088	4.675.878,925	359,071	359,062	-0,009	237,1946	400	0,98%			
Cur	1.659,000	615.882,535	4.675.878,092	359,064	359,072	0,008	237,3537	400	0,98%			
Cur	1.660,000	615.881,981	4.675.877,260	359,064	359,082	0,018	237,5129	400	0,98%			
Cur	1.661,000	615.881,424	4.675.876,429	359,069	359,091	0,022	237,6720	400	0,98%			
Cur	1.662,000	615.880,865	4.675.875,600	359,078	359,101	0,023	237,8312	400	0,98%			
Cur	1.663,000	615.880,304	4.675.874,772	359,086	359,111	0,025	237,9903	400	0,98%			
Cur	1.664,000	615.879,741	4.675.873,946	359,098	359,121	0,023	238,1495	400	0,98%			
Cur	1.665,000	615.879,176	4.675.873,120	359,109	359,130	0,021	238,3086	400	0,98%	P.S.		
Rec	1.665,795	615.878,726	4.675.872,466	359,116	359,138	0,022	238,4351	0	0,98%			
Rec	1.666,000	615.878,609	4.675.872,297	359,118	359,140	0,022	238,4351	0	0,98%			
Rec	1.667,000	615.878,041	4.675.871,474	359,127	359,150	0,023	238,4351	0	0,98%			
Rec	1.668,000	615.877,474	4.675.870,650	359,160	359,160	0,000	238,4351	0	0,98%			
Rec	1.669,000	615.876,906	4.675.869,827	359,168	359,169	-0,001	238,4351	0	0,98%			
Rec	1.670,000	615.876,338	4.675.869,004	359,175	359,179	0,004	238,4351	0	0,98%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.671,000	615.875,770	4.675.868,181	359,183	359,189	0,006	238,4351	0	0,98%			
Rec	1.672,000	615.875,203	4.675.867,358	359,197	359,199	0,002	238,4351	0	0,98%			
Rec	1.673,000	615.874,635	4.675.866,534	359,203	359,208	0,005	238,4351	0	0,98%			
Rec	1.674,000	615.874,067	4.675.865,711	359,209	359,218	0,009	238,4351	0	0,98%			
Rec	1.675,000	615.873,500	4.675.864,888	359,222	359,228	0,006	238,4351	0	0,98%			
Rec	1.676,000	615.872,932	4.675.864,065	359,226	359,238	0,012	238,4351	0	0,98%			
Rec	1.677,000	615.872,364	4.675.863,241	359,232	359,248	0,016	238,4351	0	0,98%			
Rec	1.678,000	615.871,796	4.675.862,418	359,234	359,257	0,023	238,4351	0	0,98%			
Rec	1.679,000	615.871,229	4.675.861,595	359,229	359,267	0,038	238,4351	0	0,98%			
Rec	1.680,000	615.870,661	4.675.860,772	359,236	359,277	0,041	238,4351	0	0,98%			
Rec	1.681,000	615.870,093	4.675.859,949	359,245	359,287	0,042	238,4351	0	0,98%			
Rec	1.682,000	615.869,526	4.675.859,125	359,249	359,296	0,047	238,4351	0	0,98%			
Rec	1.683,000	615.868,958	4.675.858,302	359,258	359,306	0,048	238,4351	0	0,98%			
Rec	1.684,000	615.868,390	4.675.857,479	359,266	359,316	0,050	238,4351	0	0,98%			
Rec	1.685,000	615.867,822	4.675.856,656	359,274	359,326	0,052	238,4351	0	0,98%			
Rec	1.686,000	615.867,255	4.675.855,832	359,281	359,335	0,054	238,4351	0	0,98%			
Rec	1.687,000	615.866,687	4.675.855,009	359,290	359,345	0,055	238,4351	0	0,98%			
Rec	1.688,000	615.866,119	4.675.854,186	359,297	359,355	0,058	238,4351	0	0,98%			
Rec	1.689,000	615.865,551	4.675.853,363	359,307	359,365	0,058	238,4351	0	0,98%			
Rec	1.690,000	615.864,984	4.675.852,540	359,311	359,374	0,063	238,4351	0	0,98%			
Rec	1.691,000	615.864,416	4.675.851,716	359,315	359,384	0,069	238,4351	0	0,98%			
Rec	1.692,000	615.863,848	4.675.850,893	359,305	359,394	0,089	238,4351	0	0,98%		T.E.	
Rec	1.692,201	615.863,734	4.675.850,728	359,299	359,396	0,097	238,4351	0	0,98%			
Rec	1.693,000	615.863,281	4.675.850,070	359,276	359,403	0,127	238,4351	0	0,87%			
Rec	1.694,000	615.862,713	4.675.849,247	359,260	359,411	0,151	238,4351	0	0,74%			
Rec	1.695,000	615.862,145	4.675.848,423	359,242	359,418	0,176	238,4351	0	0,60%			
Rec	1.696,000	615.861,577	4.675.847,600	359,218	359,423	0,205	238,4351	0	0,47%			
Rec	1.697,000	615.861,010	4.675.846,777	359,202	359,427	0,225	238,4351	0	0,34%			
Rec	1.698,000	615.860,442	4.675.845,954	359,189	359,430	0,241	238,4351	0	0,20%			
Rec	1.699,000	615.859,874	4.675.845,131	359,172	359,431	0,259	238,4351	0	0,07%		V.	
Rec	1.700,000	615.859,307	4.675.844,307	359,150	359,431	0,281	238,4351	0	-0,06%			
Rec	1.701,000	615.858,739	4.675.843,484	359,123	359,430	0,307	238,4351	0	-0,20%			
Rec	1.702,000	615.858,171	4.675.842,661	359,091	359,428	0,337	238,4351	0	-0,33%			
Rec	1.703,000	615.857,603	4.675.841,838	359,056	359,424	0,368	238,4351	0	-0,46%			
Rec	1.704,000	615.857,036	4.675.841,014	359,019	359,418	0,399	238,4351	0	-0,60%			
Rec	1.705,000	615.856,468	4.675.840,191	358,991	359,412	0,521	238,4351	0	-0,73%			
Rec	1.706,000	615.855,900	4.675.839,368	358,963	359,404	0,771	238,4351	0	-0,86%			
Rec	1.707,000	615.855,332	4.675.838,545	358,919	359,394	1,075	238,4351	0	-1,00%		T.S.	
Rec	1.707,799	615.854,879	4.675.837,887	358,042	359,386	1,344	238,4351	0	-1,10%			
Rec	1.708,000	615.854,765	4.675.837,722	357,972	359,384	1,412	238,4351	0	-1,10%			
Rec	1.709,000	615.854,197	4.675.836,898	357,707	359,373	1,666	238,4351	0	-1,10%			
Rec	1.710,000	615.853,629	4.675.836,075	357,489	359,362	1,873	238,4351	0	-1,10%			1 MARCO 2,0m x 1,0m L=6,30m
Rec	1.711,000	615.853,062	4.675.835,252	357,672	359,351	1,679	238,4351	0	-1,10%			
Rec	1.712,000	615.852,494	4.675.834,429	358,048	359,340	1,292	238,4351	0	-1,10%			
Rec	1.713,000	615.851,926	4.675.833,606	358,169	359,328	1,159	238,4351	0	-1,10%			
Rec	1.714,000	615.851,358	4.675.832,782	358,235	359,317	1,082	238,4351	0	-1,10%			
Rec	1.715,000	615.850,791	4.675.831,959	358,273	359,306	1,033	238,4351	0	-1,10%			
Rec	1.716,000	615.850,223	4.675.831,136	358,352	359,295	0,943	238,4351	0	-1,10%			
Rec	1.717,000	615.849,655	4.675.830,313	358,442	359,284	0,842	238,4351	0	-1,10%			
Rec	1.718,000	615.849,087	4.675.829,489	358,550	359,273	0,723	238,4351	0	-1,10%			
Rec	1.719,000	615.848,520	4.675.828,666	358,572	359,262	0,690	238,4351	0	-1,10%			
Rec	1.720,000	615.847,952	4.675.827,843	358,534	359,251	0,717	238,4351	0	-1,10%			
Rec	1.721,000	615.847,384	4.675.827,020	358,488	359,240	0,752	238,4351	0	-1,10%			
Rec	1.722,000	615.846,817	4.675.826,197	358,444	359,229	0,785	238,4351	0	-1,10%			
Rec	1.723,000	615.846,249	4.675.825,373	358,355	359,218	0,863	238,4351	0	-1,10%			
Rec	1.724,000	615.845,681	4.675.824,550	358,243	359,207	0,964	238,4351	0	-1,10%			
Rec	1.725,000	615.845,113	4.675.823,727	358,096	359,196	1,100	238,4351	0	-1,10%			
Rec	1.726,000	615.844,546	4.675.822,904	357,992	359,185	1,193	238,4351	0	-1,10%			1 MARCO 2,0m x 1,0m L=6,30m
Rec	1.727,000	615.843,978	4.675.822,080	358,029	359,174	1,145	238,4351	0	-1,10%			
Rec	1.728,000	615.843,410	4.675.821,257	358,077	359,163	1,086	238,4351	0	-1,10%			
Rec	1.729,000	615.842,843	4.675.820,434	358,122	359,152	1,030	238,4351	0	-1,10%			
Rec	1.730,000	615.842,275	4.675.819,611	358,101	359,141	1,040	238,4351	0	-1,10%			
Rec	1.731,000	615.841,707	4.675.818,788	358,132	359,130	0,998	238,4351	0	-1,10%			
Rec	1.732,000	615.841,139	4.675.817,964	358,159	359,119	0,960	238,4351	0	-1,10%			
Rec	1.733,000	615.840,572	4.675.817,141	358,193	359,108	0,915	238,4351	0	-1,10%			
Rec	1.734,000	615.840,004	4.675.816,318	358,208	359,097	0,889	238,4351	0	-1,10%			
Rec	1.735,000	615.839,436	4.675.815,495	358,220	359,086	0,866	238,4351	0	-1,10%			
Rec	1.736,000	615.838,868	4.675.814,671	358,222	359,075	0,853	238,4351	0	-1,10%			
Rec	1.737,000	615.838,301	4.675.813,848	358,238	359,064	0,826	238,4351	0	-1,10%			
Rec	1.738,000	615.837,733	4.675.813,025	358,264	359,052	0,788	238,4351	0	-1,10%			
Rec	1.739,000	615.837,165	4.675.812,202	358,291	359,041	0,750	238,4351	0	-1,10%			
Rec	1.740,000	615.836,598	4.675.811,379	358,323	359,030	0,707	238,4351	0	-1,10%		T.E.	
Rec	1.740,506	615.836,310	4.675.810,962	358,340	359,025	0,685	238,4351	0	-1,10%			
Rec	1.741,000	615.836,030	4.675.810,555	358,357	359,020	0,663	238,4351	0	-1,01%			
Rec	1.742,000	615.835,462	4.675.809,732	358,390	359,011	0,621	238,4351	0	-0,81%			
Rec	1.743,000	615.834,894	4.675.808,909	358,422	359,004	0,582	238,4351	0	-0,61%			
Rec	1.744,000	615.834,327	4.675.808,086	358,454	358,998	0,544	238,4351	0	-0,41%			
Rec	1.745,000	615.833,759	4.675.807,262	358,487	358,995	0,508	238,4351	0	-0,21%			
Rec	1.746,000	615.833,191	4.675.806,439	358,520	358,994	0,474	238,4351	0	-0,01%			
Rec	1.747,000	615.832,624	4.675.805,616	358,553	358,995	0,442	238,4351	0	0,19%			
Rec	1.748,000	615.832,056	4.675.804,793	358,586	358,998	0,412	238,4351	0	0,39%			
Rec	1.749,000	615.831,488	4.675.803,970	358,619	359,003	0,384	238,4351	0	0,59%		V.	
Rec	1.750,000	615.830,920	4.675.803,146	358,652	359,010	0,358	238,4351	0	0,79%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.751,000	615.830,353	4.675.802,323	358,685	359,019	0,334	238,4351	0	0,99%			
Rec	1.752,000	615.829,785	4.675.801,500	358,719	359,030	0,311	238,4351	0	1,19%			
Rec	1.753,000	615.829,217	4.675.800,677	358,753	359,043	0,290	238,4351	0	1,39%			
Rec	1.754,000	615.828,649	4.675.799,854	358,787	359,058	0,271	238,4351	0	1,59%			
Rec	1.755,000	615.828,082	4.675.799,030	358,821	359,075	0,254	238,4351	0	1,79%			
Rec	1.756,000	615.827,514	4.675.798,207	358,854	359,094	0,240	238,4351	0	1,99%			
Rec	1.757,000	615.826,946	4.675.797,384	358,888	359,115	0,227	238,4351	0	2,19%			
Rec	1.758,000	615.826,379	4.675.796,561	358,922	359,138	0,216	238,4351	0	2,39%			
Rec	1.759,000	615.825,811	4.675.795,737	358,956	359,163	0,207	238,4351	0	2,59%		T.S.	
Rec	1.759,494	615.825,530	4.675.795,331	358,973	359,176	0,203	238,4351	0	2,69%			
Rec	1.760,000	615.825,243	4.675.794,914	358,990	359,189	0,199	238,4351	0	2,69%			
Rec	1.761,000	615.824,675	4.675.794,091	359,025	359,216	0,191	238,4351	0	2,69%			
Rec	1.762,000	615.824,108	4.675.793,268	359,060	359,243	0,183	238,4351	0	2,69%			
Rec	1.763,000	615.823,540	4.675.792,445	359,094	359,270	0,176	238,4351	0	2,69%			
Rec	1.764,000	615.822,972	4.675.791,621	359,133	359,297	0,164	238,4351	0	2,69%			
Rec	1.765,000	615.822,404	4.675.790,798	359,166	359,324	0,158	238,4351	0	2,69%			
Rec	1.766,000	615.821,837	4.675.789,975	359,204	359,351	0,147	238,4351	0	2,69%	P.S.		
Cur	1.766,356	615.821,634	4.675.789,682	359,216	359,361	0,145	238,4351	200	2,69%			
Cur	1.767,000	615.821,268	4.675.789,152	359,226	359,378	0,152	238,6400	200	2,69%			
Cur	1.768,000	615.820,696	4.675.788,332	359,236	359,405	0,169	238,9583	200	2,69%			
Cur	1.769,000	615.820,119	4.675.787,515	359,263	359,432	0,169	239,2766	200	2,69%			
Cur	1.770,000	615.819,539	4.675.786,701	359,288	359,459	0,171	239,5949	200	2,69%			
Cur	1.771,000	615.818,954	4.675.785,890	359,299	359,486	0,187	239,9133	200	2,69%			
Cur	1.772,000	615.818,365	4.675.785,081	359,311	359,513	0,202	240,2316	200	2,69%			
Cur	1.773,000	615.817,773	4.675.784,276	359,319	359,540	0,221	240,5499	200	2,69%			
Cur	1.774,000	615.817,176	4.675.783,474	359,344	359,567	0,223	240,8682	200	2,69%			
Cur	1.775,000	615.816,575	4.675.782,674	359,371	359,594	0,223	241,1865	200	2,69%			
Cur	1.776,000	615.815,970	4.675.781,878	359,394	359,620	0,226	241,5048	200	2,69%			
Cur	1.777,000	615.815,362	4.675.781,084	359,418	359,647	0,229	241,8231	200	2,69%			
Cur	1.778,000	615.814,749	4.675.780,294	359,444	359,674	0,230	242,1414	200	2,69%			
Cur	1.779,000	615.814,132	4.675.779,507	359,470	359,701	0,231	242,4597	200	2,69%			
Cur	1.780,000	615.813,512	4.675.778,723	359,496	359,728	0,232	242,7780	200	2,69%			
Cur	1.781,000	615.812,887	4.675.777,942	359,523	359,755	0,232	243,0964	200	2,69%			
Cur	1.782,000	615.812,259	4.675.777,164	359,550	359,782	0,232	243,4147	200	2,69%			
Cur	1.783,000	615.811,627	4.675.776,389	359,578	359,809	0,231	243,7330	200	2,69%			
Cur	1.784,000	615.810,990	4.675.775,617	359,605	359,836	0,231	244,0513	200	2,69%			
Cur	1.785,000	615.810,351	4.675.774,849	359,633	359,863	0,230	244,3696	200	2,69%			
Cur	1.786,000	615.809,707	4.675.774,084	359,661	359,890	0,229	244,6879	200	2,69%			
Cur	1.787,000	615.809,059	4.675.773,322	359,691	359,917	0,226	245,0062	200	2,69%			
Cur	1.788,000	615.808,408	4.675.772,563	359,720	359,944	0,224	245,3245	200	2,69%			
Cur	1.789,000	615.807,752	4.675.771,808	359,750	359,971	0,221	245,6428	200	2,69%			
Cur	1.790,000	615.807,093	4.675.771,055	359,779	359,998	0,219	245,9611	200	2,69%			
Cur	1.791,000	615.806,431	4.675.770,307	359,809	360,025	0,216	246,2795	200	2,69%			
Cur	1.792,000	615.805,764	4.675.769,561	359,838	360,052	0,214	246,5978	200	2,69%			
Cur	1.793,000	615.805,094	4.675.768,819	359,868	360,078	0,210	246,9161	200	2,69%			
Cur	1.794,000	615.804,420	4.675.768,080	359,897	360,105	0,208	247,2344	200	2,69%			
Cur	1.795,000	615.803,743	4.675.767,345	359,927	360,132	0,205	247,5527	200	2,69%			
Cur	1.796,000	615.803,061	4.675.766,612	359,951	360,159	0,208	247,8710	200	2,69%			
Cur	1.797,000	615.802,377	4.675.765,884	359,971	360,186	0,215	248,1893	200	2,69%			
Cur	1.798,000	615.801,688	4.675.765,159	359,990	360,213	0,223	248,5076	200	2,69%			
Cur	1.799,000	615.800,996	4.675.764,437	360,037	360,240	0,203	248,8259	200	2,69%			
Cur	1.800,000	615.800,300	4.675.763,719	360,107	360,267	0,160	249,1442	200	2,69%			
Cur	1.801,000	615.799,601	4.675.763,004	360,182	360,294	0,112	249,4626	200	2,69%			
Cur	1.802,000	615.798,898	4.675.762,292	360,253	360,321	0,068	249,7809	200	2,69%			
Cur	1.803,000	615.798,191	4.675.761,585	360,309	360,348	0,039	250,0992	200	2,69%			
Cur	1.804,000	615.797,481	4.675.760,880	360,360	360,375	0,015	250,4175	200	2,69%			
Cur	1.805,000	615.796,768	4.675.760,180	360,407	360,402	-0,005	250,7358	200	2,69%			
Cur	1.806,000	615.796,051	4.675.759,483	360,462	360,429	-0,033	251,0541	200	2,69%			
Cur	1.807,000	615.795,331	4.675.758,789	360,494	360,456	-0,038	251,3724	200	2,69%			
Cur	1.808,000	615.794,607	4.675.758,099	360,552	360,483	-0,069	251,6907	200	2,69%			
Cur	1.809,000	615.793,879	4.675.757,413	360,586	360,510	-0,076	252,0090	200	2,69%			
Cur	1.810,000	615.793,149	4.675.756,730	360,620	360,536	-0,084	252,3273	200	2,69%			
Cur	1.811,000	615.792,414	4.675.756,051	360,654	360,563	-0,091	252,6457	200	2,69%			
Cur	1.812,000	615.791,677	4.675.755,376	360,688	360,590	-0,098	252,9640	200	2,69%			
Cur	1.813,000	615.790,936	4.675.754,705	360,723	360,617	-0,106	253,2823	200	2,69%			
Cur	1.814,000	615.790,192	4.675.754,037	360,758	360,644	-0,114	253,6006	200	2,69%			
Cur	1.815,000	615.789,444	4.675.753,373	360,794	360,671	-0,123	253,9189	200	2,69%			
Cur	1.816,000	615.788,693	4.675.752,712	360,829	360,698	-0,131	254,2372	200	2,69%			
Cur	1.817,000	615.787,939	4.675.752,056	360,878	360,725	-0,153	254,5555	200	2,69%			
Cur	1.818,000	615.787,181	4.675.751,403	360,911	360,752	-0,159	254,8738	200	2,69%			
Cur	1.819,000	615.786,421	4.675.750,754	360,945	360,779	-0,166	255,1921	200	2,69%			
Cur	1.820,000	615.785,657	4.675.750,108	360,977	360,806	-0,171	255,5104	200	2,69%			
Cur	1.821,000	615.784,889	4.675.749,467	361,013	360,833	-0,180	255,8288	200	2,69%			
Cur	1.822,000	615.784,119	4.675.748,829	361,056	360,860	-0,196	256,1471	200	2,69%			
Cur	1.823,000	615.783,345	4.675.748,196	361,104	360,887	-0,217	256,4654	200	2,69%			
Cur	1.824,000	615.782,569	4.675.747,566	361,151	360,914	-0,237	256,7837	200	2,69%			
Cur	1.825,000	615.781,789	4.675.746,940	361,199	360,941	-0,258	257,1020	200	2,69%			
Cur	1.826,000	615.781,006	4.675.746,318	361,247	360,968	-0,279	257,4203	200	2,69%			
Cur	1.827,000	615.780,220	4.675.745,700	361,295	360,994	-0,301	257,7386	200	2,69%			
Cur	1.828,000	615.779,431	4.675.745,086	361,344	361,021	-0,323	258,0569	200	2,69%			
Cur	1.829,000	615.778,638	4.675.744,475	361,393	361,048	-0,345	258,3752	200	2,69%			
Cur	1.830,000	615.777,843	4.675.743,869	361,442	361,075	-0,367	258,6935	200	2,69%			
Cur	1.831,000	615.777,045	4.675.743,267	361,491	361,102	-0,389	259,0119	200	2,69%			
Cur	1.832,000	615.776,244	4.675.742,669	361,529	361,129	-0,400	259,3302	200	2,69%			
Cur	1.833,000	615.775,439	4.675.742,074	361,564	361,156	-0,408	259,6485	200	2,69%			
Cur	1.834,000	615.774,632	4.675.741,484	361,604	361,183	-0,421	259,9668	200	2,69%			
Cur	1.835,000	615.773,822	4.675.740,898	361,631	361,210	-0,421	260,2851	200	2,69%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.836,000	615.773,009	4.675.740,316	361,659	361,237	-0,422	260,6034	200	2,69%			
Cur	1.837,000	615.772,193	4.675.739,738	361,673	361,264	-0,409	260,9217	200	2,69%			
Cur	1.838,000	615.771,374	4.675.739,164	361,689	361,291	-0,398	261,2400	200	2,69%			
Cur	1.839,000	615.770,552	4.675.738,594	361,717	361,318	-0,399	261,5583	200	2,69%			
Cur	1.840,000	615.769,728	4.675.738,028	361,757	361,345	-0,412	261,8766	200	2,69%			
Cur	1.841,000	615.768,900	4.675.737,467	361,788	361,372	-0,416	262,1949	200	2,69%			
Cur	1.842,000	615.768,070	4.675.736,909	361,807	361,399	-0,408	262,5133	200	2,69%			
Cur	1.843,000	615.767,237	4.675.736,356	361,823	361,426	-0,397	262,8316	200	2,69%			
Cur	1.844,000	615.766,401	4.675.735,807	361,842	361,452	-0,390	263,1499	200	2,69%			
Cur	1.845,000	615.765,563	4.675.735,262	361,856	361,479	-0,377	263,4682	200	2,69%			
Cur	1.846,000	615.764,722	4.675.734,721	361,874	361,506	-0,368	263,7865	200	2,69%			
Cur	1.847,000	615.763,878	4.675.734,184	361,889	361,533	-0,356	264,1048	200	2,69%			
Cur	1.848,000	615.763,031	4.675.733,652	361,906	361,560	-0,346	264,4231	200	2,69%			
Cur	1.849,000	615.762,182	4.675.733,124	361,927	361,587	-0,340	264,7414	200	2,69%			
Cur	1.850,000	615.761,330	4.675.732,600	361,946	361,614	-0,332	265,0597	200	2,69%			
Cur	1.851,000	615.760,476	4.675.732,081	361,964	361,641	-0,323	265,3780	200	2,69%			
Cur	1.852,000	615.759,619	4.675.731,565	361,980	361,668	-0,312	265,6964	200	2,69%			
Cur	1.853,000	615.758,759	4.675.731,054	361,997	361,695	-0,302	266,0147	200	2,69%			
Cur	1.854,000	615.757,897	4.675.730,548	362,015	361,722	-0,293	266,3330	200	2,69%			
Cur	1.855,000	615.757,032	4.675.730,045	362,034	361,749	-0,285	266,6513	200	2,69%			
Cur	1.856,000	615.756,165	4.675.729,547	362,053	361,776	-0,277	266,9696	200	2,69%			
Cur	1.857,000	615.755,296	4.675.729,054	362,071	361,803	-0,268	267,2879	200	2,69%			
Cur	1.858,000	615.754,424	4.675.728,564	362,089	361,830	-0,259	267,6062	200	2,69%			
Cur	1.859,000	615.753,549	4.675.728,079	362,106	361,857	-0,249	267,9245	200	2,69%			
Cur	1.860,000	615.752,672	4.675.727,599	362,130	361,884	-0,246	268,2428	200	2,69%			
Cur	1.861,000	615.751,793	4.675.727,122	362,144	361,910	-0,234	268,5611	200	2,69%			
Cur	1.862,000	615.750,911	4.675.726,651	362,167	361,937	-0,230	268,8795	200	2,69%			
Cur	1.863,000	615.750,027	4.675.726,183	362,185	361,964	-0,221	269,1978	200	2,69%			
Cur	1.864,000	615.749,141	4.675.725,720	362,197	361,991	-0,206	269,5161	200	2,69%			
Cur	1.865,000	615.748,252	4.675.725,262	362,206	362,018	-0,188	269,8344	200	2,69%			
Cur	1.866,000	615.747,361	4.675.724,808	362,213	362,045	-0,168	270,1527	200	2,69%			
Cur	1.867,000	615.746,468	4.675.724,358	362,228	362,072	-0,156	270,4710	200	2,69%			
Cur	1.868,000	615.745,572	4.675.723,913	362,238	362,099	-0,139	270,7893	200	2,69%			
Cur	1.869,000	615.744,675	4.675.723,472	362,257	362,126	-0,131	271,1076	200	2,69%			
Cur	1.870,000	615.743,775	4.675.723,036	362,259	362,153	-0,106	271,4259	200	2,69%			
Cur	1.871,000	615.742,873	4.675.722,604	362,276	362,180	-0,096	271,7442	200	2,69%			
Cur	1.872,000	615.741,969	4.675.722,177	362,295	362,207	-0,088	272,0626	200	2,69%			
Cur	1.873,000	615.741,062	4.675.721,755	362,314	362,234	-0,080	272,3809	200	2,69%			
Cur	1.874,000	615.740,154	4.675.721,336	362,335	362,261	-0,074	272,6992	200	2,69%			
Cur	1.875,000	615.739,243	4.675.720,923	362,355	362,288	-0,067	273,0175	200	2,69%			
Cur	1.876,000	615.738,331	4.675.720,514	362,367	362,315	-0,052	273,3358	200	2,69%			
Cur	1.877,000	615.737,416	4.675.720,110	362,386	362,342	-0,044	273,6541	200	2,69%			
Cur	1.878,000	615.736,500	4.675.719,710	362,397	362,368	-0,029	273,9724	200	2,69%	P.S.		
Rec	1.878,204	615.736,312	4.675.719,629	362,400	362,374	-0,026	274,0373	0	2,69%			
Rec	1.879,000	615.735,582	4.675.719,313	362,413	362,395	-0,018	274,0373	0	2,69%			
Rec	1.880,000	615.734,664	4.675.718,916	362,430	362,422	-0,008	274,0373	0	2,69%			
Rec	1.881,000	615.733,746	4.675.718,520	362,446	362,449	0,003	274,0373	0	2,69%			
Rec	1.882,000	615.732,828	4.675.718,123	362,464	362,476	0,012	274,0373	0	2,69%			
Rec	1.883,000	615.731,910	4.675.717,727	362,483	362,503	0,020	274,0373	0	2,69%			
Rec	1.884,000	615.730,992	4.675.717,330	362,497	362,530	0,033	274,0373	0	2,69%			
Rec	1.885,000	615.730,074	4.675.716,933	362,516	362,557	0,041	274,0373	0	2,69%			
Rec	1.886,000	615.729,156	4.675.716,537	362,537	362,584	0,047	274,0373	0	2,69%			
Rec	1.887,000	615.728,238	4.675.716,140	362,552	362,611	0,059	274,0373	0	2,69%			
Rec	1.888,000	615.727,320	4.675.715,744	362,568	362,638	0,070	274,0373	0	2,69%			
Rec	1.889,000	615.726,402	4.675.715,347	362,587	362,665	0,078	274,0373	0	2,69%			
Rec	1.890,000	615.725,484	4.675.714,950	362,606	362,692	0,086	274,0373	0	2,69%			
Rec	1.891,000	615.724,566	4.675.714,554	362,626	362,719	0,093	274,0373	0	2,69%			
Rec	1.892,000	615.723,648	4.675.714,157	362,650	362,746	0,096	274,0373	0	2,69%			
Rec	1.893,000	615.722,730	4.675.713,760	362,669	362,773	0,104	274,0373	0	2,69%			
Rec	1.894,000	615.721,812	4.675.713,364	362,692	362,800	0,108	274,0373	0	2,69%			
Rec	1.895,000	615.720,894	4.675.712,967	362,712	362,826	0,114	274,0373	0	2,69%			
Rec	1.896,000	615.719,976	4.675.712,571	362,735	362,853	0,118	274,0373	0	2,69%			
Rec	1.897,000	615.719,058	4.675.712,174	362,755	362,880	0,125	274,0373	0	2,69%			
Rec	1.898,000	615.718,140	4.675.711,777	362,775	362,907	0,132	274,0373	0	2,69%			
Rec	1.899,000	615.717,222	4.675.711,381	362,798	362,934	0,136	274,0373	0	2,69%			
Rec	1.900,000	615.716,304	4.675.710,984	362,817	362,961	0,144	274,0373	0	2,69%			
Rec	1.901,000	615.715,386	4.675.710,588	362,838	362,988	0,150	274,0373	0	2,69%			
Rec	1.902,000	615.714,468	4.675.710,191	362,858	363,015	0,157	274,0373	0	2,69%			
Rec	1.903,000	615.713,550	4.675.709,794	362,879	363,042	0,163	274,0373	0	2,69%			
Rec	1.904,000	615.712,632	4.675.709,398	362,899	363,069	0,170	274,0373	0	2,69%			
Rec	1.905,000	615.711,714	4.675.709,001	362,914	363,096	0,182	274,0373	0	2,69%			
Rec	1.906,000	615.710,796	4.675.708,605	362,932	363,123	0,191	274,0373	0	2,69%		T.E.	
Rec	1.906,530	615.710,310	4.675.708,394	362,943	363,137	0,194	274,0373	0	2,69%			
Rec	1.907,000	615.709,878	4.675.708,208	362,953	363,150	0,197	274,0373	0	2,65%			
Rec	1.908,000	615.708,960	4.675.707,811	362,975	363,176	0,201	274,0373	0	2,55%			
Rec	1.909,000	615.708,042	4.675.707,415	362,997	363,201	0,204	274,0373	0	2,45%			
Rec	1.910,000	615.707,124	4.675.707,018	363,031	363,225	0,194	274,0373	0	2,35%			
Rec	1.911,000	615.706,206	4.675.706,622	363,067	363,248	0,181	274,0373	0	2,25%			
Rec	1.912,000	615.705,288	4.675.706,225	363,103	363,270	0,167	274,0373	0	2,15%			
Rec	1.913,000	615.704,370	4.675.705,828	363,139	363,290	0,151	274,0373	0	2,05%			
Rec	1.914,000	615.703,452	4.675.705,432	363,174	363,310	0,136	274,0373	0	1,95%			
Rec	1.915,000	615.702,534	4.675.705,035	363,205	363,329	0,124	274,0373	0	1,85%			
Rec	1.916,000	615.701,616	4.675.704,638	363,236	363,347	0,111	274,0373	0	1,75%			
Rec	1.917,000	615.700,698	4.675.704,242	363,268	363,364	0,096	274,0373	0	1,65%			
Rec	1.918,000	615.699,780	4.675.703,845	363,295	363,380	0,085	274,0373	0	1,55%			
Rec	1.919,000	615.698,862	4.675.703,449	363,326	363,395	0,069	274,0373	0	1,45%		V.	
Rec	1.920,000	615.697,944	4.675.703,052	363,357	363,409	0,052	274,0373	0	1,35%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T11-T12 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.921,000	615.697,026	4.675.702,655	363,389	363,422	0,033	274,0373	0	1,25%			
Rec	1.922,000	615.696,108	4.675.702,259	363,418	363,434	0,016	274,0373	0	1,15%			
Rec	1.923,000	615.695,190	4.675.701,862	363,447	363,445	-0,002	274,0373	0	1,05%			
Rec	1.924,000	615.694,272	4.675.701,466	363,474	363,455	-0,019	274,0373	0	0,95%			
Rec	1.925,000	615.693,354	4.675.701,069	363,496	363,464	-0,032	274,0373	0	0,85%			
Rec	1.926,000	615.692,436	4.675.700,672	363,521	363,472	-0,049	274,0373	0	0,75%			
Rec	1.927,000	615.691,518	4.675.700,276	363,538	363,479	-0,059	274,0373	0	0,65%			
Rec	1.928,000	615.690,600	4.675.699,879	363,556	363,485	-0,071	274,0373	0	0,55%			
Rec	1.929,000	615.689,682	4.675.699,483	363,574	363,490	-0,084	274,0373	0	0,45%			
Rec	1.930,000	615.688,764	4.675.699,086	363,594	363,494	-0,100	274,0373	0	0,35%			
Rec	1.931,000	615.687,846	4.675.698,689	363,611	363,497	-0,114	274,0373	0	0,25%			
Rec	1.932,000	615.686,928	4.675.698,293	363,629	363,499	-0,130	274,0373	0	0,15%			
Rec	1.933,000	615.686,010	4.675.697,896	363,644	363,500	-0,144	274,0373	0	0,05%		T.S.	
Rec	1.933,470	615.685,579	4.675.697,710	363,650	363,500	-0,150	274,0373	0	0,00%			
Rec	1.934,000	615.685,092	4.675.697,499	363,656	363,500	-0,156	274,0373	0	0,00%			
Rec	1.935,000	615.684,174	4.675.697,103	363,667	363,500	-0,167	274,0373	0	0,00%			
Rec	1.936,000	615.683,256	4.675.696,706	363,674	363,500	-0,174	274,0373	0	0,00%			
Rec	1.937,000	615.682,338	4.675.696,310	363,683	363,500	-0,183	274,0373	0	0,00%			
Rec	1.938,000	615.681,420	4.675.695,913	363,692	363,500	-0,192	274,0373	0	0,00%			
Rec	1.939,000	615.680,502	4.675.695,516	363,700	363,500	-0,200	274,0373	0	0,00%			
Rec	1.940,000	615.679,584	4.675.695,120	363,707	363,500	-0,207	274,0373	0	0,00%			
Rec	1.941,000	615.678,667	4.675.694,723	363,707	363,500	-0,207	274,0373	0	0,00%			
Rec	1.942,000	615.677,749	4.675.694,327	363,702	363,500	-0,202	274,0373	0	0,00%			
Rec	1.943,000	615.676,831	4.675.693,930	363,695	363,500	-0,195	274,0373	0	0,00%			
Rec	1.944,000	615.675,913	4.675.693,533	363,683	363,500	-0,183	274,0373	0	0,00%			
Rec	1.945,000	615.674,995	4.675.693,137	363,671	363,500	-0,171	274,0373	0	0,00%			
Rec	1.946,000	615.674,077	4.675.692,740	363,649	363,500	-0,149	274,0373	0	0,00%			
Rec	1.947,000	615.673,159	4.675.692,344	363,635	363,500	-0,135	274,0373	0	0,00%			
Rec	1.948,000	615.672,241	4.675.691,947	363,616	363,500	-0,116	274,0373	0	0,00%			
Rec	1.949,000	615.671,323	4.675.691,550	363,599	363,500	-0,099	274,0373	0	0,00%			
Rec	1.950,000	615.670,405	4.675.691,154	363,580	363,500	-0,080	274,0373	0	0,00%			
Rec	1.951,000	615.669,487	4.675.690,757	363,567	363,500	-0,067	274,0373	0	0,00%			
Rec	1.952,000	615.668,569	4.675.690,361	363,553	363,500	-0,053	274,0373	0	0,00%			
Rec	1.953,000	615.667,651	4.675.689,964	363,550	363,500	-0,050	274,0373	0	0,00%			
Rec	1.954,000	615.666,733	4.675.689,567	363,534	363,500	-0,034	274,0373	0	0,00%			
Rec	1.955,000	615.665,815	4.675.689,171	363,518	363,500	-0,018	274,0373	0	0,00%			
Rec	1.956,000	615.664,897	4.675.688,774	363,499	363,500	0,001	274,0373	0	0,00%			
Rec	1.957,000	615.663,979	4.675.688,377	363,479	363,500	0,021	274,0373	0	0,00%			
Rec	1.958,000	615.663,061	4.675.687,981	363,463	363,500	0,037	274,0373	0	0,00%			
Rec	1.959,000	615.662,143	4.675.687,584	363,453	363,500	0,047	274,0373	0	0,00%			
Rec	1.960,000	615.661,225	4.675.687,188	363,437	363,500	0,063	274,0373	0	0,00%			
Rec	1.961,000	615.660,307	4.675.686,791	363,423	363,500	0,077	274,0373	0	0,00%			
Rec	1.962,000	615.659,389	4.675.686,394	363,396	363,500	0,104	274,0373	0	0,00%			
Rec	1.963,000	615.658,471	4.675.685,998	363,403	363,500	0,097	274,0373	0	0,00%			
Rec	1.964,000	615.657,553	4.675.685,601	363,366	363,500	0,134	274,0373	0	0,00%			
Rec	1.965,000	615.656,635	4.675.685,205	363,329	363,500	0,171	274,0373	0	0,00%			
Rec	1.966,000	615.655,717	4.675.684,808	363,336	363,500	0,164	274,0373	0	0,00%			
Rec	1.967,000	615.654,799	4.675.684,411	363,317	363,500	0,183	274,0373	0	0,00%			
Rec	1.968,000	615.653,881	4.675.684,015	363,305	363,500	0,195	274,0373	0	0,00%			
Rec	1.969,000	615.652,963	4.675.683,618	363,294	363,500	0,206	274,0373	0	0,00%			
Rec	1.970,000	615.652,045	4.675.683,222	363,283	363,500	0,217	274,0373	0	0,00%			
Rec	1.971,000	615.651,127	4.675.682,825	363,272	363,500	0,228	274,0373	0	0,00%			
Rec	1.972,000	615.650,209	4.675.682,428	363,261	363,500	0,239	274,0373	0	0,00%			
Rec	1.973,000	615.649,291	4.675.682,032	363,250	363,500	0,250	274,0373	0	0,00%			ODT ø500 L=7,00m
Rec	1.974,000	615.648,373	4.675.681,635	363,411	363,500	0,089	274,0373	0	0,00%			
	1.974,133	615.648,251	4.675.681,582	363,500	363,500	0,000	274,0373		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T12-T13 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	614.644,801	4.673.516,936	420,750	420,750	0,000	11,8811	0	1,68%			
Rec	1,000	614.644,986	4.673.517,919	420,828	420,767	-0,061	11,8811	0	1,68%			ODT Ø300 L=9,1m
Rec	2,000	614.645,172	4.673.518,902	420,900	420,784	-0,116	11,8811	0	1,68%			
Rec	3,000	614.645,358	4.673.519,884	420,917	420,800	-0,117	11,8811	0	1,68%			
Rec	4,000	614.645,543	4.673.520,867	420,939	420,817	-0,122	11,8811	0	1,68%			
Rec	5,000	614.645,729	4.673.521,850	420,962	420,834	-0,128	11,8811	0	1,68%			
Rec	6,000	614.645,914	4.673.522,832	420,985	420,851	-0,134	11,8811	0	1,68%			
Rec	7,000	614.646,100	4.673.523,815	421,010	420,868	-0,142	11,8811	0	1,68%			
Rec	8,000	614.646,285	4.673.524,798	421,038	420,884	-0,154	11,8811	0	1,68%			
Rec	9,000	614.646,471	4.673.525,780	421,066	420,901	-0,165	11,8811	0	1,68%			
Rec	10,000	614.646,656	4.673.526,763	421,092	420,918	-0,174	11,8811	0	1,68%			
Rec	11,000	614.646,842	4.673.527,745	421,117	420,935	-0,182	11,8811	0	1,68%			
Rec	12,000	614.647,027	4.673.528,728	421,142	420,951	-0,191	11,8811	0	1,68%			
Rec	13,000	614.647,213	4.673.529,711	421,166	420,968	-0,198	11,8811	0	1,68%			
Rec	14,000	614.647,399	4.673.530,693	421,185	420,985	-0,200	11,8811	0	1,68%			
Rec	15,000	614.647,584	4.673.531,676	421,204	421,002	-0,202	11,8811	0	1,68%			
Rec	16,000	614.647,770	4.673.532,659	421,225	421,019	-0,206	11,8811	0	1,68%			
Rec	17,000	614.647,955	4.673.533,641	421,243	421,035	-0,208	11,8811	0	1,68%			
Rec	18,000	614.648,141	4.673.534,624	421,261	421,052	-0,209	11,8811	0	1,68%			
Rec	19,000	614.648,326	4.673.535,606	421,277	421,069	-0,208	11,8811	0	1,68%			
Rec	20,000	614.648,512	4.673.536,589	421,293	421,086	-0,207	11,8811	0	1,68%			
Rec	21,000	614.648,697	4.673.537,572	421,309	421,103	-0,206	11,8811	0	1,68%			
Rec	22,000	614.648,883	4.673.538,554	421,326	421,119	-0,207	11,8811	0	1,68%			
Rec	23,000	614.649,068	4.673.539,537	421,341	421,136	-0,205	11,8811	0	1,68%			
Rec	24,000	614.649,254	4.673.540,520	421,356	421,153	-0,203	11,8811	0	1,68%			
Rec	25,000	614.649,440	4.673.541,502	421,372	421,170	-0,202	11,8811	0	1,68%			
Rec	26,000	614.649,625	4.673.542,485	421,388	421,187	-0,201	11,8811	0	1,68%			
Rec	27,000	614.649,811	4.673.543,468	421,397	421,203	-0,194	11,8811	0	1,68%			
Rec	28,000	614.649,996	4.673.544,450	421,406	421,220	-0,186	11,8811	0	1,68%			
Rec	29,000	614.650,182	4.673.545,433	421,411	421,237	-0,174	11,8811	0	1,68%			
Rec	30,000	614.650,367	4.673.546,415	421,423	421,254	-0,169	11,8811	0	1,68%			
Rec	31,000	614.650,553	4.673.547,398	421,430	421,270	-0,160	11,8811	0	1,68%			
Rec	32,000	614.650,738	4.673.548,381	421,427	421,287	-0,140	11,8811	0	1,68%			
Rec	33,000	614.650,924	4.673.549,363	421,427	421,304	-0,123	11,8811	0	1,68%			
Rec	34,000	614.651,110	4.673.550,346	421,430	421,321	-0,109	11,8811	0	1,68%			
Rec	35,000	614.651,295	4.673.551,329	421,423	421,338	-0,085	11,8811	0	1,68%			
Rec	36,000	614.651,481	4.673.552,311	421,424	421,354	-0,070	11,8811	0	1,68%			
Rec	37,000	614.651,666	4.673.553,294	421,434	421,371	-0,063	11,8811	0	1,68%			
Rec	38,000	614.651,852	4.673.554,277	421,438	421,388	-0,050	11,8811	0	1,68%			
Rec	39,000	614.652,037	4.673.555,259	421,445	421,405	-0,040	11,8811	0	1,68%			
Rec	40,000	614.652,223	4.673.556,242	421,444	421,422	-0,022	11,8811	0	1,68%			
Rec	41,000	614.652,408	4.673.557,224	421,448	421,438	-0,010	11,8811	0	1,68%			
Rec	42,000	614.652,594	4.673.558,207	421,456	421,455	-0,001	11,8811	0	1,68%			
Rec	43,000	614.652,779	4.673.559,190	421,465	421,472	0,007	11,8811	0	1,68%			
Rec	44,000	614.652,965	4.673.560,172	421,475	421,489	0,014	11,8811	0	1,68%			
Rec	45,000	614.653,151	4.673.561,155	421,488	421,505	0,017	11,8811	0	1,68%			
Rec	46,000	614.653,336	4.673.562,138	421,500	421,522	0,022	11,8811	0	1,68%			
Rec	47,000	614.653,522	4.673.563,120	421,513	421,539	0,026	11,8811	0	1,68%			
Rec	48,000	614.653,707	4.673.564,103	421,526	421,556	0,030	11,8811	0	1,68%			
Rec	49,000	614.653,893	4.673.565,086	421,542	421,573	0,031	11,8811	0	1,68%			
Rec	50,000	614.654,078	4.673.566,068	421,552	421,589	0,037	11,8811	0	1,68%			
Rec	51,000	614.654,264	4.673.567,051	421,562	421,606	0,044	11,8811	0	1,68%			
Rec	52,000	614.654,449	4.673.568,033	421,581	421,623	0,042	11,8811	0	1,68%			
Rec	53,000	614.654,635	4.673.569,016	421,600	421,640	0,040	11,8811	0	1,68%			
Rec	54,000	614.654,820	4.673.569,999	421,612	421,657	0,045	11,8811	0	1,68%			
Rec	55,000	614.655,006	4.673.570,981	421,625	421,673	0,048	11,8811	0	1,68%			
Rec	56,000	614.655,192	4.673.571,964	421,638	421,690	0,052	11,8811	0	1,68%			
Rec	57,000	614.655,377	4.673.572,947	421,652	421,707	0,055	11,8811	0	1,68%			
Rec	58,000	614.655,563	4.673.573,929	421,667	421,724	0,057	11,8811	0	1,68%			
Rec	59,000	614.655,748	4.673.574,912	421,684	421,741	0,057	11,8811	0	1,68%			
Rec	60,000	614.655,934	4.673.575,895	421,698	421,757	0,059	11,8811	0	1,68%			
Rec	61,000	614.656,119	4.673.576,877	421,711	421,774	0,063	11,8811	0	1,68%			
Rec	62,000	614.656,305	4.673.577,860	421,725	421,791	0,066	11,8811	0	1,68%			
Rec	63,000	614.656,490	4.673.578,842	421,738	421,808	0,070	11,8811	0	1,68%			
Rec	64,000	614.656,676	4.673.579,825	421,753	421,824	0,071	11,8811	0	1,68%			
Rec	65,000	614.656,861	4.673.580,808	421,768	421,841	0,073	11,8811	0	1,68%			
Cur	65,967	614.657,041	4.673.581,758	421,781	421,858	0,077	11,8811	-290	1,68%	P.S.		
Cur	66,000	614.657,047	4.673.581,790	421,781	421,858	0,077	11,8740	-290	1,68%			
Cur	67,000	614.657,231	4.673.582,773	421,783	421,875	0,092	11,6545	-290	1,68%			
Cur	68,000	614.657,411	4.673.583,757	421,797	421,892	0,095	11,4349	-290	1,68%			
Cur	69,000	614.657,588	4.673.584,741	421,816	421,908	0,092	11,2154	-290	1,68%			
Cur	70,000	614.657,762	4.673.585,726	421,832	421,925	0,093	10,9959	-290	1,68%			
Cur	71,000	614.657,932	4.673.586,711	421,844	421,942	0,098	10,7764	-290	1,68%			
Cur	72,000	614.658,099	4.673.587,697	421,863	421,959	0,096	10,5568	-290	1,68%			
Cur	73,000	614.658,262	4.673.588,684	421,883	421,976	0,093	10,3373	-290	1,68%			
Cur	74,000	614.658,422	4.673.589,671	421,901	421,992	0,091	10,1178	-290	1,68%			
Cur	75,000	614.658,578	4.673.590,659	421,923	422,009	0,086	9,8983	-290	1,68%			
Cur	76,000	614.658,732	4.673.591,647	421,947	422,026	0,079	9,6787	-290	1,68%			
Cur	77,000	614.658,881	4.673.592,636	421,969	422,043	0,074	9,4592	-290	1,68%			
Cur	78,000	614.659,028	4.673.593,625	421,992	422,060	0,068	9,2397	-290	1,68%			
Cur	79,000	614.659,171	4.673.594,615	422,022	422,076	0,054	9,0202	-290	1,68%			
Cur	79,889	614.659,295	4.673.595,495	422,050	422,091	0,042	8,8250	-290	1,68%		T.E.	
Cur	80,000	614.659,310	4.673.595,605	422,053	422,093	0,040	8,8006	-290	1,68%			
Cur	81,000	614.659,446	4.673.596,596	422,083	422,110	0,027	8,5811	-290	1,68%			
Cur	82,000	614.659,579	4.673.597,587	422,114	422,127	0,013	8,3616	-290	1,69%			
Cur	83,000	614.659,708	4.673.598,578	422,139	422,144	0,005	8,1421	-290	1,69%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T12-T13 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	84,000	614.659,834	4.673.599,570	422,161	422,161	0,000	7,9225	-290	1,70%			
Cur	85,000	614.659,956	4.673.600,563	422,184	422,178	-0,006	7,7030	-290	1,70%			
Cur	86,000	614.660,075	4.673.601,556	422,206	422,195	-0,011	7,4835	-290	1,71%			
Cur	87,000	614.660,191	4.673.602,549	422,225	422,212	-0,013	7,2640	-290	1,71%			
Cur	88,000	614.660,303	4.673.603,543	422,238	422,229	-0,009	7,0445	-290	1,72%			
Cur	89,000	614.660,412	4.673.604,537	422,251	422,246	-0,005	6,8249	-290	1,72%			
Cur	90,000	614.660,517	4.673.605,531	422,261	422,264	0,003	6,6054	-290	1,73%		V.	
Cur	91,000	614.660,619	4.673.606,526	422,268	422,281	0,013	6,3859	-290	1,73%			
Cur	92,000	614.660,717	4.673.607,521	422,274	422,298	0,024	6,1664	-290	1,74%			
Cur	93,000	614.660,812	4.673.608,517	422,275	422,316	0,041	5,9468	-290	1,74%			
Cur	94,000	614.660,904	4.673.609,512	422,273	422,333	0,060	5,7273	-290	1,75%			
Cur	95,000	614.660,992	4.673.610,509	422,276	422,351	0,075	5,5078	-290	1,75%			
Cur	96,000	614.661,077	4.673.611,505	422,279	422,368	0,089	5,2883	-290	1,76%			
Cur	97,000	614.661,158	4.673.612,502	422,282	422,386	0,104	5,0687	-290	1,76%			
Cur	98,000	614.661,236	4.673.613,499	422,285	422,404	0,119	4,8492	-290	1,77%			
Cur	99,000	614.661,310	4.673.614,496	422,285	422,421	0,136	4,6297	-290	1,77%			
Cur	100,000	614.661,381	4.673.615,493	422,282	422,439	0,157	4,4102	-290	1,78%			
Cur	100,111	614.661,389	4.673.615,604	422,281	422,441	0,160	4,3858	-290	1,78%		T.S.	
Cur	101,000	614.661,449	4.673.616,491	422,277	422,457	0,180	4,1906	-290	1,78%			
Cur	102,000	614.661,513	4.673.617,489	422,270	422,475	0,205	3,9711	-290	1,78%			
Cur	103,000	614.661,573	4.673.618,487	422,261	422,492	0,231	3,7516	-290	1,78%			
Cur	104,000	614.661,630	4.673.619,486	422,252	422,510	0,258	3,5321	-290	1,78%			
Cur	105,000	614.661,684	4.673.620,484	422,244	422,528	0,284	3,3125	-290	1,78%			
Cur	106,000	614.661,734	4.673.621,483	422,229	422,546	0,317	3,0930	-290	1,78%			
Cur	107,000	614.661,781	4.673.622,482	422,214	422,564	0,350	2,8735	-290	1,78%			
Cur	108,000	614.661,825	4.673.623,481	422,202	422,581	0,379	2,6540	-290	1,78%			
Cur	109,000	614.661,865	4.673.624,480	422,192	422,599	0,407	2,4344	-290	1,78%			
Cur	110,000	614.661,901	4.673.625,479	422,190	422,617	0,427	2,2149	-290	1,78%			
Cur	111,000	614.661,934	4.673.626,479	422,186	422,635	0,449	1,9954	-290	1,78%			
Cur	111,100	614.661,937	4.673.626,579	422,187	422,637	0,449	1,9734	-290	1,78%		T.E.	
Cur	112,000	614.661,964	4.673.627,478	422,197	422,652	0,455	1,7759	-290	1,69%			
Cur	113,000	614.661,990	4.673.628,478	422,213	422,669	0,456	1,5564	-290	1,59%			
Cur	114,000	614.662,013	4.673.629,478	422,225	422,684	0,459	1,3368	-290	1,49%			
Cur	115,000	614.662,032	4.673.630,478	422,243	422,698	0,455	1,1173	-290	1,39%			
Cur	116,000	614.662,048	4.673.631,477	422,263	422,712	0,449	0,8978	-290	1,29%			
Cur	117,000	614.662,060	4.673.632,477	422,282	422,724	0,442	0,6783	-290	1,19%			
Cur	118,000	614.662,069	4.673.633,477	422,304	422,736	0,432	0,4587	-290	1,09%			
Cur	119,000	614.662,075	4.673.634,477	422,327	422,746	0,419	0,2392	-290	0,99%			
Cur	120,000	614.662,077	4.673.635,477	422,355	422,755	0,400	0,0197	-290	0,89%		V.	
Cur	121,000	614.662,075	4.673.636,477	422,381	422,764	0,383	399,8002	-290	0,79%			
Cur	122,000	614.662,070	4.673.637,477	422,410	422,771	0,361	399,5806	-290	0,69%			
Cur	123,000	614.662,062	4.673.638,477	422,436	422,778	0,342	399,3611	-290	0,59%			
Cur	124,000	614.662,050	4.673.639,477	422,464	422,783	0,319	399,1416	-290	0,49%			
Cur	125,000	614.662,035	4.673.640,477	422,458	422,787	0,329	398,9221	-290	0,39%			
Cur	126,000	614.662,016	4.673.641,477	422,446	422,791	0,345	398,7025	-290	0,29%			
Cur	127,000	614.661,994	4.673.642,477	422,460	422,793	0,333	398,4830	-290	0,19%			
Cur	128,000	614.661,969	4.673.643,476	422,468	422,795	0,327	398,2635	-290	0,09%			
Cur	128,900	614.661,943	4.673.644,376	422,478	422,795	0,317	398,0659	-290	0,00%		T.S.	
Cur	129,000	614.661,940	4.673.644,476	422,479	422,795	0,316	398,0440	-290	0,00%			
Cur	130,000	614.661,907	4.673.645,475	422,495	422,795	0,300	397,8244	-290	0,00%			
Cur	131,000	614.661,871	4.673.646,475	422,485	422,795	0,310	397,6049	-290	0,00%			
Cur	132,000	614.661,832	4.673.647,474	422,460	422,795	0,335	397,3854	-290	0,00%			
Cur	133,000	614.661,789	4.673.648,473	422,442	422,795	0,353	397,1659	-290	0,00%			
Cur	134,000	614.661,743	4.673.649,472	422,446	422,795	0,349	396,9463	-290	0,00%			
Cur	135,000	614.661,693	4.673.650,471	422,455	422,795	0,340	396,7268	-290	0,00%			
Cur	136,000	614.661,640	4.673.651,469	422,454	422,795	0,341	396,5073	-290	0,00%			
Cur	137,000	614.661,584	4.673.652,468	422,444	422,795	0,351	396,2878	-290	0,00%			
Cur	138,000	614.661,524	4.673.653,466	422,432	422,795	0,363	396,0682	-290	0,00%			
Cur	139,000	614.661,460	4.673.654,464	422,430	422,795	0,365	395,8487	-290	0,00%			
Cur	140,000	614.661,393	4.673.655,462	422,427	422,795	0,368	395,6292	-290	0,00%			
Cur	140,352	614.661,369	4.673.655,813	422,422	422,795	0,373	395,5519		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T12-T13 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	614.396,762	4.673.209,036	425,998	425,998	0,000	82,5245	0	14,00%			
Rec	1,000	614.397,724	4.673.209,307	426,349	426,138	-0,211	82,5245	0	14,00%			
Rec	2,000	614.398,687	4.673.209,578	426,720	426,278	-0,442	82,5245	0	14,00%			ODT Ø500 L=10,0m
Rec	3,000	614.399,650	4.673.209,849	427,026	426,418	-0,608	82,5245	0	14,00%			
Rec	4,000	614.400,612	4.673.210,120	427,164	426,558	-0,606	82,5245	0	14,00%			
Rec	5,000	614.401,575	4.673.210,391	427,271	426,698	-0,573	82,5245	0	14,00%			
Rec	6,000	614.402,537	4.673.210,662	427,348	426,838	-0,510	82,5245	0	14,00%			
Rec	7,000	614.403,500	4.673.210,933	427,421	426,978	-0,443	82,5245	0	14,00%			
Rec	8,000	614.404,462	4.673.211,205	427,456	427,118	-0,338	82,5245	0	14,00%			
Rec	9,000	614.405,425	4.673.211,476	427,512	427,258	-0,254	82,5245	0	14,00%			
Rec	9,775	614.406,171	4.673.211,686	427,568	427,366	-0,201	82,5245	0	14,00%		T.E.	
Rec	10,000	614.406,388	4.673.211,747	427,584	427,398	-0,186	82,5245	0	13,75%			
Rec	11,000	614.407,350	4.673.212,018	427,654	427,530	-0,124	82,5245	0	12,64%			
Rec	12,000	614.408,313	4.673.212,289	427,723	427,650	-0,073	82,5245	0	11,53%			
Rec	13,000	614.409,275	4.673.212,560	427,795	427,760	-0,035	82,5245	0	10,42%			
Rec	14,000	614.410,238	4.673.212,831	427,868	427,859	-0,009	82,5245	0	9,31%			
Rec	15,000	614.411,200	4.673.213,102	427,943	427,946	0,003	82,5245	0	8,19%			
Rec	16,000	614.412,163	4.673.213,373	428,012	428,023	0,011	82,5245	0	7,08%			
Rec	17,000	614.413,125	4.673.213,644	428,063	428,088	0,025	82,5245	0	5,97%			
Rec	18,000	614.414,088	4.673.213,915	428,115	428,142	0,027	82,5245	0	4,86%			
Rec	19,000	614.415,051	4.673.214,186	428,160	428,185	0,025	82,5245	0	3,75%			
Rec	20,000	614.416,013	4.673.214,457	428,199	428,217	0,018	82,5245	0	2,64%			
Rec	21,000	614.416,976	4.673.214,728	428,245	428,238	-0,007	82,5245	0	1,53%			
Rec	22,000	614.417,938	4.673.215,000	428,280	428,248	-0,032	82,5245	0	0,42%		V.	
Rec	23,000	614.418,901	4.673.215,271	428,269	428,246	-0,023	82,5245	0	-0,69%			
Rec	24,000	614.419,863	4.673.215,542	428,241	428,234	-0,007	82,5245	0	-1,81%			
Rec	25,000	614.420,826	4.673.215,813	428,207	428,210	0,003	82,5245	0	-2,92%			
Rec	26,000	614.421,788	4.673.216,084	428,166	428,175	0,009	82,5245	0	-4,03%			
Rec	27,000	614.422,751	4.673.216,355	428,124	428,130	0,006	82,5245	0	-5,14%			
Rec	28,000	614.423,714	4.673.216,626	428,081	428,073	-0,008	82,5245	0	-6,25%			
Rec	29,000	614.424,676	4.673.216,897	428,039	428,005	-0,034	82,5245	0	-7,36%			
Rec	30,000	614.425,639	4.673.217,168	427,995	427,925	-0,070	82,5245	0	-8,47%			
Rec	31,000	614.426,601	4.673.217,439	427,917	427,835	-0,082	82,5245	0	-9,58%			
Rec	32,000	614.427,564	4.673.217,710	427,837	427,734	-0,103	82,5245	0	-10,69%			
Rec	33,000	614.428,526	4.673.217,981	427,757	427,621	-0,136	82,5245	0	-11,81%			
Rec	34,000	614.429,489	4.673.218,252	427,675	427,498	-0,177	82,5245	0	-12,92%			
Rec	34,225	614.429,706	4.673.218,313	427,657	427,468	-0,188	82,5245	0	-13,17%		T.S.	
Rec	35,000	614.430,452	4.673.218,523	427,594	427,366	-0,228	82,5245	0	-13,17%			
Rec	36,000	614.431,414	4.673.218,795	427,512	427,235	-0,277	82,5245	0	-13,17%			
Rec	37,000	614.432,377	4.673.219,066	427,428	427,103	-0,325	82,5245	0	-13,17%			
Rec	38,000	614.433,339	4.673.219,337	427,348	426,971	-0,377	82,5245	0	-13,17%			
Rec	39,000	614.434,302	4.673.219,608	427,262	426,840	-0,422	82,5245	0	-13,17%			
Rec	40,000	614.435,264	4.673.219,879	427,176	426,708	-0,468	82,5245	0	-13,17%			
Rec	41,000	614.436,227	4.673.220,150	427,090	426,577	-0,513	82,5245	0	-13,17%			
Rec	42,000	614.437,189	4.673.220,421	427,002	426,445	-0,557	82,5245	0	-13,17%			
Rec	43,000	614.438,152	4.673.220,692	426,859	426,313	-0,546	82,5245	0	-13,17%			
Rec	44,000	614.439,115	4.673.220,963	426,710	426,182	-0,528	82,5245	0	-13,17%			
Rec	45,000	614.440,077	4.673.221,234	426,562	426,050	-0,512	82,5245	0	-13,17%			
Rec	46,000	614.441,040	4.673.221,505	426,415	425,918	-0,497	82,5245	0	-13,17%			
Rec	47,000	614.442,002	4.673.221,776	426,265	425,787	-0,478	82,5245	0	-13,17%			
Rec	48,000	614.442,965	4.673.222,047	426,115	425,655	-0,460	82,5245	0	-13,17%			
Rec	49,000	614.443,927	4.673.222,318	425,970	425,523	-0,447	82,5245	0	-13,17%			
Rec	50,000	614.444,890	4.673.222,590	425,841	425,392	-0,449	82,5245	0	-13,17%			
Rec	51,000	614.445,852	4.673.222,861	425,714	425,260	-0,454	82,5245	0	-13,17%			
Rec	52,000	614.446,815	4.673.223,132	425,586	425,128	-0,458	82,5245	0	-13,17%			
Rec	52,063	614.446,876	4.673.223,149	425,578	425,120	-0,458	82,5245	0	-13,17%		T.E.	
Rec	53,000	614.447,778	4.673.223,403	425,458	425,002	-0,456	82,5245	0	-11,92%			
Rec	54,000	614.448,740	4.673.223,674	425,327	424,890	-0,437	82,5245	0	-10,58%			
Rec	55,000	614.449,703	4.673.223,945	425,195	424,791	-0,404	82,5245	0	-9,25%			
Rec	56,000	614.450,665	4.673.224,216	425,063	424,705	-0,358	82,5245	0	-7,92%			
Rec	57,000	614.451,628	4.673.224,487	424,940	424,632	-0,308	82,5245	0	-6,58%		V.	
Rec	58,000	614.452,590	4.673.224,758	424,825	424,573	-0,252	82,5245	0	-5,25%			
Rec	59,000	614.453,553	4.673.225,029	424,709	424,527	-0,182	82,5245	0	-3,92%			
Rec	60,000	614.454,515	4.673.225,300	424,594	424,495	-0,099	82,5245	0	-2,58%			
Rec	61,000	614.455,478	4.673.225,571	424,479	424,476	-0,003	82,5245	0	-1,25%			ODT Ø500 L=5,80m
Rec	61,937	614.456,380	4.673.225,825	424,368	424,470	0,102	82,5245	0	0,00%		T.S.	
Rec	62,000	614.456,441	4.673.225,842	424,361	424,470	0,109	82,5245	0	0,00%			
Rec	63,000	614.457,403	4.673.226,113	424,242	424,470	0,228	82,5245	0	0,00%			
Rec	64,000	614.458,366	4.673.226,385	424,123	424,470	0,347	82,5245	0	0,00%			
Rec	65,000	614.459,328	4.673.226,656	424,005	424,470	0,465	82,5245	0	0,00%			
Rec	66,000	614.460,291	4.673.226,927	423,923	424,470	0,547	82,5245	0	0,00%			
Rec	67,000	614.461,253	4.673.227,198	423,843	424,470	0,627	82,5245	0	0,00%			
Rec	68,000	614.462,216	4.673.227,469	423,763	424,470	0,707	82,5245	0	0,00%			
Rec	69,000	614.463,179	4.673.227,740	423,683	424,470	0,787	82,5245	0	0,00%			
Rec	70,000	614.464,141	4.673.228,011	423,603	424,470	0,867	82,5245	0	0,00%			
Rec	71,000	614.465,104	4.673.228,282	423,523	424,470	0,947	82,5245	0	0,00%			
Rec	72,000	614.466,066	4.673.228,553	423,447	424,470	1,023	82,5245	0	0,00%			
Rec	72,197	614.466,255	4.673.228,606	423,432	424,470	1,038	82,5245		0,00%			

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REPLANTEO CAMINO TRAMO T12-T13 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	614.097,954	4.671.239,289	263,647	263,647	0,000	327,7133	0	4,39%		V.	
Rec	1,000	614.097,047	4.671.239,711	263,733	263,691	-0,042	327,7133	0	4,39%			
Rec	2,000	614.096,140	4.671.240,133	263,833	263,735	-0,098	327,7133	0	4,39%			ODT Ø500 L=12,75m
Rec	3,000	614.095,233	4.671.240,554	263,934	263,779	-0,155	327,7133	0	4,39%			
Rec	4,000	614.094,327	4.671.240,976	264,006	263,823	-0,183	327,7133	0	4,39%			
Rec	5,000	614.093,420	4.671.241,398	264,024	263,867	-0,157	327,7133	0	4,39%			
Rec	6,000	614.092,513	4.671.241,819	264,042	263,911	-0,131	327,7133	0	4,39%			
Rec	7,000	614.091,606	4.671.242,241	264,060	263,955	-0,105	327,7133	0	4,39%			
Rec	7,213	614.091,413	4.671.242,331	264,064	263,964	-0,100	327,7133	0	4,39%		T.E.	
Rec	8,000	614.090,700	4.671.242,663	264,078	263,998	-0,080	327,7133	0	4,20%			
Rec	9,000	614.089,793	4.671.243,085	264,096	264,038	-0,058	327,7133	0	3,95%			
Rec	10,000	614.088,886	4.671.243,506	264,115	264,077	-0,038	327,7133	0	3,70%			
Rec	11,000	614.087,979	4.671.243,928	264,133	264,112	-0,021	327,7133	0	3,45%			
Rec	12,000	614.087,073	4.671.244,350	264,151	264,146	-0,005	327,7133	0	3,20%			
Rec	13,000	614.086,166	4.671.244,771	264,170	264,176	0,006	327,7133	0	2,95%			
Rec	14,000	614.085,259	4.671.245,193	264,188	264,205	0,017	327,7133	0	2,70%			
Rec	15,000	614.084,352	4.671.245,615	264,210	264,230	0,020	327,7133	0	2,45%			
Rec	16,000	614.083,446	4.671.246,036	264,234	264,253	0,019	327,7133	0	2,20%		V.	
Rec	17,000	614.082,539	4.671.246,458	264,221	264,274	0,053	327,7133	0	1,95%			
Rec	18,000	614.081,632	4.671.246,880	264,208	264,292	0,084	327,7133	0	1,70%			
Rec	19,000	614.080,726	4.671.247,302	264,195	264,308	0,113	327,7133	0	1,45%			
Rec	20,000	614.079,819	4.671.247,723	264,183	264,321	0,138	327,7133	0	1,20%			
Rec	21,000	614.078,912	4.671.248,145	264,172	264,332	0,160	327,7133	0	0,95%			
Rec	22,000	614.078,005	4.671.248,567	264,161	264,340	0,179	327,7133	0	0,70%			
Rec	23,000	614.077,099	4.671.248,988	264,149	264,346	0,197	327,7133	0	0,45%			
Rec	24,000	614.076,192	4.671.249,410	264,138	264,349	0,211	327,7133	0	0,20%			
Rec	24,787	614.075,478	4.671.249,742	264,129	264,350	0,221	327,7133	0	0,00%		T.S.	
Rec	25,000	614.075,285	4.671.249,832	264,126	264,350	0,224	327,7133	0	0,00%			
Rec	26,000	614.074,378	4.671.250,253	264,115	264,350	0,235	327,7133	0	0,00%			
Rec	27,000	614.073,472	4.671.250,675	264,104	264,350	0,246	327,7133	0	0,00%			
Rec	28,000	614.072,565	4.671.251,097	264,092	264,350	0,258	327,7133	0	0,00%			
Rec	29,000	614.071,658	4.671.251,519	264,081	264,350	0,269	327,7133	0	0,00%			
Rec	30,000	614.070,751	4.671.251,940	264,069	264,350	0,281	327,7133	0	0,00%			
Rec	31,000	614.069,845	4.671.252,362	264,058	264,350	0,292	327,7133	0	0,00%			
Rec	32,000	614.068,938	4.671.252,784	264,047	264,350	0,303	327,7133	0	0,00%			
Rec	33,000	614.068,031	4.671.253,205	264,035	264,350	0,315	327,7133	0	0,00%			
Rec	34,000	614.067,125	4.671.253,627	264,024	264,350	0,326	327,7133	0	0,00%			
Rec	35,000	614.066,218	4.671.254,049	264,012	264,350	0,338	327,7133	0	0,00%			
Rec	36,000	614.065,311	4.671.254,470	264,001	264,350	0,349	327,7133	0	0,00%			
	36,167	614.065,159	4.671.254,541	263,995	264,350	0,355	327,7133		0,00%			

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REPLANTEO CAMINO TRAMO T12-T13 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	613.608,951	4.670.257,869	260,729	260,729	0,000	330,0491	0	-6,63%			
Rec	1,000	613.608,060	4.670.258,324	260,400	260,663	0,263	330,0491	0	-6,63%		T.E.	
Rec	2,000	613.607,170	4.670.258,779	260,062	260,605	0,543	330,0491	0	-4,98%			
Rec	3,000	613.606,279	4.670.259,233	259,872	260,563	0,691	330,0491	0	-3,32%		V.	
Rec	4,000	613.605,388	4.670.259,688	259,149	260,538	1,389	330,0491	0	-1,66%			
Rec	4,159	613.605,246	4.670.259,761	259,000	260,536	1,536	330,0491	0	-1,39%			2 MARCOS 2,0m x 1,0m L=6,30m
Rec	5,000	613.604,498	4.670.260,143	258,965	260,530	1,565	330,0491	0	0,00%		T.S.	
Rec	5,409	613.604,133	4.670.260,329	258,947	260,530	1,583	330,0491	0	0,00%			
Rec	6,000	613.603,607	4.670.260,598	258,960	260,530	1,570	330,0491	0	0,00%		T.E.	
Rec	6,660	613.603,020	4.670.260,897	259,000	260,521	1,521	330,0491	0	-2,83%			
Rec	7,000	613.602,716	4.670.261,052	259,298	260,509	1,211	330,0491	0	-4,28%			
Rec	8,000	613.601,826	4.670.261,507	259,929	260,444	0,515	330,0491	0	-8,56%		V.	
Rec	9,000	613.600,935	4.670.261,962	260,016	260,337	0,321	330,0491	0	-12,84%			
Rec	10,000	613.600,044	4.670.262,416	260,033	260,188	0,155	330,0491	0	-17,12%		T.S.	
	10,821	613.599,313	4.670.262,789	260,047	260,047	0,000	330,0491		-17,12%			

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REPLANTEO CAMINO TRAMO T12-T13 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	613.285,659	4.669.955,406	262,606	262,606	0,000	249,6361	0	-23,89%			
Rec	1,000	613.284,956	4.669.954,695	262,394	262,367	-0,027	249,6361	0	-23,89%			
Rec	2,000	613.284,253	4.669.953,984	262,156	262,128	-0,028	249,6361	0	-23,89%			
Rec	3,000	613.283,550	4.669.953,273	261,821	261,889	0,068	249,6361	0	-23,89%			
Rec	4,000	613.282,847	4.669.952,562	261,309	261,650	0,341	249,6361	0	-23,89%			
Rec	5,000	613.282,144	4.669.951,851	260,833	261,411	0,578	249,6361	0	-23,89%			
Rec	6,000	613.281,441	4.669.951,139	260,414	261,172	0,758	249,6361	0	-23,89%			
Rec	7,000	613.280,738	4.669.950,428	260,367	260,934	0,567	249,6361	0	-23,89%			
Rec	7,027	613.280,719	4.669.950,409	260,365	260,927	0,562	249,6361	0	-23,89%		T.E.	
Rec	8,000	613.280,035	4.669.949,717	260,287	260,704	0,417	249,6361	0	-21,95%			
Rec	9,000	613.279,332	4.669.949,006	260,207	260,495	0,288	249,6361	0	-19,95%			
Rec	10,000	613.278,629	4.669.948,295	260,128	260,305	0,177	249,6361	0	-17,95%			
Rec	11,000	613.277,926	4.669.947,584	260,048	260,136	0,088	249,6361	0	-15,95%			
Rec	12,000	613.277,223	4.669.946,873	259,783	259,986	0,203	249,6361	0	-13,95%			
Rec	13,000	613.276,520	4.669.946,162	259,251	259,857	0,606	249,6361	0	-11,95%		V.	
Rec	14,000	613.275,817	4.669.945,450	259,000	259,747	0,747	249,6361	0	-9,95%			
Rec	14,516	613.275,454	4.669.945,084	259,000	259,699	0,699	249,6361	0	-8,91%			ODT ø500 L=5,00m
Rec	15,000	613.275,113	4.669.944,739	259,000	259,658	0,658	249,6361	0	-7,95%			
Rec	16,000	613.274,410	4.669.944,028	259,000	259,588	0,588	249,6361	0	-5,95%			
Rec	17,000	613.273,707	4.669.943,317	259,008	259,539	0,531	249,6361	0	-3,95%			
Rec	18,000	613.273,004	4.669.942,606	259,015	259,509	0,494	249,6361	0	-1,95%			
Rec	18,973	613.272,320	4.669.941,914	259,023	259,500	0,477	249,6361	0	0,00%		T.S.	
Rec	19,000	613.272,301	4.669.941,895	259,023	259,500	0,477	249,6361	0	0,00%			
Rec	20,000	613.271,598	4.669.941,184	259,030	259,500	0,470	249,6361	0	0,00%			
Rec	21,000	613.270,895	4.669.940,472	259,038	259,500	0,462	249,6361	0	0,00%			
Rec	22,000	613.270,192	4.669.939,761	259,045	259,500	0,455	249,6361	0	0,00%			
Rec	23,000	613.269,489	4.669.939,050	259,053	259,500	0,447	249,6361	0	0,00%			
Rec	24,000	613.268,786	4.669.938,339	259,060	259,500	0,440	249,6361	0	0,00%			
Rec	25,000	613.268,083	4.669.937,628	259,068	259,500	0,432	249,6361	0	0,00%			
Rec	26,000	613.267,380	4.669.936,917	259,075	259,500	0,425	249,6361	0	0,00%			
Rec	27,000	613.266,677	4.669.936,206	259,083	259,500	0,417	249,6361	0	0,00%			
Rec	28,000	613.265,974	4.669.935,494	259,090	259,500	0,410	249,6361	0	0,00%			
Rec	29,000	613.265,271	4.669.934,783	259,098	259,500	0,402	249,6361	0	0,00%			
	29,307	613.265,055	4.669.934,565	259,100	259,500	0,400	249,6361		0,00%			

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REPLANTEO CAMINO TRAMO T12-T13 C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	613.000,131	4.666.119,878	287,320	287,320	0,000	276,2426	0	24,76%			
Rec	1,000	612.999,200	4.666.119,513	287,534	287,568	0,034	276,2426	0	24,76%			ODT ø500 L=10,50m
Rec	2,000	612.998,268	4.666.119,149	287,749	287,815	0,066	276,2426	0	24,76%			
Rec	3,000	612.997,337	4.666.118,784	287,963	288,063	0,100	276,2426	0	24,76%			
Rec	4,000	612.996,406	4.666.118,419	288,235	288,310	0,075	276,2426	0	24,76%			
Rec	5,000	612.995,475	4.666.118,055	288,511	288,558	0,047	276,2426	0	24,76%			
Rec	6,000	612.994,544	4.666.117,690	288,792	288,805	0,013	276,2426	0	24,76%			
Rec	7,000	612.993,612	4.666.117,326	289,089	289,053	-0,036	276,2426	0	24,76%			
Rec	8,000	612.992,681	4.666.116,961	289,430	289,300	-0,130	276,2426	0	24,76%			
Rec	9,000	612.991,750	4.666.116,596	289,769	289,548	-0,221	276,2426	0	24,76%			
Rec	10,000	612.990,819	4.666.116,232	290,081	289,796	-0,286	276,2426	0	24,76%			
Rec	11,000	612.989,888	4.666.115,867	290,337	290,043	-0,294	276,2426	0	24,76%			
Rec	12,000	612.988,957	4.666.115,503	290,592	290,291	-0,301	276,2426	0	24,76%			
Rec	13,000	612.988,025	4.666.115,138	290,847	290,538	-0,309	276,2426	0	24,76%			
Rec	14,000	612.987,094	4.666.114,774	291,110	290,786	-0,324	276,2426	0	24,76%			
Rec	15,000	612.986,163	4.666.114,409	291,388	291,033	-0,355	276,2426	0	24,76%			
Rec	16,000	612.985,232	4.666.114,044	291,665	291,281	-0,384	276,2426	0	24,76%			
Rec	17,000	612.984,301	4.666.113,680	291,942	291,528	-0,414	276,2426	0	24,76%			
Rec	18,000	612.983,370	4.666.113,315	292,215	291,776	-0,439	276,2426	0	24,76%			
Rec	19,000	612.982,438	4.666.112,951	292,484	292,023	-0,461	276,2426	0	24,76%			
Rec	20,000	612.981,507	4.666.112,586	292,750	292,271	-0,479	276,2426	0	24,76%			
Rec	21,000	612.980,576	4.666.112,222	293,013	292,519	-0,494	276,2426	0	24,76%			
Rec	22,000	612.979,645	4.666.111,857	293,228	292,766	-0,462	276,2426	0	24,76%			
Rec	23,000	612.978,714	4.666.111,492	293,442	293,014	-0,428	276,2426	0	24,76%			
Rec	24,000	612.977,783	4.666.111,128	293,658	293,261	-0,397	276,2426	0	24,76%			
Rec	25,000	612.976,851	4.666.110,763	293,872	293,509	-0,363	276,2426	0	24,76%			
Rec	26,000	612.975,920	4.666.110,399	294,086	293,756	-0,330	276,2426	0	24,76%			
Rec	27,000	612.974,989	4.666.110,034	294,299	294,004	-0,295	276,2426	0	24,76%			
Rec	28,000	612.974,058	4.666.109,669	294,514	294,251	-0,263	276,2426	0	24,76%			
Rec	28,455	612.973,634	4.666.109,504	294,612	294,364	-0,248	276,2426	0	24,76%		T.E.	
Rec	29,000	612.973,127	4.666.109,305	294,730	294,497	-0,233	276,2426	0	24,21%			
Rec	30,000	612.972,196	4.666.108,940	294,946	294,735	-0,211	276,2426	0	23,21%			
Rec	31,000	612.971,264	4.666.108,576	295,200	294,962	-0,238	276,2426	0	22,21%			
Rec	32,000	612.970,333	4.666.108,211	295,471	295,179	-0,292	276,2426	0	21,21%			
Rec	33,000	612.969,402	4.666.107,847	295,742	295,386	-0,356	276,2426	0	20,21%			
Rec	34,000	612.968,471	4.666.107,482	296,008	295,583	-0,425	276,2426	0	19,21%			
Rec	35,000	612.967,540	4.666.107,117	296,181	295,770	-0,411	276,2426	0	18,21%			
Rec	36,000	612.966,608	4.666.106,753	296,353	295,947	-0,406	276,2426	0	17,21%			
Rec	37,000	612.965,677	4.666.106,388	296,520	296,114	-0,406	276,2426	0	16,21%			
Rec	38,000	612.964,746	4.666.106,024	296,683	296,271	-0,412	276,2426	0	15,21%			
Rec	39,000	612.963,815	4.666.105,659	296,845	296,418	-0,427	276,2426	0	14,21%			
Rec	40,000	612.962,884	4.666.105,295	297,001	296,556	-0,445	276,2426	0	13,21%		V.	
Rec	41,000	612.961,953	4.666.104,930	297,023	296,683	-0,340	276,2426	0	12,21%			
Rec	42,000	612.961,021	4.666.104,565	297,046	296,800	-0,246	276,2426	0	11,21%			
Rec	43,000	612.960,090	4.666.104,201	297,068	296,907	-0,161	276,2426	0	10,21%			
Rec	44,000	612.959,159	4.666.103,836	297,090	297,004	-0,086	276,2426	0	9,21%			
Rec	45,000	612.958,228	4.666.103,472	297,111	297,091	-0,020	276,2426	0	8,21%			
Rec	46,000	612.957,297	4.666.103,107	297,132	297,168	0,036	276,2426	0	7,21%			
Rec	47,000	612.956,366	4.666.102,742	297,153	297,235	0,082	276,2426	0	6,21%			
Rec	48,000	612.955,434	4.666.102,378	297,175	297,292	0,117	276,2426	0	5,21%			
Rec	49,000	612.954,503	4.666.102,013	297,195	297,339	0,144	276,2426	0	4,21%			
Rec	50,000	612.953,572	4.666.101,649	297,215	297,377	0,162	276,2426	0	3,21%			
Rec	51,000	612.952,641	4.666.101,284	297,235	297,404	0,169	276,2426	0	2,21%			
Rec	51,545	612.952,133	4.666.101,085	297,246	297,414	0,169	276,2426	0	1,67%		T.S.	
Rec	52,000	612.951,710	4.666.100,920	297,255	297,422	0,167	276,2426	0	1,67%			
Rec	53,000	612.950,779	4.666.100,555	297,275	297,439	0,164	276,2426	0	1,67%			
Rec	54,000	612.949,847	4.666.100,190	297,296	297,455	0,159	276,2426	0	1,67%			
Rec	55,000	612.948,916	4.666.099,826	297,317	297,472	0,155	276,2426	0	1,67%			
Rec	56,000	612.947,985	4.666.099,461	297,338	297,489	0,151	276,2426	0	1,67%			
Rec	57,000	612.947,054	4.666.099,097	297,357	297,505	0,148	276,2426	0	1,67%			
Rec	58,000	612.946,123	4.666.098,732	297,371	297,522	0,151	276,2426	0	1,67%			
Rec	59,000	612.945,191	4.666.098,368	297,372	297,539	0,167	276,2426	0	1,67%			
Rec	60,000	612.944,260	4.666.098,003	297,351	297,555	0,204	276,2426	0	1,67%			
Rec	61,000	612.943,329	4.666.097,638	297,336	297,572	0,236	276,2426	0	1,67%			
Rec	62,000	612.942,398	4.666.097,274	297,320	297,589	0,269	276,2426	0	1,67%			
Rec	63,000	612.941,467	4.666.096,909	297,314	297,605	0,291	276,2426	0	1,67%			
Rec	64,000	612.940,536	4.666.096,545	297,333	297,622	0,289	276,2426	0	1,67%			
Rec	65,000	612.939,604	4.666.096,180	297,351	297,639	0,288	276,2426	0	1,67%			
Rec	66,000	612.938,673	4.666.095,816	297,368	297,655	0,287	276,2426	0	1,67%			
Rec	66,349	612.938,348	4.666.095,688	297,365	297,661	0,297	276,2426	0	1,67%		T.E.	
Rec	67,000	612.937,742	4.666.095,451	297,358	297,672	0,314	276,2426	0	1,60%			
Rec	68,000	612.936,811	4.666.095,086	297,348	297,687	0,339	276,2426	0	1,50%			
Rec	69,000	612.935,880	4.666.094,722	297,338	297,702	0,364	276,2426	0	1,40%			
Rec	70,000	612.934,949	4.666.094,357	297,328	297,715	0,387	276,2426	0	1,30%			
Rec	71,000	612.934,017	4.666.093,993	297,318	297,728	0,410	276,2426	0	1,20%			
Rec	72,000	612.933,086	4.666.093,628	297,308	297,739	0,431	276,2426	0	1,10%			
Rec	73,000	612.932,155	4.666.093,263	297,298	297,750	0,452	276,2426	0	1,00%			
Rec	74,000	612.931,224	4.666.092,899	297,288	297,759	0,471	276,2426	0	0,90%			
Rec	74,676	612.930,594	4.666.092,652	297,281	297,765	0,484	276,2426	0	0,83%		V.	
Rec	75,000	612.930,293	4.666.092,534	297,278	297,768	0,490	276,2426	0	0,80%			
Rec	76,000	612.929,362	4.666.092,170	297,268	297,775	0,507	276,2426	0	0,70%			
Rec	77,000	612.928,430	4.666.091,805	297,258	297,782	0,524	276,2426	0	0,60%			
Rec	78,000	612.927,499	4.666.091,441	297,247	297,788	0,541	276,2426	0	0,50%			
Rec	79,000	612.926,568	4.666.091,076	297,242	297,792	0,550	276,2426	0	0,40%			
Rec	80,000	612.925,637	4.666.090,711	297,254	297,796	0,542	276,2426	0	0,30%			
Rec	81,000	612.924,706	4.666.090,347	297,269	297,798	0,529	276,2426	0	0,20%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T12-T13 C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	82,000	612.923,775	4.666.089,982	297,284	297,800	0,516	276,2426	0	0,10%			
Rec	83,000	612.922,843	4.666.089,618	297,300	297,800	0,500	276,2426	0	0,00%			
Rec	83,003	612.922,841	4.666.089,617	297,300	297,800	0,500	276,2426	0	0,00%		T.S.	
Rec	84,000	612.921,912	4.666.089,253	297,315	297,800	0,485	276,2426	0	0,00%			
Rec	85,000	612.920,981	4.666.088,889	297,330	297,800	0,470	276,2426	0	0,00%			
Rec	86,000	612.920,050	4.666.088,524	297,345	297,800	0,455	276,2426	0	0,00%			
Rec	87,000	612.919,119	4.666.088,159	297,361	297,800	0,439	276,2426	0	0,00%			
Rec	88,000	612.918,187	4.666.087,795	297,376	297,800	0,424	276,2426	0	0,00%			
Rec	89,000	612.917,256	4.666.087,430	297,391	297,800	0,409	276,2426	0	0,00%			
Rec	90,000	612.916,325	4.666.087,066	297,406	297,800	0,394	276,2426	0	0,00%			
Rec	91,000	612.915,394	4.666.086,701	297,422	297,800	0,378	276,2426	0	0,00%			
Rec	92,000	612.914,463	4.666.086,336	297,437	297,800	0,363	276,2426	0	0,00%			
Rec	93,000	612.913,532	4.666.085,972	297,452	297,800	0,348	276,2426	0	0,00%			
Rec	94,000	612.912,600	4.666.085,607	297,467	297,800	0,333	276,2426	0	0,00%			
	94,676	612.911,971	4.666.085,361	297,478	297,800	0,322	276,2426		0,00%			

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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T12-T13 C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	612.990,459	4.665.302,345	299,700	299,700	0,000	218,1770	0	-0,19%			
Rec	1,000	612.990,178	4.665.301,385	299,688	299,698	0,010	218,1770	0	-0,19%			
Rec	2,000	612.989,896	4.665.300,426	299,677	299,696	0,019	218,1770	0	-0,19%			ODT Ø300 L=8,30m
Rec	3,000	612.989,614	4.665.299,466	299,666	299,694	0,028	218,1770	0	-0,19%			
Rec	4,000	612.989,333	4.665.298,507	299,654	299,692	0,038	218,1770	0	-0,19%			
Rec	5,000	612.989,051	4.665.297,547	299,643	299,691	0,048	218,1770	0	-0,19%			
Rec	6,000	612.988,769	4.665.296,588	299,632	299,689	0,057	218,1770	0	-0,19%			
Rec	7,000	612.988,488	4.665.295,628	299,620	299,687	0,067	218,1770	0	-0,19%			
Rec	8,000	612.988,206	4.665.294,669	299,609	299,685	0,076	218,1770	0	-0,19%			
Rec	9,000	612.987,924	4.665.293,709	299,598	299,683	0,085	218,1770	0	-0,19%			
Rec	10,000	612.987,643	4.665.292,750	299,586	299,681	0,095	218,1770	0	-0,19%			
Rec	11,000	612.987,361	4.665.291,790	299,575	299,679	0,104	218,1770	0	-0,19%			
Rec	12,000	612.987,080	4.665.290,831	299,564	299,677	0,113	218,1770	0	-0,19%			
Rec	13,000	612.986,798	4.665.289,871	299,552	299,675	0,123	218,1770	0	-0,19%			
Rec	14,000	612.986,516	4.665.288,912	299,557	299,674	0,117	218,1770	0	-0,19%			
Rec	15,000	612.986,235	4.665.287,952	299,569	299,672	0,103	218,1770	0	-0,19%			
Rec	16,000	612.985,953	4.665.286,993	299,581	299,670	0,089	218,1770	0	-0,19%			
Rec	17,000	612.985,671	4.665.286,033	299,593	299,668	0,075	218,1770	0	-0,19%			
Rec	18,000	612.985,390	4.665.285,074	299,605	299,666	0,061	218,1770	0	-0,19%			
Cur	18,397	612.985,278	4.665.284,693	299,610	299,665	0,055	218,1770	-400	-0,19%	P.S.		
Cur	19,000	612.985,108	4.665.284,114	299,617	299,664	0,047	218,0810	-400	-0,19%			
Cur	20,000	612.984,827	4.665.283,154	299,629	299,662	0,033	217,9218	-400	-0,19%			
Cur	21,000	612.984,553	4.665.282,193	299,641	299,660	0,019	217,7627	-400	-0,19%			
Cur	22,000	612.984,278	4.665.281,231	299,647	299,658	0,011	217,6035	-400	-0,19%			
Cur	23,000	612.984,007	4.665.280,269	299,635	299,657	0,022	217,4444	-400	-0,19%			
Cur	24,000	612.983,737	4.665.279,306	299,624	299,655	0,031	217,2852	-400	-0,19%			
Cur	25,000	612.983,470	4.665.278,342	299,613	299,653	0,040	217,1260	-400	-0,19%			
Cur	26,000	612.983,206	4.665.277,378	299,601	299,651	0,050	216,9669	-400	-0,19%			
Cur	27,000	612.982,944	4.665.276,413	299,594	299,649	0,055	216,8077	-400	-0,19%			
Cur	28,000	612.982,686	4.665.275,447	299,603	299,647	0,044	216,6486	-400	-0,19%			
Cur	29,000	612.982,426	4.665.274,481	299,613	299,645	0,032	216,4894	-400	-0,19%			
Cur	30,000	612.982,172	4.665.273,514	299,622	299,643	0,021	216,3303	-400	-0,19%			
Cur	31,000	612.981,919	4.665.272,546	299,624	299,642	0,018	216,1711	-400	-0,19%			
Cur	32,000	612.981,669	4.665.271,578	299,594	299,640	0,046	216,0120	-400	-0,19%			
Cur	33,000	612.981,421	4.665.270,609	299,565	299,638	0,073	215,8528	-400	-0,19%			
Cur	34,000	612.981,176	4.665.269,639	299,536	299,636	0,100	215,6937	-400	-0,19%			
Cur	35,000	612.980,933	4.665.268,669	299,508	299,634	0,126	215,5345	-400	-0,19%			
Cur	36,000	612.980,693	4.665.267,699	299,498	299,632	0,134	215,3753	-400	-0,19%			
Cur	37,000	612.980,455	4.665.266,727	299,489	299,630	0,141	215,2162	-400	-0,19%			
Cur	38,000	612.980,219	4.665.265,756	299,480	299,628	0,148	215,0570	-400	-0,19%			
Cur	39,000	612.979,986	4.665.264,783	299,492	299,626	0,134	214,8979	-400	-0,19%			
Cur	40,000	612.979,756	4.665.263,810	299,520	299,625	0,105	214,7387	-400	-0,19%			
Cur	41,000	612.979,527	4.665.262,836	299,544	299,623	0,079	214,5796	-400	-0,19%			
Rec	41,672	612.979,375	4.665.262,182	299,538	299,621	0,083	214,4727	0	-0,19%	P.S.		
Rec	42,000	612.979,301	4.665.261,862	299,535	299,621	0,086	214,4727	0	-0,19%			
Rec	43,000	612.979,076	4.665.260,888	299,527	299,619	0,092	214,4727	0	-0,19%			
Rec	43,566	612.978,948	4.665.260,337	299,522	299,618	0,096	214,4727	0	-0,19%		T.E.	
Rec	44,000	612.978,851	4.665.259,914	299,518	299,617	0,099	214,4727	0	-0,18%			
Rec	45,000	612.978,625	4.665.258,940	299,510	299,615	0,105	214,4727	0	-0,17%			
Rec	46,000	612.978,400	4.665.257,965	299,504	299,614	0,110	214,4727	0	-0,16%			
Rec	47,000	612.978,175	4.665.256,991	299,498	299,612	0,114	214,4727	0	-0,15%			
Rec	48,000	612.977,949	4.665.256,017	299,492	299,610	0,118	214,4727	0	-0,14%			
Rec	49,000	612.977,724	4.665.255,042	299,486	299,609	0,123	214,4727	0	-0,13%			
Rec	50,000	612.977,498	4.665.254,068	299,480	299,608	0,128	214,4727	0	-0,12%			
Rec	51,000	612.977,273	4.665.253,094	299,474	299,607	0,133	214,4727	0	-0,11%			
Rec	52,000	612.977,048	4.665.252,120	299,468	299,605	0,137	214,4727	0	-0,10%			
Rec	53,000	612.976,822	4.665.251,145	299,462	299,604	0,142	214,4727	0	-0,09%		V.	
Rec	54,000	612.976,597	4.665.250,171	299,456	299,604	0,148	214,4727	0	-0,08%			
Rec	55,000	612.976,371	4.665.249,197	299,450	299,603	0,153	214,4727	0	-0,07%			
Rec	56,000	612.976,146	4.665.248,223	299,444	299,602	0,158	214,4727	0	-0,06%			
Rec	57,000	612.975,921	4.665.247,248	299,438	299,601	0,163	214,4727	0	-0,05%			
Rec	58,000	612.975,695	4.665.246,274	299,432	299,601	0,169	214,4727	0	-0,04%			
Rec	59,000	612.975,470	4.665.245,300	299,426	299,601	0,175	214,4727	0	-0,03%			
Rec	60,000	612.975,245	4.665.244,325	299,420	299,600	0,180	214,4727	0	-0,02%			
Rec	61,000	612.975,019	4.665.243,351	299,422	299,600	0,178	214,4727	0	-0,01%			
Rec	62,000	612.974,794	4.665.242,377	299,429	299,600	0,171	214,4727	0	0,00%			
Rec	62,434	612.974,696	4.665.241,954	299,432	299,600	0,168	214,4727	0	0,00%		T.S.	
Rec	63,000	612.974,568	4.665.241,403	299,435	299,600	0,165	214,4727	0	0,00%			
Rec	64,000	612.974,343	4.665.240,428	299,442	299,600	0,158	214,4727	0	0,00%			
Rec	65,000	612.974,118	4.665.239,454	299,448	299,600	0,152	214,4727	0	0,00%			
Rec	66,000	612.973,892	4.665.238,480	299,455	299,600	0,145	214,4727	0	0,00%			
Rec	67,000	612.973,667	4.665.237,506	299,461	299,600	0,139	214,4727	0	0,00%			
Rec	68,000	612.973,441	4.665.236,531	299,468	299,600	0,132	214,4727	0	0,00%			
Rec	69,000	612.973,216	4.665.235,557	299,474	299,600	0,126	214,4727	0	0,00%			
Rec	70,000	612.972,991	4.665.234,583	299,481	299,600	0,119	214,4727	0	0,00%			
Rec	71,000	612.972,765	4.665.233,609	299,487	299,600	0,113	214,4727	0	0,00%			
Rec	72,000	612.972,540	4.665.232,634	299,494	299,600	0,106	214,4727	0	0,00%			
	72,583	612.972,409	4.665.232,066	299,498	299,600	0,102	214,4727		0,00%			

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REPLANTEO CAMINO TRAMO T12-T13 A-T13

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	612.883,786	4.664.670,349	305,343	305,343	0,000	32,8203	0	-6,05%		T.E.	
Rec	1,000	612.884,279	4.664.671,219	305,285	305,255	-0,030	32,8203	0	-11,48%			
Rec	2,000	612.884,772	4.664.672,089	305,222	305,113	-0,109	32,8203	0	-16,91%		V.	
Rec	3,000	612.885,265	4.664.672,959	305,159	304,917	-0,242	32,8203	0	-22,34%			
Rec	4,000	612.885,758	4.664.673,829	305,095	304,666	-0,429	32,8203	0	-27,77%		T.S.	
Rec	5,000	612.886,251	4.664.674,700	305,030	304,389	-0,641	32,8203	0	-27,78%			
Rec	6,000	612.886,744	4.664.675,570	304,965	304,111	-0,854	32,8203	0	-27,78%			
Rec	7,000	612.887,237	4.664.676,440	304,899	303,833	-1,066	32,8203	0	-27,78%			
Rec	8,000	612.887,730	4.664.677,310	304,833	303,555	-1,278	32,8203	0	-27,78%		T.E.	
Rec	9,000	612.888,223	4.664.678,180	304,766	303,312	-1,454	32,8203	0	-20,83%			ODT ø500 L=7,50m
Rec	10,000	612.888,716	4.664.679,050	304,700	303,139	-1,561	32,8203	0	-13,89%		V.	
Rec	11,000	612.889,209	4.664.679,920	304,320	303,035	-1,285	32,8203	0	-6,94%			
Rec	12,000	612.889,702	4.664.680,790	303,320	303,000	-0,320	32,8203	0	0,00%		T.S.	
	12,320	612.889,860	4.664.681,068	303,000	303,000	0,000	32,8203		0,00%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	612.416,602	4.663.723,660	350,827	350,827	0,000	238,4056	0	0,00%			
Rec	1,000	612.416,035	4.663.722,837	350,820	350,827	0,007	238,4056	0	0,00%			
Rec	1,500	612.415,751	4.663.722,425	350,894	350,827	-0,067	238,4056	0	0,00%		T.E.	
Rec	2,000	612.415,468	4.663.722,013	350,968	350,830	-0,139	238,4056	0	1,00%			ODT Ø1.000 L=11,00m
Rec	3,000	612.414,900	4.663.721,190	351,407	350,849	-0,558	238,4056	0	3,00%			
Rec	4,000	612.414,333	4.663.720,366	351,916	350,890	-1,026	238,4056	0	5,00%			
Rec	5,000	612.413,765	4.663.719,543	352,653	350,950	-1,704	238,4056	0	7,00%		V.	
Rec	6,000	612.413,198	4.663.718,719	353,266	351,029	-2,237	238,4056	0	9,00%			
Rec	7,000	612.412,631	4.663.717,896	353,449	351,130	-2,320	238,4056	0	11,00%			
Rec	8,000	612.412,063	4.663.717,072	353,362	351,250	-2,113	238,4056	0	13,00%			
Rec	8,500	612.411,780	4.663.716,660	353,351	351,317	-2,034	238,4056	0	14,00%		T.S.	
Rec	9,000	612.411,496	4.663.716,249	353,339	351,387	-1,952	238,4056	0	14,00%			
Rec	10,000	612.410,929	4.663.715,425	353,264	351,527	-1,737	238,4056	0	14,00%			
Rec	11,000	612.410,361	4.663.714,602	353,150	351,667	-1,483	238,4056	0	14,00%			
Rec	11,027	612.410,346	4.663.714,579	353,148	351,671	-1,477	238,4056	0	14,00%		T.E.	
Rec	12,000	612.409,794	4.663.713,778	353,071	351,799	-1,272	238,4056	0	12,38%			
Rec	13,000	612.409,227	4.663.712,955	353,005	351,915	-1,090	238,4056	0	10,71%			
Rec	14,000	612.408,659	4.663.712,131	352,941	352,013	-0,928	238,4056	0	9,05%			
Rec	15,000	612.408,092	4.663.711,308	352,877	352,095	-0,782	238,4056	0	7,38%			
Rec	16,000	612.407,525	4.663.710,484	352,812	352,161	-0,651	238,4056	0	5,71%			
Rec	17,000	612.406,957	4.663.709,661	352,752	352,210	-0,542	238,4056	0	4,05%			
Rec	18,000	612.406,390	4.663.708,837	352,686	352,242	-0,444	238,4056	0	2,38%		V.	
Rec	19,000	612.405,823	4.663.708,014	352,616	352,257	-0,359	238,4056	0	0,71%			
Rec	20,000	612.405,255	4.663.707,190	352,536	352,256	-0,280	238,4056	0	-0,96%			
Rec	21,000	612.404,688	4.663.706,367	352,459	352,238	-0,221	238,4056	0	-2,62%			
Rec	22,000	612.404,121	4.663.705,543	352,383	352,204	-0,179	238,4056	0	-4,29%			
Rec	23,000	612.403,553	4.663.704,720	352,317	352,152	-0,165	238,4056	0	-5,96%			
Rec	24,000	612.402,986	4.663.703,896	352,246	352,085	-0,161	238,4056	0	-7,62%			
Rec	24,973	612.402,434	4.663.703,095	352,168	352,003	-0,166	238,4056	0	-9,24%		T.S.	
Rec	25,000	612.402,419	4.663.703,073	352,166	352,000	-0,166	238,4056	0	-9,24%			
Rec	26,000	612.401,851	4.663.702,249	352,072	351,908	-0,164	238,4056	0	-9,24%			
Rec	27,000	612.401,284	4.663.701,426	351,990	351,815	-0,175	238,4056	0	-9,24%			
Rec	28,000	612.400,717	4.663.700,602	351,906	351,723	-0,183	238,4056	0	-9,24%			
Rec	29,000	612.400,149	4.663.699,779	351,855	351,630	-0,225	238,4056	0	-9,24%			
Rec	30,000	612.399,582	4.663.698,956	351,760	351,538	-0,222	238,4056	0	-9,24%			
Rec	31,000	612.399,015	4.663.698,132	351,667	351,445	-0,222	238,4056	0	-9,24%			
Rec	32,000	612.398,447	4.663.697,309	351,565	351,353	-0,212	238,4056	0	-9,24%			
Rec	33,000	612.397,880	4.663.696,485	351,505	351,261	-0,244	238,4056	0	-9,24%			
Rec	34,000	612.397,313	4.663.695,662	351,412	351,168	-0,244	238,4056	0	-9,24%			
Rec	35,000	612.396,745	4.663.694,838	351,316	351,076	-0,240	238,4056	0	-9,24%			
Rec	36,000	612.396,178	4.663.694,015	351,225	350,983	-0,242	238,4056	0	-9,24%			
Rec	37,000	612.395,611	4.663.693,191	351,147	350,891	-0,256	238,4056	0	-9,24%			
Rec	38,000	612.395,043	4.663.692,368	351,052	350,799	-0,253	238,4056	0	-9,24%			
Rec	39,000	612.394,476	4.663.691,544	350,919	350,706	-0,213	238,4056	0	-9,24%			
Rec	40,000	612.393,909	4.663.690,721	350,825	350,614	-0,211	238,4056	0	-9,24%			
Rec	41,000	612.393,341	4.663.689,897	350,742	350,521	-0,221	238,4056	0	-9,24%			
Rec	42,000	612.392,774	4.663.689,074	350,662	350,429	-0,233	238,4056	0	-9,24%			
Rec	43,000	612.392,206	4.663.688,250	350,560	350,336	-0,224	238,4056	0	-9,24%			
Rec	44,000	612.391,639	4.663.687,427	350,420	350,244	-0,176	238,4056	0	-9,24%			
Rec	45,000	612.391,072	4.663.686,603	350,334	350,152	-0,182	238,4056	0	-9,24%			
Rec	46,000	612.390,504	4.663.685,780	350,244	350,059	-0,185	238,4056	0	-9,24%			
Rec	47,000	612.389,937	4.663.684,956	350,148	349,967	-0,181	238,4056	0	-9,24%			
Rec	48,000	612.389,370	4.663.684,133	350,053	349,874	-0,179	238,4056	0	-9,24%			
Rec	49,000	612.388,802	4.663.683,309	349,958	349,782	-0,176	238,4056	0	-9,24%			
Rec	50,000	612.388,235	4.663.682,486	349,864	349,689	-0,175	238,4056	0	-9,24%			
Rec	51,000	612.387,668	4.663.681,662	349,770	349,597	-0,173	238,4056	0	-9,24%			
Rec	52,000	612.387,100	4.663.680,839	349,676	349,505	-0,171	238,4056	0	-9,24%			
Rec	53,000	612.386,533	4.663.680,015	349,580	349,412	-0,168	238,4056	0	-9,24%			
Rec	54,000	612.385,966	4.663.679,192	349,486	349,320	-0,166	238,4056	0	-9,24%			
Rec	55,000	612.385,398	4.663.678,368	349,391	349,227	-0,164	238,4056	0	-9,24%			
Rec	56,000	612.384,831	4.663.677,545	349,304	349,135	-0,169	238,4056	0	-9,24%			
Rec	57,000	612.384,264	4.663.676,721	349,214	349,042	-0,172	238,4056	0	-9,24%			
Rec	58,000	612.383,696	4.663.675,898	349,120	348,950	-0,170	238,4056	0	-9,24%			
Rec	59,000	612.383,129	4.663.675,075	349,025	348,858	-0,167	238,4056	0	-9,24%			
Rec	60,000	612.382,562	4.663.674,251	348,932	348,765	-0,167	238,4056	0	-9,24%			
Rec	61,000	612.381,994	4.663.673,428	348,841	348,673	-0,168	238,4056	0	-9,24%			
Rec	62,000	612.381,427	4.663.672,604	348,751	348,580	-0,171	238,4056	0	-9,24%			
Rec	63,000	612.380,860	4.663.671,781	348,662	348,488	-0,174	238,4056	0	-9,24%			
Rec	64,000	612.380,292	4.663.670,957	348,579	348,395	-0,184	238,4056	0	-9,24%			
Rec	65,000	612.379,725	4.663.670,134	348,499	348,303	-0,196	238,4056	0	-9,24%			
Rec	66,000	612.379,158	4.663.669,310	348,418	348,211	-0,207	238,4056	0	-9,24%			
Rec	67,000	612.378,590	4.663.668,487	348,334	348,118	-0,216	238,4056	0	-9,24%			
Rec	68,000	612.378,023	4.663.667,663	348,246	348,026	-0,220	238,4056	0	-9,24%			
Rec	69,000	612.377,456	4.663.666,840	348,156	347,933	-0,223	238,4056	0	-9,24%			
Rec	70,000	612.376,888	4.663.666,016	348,066	347,841	-0,225	238,4056	0	-9,24%			
Rec	71,000	612.376,321	4.663.665,193	347,977	347,748	-0,229	238,4056	0	-9,24%			
Rec	72,000	612.375,754	4.663.664,369	347,893	347,656	-0,237	238,4056	0	-9,24%			
Rec	73,000	612.375,186	4.663.663,546	347,808	347,564	-0,244	238,4056	0	-9,24%			
Rec	74,000	612.374,619	4.663.662,722	347,725	347,471	-0,254	238,4056	0	-9,24%			
Rec	75,000	612.374,052	4.663.661,899	347,639	347,379	-0,260	238,4056	0	-9,24%			
Rec	76,000	612.373,484	4.663.661,075	347,553	347,286	-0,267	238,4056	0	-9,24%			
Rec	77,000	612.372,917	4.663.660,252	347,464	347,194	-0,270	238,4056	0	-9,24%			
Cur	77,344	612.372,722	4.663.659,968	347,434	347,162	-0,272	238,4056	-200	-9,24%	P.S.		
Cur	78,000	612.372,350	4.663.659,428	347,376	347,102	-0,274	238,1969	-200	-9,24%			
Cur	79,000	612.371,788	4.663.658,601	347,287	347,009	-0,278	237,8786	-200	-9,24%			
Cur	80,000	612.371,229	4.663.657,771	347,199	346,917	-0,282	237,5603	-200	-9,24%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13-T13BIS C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	81,000	612.370,675	4.663.656,939	347,111	346,824	-0,287	237,2420	-200	-9,24%			
Cur	81,758	612.370,258	4.663.656,306	347,045	346,754	-0,291	237,0007	-200	-9,24%		T.E.	
Cur	82,000	612.370,125	4.663.656,104	347,024	346,732	-0,292	236,9237	-200	-9,12%			
Cur	83,000	612.369,579	4.663.655,266	346,947	346,643	-0,304	236,6054	-200	-8,62%			
Cur	84,000	612.369,037	4.663.654,426	346,873	346,560	-0,313	236,2870	-200	-8,12%			
Cur	85,000	612.368,500	4.663.653,582	346,799	346,481	-0,318	235,9687	-200	-7,62%			
Cur	86,000	612.367,967	4.663.652,736	346,723	346,407	-0,316	235,6504	-200	-7,12%			
Cur	87,000	612.367,437	4.663.651,888	346,654	346,338	-0,316	235,3321	-200	-6,62%			
Cur	88,000	612.366,913	4.663.651,037	346,577	346,275	-0,302	235,0138	-200	-6,12%			
Cur	89,000	612.366,392	4.663.650,183	346,495	346,216	-0,279	234,6955	-200	-5,62%			
Cur	90,000	612.365,876	4.663.649,326	346,412	346,162	-0,250	234,3772	-200	-5,12%			
Cur	91,000	612.365,364	4.663.648,467	346,338	346,114	-0,224	234,0589	-200	-4,62%		V.	
Cur	92,000	612.364,856	4.663.647,606	346,263	346,070	-0,193	233,7406	-200	-4,12%			
Cur	93,000	612.364,353	4.663.646,742	346,186	346,031	-0,155	233,4223	-200	-3,62%			
Cur	94,000	612.363,854	4.663.645,875	346,110	345,997	-0,113	233,1039	-200	-3,12%			
Cur	95,000	612.363,359	4.663.645,006	346,035	345,969	-0,066	232,7856	-200	-2,62%			
Cur	96,000	612.362,869	4.663.644,135	345,959	345,945	-0,014	232,4673	-200	-2,12%			
Cur	97,000	612.362,383	4.663.643,261	345,892	345,926	0,034	232,1490	-200	-1,62%			
Cur	98,000	612.361,901	4.663.642,384	345,831	345,913	0,082	231,8307	-200	-1,12%			
Cur	99,000	612.361,424	4.663.641,506	345,772	345,904	0,132	231,5124	-200	-0,62%			
Cur	100,000	612.360,951	4.663.640,624	345,729	345,900	0,171	231,1941	-200	-0,12%			ODT ø500 L=4,50m
Cur	100,242	612.360,837	4.663.640,411	345,715	345,900	0,185	231,1171	-200	0,00%		T.S.	
Cur	101,000	612.360,483	4.663.639,741	345,670	345,900	0,230	230,8758	-200	0,00%			
Cur	102,000	612.360,019	4.663.638,855	345,620	345,900	0,280	230,5575	-200	0,00%			
Cur	103,000	612.359,559	4.663.637,967	345,552	345,900	0,348	230,2392	-200	0,00%			
Cur	104,000	612.359,104	4.663.637,076	345,493	345,900	0,407	229,9208	-200	0,00%			
Cur	105,000	612.358,653	4.663.636,184	345,435	345,900	0,465	229,6025	-200	0,00%			
Cur	106,000	612.358,207	4.663.635,289	345,367	345,900	0,533	229,2842	-200	0,00%			
Cur	107,000	612.357,765	4.663.634,392	345,311	345,900	0,589	228,9659	-200	0,00%			
Cur	108,000	612.357,328	4.663.633,492	345,254	345,900	0,646	228,6476	-200	0,00%			
Cur	109,000	612.356,896	4.663.632,591	345,197	345,900	0,703	228,3293	-200	0,00%			
Cur	110,000	612.356,467	4.663.631,687	345,143	345,900	0,757	228,0110	-200	0,00%			
Cur	110,727	612.356,159	4.663.631,029	345,105	345,900	0,795	227,7797	-200	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	612.013,345	4.662.403,163	382,391	382,391	0,000	341,3246	0	1,37%			
Rec	1,000	612.012,549	4.662.403,767	382,140	382,405	0,265	341,3246	0	1,37%			
Rec	2,000	612.011,752	4.662.404,372	381,964	382,418	0,454	341,3246	0	1,37%			ODT Ø300 L=16,30m
Rec	3,000	612.010,956	4.662.404,976	382,038	382,432	0,394	341,3246	0	1,37%			
Rec	4,000	612.010,159	4.662.405,581	382,092	382,446	0,354	341,3246	0	1,37%			
Rec	5,000	612.009,362	4.662.406,185	382,137	382,459	0,322	341,3246	0	1,37%			
Rec	6,000	612.008,566	4.662.406,790	382,188	382,473	0,285	341,3246	0	1,37%			
Rec	7,000	612.007,769	4.662.407,394	382,240	382,487	0,247	341,3246	0	1,37%			
Rec	8,000	612.006,972	4.662.407,999	382,284	382,500	0,216	341,3246	0	1,37%			
Rec	9,000	612.006,176	4.662.408,603	382,333	382,514	0,181	341,3246	0	1,37%			
Rec	10,000	612.005,379	4.662.409,207	382,359	382,528	0,169	341,3246	0	1,37%			
Rec	11,000	612.004,583	4.662.409,812	382,349	382,541	0,192	341,3246	0	1,37%			
Rec	12,000	612.003,786	4.662.410,416	382,343	382,555	0,212	341,3246	0	1,37%			
Rec	13,000	612.002,989	4.662.411,021	382,337	382,568	0,231	341,3246	0	1,37%			
Rec	14,000	612.002,193	4.662.411,625	382,336	382,582	0,246	341,3246	0	1,37%			
Rec	15,000	612.001,396	4.662.412,230	382,336	382,596	0,260	341,3246	0	1,37%			
Rec	16,000	612.000,600	4.662.412,834	382,331	382,609	0,278	341,3246	0	1,37%			
Rec	17,000	611.999,803	4.662.413,439	382,146	382,623	0,477	341,3246	0	1,37%			
Rec	18,000	611.999,006	4.662.414,043	382,225	382,637	0,412	341,3246	0	1,37%			
Rec	19,000	611.998,210	4.662.414,648	382,242	382,650	0,408	341,3246	0	1,37%			
Rec	20,000	611.997,413	4.662.415,252	382,237	382,664	0,427	341,3246	0	1,37%			
Rec	21,000	611.996,616	4.662.415,857	382,241	382,678	0,437	341,3246	0	1,37%			
Rec	22,000	611.995,820	4.662.416,461	382,232	382,691	0,459	341,3246	0	1,37%			
Rec	23,000	611.995,023	4.662.417,066	382,251	382,705	0,454	341,3246	0	1,37%			
Rec	24,000	611.994,227	4.662.417,670	382,259	382,719	0,460	341,3246	0	1,37%			
Rec	25,000	611.993,430	4.662.418,275	382,285	382,732	0,447	341,3246	0	1,37%			
Rec	26,000	611.992,633	4.662.418,879	382,286	382,746	0,460	341,3246	0	1,37%			
Rec	27,000	611.991,837	4.662.419,484	382,316	382,760	0,444	341,3246	0	1,37%			
Rec	27,865	611.991,148	4.662.420,007	382,342	382,771	0,429	341,3246	0	1,37%		T.E.	
Rec	28,000	611.991,040	4.662.420,088	382,346	382,773	0,427	341,3246	0	1,38%			
Rec	29,000	611.990,244	4.662.420,693	382,377	382,787	0,410	341,3246	0	1,48%			
Rec	30,000	611.989,447	4.662.421,297	382,407	382,803	0,396	341,3246	0	1,58%			
Rec	31,000	611.988,650	4.662.421,902	382,437	382,819	0,382	341,3246	0	1,68%			
Rec	32,000	611.987,854	4.662.422,506	382,470	382,836	0,366	341,3246	0	1,78%			
Rec	33,000	611.987,057	4.662.423,111	382,516	382,855	0,339	341,3246	0	1,88%			
Rec	34,000	611.986,260	4.662.423,715	382,587	382,874	0,287	341,3246	0	1,98%			
Rec	35,000	611.985,464	4.662.424,320	382,662	382,894	0,232	341,3246	0	2,08%			
Rec	36,000	611.984,667	4.662.424,924	382,737	382,915	0,178	341,3246	0	2,18%			
Rec	37,000	611.983,871	4.662.425,529	382,812	382,938	0,126	341,3246	0	2,28%			
Rec	38,000	611.983,074	4.662.426,133	382,882	382,961	0,079	341,3246	0	2,38%			
Rec	39,000	611.982,277	4.662.426,738	382,910	382,985	0,075	341,3246	0	2,48%			
Rec	40,000	611.981,481	4.662.427,342	382,937	383,011	0,074	341,3246	0	2,58%		V.	
Rec	41,000	611.980,684	4.662.427,947	382,959	383,037	0,078	341,3246	0	2,68%			
Rec	42,000	611.979,888	4.662.428,551	382,981	383,064	0,083	341,3246	0	2,78%			
Rec	43,000	611.979,091	4.662.429,156	383,002	383,092	0,090	341,3246	0	2,88%			
Rec	44,000	611.978,294	4.662.429,760	383,025	383,122	0,097	341,3246	0	2,98%			
Rec	45,000	611.977,498	4.662.430,365	383,048	383,152	0,104	341,3246	0	3,08%			
Rec	46,000	611.976,701	4.662.430,969	383,071	383,183	0,112	341,3246	0	3,18%			
Rec	47,000	611.975,905	4.662.431,574	383,093	383,216	0,123	341,3246	0	3,28%			
Rec	48,000	611.975,108	4.662.432,178	383,116	383,249	0,133	341,3246	0	3,38%			
Rec	49,000	611.974,311	4.662.432,783	383,139	383,283	0,144	341,3246	0	3,48%			
Rec	50,000	611.973,515	4.662.433,387	383,162	383,318	0,156	341,3246	0	3,58%			
Rec	51,000	611.972,718	4.662.433,992	383,184	383,355	0,171	341,3246	0	3,68%			
Rec	52,000	611.971,921	4.662.434,596	383,207	383,392	0,185	341,3246	0	3,78%			
Rec	52,135	611.971,814	4.662.434,678	383,210	383,397	0,187	341,3246	0	3,79%		T.S.	
Rec	53,000	611.971,125	4.662.435,201	383,230	383,430	0,200	341,3246	0	3,79%			
Rec	54,000	611.970,328	4.662.435,805	383,253	383,468	0,215	341,3246	0	3,79%			
Rec	55,000	611.969,532	4.662.436,410	383,275	383,506	0,231	341,3246	0	3,79%			
Rec	56,000	611.968,735	4.662.437,014	383,299	383,544	0,245	341,3246	0	3,79%			
Rec	57,000	611.967,938	4.662.437,619	383,322	383,582	0,260	341,3246	0	3,79%			
Rec	58,000	611.967,142	4.662.438,223	383,348	383,620	0,272	341,3246	0	3,79%			
Rec	59,000	611.966,345	4.662.438,827	383,399	383,657	0,258	341,3246	0	3,79%			
Rec	60,000	611.965,549	4.662.439,432	383,417	383,695	0,278	341,3246	0	3,79%			
Rec	61,000	611.964,752	4.662.440,036	383,435	383,733	0,298	341,3246	0	3,79%			
Rec	62,000	611.963,955	4.662.440,641	383,460	383,771	0,311	341,3246	0	3,79%			
Rec	63,000	611.963,159	4.662.441,245	383,487	383,809	0,322	341,3246	0	3,79%			
Rec	64,000	611.962,362	4.662.441,850	383,518	383,847	0,329	341,3246	0	3,79%			
Rec	65,000	611.961,565	4.662.442,454	383,557	383,885	0,328	341,3246	0	3,79%			
Rec	66,000	611.960,769	4.662.443,059	383,604	383,923	0,319	341,3246	0	3,79%			
Rec	67,000	611.959,972	4.662.443,663	383,639	383,961	0,322	341,3246	0	3,79%			
Rec	68,000	611.959,176	4.662.444,268	383,674	383,999	0,325	341,3246	0	3,79%			
Rec	69,000	611.958,379	4.662.444,872	383,709	384,037	0,328	341,3246	0	3,79%			
Rec	70,000	611.957,582	4.662.445,477	383,744	384,075	0,331	341,3246	0	3,79%			
Rec	71,000	611.956,786	4.662.446,081	383,779	384,113	0,334	341,3246	0	3,79%			
Rec	72,000	611.955,989	4.662.446,686	383,815	384,150	0,335	341,3246	0	3,79%			
Rec	73,000	611.955,193	4.662.447,290	383,850	384,188	0,338	341,3246	0	3,79%			
Rec	74,000	611.954,396	4.662.447,895	383,885	384,226	0,341	341,3246	0	3,79%			
Rec	75,000	611.953,599	4.662.448,499	383,920	384,264	0,344	341,3246	0	3,79%			
Rec	76,000	611.952,803	4.662.449,104	383,955	384,302	0,347	341,3246	0	3,79%			
Rec	77,000	611.952,006	4.662.449,708	383,990	384,340	0,350	341,3246	0	3,79%			
Rec	78,000	611.951,210	4.662.450,313	384,048	384,378	0,330	341,3246	0	3,79%			
Rec	78,953	611.950,450	4.662.450,889	384,111	384,414	0,303	341,3246	0	3,79%		T.E.	
Rec	79,000	611.950,413	4.662.450,917	384,114	384,416	0,302	341,3246	0	3,80%			
Rec	80,000	611.949,616	4.662.451,522	384,152	384,455	0,303	341,3246	0	3,93%			
Rec	81,000	611.948,820	4.662.452,126	384,169	384,495	0,326	341,3246	0	4,06%			
Rec	82,000	611.948,023	4.662.452,731	384,219	384,536	0,317	341,3246	0	4,20%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	83,000	611.947,226	4.662.453,335	384,272	384,578	0,306	341,3246	0	4,33%			
Rec	84,000	611.946,430	4.662.453,940	384,331	384,622	0,291	341,3246	0	4,46%			
Rec	85,000	611.945,633	4.662.454,544	384,414	384,668	0,254	341,3246	0	4,60%			
Rec	86,000	611.944,837	4.662.455,149	384,505	384,714	0,209	341,3246	0	4,73%			
Rec	87,000	611.944,040	4.662.455,753	384,591	384,762	0,171	341,3246	0	4,86%			
Rec	88,000	611.943,243	4.662.456,358	384,676	384,812	0,136	341,3246	0	5,00%			
Rec	89,000	611.942,447	4.662.456,962	384,776	384,862	0,086	341,3246	0	5,13%			
Rec	90,000	611.941,650	4.662.457,567	384,833	384,914	0,081	341,3246	0	5,26%		V.	
Rec	91,000	611.940,854	4.662.458,171	384,889	384,968	0,079	341,3246	0	5,40%			
Rec	92,000	611.940,057	4.662.458,776	384,958	385,022	0,064	341,3246	0	5,53%			
Rec	93,000	611.939,260	4.662.459,380	384,969	385,078	0,109	341,3246	0	5,66%			
Rec	94,000	611.938,464	4.662.459,985	384,968	385,136	0,168	341,3246	0	5,80%			
Rec	95,000	611.937,667	4.662.460,589	384,970	385,194	0,224	341,3246	0	5,93%			
Rec	96,000	611.936,870	4.662.461,194	384,974	385,254	0,280	341,3246	0	6,06%			
Rec	97,000	611.936,074	4.662.461,798	384,991	385,316	0,325	341,3246	0	6,20%			
Rec	98,000	611.935,277	4.662.462,403	385,067	385,378	0,311	341,3246	0	6,33%			
Rec	99,000	611.934,481	4.662.463,007	385,172	385,442	0,270	341,3246	0	6,46%			
Rec	100,000	611.933,684	4.662.463,612	385,277	385,508	0,231	341,3246	0	6,60%			
Rec	101,000	611.932,887	4.662.464,216	385,366	385,574	0,208	341,3246	0	6,73%			
Rec	101,047	611.932,850	4.662.464,244	385,371	385,577	0,207	341,3246	0	6,74%		T.S.	
Rec	102,000	611.932,091	4.662.464,821	385,463	385,642	0,179	341,3246	0	6,74%			
Rec	103,000	611.931,294	4.662.465,425	385,555	385,709	0,154	341,3246	0	6,74%			
Rec	104,000	611.930,498	4.662.466,030	385,583	385,776	0,193	341,3246	0	6,74%			
Rec	105,000	611.929,701	4.662.466,634	385,672	385,844	0,172	341,3246	0	6,74%			
Rec	106,000	611.928,904	4.662.467,238	385,708	385,911	0,203	341,3246	0	6,74%			
Rec	107,000	611.928,108	4.662.467,843	385,746	385,978	0,232	341,3246	0	6,74%			
Rec	108,000	611.927,311	4.662.468,447	385,801	386,046	0,245	341,3246	0	6,74%			
Rec	109,000	611.926,515	4.662.469,052	385,864	386,113	0,249	341,3246	0	6,74%			
Rec	110,000	611.925,718	4.662.469,656	385,937	386,181	0,244	341,3246	0	6,74%			
Rec	111,000	611.924,921	4.662.470,261	386,016	386,248	0,232	341,3246	0	6,74%			
Rec	112,000	611.924,125	4.662.470,865	386,129	386,315	0,186	341,3246	0	6,74%			
Rec	113,000	611.923,328	4.662.471,470	386,240	386,383	0,143	341,3246	0	6,74%			
Rec	114,000	611.922,531	4.662.472,074	386,318	386,450	0,132	341,3246	0	6,74%			
Rec	115,000	611.921,735	4.662.472,679	386,394	386,518	0,124	341,3246	0	6,74%			
Rec	116,000	611.920,938	4.662.473,283	386,448	386,585	0,137	341,3246	0	6,74%			
Rec	117,000	611.920,142	4.662.473,888	386,530	386,652	0,122	341,3246	0	6,74%			
Rec	118,000	611.919,345	4.662.474,492	386,617	386,720	0,103	341,3246	0	6,74%			
Rec	119,000	611.918,548	4.662.475,097	386,705	386,787	0,082	341,3246	0	6,74%			
Rec	120,000	611.917,752	4.662.475,701	386,796	386,854	0,058	341,3246	0	6,74%			
Rec	121,000	611.916,955	4.662.476,306	386,885	386,922	0,037	341,3246	0	6,74%			
Rec	122,000	611.916,159	4.662.476,910	386,971	386,989	0,018	341,3246	0	6,74%			
Rec	123,000	611.915,362	4.662.477,515	387,051	387,057	0,006	341,3246	0	6,74%			
Rec	124,000	611.914,565	4.662.478,119	387,123	387,124	0,001	341,3246	0	6,74%			
Cur	124,417	611.914,233	4.662.478,372	387,152	387,152	0,000	341,3246	20	6,74%	P.S.		
Cur	125,000	611.913,774	4.662.478,731	387,182	387,191	0,009	343,1795	20	6,74%			
Cur	126,000	611.913,011	4.662.479,377	387,252	387,259	0,007	346,3626	20	6,74%			
Cur	127,000	611.912,282	4.662.480,061	387,315	387,326	0,011	349,5457	20	6,74%			
Cur	128,000	611.911,588	4.662.480,781	387,372	387,393	0,021	352,7288	20	6,74%			
Cur	129,000	611.910,930	4.662.481,534	387,431	387,461	0,030	355,9119	20	6,74%			
Cur	129,124	611.910,851	4.662.481,630	387,437	387,469	0,032	356,3066	20	6,74%		T.E.	
Cur	130,000	611.910,311	4.662.482,319	387,482	387,526	0,044	359,0950	20	6,30%			
Cur	131,000	611.909,732	4.662.483,134	387,530	387,587	0,057	362,2781	20	5,80%			
Cur	132,000	611.909,195	4.662.483,978	387,580	387,642	0,062	365,4612	20	5,30%			
Cur	133,000	611.908,700	4.662.484,847	387,641	387,693	0,052	368,6443	20	4,80%			
Cur	134,000	611.908,249	4.662.485,739	387,682	387,738	0,056	371,8274	20	4,30%			
Cur	135,000	611.907,844	4.662.486,653	387,736	387,779	0,043	375,0105	20	3,80%			
Cur	136,000	611.907,485	4.662.487,586	387,773	387,814	0,041	378,1936	20	3,30%			
Cur	137,000	611.907,172	4.662.488,536	387,804	387,845	0,041	381,3767	20	2,80%			
Cur	138,000	611.906,908	4.662.489,501	387,828	387,870	0,042	384,5598	20	2,30%			
Cur	139,000	611.906,692	4.662.490,477	387,847	387,891	0,044	387,7429	20	1,80%			
Cur	140,000	611.906,526	4.662.491,463	387,863	387,906	0,043	390,9260	20	1,30%		V.	
Cur	141,000	611.906,408	4.662.492,456	387,875	387,917	0,042	394,1091	20	0,80%			
Cur	142,000	611.906,341	4.662.493,453	387,879	387,922	0,043	397,2922	20	0,30%			
Cur	143,000	611.906,323	4.662.494,453	387,878	387,923	0,045	0,4753	20	-0,20%			
Cur	144,000	611.906,356	4.662.495,452	387,871	387,918	0,047	3,6584	20	-0,70%			
Cur	145,000	611.906,438	4.662.496,449	387,857	387,909	0,052	6,8415	20	-1,20%			
Cur	146,000	611.906,570	4.662.497,440	387,838	387,894	0,056	10,0246	20	-1,70%			
Cur	147,000	611.906,752	4.662.498,423	387,806	387,875	0,069	13,2077	20	-2,20%			
Cur	148,000	611.906,982	4.662.499,396	387,771	387,850	0,079	16,3908	20	-2,70%			
Cur	149,000	611.907,261	4.662.500,357	387,730	387,821	0,091	19,5739	20	-3,20%			
Cur	150,000	611.907,587	4.662.501,302	387,685	387,786	0,101	22,7570	20	-3,70%			
Cur	150,876	611.907,911	4.662.502,115	387,642	387,752	0,110	25,5454	20	-4,14%		T.S.	
Cur	151,000	611.907,960	4.662.502,229	387,636	387,747	0,111	25,9401	20	-4,14%			
Cur	152,000	611.908,379	4.662.503,137	387,587	387,705	0,118	29,1232	20	-4,14%			
Cur	153,000	611.908,843	4.662.504,023	387,534	387,664	0,130	32,3063	20	-4,14%			
Cur	154,000	611.909,351	4.662.504,885	387,476	387,623	0,147	35,4894	20	-4,14%			
Rec	154,093	611.909,400	4.662.504,963	387,470	387,619	0,149	35,7841	0	-4,14%	P.S.		
Rec	155,000	611.909,884	4.662.505,731	387,416	387,581	0,165	35,7841	0	-4,14%			
Rec	155,995	611.910,414	4.662.506,573	387,353	387,540	0,187	35,7841	0	-4,14%		T.E.	
Rec	156,000	611.910,416	4.662.506,577	387,353	387,540	0,187	35,7841	0	-4,13%			
Rec	157,000	611.910,949	4.662.507,423	387,300	387,503	0,203	35,7841	0	-3,33%			
Rec	158,000	611.911,482	4.662.508,269	387,246	387,473	0,227	35,7841	0	-2,53%			
Rec	159,000	611.912,015	4.662.509,115	387,182	387,452	0,270	35,7841	0	-1,73%			
Rec	160,000	611.912,548	4.662.509,961	387,137	387,438	0,301	35,7841	0	-0,93%			
Rec	161,000	611.913,081	4.662.510,808	387,089	387,433	0,344	35,7841	0	-0,13%			
Rec	162,000	611.913,614	4.662.511,654	387,045	387,436	0,391	35,7841	0	0,67%			
Rec	163,000	611.914,147	4.662.512,500	387,015	387,446	0,431	35,7841	0	1,47%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	164,000	611.914,680	4.662.513,346	386,994	387,465	0,471	35,7841	0	2,27%			
Rec	165,000	611.915,213	4.662.514,192	387,002	387,492	0,490	35,7841	0	3,07%			
Rec	166,000	611.915,746	4.662.515,038	387,029	387,526	0,497	35,7841	0	3,87%		V.	ODT Ø500 L=5,75m
Rec	167,000	611.916,279	4.662.515,884	387,082	387,569	0,487	35,7841	0	4,67%			
Rec	168,000	611.916,812	4.662.516,731	387,134	387,620	0,486	35,7841	0	5,47%			
Rec	169,000	611.917,345	4.662.517,577	387,185	387,678	0,493	35,7841	0	6,27%			
Rec	170,000	611.917,878	4.662.518,423	387,268	387,745	0,477	35,7841	0	7,07%			
Rec	171,000	611.918,411	4.662.519,269	387,361	387,820	0,459	35,7841	0	7,87%			
Rec	172,000	611.918,944	4.662.520,115	387,445	387,902	0,457	35,7841	0	8,67%			
Rec	173,000	611.919,477	4.662.520,961	387,519	387,993	0,474	35,7841	0	9,47%			
Rec	174,000	611.920,010	4.662.521,807	387,606	388,092	0,486	35,7841	0	10,27%			
Rec	175,000	611.920,543	4.662.522,654	387,707	388,198	0,491	35,7841	0	11,07%			
Rec	176,000	611.921,076	4.662.523,500	387,807	388,313	0,506	35,7841	0	11,87%			
Rec	176,005	611.921,078	4.662.523,504	387,808	388,314	0,506	35,7841	0	11,87%		T.S.	
Rec	177,000	611.921,609	4.662.524,346	387,907	388,432	0,525	35,7841	0	11,87%			
Rec	178,000	611.922,142	4.662.525,192	388,010	388,550	0,540	35,7841	0	11,87%			
Rec	179,000	611.922,675	4.662.526,038	388,148	388,669	0,521	35,7841	0	11,87%			
Rec	180,000	611.923,208	4.662.526,884	388,286	388,788	0,502	35,7841	0	11,87%			
Rec	181,000	611.923,741	4.662.527,730	388,424	388,907	0,483	35,7841	0	11,87%			
Rec	182,000	611.924,273	4.662.528,577	388,562	389,025	0,463	35,7841	0	11,87%			
Rec	183,000	611.924,806	4.662.529,423	388,701	389,144	0,443	35,7841	0	11,87%			
Rec	184,000	611.925,339	4.662.530,269	388,839	389,263	0,424	35,7841	0	11,87%			
Rec	185,000	611.925,872	4.662.531,115	388,976	389,381	0,405	35,7841	0	11,87%			
Rec	186,000	611.926,405	4.662.531,961	389,114	389,500	0,386	35,7841	0	11,87%			
Rec	187,000	611.926,938	4.662.532,807	389,252	389,619	0,367	35,7841	0	11,87%			
Rec	188,000	611.927,471	4.662.533,653	389,390	389,738	0,348	35,7841	0	11,87%			
Rec	189,000	611.928,004	4.662.534,500	389,528	389,856	0,328	35,7841	0	11,87%			
Rec	190,000	611.928,537	4.662.535,346	389,667	389,975	0,308	35,7841	0	11,87%			
Rec	191,000	611.929,070	4.662.536,192	389,805	390,094	0,289	35,7841	0	11,87%			
Rec	192,000	611.929,603	4.662.537,038	389,943	390,212	0,269	35,7841	0	11,87%			
Rec	193,000	611.930,136	4.662.537,884	390,060	390,331	0,271	35,7841	0	11,87%			
Rec	194,000	611.930,669	4.662.538,730	390,161	390,450	0,289	35,7841	0	11,87%			
Rec	195,000	611.931,202	4.662.539,576	390,263	390,569	0,306	35,7841	0	11,87%			
Rec	196,000	611.931,735	4.662.540,423	390,364	390,687	0,323	35,7841	0	11,87%			
Rec	197,000	611.932,268	4.662.541,269	390,466	390,806	0,340	35,7841	0	11,87%			
Rec	198,000	611.932,801	4.662.542,115	390,567	390,925	0,358	35,7841	0	11,87%			
Rec	199,000	611.933,334	4.662.542,961	390,666	391,043	0,377	35,7841	0	11,87%			
Rec	200,000	611.933,867	4.662.543,807	390,766	391,162	0,396	35,7841	0	11,87%			
Rec	201,000	611.934,400	4.662.544,653	390,865	391,281	0,416	35,7841	0	11,87%			
Rec	202,000	611.934,933	4.662.545,499	390,965	391,399	0,434	35,7841	0	11,87%			
Rec	203,000	611.935,466	4.662.546,346	391,071	391,518	0,447	35,7841	0	11,87%			
Rec	204,000	611.935,999	4.662.547,192	391,176	391,637	0,461	35,7841	0	11,87%			
Rec	205,000	611.936,532	4.662.548,038	391,281	391,756	0,475	35,7841	0	11,87%			
Rec	206,000	611.937,065	4.662.548,884	391,392	391,874	0,482	35,7841	0	11,87%			
Rec	207,000	611.937,597	4.662.549,730	391,500	391,993	0,493	35,7841	0	11,87%			
Rec	208,000	611.938,130	4.662.550,576	391,609	392,112	0,503	35,7841	0	11,87%			
Rec	209,000	611.938,663	4.662.551,422	391,721	392,230	0,509	35,7841	0	11,87%			
Rec	210,000	611.939,196	4.662.552,269	391,832	392,349	0,517	35,7841	0	11,87%			
Rec	211,000	611.939,729	4.662.553,115	391,944	392,468	0,524	35,7841	0	11,87%			
Rec	212,000	611.940,262	4.662.553,961	392,068	392,587	0,519	35,7841	0	11,87%			
Rec	213,000	611.940,795	4.662.554,807	392,199	392,705	0,506	35,7841	0	11,87%			
Rec	214,000	611.941,328	4.662.555,653	392,333	392,824	0,491	35,7841	0	11,87%			
Rec	215,000	611.941,861	4.662.556,499	392,467	392,943	0,476	35,7841	0	11,87%			
Rec	216,000	611.942,394	4.662.557,345	392,597	393,061	0,464	35,7841	0	11,87%			
Rec	217,000	611.942,927	4.662.558,191	392,725	393,180	0,455	35,7841	0	11,87%			
Rec	218,000	611.943,460	4.662.559,038	392,855	393,299	0,444	35,7841	0	11,87%			
Rec	219,000	611.943,993	4.662.559,884	392,981	393,418	0,437	35,7841	0	11,87%			
Rec	220,000	611.944,526	4.662.560,730	393,108	393,536	0,428	35,7841	0	11,87%			
Rec	221,000	611.945,059	4.662.561,576	393,236	393,655	0,419	35,7841	0	11,87%			
Rec	222,000	611.945,592	4.662.562,422	393,362	393,774	0,412	35,7841	0	11,87%			
Rec	223,000	611.946,125	4.662.563,268	393,489	393,892	0,403	35,7841	0	11,87%			
Rec	224,000	611.946,658	4.662.564,114	393,616	394,011	0,395	35,7841	0	11,87%			
Rec	225,000	611.947,191	4.662.564,961	393,744	394,130	0,386	35,7841	0	11,87%			
Rec	226,000	611.947,724	4.662.565,807	393,872	394,248	0,376	35,7841	0	11,87%			
Rec	227,000	611.948,257	4.662.566,653	393,998	394,367	0,369	35,7841	0	11,87%			
Rec	228,000	611.948,790	4.662.567,499	394,107	394,486	0,379	35,7841	0	11,87%			
Rec	229,000	611.949,323	4.662.568,345	394,216	394,605	0,389	35,7841	0	11,87%			
Rec	230,000	611.949,856	4.662.569,191	394,336	394,723	0,387	35,7841	0	11,87%			
Rec	231,000	611.950,389	4.662.570,037	394,458	394,842	0,384	35,7841	0	11,87%			
Rec	232,000	611.950,921	4.662.570,884	394,576	394,961	0,385	35,7841	0	11,87%			
Rec	233,000	611.951,454	4.662.571,730	394,696	395,079	0,383	35,7841	0	11,87%			
Rec	234,000	611.951,987	4.662.572,576	394,820	395,198	0,378	35,7841	0	11,87%			
Rec	235,000	611.952,520	4.662.573,422	394,943	395,317	0,374	35,7841	0	11,87%			
Rec	236,000	611.953,053	4.662.574,268	395,063	395,436	0,373	35,7841	0	11,87%			
Rec	237,000	611.953,586	4.662.575,114	395,183	395,554	0,371	35,7841	0	11,87%			
Rec	238,000	611.954,119	4.662.575,960	395,301	395,673	0,372	35,7841	0	11,87%			
Rec	239,000	611.954,652	4.662.576,807	395,420	395,792	0,372	35,7841	0	11,87%			
Rec	240,000	611.955,185	4.662.577,653	395,540	395,910	0,370	35,7841	0	11,87%			
Rec	241,000	611.955,718	4.662.578,499	395,661	396,029	0,368	35,7841	0	11,87%			
Rec	242,000	611.956,251	4.662.579,345	395,782	396,148	0,366	35,7841	0	11,87%			
Rec	243,000	611.956,784	4.662.580,191	395,905	396,266	0,361	35,7841	0	11,87%			
Rec	244,000	611.957,317	4.662.581,037	396,031	396,385	0,354	35,7841	0	11,87%			
Rec	245,000	611.957,850	4.662.581,883	396,167	396,504	0,337	35,7841	0	11,87%			
Rec	246,000	611.958,383	4.662.582,730	396,306	396,623	0,317	35,7841	0	11,87%			
Rec	247,000	611.958,916	4.662.583,576	396,444	396,741	0,297	35,7841	0	11,87%			
Rec	248,000	611.959,449	4.662.584,422	396,582	396,860	0,278	35,7841	0	11,87%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	249,000	611.959,982	4.662.585,268	396,720	396,979	0,259	35,7841	0	11,87%			
Rec	250,000	611.960,515	4.662.586,114	396,858	397,097	0,239	35,7841	0	11,87%			
Rec	251,000	611.961,048	4.662.586,960	396,996	397,216	0,220	35,7841	0	11,87%			
Rec	252,000	611.961,581	4.662.587,806	397,116	397,335	0,219	35,7841	0	11,87%			
Rec	253,000	611.962,114	4.662.588,653	397,234	397,454	0,220	35,7841	0	11,87%			
Rec	254,000	611.962,647	4.662.589,499	397,346	397,572	0,226	35,7841	0	11,87%			
Rec	255,000	611.963,180	4.662.590,345	397,461	397,691	0,230	35,7841	0	11,87%			
Rec	256,000	611.963,713	4.662.591,191	397,578	397,810	0,232	35,7841	0	11,87%			
Rec	257,000	611.964,245	4.662.592,037	397,691	397,928	0,237	35,7841	0	11,87%			
Rec	258,000	611.964,778	4.662.592,883	397,804	398,047	0,243	35,7841	0	11,87%			
Rec	259,000	611.965,311	4.662.593,729	397,916	398,166	0,250	35,7841	0	11,87%			
Rec	260,000	611.965,844	4.662.594,576	398,053	398,285	0,232	35,7841	0	11,87%			
Rec	261,000	611.966,377	4.662.595,422	398,265	398,403	0,138	35,7841	0	11,87%			
Rec	262,000	611.966,910	4.662.596,268	398,476	398,522	0,046	35,7841	0	11,87%			
Rec	263,000	611.967,443	4.662.597,114	398,688	398,641	-0,047	35,7841	0	11,87%			
Rec	264,000	611.967,976	4.662.597,960	398,900	398,759	-0,141	35,7841	0	11,87%			
Rec	265,000	611.968,509	4.662.598,806	399,058	398,878	-0,180	35,7841	0	11,87%			
Rec	266,000	611.969,042	4.662.599,652	399,154	398,997	-0,157	35,7841	0	11,87%			
Rec	267,000	611.969,575	4.662.600,499	399,249	399,115	-0,134	35,7841	0	11,87%			
Rec	268,000	611.970,108	4.662.601,345	399,345	399,234	-0,111	35,7841	0	11,87%			
Rec	269,000	611.970,641	4.662.602,191	399,441	399,353	-0,088	35,7841	0	11,87%			
Rec	270,000	611.971,174	4.662.603,037	399,536	399,472	-0,064	35,7841	0	11,87%			
Rec	271,000	611.971,707	4.662.603,883	399,632	399,590	-0,042	35,7841	0	11,87%			
Rec	272,000	611.972,240	4.662.604,729	399,728	399,709	-0,019	35,7841	0	11,87%			
Rec	273,000	611.972,773	4.662.605,575	399,823	399,828	0,005	35,7841	0	11,87%			
Rec	274,000	611.973,306	4.662.606,421	399,919	399,946	0,027	35,7841	0	11,87%			
Rec	275,000	611.973,839	4.662.607,268	400,005	400,065	0,060	35,7841	0	11,87%			
Rec	276,000	611.974,372	4.662.608,114	400,111	400,184	0,073	35,7841	0	11,87%			
Rec	277,000	611.974,905	4.662.608,960	400,218	400,303	0,085	35,7841	0	11,87%			
Rec	278,000	611.975,438	4.662.609,806	400,329	400,421	0,092	35,7841	0	11,87%			
Rec	279,000	611.975,971	4.662.610,652	400,443	400,540	0,097	35,7841	0	11,87%			
Rec	280,000	611.976,504	4.662.611,498	400,556	400,659	0,103	35,7841	0	11,87%			
Rec	281,000	611.977,037	4.662.612,344	400,670	400,777	0,107	35,7841	0	11,87%			
Rec	282,000	611.977,569	4.662.613,191	400,783	400,896	0,113	35,7841	0	11,87%			
Rec	283,000	611.978,102	4.662.614,037	400,897	401,015	0,118	35,7841	0	11,87%			
Rec	284,000	611.978,635	4.662.614,883	401,010	401,134	0,124	35,7841	0	11,87%			
Rec	285,000	611.979,168	4.662.615,729	401,121	401,252	0,131	35,7841	0	11,87%			
Rec	286,000	611.979,701	4.662.616,575	401,231	401,371	0,140	35,7841	0	11,87%			
Rec	287,000	611.980,234	4.662.617,421	401,341	401,490	0,149	35,7841	0	11,87%			
Rec	288,000	611.980,767	4.662.618,267	401,452	401,608	0,156	35,7841	0	11,87%			
Rec	289,000	611.981,300	4.662.619,114	401,562	401,727	0,165	35,7841	0	11,87%			
Rec	290,000	611.981,833	4.662.619,960	401,672	401,846	0,174	35,7841	0	11,87%			
Rec	291,000	611.982,366	4.662.620,806	401,781	401,964	0,183	35,7841	0	11,87%			
Rec	292,000	611.982,899	4.662.621,652	401,891	402,083	0,192	35,7841	0	11,87%			
Rec	293,000	611.983,432	4.662.622,498	402,001	402,202	0,201	35,7841	0	11,87%			
Rec	294,000	611.983,965	4.662.623,344	402,131	402,321	0,190	35,7841	0	11,87%			
Rec	295,000	611.984,498	4.662.624,190	402,261	402,439	0,178	35,7841	0	11,87%			
Rec	296,000	611.985,031	4.662.625,037	402,391	402,558	0,167	35,7841	0	11,87%			
Rec	297,000	611.985,564	4.662.625,883	402,521	402,677	0,156	35,7841	0	11,87%			
Rec	298,000	611.986,097	4.662.626,729	402,652	402,795	0,143	35,7841	0	11,87%			
Rec	299,000	611.986,630	4.662.627,575	402,782	402,914	0,132	35,7841	0	11,87%			
Rec	300,000	611.987,163	4.662.628,421	402,912	403,033	0,121	35,7841	0	11,87%			
Rec	301,000	611.987,696	4.662.629,267	403,045	403,152	0,107	35,7841	0	11,87%			
Rec	302,000	611.988,229	4.662.630,113	403,182	403,270	0,088	35,7841	0	11,87%			
Rec	303,000	611.988,762	4.662.630,960	403,320	403,389	0,069	35,7841	0	11,87%			
Rec	304,000	611.989,295	4.662.631,806	403,456	403,508	0,052	35,7841	0	11,87%			
Rec	305,000	611.989,828	4.662.632,652	403,592	403,626	0,034	35,7841	0	11,87%			
Rec	306,000	611.990,361	4.662.633,498	403,729	403,745	0,016	35,7841	0	11,87%			
Rec	307,000	611.990,893	4.662.634,344	403,865	403,864	-0,001	35,7841	0	11,87%			
Rec	308,000	611.991,426	4.662.635,190	404,001	403,983	-0,018	35,7841	0	11,87%			
Rec	309,000	611.991,959	4.662.636,036	404,125	404,101	-0,024	35,7841	0	11,87%			
Rec	310,000	611.992,492	4.662.636,883	404,249	404,220	-0,029	35,7841	0	11,87%			
Rec	310,829	611.992,934	4.662.637,584	404,351	404,318	-0,033	35,7841	0	11,87%		T.E.	
Rec	311,000	611.993,025	4.662.637,729	404,372	404,339	-0,033	35,7841	0	11,84%			
Rec	312,000	611.993,558	4.662.638,575	404,496	404,456	-0,040	35,7841	0	11,64%			
Rec	313,000	611.994,091	4.662.639,421	404,620	404,571	-0,049	35,7841	0	11,44%			
Rec	314,000	611.994,624	4.662.640,267	404,745	404,685	-0,060	35,7841	0	11,24%			
Rec	315,000	611.995,157	4.662.641,113	404,870	404,796	-0,074	35,7841	0	11,04%			
Rec	316,000	611.995,690	4.662.641,959	404,995	404,905	-0,090	35,7841	0	10,84%			
Rec	317,000	611.996,223	4.662.642,806	405,097	405,013	-0,084	35,7841	0	10,64%			
Rec	318,000	611.996,756	4.662.643,652	405,198	405,118	-0,080	35,7841	0	10,44%			
Rec	319,000	611.997,289	4.662.644,498	405,298	405,222	-0,076	35,7841	0	10,24%			
Rec	320,000	611.997,822	4.662.645,344	405,395	405,323	-0,072	35,7841	0	10,04%		V.	
Rec	321,000	611.998,355	4.662.646,190	405,492	405,422	-0,070	35,7841	0	9,84%			
Rec	322,000	611.998,888	4.662.647,036	405,590	405,520	-0,070	35,7841	0	9,64%			
Rec	323,000	611.999,421	4.662.647,882	405,689	405,615	-0,074	35,7841	0	9,44%			
Rec	324,000	611.999,954	4.662.648,729	405,786	405,708	-0,078	35,7841	0	9,24%			
Rec	325,000	612.000,487	4.662.649,575	405,882	405,800	-0,082	35,7841	0	9,04%			
Rec	326,000	612.001,020	4.662.650,421	405,978	405,889	-0,089	35,7841	0	8,84%			
Rec	327,000	612.001,553	4.662.651,267	406,065	405,976	-0,089	35,7841	0	8,64%			
Rec	328,000	612.002,086	4.662.652,113	406,150	406,062	-0,088	35,7841	0	8,44%			
Rec	329,000	612.002,619	4.662.652,959	406,238	406,145	-0,093	35,7841	0	8,24%			
Rec	329,171	612.002,710	4.662.653,104	406,253	406,159	-0,094	35,7841	0	8,20%		T.S.	
Rec	330,000	612.003,152	4.662.653,805	406,326	406,227	-0,099	35,7841	0	8,20%			
Rec	331,000	612.003,685	4.662.654,651	406,412	406,309	-0,103	35,7841	0	8,20%			
Rec	332,000	612.004,217	4.662.655,498	406,498	406,391	-0,107	35,7841	0	8,20%			
Rec	333,000	612.004,750	4.662.656,344	406,585	406,473	-0,112	35,7841	0	8,20%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	334,000	612.005,283	4.662.657,190	406,671	406,555	-0,116	35,7841	0	8,20%			
Rec	335,000	612.005,816	4.662.658,036	406,758	406,637	-0,121	35,7841	0	8,20%			
Rec	336,000	612.006,349	4.662.658,882	406,846	406,719	-0,127	35,7841	0	8,20%			
Rec	337,000	612.006,882	4.662.659,728	406,939	406,801	-0,138	35,7841	0	8,20%			
Rec	338,000	612.007,415	4.662.660,574	407,028	406,883	-0,145	35,7841	0	8,20%			
Rec	339,000	612.007,948	4.662.661,421	407,109	406,965	-0,144	35,7841	0	8,20%			
Rec	339,865	612.008,409	4.662.662,153	407,176	407,036	-0,141	35,7841	0	8,20%		T.E.	
Rec	340,000	612.008,481	4.662.662,267	407,187	407,047	-0,140	35,7841	0	8,16%			
Rec	341,000	612.009,014	4.662.663,113	407,265	407,127	-0,138	35,7841	0	7,82%			
Rec	342,000	612.009,547	4.662.663,959	407,339	407,203	-0,136	35,7841	0	7,49%			
Rec	343,000	612.010,080	4.662.664,805	407,406	407,277	-0,129	35,7841	0	7,16%			
Rec	344,000	612.010,613	4.662.665,651	407,469	407,347	-0,122	35,7841	0	6,82%			
Rec	345,000	612.011,146	4.662.666,497	407,538	407,413	-0,125	35,7841	0	6,49%			
Rec	346,000	612.011,679	4.662.667,344	407,604	407,476	-0,128	35,7841	0	6,16%			
Rec	347,000	612.012,212	4.662.668,190	407,661	407,536	-0,125	35,7841	0	5,82%			
Rec	348,000	612.012,745	4.662.669,036	407,707	407,593	-0,114	35,7841	0	5,49%			
Rec	349,000	612.013,278	4.662.669,882	407,751	407,646	-0,105	35,7841	0	5,16%			
Rec	350,000	612.013,811	4.662.670,728	407,794	407,696	-0,098	35,7841	0	4,82%		V.	
Rec	351,000	612.014,344	4.662.671,574	407,838	407,742	-0,096	35,7841	0	4,49%			
Rec	352,000	612.014,877	4.662.672,420	407,875	407,786	-0,089	35,7841	0	4,16%			
Rec	353,000	612.015,410	4.662.673,267	407,903	407,825	-0,078	35,7841	0	3,82%			
Rec	354,000	612.015,943	4.662.674,113	407,939	407,862	-0,077	35,7841	0	3,49%			
Rec	355,000	612.016,476	4.662.674,959	407,976	407,895	-0,081	35,7841	0	3,16%			
Rec	356,000	612.017,009	4.662.675,805	408,004	407,925	-0,079	35,7841	0	2,82%			
Rec	357,000	612.017,542	4.662.676,651	408,015	407,952	-0,063	35,7841	0	2,49%			
Rec	358,000	612.018,074	4.662.677,497	408,026	407,975	-0,051	35,7841	0	2,16%			
Rec	359,000	612.018,607	4.662.678,343	408,036	407,995	-0,041	35,7841	0	1,82%			
Rec	360,000	612.019,140	4.662.679,190	408,048	408,011	-0,037	35,7841	0	1,49%			
Rec	360,135	612.019,212	4.662.679,304	408,049	408,014	-0,036	35,7841	0	1,44%		T.S.	
Rec	361,000	612.019,673	4.662.680,036	408,059	408,026	-0,033	35,7841	0	1,45%			
Rec	362,000	612.020,206	4.662.680,882	408,070	408,041	-0,029	35,7841	0	1,45%			
Rec	363,000	612.020,739	4.662.681,728	408,081	408,055	-0,026	35,7841	0	1,45%			
Rec	364,000	612.021,272	4.662.682,574	408,093	408,069	-0,024	35,7841	0	1,45%			
Rec	365,000	612.021,805	4.662.683,420	408,104	408,084	-0,020	35,7841	0	1,45%			
Rec	366,000	612.022,338	4.662.684,266	408,115	408,098	-0,017	35,7841	0	1,45%			
Rec	367,000	612.022,871	4.662.685,113	408,127	408,113	-0,014	35,7841	0	1,45%			
Rec	368,000	612.023,404	4.662.685,959	408,139	408,127	-0,012	35,7841	0	1,45%			
Rec	369,000	612.023,937	4.662.686,805	408,152	408,142	-0,010	35,7841	0	1,45%			
Rec	370,000	612.024,470	4.662.687,651	408,164	408,156	-0,008	35,7841	0	1,45%			
Rec	371,000	612.025,003	4.662.688,497	408,178	408,171	-0,007	35,7841	0	1,45%			
Rec	372,000	612.025,536	4.662.689,343	408,194	408,185	-0,009	35,7841	0	1,45%			
Rec	373,000	612.026,069	4.662.690,189	408,212	408,200	-0,012	35,7841	0	1,45%			
Rec	374,000	612.026,602	4.662.691,036	408,230	408,214	-0,016	35,7841	0	1,45%			
Rec	375,000	612.027,135	4.662.691,882	408,247	408,229	-0,019	35,7841	0	1,45%			
Rec	376,000	612.027,668	4.662.692,728	408,265	408,243	-0,022	35,7841	0	1,45%			
Rec	377,000	612.028,201	4.662.693,574	408,308	408,257	-0,051	35,7841	0	1,45%			
Rec	378,000	612.028,734	4.662.694,420	408,262	408,272	0,010	35,7841	0	1,45%			
Rec	379,000	612.029,267	4.662.695,266	408,269	408,286	0,017	35,7841	0	1,45%			
Rec	380,000	612.029,800	4.662.696,112	408,289	408,301	0,012	35,7841	0	1,45%			
Rec	381,000	612.030,333	4.662.696,959	408,324	408,315	-0,009	35,7841	0	1,45%			
Rec	382,000	612.030,866	4.662.697,805	408,359	408,330	-0,029	35,7841	0	1,45%			
Rec	383,000	612.031,398	4.662.698,651	408,395	408,344	-0,051	35,7841	0	1,45%			
Rec	384,000	612.031,931	4.662.699,497	408,430	408,359	-0,071	35,7841	0	1,45%			
Rec	385,000	612.032,464	4.662.700,343	408,465	408,373	-0,092	35,7841	0	1,45%			
Rec	386,000	612.032,997	4.662.701,189	408,489	408,388	-0,101	35,7841	0	1,45%			
Rec	387,000	612.033,530	4.662.702,035	408,487	408,402	-0,085	35,7841	0	1,45%			
Rec	388,000	612.034,063	4.662.702,881	408,485	408,416	-0,069	35,7841	0	1,45%			
Rec	389,000	612.034,596	4.662.703,728	408,483	408,431	-0,052	35,7841	0	1,45%			
Rec	390,000	612.035,129	4.662.704,574	408,482	408,445	-0,037	35,7841	0	1,45%			
Rec	390,196	612.035,234	4.662.704,740	408,482	408,448	-0,033	35,7841	0	1,45%		T.E.	
Rec	391,000	612.035,662	4.662.705,420	408,480	408,460	-0,020	35,7841	0	1,37%			
Rec	392,000	612.036,195	4.662.706,266	408,478	408,473	-0,005	35,7841	0	1,27%			
Rec	393,000	612.036,728	4.662.707,112	408,476	408,485	0,009	35,7841	0	1,17%			
Rec	394,000	612.037,261	4.662.707,958	408,474	408,496	0,022	35,7841	0	1,07%			
Rec	395,000	612.037,794	4.662.708,804	408,472	408,506	0,034	35,7841	0	0,97%			
Rec	396,000	612.038,327	4.662.709,651	408,470	408,515	0,045	35,7841	0	0,87%			
Rec	397,000	612.038,860	4.662.710,497	408,468	408,523	0,055	35,7841	0	0,77%			
Rec	398,000	612.039,393	4.662.711,343	408,466	408,531	0,065	35,7841	0	0,67%			
Rec	399,000	612.039,926	4.662.712,189	408,464	408,537	0,073	35,7841	0	0,57%			
Rec	400,000	612.040,459	4.662.713,035	408,462	408,542	0,080	35,7841	0	0,47%		V.	
Rec	401,000	612.040,992	4.662.713,881	408,460	408,546	0,086	35,7841	0	0,37%			
Rec	402,000	612.041,525	4.662.714,727	408,459	408,549	0,090	35,7841	0	0,27%			
Rec	403,000	612.042,058	4.662.715,574	408,457	408,551	0,094	35,7841	0	0,17%			
Rec	404,000	612.042,591	4.662.716,420	408,455	408,553	0,098	35,7841	0	0,07%			
Rec	405,000	612.043,124	4.662.717,266	408,453	408,553	0,100	35,7841	0	-0,03%			
Rec	406,000	612.043,657	4.662.718,112	408,451	408,552	0,101	35,7841	0	-0,13%			
Rec	407,000	612.044,190	4.662.718,958	408,449	408,550	0,101	35,7841	0	-0,23%			
Rec	408,000	612.044,722	4.662.719,804	408,447	408,547	0,100	35,7841	0	-0,33%			
Rec	409,000	612.045,255	4.662.720,650	408,445	408,543	0,098	35,7841	0	-0,43%			
Rec	409,804	612.045,684	4.662.721,331	408,443	408,540	0,096	35,7841	0	-0,51%		T.S.	
Rec	410,000	612.045,788	4.662.721,497	408,443	408,539	0,096	35,7841	0	-0,52%			
Rec	411,000	612.046,321	4.662.722,343	408,441	408,533	0,092	35,7841	0	-0,52%			
Rec	412,000	612.046,854	4.662.723,189	408,439	408,528	0,089	35,7841	0	-0,52%			
Rec	413,000	612.047,387	4.662.724,035	408,438	408,523	0,085	35,7841	0	-0,52%			
Rec	414,000	612.047,920	4.662.724,881	408,436	408,518	0,082	35,7841	0	-0,52%			
Rec	415,000	612.048,453	4.662.725,727	408,434	408,513	0,079	35,7841	0	-0,52%			
Rec	416,000	612.048,986	4.662.726,573	408,432	408,508	0,076	35,7841	0	-0,52%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	417,000	612.049,519	4.662.727,420	408,430	408,502	0,072	35,7841	0	-0,52%			
Rec	418,000	612.050,052	4.662.728,266	408,428	408,497	0,069	35,7841	0	-0,52%			
Rec	419,000	612.050,585	4.662.729,112	408,426	408,492	0,066	35,7841	0	-0,52%			
Rec	420,000	612.051,118	4.662.729,958	408,424	408,487	0,063	35,7841	0	-0,52%			
Rec	421,000	612.051,651	4.662.730,804	408,422	408,482	0,060	35,7841	0	-0,52%			
Rec	422,000	612.052,184	4.662.731,650	408,420	408,477	0,057	35,7841	0	-0,52%			
Rec	423,000	612.052,717	4.662.732,496	408,418	408,472	0,054	35,7841	0	-0,52%			
Rec	424,000	612.053,250	4.662.733,343	408,416	408,466	0,050	35,7841	0	-0,52%			
Rec	425,000	612.053,783	4.662.734,189	408,415	408,461	0,046	35,7841	0	-0,52%			
Rec	426,000	612.054,316	4.662.735,035	408,413	408,456	0,043	35,7841	0	-0,52%			
Rec	427,000	612.054,849	4.662.735,881	408,411	408,451	0,040	35,7841	0	-0,52%			
Rec	428,000	612.055,382	4.662.736,727	408,409	408,446	0,037	35,7841	0	-0,52%			
Rec	429,000	612.055,915	4.662.737,573	408,407	408,441	0,034	35,7841	0	-0,52%			
Rec	430,000	612.056,448	4.662.738,419	408,405	408,435	0,031	35,7841	0	-0,52%			
Rec	431,000	612.056,981	4.662.739,266	408,403	408,430	0,027	35,7841	0	-0,52%			
Rec	432,000	612.057,514	4.662.740,112	408,401	408,425	0,024	35,7841	0	-0,52%			
Rec	433,000	612.058,046	4.662.740,958	408,399	408,420	0,021	35,7841	0	-0,52%			
Rec	434,000	612.058,579	4.662.741,804	408,397	408,415	0,018	35,7841	0	-0,52%			
Rec	435,000	612.059,112	4.662.742,650	408,395	408,410	0,015	35,7841	0	-0,52%			
Rec	436,000	612.059,645	4.662.743,496	408,410	408,405	-0,005	35,7841	0	-0,52%			
Rec	437,000	612.060,178	4.662.744,342	408,436	408,399	-0,037	35,7841	0	-0,52%			
Rec	438,000	612.060,711	4.662.745,189	408,454	408,394	-0,060	35,7841	0	-0,52%			
Rec	439,000	612.061,244	4.662.746,035	408,441	408,389	-0,052	35,7841	0	-0,52%			
Rec	440,000	612.061,777	4.662.746,881	408,427	408,384	-0,043	35,7841	0	-0,52%			
Rec	441,000	612.062,310	4.662.747,727	408,412	408,379	-0,033	35,7841	0	-0,52%			
Rec	442,000	612.062,843	4.662.748,573	408,398	408,374	-0,024	35,7841	0	-0,52%			
Rec	443,000	612.063,376	4.662.749,419	408,385	408,369	-0,016	35,7841	0	-0,52%			
Rec	444,000	612.063,909	4.662.750,265	408,377	408,363	-0,014	35,7841	0	-0,52%			
Rec	445,000	612.064,442	4.662.751,111	408,369	408,358	-0,011	35,7841	0	-0,52%			
Rec	446,000	612.064,975	4.662.751,958	408,360	408,353	-0,007	35,7841	0	-0,52%			
Rec	447,000	612.065,508	4.662.752,804	408,351	408,348	-0,003	35,7841	0	-0,52%			
Rec	448,000	612.066,041	4.662.753,650	408,342	408,343	0,001	35,7841	0	-0,52%			
Rec	449,000	612.066,574	4.662.754,496	408,333	408,338	0,005	35,7841	0	-0,52%			
Rec	450,000	612.067,107	4.662.755,342	408,324	408,332	0,008	35,7841	0	-0,52%			
Rec	451,000	612.067,640	4.662.756,188	408,315	408,327	0,012	35,7841	0	-0,52%			
Rec	452,000	612.068,173	4.662.757,034	408,306	408,322	0,016	35,7841	0	-0,52%			
Rec	453,000	612.068,706	4.662.757,881	408,297	408,317	0,020	35,7841	0	-0,52%			
Rec	454,000	612.069,239	4.662.758,727	408,288	408,312	0,024	35,7841	0	-0,52%			
Rec	455,000	612.069,772	4.662.759,573	408,279	408,307	0,028	35,7841	0	-0,52%			
Rec	456,000	612.070,305	4.662.760,419	408,271	408,302	0,031	35,7841	0	-0,52%			
Rec	457,000	612.070,838	4.662.761,265	408,262	408,296	0,034	35,7841	0	-0,52%			
Rec	458,000	612.071,370	4.662.762,111	408,253	408,291	0,038	35,7841	0	-0,52%			
Rec	459,000	612.071,903	4.662.762,957	408,244	408,286	0,042	35,7841	0	-0,52%			
Rec	460,000	612.072,436	4.662.763,804	408,235	408,281	0,046	35,7841	0	-0,52%			
Rec	461,000	612.072,969	4.662.764,650	408,226	408,276	0,050	35,7841	0	-0,52%			
Rec	462,000	612.073,502	4.662.765,496	408,217	408,271	0,054	35,7841	0	-0,52%			
Rec	463,000	612.074,035	4.662.766,342	408,208	408,266	0,058	35,7841	0	-0,52%			
Rec	464,000	612.074,568	4.662.767,188	408,199	408,260	0,061	35,7841	0	-0,52%			
Rec	465,000	612.075,101	4.662.768,034	408,191	408,255	0,064	35,7841	0	-0,52%			
Rec	466,000	612.075,634	4.662.768,880	408,182	408,250	0,068	35,7841	0	-0,52%			
Rec	467,000	612.076,167	4.662.769,727	408,173	408,245	0,072	35,7841	0	-0,52%			
Rec	468,000	612.076,700	4.662.770,573	408,164	408,240	0,076	35,7841	0	-0,52%			
Rec	469,000	612.077,233	4.662.771,419	408,155	408,235	0,080	35,7841	0	-0,52%			
Rec	470,000	612.077,766	4.662.772,265	408,146	408,229	0,083	35,7841	0	-0,52%			
Rec	471,000	612.078,299	4.662.773,111	408,137	408,224	0,087	35,7841	0	-0,52%			
Rec	472,000	612.078,832	4.662.773,957	408,129	408,219	0,090	35,7841	0	-0,52%			
Rec	473,000	612.079,365	4.662.774,803	408,120	408,214	0,094	35,7841	0	-0,52%			
Rec	474,000	612.079,898	4.662.775,650	408,111	408,209	0,098	35,7841	0	-0,52%			
Rec	475,000	612.080,431	4.662.776,496	408,102	408,204	0,102	35,7841	0	-0,52%			
Rec	476,000	612.080,964	4.662.777,342	408,093	408,199	0,106	35,7841	0	-0,52%			
Rec	477,000	612.081,497	4.662.778,188	408,084	408,193	0,109	35,7841	0	-0,52%			
Rec	478,000	612.082,030	4.662.779,034	408,075	408,188	0,113	35,7841	0	-0,52%			
Rec	479,000	612.082,563	4.662.779,880	408,067	408,183	0,116	35,7841	0	-0,52%			
Rec	480,000	612.083,096	4.662.780,726	408,058	408,178	0,120	35,7841	0	-0,52%			
Rec	481,000	612.083,629	4.662.781,573	408,049	408,173	0,124	35,7841	0	-0,52%			
Rec	482,000	612.084,162	4.662.782,419	408,040	408,168	0,128	35,7841	0	-0,52%			
Rec	483,000	612.084,694	4.662.783,265	408,031	408,163	0,132	35,7841	0	-0,52%			
Rec	484,000	612.085,227	4.662.784,111	408,023	408,157	0,134	35,7841	0	-0,52%			
Rec	485,000	612.085,760	4.662.784,957	408,014	408,152	0,138	35,7841	0	-0,52%			
Rec	486,000	612.086,293	4.662.785,803	408,005	408,147	0,142	35,7841	0	-0,52%			
Rec	487,000	612.086,826	4.662.786,649	407,996	408,142	0,146	35,7841	0	-0,52%			
Rec	488,000	612.087,359	4.662.787,496	407,988	408,137	0,149	35,7841	0	-0,52%			
Rec	489,000	612.087,892	4.662.788,342	407,979	408,132	0,153	35,7841	0	-0,52%			
Rec	490,000	612.088,425	4.662.789,188	407,970	408,126	0,156	35,7841	0	-0,52%			
Rec	491,000	612.088,958	4.662.790,034	407,962	408,121	0,159	35,7841	0	-0,52%			
Rec	492,000	612.089,491	4.662.790,880	407,953	408,116	0,163	35,7841	0	-0,52%			
Rec	493,000	612.090,024	4.662.791,726	407,944	408,111	0,167	35,7841	0	-0,52%			
Rec	494,000	612.090,557	4.662.792,572	407,936	408,106	0,170	35,7841	0	-0,52%			
Rec	495,000	612.091,090	4.662.793,419	407,927	408,101	0,174	35,7841	0	-0,52%			
Rec	496,000	612.091,623	4.662.794,265	407,918	408,096	0,178	35,7841	0	-0,52%			
Rec	497,000	612.092,156	4.662.795,111	407,910	408,090	0,180	35,7841	0	-0,52%			
Rec	498,000	612.092,689	4.662.795,957	407,901	408,085	0,184	35,7841	0	-0,52%			
Rec	499,000	612.093,222	4.662.796,803	407,893	408,080	0,187	35,7841	0	-0,52%			
Rec	500,000	612.093,755	4.662.797,649	407,884	408,075	0,191	35,7841	0	-0,52%			
Rec	501,000	612.094,288	4.662.798,495	407,876	408,070	0,194	35,7841	0	-0,52%			
Rec	502,000	612.094,821	4.662.799,341	407,867	408,065	0,198	35,7841	0	-0,52%			
Rec	503,000	612.095,354	4.662.800,188	407,859	408,060	0,201	35,7841	0	-0,52%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	504,000	612.095,887	4.662.801,034	407,850	408,054	0,204	35,7841	0	-0,52%			
Rec	505,000	612.096,420	4.662.801,880	407,842	408,049	0,207	35,7841	0	-0,52%			
Rec	506,000	612.096,953	4.662.802,726	407,833	408,044	0,211	35,7841	0	-0,52%			
Rec	507,000	612.097,486	4.662.803,572	407,825	408,039	0,214	35,7841	0	-0,52%			
Rec	508,000	612.098,018	4.662.804,418	407,816	408,034	0,218	35,7841	0	-0,52%			
Rec	509,000	612.098,551	4.662.805,264	407,807	408,029	0,222	35,7841	0	-0,52%			
Rec	510,000	612.099,084	4.662.806,111	407,796	408,024	0,228	35,7841	0	-0,52%			
Rec	511,000	612.099,617	4.662.806,957	407,785	408,018	0,233	35,7841	0	-0,52%			
Rec	512,000	612.100,150	4.662.807,803	407,775	408,013	0,238	35,7841	0	-0,52%			
Rec	513,000	612.100,683	4.662.808,649	407,764	408,008	0,244	35,7841	0	-0,52%			
Rec	514,000	612.101,216	4.662.809,495	407,761	408,003	0,242	35,7841	0	-0,52%			
Rec	515,000	612.101,749	4.662.810,341	407,759	407,998	0,239	35,7841	0	-0,52%			
Rec	516,000	612.102,282	4.662.811,187	407,757	407,993	0,236	35,7841	0	-0,52%			
Rec	517,000	612.102,815	4.662.812,034	407,755	407,987	0,232	35,7841	0	-0,52%			
Rec	518,000	612.103,348	4.662.812,880	407,753	407,982	0,229	35,7841	0	-0,52%			
Rec	519,000	612.103,881	4.662.813,726	407,751	407,977	0,226	35,7841	0	-0,52%			
Rec	520,000	612.104,414	4.662.814,572	407,749	407,972	0,223	35,7841	0	-0,52%			
Rec	521,000	612.104,947	4.662.815,418	407,747	407,967	0,220	35,7841	0	-0,52%			
Rec	522,000	612.105,480	4.662.816,264	407,745	407,962	0,217	35,7841	0	-0,52%			
Rec	523,000	612.106,013	4.662.817,110	407,743	407,957	0,214	35,7841	0	-0,52%			
Rec	524,000	612.106,546	4.662.817,957	407,741	407,951	0,210	35,7841	0	-0,52%			
Rec	525,000	612.107,079	4.662.818,803	407,739	407,946	0,207	35,7841	0	-0,52%			
Rec	526,000	612.107,612	4.662.819,649	407,736	407,941	0,205	35,7841	0	-0,52%			
Rec	527,000	612.108,145	4.662.820,495	407,734	407,936	0,202	35,7841	0	-0,52%			
Rec	528,000	612.108,678	4.662.821,341	407,732	407,931	0,199	35,7841	0	-0,52%			
Rec	529,000	612.109,211	4.662.822,187	407,729	407,926	0,197	35,7841	0	-0,52%			
Rec	530,000	612.109,744	4.662.823,033	407,727	407,921	0,194	35,7841	0	-0,52%			
Rec	531,000	612.110,277	4.662.823,880	407,724	407,915	0,191	35,7841	0	-0,52%			
Rec	532,000	612.110,810	4.662.824,726	407,721	407,910	0,189	35,7841	0	-0,52%			
Rec	533,000	612.111,342	4.662.825,572	407,718	407,905	0,187	35,7841	0	-0,52%			
Rec	534,000	612.111,875	4.662.826,418	407,716	407,900	0,184	35,7841	0	-0,52%			
Rec	535,000	612.112,408	4.662.827,264	407,713	407,895	0,182	35,7841	0	-0,52%			
Rec	536,000	612.112,941	4.662.828,110	407,710	407,890	0,180	35,7841	0	-0,52%			
Rec	537,000	612.113,474	4.662.828,956	407,708	407,884	0,176	35,7841	0	-0,52%			
Rec	538,000	612.114,007	4.662.829,803	407,705	407,879	0,174	35,7841	0	-0,52%			
Rec	539,000	612.114,540	4.662.830,649	407,702	407,874	0,172	35,7841	0	-0,52%			
Rec	540,000	612.115,073	4.662.831,495	407,700	407,869	0,169	35,7841	0	-0,52%			
Rec	541,000	612.115,606	4.662.832,341	407,697	407,864	0,167	35,7841	0	-0,52%			
Rec	542,000	612.116,139	4.662.833,187	407,694	407,859	0,165	35,7841	0	-0,52%			
Rec	543,000	612.116,672	4.662.834,033	407,691	407,854	0,163	35,7841	0	-0,52%			
Rec	544,000	612.117,205	4.662.834,879	407,689	407,848	0,159	35,7841	0	-0,52%			
Rec	545,000	612.117,738	4.662.835,726	407,686	407,843	0,157	35,7841	0	-0,52%			
Rec	546,000	612.118,271	4.662.836,572	407,683	407,838	0,155	35,7841	0	-0,52%			
Rec	547,000	612.118,804	4.662.837,418	407,681	407,833	0,152	35,7841	0	-0,52%			
Rec	548,000	612.119,337	4.662.838,264	407,678	407,828	0,150	35,7841	0	-0,52%			
Rec	549,000	612.119,870	4.662.839,110	407,675	407,823	0,148	35,7841	0	-0,52%			
Rec	550,000	612.120,403	4.662.839,956	407,673	407,818	0,144	35,7841	0	-0,52%			
Rec	551,000	612.120,936	4.662.840,802	407,670	407,812	0,142	35,7841	0	-0,52%			
Rec	552,000	612.121,469	4.662.841,648	407,667	407,807	0,140	35,7841	0	-0,52%			
Rec	553,000	612.122,002	4.662.842,495	407,664	407,802	0,138	35,7841	0	-0,52%			
Rec	554,000	612.122,535	4.662.843,341	407,662	407,797	0,135	35,7841	0	-0,52%			
Rec	555,000	612.123,068	4.662.844,187	407,659	407,792	0,133	35,7841	0	-0,52%			
Rec	556,000	612.123,601	4.662.845,033	407,656	407,787	0,131	35,7841	0	-0,52%			
Rec	557,000	612.124,134	4.662.845,879	407,654	407,781	0,127	35,7841	0	-0,52%			
Rec	558,000	612.124,667	4.662.846,725	407,651	407,776	0,125	35,7841	0	-0,52%			
Rec	559,000	612.125,199	4.662.847,571	407,648	407,771	0,123	35,7841	0	-0,52%			
Rec	560,000	612.125,732	4.662.848,418	407,646	407,766	0,120	35,7841	0	-0,52%			
Rec	561,000	612.126,265	4.662.849,264	407,643	407,761	0,118	35,7841	0	-0,52%			
Rec	562,000	612.126,798	4.662.850,110	407,641	407,756	0,115	35,7841	0	-0,52%			
Rec	563,000	612.127,331	4.662.850,956	407,642	407,751	0,109	35,7841	0	-0,52%			
Rec	564,000	612.127,864	4.662.851,802	407,642	407,745	0,103	35,7841	0	-0,52%			
Rec	565,000	612.128,397	4.662.852,648	407,643	407,740	0,097	35,7841	0	-0,52%			
Rec	566,000	612.128,930	4.662.853,494	407,643	407,735	0,092	35,7841	0	-0,52%			
Rec	567,000	612.129,463	4.662.854,341	407,644	407,730	0,086	35,7841	0	-0,52%			
Rec	568,000	612.129,996	4.662.855,187	407,644	407,725	0,081	35,7841	0	-0,52%			
Rec	569,000	612.130,529	4.662.856,033	407,645	407,720	0,075	35,7841	0	-0,52%			
Rec	570,000	612.131,062	4.662.856,879	407,645	407,714	0,070	35,7841	0	-0,52%			
Rec	570,899	612.131,541	4.662.857,640	407,645	407,710	0,065	35,7841	0	-0,52%		T.E.	
Rec	571,000	612.131,595	4.662.857,725	407,645	407,709	0,064	35,7841	0	-0,51%			
Rec	572,000	612.132,128	4.662.858,571	407,646	407,705	0,059	35,7841	0	-0,44%			
Rec	573,000	612.132,661	4.662.859,417	407,646	407,701	0,055	35,7841	0	-0,37%			
Rec	574,000	612.133,194	4.662.860,264	407,647	407,697	0,050	35,7841	0	-0,31%			
Rec	575,000	612.133,727	4.662.861,110	407,647	407,694	0,047	35,7841	0	-0,24%			
Rec	576,000	612.134,260	4.662.861,956	407,648	407,692	0,044	35,7841	0	-0,17%			
Rec	577,000	612.134,793	4.662.862,802	407,648	407,691	0,043	35,7841	0	-0,11%			
Rec	578,000	612.135,326	4.662.863,648	407,649	407,690	0,041	35,7841	0	-0,04%			
Rec	579,000	612.135,859	4.662.864,494	407,649	407,690	0,041	35,7841	0	0,03%			
Rec	580,000	612.136,392	4.662.865,340	407,650	407,691	0,041	35,7841	0	0,09%		V.	ODT Ø500 L=6,85m
Rec	581,000	612.136,925	4.662.866,187	407,654	407,692	0,038	35,7841	0	0,16%			
Rec	582,000	612.137,458	4.662.867,033	407,659	407,694	0,035	35,7841	0	0,23%			
Rec	583,000	612.137,991	4.662.867,879	407,664	407,696	0,032	35,7841	0	0,29%			
Rec	584,000	612.138,523	4.662.868,725	407,669	407,700	0,031	35,7841	0	0,36%			
Rec	585,000	612.139,056	4.662.869,571	407,674	407,704	0,030	35,7841	0	0,43%			
Rec	586,000	612.139,589	4.662.870,417	407,678	407,708	0,030	35,7841	0	0,49%			
Rec	587,000	612.140,122	4.662.871,263	407,683	407,713	0,030	35,7841	0	0,56%			
Rec	588,000	612.140,655	4.662.872,110	407,688	407,719	0,031	35,7841	0	0,63%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	589,000	612.141,188	4.662.872,956	407,693	407,726	0,033	35,7841	0	0,69%			
Rec	589,101	612.141,242	4.662.873,041	407,694	407,727	0,033	35,7841	0	0,70%		T.S.	
Rec	590,000	612.141,721	4.662.873,802	407,698	407,733	0,035	35,7841	0	0,70%			
Rec	591,000	612.142,254	4.662.874,648	407,703	407,740	0,037	35,7841	0	0,70%			
Rec	592,000	612.142,787	4.662.875,494	407,708	407,747	0,039	35,7841	0	0,70%			
Rec	593,000	612.143,320	4.662.876,340	407,713	407,754	0,041	35,7841	0	0,70%			
Rec	594,000	612.143,853	4.662.877,186	407,718	407,761	0,043	35,7841	0	0,70%			
Rec	595,000	612.144,386	4.662.878,033	407,723	407,768	0,045	35,7841	0	0,70%			
Rec	596,000	612.144,919	4.662.878,879	407,728	407,775	0,047	35,7841	0	0,70%			
Rec	597,000	612.145,452	4.662.879,725	407,733	407,782	0,049	35,7841	0	0,70%			
Rec	598,000	612.145,985	4.662.880,571	407,738	407,789	0,051	35,7841	0	0,70%			
Rec	599,000	612.146,518	4.662.881,417	407,743	407,796	0,053	35,7841	0	0,70%			
Rec	600,000	612.147,051	4.662.882,263	407,748	407,803	0,055	35,7841	0	0,70%			
Rec	601,000	612.147,584	4.662.883,109	407,753	407,810	0,057	35,7841	0	0,70%			
Rec	602,000	612.148,117	4.662.883,956	407,758	407,817	0,059	35,7841	0	0,70%			
Rec	603,000	612.148,650	4.662.884,802	407,763	407,824	0,061	35,7841	0	0,70%			
Rec	604,000	612.149,183	4.662.885,648	407,768	407,831	0,063	35,7841	0	0,70%			
Rec	605,000	612.149,716	4.662.886,494	407,773	407,837	0,064	35,7841	0	0,70%			
Rec	606,000	612.150,249	4.662.887,340	407,778	407,844	0,066	35,7841	0	0,70%			
Rec	607,000	612.150,782	4.662.888,186	407,783	407,851	0,068	35,7841	0	0,70%			
Rec	608,000	612.151,315	4.662.889,032	407,788	407,858	0,070	35,7841	0	0,70%			
Rec	609,000	612.151,847	4.662.889,878	407,793	407,865	0,072	35,7841	0	0,70%			
Rec	610,000	612.152,380	4.662.890,725	407,797	407,872	0,075	35,7841	0	0,70%			
Rec	611,000	612.152,913	4.662.891,571	407,802	407,879	0,077	35,7841	0	0,70%			
Rec	612,000	612.153,446	4.662.892,417	407,807	407,886	0,079	35,7841	0	0,70%			
Rec	613,000	612.153,979	4.662.893,263	407,812	407,893	0,081	35,7841	0	0,70%			
Rec	614,000	612.154,512	4.662.894,109	407,817	407,900	0,083	35,7841	0	0,70%			
Rec	615,000	612.155,045	4.662.894,955	407,822	407,907	0,085	35,7841	0	0,70%			
Rec	616,000	612.155,578	4.662.895,801	407,827	407,914	0,087	35,7841	0	0,70%			
Rec	617,000	612.156,111	4.662.896,648	407,832	407,921	0,089	35,7841	0	0,70%			
Rec	618,000	612.156,644	4.662.897,494	407,837	407,928	0,091	35,7841	0	0,70%			
Rec	619,000	612.157,177	4.662.898,340	407,842	407,935	0,093	35,7841	0	0,70%			
Rec	620,000	612.157,710	4.662.899,186	407,847	407,942	0,095	35,7841	0	0,70%			
Rec	620,935	612.158,208	4.662.899,977	407,852	407,949	0,097	35,7841	0	0,70%		T.E.	
Rec	621,000	612.158,243	4.662.900,032	407,852	407,949	0,097	35,7841	0	0,69%			
Rec	622,000	612.158,776	4.662.900,878	407,857	407,956	0,099	35,7841	0	0,59%			
Rec	623,000	612.159,309	4.662.901,724	407,862	407,961	0,099	35,7841	0	0,49%			
Rec	624,000	612.159,842	4.662.902,571	407,867	407,965	0,098	35,7841	0	0,39%			
Rec	625,000	612.160,375	4.662.903,417	407,872	407,969	0,097	35,7841	0	0,29%			
Rec	626,000	612.160,908	4.662.904,263	407,877	407,971	0,094	35,7841	0	0,19%			
Rec	627,000	612.161,441	4.662.905,109	407,882	407,973	0,091	35,7841	0	0,09%			
Rec	628,000	612.161,974	4.662.905,955	407,887	407,973	0,086	35,7841	0	-0,01%			
Rec	629,000	612.162,507	4.662.906,801	407,892	407,972	0,080	35,7841	0	-0,11%			
Rec	630,000	612.163,040	4.662.907,647	407,897	407,971	0,074	35,7841	0	-0,21%		V.	
Rec	631,000	612.163,573	4.662.908,494	407,902	407,968	0,066	35,7841	0	-0,31%			
Rec	632,000	612.164,106	4.662.909,340	407,907	407,965	0,058	35,7841	0	-0,41%			
Rec	633,000	612.164,639	4.662.910,186	407,908	407,960	0,052	35,7841	0	-0,51%			
Rec	634,000	612.165,171	4.662.911,032	407,907	407,955	0,048	35,7841	0	-0,61%			
Rec	635,000	612.165,704	4.662.911,878	407,904	407,948	0,044	35,7841	0	-0,71%			
Rec	636,000	612.166,237	4.662.912,724	407,897	407,940	0,043	35,7841	0	-0,81%			
Rec	637,000	612.166,770	4.662.913,570	407,891	407,932	0,041	35,7841	0	-0,91%			
Rec	638,000	612.167,303	4.662.914,417	407,884	407,922	0,038	35,7841	0	-1,01%			
Rec	639,000	612.167,836	4.662.915,263	407,878	407,912	0,034	35,7841	0	-1,11%			
Rec	639,065	612.167,871	4.662.915,318	407,878	407,911	0,034	35,7841	0	-1,12%		T.S.	
Rec	640,000	612.168,369	4.662.916,109	407,871	407,901	0,030	35,7841	0	-1,11%			
Rec	641,000	612.168,902	4.662.916,955	407,865	407,890	0,025	35,7841	0	-1,11%			
Rec	642,000	612.169,435	4.662.917,801	407,858	407,878	0,020	35,7841	0	-1,11%			
Rec	643,000	612.169,968	4.662.918,647	407,851	407,867	0,016	35,7841	0	-1,11%			
Rec	644,000	612.170,501	4.662.919,493	407,845	407,856	0,011	35,7841	0	-1,11%			
Rec	645,000	612.171,034	4.662.920,340	407,838	407,845	0,007	35,7841	0	-1,11%			
Rec	646,000	612.171,567	4.662.921,186	407,831	407,834	0,003	35,7841	0	-1,11%			
Rec	647,000	612.172,100	4.662.922,032	407,820	407,823	0,003	35,7841	0	-1,11%			
Rec	648,000	612.172,633	4.662.922,878	407,809	407,812	0,003	35,7841	0	-1,11%			
Rec	649,000	612.173,166	4.662.923,724	407,799	407,800	0,001	35,7841	0	-1,11%			
Rec	650,000	612.173,699	4.662.924,570	407,788	407,789	0,001	35,7841	0	-1,11%			
Rec	651,000	612.174,232	4.662.925,416	407,777	407,778	0,001	35,7841	0	-1,11%			
Rec	652,000	612.174,765	4.662.926,263	407,766	407,767	0,001	35,7841	0	-1,11%			
Rec	653,000	612.175,298	4.662.927,109	407,755	407,756	0,001	35,7841	0	-1,11%			
Rec	654,000	612.175,831	4.662.927,955	407,744	407,745	0,001	35,7841	0	-1,11%			
Rec	655,000	612.176,364	4.662.928,801	407,734	407,734	0,000	35,7841	0	-1,11%			
Rec	656,000	612.176,897	4.662.929,647	407,723	407,722	-0,001	35,7841	0	-1,11%			
Rec	657,000	612.177,430	4.662.930,493	407,712	407,711	-0,001	35,7841	0	-1,11%			
Rec	658,000	612.177,963	4.662.931,339	407,701	407,700	-0,001	35,7841	0	-1,11%			
Rec	658,641	612.178,304	4.662.931,882	407,694	407,693	-0,001	35,7841	0	-1,11%		T.E.	
Rec	659,000	612.178,495	4.662.932,186	407,690	407,689	-0,001	35,7841	0	-1,09%			
Rec	660,000	612.179,028	4.662.933,032	407,679	407,679	0,000	35,7841	0	-1,02%			
Rec	661,000	612.179,561	4.662.933,878	407,669	407,669	0,000	35,7841	0	-0,96%			
Rec	662,000	612.180,094	4.662.934,724	407,658	407,659	0,001	35,7841	0	-0,89%			
Rec	663,000	612.180,627	4.662.935,570	407,647	407,651	0,004	35,7841	0	-0,82%			
Rec	664,000	612.181,160	4.662.936,416	407,636	407,643	0,007	35,7841	0	-0,76%			
Rec	665,000	612.181,693	4.662.937,262	407,625	407,636	0,011	35,7841	0	-0,69%			
Rec	666,000	612.182,226	4.662.938,108	407,614	407,629	0,015	35,7841	0	-0,62%			
Rec	667,000	612.182,759	4.662.938,955	407,604	407,623	0,019	35,7841	0	-0,56%		V.	
Rec	668,000	612.183,292	4.662.939,801	407,593	407,618	0,025	35,7841	0	-0,49%			
Rec	669,000	612.183,825	4.662.940,647	407,582	407,613	0,031	35,7841	0	-0,42%			
Rec	670,000	612.184,358	4.662.941,493	407,571	407,610	0,039	35,7841	0	-0,36%			
Rec	671,000	612.184,891	4.662.942,339	407,560	407,606	0,046	35,7841	0	-0,29%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13-T13BIS C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	672,000	612.185,424	4.662.943,185	407,549	407,604	0,055	35,7841	0	-0,22%			
Rec	673,000	612.185,957	4.662.944,031	407,539	407,602	0,063	35,7841	0	-0,16%			
Rec	674,000	612.186,490	4.662.944,878	407,528	407,601	0,073	35,7841	0	-0,09%			
Rec	675,000	612.187,023	4.662.945,724	407,517	407,600	0,083	35,7841	0	-0,02%			
Rec	675,359	612.187,214	4.662.946,028	407,513	407,600	0,087	35,7841	0	0,00%		T.S.	
Rec	676,000	612.187,556	4.662.946,570	407,506	407,600	0,094	35,7841	0	0,00%			
Rec	677,000	612.188,089	4.662.947,416	407,495	407,600	0,105	35,7841	0	0,00%			
Rec	678,000	612.188,622	4.662.948,262	407,484	407,600	0,116	35,7841	0	0,00%			
Rec	679,000	612.189,155	4.662.949,108	407,474	407,600	0,126	35,7841	0	0,00%			
Rec	680,000	612.189,688	4.662.949,954	407,463	407,600	0,137	35,7841	0	0,00%			
Rec	681,000	612.190,221	4.662.950,801	407,452	407,600	0,148	35,7841	0	0,00%			
Rec	682,000	612.190,754	4.662.951,647	407,441	407,600	0,159	35,7841	0	0,00%			
Rec	683,000	612.191,287	4.662.952,493	407,425	407,600	0,175	35,7841	0	0,00%			
Rec	684,000	612.191,819	4.662.953,339	407,402	407,600	0,198	35,7841	0	0,00%			
Rec	685,000	612.192,352	4.662.954,185	407,363	407,600	0,237	35,7841	0	0,00%			
Rec	686,000	612.192,885	4.662.955,031	407,351	407,600	0,249	35,7841	0	0,00%			
Rec	687,000	612.193,418	4.662.955,877	407,334	407,600	0,266	35,7841	0	0,00%			
	687,058	612.193,449	4.662.955,927	407,333	407,600	0,267	35,7841		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	611.473,727	4.661.937,124	386,217	386,217	0,000	125,4825	0	-0,68%			
Rec	1,000	611.474,648	4.661.936,734	386,022	386,210	0,188	125,4825	0	-0,68%			
Rec	2,000	611.475,569	4.661.936,344	385,992	386,203	0,211	125,4825	0	-0,68%			ODT Ø500 L=16,50m
Rec	3,000	611.476,490	4.661.935,955	385,982	386,197	0,215	125,4825	0	-0,68%			
Rec	4,000	611.477,411	4.661.935,565	385,972	386,190	0,218	125,4825	0	-0,68%			
Rec	5,000	611.478,332	4.661.935,175	385,963	386,183	0,220	125,4825	0	-0,68%			
Rec	6,000	611.479,253	4.661.934,786	385,951	386,176	0,225	125,4825	0	-0,68%			
Rec	7,000	611.480,174	4.661.934,396	385,938	386,169	0,231	125,4825	0	-0,68%			
Rec	8,000	611.481,095	4.661.934,006	385,925	386,163	0,238	125,4825	0	-0,68%			
Rec	9,000	611.482,016	4.661.933,616	385,912	386,156	0,244	125,4825	0	-0,68%			
Rec	10,000	611.482,937	4.661.933,227	385,899	386,149	0,250	125,4825	0	-0,68%			
Rec	11,000	611.483,858	4.661.932,837	385,886	386,142	0,256	125,4825	0	-0,68%			
Rec	12,000	611.484,779	4.661.932,447	385,873	386,135	0,262	125,4825	0	-0,68%			
Rec	13,000	611.485,700	4.661.932,058	385,860	386,129	0,269	125,4825	0	-0,68%			
Rec	14,000	611.486,620	4.661.931,668	385,847	386,122	0,275	125,4825	0	-0,68%			
Rec	15,000	611.487,541	4.661.931,278	385,833	386,115	0,282	125,4825	0	-0,68%			
Rec	16,000	611.488,462	4.661.930,889	385,820	386,108	0,288	125,4825	0	-0,68%			
Rec	17,000	611.489,383	4.661.930,499	385,807	386,101	0,294	125,4825	0	-0,68%			
Rec	18,000	611.490,304	4.661.930,109	385,794	386,095	0,301	125,4825	0	-0,68%			
Rec	19,000	611.491,225	4.661.929,720	385,781	386,088	0,307	125,4825	0	-0,68%			
Rec	20,000	611.492,146	4.661.929,330	385,768	386,081	0,313	125,4825	0	-0,68%			
Rec	21,000	611.493,067	4.661.928,940	385,755	386,074	0,319	125,4825	0	-0,68%			
Rec	22,000	611.493,988	4.661.928,551	385,742	386,067	0,325	125,4825	0	-0,68%			
Rec	23,000	611.494,909	4.661.928,161	385,729	386,061	0,332	125,4825	0	-0,68%			
Rec	24,000	611.495,830	4.661.927,771	385,716	386,054	0,338	125,4825	0	-0,68%			
Rec	25,000	611.496,751	4.661.927,382	385,703	386,047	0,344	125,4825	0	-0,68%			
Rec	26,000	611.497,672	4.661.926,992	385,690	386,040	0,350	125,4825	0	-0,68%			
Rec	27,000	611.498,593	4.661.926,602	385,677	386,033	0,356	125,4825	0	-0,68%			
Rec	28,000	611.499,514	4.661.926,213	385,663	386,027	0,364	125,4825	0	-0,68%			
Rec	29,000	611.500,435	4.661.925,823	385,650	386,020	0,370	125,4825	0	-0,68%			
Rec	30,000	611.501,356	4.661.925,433	385,635	386,013	0,378	125,4825	0	-0,68%			
Rec	31,000	611.502,277	4.661.925,044	385,619	386,006	0,387	125,4825	0	-0,68%			
Rec	32,000	611.503,198	4.661.924,654	385,603	385,999	0,396	125,4825	0	-0,68%			
Rec	33,000	611.504,119	4.661.924,264	385,588	385,993	0,405	125,4825	0	-0,68%			
Rec	34,000	611.505,040	4.661.923,875	385,572	385,986	0,414	125,4825	0	-0,68%			
Rec	35,000	611.505,960	4.661.923,485	385,557	385,979	0,422	125,4825	0	-0,68%			
Rec	36,000	611.506,881	4.661.923,095	385,541	385,972	0,431	125,4825	0	-0,68%			
Rec	37,000	611.507,802	4.661.922,706	385,525	385,965	0,440	125,4825	0	-0,68%			
Rec	38,000	611.508,723	4.661.922,316	385,510	385,958	0,448	125,4825	0	-0,68%			
Rec	39,000	611.509,644	4.661.921,926	385,497	385,952	0,455	125,4825	0	-0,68%			
Rec	40,000	611.510,565	4.661.921,537	385,491	385,945	0,454	125,4825	0	-0,68%			
Rec	41,000	611.511,486	4.661.921,147	385,488	385,938	0,450	125,4825	0	-0,68%			
Rec	42,000	611.512,407	4.661.920,757	385,490	385,931	0,441	125,4825	0	-0,68%			
Rec	43,000	611.513,328	4.661.920,368	385,493	385,924	0,431	125,4825	0	-0,68%			
Rec	44,000	611.514,249	4.661.919,978	385,497	385,918	0,421	125,4825	0	-0,68%			
Rec	45,000	611.515,170	4.661.919,588	385,501	385,911	0,410	125,4825	0	-0,68%			
Rec	46,000	611.516,091	4.661.919,199	385,504	385,904	0,400	125,4825	0	-0,68%			
Rec	47,000	611.517,012	4.661.918,809	385,508	385,897	0,389	125,4825	0	-0,68%			
Rec	48,000	611.517,933	4.661.918,419	385,511	385,890	0,379	125,4825	0	-0,68%			
Rec	49,000	611.518,854	4.661.918,029	385,515	385,884	0,369	125,4825	0	-0,68%			
Rec	50,000	611.519,775	4.661.917,640	385,518	385,877	0,359	125,4825	0	-0,68%			
Rec	51,000	611.520,696	4.661.917,250	385,522	385,870	0,348	125,4825	0	-0,68%			
Rec	52,000	611.521,617	4.661.916,860	385,526	385,863	0,337	125,4825	0	-0,68%			
Rec	53,000	611.522,538	4.661.916,471	385,529	385,856	0,327	125,4825	0	-0,68%			
Rec	54,000	611.523,459	4.661.916,081	385,533	385,850	0,317	125,4825	0	-0,68%			
Rec	55,000	611.524,380	4.661.915,691	385,536	385,843	0,307	125,4825	0	-0,68%			
Rec	56,000	611.525,300	4.661.915,302	385,540	385,836	0,296	125,4825	0	-0,68%			
Rec	57,000	611.526,221	4.661.914,912	385,543	385,829	0,286	125,4825	0	-0,68%			
Rec	58,000	611.527,142	4.661.914,522	385,547	385,822	0,275	125,4825	0	-0,68%			
Rec	59,000	611.528,063	4.661.914,133	385,551	385,816	0,265	125,4825	0	-0,68%			
Rec	60,000	611.528,984	4.661.913,743	385,554	385,809	0,255	125,4825	0	-0,68%			
Rec	61,000	611.529,905	4.661.913,353	385,558	385,802	0,244	125,4825	0	-0,68%			
Rec	62,000	611.530,826	4.661.912,964	385,561	385,795	0,234	125,4825	0	-0,68%			
Rec	63,000	611.531,747	4.661.912,574	385,565	385,788	0,223	125,4825	0	-0,68%			
Rec	64,000	611.532,668	4.661.912,184	385,568	385,782	0,214	125,4825	0	-0,68%			
Rec	65,000	611.533,589	4.661.911,795	385,572	385,775	0,203	125,4825	0	-0,68%			
Rec	66,000	611.534,510	4.661.911,405	385,576	385,768	0,192	125,4825	0	-0,68%			
Rec	67,000	611.535,431	4.661.911,015	385,579	385,761	0,182	125,4825	0	-0,68%			
Rec	67,497	611.535,889	4.661.910,822	385,581	385,758	0,177	125,4825	0	-0,68%		T.E.	
Rec	68,000	611.536,352	4.661.910,626	385,583	385,754	0,171	125,4825	0	-0,66%			
Rec	69,000	611.537,273	4.661.910,236	385,586	385,748	0,162	125,4825	0	-0,62%			
Rec	70,000	611.538,194	4.661.909,846	385,590	385,742	0,152	125,4825	0	-0,58%			
Rec	71,000	611.539,115	4.661.909,457	385,594	385,736	0,142	125,4825	0	-0,54%			
Rec	72,000	611.540,036	4.661.909,067	385,597	385,731	0,134	125,4825	0	-0,50%			
Rec	73,000	611.540,957	4.661.908,677	385,601	385,726	0,125	125,4825	0	-0,46%			
Rec	74,000	611.541,878	4.661.908,288	385,604	385,722	0,118	125,4825	0	-0,42%			
Rec	75,000	611.542,799	4.661.907,898	385,608	385,718	0,110	125,4825	0	-0,38%			
Rec	76,000	611.543,720	4.661.907,508	385,611	385,714	0,103	125,4825	0	-0,34%		V.	
Rec	77,000	611.544,640	4.661.907,119	385,615	385,711	0,096	125,4825	0	-0,30%			
Rec	78,000	611.545,561	4.661.906,729	385,619	385,708	0,089	125,4825	0	-0,26%			
Rec	79,000	611.546,482	4.661.906,339	385,622	385,706	0,084	125,4825	0	-0,22%			
Rec	80,000	611.547,403	4.661.905,950	385,626	385,704	0,078	125,4825	0	-0,18%			
Rec	81,000	611.548,324	4.661.905,560	385,629	385,702	0,073	125,4825	0	-0,14%			
Rec	82,000	611.549,245	4.661.905,170	385,628	385,701	0,073	125,4825	0	-0,10%			
Rec	83,000	611.550,166	4.661.904,781	385,626	385,700	0,074	125,4825	0	-0,06%			
Rec	84,000	611.551,087	4.661.904,391	385,622	385,700	0,078	125,4825	0	-0,02%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	84,503	611.551,550	4.661.904,195	385,621	385,700	0,079	125,4825	0	0,00%		T.S.	
Rec	85,000	611.552,008	4.661.904,001	385,621	385,700	0,079	125,4825	0	0,00%			
Rec	86,000	611.552,929	4.661.903,612	385,608	385,700	0,092	125,4825	0	0,00%			
Rec	87,000	611.553,850	4.661.903,222	385,562	385,700	0,138	125,4825	0	0,00%			
Rec	88,000	611.554,771	4.661.902,832	385,529	385,700	0,171	125,4825	0	0,00%			
Rec	89,000	611.555,692	4.661.902,442	385,501	385,700	0,199	125,4825	0	0,00%			
Rec	90,000	611.556,613	4.661.902,053	385,475	385,700	0,225	125,4825	0	0,00%			
Rec	91,000	611.557,534	4.661.901,663	385,453	385,700	0,247	125,4825	0	0,00%			
Rec	92,000	611.558,455	4.661.901,273	385,434	385,700	0,266	125,4825	0	0,00%			
Rec	93,000	611.559,376	4.661.900,884	385,416	385,700	0,284	125,4825	0	0,00%			
Rec	94,000	611.560,297	4.661.900,494	385,399	385,700	0,301	125,4825	0	0,00%			
Rec	95,000	611.561,218	4.661.900,104	385,382	385,700	0,318	125,4825	0	0,00%			
Rec	95,937	611.562,081	4.661.899,739	385,369	385,700	0,331	125,4825		0,00%			
Rec	94,000	616.667,624	4.677.153,099	337,425	337,479	0,054	236,8388	0	0,94%			
Rec	95,000	616.667,077	4.677.152,261	337,437	337,489	0,052	236,8388	0	0,99%			
Rec	96,000	616.666,530	4.677.151,424	337,450	337,499	0,049	236,8388	0	1,04%			
Rec	97,000	616.665,983	4.677.150,587	337,462	337,510	0,048	236,8388	0	1,09%			
Rec	98,000	616.665,437	4.677.149,750	337,475	337,521	0,046	236,8388	0	1,14%			
Rec	99,000	616.664,890	4.677.148,913	337,488	337,532	0,044	236,8388	0	1,19%		V.	
Rec	100,000	616.664,343	4.677.148,075	337,500	337,544	0,044	236,8388	0	1,24%			
Rec	101,000	616.663,796	4.677.147,238	337,513	337,557	0,044	236,8388	0	1,29%			
Rec	102,000	616.663,249	4.677.146,401	337,525	337,570	0,045	236,8388	0	1,34%			
Rec	103,000	616.662,702	4.677.145,564	337,538	337,584	0,046	236,8388	0	1,39%			
Rec	104,000	616.662,155	4.677.144,727	337,550	337,598	0,048	236,8388	0	1,44%			
Rec	105,000	616.661,608	4.677.143,889	337,563	337,612	0,049	236,8388	0	1,49%			
Rec	106,000	616.661,061	4.677.143,052	337,575	337,628	0,053	236,8388	0	1,54%			
Rec	107,000	616.660,514	4.677.142,215	337,588	337,643	0,055	236,8388	0	1,59%			
Rec	108,000	616.659,967	4.677.141,378	337,600	337,659	0,059	236,8388	0	1,64%			
Rec	109,000	616.659,421	4.677.140,541	337,613	337,676	0,063	236,8388	0	1,69%			
Rec	110,000	616.658,874	4.677.139,704	337,626	337,693	0,067	236,8388	0	1,74%			
Rec	111,000	616.658,327	4.677.138,866	337,637	337,711	0,074	236,8388	0	1,79%			
Rec	112,000	616.657,780	4.677.138,029	337,647	337,729	0,082	236,8388	0	1,84%			
Rec	113,000	616.657,233	4.677.137,192	337,656	337,747	0,091	236,8388	0	1,89%			
Rec	114,000	616.656,686	4.677.136,355	337,666	337,766	0,100	236,8388	0	1,94%		T.S.	
Rec	114,882	616.656,204	4.677.135,616	337,674	337,784	0,110	236,8388	0	1,98%			
Rec	115,000	616.656,139	4.677.135,518	337,675	337,786	0,111	236,8388	0	1,98%			
Rec	116,000	616.655,592	4.677.134,680	337,686	337,806	0,120	236,8388	0	1,98%			
Rec	117,000	616.655,045	4.677.133,843	337,698	337,826	0,128	236,8388	0	1,98%			
Rec	118,000	616.654,498	4.677.133,006	337,711	337,846	0,135	236,8388	0	1,98%			
Rec	119,000	616.653,952	4.677.132,169	337,724	337,865	0,141	236,8388	0	1,98%			
Rec	120,000	616.653,405	4.677.131,332	337,738	337,885	0,147	236,8388	0	1,98%			
Rec	121,000	616.652,858	4.677.130,494	337,752	337,905	0,153	236,8388	0	1,98%			
Rec	122,000	616.652,311	4.677.129,657	337,766	337,925	0,159	236,8388	0	1,98%			
Rec	123,000	616.651,764	4.677.128,820	337,779	337,945	0,166	236,8388	0	1,98%			
Rec	124,000	616.651,217	4.677.127,983	337,792	337,965	0,173	236,8388	0	1,98%			
Rec	125,000	616.650,670	4.677.127,146	337,804	337,984	0,180	236,8388	0	1,98%			
Rec	126,000	616.650,123	4.677.126,308	337,817	338,004	0,187	236,8388	0	1,98%			
Rec	127,000	616.649,576	4.677.125,471	337,830	338,024	0,194	236,8388	0	1,98%			
Rec	128,000	616.649,029	4.677.124,634	337,846	338,044	0,198	236,8388	0	1,98%			
Rec	129,000	616.648,482	4.677.123,797	337,862	338,064	0,202	236,8388	0	1,98%			
Rec	130,000	616.647,936	4.677.122,960	337,878	338,083	0,205	236,8388	0	1,98%			
Rec	131,000	616.647,389	4.677.122,122	337,895	338,103	0,208	236,8388	0	1,98%			
Rec	132,000	616.646,842	4.677.121,285	337,912	338,123	0,211	236,8388	0	1,98%			
Rec	133,000	616.646,295	4.677.120,448	337,929	338,143	0,214	236,8388	0	1,98%			
Rec	134,000	616.645,748	4.677.119,611	337,946	338,163	0,217	236,8388	0	1,98%			
Rec	135,000	616.645,201	4.677.118,774	337,963	338,183	0,219	236,8388	0	1,98%			
Rec	136,000	616.644,654	4.677.117,936	337,977	338,202	0,225	236,8388	0	1,98%			
Rec	137,000	616.644,107	4.677.117,099	337,992	338,222	0,230	236,8388	0	1,98%			
Rec	138,000	616.643,560	4.677.116,262	338,008	338,242	0,234	236,8388	0	1,98%			
Rec	139,000	616.643,013	4.677.115,425	338,027	338,262	0,235	236,8388	0	1,98%			
Rec	140,000	616.642,467	4.677.114,588	338,046	338,282	0,236	236,8388	0	1,98%			
Rec	141,000	616.641,920	4.677.113,750	338,066	338,301	0,235	236,8388	0	1,98%			
Rec	142,000	616.641,373	4.677.112,913	338,085	338,321	0,236	236,8388	0	1,98%			
Rec	143,000	616.640,826	4.677.112,076	338,105	338,341	0,236	236,8388	0	1,98%			
Rec	144,000	616.640,279	4.677.111,239	338,124	338,361	0,237	236,8388	0	1,98%			
Rec	145,000	616.639,732	4.677.110,402	338,144	338,381	0,237	236,8388	0	1,98%			
Rec	146,000	616.639,185	4.677.109,565	338,164	338,400	0,236	236,8388	0	1,98%			
Rec	147,000	616.638,638	4.677.108,727	338,183	338,420	0,237	236,8388	0	1,98%			
Rec	148,000	616.638,091	4.677.107,890	338,208	338,440	0,232	236,8388	0	1,98%			
Rec	149,000	616.637,544	4.677.107,053	338,238	338,460	0,222	236,8388	0	1,98%			
Rec	150,000	616.636,997	4.677.106,216	338,267	338,480	0,213	236,8388	0	1,98%			
Rec	151,000	616.636,451	4.677.105,379	338,286	338,500	0,214	236,8388	0	1,98%			
Rec	152,000	616.635,904	4.677.104,541	338,315	338,519	0,204	236,8388	0	1,98%			
Rec	153,000	616.635,357	4.677.103,704	338,345	338,539	0,194	236,8388	0	1,98%			
Rec	154,000	616.634,810	4.677.102,867	338,376	338,559	0,183	236,8388	0	1,98%			
Rec	155,000	616.634,263	4.677.102,030	338,407	338,579	0,172	236,8388	0	1,98%			
Rec	156,000	616.633,716	4.677.101,193	338,439	338,599	0,160	236,8388	0	1,98%			
Rec	157,000	616.633,169	4.677.100,355	338,470	338,618	0,148	236,8388	0	1,98%			
Rec	158,000	616.632,622	4.677.099,518	338,502	338,638	0,136	236,8388	0	1,98%		T.E.	
Rec	158,517	616.632,339	4.677.099,085	338,518	338,648	0,130	236,8388	0	1,98%			
Rec	159,000	616.632,075	4.677.098,681	338,533	338,658	0,125	236,8388	0	2,03%			
Rec	160,000	616.631,528	4.677.097,844	338,564	338,679	0,115	236,8388	0	2,13%			
Rec	161,000	616.630,982	4.677.097,007	338,595	338,701	0,106	236,8388	0	2,23%			
Rec	162,000	616.630,435	4.677.096,169	338,627	338,724	0,097	236,8388	0	2,33%			
Rec	163,000	616.629,888	4.677.095,332	338,658	338,747	0,089	236,8388	0	2,43%			
Rec	164,000	616.629,341	4.677.094,495	338,689	338,772	0,083	236,8388	0	2,53%			
Rec	165,000	616.628,794	4.677.093,658	338,720	338,798	0,078	236,8388	0	2,63%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	166,000	616.628,247	4.677.092,821	338,751	338,825	0,074	236,8388	0	2,73%			
Rec	167,000	616.627,700	4.677.091,983	338,783	338,853	0,070	236,8388	0	2,83%			
Rec	168,000	616.627,153	4.677.091,146	338,814	338,881	0,067	236,8388	0	2,93%			
Rec	169,000	616.626,606	4.677.090,309	338,845	338,911	0,066	236,8388	0	3,03%		V.	
Rec	170,000	616.626,059	4.677.089,472	338,876	338,942	0,066	236,8388	0	3,13%			
Rec	171,000	616.625,512	4.677.088,635	338,907	338,974	0,067	236,8388	0	3,23%			
Rec	172,000	616.624,966	4.677.087,797	338,939	339,007	0,068	236,8388	0	3,33%			
Rec	173,000	616.624,419	4.677.086,960	338,970	339,040	0,070	236,8388	0	3,43%			
Rec	174,000	616.623,872	4.677.086,123	339,001	339,075	0,074	236,8388	0	3,53%			
Rec	175,000	616.623,325	4.677.085,286	339,039	339,111	0,072	236,8388	0	3,63%			
Rec	176,000	616.622,778	4.677.084,449	339,077	339,148	0,071	236,8388	0	3,73%			
Rec	177,000	616.622,231	4.677.083,611	339,114	339,186	0,072	236,8388	0	3,83%			
Rec	178,000	616.621,684	4.677.082,774	339,152	339,224	0,072	236,8388	0	3,93%			
Rec	179,000	616.621,137	4.677.081,937	339,187	339,264	0,077	236,8388	0	4,03%			
Rec	180,000	616.620,590	4.677.081,100	339,224	339,305	0,081	236,8388	0	4,13%			
Rec	181,000	616.620,043	4.677.080,263	339,261	339,347	0,086	236,8388	0	4,23%		T.S.	
Rec	181,483	616.619,779	4.677.079,858	339,279	339,367	0,088	236,8388	0	4,28%			
Rec	182,000	616.619,497	4.677.079,426	339,298	339,389	0,091	236,8388	0	4,28%			
Rec	183,000	616.618,950	4.677.078,588	339,335	339,432	0,097	236,8388	0	4,28%			
Rec	184,000	616.618,403	4.677.077,751	339,372	339,475	0,103	236,8388	0	4,28%			
Rec	185,000	616.617,856	4.677.076,914	339,410	339,518	0,108	236,8388	0	4,28%			
Rec	186,000	616.617,309	4.677.076,077	339,447	339,560	0,113	236,8388	0	4,28%			
Rec	187,000	616.616,762	4.677.075,240	339,484	339,603	0,119	236,8388	0	4,28%			
Rec	188,000	616.616,215	4.677.074,402	339,521	339,646	0,125	236,8388	0	4,28%			
Rec	189,000	616.615,668	4.677.073,565	339,558	339,689	0,131	236,8388	0	4,28%			
Rec	190,000	616.615,121	4.677.072,728	339,595	339,731	0,136	236,8388	0	4,28%			
Rec	191,000	616.614,574	4.677.071,891	339,632	339,774	0,142	236,8388	0	4,28%			
Rec	192,000	616.614,027	4.677.071,054	339,669	339,817	0,148	236,8388	0	4,28%			
Rec	193,000	616.613,481	4.677.070,216	339,706	339,860	0,154	236,8388	0	4,28%			
Rec	194,000	616.612,934	4.677.069,379	339,743	339,903	0,160	236,8388	0	4,28%			
Rec	195,000	616.612,387	4.677.068,542	339,780	339,945	0,165	236,8388	0	4,28%			
Rec	196,000	616.611,840	4.677.067,705	339,818	339,988	0,170	236,8388	0	4,28%			
Rec	197,000	616.611,293	4.677.066,868	339,855	340,031	0,176	236,8388	0	4,28%			
Rec	198,000	616.610,746	4.677.066,030	339,892	340,074	0,182	236,8388	0	4,28%			
Rec	199,000	616.610,199	4.677.065,193	339,930	340,116	0,186	236,8388	0	4,28%			
Rec	200,000	616.609,652	4.677.064,356	339,967	340,159	0,192	236,8388	0	4,28%			
Rec	201,000	616.609,105	4.677.063,519	340,006	340,202	0,196	236,8388	0	4,28%			
Rec	202,000	616.608,558	4.677.062,682	340,057	340,245	0,188	236,8388	0	4,28%			
Rec	203,000	616.608,011	4.677.061,844	340,108	340,287	0,179	236,8388	0	4,28%			
Rec	204,000	616.607,465	4.677.061,007	340,158	340,330	0,172	236,8388	0	4,28%			
Rec	205,000	616.606,918	4.677.060,170	340,209	340,373	0,164	236,8388	0	4,28%			
Rec	206,000	616.606,371	4.677.059,333	340,259	340,416	0,157	236,8388	0	4,28%			
Rec	207,000	616.605,824	4.677.058,496	340,310	340,459	0,149	236,8388	0	4,28%			
Rec	208,000	616.605,277	4.677.057,658	340,357	340,501	0,144	236,8388	0	4,28%			
Rec	209,000	616.604,730	4.677.056,821	340,404	340,544	0,140	236,8388	0	4,28%			
Rec	210,000	616.604,183	4.677.055,984	340,453	340,587	0,134	236,8388	0	4,28%			
Rec	211,000	616.603,636	4.677.055,147	340,502	340,630	0,128	236,8388	0	4,28%			
Rec	212,000	616.603,089	4.677.054,310	340,550	340,672	0,122	236,8388	0	4,28%			
Rec	213,000	616.602,542	4.677.053,472	340,597	340,715	0,118	236,8388	0	4,28%			
Rec	214,000	616.601,996	4.677.052,635	340,643	340,758	0,115	236,8388	0	4,28%			
Rec	215,000	616.601,449	4.677.051,798	340,692	340,801	0,109	236,8388	0	4,28%			
Rec	216,000	616.600,902	4.677.050,961	340,739	340,843	0,104	236,8388	0	4,28%			
Rec	217,000	616.600,355	4.677.050,124	340,785	340,886	0,101	236,8388	0	4,28%			
Rec	218,000	616.599,808	4.677.049,286	340,830	340,929	0,099	236,8388	0	4,28%			
Rec	219,000	616.599,261	4.677.048,449	340,876	340,972	0,096	236,8388	0	4,28%			
Rec	220,000	616.598,714	4.677.047,612	340,923	341,015	0,092	236,8388	0	4,28%			
Rec	221,000	616.598,167	4.677.046,775	340,968	341,057	0,089	236,8388	0	4,28%			
Rec	222,000	616.597,620	4.677.045,938	341,012	341,100	0,088	236,8388	0	4,28%			
Rec	223,000	616.597,073	4.677.045,101	341,053	341,143	0,090	236,8388	0	4,28%			
Rec	224,000	616.596,526	4.677.044,263	341,094	341,186	0,092	236,8388	0	4,28%			
Rec	225,000	616.595,980	4.677.043,426	341,135	341,228	0,093	236,8388	0	4,28%			
Rec	226,000	616.595,433	4.677.042,589	341,176	341,271	0,095	236,8388	0	4,28%			
Rec	227,000	616.594,886	4.677.041,752	341,218	341,314	0,096	236,8388	0	4,28%			
Rec	228,000	616.594,339	4.677.040,915	341,260	341,357	0,097	236,8388	0	4,28%			
Rec	229,000	616.593,792	4.677.040,077	341,302	341,400	0,098	236,8388	0	4,28%			
Rec	230,000	616.593,245	4.677.039,240	341,345	341,442	0,097	236,8388	0	4,28%			
Rec	231,000	616.592,698	4.677.038,403	341,388	341,485	0,097	236,8388	0	4,28%			
Rec	232,000	616.592,151	4.677.037,566	341,428	341,528	0,100	236,8388	0	4,28%			
Rec	233,000	616.591,604	4.677.036,729	341,468	341,571	0,103	236,8388	0	4,28%			
Rec	234,000	616.591,057	4.677.035,891	341,511	341,613	0,102	236,8388	0	4,28%			
Rec	235,000	616.590,511	4.677.035,054	341,554	341,656	0,102	236,8388	0	4,28%			
Rec	236,000	616.589,964	4.677.034,217	341,594	341,699	0,105	236,8388	0	4,28%			
Rec	237,000	616.589,417	4.677.033,380	341,634	341,742	0,108	236,8388	0	4,28%			
Rec	238,000	616.588,870	4.677.032,543	341,673	341,784	0,111	236,8388	0	4,28%			
Rec	239,000	616.588,323	4.677.031,705	341,710	341,827	0,117	236,8388	0	4,28%			
Rec	240,000	616.587,776	4.677.030,868	341,748	341,870	0,122	236,8388	0	4,28%			
Rec	241,000	616.587,229	4.677.030,031	341,785	341,913	0,128	236,8388	0	4,28%			
Rec	242,000	616.586,682	4.677.029,194	341,822	341,956	0,134	236,8388	0	4,28%			
Rec	243,000	616.586,135	4.677.028,357	341,859	341,998	0,139	236,8388	0	4,28%			
Rec	244,000	616.585,588	4.677.027,519	341,896	342,041	0,145	236,8388	0	4,28%			
Rec	245,000	616.585,041	4.677.026,682	341,933	342,084	0,151	236,8388	0	4,28%			
Rec	246,000	616.584,495	4.677.025,845	341,971	342,127	0,156	236,8388	0	4,28%			
Rec	247,000	616.583,948	4.677.025,008	342,012	342,169	0,157	236,8388	0	4,28%			
Rec	248,000	616.583,401	4.677.024,171	342,067	342,212	0,145	236,8388	0	4,28%			
Rec	249,000	616.582,854	4.677.023,333	342,123	342,255	0,132	236,8388	0	4,28%			
Rec	250,000	616.582,307	4.677.022,496	342,176	342,298	0,122	236,8388	0	4,28%			
Rec	251,000	616.581,760	4.677.021,659	342,231	342,340	0,109	236,8388	0	4,28%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	252,000	616.581,213	4.677.020,822	342,286	342,383	0,097	236,8388	0	4,28%			
Rec	253,000	616.580,666	4.677.019,985	342,341	342,426	0,085	236,8388	0	4,28%			
Rec	254,000	616.580,119	4.677.019,147	342,389	342,469	0,080	236,8388	0	4,28%			
Rec	255,000	616.579,572	4.677.018,310	342,442	342,512	0,070	236,8388	0	4,28%			
Rec	256,000	616.579,026	4.677.017,473	342,495	342,554	0,059	236,8388	0	4,28%			
Rec	257,000	616.578,479	4.677.016,636	342,535	342,597	0,062	236,8388	0	4,28%			
Rec	258,000	616.577,932	4.677.015,799	342,586	342,640	0,054	236,8388	0	4,28%			
Rec	259,000	616.577,385	4.677.014,962	342,626	342,683	0,057	236,8388	0	4,28%			
Rec	260,000	616.576,838	4.677.014,124	342,660	342,725	0,065	236,8388	0	4,28%			
Rec	261,000	616.576,291	4.677.013,287	342,696	342,768	0,072	236,8388	0	4,28%			
Rec	262,000	616.575,744	4.677.012,450	342,741	342,811	0,070	236,8388	0	4,28%			
Rec	263,000	616.575,197	4.677.011,613	342,775	342,854	0,079	236,8388	0	4,28%			
Rec	264,000	616.574,650	4.677.010,776	342,816	342,897	0,081	236,8388	0	4,28%			
Rec	265,000	616.574,103	4.677.009,938	342,851	342,939	0,088	236,8388	0	4,28%			
Rec	266,000	616.573,556	4.677.009,101	342,884	342,982	0,098	236,8388	0	4,28%			
Rec	267,000	616.573,010	4.677.008,264	342,918	343,025	0,107	236,8388	0	4,28%			
Rec	268,000	616.572,463	4.677.007,427	342,950	343,068	0,118	236,8388	0	4,28%			
Rec	269,000	616.571,916	4.677.006,590	342,981	343,110	0,129	236,8388	0	4,28%			
Rec	270,000	616.571,369	4.677.005,752	343,015	343,153	0,138	236,8388	0	4,28%			
Rec	271,000	616.570,822	4.677.004,915	343,056	343,196	0,140	236,8388	0	4,28%			
Rec	272,000	616.570,275	4.677.004,078	343,099	343,239	0,140	236,8388	0	4,28%			
Rec	273,000	616.569,728	4.677.003,241	343,142	343,281	0,139	236,8388	0	4,28%			
Rec	274,000	616.569,181	4.677.002,404	343,191	343,324	0,133	236,8388	0	4,28%			
Rec	275,000	616.568,634	4.677.001,566	343,235	343,367	0,132	236,8388	0	4,28%			
Rec	276,000	616.568,087	4.677.000,729	343,277	343,410	0,133	236,8388	0	4,28%			
Rec	277,000	616.567,541	4.676.999,892	343,314	343,453	0,139	236,8388	0	4,28%			
Rec	278,000	616.566,994	4.676.999,055	343,368	343,495	0,127	236,8388	0	4,28%			
Rec	279,000	616.566,447	4.676.998,218	343,421	343,538	0,117	236,8388	0	4,28%			
Rec	280,000	616.565,900	4.676.997,380	343,465	343,581	0,116	236,8388	0	4,28%			
Rec	281,000	616.565,353	4.676.996,543	343,527	343,624	0,097	236,8388	0	4,28%			
Rec	282,000	616.564,806	4.676.995,706	343,587	343,666	0,079	236,8388	0	4,28%			
Rec	283,000	616.564,259	4.676.994,869	343,646	343,709	0,063	236,8388	0	4,28%			
Rec	284,000	616.563,712	4.676.994,032	343,705	343,752	0,047	236,8388	0	4,28%		T.E.	
Rec	284,997	616.563,167	4.676.993,197	343,764	343,795	0,031	236,8388	0	4,28%			
Rec	285,000	616.563,165	4.676.993,194	343,764	343,795	0,031	236,8388	0	4,28%			
Rec	286,000	616.562,618	4.676.992,357	343,823	343,836	0,013	236,8388	0	4,08%			
Rec	287,000	616.562,071	4.676.991,520	343,883	343,876	-0,007	236,8388	0	3,88%			
Rec	288,000	616.561,525	4.676.990,683	343,943	343,914	-0,029	236,8388	0	3,68%			
Rec	289,000	616.560,978	4.676.989,846	344,001	343,950	-0,051	236,8388	0	3,48%			
Rec	290,000	616.560,431	4.676.989,008	344,024	343,984	-0,040	236,8388	0	3,28%			
Rec	291,000	616.559,884	4.676.988,171	344,045	344,015	-0,030	236,8388	0	3,08%			
Rec	292,000	616.559,337	4.676.987,334	344,067	344,045	-0,022	236,8388	0	2,88%			
Rec	293,000	616.558,790	4.676.986,497	344,089	344,073	-0,016	236,8388	0	2,68%			
Rec	294,000	616.558,243	4.676.985,660	344,110	344,099	-0,011	236,8388	0	2,48%	P.S.	V.	
Cur	294,686	616.557,868	4.676.985,085	344,125	344,115	-0,010	236,8388	400	2,34%			
Cur	295,000	616.557,696	4.676.984,823	344,132	344,122	-0,010	236,8888	400	2,28%			
Cur	296,000	616.557,148	4.676.983,987	344,152	344,144	-0,008	237,0480	400	2,08%			
Cur	297,000	616.556,597	4.676.983,152	344,171	344,164	-0,007	237,2071	400	1,88%			
Cur	298,000	616.556,044	4.676.982,318	344,190	344,182	-0,008	237,3663	400	1,68%			
Cur	299,000	616.555,489	4.676.981,487	344,207	344,197	-0,010	237,5254	400	1,48%			
Cur	300,000	616.554,932	4.676.980,656	344,222	344,211	-0,011	237,6846	400	1,28%			
Cur	301,000	616.554,373	4.676.979,827	344,235	344,223	-0,012	237,8438	400	1,08%			
Cur	302,000	616.553,812	4.676.978,999	344,245	344,233	-0,012	238,0029	400	0,88%			
Cur	303,000	616.553,249	4.676.978,173	344,252	344,240	-0,012	238,1621	400	0,68%			
Cur	304,000	616.552,684	4.676.977,348	344,258	344,246	-0,012	238,3212	400	0,48%		T.S.	
Cur	304,375	616.552,471	4.676.977,039	344,260	344,248	-0,012	238,3809	400	0,40%			
Cur	305,000	616.552,116	4.676.976,524	344,262	344,250	-0,012	238,4804	400	0,40%			
Cur	306,000	616.551,547	4.676.975,702	344,267	344,255	-0,012	238,6395	400	0,40%			
Cur	307,000	616.550,976	4.676.974,881	344,275	344,259	-0,016	238,7987	400	0,40%			
Cur	308,000	616.550,402	4.676.974,062	344,283	344,263	-0,020	238,9578	400	0,40%			
Cur	309,000	616.549,827	4.676.973,244	344,291	344,267	-0,024	239,1170	400	0,40%			
Cur	310,000	616.549,249	4.676.972,428	344,288	344,271	-0,017	239,2761	400	0,40%			
Cur	311,000	616.548,670	4.676.971,613	344,283	344,275	-0,008	239,4353	400	0,40%			
Cur	312,000	616.548,088	4.676.970,800	344,278	344,279	0,001	239,5945	400	0,40%			
Cur	313,000	616.547,504	4.676.969,988	344,275	344,283	0,008	239,7536	400	0,40%			
Cur	314,000	616.546,919	4.676.969,177	344,275	344,287	0,012	239,9128	400	0,40%			
Cur	315,000	616.546,331	4.676.968,368	344,277	344,291	0,014	240,0719	400	0,40%			
Cur	316,000	616.545,741	4.676.967,560	344,278	344,295	0,017	240,2311	400	0,40%			
Cur	317,000	616.545,150	4.676.966,754	344,276	344,299	0,023	240,3902	400	0,40%			
Cur	318,000	616.544,556	4.676.965,950	344,272	344,303	0,031	240,5494	400	0,40%			
Cur	319,000	616.543,960	4.676.965,146	344,266	344,307	0,041	240,7085	400	0,40%			
Cur	320,000	616.543,362	4.676.964,345	344,259	344,311	0,052	240,8677	400	0,40%			
Cur	321,000	616.542,763	4.676.963,545	344,252	344,315	0,063	241,0269	400	0,40%			
Cur	322,000	616.542,161	4.676.962,746	344,246	344,319	0,073	241,1860	400	0,40%			
Cur	323,000	616.541,557	4.676.961,949	344,240	344,323	0,083	241,3452	400	0,40%			
Cur	324,000	616.540,951	4.676.961,153	344,233	344,327	0,094	241,5043	400	0,40%			
Cur	325,000	616.540,344	4.676.960,359	344,223	344,331	0,108	241,6635	400	0,40%			
Cur	326,000	616.539,734	4.676.959,566	344,211	344,335	0,124	241,8226	400	0,40%			
Cur	327,000	616.539,122	4.676.958,775	344,203	344,339	0,136	241,9818	400	0,40%			
Cur	328,000	616.538,509	4.676.957,986	344,197	344,343	0,146	242,1409	400	0,40%			
Cur	329,000	616.537,893	4.676.957,198	344,197	344,347	0,150	242,3001	400	0,40%			
Cur	330,000	616.537,275	4.676.956,411	344,197	344,351	0,154	242,4592	400	0,40%			
Cur	331,000	616.536,656	4.676.955,626	344,197	344,355	0,158	242,6184	400	0,40%			
Cur	332,000	616.536,034	4.676.954,843	344,197	344,359	0,162	242,7776	400	0,40%			
Cur	333,000	616.535,411	4.676.954,061	344,196	344,363	0,167	242,9367	400	0,40%			
Cur	334,000	616.534,785	4.676.953,281	344,196	344,367	0,171	243,0959	400	0,40%			
Cur	335,000	616.534,158	4.676.952,502	344,202	344,371	0,169	243,2550	400	0,40%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	336,000	616.533,529	4.676.951,725	344,196	344,375	0,179	243,4142	400	0,40%			
Cur	337,000	616.532,897	4.676.950,949	344,185	344,379	0,194	243,5733	400	0,40%			
Cur	338,000	616.532,264	4.676.950,175	344,176	344,383	0,207	243,7325	400	0,40%			
Cur	339,000	616.531,629	4.676.949,403	344,188	344,387	0,199	243,8916	400	0,40%			
Cur	340,000	616.530,992	4.676.948,632	344,186	344,391	0,205	244,0508	400	0,40%			
Cur	341,000	616.530,353	4.676.947,863	344,200	344,395	0,195	244,2100	400	0,40%			
Cur	342,000	616.529,712	4.676.947,095	344,208	344,399	0,191	244,3691	400	0,40%			
Cur	343,000	616.529,069	4.676.946,329	344,217	344,403	0,186	244,5283	400	0,40%			
Cur	344,000	616.528,424	4.676.945,565	344,219	344,407	0,188	244,6874	400	0,40%			
Cur	345,000	616.527,778	4.676.944,802	344,229	344,411	0,182	244,8466	400	0,40%			
Cur	346,000	616.527,129	4.676.944,041	344,236	344,415	0,179	245,0057	400	0,40%			
Cur	347,000	616.526,479	4.676.943,281	344,245	344,419	0,174	245,1649	400	0,40%			
Cur	348,000	616.525,826	4.676.942,524	344,259	344,423	0,164	245,3240	400	0,40%			
Cur	349,000	616.525,172	4.676.941,767	344,273	344,428	0,155	245,4832	400	0,40%			
Cur	350,000	616.524,516	4.676.941,013	344,295	344,432	0,137	245,6423	400	0,40%			
Cur	351,000	616.523,858	4.676.940,260	344,312	344,436	0,124	245,8015	400	0,40%			
Cur	352,000	616.523,198	4.676.939,508	344,323	344,440	0,117	245,9607	400	0,40%			
Cur	353,000	616.522,536	4.676.938,759	344,353	344,444	0,091	246,1198	400	0,40%			
Cur	354,000	616.521,873	4.676.938,011	344,374	344,448	0,074	246,2790	400	0,40%			
Cur	355,000	616.521,207	4.676.937,264	344,397	344,452	0,055	246,4381	400	0,40%			
Cur	356,000	616.520,540	4.676.936,519	344,403	344,456	0,053	246,5973	400	0,40%			
Cur	357,000	616.519,870	4.676.935,776	344,413	344,460	0,047	246,7564	400	0,40%			
Cur	358,000	616.519,199	4.676.935,035	344,461	344,464	0,003	246,9156	400	0,40%		T.E.	
Cur	358,660	616.518,755	4.676.934,547	344,472	344,466	-0,005	247,0206	400	0,40%			
Cur	359,000	616.518,526	4.676.934,295	344,477	344,468	-0,009	247,0747	400	0,45%			
Cur	360,000	616.517,852	4.676.933,557	344,483	344,473	-0,010	247,2339	400	0,58%			
Cur	361,000	616.517,175	4.676.932,821	344,499	344,479	-0,020	247,3930	400	0,71%			
Cur	362,000	616.516,496	4.676.932,086	344,491	344,487	-0,004	247,5522	400	0,85%			
Cur	363,000	616.515,816	4.676.931,354	344,488	344,496	0,008	247,7114	400	0,98%			
Cur	364,000	616.515,134	4.676.930,622	344,490	344,507	0,017	247,8705	400	1,11%			
Cur	365,000	616.514,450	4.676.929,893	344,492	344,519	0,027	248,0297	400	1,25%			
Cur	366,000	616.513,764	4.676.929,165	344,494	344,532	0,038	248,1888	400	1,38%			
Cur	367,000	616.513,077	4.676.928,439	344,500	344,546	0,046	248,3480	400	1,51%			
Cur	368,000	616.512,387	4.676.927,715	344,505	344,562	0,057	248,5071	400	1,65%			
Cur	369,000	616.511,696	4.676.926,992	344,508	344,579	0,071	248,6663	400	1,78%		V.	
Cur	370,000	616.511,003	4.676.926,271	344,512	344,598	0,086	248,8254	400	1,91%			
Cur	371,000	616.510,308	4.676.925,552	344,522	344,618	0,096	248,9846	400	2,05%			
Cur	372,000	616.509,611	4.676.924,834	344,538	344,639	0,101	249,1438	400	2,18%			
Cur	373,000	616.508,913	4.676.924,119	344,557	344,661	0,104	249,3029	400	2,31%			
Cur	374,000	616.508,213	4.676.923,405	344,582	344,685	0,103	249,4621	400	2,45%			
Cur	375,000	616.507,511	4.676.922,693	344,611	344,710	0,099	249,6212	400	2,58%			
Cur	376,000	616.506,807	4.676.921,982	344,645	344,737	0,092	249,7804	400	2,71%			
Cur	377,000	616.506,101	4.676.921,274	344,680	344,764	0,084	249,9395	400	2,85%			
Cur	378,000	616.505,394	4.676.920,567	344,717	344,794	0,077	250,0987	400	2,98%			
Cur	379,000	616.504,685	4.676.919,862	344,755	344,824	0,069	250,2578	400	3,11%			
Cur	380,000	616.503,974	4.676.919,158	344,794	344,856	0,062	250,4170	400	3,25%			
Cur	381,000	616.503,262	4.676.918,457	344,831	344,889	0,058	250,5761	400	3,38%		T.S.	
Cur	381,340	616.503,019	4.676.918,219	344,844	344,900	0,057	250,6303	400	3,43%			
Cur	382,000	616.502,547	4.676.917,757	344,868	344,923	0,055	250,7353	400	3,43%			
Cur	383,000	616.501,831	4.676.917,059	344,905	344,957	0,052	250,8945	400	3,43%			
Cur	384,000	616.501,113	4.676.916,363	344,942	344,992	0,050	251,0536	400	3,43%			
Cur	385,000	616.500,394	4.676.915,668	344,979	345,026	0,047	251,2128	400	3,43%			
Cur	386,000	616.499,672	4.676.914,976	345,021	345,060	0,039	251,3719	400	3,43%			
Cur	387,000	616.498,949	4.676.914,285	345,069	345,094	0,025	251,5311	400	3,43%			
Cur	388,000	616.498,225	4.676.913,596	345,118	345,129	0,011	251,6902	400	3,43%			
Cur	389,000	616.497,498	4.676.912,909	345,166	345,163	-0,003	251,8494	400	3,43%			
Cur	390,000	616.496,770	4.676.912,223	345,214	345,197	-0,017	252,0085	400	3,43%			
Cur	391,000	616.496,040	4.676.911,540	345,262	345,231	-0,031	252,1677	400	3,43%			
Cur	392,000	616.495,308	4.676.910,858	345,311	345,266	-0,045	252,3269	400	3,43%			
Cur	393,000	616.494,575	4.676.910,178	345,359	345,300	-0,059	252,4860	400	3,43%			
Cur	394,000	616.493,840	4.676.909,500	345,407	345,334	-0,073	252,6452	400	3,43%			
Cur	395,000	616.493,103	4.676.908,824	345,456	345,368	-0,088	252,8043	400	3,43%			
Cur	396,000	616.492,365	4.676.908,150	345,504	345,403	-0,101	252,9635	400	3,43%			
Cur	397,000	616.491,625	4.676.907,477	345,553	345,437	-0,116	253,1226	400	3,43%			
Cur	398,000	616.490,883	4.676.906,806	345,601	345,471	-0,130	253,2818	400	3,43%			
Cur	399,000	616.490,140	4.676.906,138	345,650	345,505	-0,145	253,4409	400	3,43%			
Cur	400,000	616.489,394	4.676.905,471	345,698	345,540	-0,158	253,6001	400	3,43%			
Cur	401,000	616.488,648	4.676.904,806	345,747	345,574	-0,173	253,7592	400	3,43%			
Cur	402,000	616.487,899	4.676.904,142	345,795	345,608	-0,187	253,9184	400	3,43%			
Cur	403,000	616.487,149	4.676.903,481	345,844	345,642	-0,202	254,0776	400	3,43%			
Cur	404,000	616.486,397	4.676.902,822	345,893	345,677	-0,216	254,2367	400	3,43%			
Cur	405,000	616.485,644	4.676.902,164	345,942	345,711	-0,231	254,3959	400	3,43%			
Cur	406,000	616.484,889	4.676.901,508	345,991	345,745	-0,246	254,5550	400	3,43%			
Cur	407,000	616.484,132	4.676.900,855	346,032	345,780	-0,252	254,7142	400	3,43%			
Cur	408,000	616.483,374	4.676.900,203	346,070	345,814	-0,256	254,8733	400	3,43%			
Cur	409,000	616.482,614	4.676.899,553	346,106	345,848	-0,258	255,0325	400	3,43%			
Cur	410,000	616.481,853	4.676.898,905	346,143	345,882	-0,261	255,1916	400	3,43%			
Cur	411,000	616.481,089	4.676.898,258	346,180	345,917	-0,263	255,3508	400	3,43%			
Cur	412,000	616.480,325	4.676.897,614	346,215	345,951	-0,264	255,5100	400	3,43%			
Cur	413,000	616.479,558	4.676.896,972	346,251	345,985	-0,266	255,6691	400	3,43%			
Cur	414,000	616.478,790	4.676.896,331	346,286	346,019	-0,267	255,8283	400	3,43%			
Cur	415,000	616.478,021	4.676.895,693	346,320	346,054	-0,266	255,9874	400	3,43%			
Cur	416,000	616.477,249	4.676.895,056	346,354	346,088	-0,266	256,1466	400	3,43%			
Cur	417,000	616.476,477	4.676.894,421	346,388	346,122	-0,266	256,3057	400	3,43%			
Cur	418,000	616.475,702	4.676.893,789	346,423	346,156	-0,267	256,4649	400	3,43%			
Cur	419,000	616.474,926	4.676.893,158	346,458	346,191	-0,267	256,6240	400	3,43%			
Cur	420,000	616.474,149	4.676.892,529	346,495	346,225	-0,270	256,7832	400	3,43%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	421,000	616.473,370	4.676.891,902	346,531	346,259	-0,272	256,9423	400	3,43%			
Cur	422,000	616.472,589	4.676.891,277	346,568	346,293	-0,275	257,1015	400	3,43%			
Cur	423,000	616.471,807	4.676.890,654	346,604	346,328	-0,276	257,2607	400	3,43%			
Cur	424,000	616.471,023	4.676.890,033	346,640	346,362	-0,278	257,4198	400	3,43%			
Cur	425,000	616.470,238	4.676.889,414	346,676	346,396	-0,280	257,5790	400	3,43%			
Cur	426,000	616.469,451	4.676.888,797	346,712	346,430	-0,282	257,7381	400	3,43%			
Cur	427,000	616.468,663	4.676.888,182	346,748	346,465	-0,283	257,8973	400	3,43%			
Cur	428,000	616.467,873	4.676.887,568	346,785	346,499	-0,286	258,0564	400	3,43%			
Cur	429,000	616.467,081	4.676.886,957	346,821	346,533	-0,288	258,2156	400	3,43%			
Cur	430,000	616.466,288	4.676.886,348	346,857	346,567	-0,290	258,3747	400	3,43%			
Cur	431,000	616.465,494	4.676.885,741	346,894	346,602	-0,292	258,5339	400	3,43%			
Cur	432,000	616.464,698	4.676.885,135	346,930	346,636	-0,294	258,6931	400	3,43%			
Cur	433,000	616.463,900	4.676.884,532	346,966	346,670	-0,296	258,8522	400	3,43%			
Cur	434,000	616.463,101	4.676.883,931	347,002	346,704	-0,298	259,0114	400	3,43%			
Cur	435,000	616.462,301	4.676.883,332	347,031	346,739	-0,292	259,1705	400	3,43%			
Cur	436,000	616.461,499	4.676.882,734	347,061	346,773	-0,288	259,3297	400	3,43%			
Cur	437,000	616.460,695	4.676.882,139	347,089	346,807	-0,282	259,4888	400	3,43%			
Cur	438,000	616.459,890	4.676.881,546	347,118	346,841	-0,277	259,6480	400	3,43%			
Cur	439,000	616.459,084	4.676.880,954	347,147	346,876	-0,271	259,8071	400	3,43%			
Cur	440,000	616.458,276	4.676.880,365	347,176	346,910	-0,266	259,9663	400	3,43%			
Cur	441,000	616.457,466	4.676.879,778	347,204	346,944	-0,260	260,1254	400	3,43%			
Cur	442,000	616.456,655	4.676.879,193	347,231	346,979	-0,252	260,2846	400	3,43%			
Cur	443,000	616.455,843	4.676.878,610	347,259	347,013	-0,246	260,4438	400	3,43%			
Cur	444,000	616.455,029	4.676.878,029	347,286	347,047	-0,239	260,6029	400	3,43%			
Cur	445,000	616.454,214	4.676.877,450	347,313	347,081	-0,232	260,7621	400	3,43%			
Cur	446,000	616.453,397	4.676.876,873	347,341	347,116	-0,225	260,9212	400	3,43%			
Cur	447,000	616.452,579	4.676.876,298	347,368	347,150	-0,218	261,0804	400	3,43%			
Cur	448,000	616.451,759	4.676.875,725	347,395	347,184	-0,211	261,2395	400	3,43%			
Cur	449,000	616.450,938	4.676.875,154	347,423	347,218	-0,205	261,3987	400	3,43%			
Cur	450,000	616.450,116	4.676.874,585	347,452	347,253	-0,199	261,5578	400	3,43%			
Cur	451,000	616.449,292	4.676.874,018	347,481	347,287	-0,194	261,7170	400	3,43%			
Cur	452,000	616.448,467	4.676.873,453	347,511	347,321	-0,190	261,8761	400	3,43%			
Cur	453,000	616.447,640	4.676.872,891	347,541	347,355	-0,186	262,0353	400	3,43%			
Cur	454,000	616.446,812	4.676.872,330	347,571	347,390	-0,181	262,1945	400	3,43%			
Cur	455,000	616.445,982	4.676.871,772	347,600	347,424	-0,176	262,3536	400	3,43%			
Cur	456,000	616.445,152	4.676.871,215	347,630	347,458	-0,172	262,5128	400	3,43%			
Cur	457,000	616.444,319	4.676.870,661	347,659	347,492	-0,167	262,6719	400	3,43%			
Cur	458,000	616.443,486	4.676.870,108	347,689	347,527	-0,162	262,8311	400	3,43%			
Cur	459,000	616.442,651	4.676.869,558	347,718	347,561	-0,157	262,9902	400	3,43%			
Cur	460,000	616.441,814	4.676.869,010	347,747	347,595	-0,152	263,1494	400	3,43%			
Cur	461,000	616.440,976	4.676.868,464	347,773	347,629	-0,144	263,3085	400	3,43%			
Cur	462,000	616.440,137	4.676.867,920	347,799	347,664	-0,135	263,4677	400	3,43%			
Cur	463,000	616.439,297	4.676.867,378	347,827	347,698	-0,129	263,6269	400	3,43%			
Cur	464,000	616.438,455	4.676.866,839	347,856	347,732	-0,124	263,7860	400	3,43%			
Cur	465,000	616.437,612	4.676.866,301	347,886	347,766	-0,120	263,9452	400	3,43%			
Cur	466,000	616.436,767	4.676.865,766	347,916	347,801	-0,115	264,1043	400	3,43%			
Cur	467,000	616.435,921	4.676.865,232	347,945	347,835	-0,110	264,2635	400	3,43%			
Cur	468,000	616.435,074	4.676.864,701	347,974	347,869	-0,105	264,4226	400	3,43%			
Cur	469,000	616.434,226	4.676.864,172	348,003	347,903	-0,100	264,5818	400	3,43%			
Cur	470,000	616.433,376	4.676.863,645	348,035	347,938	-0,097	264,7409	400	3,43%			
Cur	471,000	616.432,525	4.676.863,120	348,064	347,972	-0,092	264,9001	400	3,43%			
Cur	472,000	616.431,672	4.676.862,597	348,088	348,006	-0,082	265,0592	400	3,43%			
Cur	473,000	616.430,818	4.676.862,076	348,114	348,041	-0,073	265,2184	400	3,43%			
Cur	474,000	616.429,963	4.676.861,558	348,141	348,075	-0,066	265,3776	400	3,43%			
Cur	475,000	616.429,107	4.676.861,042	348,167	348,109	-0,058	265,5367	400	3,43%			
Cur	476,000	616.428,249	4.676.860,527	348,194	348,143	-0,051	265,6959	400	3,43%			
Cur	477,000	616.427,390	4.676.860,015	348,221	348,178	-0,043	265,8550	400	3,43%			
Cur	478,000	616.426,530	4.676.859,505	348,251	348,212	-0,039	266,0142	400	3,43%			
Cur	479,000	616.425,669	4.676.858,998	348,279	348,246	-0,033	266,1733	400	3,43%			
Cur	480,000	616.424,806	4.676.858,492	348,308	348,280	-0,028	266,3325	400	3,43%			
Cur	481,000	616.423,942	4.676.857,989	348,339	348,315	-0,024	266,4916	400	3,43%			
Cur	482,000	616.423,077	4.676.857,487	348,369	348,349	-0,020	266,6508	400	3,43%			
Cur	483,000	616.422,210	4.676.856,988	348,397	348,383	-0,014	266,8100	400	3,43%			
Cur	484,000	616.421,342	4.676.856,491	348,426	348,417	-0,009	266,9691	400	3,43%			
Cur	485,000	616.420,473	4.676.855,996	348,453	348,452	-0,001	267,1283	400	3,43%			
Cur	486,000	616.419,603	4.676.855,504	348,481	348,486	0,005	267,2874	400	3,43%			
Cur	487,000	616.418,731	4.676.855,013	348,510	348,520	0,010	267,4466	400	3,43%			
Cur	488,000	616.417,859	4.676.854,525	348,540	348,554	0,014	267,6057	400	3,43%			
Cur	489,000	616.416,985	4.676.854,039	348,570	348,589	0,019	267,7649	400	3,43%			
Cur	490,000	616.416,110	4.676.853,555	348,603	348,623	0,020	267,9240	400	3,43%			
Cur	491,000	616.415,233	4.676.853,073	348,636	348,657	0,021	268,0832	400	3,43%			
Cur	492,000	616.414,356	4.676.852,594	348,668	348,691	0,023	268,2423	400	3,43%			
Cur	493,000	616.413,477	4.676.852,117	348,701	348,726	0,025	268,4015	400	3,43%			
Cur	494,000	616.412,597	4.676.851,641	348,733	348,760	0,027	268,5607	400	3,43%			
Cur	495,000	616.411,716	4.676.851,168	348,765	348,794	0,029	268,7198	400	3,43%			
Cur	496,000	616.410,834	4.676.850,698	348,796	348,828	0,032	268,8790	400	3,43%			
Cur	497,000	616.409,950	4.676.850,229	348,828	348,863	0,035	269,0381	400	3,43%			
Cur	498,000	616.409,066	4.676.849,763	348,860	348,897	0,037	269,1973	400	3,43%			
Cur	499,000	616.408,180	4.676.849,299	348,891	348,931	0,040	269,3564	400	3,43%			
Cur	500,000	616.407,293	4.676.848,837	348,923	348,965	0,042	269,5156	400	3,43%			
Cur	501,000	616.406,405	4.676.848,377	348,955	349,000	0,045	269,6747	400	3,43%			
Cur	502,000	616.405,516	4.676.847,920	348,986	349,034	0,048	269,8339	400	3,43%	P.S.		
Rec	502,713	616.404,881	4.676.847,595	349,010	349,058	0,048	269,9473	0	3,43%			
Rec	503,000	616.404,625	4.676.847,465	349,021	349,068	0,047	269,9473	0	3,43%			
Rec	504,000	616.403,735	4.676.847,010	349,057	349,102	0,045	269,9473	0	3,43%			
Rec	505,000	616.402,844	4.676.846,555	349,093	349,137	0,044	269,9473	0	3,43%			
Rec	506,000	616.401,953	4.676.846,100	349,129	349,171	0,042	269,9473	0	3,43%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	507,000	616.401,063	4.676.845,646	349,165	349,205	0,040	269,9473	0	3,43%			
Rec	508,000	616.400,172	4.676.845,191	349,201	349,240	0,039	269,9473	0	3,43%			
Rec	509,000	616.399,282	4.676.844,736	349,237	349,274	0,037	269,9473	0	3,43%			
Rec	510,000	616.398,391	4.676.844,282	349,273	349,308	0,035	269,9473	0	3,43%			
Rec	511,000	616.397,500	4.676.843,827	349,309	349,342	0,033	269,9473	0	3,43%			
Rec	512,000	616.396,610	4.676.843,372	349,345	349,377	0,032	269,9473	0	3,43%			
Rec	513,000	616.395,719	4.676.842,917	349,381	349,411	0,030	269,9473	0	3,43%			
Rec	514,000	616.394,828	4.676.842,463	349,417	349,445	0,028	269,9473	0	3,43%			
Rec	515,000	616.393,938	4.676.842,008	349,453	349,479	0,026	269,9473	0	3,43%			
Rec	516,000	616.393,047	4.676.841,553	349,489	349,514	0,025	269,9473	0	3,43%			
Rec	517,000	616.392,156	4.676.841,098	349,525	349,548	0,023	269,9473	0	3,43%			
Rec	518,000	616.391,266	4.676.840,644	349,561	349,582	0,021	269,9473	0	3,43%			
Rec	519,000	616.390,375	4.676.840,189	349,597	349,616	0,019	269,9473	0	3,43%			
Rec	520,000	616.389,485	4.676.839,734	349,633	349,651	0,018	269,9473	0	3,43%			
Rec	521,000	616.388,594	4.676.839,280	349,669	349,685	0,016	269,9473	0	3,43%			
Rec	522,000	616.387,703	4.676.838,825	349,705	349,719	0,014	269,9473	0	3,43%			
Rec	523,000	616.386,813	4.676.838,370	349,741	349,753	0,012	269,9473	0	3,43%			
Rec	524,000	616.385,922	4.676.837,915	349,778	349,788	0,010	269,9473	0	3,43%			
Rec	525,000	616.385,031	4.676.837,461	349,814	349,822	0,008	269,9473	0	3,43%			
Rec	526,000	616.384,141	4.676.837,006	349,850	349,856	0,006	269,9473	0	3,43%			
Rec	527,000	616.383,250	4.676.836,551	349,886	349,890	0,004	269,9473	0	3,43%			
Rec	528,000	616.382,360	4.676.836,096	349,921	349,925	0,004	269,9473	0	3,43%			
Rec	529,000	616.381,469	4.676.835,642	349,956	349,959	0,003	269,9473	0	3,43%			
Rec	530,000	616.380,578	4.676.835,187	349,990	349,993	0,003	269,9473	0	3,43%			
Rec	531,000	616.379,688	4.676.834,732	350,014	350,027	0,013	269,9473	0	3,43%			
Rec	532,000	616.378,797	4.676.834,278	350,035	350,062	0,027	269,9473	0	3,43%			
Rec	533,000	616.377,906	4.676.833,823	350,056	350,096	0,040	269,9473	0	3,43%			
Rec	534,000	616.377,016	4.676.833,368	350,076	350,130	0,054	269,9473	0	3,43%			
Rec	535,000	616.376,125	4.676.832,913	350,097	350,164	0,067	269,9473	0	3,43%			
Rec	536,000	616.375,235	4.676.832,459	350,118	350,199	0,081	269,9473	0	3,43%			
Rec	537,000	616.374,344	4.676.832,004	350,138	350,233	0,095	269,9473	0	3,43%			
Rec	538,000	616.373,453	4.676.831,549	350,156	350,267	0,111	269,9473	0	3,43%		T.E.	
Rec	538,838	616.372,707	4.676.831,168	350,171	350,296	0,125	269,9473	0	3,43%			
Rec	539,000	616.372,563	4.676.831,094	350,174	350,301	0,127	269,9473	0	3,40%			
Rec	540,000	616.371,672	4.676.830,640	350,192	350,335	0,143	269,9473	0	3,27%			
Rec	541,000	616.370,781	4.676.830,185	350,210	350,367	0,157	269,9473	0	3,14%			
Rec	542,000	616.369,891	4.676.829,730	350,229	350,398	0,169	269,9473	0	3,00%			
Rec	543,000	616.369,000	4.676.829,276	350,249	350,427	0,178	269,9473	0	2,87%			
Rec	544,000	616.368,109	4.676.828,821	350,282	350,455	0,173	269,9473	0	2,74%			
Rec	545,000	616.367,219	4.676.828,366	350,315	350,482	0,167	269,9473	0	2,60%			
Rec	546,000	616.366,328	4.676.827,911	350,348	350,507	0,159	269,9473	0	2,47%			
Rec	547,000	616.365,438	4.676.827,457	350,381	350,531	0,150	269,9473	0	2,34%			
Rec	548,000	616.364,547	4.676.827,002	350,414	350,554	0,140	269,9473	0	2,20%			
Rec	549,000	616.363,656	4.676.826,547	350,446	350,575	0,129	269,9473	0	2,07%			
Rec	550,000	616.362,766	4.676.826,092	350,479	350,595	0,116	269,9473	0	1,94%	P.S.	V.	
Cur	550,516	616.362,306	4.676.825,858	350,496	350,605	0,109	269,9473	-400	1,87%			
Cur	551,000	616.361,875	4.676.825,637	350,512	350,614	0,102	269,8703	-400	1,80%			
Cur	552,000	616.360,986	4.676.825,181	350,545	350,631	0,086	269,7111	-400	1,67%			
Cur	553,000	616.360,097	4.676.824,721	350,578	350,647	0,069	269,5520	-400	1,54%			
Cur	554,000	616.359,210	4.676.824,260	350,611	350,662	0,051	269,3928	-400	1,40%			
Cur	555,000	616.358,324	4.676.823,796	350,645	350,675	0,030	269,2336	-400	1,27%			
Cur	556,000	616.357,439	4.676.823,331	350,678	350,688	0,010	269,0745	-400	1,14%			
Cur	557,000	616.356,555	4.676.822,863	350,711	350,698	-0,013	268,9153	-400	1,00%			
Cur	558,000	616.355,673	4.676.822,392	350,745	350,708	-0,037	268,7562	-400	0,87%			
Cur	559,000	616.354,791	4.676.821,920	350,759	350,716	-0,043	268,5970	-400	0,74%			
Cur	560,000	616.353,911	4.676.821,445	350,756	350,722	-0,034	268,4379	-400	0,60%			
Cur	561,000	616.353,032	4.676.820,969	350,751	350,728	-0,023	268,2787	-400	0,47%			
Cur	562,000	616.352,154	4.676.820,490	350,749	350,732	-0,017	268,1196	-400	0,34%		T.S.	
Cur	562,194	616.351,984	4.676.820,396	350,749	350,732	-0,017	268,0887	-400	0,31%			
Cur	563,000	616.351,278	4.676.820,008	350,751	350,735	-0,016	267,9604	-400	0,31%			
Cur	564,000	616.350,402	4.676.819,525	350,752	350,738	-0,014	267,8013	-400	0,31%			
Cur	565,000	616.349,528	4.676.819,039	350,743	350,741	-0,002	267,6421	-400	0,31%			
Cur	566,000	616.348,655	4.676.818,552	350,734	350,744	0,010	267,4829	-400	0,31%			
Cur	567,000	616.347,784	4.676.818,062	350,724	350,747	0,023	267,3238	-400	0,31%			
Cur	568,000	616.346,913	4.676.817,570	350,715	350,750	0,035	267,1646	-400	0,31%			
Cur	569,000	616.346,044	4.676.817,075	350,706	350,754	0,048	267,0055	-400	0,31%			
Cur	570,000	616.345,176	4.676.816,579	350,697	350,757	0,060	266,8463	-400	0,31%			
Cur	571,000	616.344,309	4.676.816,080	350,688	350,760	0,072	266,6872	-400	0,31%			
Cur	572,000	616.343,443	4.676.815,579	350,679	350,763	0,084	266,5280	-400	0,31%			
Cur	573,000	616.342,579	4.676.815,076	350,670	350,766	0,096	266,3689	-400	0,31%			
Cur	574,000	616.341,716	4.676.814,571	350,662	350,769	0,107	266,2097	-400	0,31%			
Cur	575,000	616.340,854	4.676.814,064	350,653	350,772	0,119	266,0505	-400	0,31%			
Cur	576,000	616.339,994	4.676.813,555	350,653	350,775	0,122	265,8914	-400	0,31%			
Cur	577,000	616.339,134	4.676.813,043	350,657	350,779	0,122	265,7322	-400	0,31%			
Cur	578,000	616.338,276	4.676.812,529	350,662	350,782	0,120	265,5731	-400	0,31%			
Cur	579,000	616.337,420	4.676.812,013	350,665	350,785	0,120	265,4139	-400	0,31%		T.E.	
Cur	579,816	616.336,722	4.676.811,591	350,669	350,787	0,118	265,2841	-400	0,31%			
Cur	580,000	616.336,564	4.676.811,495	350,670	350,788	0,118	265,2548	-400	0,35%			
Cur	581,000	616.335,710	4.676.810,975	350,675	350,792	0,117	265,0956	-400	0,55%			
Cur	582,000	616.334,858	4.676.810,453	350,680	350,799	0,119	264,9365	-400	0,75%			
Cur	583,000	616.334,006	4.676.809,929	350,688	350,807	0,119	264,7773	-400	0,95%			
Cur	584,000	616.333,156	4.676.809,402	350,699	350,818	0,119	264,6182	-400	1,15%			
Cur	585,000	616.332,307	4.676.808,873	350,714	350,830	0,116	264,4590	-400	1,35%			
Cur	586,000	616.331,460	4.676.808,343	350,732	350,845	0,113	264,2998	-400	1,55%			
Cur	587,000	616.330,613	4.676.807,810	350,753	350,861	0,108	264,1407	-400	1,75%			
Cur	588,000	616.329,769	4.676.807,275	350,774	350,880	0,106	263,9815	-400	1,95%			
Cur	589,000	616.328,925	4.676.806,738	350,794	350,900	0,106	263,8224	-400	2,15%		V.	

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	590,000	616.328,083	4.676.806,198	350,819	350,923	0,104	263,6632	-400	2,35%			
Cur	591,000	616.327,242	4.676.805,657	350,845	350,947	0,102	263,5041	-400	2,55%			
Cur	592,000	616.326,403	4.676.805,114	350,876	350,974	0,098	263,3449	-400	2,75%			
Cur	593,000	616.325,565	4.676.804,568	350,909	351,002	0,093	263,1858	-400	2,95%			
Cur	594,000	616.324,728	4.676.804,020	350,943	351,033	0,090	263,0266	-400	3,15%			
Cur	595,000	616.323,893	4.676.803,471	350,978	351,065	0,087	262,8674	-400	3,35%			
Cur	596,000	616.323,059	4.676.802,919	351,014	351,100	0,086	262,7083	-400	3,55%			
Cur	597,000	616.322,226	4.676.802,365	351,050	351,136	0,086	262,5491	-400	3,75%			
Cur	598,000	616.321,395	4.676.801,809	351,088	351,175	0,087	262,3900	-400	3,95%			
Cur	599,000	616.320,565	4.676.801,251	351,125	351,215	0,090	262,2308	-400	4,15%			
Cur	600,000	616.319,737	4.676.800,691	351,161	351,258	0,097	262,0717	-400	4,35%		T.S.	
Cur	600,184	616.319,584	4.676.800,588	351,168	351,266	0,098	262,0424	-400	4,39%			
Cur	601,000	616.318,910	4.676.800,129	351,198	351,301	0,103	261,9125	-400	4,39%			
Cur	602,000	616.318,084	4.676.799,564	351,235	351,345	0,110	261,7534	-400	4,39%			
Cur	603,000	616.317,260	4.676.798,998	351,272	351,389	0,117	261,5942	-400	4,39%			
Cur	604,000	616.316,437	4.676.798,430	351,307	351,433	0,126	261,4351	-400	4,39%			
Cur	605,000	616.315,616	4.676.797,859	351,341	351,477	0,136	261,2759	-400	4,39%			
Cur	606,000	616.314,796	4.676.797,287	351,372	351,521	0,149	261,1167	-400	4,39%			
Cur	607,000	616.313,977	4.676.796,712	351,407	351,564	0,157	260,9576	-400	4,39%			
Cur	608,000	616.313,160	4.676.796,136	351,444	351,608	0,164	260,7984	-400	4,39%			
Cur	609,000	616.312,345	4.676.795,557	351,484	351,652	0,168	260,6393	-400	4,39%			
Cur	610,000	616.311,530	4.676.794,976	351,525	351,696	0,171	260,4801	-400	4,39%			
Cur	611,000	616.310,718	4.676.794,394	351,568	351,740	0,172	260,3210	-400	4,39%			
Cur	612,000	616.309,906	4.676.793,809	351,611	351,784	0,173	260,1618	-400	4,39%			
Cur	613,000	616.309,097	4.676.793,222	351,654	351,828	0,174	260,0027	-400	4,39%			
Cur	614,000	616.308,288	4.676.792,634	351,697	351,871	0,174	259,8435	-400	4,39%			
Cur	615,000	616.307,482	4.676.792,043	351,740	351,915	0,175	259,6843	-400	4,39%			
Cur	616,000	616.306,676	4.676.791,450	351,784	351,959	0,175	259,5252	-400	4,39%			
Cur	617,000	616.305,872	4.676.790,855	351,827	352,003	0,176	259,3660	-400	4,39%			
Cur	618,000	616.305,070	4.676.790,258	351,870	352,047	0,177	259,2069	-400	4,39%			
Cur	619,000	616.304,269	4.676.789,660	351,914	352,091	0,177	259,0477	-400	4,39%			
Cur	620,000	616.303,470	4.676.789,059	351,960	352,135	0,175	258,8886	-400	4,39%			
Cur	621,000	616.302,672	4.676.788,456	352,007	352,178	0,171	258,7294	-400	4,39%			
Cur	622,000	616.301,875	4.676.787,851	352,072	352,222	0,150	258,5703	-400	4,39%		T.E.	
Cur	622,055	616.301,832	4.676.787,818	352,075	352,225	0,149	258,5615	-400	4,39%			
Cur	623,000	616.301,081	4.676.787,244	352,135	352,267	0,132	258,4111	-400	4,57%			
Cur	624,000	616.300,287	4.676.786,635	352,197	352,314	0,117	258,2520	-400	4,77%			
Cur	625,000	616.299,495	4.676.786,025	352,259	352,362	0,103	258,0928	-400	4,97%			
Cur	626,000	616.298,705	4.676.785,412	352,323	352,413	0,090	257,9336	-400	5,17%			
Cur	627,000	616.297,916	4.676.784,797	352,388	352,466	0,078	257,7745	-400	5,37%			
Cur	628,000	616.297,129	4.676.784,181	352,452	352,521	0,069	257,6153	-400	5,57%			
Cur	629,000	616.296,344	4.676.783,562	352,514	352,577	0,063	257,4562	-400	5,77%		V.	
Cur	630,000	616.295,559	4.676.782,941	352,573	352,636	0,063	257,2970	-400	5,97%			
Cur	631,000	616.294,777	4.676.782,319	352,632	352,697	0,065	257,1379	-400	6,17%			
Cur	632,000	616.293,996	4.676.781,694	352,691	352,760	0,069	256,9787	-400	6,37%			
Cur	633,000	616.293,216	4.676.781,068	352,752	352,824	0,072	256,8196	-400	6,57%			
Cur	634,000	616.292,439	4.676.780,439	352,815	352,891	0,076	256,6604	-400	6,77%			
Cur	635,000	616.291,662	4.676.779,809	352,876	352,960	0,084	256,5012	-400	6,97%			
Cur	636,000	616.290,888	4.676.779,177	352,930	353,031	0,101	256,3421	-400	7,17%			
Cur	637,000	616.290,114	4.676.778,542	352,984	353,103	0,119	256,1829	-400	7,37%		T.S.	
Cur	637,945	616.289,385	4.676.777,941	353,042	353,174	0,132	256,0325	-400	7,56%			
Cur	638,000	616.289,343	4.676.777,906	353,045	353,178	0,133	256,0238	-400	7,56%			
Cur	639,000	616.288,573	4.676.777,268	353,109	353,254	0,145	255,8646	-400	7,56%			
Cur	640,000	616.287,805	4.676.776,628	353,175	353,329	0,154	255,7055	-400	7,56%			
Cur	641,000	616.287,038	4.676.775,986	353,239	353,405	0,166	255,5463	-400	7,56%			
Cur	642,000	616.286,273	4.676.775,342	353,303	353,481	0,178	255,3872	-400	7,56%			
Cur	643,000	616.285,509	4.676.774,697	353,366	353,556	0,190	255,2280	-400	7,56%			
Cur	644,000	616.284,747	4.676.774,049	353,434	353,632	0,198	255,0689	-400	7,56%			
Cur	645,000	616.283,987	4.676.773,399	353,502	353,707	0,205	254,9097	-400	7,56%			
Cur	646,000	616.283,228	4.676.772,748	353,571	353,783	0,212	254,7505	-400	7,56%			
Cur	647,000	616.282,471	4.676.772,094	353,637	353,859	0,222	254,5914	-400	7,56%			
Cur	648,000	616.281,716	4.676.771,439	353,706	353,934	0,228	254,4322	-400	7,56%			
Cur	649,000	616.280,962	4.676.770,782	353,776	354,010	0,234	254,2731	-400	7,56%			
Cur	650,000	616.280,210	4.676.770,123	353,845	354,086	0,241	254,1139	-400	7,56%			
Cur	651,000	616.279,459	4.676.769,462	353,914	354,161	0,247	253,9548	-400	7,56%			
Cur	652,000	616.278,711	4.676.768,799	353,983	354,237	0,254	253,7956	-400	7,56%			
Cur	653,000	616.277,963	4.676.768,135	354,052	354,313	0,261	253,6365	-400	7,56%			
Cur	654,000	616.277,218	4.676.767,468	354,122	354,388	0,266	253,4773	-400	7,56%			
Cur	655,000	616.276,474	4.676.766,800	354,192	354,464	0,272	253,3182	-400	7,56%			
Cur	656,000	616.275,732	4.676.766,130	354,262	354,539	0,277	253,1590	-400	7,56%			
Cur	657,000	616.274,992	4.676.765,457	354,335	354,615	0,280	252,9998	-400	7,56%			
Cur	658,000	616.274,253	4.676.764,784	354,408	354,691	0,283	252,8407	-400	7,56%			
Cur	659,000	616.273,516	4.676.764,108	354,479	354,766	0,287	252,6815	-400	7,56%			
Cur	660,000	616.272,780	4.676.763,430	354,550	354,842	0,292	252,5224	-400	7,56%			
Cur	661,000	616.272,047	4.676.762,751	354,623	354,918	0,295	252,3632	-400	7,56%			
Cur	662,000	616.271,315	4.676.762,069	354,696	354,993	0,297	252,2041	-400	7,56%			
Cur	663,000	616.270,584	4.676.761,386	354,769	355,069	0,300	252,0449	-400	7,56%			
Cur	664,000	616.269,856	4.676.760,701	354,842	355,144	0,302	251,8858	-400	7,56%			
Cur	665,000	616.269,129	4.676.760,015	354,915	355,220	0,305	251,7266	-400	7,56%			
Cur	666,000	616.268,404	4.676.759,326	354,989	355,296	0,307	251,5674	-400	7,56%			
Cur	667,000	616.267,680	4.676.758,636	355,069	355,371	0,302	251,4083	-400	7,56%			
Cur	668,000	616.266,958	4.676.757,943	355,149	355,447	0,298	251,2491	-400	7,56%			
Cur	669,000	616.266,238	4.676.757,249	355,230	355,523	0,293	251,0900	-400	7,56%			
Cur	670,000	616.265,520	4.676.756,554	355,312	355,598	0,286	250,9308	-400	7,56%			
Cur	671,000	616.264,804	4.676.755,856	355,393	355,674	0,281	250,7717	-400	7,56%			
Cur	672,000	616.264,089	4.676.755,157	355,475	355,750	0,275	250,6125	-400	7,56%			
Cur	673,000	616.263,376	4.676.754,455	355,557	355,825	0,268	250,4534	-400	7,56%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	674,000	616.262,665	4.676.753,752	355,639	355,901	0,262	250,2942	-400	7,56%			
Cur	675,000	616.261,955	4.676.753,048	355,721	355,976	0,255	250,1351	-400	7,56%			
Cur	676,000	616.261,248	4.676.752,341	355,805	356,052	0,247	249,9759	-400	7,56%			
Cur	677,000	616.260,542	4.676.751,633	355,888	356,128	0,240	249,8167	-400	7,56%			
Cur	678,000	616.259,837	4.676.750,923	355,971	356,203	0,232	249,6576	-400	7,56%			
Cur	679,000	616.259,135	4.676.750,211	356,058	356,279	0,221	249,4984	-400	7,56%			
Cur	680,000	616.258,434	4.676.749,498	356,146	356,355	0,209	249,3393	-400	7,56%			
Cur	681,000	616.257,736	4.676.748,782	356,233	356,430	0,197	249,1801	-400	7,56%			
Cur	682,000	616.257,038	4.676.748,065	356,321	356,506	0,185	249,0210	-400	7,56%			
Cur	683,000	616.256,343	4.676.747,347	356,409	356,581	0,172	248,8618	-400	7,56%			
Cur	684,000	616.255,650	4.676.746,626	356,497	356,657	0,160	248,7027	-400	7,56%			
Cur	685,000	616.254,958	4.676.745,904	356,586	356,733	0,147	248,5435	-400	7,56%			
Cur	686,000	616.254,268	4.676.745,180	356,674	356,808	0,134	248,3843	-400	7,56%			
Cur	687,000	616.253,580	4.676.744,454	356,763	356,884	0,121	248,2252	-400	7,56%			
Cur	688,000	616.252,894	4.676.743,727	356,851	356,960	0,109	248,0660	-400	7,56%			
Cur	689,000	616.252,210	4.676.742,998	356,939	357,035	0,096	247,9069	-400	7,56%			
Cur	690,000	616.251,527	4.676.742,267	357,029	357,111	0,082	247,7477	-400	7,56%		T.E.	
Cur	690,049	616.251,494	4.676.742,231	357,034	357,115	0,081	247,7399	-400	7,56%			
Cur	691,000	616.250,846	4.676.741,534	357,121	357,187	0,066	247,5886	-400	7,61%			
Cur	692,000	616.250,167	4.676.740,800	357,207	357,263	0,056	247,4294	-400	7,66%			
Cur	693,000	616.249,490	4.676.740,064	357,288	357,340	0,052	247,2703	-400	7,71%			
Cur	694,000	616.248,815	4.676.739,327	357,370	357,417	0,047	247,1111	-400	7,76%			
Cur	695,000	616.248,142	4.676.738,587	357,452	357,495	0,043	246,9520	-400	7,81%			
Cur	696,000	616.247,470	4.676.737,846	357,536	357,574	0,038	246,7928	-400	7,86%			
Cur	697,000	616.246,801	4.676.737,104	357,621	357,652	0,031	246,6336	-400	7,91%			
Cur	698,000	616.246,133	4.676.736,359	357,707	357,732	0,025	246,4745	-400	7,96%			
Cur	699,000	616.245,467	4.676.735,613	357,787	357,812	0,025	246,3153	-400	8,01%			
Cur	700,000	616.244,803	4.676.734,866	357,866	357,892	0,026	246,1562	-400	8,06%			
Cur	701,000	616.244,141	4.676.734,116	357,945	357,973	0,028	245,9970	-400	8,11%			
Cur	702,000	616.243,480	4.676.733,365	358,022	358,054	0,032	245,8379	-400	8,16%	P.S.	V.	
Rec	702,827	616.242,935	4.676.732,743	358,081	358,122	0,041	245,7062	0	8,20%			
Rec	703,000	616.242,822	4.676.732,613	358,094	358,136	0,042	245,7062	0	8,21%			
Rec	704,000	616.242,164	4.676.731,860	358,160	358,218	0,058	245,7062	0	8,26%			
Rec	705,000	616.241,506	4.676.731,107	358,219	358,301	0,082	245,7062	0	8,31%			
Rec	706,000	616.240,848	4.676.730,353	358,265	358,385	0,120	245,7062	0	8,36%			
Rec	707,000	616.240,190	4.676.729,600	358,302	358,468	0,166	245,7062	0	8,41%			
Rec	708,000	616.239,532	4.676.728,847	358,333	358,553	0,220	245,7062	0	8,46%			
Rec	709,000	616.238,875	4.676.728,094	358,358	358,638	0,280	245,7062	0	8,51%			
Rec	710,000	616.238,217	4.676.727,341	358,384	358,723	0,339	245,7062	0	8,56%			
Rec	711,000	616.237,559	4.676.726,588	358,417	358,809	0,392	245,7062	0	8,61%			
Rec	712,000	616.236,901	4.676.725,834	358,468	358,895	0,427	245,7062	0	8,66%			
Rec	713,000	616.236,243	4.676.725,081	358,530	358,982	0,452	245,7062	0	8,71%			
Rec	714,000	616.235,585	4.676.724,328	358,574	359,069	0,495	245,7062	0	8,76%			
Rec	715,000	616.234,928	4.676.723,575	358,641	359,157	0,516	245,7062	0	8,81%		T.S.	
Rec	715,605	616.234,530	4.676.723,119	358,683	359,211	0,527	245,7062	0	8,84%			
Rec	716,000	616.234,270	4.676.722,822	358,711	359,246	0,535	245,7062	0	8,84%			
Rec	717,000	616.233,612	4.676.722,069	358,785	359,334	0,549	245,7062	0	8,84%			
Rec	718,000	616.232,954	4.676.721,316	358,866	359,422	0,556	245,7062	0	8,84%			
Rec	719,000	616.232,296	4.676.720,562	358,952	359,511	0,559	245,7062	0	8,84%			
Rec	720,000	616.231,638	4.676.719,809	359,049	359,599	0,550	245,7062	0	8,84%			
Rec	721,000	616.230,980	4.676.719,056	359,158	359,688	0,530	245,7062	0	8,84%			
Rec	722,000	616.230,323	4.676.718,303	359,268	359,776	0,508	245,7062	0	8,84%			
Rec	723,000	616.229,665	4.676.717,550	359,377	359,864	0,487	245,7062	0	8,84%			
Rec	724,000	616.229,007	4.676.716,797	359,486	359,953	0,467	245,7062	0	8,84%			
Rec	725,000	616.228,349	4.676.716,043	359,595	360,041	0,446	245,7062	0	8,84%			
Rec	726,000	616.227,691	4.676.715,290	359,705	360,130	0,425	245,7062	0	8,84%			
Rec	727,000	616.227,033	4.676.714,537	359,814	360,218	0,404	245,7062	0	8,84%			
Rec	728,000	616.226,376	4.676.713,784	359,923	360,306	0,383	245,7062	0	8,84%			
Rec	729,000	616.225,718	4.676.713,031	360,026	360,395	0,369	245,7062	0	8,84%			
Rec	730,000	616.225,060	4.676.712,278	360,114	360,483	0,369	245,7062	0	8,84%			
Rec	731,000	616.224,402	4.676.711,525	360,202	360,572	0,370	245,7062	0	8,84%			
Rec	732,000	616.223,744	4.676.710,771	360,291	360,660	0,369	245,7062	0	8,84%			
Rec	733,000	616.223,086	4.676.710,018	360,379	360,749	0,370	245,7062	0	8,84%			
Rec	734,000	616.222,429	4.676.709,265	360,467	360,837	0,370	245,7062	0	8,84%			
Rec	735,000	616.221,771	4.676.708,512	360,555	360,925	0,370	245,7062	0	8,84%			
Rec	736,000	616.221,113	4.676.707,759	360,644	361,014	0,370	245,7062	0	8,84%			
Rec	737,000	616.220,455	4.676.707,006	360,731	361,102	0,371	245,7062	0	8,84%			
Rec	738,000	616.219,797	4.676.706,252	360,819	361,191	0,372	245,7062	0	8,84%			
Rec	739,000	616.219,139	4.676.705,499	360,906	361,279	0,373	245,7062	0	8,84%			
Rec	740,000	616.218,481	4.676.704,746	360,993	361,367	0,374	245,7062	0	8,84%			
Rec	741,000	616.217,824	4.676.703,993	361,083	361,456	0,373	245,7062	0	8,84%			
Rec	742,000	616.217,166	4.676.703,240	361,173	361,544	0,371	245,7062	0	8,84%			
Rec	743,000	616.216,508	4.676.702,487	361,263	361,633	0,370	245,7062	0	8,84%			
Rec	744,000	616.215,850	4.676.701,733	361,353	361,721	0,368	245,7062	0	8,84%			
Rec	745,000	616.215,192	4.676.700,980	361,444	361,809	0,365	245,7062	0	8,84%			
Rec	746,000	616.214,534	4.676.700,227	361,534	361,898	0,364	245,7062	0	8,84%			
Rec	747,000	616.213,877	4.676.699,474	361,624	361,986	0,362	245,7062	0	8,84%			
Rec	748,000	616.213,219	4.676.698,721	361,713	362,075	0,362	245,7062	0	8,84%			
Rec	749,000	616.212,561	4.676.697,968	361,802	362,163	0,361	245,7062	0	8,84%			
Rec	750,000	616.211,903	4.676.697,215	361,891	362,251	0,360	245,7062	0	8,84%			
Rec	751,000	616.211,245	4.676.696,461	361,980	362,340	0,360	245,7062	0	8,84%			
Rec	752,000	616.210,587	4.676.695,708	362,074	362,428	0,354	245,7062	0	8,84%			
Rec	753,000	616.209,930	4.676.694,955	362,170	362,517	0,347	245,7062	0	8,84%			
Rec	754,000	616.209,272	4.676.694,202	362,265	362,605	0,340	245,7062	0	8,84%			
Rec	755,000	616.208,614	4.676.693,449	362,360	362,693	0,333	245,7062	0	8,84%			
Rec	756,000	616.207,956	4.676.692,696	362,456	362,782	0,326	245,7062	0	8,84%			
Rec	757,000	616.207,298	4.676.691,942	362,552	362,870	0,318	245,7062	0	8,84%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	758,000	616.206,640	4.676.691,189	362,648	362,959	0,311	245,7062	0	8,84%			
Rec	759,000	616.205,982	4.676.690,436	362,744	363,047	0,303	245,7062	0	8,84%			
Rec	760,000	616.205,325	4.676.689,683	362,840	363,136	0,296	245,7062	0	8,84%			
Rec	761,000	616.204,667	4.676.688,930	362,936	363,224	0,288	245,7062	0	8,84%			
Rec	762,000	616.204,009	4.676.688,177	363,035	363,312	0,277	245,7062	0	8,84%			
Rec	763,000	616.203,351	4.676.687,424	363,138	363,401	0,263	245,7062	0	8,84%			
Rec	764,000	616.202,693	4.676.686,670	363,241	363,489	0,248	245,7062	0	8,84%			
Rec	765,000	616.202,035	4.676.685,917	363,345	363,578	0,233	245,7062	0	8,84%			
Rec	766,000	616.201,378	4.676.685,164	363,448	363,666	0,218	245,7062	0	8,84%			
Rec	767,000	616.200,720	4.676.684,411	363,552	363,754	0,202	245,7062	0	8,84%			
Rec	768,000	616.200,062	4.676.683,658	363,656	363,843	0,187	245,7062	0	8,84%			
Rec	769,000	616.199,404	4.676.682,905	363,761	363,931	0,170	245,7062	0	8,84%			
Rec	770,000	616.198,746	4.676.682,151	363,866	364,020	0,154	245,7062	0	8,84%			
Rec	771,000	616.198,088	4.676.681,398	363,970	364,108	0,138	245,7062	0	8,84%			
Rec	772,000	616.197,430	4.676.680,645	364,068	364,196	0,128	245,7062	0	8,84%			
Rec	773,000	616.196,773	4.676.679,892	364,163	364,285	0,122	245,7062	0	8,84%			
Rec	774,000	616.196,115	4.676.679,139	364,253	364,373	0,120	245,7062	0	8,84%			
Rec	775,000	616.195,457	4.676.678,386	364,346	364,462	0,116	245,7062	0	8,84%			
Rec	776,000	616.194,799	4.676.677,633	364,440	364,550	0,110	245,7062	0	8,84%			
Rec	777,000	616.194,141	4.676.676,879	364,533	364,638	0,105	245,7062	0	8,84%			
Rec	778,000	616.193,483	4.676.676,126	364,626	364,727	0,101	245,7062	0	8,84%			
Rec	779,000	616.192,826	4.676.675,373	364,721	364,815	0,094	245,7062	0	8,84%			
Rec	780,000	616.192,168	4.676.674,620	364,815	364,904	0,089	245,7062	0	8,84%			
Rec	781,000	616.191,510	4.676.673,867	364,910	364,992	0,082	245,7062	0	8,84%			
Rec	782,000	616.190,852	4.676.673,114	365,005	365,081	0,076	245,7062	0	8,84%			
Rec	783,000	616.190,194	4.676.672,360	365,099	365,169	0,070	245,7062	0	8,84%			
Rec	784,000	616.189,536	4.676.671,607	365,194	365,257	0,063	245,7062	0	8,84%			
Rec	785,000	616.188,879	4.676.670,854	365,290	365,346	0,056	245,7062	0	8,84%			
Rec	786,000	616.188,221	4.676.670,101	365,386	365,434	0,048	245,7062	0	8,84%			
Rec	787,000	616.187,563	4.676.669,348	365,482	365,523	0,041	245,7062	0	8,84%			
Rec	788,000	616.186,905	4.676.668,595	365,578	365,611	0,033	245,7062	0	8,84%			
Rec	789,000	616.186,247	4.676.667,842	365,674	365,699	0,025	245,7062	0	8,84%			
Rec	790,000	616.185,589	4.676.667,088	365,771	365,788	0,017	245,7062	0	8,84%			
Rec	791,000	616.184,931	4.676.666,335	365,867	365,876	0,009	245,7062	0	8,84%			
Rec	792,000	616.184,274	4.676.665,582	365,963	365,965	0,002	245,7062	0	8,84%			
Rec	793,000	616.183,616	4.676.664,829	366,070	366,053	-0,017	245,7062	0	8,84%			
Rec	794,000	616.182,958	4.676.664,076	366,185	366,141	-0,044	245,7062	0	8,84%			
Rec	795,000	616.182,300	4.676.663,323	366,299	366,230	-0,069	245,7062	0	8,84%			
Rec	796,000	616.181,642	4.676.662,569	366,414	366,318	-0,096	245,7062	0	8,84%			
Rec	797,000	616.180,984	4.676.661,816	366,528	366,407	-0,121	245,7062	0	8,84%			
Rec	798,000	616.180,327	4.676.661,063	366,643	366,495	-0,148	245,7062	0	8,84%			
Rec	799,000	616.179,669	4.676.660,310	366,755	366,583	-0,172	245,7062	0	8,84%			
Rec	800,000	616.179,011	4.676.659,557	366,868	366,672	-0,196	245,7062	0	8,84%			
Rec	801,000	616.178,353	4.676.658,804	366,980	366,760	-0,220	245,7062	0	8,84%			
Rec	802,000	616.177,695	4.676.658,051	367,072	366,849	-0,223	245,7062	0	8,84%			
Rec	803,000	616.177,037	4.676.657,297	367,159	366,937	-0,222	245,7062	0	8,84%			
Rec	804,000	616.176,379	4.676.656,544	367,247	367,025	-0,222	245,7062	0	8,84%			
Rec	805,000	616.175,722	4.676.655,791	367,322	367,114	-0,208	245,7062	0	8,84%			
Rec	806,000	616.175,064	4.676.655,038	367,389	367,202	-0,187	245,7062	0	8,84%			
Rec	807,000	616.174,406	4.676.654,285	367,450	367,291	-0,159	245,7062	0	8,84%			
Rec	808,000	616.173,748	4.676.653,532	367,503	367,379	-0,124	245,7062	0	8,84%			
Rec	809,000	616.173,090	4.676.652,778	367,552	367,468	-0,084	245,7062	0	8,84%			
Rec	810,000	616.172,432	4.676.652,025	367,628	367,556	-0,072	245,7062	0	8,84%			
Rec	811,000	616.171,775	4.676.651,272	367,712	367,644	-0,068	245,7062	0	8,84%			
Rec	812,000	616.171,117	4.676.650,519	367,783	367,733	-0,050	245,7062	0	8,84%			
Rec	813,000	616.170,459	4.676.649,766	367,838	367,821	-0,017	245,7062	0	8,84%			
Rec	814,000	616.169,801	4.676.649,013	367,904	367,910	0,006	245,7062	0	8,84%			
Rec	815,000	616.169,143	4.676.648,260	367,972	367,998	0,026	245,7062	0	8,84%			
Rec	816,000	616.168,485	4.676.647,506	368,054	368,086	0,032	245,7062	0	8,84%			
Rec	817,000	616.167,828	4.676.646,753	368,137	368,175	0,038	245,7062	0	8,84%			
Rec	818,000	616.167,170	4.676.646,000	368,230	368,263	0,033	245,7062	0	8,84%			
Rec	819,000	616.166,512	4.676.645,247	368,324	368,352	0,028	245,7062	0	8,84%			
Rec	820,000	616.165,854	4.676.644,494	368,387	368,440	0,053	245,7062	0	8,84%			
Rec	821,000	616.165,196	4.676.643,741	368,453	368,528	0,075	245,7062	0	8,84%			
Rec	822,000	616.164,538	4.676.642,987	368,529	368,617	0,088	245,7062	0	8,84%			
Rec	823,000	616.163,880	4.676.642,234	368,614	368,705	0,091	245,7062	0	8,84%			
Rec	824,000	616.163,223	4.676.641,481	368,701	368,794	0,093	245,7062	0	8,84%			
Rec	825,000	616.162,565	4.676.640,728	368,788	368,882	0,094	245,7062	0	8,84%			
Rec	826,000	616.161,907	4.676.639,975	368,876	368,970	0,094	245,7062	0	8,84%			
Rec	827,000	616.161,249	4.676.639,222	368,966	369,059	0,093	245,7062	0	8,84%			
Rec	828,000	616.160,591	4.676.638,469	369,058	369,147	0,089	245,7062	0	8,84%			
Rec	829,000	616.159,933	4.676.637,715	369,152	369,236	0,084	245,7062	0	8,84%			
Rec	830,000	616.159,276	4.676.636,962	369,246	369,324	0,078	245,7062	0	8,84%			
Rec	831,000	616.158,618	4.676.636,209	369,340	369,412	0,072	245,7062	0	8,84%			
Rec	832,000	616.157,960	4.676.635,456	369,434	369,501	0,067	245,7062	0	8,84%			
Rec	833,000	616.157,302	4.676.634,703	369,528	369,589	0,061	245,7062	0	8,84%			
Rec	834,000	616.156,644	4.676.633,950	369,621	369,678	0,057	245,7062	0	8,84%			
Rec	835,000	616.155,986	4.676.633,196	369,714	369,766	0,052	245,7062	0	8,84%			
Rec	836,000	616.155,328	4.676.632,443	369,807	369,855	0,048	245,7062	0	8,84%			
Rec	837,000	616.154,671	4.676.631,690	369,900	369,943	0,043	245,7062	0	8,84%			
Rec	838,000	616.154,013	4.676.630,937	369,993	370,031	0,038	245,7062	0	8,84%			
Rec	839,000	616.153,355	4.676.630,184	370,078	370,120	0,042	245,7062	0	8,84%			
Rec	840,000	616.152,697	4.676.629,431	370,161	370,208	0,047	245,7062	0	8,84%			
Rec	841,000	616.152,039	4.676.628,677	370,244	370,297	0,053	245,7062	0	8,84%			
Rec	842,000	616.151,381	4.676.627,924	370,328	370,385	0,057	245,7062	0	8,84%			
Rec	843,000	616.150,724	4.676.627,171	370,413	370,473	0,060	245,7062	0	8,84%			
Rec	844,000	616.150,066	4.676.626,418	370,498	370,562	0,064	245,7062	0	8,84%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	845,000	616.149,408	4.676.625,665	370,583	370,650	0,067	245,7062	0	8,84%			
Rec	846,000	616.148,750	4.676.624,912	370,668	370,739	0,071	245,7062	0	8,84%			
Rec	847,000	616.148,092	4.676.624,159	370,753	370,827	0,074	245,7062	0	8,84%			
Rec	848,000	616.147,434	4.676.623,405	370,838	370,915	0,077	245,7062	0	8,84%			
Rec	849,000	616.146,777	4.676.622,652	370,923	371,004	0,081	245,7062	0	8,84%			
Rec	850,000	616.146,119	4.676.621,899	371,009	371,092	0,083	245,7062	0	8,84%			
Rec	851,000	616.145,461	4.676.621,146	371,097	371,181	0,084	245,7062	0	8,84%			
Rec	852,000	616.144,803	4.676.620,393	371,185	371,269	0,084	245,7062	0	8,84%			
Rec	853,000	616.144,145	4.676.619,640	371,274	371,357	0,083	245,7062	0	8,84%			
Rec	854,000	616.143,487	4.676.618,886	371,362	371,446	0,084	245,7062	0	8,84%			
Rec	855,000	616.142,829	4.676.618,133	371,451	371,534	0,083	245,7062	0	8,84%			
Rec	856,000	616.142,172	4.676.617,380	371,539	371,623	0,084	245,7062	0	8,84%			
Rec	857,000	616.141,514	4.676.616,627	371,628	371,711	0,083	245,7062	0	8,84%			
Rec	858,000	616.140,856	4.676.615,874	371,716	371,799	0,083	245,7062	0	8,84%			
Rec	859,000	616.140,198	4.676.615,121	371,804	371,888	0,084	245,7062	0	8,84%			
Rec	860,000	616.139,540	4.676.614,368	371,892	371,976	0,084	245,7062	0	8,84%			
Rec	861,000	616.138,882	4.676.613,614	371,980	372,065	0,085	245,7062	0	8,84%			
Rec	862,000	616.138,225	4.676.612,861	372,069	372,153	0,084	245,7062	0	8,84%			
Rec	863,000	616.137,567	4.676.612,108	372,158	372,242	0,084	245,7062	0	8,84%			
Rec	864,000	616.136,909	4.676.611,355	372,247	372,330	0,083	245,7062	0	8,84%			
Rec	865,000	616.136,251	4.676.610,602	372,336	372,418	0,082	245,7062	0	8,84%			
Rec	866,000	616.135,593	4.676.609,849	372,425	372,507	0,082	245,7062	0	8,84%			
Rec	867,000	616.134,935	4.676.609,095	372,515	372,595	0,080	245,7062	0	8,84%			
Rec	868,000	616.134,277	4.676.608,342	372,604	372,684	0,080	245,7062	0	8,84%			
Rec	869,000	616.133,620	4.676.607,589	372,690	372,772	0,082	245,7062	0	8,84%			
Rec	870,000	616.132,962	4.676.606,836	372,775	372,860	0,085	245,7062	0	8,84%			
Rec	871,000	616.132,304	4.676.606,083	372,859	372,949	0,090	245,7062	0	8,84%			
Rec	872,000	616.131,646	4.676.605,330	372,944	373,037	0,093	245,7062	0	8,84%			
Rec	873,000	616.130,988	4.676.604,577	373,031	373,126	0,095	245,7062	0	8,84%			
Rec	874,000	616.130,330	4.676.603,823	373,123	373,214	0,091	245,7062	0	8,84%			
Rec	875,000	616.129,673	4.676.603,070	373,215	373,302	0,087	245,7062	0	8,84%			
Rec	876,000	616.129,015	4.676.602,317	373,307	373,391	0,084	245,7062	0	8,84%			
Rec	877,000	616.128,357	4.676.601,564	373,396	373,479	0,083	245,7062	0	8,84%			
Rec	878,000	616.127,699	4.676.600,811	373,486	373,568	0,082	245,7062	0	8,84%			
Rec	879,000	616.127,041	4.676.600,058	373,576	373,656	0,080	245,7062	0	8,84%			
Rec	880,000	616.126,383	4.676.599,304	373,667	373,744	0,077	245,7062	0	8,84%			
Rec	881,000	616.125,726	4.676.598,551	373,758	373,833	0,075	245,7062	0	8,84%			
Rec	882,000	616.125,068	4.676.597,798	373,846	373,921	0,075	245,7062	0	8,84%			
Rec	883,000	616.124,410	4.676.597,045	373,933	374,010	0,077	245,7062	0	8,84%			
Rec	884,000	616.123,752	4.676.596,292	374,024	374,098	0,074	245,7062	0	8,84%			
Rec	885,000	616.123,094	4.676.595,539	374,124	374,186	0,062	245,7062	0	8,84%			
Rec	886,000	616.122,436	4.676.594,786	374,223	374,275	0,052	245,7062	0	8,84%			
Rec	887,000	616.121,778	4.676.594,032	374,322	374,363	0,041	245,7062	0	8,84%			
Rec	888,000	616.121,121	4.676.593,279	374,421	374,452	0,031	245,7062	0	8,84%			
Rec	889,000	616.120,463	4.676.592,526	374,518	374,540	0,022	245,7062	0	8,84%			
Rec	890,000	616.119,805	4.676.591,773	374,613	374,629	0,016	245,7062	0	8,84%			
Rec	891,000	616.119,147	4.676.591,020	374,708	374,717	0,009	245,7062	0	8,84%			
Rec	892,000	616.118,489	4.676.590,267	374,803	374,805	0,002	245,7062	0	8,84%			
Rec	893,000	616.117,831	4.676.589,513	374,900	374,894	-0,006	245,7062	0	8,84%			
Rec	894,000	616.117,174	4.676.588,760	374,994	374,982	-0,012	245,7062	0	8,84%			
Rec	895,000	616.116,516	4.676.588,007	375,094	375,071	-0,023	245,7062	0	8,84%			
Rec	896,000	616.115,858	4.676.587,254	375,195	375,159	-0,036	245,7062	0	8,84%			
Rec	897,000	616.115,200	4.676.586,501	375,295	375,247	-0,048	245,7062	0	8,84%			
Rec	898,000	616.114,542	4.676.585,748	375,392	375,336	-0,056	245,7062	0	8,84%			
Rec	899,000	616.113,884	4.676.584,995	375,488	375,424	-0,064	245,7062	0	8,84%			
Rec	900,000	616.113,226	4.676.584,241	375,587	375,513	-0,074	245,7062	0	8,84%			
Rec	901,000	616.112,569	4.676.583,488	375,687	375,601	-0,086	245,7062	0	8,84%			
Rec	902,000	616.111,911	4.676.582,735	375,782	375,689	-0,093	245,7062	0	8,84%			
Rec	903,000	616.111,253	4.676.581,982	375,872	375,778	-0,094	245,7062	0	8,84%			
Rec	904,000	616.110,595	4.676.581,229	375,962	375,866	-0,096	245,7062	0	8,84%			
Rec	905,000	616.109,937	4.676.580,476	376,046	375,955	-0,091	245,7062	0	8,84%			
Rec	906,000	616.109,279	4.676.579,722	376,129	376,043	-0,086	245,7062	0	8,84%			
Rec	907,000	616.108,622	4.676.578,969	376,211	376,131	-0,080	245,7062	0	8,84%			
Rec	908,000	616.107,964	4.676.578,216	376,297	376,220	-0,077	245,7062	0	8,84%			
Rec	909,000	616.107,306	4.676.577,463	376,384	376,308	-0,076	245,7062	0	8,84%			
Rec	910,000	616.106,648	4.676.576,710	376,470	376,397	-0,073	245,7062	0	8,84%			
Rec	911,000	616.105,990	4.676.575,957	376,553	376,485	-0,068	245,7062	0	8,84%			
Rec	912,000	616.105,332	4.676.575,204	376,642	376,574	-0,068	245,7062	0	8,84%			
Rec	913,000	616.104,675	4.676.574,450	376,722	376,662	-0,060	245,7062	0	8,84%			
Rec	914,000	616.104,017	4.676.573,697	376,805	376,750	-0,055	245,7062	0	8,84%			
Rec	915,000	616.103,359	4.676.572,944	376,887	376,839	-0,048	245,7062	0	8,84%			
Rec	916,000	616.102,701	4.676.572,191	376,963	376,927	-0,036	245,7062	0	8,84%			
Rec	917,000	616.102,043	4.676.571,438	377,042	377,016	-0,026	245,7062	0	8,84%			
Rec	918,000	616.101,385	4.676.570,685	377,122	377,104	-0,018	245,7062	0	8,84%			
Rec	919,000	616.100,727	4.676.569,931	377,203	377,192	-0,011	245,7062	0	8,84%			
Rec	920,000	616.100,070	4.676.569,178	377,285	377,281	-0,004	245,7062	0	8,84%			
Rec	921,000	616.099,412	4.676.568,425	377,366	377,369	0,003	245,7062	0	8,84%			
Rec	922,000	616.098,754	4.676.567,672	377,450	377,458	0,008	245,7062	0	8,84%			
Rec	923,000	616.098,096	4.676.566,919	377,532	377,546	0,014	245,7062	0	8,84%			
Rec	924,000	616.097,438	4.676.566,166	377,614	377,634	0,020	245,7062	0	8,84%			
Rec	925,000	616.096,780	4.676.565,413	377,697	377,723	0,026	245,7062	0	8,84%			
Rec	926,000	616.096,123	4.676.564,659	377,778	377,811	0,033	245,7062	0	8,84%			
Rec	927,000	616.095,465	4.676.563,906	377,860	377,900	0,040	245,7062	0	8,84%			
Rec	928,000	616.094,807	4.676.563,153	377,939	377,988	0,049	245,7062	0	8,84%			
Rec	929,000	616.094,149	4.676.562,400	378,018	378,076	0,058	245,7062	0	8,84%			
Rec	930,000	616.093,491	4.676.561,647	378,093	378,165	0,072	245,7062	0	8,84%			
Rec	931,000	616.092,833	4.676.560,894	378,174	378,253	0,079	245,7062	0	8,84%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	932,000	616.092,176	4.676.560,140	378,253	378,342	0,089	245,7062	0	8,84%			
Rec	933,000	616.091,518	4.676.559,387	378,332	378,430	0,098	245,7062	0	8,84%		T.E.	
Rec	933,657	616.091,085	4.676.558,892	378,385	378,488	0,104	245,7062	0	8,84%			
Rec	934,000	616.090,860	4.676.558,634	378,412	378,518	0,106	245,7062	0	8,50%			
Rec	935,000	616.090,202	4.676.557,881	378,490	378,598	0,108	245,7062	0	7,50%			
Rec	936,000	616.089,544	4.676.557,128	378,559	378,668	0,109	245,7062	0	6,50%			
Rec	937,000	616.088,886	4.676.556,375	378,630	378,728	0,098	245,7062	0	5,50%			
Rec	938,000	616.088,228	4.676.555,622	378,704	378,778	0,074	245,7062	0	4,50%			
Rec	939,000	616.087,571	4.676.554,868	378,765	378,818	0,053	245,7062	0	3,50%			
Rec	940,000	616.086,913	4.676.554,115	378,832	378,848	0,016	245,7062	0	2,50%			
Rec	941,000	616.086,255	4.676.553,362	378,876	378,868	-0,008	245,7062	0	1,50%			
Rec	942,000	616.085,597	4.676.552,609	378,912	378,878	-0,034	245,7062	0	0,50%			
Rec	943,000	616.084,939	4.676.551,856	378,907	378,878	-0,029	245,7062	0	-0,50%			
Rec	944,000	616.084,281	4.676.551,103	378,931	378,868	-0,063	245,7062	0	-1,50%			
Rec	945,000	616.083,624	4.676.550,349	378,926	378,848	-0,078	245,7062	0	-2,50%			
Rec	946,000	616.082,966	4.676.549,596	378,915	378,818	-0,097	245,7062	0	-3,50%			
Rec	947,000	616.082,308	4.676.548,843	378,897	378,778	-0,119	245,7062	0	-4,50%			
Rec	948,000	616.081,650	4.676.548,090	378,871	378,728	-0,143	245,7062	0	-5,50%			
Rec	949,000	616.080,992	4.676.547,337	378,844	378,668	-0,176	245,7062	0	-6,50%		V.	
Rec	950,000	616.080,334	4.676.546,584	378,804	378,598	-0,206	245,7062	0	-7,50%			
Rec	951,000	616.079,676	4.676.545,830	378,788	378,518	-0,270	245,7062	0	-8,50%			
Rec	952,000	616.079,019	4.676.545,077	378,526	378,427	-0,099	245,7062	0	-9,50%			
Rec	953,000	616.078,361	4.676.544,324	378,296	378,327	0,031	245,7062	0	-10,50%			
Rec	954,000	616.077,703	4.676.543,571	378,293	378,217	-0,076	245,7062	0	-11,50%			
Rec	955,000	616.077,045	4.676.542,818	378,241	378,097	-0,144	245,7062	0	-12,50%			
Rec	956,000	616.076,387	4.676.542,065	377,927	377,967	0,040	245,7062	0	-13,50%			
Rec	957,000	616.075,729	4.676.541,312	377,577	377,827	0,250	245,7062	0	-14,50%			
Rec	958,000	616.075,072	4.676.540,558	377,235	377,677	0,442	245,7062	0	-15,50%	P.S.		
Cur	958,405	616.074,805	4.676.540,254	377,067	377,614	0,547	245,7062	-200	-15,91%			
Cur	959,000	616.074,414	4.676.539,805	376,820	377,517	0,697	245,5168	-200	-16,50%			
Cur	960,000	616.073,761	4.676.539,048	376,427	377,347	0,920	245,1985	-200	-17,50%			
Cur	961,000	616.073,111	4.676.538,288	375,985	377,167	1,182	244,8801	-200	-18,50%			
Cur	962,000	616.072,465	4.676.537,525	375,540	376,977	1,437	244,5618	-200	-19,50%			
Cur	963,000	616.071,822	4.676.536,758	375,114	376,777	1,663	244,2435	-200	-20,50%			
Cur	964,000	616.071,184	4.676.535,989	374,757	376,567	1,810	243,9252	-200	-21,50%			
Cur	965,000	616.070,549	4.676.535,216	374,418	376,347	1,929	243,6069	-200	-22,50%			
Cur	966,000	616.069,919	4.676.534,440	374,083	376,117	2,034	243,2886	-200	-23,50%		T.S.	
Cur	966,343	616.069,703	4.676.534,173	373,971	376,036	2,065	243,1794	-200	-23,85%			
Cur	967,000	616.069,292	4.676.533,661	373,756	375,879	2,123	242,9703	-200	-23,85%			
Cur	968,000	616.068,669	4.676.532,878	373,439	375,641	2,202	242,6520	-200	-23,85%			
Cur	969,000	616.068,050	4.676.532,093	373,119	375,402	2,283	242,3337	-200	-23,85%			
Cur	970,000	616.067,435	4.676.531,304	372,819	375,164	2,345	242,0154	-200	-23,85%			
Cur	971,000	616.066,824	4.676.530,513	372,530	374,926	2,396	241,6970	-200	-23,85%			
Cur	972,000	616.066,217	4.676.529,718	372,235	374,687	2,452	241,3787	-200	-23,85%			
Cur	973,000	616.065,613	4.676.528,921	371,945	374,449	2,504	241,0604	-200	-23,85%			
Cur	974,000	616.065,014	4.676.528,120	371,696	374,210	2,514	240,7421	-200	-23,85%			
Cur	975,000	616.064,419	4.676.527,316	371,447	373,972	2,525	240,4238	-200	-23,85%			
Cur	976,000	616.063,828	4.676.526,510	371,197	373,733	2,536	240,1055	-200	-23,85%			
Cur	977,000	616.063,241	4.676.525,700	370,948	373,495	2,547	239,7872	-200	-23,85%			
Cur	978,000	616.062,658	4.676.524,888	370,749	373,256	2,507	239,4689	-200	-23,85%			
Cur	979,000	616.062,079	4.676.524,073	370,549	373,018	2,469	239,1506	-200	-23,85%			
Cur	980,000	616.061,504	4.676.523,254	370,350	372,779	2,429	238,8323	-200	-23,85%			
Cur	981,000	616.060,933	4.676.522,433	370,151	372,541	2,390	238,5139	-200	-23,85%			
Cur	982,000	616.060,366	4.676.521,609	369,966	372,303	2,337	238,1956	-200	-23,85%			
Cur	983,000	616.059,804	4.676.520,783	369,827	372,064	2,237	237,8773	-200	-23,85%			
Cur	984,000	616.059,245	4.676.519,953	369,688	371,826	2,138	237,5590	-200	-23,85%			
Cur	985,000	616.058,691	4.676.519,121	369,549	371,587	2,038	237,2407	-200	-23,85%			
Cur	986,000	616.058,141	4.676.518,286	369,409	371,349	1,940	236,9224	-200	-23,85%			
Cur	987,000	616.057,595	4.676.517,448	369,270	371,110	1,840	236,6041	-200	-23,85%			
Cur	988,000	616.057,053	4.676.516,607	369,130	370,872	1,742	236,2858	-200	-23,85%			
Cur	989,000	616.056,516	4.676.515,764	368,987	370,633	1,646	235,9675	-200	-23,85%			
Cur	990,000	616.055,983	4.676.514,918	368,794	370,395	1,601	235,6492	-200	-23,85%			
Cur	991,000	616.055,454	4.676.514,069	368,600	370,157	1,557	235,3308	-200	-23,85%			
Cur	992,000	616.054,929	4.676.513,218	368,407	369,918	1,511	235,0125	-200	-23,85%			
Cur	993,000	616.054,408	4.676.512,364	368,212	369,680	1,468	234,6942	-200	-23,85%			
Cur	994,000	616.053,892	4.676.511,508	368,017	369,441	1,424	234,3759	-200	-23,85%			
Cur	995,000	616.053,380	4.676.510,649	367,793	369,203	1,410	234,0576	-200	-23,85%			
Cur	996,000	616.052,872	4.676.509,787	367,567	368,964	1,397	233,7393	-200	-23,85%			
Cur	997,000	616.052,369	4.676.508,923	367,337	368,726	1,389	233,4210	-200	-23,85%			
Cur	998,000	616.051,870	4.676.508,057	367,108	368,487	1,379	233,1027	-200	-23,85%			
Cur	999,000	616.051,375	4.676.507,188	367,016	368,249	1,233	232,7844	-200	-23,85%			
Cur	1.000,000	616.050,885	4.676.506,316	366,921	368,010	1,089	232,4661	-200	-23,85%		T.E.	
Cur	1.000,573	616.050,606	4.676.505,816	366,862	367,874	1,012	232,2837	-200	-23,85%			
Cur	1.001,000	616.050,399	4.676.505,442	366,818	367,773	0,955	232,1477	-200	-23,42%			
Cur	1.002,000	616.049,917	4.676.504,566	366,728	367,544	0,816	231,8294	-200	-22,42%			
Cur	1.003,000	616.049,440	4.676.503,687	366,637	367,325	0,688	231,5111	-200	-21,42%			
Cur	1.004,000	616.048,967	4.676.502,806	366,520	367,115	0,595	231,1928	-200	-20,42%			
Cur	1.005,000	616.048,499	4.676.501,922	366,402	366,916	0,514	230,8745	-200	-19,42%			
Cur	1.006,000	616.048,035	4.676.501,036	366,284	366,727	0,443	230,5562	-200	-18,42%			
Cur	1.007,000	616.047,575	4.676.500,148	366,171	366,548	0,377	230,2379	-200	-17,42%			
Cur	1.008,000	616.047,120	4.676.499,258	366,057	366,379	0,322	229,9196	-200	-16,42%			
Cur	1.009,000	616.046,670	4.676.498,365	365,957	366,220	0,263	229,6013	-200	-15,42%		V.	
Cur	1.010,000	616.046,224	4.676.497,470	365,870	366,070	0,200	229,2830	-200	-14,42%			
Cur	1.011,000	616.045,782	4.676.496,573	365,791	365,931	0,140	228,9647	-200	-13,42%			
Cur	1.012,000	616.045,345	4.676.495,674	365,707	365,802	0,095	228,6463	-200	-12,42%			
Cur	1.013,000	616.044,912	4.676.494,772	365,632	365,683	0,051	228,3280	-200	-11,42%			
Cur	1.014,000	616.044,484	4.676.493,868	365,559	365,574	0,015	228,0097	-200	-10,42%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.015,000	616.044,060	4.676.492,963	365,472	365,474	0,002	227,6914	-200	-9,42%			
Cur	1.016,000	616.043,641	4.676.492,055	365,390	365,385	-0,005	227,3731	-200	-8,42%			
Cur	1.017,000	616.043,226	4.676.491,145	365,306	365,306	0,000	227,0548	-200	-7,42%			
Cur	1.018,000	616.042,816	4.676.490,233	365,219	365,237	0,018	226,7365	-200	-6,42%			
Cur	1.019,000	616.042,411	4.676.489,318	365,140	365,178	0,038	226,4182	-200	-5,42%		T.S.	
Cur	1.019,427	616.042,239	4.676.488,927	365,105	365,155	0,050	226,2823	-200	-4,99%			
Cur	1.020,000	616.042,010	4.676.488,402	365,058	365,127	0,069	226,0999	-200	-4,99%			
Cur	1.021,000	616.041,614	4.676.487,484	364,984	365,077	0,093	225,7816	-200	-4,99%			
Cur	1.022,000	616.041,222	4.676.486,564	364,925	365,027	0,102	225,4632	-200	-4,99%			
Cur	1.023,000	616.040,835	4.676.485,642	364,868	364,977	0,109	225,1449	-200	-4,99%			
Cur	1.024,000	616.040,453	4.676.484,718	364,810	364,927	0,117	224,8266	-200	-4,99%			
Cur	1.025,000	616.040,075	4.676.483,792	364,754	364,877	0,123	224,5083	-200	-4,99%			
Cur	1.026,000	616.039,701	4.676.482,864	364,696	364,827	0,131	224,1900	-200	-4,99%			
Cur	1.027,000	616.039,333	4.676.481,935	364,634	364,777	0,143	223,8717	-200	-4,99%			
Cur	1.028,000	616.038,969	4.676.481,003	364,573	364,727	0,154	223,5534	-200	-4,99%			
Cur	1.029,000	616.038,610	4.676.480,070	364,512	364,678	0,166	223,2351	-200	-4,99%			
Cur	1.030,000	616.038,255	4.676.479,135	364,448	364,628	0,180	222,9168	-200	-4,99%			
Cur	1.031,000	616.037,905	4.676.478,198	364,382	364,578	0,196	222,5985	-200	-4,99%			
Cur	1.032,000	616.037,560	4.676.477,260	364,311	364,528	0,217	222,2801	-200	-4,99%			
Cur	1.033,000	616.037,219	4.676.476,320	364,232	364,478	0,246	221,9618	-200	-4,99%			
Cur	1.034,000	616.036,884	4.676.475,378	364,148	364,428	0,280	221,6435	-200	-4,99%			
Cur	1.035,000	616.036,553	4.676.474,434	364,061	364,378	0,317	221,3252	-200	-4,99%			
Cur	1.036,000	616.036,226	4.676.473,489	363,973	364,328	0,355	221,0069	-200	-4,99%			
Cur	1.037,000	616.035,905	4.676.472,542	363,886	364,278	0,392	220,6886	-200	-4,99%			
Cur	1.038,000	616.035,588	4.676.471,594	363,797	364,228	0,431	220,3703	-200	-4,99%			
Cur	1.039,000	616.035,275	4.676.470,644	363,710	364,178	0,468	220,0520	-200	-4,99%			
Cur	1.040,000	616.034,968	4.676.469,692	363,621	364,128	0,507	219,7337	-200	-4,99%			
Cur	1.041,000	616.034,665	4.676.468,739	363,538	364,078	0,540	219,4154	-200	-4,99%			
Cur	1.042,000	616.034,367	4.676.467,784	363,457	364,029	0,572	219,0970	-200	-4,99%			
Cur	1.043,000	616.034,074	4.676.466,828	363,379	363,979	0,600	218,7787	-200	-4,99%			
Cur	1.044,000	616.033,786	4.676.465,871	363,305	363,929	0,624	218,4604	-200	-4,99%			
Cur	1.045,000	616.033,503	4.676.464,912	363,234	363,879	0,645	218,1421	-200	-4,99%			
Cur	1.046,000	616.033,224	4.676.463,951	363,167	363,829	0,662	217,8238	-200	-4,99%			
Cur	1.047,000	616.032,950	4.676.462,990	363,103	363,779	0,676	217,5055	-200	-4,99%			
Cur	1.048,000	616.032,681	4.676.462,026	363,044	363,729	0,685	217,1872	-200	-4,99%			
Cur	1.049,000	616.032,416	4.676.461,062	362,995	363,679	0,684	216,8689	-200	-4,99%			
Cur	1.050,000	616.032,157	4.676.460,096	362,959	363,629	0,670	216,5506	-200	-4,99%			
Cur	1.051,000	616.031,902	4.676.459,129	362,927	363,579	0,652	216,2323	-200	-4,99%			
Cur	1.052,000	616.031,653	4.676.458,161	362,904	363,529	0,625	215,9139	-200	-4,99%			
Cur	1.053,000	616.031,408	4.676.457,191	362,882	363,479	0,597	215,5956	-200	-4,99%			
Cur	1.054,000	616.031,167	4.676.456,221	362,864	363,430	0,566	215,2773	-200	-4,99%			
Cur	1.055,000	616.030,932	4.676.455,249	362,843	363,380	0,537	214,9590	-200	-4,99%			
Cur	1.056,000	616.030,702	4.676.454,276	362,824	363,330	0,506	214,6407	-200	-4,99%			
Cur	1.057,000	616.030,476	4.676.453,301	362,793	363,280	0,487	214,3224	-200	-4,99%			
Cur	1.058,000	616.030,256	4.676.452,326	362,768	363,230	0,462	214,0041	-200	-4,99%			
Cur	1.059,000	616.030,040	4.676.451,350	362,741	363,180	0,439	213,6858	-200	-4,99%			
Cur	1.060,000	616.029,829	4.676.450,372	362,717	363,130	0,413	213,3675	-200	-4,99%			
Cur	1.061,000	616.029,623	4.676.449,394	362,692	363,080	0,388	213,0492	-200	-4,99%			
Cur	1.062,000	616.029,422	4.676.448,414	362,673	363,030	0,357	212,7308	-200	-4,99%			
Cur	1.063,000	616.029,226	4.676.447,433	362,656	362,980	0,324	212,4125	-200	-4,99%			
Cur	1.064,000	616.029,034	4.676.446,452	362,643	362,930	0,287	212,0942	-200	-4,99%			
Cur	1.065,000	616.028,848	4.676.445,469	362,613	362,880	0,267	211,7759	-200	-4,99%			
Cur	1.066,000	616.028,667	4.676.444,486	362,576	362,831	0,255	211,4576	-200	-4,99%			
Cur	1.067,000	616.028,490	4.676.443,502	362,535	362,781	0,246	211,1393	-200	-4,99%			
Cur	1.068,000	616.028,318	4.676.442,517	362,492	362,731	0,239	210,8210	-200	-4,99%			
Cur	1.069,000	616.028,152	4.676.441,531	362,450	362,681	0,231	210,5027	-200	-4,99%		T.E.	
Cur	1.069,709	616.028,037	4.676.440,831	362,420	362,645	0,226	210,2770	-200	-4,99%			
Cur	1.070,000	616.027,990	4.676.440,544	362,407	362,631	0,224	210,1844	-200	-4,93%			
Cur	1.071,000	616.027,833	4.676.439,556	362,366	362,583	0,217	209,8661	-200	-4,73%			
Cur	1.072,000	616.027,681	4.676.438,568	362,326	362,536	0,210	209,5477	-200	-4,53%			
Cur	1.073,000	616.027,534	4.676.437,579	362,285	362,492	0,207	209,2294	-200	-4,33%			
Cur	1.074,000	616.027,392	4.676.436,589	362,245	362,450	0,205	208,9111	-200	-4,13%			
Cur	1.075,000	616.027,255	4.676.435,598	362,206	362,409	0,203	208,5928	-200	-3,93%			
Cur	1.076,000	616.027,123	4.676.434,607	362,171	362,371	0,200	208,2745	-200	-3,73%			
Cur	1.077,000	616.026,996	4.676.433,615	362,136	362,335	0,199	207,9562	-200	-3,53%			
Cur	1.078,000	616.026,874	4.676.432,622	362,108	362,300	0,192	207,6379	-200	-3,33%			
Cur	1.079,000	616.026,757	4.676.431,629	362,081	362,268	0,187	207,3196	-200	-3,13%			
Cur	1.080,000	616.026,644	4.676.430,636	362,061	362,238	0,177	207,0013	-200	-2,93%			
Cur	1.081,000	616.026,537	4.676.429,641	362,046	362,209	0,163	206,6830	-200	-2,73%			
Cur	1.082,000	616.026,435	4.676.428,647	362,040	362,183	0,143	206,3646	-200	-2,53%			
Cur	1.083,000	616.026,338	4.676.427,651	362,043	362,159	0,116	206,0463	-200	-2,33%			
Cur	1.084,000	616.026,245	4.676.426,656	362,052	362,136	0,084	205,7280	-200	-2,13%			
Cur	1.085,000	616.026,158	4.676.425,660	362,064	362,116	0,052	205,4097	-200	-1,93%			
Cur	1.086,000	616.026,076	4.676.424,663	362,078	362,098	0,020	205,0914	-200	-1,73%			
Cur	1.087,000	616.025,998	4.676.423,666	362,096	362,081	-0,015	204,7731	-200	-1,53%			
Cur	1.088,000	616.025,926	4.676.422,669	362,113	362,067	-0,046	204,4548	-200	-1,33%	P.S.	V.	
Rec	1.088,266	616.025,907	4.676.422,403	362,118	362,063	-0,055	204,3700	0	-1,28%			
Rec	1.089,000	616.025,857	4.676.421,671	362,131	362,055	-0,076	204,3700	0	-1,13%			
Rec	1.090,000	616.025,788	4.676.420,673	362,143	362,044	-0,099	204,3700	0	-0,93%			
Rec	1.091,000	616.025,720	4.676.419,676	362,152	362,036	-0,116	204,3700	0	-0,73%			
Rec	1.092,000	616.025,651	4.676.418,678	362,157	362,029	-0,128	204,3700	0	-0,53%			
Rec	1.093,000	616.025,583	4.676.417,680	362,156	362,025	-0,131	204,3700	0	-0,33%			ODT DN 1000
Rec	1.094,000	616.025,514	4.676.416,683	362,147	362,023	-0,124	204,3700	0	-0,13%			
Rec	1.095,000	616.025,445	4.676.415,685	362,140	362,022	-0,118	204,3700	0	0,07%			
Rec	1.096,000	616.025,377	4.676.414,687	362,136	362,024	-0,112	204,3700	0	0,27%			
Rec	1.097,000	616.025,308	4.676.413,690	362,134	362,028	-0,106	204,3700	0	0,47%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.098,000	616.025,240	4.676.412,692	362,134	362,033	-0,101	204,3700	0	0,67%			
Rec	1.099,000	616.025,171	4.676.411,695	362,131	362,041	-0,090	204,3700	0	0,87%			
Rec	1.100,000	616.025,102	4.676.410,697	362,128	362,051	-0,077	204,3700	0	1,07%			
Rec	1.101,000	616.025,034	4.676.409,699	362,125	362,062	-0,063	204,3700	0	1,27%			
Rec	1.102,000	616.024,965	4.676.408,702	362,122	362,076	-0,046	204,3700	0	1,47%			
Rec	1.103,000	616.024,897	4.676.407,704	362,122	362,092	-0,030	204,3700	0	1,67%			
Rec	1.104,000	616.024,828	4.676.406,706	362,118	362,109	-0,009	204,3700	0	1,87%			
Rec	1.105,000	616.024,759	4.676.405,709	362,109	362,129	0,020	204,3700	0	2,07%			
Rec	1.106,000	616.024,691	4.676.404,711	362,094	362,151	0,057	204,3700	0	2,27%		T.S.	
Rec	1.106,823	616.024,634	4.676.403,890	362,089	362,170	0,081	204,3700	0	2,43%			
Rec	1.107,000	616.024,622	4.676.403,713	362,088	362,174	0,086	204,3700	0	2,43%			
Rec	1.108,000	616.024,554	4.676.402,716	362,082	362,199	0,117	204,3700	0	2,43%			
Rec	1.109,000	616.024,485	4.676.401,718	362,062	362,223	0,161	204,3700	0	2,43%			
Rec	1.110,000	616.024,417	4.676.400,720	362,049	362,247	0,198	204,3700	0	2,43%			
Rec	1.111,000	616.024,348	4.676.399,723	362,036	362,272	0,236	204,3700	0	2,43%			
Rec	1.112,000	616.024,279	4.676.398,725	362,026	362,296	0,270	204,3700	0	2,43%			
Rec	1.113,000	616.024,211	4.676.397,727	362,025	362,320	0,295	204,3700	0	2,43%			
Rec	1.114,000	616.024,142	4.676.396,730	362,029	362,345	0,316	204,3700	0	2,43%			
Rec	1.115,000	616.024,074	4.676.395,732	362,041	362,369	0,328	204,3700	0	2,43%			
Rec	1.116,000	616.024,005	4.676.394,735	362,072	362,393	0,321	204,3700	0	2,43%			
Rec	1.117,000	616.023,936	4.676.393,737	362,103	362,417	0,314	204,3700	0	2,43%			
Rec	1.118,000	616.023,868	4.676.392,739	362,138	362,442	0,304	204,3700	0	2,43%			
Rec	1.119,000	616.023,799	4.676.391,742	362,179	362,466	0,287	204,3700	0	2,43%			
Rec	1.120,000	616.023,731	4.676.390,744	362,227	362,490	0,263	204,3700	0	2,43%			
Rec	1.121,000	616.023,662	4.676.389,746	362,278	362,515	0,237	204,3700	0	2,43%			
Rec	1.122,000	616.023,593	4.676.388,749	362,328	362,539	0,211	204,3700	0	2,43%			
Rec	1.123,000	616.023,525	4.676.387,751	362,378	362,563	0,185	204,3700	0	2,43%			
Rec	1.124,000	616.023,456	4.676.386,753	362,429	362,588	0,159	204,3700	0	2,43%			
Rec	1.125,000	616.023,388	4.676.385,756	362,480	362,612	0,132	204,3700	0	2,43%			
Rec	1.126,000	616.023,319	4.676.384,758	362,538	362,636	0,098	204,3700	0	2,43%			
Rec	1.127,000	616.023,251	4.676.383,760	362,596	362,661	0,065	204,3700	0	2,43%			
Rec	1.128,000	616.023,182	4.676.382,763	362,620	362,685	0,065	204,3700	0	2,43%			
Rec	1.129,000	616.023,113	4.676.381,765	362,663	362,709	0,046	204,3700	0	2,43%			
Rec	1.130,000	616.023,045	4.676.380,768	362,718	362,733	0,015	204,3700	0	2,43%			
Rec	1.131,000	616.022,976	4.676.379,770	362,777	362,758	-0,019	204,3700	0	2,43%			
Rec	1.132,000	616.022,908	4.676.378,772	362,836	362,782	-0,054	204,3700	0	2,43%			
Rec	1.133,000	616.022,839	4.676.377,775	362,898	362,806	-0,092	204,3700	0	2,43%			
Rec	1.134,000	616.022,770	4.676.376,777	362,964	362,831	-0,133	204,3700	0	2,43%			
Rec	1.135,000	616.022,702	4.676.375,779	363,047	362,855	-0,192	204,3700	0	2,43%			
Rec	1.136,000	616.022,633	4.676.374,782	363,127	362,879	-0,248	204,3700	0	2,43%			
Rec	1.137,000	616.022,565	4.676.373,784	363,171	362,904	-0,267	204,3700	0	2,43%			
Rec	1.138,000	616.022,496	4.676.372,786	363,158	362,928	-0,230	204,3700	0	2,43%			
Rec	1.139,000	616.022,427	4.676.371,789	363,324	362,952	-0,372	204,3700	0	2,43%			
Rec	1.140,000	616.022,359	4.676.370,791	363,443	362,977	-0,466	204,3700	0	2,43%			
Rec	1.141,000	616.022,290	4.676.369,793	363,342	363,001	-0,341	204,3700	0	2,43%			
Rec	1.142,000	616.022,222	4.676.368,796	363,213	363,025	-0,188	204,3700	0	2,43%			
Rec	1.143,000	616.022,153	4.676.367,798	363,098	363,050	-0,048	204,3700	0	2,43%			
Rec	1.144,000	616.022,084	4.676.366,800	362,990	363,074	0,084	204,3700	0	2,43%			
Rec	1.145,000	616.022,016	4.676.365,803	362,921	363,098	0,177	204,3700	0	2,43%			
Rec	1.146,000	616.021,947	4.676.364,805	362,855	363,122	0,267	204,3700	0	2,43%			
Rec	1.147,000	616.021,879	4.676.363,808	362,802	363,147	0,345	204,3700	0	2,43%			
Rec	1.148,000	616.021,810	4.676.362,810	362,759	363,171	0,412	204,3700	0	2,43%			
Rec	1.149,000	616.021,742	4.676.361,812	362,747	363,195	0,448	204,3700	0	2,43%			
Rec	1.150,000	616.021,673	4.676.360,815	362,672	363,220	0,548	204,3700	0	2,43%			
Rec	1.151,000	616.021,604	4.676.359,817	362,620	363,244	0,624	204,3700	0	2,43%			
Rec	1.152,000	616.021,536	4.676.358,819	362,570	363,268	0,698	204,3700	0	2,43%			
Rec	1.153,000	616.021,467	4.676.357,822	362,539	363,293	0,754	204,3700	0	2,43%			
Rec	1.154,000	616.021,399	4.676.356,824	362,553	363,317	0,764	204,3700	0	2,43%			
Rec	1.155,000	616.021,330	4.676.355,826	362,562	363,341	0,779	204,3700	0	2,43%			
Rec	1.156,000	616.021,261	4.676.354,829	362,609	363,366	0,757	204,3700	0	2,43%			
Rec	1.157,000	616.021,193	4.676.353,831	362,682	363,390	0,708	204,3700	0	2,43%			
Rec	1.158,000	616.021,124	4.676.352,833	362,556	363,414	0,858	204,3700	0	2,43%			
Rec	1.159,000	616.021,056	4.676.351,836	362,398	363,438	1,040	204,3700	0	2,43%			
Rec	1.160,000	616.020,987	4.676.350,838	362,201	363,463	1,262	204,3700	0	2,43%			
Rec	1.161,000	616.020,918	4.676.349,841	362,055	363,487	1,432	204,3700	0	2,43%			
Rec	1.162,000	616.020,850	4.676.348,843	360,591	363,511	2,920	204,3700	0	2,43%			
Rec	1.163,000	616.020,781	4.676.347,845	359,454	363,536	4,082	204,3700	0	2,43%			3 MARCOS 2,5m x 2,0m
Rec	1.164,000	616.020,713	4.676.346,848	360,168	363,560	3,392	204,3700	0	2,43%			
Rec	1.165,000	616.020,644	4.676.345,850	360,792	363,584	2,792	204,3700	0	2,43%			
Rec	1.166,000	616.020,575	4.676.344,852	361,859	363,609	1,750	204,3700	0	2,43%			
Rec	1.167,000	616.020,507	4.676.343,855	363,515	363,633	0,118	204,3700	0	2,43%			
Rec	1.168,000	616.020,438	4.676.342,857	363,676	363,657	-0,019	204,3700	0	2,43%			
Rec	1.169,000	616.020,370	4.676.341,859	363,716	363,682	-0,034	204,3700	0	2,43%			
Rec	1.170,000	616.020,301	4.676.340,862	363,706	363,706	0,000	204,3700	0	2,43%			
Rec	1.171,000	616.020,233	4.676.339,864	363,639	363,730	0,091	204,3700	0	2,43%			
Rec	1.172,000	616.020,164	4.676.338,866	363,676	363,754	0,078	204,3700	0	2,43%			
Rec	1.173,000	616.020,095	4.676.337,869	363,722	363,779	0,057	204,3700	0	2,43%			
Rec	1.174,000	616.020,027	4.676.336,871	363,749	363,803	0,054	204,3700	0	2,43%			
Rec	1.175,000	616.019,958	4.676.335,873	363,777	363,827	0,050	204,3700	0	2,43%			
Rec	1.176,000	616.019,890	4.676.334,876	363,782	363,852	0,070	204,3700	0	2,43%			
Rec	1.177,000	616.019,821	4.676.333,878	363,781	363,876	0,095	204,3700	0	2,43%			
Rec	1.178,000	616.019,752	4.676.332,881	363,769	363,900	0,131	204,3700	0	2,43%			
Rec	1.179,000	616.019,684	4.676.331,883	363,771	363,925	0,154	204,3700	0	2,43%		T.E.	
Rec	1.179,116	616.019,676	4.676.331,767	363,772	363,927	0,155	204,3700	0	2,43%			
Rec	1.180,000	616.019,615	4.676.330,885	363,780	363,949	0,169	204,3700	0	2,34%			
Rec	1.181,000	616.019,547	4.676.329,888	363,788	363,971	0,183	204,3700	0	2,24%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.182,000	616.019,478	4.676.328,890	363,762	363,993	0,231	204,3700	0	2,14%			
Rec	1.183,000	616.019,409	4.676.327,892	363,751	364,014	0,263	204,3700	0	2,04%			
Rec	1.184,000	616.019,341	4.676.326,895	363,748	364,034	0,286	204,3700	0	1,94%			
Rec	1.185,000	616.019,272	4.676.325,897	363,744	364,053	0,309	204,3700	0	1,84%			
Rec	1.186,000	616.019,204	4.676.324,899	363,738	364,071	0,333	204,3700	0	1,74%			
Rec	1.187,000	616.019,135	4.676.323,902	363,710	364,088	0,378	204,3700	0	1,64%			
Rec	1.188,000	616.019,067	4.676.322,904	363,685	364,104	0,419	204,3700	0	1,54%			
Rec	1.189,000	616.018,998	4.676.321,906	363,656	364,119	0,463	204,3700	0	1,44%		V.	
Rec	1.190,000	616.018,929	4.676.320,909	363,645	364,133	0,488	204,3700	0	1,34%			
Rec	1.191,000	616.018,861	4.676.319,911	363,634	364,146	0,512	204,3700	0	1,24%			
Rec	1.192,000	616.018,792	4.676.318,914	363,624	364,158	0,534	204,3700	0	1,14%			
Rec	1.193,000	616.018,724	4.676.317,916	363,600	364,169	0,569	204,3700	0	1,04%			
Rec	1.194,000	616.018,655	4.676.316,918	363,607	364,178	0,571	204,3700	0	0,94%			
Rec	1.195,000	616.018,586	4.676.315,921	363,614	364,187	0,573	204,3700	0	0,84%			
Rec	1.196,000	616.018,518	4.676.314,923	363,618	364,195	0,577	204,3700	0	0,74%			
Rec	1.197,000	616.018,449	4.676.313,925	363,603	364,202	0,599	204,3700	0	0,64%			
Rec	1.198,000	616.018,381	4.676.312,928	363,600	364,208	0,608	204,3700	0	0,54%			
Rec	1.199,000	616.018,312	4.676.311,930	363,598	364,213	0,615	204,3700	0	0,44%			
Rec	1.200,000	616.018,243	4.676.310,932	363,601	364,217	0,616	204,3700	0	0,34%		T.S.	
Rec	1.200,884	616.018,183	4.676.310,050	363,605	364,220	0,615	204,3700	0	0,25%			
Rec	1.201,000	616.018,175	4.676.309,935	363,605	364,220	0,615	204,3700	0	0,25%			
Rec	1.202,000	616.018,106	4.676.308,937	363,605	364,222	0,617	204,3700	0	0,25%			
Rec	1.203,000	616.018,038	4.676.307,939	363,609	364,225	0,616	204,3700	0	0,25%			
Rec	1.204,000	616.017,969	4.676.306,942	363,617	364,228	0,611	204,3700	0	0,25%			
Rec	1.205,000	616.017,900	4.676.305,944	363,629	364,230	0,601	204,3700	0	0,25%			
Rec	1.206,000	616.017,832	4.676.304,946	363,654	364,233	0,579	204,3700	0	0,25%			
Rec	1.207,000	616.017,763	4.676.303,949	363,551	364,235	0,684	204,3700	0	0,25%			
Rec	1.208,000	616.017,695	4.676.302,951	363,480	364,238	0,758	204,3700	0	0,25%			
Rec	1.209,000	616.017,626	4.676.301,954	363,325	364,240	0,915	204,3700	0	0,25%			
Rec	1.210,000	616.017,558	4.676.300,956	363,255	364,243	0,988	204,3700	0	0,25%			
Rec	1.211,000	616.017,489	4.676.299,958	363,166	364,245	1,079	204,3700	0	0,25%			
Rec	1.212,000	616.017,420	4.676.298,961	363,195	364,248	1,053	204,3700	0	0,25%			
Rec	1.213,000	616.017,352	4.676.297,963	363,052	364,250	1,198	204,3700	0	0,25%	P.S.		
Cur	1.213,582	616.017,312	4.676.297,383	362,611	364,252	1,641	204,3700	200	0,25%			2 MARCOS 3,0m x 1,5m
Cur	1.214,000	616.017,283	4.676.296,965	362,144	364,253	2,109	204,5032	200	0,25%			
Cur	1.215,000	616.017,210	4.676.295,968	361,881	364,255	2,375	204,8215	200	0,25%			
Cur	1.216,000	616.017,131	4.676.294,971	362,402	364,258	1,856	205,1398	200	0,25%			
Cur	1.217,000	616.017,048	4.676.293,975	363,039	364,261	1,222	205,4581	200	0,25%			
Cur	1.218,000	616.016,960	4.676.292,978	363,174	364,263	1,089	205,7765	200	0,25%			
Cur	1.219,000	616.016,867	4.676.291,983	363,346	364,266	0,920	206,0948	200	0,25%			
Cur	1.220,000	616.016,769	4.676.290,988	363,559	364,268	0,709	206,4131	200	0,25%			
Cur	1.221,000	616.016,666	4.676.289,993	363,562	364,271	0,709	206,7314	200	0,25%			
Cur	1.222,000	616.016,558	4.676.288,999	363,576	364,273	0,697	207,0497	200	0,25%			
Cur	1.223,000	616.016,445	4.676.288,005	363,580	364,276	0,696	207,3680	200	0,25%			
Cur	1.224,000	616.016,327	4.676.287,012	363,588	364,278	0,690	207,6863	200	0,25%			
Cur	1.225,000	616.016,204	4.676.286,020	363,603	364,281	0,678	208,0046	200	0,25%			
Cur	1.226,000	616.016,076	4.676.285,028	363,619	364,283	0,664	208,3229	200	0,25%			
Cur	1.227,000	616.015,943	4.676.284,037	363,631	364,286	0,655	208,6412	200	0,25%			
Cur	1.228,000	616.015,805	4.676.283,046	363,642	364,289	0,647	208,9596	200	0,25%			
Cur	1.229,000	616.015,663	4.676.282,057	363,652	364,291	0,639	209,2779	200	0,25%			
Cur	1.230,000	616.015,515	4.676.281,068	363,663	364,294	0,631	209,5962	200	0,25%			
Cur	1.231,000	616.015,362	4.676.280,079	363,672	364,296	0,624	209,9145	200	0,25%			
Cur	1.232,000	616.015,205	4.676.279,092	363,698	364,299	0,601	210,2328	200	0,25%			
Cur	1.233,000	616.015,042	4.676.278,105	363,716	364,301	0,585	210,5511	200	0,25%			
Cur	1.234,000	616.014,875	4.676.277,119	363,730	364,304	0,574	210,8694	200	0,25%			
Cur	1.235,000	616.014,702	4.676.276,134	363,729	364,306	0,577	211,1877	200	0,25%			
Cur	1.236,000	616.014,525	4.676.275,150	363,744	364,309	0,565	211,5060	200	0,25%			
Cur	1.237,000	616.014,343	4.676.274,167	363,745	364,311	0,566	211,8243	200	0,25%			
Cur	1.238,000	616.014,156	4.676.273,184	363,772	364,314	0,542	212,1427	200	0,25%			
Cur	1.239,000	616.013,964	4.676.272,203	363,776	364,316	0,540	212,4610	200	0,25%			
Cur	1.240,000	616.013,767	4.676.271,223	363,777	364,319	0,542	212,7793	200	0,25%			
Cur	1.241,000	616.013,565	4.676.270,243	363,778	364,322	0,544	213,0976	200	0,25%			
Cur	1.242,000	616.013,358	4.676.269,265	363,785	364,324	0,539	213,4159	200	0,25%			
Cur	1.243,000	616.013,147	4.676.268,287	363,829	364,327	0,498	213,7342	200	0,25%			
Cur	1.244,000	616.012,930	4.676.267,311	363,823	364,329	0,506	214,0525	200	0,25%			
Cur	1.245,000	616.012,709	4.676.266,336	363,831	364,332	0,501	214,3708	200	0,25%			
Cur	1.246,000	616.012,483	4.676.265,362	363,829	364,334	0,505	214,6891	200	0,25%			
Cur	1.247,000	616.012,251	4.676.264,389	363,837	364,337	0,500	215,0074	200	0,25%			
Cur	1.248,000	616.012,015	4.676.263,417	363,834	364,339	0,505	215,3258	200	0,25%			
Cur	1.249,000	616.011,775	4.676.262,447	363,831	364,342	0,511	215,6441	200	0,25%			
Cur	1.250,000	616.011,529	4.676.261,477	363,827	364,344	0,517	215,9624	200	0,25%			
Cur	1.251,000	616.011,278	4.676.260,509	363,823	364,347	0,524	216,2807	200	0,25%			
Cur	1.252,000	616.011,023	4.676.259,542	363,819	364,349	0,530	216,5990	200	0,25%			
Cur	1.253,000	616.010,763	4.676.258,577	363,815	364,352	0,537	216,9173	200	0,25%			
Cur	1.254,000	616.010,498	4.676.257,613	363,814	364,355	0,541	217,2356	200	0,25%			
Cur	1.255,000	616.010,228	4.676.256,650	363,818	364,357	0,539	217,5539	200	0,25%			
Cur	1.256,000	616.009,953	4.676.255,688	363,823	364,360	0,537	217,8722	200	0,25%			
Cur	1.257,000	616.009,674	4.676.254,728	363,827	364,362	0,535	218,1905	200	0,25%			
Cur	1.258,000	616.009,389	4.676.253,769	363,836	364,365	0,529	218,5089	200	0,25%			
Cur	1.259,000	616.009,100	4.676.252,812	363,846	364,367	0,521	218,8272	200	0,25%			
Cur	1.260,000	616.008,807	4.676.251,856	363,856	364,370	0,514	219,1455	200	0,25%			
Cur	1.261,000	616.008,508	4.676.250,902	363,871	364,372	0,501	219,4638	200	0,25%			
Cur	1.262,000	616.008,205	4.676.249,949	363,885	364,375	0,490	219,7821	200	0,25%			
Cur	1.263,000	616.007,896	4.676.248,998	363,905	364,377	0,472	220,1004	200	0,25%			
Cur	1.264,000	616.007,584	4.676.248,048	363,922	364,380	0,458	220,4187	200	0,25%			
Cur	1.265,000	616.007,266	4.676.247,100	363,940	364,383	0,443	220,7370	200	0,25%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.266,000	616.006,944	4.676.246,153	363,958	364,385	0,427	221,0553	200	0,25%			
Cur	1.267,000	616.006,616	4.676.245,208	363,978	364,388	0,410	221,3736	200	0,25%			
Cur	1.268,000	616.006,285	4.676.244,265	363,998	364,390	0,392	221,6920	200	0,25%			
Cur	1.269,000	616.005,948	4.676.243,323	364,020	364,393	0,373	222,0103	200	0,25%			
Cur	1.270,000	616.005,607	4.676.242,383	364,043	364,395	0,352	222,3286	200	0,25%			
Cur	1.271,000	616.005,261	4.676.241,445	364,066	364,398	0,332	222,6469	200	0,25%			
Cur	1.272,000	616.004,910	4.676.240,508	364,084	364,400	0,316	222,9652	200	0,25%			
Cur	1.273,000	616.004,555	4.676.239,573	364,110	364,403	0,293	223,2835	200	0,25%			
Cur	1.274,000	616.004,195	4.676.238,640	364,136	364,405	0,269	223,6018	200	0,25%			
Cur	1.275,000	616.003,830	4.676.237,709	364,170	364,408	0,238	223,9201	200	0,25%			
Cur	1.276,000	616.003,461	4.676.236,780	364,203	364,410	0,207	224,2384	200	0,25%			
Cur	1.277,000	616.003,087	4.676.235,853	364,261	364,413	0,152	224,5567	200	0,25%			
Cur	1.278,000	616.002,709	4.676.234,927	364,334	364,416	0,082	224,8751	200	0,25%			
Cur	1.279,000	616.002,325	4.676.234,003	364,394	364,418	0,024	225,1934	200	0,25%		T.E.	
Cur	1.279,592	616.002,096	4.676.233,457	364,410	364,420	0,010	225,3818	200	0,25%			
Cur	1.280,000	616.001,938	4.676.233,082	364,421	364,421	0,000	225,5117	200	0,34%			
Cur	1.281,000	616.001,545	4.676.232,162	364,420	364,425	0,005	225,8300	200	0,54%			
Cur	1.282,000	616.001,148	4.676.231,244	364,410	364,431	0,021	226,1483	200	0,74%			
Cur	1.283,000	616.000,747	4.676.230,328	364,401	364,440	0,039	226,4666	200	0,94%			
Cur	1.284,000	616.000,341	4.676.229,414	364,391	364,450	0,059	226,7849	200	1,14%			
Cur	1.285,000	615.999,930	4.676.228,503	364,381	364,463	0,082	227,1032	200	1,34%			
Cur	1.286,000	615.999,515	4.676.227,593	364,382	364,477	0,095	227,4215	200	1,54%			
Cur	1.287,000	615.999,095	4.676.226,685	364,387	364,493	0,106	227,7398	200	1,74%			
Cur	1.288,000	615.998,670	4.676.225,780	364,394	364,512	0,118	228,0582	200	1,94%			
Cur	1.289,000	615.998,242	4.676.224,876	364,470	364,532	0,062	228,3765	200	2,14%		V.	
Cur	1.290,000	615.997,808	4.676.223,975	364,589	364,554	-0,035	228,6948	200	2,34%			
Cur	1.291,000	615.997,370	4.676.223,076	364,620	364,579	-0,041	229,0131	200	2,54%			
Cur	1.292,000	615.996,928	4.676.222,179	364,640	364,605	-0,035	229,3314	200	2,74%			
Cur	1.293,000	615.996,481	4.676.221,285	364,679	364,633	-0,046	229,6497	200	2,94%			
Cur	1.294,000	615.996,030	4.676.220,392	364,705	364,664	-0,041	229,9680	200	3,14%	P.S.		
Rec	1.294,006	615.996,027	4.676.220,387	364,705	364,664	-0,041	229,9699	0	3,14%			
Rec	1.295,000	615.995,576	4.676.219,501	364,726	364,696	-0,030	229,9699	0	3,34%			
Rec	1.296,000	615.995,123	4.676.218,610	364,756	364,730	-0,026	229,9699	0	3,54%			
Rec	1.297,000	615.994,669	4.676.217,719	364,764	364,767	0,003	229,9699	0	3,74%			
Rec	1.298,000	615.994,216	4.676.216,827	364,778	364,805	0,027	229,9699	0	3,94%			
Rec	1.299,000	615.993,762	4.676.215,936	364,796	364,846	0,050	229,9699	0	4,14%			
Rec	1.300,000	615.993,308	4.676.215,045	364,823	364,888	0,065	229,9699	0	4,34%		T.S.	
Rec	1.300,408	615.993,123	4.676.214,681	364,838	364,906	0,068	229,9699	0	4,42%			
Rec	1.301,000	615.992,855	4.676.214,154	364,860	364,932	0,072	229,9699	0	4,42%			
Rec	1.302,000	615.992,401	4.676.213,263	364,908	364,976	0,068	229,9699	0	4,42%			
Rec	1.303,000	615.991,948	4.676.212,371	364,966	365,020	0,054	229,9699	0	4,42%			
Rec	1.304,000	615.991,494	4.676.211,480	365,031	365,065	0,034	229,9699	0	4,42%			
Rec	1.305,000	615.991,041	4.676.210,589	365,109	365,109	0,000	229,9699	0	4,42%			
Rec	1.306,000	615.990,587	4.676.209,698	365,187	365,153	-0,034	229,9699	0	4,42%			
Rec	1.307,000	615.990,133	4.676.208,806	365,265	365,197	-0,068	229,9699	0	4,42%			
Rec	1.308,000	615.989,680	4.676.207,915	365,343	365,241	-0,102	229,9699	0	4,42%			
Rec	1.309,000	615.989,226	4.676.207,024	365,421	365,285	-0,136	229,9699	0	4,42%			
Rec	1.310,000	615.988,773	4.676.206,133	365,499	365,330	-0,169	229,9699	0	4,42%			
Rec	1.311,000	615.988,319	4.676.205,242	365,577	365,374	-0,203	229,9699	0	4,42%			
Rec	1.312,000	615.987,866	4.676.204,350	365,654	365,418	-0,236	229,9699	0	4,42%			
Rec	1.313,000	615.987,412	4.676.203,459	365,733	365,462	-0,271	229,9699	0	4,42%			
Rec	1.314,000	615.986,958	4.676.202,568	365,812	365,506	-0,306	229,9699	0	4,42%			
Rec	1.315,000	615.986,505	4.676.201,677	365,888	365,551	-0,337	229,9699	0	4,42%			
Rec	1.316,000	615.986,051	4.676.200,785	365,965	365,595	-0,370	229,9699	0	4,42%			
Rec	1.317,000	615.985,598	4.676.199,894	366,020	365,639	-0,381	229,9699	0	4,42%			
Rec	1.318,000	615.985,144	4.676.199,003	366,057	365,683	-0,374	229,9699	0	4,42%			
Rec	1.319,000	615.984,691	4.676.198,112	366,094	365,727	-0,367	229,9699	0	4,42%			
Rec	1.320,000	615.984,237	4.676.197,221	366,132	365,771	-0,361	229,9699	0	4,42%			
Rec	1.321,000	615.983,783	4.676.196,329	366,169	365,816	-0,353	229,9699	0	4,42%			
Rec	1.322,000	615.983,330	4.676.195,438	366,205	365,860	-0,345	229,9699	0	4,42%			
Rec	1.323,000	615.982,876	4.676.194,547	366,242	365,904	-0,338	229,9699	0	4,42%			
Rec	1.324,000	615.982,423	4.676.193,656	366,277	365,948	-0,329	229,9699	0	4,42%			
Rec	1.325,000	615.981,969	4.676.192,764	366,313	365,992	-0,321	229,9699	0	4,42%			
Rec	1.326,000	615.981,516	4.676.191,873	366,350	366,037	-0,313	229,9699	0	4,42%			
Rec	1.327,000	615.981,062	4.676.190,982	366,390	366,081	-0,309	229,9699	0	4,42%			
Rec	1.328,000	615.980,608	4.676.190,091	366,430	366,125	-0,305	229,9699	0	4,42%			
Rec	1.329,000	615.980,155	4.676.189,200	366,471	366,169	-0,302	229,9699	0	4,42%			
Rec	1.330,000	615.979,701	4.676.188,308	366,512	366,213	-0,299	229,9699	0	4,42%			
Rec	1.331,000	615.979,248	4.676.187,417	366,553	366,257	-0,296	229,9699	0	4,42%			
Rec	1.332,000	615.978,794	4.676.186,526	366,593	366,302	-0,291	229,9699	0	4,42%			
Rec	1.333,000	615.978,341	4.676.185,635	366,634	366,346	-0,288	229,9699	0	4,42%			
Rec	1.334,000	615.977,887	4.676.184,743	366,675	366,390	-0,285	229,9699	0	4,42%			
Rec	1.335,000	615.977,433	4.676.183,852	366,715	366,434	-0,281	229,9699	0	4,42%			
Rec	1.336,000	615.976,980	4.676.182,961	366,724	366,478	-0,246	229,9699	0	4,42%		T.E.	
Rec	1.336,285	615.976,851	4.676.182,707	366,726	366,491	-0,235	229,9699	0	4,42%			
Rec	1.337,000	615.976,526	4.676.182,070	366,731	366,524	-0,207	229,9699	0	4,78%			
Rec	1.338,000	615.976,073	4.676.181,179	366,752	366,574	-0,178	229,9699	0	5,28%			
Rec	1.339,000	615.975,619	4.676.180,287	366,781	366,629	-0,152	229,9699	0	5,78%			
Rec	1.340,000	615.975,166	4.676.179,396	366,811	366,690	-0,121	229,9699	0	6,28%			
Rec	1.341,000	615.974,712	4.676.178,505	366,837	366,755	-0,082	229,9699	0	6,78%			
Rec	1.342,000	615.974,258	4.676.177,614	366,861	366,825	-0,036	229,9699	0	7,28%			
Rec	1.343,000	615.973,805	4.676.176,722	366,883	366,900	0,017	229,9699	0	7,78%			
Rec	1.344,000	615.973,351	4.676.175,831	366,903	366,981	0,078	229,9699	0	8,28%			
Rec	1.345,000	615.972,898	4.676.174,940	366,922	367,066	0,144	229,9699	0	8,78%			
Rec	1.346,000	615.972,444	4.676.174,049	366,940	367,156	0,216	229,9699	0	9,28%	P.S.	V.	
Cur	1.346,719	615.972,118	4.676.173,408	366,952	367,224	0,272	229,9699	-200	9,64%			
Cur	1.347,000	615.971,991	4.676.173,158	366,957	367,251	0,294	229,8805	-200	9,78%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.348,000	615.971,541	4.676.172,265	366,974	367,352	0,378	229,5622	-200	10,28%			
Cur	1.349,000	615.971,095	4.676.171,369	366,991	367,457	0,466	229,2438	-200	10,78%			
Cur	1.350,000	615.970,654	4.676.170,472	367,021	367,567	0,546	228,9255	-200	11,28%			
Cur	1.351,000	615.970,217	4.676.169,572	367,066	367,682	0,616	228,6072	-200	11,78%			
Cur	1.352,000	615.969,785	4.676.168,670	367,126	367,803	0,677	228,2889	-200	12,28%			
Cur	1.353,000	615.969,358	4.676.167,766	367,181	367,928	0,747	227,9706	-200	12,78%			
Cur	1.354,000	615.968,934	4.676.166,860	367,240	368,058	0,818	227,6523	-200	13,28%			
Cur	1.355,000	615.968,516	4.676.165,952	367,319	368,194	0,875	227,3340	-200	13,78%			
Cur	1.356,000	615.968,102	4.676.165,042	367,386	368,334	0,948	227,0157	-200	14,28%			
Cur	1.357,000	615.967,692	4.676.164,130	367,449	368,479	1,030	226,6974	-200	14,78%		T.S.	
Cur	1.357,153	615.967,630	4.676.163,990	367,460	368,502	1,041	226,6487	-200	14,85%			
Cur	1.358,000	615.967,288	4.676.163,215	367,524	368,627	1,103	226,3791	-200	14,85%			
Cur	1.359,000	615.966,887	4.676.162,299	367,609	368,776	1,167	226,0607	-200	14,85%			
Cur	1.360,000	615.966,491	4.676.161,380	367,681	368,924	1,243	225,7424	-200	14,85%			
Cur	1.361,000	615.966,100	4.676.160,460	367,762	369,073	1,311	225,4241	-200	14,85%			
Cur	1.362,000	615.965,714	4.676.159,538	367,851	369,221	1,370	225,1058	-200	14,85%			
Cur	1.363,000	615.965,332	4.676.158,614	367,938	369,370	1,432	224,7875	-200	14,85%			
Cur	1.364,000	615.964,955	4.676.157,688	368,050	369,518	1,468	224,4692	-200	14,85%			
Cur	1.365,000	615.964,582	4.676.156,760	368,205	369,667	1,462	224,1509	-200	14,85%			
Cur	1.366,000	615.964,214	4.676.155,830	368,360	369,815	1,455	223,8326	-200	14,85%			
Cur	1.367,000	615.963,851	4.676.154,898	368,514	369,964	1,450	223,5143	-200	14,85%			
Cur	1.368,000	615.963,492	4.676.153,965	368,668	370,112	1,444	223,1960	-200	14,85%			
Cur	1.369,000	615.963,138	4.676.153,029	368,822	370,261	1,439	222,8776	-200	14,85%			
Cur	1.370,000	615.962,789	4.676.152,092	368,976	370,409	1,433	222,5593	-200	14,85%		T.E.	
Cur	1.370,094	615.962,756	4.676.152,004	368,992	370,423	1,431	222,5294	-200	14,85%			
Cur	1.371,000	615.962,444	4.676.151,154	369,145	370,552	1,407	222,2410	-200	13,64%			
Cur	1.372,000	615.962,104	4.676.150,213	369,316	370,682	1,366	221,9227	-200	12,31%			
Cur	1.373,000	615.961,769	4.676.149,271	369,491	370,799	1,308	221,6044	-200	10,98%			
Cur	1.374,000	615.961,438	4.676.148,327	369,667	370,902	1,235	221,2861	-200	9,64%			
Cur	1.375,000	615.961,112	4.676.147,382	369,844	370,991	1,147	220,9678	-200	8,31%			
Cur	1.376,000	615.960,791	4.676.146,435	370,047	371,068	1,021	220,6495	-200	6,98%			
Cur	1.377,000	615.960,475	4.676.145,486	370,475	371,131	0,656	220,3312	-200	5,64%			
Cur	1.378,000	615.960,163	4.676.144,536	370,909	371,181	0,272	220,0129	-200	4,31%			
Cur	1.379,000	615.959,857	4.676.143,584	371,301	371,217	-0,084	219,6945	-200	2,98%			
Cur	1.380,000	615.959,555	4.676.142,631	371,682	371,240	-0,442	219,3762	-200	1,64%		V.	
Cur	1.381,000	615.959,257	4.676.141,676	371,975	371,250	-0,725	219,0579	-200	0,31%			
Cur	1.382,000	615.958,965	4.676.140,720	371,969	371,246	-0,723	218,7396	-200	-1,02%			
Cur	1.383,000	615.958,677	4.676.139,762	371,713	371,230	-0,483	218,4213	-200	-2,36%			
Cur	1.384,000	615.958,394	4.676.138,803	371,421	371,199	-0,222	218,1030	-200	-3,69%			
Cur	1.385,000	615.958,116	4.676.137,843	371,120	371,156	0,036	217,7847	-200	-5,02%			
Cur	1.386,000	615.957,843	4.676.136,881	370,792	371,099	0,307	217,4664	-200	-6,36%			
Cur	1.387,000	615.957,574	4.676.135,917	370,447	371,029	0,582	217,1481	-200	-7,69%			
Cur	1.388,000	615.957,310	4.676.134,953	370,102	370,945	0,843	216,8298	-200	-9,02%			
Cur	1.389,000	615.957,051	4.676.133,987	369,825	370,848	1,023	216,5114	-200	-10,36%			
Cur	1.390,000	615.956,797	4.676.133,020	369,549	370,738	1,189	216,1931	-200	-11,69%			
Cur	1.391,000	615.956,548	4.676.132,051	369,247	370,614	1,367	215,8748	-200	-13,02%		T.S.	
Cur	1.391,906	615.956,327	4.676.131,173	368,971	370,491	1,520	215,5864	-200	-14,23%			
Cur	1.392,000	615.956,304	4.676.131,081	368,942	370,478	1,536	215,5565	-200	-14,23%			
Cur	1.393,000	615.956,064	4.676.130,111	368,948	370,335	1,387	215,2382	-200	-14,23%			
Cur	1.394,000	615.955,830	4.676.129,139	368,695	370,193	1,498	214,9199	-200	-14,23%			
Cur	1.395,000	615.955,600	4.676.128,165	368,475	370,051	1,576	214,6016	-200	-14,23%			
Cur	1.396,000	615.955,375	4.676.127,191	368,457	369,908	1,451	214,2833	-200	-14,23%			
Cur	1.397,000	615.955,155	4.676.126,215	368,381	369,766	1,385	213,9650	-200	-14,23%			
Cur	1.398,000	615.954,940	4.676.125,239	368,187	369,624	1,437	213,6467	-200	-14,23%			
Cur	1.399,000	615.954,729	4.676.124,261	367,999	369,482	1,483	213,3283	-200	-14,23%			
Cur	1.400,000	615.954,524	4.676.123,283	367,839	369,339	1,500	213,0100	-200	-14,23%			
Cur	1.401,000	615.954,324	4.676.122,303	367,709	369,197	1,488	212,6917	-200	-14,23%			
Cur	1.402,000	615.954,128	4.676.121,322	367,548	369,055	1,507	212,3734	-200	-14,23%			
Cur	1.403,000	615.953,937	4.676.120,340	367,433	368,912	1,479	212,0551	-200	-14,23%			
Cur	1.404,000	615.953,752	4.676.119,358	367,299	368,770	1,471	211,7368	-200	-14,23%			
Cur	1.405,000	615.953,571	4.676.118,374	367,224	368,628	1,404	211,4185	-200	-14,23%			
Cur	1.406,000	615.953,395	4.676.117,390	367,145	368,485	1,340	211,1002	-200	-14,23%			
Cur	1.407,000	615.953,224	4.676.116,405	367,050	368,343	1,293	210,7819	-200	-14,23%			
Cur	1.408,000	615.953,058	4.676.115,419	366,950	368,201	1,251	210,4636	-200	-14,23%			
Cur	1.409,000	615.952,896	4.676.114,432	366,847	368,058	1,211	210,1453	-200	-14,23%			
Cur	1.410,000	615.952,740	4.676.113,444	366,740	367,916	1,176	209,8269	-200	-14,23%			
Cur	1.411,000	615.952,589	4.676.112,455	366,640	367,774	1,134	209,5086	-200	-14,23%			
Cur	1.412,000	615.952,443	4.676.111,466	366,538	367,632	1,094	209,1903	-200	-14,23%			
Cur	1.413,000	615.952,301	4.676.110,476	366,445	367,489	1,044	208,8720	-200	-14,23%			
Cur	1.414,000	615.952,165	4.676.109,486	366,347	367,347	1,000	208,5537	-200	-14,23%			
Cur	1.415,000	615.952,033	4.676.108,494	366,249	367,205	0,956	208,2354	-200	-14,23%			
Cur	1.416,000	615.951,907	4.676.107,502	366,149	367,062	0,913	207,9171	-200	-14,23%			
Cur	1.417,000	615.951,785	4.676.106,510	366,044	366,920	0,876	207,5988	-200	-14,23%			
Cur	1.418,000	615.951,669	4.676.105,517	365,934	366,778	0,844	207,2805	-200	-14,23%			
Cur	1.419,000	615.951,557	4.676.104,523	365,822	366,635	0,813	206,9622	-200	-14,23%			
Cur	1.420,000	615.951,450	4.676.103,529	365,691	366,493	0,802	206,6438	-200	-14,23%			
Cur	1.421,000	615.951,349	4.676.102,534	365,577	366,351	0,774	206,3255	-200	-14,23%			
Cur	1.422,000	615.951,252	4.676.101,538	365,437	366,209	0,772	206,0072	-200	-14,23%	P.S.		
Rec	1.422,097	615.951,243	4.676.101,442	365,423	366,195	0,772	205,9763	0	-14,23%			
Rec	1.423,000	615.951,158	4.676.100,543	365,307	366,066	0,759	205,9763	0	-14,23%			
Rec	1.424,000	615.951,065	4.676.099,547	365,172	365,924	0,752	205,9763	0	-14,23%			
Rec	1.425,000	615.950,971	4.676.098,552	365,023	365,782	0,759	205,9763	0	-14,23%			
Rec	1.426,000	615.950,877	4.676.097,556	364,859	365,639	0,780	205,9763	0	-14,23%			
Rec	1.427,000	615.950,783	4.676.096,560	364,652	365,497	0,845	205,9763	0	-14,23%			
Rec	1.428,000	615.950,690	4.676.095,565	364,425	365,355	0,930	205,9763	0	-14,23%			
Rec	1.429,000	615.950,596	4.676.094,569	364,198	365,212	1,014	205,9763	0	-14,23%			
Rec	1.430,500	615.950,455	4.676.093,076	363,794	364,999	1,205	205,9763	0	-14,23%			ODT DN 500

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.430,000	615.950,502	4.676.093,574	363,922	365,070	1,148	205,9763	0	-14,23%			
Rec	1.431,000	615.950,408	4.676.092,578	363,665	364,928	1,263	205,9763	0	-14,23%			
Rec	1.432,000	615.950,315	4.676.091,582	363,678	364,785	1,107	205,9763	0	-14,23%			
Rec	1.433,000	615.950,221	4.676.090,587	363,692	364,643	0,951	205,9763	0	-14,23%			
Rec	1.434,000	615.950,127	4.676.089,591	363,672	364,501	0,829	205,9763	0	-14,23%			
Rec	1.435,000	615.950,033	4.676.088,596	363,597	364,359	0,762	205,9763	0	-14,23%			
Rec	1.436,000	615.949,940	4.676.087,600	363,521	364,216	0,695	205,9763	0	-14,23%			
Rec	1.437,000	615.949,846	4.676.086,604	363,451	364,074	0,623	205,9763	0	-14,23%			
Rec	1.438,000	615.949,752	4.676.085,609	363,378	363,932	0,554	205,9763	0	-14,23%			
Rec	1.439,000	615.949,658	4.676.084,613	363,294	363,789	0,495	205,9763	0	-14,23%		T.E.	
Rec	1.439,468	615.949,615	4.676.084,147	363,265	363,723	0,458	205,9763	0	-14,23%			
Rec	1.440,000	615.949,565	4.676.083,618	363,232	363,648	0,416	205,9763	0	-13,96%			
Rec	1.441,000	615.949,471	4.676.082,622	363,142	363,511	0,369	205,9763	0	-13,46%			
Rec	1.442,000	615.949,377	4.676.081,626	363,052	363,378	0,326	205,9763	0	-12,96%			
Rec	1.443,000	615.949,284	4.676.080,631	362,959	363,251	0,292	205,9763	0	-12,46%			
Rec	1.444,000	615.949,190	4.676.079,635	362,860	363,129	0,269	205,9763	0	-11,96%			
Rec	1.445,000	615.949,096	4.676.078,640	362,760	363,012	0,252	205,9763	0	-11,46%			
Rec	1.446,000	615.949,002	4.676.077,644	362,660	362,900	0,240	205,9763	0	-10,96%			
Rec	1.447,000	615.948,909	4.676.076,649	362,559	362,793	0,234	205,9763	0	-10,46%			
Rec	1.448,000	615.948,815	4.676.075,653	362,457	362,691	0,234	205,9763	0	-9,96%			
Rec	1.449,000	615.948,721	4.676.074,657	362,355	362,593	0,238	205,9763	0	-9,46%		V.	
Rec	1.450,000	615.948,627	4.676.073,662	362,255	362,501	0,246	205,9763	0	-8,96%			
Rec	1.451,000	615.948,534	4.676.072,666	362,154	362,414	0,260	205,9763	0	-8,46%			
Rec	1.452,000	615.948,440	4.676.071,671	362,056	362,332	0,276	205,9763	0	-7,96%			
Rec	1.453,000	615.948,346	4.676.070,675	361,965	362,255	0,290	205,9763	0	-7,46%			
Rec	1.454,000	615.948,252	4.676.069,679	361,879	362,183	0,304	205,9763	0	-6,96%			
Rec	1.455,000	615.948,159	4.676.068,684	361,792	362,116	0,324	205,9763	0	-6,46%			
Rec	1.456,000	615.948,065	4.676.067,688	361,713	362,053	0,340	205,9763	0	-5,96%			
Rec	1.457,000	615.947,971	4.676.066,693	361,632	361,996	0,364	205,9763	0	-5,46%			
Rec	1.458,000	615.947,877	4.676.065,697	361,549	361,944	0,395	205,9763	0	-4,96%			
Rec	1.459,000	615.947,784	4.676.064,701	361,473	361,897	0,424	205,9763	0	-4,46%			
Rec	1.460,000	615.947,690	4.676.063,706	361,396	361,855	0,459	205,9763	0	-3,96%		T.S.	
Rec	1.460,532	615.947,640	4.676.063,176	361,356	361,834	0,478	205,9763	0	-3,70%			
Rec	1.461,000	615.947,596	4.676.062,710	361,321	361,817	0,496	205,9763	0	-3,70%			
Rec	1.462,000	615.947,502	4.676.061,715	361,244	361,780	0,536	205,9763	0	-3,70%			
Rec	1.463,000	615.947,409	4.676.060,719	361,164	361,743	0,579	205,9763	0	-3,70%			
Rec	1.464,000	615.947,315	4.676.059,723	361,084	361,706	0,622	205,9763	0	-3,70%			
Rec	1.465,000	615.947,221	4.676.058,728	361,009	361,669	0,660	205,9763	0	-3,70%			
Rec	1.466,000	615.947,128	4.676.057,732	360,952	361,632	0,680	205,9763	0	-3,70%			
Rec	1.467,000	615.947,034	4.676.056,737	360,896	361,595	0,699	205,9763	0	-3,70%			
Rec	1.468,000	615.946,940	4.676.055,741	360,842	361,558	0,716	205,9763	0	-3,70%			
Rec	1.469,000	615.946,846	4.676.054,745	360,787	361,521	0,734	205,9763	0	-3,70%			
Rec	1.470,000	615.946,753	4.676.053,750	360,725	361,484	0,759	205,9763	0	-3,70%			
Rec	1.471,000	615.946,659	4.676.052,754	360,662	361,447	0,785	205,9763	0	-3,70%			
Rec	1.472,000	615.946,565	4.676.051,759	360,599	361,410	0,811	205,9763	0	-3,70%			
Rec	1.473,000	615.946,471	4.676.050,763	360,534	361,373	0,839	205,9763	0	-3,70%			
Rec	1.474,000	615.946,378	4.676.049,767	360,469	361,336	0,867	205,9763	0	-3,70%			
Rec	1.475,000	615.946,284	4.676.048,772	360,401	361,299	0,898	205,9763	0	-3,70%			
Rec	1.476,000	615.946,190	4.676.047,776	360,332	361,262	0,930	205,9763	0	-3,70%			
Rec	1.477,000	615.946,096	4.676.046,781	360,264	361,225	0,961	205,9763	0	-3,70%			
Rec	1.478,000	615.946,003	4.676.045,785	360,195	361,188	0,993	205,9763	0	-3,70%			
Rec	1.479,000	615.945,909	4.676.044,789	360,125	361,151	1,026	205,9763	0	-3,70%			
Rec	1.480,000	615.945,815	4.676.043,794	360,055	361,114	1,059	205,9763	0	-3,70%			
Rec	1.481,000	615.945,721	4.676.042,798	359,986	361,077	1,091	205,9763	0	-3,70%			
Rec	1.482,000	615.945,628	4.676.041,803	359,924	361,040	1,116	205,9763	0	-3,70%			
Rec	1.483,000	615.945,534	4.676.040,807	359,861	361,003	1,142	205,9763	0	-3,70%			
Rec	1.484,000	615.945,440	4.676.039,811	359,797	360,966	1,169	205,9763	0	-3,70%			
Rec	1.485,000	615.945,347	4.676.038,816	359,736	360,929	1,193	205,9763	0	-3,70%			
Rec	1.486,000	615.945,253	4.676.037,820	359,673	360,892	1,219	205,9763	0	-3,70%	P.S.		
Cur	1.486,172	615.945,237	4.676.037,649	359,662	360,886	1,224	205,9763	200	-3,70%			
Cur	1.487,000	615.945,157	4.676.036,825	359,609	360,855	1,246	206,2399	200	-3,70%			
Cur	1.488,000	615.945,057	4.676.035,830	359,547	360,818	1,271	206,5582	200	-3,70%			
Cur	1.489,000	615.944,952	4.676.034,835	359,491	360,781	1,290	206,8765	200	-3,70%			
Cur	1.490,000	615.944,841	4.676.033,841	359,431	360,744	1,313	207,1948	200	-3,70%			
Cur	1.491,000	615.944,726	4.676.032,848	359,370	360,707	1,337	207,5131	200	-3,70%			
Cur	1.492,000	615.944,606	4.676.031,855	359,313	360,670	1,357	207,8314	200	-3,70%			
Cur	1.493,000	615.944,481	4.676.030,863	359,263	360,633	1,370	208,1497	200	-3,70%			
Cur	1.494,000	615.944,351	4.676.029,872	359,237	360,596	1,359	208,4680	200	-3,70%			
Cur	1.495,000	615.944,215	4.676.028,881	359,239	360,559	1,320	208,7863	200	-3,70%			
Cur	1.496,000	615.944,075	4.676.027,891	359,208	360,522	1,314	209,1047	200	-3,70%			
Cur	1.497,000	615.943,930	4.676.026,901	359,157	360,485	1,328	209,4230	200	-3,70%			
Cur	1.498,000	615.943,780	4.676.025,913	359,134	360,448	1,314	209,7413	200	-3,70%			
Cur	1.499,000	615.943,626	4.676.024,925	359,100	360,411	1,311	210,0596	200	-3,70%			
Cur	1.500,000	615.943,466	4.676.023,938	359,063	360,374	1,311	210,3779	200	-3,70%			
Cur	1.501,000	615.943,301	4.676.022,951	359,025	360,337	1,312	210,6962	200	-3,70%			
Cur	1.502,000	615.943,131	4.676.021,966	358,990	360,300	1,310	211,0145	200	-3,70%			
Cur	1.503,000	615.942,957	4.676.020,981	358,965	360,263	1,298	211,3328	200	-3,70%			
Cur	1.504,000	615.942,777	4.676.019,997	358,938	360,226	1,288	211,6511	200	-3,70%			
Cur	1.505,000	615.942,593	4.676.019,015	358,908	360,189	1,281	211,9694	200	-3,70%			
Cur	1.506,000	615.942,403	4.676.018,033	358,877	360,152	1,275	212,2878	200	-3,70%			
Cur	1.507,000	615.942,209	4.676.017,052	358,847	360,115	1,268	212,6061	200	-3,70%			
Cur	1.508,000	615.942,010	4.676.016,072	358,818	360,078	1,260	212,9244	200	-3,70%			
Cur	1.509,000	615.941,806	4.676.015,093	358,790	360,041	1,251	213,2427	200	-3,70%			
Cur	1.510,000	615.941,597	4.676.014,115	358,764	360,004	1,240	213,5610	200	-3,70%			
Cur	1.511,000	615.941,383	4.676.013,138	358,740	359,967	1,227	213,8793	200	-3,70%			
Cur	1.512,000	615.941,164	4.676.012,162	358,717	359,930	1,213	214,1976	200	-3,70%			
Cur	1.513,000	615.940,941	4.676.011,188	358,698	359,893	1,195	214,5159	200	-3,70%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.514,000	615.940,712	4.676.010,214	358,682	359,856	1,174	214,8342	200	-3,70%			
Cur	1.515,000	615.940,479	4.676.009,242	358,669	359,819	1,150	215,1525	200	-3,70%			
Cur	1.516,000	615.940,241	4.676.008,270	358,658	359,782	1,124	215,4709	200	-3,70%			
Cur	1.517,000	615.939,998	4.676.007,300	358,653	359,745	1,092	215,7892	200	-3,70%			
Cur	1.518,000	615.939,750	4.676.006,332	358,650	359,708	1,058	216,1075	200	-3,70%			
Cur	1.519,000	615.939,497	4.676.005,364	358,647	359,671	1,024	216,4258	200	-3,70%			
Cur	1.520,000	615.939,239	4.676.004,398	358,644	359,634	0,990	216,7441	200	-3,70%			
Cur	1.521,000	615.938,977	4.676.003,433	358,645	359,597	0,952	217,0624	200	-3,70%			
Cur	1.522,000	615.938,710	4.676.002,469	358,657	359,560	0,903	217,3807	200	-3,70%			
Cur	1.523,000	615.938,438	4.676.001,507	358,684	359,523	0,839	217,6990	200	-3,70%			
Cur	1.524,000	615.938,161	4.676.000,546	358,748	359,486	0,738	218,0173	200	-3,70%			
Cur	1.525,000	615.937,879	4.675.999,587	358,689	359,449	0,760	218,3356	200	-3,70%			
Cur	1.526,000	615.937,593	4.675.998,628	358,621	359,412	0,791	218,6540	200	-3,70%			
Cur	1.527,000	615.937,302	4.675.997,672	358,553	359,375	0,822	218,9723	200	-3,70%			
Cur	1.528,000	615.937,005	4.675.996,717	358,459	359,338	0,879	219,2906	200	-3,70%			
Cur	1.529,000	615.936,705	4.675.995,763	358,345	359,301	0,956	219,6089	200	-3,70%			
Cur	1.530,000	615.936,399	4.675.994,811	358,297	359,264	0,967	219,9272	200	-3,70%			
Cur	1.531,000	615.936,089	4.675.993,860	358,191	359,227	1,036	220,2455	200	-3,70%			
Cur	1.532,000	615.935,774	4.675.992,911	358,060	359,190	1,130	220,5638	200	-3,70%			
Cur	1.533,000	615.935,454	4.675.991,964	357,914	359,153	1,239	220,8821	200	-3,70%	P.S.		
Rec	1.533,849	615.935,179	4.675.991,160	357,779	359,122	1,343	221,1524	0	-3,70%			
Rec	1.534,000	615.935,130	4.675.991,018	357,755	359,116	1,361	221,1524	0	-3,70%			
Rec	1.535,000	615.934,803	4.675.990,072	357,596	359,079	1,483	221,1524	0	-3,70%			
Rec	1.536,000	615.934,477	4.675.989,127	357,436	359,042	1,606	221,1524	0	-3,70%			
Rec	1.537,000	615.934,151	4.675.988,182	357,277	359,005	1,728	221,1524	0	-3,70%			
Rec	1.538,000	615.933,825	4.675.987,236	357,118	358,968	1,850	221,1524	0	-3,70%			
Rec	1.539,000	615.933,499	4.675.986,291	356,976	358,931	1,955	221,1524	0	-3,70%			
Rec	1.540,000	615.933,172	4.675.985,346	356,809	358,894	2,085	221,1524	0	-3,70%			1 MARCO 3,0m x 1,5m
Rec	1.541,000	615.932,846	4.675.984,400	356,891	358,857	1,966	221,1524	0	-3,70%		T.E.	
Rec	1.541,544	615.932,669	4.675.983,886	356,962	358,837	1,875	221,1524	0	-3,70%			
Rec	1.542,000	615.932,520	4.675.983,455	357,021	358,820	1,799	221,1524	0	-3,67%			
Rec	1.543,000	615.932,194	4.675.982,510	357,332	358,784	1,452	221,1524	0	-3,60%			
Rec	1.544,000	615.931,868	4.675.981,565	357,606	358,748	1,142	221,1524	0	-3,54%			
Rec	1.545,000	615.931,542	4.675.980,619	357,862	358,713	0,851	221,1524	0	-3,47%			
Rec	1.546,000	615.931,215	4.675.979,674	358,081	358,679	0,598	221,1524	0	-3,40%			
Rec	1.547,000	615.930,889	4.675.978,729	358,255	358,645	0,390	221,1524	0	-3,34%			
Rec	1.548,000	615.930,563	4.675.977,783	358,402	358,612	0,210	221,1524	0	-3,27%			
Rec	1.549,000	615.930,237	4.675.976,838	358,484	358,580	0,096	221,1524	0	-3,20%		V.	
Rec	1.550,000	615.929,911	4.675.975,893	358,524	358,548	0,024	221,1524	0	-3,14%			
Rec	1.551,000	615.929,584	4.675.974,947	358,487	358,517	0,030	221,1524	0	-3,07%			
Rec	1.552,000	615.929,258	4.675.974,002	358,415	358,486	0,071	221,1524	0	-3,00%			
Rec	1.553,000	615.928,932	4.675.973,057	358,338	358,457	0,119	221,1524	0	-2,94%			
Rec	1.554,000	615.928,606	4.675.972,111	358,281	358,428	0,147	221,1524	0	-2,87%			
Rec	1.555,000	615.928,280	4.675.971,166	358,223	358,399	0,176	221,1524	0	-2,80%			
Rec	1.556,000	615.927,954	4.675.970,221	358,153	358,372	0,219	221,1524	0	-2,74%			
Rec	1.557,000	615.927,627	4.675.969,276	358,114	358,345	0,231	221,1524	0	-2,67%	P.S.		
Cur	1.557,204	615.927,561	4.675.969,082	358,106	358,339	0,233	221,1524	400	-2,66%			
Cur	1.558,000	615.927,300	4.675.968,331	358,077	358,318	0,241	221,2791	400	-2,60%		T.S.	
Cur	1.558,456	615.927,151	4.675.967,900	358,060	358,306	0,246	221,3516	400	-2,57%			
Cur	1.559,000	615.926,971	4.675.967,386	358,040	358,292	0,252	221,4382	400	-2,57%			
Cur	1.560,000	615.926,640	4.675.966,443	358,004	358,267	0,263	221,5974	400	-2,57%			
Cur	1.561,000	615.926,306	4.675.965,500	357,975	358,241	0,266	221,7565	400	-2,57%			
Cur	1.562,000	615.925,969	4.675.964,559	357,943	358,215	0,272	221,9157	400	-2,57%			
Cur	1.563,000	615.925,631	4.675.963,618	357,911	358,190	0,279	222,0748	400	-2,57%			
Cur	1.564,000	615.925,290	4.675.962,678	357,873	358,164	0,291	222,2340	400	-2,57%			
Cur	1.565,000	615.924,946	4.675.961,738	357,826	358,138	0,312	222,3932	400	-2,57%			
Cur	1.566,000	615.924,601	4.675.960,800	357,784	358,112	0,328	222,5523	400	-2,57%			
Cur	1.567,000	615.924,252	4.675.959,863	357,731	358,087	0,356	222,7115	400	-2,57%			
Cur	1.568,000	615.923,902	4.675.958,926	357,676	358,061	0,385	222,8706	400	-2,57%			
Cur	1.569,000	615.923,549	4.675.957,990	357,621	358,035	0,414	223,0298	400	-2,57%			
Cur	1.570,000	615.923,194	4.675.957,055	357,560	358,010	0,450	223,1889	400	-2,57%			
Cur	1.571,000	615.922,837	4.675.956,121	357,498	357,984	0,486	223,3481	400	-2,57%			
Cur	1.572,000	615.922,477	4.675.955,188	357,427	357,958	0,531	223,5072	400	-2,57%			
Cur	1.573,000	615.922,115	4.675.954,256	357,360	357,932	0,572	223,6664	400	-2,57%			
Cur	1.574,000	615.921,751	4.675.953,325	357,291	357,907	0,616	223,8255	400	-2,57%			
Cur	1.575,000	615.921,384	4.675.952,395	357,224	357,881	0,657	223,9847	400	-2,57%			
Cur	1.576,000	615.921,015	4.675.951,465	357,162	357,855	0,693	224,1439	400	-2,57%			
Cur	1.577,000	615.920,643	4.675.950,537	357,098	357,829	0,731	224,3030	400	-2,57%			
Cur	1.578,000	615.920,270	4.675.949,609	357,035	357,804	0,769	224,4622	400	-2,57%			
Cur	1.579,000	615.919,894	4.675.948,683	356,985	357,778	0,793	224,6213	400	-2,57%			
Cur	1.580,000	615.919,515	4.675.947,757	356,948	357,752	0,804	224,7805	400	-2,57%			
Cur	1.581,000	615.919,135	4.675.946,832	356,915	357,727	0,812	224,9396	400	-2,57%			
Cur	1.582,000	615.918,752	4.675.945,908	356,883	357,701	0,818	225,0988	400	-2,57%			
Cur	1.583,000	615.918,366	4.675.944,986	356,850	357,675	0,825	225,2579	400	-2,57%			
Cur	1.584,000	615.917,979	4.675.944,064	356,822	357,649	0,827	225,4171	400	-2,57%			
Cur	1.585,000	615.917,589	4.675.943,143	356,801	357,624	0,823	225,5763	400	-2,57%			
Cur	1.586,000	615.917,197	4.675.942,223	356,781	357,598	0,817	225,7354	400	-2,57%			
Cur	1.587,000	615.916,802	4.675.941,304	356,764	357,572	0,808	225,8946	400	-2,57%			
Cur	1.588,000	615.916,406	4.675.940,386	356,744	357,546	0,802	226,0537	400	-2,57%			
Cur	1.589,000	615.916,006	4.675.939,469	356,737	357,521	0,784	226,2129	400	-2,57%			
Cur	1.590,000	615.915,605	4.675.938,553	356,699	357,495	0,796	226,3720	400	-2,57%			
Cur	1.591,000	615.915,201	4.675.937,639	356,639	357,469	0,830	226,5312	400	-2,57%			
Cur	1.592,000	615.914,796	4.675.936,725	356,602	357,444	0,842	226,6903	400	-2,57%			
Cur	1.593,000	615.914,387	4.675.935,812	356,564	357,418	0,854	226,8495	400	-2,57%			
Cur	1.594,000	615.913,977	4.675.934,900	356,485	357,392	0,907	227,0086	400	-2,57%			
Cur	1.595,000	615.913,564	4.675.933,989	356,428	357,366	0,938	227,1678	400	-2,57%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.596,000	615.913,149	4.675.933,079	356,346	357,341	0,995	227,3270	400	-2,57%			
Cur	1.597,000	615.912,732	4.675.932,170	356,273	357,315	1,042	227,4861	400	-2,57%			
Cur	1.598,000	615.912,312	4.675.931,263	356,194	357,289	1,095	227,6453	400	-2,57%			
Cur	1.599,000	615.911,890	4.675.930,356	356,114	357,263	1,149	227,8044	400	-2,57%			
Cur	1.600,000	615.911,466	4.675.929,451	356,030	357,238	1,208	227,9636	400	-2,57%			
Cur	1.601,000	615.911,040	4.675.928,546	355,881	357,212	1,331	228,1227	400	-2,57%			
Cur	1.602,000	615.910,611	4.675.927,643	355,689	357,186	1,497	228,2819	400	-2,57%			
Cur	1.602,500	615.910,396	4.675.927,191	355,672	357,173	1,501	228,3615	400	-2,57%			1 MARCO 2,0m x 1,0m
Cur	1.603,000	615.910,180	4.675.926,740	355,655	357,161	1,506	228,4410	400	-2,57%			
Cur	1.604,000	615.909,747	4.675.925,839	355,826	357,135	1,309	228,6002	400	-2,57%			
Cur	1.605,000	615.909,312	4.675.924,939	356,007	357,109	1,102	228,7594	400	-2,57%			
Cur	1.606,000	615.908,874	4.675.924,039	356,152	357,083	0,931	228,9185	400	-2,57%			
Cur	1.607,000	615.908,434	4.675.923,141	356,260	357,058	0,798	229,0777	400	-2,57%			
Cur	1.608,000	615.907,992	4.675.922,244	356,345	357,032	0,687	229,2368	400	-2,57%			
Cur	1.609,000	615.907,547	4.675.921,349	356,389	357,006	0,617	229,3960	400	-2,57%			
Cur	1.610,000	615.907,101	4.675.920,454	356,423	356,981	0,558	229,5551	400	-2,57%			
Cur	1.611,000	615.906,652	4.675.919,560	356,462	356,955	0,493	229,7143	400	-2,57%			
Cur	1.612,000	615.906,201	4.675.918,668	356,475	356,929	0,454	229,8734	400	-2,57%			
Cur	1.613,000	615.905,747	4.675.917,777	356,476	356,903	0,427	230,0326	400	-2,57%			
Cur	1.614,000	615.905,292	4.675.916,886	356,474	356,878	0,404	230,1917	400	-2,57%			
Cur	1.615,000	615.904,834	4.675.915,997	356,471	356,852	0,381	230,3509	400	-2,57%			
Cur	1.616,000	615.904,374	4.675.915,109	356,460	356,826	0,366	230,5101	400	-2,57%			
Cur	1.617,000	615.903,912	4.675.914,223	356,441	356,800	0,359	230,6692	400	-2,57%			
Cur	1.618,000	615.903,447	4.675.913,337	356,420	356,775	0,355	230,8284	400	-2,57%			
Cur	1.619,000	615.902,981	4.675.912,453	356,399	356,749	0,350	230,9875	400	-2,57%			
Cur	1.620,000	615.902,512	4.675.911,569	356,373	356,723	0,350	231,1467	400	-2,57%			
Cur	1.621,000	615.902,041	4.675.910,687	356,337	356,698	0,361	231,3058	400	-2,57%			
Cur	1.622,000	615.901,568	4.675.909,806	356,364	356,672	0,308	231,4650	400	-2,57%		T.E.	
Cur	1.622,419	615.901,369	4.675.909,437	356,381	356,661	0,280	231,5317	400	-2,57%			
Cur	1.623,000	615.901,092	4.675.908,927	356,405	356,648	0,243	231,6241	400	-1,99%			
Cur	1.624,000	615.900,614	4.675.908,048	356,446	356,633	0,187	231,7833	400	-0,99%			
Cur	1.625,000	615.900,135	4.675.907,171	356,487	356,628	0,141	231,9425	400	0,01%			
Cur	1.626,000	615.899,653	4.675.906,294	356,527	356,633	0,106	232,1016	400	1,01%			
Cur	1.627,000	615.899,168	4.675.905,420	356,568	356,648	0,080	232,2608	400	2,01%			
Cur	1.628,000	615.898,682	4.675.904,546	356,597	356,673	0,076	232,4199	400	3,01%			
Cur	1.629,000	615.898,193	4.675.903,673	356,612	356,708	0,096	232,5791	400	4,01%		V.	
Cur	1.630,000	615.897,702	4.675.902,802	356,679	356,753	0,074	232,7382	400	5,01%			
Cur	1.631,000	615.897,209	4.675.901,932	356,723	356,808	0,085	232,8974	400	6,01%			
Cur	1.632,000	615.896,714	4.675.901,063	356,768	356,874	0,106	233,0565	400	7,01%			
Cur	1.633,000	615.896,217	4.675.900,196	356,816	356,949	0,133	233,2157	400	8,01%			
Cur	1.634,000	615.895,718	4.675.899,329	356,864	357,034	0,170	233,3748	400	9,01%			
Cur	1.635,000	615.895,216	4.675.898,464	356,913	357,129	0,216	233,5340	400	10,01%			
Cur	1.636,000	615.894,712	4.675.897,600	356,962	357,234	0,272	233,6932	400	11,01%			
Cur	1.637,000	615.894,206	4.675.896,738	357,029	357,349	0,320	233,8523	400	12,01%		T.S.	
Cur	1.637,581	615.893,911	4.675.896,237	357,137	357,420	0,283	233,9448	400	12,59%			
Cur	1.638,000	615.893,698	4.675.895,877	357,215	357,473	0,258	234,0115	400	12,59%			
Cur	1.639,000	615.893,188	4.675.895,017	357,402	357,599	0,197	234,1706	400	12,59%			
Cur	1.640,000	615.892,675	4.675.894,158	357,586	357,725	0,139	234,3298	400	12,59%			
Cur	1.641,000	615.892,161	4.675.893,300	357,778	357,851	0,073	234,4889	400	12,59%			
Cur	1.642,000	615.891,644	4.675.892,444	357,977	357,977	0,000	234,6481	400	12,59%			
Cur	1.643,000	615.891,125	4.675.891,589	358,108	358,103	-0,005	234,8072	400	12,59%			
Cur	1.644,000	615.890,604	4.675.890,736	358,230	358,229	-0,001	234,9664	400	12,59%		T.E.	
Cur	1.644,194	615.890,503	4.675.890,570	358,253	358,253	0,000	234,9973	400	12,59%			
Cur	1.645,000	615.890,081	4.675.889,884	358,351	358,351	0,000	235,1256	400	11,78%			
Cur	1.646,000	615.889,556	4.675.889,033	358,472	358,464	-0,008	235,2847	400	10,78%			
Cur	1.647,000	615.889,028	4.675.888,183	358,592	358,567	-0,025	235,4439	400	9,78%			
Cur	1.648,000	615.888,499	4.675.887,335	358,710	358,660	-0,050	235,6030	400	8,78%			
Cur	1.649,000	615.887,967	4.675.886,488	358,820	358,743	-0,077	235,7622	400	7,78%		V.	
Cur	1.650,000	615.887,434	4.675.885,642	358,984	358,815	-0,169	235,9213	400	6,78%			
Cur	1.651,000	615.886,898	4.675.884,798	359,035	358,878	-0,157	236,0805	400	5,78%			
Cur	1.652,000	615.886,360	4.675.883,955	359,057	358,931	-0,126	236,2396	400	4,78%			
Cur	1.653,000	615.885,820	4.675.883,113	359,046	358,974	-0,072	236,3988	400	3,78%			
Cur	1.654,000	615.885,278	4.675.882,273	359,054	359,007	-0,047	236,5579	400	2,78%			
Cur	1.655,000	615.884,733	4.675.881,434	359,062	359,030	-0,032	236,7171	400	1,78%		T.S.	
Cur	1.655,806	615.884,293	4.675.880,759	359,068	359,041	-0,028	236,8454	400	0,98%			
Cur	1.656,000	615.884,187	4.675.880,596	359,070	359,043	-0,027	236,8763	400	0,98%			
Cur	1.657,000	615.883,639	4.675.879,760	359,073	359,052	-0,021	237,0354	400	0,98%			
Cur	1.658,000	615.883,088	4.675.878,925	359,071	359,062	-0,009	237,1946	400	0,98%			
Cur	1.659,000	615.882,535	4.675.878,092	359,064	359,072	0,008	237,3537	400	0,98%			
Cur	1.660,000	615.881,981	4.675.877,260	359,064	359,082	0,018	237,5129	400	0,98%			
Cur	1.661,000	615.881,424	4.675.876,429	359,069	359,091	0,022	237,6720	400	0,98%			
Cur	1.662,000	615.880,865	4.675.875,600	359,078	359,101	0,023	237,8312	400	0,98%			
Cur	1.663,000	615.880,304	4.675.874,772	359,086	359,111	0,025	237,9903	400	0,98%			
Cur	1.664,000	615.879,741	4.675.873,946	359,098	359,121	0,023	238,1495	400	0,98%			
Cur	1.665,000	615.879,176	4.675.873,120	359,109	359,130	0,021	238,3086	400	0,98%	P.S.		
Rec	1.665,795	615.878,726	4.675.872,466	359,116	359,138	0,022	238,4351	0	0,98%			
Rec	1.666,000	615.878,609	4.675.872,297	359,118	359,140	0,022	238,4351	0	0,98%			
Rec	1.667,000	615.878,041	4.675.871,474	359,127	359,150	0,023	238,4351	0	0,98%			
Rec	1.668,000	615.877,474	4.675.870,650	359,160	359,160	0,000	238,4351	0	0,98%			
Rec	1.669,000	615.876,906	4.675.869,827	359,168	359,169	0,001	238,4351	0	0,98%			
Rec	1.670,000	615.876,338	4.675.869,004	359,175	359,179	0,004	238,4351	0	0,98%			
Rec	1.671,000	615.875,770	4.675.868,181	359,183	359,189	0,006	238,4351	0	0,98%			
Rec	1.672,000	615.875,203	4.675.867,358	359,197	359,199	0,002	238,4351	0	0,98%			
Rec	1.673,000	615.874,635	4.675.866,534	359,203	359,208	0,005	238,4351	0	0,98%			
Rec	1.674,000	615.874,067	4.675.865,711	359,209	359,218	0,009	238,4351	0	0,98%			
Rec	1.675,000	615.873,500	4.675.864,888	359,222	359,228	0,006	238,4351	0	0,98%			

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V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.676,000	615.872,932	4.675.864,065	359,226	359,238	0,012	238,4351	0	0,98%			
Rec	1.677,000	615.872,364	4.675.863,241	359,232	359,248	0,016	238,4351	0	0,98%			
Rec	1.678,000	615.871,796	4.675.862,418	359,234	359,257	0,023	238,4351	0	0,98%			
Rec	1.679,000	615.871,229	4.675.861,595	359,229	359,267	0,038	238,4351	0	0,98%			
Rec	1.680,000	615.870,661	4.675.860,772	359,236	359,277	0,041	238,4351	0	0,98%			
Rec	1.681,000	615.870,093	4.675.859,949	359,245	359,287	0,042	238,4351	0	0,98%			
Rec	1.682,000	615.869,526	4.675.859,125	359,249	359,296	0,047	238,4351	0	0,98%			
Rec	1.683,000	615.868,958	4.675.858,302	359,258	359,306	0,048	238,4351	0	0,98%			
Rec	1.684,000	615.868,390	4.675.857,479	359,266	359,316	0,050	238,4351	0	0,98%			
Rec	1.685,000	615.867,822	4.675.856,656	359,274	359,326	0,052	238,4351	0	0,98%			
Rec	1.686,000	615.867,255	4.675.855,832	359,281	359,335	0,054	238,4351	0	0,98%			
Rec	1.687,000	615.866,687	4.675.855,009	359,290	359,345	0,055	238,4351	0	0,98%			
Rec	1.688,000	615.866,119	4.675.854,186	359,297	359,355	0,058	238,4351	0	0,98%			
Rec	1.689,000	615.865,551	4.675.853,363	359,307	359,365	0,058	238,4351	0	0,98%			
Rec	1.690,000	615.864,984	4.675.852,540	359,311	359,374	0,063	238,4351	0	0,98%			
Rec	1.691,000	615.864,416	4.675.851,716	359,315	359,384	0,069	238,4351	0	0,98%			
Rec	1.692,000	615.863,848	4.675.850,893	359,305	359,394	0,089	238,4351	0	0,98%		T.E.	
Rec	1.692,201	615.863,734	4.675.850,728	359,299	359,396	0,097	238,4351	0	0,98%			
Rec	1.693,000	615.863,281	4.675.850,070	359,276	359,403	0,127	238,4351	0	0,87%			
Rec	1.694,000	615.862,713	4.675.849,247	359,260	359,411	0,151	238,4351	0	0,74%			
Rec	1.695,000	615.862,145	4.675.848,423	359,242	359,418	0,176	238,4351	0	0,60%			
Rec	1.696,000	615.861,577	4.675.847,600	359,218	359,423	0,205	238,4351	0	0,47%			
Rec	1.697,000	615.861,010	4.675.846,777	359,202	359,427	0,225	238,4351	0	0,34%			
Rec	1.698,000	615.860,442	4.675.845,954	359,189	359,430	0,241	238,4351	0	0,20%			
Rec	1.699,000	615.859,874	4.675.845,131	359,172	359,431	0,259	238,4351	0	0,07%		V.	
Rec	1.700,000	615.859,307	4.675.844,307	359,150	359,431	0,281	238,4351	0	-0,06%			
Rec	1.701,000	615.858,739	4.675.843,484	359,123	359,430	0,307	238,4351	0	-0,20%			
Rec	1.702,000	615.858,171	4.675.842,661	359,091	359,428	0,337	238,4351	0	-0,33%			
Rec	1.703,000	615.857,603	4.675.841,838	359,056	359,424	0,368	238,4351	0	-0,46%			
Rec	1.704,000	615.857,036	4.675.841,014	359,019	359,418	0,399	238,4351	0	-0,60%			
Rec	1.705,000	615.856,468	4.675.840,191	358,991	359,412	0,521	238,4351	0	-0,73%			
Rec	1.706,000	615.855,900	4.675.839,368	358,963	359,404	0,771	238,4351	0	-0,86%			
Rec	1.707,000	615.855,332	4.675.838,545	358,939	359,394	1,075	238,4351	0	-1,00%		T.S.	
Rec	1.707,799	615.854,879	4.675.837,887	358,942	359,386	1,344	238,4351	0	-1,10%			
Rec	1.708,000	615.854,765	4.675.837,722	357,972	359,384	1,412	238,4351	0	-1,10%			
Rec	1.709,000	615.854,197	4.675.836,898	357,707	359,373	1,666	238,4351	0	-1,10%			
Rec	1.710,000	615.853,629	4.675.836,075	357,489	359,362	1,873	238,4351	0	-1,10%			1 MARCO 2,0m x 1,0m
Rec	1.711,000	615.853,062	4.675.835,252	357,672	359,351	1,679	238,4351	0	-1,10%			
Rec	1.712,000	615.852,494	4.675.834,429	358,048	359,340	1,292	238,4351	0	-1,10%			
Rec	1.713,000	615.851,926	4.675.833,606	358,169	359,328	1,159	238,4351	0	-1,10%			
Rec	1.714,000	615.851,358	4.675.832,782	358,235	359,317	1,082	238,4351	0	-1,10%			
Rec	1.715,000	615.850,791	4.675.831,959	358,273	359,306	1,033	238,4351	0	-1,10%			
Rec	1.716,000	615.850,223	4.675.831,136	358,352	359,295	0,943	238,4351	0	-1,10%			
Rec	1.717,000	615.849,655	4.675.830,313	358,442	359,284	0,842	238,4351	0	-1,10%			
Rec	1.718,000	615.849,087	4.675.829,489	358,550	359,273	0,723	238,4351	0	-1,10%			
Rec	1.719,000	615.848,520	4.675.828,666	358,572	359,262	0,690	238,4351	0	-1,10%			
Rec	1.720,000	615.847,952	4.675.827,843	358,534	359,251	0,717	238,4351	0	-1,10%			
Rec	1.721,000	615.847,384	4.675.827,020	358,488	359,240	0,752	238,4351	0	-1,10%			
Rec	1.722,000	615.846,817	4.675.826,197	358,444	359,229	0,785	238,4351	0	-1,10%			
Rec	1.723,000	615.846,249	4.675.825,373	358,355	359,218	0,863	238,4351	0	-1,10%			
Rec	1.724,000	615.845,681	4.675.824,550	358,243	359,207	0,964	238,4351	0	-1,10%			
Rec	1.725,000	615.845,113	4.675.823,727	358,096	359,196	1,100	238,4351	0	-1,10%			
Rec	1.726,000	615.844,546	4.675.822,904	357,992	359,185	1,193	238,4351	0	-1,10%			1 MARCO 2,0m x 1,0m
Rec	1.727,000	615.843,978	4.675.822,080	358,029	359,174	1,145	238,4351	0	-1,10%			
Rec	1.728,000	615.843,410	4.675.821,257	358,077	359,163	1,086	238,4351	0	-1,10%			
Rec	1.729,000	615.842,843	4.675.820,434	358,122	359,152	1,030	238,4351	0	-1,10%			
Rec	1.730,000	615.842,275	4.675.819,611	358,101	359,141	1,040	238,4351	0	-1,10%			
Rec	1.731,000	615.841,707	4.675.818,788	358,132	359,130	0,998	238,4351	0	-1,10%			
Rec	1.732,000	615.841,139	4.675.817,964	358,159	359,119	0,960	238,4351	0	-1,10%			
Rec	1.733,000	615.840,572	4.675.817,141	358,193	359,108	0,915	238,4351	0	-1,10%			
Rec	1.734,000	615.840,004	4.675.816,318	358,208	359,097	0,889	238,4351	0	-1,10%			
Rec	1.735,000	615.839,436	4.675.815,495	358,220	359,086	0,866	238,4351	0	-1,10%			
Rec	1.736,000	615.838,868	4.675.814,671	358,222	359,075	0,853	238,4351	0	-1,10%			
Rec	1.737,000	615.838,301	4.675.813,848	358,238	359,064	0,826	238,4351	0	-1,10%			
Rec	1.738,000	615.837,733	4.675.813,025	358,264	359,052	0,788	238,4351	0	-1,10%			
Rec	1.739,000	615.837,165	4.675.812,202	358,291	359,041	0,750	238,4351	0	-1,10%			
Rec	1.740,000	615.836,598	4.675.811,379	358,323	359,030	0,707	238,4351	0	-1,10%		T.E.	
Rec	1.740,506	615.836,310	4.675.810,962	358,340	359,025	0,685	238,4351	0	-1,10%			
Rec	1.741,000	615.836,030	4.675.810,555	358,357	359,020	0,663	238,4351	0	-1,01%			
Rec	1.742,000	615.835,462	4.675.809,732	358,390	359,011	0,621	238,4351	0	-0,81%			
Rec	1.743,000	615.834,894	4.675.808,909	358,422	359,004	0,582	238,4351	0	-0,61%			
Rec	1.744,000	615.834,327	4.675.808,086	358,454	358,998	0,544	238,4351	0	-0,41%			
Rec	1.745,000	615.833,759	4.675.807,262	358,487	358,995	0,508	238,4351	0	-0,21%			
Rec	1.746,000	615.833,191	4.675.806,439	358,520	358,994	0,474	238,4351	0	-0,01%			
Rec	1.747,000	615.832,624	4.675.805,616	358,553	358,995	0,442	238,4351	0	0,19%			
Rec	1.748,000	615.832,056	4.675.804,793	358,586	358,998	0,412	238,4351	0	0,39%			
Rec	1.749,000	615.831,488	4.675.803,970	358,619	359,003	0,384	238,4351	0	0,59%		V.	
Rec	1.750,000	615.830,920	4.675.803,146	358,652	359,010	0,358	238,4351	0	0,79%			
Rec	1.751,000	615.830,353	4.675.802,323	358,685	359,019	0,334	238,4351	0	0,99%			
Rec	1.752,000	615.829,785	4.675.801,500	358,719	359,030	0,311	238,4351	0	1,19%			
Rec	1.753,000	615.829,217	4.675.800,677	358,753	359,043	0,290	238,4351	0	1,39%			
Rec	1.754,000	615.828,649	4.675.799,854	358,787	359,058	0,271	238,4351	0	1,59%			
Rec	1.755,000	615.828,082	4.675.799,030	358,821	359,075	0,254	238,4351	0	1,79%			
Rec	1.756,000	615.827,514	4.675.798,207	358,854	359,094	0,240	238,4351	0	1,99%			
Rec	1.757,000	615.826,946	4.675.797,384	358,888	359,115	0,227	238,4351	0	2,19%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.758,000	615.826,379	4.675.796,561	358,922	359,138	0,216	238,4351	0	2,39%			
Rec	1.759,000	615.825,811	4.675.795,737	358,956	359,163	0,207	238,4351	0	2,59%		T.S.	
Rec	1.759,494	615.825,530	4.675.795,331	358,973	359,176	0,203	238,4351	0	2,69%			
Rec	1.760,000	615.825,243	4.675.794,914	358,990	359,189	0,199	238,4351	0	2,69%			
Rec	1.761,000	615.824,675	4.675.794,091	359,025	359,216	0,191	238,4351	0	2,69%			
Rec	1.762,000	615.824,108	4.675.793,268	359,060	359,243	0,183	238,4351	0	2,69%			
Rec	1.763,000	615.823,540	4.675.792,445	359,094	359,270	0,176	238,4351	0	2,69%			
Rec	1.764,000	615.822,972	4.675.791,621	359,133	359,297	0,164	238,4351	0	2,69%			
Rec	1.765,000	615.822,404	4.675.790,798	359,166	359,324	0,158	238,4351	0	2,69%			
Rec	1.766,000	615.821,837	4.675.789,975	359,204	359,351	0,147	238,4351	0	2,69%	P.S.		
Cur	1.766,356	615.821,634	4.675.789,682	359,216	359,361	0,145	238,4351	200	2,69%			
Cur	1.767,000	615.821,268	4.675.789,152	359,226	359,378	0,152	238,6400	200	2,69%			
Cur	1.768,000	615.820,696	4.675.788,332	359,236	359,405	0,169	238,9583	200	2,69%			
Cur	1.769,000	615.820,119	4.675.787,515	359,263	359,432	0,169	239,2766	200	2,69%			
Cur	1.770,000	615.819,539	4.675.786,701	359,288	359,459	0,171	239,5949	200	2,69%			
Cur	1.771,000	615.818,954	4.675.785,890	359,299	359,486	0,187	239,9133	200	2,69%			
Cur	1.772,000	615.818,365	4.675.785,081	359,311	359,513	0,202	240,2316	200	2,69%			
Cur	1.773,000	615.817,773	4.675.784,276	359,319	359,540	0,221	240,5499	200	2,69%			
Cur	1.774,000	615.817,176	4.675.783,474	359,344	359,567	0,223	240,8682	200	2,69%			
Cur	1.775,000	615.816,575	4.675.782,674	359,371	359,594	0,223	241,1865	200	2,69%			
Cur	1.776,000	615.815,970	4.675.781,878	359,394	359,620	0,226	241,5048	200	2,69%			
Cur	1.777,000	615.815,362	4.675.781,084	359,418	359,647	0,229	241,8231	200	2,69%			
Cur	1.778,000	615.814,749	4.675.780,294	359,444	359,674	0,230	242,1414	200	2,69%			
Cur	1.779,000	615.814,132	4.675.779,507	359,470	359,701	0,231	242,4597	200	2,69%			
Cur	1.780,000	615.813,512	4.675.778,723	359,496	359,728	0,232	242,7780	200	2,69%			
Cur	1.781,000	615.812,887	4.675.777,942	359,523	359,755	0,232	243,0964	200	2,69%			
Cur	1.782,000	615.812,259	4.675.777,164	359,550	359,782	0,232	243,4147	200	2,69%			
Cur	1.783,000	615.811,627	4.675.776,389	359,578	359,809	0,231	243,7330	200	2,69%			
Cur	1.784,000	615.810,990	4.675.775,617	359,605	359,836	0,231	244,0513	200	2,69%			
Cur	1.785,000	615.810,351	4.675.774,849	359,633	359,863	0,230	244,3696	200	2,69%			
Cur	1.786,000	615.809,707	4.675.774,084	359,661	359,890	0,229	244,6879	200	2,69%			
Cur	1.787,000	615.809,059	4.675.773,322	359,691	359,917	0,226	245,0062	200	2,69%			
Cur	1.788,000	615.808,408	4.675.772,563	359,720	359,944	0,224	245,3245	200	2,69%			
Cur	1.789,000	615.807,752	4.675.771,808	359,750	359,971	0,221	245,6428	200	2,69%			
Cur	1.790,000	615.807,093	4.675.771,055	359,779	359,998	0,219	245,9611	200	2,69%			
Cur	1.791,000	615.806,431	4.675.770,307	359,809	360,025	0,216	246,2795	200	2,69%			
Cur	1.792,000	615.805,764	4.675.769,561	359,838	360,052	0,214	246,5978	200	2,69%			
Cur	1.793,000	615.805,094	4.675.768,819	359,868	360,078	0,210	246,9161	200	2,69%			
Cur	1.794,000	615.804,420	4.675.768,080	359,897	360,105	0,208	247,2344	200	2,69%			
Cur	1.795,000	615.803,743	4.675.767,345	359,927	360,132	0,205	247,5527	200	2,69%			
Cur	1.796,000	615.803,061	4.675.766,612	359,951	360,159	0,208	247,8710	200	2,69%			
Cur	1.797,000	615.802,377	4.675.765,884	359,971	360,186	0,215	248,1893	200	2,69%			
Cur	1.798,000	615.801,688	4.675.765,159	359,990	360,213	0,223	248,5076	200	2,69%			
Cur	1.799,000	615.800,996	4.675.764,437	360,037	360,240	0,203	248,8259	200	2,69%			
Cur	1.800,000	615.800,300	4.675.763,719	360,107	360,267	0,160	249,1442	200	2,69%			
Cur	1.801,000	615.799,601	4.675.763,004	360,182	360,294	0,112	249,4626	200	2,69%			
Cur	1.802,000	615.798,898	4.675.762,292	360,253	360,321	0,068	249,7809	200	2,69%			
Cur	1.803,000	615.798,191	4.675.761,585	360,309	360,348	0,039	250,0992	200	2,69%			
Cur	1.804,000	615.797,481	4.675.760,880	360,360	360,375	0,015	250,4175	200	2,69%			
Cur	1.805,000	615.796,768	4.675.760,180	360,407	360,402	-0,005	250,7358	200	2,69%			
Cur	1.806,000	615.796,051	4.675.759,483	360,462	360,429	-0,033	251,0541	200	2,69%			
Cur	1.807,000	615.795,331	4.675.758,789	360,494	360,456	-0,038	251,3724	200	2,69%			
Cur	1.808,000	615.794,607	4.675.758,099	360,552	360,483	-0,069	251,6907	200	2,69%			
Cur	1.809,000	615.793,879	4.675.757,413	360,586	360,510	-0,076	252,0090	200	2,69%			
Cur	1.810,000	615.793,149	4.675.756,730	360,620	360,536	-0,084	252,3273	200	2,69%			
Cur	1.811,000	615.792,414	4.675.756,051	360,654	360,563	-0,091	252,6457	200	2,69%			
Cur	1.812,000	615.791,677	4.675.755,376	360,688	360,590	-0,098	252,9640	200	2,69%			
Cur	1.813,000	615.790,936	4.675.754,705	360,723	360,617	-0,106	253,2823	200	2,69%			
Cur	1.814,000	615.790,192	4.675.754,037	360,758	360,644	-0,114	253,6006	200	2,69%			
Cur	1.815,000	615.789,444	4.675.753,373	360,794	360,671	-0,123	253,9189	200	2,69%			
Cur	1.816,000	615.788,693	4.675.752,712	360,829	360,698	-0,131	254,2372	200	2,69%			
Cur	1.817,000	615.787,939	4.675.752,056	360,878	360,725	-0,153	254,5555	200	2,69%			
Cur	1.818,000	615.787,181	4.675.751,403	360,911	360,752	-0,159	254,8738	200	2,69%			
Cur	1.819,000	615.786,421	4.675.750,754	360,945	360,779	-0,166	255,1921	200	2,69%			
Cur	1.820,000	615.785,657	4.675.750,108	360,977	360,806	-0,171	255,5104	200	2,69%			
Cur	1.821,000	615.784,889	4.675.749,467	361,013	360,833	-0,180	255,8288	200	2,69%			
Cur	1.822,000	615.784,119	4.675.748,829	361,056	360,860	-0,196	256,1471	200	2,69%			
Cur	1.823,000	615.783,345	4.675.748,196	361,104	360,887	-0,217	256,4654	200	2,69%			
Cur	1.824,000	615.782,569	4.675.747,566	361,151	360,914	-0,237	256,7837	200	2,69%			
Cur	1.825,000	615.781,789	4.675.746,940	361,199	360,941	-0,258	257,1020	200	2,69%			
Cur	1.826,000	615.781,006	4.675.746,318	361,247	360,968	-0,279	257,4203	200	2,69%			
Cur	1.827,000	615.780,220	4.675.745,700	361,295	360,994	-0,301	257,7386	200	2,69%			
Cur	1.828,000	615.779,431	4.675.745,086	361,344	361,021	-0,323	258,0569	200	2,69%			
Cur	1.829,000	615.778,638	4.675.744,475	361,393	361,048	-0,345	258,3752	200	2,69%			
Cur	1.830,000	615.777,843	4.675.743,869	361,442	361,075	-0,367	258,6935	200	2,69%			
Cur	1.831,000	615.777,045	4.675.743,267	361,491	361,102	-0,389	259,0119	200	2,69%			
Cur	1.832,000	615.776,244	4.675.742,669	361,529	361,129	-0,400	259,3302	200	2,69%			
Cur	1.833,000	615.775,439	4.675.742,074	361,564	361,156	-0,408	259,6485	200	2,69%			
Cur	1.834,000	615.774,632	4.675.741,484	361,604	361,183	-0,421	259,9668	200	2,69%			
Cur	1.835,000	615.773,822	4.675.740,898	361,631	361,210	-0,421	260,2851	200	2,69%			
Cur	1.836,000	615.773,009	4.675.740,316	361,659	361,237	-0,422	260,6034	200	2,69%			
Cur	1.837,000	615.772,193	4.675.739,738	361,673	361,264	-0,409	260,9217	200	2,69%			
Cur	1.838,000	615.771,374	4.675.739,164	361,689	361,291	-0,398	261,2400	200	2,69%			
Cur	1.839,000	615.770,552	4.675.738,594	361,717	361,318	-0,399	261,5583	200	2,69%			
Cur	1.840,000	615.769,728	4.675.738,028	361,757	361,345	-0,412	261,8766	200	2,69%			
Cur	1.841,000	615.768,900	4.675.737,467	361,788	361,372	-0,416	262,1949	200	2,69%			
Cur	1.842,000	615.768,070	4.675.736,909	361,807	361,399	-0,408	262,5133	200	2,69%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	1.843,000	615.767,237	4.675.736,356	361,823	361,426	-0,397	262,8316	200	2,69%			
Cur	1.844,000	615.766,401	4.675.735,807	361,842	361,452	-0,390	263,1499	200	2,69%			
Cur	1.845,000	615.765,563	4.675.735,262	361,856	361,479	-0,377	263,4682	200	2,69%			
Cur	1.846,000	615.764,722	4.675.734,721	361,874	361,506	-0,368	263,7865	200	2,69%			
Cur	1.847,000	615.763,878	4.675.734,184	361,889	361,533	-0,356	264,1048	200	2,69%			
Cur	1.848,000	615.763,031	4.675.733,652	361,906	361,560	-0,346	264,4231	200	2,69%			
Cur	1.849,000	615.762,182	4.675.733,124	361,927	361,587	-0,340	264,7414	200	2,69%			
Cur	1.850,000	615.761,330	4.675.732,600	361,946	361,614	-0,332	265,0597	200	2,69%			
Cur	1.851,000	615.760,476	4.675.732,081	361,964	361,641	-0,323	265,3780	200	2,69%			
Cur	1.852,000	615.759,619	4.675.731,565	361,980	361,668	-0,312	265,6964	200	2,69%			
Cur	1.853,000	615.758,759	4.675.731,054	361,997	361,695	-0,302	266,0147	200	2,69%			
Cur	1.854,000	615.757,897	4.675.730,548	362,015	361,722	-0,293	266,3330	200	2,69%			
Cur	1.855,000	615.757,032	4.675.730,045	362,034	361,749	-0,285	266,6513	200	2,69%			
Cur	1.856,000	615.756,165	4.675.729,547	362,053	361,776	-0,277	266,9696	200	2,69%			
Cur	1.857,000	615.755,296	4.675.729,054	362,071	361,803	-0,268	267,2879	200	2,69%			
Cur	1.858,000	615.754,424	4.675.728,564	362,089	361,830	-0,259	267,6062	200	2,69%			
Cur	1.859,000	615.753,549	4.675.728,079	362,106	361,857	-0,249	267,9245	200	2,69%			
Cur	1.860,000	615.752,672	4.675.727,599	362,130	361,884	-0,246	268,2428	200	2,69%			
Cur	1.861,000	615.751,793	4.675.727,122	362,144	361,910	-0,234	268,5611	200	2,69%			
Cur	1.862,000	615.750,911	4.675.726,651	362,167	361,937	-0,230	268,8795	200	2,69%			
Cur	1.863,000	615.750,027	4.675.726,183	362,185	361,964	-0,221	269,1978	200	2,69%			
Cur	1.864,000	615.749,141	4.675.725,720	362,197	361,991	-0,206	269,5161	200	2,69%			
Cur	1.865,000	615.748,252	4.675.725,262	362,206	362,018	-0,188	269,8344	200	2,69%			
Cur	1.866,000	615.747,361	4.675.724,808	362,213	362,045	-0,168	270,1527	200	2,69%			
Cur	1.867,000	615.746,468	4.675.724,358	362,228	362,072	-0,156	270,4710	200	2,69%			
Cur	1.868,000	615.745,572	4.675.723,913	362,238	362,099	-0,139	270,7893	200	2,69%			
Cur	1.869,000	615.744,675	4.675.723,472	362,257	362,126	-0,131	271,1076	200	2,69%			
Cur	1.870,000	615.743,775	4.675.723,036	362,259	362,153	-0,106	271,4259	200	2,69%			
Cur	1.871,000	615.742,873	4.675.722,604	362,276	362,180	-0,096	271,7442	200	2,69%			
Cur	1.872,000	615.741,969	4.675.722,177	362,295	362,207	-0,088	272,0626	200	2,69%			
Cur	1.873,000	615.741,062	4.675.721,755	362,314	362,234	-0,080	272,3809	200	2,69%			
Cur	1.874,000	615.740,154	4.675.721,336	362,335	362,261	-0,074	272,6992	200	2,69%			
Cur	1.875,000	615.739,243	4.675.720,923	362,355	362,288	-0,067	273,0175	200	2,69%			
Cur	1.876,000	615.738,331	4.675.720,514	362,367	362,315	-0,052	273,3358	200	2,69%			
Cur	1.877,000	615.737,416	4.675.720,110	362,386	362,342	-0,044	273,6541	200	2,69%			
Cur	1.878,000	615.736,500	4.675.719,710	362,397	362,368	-0,029	273,9724	200	2,69%	P.S.		
Rec	1.878,204	615.736,312	4.675.719,629	362,400	362,374	-0,026	274,0373	0	2,69%			
Rec	1.879,000	615.735,582	4.675.719,313	362,413	362,395	-0,018	274,0373	0	2,69%			
Rec	1.880,000	615.734,664	4.675.718,916	362,430	362,422	-0,008	274,0373	0	2,69%			
Rec	1.881,000	615.733,746	4.675.718,520	362,446	362,449	0,003	274,0373	0	2,69%			
Rec	1.882,000	615.732,828	4.675.718,123	362,464	362,476	0,012	274,0373	0	2,69%			
Rec	1.883,000	615.731,910	4.675.717,727	362,483	362,503	0,020	274,0373	0	2,69%			
Rec	1.884,000	615.730,992	4.675.717,330	362,497	362,530	0,033	274,0373	0	2,69%			
Rec	1.885,000	615.730,074	4.675.716,933	362,516	362,557	0,041	274,0373	0	2,69%			
Rec	1.886,000	615.729,156	4.675.716,537	362,537	362,584	0,047	274,0373	0	2,69%			
Rec	1.887,000	615.728,238	4.675.716,140	362,552	362,611	0,059	274,0373	0	2,69%			
Rec	1.888,000	615.727,320	4.675.715,744	362,568	362,638	0,070	274,0373	0	2,69%			
Rec	1.889,000	615.726,402	4.675.715,347	362,587	362,665	0,078	274,0373	0	2,69%			
Rec	1.890,000	615.725,484	4.675.714,950	362,606	362,692	0,086	274,0373	0	2,69%			
Rec	1.891,000	615.724,566	4.675.714,554	362,626	362,719	0,093	274,0373	0	2,69%			
Rec	1.892,000	615.723,648	4.675.714,157	362,650	362,746	0,096	274,0373	0	2,69%			
Rec	1.893,000	615.722,730	4.675.713,760	362,669	362,773	0,104	274,0373	0	2,69%			
Rec	1.894,000	615.721,812	4.675.713,364	362,692	362,800	0,108	274,0373	0	2,69%			
Rec	1.895,000	615.720,894	4.675.712,967	362,712	362,826	0,114	274,0373	0	2,69%			
Rec	1.896,000	615.719,976	4.675.712,571	362,735	362,853	0,118	274,0373	0	2,69%			
Rec	1.897,000	615.719,058	4.675.712,174	362,755	362,880	0,125	274,0373	0	2,69%			
Rec	1.898,000	615.718,140	4.675.711,777	362,775	362,907	0,132	274,0373	0	2,69%			
Rec	1.899,000	615.717,222	4.675.711,381	362,798	362,934	0,136	274,0373	0	2,69%			
Rec	1.900,000	615.716,304	4.675.710,984	362,817	362,961	0,144	274,0373	0	2,69%			
Rec	1.901,000	615.715,386	4.675.710,588	362,838	362,988	0,150	274,0373	0	2,69%			
Rec	1.902,000	615.714,468	4.675.710,191	362,858	363,015	0,157	274,0373	0	2,69%			
Rec	1.903,000	615.713,550	4.675.709,794	362,879	363,042	0,163	274,0373	0	2,69%			
Rec	1.904,000	615.712,632	4.675.709,398	362,899	363,069	0,170	274,0373	0	2,69%			
Rec	1.905,000	615.711,714	4.675.709,001	362,914	363,096	0,182	274,0373	0	2,69%			
Rec	1.906,000	615.710,796	4.675.708,605	362,932	363,123	0,191	274,0373	0	2,69%		T.E.	
Rec	1.906,530	615.710,310	4.675.708,394	362,943	363,137	0,194	274,0373	0	2,69%			
Rec	1.907,000	615.709,878	4.675.708,208	362,953	363,150	0,197	274,0373	0	2,65%			
Rec	1.908,000	615.708,960	4.675.707,811	362,975	363,176	0,201	274,0373	0	2,55%			
Rec	1.909,000	615.708,042	4.675.707,415	362,997	363,201	0,204	274,0373	0	2,45%			
Rec	1.910,000	615.707,124	4.675.707,018	363,031	363,225	0,194	274,0373	0	2,35%			
Rec	1.911,000	615.706,206	4.675.706,622	363,067	363,248	0,181	274,0373	0	2,25%			
Rec	1.912,000	615.705,288	4.675.706,225	363,103	363,270	0,167	274,0373	0	2,15%			
Rec	1.913,000	615.704,370	4.675.705,828	363,139	363,290	0,151	274,0373	0	2,05%			
Rec	1.914,000	615.703,452	4.675.705,432	363,174	363,310	0,136	274,0373	0	1,95%			
Rec	1.915,000	615.702,534	4.675.705,035	363,205	363,329	0,124	274,0373	0	1,85%			
Rec	1.916,000	615.701,616	4.675.704,638	363,236	363,347	0,111	274,0373	0	1,75%			
Rec	1.917,000	615.700,698	4.675.704,242	363,268	363,364	0,096	274,0373	0	1,65%			
Rec	1.918,000	615.699,780	4.675.703,845	363,295	363,380	0,085	274,0373	0	1,55%			
Rec	1.919,000	615.698,862	4.675.703,449	363,326	363,395	0,069	274,0373	0	1,45%		V.	
Rec	1.920,000	615.697,944	4.675.703,052	363,357	363,409	0,052	274,0373	0	1,35%			
Rec	1.921,000	615.697,026	4.675.702,655	363,389	363,422	0,033	274,0373	0	1,25%			
Rec	1.922,000	615.696,108	4.675.702,259	363,418	363,434	0,016	274,0373	0	1,15%			
Rec	1.923,000	615.695,190	4.675.701,862	363,447	363,445	-0,002	274,0373	0	1,05%			
Rec	1.924,000	615.694,272	4.675.701,466	363,474	363,455	-0,019	274,0373	0	0,95%			
Rec	1.925,000	615.693,354	4.675.701,069	363,496	363,464	-0,032	274,0373	0	0,85%			
Rec	1.926,000	615.692,436	4.675.700,672	363,521	363,472	-0,049	274,0373	0	0,75%			
Rec	1.927,000	615.691,518	4.675.700,276	363,538	363,479	-0,059	274,0373	0	0,65%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.928,000	615.690,600	4.675.699,879	363,556	363,485	-0,071	274,0373	0	0,55%			
Rec	1.929,000	615.689,682	4.675.699,483	363,574	363,490	-0,084	274,0373	0	0,45%			
Rec	1.930,000	615.688,764	4.675.699,086	363,594	363,494	-0,100	274,0373	0	0,35%			
Rec	1.931,000	615.687,846	4.675.698,689	363,611	363,497	-0,114	274,0373	0	0,25%			
Rec	1.932,000	615.686,928	4.675.698,293	363,629	363,499	-0,130	274,0373	0	0,15%			
Rec	1.933,000	615.686,010	4.675.697,896	363,644	363,500	-0,144	274,0373	0	0,05%		T.S.	
Rec	1.933,470	615.685,579	4.675.697,710	363,650	363,500	-0,150	274,0373	0	0,00%			
Rec	1.934,000	615.685,092	4.675.697,499	363,656	363,500	-0,156	274,0373	0	0,00%			
Rec	1.935,000	615.684,174	4.675.697,103	363,667	363,500	-0,167	274,0373	0	0,00%			
Rec	1.936,000	615.683,256	4.675.696,706	363,674	363,500	-0,174	274,0373	0	0,00%			
Rec	1.937,000	615.682,338	4.675.696,310	363,683	363,500	-0,183	274,0373	0	0,00%			
Rec	1.938,000	615.681,420	4.675.695,913	363,692	363,500	-0,192	274,0373	0	0,00%			
Rec	1.939,000	615.680,502	4.675.695,516	363,700	363,500	-0,200	274,0373	0	0,00%			
Rec	1.940,000	615.679,584	4.675.695,120	363,707	363,500	-0,207	274,0373	0	0,00%			
Rec	1.941,000	615.678,667	4.675.694,723	363,707	363,500	-0,207	274,0373	0	0,00%			
Rec	1.942,000	615.677,749	4.675.694,327	363,702	363,500	-0,202	274,0373	0	0,00%			
Rec	1.943,000	615.676,831	4.675.693,930	363,695	363,500	-0,195	274,0373	0	0,00%			
Rec	1.944,000	615.675,913	4.675.693,533	363,683	363,500	-0,183	274,0373	0	0,00%			
Rec	1.945,000	615.674,995	4.675.693,137	363,671	363,500	-0,171	274,0373	0	0,00%			
Rec	1.946,000	615.674,077	4.675.692,740	363,649	363,500	-0,149	274,0373	0	0,00%			
Rec	1.947,000	615.673,159	4.675.692,344	363,635	363,500	-0,135	274,0373	0	0,00%			
Rec	1.948,000	615.672,241	4.675.691,947	363,616	363,500	-0,116	274,0373	0	0,00%			
Rec	1.949,000	615.671,323	4.675.691,550	363,599	363,500	-0,099	274,0373	0	0,00%			
Rec	1.950,000	615.670,405	4.675.691,154	363,580	363,500	-0,080	274,0373	0	0,00%			
Rec	1.951,000	615.669,487	4.675.690,757	363,567	363,500	-0,067	274,0373	0	0,00%			
Rec	1.952,000	615.668,569	4.675.690,361	363,553	363,500	-0,053	274,0373	0	0,00%			
Rec	1.953,000	615.667,651	4.675.689,964	363,550	363,500	-0,050	274,0373	0	0,00%			
Rec	1.954,000	615.666,733	4.675.689,567	363,534	363,500	-0,034	274,0373	0	0,00%			
Rec	1.955,000	615.665,815	4.675.689,171	363,518	363,500	-0,018	274,0373	0	0,00%			
Rec	1.956,000	615.664,897	4.675.688,774	363,499	363,500	0,001	274,0373	0	0,00%			
Rec	1.957,000	615.663,979	4.675.688,377	363,479	363,500	0,021	274,0373	0	0,00%			
Rec	1.958,000	615.663,061	4.675.687,981	363,463	363,500	0,037	274,0373	0	0,00%			
Rec	1.959,000	615.662,143	4.675.687,584	363,453	363,500	0,047	274,0373	0	0,00%			
Rec	1.960,000	615.661,225	4.675.687,188	363,437	363,500	0,063	274,0373	0	0,00%			
Rec	1.961,000	615.660,307	4.675.686,791	363,423	363,500	0,077	274,0373	0	0,00%			
Rec	1.962,000	615.659,389	4.675.686,394	363,396	363,500	0,104	274,0373	0	0,00%			
Rec	1.963,000	615.658,471	4.675.685,998	363,403	363,500	0,097	274,0373	0	0,00%			
Rec	1.964,000	615.657,553	4.675.685,601	363,366	363,500	0,134	274,0373	0	0,00%			
Rec	1.965,000	615.656,635	4.675.685,205	363,329	363,500	0,171	274,0373	0	0,00%			
Rec	1.966,000	615.655,717	4.675.684,808	363,336	363,500	0,164	274,0373	0	0,00%			
Rec	1.967,000	615.654,799	4.675.684,411	363,317	363,500	0,183	274,0373	0	0,00%			
Rec	1.968,000	615.653,881	4.675.684,015	363,305	363,500	0,195	274,0373	0	0,00%			
Rec	1.969,000	615.652,963	4.675.683,618	363,294	363,500	0,206	274,0373	0	0,00%			
Rec	1.970,000	615.652,045	4.675.683,222	363,283	363,500	0,217	274,0373	0	0,00%			
Rec	1.971,000	615.651,127	4.675.682,825	363,272	363,500	0,228	274,0373	0	0,00%			
Rec	1.972,000	615.650,209	4.675.682,428	363,261	363,500	0,239	274,0373	0	0,00%			
Rec	1.973,000	615.649,291	4.675.682,032	363,250	363,500	0,250	274,0373	0	0,00%			
Rec	1.974,000	615.648,373	4.675.681,635	363,411	363,500	0,089	274,0373	0	0,00%			
	1.974,133	615.648,251	4.675.681,582	363,500	363,500	0,000	274,0373		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	611.374,154	4.661.505,229	376,312	376,350	0,038	393,0527	0	4,46%			
Rec	1,000	611.374,045	4.661.506,223	376,354	376,395	0,041	393,0527	0	4,46%			
Rec	2,000	611.373,936	4.661.507,217	376,407	376,439	0,032	393,0527	0	4,46%			
Rec	3,000	611.373,827	4.661.508,211	376,450	376,484	0,034	393,0527	0	4,46%			
Rec	4,000	611.373,719	4.661.509,205	376,512	376,528	0,016	393,0527	0	4,46%			
Rec	5,000	611.373,610	4.661.510,199	376,580	376,573	-0,007	393,0527	0	4,46%			
Rec	6,000	611.373,501	4.661.511,193	376,630	376,618	-0,012	393,0527	0	4,46%			ODT Ø1.000 L=4,60m
Rec	6,644	611.373,431	4.661.511,833	376,674	376,646	-0,028	393,0527	0	4,46%		T.E.	
Rec	7,000	611.373,392	4.661.512,187	376,699	376,663	-0,036	393,0527	0	4,82%			
Rec	8,000	611.373,283	4.661.513,181	376,747	376,716	-0,031	393,0527	0	5,82%			
Rec	9,000	611.373,174	4.661.514,175	376,822	376,779	-0,043	393,0527	0	6,82%			
Rec	10,000	611.373,065	4.661.515,169	376,888	376,852	-0,036	393,0527	0	7,82%		V.	
Rec	11,000	611.372,956	4.661.516,163	376,961	376,935	-0,026	393,0527	0	8,82%			
Rec	12,000	611.372,847	4.661.517,157	377,056	377,029	-0,027	393,0527	0	9,82%			
Rec	13,000	611.372,738	4.661.518,152	377,161	377,132	-0,029	393,0527	0	10,82%			
Rec	13,356	611.372,700	4.661.518,505	377,198	377,171	-0,027	393,0527	0	11,17%		T.S.	
Rec	14,000	611.372,629	4.661.519,146	377,264	377,243	-0,021	393,0527	0	11,17%			
Rec	15,000	611.372,521	4.661.520,140	377,358	377,354	-0,004	393,0527	0	11,17%			
Rec	16,000	611.372,412	4.661.521,134	377,452	377,466	0,014	393,0527	0	11,17%			
Rec	17,000	611.372,303	4.661.522,128	377,545	377,578	0,033	393,0527	0	11,17%			
Rec	18,000	611.372,194	4.661.523,122	377,642	377,689	0,047	393,0527	0	11,17%			
Rec	19,000	611.372,085	4.661.524,116	377,736	377,801	0,065	393,0527	0	11,17%			
Cur	19,722	611.372,006	4.661.524,833	377,809	377,882	0,073	393,0527	100	11,17%	P.S.		
Cur	20,000	611.371,976	4.661.525,110	377,837	377,913	0,076	393,2299	100	11,17%			
Cur	21,000	611.371,875	4.661.526,105	377,936	378,024	0,088	393,8666	100	11,17%			
Cur	22,000	611.371,784	4.661.527,101	378,047	378,136	0,089	394,5032	100	11,17%			
Cur	23,000	611.371,703	4.661.528,097	378,172	378,248	0,076	395,1398	100	11,17%			
Cur	24,000	611.371,631	4.661.529,095	378,300	378,359	0,059	395,7764	100	11,17%			
Cur	25,000	611.371,570	4.661.530,093	378,425	378,471	0,046	396,4130	100	11,17%			
Cur	26,000	611.371,519	4.661.531,092	378,558	378,583	0,025	397,0497	100	11,17%			
Cur	27,000	611.371,478	4.661.532,091	378,684	378,694	0,010	397,6863	100	11,17%			
Cur	28,000	611.371,446	4.661.533,090	378,806	378,806	0,000	398,3229	100	11,17%			
Cur	29,000	611.371,425	4.661.534,090	378,925	378,918	-0,007	398,9595	100	11,17%			
Cur	30,000	611.371,413	4.661.535,090	379,020	379,029	0,009	399,5961	100	11,17%			
Cur	31,000	611.371,412	4.661.536,090	379,125	379,141	0,016	0,2328	100	11,17%			
Cur	32,000	611.371,421	4.661.537,090	379,239	379,253	0,014	0,8694	100	11,17%			
Cur	33,000	611.371,439	4.661.538,090	379,345	379,364	0,019	1,5060	100	11,17%			
Cur	34,000	611.371,468	4.661.539,089	379,449	379,476	0,027	2,1426	100	11,17%			
Cur	35,000	611.371,507	4.661.540,089	379,559	379,588	0,029	2,7792	100	11,17%			
Cur	36,000	611.371,555	4.661.541,087	379,676	379,699	0,023	3,4159	100	11,17%			
Cur	36,866	611.371,606	4.661.541,952	379,778	379,796	0,018	3,9672	100	11,17%		T.E.	
Cur	37,000	611.371,614	4.661.542,086	379,794	379,811	0,017	4,0525	100	11,03%			
Cur	38,000	611.371,683	4.661.543,083	379,909	379,916	0,007	4,6891	100	10,03%			
Cur	39,000	611.371,761	4.661.544,080	380,016	380,012	-0,004	5,3257	100	9,03%			
Cur	40,000	611.371,850	4.661.545,076	380,096	380,097	0,001	5,9623	100	8,03%		V.	
Cur	41,000	611.371,948	4.661.546,071	380,174	380,172	-0,002	6,5990	100	7,03%			
Cur	42,000	611.372,057	4.661.547,065	380,251	380,238	-0,013	7,2356	100	6,03%			
Cur	43,000	611.372,175	4.661.548,058	380,303	380,293	-0,010	7,8722	100	5,03%			
Cur	43,134	611.372,192	4.661.548,191	380,311	380,300	-0,011	7,9575	100	4,90%		T.S.	
Cur	44,000	611.372,303	4.661.549,050	380,363	380,342	-0,021	8,5088	100	4,90%			
Cur	45,000	611.372,442	4.661.550,041	380,408	380,391	-0,017	9,1454	100	4,90%			
Cur	46,000	611.372,590	4.661.551,030	380,457	380,440	-0,017	9,7821	100	4,90%			
Cur	47,000	611.372,748	4.661.552,017	380,486	380,489	0,003	10,4187	100	4,90%			
Cur	48,000	611.372,916	4.661.553,003	380,500	380,538	0,038	11,0553	100	4,90%			
Cur	49,000	611.373,093	4.661.553,987	380,508	380,587	0,079	11,6919	100	4,90%			
Cur	50,000	611.373,281	4.661.554,969	380,548	380,636	0,088	12,3285	100	4,90%			
Cur	51,000	611.373,478	4.661.555,949	380,636	380,685	0,049	12,9651	100	4,90%			
Cur	52,000	611.373,685	4.661.556,928	380,713	380,734	0,021	13,6018	100	4,90%			
Cur	53,000	611.373,902	4.661.557,904	380,757	380,783	0,026	14,2384	100	4,90%			
Cur	54,000	611.374,129	4.661.558,878	380,839	380,832	-0,007	14,8750	100	4,90%			
Cur	55,000	611.374,365	4.661.559,850	380,944	380,881	-0,063	15,5116	100	4,90%			
Cur	56,000	611.374,611	4.661.560,819	381,018	380,930	-0,088	16,1482	100	4,90%			
Cur	57,000	611.374,867	4.661.561,786	381,052	380,979	-0,073	16,7849	100	4,90%			
Cur	58,000	611.375,133	4.661.562,750	381,084	381,028	-0,056	17,4215	100	4,90%			
Cur	59,000	611.375,408	4.661.563,711	381,115	381,077	-0,038	18,0581	100	4,90%			
Cur	60,000	611.375,692	4.661.564,670	381,146	381,126	-0,020	18,6947	100	4,90%			
Cur	61,000	611.375,986	4.661.565,625	381,177	381,175	-0,002	19,3313	100	4,90%			
Cur	62,000	611.376,290	4.661.566,578	381,208	381,224	0,016	19,9680	100	4,90%			
Cur	63,000	611.376,604	4.661.567,528	381,241	381,273	0,032	20,6046	100	4,90%			
Cur	64,000	611.376,926	4.661.568,474	381,275	381,322	0,047	21,2412	100	4,90%			
Cur	65,000	611.377,259	4.661.569,417	381,310	381,371	0,061	21,8778	100	4,90%			
Cur	66,000	611.377,600	4.661.570,357	381,349	381,420	0,071	22,5144	100	4,90%			
Cur	67,000	611.377,951	4.661.571,294	381,398	381,469	0,071	23,1511	100	4,90%			
Cur	68,000	611.378,312	4.661.572,226	381,448	381,518	0,070	23,7877	100	4,90%			
Cur	69,000	611.378,681	4.661.573,156	381,498	381,567	0,069	24,4243	100	4,90%			
Cur	70,000	611.379,060	4.661.574,081	381,548	381,616	0,068	25,0609	100	4,90%			
Cur	70,903	611.379,410	4.661.574,913	381,592	381,660	0,068	25,6358	100	4,90%		T.E.	
Cur	71,000	611.379,448	4.661.575,003	381,597	381,665	0,068	25,6975	100	4,87%			
Cur	72,000	611.379,846	4.661.575,920	381,647	381,712	0,065	26,3342	100	4,53%			
Cur	73,000	611.380,252	4.661.576,834	381,696	381,756	0,060	26,9708	100	4,20%			
Cur	74,000	611.380,668	4.661.577,743	381,745	381,796	0,051	27,6074	100	3,87%			
Cur	75,000	611.381,093	4.661.578,649	381,794	381,833	0,039	28,2440	100	3,53%			
Cur	76,000	611.381,526	4.661.579,550	381,843	381,867	0,024	28,8806	100	3,20%			
Cur	77,000	611.381,969	4.661.580,446	381,891	381,897	0,006	29,5173	100	2,87%		V.	
Cur	78,000	611.382,421	4.661.581,339	381,896	381,924	0,028	30,1539	100	2,53%			
Cur	79,000	611.382,881	4.661.582,226	381,900	381,948	0,048	30,7905	100	2,20%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13-T13BIS C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	80,000	611.383,351	4.661.583,109	381,906	381,968	0,062	31,4271	100	1,87%			
Rec	80,756	611.383,712	4.661.583,773	381,910	381,981	0,071	31,9084	0	1,62%	P.S.		
Rec	81,000	611.383,829	4.661.583,988	381,912	381,985	0,073	31,9084	0	1,53%			
Rec	82,000	611.384,309	4.661.584,865	381,916	381,999	0,083	31,9084	0	1,20%			
Rec	83,000	611.384,790	4.661.585,742	381,919	382,009	0,090	31,9084	0	0,87%			
Rec	83,097	611.384,836	4.661.585,827	381,919	382,010	0,091	31,9084	0	0,84%		T.S.	
Rec	84,000	611.385,270	4.661.586,619	381,922	382,018	0,096	31,9084	0	0,84%			
Rec	85,000	611.385,751	4.661.587,496	381,923	382,026	0,103	31,9084	0	0,84%			
Rec	86,000	611.386,231	4.661.588,373	381,925	382,034	0,109	31,9084	0	0,84%			
Rec	87,000	611.386,712	4.661.589,250	381,927	382,043	0,116	31,9084	0	0,84%			
Rec	88,000	611.387,192	4.661.590,127	381,930	382,051	0,121	31,9084	0	0,84%			
Rec	89,000	611.387,673	4.661.591,004	381,934	382,059	0,125	31,9084	0	0,84%			
Rec	90,000	611.388,153	4.661.591,881	381,938	382,068	0,130	31,9084	0	0,84%			
Rec	91,000	611.388,634	4.661.592,758	381,943	382,076	0,133	31,9084	0	0,84%			
Rec	92,000	611.389,114	4.661.593,635	381,947	382,084	0,137	31,9084	0	0,84%			
Rec	93,000	611.389,595	4.661.594,512	381,952	382,093	0,141	31,9084	0	0,84%			
Rec	94,000	611.390,075	4.661.595,389	381,957	382,101	0,144	31,9084	0	0,84%			
Rec	95,000	611.390,556	4.661.596,266	381,962	382,110	0,148	31,9084	0	0,84%			
Rec	96,000	611.391,036	4.661.597,143	381,967	382,118	0,151	31,9084	0	0,84%			
Rec	97,000	611.391,517	4.661.598,020	381,973	382,126	0,153	31,9084	0	0,84%			
Rec	98,000	611.391,997	4.661.598,897	381,979	382,135	0,156	31,9084	0	0,84%			
Rec	99,000	611.392,478	4.661.599,774	381,985	382,143	0,158	31,9084	0	0,84%			
Rec	100,000	611.392,958	4.661.600,651	381,990	382,151	0,161	31,9084	0	0,84%			
Rec	101,000	611.393,439	4.661.601,528	381,996	382,160	0,164	31,9084	0	0,84%			
Rec	102,000	611.393,919	4.661.602,405	382,006	382,168	0,162	31,9084	0	0,84%			
Rec	103,000	611.394,400	4.661.603,282	382,026	382,176	0,160	31,9084	0	0,84%			
Rec	104,000	611.394,880	4.661.604,159	382,046	382,185	0,139	31,9084	0	0,84%			
Rec	105,000	611.395,361	4.661.605,036	382,065	382,193	0,128	31,9084	0	0,84%			
Rec	106,000	611.395,841	4.661.605,913	382,085	382,201	0,116	31,9084	0	0,84%			
Rec	107,000	611.396,322	4.661.606,790	382,104	382,210	0,106	31,9084	0	0,84%			
Rec	108,000	611.396,802	4.661.607,667	382,123	382,218	0,095	31,9084	0	0,84%			
Rec	109,000	611.397,283	4.661.608,544	382,143	382,227	0,084	31,9084	0	0,84%			
Rec	110,000	611.397,763	4.661.609,421	382,162	382,235	0,073	31,9084	0	0,84%			
Rec	111,000	611.398,244	4.661.610,298	382,182	382,243	0,061	31,9084	0	0,84%			
Rec	112,000	611.398,724	4.661.611,175	382,201	382,252	0,051	31,9084	0	0,84%			
Rec	113,000	611.399,205	4.661.612,052	382,221	382,260	0,039	31,9084	0	0,84%			
Rec	114,000	611.399,685	4.661.612,929	382,240	382,268	0,028	31,9084	0	0,84%			
Rec	115,000	611.400,166	4.661.613,806	382,260	382,277	0,017	31,9084	0	0,84%			
Rec	116,000	611.400,646	4.661.614,683	382,279	382,285	0,006	31,9084	0	0,84%			
Rec	117,000	611.401,127	4.661.615,560	382,298	382,293	-0,005	31,9084	0	0,84%			
Rec	118,000	611.401,607	4.661.616,437	382,318	382,302	-0,016	31,9084	0	0,84%			
Rec	119,000	611.402,087	4.661.617,314	382,338	382,310	-0,028	31,9084	0	0,84%			
Rec	120,000	611.402,568	4.661.618,191	382,359	382,319	-0,040	31,9084	0	0,84%			
Rec	121,000	611.403,048	4.661.619,068	382,380	382,327	-0,053	31,9084	0	0,84%			
Rec	122,000	611.403,529	4.661.619,945	382,405	382,335	-0,070	31,9084	0	0,84%			
Rec	123,000	611.404,009	4.661.620,822	382,433	382,344	-0,089	31,9084	0	0,84%			
Rec	124,000	611.404,490	4.661.621,699	382,458	382,352	-0,106	31,9084	0	0,84%			
Rec	125,000	611.404,970	4.661.622,576	382,483	382,360	-0,123	31,9084	0	0,84%			
Rec	126,000	611.405,451	4.661.623,453	382,505	382,369	-0,136	31,9084	0	0,84%			
Rec	127,000	611.405,931	4.661.624,330	382,505	382,377	-0,128	31,9084	0	0,84%			
Rec	128,000	611.406,412	4.661.625,207	382,504	382,385	-0,119	31,9084	0	0,84%			
Rec	129,000	611.406,892	4.661.626,084	382,504	382,394	-0,110	31,9084	0	0,84%			
Rec	130,000	611.407,373	4.661.626,961	382,504	382,402	-0,102	31,9084	0	0,84%			
Rec	131,000	611.407,853	4.661.627,838	382,504	382,411	-0,093	31,9084	0	0,84%			
Rec	132,000	611.408,334	4.661.628,715	382,505	382,419	-0,086	31,9084	0	0,84%			
Rec	133,000	611.408,814	4.661.629,592	382,508	382,427	-0,081	31,9084	0	0,84%			
Rec	134,000	611.409,295	4.661.630,469	382,511	382,436	-0,075	31,9084	0	0,84%			
Rec	135,000	611.409,775	4.661.631,346	382,514	382,444	-0,070	31,9084	0	0,84%			
Rec	136,000	611.410,256	4.661.632,223	382,516	382,452	-0,064	31,9084	0	0,84%			
Rec	137,000	611.410,736	4.661.633,100	382,519	382,461	-0,058	31,9084	0	0,84%			
Rec	138,000	611.411,217	4.661.633,977	382,522	382,469	-0,053	31,9084	0	0,84%			
Rec	139,000	611.411,697	4.661.634,853	382,525	382,477	-0,048	31,9084	0	0,84%			
Rec	140,000	611.412,178	4.661.635,730	382,528	382,486	-0,042	31,9084	0	0,84%			
Rec	141,000	611.412,658	4.661.636,607	382,531	382,494	-0,037	31,9084	0	0,84%			
Rec	142,000	611.413,139	4.661.637,484	382,534	382,502	-0,032	31,9084	0	0,84%			
Rec	143,000	611.413,619	4.661.638,361	382,537	382,511	-0,026	31,9084	0	0,84%			
Rec	144,000	611.414,100	4.661.639,238	382,540	382,519	-0,021	31,9084	0	0,84%			
Rec	145,000	611.414,580	4.661.640,115	382,543	382,528	-0,015	31,9084	0	0,84%			
Rec	146,000	611.415,061	4.661.640,992	382,546	382,536	-0,010	31,9084	0	0,84%			
Rec	147,000	611.415,541	4.661.641,869	382,548	382,544	-0,004	31,9084	0	0,84%			
Rec	148,000	611.416,022	4.661.642,746	382,551	382,553	0,002	31,9084	0	0,84%			
Rec	149,000	611.416,502	4.661.643,623	382,554	382,561	0,007	31,9084	0	0,84%			
Rec	150,000	611.416,983	4.661.644,500	382,557	382,569	0,012	31,9084	0	0,84%			
Rec	150,959	611.417,444	4.661.645,342	382,560	382,577	0,018	31,9084	0	0,84%		T.E.	
Rec	151,000	611.417,463	4.661.645,377	382,560	382,578	0,018	31,9084	0	0,83%			
Rec	152,000	611.417,944	4.661.646,254	382,563	382,586	0,023	31,9084	0	0,73%			
Rec	153,000	611.418,424	4.661.647,131	382,566	382,592	0,026	31,9084	0	0,63%			
Rec	154,000	611.418,905	4.661.648,008	382,569	382,598	0,029	31,9084	0	0,53%			
Rec	155,000	611.419,385	4.661.648,885	382,572	382,603	0,031	31,9084	0	0,43%			
Rec	156,000	611.419,866	4.661.649,762	382,575	382,607	0,032	31,9084	0	0,33%			
Rec	157,000	611.420,346	4.661.650,639	382,577	382,610	0,033	31,9084	0	0,23%			
Rec	158,000	611.420,827	4.661.651,516	382,580	382,611	0,031	31,9084	0	0,13%			
Rec	159,000	611.421,307	4.661.652,393	382,583	382,612	0,029	31,9084	0	0,03%			
Rec	160,000	611.421,788	4.661.653,270	382,586	382,612	0,026	31,9084	0	-0,07%		V.	
Rec	161,000	611.422,268	4.661.654,147	382,589	382,611	0,022	31,9084	0	-0,17%			
Rec	162,000	611.422,749	4.661.655,024	382,592	382,609	0,017	31,9084	0	-0,27%			
Rec	163,000	611.423,229	4.661.655,901	382,595	382,606	0,011	31,9084	0	-0,37%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13-T13BIS C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	164,000	611.423,710	4.661.656,778	382,598	382,601	0,003	31,9084	0	-0,47%			
Rec	165,000	611.424,190	4.661.657,655	382,601	382,596	-0,005	31,9084	0	-0,57%			
Rec	166,000	611.424,671	4.661.658,532	382,596	382,590	-0,006	31,9084	0	-0,67%			
Rec	167,000	611.425,151	4.661.659,409	382,592	382,583	-0,009	31,9084	0	-0,77%			
Rec	168,000	611.425,632	4.661.660,286	382,588	382,575	-0,013	31,9084	0	-0,87%			
Rec	169,000	611.426,112	4.661.661,163	382,584	382,566	-0,018	31,9084	0	-0,97%			
Rec	169,041	611.426,132	4.661.661,199	382,584	382,565	-0,019	31,9084	0	-0,97%		T.S.	
Rec	170,000	611.426,593	4.661.662,040	382,580	382,556	-0,024	31,9084	0	-0,97%			
Rec	171,000	611.427,073	4.661.662,917	382,576	382,546	-0,030	31,9084	0	-0,97%			
Rec	172,000	611.427,554	4.661.663,794	382,572	382,536	-0,036	31,9084	0	-0,97%			
Rec	173,000	611.428,034	4.661.664,671	382,567	382,526	-0,041	31,9084	0	-0,97%			
Rec	174,000	611.428,515	4.661.665,548	382,563	382,517	-0,046	31,9084	0	-0,97%			
Rec	175,000	611.428,995	4.661.666,425	382,559	382,507	-0,052	31,9084	0	-0,97%			
Rec	176,000	611.429,476	4.661.667,302	382,555	382,497	-0,058	31,9084	0	-0,97%			
Rec	177,000	611.429,956	4.661.668,179	382,546	382,488	-0,058	31,9084	0	-0,97%			
Rec	178,000	611.430,437	4.661.669,056	382,530	382,478	-0,052	31,9084	0	-0,97%			
Rec	179,000	611.430,917	4.661.669,933	382,514	382,468	-0,046	31,9084	0	-0,97%			
Rec	180,000	611.431,397	4.661.670,810	382,497	382,458	-0,039	31,9084	0	-0,97%			
Rec	181,000	611.431,878	4.661.671,687	382,481	382,449	-0,032	31,9084	0	-0,97%			
Rec	182,000	611.432,358	4.661.672,564	382,465	382,439	-0,026	31,9084	0	-0,97%			
Rec	183,000	611.432,839	4.661.673,441	382,448	382,429	-0,019	31,9084	0	-0,97%			
Rec	183,089	611.432,882	4.661.673,520	382,447	382,428	-0,018	31,9084	0	-0,97%		T.E.	
Rec	184,000	611.433,319	4.661.674,318	382,432	382,419	-0,013	31,9084	0	-1,09%			
Rec	185,000	611.433,800	4.661.675,195	382,416	382,407	-0,009	31,9084	0	-1,23%			
Rec	186,000	611.434,280	4.661.676,072	382,399	382,394	-0,005	31,9084	0	-1,36%			
Rec	187,000	611.434,761	4.661.676,949	382,383	382,380	-0,003	31,9084	0	-1,49%			
Rec	188,000	611.435,241	4.661.677,826	382,367	382,364	-0,003	31,9084	0	-1,63%			
Rec	189,000	611.435,722	4.661.678,703	382,350	382,347	-0,003	31,9084	0	-1,76%			
Rec	190,000	611.436,202	4.661.679,580	382,334	382,329	-0,005	31,9084	0	-1,89%		V.	
Rec	191,000	611.436,683	4.661.680,457	382,317	382,310	-0,007	31,9084	0	-2,03%			
Rec	192,000	611.437,163	4.661.681,334	382,301	382,289	-0,012	31,9084	0	-2,16%			
Rec	193,000	611.437,644	4.661.682,211	382,285	382,266	-0,019	31,9084	0	-2,29%			
Rec	194,000	611.438,124	4.661.683,088	382,268	382,243	-0,025	31,9084	0	-2,43%			
Rec	195,000	611.438,605	4.661.683,965	382,252	382,218	-0,034	31,9084	0	-2,56%			
Rec	196,000	611.439,085	4.661.684,842	382,236	382,191	-0,045	31,9084	0	-2,69%			
Rec	196,911	611.439,523	4.661.685,641	382,221	382,166	-0,054	31,9084	0	-2,82%		T.S.	
Rec	197,000	611.439,566	4.661.685,719	382,219	382,164	-0,055	31,9084	0	-2,81%			
Rec	198,000	611.440,046	4.661.686,596	382,203	382,136	-0,067	31,9084	0	-2,81%			
Rec	199,000	611.440,527	4.661.687,473	382,187	382,108	-0,079	31,9084	0	-2,81%			
Rec	200,000	611.441,007	4.661.688,350	382,170	382,080	-0,090	31,9084	0	-2,81%			
Rec	201,000	611.441,488	4.661.689,227	382,154	382,051	-0,103	31,9084	0	-2,81%			
Rec	202,000	611.441,968	4.661.690,104	382,139	382,023	-0,116	31,9084	0	-2,81%			
Rec	203,000	611.442,449	4.661.690,981	382,127	381,995	-0,132	31,9084	0	-2,81%			
Rec	204,000	611.442,929	4.661.691,858	382,113	381,967	-0,146	31,9084	0	-2,81%			
Rec	205,000	611.443,410	4.661.692,735	382,100	381,939	-0,161	31,9084	0	-2,81%			
Rec	206,000	611.443,890	4.661.693,612	382,086	381,911	-0,175	31,9084	0	-2,81%			
Rec	207,000	611.444,371	4.661.694,489	382,071	381,882	-0,189	31,9084	0	-2,81%			
Rec	208,000	611.444,851	4.661.695,366	382,056	381,854	-0,202	31,9084	0	-2,81%			
Rec	209,000	611.445,332	4.661.696,243	382,040	381,826	-0,214	31,9084	0	-2,81%			
Rec	210,000	611.445,812	4.661.697,120	382,025	381,798	-0,227	31,9084	0	-2,81%			
Rec	211,000	611.446,293	4.661.697,997	382,010	381,770	-0,240	31,9084	0	-2,81%			
Rec	211,859	611.446,705	4.661.698,751	381,978	381,746	-0,233	31,9084	0	-2,81%		T.E.	
Rec	212,000	611.446,773	4.661.698,874	381,973	381,742	-0,231	31,9084	0	-3,10%			
Rec	213,000	611.447,254	4.661.699,751	381,901	381,701	-0,200	31,9084	0	-5,10%			
Rec	214,000	611.447,734	4.661.700,628	381,828	381,640	-0,188	31,9084	0	-7,10%			
Rec	215,000	611.448,215	4.661.701,505	381,756	381,559	-0,197	31,9084	0	-9,10%			
Rec	216,000	611.448,695	4.661.702,382	381,678	381,458	-0,220	31,9084	0	-11,10%			
Rec	217,000	611.449,176	4.661.703,259	381,601	381,337	-0,264	31,9084	0	-13,10%		V.	
Rec	218,000	611.449,656	4.661.704,136	381,525	381,196	-0,329	31,9084	0	-15,10%			
Rec	219,000	611.450,137	4.661.705,013	381,443	381,035	-0,408	31,9084	0	-17,10%			
Rec	220,000	611.450,617	4.661.705,890	381,364	380,854	-0,510	31,9084	0	-19,10%			
Rec	221,000	611.451,098	4.661.706,767	381,286	380,653	-0,633	31,9084	0	-21,10%			
Rec	222,000	611.451,578	4.661.707,644	381,205	380,432	-0,773	31,9084	0	-23,10%			
Rec	222,141	611.451,646	4.661.707,768	381,194	380,399	-0,795	31,9084	0	-23,38%		T.S.	
Rec	223,000	611.452,059	4.661.708,521	381,124	380,198	-0,926	31,9084	0	-23,38%			
Rec	224,000	611.452,539	4.661.709,398	381,042	379,964	-1,078	31,9084	0	-23,38%			
Rec	225,000	611.453,020	4.661.710,275	380,774	379,731	-1,043	31,9084	0	-23,38%			
Rec	226,000	611.453,500	4.661.711,152	380,304	379,497	-0,807	31,9084	0	-23,38%			
Rec	227,000	611.453,981	4.661.712,029	379,841	379,263	-0,578	31,9084	0	-23,38%			
Rec	228,000	611.454,461	4.661.712,906	379,411	379,029	-0,382	31,9084	0	-23,38%			
Rec	229,000	611.454,942	4.661.713,783	378,988	378,795	-0,193	31,9084	0	-23,38%			
Rec	230,000	611.455,422	4.661.714,660	378,673	378,561	-0,112	31,9084	0	-23,38%			
Rec	231,000	611.455,903	4.661.715,537	378,371	378,328	-0,043	31,9084	0	-23,38%			
Rec	232,000	611.456,383	4.661.716,414	378,070	378,094	0,024	31,9084	0	-23,38%			
Rec	233,000	611.456,864	4.661.717,291	377,865	377,860	-0,005	31,9084	0	-23,38%			
Rec	234,000	611.457,344	4.661.718,168	377,676	377,626	-0,050	31,9084	0	-23,38%			
Rec	235,000	611.457,825	4.661.719,045	377,489	377,392	-0,097	31,9084	0	-23,38%			
Rec	236,000	611.458,305	4.661.719,922	377,302	377,159	-0,143	31,9084	0	-23,38%			
Rec	237,000	611.458,786	4.661.720,799	377,107	376,925	-0,182	31,9084	0	-23,38%			
Rec	238,000	611.459,266	4.661.721,676	376,893	376,691	-0,202	31,9084	0	-23,38%			
Rec	239,000	611.459,746	4.661.722,553	376,662	376,457	-0,205	31,9084	0	-23,38%			
Rec	240,000	611.460,227	4.661.723,430	376,431	376,223	-0,208	31,9084	0	-23,38%			
Rec	241,000	611.460,707	4.661.724,307	376,200	375,990	-0,210	31,9084	0	-23,38%			
Rec	242,000	611.461,188	4.661.725,184	375,982	375,756	-0,226	31,9084	0	-23,38%			
Rec	243,000	611.461,668	4.661.726,061	375,848	375,522	-0,326	31,9084	0	-23,38%			
Rec	244,000	611.462,149	4.661.726,938	375,714	375,288	-0,426	31,9084	0	-23,38%			
Rec	245,000	611.462,629	4.661.727,815	375,579	375,054	-0,525	31,9084	0	-23,38%			

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REPLANTEO CAMINO TRAMO T13-T13BIS C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	246,000	611.463,110	4.661.728,692	375,447	374,820	-0,627	31,9084	0	-23,38%			
Rec	247,000	611.463,590	4.661.729,569	375,314	374,587	-0,727	31,9084	0	-23,38%			
Rec	248,000	611.464,071	4.661.730,446	375,179	374,353	-0,826	31,9084	0	-23,38%			
Rec	249,000	611.464,551	4.661.731,323	375,039	374,119	-0,920	31,9084	0	-23,38%			
Rec	250,000	611.465,032	4.661.732,200	374,747	373,885	-0,862	31,9084	0	-23,38%			
Rec	251,000	611.465,512	4.661.733,077	374,394	373,651	-0,743	31,9084	0	-23,38%			
Rec	252,000	611.465,993	4.661.733,954	374,038	373,418	-0,620	31,9084	0	-23,38%		T.E.	
Rec	253,000	611.466,473	4.661.734,831	373,723	373,213	-0,510	31,9084	0	-17,54%			
Rec	254,000	611.466,954	4.661.735,708	373,400	373,067	-0,333	31,9084	0	-11,69%		V.	
Rec	255,000	611.467,434	4.661.736,585	373,077	372,979	-0,098	31,9084	0	-5,85%			
Rec	256,000	611.467,915	4.661.737,462	372,952	372,950	-0,002	31,9084	0	0,00%		T.S.	ODT Ø500 L=5,80m
Rec	257,000	611.468,395	4.661.738,339	372,911	372,950	0,039	31,9084	0	0,00%			
Rec	258,000	611.468,876	4.661.739,216	372,867	372,950	0,083	31,9084	0	0,00%			
Rec	259,000	611.469,356	4.661.740,093	372,820	372,950	0,130	31,9084	0	0,00%			
Rec	260,000	611.469,837	4.661.740,970	372,782	372,950	0,168	31,9084	0	0,00%			
Rec	261,000	611.470,317	4.661.741,847	372,743	372,950	0,207	31,9084	0	0,00%			
Rec	262,000	611.470,798	4.661.742,724	372,694	372,950	0,256	31,9084	0	0,00%			
Rec	263,000	611.471,278	4.661.743,601	372,645	372,950	0,305	31,9084	0	0,00%			
Rec	264,000	611.471,759	4.661.744,478	372,595	372,950	0,355	31,9084	0	0,00%			
Rec	265,000	611.472,239	4.661.745,355	372,542	372,950	0,408	31,9084	0	0,00%			
Rec	266,000	611.472,720	4.661.746,232	372,462	372,950	0,488	31,9084	0	0,00%			
	266,165	611.472,799	4.661.746,377	372,450	372,950	0,500	31,9084		0,00%			

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REPLANTEO CAMINO TRAMO T13-T13BIS A-T13BIS

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	611.323,892	4.661.497,207	381,177	381,177	0,000	93,0527	0	-1,90%			
Rec	1,000	611.324,886	4.661.497,316	381,143	381,158	0,015	93,0527	0	-1,90%			
Rec	2,000	611.325,880	4.661.497,425	381,108	381,139	0,031	93,0527	0	-1,90%			ODT Ø500 L=16,50m
Rec	3,000	611.326,874	4.661.497,534	381,073	381,120	0,047	93,0527	0	-1,90%			
Rec	4,000	611.327,868	4.661.497,643	381,039	381,101	0,062	93,0527	0	-1,90%			
Rec	5,000	611.328,862	4.661.497,752	381,011	381,082	0,071	93,0527	0	-1,90%			
Rec	6,000	611.329,856	4.661.497,860	381,010	381,063	0,053	93,0527	0	-1,90%			
Rec	7,000	611.330,850	4.661.497,969	381,008	381,044	0,036	93,0527	0	-1,90%			
Rec	8,000	611.331,844	4.661.498,078	381,006	381,025	0,019	93,0527	0	-1,90%			
Rec	8,241	611.332,084	4.661.498,105	381,006	381,020	0,015	93,0527	0	-1,90%		T.E.	
Rec	9,000	611.332,838	4.661.498,187	381,004	381,000	-0,004	93,0527	0	-3,42%			
Rec	10,000	611.333,832	4.661.498,296	381,002	380,956	-0,046	93,0527	0	-5,42%			
Rec	11,000	611.334,826	4.661.498,405	381,000	380,892	-0,108	93,0527	0	-7,42%			
Rec	12,000	611.335,820	4.661.498,514	380,880	380,808	-0,072	93,0527	0	-9,42%		V.	
Rec	13,000	611.336,814	4.661.498,623	380,718	380,704	-0,014	93,0527	0	-11,42%			
Rec	14,000	611.337,808	4.661.498,732	380,556	380,579	0,023	93,0527	0	-13,42%			
Rec	15,000	611.338,803	4.661.498,841	380,394	380,435	0,041	93,0527	0	-15,42%			
Rec	15,759	611.339,557	4.661.498,923	380,271	380,312	0,041	93,0527	0	-16,94%		T.S.	
Rec	16,000	611.339,797	4.661.498,950	380,232	380,272	0,040	93,0527	0	-16,93%			
Rec	17,000	611.340,791	4.661.499,059	380,070	380,102	0,032	93,0527	0	-16,93%			
Rec	18,000	611.341,785	4.661.499,167	379,915	379,933	0,018	93,0527	0	-16,93%			
Rec	19,000	611.342,779	4.661.499,276	379,762	379,764	0,002	93,0527	0	-16,93%			
Rec	20,000	611.343,773	4.661.499,385	379,610	379,594	-0,016	93,0527	0	-16,93%			
Rec	21,000	611.344,767	4.661.499,494	379,457	379,425	-0,032	93,0527	0	-16,93%			
Rec	22,000	611.345,761	4.661.499,603	379,324	379,256	-0,068	93,0527	0	-16,93%			
Rec	23,000	611.346,755	4.661.499,712	379,192	379,086	-0,106	93,0527	0	-16,93%			
Rec	24,000	611.347,749	4.661.499,821	379,060	378,917	-0,143	93,0527	0	-16,93%			
Rec	25,000	611.348,743	4.661.499,930	378,888	378,748	-0,140	93,0527	0	-16,93%			
Rec	26,000	611.349,737	4.661.500,039	378,688	378,578	-0,110	93,0527	0	-16,93%			
Rec	26,881	611.350,613	4.661.500,135	378,512	378,429	-0,083	93,0527	0	-16,93%		T.E.	
Rec	27,000	611.350,731	4.661.500,148	378,488	378,409	-0,079	93,0527	0	-16,77%			
Rec	28,000	611.351,725	4.661.500,257	378,309	378,248	-0,061	93,0527	0	-15,44%			
Rec	29,000	611.352,719	4.661.500,365	378,082	378,100	0,018	93,0527	0	-14,11%			
Rec	30,000	611.353,713	4.661.500,474	377,930	377,966	0,036	93,0527	0	-12,77%		V.	
Rec	31,000	611.354,707	4.661.500,583	377,821	377,845	0,024	93,0527	0	-11,44%			
Rec	32,000	611.355,701	4.661.500,692	377,723	377,737	0,014	93,0527	0	-10,11%			
Rec	33,000	611.356,695	4.661.500,801	377,631	377,643	0,012	93,0527	0	-8,77%			
Rec	33,119	611.356,814	4.661.500,814	377,620	377,632	0,013	93,0527	0	-8,62%		T.S.	
Rec	34,000	611.357,689	4.661.500,910	377,535	377,556	0,021	93,0527	0	-8,62%			
Rec	35,000	611.358,684	4.661.501,019	377,442	377,470	0,028	93,0527	0	-8,62%			
Rec	36,000	611.359,678	4.661.501,128	377,342	377,384	0,042	93,0527	0	-8,62%			
Rec	37,000	611.360,672	4.661.501,237	377,227	377,298	0,071	93,0527	0	-8,62%			
Rec	38,000	611.361,666	4.661.501,346	377,096	377,212	0,116	93,0527	0	-8,62%			
Rec	39,000	611.362,660	4.661.501,455	376,980	377,125	0,145	93,0527	0	-8,62%			
Rec	40,000	611.363,654	4.661.501,563	376,914	377,039	0,125	93,0527	0	-8,62%			
Rec	41,000	611.364,648	4.661.501,672	376,849	376,953	0,104	93,0527	0	-8,62%			
Rec	42,000	611.365,642	4.661.501,781	376,783	376,867	0,084	93,0527	0	-8,62%			
Rec	43,000	611.366,636	4.661.501,890	376,719	376,781	0,062	93,0527	0	-8,62%			
Rec	44,000	611.367,630	4.661.501,999	376,650	376,695	0,045	93,0527	0	-8,62%			
Rec	45,000	611.368,624	4.661.502,108	376,581	376,609	0,028	93,0527	0	-8,62%			
Rec	45,846	611.369,465	4.661.502,200	376,523	376,536	0,013	93,0527	0	-8,62%		T.E.	
Rec	46,000	611.369,618	4.661.502,217	376,512	376,523	0,011	93,0527	0	-8,31%			
Rec	47,000	611.370,612	4.661.502,326	376,443	376,449	0,006	93,0527	0	-6,31%			
Rec	48,000	611.371,606	4.661.502,435	376,374	376,396	0,022	93,0527	0	-4,31%		V.	
Rec	49,000	611.372,600	4.661.502,544	376,305	376,363	0,058	93,0527	0	-2,31%			
Rec	50,000	611.373,594	4.661.502,653	376,241	376,350	0,109	93,0527	0	-0,31%			
Rec	50,154	611.373,747	4.661.502,669	376,233	376,350	0,117	93,0527	0	0,00%		T.S.	
Rec	51,000	611.374,588	4.661.502,761	376,187	376,350	0,163	93,0527	0	0,00%			
Rec	52,000	611.375,582	4.661.502,870	376,137	376,350	0,213	93,0527	0	0,00%			
Rec	53,000	611.376,576	4.661.502,979	376,076	376,350	0,274	93,0527	0	0,00%			
Rec	54,000	611.377,571	4.661.503,088	376,017	376,350	0,333	93,0527	0	0,00%			
Rec	55,000	611.378,565	4.661.503,197	375,948	376,350	0,402	93,0527	0	0,00%			
Rec	56,000	611.379,559	4.661.503,306	375,877	376,350	0,473	93,0527	0	0,00%			
Rec	57,000	611.380,553	4.661.503,415	375,803	376,350	0,547	93,0527	0	0,00%			
Rec	58,000	611.381,547	4.661.503,524	375,725	376,350	0,625	93,0527	0	0,00%			
Rec	59,000	611.382,541	4.661.503,633	375,652	376,350	0,698	93,0527	0	0,00%			
Rec	60,000	611.383,535	4.661.503,742	375,577	376,350	0,773	93,0527	0	0,00%			
Rec	61,000	611.384,529	4.661.503,851	375,495	376,350	0,855	93,0527	0	0,00%			
Rec	62,000	611.385,523	4.661.503,960	375,412	376,350	0,938	93,0527	0	0,00%			
Rec	63,000	611.386,517	4.661.504,068	375,524	376,350	0,826	93,0527	0	0,00%			
Rec	64,000	611.387,511	4.661.504,177	376,190	376,350	0,160	93,0527	0	0,00%			
Rec	64,239	611.387,749	4.661.504,203	376,350	376,350	0,000	93,0527		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	610.681,209	4.660.924,697	370,353	370,353	0,000	72,4503	0	-0,50%			
Rec	1,000	610.682,117	4.660.925,117	370,284	370,348	0,064	72,4503	0	-0,50%			
Rec	2,000	610.683,025	4.660.925,536	370,216	370,343	0,127	72,4503	0	-0,50%			ODT Ø500 L=7,00m
Rec	3,000	610.683,933	4.660.925,955	370,147	370,338	0,191	72,4503	0	-0,50%			
Rec	4,000	610.684,841	4.660.926,375	370,103	370,333	0,230	72,4503	0	-0,50%			
Rec	5,000	610.685,748	4.660.926,794	370,069	370,328	0,259	72,4503	0	-0,50%			
Rec	6,000	610.686,656	4.660.927,213	370,043	370,323	0,280	72,4503	0	-0,50%			
Rec	7,000	610.687,564	4.660.927,633	370,024	370,318	0,294	72,4503	0	-0,50%			
Rec	8,000	610.688,472	4.660.928,052	370,009	370,313	0,304	72,4503	0	-0,50%			
Rec	9,000	610.689,380	4.660.928,472	370,004	370,308	0,304	72,4503	0	-0,50%			
Rec	10,000	610.690,287	4.660.928,891	370,002	370,303	0,301	72,4503	0	-0,50%			
Rec	11,000	610.691,195	4.660.929,310	370,003	370,298	0,295	72,4503	0	-0,50%			
Rec	12,000	610.692,103	4.660.929,730	370,003	370,293	0,290	72,4503	0	-0,50%			
Rec	13,000	610.693,011	4.660.930,149	370,003	370,287	0,284	72,4503	0	-0,50%			
Rec	14,000	610.693,919	4.660.930,568	370,003	370,282	0,279	72,4503	0	-0,50%			
Rec	15,000	610.694,827	4.660.930,988	370,003	370,277	0,274	72,4503	0	-0,50%			
Rec	16,000	610.695,734	4.660.931,407	370,003	370,272	0,269	72,4503	0	-0,50%			
Rec	17,000	610.696,642	4.660.931,826	370,004	370,267	0,263	72,4503	0	-0,50%			
Rec	18,000	610.697,550	4.660.932,246	370,004	370,262	0,258	72,4503	0	-0,50%			
Rec	19,000	610.698,458	4.660.932,665	370,004	370,257	0,253	72,4503	0	-0,50%			
Rec	20,000	610.699,366	4.660.933,085	370,003	370,252	0,249	72,4503	0	-0,50%			
Rec	21,000	610.700,273	4.660.933,504	370,003	370,247	0,244	72,4503	0	-0,50%			
Rec	22,000	610.701,181	4.660.933,923	370,003	370,242	0,239	72,4503	0	-0,50%			
Rec	23,000	610.702,089	4.660.934,343	370,002	370,237	0,235	72,4503	0	-0,50%			
Cur	23,923	610.702,927	4.660.934,730	370,000	370,232	0,232	72,4503	-65	-0,50%	P.S.		
Cur	24,000	610.702,997	4.660.934,762	370,000	370,232	0,232	72,3750	-65	-0,50%			
Cur	25,000	610.703,901	4.660.935,190	369,999	370,227	0,228	71,3956	-65	-0,50%			
Cur	26,000	610.704,798	4.660.935,631	369,998	370,222	0,224	70,4162	-65	-0,50%			
Cur	27,000	610.705,689	4.660.936,086	369,997	370,217	0,220	69,4368	-65	-0,50%			
Cur	28,000	610.706,572	4.660.936,554	369,997	370,212	0,215	68,4574	-65	-0,50%			
Cur	29,000	610.707,448	4.660.937,037	369,995	370,207	0,212	67,4779	-65	-0,50%			
Cur	30,000	610.708,317	4.660.937,532	369,993	370,202	0,209	66,4985	-65	-0,50%			
Cur	31,000	610.709,177	4.660.938,041	369,992	370,197	0,205	65,5191	-65	-0,50%			
Cur	32,000	610.710,030	4.660.938,563	369,992	370,192	0,200	64,5397	-65	-0,50%			
Cur	33,000	610.710,875	4.660.939,098	369,993	370,187	0,194	63,5603	-65	-0,50%			
Cur	34,000	610.711,712	4.660.939,647	369,992	370,182	0,190	62,5809	-65	-0,50%			
Cur	35,000	610.712,539	4.660.940,207	369,981	370,177	0,196	61,6014	-65	-0,50%			
Cur	36,000	610.713,359	4.660.940,781	369,946	370,172	0,226	60,6220	-65	-0,50%			
Cur	37,000	610.714,169	4.660.941,367	369,893	370,167	0,274	59,6426	-65	-0,50%			
Cur	38,000	610.714,970	4.660.941,966	369,930	370,161	0,231	58,6632	-65	-0,50%			
Cur	39,000	610.715,762	4.660.942,576	369,953	370,156	0,203	57,6838	-65	-0,50%			
Cur	40,000	610.716,544	4.660.943,199	369,958	370,151	0,193	56,7044	-65	-0,50%			
Cur	41,000	610.717,317	4.660.943,834	369,962	370,146	0,184	55,7250	-65	-0,50%			
Cur	42,000	610.718,079	4.660.944,481	369,967	370,141	0,174	54,7455	-65	-0,50%			
Cur	43,000	610.718,832	4.660.945,139	369,966	370,136	0,170	53,7661	-65	-0,50%			
Cur	44,000	610.719,575	4.660.945,809	369,969	370,131	0,162	52,7867	-65	-0,50%			
Cur	45,000	610.720,307	4.660.946,490	369,976	370,126	0,150	51,8073	-65	-0,50%			
Cur	46,000	610.721,028	4.660.947,182	369,979	370,121	0,142	50,8279	-65	-0,50%			
Cur	47,000	610.721,739	4.660.947,885	369,981	370,116	0,135	49,8485	-65	-0,50%			
Cur	48,000	610.722,439	4.660.948,600	369,985	370,111	0,126	48,8691	-65	-0,50%			
Cur	49,000	610.723,128	4.660.949,325	369,990	370,106	0,116	47,8896	-65	-0,50%			
Cur	50,000	610.723,806	4.660.950,060	369,996	370,101	0,105	46,9102	-65	-0,50%			
Cur	51,000	610.724,472	4.660.950,806	369,999	370,096	0,097	45,9308	-65	-0,50%			
Cur	52,000	610.725,127	4.660.951,561	370,000	370,091	0,091	44,9514	-65	-0,50%			
Cur	53,000	610.725,770	4.660.952,327	370,000	370,086	0,086	43,9720	-65	-0,50%			
Cur	54,000	610.726,401	4.660.953,103	370,000	370,081	0,081	42,9926	-65	-0,50%			
Cur	55,000	610.727,020	4.660.953,888	369,998	370,076	0,078	42,0131	-65	-0,50%			
Cur	56,000	610.727,627	4.660.954,683	369,995	370,071	0,076	41,0337	-65	-0,50%			
Cur	57,000	610.728,222	4.660.955,487	369,996	370,066	0,070	40,0543	-65	-0,50%			
Cur	58,000	610.728,804	4.660.956,300	370,000	370,061	0,061	39,0749	-65	-0,50%			
Cur	59,000	610.729,374	4.660.957,122	370,001	370,056	0,055	38,0955	-65	-0,50%			
Cur	60,000	610.729,930	4.660.957,952	370,002	370,051	0,049	37,1161	-65	-0,50%			
Cur	61,000	610.730,475	4.660.958,791	370,003	370,046	0,043	36,1367	-65	-0,50%			
Cur	62,000	610.731,006	4.660.959,639	370,003	370,041	0,038	35,1572	-65	-0,50%			
Cur	63,000	610.731,524	4.660.960,494	370,003	370,035	0,032	34,1778	-65	-0,50%			
Cur	64,000	610.732,029	4.660.961,357	370,002	370,030	0,028	33,1984	-65	-0,50%			
Rec	64,709	610.732,379	4.660.961,974	370,002	370,027	0,025	32,5036	0	-0,50%	P.S.		
Rec	65,000	610.732,521	4.660.962,228	370,002	370,025	0,023	32,5036	0	-0,50%			
Rec	66,000	610.733,009	4.660.963,100	370,002	370,020	0,018	32,5036	0	-0,50%			
Rec	67,000	610.733,498	4.660.963,973	370,003	370,015	0,012	32,5036	0	-0,50%			
Rec	68,000	610.733,987	4.660.964,845	370,002	370,010	0,008	32,5036	0	-0,50%			
Rec	69,000	610.734,475	4.660.965,718	370,001	370,005	0,004	32,5036	0	-0,50%			
Rec	70,000	610.734,964	4.660.966,590	370,001	370,000	-0,001	32,5036	0	-0,50%			
Rec	71,000	610.735,453	4.660.967,463	369,999	369,995	-0,004	32,5036	0	-0,50%			
Rec	72,000	610.735,941	4.660.968,335	369,982	369,990	0,008	32,5036	0	-0,50%			
Rec	73,000	610.736,430	4.660.969,208	369,965	369,985	0,020	32,5036	0	-0,50%			
Rec	74,000	610.736,919	4.660.970,080	369,978	369,980	0,002	32,5036	0	-0,50%			
Cur	74,372	610.737,100	4.660.970,405	369,977	369,978	0,001	32,5036	10	-0,50%	P.S.		
Cur	75,000	610.737,424	4.660.970,942	369,980	369,975	-0,005	36,5013	10	-0,50%			
Cur	76,000	610.738,008	4.660.971,754	369,975	369,970	-0,005	42,8675	10	-0,50%			
Cur	77,000	610.738,669	4.660.972,503	369,953	369,965	0,012	49,2337	10	-0,50%			
Cur	78,000	610.739,403	4.660.973,183	369,918	369,960	0,042	55,5999	10	-0,50%			
Cur	79,000	610.740,200	4.660.973,786	369,872	369,955	0,083	61,9661	10	-0,50%			
Cur	80,000	610.741,053	4.660.974,306	369,850	369,950	0,100	68,3323	10	-0,50%			
Cur	80,841	610.741,808	4.660.974,676	369,818	369,946	0,128	73,6862	10	-0,50%		T.E.	
Cur	81,000	610.741,955	4.660.974,738	369,812	369,945	0,133	74,6984	10	-0,52%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	82,000	610.742,894	4.660.975,079	369,774	369,939	0,165	81,0646	10	-0,62%			
Cur	83,000	610.743,864	4.660.975,324	369,749	369,932	0,183	87,4308	10	-0,72%			
Cur	84,000	610.744,852	4.660.975,470	369,738	369,925	0,187	93,7970	10	-0,82%			
Cur	85,000	610.745,851	4.660.975,518	369,752	369,916	0,164	100,1632	10	-0,92%			
Cur	86,000	610.746,849	4.660.975,465	369,789	369,906	0,117	106,5294	10	-1,02%			
Cur	87,000	610.747,837	4.660.975,313	369,834	369,896	0,062	112,8956	10	-1,12%			
Cur	88,000	610.748,805	4.660.975,064	369,850	369,884	0,034	119,2618	10	-1,22%			
Cur	89,000	610.749,743	4.660.974,719	369,881	369,871	-0,010	125,6280	10	-1,32%			
Cur	90,000	610.750,642	4.660.974,281	369,889	369,857	-0,032	131,9942	10	-1,42%			
Cur	91,000	610.751,493	4.660.973,757	369,894	369,843	-0,051	138,3604	10	-1,52%			
Rec	91,666	610.752,028	4.660.973,361	369,891	369,832	-0,059	142,6000	0	-1,59%	P.S.	V.	
Rec	92,000	610.752,290	4.660.973,154	369,875	369,827	-0,048	142,6000	0	-1,62%			
Rec	93,000	610.753,075	4.660.972,534	369,777	369,810	0,033	142,6000	0	-1,72%			
Rec	94,000	610.753,859	4.660.971,913	369,667	369,793	0,126	142,6000	0	-1,82%			
Rec	95,000	610.754,643	4.660.971,293	369,553	369,774	0,221	142,6000	0	-1,92%			
Rec	96,000	610.755,428	4.660.970,673	369,471	369,754	0,283	142,6000	0	-2,02%			
Rec	97,000	610.756,212	4.660.970,052	369,404	369,734	0,330	142,6000	0	-2,12%			
Rec	98,000	610.756,996	4.660.969,432	369,336	369,712	0,376	142,6000	0	-2,22%			
Rec	99,000	610.757,781	4.660.968,812	369,261	369,689	0,428	142,6000	0	-2,32%			
Rec	100,000	610.758,565	4.660.968,192	369,167	369,665	0,498	142,6000	0	-2,42%			
Rec	101,000	610.759,349	4.660.967,571	369,144	369,641	0,497	142,6000	0	-2,52%			
Rec	102,000	610.760,134	4.660.966,951	369,068	369,615	0,547	142,6000	0	-2,62%			
Rec	102,491	610.760,519	4.660.966,646	369,063	369,602	0,539	142,6000	0	-2,67%		T.S.	
Rec	103,000	610.760,918	4.660.966,331	369,058	369,589	0,531	142,6000	0	-2,67%			
Rec	104,000	610.761,703	4.660.965,710	369,051	369,562	0,511	142,6000	0	-2,67%			
Rec	105,000	610.762,487	4.660.965,090	369,044	369,535	0,491	142,6000	0	-2,67%			
Rec	106,000	610.763,271	4.660.964,470	369,037	369,508	0,471	142,6000	0	-2,67%			
Rec	107,000	610.764,056	4.660.963,849	369,030	369,482	0,452	142,6000	0	-2,67%			
Rec	108,000	610.764,840	4.660.963,229	369,024	369,455	0,431	142,6000	0	-2,67%			
Rec	109,000	610.765,624	4.660.962,609	369,019	369,428	0,409	142,6000	0	-2,67%			
Rec	110,000	610.766,409	4.660.961,988	369,016	369,402	0,386	142,6000	0	-2,67%			
Rec	111,000	610.767,193	4.660.961,368	369,012	369,375	0,363	142,6000	0	-2,67%			
Rec	112,000	610.767,977	4.660.960,748	369,009	369,348	0,339	142,6000	0	-2,67%			
Rec	113,000	610.768,762	4.660.960,127	369,006	369,322	0,316	142,6000	0	-2,67%			
Rec	114,000	610.769,546	4.660.959,507	369,003	369,295	0,292	142,6000	0	-2,67%			
Rec	115,000	610.770,330	4.660.958,887	369,000	369,268	0,268	142,6000	0	-2,67%			
Rec	116,000	610.771,115	4.660.958,266	368,998	369,242	0,244	142,6000	0	-2,67%			
Rec	117,000	610.771,899	4.660.957,646	368,997	369,215	0,218	142,6000	0	-2,67%			
Rec	118,000	610.772,683	4.660.957,026	368,996	369,188	0,192	142,6000	0	-2,67%			
Rec	119,000	610.773,468	4.660.956,405	368,995	369,161	0,166	142,6000	0	-2,67%			
Cur	119,804	610.774,099	4.660.955,906	368,994	369,140	0,146	142,6000	-400	-2,67%	P.S.		
Cur	120,000	610.774,252	4.660.955,785	368,994	369,135	0,141	142,5689	-400	-2,67%			
Cur	121,000	610.775,037	4.660.955,166	368,992	369,108	0,116	142,4097	-400	-2,67%			
Cur	122,000	610.775,824	4.660.954,549	368,991	369,081	0,090	142,2506	-400	-2,67%			
Cur	123,000	610.776,613	4.660.953,934	368,980	369,055	0,075	142,0914	-400	-2,67%			
Cur	124,000	610.777,403	4.660.953,321	368,980	369,028	0,048	141,9323	-400	-2,67%			
Cur	125,000	610.778,195	4.660.952,710	368,971	369,001	0,030	141,7731	-400	-2,67%			
Cur	126,000	610.778,988	4.660.952,101	368,966	368,975	0,009	141,6140	-400	-2,67%			
Cur	127,000	610.779,782	4.660.951,494	368,960	368,948	-0,012	141,4548	-400	-2,67%			
Cur	128,000	610.780,578	4.660.950,889	368,944	368,921	-0,023	141,2956	-400	-2,67%			
Cur	129,000	610.781,376	4.660.950,285	368,887	368,895	0,008	141,1365	-400	-2,67%			
Cur	130,000	610.782,175	4.660.949,684	368,798	368,868	0,070	140,9773	-400	-2,67%			
Cur	131,000	610.782,976	4.660.949,085	368,710	368,841	0,131	140,8182	-400	-2,67%			
Cur	132,000	610.783,778	4.660.948,488	368,654	368,815	0,161	140,6590	-400	-2,67%			
Cur	133,000	610.784,582	4.660.947,893	368,620	368,788	0,168	140,4999	-400	-2,67%			
Cur	134,000	610.785,387	4.660.947,300	368,522	368,761	0,239	140,3407	-400	-2,67%			
Cur	135,000	610.786,193	4.660.946,709	368,438	368,734	0,296	140,1816	-400	-2,67%			
Cur	136,000	610.787,001	4.660.946,120	368,347	368,708	0,361	140,0224	-400	-2,67%			
Cur	137,000	610.787,811	4.660.945,533	368,250	368,681	0,431	139,8633	-400	-2,67%			
Cur	138,000	610.788,622	4.660.944,948	368,181	368,654	0,473	139,7041	-400	-2,67%			
Cur	139,000	610.789,434	4.660.944,365	368,095	368,628	0,533	139,5449	-400	-2,67%			
Cur	140,000	610.790,248	4.660.943,784	368,071	368,601	0,530	139,3858	-400	-2,67%			
Cur	141,000	610.791,064	4.660.943,205	368,051	368,574	0,523	139,2266	-400	-2,67%			
Cur	142,000	610.791,881	4.660.942,628	368,027	368,548	0,521	139,0675	-400	-2,67%			
Cur	143,000	610.792,699	4.660.942,053	368,022	368,521	0,499	138,9083	-400	-2,67%			
Cur	144,000	610.793,518	4.660.941,480	368,018	368,494	0,476	138,7492	-400	-2,67%			
Cur	145,000	610.794,340	4.660.940,909	368,014	368,468	0,454	138,5900	-400	-2,67%			
Rec	145,711	610.794,924	4.660.940,505	368,011	368,449	0,438	138,4769	0	-2,67%	P.S.		
Rec	146,000	610.795,162	4.660.940,341	368,010	368,441	0,431	138,4769	0	-2,67%			
Rec	147,000	610.795,985	4.660.939,772	368,007	368,414	0,407	138,4769	0	-2,67%			
Rec	148,000	610.796,808	4.660.939,204	368,007	368,387	0,380	138,4769	0	-2,67%			
Rec	149,000	610.797,631	4.660.938,636	368,006	368,361	0,355	138,4769	0	-2,67%			
Rec	150,000	610.798,453	4.660.938,067	368,004	368,334	0,330	138,4769	0	-2,67%			
Rec	151,000	610.799,276	4.660.937,499	368,004	368,307	0,303	138,4769	0	-2,67%			
Rec	152,000	610.800,099	4.660.936,931	368,004	368,281	0,277	138,4769	0	-2,67%			
Rec	153,000	610.800,922	4.660.936,363	368,005	368,254	0,249	138,4769	0	-2,67%			
Rec	154,000	610.801,745	4.660.935,794	368,005	368,227	0,222	138,4769	0	-2,67%			
Rec	155,000	610.802,568	4.660.935,226	368,006	368,201	0,195	138,4769	0	-2,67%			
Rec	156,000	610.803,391	4.660.934,658	368,007	368,174	0,167	138,4769	0	-2,67%			
Rec	157,000	610.804,213	4.660.934,090	368,007	368,147	0,140	138,4769	0	-2,67%			
Rec	158,000	610.805,036	4.660.933,521	368,009	368,121	0,112	138,4769	0	-2,67%			
Rec	159,000	610.805,859	4.660.932,953	368,009	368,094	0,085	138,4769	0	-2,67%			
Rec	160,000	610.806,682	4.660.932,385	368,009	368,067	0,058	138,4769	0	-2,67%			
Rec	161,000	610.807,505	4.660.931,817	368,008	368,041	0,033	138,4769	0	-2,67%			
Rec	162,000	610.808,328	4.660.931,248	368,009	368,014	0,005	138,4769	0	-2,67%			
Rec	163,000	610.809,150	4.660.930,680	368,010	367,987	-0,023	138,4769	0	-2,67%			
Rec	164,000	610.809,973	4.660.930,112	368,011	367,960	-0,051	138,4769	0	-2,67%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	165,000	610.810,796	4.660.929,544	368,009	367,934	-0,075	138,4769	0	-2,67%			
Rec	166,000	610.811,619	4.660.928,975	368,003	367,907	-0,096	138,4769	0	-2,67%			
Rec	167,000	610.812,442	4.660.928,407	367,992	367,880	-0,112	138,4769	0	-2,67%			
Rec	168,000	610.813,265	4.660.927,839	367,965	367,854	-0,111	138,4769	0	-2,67%			
Rec	169,000	610.814,088	4.660.927,270	367,920	367,827	-0,093	138,4769	0	-2,67%			
Rec	170,000	610.814,910	4.660.926,702	367,894	367,800	-0,094	138,4769	0	-2,67%			
Rec	171,000	610.815,733	4.660.926,134	367,887	367,774	-0,113	138,4769	0	-2,67%			
Rec	172,000	610.816,556	4.660.925,566	367,878	367,747	-0,131	138,4769	0	-2,67%			
Rec	173,000	610.817,379	4.660.924,997	367,867	367,720	-0,147	138,4769	0	-2,67%			
Rec	174,000	610.818,202	4.660.924,429	367,852	367,694	-0,158	138,4769	0	-2,67%			
Rec	175,000	610.819,025	4.660.923,861	367,828	367,667	-0,161	138,4769	0	-2,67%			
Rec	176,000	610.819,847	4.660.923,293	367,795	367,640	-0,155	138,4769	0	-2,67%			
Rec	176,993	610.820,665	4.660.922,728	367,764	367,614	-0,151	138,4769	0	-2,67%		T.E.	
Rec	177,000	610.820,670	4.660.922,724	367,764	367,614	-0,150	138,4769	0	-2,67%			
Rec	178,000	610.821,493	4.660.922,156	367,704	367,588	-0,116	138,4769	0	-2,50%			
Rec	179,000	610.822,316	4.660.921,588	367,642	367,563	-0,079	138,4769	0	-2,33%			
Rec	180,000	610.823,139	4.660.921,020	367,598	367,541	-0,057	138,4769	0	-2,17%			
Rec	181,000	610.823,962	4.660.920,451	367,541	367,520	-0,021	138,4769	0	-2,00%			
Rec	182,000	610.824,785	4.660.919,883	367,473	367,501	0,028	138,4769	0	-1,83%			
Rec	183,000	610.825,607	4.660.919,315	367,409	367,483	0,074	138,4769	0	-1,67%			
Rec	184,000	610.826,430	4.660.918,747	367,354	367,468	0,114	138,4769	0	-1,50%			
Rec	185,000	610.827,253	4.660.918,178	367,298	367,453	0,155	138,4769	0	-1,33%		V.	
Rec	186,000	610.828,076	4.660.917,610	367,243	367,441	0,198	138,4769	0	-1,17%			
Rec	187,000	610.828,899	4.660.917,042	367,183	367,430	0,247	138,4769	0	-1,00%			
Rec	188,000	610.829,722	4.660.916,473	367,115	367,421	0,306	138,4769	0	-0,83%			
Rec	189,000	610.830,544	4.660.915,905	367,064	367,413	0,349	138,4769	0	-0,67%			
Rec	190,000	610.831,367	4.660.915,337	367,054	367,408	0,354	138,4769	0	-0,50%			
Rec	191,000	610.832,190	4.660.914,769	367,046	367,403	0,357	138,4769	0	-0,33%			
Rec	192,000	610.833,013	4.660.914,200	367,038	367,401	0,363	138,4769	0	-0,17%			
Rec	193,000	610.833,836	4.660.913,632	367,028	367,400	0,372	138,4769	0	0,00%			
Rec	193,007	610.833,842	4.660.913,628	367,028	367,400	0,372	138,4769	0	0,00%		T.S.	
Rec	194,000	610.834,659	4.660.913,064	367,024	367,400	0,376	138,4769	0	0,00%			
Rec	195,000	610.835,482	4.660.912,496	367,022	367,400	0,378	138,4769	0	0,00%			
Rec	196,000	610.836,304	4.660.911,927	367,021	367,400	0,379	138,4769	0	0,00%			
Rec	197,000	610.837,127	4.660.911,359	367,019	367,400	0,381	138,4769	0	0,00%			
Rec	198,000	610.837,950	4.660.910,791	367,017	367,400	0,383	138,4769	0	0,00%			
Rec	199,000	610.838,773	4.660.910,223	367,016	367,400	0,384	138,4769	0	0,00%			
Rec	200,000	610.839,596	4.660.909,654	367,014	367,400	0,386	138,4769	0	0,00%			
Rec	201,000	610.840,419	4.660.909,086	367,013	367,400	0,387	138,4769	0	0,00%			
Rec	202,000	610.841,241	4.660.908,518	367,005	367,400	0,395	138,4769	0	0,00%			
Rec	203,000	610.842,064	4.660.907,950	367,004	367,400	0,396	138,4769	0	0,00%			
Rec	204,000	610.842,887	4.660.907,381	367,004	367,400	0,396	138,4769	0	0,00%			
	204,528	610.843,322	4.660.907,081	367,004	367,400	0,396	138,4769		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	610.302,832	4.660.694,570	370,418	370,418	0,000	192,0694	0	-5,12%			
Rec	1,000	610.302,956	4.660.693,577	370,232	370,367	0,135	192,0694	0	-5,12%			ODT Ø300 L=10,00m
Rec	2,000	610.303,081	4.660.692,585	370,069	370,316	0,247	192,0694	0	-5,12%			
Rec	3,000	610.303,205	4.660.691,593	369,984	370,265	0,281	192,0694	0	-5,12%			
Rec	4,000	610.303,329	4.660.690,601	369,921	370,213	0,292	192,0694	0	-5,12%			
Rec	5,000	610.303,453	4.660.689,608	369,854	370,162	0,308	192,0694	0	-5,12%			
Rec	6,000	610.303,578	4.660.688,616	369,783	370,111	0,328	192,0694	0	-5,12%			
Rec	7,000	610.303,702	4.660.687,624	369,713	370,060	0,347	192,0694	0	-5,12%			
Rec	8,000	610.303,826	4.660.686,632	369,645	370,009	0,364	192,0694	0	-5,12%			
Rec	9,000	610.303,950	4.660.685,639	369,578	369,958	0,380	192,0694	0	-5,12%			
Rec	10,000	610.304,075	4.660.684,647	369,510	369,906	0,396	192,0694	0	-5,12%			
Rec	11,000	610.304,199	4.660.683,655	369,442	369,855	0,413	192,0694	0	-5,12%			
Rec	12,000	610.304,323	4.660.682,663	369,374	369,804	0,430	192,0694	0	-5,12%			
Rec	13,000	610.304,447	4.660.681,670	369,305	369,753	0,448	192,0694	0	-5,12%			
Rec	14,000	610.304,572	4.660.680,678	369,233	369,702	0,469	192,0694	0	-5,12%			
Rec	15,000	610.304,696	4.660.679,686	369,161	369,651	0,490	192,0694	0	-5,12%			
Rec	16,000	610.304,820	4.660.678,694	369,091	369,599	0,508	192,0694	0	-5,12%			
Rec	17,000	610.304,944	4.660.677,701	369,031	369,548	0,517	192,0694	0	-5,12%			
Rec	18,000	610.305,069	4.660.676,709	369,019	369,497	0,478	192,0694	0	-5,12%			
Rec	19,000	610.305,193	4.660.675,717	369,014	369,446	0,432	192,0694	0	-5,12%			
Rec	20,000	610.305,317	4.660.674,725	369,007	369,395	0,388	192,0694	0	-5,12%			
Rec	21,000	610.305,441	4.660.673,732	369,001	369,344	0,343	192,0694	0	-5,12%			
Cur	21,152	610.305,460	4.660.673,582	368,999	369,336	0,337	192,0694	200	-5,12%	P.S.	P.S.	
Cur	22,000	610.305,564	4.660.672,740	368,991	369,293	0,302	192,3394	200	-5,12%			
Cur	23,000	610.305,682	4.660.671,747	368,980	369,241	0,261	192,6577	200	-5,12%			
Cur	23,936	610.305,787	4.660.670,817	368,958	369,193	0,235	192,9557	200	-5,12%		T.E.	
Cur	24,000	610.305,794	4.660.670,753	368,957	369,190	0,233	192,9760	200	-5,10%			
Cur	25,000	610.305,902	4.660.669,759	368,897	369,140	0,243	193,2943	200	-4,90%			
Cur	26,000	610.306,004	4.660.668,764	368,823	369,092	0,269	193,6126	200	-4,70%			
Cur	27,000	610.306,102	4.660.667,769	368,759	369,046	0,287	193,9310	200	-4,50%			
Cur	28,000	610.306,195	4.660.666,773	368,694	369,002	0,308	194,2493	200	-4,30%			
Cur	29,000	610.306,282	4.660.665,777	368,629	368,960	0,331	194,5676	200	-4,10%			
Cur	30,000	610.306,365	4.660.664,781	368,564	368,920	0,356	194,8859	200	-3,90%			
Cur	31,000	610.306,443	4.660.663,784	368,492	368,882	0,390	195,2042	200	-3,70%			
Cur	32,000	610.306,516	4.660.662,786	368,421	368,846	0,425	195,5225	200	-3,50%			
Cur	33,000	610.306,584	4.660.661,789	368,349	368,812	0,463	195,8408	200	-3,30%			
Cur	34,000	610.306,646	4.660.660,791	368,277	368,780	0,503	196,1591	200	-3,10%			
Cur	35,000	610.306,704	4.660.659,792	368,205	368,750	0,545	196,4774	200	-2,90%			
Rec	35,478	610.306,730	4.660.659,315	368,178	368,736	0,558	196,6296	0	-2,81%	P.S.	V.	
Rec	36,000	610.306,758	4.660.658,794	368,156	368,722	0,566	196,6296	0	-2,70%			
Rec	37,000	610.306,811	4.660.657,795	368,131	368,696	0,565	196,6296	0	-2,50%			
Rec	38,000	610.306,863	4.660.656,796	368,110	368,672	0,562	196,6296	0	-2,30%			
Rec	39,000	610.306,916	4.660.655,798	368,081	368,650	0,569	196,6296	0	-2,10%			
Rec	40,000	610.306,969	4.660.654,799	368,066	368,630	0,564	196,6296	0	-1,90%			
Rec	41,000	610.307,022	4.660.653,801	368,055	368,612	0,557	196,6296	0	-1,70%			
Rec	42,000	610.307,075	4.660.652,802	368,037	368,596	0,559	196,6296	0	-1,50%			
Rec	43,000	610.307,128	4.660.651,803	368,025	368,582	0,557	196,6296	0	-1,30%			
Rec	44,000	610.307,181	4.660.650,805	368,013	368,570	0,557	196,6296	0	-1,10%			
Rec	45,000	610.307,234	4.660.649,806	368,000	368,560	0,560	196,6296	0	-0,90%			
Rec	46,000	610.307,287	4.660.648,808	367,966	368,552	0,586	196,6296	0	-0,70%			
Rec	47,000	610.307,340	4.660.647,809	367,932	368,546	0,614	196,6296	0	-0,50%			
Rec	47,020	610.307,341	4.660.647,789	367,931	368,545	0,614	196,6296	0	-0,50%		T.S.	
Rec	48,000	610.307,393	4.660.646,810	367,900	368,540	0,640	196,6296	0	-0,50%			
Rec	49,000	610.307,446	4.660.645,812	367,867	368,535	0,668	196,6296	0	-0,50%			
Rec	50,000	610.307,498	4.660.644,813	367,833	368,530	0,697	196,6296	0	-0,50%			
Rec	51,000	610.307,551	4.660.643,815	367,800	368,525	0,725	196,6296	0	-0,50%			
Rec	52,000	610.307,604	4.660.642,816	367,783	368,520	0,737	196,6296	0	-0,50%			
Rec	53,000	610.307,657	4.660.641,817	367,764	368,515	0,751	196,6296	0	-0,50%			
Rec	54,000	610.307,710	4.660.640,819	367,739	368,510	0,771	196,6296	0	-0,50%			
Rec	55,000	610.307,763	4.660.639,820	367,714	368,505	0,791	196,6296	0	-0,50%			
Rec	56,000	610.307,816	4.660.638,822	367,699	368,500	0,801	196,6296	0	-0,50%			
Rec	57,000	610.307,869	4.660.637,823	367,715	368,495	0,780	196,6296	0	-0,50%			
Rec	58,000	610.307,922	4.660.636,824	367,732	368,490	0,758	196,6296	0	-0,50%			
Rec	59,000	610.307,975	4.660.635,826	367,727	368,485	0,758	196,6296	0	-0,50%			
Rec	60,000	610.308,028	4.660.634,827	367,712	368,480	0,768	196,6296	0	-0,50%			
Rec	61,000	610.308,081	4.660.633,829	367,715	368,475	0,760	196,6296	0	-0,50%			
Rec	62,000	610.308,133	4.660.632,830	367,721	368,470	0,749	196,6296	0	-0,50%			
Rec	63,000	610.308,186	4.660.631,832	367,726	368,465	0,739	196,6296	0	-0,50%			
Rec	64,000	610.308,239	4.660.630,833	367,732	368,460	0,728	196,6296	0	-0,50%			
Rec	65,000	610.308,292	4.660.629,834	367,738	368,455	0,717	196,6296	0	-0,50%			
Rec	66,000	610.308,345	4.660.628,836	367,741	368,450	0,709	196,6296	0	-0,50%			
Rec	67,000	610.308,398	4.660.627,837	367,743	368,445	0,702	196,6296	0	-0,50%			
Rec	68,000	610.308,451	4.660.626,839	367,746	368,440	0,694	196,6296	0	-0,50%			
Rec	69,000	610.308,504	4.660.625,840	367,749	368,435	0,686	196,6296	0	-0,50%			
Rec	70,000	610.308,557	4.660.624,841	367,757	368,430	0,673	196,6296	0	-0,50%			
Rec	71,000	610.308,610	4.660.623,843	367,784	368,425	0,641	196,6296	0	-0,50%			
Rec	72,000	610.308,663	4.660.622,844	367,797	368,420	0,623	196,6296	0	-0,50%			
Rec	73,000	610.308,716	4.660.621,846	367,797	368,415	0,618	196,6296	0	-0,50%			
Rec	74,000	610.308,768	4.660.620,847	367,815	368,410	0,595	196,6296	0	-0,50%			
Rec	75,000	610.308,821	4.660.619,848	367,834	368,405	0,571	196,6296	0	-0,50%			
Rec	76,000	610.308,874	4.660.618,850	367,853	368,400	0,547	196,6296	0	-0,50%			
Rec	77,000	610.308,927	4.660.617,851	367,878	368,395	0,517	196,6296	0	-0,50%			
Cur	77,602	610.308,959	4.660.617,250	367,881	368,392	0,511	196,6296	-150	-0,50%	P.S.		
Cur	78,000	610.308,981	4.660.616,853	367,890	368,390	0,500	196,4607	-150	-0,50%			
Cur	79,000	610.309,040	4.660.615,854	367,904	368,385	0,481	196,0363	-150	-0,50%			
Cur	80,000	610.309,105	4.660.614,856	367,920	368,380	0,460	195,6119	-150	-0,50%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	81,000	610.309,177	4.660.613,859	367,932	368,375	0,443	195,1875	-150	-0,50%			
Cur	82,000	610.309,256	4.660.612,862	367,931	368,370	0,439	194,7631	-150	-0,50%			
Cur	83,000	610.309,342	4.660.611,866	367,930	368,365	0,435	194,3386	-150	-0,50%			
Cur	84,000	610.309,434	4.660.610,870	367,923	368,360	0,437	193,9142	-150	-0,50%			
Cur	85,000	610.309,533	4.660.609,875	367,923	368,355	0,432	193,4898	-150	-0,50%			
Cur	86,000	610.309,638	4.660.608,881	367,915	368,350	0,435	193,0654	-150	-0,50%			
Cur	87,000	610.309,750	4.660.607,887	367,916	368,345	0,429	192,6410	-150	-0,50%			
Cur	88,000	610.309,869	4.660.606,894	367,896	368,340	0,444	192,2166	-150	-0,50%			
Cur	89,000	610.309,994	4.660.605,902	367,791	368,335	0,544	191,7922	-150	-0,50%			
Cur	90,000	610.310,126	4.660.604,911	367,790	368,330	0,540	191,3677	-150	-0,50%			
Cur	91,000	610.310,264	4.660.603,920	367,792	368,325	0,533	190,9433	-150	-0,50%			
Cur	92,000	610.310,409	4.660.602,931	367,797	368,320	0,523	190,5189	-150	-0,50%			
Cur	93,000	610.310,561	4.660.601,942	367,767	368,315	0,548	190,0945	-150	-0,50%			
Cur	94,000	610.310,719	4.660.600,955	367,746	368,310	0,564	189,6701	-150	-0,50%			
Cur	95,000	610.310,884	4.660.599,969	367,731	368,305	0,574	189,2457	-150	-0,50%			
Rec	95,570	610.310,981	4.660.599,407	367,710	368,302	0,592	189,0039	0	-0,50%	P.S.		
Rec	96,000	610.311,055	4.660.598,983	367,702	368,300	0,598	189,0039	0	-0,50%			
Rec	97,000	610.311,227	4.660.597,998	367,666	368,295	0,629	189,0039	0	-0,50%			
Rec	98,000	610.311,399	4.660.597,013	367,645	368,290	0,645	189,0039	0	-0,50%			
Rec	98,500	610.311,485	4.660.596,520	367,623	368,288	0,665	189,0039	0	-0,50%		T.E.	
Rec	99,000	610.311,570	4.660.596,028	367,600	368,285	0,685	189,0039	0	-0,48%			
Rec	100,000	610.311,742	4.660.595,043	367,545	368,280	0,735	189,0039	0	-0,45%			
Rec	101,000	610.311,914	4.660.594,058	367,498	368,276	0,778	189,0039	0	-0,42%			
Rec	102,000	610.312,086	4.660.593,073	367,453	368,272	0,819	189,0039	0	-0,38%			
Rec	103,000	610.312,258	4.660.592,087	367,406	368,268	0,862	189,0039	0	-0,35%			
Rec	104,000	610.312,430	4.660.591,102	367,348	368,265	0,917	189,0039	0	-0,32%			
Rec	105,000	610.312,602	4.660.590,117	367,286	368,262	0,976	189,0039	0	-0,28%			
Rec	106,000	610.312,774	4.660.589,132	367,222	368,259	1,037	189,0039	0	-0,25%		V.	
Rec	107,000	610.312,945	4.660.588,147	367,170	368,257	1,087	189,0039	0	-0,22%			
Rec	108,000	610.313,117	4.660.587,162	367,134	368,255	1,121	189,0039	0	-0,18%			
Rec	109,000	610.313,289	4.660.586,177	367,091	368,253	1,162	189,0039	0	-0,15%			
Rec	110,000	610.313,461	4.660.585,192	367,030	368,252	1,222	189,0039	0	-0,12%			
Rec	111,000	610.313,633	4.660.584,206	366,996	368,251	1,255	189,0039	0	-0,08%			
Rec	112,000	610.313,805	4.660.583,221	366,990	368,250	1,260	189,0039	0	-0,05%			
Rec	113,000	610.313,977	4.660.582,236	366,985	368,250	1,265	189,0039	0	-0,02%			
Rec	113,500	610.314,063	4.660.581,744	366,986	368,250	1,264	189,0039	0	0,00%		T.S.	
Rec	114,000	610.314,148	4.660.581,251	366,987	368,250	1,263	189,0039	0	0,00%			
Rec	115,000	610.314,320	4.660.580,266	366,984	368,250	1,266	189,0039	0	0,00%			
Rec	116,000	610.314,492	4.660.579,281	366,979	368,250	1,271	189,0039	0	0,00%			
Rec	117,000	610.314,664	4.660.578,296	366,975	368,250	1,275	189,0039	0	0,00%			
Rec	118,000	610.314,836	4.660.577,311	366,974	368,250	1,276	189,0039	0	0,00%			
Rec	119,000	610.315,008	4.660.576,326	366,974	368,250	1,276	189,0039	0	0,00%			
Rec	120,000	610.315,180	4.660.575,340	366,969	368,250	1,281	189,0039	0	0,00%			
Rec	121,000	610.315,352	4.660.574,355	366,908	368,250	1,342	189,0039	0	0,00%			
Rec	122,000	610.315,523	4.660.573,370	366,803	368,250	1,447	189,0039	0	0,00%			
Rec	123,000	610.315,695	4.660.572,385	366,759	368,250	1,491	189,0039	0	0,00%			
Rec	124,000	610.315,867	4.660.571,400	366,732	368,250	1,518	189,0039	0	0,00%			
Rec	125,000	610.316,039	4.660.570,415	366,698	368,250	1,552	189,0039	0	0,00%			
	125,630	610.316,147	4.660.569,794	366,692	368,250	1,558	189,0039		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	609.258,816	4.660.245,477	354,588	354,588	0,000	87,7562	0	4,49%			
Rec	1,000	609.259,797	4.660.245,668	354,829	354,633	-0,196	87,7562	0	4,49%			
Rec	2,000	609.260,779	4.660.245,860	354,980	354,678	-0,302	87,7562	0	4,49%			ODT Ø300 L=9,00m
Rec	3,000	609.261,760	4.660.246,051	355,026	354,723	-0,303	87,7562	0	4,49%			
Rec	4,000	609.262,742	4.660.246,242	355,058	354,768	-0,290	87,7562	0	4,49%			
Rec	5,000	609.263,723	4.660.246,433	355,091	354,813	-0,278	87,7562	0	4,49%			
Rec	6,000	609.264,705	4.660.246,624	355,124	354,858	-0,266	87,7562	0	4,49%			
Rec	7,000	609.265,687	4.660.246,815	355,157	354,903	-0,254	87,7562	0	4,49%			
Rec	8,000	609.266,668	4.660.247,006	355,190	354,948	-0,242	87,7562	0	4,49%			
Rec	9,000	609.267,650	4.660.247,198	355,223	354,992	-0,231	87,7562	0	4,49%			
Rec	10,000	609.268,631	4.660.247,389	355,258	355,037	-0,221	87,7562	0	4,49%			
Rec	11,000	609.269,613	4.660.247,580	355,294	355,082	-0,212	87,7562	0	4,49%			
Rec	12,000	609.270,594	4.660.247,771	355,330	355,127	-0,203	87,7562	0	4,49%			
Rec	13,000	609.271,576	4.660.247,962	355,366	355,172	-0,194	87,7562	0	4,49%			
Rec	14,000	609.272,557	4.660.248,153	355,396	355,217	-0,179	87,7562	0	4,49%			
Rec	15,000	609.273,539	4.660.248,344	355,423	355,262	-0,161	87,7562	0	4,49%			
Rec	16,000	609.274,521	4.660.248,536	355,451	355,307	-0,144	87,7562	0	4,49%			
Rec	17,000	609.275,502	4.660.248,727	355,485	355,352	-0,133	87,7562	0	4,49%			
Rec	18,000	609.276,484	4.660.248,918	355,519	355,397	-0,122	87,7562	0	4,49%			
Rec	19,000	609.277,465	4.660.249,109	355,553	355,442	-0,111	87,7562	0	4,49%			
Rec	20,000	609.278,447	4.660.249,300	355,587	355,487	-0,100	87,7562	0	4,49%			
Rec	21,000	609.279,428	4.660.249,491	355,620	355,532	-0,088	87,7562	0	4,49%			
Rec	22,000	609.280,410	4.660.249,682	355,654	355,577	-0,077	87,7562	0	4,49%			
Rec	23,000	609.281,392	4.660.249,874	355,688	355,622	-0,066	87,7562	0	4,49%			
Rec	24,000	609.282,373	4.660.250,065	355,722	355,667	-0,055	87,7562	0	4,49%			
Rec	25,000	609.283,355	4.660.250,256	355,756	355,712	-0,044	87,7562	0	4,49%			
Rec	26,000	609.284,336	4.660.250,447	355,789	355,756	-0,033	87,7562	0	4,49%			
Rec	27,000	609.285,318	4.660.250,638	355,822	355,801	-0,021	87,7562	0	4,49%			
Rec	28,000	609.286,299	4.660.250,829	355,854	355,846	-0,008	87,7562	0	4,49%			
Rec	29,000	609.287,281	4.660.251,020	355,887	355,891	0,004	87,7562	0	4,49%			
Rec	30,000	609.288,262	4.660.251,212	355,919	355,936	0,017	87,7562	0	4,49%			
Rec	31,000	609.289,244	4.660.251,403	355,952	355,981	0,029	87,7562	0	4,49%			
Rec	32,000	609.290,226	4.660.251,594	355,985	356,026	0,041	87,7562	0	4,49%			
Rec	33,000	609.291,207	4.660.251,785	356,024	356,071	0,047	87,7562	0	4,49%			
Rec	34,000	609.292,189	4.660.251,976	356,069	356,116	0,047	87,7562	0	4,49%			
Rec	35,000	609.293,170	4.660.252,167	356,113	356,161	0,048	87,7562	0	4,49%			
Rec	36,000	609.294,152	4.660.252,358	356,158	356,206	0,048	87,7562	0	4,49%			
Rec	37,000	609.295,133	4.660.252,550	356,205	356,251	0,046	87,7562	0	4,49%			
Rec	38,000	609.296,115	4.660.252,741	356,252	356,296	0,044	87,7562	0	4,49%			
Rec	39,000	609.297,097	4.660.252,932	356,298	356,341	0,043	87,7562	0	4,49%			
Rec	39,820	609.297,901	4.660.253,089	356,338	356,378	0,039	87,7562	0	4,49%		T.E.	
Rec	40,000	609.298,078	4.660.253,123	356,347	356,386	0,039	87,7562	0	4,52%			
Rec	41,000	609.299,060	4.660.253,314	356,401	356,432	0,031	87,7562	0	4,69%			
Rec	42,000	609.300,041	4.660.253,505	356,456	356,479	0,023	87,7562	0	4,86%			
Rec	43,000	609.301,023	4.660.253,696	356,512	356,529	0,017	87,7562	0	5,02%			
Rec	44,000	609.302,004	4.660.253,888	356,567	356,580	0,013	87,7562	0	5,19%			
Rec	45,000	609.302,986	4.660.254,079	356,623	356,633	0,010	87,7562	0	5,36%			
Rec	46,000	609.303,967	4.660.254,270	356,679	356,687	0,008	87,7562	0	5,52%			
Rec	47,000	609.304,949	4.660.254,461	356,734	356,743	0,009	87,7562	0	5,69%			
Rec	48,000	609.305,931	4.660.254,652	356,790	356,801	0,011	87,7562	0	5,86%			
Rec	49,000	609.306,912	4.660.254,843	356,845	356,860	0,015	87,7562	0	6,02%			
Rec	50,000	609.307,894	4.660.255,034	356,900	356,921	0,021	87,7562	0	6,19%		V.	
Rec	51,000	609.308,875	4.660.255,226	356,961	356,984	0,023	87,7562	0	6,36%			
Rec	52,000	609.309,857	4.660.255,417	357,026	357,049	0,023	87,7562	0	6,52%			
Rec	53,000	609.310,838	4.660.255,608	357,099	357,115	0,016	87,7562	0	6,69%			
Rec	54,000	609.311,820	4.660.255,799	357,173	357,182	0,009	87,7562	0	6,86%			
Rec	55,000	609.312,802	4.660.255,990	357,246	357,252	0,006	87,7562	0	7,02%			
Rec	56,000	609.313,783	4.660.256,181	357,320	357,323	0,003	87,7562	0	7,19%			
Rec	57,000	609.314,765	4.660.256,372	357,393	357,396	0,003	87,7562	0	7,36%			
Rec	58,000	609.315,746	4.660.256,564	357,467	357,470	0,003	87,7562	0	7,52%			
Rec	59,000	609.316,728	4.660.256,755	357,541	357,546	0,005	87,7562	0	7,69%			
Rec	60,000	609.317,709	4.660.256,946	357,615	357,624	0,009	87,7562	0	7,86%			
Rec	60,180	609.317,886	4.660.256,980	357,628	357,638	0,009	87,7562	0	7,89%		T.S.	
Rec	61,000	609.318,691	4.660.257,137	357,689	357,702	0,013	87,7562	0	7,89%			
Rec	62,000	609.319,672	4.660.257,328	357,763	357,781	0,018	87,7562	0	7,89%			
Rec	63,000	609.320,654	4.660.257,519	357,837	357,860	0,023	87,7562	0	7,89%			
Rec	64,000	609.321,636	4.660.257,710	357,912	357,939	0,027	87,7562	0	7,89%			
Rec	65,000	609.322,617	4.660.257,902	357,986	358,018	0,032	87,7562	0	7,89%			
Rec	66,000	609.323,599	4.660.258,093	358,069	358,097	0,028	87,7562	0	7,89%			
Rec	67,000	609.324,580	4.660.258,284	358,155	358,175	0,020	87,7562	0	7,89%			
Rec	68,000	609.325,562	4.660.258,475	358,240	358,254	0,014	87,7562	0	7,89%			
Rec	69,000	609.326,543	4.660.258,666	358,325	358,333	0,008	87,7562	0	7,89%			
Rec	70,000	609.327,525	4.660.258,857	358,410	358,412	0,002	87,7562	0	7,89%			
Rec	71,000	609.328,506	4.660.259,048	358,494	358,491	-0,003	87,7562	0	7,89%			
Rec	72,000	609.329,488	4.660.259,240	358,579	358,570	-0,009	87,7562	0	7,89%			
Rec	73,000	609.330,470	4.660.259,431	358,663	358,649	-0,014	87,7562	0	7,89%			
Rec	74,000	609.331,451	4.660.259,622	358,748	358,727	-0,021	87,7562	0	7,89%			
Rec	75,000	609.332,433	4.660.259,813	358,833	358,806	-0,027	87,7562	0	7,89%			
Rec	76,000	609.333,414	4.660.260,004	358,917	358,885	-0,032	87,7562	0	7,89%			
Rec	77,000	609.334,396	4.660.260,195	359,002	358,964	-0,038	87,7562	0	7,89%			
Rec	78,000	609.335,377	4.660.260,386	359,090	359,043	-0,047	87,7562	0	7,89%			
Rec	79,000	609.336,359	4.660.260,578	359,178	359,122	-0,056	87,7562	0	7,89%			
Rec	80,000	609.337,341	4.660.260,769	359,267	359,200	-0,067	87,7562	0	7,89%			
Rec	80,352	609.337,686	4.660.260,836	359,298	359,228	-0,070	87,7562	0	7,89%		T.E.	
Rec	81,000	609.338,322	4.660.260,960	359,355	359,281	-0,074	87,7562	0	8,32%			
Rec	82,000	609.339,304	4.660.261,151	359,443	359,367	-0,076	87,7562	0	8,98%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	83,000	609.340,285	4.660.261,342	359,532	359,460	-0,072	87,7562	0	9,65%			
Rec	84,000	609.341,267	4.660.261,533	359,620	359,560	-0,060	87,7562	0	10,32%			
Rec	85,000	609.342,248	4.660.261,724	359,709	359,667	-0,042	87,7562	0	10,98%			
Rec	86,000	609.343,230	4.660.261,916	359,799	359,780	-0,019	87,7562	0	11,65%			
Rec	87,000	609.344,211	4.660.262,107	359,888	359,900	0,012	87,7562	0	12,32%			
Rec	88,000	609.345,193	4.660.262,298	359,978	360,026	0,048	87,7562	0	12,98%			
Rec	89,000	609.346,175	4.660.262,489	360,090	360,159	0,069	87,7562	0	13,65%			
Rec	90,000	609.347,156	4.660.262,680	360,211	360,299	0,088	87,7562	0	14,32%		V.	
Rec	91,000	609.348,138	4.660.262,871	360,329	360,446	0,117	87,7562	0	14,98%			
Rec	92,000	609.349,119	4.660.263,062	360,447	360,599	0,152	87,7562	0	15,65%			
Rec	93,000	609.350,101	4.660.263,254	360,544	360,759	0,215	87,7562	0	16,32%			
Rec	94,000	609.351,082	4.660.263,445	360,642	360,925	0,283	87,7562	0	16,98%			
Rec	95,000	609.352,064	4.660.263,636	360,753	361,098	0,345	87,7562	0	17,65%			
Rec	96,000	609.353,046	4.660.263,827	360,842	361,278	0,436	87,7562	0	18,32%			
Rec	97,000	609.354,027	4.660.264,018	360,923	361,465	0,542	87,7562	0	18,98%			
Rec	98,000	609.355,009	4.660.264,209	361,015	361,658	0,643	87,7562	0	19,65%			
Rec	99,000	609.355,990	4.660.264,400	361,256	361,858	0,602	87,7562	0	20,32%			
Rec	99,648	609.356,626	4.660.264,524	361,413	361,991	0,578	87,7562	0	20,75%		T.S.	
Rec	100,000	609.356,972	4.660.264,592	361,498	362,064	0,566	87,7562	0	20,75%			
Rec	101,000	609.357,953	4.660.264,783	361,755	362,272	0,517	87,7562	0	20,75%			
Rec	102,000	609.358,935	4.660.264,974	362,022	362,479	0,457	87,7562	0	20,75%			
Rec	103,000	609.359,916	4.660.265,165	362,247	362,687	0,440	87,7562	0	20,75%			
Rec	104,000	609.360,898	4.660.265,356	362,481	362,894	0,413	87,7562	0	20,75%			
Rec	105,000	609.361,880	4.660.265,547	362,690	363,102	0,412	87,7562	0	20,75%			
Rec	106,000	609.362,861	4.660.265,738	362,898	363,309	0,411	87,7562	0	20,75%			
Rec	107,000	609.363,843	4.660.265,929	363,061	363,517	0,456	87,7562	0	20,75%			
Rec	108,000	609.364,824	4.660.266,121	363,201	363,724	0,523	87,7562	0	20,75%			
Rec	109,000	609.365,806	4.660.266,312	363,338	363,932	0,594	87,7562	0	20,75%			
Rec	110,000	609.366,787	4.660.266,503	363,491	364,139	0,648	87,7562	0	20,75%			
Rec	111,000	609.367,769	4.660.266,694	363,639	364,347	0,708	87,7562	0	20,75%			
Rec	112,000	609.368,751	4.660.266,885	363,800	364,554	0,754	87,7562	0	20,75%			
Rec	113,000	609.369,732	4.660.267,076	363,961	364,762	0,801	87,7562	0	20,75%			
Rec	114,000	609.370,714	4.660.267,267	364,316	364,969	0,653	87,7562	0	20,75%			
Rec	115,000	609.371,695	4.660.267,459	364,719	365,177	0,458	87,7562	0	20,75%			
Rec	116,000	609.372,677	4.660.267,650	365,075	365,384	0,309	87,7562	0	20,75%			
Rec	117,000	609.373,658	4.660.267,841	365,327	365,592	0,265	87,7562	0	20,75%			
Rec	118,000	609.374,640	4.660.268,032	365,577	365,799	0,222	87,7562	0	20,75%			
Rec	119,000	609.375,621	4.660.268,223	365,815	366,007	0,192	87,7562	0	20,75%			
Rec	120,000	609.376,603	4.660.268,414	366,055	366,214	0,159	87,7562	0	20,75%			
Rec	121,000	609.377,585	4.660.268,605	366,297	366,422	0,125	87,7562	0	20,75%			
Rec	122,000	609.378,566	4.660.268,797	366,542	366,630	0,088	87,7562	0	20,75%			
Rec	123,000	609.379,548	4.660.268,988	366,795	366,837	0,042	87,7562	0	20,75%			
Rec	124,000	609.380,529	4.660.269,179	367,049	367,045	-0,004	87,7562	0	20,75%			
Rec	125,000	609.381,511	4.660.269,370	367,309	367,252	-0,057	87,7562	0	20,75%			
Rec	126,000	609.382,492	4.660.269,561	367,570	367,460	-0,110	87,7562	0	20,75%			
Rec	127,000	609.383,474	4.660.269,752	367,831	367,667	-0,164	87,7562	0	20,75%			
Rec	128,000	609.384,456	4.660.269,943	368,159	367,875	-0,284	87,7562	0	20,75%			
Rec	129,000	609.385,437	4.660.270,135	368,582	368,082	-0,500	87,7562	0	20,75%			
Rec	130,000	609.386,419	4.660.270,326	369,004	368,290	-0,714	87,7562	0	20,75%			
Rec	131,000	609.387,400	4.660.270,517	369,239	368,497	-0,742	87,7562	0	20,75%			
Rec	132,000	609.388,382	4.660.270,708	369,466	368,705	-0,761	87,7562	0	20,75%			
Rec	133,000	609.389,363	4.660.270,899	369,695	368,912	-0,783	87,7562	0	20,75%			
Rec	134,000	609.390,345	4.660.271,090	369,924	369,120	-0,804	87,7562	0	20,75%			
Rec	135,000	609.391,326	4.660.271,281	370,106	369,327	-0,779	87,7562	0	20,75%			
Rec	136,000	609.392,308	4.660.271,473	370,261	369,535	-0,726	87,7562	0	20,75%			
Rec	137,000	609.393,290	4.660.271,664	370,418	369,742	-0,676	87,7562	0	20,75%			
Rec	138,000	609.394,271	4.660.271,855	370,574	369,950	-0,624	87,7562	0	20,75%			
Rec	139,000	609.395,253	4.660.272,046	370,726	370,157	-0,569	87,7562	0	20,75%			
Rec	140,000	609.396,234	4.660.272,237	370,877	370,365	-0,512	87,7562	0	20,75%			
Rec	140,804	609.397,023	4.660.272,391	370,985	370,532	-0,453	87,7562	0	20,75%		T.E.	
Rec	141,000	609.397,216	4.660.272,428	371,011	370,572	-0,439	87,7562	0	20,49%			
Rec	142,000	609.398,197	4.660.272,619	371,071	370,770	-0,301	87,7562	0	19,16%			
Rec	143,000	609.399,179	4.660.272,811	371,169	370,955	-0,214	87,7562	0	17,82%			
Rec	144,000	609.400,161	4.660.273,002	371,337	371,127	-0,210	87,7562	0	16,49%			
Rec	145,000	609.401,142	4.660.273,193	371,504	371,285	-0,219	87,7562	0	15,16%			
Rec	146,000	609.402,124	4.660.273,384	371,672	371,430	-0,242	87,7562	0	13,82%			
Rec	147,000	609.403,105	4.660.273,575	371,840	371,562	-0,278	87,7562	0	12,49%			
Rec	148,000	609.404,087	4.660.273,766	371,894	371,680	-0,214	87,7562	0	11,16%			
Rec	149,000	609.405,068	4.660.273,957	371,888	371,785	-0,103	87,7562	0	9,82%			
Rec	150,000	609.406,050	4.660.274,149	371,852	371,876	0,024	87,7562	0	8,49%		V.	
Rec	151,000	609.407,031	4.660.274,340	371,813	371,954	0,141	87,7562	0	7,16%			
Rec	152,000	609.408,013	4.660.274,531	371,773	372,019	0,246	87,7562	0	5,82%			
Rec	153,000	609.408,995	4.660.274,722	371,734	372,071	0,337	87,7562	0	4,49%			
Rec	154,000	609.409,976	4.660.274,913	371,695	372,109	0,414	87,7562	0	3,16%			
Rec	155,000	609.410,958	4.660.275,104	371,656	372,134	0,478	87,7562	0	1,82%			
Rec	156,000	609.411,939	4.660.275,295	371,617	372,146	0,529	87,7562	0	0,49%			
Rec	157,000	609.412,921	4.660.275,487	371,577	372,144	0,567	87,7562	0	-0,84%			
Rec	158,000	609.413,902	4.660.275,678	371,538	372,129	0,591	87,7562	0	-2,18%			
Rec	159,000	609.414,884	4.660.275,869	371,499	372,100	0,601	87,7562	0	-3,51%			
Rec	159,196	609.415,076	4.660.275,906	371,491	372,093	0,602	87,7562	0	-3,77%		T.S.	
Rec	160,000	609.415,866	4.660.276,060	371,460	372,063	0,603	87,7562	0	-3,77%			
Rec	161,000	609.416,847	4.660.276,251	371,422	372,025	0,603	87,7562	0	-3,77%			
Rec	162,000	609.417,829	4.660.276,442	371,390	371,987	0,597	87,7562	0	-3,77%			
Rec	163,000	609.418,810	4.660.276,633	371,357	371,950	0,593	87,7562	0	-3,77%			
Rec	164,000	609.419,792	4.660.276,825	371,326	371,912	0,586	87,7562	0	-3,77%			
Rec	165,000	609.420,773	4.660.277,016	371,296	371,874	0,578	87,7562	0	-3,77%			
Rec	166,000	609.421,755	4.660.277,207	371,258	371,837	0,579	87,7562	0	-3,77%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	167,000	609.422,736	4.660.277,398	371,220	371,799	0,579	87,7562	0	-3,77%			
Rec	168,000	609.423,718	4.660.277,589	371,183	371,761	0,578	87,7562	0	-3,77%			
Rec	169,000	609.424,700	4.660.277,780	371,148	371,723	0,575	87,7562	0	-3,77%			
Rec	170,000	609.425,681	4.660.277,971	371,111	371,686	0,575	87,7562	0	-3,77%			
Rec	171,000	609.426,663	4.660.278,163	371,073	371,648	0,575	87,7562	0	-3,77%			
Rec	172,000	609.427,644	4.660.278,354	371,033	371,610	0,577	87,7562	0	-3,77%			
Rec	173,000	609.428,626	4.660.278,545	370,996	371,573	0,577	87,7562	0	-3,77%			
Rec	174,000	609.429,607	4.660.278,736	370,973	371,535	0,562	87,7562	0	-3,77%			
Rec	174,975	609.430,564	4.660.278,922	370,952	371,498	0,547	87,7562	0	-3,77%		T.E.	
Rec	175,000	609.430,589	4.660.278,927	370,951	371,497	0,546	87,7562	0	-3,76%			
Rec	176,000	609.431,571	4.660.279,118	370,928	371,462	0,534	87,7562	0	-3,36%			
Rec	177,000	609.432,552	4.660.279,309	370,905	371,430	0,525	87,7562	0	-2,96%			
Rec	178,000	609.433,534	4.660.279,501	370,883	371,402	0,519	87,7562	0	-2,56%			
Rec	179,000	609.434,515	4.660.279,692	370,861	371,379	0,518	87,7562	0	-2,16%			
Rec	180,000	609.435,497	4.660.279,883	370,841	371,359	0,518	87,7562	0	-1,76%			
Rec	181,000	609.436,478	4.660.280,074	370,822	371,343	0,521	87,7562	0	-1,36%			
Rec	182,000	609.437,460	4.660.280,265	370,809	371,332	0,523	87,7562	0	-0,96%			
Rec	183,000	609.438,441	4.660.280,456	370,800	371,324	0,524	87,7562	0	-0,56%			
Rec	184,000	609.439,423	4.660.280,647	370,802	371,321	0,519	87,7562	0	-0,16%			
Rec	185,000	609.440,405	4.660.280,839	370,820	371,321	0,501	87,7562	0	0,24%		V.	ODT Ø500 L=7,50m
Rec	186,000	609.441,386	4.660.281,030	370,847	371,325	0,478	87,7562	0	0,64%			
Rec	187,000	609.442,368	4.660.281,221	370,867	371,334	0,467	87,7562	0	1,04%			
Rec	188,000	609.443,349	4.660.281,412	370,881	371,346	0,465	87,7562	0	1,44%			
Rec	189,000	609.444,331	4.660.281,603	370,893	371,363	0,470	87,7562	0	1,84%			
Rec	190,000	609.445,312	4.660.281,794	370,908	371,383	0,475	87,7562	0	2,24%			
Rec	191,000	609.446,294	4.660.281,985	370,925	371,407	0,482	87,7562	0	2,64%			
Rec	192,000	609.447,276	4.660.282,177	370,944	371,436	0,492	87,7562	0	3,04%			
Rec	193,000	609.448,257	4.660.282,368	370,966	371,468	0,502	87,7562	0	3,44%			
Rec	194,000	609.449,239	4.660.282,559	370,988	371,504	0,516	87,7562	0	3,84%			
Rec	195,000	609.450,220	4.660.282,750	371,017	371,545	0,528	87,7562	0	4,24%			
Rec	195,025	609.450,245	4.660.282,755	371,018	371,546	0,528	87,7562	0	4,25%		T.S.	
Rec	196,000	609.451,202	4.660.282,941	371,052	371,587	0,535	87,7562	0	4,25%			
Rec	197,000	609.452,183	4.660.283,132	371,088	371,630	0,542	87,7562	0	4,25%			
Rec	198,000	609.453,165	4.660.283,323	371,136	371,672	0,536	87,7562	0	4,25%			
Rec	199,000	609.454,146	4.660.283,515	371,174	371,715	0,541	87,7562	0	4,25%			
Rec	200,000	609.455,128	4.660.283,706	371,215	371,757	0,542	87,7562	0	4,25%			
Rec	201,000	609.456,110	4.660.283,897	371,262	371,800	0,538	87,7562	0	4,25%			
Rec	202,000	609.457,091	4.660.284,088	371,308	371,842	0,534	87,7562	0	4,25%			
Rec	203,000	609.458,073	4.660.284,279	371,361	371,885	0,524	87,7562	0	4,25%			
Rec	204,000	609.459,054	4.660.284,470	371,419	371,927	0,508	87,7562	0	4,25%			
Rec	205,000	609.460,036	4.660.284,661	371,466	371,970	0,504	87,7562	0	4,25%			
Rec	206,000	609.461,017	4.660.284,853	371,511	372,012	0,501	87,7562	0	4,25%			
Rec	207,000	609.461,999	4.660.285,044	371,569	372,055	0,486	87,7562	0	4,25%			
Rec	208,000	609.462,981	4.660.285,235	371,618	372,097	0,479	87,7562	0	4,25%			
Rec	209,000	609.463,962	4.660.285,426	371,682	372,140	0,458	87,7562	0	4,25%			
Rec	210,000	609.464,944	4.660.285,617	371,738	372,182	0,444	87,7562	0	4,25%			
Rec	211,000	609.465,925	4.660.285,808	371,802	372,225	0,423	87,7562	0	4,25%			
Rec	212,000	609.466,907	4.660.285,999	371,867	372,267	0,400	87,7562	0	4,25%			
Rec	213,000	609.467,888	4.660.286,191	371,932	372,310	0,378	87,7562	0	4,25%			
Rec	214,000	609.468,870	4.660.286,382	371,997	372,352	0,355	87,7562	0	4,25%			
Rec	215,000	609.469,851	4.660.286,573	372,068	372,395	0,327	87,7562	0	4,25%			
Rec	216,000	609.470,833	4.660.286,764	372,139	372,437	0,298	87,7562	0	4,25%			
Rec	217,000	609.471,815	4.660.286,955	372,209	372,480	0,271	87,7562	0	4,25%			
Rec	218,000	609.472,796	4.660.287,146	372,278	372,522	0,244	87,7562	0	4,25%			
Rec	219,000	609.473,778	4.660.287,337	372,349	372,565	0,216	87,7562	0	4,25%			
Rec	219,843	609.474,605	4.660.287,499	372,408	372,600	0,192	87,7562	0	4,25%		T.E.	
Rec	220,000	609.474,759	4.660.287,529	372,419	372,607	0,188	87,7562	0	4,24%			
Rec	221,000	609.475,741	4.660.287,720	372,490	372,649	0,159	87,7562	0	4,19%			
Rec	222,000	609.476,722	4.660.287,911	372,559	372,691	0,132	87,7562	0	4,14%			
Rec	223,000	609.477,704	4.660.288,102	372,625	372,732	0,107	87,7562	0	4,09%			
Rec	224,000	609.478,686	4.660.288,293	372,693	372,773	0,080	87,7562	0	4,04%			
Rec	225,000	609.479,667	4.660.288,484	372,756	372,813	0,057	87,7562	0	3,99%			
Rec	226,000	609.480,649	4.660.288,675	372,823	372,853	0,030	87,7562	0	3,94%			
Rec	227,000	609.481,630	4.660.288,867	372,883	372,892	0,009	87,7562	0	3,89%			
Rec	228,000	609.482,612	4.660.289,058	372,944	372,930	-0,014	87,7562	0	3,84%			
Rec	229,000	609.483,593	4.660.289,249	373,002	372,969	-0,033	87,7562	0	3,79%			
Rec	230,000	609.484,575	4.660.289,440	373,032	373,006	-0,026	87,7562	0	3,74%		V.	
Rec	231,000	609.485,556	4.660.289,631	373,061	373,043	-0,018	87,7562	0	3,69%			
Rec	232,000	609.486,538	4.660.289,822	373,092	373,080	-0,012	87,7562	0	3,64%			
Rec	233,000	609.487,520	4.660.290,013	373,121	373,116	-0,005	87,7562	0	3,59%			
Rec	234,000	609.488,501	4.660.290,205	373,152	373,152	0,000	87,7562	0	3,54%			
Rec	235,000	609.489,483	4.660.290,396	373,184	373,187	0,003	87,7562	0	3,49%			
Rec	236,000	609.490,464	4.660.290,587	373,219	373,222	0,003	87,7562	0	3,44%			
Rec	237,000	609.491,446	4.660.290,778	373,253	373,256	0,003	87,7562	0	3,39%			
Rec	238,000	609.492,427	4.660.290,969	373,288	373,289	0,001	87,7562	0	3,34%			
Rec	239,000	609.493,409	4.660.291,160	373,322	373,323	0,001	87,7562	0	3,29%			
Rec	240,000	609.494,391	4.660.291,351	373,357	373,355	-0,002	87,7562	0	3,24%			
Rec	240,157	609.494,545	4.660.291,381	373,362	373,360	-0,002	87,7562	0	3,23%		T.S.	
Rec	241,000	609.495,372	4.660.291,543	373,391	373,388	-0,003	87,7562	0	3,23%			
Rec	242,000	609.496,354	4.660.291,734	373,426	373,420	-0,006	87,7562	0	3,23%			
Rec	243,000	609.497,335	4.660.291,925	373,460	373,452	-0,008	87,7562	0	3,23%			
Rec	244,000	609.498,317	4.660.292,116	373,495	373,485	-0,010	87,7562	0	3,23%			
Rec	245,000	609.499,298	4.660.292,307	373,529	373,517	-0,012	87,7562	0	3,23%			
Rec	246,000	609.500,280	4.660.292,498	373,564	373,549	-0,015	87,7562	0	3,23%			
Rec	247,000	609.501,261	4.660.292,689	373,598	373,582	-0,016	87,7562	0	3,23%			
Rec	248,000	609.502,243	4.660.292,881	373,633	373,614	-0,019	87,7562	0	3,23%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	249,000	609.503,225	4.660.293,072	373,667	373,646	-0,021	87,7562	0	3,23%			
Rec	250,000	609.504,206	4.660.293,263	373,702	373,678	-0,024	87,7562	0	3,23%			
Rec	251,000	609.505,188	4.660.293,454	373,736	373,711	-0,025	87,7562	0	3,23%			
Rec	252,000	609.506,169	4.660.293,645	373,754	373,743	-0,011	87,7562	0	3,23%			
Rec	253,000	609.507,151	4.660.293,836	373,770	373,775	0,005	87,7562	0	3,23%			
Rec	254,000	609.508,132	4.660.294,027	373,786	373,808	0,022	87,7562	0	3,23%			
Rec	255,000	609.509,114	4.660.294,219	373,801	373,840	0,039	87,7562	0	3,23%			
Rec	256,000	609.510,096	4.660.294,410	373,817	373,872	0,055	87,7562	0	3,23%			
Rec	257,000	609.511,077	4.660.294,601	373,833	373,905	0,072	87,7562	0	3,23%			
Rec	258,000	609.512,059	4.660.294,792	373,847	373,937	0,090	87,7562	0	3,23%			
Rec	258,621	609.512,668	4.660.294,911	373,855	373,957	0,102	87,7562	0	3,23%		T.E.	
Rec	259,000	609.513,040	4.660.294,983	373,860	373,969	0,109	87,7562	0	3,16%			
Rec	260,000	609.514,022	4.660.295,174	373,873	374,000	0,127	87,7562	0	2,96%			
Rec	261,000	609.515,003	4.660.295,365	373,885	374,028	0,143	87,7562	0	2,76%			
Rec	262,000	609.515,985	4.660.295,557	373,896	374,055	0,159	87,7562	0	2,56%			
Rec	263,000	609.516,966	4.660.295,748	373,906	374,080	0,174	87,7562	0	2,36%			
Rec	264,000	609.517,948	4.660.295,939	373,914	374,102	0,188	87,7562	0	2,16%			
Rec	265,000	609.518,930	4.660.296,130	373,922	374,123	0,201	87,7562	0	1,96%			
Rec	266,000	609.519,911	4.660.296,321	373,930	374,141	0,211	87,7562	0	1,76%			
Rec	267,000	609.520,893	4.660.296,512	373,937	374,158	0,221	87,7562	0	1,56%			
Rec	268,000	609.521,874	4.660.296,703	373,947	374,172	0,225	87,7562	0	1,36%			
Rec	269,000	609.522,856	4.660.296,895	373,964	374,185	0,221	87,7562	0	1,16%			
Rec	270,000	609.523,837	4.660.297,086	373,981	374,196	0,215	87,7562	0	0,96%		V.	
Rec	271,000	609.524,819	4.660.297,277	373,989	374,204	0,215	87,7562	0	0,76%			
Rec	272,000	609.525,801	4.660.297,468	373,966	374,211	0,245	87,7562	0	0,56%			
Rec	273,000	609.526,782	4.660.297,659	373,964	374,215	0,251	87,7562	0	0,36%			
Rec	274,000	609.527,764	4.660.297,850	373,960	374,218	0,258	87,7562	0	0,16%			
Rec	275,000	609.528,745	4.660.298,041	373,954	374,218	0,264	87,7562	0	-0,04%			
Rec	276,000	609.529,727	4.660.298,233	373,942	374,217	0,275	87,7562	0	-0,24%			
Rec	277,000	609.530,708	4.660.298,424	373,928	374,213	0,285	87,7562	0	-0,44%			
Rec	278,000	609.531,690	4.660.298,615	373,914	374,208	0,294	87,7562	0	-0,64%			
Rec	279,000	609.532,671	4.660.298,806	373,896	374,201	0,305	87,7562	0	-0,84%			
Rec	280,000	609.533,653	4.660.298,997	373,877	374,191	0,314	87,7562	0	-1,04%			
Rec	281,000	609.534,635	4.660.299,188	373,862	374,180	0,318	87,7562	0	-1,24%			
Rec	281,379	609.535,007	4.660.299,261	373,856	374,175	0,319	87,7562	0	-1,32%		T.S.	
Rec	282,000	609.535,616	4.660.299,379	373,847	374,167	0,320	87,7562	0	-1,32%			
Rec	283,000	609.536,598	4.660.299,571	373,832	374,154	0,322	87,7562	0	-1,32%			
Rec	284,000	609.537,579	4.660.299,762	373,814	374,140	0,326	87,7562	0	-1,32%			
Rec	285,000	609.538,561	4.660.299,953	373,802	374,127	0,325	87,7562	0	-1,32%			
Rec	286,000	609.539,542	4.660.300,144	373,789	374,114	0,325	87,7562	0	-1,32%			
Rec	287,000	609.540,524	4.660.300,335	373,776	374,101	0,325	87,7562	0	-1,32%			
Rec	288,000	609.541,506	4.660.300,526	373,761	374,088	0,327	87,7562	0	-1,32%			
Rec	289,000	609.542,487	4.660.300,717	373,748	374,075	0,327	87,7562	0	-1,32%			
Rec	290,000	609.543,469	4.660.300,909	373,733	374,061	0,328	87,7562	0	-1,32%			
Rec	291,000	609.544,450	4.660.301,100	373,718	374,048	0,330	87,7562	0	-1,32%			
Rec	292,000	609.545,432	4.660.301,291	373,704	374,035	0,331	87,7562	0	-1,32%			
Rec	293,000	609.546,413	4.660.301,482	373,688	374,022	0,334	87,7562	0	-1,32%			
Rec	294,000	609.547,395	4.660.301,673	373,673	374,009	0,336	87,7562	0	-1,32%			
Rec	295,000	609.548,376	4.660.301,864	373,657	373,995	0,338	87,7562	0	-1,32%			
Rec	296,000	609.549,358	4.660.302,055	373,640	373,982	0,342	87,7562	0	-1,32%			
Rec	297,000	609.550,340	4.660.302,247	373,632	373,969	0,337	87,7562	0	-1,32%			
Rec	298,000	609.551,321	4.660.302,438	373,625	373,956	0,331	87,7562	0	-1,32%			
Rec	299,000	609.552,303	4.660.302,629	373,619	373,943	0,324	87,7562	0	-1,32%			
Rec	300,000	609.553,284	4.660.302,820	373,612	373,929	0,317	87,7562	0	-1,32%			
Rec	301,000	609.554,266	4.660.303,011	373,606	373,916	0,310	87,7562	0	-1,32%			
Rec	302,000	609.555,247	4.660.303,202	373,599	373,903	0,304	87,7562	0	-1,32%			
Rec	303,000	609.556,229	4.660.303,393	373,592	373,890	0,298	87,7562	0	-1,32%			
Rec	304,000	609.557,211	4.660.303,585	373,586	373,877	0,291	87,7562	0	-1,32%			
Rec	305,000	609.558,192	4.660.303,776	373,579	373,864	0,285	87,7562	0	-1,32%			
Rec	306,000	609.559,174	4.660.303,967	373,573	373,850	0,277	87,7562	0	-1,32%			
Rec	307,000	609.560,155	4.660.304,158	373,566	373,837	0,271	87,7562	0	-1,32%			
Rec	308,000	609.561,137	4.660.304,349	373,560	373,824	0,264	87,7562	0	-1,32%			
Rec	309,000	609.562,118	4.660.304,540	373,553	373,811	0,258	87,7562	0	-1,32%			
Rec	310,000	609.563,100	4.660.304,731	373,546	373,798	0,252	87,7562	0	-1,32%			
Rec	311,000	609.564,081	4.660.304,923	373,540	373,784	0,244	87,7562	0	-1,32%			
Rec	312,000	609.565,063	4.660.305,114	373,532	373,771	0,239	87,7562	0	-1,32%			
Rec	313,000	609.566,045	4.660.305,305	373,526	373,758	0,232	87,7562	0	-1,32%			
Rec	314,000	609.567,026	4.660.305,496	373,516	373,745	0,229	87,7562	0	-1,32%			
Rec	315,000	609.568,008	4.660.305,687	373,506	373,732	0,226	87,7562	0	-1,32%			
Rec	316,000	609.568,989	4.660.305,878	373,496	373,719	0,223	87,7562	0	-1,32%			
Rec	317,000	609.569,971	4.660.306,069	373,486	373,705	0,219	87,7562	0	-1,32%			
Rec	318,000	609.570,952	4.660.306,261	373,476	373,692	0,216	87,7562	0	-1,32%			
Rec	319,000	609.571,934	4.660.306,452	373,465	373,679	0,214	87,7562	0	-1,32%			
Rec	320,000	609.572,916	4.660.306,643	373,455	373,666	0,211	87,7562	0	-1,32%			
Rec	321,000	609.573,897	4.660.306,834	373,445	373,653	0,208	87,7562	0	-1,32%			
Rec	322,000	609.574,879	4.660.307,025	373,435	373,639	0,204	87,7562	0	-1,32%			
Rec	323,000	609.575,860	4.660.307,216	373,425	373,626	0,201	87,7562	0	-1,32%			
Rec	324,000	609.576,842	4.660.307,407	373,421	373,613	0,192	87,7562	0	-1,32%			
Rec	325,000	609.577,823	4.660.307,599	373,419	373,600	0,181	87,7562	0	-1,32%			
Rec	326,000	609.578,805	4.660.307,790	373,414	373,587	0,173	87,7562	0	-1,32%			
Rec	327,000	609.579,786	4.660.307,981	373,402	373,574	0,172	87,7562	0	-1,32%			
Rec	328,000	609.580,768	4.660.308,172	373,387	373,560	0,173	87,7562	0	-1,32%			
Rec	329,000	609.581,750	4.660.308,363	373,371	373,547	0,176	87,7562	0	-1,32%			
Rec	330,000	609.582,731	4.660.308,554	373,355	373,534	0,179	87,7562	0	-1,32%			
Rec	331,000	609.583,713	4.660.308,745	373,335	373,521	0,186	87,7562	0	-1,32%			
Rec	332,000	609.584,694	4.660.308,937	373,317	373,508	0,191	87,7562	0	-1,32%			
Rec	333,000	609.585,676	4.660.309,128	373,298	373,494	0,196	87,7562	0	-1,32%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	334,000	609.586,657	4.660.309,319	373,280	373,481	0,201	87,7562	0	-1,32%			
Rec	335,000	609.587,639	4.660.309,510	373,262	373,468	0,206	87,7562	0	-1,32%			
Rec	336,000	609.588,621	4.660.309,701	373,243	373,455	0,212	87,7562	0	-1,32%			
Rec	337,000	609.589,602	4.660.309,892	373,227	373,442	0,215	87,7562	0	-1,32%			
Rec	338,000	609.590,584	4.660.310,083	373,211	373,429	0,218	87,7562	0	-1,32%			
Rec	339,000	609.591,565	4.660.310,275	373,194	373,415	0,221	87,7562	0	-1,32%			
Rec	340,000	609.592,547	4.660.310,466	373,178	373,402	0,224	87,7562	0	-1,32%			
Rec	341,000	609.593,528	4.660.310,657	373,161	373,389	0,228	87,7562	0	-1,32%			
Rec	342,000	609.594,510	4.660.310,848	373,144	373,376	0,232	87,7562	0	-1,32%			
Rec	343,000	609.595,491	4.660.311,039	373,125	373,363	0,238	87,7562	0	-1,32%			
Rec	344,000	609.596,473	4.660.311,230	373,108	373,349	0,241	87,7562	0	-1,32%			
Rec	345,000	609.597,455	4.660.311,421	373,091	373,336	0,245	87,7562	0	-1,32%			
Rec	346,000	609.598,436	4.660.311,613	373,073	373,323	0,250	87,7562	0	-1,32%			
Rec	347,000	609.599,418	4.660.311,804	373,056	373,310	0,254	87,7562	0	-1,32%			
Rec	348,000	609.600,399	4.660.311,995	373,039	373,297	0,258	87,7562	0	-1,32%			
Rec	349,000	609.601,381	4.660.312,186	373,022	373,284	0,262	87,7562	0	-1,32%			
Rec	350,000	609.602,362	4.660.312,377	373,007	373,270	0,263	87,7562	0	-1,32%			
Rec	351,000	609.603,344	4.660.312,568	372,995	373,257	0,262	87,7562	0	-1,32%			
Rec	352,000	609.604,326	4.660.312,759	372,986	373,244	0,258	87,7562	0	-1,32%			
Rec	353,000	609.605,307	4.660.312,951	372,978	373,231	0,253	87,7562	0	-1,32%			
Rec	354,000	609.606,289	4.660.313,142	372,974	373,218	0,244	87,7562	0	-1,32%			
Rec	355,000	609.607,270	4.660.313,333	372,975	373,204	0,229	87,7562	0	-1,32%			
Rec	356,000	609.608,252	4.660.313,524	372,978	373,191	0,213	87,7562	0	-1,32%			
Rec	357,000	609.609,233	4.660.313,715	372,978	373,178	0,200	87,7562	0	-1,32%			
Rec	358,000	609.610,215	4.660.313,906	372,977	373,165	0,188	87,7562	0	-1,32%			
Rec	359,000	609.611,196	4.660.314,097	372,977	373,152	0,175	87,7562	0	-1,32%			
Rec	360,000	609.612,178	4.660.314,289	372,976	373,139	0,163	87,7562	0	-1,32%			
Rec	361,000	609.613,160	4.660.314,480	372,971	373,125	0,154	87,7562	0	-1,32%			
Rec	362,000	609.614,141	4.660.314,671	372,966	373,112	0,146	87,7562	0	-1,32%			
Rec	363,000	609.615,123	4.660.314,862	372,932	373,099	0,167	87,7562	0	-1,32%			
Rec	364,000	609.616,104	4.660.315,053	372,905	373,086	0,181	87,7562	0	-1,32%			
Rec	365,000	609.617,086	4.660.315,244	372,889	373,073	0,184	87,7562	0	-1,32%			
Rec	366,000	609.618,067	4.660.315,435	372,873	373,059	0,186	87,7562	0	-1,32%			
Rec	367,000	609.619,049	4.660.315,627	372,856	373,046	0,190	87,7562	0	-1,32%			
Rec	368,000	609.620,031	4.660.315,818	372,835	373,033	0,198	87,7562	0	-1,32%			
Rec	369,000	609.621,012	4.660.316,009	372,814	373,020	0,206	87,7562	0	-1,32%			
Rec	370,000	609.621,994	4.660.316,200	372,794	373,007	0,213	87,7562	0	-1,32%			
Rec	371,000	609.622,975	4.660.316,391	372,773	372,993	0,220	87,7562	0	-1,32%			
Rec	372,000	609.623,957	4.660.316,582	372,757	372,980	0,223	87,7562	0	-1,32%			
Rec	373,000	609.624,938	4.660.316,773	372,736	372,967	0,231	87,7562	0	-1,32%			
Rec	374,000	609.625,920	4.660.316,965	372,710	372,954	0,244	87,7562	0	-1,32%			
Rec	375,000	609.626,901	4.660.317,156	372,670	372,941	0,271	87,7562	0	-1,32%			
Rec	376,000	609.627,883	4.660.317,347	372,615	372,928	0,313	87,7562	0	-1,32%			
Rec	377,000	609.628,865	4.660.317,538	372,577	372,914	0,337	87,7562	0	-1,32%			
Rec	378,000	609.629,846	4.660.317,729	372,564	372,901	0,337	87,7562	0	-1,32%			
Rec	379,000	609.630,828	4.660.317,920	372,562	372,888	0,326	87,7562	0	-1,32%			
Rec	380,000	609.631,809	4.660.318,111	372,556	372,875	0,319	87,7562	0	-1,32%			
Rec	381,000	609.632,791	4.660.318,303	372,541	372,862	0,321	87,7562	0	-1,32%			
Rec	382,000	609.633,772	4.660.318,494	372,525	372,848	0,323	87,7562	0	-1,32%			
Rec	383,000	609.634,754	4.660.318,685	372,510	372,835	0,325	87,7562	0	-1,32%			
Rec	384,000	609.635,735	4.660.318,876	372,495	372,822	0,327	87,7562	0	-1,32%			
Rec	385,000	609.636,717	4.660.319,067	372,480	372,809	0,329	87,7562	0	-1,32%			
Rec	386,000	609.637,699	4.660.319,258	372,465	372,796	0,331	87,7562	0	-1,32%			
Rec	387,000	609.638,680	4.660.319,449	372,450	372,783	0,333	87,7562	0	-1,32%			
Rec	388,000	609.639,662	4.660.319,641	372,429	372,769	0,340	87,7562	0	-1,32%			
Rec	389,000	609.640,643	4.660.319,832	372,404	372,756	0,352	87,7562	0	-1,32%			
Rec	390,000	609.641,625	4.660.320,023	372,382	372,743	0,361	87,7562	0	-1,32%			
Rec	391,000	609.642,606	4.660.320,214	372,364	372,730	0,366	87,7562	0	-1,32%			
Rec	392,000	609.643,588	4.660.320,405	372,357	372,717	0,360	87,7562	0	-1,32%			
Rec	393,000	609.644,570	4.660.320,596	372,340	372,703	0,363	87,7562	0	-1,32%			
Rec	394,000	609.645,551	4.660.320,787	372,322	372,690	0,368	87,7562	0	-1,32%			
Rec	395,000	609.646,533	4.660.320,979	372,295	372,677	0,382	87,7562	0	-1,32%			
Rec	396,000	609.647,514	4.660.321,170	372,267	372,664	0,397	87,7562	0	-1,32%			
Rec	397,000	609.648,496	4.660.321,361	372,257	372,651	0,394	87,7562	0	-1,32%			
Rec	398,000	609.649,477	4.660.321,552	372,246	372,638	0,392	87,7562	0	-1,32%			
Rec	399,000	609.650,459	4.660.321,743	372,228	372,624	0,396	87,7562	0	-1,32%			
Rec	400,000	609.651,440	4.660.321,934	372,223	372,611	0,388	87,7562	0	-1,32%			
Rec	401,000	609.652,422	4.660.322,125	372,211	372,598	0,387	87,7562	0	-1,32%			
Rec	402,000	609.653,404	4.660.322,317	372,195	372,585	0,390	87,7562	0	-1,32%			
Rec	403,000	609.654,385	4.660.322,508	372,186	372,572	0,386	87,7562	0	-1,32%			
Rec	404,000	609.655,367	4.660.322,699	372,180	372,558	0,378	87,7562	0	-1,32%			
Rec	405,000	609.656,348	4.660.322,890	372,176	372,545	0,369	87,7562	0	-1,32%			
Rec	406,000	609.657,330	4.660.323,081	372,173	372,532	0,359	87,7562	0	-1,32%			
Rec	407,000	609.658,311	4.660.323,272	372,171	372,519	0,348	87,7562	0	-1,32%			
Rec	408,000	609.659,293	4.660.323,463	372,170	372,506	0,336	87,7562	0	-1,32%			
Rec	409,000	609.660,275	4.660.323,655	372,170	372,493	0,323	87,7562	0	-1,32%			
Rec	410,000	609.661,256	4.660.323,846	372,167	372,479	0,312	87,7562	0	-1,32%			
Rec	411,000	609.662,238	4.660.324,037	372,163	372,466	0,303	87,7562	0	-1,32%			
Rec	412,000	609.663,219	4.660.324,228	372,160	372,453	0,293	87,7562	0	-1,32%			
Rec	413,000	609.664,201	4.660.324,419	372,157	372,440	0,283	87,7562	0	-1,32%			
Rec	414,000	609.665,182	4.660.324,610	372,157	372,427	0,270	87,7562	0	-1,32%			
Rec	415,000	609.666,164	4.660.324,801	372,155	372,413	0,258	87,7562	0	-1,32%			
Rec	416,000	609.667,145	4.660.324,993	372,155	372,400	0,245	87,7562	0	-1,32%			
Rec	417,000	609.668,127	4.660.325,184	372,151	372,387	0,236	87,7562	0	-1,32%			
Rec	418,000	609.669,109	4.660.325,375	372,150	372,374	0,224	87,7562	0	-1,32%			
Rec	419,000	609.670,090	4.660.325,566	372,151	372,361	0,210	87,7562	0	-1,32%			
Rec	420,000	609.671,072	4.660.325,757	372,157	372,347	0,190	87,7562	0	-1,32%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	421,000	609.672,053	4.660.325,948	372,165	372,334	0,169	87,7562	0	-1,32%			
Rec	422,000	609.673,035	4.660.326,139	372,174	372,321	0,147	87,7562	0	-1,32%			
Rec	423,000	609.674,016	4.660.326,331	372,182	372,308	0,126	87,7562	0	-1,32%			
Rec	424,000	609.674,998	4.660.326,522	372,190	372,295	0,105	87,7562	0	-1,32%			
Rec	425,000	609.675,980	4.660.326,713	372,193	372,282	0,089	87,7562	0	-1,32%			
Rec	426,000	609.676,961	4.660.326,904	372,196	372,268	0,072	87,7562	0	-1,32%			
Rec	427,000	609.677,943	4.660.327,095	372,200	372,255	0,055	87,7562	0	-1,32%			
Rec	428,000	609.678,924	4.660.327,286	372,199	372,242	0,043	87,7562	0	-1,32%			
Rec	429,000	609.679,906	4.660.327,477	372,199	372,229	0,030	87,7562	0	-1,32%			
Rec	430,000	609.680,887	4.660.327,669	372,198	372,216	0,018	87,7562	0	-1,32%			
Rec	431,000	609.681,869	4.660.327,860	372,198	372,202	0,004	87,7562	0	-1,32%			
Rec	432,000	609.682,850	4.660.328,051	372,198	372,189	-0,009	87,7562	0	-1,32%			
Rec	433,000	609.683,832	4.660.328,242	372,197	372,176	-0,021	87,7562	0	-1,32%			
Rec	434,000	609.684,814	4.660.328,433	372,196	372,163	-0,033	87,7562	0	-1,32%			
Rec	435,000	609.685,795	4.660.328,624	372,195	372,150	-0,045	87,7562	0	-1,32%			
Rec	436,000	609.686,777	4.660.328,815	372,192	372,137	-0,055	87,7562	0	-1,32%			
Rec	437,000	609.687,758	4.660.329,007	372,188	372,123	-0,065	87,7562	0	-1,32%			
Rec	438,000	609.688,740	4.660.329,198	372,182	372,110	-0,072	87,7562	0	-1,32%			
Rec	439,000	609.689,721	4.660.329,389	372,175	372,097	-0,078	87,7562	0	-1,32%			
Rec	440,000	609.690,703	4.660.329,580	372,165	372,084	-0,081	87,7562	0	-1,32%			
Rec	440,067	609.690,769	4.660.329,593	372,164	372,083	-0,081	87,7562	0	-1,32%		T.E.	
Rec	441,000	609.691,685	4.660.329,771	372,149	372,071	-0,078	87,7562	0	-1,35%			
Rec	442,000	609.692,666	4.660.329,962	372,127	372,057	-0,070	87,7562	0	-1,38%			
Rec	443,000	609.693,648	4.660.330,153	372,106	372,043	-0,063	87,7562	0	-1,42%			
Rec	444,000	609.694,629	4.660.330,345	372,085	372,029	-0,056	87,7562	0	-1,45%			
Rec	445,000	609.695,611	4.660.330,536	372,063	372,014	-0,049	87,7562	0	-1,48%			
Rec	446,000	609.696,592	4.660.330,727	372,041	371,999	-0,042	87,7562	0	-1,52%			
Rec	447,000	609.697,574	4.660.330,918	372,017	371,984	-0,033	87,7562	0	-1,55%			
Rec	448,000	609.698,555	4.660.331,109	371,994	371,968	-0,026	87,7562	0	-1,58%			
Rec	449,000	609.699,537	4.660.331,300	371,972	371,952	-0,020	87,7562	0	-1,62%			
Rec	450,000	609.700,519	4.660.331,491	371,952	371,936	-0,016	87,7562	0	-1,65%		V.	
Rec	451,000	609.701,500	4.660.331,683	371,933	371,919	-0,014	87,7562	0	-1,68%			
Rec	452,000	609.702,482	4.660.331,874	371,915	371,902	-0,013	87,7562	0	-1,72%			
Rec	453,000	609.703,463	4.660.332,065	371,901	371,885	-0,016	87,7562	0	-1,75%			
Rec	454,000	609.704,445	4.660.332,256	371,888	371,867	-0,021	87,7562	0	-1,78%			
Rec	455,000	609.705,426	4.660.332,447	371,877	371,849	-0,028	87,7562	0	-1,82%			
Rec	456,000	609.706,408	4.660.332,638	371,864	371,831	-0,033	87,7562	0	-1,85%			
Rec	457,000	609.707,390	4.660.332,829	371,850	371,812	-0,038	87,7562	0	-1,88%			
Rec	458,000	609.708,371	4.660.333,020	371,831	371,793	-0,038	87,7562	0	-1,92%			
Rec	459,000	609.709,353	4.660.333,212	371,811	371,774	-0,037	87,7562	0	-1,95%			
Rec	459,933	609.710,268	4.660.333,390	371,775	371,755	-0,019	87,7562	0	-1,98%		T.S.	
Rec	460,000	609.710,334	4.660.333,403	371,772	371,754	-0,018	87,7562	0	-1,98%			
Rec	461,000	609.711,316	4.660.333,594	371,734	371,734	0,000	87,7562	0	-1,98%			
Rec	462,000	609.712,297	4.660.333,785	371,711	371,714	0,003	87,7562	0	-1,98%			
Rec	463,000	609.713,279	4.660.333,976	371,693	371,695	0,002	87,7562	0	-1,98%			
Rec	464,000	609.714,260	4.660.334,167	371,671	371,675	0,004	87,7562	0	-1,98%			
Rec	465,000	609.715,242	4.660.334,358	371,639	371,655	0,016	87,7562	0	-1,98%			
Rec	466,000	609.716,224	4.660.334,550	371,613	371,635	0,022	87,7562	0	-1,98%			
Rec	467,000	609.717,205	4.660.334,741	371,595	371,615	0,020	87,7562	0	-1,98%			
Rec	468,000	609.718,187	4.660.334,932	371,574	371,595	0,021	87,7562	0	-1,98%			
Rec	469,000	609.719,168	4.660.335,123	371,551	371,576	0,025	87,7562	0	-1,98%			
Rec	470,000	609.720,150	4.660.335,314	371,526	371,556	0,030	87,7562	0	-1,98%			
Rec	471,000	609.721,131	4.660.335,505	371,502	371,536	0,034	87,7562	0	-1,98%			
Rec	472,000	609.722,113	4.660.335,696	371,479	371,516	0,037	87,7562	0	-1,98%			
Rec	473,000	609.723,095	4.660.335,888	371,456	371,496	0,040	87,7562	0	-1,98%			
Rec	474,000	609.724,076	4.660.336,079	371,435	371,477	0,042	87,7562	0	-1,98%			
Rec	475,000	609.725,058	4.660.336,270	371,413	371,457	0,044	87,7562	0	-1,98%			
Rec	476,000	609.726,039	4.660.336,461	371,390	371,437	0,047	87,7562	0	-1,98%			
Rec	477,000	609.727,021	4.660.336,652	371,360	371,417	0,057	87,7562	0	-1,98%			
Rec	478,000	609.728,002	4.660.336,843	371,324	371,397	0,073	87,7562	0	-1,98%			
Rec	479,000	609.728,984	4.660.337,034	371,283	371,378	0,095	87,7562	0	-1,98%			
Rec	480,000	609.729,965	4.660.337,226	371,238	371,358	0,120	87,7562	0	-1,98%			
Rec	481,000	609.730,947	4.660.337,417	371,189	371,338	0,149	87,7562	0	-1,98%			
Rec	482,000	609.731,929	4.660.337,608	371,136	371,318	0,182	87,7562	0	-1,98%			
Rec	483,000	609.732,910	4.660.337,799	371,080	371,298	0,218	87,7562	0	-1,98%			
Rec	484,000	609.733,892	4.660.337,990	371,022	371,279	0,257	87,7562	0	-1,98%			
Rec	485,000	609.734,873	4.660.338,181	370,970	371,259	0,289	87,7562	0	-1,98%			
Rec	486,000	609.735,855	4.660.338,372	370,921	371,239	0,318	87,7562	0	-1,98%			
Rec	487,000	609.736,836	4.660.338,564	370,873	371,219	0,346	87,7562	0	-1,98%			
Rec	488,000	609.737,818	4.660.338,755	370,825	371,199	0,374	87,7562	0	-1,98%			
Rec	489,000	609.738,800	4.660.338,946	370,780	371,180	0,400	87,7562	0	-1,98%			
Rec	490,000	609.739,781	4.660.339,137	370,736	371,160	0,424	87,7562	0	-1,98%			
Rec	491,000	609.740,763	4.660.339,328	370,692	371,140	0,448	87,7562	0	-1,98%			
Rec	492,000	609.741,744	4.660.339,519	370,648	371,120	0,472	87,7562	0	-1,98%			
Rec	493,000	609.742,726	4.660.339,710	370,608	371,100	0,492	87,7562	0	-1,98%			
Rec	494,000	609.743,707	4.660.339,902	370,573	371,081	0,508	87,7562	0	-1,98%			
Rec	495,000	609.744,689	4.660.340,093	370,536	371,061	0,525	87,7562	0	-1,98%			
Rec	496,000	609.745,670	4.660.340,284	370,501	371,041	0,540	87,7562	0	-1,98%			
Rec	497,000	609.746,652	4.660.340,475	370,466	371,021	0,555	87,7562	0	-1,98%			
Rec	498,000	609.747,634	4.660.340,666	370,434	371,001	0,567	87,7562	0	-1,98%			
Rec	499,000	609.748,615	4.660.340,857	370,401	370,981	0,580	87,7562	0	-1,98%			
Rec	500,000	609.749,597	4.660.341,048	370,368	370,962	0,594	87,7562	0	-1,98%			
Rec	501,000	609.750,578	4.660.341,240	370,341	370,942	0,601	87,7562	0	-1,98%			
Rec	502,000	609.751,560	4.660.341,431	370,314	370,922	0,608	87,7562	0	-1,98%			
Rec	503,000	609.752,541	4.660.341,622	370,272	370,902	0,630	87,7562	0	-1,98%			
Rec	504,000	609.753,523	4.660.341,813	370,225	370,882	0,657	87,7562	0	-1,98%			
Rec	505,000	609.754,505	4.660.342,004	370,210	370,863	0,653	87,7562	0	-1,98%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	506,000	609.755,486	4.660.342,195	370,210	370,843	0,633	87,7562	0	-1,98%			
Rec	507,000	609.756,468	4.660.342,386	370,189	370,823	0,634	87,7562	0	-1,98%			
Rec	508,000	609.757,449	4.660.342,578	370,167	370,803	0,636	87,7562	0	-1,98%			
Rec	509,000	609.758,431	4.660.342,769	370,150	370,783	0,633	87,7562	0	-1,98%			
Rec	510,000	609.759,412	4.660.342,960	370,130	370,764	0,634	87,7562	0	-1,98%			
Rec	511,000	609.760,394	4.660.343,151	370,108	370,744	0,636	87,7562	0	-1,98%			
Rec	512,000	609.761,375	4.660.343,342	370,091	370,724	0,633	87,7562	0	-1,98%			
Rec	513,000	609.762,357	4.660.343,533	370,076	370,704	0,628	87,7562	0	-1,98%			
Rec	514,000	609.763,339	4.660.343,724	370,066	370,684	0,618	87,7562	0	-1,98%			
Rec	515,000	609.764,320	4.660.343,916	370,055	370,665	0,610	87,7562	0	-1,98%			
Rec	516,000	609.765,302	4.660.344,107	370,043	370,645	0,602	87,7562	0	-1,98%			
Rec	517,000	609.766,283	4.660.344,298	370,031	370,625	0,594	87,7562	0	-1,98%			
Rec	518,000	609.767,265	4.660.344,489	370,017	370,605	0,588	87,7562	0	-1,98%			
Rec	519,000	609.768,246	4.660.344,680	370,002	370,585	0,583	87,7562	0	-1,98%			
Rec	520,000	609.769,228	4.660.344,871	369,987	370,566	0,579	87,7562	0	-1,98%			
Rec	521,000	609.770,210	4.660.345,062	369,973	370,546	0,573	87,7562	0	-1,98%			
Rec	522,000	609.771,191	4.660.345,254	369,959	370,526	0,567	87,7562	0	-1,98%			
Rec	523,000	609.772,173	4.660.345,445	369,949	370,506	0,557	87,7562	0	-1,98%			
Rec	524,000	609.773,154	4.660.345,636	369,942	370,486	0,544	87,7562	0	-1,98%			
Rec	525,000	609.774,136	4.660.345,827	369,939	370,467	0,527	87,7562	0	-1,98%			
Rec	526,000	609.775,117	4.660.346,018	369,937	370,447	0,510	87,7562	0	-1,98%			
Rec	527,000	609.776,099	4.660.346,209	369,934	370,427	0,493	87,7562	0	-1,98%			
Rec	528,000	609.777,080	4.660.346,400	369,936	370,407	0,471	87,7562	0	-1,98%			
Rec	529,000	609.778,062	4.660.346,592	369,937	370,387	0,450	87,7562	0	-1,98%			
Rec	530,000	609.779,044	4.660.346,783	369,938	370,367	0,429	87,7562	0	-1,98%			
Rec	531,000	609.780,025	4.660.346,974	369,937	370,348	0,411	87,7562	0	-1,98%			
Rec	532,000	609.781,007	4.660.347,165	369,938	370,328	0,390	87,7562	0	-1,98%			
Rec	533,000	609.781,988	4.660.347,356	369,937	370,308	0,371	87,7562	0	-1,98%			
Rec	534,000	609.782,970	4.660.347,547	369,932	370,288	0,356	87,7562	0	-1,98%			
Rec	535,000	609.783,951	4.660.347,738	369,928	370,268	0,340	87,7562	0	-1,98%			
Rec	536,000	609.784,933	4.660.347,930	369,923	370,249	0,326	87,7562	0	-1,98%			
Rec	537,000	609.785,915	4.660.348,121	369,921	370,229	0,308	87,7562	0	-1,98%			
Rec	538,000	609.786,896	4.660.348,312	369,919	370,209	0,290	87,7562	0	-1,98%			
Rec	539,000	609.787,878	4.660.348,503	369,918	370,189	0,271	87,7562	0	-1,98%			
Rec	540,000	609.788,859	4.660.348,694	369,921	370,169	0,248	87,7562	0	-1,98%			
Rec	541,000	609.789,841	4.660.348,885	369,922	370,150	0,228	87,7562	0	-1,98%			
Rec	542,000	609.790,822	4.660.349,076	369,922	370,130	0,208	87,7562	0	-1,98%			
Rec	543,000	609.791,804	4.660.349,268	369,921	370,110	0,189	87,7562	0	-1,98%			
Rec	544,000	609.792,785	4.660.349,459	369,921	370,090	0,169	87,7562	0	-1,98%			
Rec	545,000	609.793,767	4.660.349,650	369,919	370,070	0,151	87,7562	0	-1,98%			
Rec	546,000	609.794,749	4.660.349,841	369,917	370,051	0,134	87,7562	0	-1,98%			
Rec	547,000	609.795,730	4.660.350,032	369,917	370,031	0,114	87,7562	0	-1,98%			
Rec	548,000	609.796,712	4.660.350,223	369,922	370,011	0,089	87,7562	0	-1,98%			
Rec	549,000	609.797,693	4.660.350,414	369,930	369,991	0,061	87,7562	0	-1,98%			
Rec	550,000	609.798,675	4.660.350,606	369,936	369,971	0,035	87,7562	0	-1,98%			
Rec	551,000	609.799,656	4.660.350,797	369,939	369,952	0,013	87,7562	0	-1,98%			
Rec	552,000	609.800,638	4.660.350,988	369,938	369,932	-0,006	87,7562	0	-1,98%			
Rec	553,000	609.801,620	4.660.351,179	369,934	369,912	-0,022	87,7562	0	-1,98%			
Rec	554,000	609.802,601	4.660.351,370	369,930	369,892	-0,038	87,7562	0	-1,98%			
Rec	555,000	609.803,583	4.660.351,561	369,926	369,872	-0,054	87,7562	0	-1,98%			
Rec	556,000	609.804,564	4.660.351,752	369,918	369,852	-0,066	87,7562	0	-1,98%			
Rec	557,000	609.805,546	4.660.351,944	369,910	369,833	-0,077	87,7562	0	-1,98%			
Rec	558,000	609.806,527	4.660.352,135	369,897	369,813	-0,084	87,7562	0	-1,98%			
Rec	559,000	609.807,509	4.660.352,326	369,889	369,793	-0,096	87,7562	0	-1,98%			
Rec	560,000	609.808,490	4.660.352,517	369,872	369,773	-0,099	87,7562	0	-1,98%			
Rec	561,000	609.809,472	4.660.352,708	369,853	369,753	-0,100	87,7562	0	-1,98%			
Rec	562,000	609.810,454	4.660.352,899	369,838	369,734	-0,104	87,7562	0	-1,98%			
Rec	563,000	609.811,435	4.660.353,090	369,821	369,714	-0,107	87,7562	0	-1,98%			
Rec	564,000	609.812,417	4.660.353,282	369,801	369,694	-0,107	87,7562	0	-1,98%			
Rec	565,000	609.813,398	4.660.353,473	369,781	369,674	-0,107	87,7562	0	-1,98%			
Rec	566,000	609.814,380	4.660.353,664	369,763	369,654	-0,109	87,7562	0	-1,98%			
Rec	567,000	609.815,361	4.660.353,855	369,744	369,635	-0,109	87,7562	0	-1,98%			
Rec	568,000	609.816,343	4.660.354,046	369,725	369,615	-0,110	87,7562	0	-1,98%			
Rec	569,000	609.817,325	4.660.354,237	369,703	369,595	-0,108	87,7562	0	-1,98%			
Rec	570,000	609.818,306	4.660.354,428	369,679	369,575	-0,104	87,7562	0	-1,98%			
Rec	571,000	609.819,288	4.660.354,620	369,657	369,555	-0,102	87,7562	0	-1,98%			
Rec	572,000	609.820,269	4.660.354,811	369,636	369,536	-0,100	87,7562	0	-1,98%			
Rec	573,000	609.821,251	4.660.355,002	369,614	369,516	-0,098	87,7562	0	-1,98%			
Rec	574,000	609.822,232	4.660.355,193	369,592	369,496	-0,096	87,7562	0	-1,98%			
Rec	575,000	609.823,214	4.660.355,384	369,568	369,476	-0,092	87,7562	0	-1,98%			
Rec	576,000	609.824,195	4.660.355,575	369,544	369,456	-0,088	87,7562	0	-1,98%			
Rec	577,000	609.825,177	4.660.355,766	369,524	369,437	-0,087	87,7562	0	-1,98%			
Rec	578,000	609.826,159	4.660.355,958	369,505	369,417	-0,088	87,7562	0	-1,98%			
Rec	579,000	609.827,140	4.660.356,149	369,483	369,397	-0,086	87,7562	0	-1,98%			
Rec	580,000	609.828,122	4.660.356,340	369,461	369,377	-0,084	87,7562	0	-1,98%			
Rec	581,000	609.829,103	4.660.356,531	369,435	369,357	-0,078	87,7562	0	-1,98%			
Rec	582,000	609.830,085	4.660.356,722	369,408	369,338	-0,070	87,7562	0	-1,98%			
Rec	583,000	609.831,066	4.660.356,913	369,385	369,318	-0,067	87,7562	0	-1,98%			
Rec	584,000	609.832,048	4.660.357,104	369,365	369,298	-0,067	87,7562	0	-1,98%			
Rec	585,000	609.833,030	4.660.357,296	369,345	369,278	-0,067	87,7562	0	-1,98%			
Rec	586,000	609.834,011	4.660.357,487	369,320	369,258	-0,062	87,7562	0	-1,98%			
Rec	587,000	609.834,993	4.660.357,678	369,295	369,238	-0,057	87,7562	0	-1,98%			
Rec	588,000	609.835,974	4.660.357,869	369,255	369,219	-0,036	87,7562	0	-1,98%			
Rec	588,215	609.836,185	4.660.357,910	369,249	369,214	-0,035	87,7562	0	-1,98%		T.E.	
Rec	589,000	609.836,956	4.660.358,060	369,229	369,197	-0,032	87,7562	0	-2,50%			
Rec	590,000	609.837,937	4.660.358,251	369,205	369,168	-0,037	87,7562	0	-3,17%			
Rec	591,000	609.838,919	4.660.358,442	369,181	369,133	-0,048	87,7562	0	-3,84%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	592,000	609.839,900	4.660.358,634	369,158	369,092	-0,066	87,7562	0	-4,50%			
Rec	593,000	609.840,882	4.660.358,825	369,132	369,043	-0,089	87,7562	0	-5,17%			
Rec	594,000	609.841,864	4.660.359,016	369,104	368,988	-0,116	87,7562	0	-5,84%			
Rec	595,000	609.842,845	4.660.359,207	369,077	368,927	-0,150	87,7562	0	-6,50%			
Rec	596,000	609.843,827	4.660.359,398	369,060	368,858	-0,202	87,7562	0	-7,17%			
Rec	597,000	609.844,808	4.660.359,589	369,046	368,783	-0,263	87,7562	0	-7,84%			
Rec	598,000	609.845,790	4.660.359,780	369,025	368,701	-0,324	87,7562	0	-8,50%			
Rec	599,000	609.846,771	4.660.359,972	369,007	368,613	-0,394	87,7562	0	-9,17%			
Rec	600,000	609.847,753	4.660.360,163	368,981	368,518	-0,463	87,7562	0	-9,84%		V.	
Rec	601,000	609.848,735	4.660.360,354	368,946	368,416	-0,530	87,7562	0	-10,50%			
Rec	602,000	609.849,716	4.660.360,545	368,918	368,308	-0,610	87,7562	0	-11,17%			
Rec	603,000	609.850,698	4.660.360,736	368,885	368,193	-0,692	87,7562	0	-11,84%			
Rec	604,000	609.851,679	4.660.360,927	368,848	368,071	-0,777	87,7562	0	-12,50%			
Rec	605,000	609.852,661	4.660.361,118	368,826	367,943	-0,883	87,7562	0	-13,17%			
Rec	606,000	609.853,642	4.660.361,310	368,801	367,808	-0,793	87,7562	0	-13,84%			
Rec	607,000	609.854,624	4.660.361,501	368,384	367,666	-0,718	87,7562	0	-14,50%			
Rec	608,000	609.855,605	4.660.361,692	368,154	367,518	-0,636	87,7562	0	-15,17%			
Rec	609,000	609.856,587	4.660.361,883	367,857	367,363	-0,494	87,7562	0	-15,84%			
Rec	610,000	609.857,569	4.660.362,074	367,408	367,201	-0,207	87,7562	0	-16,50%			
Rec	611,000	609.858,550	4.660.362,265	366,991	367,033	0,042	87,7562	0	-17,17%			
Rec	611,785	609.859,321	4.660.362,415	366,827	366,896	0,069	87,7562	0	-17,69%		T.S.	
Rec	612,000	609.859,532	4.660.362,456	366,782	366,857	0,075	87,7562	0	-17,70%			
Rec	613,000	609.860,513	4.660.362,648	366,556	366,681	0,125	87,7562	0	-17,70%			
Rec	614,000	609.861,495	4.660.362,839	366,331	366,504	0,173	87,7562	0	-17,70%			
Rec	615,000	609.862,476	4.660.363,030	366,105	366,327	0,222	87,7562	0	-17,70%			
Rec	615,003	609.862,479	4.660.363,030	366,104	366,326	0,222	87,7562	0	-17,70%		T.E.	
Rec	616,000	609.863,458	4.660.363,221	365,929	366,153	0,224	87,7562	0	-17,03%			
Rec	617,000	609.864,440	4.660.363,412	365,797	365,986	0,189	87,7562	0	-16,36%			
Rec	618,000	609.865,421	4.660.363,603	365,664	365,826	0,162	87,7562	0	-15,70%			
Rec	619,000	609.866,403	4.660.363,794	365,532	365,672	0,140	87,7562	0	-15,03%			
Rec	620,000	609.867,384	4.660.363,986	365,399	365,525	0,126	87,7562	0	-14,36%			
Rec	621,000	609.868,366	4.660.364,177	365,267	365,385	0,118	87,7562	0	-13,70%			
Rec	622,000	609.869,347	4.660.364,368	365,134	365,251	0,117	87,7562	0	-13,03%			
Rec	623,000	609.870,329	4.660.364,559	364,998	365,124	0,126	87,7562	0	-12,36%			
Rec	624,000	609.871,310	4.660.364,750	364,860	365,004	0,144	87,7562	0	-11,70%			
Rec	625,000	609.872,292	4.660.364,941	364,722	364,890	0,168	87,7562	0	-11,03%		V.	
Rec	626,000	609.873,274	4.660.365,132	364,583	364,783	0,200	87,7562	0	-10,36%			
Rec	627,000	609.874,255	4.660.365,324	364,445	364,683	0,238	87,7562	0	-9,70%			
Rec	628,000	609.875,237	4.660.365,515	364,310	364,589	0,279	87,7562	0	-9,03%			
Rec	629,000	609.876,218	4.660.365,706	364,178	364,502	0,324	87,7562	0	-8,36%			
Rec	630,000	609.877,200	4.660.365,897	364,046	364,422	0,376	87,7562	0	-7,70%			
Rec	631,000	609.878,181	4.660.366,088	363,947	364,348	0,401	87,7562	0	-7,03%			
Rec	632,000	609.879,163	4.660.366,279	363,866	364,281	0,415	87,7562	0	-6,36%			
Rec	633,000	609.880,145	4.660.366,470	363,787	364,221	0,434	87,7562	0	-5,70%			
Rec	634,000	609.881,126	4.660.366,662	363,718	364,167	0,449	87,7562	0	-5,03%			
Rec	634,997	609.882,105	4.660.366,852	363,644	364,121	0,477	87,7562	0	-4,37%		T.S.	
Rec	635,000	609.882,108	4.660.366,853	363,644	364,121	0,477	87,7562	0	-4,36%			
Rec	636,000	609.883,089	4.660.367,044	363,568	364,077	0,509	87,7562	0	-4,36%			
Rec	637,000	609.884,071	4.660.367,235	363,492	364,033	0,541	87,7562	0	-4,36%			
Rec	638,000	609.885,052	4.660.367,426	363,417	363,990	0,573	87,7562	0	-4,36%			
Rec	638,345	609.885,391	4.660.367,492	363,391	363,975	0,584	87,7562	0	-4,36%		T.E.	
Rec	639,000	609.886,034	4.660.367,617	363,341	363,947	0,606	87,7562	0	-4,04%			
Rec	640,000	609.887,015	4.660.367,808	363,265	363,909	0,644	87,7562	0	-3,54%			
Rec	641,000	609.887,997	4.660.368,000	363,199	363,876	0,677	87,7562	0	-3,04%			
Rec	642,000	609.888,979	4.660.368,191	363,145	363,849	0,704	87,7562	0	-2,54%			
Rec	643,000	609.889,960	4.660.368,382	363,091	363,826	0,735	87,7562	0	-2,04%			
Rec	644,000	609.890,942	4.660.368,573	363,034	363,808	0,774	87,7562	0	-1,54%			
Rec	645,000	609.891,923	4.660.368,764	362,993	363,795	0,802	87,7562	0	-1,04%			
Cur	645,088	609.892,010	4.660.368,781	362,990	363,794	0,804	87,7562	-1.000	-0,99%	P.S.		
Cur	646,000	609.892,905	4.660.368,956	362,970	363,787	0,817	87,6981	-1.000	-0,54%			
Cur	647,000	609.893,886	4.660.369,148	362,961	363,784	0,823	87,6344	-1.000	-0,04%			
Cur	648,000	609.894,867	4.660.369,342	362,957	363,786	0,829	87,5708	-1.000	0,46%			
Cur	649,000	609.895,848	4.660.369,536	362,961	363,793	0,832	87,5071	-1.000	0,96%			
Cur	650,000	609.896,829	4.660.369,732	362,966	363,806	0,840	87,4435	-1.000	1,46%		V.	ODT Ø500 L=8,50m
Cur	651,000	609.897,809	4.660.369,928	362,972	363,823	0,851	87,3798	-1.000	1,96%			
Cur	652,000	609.898,790	4.660.370,126	362,981	363,845	0,864	87,3161	-1.000	2,46%			
Cur	653,000	609.899,770	4.660.370,324	362,994	363,872	0,878	87,2525	-1.000	2,96%			
Cur	654,000	609.900,750	4.660.370,523	363,048	363,904	0,856	87,1888	-1.000	3,46%			
Cur	655,000	609.901,729	4.660.370,724	363,122	363,941	0,819	87,1251	-1.000	3,96%			
Cur	656,000	609.902,709	4.660.370,925	363,196	363,983	0,787	87,0615	-1.000	4,46%			
Cur	657,000	609.903,688	4.660.371,127	363,272	364,031	0,759	86,9978	-1.000	4,96%			
Cur	658,000	609.904,667	4.660.371,331	363,350	364,083	0,733	86,9342	-1.000	5,46%			
Cur	659,000	609.905,646	4.660.371,535	363,458	364,140	0,682	86,8705	-1.000	5,96%			
Cur	660,000	609.906,625	4.660.371,740	363,579	364,202	0,623	86,8068	-1.000	6,46%			
Cur	661,000	609.907,603	4.660.371,947	363,701	364,269	0,568	86,7432	-1.000	6,96%			
Cur	661,655	609.908,244	4.660.372,082	363,780	364,316	0,535	86,7015	-1.000	7,29%		T.S.	
Cur	662,000	609.908,582	4.660.372,154	363,822	364,341	0,519	86,6795	-1.000	7,29%			
Cur	663,000	609.909,560	4.660.372,362	363,943	364,414	0,471	86,6158	-1.000	7,29%			
Cur	664,000	609.910,538	4.660.372,571	364,062	364,487	0,425	86,5522	-1.000	7,29%			
Cur	665,000	609.911,515	4.660.372,781	364,179	364,559	0,380	86,4885	-1.000	7,29%			
Cur	666,000	609.912,493	4.660.372,992	364,287	364,632	0,345	86,4249	-1.000	7,29%			
Cur	667,000	609.913,470	4.660.373,205	364,386	364,705	0,319	86,3612	-1.000	7,29%			
Cur	668,000	609.914,447	4.660.373,418	364,492	364,778	0,286	86,2975	-1.000	7,29%			
Cur	669,000	609.915,424	4.660.373,632	364,599	364,851	0,252	86,2339	-1.000	7,29%			
Cur	670,000	609.916,400	4.660.373,847	364,706	364,924	0,218	86,1702	-1.000	7,29%			
Cur	671,000	609.917,377	4.660.374,063	364,812	364,997	0,185	86,1066	-1.000	7,29%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	672,000	609.918,353	4.660.374,280	364,890	365,070	0,180	86,0429	-1.000	7,29%			
Cur	673,000	609.919,329	4.660.374,498	364,984	365,143	0,159	85,9792	-1.000	7,29%			
Cur	674,000	609.920,305	4.660.374,717	365,067	365,215	0,148	85,9156	-1.000	7,29%			
Cur	675,000	609.921,280	4.660.374,937	365,148	365,288	0,140	85,8519	-1.000	7,29%			
Cur	676,000	609.922,256	4.660.375,158	365,228	365,361	0,133	85,7882	-1.000	7,29%			
Cur	677,000	609.923,231	4.660.375,379	365,311	365,434	0,123	85,7246	-1.000	7,29%			
Cur	678,000	609.924,205	4.660.375,602	365,392	365,507	0,115	85,6609	-1.000	7,29%			
Cur	679,000	609.925,180	4.660.375,826	365,474	365,580	0,106	85,5973	-1.000	7,29%			
Cur	680,000	609.926,155	4.660.376,051	365,556	365,653	0,097	85,5336	-1.000	7,29%			
Cur	681,000	609.927,129	4.660.376,277	365,635	365,726	0,091	85,4699	-1.000	7,29%			
Cur	682,000	609.928,103	4.660.376,503	365,722	365,799	0,077	85,4063	-1.000	7,29%			
Cur	683,000	609.929,076	4.660.376,731	365,809	365,872	0,063	85,3426	-1.000	7,29%			
Cur	684,000	609.930,050	4.660.376,960	365,893	365,944	0,051	85,2789	-1.000	7,29%			
Cur	685,000	609.931,023	4.660.377,189	365,980	366,017	0,037	85,2153	-1.000	7,29%			
Cur	686,000	609.931,996	4.660.377,420	366,062	366,090	0,028	85,1516	-1.000	7,29%			
Cur	687,000	609.932,969	4.660.377,652	366,143	366,163	0,020	85,0880	-1.000	7,29%			
Cur	688,000	609.933,942	4.660.377,884	366,225	366,236	0,011	85,0243	-1.000	7,29%			
Cur	689,000	609.934,914	4.660.378,118	366,300	366,309	0,009	84,9606	-1.000	7,29%			
Cur	690,000	609.935,886	4.660.378,352	366,380	366,382	0,002	84,8970	-1.000	7,29%			
Cur	691,000	609.936,858	4.660.378,588	366,456	366,455	-0,001	84,8333	-1.000	7,29%			
Cur	692,000	609.937,830	4.660.378,824	366,530	366,528	-0,002	84,7697	-1.000	7,29%			
Cur	693,000	609.938,801	4.660.379,062	366,607	366,601	-0,006	84,7060	-1.000	7,29%			
Cur	694,000	609.939,772	4.660.379,300	366,678	366,673	-0,005	84,6423	-1.000	7,29%			
Cur	695,000	609.940,743	4.660.379,540	366,749	366,746	-0,003	84,5787	-1.000	7,29%			
Cur	696,000	609.941,714	4.660.379,780	366,821	366,819	-0,002	84,5150	-1.000	7,29%			
Cur	697,000	609.942,684	4.660.380,021	366,893	366,892	-0,001	84,4513	-1.000	7,29%			
Cur	698,000	609.943,654	4.660.380,264	366,965	366,965	0,000	84,3877	-1.000	7,29%			
Cur	699,000	609.944,624	4.660.380,507	367,032	367,038	0,006	84,3240	-1.000	7,29%			
Cur	700,000	609.945,594	4.660.380,751	367,098	367,111	0,013	84,2604	-1.000	7,29%			
Cur	701,000	609.946,563	4.660.380,996	367,165	367,184	0,019	84,1967	-1.000	7,29%			
Cur	702,000	609.947,533	4.660.381,243	367,228	367,257	0,029	84,1330	-1.000	7,29%			
Cur	703,000	609.948,502	4.660.381,490	367,288	367,329	0,041	84,0694	-1.000	7,29%			
Cur	704,000	609.949,470	4.660.381,738	367,338	367,402	0,064	84,0057	-1.000	7,29%			
Cur	705,000	609.950,439	4.660.381,987	367,395	367,475	0,080	83,9420	-1.000	7,29%			
Cur	706,000	609.951,407	4.660.382,237	367,442	367,548	0,106	83,8784	-1.000	7,29%			
Cur	707,000	609.952,375	4.660.382,488	367,496	367,621	0,125	83,8147	-1.000	7,29%			
Cur	707,888	609.953,234	4.660.382,712	367,534	367,686	0,152	83,7582	-1.000	7,29%		T.E.	
Cur	708,000	609.953,343	4.660.382,740	367,539	367,694	0,155	83,7511	-1.000	7,24%			
Cur	709,000	609.954,310	4.660.382,993	367,563	367,764	0,201	83,6874	-1.000	6,84%			
Cur	710,000	609.955,278	4.660.383,247	367,590	367,831	0,241	83,6237	-1.000	6,44%			
Cur	711,000	609.956,244	4.660.383,502	367,602	367,893	0,291	83,5601	-1.000	6,04%			
Cur	712,000	609.957,211	4.660.383,758	367,626	367,952	0,326	83,4964	-1.000	5,64%			
Cur	713,000	609.958,178	4.660.384,014	367,645	368,006	0,361	83,4327	-1.000	5,24%			
Cur	714,000	609.959,144	4.660.384,272	367,664	368,057	0,393	83,3691	-1.000	4,84%			
Cur	715,000	609.960,110	4.660.384,531	367,677	368,103	0,426	83,3054	-1.000	4,44%			
Cur	716,000	609.961,075	4.660.384,791	367,688	368,145	0,457	83,2418	-1.000	4,04%			
Cur	717,000	609.962,041	4.660.385,051	367,701	368,184	0,483	83,1781	-1.000	3,64%		V.	
Cur	718,000	609.963,006	4.660.385,313	367,715	368,218	0,503	83,1144	-1.000	3,24%			
Cur	719,000	609.963,971	4.660.385,576	367,729	368,249	0,520	83,0508	-1.000	2,84%			
Cur	720,000	609.964,936	4.660.385,839	367,746	368,275	0,529	82,9871	-1.000	2,44%			
Cur	721,000	609.965,900	4.660.386,104	367,762	368,298	0,536	82,9235	-1.000	2,04%			
Cur	722,000	609.966,864	4.660.386,369	367,780	368,316	0,536	82,8598	-1.000	1,64%			
Cur	723,000	609.967,828	4.660.386,636	367,796	368,331	0,535	82,7961	-1.000	1,24%			
Cur	724,000	609.968,791	4.660.386,903	367,812	368,341	0,529	82,7325	-1.000	0,84%			
Cur	725,000	609.969,755	4.660.387,172	367,828	368,348	0,520	82,6688	-1.000	0,44%			
Cur	726,000	609.970,718	4.660.387,441	367,845	368,350	0,505	82,6051	-1.000	0,04%			ODT Ø500 L=7,50m
Cur	726,112	609.970,826	4.660.387,471	367,847	368,350	0,503	82,5980	-1.000	0,00%		T.S.	
Cur	727,000	609.971,681	4.660.387,711	367,861	368,350	0,489	82,5415	-1.000	0,00%			
Cur	728,000	609.972,643	4.660.387,983	367,878	368,350	0,472	82,4778	-1.000	0,00%			
Cur	729,000	609.973,605	4.660.388,255	367,896	368,350	0,454	82,4142	-1.000	0,00%			
Cur	730,000	609.974,567	4.660.388,528	367,911	368,350	0,439	82,3505	-1.000	0,00%			
Cur	731,000	609.975,529	4.660.388,802	367,927	368,350	0,423	82,2868	-1.000	0,00%			
Cur	732,000	609.976,490	4.660.389,077	367,945	368,350	0,405	82,2232	-1.000	0,00%			
Cur	733,000	609.977,451	4.660.389,354	367,957	368,350	0,393	82,1595	-1.000	0,00%			
Cur	734,000	609.978,412	4.660.389,631	367,972	368,350	0,378	82,0958	-1.000	0,00%			
Cur	735,000	609.979,373	4.660.389,909	367,980	368,350	0,370	82,0322	-1.000	0,00%			
Cur	736,000	609.980,333	4.660.390,188	367,988	368,350	0,362	81,9685	-1.000	0,00%			
Cur	736,654	609.980,961	4.660.390,371	367,994	368,350	0,356	81,9269	-1.000	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	608.426,076	4.660.237,795	367,330	367,330	0,000	95,6179	0	-11,79%			
Rec	1,000	608.427,073	4.660.237,863	366,961	367,212	0,251	95,6179	0	-11,79%			
Rec	2,000	608.428,071	4.660.237,932	366,788	367,094	0,306	95,6179	0	-11,79%			
Rec	3,000	608.429,069	4.660.238,001	366,615	366,976	0,361	95,6179	0	-11,79%			
Rec	4,000	608.430,066	4.660.238,070	366,429	366,858	0,429	95,6179	0	-11,79%			
Rec	5,000	608.431,064	4.660.238,139	366,282	366,741	0,459	95,6179	0	-11,79%			
Rec	6,000	608.432,062	4.660.238,207	366,188	366,623	0,435	95,6179	0	-11,79%			
Rec	7,000	608.433,059	4.660.238,276	366,097	366,505	0,408	95,6179	0	-11,79%			
Rec	7,334	608.433,392	4.660.238,299	366,064	366,465	0,401	95,6179	0	-11,79%		T.E.	
Rec	8,000	608.434,057	4.660.238,345	365,999	366,388	0,389	95,6179	0	-11,34%			
Rec	9,000	608.435,054	4.660.238,414	365,870	366,278	0,408	95,6179	0	-10,68%			
Rec	10,000	608.436,052	4.660.238,482	365,761	366,175	0,414	95,6179	0	-10,01%			
Rec	11,000	608.437,050	4.660.238,551	365,652	366,078	0,426	95,6179	0	-9,34%			
Rec	12,000	608.438,047	4.660.238,620	365,543	365,988	0,445	95,6179	0	-8,68%			
Rec	13,000	608.439,045	4.660.238,689	365,434	365,905	0,471	95,6179	0	-8,01%			
Rec	14,000	608.440,043	4.660.238,758	365,324	365,828	0,504	95,6179	0	-7,34%			
Rec	15,000	608.441,040	4.660.238,826	365,212	365,758	0,546	95,6179	0	-6,68%			
Rec	16,000	608.442,038	4.660.238,895	365,101	365,694	0,593	95,6179	0	-6,01%			
Rec	16,500	608.442,537	4.660.238,930	365,084	365,665	0,581	95,6179	0	-5,68%		V.	ODT Ø500 L=8,25m
Rec	17,000	608.443,036	4.660.238,964	365,068	365,637	0,569	95,6179	0	-5,34%			
Rec	18,000	608.444,033	4.660.239,033	365,071	365,587	0,516	95,6179	0	-4,68%			
Rec	19,000	608.445,031	4.660.239,101	365,088	365,544	0,456	95,6179	0	-4,01%			
Rec	20,000	608.446,028	4.660.239,170	365,120	365,507	0,387	95,6179	0	-3,34%			
Rec	21,000	608.447,026	4.660.239,239	365,160	365,477	0,317	95,6179	0	-2,68%			
Rec	22,000	608.448,024	4.660.239,308	365,202	365,454	0,252	95,6179	0	-2,01%			
Rec	23,000	608.449,021	4.660.239,377	365,256	365,437	0,181	95,6179	0	-1,34%			
Rec	24,000	608.450,019	4.660.239,445	365,291	365,427	0,136	95,6179	0	-0,68%			
Rec	25,000	608.451,017	4.660.239,514	365,338	365,423	0,085	95,6179	0	-0,01%			
Rec	25,666	608.451,681	4.660.239,560	365,352	365,424	0,072	95,6179	0	0,43%		T.S.	
Rec	26,000	608.452,014	4.660.239,583	365,359	365,426	0,067	95,6179	0	0,43%			
Rec	27,000	608.453,012	4.660.239,652	365,390	365,430	0,040	95,6179	0	0,43%			
Rec	28,000	608.454,009	4.660.239,721	365,406	365,434	0,028	95,6179	0	0,43%			
Rec	29,000	608.455,007	4.660.239,789	365,407	365,439	0,032	95,6179	0	0,43%			
Rec	30,000	608.456,005	4.660.239,858	365,403	365,443	0,040	95,6179	0	0,43%			
Rec	31,000	608.457,002	4.660.239,927	365,395	365,447	0,052	95,6179	0	0,43%			
Rec	32,000	608.458,000	4.660.239,996	365,383	365,451	0,068	95,6179	0	0,43%			
Rec	33,000	608.458,998	4.660.240,064	365,369	365,456	0,087	95,6179	0	0,43%			
Rec	34,000	608.459,995	4.660.240,133	365,352	365,460	0,108	95,6179	0	0,43%			
Rec	35,000	608.460,993	4.660.240,202	365,328	365,464	0,136	95,6179	0	0,43%			
Rec	36,000	608.461,991	4.660.240,271	365,303	365,469	0,166	95,6179	0	0,43%			
Rec	37,000	608.462,988	4.660.240,340	365,286	365,473	0,187	95,6179	0	0,43%			
Rec	38,000	608.463,986	4.660.240,408	365,271	365,477	0,206	95,6179	0	0,43%			
Rec	39,000	608.464,983	4.660.240,477	365,266	365,481	0,215	95,6179	0	0,43%			
Rec	40,000	608.465,981	4.660.240,546	365,258	365,486	0,228	95,6179	0	0,43%			
Rec	41,000	608.466,979	4.660.240,615	365,267	365,490	0,223	95,6179	0	0,43%			
Rec	42,000	608.467,976	4.660.240,683	365,282	365,494	0,212	95,6179	0	0,43%			
Rec	43,000	608.468,974	4.660.240,752	365,288	365,499	0,211	95,6179	0	0,43%			
Rec	44,000	608.469,972	4.660.240,821	365,299	365,503	0,204	95,6179	0	0,43%			
Rec	45,000	608.470,969	4.660.240,890	365,315	365,507	0,192	95,6179	0	0,43%			
Rec	46,000	608.471,967	4.660.240,959	365,334	365,512	0,178	95,6179	0	0,43%			
Rec	47,000	608.472,964	4.660.241,027	365,347	365,516	0,169	95,6179	0	0,43%			
Rec	48,000	608.473,962	4.660.241,096	365,350	365,520	0,170	95,6179	0	0,43%			
Rec	49,000	608.474,960	4.660.241,165	365,359	365,524	0,165	95,6179	0	0,43%			
Rec	50,000	608.475,957	4.660.241,234	365,368	365,529	0,161	95,6179	0	0,43%			
Rec	51,000	608.476,955	4.660.241,302	365,383	365,533	0,150	95,6179	0	0,43%			
Rec	52,000	608.477,953	4.660.241,371	365,399	365,537	0,138	95,6179	0	0,43%			
Rec	53,000	608.478,950	4.660.241,440	365,415	365,542	0,127	95,6179	0	0,43%			
Rec	54,000	608.479,948	4.660.241,509	365,428	365,546	0,118	95,6179	0	0,43%			
Rec	54,612	608.480,558	4.660.241,551	365,430	365,548	0,119	95,6179	0	0,43%		T.E.	
Rec	55,000	608.480,946	4.660.241,578	365,431	365,550	0,119	95,6179	0	0,58%			
Rec	56,000	608.481,943	4.660.241,646	365,446	365,558	0,112	95,6179	0	0,98%			
Rec	57,000	608.482,941	4.660.241,715	365,457	365,570	0,113	95,6179	0	1,38%			
Rec	58,000	608.483,938	4.660.241,784	365,468	365,586	0,118	95,6179	0	1,78%			
Rec	59,000	608.484,936	4.660.241,853	365,480	365,606	0,126	95,6179	0	2,18%			
Rec	60,000	608.485,934	4.660.241,921	365,485	365,630	0,145	95,6179	0	2,58%			
Rec	61,000	608.486,931	4.660.241,990	365,503	365,657	0,154	95,6179	0	2,98%			
Rec	62,000	608.487,929	4.660.242,059	365,523	365,689	0,166	95,6179	0	3,38%			
Rec	63,000	608.488,927	4.660.242,128	365,545	365,725	0,180	95,6179	0	3,78%			
Rec	64,000	608.489,924	4.660.242,197	365,567	365,765	0,198	95,6179	0	4,18%			
Rec	65,000	608.490,922	4.660.242,265	365,593	365,809	0,216	95,6179	0	4,58%		V.	
Rec	66,000	608.491,919	4.660.242,334	365,630	365,857	0,227	95,6179	0	4,98%			
Rec	67,000	608.492,917	4.660.242,403	365,679	365,909	0,230	95,6179	0	5,38%			
Rec	68,000	608.493,915	4.660.242,472	365,743	365,964	0,221	95,6179	0	5,78%			
Rec	69,000	608.494,912	4.660.242,540	365,819	366,024	0,205	95,6179	0	6,18%			
Rec	70,000	608.495,910	4.660.242,609	365,904	366,088	0,184	95,6179	0	6,58%			
Rec	71,000	608.496,908	4.660.242,678	365,994	366,156	0,162	95,6179	0	6,98%			
Rec	72,000	608.497,905	4.660.242,747	366,110	366,228	0,118	95,6179	0	7,38%			
Rec	73,000	608.498,903	4.660.242,816	366,226	366,304	0,078	95,6179	0	7,78%			
Rec	74,000	608.499,901	4.660.242,884	366,347	366,383	0,036	95,6179	0	8,18%			
Rec	75,000	608.500,898	4.660.242,953	366,460	366,467	0,007	95,6179	0	8,58%			
Rec	75,388	608.501,285	4.660.242,980	366,496	366,501	0,005	95,6179	0	8,74%		T.S.	
Rec	76,000	608.501,896	4.660.243,022	366,553	366,554	0,001	95,6179	0	8,74%			
Rec	77,000	608.502,893	4.660.243,091	366,645	366,642	-0,003	95,6179	0	8,74%			
Rec	78,000	608.503,891	4.660.243,159	366,736	366,729	-0,007	95,6179	0	8,74%			
Rec	79,000	608.504,889	4.660.243,228	366,827	366,817	-0,010	95,6179	0	8,74%			
Rec	80,000	608.505,886	4.660.243,297	366,919	366,904	-0,015	95,6179	0	8,74%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	81,000	608.506,884	4.660.243,366	367,009	366,991	-0,018	95,6179	0	8,74%			
Rec	82,000	608.507,882	4.660.243,435	367,106	367,079	-0,027	95,6179	0	8,74%			
Rec	83,000	608.508,879	4.660.243,503	367,197	367,166	-0,031	95,6179	0	8,74%			
Rec	84,000	608.509,877	4.660.243,572	367,283	367,254	-0,029	95,6179	0	8,74%			
Rec	85,000	608.510,874	4.660.243,641	367,369	367,341	-0,028	95,6179	0	8,74%			
Rec	86,000	608.511,872	4.660.243,710	367,452	367,428	-0,024	95,6179	0	8,74%			
Rec	87,000	608.512,870	4.660.243,778	367,534	367,516	-0,018	95,6179	0	8,74%			
Rec	88,000	608.513,867	4.660.243,847	367,610	367,603	-0,007	95,6179	0	8,74%			
Rec	89,000	608.514,865	4.660.243,916	367,687	367,691	0,004	95,6179	0	8,74%			
Rec	90,000	608.515,863	4.660.243,985	367,750	367,778	0,028	95,6179	0	8,74%			
Rec	91,000	608.516,860	4.660.244,054	367,825	367,865	0,040	95,6179	0	8,74%			
Rec	92,000	608.517,858	4.660.244,122	367,883	367,953	0,070	95,6179	0	8,74%			
Rec	93,000	608.518,856	4.660.244,191	367,947	368,040	0,093	95,6179	0	8,74%			
Rec	94,000	608.519,853	4.660.244,260	368,005	368,128	0,123	95,6179	0	8,74%			
Rec	95,000	608.520,851	4.660.244,329	368,104	368,215	0,111	95,6179	0	8,74%			
Rec	96,000	608.521,848	4.660.244,397	368,191	368,302	0,111	95,6179	0	8,74%			
Rec	97,000	608.522,846	4.660.244,466	368,285	368,390	0,105	95,6179	0	8,74%			
Rec	98,000	608.523,844	4.660.244,535	368,358	368,477	0,119	95,6179	0	8,74%			
Rec	99,000	608.524,841	4.660.244,604	368,445	368,565	0,120	95,6179	0	8,74%			
Rec	100,000	608.525,839	4.660.244,673	368,527	368,652	0,125	95,6179	0	8,74%			
Rec	100,023	608.525,862	4.660.244,674	368,529	368,654	0,125	95,6179	0	8,74%		T.E.	
Rec	101,000	608.526,837	4.660.244,741	368,609	368,738	0,129	95,6179	0	8,41%			
Rec	102,000	608.527,834	4.660.244,810	368,690	368,820	0,130	95,6179	0	8,08%			
Rec	103,000	608.528,832	4.660.244,879	368,797	368,899	0,102	95,6179	0	7,75%			
Rec	104,000	608.529,829	4.660.244,948	368,913	368,975	0,062	95,6179	0	7,41%			
Rec	105,000	608.530,827	4.660.245,017	369,041	369,048	0,007	95,6179	0	7,08%			
Rec	106,000	608.531,825	4.660.245,085	369,243	369,117	-0,126	95,6179	0	6,75%			
Rec	107,000	608.532,822	4.660.245,154	369,260	369,183	-0,077	95,6179	0	6,41%			
Rec	108,000	608.533,820	4.660.245,223	369,380	369,245	-0,135	95,6179	0	6,08%			
Rec	109,000	608.534,818	4.660.245,292	369,484	369,304	-0,180	95,6179	0	5,75%			
Rec	110,000	608.535,815	4.660.245,360	369,526	369,360	-0,166	95,6179	0	5,41%		V.	
Rec	111,000	608.536,813	4.660.245,429	369,525	369,413	-0,112	95,6179	0	5,08%			
Rec	112,000	608.537,811	4.660.245,498	369,519	369,462	-0,057	95,6179	0	4,75%			
Rec	113,000	608.538,808	4.660.245,567	369,519	369,508	-0,011	95,6179	0	4,41%			
Rec	114,000	608.539,806	4.660.245,636	369,515	369,550	0,035	95,6179	0	4,08%			
Rec	115,000	608.540,803	4.660.245,704	369,512	369,589	0,077	95,6179	0	3,75%			
Rec	116,000	608.541,801	4.660.245,773	369,502	369,625	0,123	95,6179	0	3,41%			
Rec	117,000	608.542,799	4.660.245,842	369,499	369,657	0,158	95,6179	0	3,08%			
Rec	118,000	608.543,796	4.660.245,911	369,505	369,687	0,182	95,6179	0	2,75%			
Rec	119,000	608.544,794	4.660.245,979	369,506	369,712	0,206	95,6179	0	2,41%			
Rec	119,977	608.545,769	4.660.246,047	369,514	369,734	0,221	95,6179	0	2,09%		T.S.	
Rec	120,000	608.545,792	4.660.246,048	369,514	369,735	0,221	95,6179	0	2,09%			
Rec	121,000	608.546,789	4.660.246,117	369,529	369,756	0,227	95,6179	0	2,09%			
Rec	122,000	608.547,787	4.660.246,186	369,536	369,777	0,241	95,6179	0	2,09%			
Rec	123,000	608.548,784	4.660.246,255	369,553	369,797	0,244	95,6179	0	2,09%			
Rec	124,000	608.549,782	4.660.246,323	369,565	369,818	0,253	95,6179	0	2,09%			
Rec	125,000	608.550,780	4.660.246,392	369,587	369,839	0,252	95,6179	0	2,09%			
Rec	126,000	608.551,777	4.660.246,461	369,608	369,860	0,252	95,6179	0	2,09%			
Rec	127,000	608.552,775	4.660.246,530	369,645	369,881	0,236	95,6179	0	2,09%			
Rec	128,000	608.553,773	4.660.246,598	369,655	369,902	0,247	95,6179	0	2,09%			
Rec	129,000	608.554,770	4.660.246,667	369,674	369,923	0,249	95,6179	0	2,09%			
Rec	130,000	608.555,768	4.660.246,736	369,703	369,944	0,241	95,6179	0	2,09%			
Rec	131,000	608.556,766	4.660.246,805	369,711	369,964	0,253	95,6179	0	2,09%			
Rec	132,000	608.557,763	4.660.246,874	369,732	369,985	0,253	95,6179	0	2,09%			
Rec	133,000	608.558,761	4.660.246,942	369,767	370,006	0,239	95,6179	0	2,09%			
Rec	134,000	608.559,758	4.660.247,011	369,786	370,027	0,241	95,6179	0	2,09%			
Rec	135,000	608.560,756	4.660.247,080	369,806	370,048	0,242	95,6179	0	2,09%			
Rec	136,000	608.561,754	4.660.247,149	369,828	370,069	0,241	95,6179	0	2,09%			
Rec	137,000	608.562,751	4.660.247,217	369,853	370,090	0,237	95,6179	0	2,09%			
Rec	138,000	608.563,749	4.660.247,286	369,880	370,111	0,231	95,6179	0	2,09%			
Rec	139,000	608.564,747	4.660.247,355	369,907	370,132	0,225	95,6179	0	2,09%			
Rec	140,000	608.565,744	4.660.247,424	369,940	370,152	0,212	95,6179	0	2,09%			
Rec	141,000	608.566,742	4.660.247,493	369,968	370,173	0,205	95,6179	0	2,09%			
Rec	142,000	608.567,739	4.660.247,561	369,995	370,194	0,199	95,6179	0	2,09%			
Rec	143,000	608.568,737	4.660.247,630	370,041	370,215	0,174	95,6179	0	2,09%			
Rec	144,000	608.569,735	4.660.247,699	370,093	370,236	0,143	95,6179	0	2,09%			
Rec	145,000	608.570,732	4.660.247,768	370,149	370,257	0,108	95,6179	0	2,09%			
Rec	146,000	608.571,730	4.660.247,836	370,200	370,278	0,078	95,6179	0	2,09%			
Rec	147,000	608.572,728	4.660.247,905	370,243	370,299	0,056	95,6179	0	2,09%			
Rec	148,000	608.573,725	4.660.247,974	370,289	370,319	0,030	95,6179	0	2,09%			
Rec	149,000	608.574,723	4.660.248,043	370,330	370,340	0,010	95,6179	0	2,09%			
Rec	150,000	608.575,721	4.660.248,112	370,388	370,361	-0,027	95,6179	0	2,09%			
Rec	151,000	608.576,718	4.660.248,180	370,441	370,382	-0,059	95,6179	0	2,09%			
Rec	151,595	608.577,312	4.660.248,221	370,459	370,395	-0,064	95,6179	0	2,09%		T.E.	
Rec	152,000	608.577,716	4.660.248,249	370,471	370,403	-0,068	95,6179	0	2,01%			
Rec	153,000	608.578,713	4.660.248,318	370,483	370,422	-0,061	95,6179	0	1,81%			
Rec	154,000	608.579,711	4.660.248,387	370,483	370,439	-0,044	95,6179	0	1,61%			
Rec	155,000	608.580,709	4.660.248,455	370,495	370,454	-0,041	95,6179	0	1,41%			
Rec	156,000	608.581,706	4.660.248,524	370,499	370,467	-0,032	95,6179	0	1,21%			
Rec	157,000	608.582,704	4.660.248,593	370,496	370,478	-0,018	95,6179	0	1,01%			
Rec	158,000	608.583,702	4.660.248,662	370,488	370,487	-0,001	95,6179	0	0,81%			
Rec	159,000	608.584,699	4.660.248,731	370,477	370,494	0,017	95,6179	0	0,61%			
Rec	160,000	608.585,697	4.660.248,799	370,465	370,499	0,034	95,6179	0	0,41%		V.	
Rec	161,000	608.586,695	4.660.248,868	370,460	370,502	0,042	95,6179	0	0,21%			
Rec	162,000	608.587,692	4.660.248,937	370,452	370,503	0,051	95,6179	0	0,01%			
Rec	163,000	608.588,690	4.660.249,006	370,453	370,503	0,050	95,6179	0	-0,19%			
Rec	164,000	608.589,687	4.660.249,074	370,453	370,500	0,047	95,6179	0	-0,39%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	165,000	608.590,685	4.660.249,143	370,442	370,495	0,053	95,6179	0	-0,59%			
Rec	166,000	608.591,683	4.660.249,212	370,437	370,488	0,051	95,6179	0	-0,79%			
Rec	167,000	608.592,680	4.660.249,281	370,445	370,479	0,034	95,6179	0	-0,99%			
Rec	168,000	608.593,678	4.660.249,350	370,433	370,468	0,035	95,6179	0	-1,19%			
Rec	168,405	608.594,082	4.660.249,377	370,433	370,463	0,030	95,6179	0	-1,27%		T.S.	
Rec	169,000	608.594,676	4.660.249,418	370,434	370,456	0,022	95,6179	0	-1,27%			
Rec	170,000	608.595,673	4.660.249,487	370,422	370,443	0,021	95,6179	0	-1,27%			
Rec	171,000	608.596,671	4.660.249,556	370,417	370,430	0,013	95,6179	0	-1,27%			
Rec	172,000	608.597,668	4.660.249,625	370,426	370,417	-0,009	95,6179	0	-1,27%			
Rec	173,000	608.598,666	4.660.249,694	370,415	370,405	-0,010	95,6179	0	-1,27%			
Rec	174,000	608.599,664	4.660.249,762	370,397	370,392	-0,005	95,6179	0	-1,27%			
Rec	175,000	608.600,661	4.660.249,831	370,379	370,379	0,000	95,6179	0	-1,27%			
Rec	175,420	608.601,080	4.660.249,860	370,379	370,374	-0,006	95,6179	0	-1,27%		T.E.	
Rec	176,000	608.601,659	4.660.249,900	370,380	370,366	-0,014	95,6179	0	-1,50%			
Rec	177,000	608.602,657	4.660.249,969	370,372	370,349	-0,023	95,6179	0	-1,90%			
Rec	178,000	608.603,654	4.660.250,037	370,359	370,328	-0,031	95,6179	0	-2,30%			
Rec	179,000	608.604,652	4.660.250,106	370,336	370,303	-0,033	95,6179	0	-2,70%			
Rec	180,000	608.605,650	4.660.250,175	370,313	370,274	-0,039	95,6179	0	-3,10%			
Rec	181,000	608.606,647	4.660.250,244	370,290	370,241	-0,049	95,6179	0	-3,50%			
Rec	182,000	608.607,645	4.660.250,313	370,272	370,204	-0,068	95,6179	0	-3,90%			
Rec	183,000	608.608,642	4.660.250,381	370,245	370,163	-0,082	95,6179	0	-4,30%			
Rec	184,000	608.609,640	4.660.250,450	370,216	370,117	-0,099	95,6179	0	-4,70%			
Rec	185,000	608.610,638	4.660.250,519	370,188	370,068	-0,120	95,6179	0	-5,10%		V.	
Rec	186,000	608.611,635	4.660.250,588	370,137	370,015	-0,122	95,6179	0	-5,50%			
Rec	187,000	608.612,633	4.660.250,656	370,087	369,958	-0,129	95,6179	0	-5,90%			
Rec	188,000	608.613,631	4.660.250,725	370,036	369,897	-0,139	95,6179	0	-6,30%			
Rec	189,000	608.614,628	4.660.250,794	369,984	369,832	-0,152	95,6179	0	-6,70%			
Rec	190,000	608.615,626	4.660.250,863	369,932	369,763	-0,169	95,6179	0	-7,10%			
Rec	191,000	608.616,623	4.660.250,932	369,879	369,690	-0,189	95,6179	0	-7,50%			
Rec	192,000	608.617,621	4.660.251,000	369,827	369,613	-0,214	95,6179	0	-7,90%			
Rec	193,000	608.618,619	4.660.251,069	369,752	369,532	-0,220	95,6179	0	-8,30%			
Rec	194,000	608.619,616	4.660.251,138	369,666	369,447	-0,219	95,6179	0	-8,70%			
Rec	194,580	608.620,195	4.660.251,178	369,616	369,396	-0,220	95,6179	0	-8,94%		T.S.	
Rec	195,000	608.620,614	4.660.251,207	369,579	369,358	-0,221	95,6179	0	-8,94%			
Rec	196,000	608.621,612	4.660.251,275	369,490	369,269	-0,221	95,6179	0	-8,94%			
Rec	197,000	608.622,609	4.660.251,344	369,406	369,180	-0,226	95,6179	0	-8,94%			
Rec	198,000	608.623,607	4.660.251,413	369,321	369,090	-0,231	95,6179	0	-8,94%			
Rec	199,000	608.624,605	4.660.251,482	369,225	369,001	-0,224	95,6179	0	-8,94%			
Rec	200,000	608.625,602	4.660.251,551	369,118	368,912	-0,206	95,6179	0	-8,94%			
Rec	201,000	608.626,600	4.660.251,619	369,012	368,822	-0,190	95,6179	0	-8,94%			
Rec	202,000	608.627,597	4.660.251,688	368,925	368,733	-0,192	95,6179	0	-8,94%			
Rec	203,000	608.628,595	4.660.251,757	368,840	368,643	-0,197	95,6179	0	-8,94%			
Rec	204,000	608.629,593	4.660.251,826	368,748	368,554	-0,194	95,6179	0	-8,94%			
Rec	205,000	608.630,590	4.660.251,894	368,655	368,465	-0,190	95,6179	0	-8,94%			
Rec	206,000	608.631,588	4.660.251,963	368,538	368,375	-0,163	95,6179	0	-8,94%			
Rec	207,000	608.632,586	4.660.252,032	368,440	368,286	-0,154	95,6179	0	-8,94%			
Rec	208,000	608.633,583	4.660.252,101	368,323	368,197	-0,126	95,6179	0	-8,94%			
Rec	209,000	608.634,581	4.660.252,170	368,208	368,107	-0,101	95,6179	0	-8,94%			
Rec	210,000	608.635,578	4.660.252,238	368,082	368,018	-0,064	95,6179	0	-8,94%			
Rec	211,000	608.636,576	4.660.252,307	367,964	367,929	-0,035	95,6179	0	-8,94%			
Rec	212,000	608.637,574	4.660.252,376	367,869	367,839	-0,030	95,6179	0	-8,94%			
Rec	213,000	608.638,571	4.660.252,445	367,759	367,750	-0,009	95,6179	0	-8,94%			
Rec	214,000	608.639,569	4.660.252,513	367,666	367,660	-0,006	95,6179	0	-8,94%			
Rec	215,000	608.640,567	4.660.252,582	367,564	367,571	0,007	95,6179	0	-8,94%			
Rec	216,000	608.641,564	4.660.252,651	367,439	367,482	0,043	95,6179	0	-8,94%			
Rec	217,000	608.642,562	4.660.252,720	367,332	367,392	0,060	95,6179	0	-8,94%			
Rec	218,000	608.643,560	4.660.252,789	367,214	367,303	0,089	95,6179	0	-8,94%			
Rec	219,000	608.644,557	4.660.252,857	367,085	367,214	0,129	95,6179	0	-8,94%			
Rec	220,000	608.645,555	4.660.252,926	366,971	367,124	0,153	95,6179	0	-8,94%			
Rec	221,000	608.646,552	4.660.252,995	366,887	367,035	0,148	95,6179	0	-8,94%			
Rec	222,000	608.647,550	4.660.253,064	366,803	366,946	0,143	95,6179	0	-8,94%			
Rec	223,000	608.648,548	4.660.253,132	366,712	366,856	0,144	95,6179	0	-8,94%			
Rec	224,000	608.649,545	4.660.253,201	366,630	366,767	0,137	95,6179	0	-8,94%			
Rec	225,000	608.650,543	4.660.253,270	366,545	366,677	0,132	95,6179	0	-8,94%			
Rec	226,000	608.651,541	4.660.253,339	366,445	366,588	0,143	95,6179	0	-8,94%			
Rec	227,000	608.652,538	4.660.253,408	366,356	366,499	0,143	95,6179	0	-8,94%			
Rec	228,000	608.653,536	4.660.253,476	366,260	366,409	0,149	95,6179	0	-8,94%			
Rec	229,000	608.654,533	4.660.253,545	366,148	366,320	0,172	95,6179	0	-8,94%			
Rec	230,000	608.655,531	4.660.253,614	366,037	366,231	0,194	95,6179	0	-8,94%			
Rec	231,000	608.656,529	4.660.253,683	365,954	366,141	0,187	95,6179	0	-8,94%			
Rec	232,000	608.657,526	4.660.253,751	365,887	366,052	0,165	95,6179	0	-8,94%			
Rec	232,520	608.658,045	4.660.253,787	365,852	366,005	0,154	95,6179	0	-8,94%		T.E.	
Rec	233,000	608.658,524	4.660.253,820	365,819	365,963	0,144	95,6179	0	-8,74%			
Rec	234,000	608.659,522	4.660.253,889	365,752	365,878	0,126	95,6179	0	-8,34%			
Rec	235,000	608.660,519	4.660.253,958	365,685	365,796	0,111	95,6179	0	-7,94%			
Rec	236,000	608.661,517	4.660.254,027	365,618	365,719	0,101	95,6179	0	-7,54%			
Rec	237,000	608.662,515	4.660.254,095	365,551	365,645	0,094	95,6179	0	-7,14%			
Rec	238,000	608.663,512	4.660.254,164	365,485	365,576	0,091	95,6179	0	-6,74%			
Rec	239,000	608.664,510	4.660.254,233	365,421	365,510	0,089	95,6179	0	-6,34%			
Rec	240,000	608.665,507	4.660.254,302	365,357	365,449	0,092	95,6179	0	-5,94%		V.	
Rec	241,000	608.666,505	4.660.254,370	365,295	365,391	0,096	95,6179	0	-5,54%			
Rec	242,000	608.667,503	4.660.254,439	365,235	365,338	0,103	95,6179	0	-5,14%			
Rec	243,000	608.668,500	4.660.254,508	365,162	365,289	0,127	95,6179	0	-4,74%			
Rec	244,000	608.669,498	4.660.254,577	365,086	365,243	0,157	95,6179	0	-4,34%			
Rec	245,000	608.670,496	4.660.254,646	365,008	365,202	0,194	95,6179	0	-3,94%			
Rec	246,000	608.671,493	4.660.254,714	364,957	365,164	0,207	95,6179	0	-3,54%			
Rec	247,000	608.672,491	4.660.254,783	364,908	365,131	0,223	95,6179	0	-3,14%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	247,480	608.672,970	4.660.254,816	364,884	365,116	0,231	95,6179	0	-2,95%		T.S.	
Rec	248,000	608.673,488	4.660.254,852	364,859	365,101	0,242	95,6179	0	-2,96%			
Rec	249,000	608.674,486	4.660.254,921	364,810	365,071	0,261	95,6179	0	-2,96%			
Rec	250,000	608.675,484	4.660.254,990	364,761	365,041	0,280	95,6179	0	-2,96%			
Rec	251,000	608.676,481	4.660.255,058	364,714	365,012	0,298	95,6179	0	-2,96%			
Rec	251,855	608.677,334	4.660.255,117	364,681	364,987	0,306	95,6179	0	-2,96%		T.E.	
Rec	252,000	608.677,479	4.660.255,127	364,675	364,982	0,307	95,6179	0	-2,93%			
Rec	253,000	608.678,477	4.660.255,196	364,637	364,954	0,317	95,6179	0	-2,73%			
Rec	254,000	608.679,474	4.660.255,265	364,603	364,928	0,325	95,6179	0	-2,53%			
Rec	255,000	608.680,472	4.660.255,333	364,571	364,904	0,333	95,6179	0	-2,33%			
Rec	256,000	608.681,470	4.660.255,402	364,546	364,881	0,335	95,6179	0	-2,13%			
Rec	257,000	608.682,467	4.660.255,471	364,532	364,861	0,329	95,6179	0	-1,93%			
Rec	258,000	608.683,465	4.660.255,540	364,537	364,843	0,306	95,6179	0	-1,73%			
Rec	259,000	608.684,462	4.660.255,609	364,541	364,827	0,286	95,6179	0	-1,53%			
Rec	260,000	608.685,460	4.660.255,677	364,546	364,812	0,266	95,6179	0	-1,33%		V.	ODT Ø500 L=7,00m
Rec	261,000	608.686,458	4.660.255,746	364,549	364,800	0,251	95,6179	0	-1,13%			
Rec	262,000	608.687,455	4.660.255,815	364,552	364,790	0,238	95,6179	0	-0,93%			
Rec	263,000	608.688,453	4.660.255,884	364,555	364,782	0,227	95,6179	0	-0,73%			
Rec	264,000	608.689,451	4.660.255,952	364,558	364,775	0,217	95,6179	0	-0,53%			
Rec	265,000	608.690,448	4.660.256,021	364,561	364,771	0,210	95,6179	0	-0,33%			
Rec	266,000	608.691,446	4.660.256,090	364,564	364,769	0,205	95,6179	0	-0,13%			
Rec	267,000	608.692,443	4.660.256,159	364,567	364,769	0,202	95,6179	0	0,07%			
Rec	268,000	608.693,441	4.660.256,228	364,570	364,770	0,200	95,6179	0	0,27%			
Rec	268,145	608.693,586	4.660.256,238	364,568	364,771	0,203	95,6179	0	0,30%		T.S.	
Rec	269,000	608.694,439	4.660.256,296	364,553	364,773	0,220	95,6179	0	0,30%			
Rec	270,000	608.695,436	4.660.256,365	364,560	364,776	0,216	95,6179	0	0,30%			
Rec	271,000	608.696,434	4.660.256,434	364,554	364,779	0,225	95,6179	0	0,30%			
Rec	272,000	608.697,432	4.660.256,503	364,557	364,783	0,226	95,6179	0	0,30%			
Rec	273,000	608.698,429	4.660.256,571	364,556	364,786	0,230	95,6179	0	0,30%			
Rec	274,000	608.699,427	4.660.256,640	364,557	364,789	0,232	95,6179	0	0,30%			
Rec	275,000	608.700,425	4.660.256,709	364,560	364,792	0,232	95,6179	0	0,30%			
Rec	276,000	608.701,422	4.660.256,778	364,565	364,795	0,230	95,6179	0	0,30%			
Rec	277,000	608.702,420	4.660.256,847	364,572	364,798	0,226	95,6179	0	0,30%			
Rec	278,000	608.703,417	4.660.256,915	364,581	364,801	0,220	95,6179	0	0,30%			
Rec	279,000	608.704,415	4.660.256,984	364,587	364,804	0,217	95,6179	0	0,30%			
Rec	280,000	608.705,413	4.660.257,053	364,595	364,807	0,212	95,6179	0	0,30%			
Rec	281,000	608.706,410	4.660.257,122	364,600	364,810	0,210	95,6179	0	0,30%			
Rec	282,000	608.707,408	4.660.257,190	364,604	364,813	0,209	95,6179	0	0,30%			
Rec	283,000	608.708,406	4.660.257,259	364,610	364,816	0,206	95,6179	0	0,30%			
Rec	284,000	608.709,403	4.660.257,328	364,616	364,819	0,203	95,6179	0	0,30%			
Rec	285,000	608.710,401	4.660.257,397	364,622	364,822	0,200	95,6179	0	0,30%			
Rec	286,000	608.711,398	4.660.257,466	364,629	364,825	0,196	95,6179	0	0,30%			
Rec	287,000	608.712,396	4.660.257,534	364,632	364,828	0,196	95,6179	0	0,30%			
Rec	288,000	608.713,394	4.660.257,603	364,634	364,831	0,197	95,6179	0	0,30%			
Rec	289,000	608.714,391	4.660.257,672	364,637	364,834	0,197	95,6179	0	0,30%			
Rec	290,000	608.715,389	4.660.257,741	364,640	364,837	0,197	95,6179	0	0,30%			
Rec	291,000	608.716,387	4.660.257,809	364,643	364,840	0,197	95,6179	0	0,30%			
Rec	292,000	608.717,384	4.660.257,878	364,648	364,843	0,195	95,6179	0	0,30%			
Rec	293,000	608.718,382	4.660.257,947	364,652	364,846	0,194	95,6179	0	0,30%			
Rec	294,000	608.719,380	4.660.258,016	364,651	364,850	0,199	95,6179	0	0,30%			
Rec	295,000	608.720,377	4.660.258,085	364,652	364,853	0,201	95,6179	0	0,30%			
Rec	296,000	608.721,375	4.660.258,153	364,651	364,856	0,205	95,6179	0	0,30%			
Rec	297,000	608.722,372	4.660.258,222	364,650	364,859	0,209	95,6179	0	0,30%			
Rec	298,000	608.723,370	4.660.258,291	364,650	364,862	0,212	95,6179	0	0,30%			
Rec	299,000	608.724,368	4.660.258,360	364,650	364,865	0,215	95,6179	0	0,30%			
Rec	300,000	608.725,365	4.660.258,428	364,652	364,868	0,216	95,6179	0	0,30%			
Rec	301,000	608.726,363	4.660.258,497	364,649	364,871	0,222	95,6179	0	0,30%			
Rec	302,000	608.727,361	4.660.258,566	364,644	364,874	0,230	95,6179	0	0,30%			
Rec	303,000	608.728,358	4.660.258,635	364,639	364,877	0,238	95,6179	0	0,30%			
Rec	304,000	608.729,356	4.660.258,704	364,637	364,880	0,243	95,6179	0	0,30%			
Rec	305,000	608.730,353	4.660.258,772	364,630	364,883	0,253	95,6179	0	0,30%			
Rec	306,000	608.731,351	4.660.258,841	364,633	364,886	0,253	95,6179	0	0,30%			
Rec	307,000	608.732,349	4.660.258,910	364,625	364,889	0,264	95,6179	0	0,30%			
Rec	308,000	608.733,346	4.660.258,979	364,621	364,892	0,271	95,6179	0	0,30%			
Rec	309,000	608.734,344	4.660.259,047	364,615	364,895	0,280	95,6179	0	0,30%			
Rec	310,000	608.735,342	4.660.259,116	364,607	364,898	0,291	95,6179	0	0,30%			
Rec	311,000	608.736,339	4.660.259,185	364,599	364,901	0,302	95,6179	0	0,30%			
Rec	312,000	608.737,337	4.660.259,254	364,591	364,904	0,313	95,6179	0	0,30%			
Rec	313,000	608.738,335	4.660.259,323	364,581	364,907	0,326	95,6179	0	0,30%			
Rec	314,000	608.739,332	4.660.259,391	364,572	364,910	0,338	95,6179	0	0,30%			
Rec	315,000	608.740,330	4.660.259,460	364,559	364,913	0,354	95,6179	0	0,30%			
Rec	316,000	608.741,327	4.660.259,529	364,551	364,916	0,365	95,6179	0	0,30%			
Rec	317,000	608.742,325	4.660.259,598	364,544	364,920	0,376	95,6179	0	0,30%			
Rec	318,000	608.743,323	4.660.259,667	364,534	364,923	0,389	95,6179	0	0,30%			
Rec	319,000	608.744,320	4.660.259,735	364,524	364,926	0,402	95,6179	0	0,30%			
Rec	320,000	608.745,318	4.660.259,804	364,516	364,929	0,413	95,6179	0	0,30%			
Rec	321,000	608.746,316	4.660.259,873	364,504	364,932	0,428	95,6179	0	0,30%			
Rec	322,000	608.747,313	4.660.259,942	364,488	364,935	0,447	95,6179	0	0,30%			
Rec	323,000	608.748,311	4.660.260,010	364,474	364,938	0,464	95,6179	0	0,30%			
Rec	324,000	608.749,309	4.660.260,079	364,460	364,941	0,481	95,6179	0	0,30%			
Rec	325,000	608.750,306	4.660.260,148	364,454	364,944	0,490	95,6179	0	0,30%			
Rec	326,000	608.751,304	4.660.260,217	364,450	364,947	0,497	95,6179	0	0,30%			
Rec	327,000	608.752,301	4.660.260,286	364,444	364,950	0,506	95,6179	0	0,30%			
Rec	328,000	608.753,299	4.660.260,354	364,435	364,953	0,518	95,6179	0	0,30%			
Rec	329,000	608.754,297	4.660.260,423	364,424	364,956	0,532	95,6179	0	0,30%			
Rec	330,000	608.755,294	4.660.260,492	364,415	364,959	0,544	95,6179	0	0,30%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	331,000	608.756,292	4.660.260,561	364,407	364,962	0,555	95,6179	0	0,30%			
Rec	332,000	608.757,290	4.660.260,629	364,391	364,965	0,574	95,6179	0	0,30%			
Rec	333,000	608.758,287	4.660.260,698	364,382	364,968	0,586	95,6179	0	0,30%			
Rec	334,000	608.759,285	4.660.260,767	364,384	364,971	0,587	95,6179	0	0,30%			
Rec	335,000	608.760,282	4.660.260,836	364,384	364,974	0,590	95,6179	0	0,30%			
Rec	336,000	608.761,280	4.660.260,905	364,385	364,977	0,592	95,6179	0	0,30%			
Rec	337,000	608.762,278	4.660.260,973	364,397	364,980	0,583	95,6179	0	0,30%			
Rec	338,000	608.763,275	4.660.261,042	364,405	364,983	0,578	95,6179	0	0,30%			
Rec	339,000	608.764,273	4.660.261,111	364,419	364,987	0,568	95,6179	0	0,30%			
Rec	339,728	608.764,999	4.660.261,161	364,435	364,989	0,554	95,6179	0	0,30%		T.E.	
Rec	340,000	608.765,271	4.660.261,180	364,441	364,990	0,549	95,6179	0	0,49%			
Rec	341,000	608.766,268	4.660.261,248	364,458	364,998	0,540	95,6179	0	1,15%			
Rec	342,000	608.767,266	4.660.261,317	364,498	365,013	0,515	95,6179	0	1,82%			
Rec	343,000	608.768,264	4.660.261,386	364,532	365,034	0,502	95,6179	0	2,49%			
Rec	344,000	608.769,261	4.660.261,455	364,590	365,063	0,473	95,6179	0	3,15%			
Rec	345,000	608.770,259	4.660.261,524	364,651	365,097	0,446	95,6179	0	3,82%			
Rec	346,000	608.771,256	4.660.261,592	364,686	365,139	0,453	95,6179	0	4,49%			
Rec	347,000	608.772,254	4.660.261,661	364,757	365,187	0,430	95,6179	0	5,15%			
Rec	348,000	608.773,252	4.660.261,730	364,826	365,242	0,416	95,6179	0	5,82%			
Rec	349,000	608.774,249	4.660.261,799	364,922	365,304	0,382	95,6179	0	6,49%			
Rec	350,000	608.775,247	4.660.261,867	365,020	365,372	0,352	95,6179	0	7,15%		V.	
Rec	351,000	608.776,245	4.660.261,936	365,128	365,447	0,319	95,6179	0	7,82%			
Rec	352,000	608.777,242	4.660.262,005	365,244	365,528	0,284	95,6179	0	8,49%			
Rec	353,000	608.778,240	4.660.262,074	365,361	365,616	0,255	95,6179	0	9,15%			
Rec	354,000	608.779,237	4.660.262,143	365,484	365,711	0,227	95,6179	0	9,82%			
Cur	354,675	608.779,910	4.660.262,189	365,577	365,779	0,202	95,6179	400	10,27%	P.S.		
Cur	355,000	608.780,235	4.660.262,211	365,621	365,813	0,192	95,6697	400	10,49%			
Cur	356,000	608.781,233	4.660.262,278	365,759	365,921	0,162	95,8289	400	11,15%			
Cur	357,000	608.782,231	4.660.262,342	365,897	366,036	0,139	95,9880	400	11,82%			
Cur	358,000	608.783,229	4.660.262,404	366,033	366,157	0,124	96,1472	400	12,49%			
Cur	359,000	608.784,227	4.660.262,463	366,167	366,285	0,118	96,3063	400	13,15%			
Cur	360,000	608.785,226	4.660.262,520	366,301	366,420	0,119	96,4655	400	13,82%			
Cur	360,272	608.785,497	4.660.262,535	366,339	366,458	0,119	96,5088	400	14,00%		T.S.	
Cur	361,000	608.786,224	4.660.262,574	366,441	366,560	0,119	96,6246	400	14,00%			
Cur	362,000	608.787,223	4.660.262,626	366,582	366,700	0,118	96,7838	400	14,00%			
Cur	363,000	608.788,222	4.660.262,675	366,722	366,840	0,118	96,9430	400	14,00%			
Cur	364,000	608.789,220	4.660.262,722	366,860	366,980	0,120	97,1021	400	14,00%			
Cur	365,000	608.790,219	4.660.262,766	367,002	367,120	0,118	97,2613	400	14,00%			
Cur	366,000	608.791,219	4.660.262,808	367,159	367,260	0,101	97,4204	400	14,00%			
Cur	367,000	608.792,218	4.660.262,847	367,317	367,400	0,083	97,5796	400	14,00%			
Cur	368,000	608.793,217	4.660.262,884	367,476	367,540	0,064	97,7387	400	14,00%			
Cur	369,000	608.794,217	4.660.262,918	367,636	367,680	0,044	97,8979	400	14,00%			
Cur	370,000	608.795,216	4.660.262,950	367,796	367,820	0,024	98,0570	400	14,00%			
Cur	371,000	608.796,216	4.660.262,979	367,955	367,960	0,005	98,2162	400	14,00%			
Cur	372,000	608.797,215	4.660.263,006	368,093	368,100	0,007	98,3754	400	14,00%			
Cur	373,000	608.798,215	4.660.263,030	368,222	368,240	0,018	98,5345	400	14,00%			
Cur	374,000	608.799,215	4.660.263,052	368,351	368,380	0,029	98,6937	400	14,00%			
Cur	375,000	608.800,215	4.660.263,071	368,481	368,520	0,039	98,8528	400	14,00%			
Cur	376,000	608.801,214	4.660.263,088	368,612	368,660	0,048	99,0120	400	14,00%			
Cur	376,849	608.802,063	4.660.263,100	368,723	368,779	0,056	99,1471	400	14,00%		T.E.	
Cur	377,000	608.802,214	4.660.263,102	368,743	368,800	0,057	99,1711	400	13,85%			
Cur	378,000	608.803,214	4.660.263,114	368,870	368,933	0,063	99,3303	400	12,85%			
Cur	379,000	608.804,214	4.660.263,123	368,993	369,057	0,064	99,4894	400	11,85%			
Cur	380,000	608.805,214	4.660.263,130	369,078	369,170	0,092	99,6486	400	10,85%			
Cur	381,000	608.806,214	4.660.263,134	369,159	369,274	0,115	99,8077	400	9,85%			
Cur	382,000	608.807,214	4.660.263,136	369,238	369,367	0,129	99,9669	400	8,85%			
Cur	383,000	608.808,214	4.660.263,135	369,314	369,451	0,137	100,1261	400	7,85%			
Cur	384,000	608.809,214	4.660.263,132	369,384	369,524	0,140	100,2852	400	6,85%			
Cur	385,000	608.810,214	4.660.263,126	369,448	369,588	0,140	100,4444	400	5,85%			
Cur	386,000	608.811,214	4.660.263,118	369,514	369,641	0,127	100,6035	400	4,85%			
Cur	387,000	608.812,214	4.660.263,107	369,582	369,685	0,103	100,7627	400	3,85%			
Cur	388,000	608.813,214	4.660.263,094	369,630	369,718	0,088	100,9218	400	2,85%			
Cur	389,000	608.814,214	4.660.263,079	369,672	369,742	0,070	101,0810	400	1,85%			
Cur	390,000	608.815,214	4.660.263,060	369,701	369,755	0,054	101,2401	400	0,85%		V.	
Cur	391,000	608.816,213	4.660.263,040	369,711	369,759	0,048	101,3993	400	-0,15%			
Cur	392,000	608.817,213	4.660.263,016	369,712	369,752	0,040	101,5585	400	-1,15%			
Cur	393,000	608.818,213	4.660.262,991	369,692	369,736	0,044	101,7176	400	-2,15%			
Cur	394,000	608.819,212	4.660.262,962	369,641	369,709	0,068	101,8768	400	-3,15%			
Cur	395,000	608.820,212	4.660.262,932	369,586	369,673	0,087	102,0359	400	-4,15%			
Cur	396,000	608.821,211	4.660.262,898	369,539	369,626	0,087	102,1951	400	-5,15%			
Cur	397,000	608.822,211	4.660.262,863	369,476	369,570	0,094	102,3542	400	-6,15%			
Cur	398,000	608.823,210	4.660.262,824	369,396	369,503	0,107	102,5134	400	-7,15%			
Cur	399,000	608.824,209	4.660.262,784	369,308	369,427	0,119	102,6725	400	-8,15%			
Cur	400,000	608.825,208	4.660.262,741	369,213	369,340	0,127	102,8317	400	-9,15%			
Cur	401,000	608.826,207	4.660.262,695	369,110	369,244	0,134	102,9908	400	-10,15%			
Cur	402,000	608.827,206	4.660.262,647	369,008	369,137	0,129	103,1500	400	-11,15%			
Cur	403,000	608.828,205	4.660.262,596	368,893	369,021	0,128	103,3092	400	-12,15%			
Cur	403,151	608.828,356	4.660.262,588	368,876	369,002	0,126	103,3332	400	-12,30%		T.S.	
Cur	404,000	608.829,203	4.660.262,543	368,779	368,898	0,119	103,4683	400	-12,30%			
Cur	405,000	608.830,202	4.660.262,487	368,658	368,775	0,117	103,6275	400	-12,30%			
Cur	406,000	608.831,200	4.660.262,429	368,530	368,652	0,122	103,7866	400	-12,30%			
Cur	407,000	608.832,198	4.660.262,368	368,401	368,529	0,128	103,9458	400	-12,30%			
Cur	408,000	608.833,196	4.660.262,305	368,271	368,406	0,135	104,1049	400	-12,30%			
Cur	409,000	608.834,194	4.660.262,239	368,140	368,283	0,143	104,2641	400	-12,30%			
Cur	410,000	608.835,192	4.660.262,171	368,004	368,159	0,155	104,4232	400	-12,30%			
Cur	411,000	608.836,189	4.660.262,100	367,890	368,036	0,146	104,5824	400	-12,30%			
Cur	412,000	608.837,187	4.660.262,027	367,778	367,913	0,135	104,7415	400	-12,30%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	413,000	608.838,184	4.660.261,952	367,665	367,790	0,125	104,9007	400	-12,30%			
Cur	414,000	608.839,181	4.660.261,873	367,552	367,667	0,115	105,0599	400	-12,30%			
Cur	415,000	608.840,177	4.660.261,793	367,438	367,544	0,106	105,2190	400	-12,30%			
Cur	416,000	608.841,174	4.660.261,710	367,322	367,421	0,099	105,3782	400	-12,30%			
Cur	417,000	608.842,170	4.660.261,624	367,204	367,298	0,094	105,5373	400	-12,30%			
Cur	418,000	608.843,166	4.660.261,536	367,087	367,175	0,088	105,6965	400	-12,30%			
Cur	419,000	608.844,162	4.660.261,445	366,971	367,052	0,081	105,8556	400	-12,30%			
Cur	420,000	608.845,158	4.660.261,352	366,861	366,929	0,068	106,0148	400	-12,30%			
Cur	420,536	608.845,691	4.660.261,301	366,800	366,863	0,063	106,1001	400	-12,30%		T.E.	
Cur	421,000	608.846,153	4.660.261,257	366,748	366,807	0,059	106,1739	400	-12,07%			
Cur	422,000	608.847,149	4.660.261,159	366,636	366,689	0,053	106,3331	400	-11,57%			
Cur	423,000	608.848,143	4.660.261,058	366,524	366,575	0,051	106,4923	400	-11,07%			
Cur	424,000	608.849,138	4.660.260,955	366,411	366,467	0,056	106,6514	400	-10,57%			
Cur	425,000	608.850,133	4.660.260,849	366,299	366,364	0,065	106,8106	400	-10,07%			
Cur	426,000	608.851,127	4.660.260,741	366,186	366,266	0,080	106,9697	400	-9,57%			
Cur	427,000	608.852,121	4.660.260,631	366,073	366,173	0,100	107,1289	400	-9,07%			
Cur	428,000	608.853,114	4.660.260,518	365,970	366,084	0,114	107,2880	400	-8,57%			
Cur	429,000	608.854,107	4.660.260,402	365,887	366,001	0,114	107,4472	400	-8,07%			
Cur	430,000	608.855,100	4.660.260,284	365,807	365,923	0,116	107,6063	400	-7,57%		V.	
Cur	431,000	608.856,093	4.660.260,164	365,729	365,850	0,121	107,7655	400	-7,07%			
Cur	432,000	608.857,086	4.660.260,041	365,647	365,782	0,135	107,9246	400	-6,57%			
Cur	433,000	608.858,078	4.660.259,916	365,566	365,718	0,152	108,0838	400	-6,07%			
Rec	433,279	608.858,355	4.660.259,880	365,544	365,702	0,158	108,1282	0	-5,93%	P.S.		
Rec	434,000	608.859,070	4.660.259,788	365,493	365,660	0,167	108,1282	0	-5,57%			
Rec	435,000	608.860,061	4.660.259,661	365,421	365,607	0,186	108,1282	0	-5,07%			
Rec	436,000	608.861,053	4.660.259,534	365,348	365,559	0,211	108,1282	0	-4,57%			
Rec	437,000	608.862,045	4.660.259,407	365,269	365,515	0,246	108,1282	0	-4,07%			
Rec	438,000	608.863,037	4.660.259,279	365,200	365,477	0,277	108,1282	0	-3,57%			
Rec	439,000	608.864,029	4.660.259,152	365,132	365,444	0,312	108,1282	0	-3,07%			
Rec	439,464	608.864,489	4.660.259,093	365,100	365,431	0,330	108,1282	0	-2,84%		T.S.	
Rec	440,000	608.865,021	4.660.259,025	365,064	365,415	0,351	108,1282	0	-2,84%			
Rec	441,000	608.866,013	4.660.258,997	364,999	365,387	0,388	108,1282	0	-2,84%			
Rec	442,000	608.867,004	4.660.258,770	364,974	365,359	0,385	108,1282	0	-2,84%			
Rec	443,000	608.867,996	4.660.258,643	364,949	365,330	0,381	108,1282	0	-2,84%			
Rec	444,000	608.868,988	4.660.258,515	364,924	365,302	0,378	108,1282	0	-2,84%			
Rec	445,000	608.869,980	4.660.258,388	364,899	365,274	0,375	108,1282	0	-2,84%			
Rec	446,000	608.870,972	4.660.258,261	364,874	365,245	0,371	108,1282	0	-2,84%			
Rec	447,000	608.871,964	4.660.258,133	364,849	365,217	0,368	108,1282	0	-2,84%			
Rec	448,000	608.872,956	4.660.258,006	364,824	365,188	0,364	108,1282	0	-2,84%			
Rec	449,000	608.873,948	4.660.257,879	364,799	365,160	0,361	108,1282	0	-2,84%			
Rec	449,856	608.874,797	4.660.257,770	364,778	365,136	0,358	108,1282	0	-2,84%		T.E.	
Rec	450,000	608.874,939	4.660.257,751	364,774	365,132	0,358	108,1282	0	-2,81%			
Rec	451,000	608.875,931	4.660.257,624	364,750	365,105	0,355	108,1282	0	-2,61%			
Rec	452,000	608.876,923	4.660.257,497	364,726	365,080	0,354	108,1282	0	-2,41%			
Rec	453,000	608.877,915	4.660.257,369	364,704	365,056	0,352	108,1282	0	-2,21%			
Rec	454,000	608.878,907	4.660.257,242	364,683	365,035	0,352	108,1282	0	-2,01%			
Rec	455,000	608.879,899	4.660.257,115	364,663	365,016	0,353	108,1282	0	-1,81%			
Rec	456,000	608.880,891	4.660.256,987	364,647	364,999	0,352	108,1282	0	-1,61%			
Rec	457,000	608.881,882	4.660.256,860	364,637	364,984	0,347	108,1282	0	-1,41%			
Rec	458,000	608.882,874	4.660.256,733	364,634	364,971	0,337	108,1282	0	-1,21%			
Rec	459,000	608.883,866	4.660.256,605	364,638	364,960	0,322	108,1282	0	-1,01%			
Rec	460,000	608.884,858	4.660.256,478	364,648	364,951	0,303	108,1282	0	-0,81%		V.	ODT Ø500 L=7,00m
Rec	461,000	608.885,850	4.660.256,351	364,660	364,944	0,284	108,1282	0	-0,61%			
Rec	462,000	608.886,842	4.660.256,223	364,673	364,939	0,266	108,1282	0	-0,41%			
Rec	463,000	608.887,834	4.660.256,096	364,686	364,936	0,250	108,1282	0	-0,21%			
Rec	464,000	608.888,825	4.660.255,969	364,689	364,935	0,246	108,1282	0	-0,01%			
Rec	465,000	608.889,817	4.660.255,841	364,692	364,936	0,244	108,1282	0	0,19%			
Rec	466,000	608.890,809	4.660.255,714	364,695	364,938	0,243	108,1282	0	0,39%			
Rec	467,000	608.891,801	4.660.255,587	364,698	364,943	0,245	108,1282	0	0,59%			
Rec	468,000	608.892,793	4.660.255,459	364,701	364,950	0,249	108,1282	0	0,79%			
Rec	469,000	608.893,785	4.660.255,332	364,704	364,959	0,255	108,1282	0	0,99%			
Rec	470,000	608.894,777	4.660.255,205	364,707	364,970	0,263	108,1282	0	1,19%			
Rec	470,144	608.894,919	4.660.255,186	364,707	364,972	0,264	108,1282	0	1,22%		T.S.	
Rec	471,000	608.895,768	4.660.255,077	364,710	364,982	0,272	108,1282	0	1,22%			
Rec	472,000	608.896,760	4.660.254,950	364,713	364,994	0,281	108,1282	0	1,22%			
Rec	473,000	608.897,752	4.660.254,823	364,716	365,007	0,291	108,1282	0	1,22%			
Rec	474,000	608.898,744	4.660.254,695	364,736	365,019	0,283	108,1282	0	1,22%			
Rec	474,399	608.899,140	4.660.254,644	364,742	365,024	0,282	108,1282	0	1,22%		T.E.	
Rec	475,000	608.899,736	4.660.254,568	364,751	365,031	0,280	108,1282	0	1,34%			
Rec	476,000	608.900,728	4.660.254,441	364,779	365,046	0,267	108,1282	0	1,54%			
Rec	477,000	608.901,720	4.660.254,313	364,807	365,062	0,255	108,1282	0	1,74%			
Rec	478,000	608.902,711	4.660.254,186	364,836	365,081	0,245	108,1282	0	1,94%			
Rec	479,000	608.903,703	4.660.254,059	364,867	365,101	0,234	108,1282	0	2,14%			
Rec	480,000	608.904,695	4.660.253,931	364,905	365,123	0,218	108,1282	0	2,34%			
Rec	481,000	608.905,687	4.660.253,804	364,942	365,148	0,206	108,1282	0	2,54%			
Rec	482,000	608.906,679	4.660.253,677	364,980	365,174	0,194	108,1282	0	2,74%			
Rec	483,000	608.907,671	4.660.253,549	365,029	365,203	0,174	108,1282	0	2,94%			
Rec	484,000	608.908,663	4.660.253,422	365,090	365,233	0,143	108,1282	0	3,14%			
Rec	485,000	608.909,654	4.660.253,295	365,153	365,265	0,112	108,1282	0	3,34%		V.	
Rec	486,000	608.910,646	4.660.253,167	365,209	365,300	0,091	108,1282	0	3,54%			
Rec	487,000	608.911,638	4.660.253,040	365,265	365,336	0,071	108,1282	0	3,74%			
Rec	488,000	608.912,630	4.660.252,913	365,322	365,375	0,053	108,1282	0	3,94%			
Rec	489,000	608.913,622	4.660.252,785	365,367	365,415	0,048	108,1282	0	4,14%			
Rec	490,000	608.914,614	4.660.252,658	365,415	365,457	0,042	108,1282	0	4,34%			
Rec	491,000	608.915,606	4.660.252,531	365,460	365,502	0,042	108,1282	0	4,54%			
Rec	492,000	608.916,598	4.660.252,403	365,504	365,548	0,044	108,1282	0	4,74%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	493,000	608.917,589	4.660.252,276	365,550	365,597	0,047	108,1282	0	4,94%			
Rec	494,000	608.918,581	4.660.252,149	365,595	365,647	0,052	108,1282	0	5,14%			
Rec	495,000	608.919,573	4.660.252,021	365,642	365,699	0,057	108,1282	0	5,34%			
Rec	495,601	608.920,169	4.660.251,945	365,668	365,732	0,063	108,1282	0	5,46%		T.S.	
Rec	496,000	608.920,565	4.660.251,894	365,686	365,754	0,068	108,1282	0	5,46%			
Rec	497,000	608.921,557	4.660.251,767	365,723	365,808	0,085	108,1282	0	5,46%			
Rec	498,000	608.922,549	4.660.251,639	365,765	365,863	0,098	108,1282	0	5,46%			
Rec	499,000	608.923,541	4.660.251,512	365,808	365,917	0,109	108,1282	0	5,46%			
Rec	500,000	608.924,532	4.660.251,385	365,857	365,972	0,115	108,1282	0	5,46%			
Rec	501,000	608.925,524	4.660.251,257	365,902	366,027	0,125	108,1282	0	5,46%			
Rec	502,000	608.926,516	4.660.251,130	365,949	366,081	0,132	108,1282	0	5,46%			
Rec	503,000	608.927,508	4.660.251,003	365,996	366,136	0,140	108,1282	0	5,46%			
Rec	504,000	608.928,500	4.660.250,875	366,055	366,190	0,135	108,1282	0	5,46%			
Rec	505,000	608.929,492	4.660.250,748	366,115	366,245	0,130	108,1282	0	5,46%			
Rec	506,000	608.930,484	4.660.250,621	366,171	366,300	0,129	108,1282	0	5,46%			
Rec	507,000	608.931,475	4.660.250,493	366,228	366,354	0,126	108,1282	0	5,46%			
Rec	508,000	608.932,467	4.660.250,366	366,286	366,409	0,123	108,1282	0	5,46%			
Rec	509,000	608.933,459	4.660.250,239	366,345	366,463	0,118	108,1282	0	5,46%			
Rec	510,000	608.934,451	4.660.250,111	366,402	366,518	0,116	108,1282	0	5,46%			
Rec	511,000	608.935,443	4.660.249,984	366,465	366,573	0,108	108,1282	0	5,46%			
Rec	512,000	608.936,435	4.660.249,857	366,531	366,627	0,096	108,1282	0	5,46%			
Rec	513,000	608.937,427	4.660.249,729	366,589	366,682	0,093	108,1282	0	5,46%			
Rec	514,000	608.938,418	4.660.249,602	366,662	366,737	0,075	108,1282	0	5,46%			
Rec	515,000	608.939,410	4.660.249,475	366,738	366,791	0,053	108,1282	0	5,46%			
Rec	516,000	608.940,402	4.660.249,347	366,814	366,846	0,032	108,1282	0	5,46%			
Rec	517,000	608.941,394	4.660.249,220	366,883	366,900	0,017	108,1282	0	5,46%			
Rec	518,000	608.942,386	4.660.249,093	366,959	366,955	-0,004	108,1282	0	5,46%			
Rec	519,000	608.943,378	4.660.248,965	367,030	367,010	-0,020	108,1282	0	5,46%			
Rec	520,000	608.944,370	4.660.248,838	367,088	367,064	-0,024	108,1282	0	5,46%			
Rec	520,913	608.945,275	4.660.248,722	367,141	367,114	-0,027	108,1282	0	5,46%		T.E.	
Rec	521,000	608.945,361	4.660.248,711	367,146	367,119	-0,027	108,1282	0	5,46%			
Rec	522,000	608.946,353	4.660.248,583	367,204	367,173	-0,031	108,1282	0	5,45%			
Rec	523,000	608.947,345	4.660.248,456	367,260	367,228	-0,032	108,1282	0	5,44%			
Rec	524,000	608.948,337	4.660.248,329	367,318	367,282	-0,036	108,1282	0	5,43%			
Rec	525,000	608.949,329	4.660.248,201	367,374	367,336	-0,038	108,1282	0	5,42%			
Rec	526,000	608.950,321	4.660.248,074	367,429	367,390	-0,039	108,1282	0	5,41%			
Rec	527,000	608.951,313	4.660.247,947	367,488	367,445	-0,043	108,1282	0	5,40%			
Rec	528,000	608.952,304	4.660.247,819	367,538	367,498	-0,040	108,1282	0	5,39%			
Rec	529,000	608.953,296	4.660.247,692	367,577	367,552	-0,025	108,1282	0	5,38%			
Rec	530,000	608.954,288	4.660.247,565	367,609	367,606	-0,003	108,1282	0	5,37%			
Cur	530,601	608.954,884	4.660.247,488	367,643	367,638	-0,005	108,1282	400	5,36%		V.	
Cur	531,000	608.955,280	4.660.247,437	367,665	367,660	-0,005	108,1918	400	5,36%			
Cur	532,000	608.956,272	4.660.247,308	367,694	367,713	0,019	108,3509	400	5,35%			
Cur	533,000	608.957,263	4.660.247,176	367,729	367,767	0,038	108,5101	400	5,34%			
Cur	534,000	608.958,254	4.660.247,041	367,760	367,820	0,060	108,6692	400	5,33%			
Cur	535,000	608.959,244	4.660.246,904	367,791	367,873	0,082	108,8284	400	5,32%			
Cur	536,000	608.960,235	4.660.246,765	367,821	367,926	0,105	108,9875	400	5,31%			
Cur	537,000	608.961,224	4.660.246,623	367,851	367,979	0,128	109,1467	400	5,30%			
Cur	538,000	608.962,214	4.660.246,478	367,879	368,032	0,153	109,3058	400	5,29%			
Cur	539,000	608.963,203	4.660.246,331	367,905	368,085	0,180	109,4650	400	5,28%			
Cur	540,000	608.964,192	4.660.246,182	367,928	368,138	0,210	109,6241	400	5,27%			
Cur	540,289	608.964,478	4.660.246,138	367,935	368,153	0,218	109,6701	400	5,27%		T.S.	
Cur	541,000	608.965,180	4.660.246,030	367,953	368,191	0,238	109,7833	400	5,27%			
Cur	542,000	608.966,168	4.660.245,876	367,981	368,243	0,262	109,9425	400	5,27%			
Cur	543,000	608.967,156	4.660.245,719	368,010	368,296	0,286	110,1016	400	5,27%			
Cur	544,000	608.968,143	4.660.245,560	368,041	368,349	0,308	110,2608	400	5,27%			
Cur	545,000	608.969,130	4.660.245,398	368,076	368,401	0,325	110,4199	400	5,27%			
Cur	546,000	608.970,116	4.660.245,234	368,113	368,454	0,341	110,5791	400	5,27%			
Cur	547,000	608.971,102	4.660.245,067	368,151	368,507	0,356	110,7382	400	5,27%			
Cur	548,000	608.972,088	4.660.244,898	368,188	368,559	0,371	110,8974	400	5,27%			
Cur	549,000	608.973,073	4.660.244,727	368,224	368,612	0,388	111,0565	400	5,27%			
Cur	550,000	608.974,058	4.660.244,553	368,261	368,665	0,404	111,2157	400	5,27%			
Cur	551,000	608.975,042	4.660.244,376	368,299	368,717	0,418	111,3749	400	5,27%			
Cur	552,000	608.976,026	4.660.244,197	368,330	368,770	0,440	111,5340	400	5,27%			
Cur	553,000	608.977,010	4.660.244,016	368,370	368,823	0,453	111,6932	400	5,27%			
Cur	554,000	608.977,992	4.660.243,832	368,401	368,875	0,474	111,8523	400	5,27%			
Cur	555,000	608.978,975	4.660.243,645	368,433	368,928	0,495	112,0115	400	5,27%			
Cur	556,000	608.979,957	4.660.243,457	368,469	368,981	0,512	112,1706	400	5,27%			
Cur	557,000	608.980,939	4.660.243,265	368,497	369,033	0,536	112,3298	400	5,27%			
Cur	558,000	608.981,920	4.660.243,072	368,522	369,086	0,564	112,4889	400	5,27%			
Cur	559,000	608.982,900	4.660.242,876	368,549	369,139	0,590	112,6481	400	5,27%			
Cur	560,000	608.983,880	4.660.242,677	368,571	369,191	0,620	112,8072	400	5,27%			
Cur	561,000	608.984,860	4.660.242,476	368,597	369,244	0,647	112,9664	400	5,27%			
Cur	562,000	608.985,839	4.660.242,272	368,629	369,297	0,668	113,1256	400	5,27%			
Cur	563,000	608.986,817	4.660.242,067	368,664	369,349	0,685	113,2847	400	5,27%			
Cur	564,000	608.987,796	4.660.241,858	368,697	369,402	0,705	113,4439	400	5,27%			
Cur	565,000	608.988,773	4.660.241,647	368,742	369,455	0,713	113,6030	400	5,27%			
Cur	566,000	608.989,750	4.660.241,434	368,785	369,507	0,722	113,7622	400	5,27%			
Cur	567,000	608.990,726	4.660.241,218	368,833	369,560	0,727	113,9213	400	5,27%			
Cur	568,000	608.991,702	4.660.241,000	368,867	369,613	0,746	114,0805	400	5,27%			
Cur	569,000	608.992,678	4.660.240,780	368,912	369,665	0,753	114,2396	400	5,27%			
Cur	570,000	608.993,653	4.660.240,557	368,949	369,718	0,769	114,3988	400	5,27%			
Cur	571,000	608.994,627	4.660.240,331	368,987	369,771	0,784	114,5580	400	5,27%			
Cur	572,000	608.995,601	4.660.240,103	369,018	369,823	0,805	114,7171	400	5,27%			
Cur	573,000	608.996,574	4.660.239,873	369,046	369,876	0,830	114,8763	400	5,27%			
Rec	573,288	608.996,854	4.660.239,806	369,054	369,891	0,837	114,9221	0	5,27%	P.S.		
Rec	574,000	608.997,546	4.660.239,641	369,072	369,929	0,857	114,9221	0	5,27%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	574,100	608.997,644	4.660.239,617	369,074	369,934	0,860	114,9221	0	5,27%		T.E.	
Rec	575,000	608.998,519	4.660.239,408	369,096	369,980	0,884	114,9221	0	4,97%			
Rec	576,000	608.999,492	4.660.239,176	369,118	370,028	0,910	114,9221	0	4,63%			
Rec	577,000	609.000,464	4.660.238,944	369,136	370,073	0,937	114,9221	0	4,30%			
Rec	578,000	609.001,437	4.660.238,712	369,151	370,114	0,963	114,9221	0	3,97%			
Rec	579,000	609.002,410	4.660.238,479	369,167	370,152	0,985	114,9221	0	3,63%			
Rec	580,000	609.003,382	4.660.238,247	369,180	370,187	1,007	114,9221	0	3,30%			
Rec	581,000	609.004,355	4.660.238,015	369,190	370,218	1,028	114,9221	0	2,97%			
Rec	582,000	609.005,328	4.660.237,783	369,198	370,246	1,048	114,9221	0	2,63%		V.	
Rec	583,000	609.006,300	4.660.237,550	369,203	370,271	1,068	114,9221	0	2,30%			
Rec	584,000	609.007,273	4.660.237,318	369,208	370,292	1,084	114,9221	0	1,97%			
Rec	585,000	609.008,246	4.660.237,086	369,218	370,310	1,092	114,9221	0	1,63%			
Rec	586,000	609.009,218	4.660.236,854	369,225	370,325	1,100	114,9221	0	1,30%			
Rec	587,000	609.010,191	4.660.236,621	369,235	370,336	1,101	114,9221	0	0,97%			
Rec	588,000	609.011,163	4.660.236,389	369,251	370,344	1,093	114,9221	0	0,63%			
Rec	589,000	609.012,136	4.660.236,157	369,278	370,349	1,071	114,9221	0	0,30%			
Rec	589,900	609.013,012	4.660.235,948	369,291	370,350	1,059	114,9221	0	0,00%		T.S.	
Rec	590,000	609.013,109	4.660.235,925	369,293	370,350	1,057	114,9221	0	0,00%			ODT Ø500 L=9,00m
Rec	591,000	609.014,081	4.660.235,692	369,298	370,350	1,052	114,9221	0	0,00%			
Rec	592,000	609.015,054	4.660.235,460	369,320	370,350	1,030	114,9221	0	0,00%			
Rec	593,000	609.016,027	4.660.235,228	369,330	370,350	1,020	114,9221	0	0,00%			
Rec	594,000	609.016,999	4.660.234,996	369,345	370,350	1,005	114,9221	0	0,00%			
Rec	595,000	609.017,972	4.660.234,763	369,354	370,350	0,996	114,9221	0	0,00%			
Rec	596,000	609.018,945	4.660.234,531	369,376	370,350	0,974	114,9221	0	0,00%			
Rec	597,000	609.019,917	4.660.234,299	369,388	370,350	0,962	114,9221	0	0,00%			
Rec	598,000	609.020,890	4.660.234,067	369,407	370,350	0,943	114,9221	0	0,00%			
Rec	599,000	609.021,863	4.660.233,834	369,418	370,350	0,932	114,9221	0	0,00%			
Rec	600,000	609.022,835	4.660.233,602	369,416	370,350	0,934	114,9221	0	0,00%			
Rec	601,000	609.023,808	4.660.233,370	369,418	370,350	0,932	114,9221	0	0,00%			
	601,474	609.024,269	4.660.233,260	369,417	370,350	0,933	114,9221		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	607.700,999	4.659.977,124	357,348	357,348	0,000	2,2632	0	1,90%			
Rec	1,000	607.701,035	4.659.978,124	357,334	357,367	0,033	2,2632	0	1,90%			ODT Ø500 L=10,00m
Rec	2,000	607.701,070	4.659.979,123	357,319	357,386	0,067	2,2632	0	1,90%			
Rec	3,000	607.701,106	4.659.980,122	357,304	357,405	0,101	2,2632	0	1,90%			
Rec	4,000	607.701,141	4.659.981,122	357,289	357,424	0,135	2,2632	0	1,90%			
Rec	5,000	607.701,177	4.659.982,121	357,275	357,443	0,168	2,2632	0	1,90%			
Rec	6,000	607.701,213	4.659.983,120	357,260	357,462	0,202	2,2632	0	1,90%			
Rec	7,000	607.701,248	4.659.984,120	357,245	357,481	0,236	2,2632	0	1,90%			
Rec	8,000	607.701,284	4.659.985,119	357,230	357,500	0,270	2,2632	0	1,90%			
Rec	9,000	607.701,319	4.659.986,119	357,216	357,519	0,303	2,2632	0	1,90%			
Rec	10,000	607.701,355	4.659.987,118	357,211	357,538	0,327	2,2632	0	1,90%			
Cur	10,944	607.701,388	4.659.988,061	357,210	357,556	0,346	2,2632	-50	1,90%	P.S.		
Cur	11,000	607.701,390	4.659.988,117	357,210	357,557	0,347	2,1914	-50	1,90%			
Cur	12,000	607.701,415	4.659.989,117	357,211	357,576	0,365	0,9181	-50	1,90%			
Cur	13,000	607.701,419	4.659.990,117	357,216	357,595	0,379	399,6449	-50	1,90%			
Cur	14,000	607.701,403	4.659.991,117	357,223	357,614	0,391	398,3716	-50	1,90%			
Cur	15,000	607.701,368	4.659.992,116	357,229	357,634	0,405	397,0984	-50	1,90%			
Cur	16,000	607.701,312	4.659.993,115	357,235	357,653	0,418	395,8252	-50	1,90%			
Cur	17,000	607.701,237	4.659.994,112	357,242	357,672	0,430	394,5519	-50	1,90%			
Cur	18,000	607.701,141	4.659.995,107	357,249	357,691	0,442	393,2787	-50	1,90%			
Cur	19,000	607.701,026	4.659.996,100	357,257	357,710	0,453	392,0054	-50	1,90%			
Cur	19,483	607.699,963	4.659.996,579	357,261	357,719	0,458	391,3905	-50	1,90%		T.E.	
Cur	20,000	607.700,891	4.659.997,091	357,266	357,729	0,463	390,7322	-50	1,85%			
Cur	21,000	607.700,736	4.659.998,079	357,275	357,747	0,472	389,4590	-50	1,75%			
Cur	22,000	607.700,561	4.659.999,064	357,285	357,764	0,479	388,1857	-50	1,65%			
Cur	23,000	607.700,367	4.660.000,045	357,295	357,780	0,485	386,9125	-50	1,55%			
Cur	24,000	607.700,153	4.660.001,022	357,308	357,795	0,487	385,6392	-50	1,45%			
Cur	25,000	607.699,920	4.660.001,994	357,321	357,809	0,488	384,3660	-50	1,35%			
Cur	26,000	607.699,667	4.660.002,961	357,331	357,822	0,491	383,0928	-50	1,25%			
Cur	27,000	607.699,395	4.660.003,924	357,345	357,834	0,489	381,8195	-50	1,15%			
Cur	28,000	607.699,103	4.660.004,880	357,358	357,845	0,487	380,5463	-50	1,05%			
Cur	29,000	607.698,793	4.660.005,831	357,375	357,855	0,480	379,2730	-50	0,95%		V.	
Cur	30,000	607.698,464	4.660.006,775	357,393	357,864	0,471	377,9998	-50	0,85%			
Cur	31,000	607.698,116	4.660.007,713	357,411	357,872	0,461	376,7266	-50	0,75%			
Cur	32,000	607.697,749	4.660.008,643	357,430	357,879	0,449	375,4533	-50	0,65%			
Cur	33,000	607.697,364	4.660.009,566	357,449	357,885	0,436	374,1801	-50	0,55%			
Cur	34,000	607.696,960	4.660.010,480	357,469	357,890	0,421	372,9068	-50	0,45%			
Cur	35,000	607.696,538	4.660.011,387	357,490	357,894	0,404	371,6336	-50	0,35%			
Cur	36,000	607.696,098	4.660.012,285	357,511	357,897	0,386	370,3604	-50	0,25%			
Rec	36,567	607.695,841	4.660.012,790	357,523	357,898	0,375	369,6388	0	0,20%	P.S.		
Rec	37,000	607.695,642	4.660.013,175	357,532	357,899	0,367	369,6388	0	0,15%			
Rec	38,000	607.695,183	4.660.014,063	357,553	357,900	0,347	369,6388	0	0,05%			
Rec	38,517	607.694,945	4.660.014,523	357,564	357,900	0,336	369,6388	0	0,00%		T.S.	
Rec	39,000	607.694,724	4.660.014,952	357,575	357,900	0,325	369,6388	0	0,00%			
Rec	40,000	607.694,265	4.660.015,840	357,596	357,900	0,304	369,6388	0	0,00%			
Rec	41,000	607.693,806	4.660.016,729	357,617	357,900	0,283	369,6388	0	0,00%			
Rec	42,000	607.693,347	4.660.017,617	357,639	357,900	0,261	369,6388	0	0,00%			
Rec	43,000	607.692,888	4.660.018,505	357,660	357,900	0,240	369,6388	0	0,00%			
Rec	44,000	607.692,428	4.660.019,394	357,680	357,900	0,220	369,6388	0	0,00%			
Rec	45,000	607.691,969	4.660.020,282	357,684	357,900	0,216	369,6388	0	0,00%			
Rec	46,000	607.691,510	4.660.021,171	357,683	357,900	0,217	369,6388	0	0,00%			
Rec	47,000	607.691,051	4.660.022,059	357,683	357,900	0,217	369,6388	0	0,00%			
Rec	48,000	607.690,592	4.660.022,948	357,712	357,900	0,188	369,6388	0	0,00%			
	48,178	607.690,511	4.660.023,105	357,717	357,900	0,183	369,6388		0,00%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	607.109,873	4.659.783,702	366,834	366,834	0,000	358,7405	0	14,00%			
Rec	1,000	607.109,269	4.659.784,499	366,988	366,974	-0,014	358,7405	0	14,00%			ODT Ø500 L=7,25m
Rec	2,000	607.108,666	4.659.785,296	367,189	367,114	-0,075	358,7405	0	14,00%			
Rec	2,222	607.108,532	4.659.785,473	367,222	367,145	-0,077	358,7405	0	14,00%		T.E.	
Rec	3,000	607.108,062	4.659.786,094	367,337	367,252	-0,085	358,7405	0	13,38%			
Rec	4,000	607.107,458	4.659.786,891	367,388	367,381	-0,007	358,7405	0	12,58%			
Rec	5,000	607.106,855	4.659.787,688	367,461	367,503	0,042	358,7405	0	11,78%			
Rec	6,000	607.106,251	4.659.788,485	367,566	367,617	0,051	358,7405	0	10,98%			
Rec	7,000	607.105,647	4.659.789,283	367,672	367,723	0,051	358,7405	0	10,18%			
Rec	8,000	607.105,044	4.659.790,080	367,733	367,820	0,087	358,7405	0	9,38%			
Rec	9,000	607.104,440	4.659.790,877	367,794	367,910	0,116	358,7405	0	8,58%			
Rec	10,000	607.103,836	4.659.791,674	367,857	367,992	0,135	358,7405	0	7,78%		V.	
Rec	11,000	607.103,233	4.659.792,471	367,918	368,066	0,148	358,7405	0	6,98%			
Rec	12,000	607.102,629	4.659.793,269	367,977	368,132	0,155	358,7405	0	6,18%			
Rec	13,000	607.102,025	4.659.794,066	368,026	368,189	0,163	358,7405	0	5,38%			
Rec	14,000	607.101,422	4.659.794,863	368,070	368,239	0,169	358,7405	0	4,58%			
Rec	15,000	607.100,818	4.659.795,660	368,105	368,281	0,176	358,7405	0	3,78%			
Rec	16,000	607.100,214	4.659.796,458	368,141	368,315	0,174	358,7405	0	2,98%			
Rec	17,000	607.099,611	4.659.797,255	368,174	368,340	0,166	358,7405	0	2,18%			
Rec	17,778	607.099,141	4.659.797,875	368,193	368,355	0,161	358,7405	0	1,56%		T.S.	
Rec	18,000	607.099,007	4.659.798,052	368,199	368,358	0,159	358,7405	0	1,55%			
Rec	19,000	607.098,403	4.659.798,849	368,216	368,374	0,158	358,7405	0	1,55%			
Rec	20,000	607.097,800	4.659.799,647	368,241	368,389	0,148	358,7405	0	1,55%			
Rec	21,000	607.097,196	4.659.800,444	368,262	368,405	0,143	358,7405	0	1,55%			
Rec	22,000	607.096,592	4.659.801,241	368,288	368,421	0,133	358,7405	0	1,55%			
Rec	23,000	607.095,989	4.659.802,038	368,320	368,436	0,116	358,7405	0	1,55%			
Rec	24,000	607.095,385	4.659.802,835	368,353	368,452	0,099	358,7405	0	1,55%			
Rec	25,000	607.094,781	4.659.803,633	368,392	368,467	0,075	358,7405	0	1,55%			
Rec	26,000	607.094,178	4.659.804,430	368,429	368,483	0,054	358,7405	0	1,55%			
Rec	27,000	607.093,574	4.659.805,227	368,458	368,498	0,040	358,7405	0	1,55%			
Rec	28,000	607.092,970	4.659.806,024	368,491	368,514	0,023	358,7405	0	1,55%			
Rec	29,000	607.092,366	4.659.806,822	368,520	368,529	0,009	358,7405	0	1,55%			
Rec	30,000	607.091,763	4.659.807,619	368,555	368,545	-0,010	358,7405	0	1,55%			
Rec	31,000	607.091,159	4.659.808,416	368,581	368,561	-0,020	358,7405	0	1,55%			
Rec	32,000	607.090,555	4.659.809,213	368,605	368,576	-0,029	358,7405	0	1,55%			
Rec	33,000	607.089,952	4.659.810,011	368,626	368,592	-0,034	358,7405	0	1,55%			
Rec	34,000	607.089,348	4.659.810,808	368,647	368,607	-0,040	358,7405	0	1,55%			
Rec	35,000	607.088,744	4.659.811,605	368,665	368,623	-0,042	358,7405	0	1,55%			
Rec	36,000	607.088,141	4.659.812,402	368,685	368,638	-0,047	358,7405	0	1,55%			
Rec	37,000	607.087,537	4.659.813,199	368,697	368,654	-0,043	358,7405	0	1,55%			
Rec	38,000	607.086,933	4.659.813,997	368,716	368,669	-0,047	358,7405	0	1,55%			
Rec	39,000	607.086,330	4.659.814,794	368,728	368,685	-0,043	358,7405	0	1,55%			
Rec	40,000	607.085,726	4.659.815,591	368,735	368,700	-0,035	358,7405	0	1,55%			
Rec	41,000	607.085,122	4.659.816,388	368,745	368,716	-0,029	358,7405	0	1,55%			
Rec	42,000	607.084,519	4.659.817,186	368,753	368,732	-0,021	358,7405	0	1,55%			
Rec	43,000	607.083,915	4.659.817,983	368,765	368,747	-0,018	358,7405	0	1,55%			
Rec	44,000	607.083,311	4.659.818,780	368,776	368,763	-0,013	358,7405	0	1,55%			
Rec	45,000	607.082,708	4.659.819,577	368,789	368,778	-0,011	358,7405	0	1,55%			
Rec	46,000	607.082,104	4.659.820,375	368,806	368,794	-0,012	358,7405	0	1,55%			
Rec	47,000	607.081,500	4.659.821,172	368,820	368,809	-0,011	358,7405	0	1,55%			
Rec	48,000	607.080,897	4.659.821,969	368,837	368,825	-0,012	358,7405	0	1,55%			
Rec	49,000	607.080,293	4.659.822,766	368,853	368,840	-0,013	358,7405	0	1,55%			
Rec	50,000	607.079,689	4.659.823,563	368,867	368,856	-0,011	358,7405	0	1,55%			
Rec	51,000	607.079,086	4.659.824,361	368,887	368,871	-0,016	358,7405	0	1,55%			
Rec	52,000	607.078,482	4.659.825,158	368,902	368,887	-0,015	358,7405	0	1,55%			
Rec	53,000	607.077,878	4.659.825,955	368,922	368,903	-0,019	358,7405	0	1,55%			
Rec	54,000	607.077,275	4.659.826,752	368,941	368,918	-0,023	358,7405	0	1,55%			
Rec	55,000	607.076,671	4.659.827,550	368,963	368,934	-0,029	358,7405	0	1,55%			
Rec	56,000	607.076,067	4.659.828,347	368,984	368,949	-0,035	358,7405	0	1,55%			
Rec	57,000	607.075,464	4.659.829,144	369,003	368,965	-0,038	358,7405	0	1,55%			
Rec	58,000	607.074,860	4.659.829,941	369,018	368,980	-0,038	358,7405	0	1,55%			
Rec	59,000	607.074,256	4.659.830,739	369,032	368,996	-0,036	358,7405	0	1,55%			
Rec	60,000	607.073,653	4.659.831,536	369,047	369,011	-0,036	358,7405	0	1,55%			
Rec	61,000	607.073,049	4.659.832,333	369,062	369,027	-0,035	358,7405	0	1,55%			
Rec	62,000	607.072,445	4.659.833,130	369,077	369,042	-0,035	358,7405	0	1,55%			
Rec	63,000	607.071,842	4.659.833,927	369,090	369,058	-0,032	358,7405	0	1,55%			
Rec	64,000	607.071,238	4.659.834,725	369,101	369,074	-0,027	358,7405	0	1,55%			
Rec	65,000	607.070,634	4.659.835,522	369,112	369,089	-0,023	358,7405	0	1,55%			
Rec	66,000	607.070,031	4.659.836,319	369,122	369,105	-0,017	358,7405	0	1,55%			
Rec	67,000	607.069,427	4.659.837,116	369,132	369,120	-0,012	358,7405	0	1,55%			
Rec	68,000	607.068,823	4.659.837,914	369,152	369,136	-0,016	358,7405	0	1,55%			
Rec	69,000	607.068,219	4.659.838,711	369,171	369,151	-0,020	358,7405	0	1,55%			
Rec	70,000	607.067,616	4.659.839,508	369,190	369,167	-0,023	358,7405	0	1,55%			
Rec	71,000	607.067,012	4.659.840,305	369,207	369,182	-0,025	358,7405	0	1,55%			
Rec	72,000	607.066,408	4.659.841,103	369,222	369,198	-0,024	358,7405	0	1,55%			
Rec	73,000	607.065,805	4.659.841,900	369,235	369,214	-0,021	358,7405	0	1,55%			
Rec	74,000	607.065,201	4.659.842,697	369,249	369,229	-0,020	358,7405	0	1,55%			
Rec	75,000	607.064,597	4.659.843,494	369,269	369,245	-0,024	358,7405	0	1,55%			
Rec	76,000	607.063,994	4.659.844,291	369,285	369,260	-0,025	358,7405	0	1,55%			
Rec	77,000	607.063,390	4.659.845,089	369,300	369,276	-0,024	358,7405	0	1,55%			
Rec	78,000	607.062,786	4.659.845,886	369,315	369,291	-0,024	358,7405	0	1,55%			
Rec	79,000	607.062,183	4.659.846,683	369,330	369,307	-0,023	358,7405	0	1,55%			
Rec	80,000	607.061,579	4.659.847,480	369,345	369,322	-0,023	358,7405	0	1,55%			
Rec	81,000	607.060,975	4.659.848,278	369,360	369,338	-0,022	358,7405	0	1,55%			
Rec	82,000	607.060,372	4.659.849,075	369,375	369,353	-0,022	358,7405	0	1,55%			
Rec	83,000	607.059,768	4.659.849,872	369,391	369,369	-0,022	358,7405	0	1,55%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	84,000	607.059,164	4.659.850,669	369,408	369,385	-0,023	358,7405	0	1,55%			
Rec	85,000	607.058,561	4.659.851,467	369,430	369,400	-0,030	358,7405	0	1,55%			
Rec	86,000	607.057,957	4.659.852,264	369,447	369,416	-0,031	358,7405	0	1,55%			
Rec	87,000	607.057,353	4.659.853,061	369,454	369,431	-0,023	358,7405	0	1,55%			
Cur	87,040	607.057,329	4.659.853,093	369,454	369,432	-0,022	358,7405	-200	1,55%	P.S.		
Cur	88,000	607.056,748	4.659.853,857	369,459	369,447	-0,012	358,4350	-200	1,55%			
Cur	89,000	607.056,138	4.659.854,650	369,469	369,462	-0,007	358,1167	-200	1,55%			
Cur	90,000	607.055,525	4.659.855,439	369,476	369,478	0,002	357,7983	-200	1,55%			
Cur	91,000	607.054,908	4.659.856,226	369,486	369,493	0,007	357,4800	-200	1,55%			
Cur	92,000	607.054,286	4.659.857,010	369,495	369,509	0,014	357,1617	-200	1,55%			
Cur	93,000	607.053,661	4.659.857,790	369,504	369,524	0,020	356,8434	-200	1,55%			
Cur	94,000	607.053,032	4.659.858,567	369,522	369,540	0,018	356,5251	-200	1,55%			
Cur	95,000	607.052,399	4.659.859,342	369,542	369,556	0,014	356,2068	-200	1,55%			
Cur	96,000	607.051,762	4.659.860,113	369,575	369,571	-0,004	355,8885	-200	1,55%			
Cur	97,000	607.051,121	4.659.860,880	369,602	369,587	-0,015	355,5702	-200	1,55%			
Cur	98,000	607.050,477	4.659.861,645	369,614	369,602	-0,012	355,2519	-200	1,55%			
Cur	99,000	607.049,829	4.659.862,406	369,637	369,618	-0,019	354,9336	-200	1,55%			
Cur	100,000	607.049,176	4.659.863,164	369,660	369,633	-0,027	354,6152	-200	1,55%			
Cur	101,000	607.048,520	4.659.863,919	369,679	369,649	-0,030	354,2969	-200	1,55%			
Cur	102,000	607.047,861	4.659.864,671	369,704	369,664	-0,040	353,9786	-200	1,55%			
Cur	103,000	607.047,197	4.659.865,419	369,728	369,680	-0,048	353,6603	-200	1,55%			
Cur	103,045	607.047,167	4.659.865,453	369,729	369,681	-0,048	353,6460	-200	1,55%		T.E.	
Cur	104,000	607.046,530	4.659.866,164	369,745	369,695	-0,050	353,3420	-200	1,49%			
Cur	105,000	607.045,859	4.659.866,905	369,765	369,710	-0,055	353,0237	-200	1,42%			
Cur	106,000	607.045,185	4.659.867,644	369,778	369,724	-0,054	352,7054	-200	1,36%			
Cur	107,000	607.044,506	4.659.868,378	369,790	369,737	-0,053	352,3871	-200	1,29%			
Cur	108,000	607.043,825	4.659.869,110	369,800	369,750	-0,050	352,0688	-200	1,22%			
Cur	109,000	607.043,139	4.659.869,838	369,809	369,761	-0,048	351,7505	-200	1,16%			
Cur	110,000	607.042,450	4.659.870,562	369,816	369,773	-0,043	351,4321	-200	1,09%			
Cur	111,000	607.041,757	4.659.871,284	369,822	369,783	-0,039	351,1138	-200	1,02%			
Cur	112,000	607.041,060	4.659.872,001	369,825	369,793	-0,032	350,7955	-200	0,96%			
Rec	112,714	607.040,561	4.659.872,511	369,831	369,800	-0,031	350,5682	0	0,91%	P.S.	V.	
Rec	113,000	607.040,361	4.659.872,715	369,833	369,802	-0,031	350,5682	0	0,89%			
Rec	114,000	607.039,660	4.659.873,429	369,844	369,811	-0,033	350,5682	0	0,82%			
Rec	115,000	607.038,959	4.659.874,142	369,859	369,819	-0,040	350,5682	0	0,76%			
Rec	116,000	607.038,258	4.659.874,856	369,870	369,826	-0,044	350,5682	0	0,69%			
Rec	117,000	607.037,558	4.659.875,569	369,881	369,833	-0,048	350,5682	0	0,62%			
Rec	118,000	607.036,857	4.659.876,282	369,887	369,839	-0,048	350,5682	0	0,56%			
Rec	119,000	607.036,156	4.659.876,996	369,893	369,844	-0,049	350,5682	0	0,49%			
Rec	120,000	607.035,455	4.659.877,709	369,892	369,848	-0,044	350,5682	0	0,42%			
Rec	121,000	607.034,754	4.659.878,423	369,894	369,852	-0,042	350,5682	0	0,36%			
Rec	122,000	607.034,054	4.659.879,136	369,892	369,856	-0,036	350,5682	0	0,29%			
Rec	122,383	607.033,785	4.659.879,409	369,894	369,857	-0,038	350,5682	0	0,27%		T.S.	
Rec	123,000	607.033,353	4.659.879,849	369,898	369,858	-0,040	350,5682	0	0,27%			
Rec	124,000	607.032,652	4.659.880,563	369,905	369,861	-0,044	350,5682	0	0,27%			
Rec	125,000	607.031,951	4.659.881,276	369,908	369,864	-0,044	350,5682	0	0,27%			
Rec	126,000	607.031,251	4.659.881,989	369,911	369,866	-0,045	350,5682	0	0,27%			
Rec	127,000	607.030,550	4.659.882,703	369,911	369,869	-0,042	350,5682	0	0,27%			
Rec	128,000	607.029,849	4.659.883,416	369,914	369,872	-0,042	350,5682	0	0,27%			
Rec	129,000	607.029,148	4.659.884,130	369,916	369,874	-0,042	350,5682	0	0,27%			
Rec	130,000	607.028,448	4.659.884,843	369,918	369,877	-0,041	350,5682	0	0,27%			
Rec	131,000	607.027,747	4.659.885,556	369,919	369,880	-0,039	350,5682	0	0,27%			
Rec	132,000	607.027,046	4.659.886,270	369,926	369,882	-0,044	350,5682	0	0,27%			
Rec	133,000	607.026,345	4.659.886,983	369,937	369,885	-0,052	350,5682	0	0,27%			
Rec	134,000	607.025,645	4.659.887,697	369,954	369,888	-0,066	350,5682	0	0,27%			
Rec	135,000	607.024,944	4.659.888,410	369,970	369,890	-0,080	350,5682	0	0,27%			
Rec	136,000	607.024,243	4.659.889,123	369,978	369,893	-0,085	350,5682	0	0,27%			
Rec	137,000	607.023,542	4.659.889,837	369,977	369,896	-0,081	350,5682	0	0,27%			
Rec	138,000	607.022,841	4.659.890,550	369,972	369,898	-0,074	350,5682	0	0,27%			
Rec	139,000	607.022,141	4.659.891,264	369,972	369,901	-0,071	350,5682	0	0,27%			
Rec	140,000	607.021,440	4.659.891,977	369,977	369,903	-0,074	350,5682	0	0,27%			
Rec	141,000	607.020,739	4.659.892,690	369,988	369,906	-0,082	350,5682	0	0,27%			
Rec	142,000	607.020,038	4.659.893,404	369,995	369,909	-0,086	350,5682	0	0,27%			
Rec	143,000	607.019,338	4.659.894,117	370,000	369,911	-0,089	350,5682	0	0,27%			
Rec	144,000	607.018,637	4.659.894,831	370,006	369,914	-0,092	350,5682	0	0,27%			
Rec	145,000	607.017,936	4.659.895,544	370,012	369,917	-0,095	350,5682	0	0,27%			
Rec	146,000	607.017,235	4.659.896,257	370,020	369,919	-0,101	350,5682	0	0,27%			
Rec	147,000	607.016,535	4.659.896,971	370,028	369,922	-0,106	350,5682	0	0,27%			
Rec	148,000	607.015,834	4.659.897,684	370,036	369,925	-0,111	350,5682	0	0,27%			
Rec	149,000	607.015,133	4.659.898,397	370,042	369,927	-0,115	350,5682	0	0,27%			
Rec	150,000	607.014,432	4.659.899,111	370,045	369,930	-0,115	350,5682	0	0,27%			
Rec	151,000	607.013,731	4.659.899,824	370,049	369,933	-0,116	350,5682	0	0,27%			
Rec	152,000	607.013,031	4.659.900,538	370,055	369,935	-0,120	350,5682	0	0,27%			
Rec	153,000	607.012,330	4.659.901,251	370,057	369,938	-0,119	350,5682	0	0,27%			
Rec	154,000	607.011,629	4.659.901,964	370,058	369,941	-0,117	350,5682	0	0,27%			
Rec	155,000	607.010,928	4.659.902,678	370,051	369,943	-0,108	350,5682	0	0,27%			
Rec	156,000	607.010,228	4.659.903,391	370,044	369,946	-0,098	350,5682	0	0,27%			
Rec	157,000	607.009,527	4.659.904,105	370,036	369,949	-0,087	350,5682	0	0,27%			
Rec	158,000	607.008,826	4.659.904,818	370,032	369,951	-0,081	350,5682	0	0,27%			
Rec	159,000	607.008,125	4.659.905,531	370,030	369,954	-0,076	350,5682	0	0,27%			
Rec	160,000	607.007,425	4.659.906,245	370,028	369,957	-0,071	350,5682	0	0,27%			
Rec	161,000	607.006,724	4.659.906,958	370,026	369,959	-0,067	350,5682	0	0,27%			
Rec	162,000	607.006,023	4.659.907,672	370,024	369,962	-0,062	350,5682	0	0,27%			
Rec	163,000	607.005,322	4.659.908,385	370,022	369,965	-0,057	350,5682	0	0,27%			
Rec	164,000	607.004,621	4.659.909,098	370,020	369,967	-0,053	350,5682	0	0,27%			
Rec	165,000	607.003,921	4.659.909,812	370,018	369,970	-0,048	350,5682	0	0,27%			
Rec	166,000	607.003,220	4.659.910,525	370,014	369,973	-0,041	350,5682	0	0,27%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	167,000	607.002,519	4.659.911,238	370,005	369,975	-0,030	350,5682	0	0,27%			
Rec	168,000	607.001,818	4.659.911,952	369,998	369,978	-0,020	350,5682	0	0,27%			
Rec	169,000	607.001,118	4.659.912,665	369,993	369,981	-0,012	350,5682	0	0,27%			
Rec	170,000	607.000,417	4.659.913,379	369,988	369,983	-0,005	350,5682	0	0,27%			
Rec	171,000	606.999,716	4.659.914,092	369,984	369,986	0,002	350,5682	0	0,27%			
Rec	172,000	606.999,015	4.659.914,805	369,981	369,988	0,007	350,5682	0	0,27%			
Rec	173,000	606.998,315	4.659.915,519	369,980	369,991	0,011	350,5682	0	0,27%			
Rec	174,000	606.997,614	4.659.916,232	369,978	369,994	0,016	350,5682	0	0,27%			
Rec	175,000	606.996,913	4.659.916,946	369,976	369,996	0,020	350,5682	0	0,27%			
Rec	175,861	606.996,310	4.659.917,560	369,973	369,999	0,026	350,5682	0	0,27%		T.E.	
Rec	176,000	606.996,212	4.659.917,659	369,972	369,999	0,027	350,5682	0	0,28%			
Rec	177,000	606.995,512	4.659.918,372	369,969	370,002	0,033	350,5682	0	0,38%			
Rec	178,000	606.994,811	4.659.919,086	369,971	370,007	0,036	350,5682	0	0,48%			
Rec	179,000	606.994,110	4.659.919,799	369,974	370,012	0,038	350,5682	0	0,58%			
Rec	180,000	606.993,409	4.659.920,513	369,979	370,018	0,039	350,5682	0	0,68%			
Rec	181,000	606.992,708	4.659.921,226	369,984	370,026	0,042	350,5682	0	0,78%			
Rec	182,000	606.992,008	4.659.921,939	369,989	370,034	0,045	350,5682	0	0,88%			
Rec	183,000	606.991,307	4.659.922,653	369,995	370,043	0,048	350,5682	0	0,98%			
Rec	184,000	606.990,606	4.659.923,366	370,002	370,053	0,051	350,5682	0	1,08%			
Rec	185,000	606.989,905	4.659.924,079	370,023	370,065	0,042	350,5682	0	1,18%		V.	
Rec	186,000	606.989,205	4.659.924,793	370,047	370,077	0,030	350,5682	0	1,28%			
Rec	187,000	606.988,504	4.659.925,506	370,082	370,090	0,008	350,5682	0	1,38%			
Rec	188,000	606.987,803	4.659.926,220	370,112	370,105	-0,007	350,5682	0	1,48%			
Rec	189,000	606.987,102	4.659.926,933	370,140	370,120	-0,020	350,5682	0	1,58%			
Rec	190,000	606.986,402	4.659.927,646	370,166	370,136	-0,030	350,5682	0	1,68%			
Rec	191,000	606.985,701	4.659.928,360	370,191	370,154	-0,037	350,5682	0	1,78%			
Rec	192,000	606.985,000	4.659.929,073	370,215	370,172	-0,043	350,5682	0	1,88%			
Rec	193,000	606.984,299	4.659.929,787	370,233	370,191	-0,042	350,5682	0	1,98%			
Rec	194,000	606.983,598	4.659.930,500	370,259	370,211	-0,048	350,5682	0	2,08%			
Rec	194,139	606.983,501	4.659.930,599	370,262	370,214	-0,047	350,5682	0	2,09%		T.S.	
Rec	195,000	606.982,898	4.659.931,213	370,279	370,232	-0,047	350,5682	0	2,09%			
Rec	196,000	606.982,197	4.659.931,927	370,305	370,253	-0,052	350,5682	0	2,09%			
Rec	197,000	606.981,496	4.659.932,640	370,333	370,274	-0,059	350,5682	0	2,09%			
Rec	198,000	606.980,795	4.659.933,354	370,357	370,295	-0,062	350,5682	0	2,09%			
Rec	199,000	606.980,095	4.659.934,067	370,368	370,316	-0,052	350,5682	0	2,09%			
Rec	200,000	606.979,394	4.659.934,780	370,385	370,337	-0,048	350,5682	0	2,09%			
Rec	201,000	606.978,693	4.659.935,494	370,393	370,358	-0,035	350,5682	0	2,09%			
Rec	202,000	606.977,992	4.659.936,207	370,413	370,379	-0,034	350,5682	0	2,09%			
Rec	203,000	606.977,292	4.659.936,921	370,416	370,400	-0,016	350,5682	0	2,09%			
Rec	204,000	606.976,591	4.659.937,634	370,427	370,421	-0,006	350,5682	0	2,09%			
Rec	205,000	606.975,890	4.659.938,347	370,446	370,442	-0,004	350,5682	0	2,09%			
Rec	206,000	606.975,189	4.659.939,061	370,461	370,463	0,002	350,5682	0	2,09%			
Rec	207,000	606.974,489	4.659.939,774	370,475	370,484	0,009	350,5682	0	2,09%			
Rec	208,000	606.973,788	4.659.940,487	370,488	370,504	0,016	350,5682	0	2,09%			
Rec	209,000	606.973,087	4.659.941,201	370,500	370,525	0,025	350,5682	0	2,09%			
Rec	210,000	606.972,386	4.659.941,914	370,511	370,546	0,035	350,5682	0	2,09%			
Rec	211,000	606.971,685	4.659.942,628	370,522	370,567	0,045	350,5682	0	2,09%			
Rec	212,000	606.970,985	4.659.943,341	370,533	370,588	0,055	350,5682	0	2,09%			
Rec	213,000	606.970,284	4.659.944,054	370,553	370,609	0,056	350,5682	0	2,09%			
Rec	214,000	606.969,583	4.659.944,768	370,568	370,630	0,062	350,5682	0	2,09%			
Rec	215,000	606.968,882	4.659.945,481	370,590	370,651	0,061	350,5682	0	2,09%			
Rec	216,000	606.968,182	4.659.946,195	370,624	370,672	0,048	350,5682	0	2,09%			
Rec	217,000	606.967,481	4.659.946,908	370,658	370,693	0,035	350,5682	0	2,09%			
Cur	217,727	606.966,971	4.659.947,427	370,683	370,708	0,025	350,5682	-207,25	2,09%	P.S.	P.S.	
Cur	218,000	606.966,780	4.659.947,621	370,692	370,714	0,022	350,4844	-207,25	2,09%			
Cur	219,000	606.966,077	4.659.948,332	370,726	370,735	0,009	350,1772	-207,25	2,09%			
Cur	220,000	606.965,370	4.659.949,039	370,759	370,756	-0,003	349,8700	-207,25	2,09%			
Cur	220,942	606.964,701	4.659.949,703	370,776	370,775	-0,001	349,5807	-207,25	2,09%		T.E.	
Cur	221,000	606.964,659	4.659.949,743	370,777	370,777	0,000	349,5628	-207,25	2,12%			
Cur	222,000	606.963,946	4.659.950,444	370,792	370,800	0,008	349,2557	-207,25	2,52%			
Cur	223,000	606.963,229	4.659.951,141	370,807	370,827	0,020	348,9485	-207,25	2,92%			
Cur	224,000	606.962,508	4.659.951,834	370,828	370,858	0,030	348,6413	-207,25	3,32%			
Cur	225,000	606.961,785	4.659.952,525	370,851	370,893	0,042	348,3342	-207,25	3,72%			
Cur	226,000	606.961,058	4.659.953,211	370,874	370,932	0,058	348,0270	-207,25	4,12%			
Cur	227,000	606.960,327	4.659.953,894	370,897	370,976	0,079	347,7198	-207,25	4,52%			
Cur	228,000	606.959,594	4.659.954,574	370,920	371,023	0,103	347,4126	-207,25	4,92%			
Cur	229,000	606.958,857	4.659.955,250	370,943	371,074	0,131	347,1055	-207,25	5,32%			
Cur	230,000	606.958,117	4.659.955,922	370,965	371,129	0,164	346,7983	-207,25	5,72%		V.	
Cur	231,000	606.957,373	4.659.956,591	370,984	371,188	0,204	346,4911	-207,25	6,12%			
Cur	232,000	606.956,627	4.659.957,256	371,004	371,251	0,247	346,1839	-207,25	6,52%			
Cur	233,000	606.955,877	4.659.957,918	371,030	371,319	0,289	345,8768	-207,25	6,92%			
Cur	234,000	606.955,124	4.659.958,576	371,052	371,390	0,338	345,5696	-207,25	7,32%			
Cur	235,000	606.954,368	4.659.959,231	371,077	371,465	0,388	345,2624	-207,25	7,72%			
Cur	236,000	606.953,609	4.659.959,881	371,103	371,544	0,441	344,9552	-207,25	8,12%			
Cur	237,000	606.952,846	4.659.960,528	371,129	371,627	0,498	344,6481	-207,25	8,52%			
Cur	238,000	606.952,081	4.659.961,172	371,153	371,714	0,561	344,3409	-207,25	8,92%			
Cur	239,000	606.951,312	4.659.961,812	371,185	371,806	0,621	344,0337	-207,25	9,32%			
Cur	239,058	606.951,267	4.659.961,848	371,187	371,811	0,624	344,0159	-207,25	9,34%		T.S.	
Cur	240,000	606.950,540	4.659.962,447	371,221	371,899	0,678	343,7265	-207,25	9,34%			
Cur	241,000	606.949,765	4.659.963,080	371,255	371,992	0,737	343,4194	-207,25	9,34%			
Cur	242,000	606.948,988	4.659.963,708	371,298	372,086	0,788	343,1122	-207,25	9,34%			
Cur	243,000	606.948,207	4.659.964,333	371,349	372,179	0,830	342,8050	-207,25	9,34%			
Cur	244,000	606.947,423	4.659.964,954	371,402	372,273	0,871	342,4978	-207,25	9,34%			
Cur	245,000	606.946,636	4.659.965,571	371,457	372,366	0,909	342,1907	-207,25	9,34%			
Cur	245,660	606.946,115	4.659.965,976	371,495	372,428	0,932	341,9879	-207,25	9,34%		T.E.	
Cur	246,000	606.945,846	4.659.966,184	371,515	372,459	0,944	341,8835	-207,25	9,17%			
Cur	247,000	606.945,054	4.659.966,794	371,573	372,548	0,975	341,5763	-207,25	8,67%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	248,000	606.944,258	4.659.967,400	371,633	372,633	1,000	341,2691	-207,25	8,17%			
Cur	249,000	606.943,459	4.659.968,002	371,692	372,712	1,020	340,9620	-207,25	7,67%			
Cur	250,000	606.942,658	4.659.968,600	371,750	372,786	1,036	340,6548	-207,25	7,17%			
Cur	251,000	606.941,853	4.659.969,194	371,807	372,855	1,048	340,3476	-207,25	6,67%			
Cur	252,000	606.941,046	4.659.969,784	371,866	372,919	1,053	340,0404	-207,25	6,17%			
Cur	253,000	606.940,236	4.659.970,370	371,925	372,979	1,054	339,7333	-207,25	5,67%			
Cur	254,000	606.939,423	4.659.970,953	371,986	373,033	1,047	339,4261	-207,25	5,17%			
Cur	255,000	606.938,608	4.659.971,531	372,046	373,082	1,036	339,1189	-207,25	4,67%		V.	
Cur	256,000	606.937,789	4.659.972,106	372,108	373,126	1,018	338,8117	-207,25	4,17%			
Cur	257,000	606.936,968	4.659.972,676	372,170	373,165	0,995	338,5046	-207,25	3,67%			
Cur	258,000	606.936,144	4.659.973,243	372,232	373,200	0,968	338,1974	-207,25	3,17%			
Cur	259,000	606.935,317	4.659.973,806	372,288	373,229	0,941	337,8902	-207,25	2,67%			
Cur	260,000	606.934,488	4.659.974,364	372,351	373,253	0,902	337,5830	-207,25	2,17%			
Cur	261,000	606.933,656	4.659.974,919	372,413	373,272	0,859	337,2759	-207,25	1,67%			
Cur	262,000	606.932,821	4.659.975,470	372,468	373,286	0,818	336,9687	-207,25	1,17%			
Cur	263,000	606.931,984	4.659.976,016	372,521	373,296	0,775	336,6615	-207,25	0,67%			
Cur	264,000	606.931,144	4.659.976,559	372,574	373,300	0,726	336,3543	-207,25	0,17%			
Cur	264,340	606.930,857	4.659.976,742	372,592	373,300	0,708	336,2499	-207,25	0,00%		T.S.	
Cur	265,000	606.930,301	4.659.977,097	372,626	373,300	0,674	336,0472	-207,25	0,00%			
Cur	266,000	606.929,456	4.659.977,632	372,679	373,300	0,621	335,7400	-207,25	0,00%			
Cur	267,000	606.928,608	4.659.978,162	372,731	373,300	0,569	335,4328	-207,25	0,00%			
Cur	268,000	606.927,758	4.659.978,688	372,784	373,300	0,516	335,1256	-207,25	0,00%			
Cur	269,000	606.926,905	4.659.979,210	372,836	373,300	0,464	334,8185	-207,25	0,00%			
Cur	270,000	606.926,049	4.659.979,728	372,889	373,300	0,411	334,5113	-207,25	0,00%			
Cur	271,000	606.925,192	4.659.980,242	372,942	373,300	0,358	334,2041	-207,25	0,00%			
Cur	272,000	606.924,331	4.659.980,752	372,996	373,300	0,304	333,8969	-207,25	0,00%			
Cur	273,000	606.923,468	4.659.981,258	373,037	373,300	0,263	333,5898	-207,25	0,00%			
Cur	274,000	606.922,603	4.659.981,759	373,081	373,300	0,219	333,2826	-207,25	0,00%			
	274,599	606.922,084	4.659.982,057	373,108	373,300	0,192	333,0985	-207,25	0,00%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	606.154,689	4.659.867,603	374,500	374,500	0,000	206,6484	0	0,60%		V.	
Rec	1,000	606.154,585	4.659.866,609	374,495	374,506	0,011	206,6484	0	0,60%			
Rec	2,000	606.154,480	4.659.865,614	374,491	374,512	0,021	206,6484	0	0,60%			
Rec	3,000	606.154,376	4.659.864,620	374,486	374,518	0,032	206,6484	0	0,60%			
Rec	4,000	606.154,272	4.659.863,625	374,481	374,524	0,043	206,6484	0	0,60%			
Rec	5,000	606.154,168	4.659.862,631	374,477	374,530	0,053	206,6484	0	0,60%			
Rec	6,000	606.154,063	4.659.861,636	374,472	374,536	0,064	206,6484	0	0,60%			
Rec	7,000	606.153,959	4.659.860,641	374,468	374,542	0,074	206,6484	0	0,60%			
Rec	8,000	606.153,855	4.659.859,647	374,463	374,548	0,085	206,6484	0	0,60%			
Rec	9,000	606.153,751	4.659.858,652	374,458	374,554	0,096	206,6484	0	0,60%			
Rec	10,000	606.153,647	4.659.857,658	374,454	374,560	0,106	206,6484	0	0,60%			ODT Ø500 L=7,50m
Rec	11,000	606.153,542	4.659.856,663	374,449	374,566	0,117	206,6484	0	0,60%			
Rec	12,000	606.153,438	4.659.855,669	374,444	374,572	0,128	206,6484	0	0,60%			
Rec	13,000	606.153,334	4.659.854,674	374,440	374,578	0,138	206,6484	0	0,60%			
Rec	14,000	606.153,230	4.659.853,680	374,435	374,584	0,149	206,6484	0	0,60%			
Rec	15,000	606.153,125	4.659.852,685	374,430	374,590	0,160	206,6484	0	0,60%			
Rec	16,000	606.153,021	4.659.851,690	374,425	374,596	0,171	206,6484	0	0,60%			
Rec	17,000	606.152,917	4.659.850,696	374,421	374,602	0,181	206,6484	0	0,60%			
Rec	18,000	606.152,813	4.659.849,701	374,416	374,608	0,192	206,6484	0	0,60%			
Rec	19,000	606.152,708	4.659.848,707	374,411	374,614	0,203	206,6484	0	0,60%			
Rec	20,000	606.152,604	4.659.847,712	374,406	374,620	0,214	206,6484	0	0,60%			
Rec	21,000	606.152,500	4.659.846,718	374,402	374,626	0,224	206,6484	0	0,60%			
Rec	22,000	606.152,396	4.659.845,723	374,393	374,632	0,239	206,6484	0	0,60%			
Rec	23,000	606.152,291	4.659.844,729	374,382	374,638	0,256	206,6484	0	0,60%			
Rec	24,000	606.152,187	4.659.843,734	374,371	374,644	0,273	206,6484	0	0,60%			
Rec	25,000	606.152,083	4.659.842,739	374,360	374,649	0,289	206,6484	0	0,60%			
Rec	26,000	606.151,979	4.659.841,745	374,350	374,655	0,305	206,6484	0	0,60%			
Rec	27,000	606.151,874	4.659.840,750	374,339	374,661	0,322	206,6484	0	0,60%			
Rec	28,000	606.151,770	4.659.839,756	374,328	374,667	0,339	206,6484	0	0,60%			
Rec	29,000	606.151,666	4.659.838,761	374,317	374,673	0,356	206,6484	0	0,60%			
Rec	30,000	606.151,562	4.659.837,767	374,306	374,679	0,373	206,6484	0	0,60%			
Rec	31,000	606.151,457	4.659.836,772	374,295	374,685	0,390	206,6484	0	0,60%			
Rec	32,000	606.151,353	4.659.835,778	374,284	374,691	0,407	206,6484	0	0,60%			
Rec	33,000	606.151,249	4.659.834,783	374,280	374,697	0,417	206,6484	0	0,60%			
Rec	34,000	606.151,145	4.659.833,788	374,288	374,703	0,415	206,6484	0	0,60%			
Rec	35,000	606.151,040	4.659.832,794	374,296	374,709	0,413	206,6484	0	0,60%			
Rec	36,000	606.150,936	4.659.831,799	374,297	374,715	0,418	206,6484	0	0,60%			
Rec	37,000	606.150,832	4.659.830,805	374,299	374,721	0,422	206,6484	0	0,60%			
Rec	38,000	606.150,728	4.659.829,810	374,300	374,727	0,427	206,6484	0	0,60%			
Rec	39,000	606.150,623	4.659.828,816	374,301	374,733	0,432	206,6484	0	0,60%			
Rec	40,000	606.150,519	4.659.827,821	374,303	374,739	0,436	206,6484	0	0,60%			
Rec	41,000	606.150,415	4.659.826,827	374,307	374,745	0,438	206,6484	0	0,60%			
Rec	42,000	606.150,311	4.659.825,832	374,314	374,751	0,437	206,6484	0	0,60%			
Rec	43,000	606.150,207	4.659.824,838	374,325	374,757	0,432	206,6484	0	0,60%			
Rec	44,000	606.150,102	4.659.823,843	374,328	374,763	0,435	206,6484	0	0,60%			
Rec	45,000	606.149,998	4.659.822,848	374,327	374,769	0,442	206,6484	0	0,60%			
Rec	46,000	606.149,894	4.659.821,854	374,326	374,775	0,449	206,6484	0	0,60%			
Rec	47,000	606.149,790	4.659.820,859	374,325	374,781	0,456	206,6484	0	0,60%			
Rec	48,000	606.149,685	4.659.819,865	374,324	374,787	0,463	206,6484	0	0,60%			
Rec	49,000	606.149,581	4.659.818,870	374,357	374,793	0,436	206,6484	0	0,60%			
Rec	50,000	606.149,477	4.659.817,876	374,429	374,799	0,370	206,6484	0	0,60%			
Rec	51,000	606.149,373	4.659.816,881	374,501	374,805	0,304	206,6484	0	0,60%			
Rec	52,000	606.149,268	4.659.815,887	374,573	374,811	0,238	206,6484	0	0,60%			
Rec	53,000	606.149,164	4.659.814,892	374,646	374,817	0,171	206,6484	0	0,60%			
Rec	54,000	606.149,060	4.659.813,897	374,718	374,823	0,105	206,6484	0	0,60%			
Rec	55,000	606.148,956	4.659.812,903	374,790	374,829	0,039	206,6484	0	0,60%			
Rec	56,000	606.148,851	4.659.811,908	374,862	374,835	-0,027	206,6484	0	0,60%			
Rec	57,000	606.148,747	4.659.810,914	374,934	374,841	-0,093	206,6484	0	0,60%			
Rec	58,000	606.148,643	4.659.809,919	374,994	374,847	-0,147	206,6484	0	0,60%			
Rec	59,000	606.148,539	4.659.808,925	374,932	374,853	-0,079	206,6484	0	0,60%			
Rec	60,000	606.148,434	4.659.807,930	374,870	374,859	-0,011	206,6484	0	0,60%			
Rec	61,000	606.148,330	4.659.806,936	374,860	374,865	0,005	206,6484	0	0,60%			
Rec	62,000	606.148,226	4.659.805,941	374,863	374,871	0,008	206,6484	0	0,60%			
Rec	63,000	606.148,122	4.659.804,946	374,867	374,877	0,010	206,6484	0	0,60%			
Rec	64,000	606.148,017	4.659.803,952	374,873	374,883	0,010	206,6484	0	0,60%			
Rec	65,000	606.147,913	4.659.802,957	374,877	374,889	0,012	206,6484	0	0,60%			
Rec	66,000	606.147,809	4.659.801,963	374,880	374,895	0,015	206,6484	0	0,60%			
Rec	67,000	606.147,705	4.659.800,968	374,885	374,901	0,016	206,6484	0	0,60%			
Rec	68,000	606.147,600	4.659.799,974	374,893	374,907	0,014	206,6484	0	0,60%			
Rec	69,000	606.147,496	4.659.798,979	374,903	374,913	0,010	206,6484	0	0,60%			
Rec	70,000	606.147,392	4.659.797,985	374,913	374,919	0,006	206,6484	0	0,60%			
Rec	70,862	606.147,302	4.659.797,127	374,922	374,924	0,002	206,6484	0	0,60%		T.E.	
Rec	71,000	606.147,288	4.659.796,990	374,923	374,925	0,002	206,6484	0	0,57%			
Rec	72,000	606.147,183	4.659.795,996	374,934	374,929	-0,005	206,6484	0	0,37%			
Rec	73,000	606.147,079	4.659.795,001	374,946	374,932	-0,014	206,6484	0	0,17%			
Rec	74,000	606.146,975	4.659.794,006	374,958	374,933	-0,025	206,6484	0	-0,03%			
Rec	75,000	606.146,871	4.659.793,012	374,969	374,931	-0,038	206,6484	0	-0,23%			
Rec	76,000	606.146,767	4.659.792,017	374,978	374,928	-0,050	206,6484	0	-0,43%			
Rec	77,000	606.146,662	4.659.791,023	374,982	374,923	-0,059	206,6484	0	-0,63%			
Rec	78,000	606.146,558	4.659.790,028	374,985	374,915	-0,070	206,6484	0	-0,83%			
Rec	79,000	606.146,454	4.659.789,034	374,986	374,906	-0,080	206,6484	0	-1,03%			
Rec	80,000	606.146,350	4.659.788,039	374,986	374,895	-0,091	206,6484	0	-1,23%			
Rec	81,000	606.146,245	4.659.787,045	374,985	374,882	-0,103	206,6484	0	-1,43%			
Cur	81,108	606.146,234	4.659.786,937	374,985	374,880	-0,105	206,6484	80	-1,45%	P.S.	V.	
Cur	82,000	606.146,136	4.659.786,051	374,986	374,866	-0,120	207,3581	80	-1,63%			
Cur	83,000	606.146,015	4.659.785,058	374,977	374,849	-0,128	208,1539	80	-1,83%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	84,000	606.145,881	4.659.784,067	374,975	374,830	-0,145	208,9496	80	-2,03%			
Cur	85,000	606.145,734	4.659.783,078	374,970	374,808	-0,162	209,7454	80	-2,23%			
Cur	86,000	606.145,576	4.659.782,090	374,952	374,785	-0,167	210,5412	80	-2,43%			
Cur	87,000	606.145,405	4.659.781,105	374,932	374,760	-0,172	211,3369	80	-2,63%			
Cur	88,000	606.145,221	4.659.780,122	374,901	374,733	-0,168	212,1327	80	-2,83%			
Cur	89,000	606.145,026	4.659.779,141	374,874	374,703	-0,171	212,9285	80	-3,03%			
Cur	90,000	606.144,818	4.659.778,163	374,848	374,672	-0,176	213,7243	80	-3,23%			
Cur	91,000	606.144,598	4.659.777,188	374,823	374,639	-0,184	214,5200	80	-3,43%			
Cur	91,354	606.144,517	4.659.776,843	374,816	374,626	-0,190	214,8018	80	-3,50%		T.S.	
Cur	92,000	606.144,366	4.659.776,215	374,803	374,604	-0,199	215,3158	80	-3,50%			
Cur	93,000	606.144,122	4.659.775,245	374,772	374,569	-0,203	216,1116	80	-3,50%			
Cur	94,000	606.143,865	4.659.774,279	374,753	374,534	-0,219	216,9074	80	-3,50%			
Cur	95,000	606.143,597	4.659.773,316	374,737	374,499	-0,238	217,7031	80	-3,50%			
Cur	96,000	606.143,316	4.659.772,356	374,722	374,464	-0,258	218,4989	80	-3,50%			
Cur	97,000	606.143,024	4.659.771,399	374,692	374,429	-0,263	219,2947	80	-3,50%			
Cur	98,000	606.142,719	4.659.770,447	374,672	374,394	-0,278	220,0905	80	-3,50%			
Cur	99,000	606.142,403	4.659.769,498	374,643	374,359	-0,284	220,8862	80	-3,50%			
Cur	100,000	606.142,075	4.659.768,554	374,614	374,324	-0,290	221,6820	80	-3,50%			
Cur	101,000	606.141,735	4.659.767,613	374,580	374,289	-0,291	222,4778	80	-3,50%			
Cur	102,000	606.141,383	4.659.766,677	374,533	374,254	-0,279	223,2736	80	-3,50%			
Cur	103,000	606.141,020	4.659.765,745	374,490	374,219	-0,271	224,0693	80	-3,50%			
Cur	104,000	606.140,645	4.659.764,818	374,439	374,184	-0,255	224,8651	80	-3,50%			
Cur	105,000	606.140,258	4.659.763,896	374,380	374,149	-0,231	225,6609	80	-3,50%			
Cur	106,000	606.139,860	4.659.762,979	374,337	374,114	-0,223	226,4567	80	-3,50%			
Cur	107,000	606.139,451	4.659.762,066	374,295	374,079	-0,216	227,2524	80	-3,50%			
Cur	108,000	606.139,030	4.659.761,159	374,248	374,044	-0,204	228,0482	80	-3,50%			
Cur	109,000	606.138,598	4.659.760,257	374,198	374,009	-0,189	228,8440	80	-3,50%			
Cur	110,000	606.138,155	4.659.759,361	374,146	373,974	-0,172	229,6398	80	-3,50%			
Cur	111,000	606.137,700	4.659.758,470	374,091	373,939	-0,152	230,4355	80	-3,50%			
Cur	112,000	606.137,235	4.659.757,585	374,035	373,904	-0,131	231,2313	80	-3,50%			
Cur	113,000	606.136,758	4.659.756,706	373,992	373,869	-0,123	232,0271	80	-3,50%			
Cur	114,000	606.136,270	4.659.755,833	373,966	373,834	-0,132	232,8229	80	-3,50%			
Cur	115,000	606.135,772	4.659.754,966	373,922	373,799	-0,123	233,6186	80	-3,50%			
Cur	116,000	606.135,263	4.659.754,106	373,878	373,764	-0,114	234,4144	80	-3,50%			
Cur	117,000	606.134,743	4.659.753,252	373,834	373,729	-0,105	235,2102	80	-3,50%			
Cur	118,000	606.134,212	4.659.752,404	373,790	373,694	-0,096	236,0060	80	-3,50%			
Cur	119,000	606.133,671	4.659.751,563	373,746	373,659	-0,087	236,8017	80	-3,50%			
Cur	120,000	606.133,119	4.659.750,729	373,703	373,624	-0,079	237,5975	80	-3,50%			
Cur	121,000	606.132,557	4.659.749,902	373,660	373,589	-0,071	238,3933	80	-3,50%			
Cur	121,897	606.132,044	4.659.749,166	373,621	373,557	-0,064	239,1071	80	-3,50%		T.E.	
Cur	122,000	606.131,985	4.659.749,082	373,617	373,554	-0,063	239,1891	80	-3,49%			
Cur	123,000	606.131,402	4.659.748,269	373,574	373,519	-0,055	239,9848	80	-3,35%			
Cur	124,000	606.130,810	4.659.747,464	373,531	373,487	-0,044	240,7806	80	-3,22%			
Cur	125,000	606.130,207	4.659.746,666	373,489	373,455	-0,034	241,5764	80	-3,09%			
Cur	126,000	606.129,595	4.659.745,875	373,447	373,425	-0,022	242,3722	80	-2,95%			
Cur	127,000	606.128,972	4.659.745,092	373,405	373,396	-0,009	243,1679	80	-2,82%			
Cur	128,000	606.128,340	4.659.744,318	373,363	373,368	0,005	243,9637	80	-2,69%			
Cur	129,000	606.127,698	4.659.743,551	373,322	373,342	0,020	244,7595	80	-2,55%			
Cur	130,000	606.127,047	4.659.742,792	373,281	373,317	0,036	245,5553	80	-2,42%			
Cur	131,000	606.126,386	4.659.742,041	373,240	373,294	0,054	246,3510	80	-2,29%			
Rec	131,216	606.126,242	4.659.741,880	373,231	373,289	0,058	246,5232	0	-2,26%	P.S.	V.	
Rec	132,000	606.125,719	4.659.741,297	373,199	373,272	0,073	246,5232	0	-2,15%			
Rec	133,000	606.125,051	4.659.740,552	373,159	373,251	0,092	246,5232	0	-2,02%			
Rec	134,000	606.124,384	4.659.739,807	373,118	373,231	0,113	246,5232	0	-1,89%			
Rec	135,000	606.123,717	4.659.739,063	373,077	373,213	0,136	246,5232	0	-1,75%			
Rec	136,000	606.123,049	4.659.738,318	373,037	373,196	0,159	246,5232	0	-1,62%			
Rec	137,000	606.122,382	4.659.737,573	373,034	373,181	0,147	246,5232	0	-1,49%			
Rec	138,000	606.121,714	4.659.736,829	373,033	373,166	0,133	246,5232	0	-1,35%			
Rec	139,000	606.121,047	4.659.736,084	373,033	373,154	0,121	246,5232	0	-1,22%			
Rec	140,000	606.120,379	4.659.735,339	373,033	373,142	0,109	246,5232	0	-1,09%			
Rec	140,535	606.120,022	4.659.734,941	373,032	373,136	0,104	246,5232	0	-1,02%		T.S.	
Rec	141,000	606.119,712	4.659.734,595	373,032	373,132	0,100	246,5232	0	-1,02%			
Rec	142,000	606.119,044	4.659.733,850	373,032	373,122	0,090	246,5232	0	-1,02%			
Rec	143,000	606.118,377	4.659.733,105	373,032	373,111	0,079	246,5232	0	-1,02%			
Rec	144,000	606.117,709	4.659.732,361	373,031	373,101	0,070	246,5232	0	-1,02%			
Rec	145,000	606.117,042	4.659.731,616	373,031	373,091	0,060	246,5232	0	-1,02%			
Rec	146,000	606.116,375	4.659.730,871	373,031	373,081	0,050	246,5232	0	-1,02%			
Rec	147,000	606.115,707	4.659.730,127	373,031	373,071	0,040	246,5232	0	-1,02%			
Rec	148,000	606.115,040	4.659.729,382	373,031	373,061	0,030	246,5232	0	-1,02%			
Rec	149,000	606.114,372	4.659.728,637	373,030	373,050	0,020	246,5232	0	-1,02%			
Rec	150,000	606.113,705	4.659.727,893	373,029	373,040	0,011	246,5232	0	-1,02%			
Rec	151,000	606.113,037	4.659.727,148	373,028	373,030	0,002	246,5232	0	-1,02%			
Rec	152,000	606.112,370	4.659.726,404	373,026	373,020	-0,006	246,5232	0	-1,02%			
Rec	153,000	606.111,702	4.659.725,659	373,021	373,010	-0,011	246,5232	0	-1,02%			
Rec	154,000	606.111,035	4.659.724,914	373,014	373,000	-0,014	246,5232	0	-1,02%			
Rec	155,000	606.110,367	4.659.724,170	373,010	372,990	-0,020	246,5232	0	-1,02%			
Rec	156,000	606.109,700	4.659.723,425	373,008	372,979	-0,029	246,5232	0	-1,02%			
Rec	157,000	606.109,033	4.659.722,680	373,005	372,969	-0,036	246,5232	0	-1,02%			
Rec	158,000	606.108,365	4.659.721,936	373,003	372,959	-0,044	246,5232	0	-1,02%			
Rec	159,000	606.107,698	4.659.721,191	373,000	372,949	-0,051	246,5232	0	-1,02%			
Cur	159,942	606.107,069	4.659.720,490	372,989	372,939	-0,050	246,5232	-25	-1,02%	P.S.		
Cur	160,000	606.107,030	4.659.720,446	372,988	372,939	-0,049	246,3746	-25	-1,02%			
Cur	161,000	606.106,380	4.659.719,687	372,973	372,929	-0,044	243,8282	-25	-1,02%			
Cur	162,000	606.105,760	4.659.718,902	372,958	372,918	-0,040	241,2817	-25	-1,02%			
Cur	163,000	606.105,172	4.659.718,093	372,941	372,908	-0,033	238,7352	-25	-1,02%			
Cur	164,000	606.104,617	4.659.717,262	372,923	372,898	-0,025	236,1887	-25	-1,02%			
Cur	165,000	606.104,096	4.659.716,408	372,904	372,888	-0,016	233,6422	-25	-1,02%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	166,000	606.103,609	4.659.715,535	372,885	372,878	-0,007	231,0958	-25	-1,02%			
Cur	167,000	606.103,157	4.659.714,643	372,865	372,868	0,003	228,5493	-25	-1,02%			
Cur	168,000	606.102,742	4.659.713,733	372,844	372,858	0,014	226,0028	-25	-1,02%			
Cur	169,000	606.102,363	4.659.712,808	372,821	372,847	0,026	223,4563	-25	-1,02%			
Cur	170,000	606.102,022	4.659.711,868	372,797	372,837	0,040	220,9098	-25	-1,02%			
Cur	171,000	606.101,718	4.659.710,915	372,772	372,827	0,055	218,3634	-25	-1,02%			
Cur	172,000	606.101,453	4.659.709,951	372,746	372,817	0,071	215,8169	-25	-1,02%			
Cur	173,000	606.101,227	4.659.708,977	372,722	372,807	0,085	213,2704	-25	-1,02%			
Cur	174,000	606.101,039	4.659.707,995	372,714	372,797	0,083	210,7239	-25	-1,02%			
Cur	175,000	606.100,891	4.659.707,006	372,727	372,786	0,059	208,1774	-25	-1,02%			
Cur	176,000	606.100,783	4.659.706,012	372,744	372,776	0,032	205,6310	-25	-1,02%			
Cur	177,000	606.100,715	4.659.705,014	372,762	372,766	0,004	203,0845	-25	-1,02%			
Cur	178,000	606.100,686	4.659.704,015	372,781	372,756	-0,025	200,5380	-25	-1,02%			
Cur	179,000	606.100,698	4.659.703,015	372,798	372,746	-0,052	197,9915	-25	-1,02%			
Cur	180,000	606.100,749	4.659.702,016	372,816	372,736	-0,080	195,4450	-25	-1,02%			
Cur	181,000	606.100,841	4.659.701,020	372,834	372,726	-0,108	192,8986	-25	-1,02%			
Cur	182,000	606.100,972	4.659.700,029	372,850	372,715	-0,135	190,3521	-25	-1,02%			
Cur	183,000	606.101,143	4.659.699,044	372,864	372,705	-0,159	187,8056	-25	-1,02%			
Cur	184,000	606.101,353	4.659.698,066	372,867	372,695	-0,172	185,2591	-25	-1,02%			
Cur	185,000	606.101,601	4.659.697,098	372,861	372,685	-0,176	182,7127	-25	-1,02%			
Cur	186,000	606.101,889	4.659.696,140	372,853	372,675	-0,178	180,1662	-25	-1,02%			
Cur	187,000	606.102,214	4.659.695,195	372,842	372,665	-0,177	177,6197	-25	-1,02%			
Cur	188,000	606.102,577	4.659.694,263	372,829	372,654	-0,175	175,0732	-25	-1,02%			
Cur	189,000	606.102,977	4.659.693,346	372,812	372,644	-0,168	172,5267	-25	-1,02%			
Cur	190,000	606.103,414	4.659.692,447	372,819	372,634	-0,185	169,9803	-25	-1,02%			
Cur	191,000	606.103,886	4.659.691,565	372,818	372,624	-0,194	167,4338	-25	-1,02%			
Cur	192,000	606.104,393	4.659.690,703	372,823	372,614	-0,209	164,8873	-25	-1,02%			
Cur	193,000	606.104,933	4.659.689,862	372,816	372,604	-0,212	162,3408	-25	-1,02%			
Cur	194,000	606.105,508	4.659.689,044	372,803	372,594	-0,209	159,7943	-25	-1,02%			
Cur	195,000	606.106,114	4.659.688,248	372,788	372,583	-0,205	157,2479	-25	-1,02%			
Rec	195,568	606.106,472	4.659.687,808	372,782	372,578	-0,204	155,8016	0	-1,02%	P.S.		
Rec	196,000	606.106,749	4.659.687,476	372,773	372,573	-0,200	155,8016	0	-1,02%			
Rec	197,000	606.107,389	4.659.686,707	372,754	372,563	-0,191	155,8016	0	-1,02%			
Rec	198,000	606.108,028	4.659.685,939	372,730	372,553	-0,177	155,8016	0	-1,02%			
Rec	199,000	606.108,668	4.659.685,170	372,706	372,543	-0,163	155,8016	0	-1,02%			
Rec	199,502	606.108,989	4.659.684,784	372,694	372,538	-0,156	155,8016	0	-1,02%		T.E.	
Rec	200,000	606.109,308	4.659.684,402	372,682	372,533	-0,149	155,8016	0	-0,85%			
Rec	201,000	606.109,948	4.659.683,633	372,657	372,526	-0,131	155,8016	0	-0,52%			
Rec	202,000	606.110,588	4.659.682,865	372,631	372,523	-0,108	155,8016	0	-0,18%			
Rec	203,000	606.111,227	4.659.682,096	372,603	372,523	-0,080	155,8016	0	0,15%			
Rec	204,000	606.111,867	4.659.681,328	372,575	372,526	-0,049	155,8016	0	0,48%			
Rec	205,000	606.112,507	4.659.680,559	372,546	372,532	-0,014	155,8016	0	0,82%			
Rec	206,000	606.113,147	4.659.679,791	372,513	372,542	0,029	155,8016	0	1,15%			
Rec	207,000	606.113,787	4.659.679,022	372,482	372,555	0,073	155,8016	0	1,48%			
Rec	208,000	606.114,427	4.659.678,254	372,459	372,572	0,113	155,8016	0	1,82%			
Cur	208,435	606.114,705	4.659.677,919	372,447	372,580	0,133	155,8016	25	1,96%	P.S.	V.	ODT Ø500 L=7,00m
Cur	209,000	606.115,061	4.659.677,481	372,430	372,592	0,162	157,2399	25	2,15%			
Cur	210,000	606.115,668	4.659.676,686	372,410	372,615	0,205	159,7864	25	2,48%			
Cur	211,000	606.116,242	4.659.675,867	372,387	372,641	0,254	162,3328	25	2,82%			
Cur	212,000	606.116,783	4.659.675,026	372,385	372,671	0,286	164,8793	25	3,15%			
Cur	213,000	606.117,290	4.659.674,164	372,378	372,704	0,326	167,4258	25	3,48%			
Cur	214,000	606.117,762	4.659.673,283	372,391	372,741	0,350	169,9723	25	3,82%			
Cur	215,000	606.118,199	4.659.672,383	372,405	372,781	0,376	172,5188	25	4,15%			
Cur	216,000	606.118,599	4.659.671,467	372,437	372,824	0,387	175,0652	25	4,48%			
Cur	217,000	606.118,962	4.659.670,535	372,475	372,870	0,395	177,6117	25	4,82%			
Cur	217,368	606.119,086	4.659.670,189	372,493	372,888	0,396	178,5488	25	4,94%		T.S.	
Cur	218,000	606.119,288	4.659.669,590	372,523	372,920	0,397	180,1582	25	4,94%			
Cur	219,000	606.119,575	4.659.668,632	372,572	372,969	0,397	182,7047	25	4,94%			
Cur	220,000	606.119,824	4.659.667,664	372,633	373,018	0,385	185,2512	25	4,94%			
Cur	221,000	606.120,034	4.659.666,686	372,681	373,068	0,387	187,7976	25	4,94%			
Cur	222,000	606.120,205	4.659.665,701	372,743	373,117	0,374	190,3441	25	4,94%			
Cur	223,000	606.120,336	4.659.664,710	372,803	373,167	0,364	192,8906	25	4,94%			
Cur	224,000	606.120,428	4.659.663,714	372,871	373,216	0,345	195,4371	25	4,94%			
Cur	225,000	606.120,479	4.659.662,715	372,938	373,265	0,327	197,9835	25	4,94%			
Cur	226,000	606.120,491	4.659.661,715	373,045	373,315	0,270	200,5300	25	4,94%			
Cur	227,000	606.120,463	4.659.660,716	373,534	373,364	-0,170	203,0765	25	4,94%			
Cur	228,000	606.120,395	4.659.659,718	374,001	373,414	-0,587	205,6230	25	4,94%			
Cur	229,000	606.120,286	4.659.658,724	374,010	373,463	-0,547	208,1695	25	4,94%			
Cur	230,000	606.120,139	4.659.657,735	374,020	373,512	-0,508	210,7159	25	4,94%			
Cur	231,000	606.119,951	4.659.656,753	374,029	373,562	-0,467	213,2624	25	4,94%			
Cur	232,000	606.119,725	4.659.655,779	374,039	373,611	-0,428	215,8089	25	4,94%			
Cur	232,031	606.119,717	4.659.655,749	374,039	373,613	-0,427	215,8878	25	4,94%		T.E.	
Cur	233,000	606.119,460	4.659.654,815	374,049	373,657	-0,392	218,3554	25	4,29%			
Cur	234,000	606.119,157	4.659.653,862	374,058	373,697	-0,361	220,9019	25	3,63%			
Cur	235,000	606.118,815	4.659.652,922	374,068	373,730	-0,338	223,4483	25	2,96%			
Cur	236,000	606.118,437	4.659.651,997	374,077	373,756	-0,321	225,9948	25	2,29%			
Cur	237,000	606.118,021	4.659.651,087	374,087	373,776	-0,311	228,5413	25	1,63%			
Cur	238,000	606.117,570	4.659.650,195	374,120	373,789	-0,331	231,0878	25	0,96%			
Cur	239,000	606.117,083	4.659.649,321	374,117	373,795	-0,322	233,6343	25	0,29%			
Cur	240,000	606.116,562	4.659.648,468	374,110	373,795	-0,315	236,1807	25	-0,37%			
Cur	241,000	606.116,007	4.659.647,636	374,101	373,788	-0,313	238,7272	25	-1,04%			
Rec	241,733	606.115,580	4.659.647,041	374,092	373,778	-0,314	240,5936	0	-1,53%	P.S.	V.	
Rec	242,000	606.115,421	4.659.646,826	374,089	373,774	-0,315	240,5936	0	-1,71%			
Rec	243,000	606.114,825	4.659.646,023	374,075	373,754	-0,321	240,5936	0	-2,37%			
Rec	244,000	606.114,230	4.659.645,219	374,062	373,726	-0,336	240,5936	0	-3,04%			
Rec	245,000	606.113,635	4.659.644,416	374,049	373,693	-0,356	240,5936	0	-3,71%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	246,000	606.113,039	4.659.643,612	374,036	373,652	-0,384	240,5936	0	-4,37%			
Rec	247,000	606.112,444	4.659.642,809	374,022	373,605	-0,417	240,5936	0	-5,04%			
Rec	248,000	606.111,849	4.659.642,005	374,000	373,552	-0,448	240,5936	0	-5,71%			
Rec	249,000	606.111,253	4.659.641,202	373,768	373,491	-0,277	240,5936	0	-6,37%			
Rec	250,000	606.110,658	4.659.640,398	373,518	373,424	-0,094	240,5936	0	-7,04%			
Rec	251,000	606.110,063	4.659.639,595	373,282	373,350	0,068	240,5936	0	-7,71%			
Rec	251,435	606.109,804	4.659.639,245	373,160	373,316	0,156	240,5936	0	-8,00%		T.S.	
Rec	252,000	606.109,467	4.659.638,791	373,001	373,271	0,270	240,5936	0	-8,00%			
Rec	253,000	606.108,872	4.659.637,988	372,873	373,191	0,318	240,5936	0	-8,00%			
Rec	254,000	606.108,277	4.659.637,184	372,743	373,111	0,368	240,5936	0	-8,00%			
Rec	255,000	606.107,682	4.659.636,381	372,614	373,031	0,417	240,5936	0	-8,00%			
Rec	256,000	606.107,086	4.659.635,577	372,486	372,951	0,465	240,5936	0	-8,00%			
Rec	257,000	606.106,491	4.659.634,774	372,356	372,871	0,515	240,5936	0	-8,00%			
Rec	258,000	606.105,896	4.659.633,970	372,222	372,791	0,569	240,5936	0	-8,00%			
Rec	259,000	606.105,300	4.659.633,167	372,088	372,711	0,623	240,5936	0	-8,00%			
Rec	260,000	606.104,705	4.659.632,363	371,979	372,631	0,652	240,5936	0	-8,00%			
Rec	261,000	606.104,110	4.659.631,560	371,919	372,551	0,632	240,5936	0	-8,00%			
Rec	262,000	606.103,514	4.659.630,756	371,859	372,471	0,612	240,5936	0	-8,00%			
Rec	263,000	606.102,919	4.659.629,953	371,798	372,391	0,593	240,5936	0	-8,00%			
Rec	264,000	606.102,324	4.659.629,149	371,728	372,311	0,583	240,5936	0	-8,00%			
Rec	265,000	606.101,729	4.659.628,346	371,656	372,231	0,575	240,5936	0	-8,00%			
Rec	266,000	606.101,133	4.659.627,542	371,591	372,151	0,560	240,5936	0	-8,00%			
Rec	267,000	606.100,538	4.659.626,739	371,527	372,072	0,545	240,5936	0	-8,00%			
Rec	268,000	606.099,943	4.659.625,935	371,462	371,992	0,530	240,5936	0	-8,00%			
Rec	269,000	606.099,347	4.659.625,132	371,391	371,912	0,521	240,5936	0	-8,00%			
Rec	270,000	606.098,752	4.659.624,328	371,315	371,832	0,517	240,5936	0	-8,00%			
Rec	271,000	606.098,157	4.659.623,525	371,239	371,752	0,513	240,5936	0	-8,00%			
Rec	272,000	606.097,561	4.659.622,721	371,163	371,672	0,509	240,5936	0	-8,00%			
Rec	273,000	606.096,966	4.659.621,918	371,090	371,592	0,502	240,5936	0	-8,00%			
Rec	274,000	606.096,371	4.659.621,114	371,012	371,512	0,500	240,5936	0	-8,00%			
Rec	275,000	606.095,776	4.659.620,311	370,946	371,432	0,486	240,5936	0	-8,00%			
Rec	276,000	606.095,180	4.659.619,507	370,882	371,352	0,470	240,5936	0	-8,00%			
Rec	277,000	606.094,585	4.659.618,704	370,818	371,272	0,454	240,5936	0	-8,00%			
Rec	278,000	606.093,990	4.659.617,900	370,754	371,192	0,438	240,5936	0	-8,00%			
Rec	279,000	606.093,394	4.659.617,097	370,690	371,112	0,422	240,5936	0	-8,00%			
Rec	280,000	606.092,799	4.659.616,293	370,625	371,032	0,407	240,5936	0	-8,00%			
Rec	281,000	606.092,204	4.659.615,490	370,561	370,952	0,391	240,5936	0	-8,00%			
Rec	282,000	606.091,608	4.659.614,686	370,496	370,872	0,376	240,5936	0	-8,00%			
Rec	283,000	606.091,013	4.659.613,883	370,432	370,792	0,360	240,5936	0	-8,00%			
Rec	284,000	606.090,418	4.659.613,079	370,368	370,712	0,344	240,5936	0	-8,00%			
Rec	285,000	606.089,822	4.659.612,276	370,304	370,632	0,328	240,5936	0	-8,00%			
Rec	286,000	606.089,227	4.659.611,472	370,240	370,552	0,312	240,5936	0	-8,00%			
Rec	287,000	606.088,632	4.659.610,669	370,175	370,472	0,297	240,5936	0	-8,00%			
Rec	288,000	606.088,037	4.659.609,865	370,109	370,392	0,283	240,5936	0	-8,00%			
Rec	289,000	606.087,441	4.659.609,062	370,044	370,312	0,268	240,5936	0	-8,00%			
Rec	290,000	606.086,846	4.659.608,258	369,982	370,232	0,250	240,5936	0	-8,00%			
Rec	291,000	606.086,251	4.659.607,455	369,928	370,152	0,224	240,5936	0	-8,00%			
Rec	292,000	606.085,655	4.659.606,651	369,873	370,072	0,199	240,5936	0	-8,00%			
Rec	293,000	606.085,060	4.659.605,848	369,818	369,992	0,174	240,5936	0	-8,00%			
Rec	294,000	606.084,465	4.659.605,044	369,764	369,912	0,148	240,5936	0	-8,00%			
Rec	295,000	606.083,869	4.659.604,241	369,708	369,832	0,124	240,5936	0	-8,00%			
Rec	296,000	606.083,274	4.659.603,437	369,653	369,753	0,100	240,5936	0	-8,00%			
Rec	297,000	606.082,679	4.659.602,634	369,598	369,673	0,075	240,5936	0	-8,00%			
Rec	298,000	606.082,084	4.659.601,830	369,543	369,593	0,050	240,5936	0	-8,00%			
Rec	298,168	606.081,984	4.659.601,695	369,534	369,579	0,045	240,5936	0	-8,00%		T.E.	
Rec	299,000	606.081,488	4.659.601,027	369,488	369,513	0,025	240,5936	0	-7,79%			
Rec	300,000	606.080,893	4.659.600,223	369,433	369,437	0,004	240,5936	0	-7,54%			
Rec	301,000	606.080,298	4.659.599,420	369,378	369,363	-0,015	240,5936	0	-7,29%			
Rec	302,000	606.079,702	4.659.598,616	369,323	369,291	-0,032	240,5936	0	-7,04%			
Rec	303,000	606.079,107	4.659.597,813	369,268	369,222	-0,046	240,5936	0	-6,79%			
Rec	304,000	606.078,512	4.659.597,009	369,213	369,155	-0,058	240,5936	0	-6,54%			
Rec	305,000	606.077,916	4.659.596,206	369,158	369,091	-0,067	240,5936	0	-6,29%			
Rec	306,000	606.077,321	4.659.595,402	369,103	369,030	-0,073	240,5936	0	-6,04%			
Rec	307,000	606.076,726	4.659.594,599	369,047	368,970	-0,077	240,5936	0	-5,79%			
Rec	308,000	606.076,131	4.659.593,795	368,993	368,914	-0,079	240,5936	0	-5,54%			
Rec	309,000	606.075,535	4.659.592,992	368,954	368,860	-0,094	240,5936	0	-5,29%			
Rec	310,000	606.074,940	4.659.592,188	368,914	368,808	-0,106	240,5936	0	-5,04%		V.	
Rec	311,000	606.074,345	4.659.591,385	368,874	368,759	-0,115	240,5936	0	-4,79%			
Rec	312,000	606.073,749	4.659.590,581	368,833	368,712	-0,121	240,5936	0	-4,54%			
Rec	313,000	606.073,154	4.659.589,778	368,793	368,668	-0,125	240,5936	0	-4,29%			
Rec	314,000	606.072,559	4.659.588,974	368,753	368,626	-0,127	240,5936	0	-4,04%			
Rec	315,000	606.071,963	4.659.588,171	368,713	368,587	-0,126	240,5936	0	-3,79%			
Rec	316,000	606.071,368	4.659.587,367	368,672	368,551	-0,121	240,5936	0	-3,54%			
Rec	317,000	606.070,773	4.659.586,564	368,632	368,517	-0,115	240,5936	0	-3,29%			
Rec	318,000	606.070,177	4.659.585,760	368,592	368,485	-0,107	240,5936	0	-3,04%			
Rec	319,000	606.069,582	4.659.584,957	368,551	368,456	-0,095	240,5936	0	-2,79%			
Rec	320,000	606.068,987	4.659.584,153	368,511	368,429	-0,082	240,5936	0	-2,54%			
Rec	321,000	606.068,392	4.659.583,350	368,472	368,405	-0,067	240,5936	0	-2,29%			
Rec	321,832	606.067,796	4.659.582,546	368,432	368,387	-0,052	240,5936	0	-2,08%		T.S.	
Rec	322,000	606.067,201	4.659.581,743	368,393	368,363	-0,030	240,5936	0	-2,08%			
Rec	323,000	606.066,606	4.659.580,939	368,353	368,342	-0,011	240,5936	0	-2,08%			
Rec	324,000	606.066,010	4.659.580,136	368,317	368,321	0,004	240,5936	0	-2,08%			
Rec	325,000	606.065,415	4.659.579,332	368,280	368,300	0,020	240,5936	0	-2,08%			
Rec	326,000	606.064,820	4.659.578,529	368,243	368,279	0,036	240,5936	0	-2,08%			
Rec	327,000	606.064,224	4.659.577,725	368,207	368,259	0,052	240,5936	0	-2,08%			
Rec	328,000	606.063,629	4.659.576,922	368,169	368,238	0,069	240,5936	0	-2,08%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	330,000	606.063,034	4.659.576,118	368,130	368,217	0,087	240,5936	0	-2,08%			
Rec	331,000	606.062,439	4.659.575,315	368,093	368,196	0,103	240,5936	0	-2,08%			
Rec	332,000	606.061,843	4.659.574,511	368,055	368,175	0,120	240,5936	0	-2,08%			
Rec	333,000	606.061,248	4.659.573,708	368,017	368,155	0,138	240,5936	0	-2,08%			
Rec	334,000	606.060,653	4.659.572,904	367,999	368,134	0,135	240,5936	0	-2,08%			
Rec	335,000	606.060,057	4.659.572,101	367,980	368,113	0,133	240,5936	0	-2,08%			
Rec	336,000	606.059,462	4.659.571,297	367,960	368,092	0,132	240,5936	0	-2,08%			
Rec	337,000	606.058,867	4.659.570,494	367,941	368,071	0,130	240,5936	0	-2,08%			
Rec	338,000	606.058,271	4.659.569,690	367,921	368,051	0,130	240,5936	0	-2,08%			
Rec	339,000	606.057,676	4.659.568,887	367,902	368,030	0,128	240,5936	0	-2,08%			
Rec	340,000	606.057,081	4.659.568,083	367,882	368,009	0,127	240,5936	0	-2,08%			
Rec	341,000	606.056,486	4.659.567,280	367,862	367,988	0,126	240,5936	0	-2,08%			
Rec	342,000	606.055,890	4.659.566,476	367,842	367,967	0,125	240,5936	0	-2,08%			
Rec	343,000	606.055,295	4.659.565,673	367,822	367,947	0,125	240,5936	0	-2,08%			
Rec	344,000	606.054,700	4.659.564,869	367,802	367,926	0,124	240,5936	0	-2,08%			
Rec	345,000	606.054,104	4.659.564,066	367,782	367,905	0,123	240,5936	0	-2,08%			
Rec	346,000	606.053,509	4.659.563,262	367,762	367,884	0,122	240,5936	0	-2,08%			
Rec	347,000	606.052,914	4.659.562,459	367,743	367,863	0,120	240,5936	0	-2,08%			
Rec	348,000	606.052,318	4.659.561,655	367,723	367,843	0,120	240,5936	0	-2,08%			
Rec	349,000	606.051,723	4.659.560,852	367,704	367,822	0,118	240,5936	0	-2,08%			
Rec	350,000	606.051,128	4.659.560,048	367,684	367,801	0,117	240,5936	0	-2,08%			
Rec	351,000	606.050,532	4.659.559,245	367,665	367,780	0,115	240,5936	0	-2,08%			
Rec	352,000	606.049,937	4.659.558,441	367,647	367,759	0,112	240,5936	0	-2,08%			
Rec	353,000	606.049,342	4.659.557,638	367,629	367,739	0,110	240,5936	0	-2,08%			
Rec	354,000	606.048,747	4.659.556,834	367,613	367,718	0,105	240,5936	0	-2,08%			
Rec	355,000	606.048,151	4.659.556,031	367,598	367,697	0,099	240,5936	0	-2,08%			
Rec	356,000	606.047,556	4.659.555,227	367,584	367,676	0,092	240,5936	0	-2,08%			
Rec	357,000	606.046,961	4.659.554,424	367,573	367,655	0,082	240,5936	0	-2,08%			
Rec	358,000	606.046,365	4.659.553,620	367,562	367,635	0,073	240,5936	0	-2,08%			
Rec	359,000	606.045,770	4.659.552,817	367,551	367,614	0,063	240,5936	0	-2,08%			
Rec	360,000	606.045,175	4.659.552,013	367,539	367,593	0,054	240,5936	0	-2,08%			
Rec	361,000	606.044,579	4.659.551,210	367,531	367,572	0,041	240,5936	0	-2,08%			
Rec	362,000	606.043,984	4.659.550,406	367,527	367,551	0,024	240,5936	0	-2,08%			
Rec	363,000	606.043,389	4.659.549,603	367,524	367,531	0,007	240,5936	0	-2,08%			
Rec	364,000	606.042,794	4.659.548,799	367,523	367,510	-0,013	240,5936	0	-2,08%			
Rec	365,000	606.042,198	4.659.547,996	367,525	367,489	-0,036	240,5936	0	-2,08%			
Rec	366,000	606.041,603	4.659.547,192	367,510	367,468	-0,042	240,5936	0	-2,08%			
Rec	367,000	606.041,008	4.659.546,389	367,488	367,447	-0,041	240,5936	0	-2,08%			
Rec	368,000	606.040,412	4.659.545,585	367,465	367,427	-0,038	240,5936	0	-2,08%			
Rec	368,116	606.040,343	4.659.545,492	367,462	367,424	-0,038	240,5936	0	-2,08%		T.E.	
Rec	369,000	606.039,817	4.659.544,782	367,443	367,406	-0,037	240,5936	0	-2,04%			
Rec	370,000	606.039,222	4.659.543,978	367,421	367,386	-0,035	240,5936	0	-1,99%			
Rec	371,000	606.038,626	4.659.543,175	367,398	367,366	-0,032	240,5936	0	-1,94%			
Rec	372,000	606.038,031	4.659.542,371	367,376	367,347	-0,029	240,5936	0	-1,89%			
Rec	373,000	606.037,436	4.659.541,568	367,354	367,329	-0,025	240,5936	0	-1,84%			
Rec	374,000	606.036,841	4.659.540,764	367,331	367,310	-0,021	240,5936	0	-1,79%			
Rec	375,000	606.036,245	4.659.539,961	367,309	367,293	-0,016	240,5936	0	-1,74%			
Rec	376,000	606.035,650	4.659.539,157	367,286	367,276	-0,010	240,5936	0	-1,69%			
Rec	377,000	606.035,055	4.659.538,354	367,264	367,259	-0,005	240,5936	0	-1,64%			
Rec	378,000	606.034,459	4.659.537,550	367,242	367,243	0,001	240,5936	0	-1,59%			
Rec	379,000	606.033,864	4.659.536,747	367,219	367,227	0,008	240,5936	0	-1,54%			
Rec	380,000	606.033,269	4.659.535,943	367,197	367,212	0,015	240,5936	0	-1,49%		V.	
Rec	381,000	606.032,673	4.659.535,140	367,174	367,198	0,024	240,5936	0	-1,44%			
Rec	382,000	606.032,078	4.659.534,336	367,152	367,184	0,032	240,5936	0	-1,39%			
Rec	383,000	606.031,483	4.659.533,533	367,130	367,170	0,040	240,5936	0	-1,34%			
Rec	384,000	606.030,887	4.659.532,729	367,107	367,157	0,050	240,5936	0	-1,29%			
Rec	385,000	606.030,292	4.659.531,926	367,085	367,144	0,059	240,5936	0	-1,24%			
Rec	386,000	606.029,697	4.659.531,122	367,063	367,132	0,069	240,5936	0	-1,19%			
Rec	387,000	606.029,102	4.659.530,319	367,040	367,121	0,081	240,5936	0	-1,14%			
Rec	388,000	606.028,506	4.659.529,515	367,009	367,109	0,100	240,5936	0	-1,09%			
Rec	389,000	606.027,911	4.659.528,712	366,991	367,099	0,108	240,5936	0	-1,04%			
Rec	390,000	606.027,316	4.659.527,908	366,979	367,089	0,110	240,5936	0	-0,99%			
Rec	391,000	606.026,720	4.659.527,105	366,968	367,079	0,111	240,5936	0	-0,94%			
Rec	391,884	606.026,194	4.659.526,394	366,957	367,071	0,114	240,5936	0	-0,89%		T.S.	
Rec	392,000	606.026,125	4.659.526,301	366,956	367,070	0,114	240,5936	0	-0,89%			
Rec	393,000	606.025,530	4.659.525,498	366,945	367,061	0,116	240,5936	0	-0,89%			
Rec	394,000	606.024,934	4.659.524,694	366,933	367,052	0,119	240,5936	0	-0,89%			
Rec	395,000	606.024,339	4.659.523,891	366,922	367,043	0,121	240,5936	0	-0,89%			
Rec	396,000	606.023,744	4.659.523,087	366,910	367,034	0,124	240,5936	0	-0,89%			
Rec	397,000	606.023,149	4.659.522,284	366,899	367,026	0,127	240,5936	0	-0,89%			
Rec	398,000	606.022,553	4.659.521,480	366,888	367,017	0,129	240,5936	0	-0,89%			
Rec	399,000	606.021,958	4.659.520,677	366,876	367,008	0,132	240,5936	0	-0,89%			
Rec	400,000	606.021,363	4.659.519,873	366,865	366,999	0,134	240,5936	0	-0,89%			
Rec	401,000	606.020,767	4.659.519,070	366,854	366,990	0,136	240,5936	0	-0,89%			
Rec	402,000	606.020,172	4.659.518,266	366,843	366,981	0,138	240,5936	0	-0,89%			
Rec	403,000	606.019,577	4.659.517,463	366,832	366,972	0,140	240,5936	0	-0,89%			
Rec	404,000	606.018,981	4.659.516,659	366,822	366,963	0,141	240,5936	0	-0,89%			
Rec	405,000	606.018,386	4.659.515,856	366,812	366,954	0,142	240,5936	0	-0,89%			
Rec	406,000	606.017,791	4.659.515,052	366,801	366,945	0,144	240,5936	0	-0,89%			
Rec	407,000	606.017,196	4.659.514,249	366,791	366,936	0,145	240,5936	0	-0,89%			
Rec	408,000	606.016,600	4.659.513,445	366,782	366,927	0,145	240,5936	0	-0,89%			
Rec	409,000	606.016,005	4.659.512,642	366,772	366,919	0,147	240,5936	0	-0,89%			
Rec	410,000	606.015,410	4.659.511,838	366,763	366,910	0,147	240,5936	0	-0,89%			
Rec	411,000	606.014,814	4.659.511,035	366,753	366,901	0,148	240,5936	0	-0,89%			
Rec	412,000	606.014,219	4.659.510,231	366,743	366,892	0,149	240,5936	0	-0,89%			
Rec	413,000	606.013,624	4.659.509,428	366,733	366,883	0,150	240,5936	0	-0,89%			
Rec	414,000	606.013,028	4.659.508,624	366,724	366,874	0,150	240,5936	0	-0,89%			

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V. = VÉRTICE DE ACUERDO VERTICAL
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	415,000	606.012,433	4.659.507,821	366,714	366,865	0,151	240,5936	0	-0,89%			
Rec	416,000	606.011,838	4.659.507,017	366,705	366,856	0,151	240,5936	0	-0,89%			
Rec	417,000	606.011,242	4.659.506,214	366,696	366,847	0,151	240,5936	0	-0,89%			
Rec	418,000	606.010,647	4.659.505,410	366,688	366,838	0,150	240,5936	0	-0,89%			
Rec	419,000	606.010,052	4.659.504,607	366,681	366,829	0,148	240,5936	0	-0,89%			
Rec	420,000	606.009,457	4.659.503,803	366,674	366,821	0,147	240,5936	0	-0,89%			
Rec	421,000	606.008,861	4.659.503,000	366,666	366,812	0,146	240,5936	0	-0,89%			
Rec	422,000	606.008,266	4.659.502,196	366,659	366,803	0,144	240,5936	0	-0,89%			
Rec	423,000	606.007,671	4.659.501,393	366,651	366,794	0,143	240,5936	0	-0,89%			
Rec	424,000	606.007,075	4.659.500,589	366,641	366,785	0,144	240,5936	0	-0,89%			
Rec	425,000	606.006,480	4.659.499,786	366,629	366,776	0,147	240,5936	0	-0,89%			
Rec	426,000	606.005,885	4.659.498,982	366,619	366,767	0,148	240,5936	0	-0,89%			
Rec	427,000	606.005,289	4.659.498,179	366,612	366,758	0,146	240,5936	0	-0,89%			
Rec	428,000	606.004,694	4.659.497,375	366,605	366,749	0,144	240,5936	0	-0,89%			
Rec	429,000	606.004,099	4.659.496,572	366,603	366,740	0,137	240,5936	0	-0,89%			
Rec	430,000	606.003,504	4.659.495,768	366,604	366,731	0,127	240,5936	0	-0,89%			
Rec	431,000	606.002,908	4.659.494,965	366,613	366,723	0,110	240,5936	0	-0,89%			
Rec	432,000	606.002,313	4.659.494,161	366,601	366,714	0,113	240,5936	0	-0,89%			
Rec	433,000	606.001,718	4.659.493,358	366,589	366,705	0,116	240,5936	0	-0,89%			
Rec	434,000	606.001,122	4.659.492,554	366,577	366,696	0,119	240,5936	0	-0,89%			
Rec	435,000	606.000,527	4.659.491,751	366,566	366,687	0,121	240,5936	0	-0,89%			
Rec	436,000	605.999,932	4.659.490,947	366,554	366,678	0,124	240,5936	0	-0,89%			
Rec	437,000	605.999,336	4.659.490,144	366,542	366,669	0,127	240,5936	0	-0,89%			
Rec	438,000	605.998,741	4.659.489,340	366,530	366,660	0,130	240,5936	0	-0,89%			
Rec	439,000	605.998,146	4.659.488,537	366,519	366,651	0,132	240,5936	0	-0,89%			
Rec	440,000	605.997,551	4.659.487,733	366,507	366,642	0,135	240,5936	0	-0,89%			
Rec	441,000	605.996,955	4.659.486,930	366,495	366,633	0,138	240,5936	0	-0,89%			
Rec	442,000	605.996,360	4.659.486,126	366,483	366,624	0,141	240,5936	0	-0,89%			
Rec	443,000	605.995,765	4.659.485,323	366,472	366,616	0,144	240,5936	0	-0,89%			
Rec	444,000	605.995,169	4.659.484,519	366,460	366,607	0,147	240,5936	0	-0,89%			
Rec	445,000	605.994,574	4.659.483,716	366,448	366,598	0,150	240,5936	0	-0,89%			
Rec	446,000	605.993,979	4.659.482,912	366,437	366,589	0,152	240,5936	0	-0,89%			
Rec	447,000	605.993,383	4.659.482,109	366,425	366,580	0,155	240,5936	0	-0,89%			
Rec	448,000	605.992,788	4.659.481,305	366,413	366,571	0,158	240,5936	0	-0,89%			
Rec	449,000	605.992,193	4.659.480,502	366,401	366,562	0,161	240,5936	0	-0,89%			
Rec	450,000	605.991,597	4.659.479,698	366,390	366,553	0,163	240,5936	0	-0,89%			
Rec	451,000	605.991,002	4.659.478,895	366,378	366,544	0,166	240,5936	0	-0,89%			
Rec	452,000	605.990,407	4.659.478,091	366,366	366,535	0,169	240,5936	0	-0,89%			
Rec	453,000	605.989,812	4.659.477,288	366,354	366,526	0,172	240,5936	0	-0,89%			
Rec	454,000	605.989,216	4.659.476,484	366,343	366,518	0,175	240,5936	0	-0,89%			
Rec	455,000	605.988,621	4.659.475,681	366,316	366,509	0,193	240,5936	0	-0,89%			
Rec	456,000	605.988,026	4.659.474,877	366,286	366,500	0,214	240,5936	0	-0,89%			
Rec	457,000	605.987,430	4.659.474,074	366,268	366,491	0,223	240,5936	0	-0,89%			
Rec	458,000	605.986,835	4.659.473,270	366,237	366,482	0,245	240,5936	0	-0,89%			
Rec	459,000	605.986,240	4.659.472,467	366,215	366,473	0,258	240,5936	0	-0,89%			
Rec	460,000	605.985,644	4.659.471,663	366,196	366,464	0,268	240,5936	0	-0,89%			
Rec	461,000	605.985,049	4.659.470,860	366,176	366,455	0,279	240,5936	0	-0,89%			
Rec	462,000	605.984,454	4.659.470,056	366,162	366,446	0,284	240,5936	0	-0,89%			
Rec	463,000	605.983,859	4.659.469,253	366,153	366,437	0,284	240,5936	0	-0,89%			
Rec	464,000	605.983,263	4.659.468,449	366,144	366,428	0,284	240,5936	0	-0,89%			
Rec	465,000	605.982,668	4.659.467,646	366,134	366,419	0,285	240,5936	0	-0,89%			
Rec	466,000	605.982,073	4.659.466,842	366,134	366,411	0,277	240,5936	0	-0,89%			
Rec	467,000	605.981,477	4.659.466,039	366,128	366,402	0,274	240,5936	0	-0,89%			
Rec	468,000	605.980,882	4.659.465,235	366,125	366,393	0,268	240,5936	0	-0,89%			
Rec	469,000	605.980,287	4.659.464,432	366,120	366,384	0,264	240,5936	0	-0,89%			
Rec	470,000	605.979,691	4.659.463,628	366,115	366,375	0,260	240,5936	0	-0,89%			
Rec	471,000	605.979,096	4.659.462,825	366,109	366,366	0,257	240,5936	0	-0,89%			
Rec	472,000	605.978,501	4.659.462,021	366,103	366,357	0,254	240,5936	0	-0,89%			
Rec	473,000	605.977,906	4.659.461,218	366,104	366,348	0,244	240,5936	0	-0,89%			
Rec	474,000	605.977,310	4.659.460,414	366,098	366,339	0,241	240,5936	0	-0,89%			
Rec	475,000	605.976,715	4.659.459,611	366,092	366,330	0,238	240,5936	0	-0,89%			
Rec	476,000	605.976,120	4.659.458,807	366,088	366,321	0,233	240,5936	0	-0,89%			
Rec	477,000	605.975,524	4.659.458,004	366,087	366,313	0,226	240,5936	0	-0,89%			
Rec	478,000	605.974,929	4.659.457,200	366,087	366,304	0,217	240,5936	0	-0,89%			
Rec	479,000	605.974,334	4.659.456,397	366,092	366,295	0,203	240,5936	0	-0,89%			
Rec	480,000	605.973,738	4.659.455,593	366,095	366,286	0,191	240,5936	0	-0,89%			
Rec	481,000	605.973,143	4.659.454,790	366,099	366,277	0,178	240,5936	0	-0,89%			
Rec	482,000	605.972,548	4.659.453,986	366,102	366,268	0,166	240,5936	0	-0,89%			
Rec	483,000	605.971,952	4.659.453,183	366,110	366,259	0,149	240,5936	0	-0,89%			
Rec	484,000	605.971,357	4.659.452,379	366,120	366,250	0,130	240,5936	0	-0,89%			
Rec	485,000	605.970,762	4.659.451,576	366,131	366,241	0,110	240,5936	0	-0,89%			
Rec	486,000	605.970,167	4.659.450,772	366,140	366,232	0,092	240,5936	0	-0,89%			
Rec	487,000	605.969,571	4.659.449,969	366,146	366,223	0,077	240,5936	0	-0,89%			
Rec	488,000	605.968,976	4.659.449,165	366,150	366,215	0,065	240,5936	0	-0,89%			
Rec	489,000	605.968,381	4.659.448,362	366,151	366,206	0,055	240,5936	0	-0,89%			
Rec	490,000	605.967,785	4.659.447,558	366,151	366,197	0,046	240,5936	0	-0,89%			
Rec	491,000	605.967,190	4.659.446,755	366,150	366,188	0,038	240,5936	0	-0,89%			
Rec	492,000	605.966,595	4.659.445,951	366,149	366,179	0,030	240,5936	0	-0,89%			
Rec	493,000	605.965,999	4.659.445,148	366,147	366,170	0,023	240,5936	0	-0,89%			
Rec	494,000	605.965,404	4.659.444,344	366,143	366,161	0,018	240,5936	0	-0,89%			
Rec	495,000	605.964,809	4.659.443,541	366,144	366,152	0,008	240,5936	0	-0,89%			
Rec	496,000	605.964,214	4.659.442,737	366,143	366,143	0,000	240,5936	0	-0,89%			
Rec	497,000	605.963,618	4.659.441,934	366,138	366,134	-0,004	240,5936	0	-0,89%			
Rec	498,000	605.963,023	4.659.441,130	366,130	366,125	-0,005	240,5936	0	-0,89%			
Rec	499,000	605.962,428	4.659.440,327	366,121	366,116	-0,005	240,5936	0	-0,89%			
Rec	500,000	605.961,832	4.659.439,523	366,111	366,108	-0,003	240,5936	0	-0,89%			
Rec	501,000	605.961,237	4.659.438,720	366,104	366,099	-0,005	240,5936	0	-0,89%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	502,000	605.960,642	4.659.437,916	366,089	366,090	0,001	240,5936	0	-0,89%			
Rec	503,000	605.960,046	4.659.437,113	366,074	366,081	0,007	240,5936	0	-0,89%			
Rec	504,000	605.959,451	4.659.436,309	366,059	366,072	0,013	240,5936	0	-0,89%			
Rec	505,000	605.958,856	4.659.435,506	366,046	366,063	0,017	240,5936	0	-0,89%			
Rec	506,000	605.958,261	4.659.434,702	366,029	366,054	0,025	240,5936	0	-0,89%			
Rec	507,000	605.957,665	4.659.433,899	366,010	366,045	0,035	240,5936	0	-0,89%			
Rec	508,000	605.957,070	4.659.433,095	365,990	366,036	0,046	240,5936	0	-0,89%			
Rec	509,000	605.956,475	4.659.432,292	365,971	366,027	0,056	240,5936	0	-0,89%			
Rec	510,000	605.955,879	4.659.431,488	365,952	366,018	0,066	240,5936	0	-0,89%			
Rec	511,000	605.955,284	4.659.430,684	365,935	366,010	0,075	240,5936	0	-0,89%			
Rec	512,000	605.954,689	4.659.429,881	365,919	366,001	0,082	240,5936	0	-0,89%			
Rec	513,000	605.954,093	4.659.429,077	365,904	365,992	0,088	240,5936	0	-0,89%			
Rec	514,000	605.953,498	4.659.428,274	365,890	365,983	0,093	240,5936	0	-0,89%			
Rec	515,000	605.952,903	4.659.427,470	365,880	365,974	0,094	240,5936	0	-0,89%			
Rec	516,000	605.952,307	4.659.426,667	365,874	365,965	0,091	240,5936	0	-0,89%			
Rec	517,000	605.951,712	4.659.425,863	365,870	365,956	0,086	240,5936	0	-0,89%			
Rec	518,000	605.951,117	4.659.425,060	365,866	365,947	0,081	240,5936	0	-0,89%			
Rec	519,000	605.950,522	4.659.424,256	365,865	365,938	0,073	240,5936	0	-0,89%			
Rec	520,000	605.949,926	4.659.423,453	365,866	365,929	0,063	240,5936	0	-0,89%			
Rec	521,000	605.949,331	4.659.422,649	365,866	365,920	0,054	240,5936	0	-0,89%			
Rec	522,000	605.948,736	4.659.421,846	365,868	365,912	0,044	240,5936	0	-0,89%			
Rec	523,000	605.948,140	4.659.421,042	365,870	365,903	0,033	240,5936	0	-0,89%			
Rec	524,000	605.947,545	4.659.420,239	365,870	365,894	0,024	240,5936	0	-0,89%			
Rec	525,000	605.946,950	4.659.419,435	365,868	365,885	0,017	240,5936	0	-0,89%			
Rec	526,000	605.946,354	4.659.418,632	365,866	365,876	0,010	240,5936	0	-0,89%			
Rec	527,000	605.945,759	4.659.417,828	365,864	365,867	0,003	240,5936	0	-0,89%			
Rec	528,000	605.945,164	4.659.417,025	365,862	365,858	-0,004	240,5936	0	-0,89%			
Rec	529,000	605.944,569	4.659.416,221	365,853	365,849	-0,004	240,5936	0	-0,89%			
Rec	530,000	605.943,973	4.659.415,418	365,845	365,840	-0,005	240,5936	0	-0,89%			
Rec	531,000	605.943,378	4.659.414,614	365,833	365,831	-0,002	240,5936	0	-0,89%			
Rec	532,000	605.942,783	4.659.413,811	365,818	365,822	0,004	240,5936	0	-0,89%			
Rec	533,000	605.942,187	4.659.413,007	365,799	365,813	0,014	240,5936	0	-0,89%			
Rec	534,000	605.941,592	4.659.412,204	365,779	365,805	0,026	240,5936	0	-0,89%			
Rec	535,000	605.940,997	4.659.411,400	365,767	365,796	0,029	240,5936	0	-0,89%			
Rec	536,000	605.940,401	4.659.410,597	365,769	365,787	0,018	240,5936	0	-0,89%			
Rec	537,000	605.939,806	4.659.409,793	365,771	365,778	0,007	240,5936	0	-0,89%			
Rec	538,000	605.939,211	4.659.408,990	365,773	365,769	-0,004	240,5936	0	-0,89%			
Rec	539,000	605.938,616	4.659.408,186	365,775	365,760	-0,015	240,5936	0	-0,89%			
Rec	540,000	605.938,020	4.659.407,383	365,777	365,751	-0,026	240,5936	0	-0,89%			
Rec	540,079	605.937,973	4.659.407,319	365,777	365,750	-0,027	240,5936	0	-0,89%		T.E.	
Rec	541,000	605.937,425	4.659.406,579	365,779	365,743	-0,036	240,5936	0	-0,80%			
Rec	542,000	605.936,830	4.659.405,776	365,781	365,735	-0,046	240,5936	0	-0,70%			
Rec	543,000	605.936,234	4.659.404,972	365,784	365,729	-0,055	240,5936	0	-0,60%			
Rec	544,000	605.935,639	4.659.404,169	365,779	365,723	-0,056	240,5936	0	-0,50%			
Rec	545,000	605.935,044	4.659.403,365	365,768	365,719	-0,049	240,5936	0	-0,40%			
Rec	546,000	605.934,448	4.659.402,562	365,758	365,715	-0,043	240,5936	0	-0,30%			
Rec	547,000	605.933,853	4.659.401,758	365,748	365,713	-0,035	240,5936	0	-0,20%			
Rec	548,000	605.933,258	4.659.400,955	365,742	365,711	-0,031	240,5936	0	-0,10%			
Rec	549,000	605.932,662	4.659.400,151	365,739	365,711	-0,028	240,5936	0	0,00%			
Rec	550,000	605.932,067	4.659.399,348	365,738	365,711	-0,027	240,5936	0	0,10%		V.	ODT Ø500 L=7,00m
Rec	551,000	605.931,472	4.659.398,544	365,738	365,713	-0,025	240,5936	0	0,20%			
Rec	552,000	605.930,877	4.659.397,741	365,736	365,715	-0,021	240,5936	0	0,30%			
Rec	553,000	605.930,281	4.659.396,937	365,735	365,719	-0,016	240,5936	0	0,40%			
Rec	554,000	605.929,686	4.659.396,134	365,735	365,723	-0,012	240,5936	0	0,50%			
Rec	555,000	605.929,091	4.659.395,330	365,736	365,729	-0,007	240,5936	0	0,60%			
Rec	556,000	605.928,495	4.659.394,527	365,736	365,735	-0,001	240,5936	0	0,70%			
Rec	557,000	605.927,900	4.659.393,723	365,738	365,743	0,005	240,5936	0	0,80%			
Rec	558,000	605.927,305	4.659.392,920	365,741	365,751	0,010	240,5936	0	0,90%			
Rec	559,000	605.926,709	4.659.392,116	365,745	365,761	0,016	240,5936	0	1,00%			
Rec	559,921	605.926,161	4.659.391,376	365,751	365,770	0,020	240,5936	0	1,09%		T.S.	
Rec	560,000	605.926,114	4.659.391,313	365,751	365,771	0,020	240,5936	0	1,09%			
Rec	561,000	605.925,519	4.659.390,509	365,757	365,782	0,025	240,5936	0	1,09%			
Rec	562,000	605.924,924	4.659.389,706	365,763	365,793	0,030	240,5936	0	1,09%			
Rec	563,000	605.924,328	4.659.388,902	365,772	365,804	0,032	240,5936	0	1,09%			
Rec	564,000	605.923,733	4.659.388,099	365,783	365,815	0,032	240,5936	0	1,09%			
Rec	565,000	605.923,138	4.659.387,295	365,796	365,826	0,030	240,5936	0	1,09%			
Rec	566,000	605.922,542	4.659.386,492	365,809	365,837	0,028	240,5936	0	1,09%			
Rec	567,000	605.921,947	4.659.385,688	365,821	365,848	0,027	240,5936	0	1,09%			
Rec	568,000	605.921,352	4.659.384,885	365,834	365,859	0,025	240,5936	0	1,09%			
Rec	569,000	605.920,756	4.659.384,081	365,847	365,870	0,023	240,5936	0	1,09%			
Rec	570,000	605.920,161	4.659.383,278	365,860	365,881	0,021	240,5936	0	1,09%			
Rec	571,000	605.919,566	4.659.382,474	365,872	365,892	0,020	240,5936	0	1,09%			
Rec	572,000	605.918,971	4.659.381,671	365,885	365,903	0,018	240,5936	0	1,09%			
Rec	573,000	605.918,375	4.659.380,867	365,898	365,913	0,015	240,5936	0	1,09%			
Rec	574,000	605.917,780	4.659.380,064	365,911	365,924	0,013	240,5936	0	1,09%			
Rec	575,000	605.917,185	4.659.379,260	365,924	365,935	0,011	240,5936	0	1,09%			
Rec	576,000	605.916,589	4.659.378,457	365,938	365,946	0,008	240,5936	0	1,09%			
Rec	577,000	605.915,994	4.659.377,653	365,951	365,957	0,006	240,5936	0	1,09%			
Rec	578,000	605.915,399	4.659.376,850	365,964	365,968	0,004	240,5936	0	1,09%			
Rec	579,000	605.914,803	4.659.376,046	365,977	365,979	0,002	240,5936	0	1,09%			
Rec	580,000	605.914,208	4.659.375,243	365,990	365,990	0,000	240,5936	0	1,09%			
Rec	581,000	605.913,613	4.659.374,439	366,005	366,001	-0,004	240,5936	0	1,09%			
Rec	582,000	605.913,017	4.659.373,636	366,021	366,012	-0,009	240,5936	0	1,09%			
Rec	583,000	605.912,422	4.659.372,832	366,035	366,023	-0,012	240,5936	0	1,09%			
Rec	584,000	605.911,827	4.659.372,029	366,050	366,034	-0,016	240,5936	0	1,09%			
Rec	585,000	605.911,232	4.659.371,225	366,064	366,045	-0,019	240,5936	0	1,09%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	586,000	605.910,636	4.659.370,422	366,079	366,056	-0,023	240,5936	0	1,09%			
Rec	587,000	605.910,041	4.659.369,618	366,093	366,067	-0,026	240,5936	0	1,09%			
Rec	588,000	605.909,446	4.659.368,815	366,104	366,077	-0,027	240,5936	0	1,09%			
Rec	589,000	605.908,850	4.659.368,011	366,115	366,088	-0,027	240,5936	0	1,09%			
Rec	590,000	605.908,255	4.659.367,208	366,127	366,099	-0,028	240,5936	0	1,09%			
Rec	591,000	605.907,660	4.659.366,404	366,138	366,110	-0,028	240,5936	0	1,09%			
Rec	592,000	605.907,064	4.659.365,601	366,147	366,121	-0,026	240,5936	0	1,09%			
Rec	593,000	605.906,469	4.659.364,797	366,156	366,132	-0,024	240,5936	0	1,09%			
Rec	594,000	605.905,874	4.659.363,994	366,164	366,143	-0,021	240,5936	0	1,09%			
Rec	595,000	605.905,279	4.659.363,190	366,172	366,154	-0,018	240,5936	0	1,09%			
Rec	596,000	605.904,683	4.659.362,387	366,181	366,165	-0,016	240,5936	0	1,09%			
Rec	597,000	605.904,088	4.659.361,583	366,189	366,176	-0,013	240,5936	0	1,09%			
Rec	598,000	605.903,493	4.659.360,780	366,198	366,187	-0,011	240,5936	0	1,09%			
Rec	599,000	605.902,897	4.659.359,976	366,209	366,198	-0,011	240,5936	0	1,09%			
Rec	600,000	605.902,302	4.659.359,173	366,219	366,209	-0,010	240,5936	0	1,09%			
Rec	600,471	605.902,022	4.659.358,794	366,224	366,214	-0,010	240,5936	0	1,09%		T.E.	
Rec	601,000	605.901,707	4.659.358,369	366,229	366,220	-0,009	240,5936	0	1,16%			
Rec	602,000	605.901,111	4.659.357,566	366,238	366,232	-0,006	240,5936	0	1,30%			
Rec	603,000	605.900,516	4.659.356,762	366,248	366,246	-0,002	240,5936	0	1,43%			
Rec	604,000	605.899,921	4.659.355,959	366,257	366,261	0,004	240,5936	0	1,56%			
Rec	605,000	605.899,326	4.659.355,155	366,266	366,277	0,011	240,5936	0	1,70%			
Rec	606,000	605.898,730	4.659.354,352	366,277	366,295	0,018	240,5936	0	1,83%			
Rec	607,000	605.898,135	4.659.353,548	366,287	366,314	0,027	240,5936	0	1,96%			
Rec	608,000	605.897,540	4.659.352,745	366,296	366,334	0,038	240,5936	0	2,10%			
Rec	609,000	605.896,944	4.659.351,941	366,315	366,356	0,041	240,5936	0	2,23%			
Rec	610,000	605.896,349	4.659.351,138	366,338	366,379	0,041	240,5936	0	2,36%		V.	
Rec	611,000	605.895,754	4.659.350,334	366,355	366,403	0,048	240,5936	0	2,50%			
Rec	612,000	605.895,158	4.659.349,531	366,367	366,428	0,061	240,5936	0	2,63%			
Rec	613,000	605.894,563	4.659.348,727	366,385	366,455	0,070	240,5936	0	2,76%			
Rec	614,000	605.893,968	4.659.347,924	366,412	366,484	0,072	240,5936	0	2,90%			
Rec	615,000	605.893,372	4.659.347,120	366,434	366,513	0,079	240,5936	0	3,03%			
Rec	616,000	605.892,777	4.659.346,317	366,458	366,544	0,086	240,5936	0	3,16%			
Rec	617,000	605.892,182	4.659.345,513	366,492	366,577	0,085	240,5936	0	3,30%			
Rec	618,000	605.891,587	4.659.344,710	366,514	366,610	0,096	240,5936	0	3,43%			
Rec	619,000	605.890,991	4.659.343,906	366,546	366,645	0,099	240,5936	0	3,56%			
Rec	619,529	605.890,676	4.659.343,481	366,563	366,664	0,101	240,5936	0	3,63%		T.S.	
Rec	620,000	605.890,396	4.659.343,103	366,579	366,681	0,102	240,5936	0	3,63%			
Rec	621,000	605.889,801	4.659.342,299	366,616	366,717	0,101	240,5936	0	3,63%			
Rec	622,000	605.889,205	4.659.341,496	366,658	366,754	0,096	240,5936	0	3,63%			
Rec	623,000	605.888,610	4.659.340,692	366,689	366,790	0,101	240,5936	0	3,63%			
Rec	624,000	605.888,015	4.659.339,889	366,729	366,826	0,097	240,5936	0	3,63%			
Rec	625,000	605.887,419	4.659.339,085	366,751	366,863	0,112	240,5936	0	3,63%			
Rec	626,000	605.886,824	4.659.338,282	366,785	366,899	0,114	240,5936	0	3,63%			
Rec	627,000	605.886,229	4.659.337,478	366,818	366,935	0,117	240,5936	0	3,63%			
Rec	628,000	605.885,634	4.659.336,675	366,858	366,972	0,114	240,5936	0	3,63%			
Rec	629,000	605.885,038	4.659.335,871	366,901	367,008	0,107	240,5936	0	3,63%			
Rec	630,000	605.884,443	4.659.335,068	366,943	367,044	0,101	240,5936	0	3,63%			
Rec	631,000	605.883,848	4.659.334,264	366,986	367,081	0,095	240,5936	0	3,63%			
Rec	632,000	605.883,252	4.659.333,461	367,041	367,117	0,076	240,5936	0	3,63%			
Rec	632,732	605.882,817	4.659.332,873	367,086	367,143	0,058	240,5936	0	3,63%		T.E.	
Rec	633,000	605.882,657	4.659.332,657	367,102	367,153	0,051	240,5936	0	3,68%			
Rec	634,000	605.882,062	4.659.331,854	367,161	367,191	0,030	240,5936	0	3,84%			
Rec	635,000	605.881,466	4.659.331,050	367,220	367,230	0,010	240,5936	0	4,01%			
Rec	636,000	605.880,871	4.659.330,247	367,278	367,271	-0,007	240,5936	0	4,18%			
Rec	637,000	605.880,276	4.659.329,443	367,337	367,314	-0,023	240,5936	0	4,34%			
Rec	638,000	605.879,681	4.659.328,640	367,390	367,358	-0,032	240,5936	0	4,51%			
Rec	639,000	605.879,085	4.659.327,836	367,442	367,404	-0,038	240,5936	0	4,68%			
Rec	640,000	605.878,490	4.659.327,033	367,503	367,451	-0,052	240,5936	0	4,84%			
Rec	641,000	605.877,895	4.659.326,229	367,565	367,501	-0,064	240,5936	0	5,01%			
Rec	642,000	605.877,299	4.659.325,426	367,624	367,552	-0,072	240,5936	0	5,18%			
Rec	643,000	605.876,704	4.659.324,622	367,669	367,604	-0,065	240,5936	0	5,34%			
Cur	643,902	605.876,167	4.659.323,897	367,704	367,653	-0,051	240,5936	200	5,49%	P.S.	V.	
Cur	644,000	605.876,109	4.659.323,819	367,708	367,658	-0,050	240,6246	200	5,51%			
Cur	645,000	605.875,511	4.659.323,017	367,754	367,714	-0,040	240,9429	200	5,68%			
Cur	646,000	605.874,909	4.659.322,218	367,802	367,772	-0,030	241,2613	200	5,84%			
Cur	647,000	605.874,304	4.659.321,423	367,857	367,831	-0,026	241,5796	200	6,01%			
Cur	648,000	605.873,694	4.659.320,630	367,913	367,892	-0,021	241,8979	200	6,18%			
Cur	649,000	605.873,080	4.659.319,840	367,970	367,955	-0,015	242,2162	200	6,34%			
Cur	650,000	605.872,463	4.659.319,054	368,027	368,019	-0,008	242,5345	200	6,51%			
Cur	651,000	605.871,841	4.659.318,270	368,081	368,085	0,004	242,8528	200	6,68%			
Cur	652,000	605.871,216	4.659.317,490	368,133	368,152	0,019	243,1711	200	6,84%			
Cur	653,000	605.870,587	4.659.316,713	368,185	368,222	0,037	243,4894	200	7,01%			
Cur	654,000	605.869,953	4.659.315,939	368,234	368,293	0,059	243,8077	200	7,18%			
Cur	655,000	605.869,316	4.659.315,168	368,282	368,365	0,083	244,1260	200	7,34%			
Cur	655,072	605.869,270	4.659.315,113	368,285	368,371	0,086	244,1490	200	7,35%		T.S.	
Cur	656,000	605.868,676	4.659.314,400	368,328	368,439	0,111	244,4444	200	7,36%			
Cur	657,000	605.868,031	4.659.313,636	368,374	368,513	0,139	244,7627	200	7,36%			
Cur	658,000	605.867,382	4.659.312,875	368,425	368,586	0,161	245,0810	200	7,36%			
Cur	659,000	605.866,730	4.659.312,117	368,476	368,660	0,184	245,3993	200	7,36%			
Cur	660,000	605.866,074	4.659.311,362	368,526	368,733	0,207	245,7176	200	7,36%			
Cur	661,000	605.865,414	4.659.310,611	368,577	368,807	0,230	246,0359	200	7,36%			
Cur	662,000	605.864,750	4.659.309,863	368,615	368,881	0,266	246,3542	200	7,36%			
Cur	663,000	605.864,083	4.659.309,118	368,647	368,954	0,307	246,6725	200	7,36%			
Cur	664,000	605.863,412	4.659.308,377	368,680	369,028	0,348	246,9908	200	7,36%			
Cur	665,000	605.862,737	4.659.307,639	368,714	369,101	0,387	247,3091	200	7,36%			
Cur	666,000	605.862,059	4.659.306,904	368,749	369,175	0,426	247,6275	200	7,36%			
Cur	667,000	605.861,377	4.659.306,173	368,818	369,248	0,430	247,9458	200	7,36%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	668,000	605.860,691	4.659.305,445	368,887	369,322	0,435	248,2641	200	7,36%			
Cur	669,000	605.860,002	4.659.304,720	368,957	369,396	0,439	248,5824	200	7,36%			
Cur	670,000	605.859,309	4.659.303,999	369,025	369,469	0,444	248,9007	200	7,36%			
Cur	671,000	605.858,612	4.659.303,282	369,096	369,543	0,447	249,2190	200	7,36%			
Cur	672,000	605.857,912	4.659.302,568	369,167	369,616	0,449	249,5373	200	7,36%			
Cur	673,000	605.857,208	4.659.301,858	369,239	369,690	0,451	249,8556	200	7,36%			
Cur	674,000	605.856,501	4.659.301,151	369,311	369,763	0,452	250,1739	200	7,36%			
Cur	675,000	605.855,790	4.659.300,447	369,384	369,837	0,453	250,4922	200	7,36%			
Cur	676,000	605.855,076	4.659.299,747	369,459	369,911	0,452	250,8106	200	7,36%			
Cur	677,000	605.854,358	4.659.299,051	369,534	369,984	0,450	251,1289	200	7,36%			
Cur	678,000	605.853,637	4.659.298,358	369,611	370,058	0,447	251,4472	200	7,36%			
Cur	679,000	605.852,912	4.659.297,669	369,685	370,131	0,446	251,7655	200	7,36%			
Cur	680,000	605.852,184	4.659.296,984	369,763	370,205	0,442	252,0838	200	7,36%			
Cur	681,000	605.851,452	4.659.296,302	369,835	370,278	0,443	252,4021	200	7,36%			
Cur	682,000	605.850,717	4.659.295,624	369,908	370,352	0,444	252,7204	200	7,36%			
Cur	683,000	605.849,979	4.659.294,950	369,982	370,426	0,444	253,0387	200	7,36%			
Cur	684,000	605.849,237	4.659.294,279	370,068	370,499	0,431	253,3570	200	7,36%			
Cur	685,000	605.848,492	4.659.293,612	370,158	370,573	0,415	253,6753	200	7,36%			
Cur	686,000	605.847,744	4.659.292,949	370,250	370,646	0,396	253,9937	200	7,36%			
Cur	687,000	605.846,992	4.659.292,289	370,344	370,720	0,376	254,3120	200	7,36%			
Cur	688,000	605.846,237	4.659.291,634	370,434	370,793	0,359	254,6303	200	7,36%			
Cur	689,000	605.845,479	4.659.290,982	370,523	370,867	0,344	254,9486	200	7,36%			
Cur	690,000	605.844,717	4.659.290,333	370,612	370,941	0,329	255,2669	200	7,36%			
Cur	691,000	605.843,953	4.659.289,689	370,696	371,014	0,318	255,5852	200	7,36%			
Cur	692,000	605.843,185	4.659.289,049	370,781	371,088	0,307	255,9035	200	7,36%			
Cur	693,000	605.842,414	4.659.288,412	370,860	371,161	0,301	256,2218	200	7,36%			
Cur	694,000	605.841,639	4.659.287,779	370,940	371,235	0,295	256,5401	200	7,36%			
Cur	695,000	605.840,862	4.659.287,150	371,017	371,308	0,291	256,8584	200	7,36%			
Cur	696,000	605.840,081	4.659.286,525	371,090	371,382	0,292	257,1767	200	7,36%			
Cur	697,000	605.839,297	4.659.285,904	371,163	371,456	0,293	257,4951	200	7,36%			
Cur	698,000	605.838,511	4.659.285,287	371,238	371,529	0,291	257,8134	200	7,36%			
Cur	699,000	605.837,721	4.659.284,674	371,312	371,603	0,291	258,1317	200	7,36%			
Cur	700,000	605.836,928	4.659.284,064	371,389	371,676	0,287	258,4500	200	7,36%			
Cur	701,000	605.836,132	4.659.283,459	371,462	371,750	0,288	258,7683	200	7,36%			
Cur	702,000	605.835,333	4.659.282,858	371,536	371,823	0,287	259,0866	200	7,36%			
Cur	703,000	605.834,531	4.659.282,260	371,610	371,897	0,287	259,4049	200	7,36%			
Cur	704,000	605.833,726	4.659.281,667	371,680	371,971	0,291	259,7232	200	7,36%			
Cur	705,000	605.832,918	4.659.281,078	371,754	372,044	0,290	260,0415	200	7,36%			
Cur	706,000	605.832,107	4.659.280,492	371,825	372,118	0,293	260,3598	200	7,36%			
Cur	707,000	605.831,293	4.659.279,911	371,892	372,191	0,299	260,6782	200	7,36%			
Cur	708,000	605.830,477	4.659.279,334	371,954	372,265	0,311	260,9965	200	7,36%			
Cur	709,000	605.829,657	4.659.278,761	372,015	372,339	0,324	261,3148	200	7,36%			
Cur	710,000	605.828,835	4.659.278,192	372,086	372,412	0,326	261,6331	200	7,36%			
Cur	711,000	605.828,009	4.659.277,628	372,160	372,486	0,326	261,9514	200	7,36%			
Cur	712,000	605.827,181	4.659.277,067	372,232	372,559	0,327	262,2697	200	7,36%			
Cur	713,000	605.826,351	4.659.276,510	372,300	372,633	0,303	262,5880	200	7,36%			
Cur	714,000	605.825,517	4.659.275,958	372,409	372,706	0,297	262,9063	200	7,36%			
Cur	715,000	605.824,681	4.659.275,410	372,497	372,780	0,283	263,2246	200	7,36%			
Cur	716,000	605.823,841	4.659.274,866	372,563	372,854	0,291	263,5429	200	7,36%			
Cur	717,000	605.823,000	4.659.274,326	372,634	372,927	0,293	263,8613	200	7,36%			
Cur	718,000	605.822,155	4.659.273,791	372,713	373,001	0,288	264,1796	200	7,36%			
Cur	719,000	605.821,308	4.659.273,259	372,771	373,074	0,303	264,4979	200	7,36%			
Cur	720,000	605.820,458	4.659.272,732	372,850	373,148	0,298	264,8162	200	7,36%			
Cur	721,000	605.819,606	4.659.272,209	372,904	373,221	0,317	265,1345	200	7,36%			
Cur	722,000	605.818,751	4.659.271,691	372,959	373,295	0,336	265,4528	200	7,36%			
Cur	723,000	605.817,893	4.659.271,177	373,049	373,369	0,320	265,7711	200	7,36%			
Cur	724,000	605.817,033	4.659.270,667	373,284	373,442	0,158	266,0894	200	7,36%			
Cur	724,099	605.816,948	4.659.270,616	373,306	373,449	0,143	266,1209	200	7,36%			
Cur	725,000	605.816,170	4.659.270,161	373,508	373,515	0,007	266,4077	200	7,27%			
Cur	726,000	605.815,305	4.659.269,660	373,735	373,587	-0,148	266,7260	200	7,17%			
Cur	727,000	605.814,437	4.659.269,162	373,964	373,659	-0,305	267,0444	200	7,07%			
Cur	728,000	605.813,567	4.659.268,670	374,028	373,729	-0,299	267,3627	200	6,97%			
Cur	729,000	605.812,694	4.659.268,181	374,065	373,798	-0,267	267,6810	200	6,87%			
Cur	730,000	605.811,819	4.659.267,698	374,101	373,866	-0,235	267,9993	200	6,77%			
Cur	731,000	605.810,942	4.659.267,218	374,137	373,933	-0,204	268,3176	200	6,67%			
Cur	732,000	605.810,062	4.659.266,743	374,173	373,999	-0,174	268,6359	200	6,57%			
Cur	733,000	605.809,180	4.659.266,272	374,209	374,065	-0,144	268,9542	200	6,47%			
Cur	734,000	605.808,295	4.659.265,806	374,246	374,129	-0,117	269,2725	200	6,37%			
Cur	735,000	605.807,408	4.659.265,344	374,283	374,192	-0,091	269,5908	200	6,27%			
Rec	735,864	605.806,640	4.659.264,948	374,315	374,246	-0,069	269,8657	0	6,18%	P.S.	V.	
Rec	736,000	605.806,519	4.659.264,886	374,320	374,254	-0,066	269,8657	0	6,17%			
Rec	737,000	605.805,629	4.659.264,430	374,358	374,315	-0,043	269,8657	0	6,07%			
Rec	738,000	605.804,739	4.659.263,974	374,403	374,376	-0,027	269,8657	0	5,97%			
Rec	739,000	605.803,849	4.659.263,519	374,448	374,435	-0,013	269,8657	0	5,87%			
Rec	740,000	605.802,959	4.659.263,063	374,492	374,493	0,001	269,8657	0	5,77%			
Rec	741,000	605.802,069	4.659.262,607	374,527	374,550	0,023	269,8657	0	5,67%			
Rec	742,000	605.801,179	4.659.262,151	374,571	374,606	0,035	269,8657	0	5,57%			
Rec	743,000	605.800,289	4.659.261,695	374,612	374,661	0,049	269,8657	0	5,47%			
Rec	744,000	605.799,398	4.659.261,239	374,653	374,716	0,063	269,8657	0	5,37%			
Rec	745,000	605.798,508	4.659.260,783	374,701	374,769	0,068	269,8657	0	5,27%			
Rec	746,000	605.797,618	4.659.260,328	374,753	374,821	0,068	269,8657	0	5,17%			
Rec	747,000	605.796,728	4.659.259,872	374,811	374,872	0,061	269,8657	0	5,07%			
Rec	747,629	605.796,168	4.659.259,585	374,847	374,904	0,056	269,8657	0	5,00%			
Rec	748,000	605.795,838	4.659.259,416	374,869	374,922	0,053	269,8657	0	5,00%			
Rec	749,000	605.794,948	4.659.258,960	374,934	374,972	0,038	269,8657	0	5,00%			
Rec	750,000	605.794,058	4.659.258,504	374,993	375,022	0,029	269,8657	0	5,00%			
Rec	751,000	605.793,168	4.659.258,048	375,064	375,072	0,008	269,8657	0	5,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	752,000	605.792,278	4.659.257,592	375,132	375,122	-0,010	269,8657	0	5,00%			
Rec	753,000	605.791,388	4.659.257,136	375,194	375,172	-0,022	269,8657	0	5,00%			
Rec	754,000	605.790,498	4.659.256,681	375,255	375,223	-0,032	269,8657	0	5,00%			
Rec	755,000	605.789,608	4.659.256,225	375,310	375,273	-0,037	269,8657	0	5,00%			
Rec	756,000	605.788,718	4.659.255,769	375,369	375,323	-0,046	269,8657	0	5,00%			
Rec	757,000	605.787,828	4.659.255,313	375,424	375,373	-0,051	269,8657	0	5,00%			
Rec	758,000	605.786,938	4.659.254,857	375,473	375,423	-0,050	269,8657	0	5,00%			
Rec	759,000	605.786,048	4.659.254,401	375,523	375,473	-0,050	269,8657	0	5,00%			
Rec	760,000	605.785,158	4.659.253,945	375,571	375,523	-0,048	269,8657	0	5,00%			
Rec	761,000	605.784,268	4.659.253,489	375,620	375,573	-0,047	269,8657	0	5,00%			
Rec	762,000	605.783,378	4.659.253,034	375,667	375,623	-0,044	269,8657	0	5,00%			
Rec	763,000	605.782,488	4.659.252,578	375,717	375,673	-0,044	269,8657	0	5,00%			
Rec	764,000	605.781,598	4.659.252,122	375,766	375,723	-0,043	269,8657	0	5,00%			
Rec	765,000	605.780,707	4.659.251,666	375,814	375,773	-0,041	269,8657	0	5,00%			
Rec	766,000	605.779,817	4.659.251,210	375,860	375,823	-0,037	269,8657	0	5,00%			
Rec	767,000	605.778,927	4.659.250,754	375,904	375,873	-0,031	269,8657	0	5,00%			
Rec	768,000	605.778,037	4.659.250,298	375,947	375,923	-0,024	269,8657	0	5,00%			
Rec	769,000	605.777,147	4.659.249,843	375,990	375,973	-0,017	269,8657	0	5,00%			
Rec	770,000	605.776,257	4.659.249,387	376,039	376,023	-0,016	269,8657	0	5,00%			
Rec	771,000	605.775,367	4.659.248,931	376,090	376,073	-0,017	269,8657	0	5,00%			
Rec	772,000	605.774,477	4.659.248,475	376,139	376,123	-0,016	269,8657	0	5,00%			
Rec	773,000	605.773,587	4.659.248,019	376,189	376,173	-0,016	269,8657	0	5,00%			
Rec	774,000	605.772,697	4.659.247,563	376,236	376,223	-0,013	269,8657	0	5,00%			
Rec	775,000	605.771,807	4.659.247,107	376,287	376,273	-0,014	269,8657	0	5,00%			
Rec	776,000	605.770,917	4.659.246,651	376,333	376,323	-0,010	269,8657	0	5,00%			
Rec	777,000	605.770,027	4.659.246,196	376,391	376,373	-0,018	269,8657	0	5,00%			
Rec	778,000	605.769,137	4.659.245,740	376,443	376,424	-0,019	269,8657	0	5,00%			
Rec	779,000	605.768,247	4.659.245,284	376,498	376,474	-0,024	269,8657	0	5,00%			
Rec	780,000	605.767,357	4.659.244,828	376,550	376,524	-0,026	269,8657	0	5,00%			
Rec	781,000	605.766,467	4.659.244,372	376,601	376,574	-0,027	269,8657	0	5,00%			
Rec	782,000	605.765,577	4.659.243,916	376,647	376,624	-0,023	269,8657	0	5,00%			
Rec	783,000	605.764,687	4.659.243,460	376,690	376,674	-0,016	269,8657	0	5,00%			
Rec	784,000	605.763,797	4.659.243,005	376,734	376,724	-0,010	269,8657	0	5,00%			
Rec	785,000	605.762,907	4.659.242,549	376,776	376,774	-0,002	269,8657	0	5,00%			
Rec	786,000	605.762,016	4.659.242,093	376,816	376,824	0,008	269,8657	0	5,00%			
Rec	787,000	605.761,126	4.659.241,637	376,857	376,874	0,017	269,8657	0	5,00%			
Rec	788,000	605.760,236	4.659.241,181	376,899	376,924	0,025	269,8657	0	5,00%			
Rec	789,000	605.759,346	4.659.240,725	376,941	376,974	0,033	269,8657	0	5,00%			
Rec	790,000	605.758,456	4.659.240,269	376,982	377,024	0,042	269,8657	0	5,00%			
Rec	791,000	605.757,566	4.659.239,813	377,023	377,074	0,051	269,8657	0	5,00%			
Rec	792,000	605.756,676	4.659.239,358	377,067	377,124	0,057	269,8657	0	5,00%			
Rec	793,000	605.755,786	4.659.238,902	377,113	377,174	0,061	269,8657	0	5,00%			
Rec	793,678	605.755,183	4.659.238,593	377,145	377,208	0,063	269,8657	0	5,00%		T.E.	
Rec	794,000	605.754,896	4.659.238,446	377,160	377,224	0,064	269,8657	0	4,94%			
Rec	795,000	605.754,006	4.659.237,990	377,211	377,272	0,061	269,8657	0	4,74%			
Rec	796,000	605.753,116	4.659.237,534	377,265	377,319	0,054	269,8657	0	4,54%			
Rec	797,000	605.752,226	4.659.237,078	377,318	377,363	0,045	269,8657	0	4,34%			
Rec	798,000	605.751,336	4.659.236,622	377,377	377,406	0,029	269,8657	0	4,14%			
Rec	799,000	605.750,446	4.659.236,166	377,425	377,446	0,021	269,8657	0	3,94%			
Rec	800,000	605.749,556	4.659.235,711	377,482	377,484	0,002	269,8657	0	3,74%			
Rec	801,000	605.748,666	4.659.235,255	377,519	377,521	0,002	269,8657	0	3,54%			
Rec	802,000	605.747,776	4.659.234,799	377,571	377,555	-0,016	269,8657	0	3,34%			
Rec	803,000	605.746,886	4.659.234,343	377,608	377,588	-0,020	269,8657	0	3,14%			
Rec	804,000	605.745,996	4.659.233,887	377,652	377,618	-0,034	269,8657	0	2,94%			
Rec	805,000	605.745,106	4.659.233,431	377,686	377,646	-0,040	269,8657	0	2,74%			
Rec	806,000	605.744,216	4.659.232,975	377,724	377,673	-0,051	269,8657	0	2,54%			
Rec	807,000	605.743,325	4.659.232,520	377,754	377,697	-0,057	269,8657	0	2,34%			
Rec	808,000	605.742,435	4.659.232,064	377,782	377,720	-0,062	269,8657	0	2,14%			
Rec	809,000	605.741,545	4.659.231,608	377,808	377,740	-0,068	269,8657	0	1,94%			
Rec	810,000	605.740,655	4.659.231,152	377,827	377,758	-0,069	269,8657	0	1,74%			
Rec	811,000	605.739,765	4.659.230,696	377,862	377,775	-0,087	269,8657	0	1,54%			
Rec	812,000	605.738,875	4.659.230,240	377,908	377,789	-0,119	269,8657	0	1,34%			
Rec	813,000	605.737,985	4.659.229,784	377,916	377,802	-0,114	269,8657	0	1,14%			
Rec	814,000	605.737,095	4.659.229,328	377,919	377,812	-0,107	269,8657	0	0,94%			
Rec	815,000	605.736,205	4.659.228,873	377,921	377,820	-0,101	269,8657	0	0,74%		V.	
Rec	816,000	605.735,315	4.659.228,417	377,922	377,827	-0,095	269,8657	0	0,54%			
Rec	817,000	605.734,425	4.659.227,961	377,922	377,831	-0,091	269,8657	0	0,34%			
Rec	818,000	605.733,535	4.659.227,505	377,920	377,834	-0,086	269,8657	0	0,14%			
Rec	819,000	605.732,645	4.659.227,049	377,917	377,834	-0,083	269,8657	0	-0,06%			
Rec	820,000	605.731,755	4.659.226,593	377,896	377,832	-0,064	269,8657	0	-0,26%			
Rec	821,000	605.730,865	4.659.226,137	377,867	377,829	-0,038	269,8657	0	-0,46%			
Rec	822,000	605.729,975	4.659.225,681	377,859	377,823	-0,036	269,8657	0	-0,66%			
Rec	823,000	605.729,085	4.659.225,226	377,841	377,816	-0,025	269,8657	0	-0,86%			
Rec	824,000	605.728,195	4.659.224,770	377,829	377,806	-0,023	269,8657	0	-1,06%			
Rec	825,000	605.727,305	4.659.224,314	377,809	377,794	-0,015	269,8657	0	-1,26%			
Rec	826,000	605.726,415	4.659.223,858	377,786	377,781	-0,005	269,8657	0	-1,46%			
Rec	827,000	605.725,525	4.659.223,402	377,768	377,765	-0,003	269,8657	0	-1,66%			
Rec	828,000	605.724,635	4.659.222,946	377,744	377,748	0,004	269,8657	0	-1,86%			
Rec	829,000	605.723,744	4.659.222,490	377,711	377,728	0,017	269,8657	0	-2,06%			
Rec	830,000	605.722,854	4.659.222,035	377,684	377,706	0,022	269,8657	0	-2,26%			
Rec	831,000	605.721,964	4.659.221,579	377,649	377,683	0,034	269,8657	0	-2,46%			
Rec	832,000	605.721,074	4.659.221,123	377,617	377,657	0,040	269,8657	0	-2,66%			
Rec	833,000	605.720,184	4.659.220,667	377,584	377,630	0,046	269,8657	0	-2,86%			
Rec	834,000	605.719,294	4.659.220,211	377,554	377,600	0,046	269,8657	0	-3,06%			
Rec	835,000	605.718,404	4.659.219,755	377,523	377,568	0,045	269,8657	0	-3,26%			
Rec	836,000	605.717,514	4.659.219,299	377,496	377,535	0,039	269,8657	0	-3,46%			
Rec	836,322	605.717,228	4.659.219,153	377,487	377,524	0,037	269,8657	0	-3,52%		T.S.	

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	837,000	605.716,624	4.659.218,843	377,467	377,500	0,033	269,8657	0	-3,52%			
Rec	838,000	605.715,734	4.659.218,388	377,433	377,464	0,031	269,8657	0	-3,52%			
Rec	839,000	605.714,844	4.659.217,932	377,395	377,429	0,034	269,8657	0	-3,52%			
Rec	840,000	605.713,954	4.659.217,476	377,355	377,394	0,039	269,8657	0	-3,52%			
Rec	841,000	605.713,064	4.659.217,020	377,316	377,359	0,043	269,8657	0	-3,52%			
Rec	842,000	605.712,174	4.659.216,564	377,275	377,323	0,048	269,8657	0	-3,52%			
Rec	843,000	605.711,284	4.659.216,108	377,235	377,288	0,053	269,8657	0	-3,52%			
Rec	844,000	605.710,394	4.659.215,652	377,195	377,253	0,058	269,8657	0	-3,52%			
Rec	845,000	605.709,504	4.659.215,197	377,161	377,218	0,057	269,8657	0	-3,52%			
Rec	846,000	605.708,614	4.659.214,741	377,129	377,182	0,053	269,8657	0	-3,52%			
Rec	847,000	605.707,724	4.659.214,285	377,105	377,147	0,042	269,8657	0	-3,52%			
Rec	848,000	605.706,834	4.659.213,829	377,080	377,112	0,032	269,8657	0	-3,52%			
Rec	849,000	605.705,944	4.659.213,373	377,056	377,077	0,021	269,8657	0	-3,52%			
Rec	850,000	605.705,053	4.659.212,917	377,028	377,041	0,013	269,8657	0	-3,52%			
Rec	851,000	605.704,163	4.659.212,461	376,999	377,006	0,007	269,8657	0	-3,52%			
Rec	852,000	605.703,273	4.659.212,005	376,966	376,971	0,005	269,8657	0	-3,52%			
Rec	853,000	605.702,383	4.659.211,550	376,935	376,936	0,001	269,8657	0	-3,52%			
Rec	854,000	605.701,493	4.659.211,094	376,905	376,901	-0,004	269,8657	0	-3,52%			
Rec	855,000	605.700,603	4.659.210,638	376,870	376,865	-0,005	269,8657	0	-3,52%			
Rec	856,000	605.699,713	4.659.210,182	376,829	376,830	0,001	269,8657	0	-3,52%			
Rec	857,000	605.698,823	4.659.209,726	376,786	376,795	0,009	269,8657	0	-3,52%			
Rec	858,000	605.697,933	4.659.209,270	376,745	376,760	0,015	269,8657	0	-3,52%			
Rec	859,000	605.697,043	4.659.208,814	376,707	376,724	0,017	269,8657	0	-3,52%			
Rec	860,000	605.696,153	4.659.208,358	376,674	376,689	0,015	269,8657	0	-3,52%			
Rec	861,000	605.695,263	4.659.207,903	376,636	376,654	0,018	269,8657	0	-3,52%			
Rec	862,000	605.694,373	4.659.207,447	376,621	376,619	-0,002	269,8657	0	-3,52%			
Rec	863,000	605.693,483	4.659.206,991	376,572	376,583	0,011	269,8657	0	-3,52%			
Rec	864,000	605.692,593	4.659.206,535	376,531	376,548	0,017	269,8657	0	-3,52%			
Rec	865,000	605.691,703	4.659.206,079	376,492	376,513	0,021	269,8657	0	-3,52%			
Rec	866,000	605.690,813	4.659.205,623	376,454	376,478	0,024	269,8657	0	-3,52%			
Rec	867,000	605.689,923	4.659.205,167	376,424	376,442	0,018	269,8657	0	-3,52%			
Rec	868,000	605.689,033	4.659.204,712	376,406	376,407	0,001	269,8657	0	-3,52%			
Rec	869,000	605.688,143	4.659.204,256	376,374	376,372	-0,002	269,8657	0	-3,52%			
Rec	870,000	605.687,253	4.659.203,800	376,335	376,337	0,002	269,8657	0	-3,52%			
Rec	871,000	605.686,362	4.659.203,344	376,307	376,301	-0,006	269,8657	0	-3,52%			
Rec	872,000	605.685,472	4.659.202,888	376,270	376,266	-0,004	269,8657	0	-3,52%			
Rec	873,000	605.684,582	4.659.202,432	376,226	376,231	0,005	269,8657	0	-3,52%			
Rec	874,000	605.683,692	4.659.201,976	376,196	376,196	0,000	269,8657	0	-3,52%			
Rec	875,000	605.682,802	4.659.201,520	376,166	376,160	-0,006	269,8657	0	-3,52%			
Rec	876,000	605.681,912	4.659.201,065	376,130	376,125	-0,005	269,8657	0	-3,52%			
Rec	877,000	605.681,022	4.659.200,609	376,078	376,090	0,012	269,8657	0	-3,52%			
Rec	878,000	605.680,132	4.659.200,153	376,016	376,055	0,039	269,8657	0	-3,52%			
Rec	878,452	605.679,730	4.659.199,947	375,992	376,039	0,047	269,8657	0	-3,52%		T.E.	
Rec	879,000	605.679,242	4.659.199,697	375,962	376,019	0,057	269,8657	0	-3,51%			
Rec	880,000	605.678,352	4.659.199,241	375,915	375,984	0,069	269,8657	0	-3,49%			
Rec	881,000	605.677,462	4.659.198,785	375,868	375,950	0,082	269,8657	0	-3,47%			
Rec	882,000	605.676,572	4.659.198,329	375,830	375,915	0,085	269,8657	0	-3,45%			
Rec	883,000	605.675,682	4.659.197,874	375,794	375,881	0,087	269,8657	0	-3,43%			
Rec	884,000	605.674,792	4.659.197,418	375,764	375,846	0,082	269,8657	0	-3,41%			
Rec	885,000	605.673,902	4.659.196,962	375,738	375,812	0,074	269,8657	0	-3,39%			
Rec	886,000	605.673,012	4.659.196,506	375,720	375,778	0,058	269,8657	0	-3,37%			
Rec	887,000	605.672,122	4.659.196,050	375,706	375,745	0,039	269,8657	0	-3,35%			
Rec	888,000	605.671,232	4.659.195,594	375,692	375,711	0,019	269,8657	0	-3,33%			
Cur	888,262	605.670,998	4.659.195,475	375,691	375,703	0,012	269,8657	75	-3,33%	P.S.	V.	
Cur	889,000	605.670,340	4.659.195,142	375,664	375,678	0,014	270,4919	75	-3,31%			
Cur	890,000	605.669,443	4.659.194,700	375,648	375,645	-0,003	271,3408	75	-3,29%			
Cur	891,000	605.668,539	4.659.194,271	375,618	375,612	-0,006	272,1896	75	-3,27%			
Cur	892,000	605.667,630	4.659.193,854	375,599	375,580	-0,019	273,0384	75	-3,25%			
Cur	893,000	605.666,716	4.659.193,449	375,573	375,547	-0,026	273,8873	75	-3,23%			
Cur	894,000	605.665,796	4.659.193,057	375,551	375,515	-0,036	274,7361	75	-3,21%			
Cur	895,000	605.664,872	4.659.192,676	375,536	375,483	-0,053	275,5849	75	-3,19%			
Cur	896,000	605.663,942	4.659.192,308	375,520	375,451	-0,069	276,4337	75	-3,17%			
Cur	897,000	605.663,007	4.659.191,953	375,506	375,419	-0,087	277,2826	75	-3,15%			
Cur	898,000	605.662,068	4.659.191,610	375,509	375,388	-0,121	278,1314	75	-3,13%			
Cur	898,072	605.662,000	4.659.191,586	375,509	375,386	-0,123	278,1925	75	-3,13%		T.S.	
Cur	899,000	605.661,124	4.659.191,279	375,505	375,356	-0,149	278,9802	75	-3,13%			
Cur	900,000	605.660,176	4.659.190,961	375,516	375,325	-0,191	279,8290	75	-3,13%			
Cur	901,000	605.659,224	4.659.190,656	375,514	375,294	-0,220	280,6779	75	-3,13%			
Cur	902,000	605.658,267	4.659.190,364	375,516	375,262	-0,254	281,5267	75	-3,13%			
Cur	903,000	605.657,307	4.659.190,084	375,514	375,231	-0,283	282,3755	75	-3,13%			
Cur	904,000	605.656,344	4.659.189,817	375,513	375,200	-0,313	283,2243	75	-3,13%			
Cur	905,000	605.655,376	4.659.189,563	375,521	375,168	-0,353	284,0732	75	-3,13%			
Cur	906,000	605.654,406	4.659.189,322	375,456	375,137	-0,319	284,9220	75	-3,13%			
Cur	907,000	605.653,432	4.659.189,094	375,403	375,106	-0,297	285,7708	75	-3,13%			
Cur	908,000	605.652,456	4.659.188,879	375,371	375,074	-0,297	286,6196	75	-3,13%			
Cur	909,000	605.651,476	4.659.188,677	375,251	375,043	-0,208	287,4685	75	-3,13%			
Cur	910,000	605.650,494	4.659.188,487	375,189	375,012	-0,177	288,3173	75	-3,13%			
Cur	911,000	605.649,510	4.659.188,312	375,096	374,980	-0,116	289,1661	75	-3,13%			
Cur	912,000	605.648,523	4.659.188,149	375,000	374,949	-0,051	290,0150	75	-3,13%			
Cur	913,000	605.647,535	4.659.187,999	374,958	374,918	-0,040	290,8638	75	-3,13%			
Cur	914,000	605.646,544	4.659.187,863	374,917	374,886	-0,031	291,7126	75	-3,13%			
Cur	915,000	605.645,552	4.659.187,740	374,879	374,855	-0,024	292,5614	75	-3,13%			
Cur	916,000	605.644,558	4.659.187,630	374,848	374,824	-0,024	293,4103	75	-3,13%			
Cur	916,385	605.644,175	4.659.187,591	374,835	374,812	-0,023	293,7371	75	-3,13%		T.E.	
Cur	917,000	605.643,562	4.659.187,533	374,813	374,793	-0,020	294,2591	75	-3,01%			
Cur	918,000	605.642,566	4.659.187,449	374,784	374,764	-0,020	295,1079	75	-2,81%			
Cur	919,000	605.641,568	4.659.187,379	374,754	374,737	-0,017	295,9567	75	-2,61%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	920,000	605.640,570	4.659.187,323	374,726	374,711	-0,015	296,8056	75	-2,41%			
Cur	921,000	605.639,571	4.659.187,279	374,696	374,688	-0,008	297,6544	75	-2,21%			
Cur	922,000	605.638,571	4.659.187,249	374,661	374,667	0,006	298,5032	75	-2,01%			
Cur	923,000	605.637,571	4.659.187,232	374,629	374,648	0,019	299,3520	75	-1,81%			
Cur	924,000	605.636,571	4.659.187,229	374,617	374,631	0,014	300,2009	75	-1,61%			
Cur	925,000	605.635,572	4.659.187,238	374,612	374,616	0,004	301,0497	75	-1,41%			
Cur	926,000	605.634,572	4.659.187,261	374,605	374,603	-0,002	301,8985	75	-1,21%			
Cur	927,000	605.633,572	4.659.187,298	374,601	374,592	-0,009	302,7473	75	-1,01%			
Cur	928,000	605.632,574	4.659.187,348	374,591	374,583	-0,008	303,5962	75	-0,81%			
Cur	929,000	605.631,576	4.659.187,411	374,586	374,575	-0,011	304,4450	75	-0,61%			
Cur	930,000	605.630,579	4.659.187,487	374,586	374,570	-0,016	305,2938	75	-0,41%		V.	ODT Ø1.000 L=6,00m
Cur	931,000	605.629,583	4.659.187,577	374,577	374,567	-0,010	306,1427	75	-0,21%			
Cur	932,000	605.628,588	4.659.187,680	374,579	374,566	-0,013	306,9915	75	-0,01%			
Cur	933,000	605.627,595	4.659.187,796	374,579	374,567	-0,012	307,8403	75	0,19%			
Cur	934,000	605.626,603	4.659.187,926	374,576	374,570	-0,006	308,6891	75	0,39%			
Cur	935,000	605.625,613	4.659.188,068	374,576	374,575	-0,001	309,5380	75	0,59%			
Cur	936,000	605.624,626	4.659.188,224	374,577	374,582	0,005	310,3868	75	0,79%			
Cur	937,000	605.623,640	4.659.188,393	374,578	374,591	0,013	311,2356	75	0,99%			
Cur	938,000	605.622,657	4.659.188,575	374,581	374,602	0,021	312,0844	75	1,19%			
Cur	939,000	605.621,676	4.659.188,771	374,584	374,614	0,030	312,9333	75	1,39%			
Cur	940,000	605.620,698	4.659.188,979	374,588	374,629	0,041	313,7821	75	1,59%			
Cur	941,000	605.619,723	4.659.189,200	374,590	374,646	0,056	314,6309	75	1,79%			
Cur	942,000	605.618,751	4.659.189,434	374,593	374,665	0,072	315,4797	75	1,99%			
Cur	943,000	605.617,782	4.659.189,682	374,604	374,686	0,082	316,3286	75	2,19%			
Cur	943,615	605.617,187	4.659.189,840	374,611	374,700	0,089	316,8506	75	2,31%		T.S.	
Cur	944,000	605.616,816	4.659.189,942	374,615	374,709	0,094	317,1774	75	2,31%			
Cur	945,000	605.615,854	4.659.190,215	374,623	374,732	0,109	318,0262	75	2,31%			
Cur	946,000	605.614,896	4.659.190,501	374,630	374,755	0,125	318,8751	75	2,31%			
Cur	947,000	605.613,941	4.659.190,799	374,636	374,778	0,142	319,7239	75	2,31%			
Cur	948,000	605.612,991	4.659.191,110	374,646	374,801	0,155	320,5727	75	2,31%			
Cur	949,000	605.612,045	4.659.191,434	374,658	374,825	0,167	321,4215	75	2,31%			
Cur	950,000	605.611,103	4.659.191,771	374,671	374,848	0,177	322,2704	75	2,31%			
Cur	951,000	605.610,166	4.659.192,120	374,686	374,871	0,185	323,1192	75	2,31%			
Cur	952,000	605.609,234	4.659.192,481	374,701	374,894	0,193	323,9680	75	2,31%			
Cur	953,000	605.608,306	4.659.192,855	374,712	374,917	0,205	324,8168	75	2,31%			
Cur	954,000	605.607,384	4.659.193,241	374,723	374,940	0,217	325,6657	75	2,31%			
Cur	955,000	605.606,467	4.659.193,640	374,741	374,963	0,222	326,5145	75	2,31%			
Cur	956,000	605.605,555	4.659.194,050	374,745	374,987	0,242	327,3633	75	2,31%			
Cur	957,000	605.604,649	4.659.194,473	374,753	375,010	0,257	328,2121	75	2,31%			
Cur	958,000	605.603,748	4.659.194,908	374,760	375,033	0,273	329,0610	75	2,31%			
Cur	959,000	605.602,854	4.659.195,354	374,772	375,056	0,284	329,9098	75	2,31%			
Cur	960,000	605.601,965	4.659.195,813	374,782	375,079	0,297	330,7586	75	2,31%			
Cur	961,000	605.601,083	4.659.196,284	374,792	375,102	0,310	331,6074	75	2,31%			
Cur	962,000	605.600,206	4.659.196,766	374,807	375,125	0,318	332,4563	75	2,31%			
Cur	963,000	605.599,337	4.659.197,260	374,825	375,149	0,324	333,3051	75	2,31%			
Cur	964,000	605.598,474	4.659.197,765	374,849	375,172	0,323	334,1539	75	2,31%			
Cur	965,000	605.597,618	4.659.198,282	374,873	375,195	0,322	335,0028	75	2,31%			
Cur	966,000	605.596,769	4.659.198,810	374,900	375,218	0,318	335,8516	75	2,31%			
Cur	967,000	605.595,927	4.659.199,350	374,926	375,241	0,315	336,7004	75	2,31%			
Cur	968,000	605.595,092	4.659.199,900	374,953	375,264	0,311	337,5492	75	2,31%			
Cur	969,000	605.594,265	4.659.200,462	374,982	375,287	0,305	338,3981	75	2,31%			
Cur	970,000	605.593,445	4.659.201,035	375,014	375,310	0,296	339,2469	75	2,31%			
Cur	971,000	605.592,633	4.659.201,618	375,051	375,334	0,283	340,0957	75	2,31%			
Cur	972,000	605.591,829	4.659.202,213	375,094	375,357	0,263	340,9445	75	2,31%			
Cur	973,000	605.591,033	4.659.202,818	375,137	375,380	0,243	341,7934	75	2,31%			
Cur	974,000	605.590,245	4.659.203,433	375,179	375,403	0,224	342,6422	75	2,31%			
Cur	975,000	605.589,465	4.659.204,059	375,217	375,426	0,209	343,4910	75	2,31%			
Cur	976,000	605.588,694	4.659.204,696	375,252	375,449	0,197	344,3398	75	2,31%			
Cur	977,000	605.587,931	4.659.205,342	375,286	375,472	0,186	345,1887	75	2,31%			
Cur	978,000	605.587,177	4.659.205,999	375,324	375,496	0,172	346,0375	75	2,31%			
Cur	979,000	605.586,431	4.659.206,666	375,361	375,519	0,158	346,8863	75	2,31%			
Cur	980,000	605.585,695	4.659.207,342	375,398	375,542	0,144	347,7351	75	2,31%			
Cur	981,000	605.584,968	4.659.208,029	375,439	375,565	0,126	348,5840	75	2,31%			
Cur	982,000	605.584,250	4.659.208,725	375,476	375,588	0,112	349,4328	75	2,31%			
Cur	983,000	605.583,541	4.659.209,430	375,511	375,611	0,100	350,2816	75	2,31%			
Cur	984,000	605.582,842	4.659.210,145	375,544	375,634	0,090	351,1305	75	2,31%			
Cur	985,000	605.582,152	4.659.210,869	375,576	375,658	0,082	351,9793	75	2,31%			
Cur	986,000	605.581,472	4.659.211,603	375,608	375,681	0,073	352,8281	75	2,31%			
Cur	987,000	605.580,802	4.659.212,345	375,639	375,704	0,065	353,6769	75	2,31%			
Cur	988,000	605.580,142	4.659.213,096	375,671	375,727	0,056	354,5258	75	2,31%			
Cur	989,000	605.579,492	4.659.213,856	375,705	375,750	0,045	355,3746	75	2,31%			
Cur	990,000	605.578,852	4.659.214,624	375,739	375,773	0,034	356,2234	75	2,31%			
Cur	991,000	605.578,223	4.659.215,401	375,765	375,796	0,031	357,0722	75	2,31%			
Cur	992,000	605.577,604	4.659.216,187	375,787	375,820	0,033	357,9211	75	2,31%			
Cur	993,000	605.576,995	4.659.216,980	375,811	375,843	0,032	358,7699	75	2,31%			
Cur	994,000	605.576,397	4.659.217,782	375,843	375,866	0,023	359,6187	75	2,31%			
Cur	995,000	605.575,810	4.659.218,591	375,876	375,889	0,013	360,4675	75	2,31%			
Cur	996,000	605.575,233	4.659.219,408	375,908	375,912	0,004	361,3164	75	2,31%			
Cur	997,000	605.574,668	4.659.220,233	375,938	375,935	-0,003	362,1652	75	2,31%			
Cur	998,000	605.574,113	4.659.221,065	375,968	375,958	-0,010	363,0140	75	2,31%			
Cur	998,432	605.573,877	4.659.221,427	375,981	375,968	-0,012	363,3807	75	2,31%		T.E.	
Cur	999,000	605.573,570	4.659.221,905	375,997	375,981	-0,016	363,8628	75	2,26%			
Cur	1.000,000	605.573,038	4.659.222,752	376,023	376,003	-0,020	364,7117	75	2,16%			
Rec	1.000,808	605.572,617	4.659.223,440	376,046	376,020	-0,026	365,3972	0	2,08%	P.S.		
Rec	1.001,000	605.572,517	4.659.223,605	376,051	376,024	-0,027	365,3972	0	2,06%			
Rec	1.002,000	605.572,000	4.659.224,461	376,078	376,045	-0,033	365,3972	0	1,96%			

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REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.003,000	605.571,483	4.659.225,317	376,105	376,064	-0,041	365,3972	0	1,86%			
Rec	1.004,000	605.570,966	4.659.226,173	376,130	376,082	-0,048	365,3972	0	1,76%			
Rec	1.005,000	605.570,449	4.659.227,029	376,156	376,099	-0,057	365,3972	0	1,66%			
Rec	1.006,000	605.569,932	4.659.227,885	376,185	376,115	-0,070	365,3972	0	1,56%			
Rec	1.007,000	605.569,414	4.659.228,740	376,212	376,130	-0,082	365,3972	0	1,46%			
Rec	1.008,000	605.568,897	4.659.229,596	376,240	376,144	-0,096	365,3972	0	1,36%			
Rec	1.009,000	605.568,380	4.659.230,452	376,268	376,157	-0,111	365,3972	0	1,26%			
Rec	1.010,000	605.567,863	4.659.231,308	376,296	376,169	-0,127	365,3972	0	1,16%		V.	
Rec	1.011,000	605.567,346	4.659.232,164	376,321	376,180	-0,141	365,3972	0	1,06%			
Rec	1.012,000	605.566,828	4.659.233,020	376,335	376,190	-0,145	365,3972	0	0,96%			
Rec	1.013,000	605.566,311	4.659.233,876	376,351	376,199	-0,152	365,3972	0	0,86%			
Rec	1.014,000	605.565,794	4.659.234,732	376,365	376,207	-0,158	365,3972	0	0,76%			
Rec	1.015,000	605.565,277	4.659.235,588	376,382	376,214	-0,168	365,3972	0	0,66%			
Rec	1.016,000	605.564,760	4.659.236,443	376,399	376,221	-0,178	365,3972	0	0,56%			
Rec	1.017,000	605.564,243	4.659.237,299	376,424	376,226	-0,198	365,3972	0	0,46%			
Rec	1.018,000	605.563,725	4.659.238,155	376,464	376,230	-0,234	365,3972	0	0,36%			
Rec	1.019,000	605.563,208	4.659.239,011	376,488	376,233	-0,255	365,3972	0	0,26%			
Rec	1.020,000	605.562,691	4.659.239,867	376,516	376,235	-0,281	365,3972	0	0,16%			
Rec	1.021,000	605.562,174	4.659.240,723	376,540	376,236	-0,304	365,3972	0	0,06%			
Rec	1.021,568	605.561,880	4.659.241,209	376,561	376,236	-0,325	365,3972	0	0,00%		T.S.	
Rec	1.022,000	605.561,657	4.659.241,579	376,577	376,236	-0,341	365,3972	0	0,00%			
Rec	1.023,000	605.561,140	4.659.242,435	376,610	376,236	-0,374	365,3972	0	0,00%			
Rec	1.024,000	605.560,622	4.659.243,290	376,640	376,236	-0,404	365,3972	0	0,00%			
Rec	1.025,000	605.560,105	4.659.244,146	376,676	376,236	-0,440	365,3972	0	0,00%			
Rec	1.026,000	605.559,588	4.659.245,002	376,720	376,236	-0,484	365,3972	0	0,00%			
Rec	1.027,000	605.559,071	4.659.245,858	376,758	376,236	-0,522	365,3972	0	0,00%			
Rec	1.028,000	605.558,554	4.659.246,714	376,785	376,236	-0,549	365,3972	0	0,00%			
Rec	1.029,000	605.558,037	4.659.247,570	376,825	376,236	-0,589	365,3972	0	0,00%			
Rec	1.030,000	605.557,519	4.659.248,426	376,884	376,236	-0,648	365,3972	0	0,00%			
Rec	1.031,000	605.557,002	4.659.249,282	376,929	376,236	-0,693	365,3972	0	0,00%			
Rec	1.032,000	605.556,485	4.659.250,138	376,975	376,236	-0,739	365,3972	0	0,00%			
Rec	1.033,000	605.555,968	4.659.250,993	377,035	376,236	-0,799	365,3972	0	0,00%			
Rec	1.034,000	605.555,451	4.659.251,849	377,114	376,236	-0,878	365,3972	0	0,00%			
Rec	1.035,000	605.554,934	4.659.252,705	377,206	376,236	-0,970	365,3972	0	0,00%			
Rec	1.036,000	605.554,416	4.659.253,561	377,300	376,236	-1,064	365,3972	0	0,00%			
Rec	1.037,000	605.553,899	4.659.254,417	377,384	376,236	-1,148	365,3972	0	0,00%			
Rec	1.038,000	605.553,382	4.659.255,273	377,471	376,236	-1,235	365,3972	0	0,00%			
Rec	1.039,000	605.552,865	4.659.256,129	377,550	376,236	-1,314	365,3972	0	0,00%			
Rec	1.040,000	605.552,348	4.659.256,985	377,650	376,236	-1,414	365,3972	0	0,00%			
Rec	1.041,000	605.551,831	4.659.257,840	377,765	376,236	-1,529	365,3972	0	0,00%			
Rec	1.042,000	605.551,313	4.659.258,696	377,852	376,236	-1,616	365,3972	0	0,00%			
Rec	1.043,000	605.550,796	4.659.259,552	377,933	376,236	-1,697	365,3972	0	0,00%			
Rec	1.044,000	605.550,279	4.659.260,408	378,005	376,236	-1,769	365,3972	0	0,00%			
Rec	1.045,000	605.549,762	4.659.261,264	378,042	376,236	-1,806	365,3972	0	0,00%			
Rec	1.046,000	605.549,245	4.659.262,120	378,086	376,236	-1,850	365,3972	0	0,00%			
Rec	1.047,000	605.548,728	4.659.262,976	378,135	376,236	-1,899	365,3972	0	0,00%			
Rec	1.048,000	605.548,210	4.659.263,832	378,167	376,236	-1,931	365,3972	0	0,00%			
Rec	1.049,000	605.547,693	4.659.264,688	378,181	376,236	-1,945	365,3972	0	0,00%			
Rec	1.050,000	605.547,176	4.659.265,543	378,215	376,236	-1,979	365,3972	0	0,00%			
Rec	1.051,000	605.546,659	4.659.266,399	378,244	376,236	-2,008	365,3972	0	0,00%			
Rec	1.052,000	605.546,142	4.659.267,255	378,267	376,236	-2,031	365,3972	0	0,00%			
Rec	1.053,000	605.545,625	4.659.268,111	378,291	376,236	-2,055	365,3972	0	0,00%			
Rec	1.054,000	605.545,107	4.659.268,967	378,326	376,236	-2,090	365,3972	0	0,00%			
Rec	1.055,000	605.544,590	4.659.269,823	378,360	376,236	-2,124	365,3972	0	0,00%			
Rec	1.056,000	605.544,073	4.659.270,679	378,400	376,236	-2,164	365,3972	0	0,00%			
Rec	1.057,000	605.543,556	4.659.271,535	378,430	376,236	-2,194	365,3972	0	0,00%			
Rec	1.058,000	605.543,039	4.659.272,391	378,455	376,236	-2,219	365,3972	0	0,00%			
Rec	1.059,000	605.542,522	4.659.273,246	378,480	376,236	-2,244	365,3972	0	0,00%			
Rec	1.060,000	605.542,004	4.659.274,102	378,511	376,236	-2,275	365,3972	0	0,00%			
Rec	1.061,000	605.541,487	4.659.274,958	378,548	376,236	-2,312	365,3972	0	0,00%			
Rec	1.062,000	605.540,970	4.659.275,814	378,575	376,236	-2,339	365,3972	0	0,00%			
Rec	1.063,000	605.540,453	4.659.276,670	378,610	376,236	-2,374	365,3972	0	0,00%			
Rec	1.064,000	605.539,936	4.659.277,526	378,646	376,236	-2,410	365,3972	0	0,00%			
Rec	1.065,000	605.539,419	4.659.278,382	378,683	376,236	-2,447	365,3972	0	0,00%			
Rec	1.066,000	605.538,901	4.659.279,238	378,723	376,236	-2,487	365,3972	0	0,00%			
Rec	1.067,000	605.538,384	4.659.280,093	378,762	376,236	-2,526	365,3972	0	0,00%			
Rec	1.068,000	605.537,867	4.659.280,949	378,796	376,236	-2,560	365,3972	0	0,00%			
Rec	1.069,000	605.537,350	4.659.281,805	378,830	376,236	-2,594	365,3972	0	0,00%			
Rec	1.070,000	605.536,833	4.659.282,661	378,870	376,236	-2,634	365,3972	0	0,00%			
Rec	1.071,000	605.536,316	4.659.283,517	378,911	376,236	-2,675	365,3972	0	0,00%			
Rec	1.072,000	605.535,798	4.659.284,373	378,795	376,236	-2,559	365,3972	0	0,00%			
Rec	1.073,000	605.535,281	4.659.285,229	377,795	376,236	-1,559	365,3972	0	0,00%			
Rec	1.074,000	605.534,764	4.659.286,085	376,795	376,236	-0,559	365,3972	0	0,00%			
Rec	1.074,559	605.534,475	4.659.286,563	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.075,000	605.534,247	4.659.286,941	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.076,000	605.533,730	4.659.287,796	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.077,000	605.533,213	4.659.288,652	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.078,000	605.532,695	4.659.289,508	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.079,000	605.532,178	4.659.290,364	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.080,000	605.531,661	4.659.291,220	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.081,000	605.531,144	4.659.292,076	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.082,000	605.530,627	4.659.292,932	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.083,000	605.530,110	4.659.293,788	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.084,000	605.529,592	4.659.294,643	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.085,000	605.529,075	4.659.295,499	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.086,000	605.528,558	4.659.296,355	376,236	376,236	0,000	365,3972	0	0,00%			
Rec	1.087,000	605.528,041	4.659.297,211	376,236	376,236	0,000	365,3972	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.088,000	605.527,524	4.659.298,067	376,236	376,236	0,000	365,3972	0	0,00%			
Cur	1.088,468	605.527,282	4.659.298,468	376,236	376,236	0,000	365,3972	-25	0,00%	P.S.		
Cur	1.089,000	605.527,000	4.659.298,920	376,236	376,236	0,000	364,0431	-25	0,00%			
Cur	1.090,000	605.526,450	4.659.299,754	376,236	376,236	0,000	361,4966	-25	0,00%			
Cur	1.091,000	605.525,865	4.659.300,565	376,236	376,236	0,000	358,9502	-25	0,00%			
Cur	1.092,000	605.525,248	4.659.301,352	376,236	376,236	0,000	356,4037	-25	0,00%			
Cur	1.093,000	605.524,600	4.659.302,113	376,236	376,236	0,000	353,8572	-25	0,00%			
Cur	1.094,000	605.523,922	4.659.302,849	376,236	376,236	0,000	351,3107	-25	0,00%			
Cur	1.095,000	605.523,216	4.659.303,556	376,236	376,236	0,000	348,7642	-25	0,00%			
Cur	1.096,000	605.522,481	4.659.304,235	376,236	376,236	0,000	346,2178	-25	0,00%			
Cur	1.097,000	605.521,720	4.659.304,883	376,236	376,236	0,000	343,6713	-25	0,00%			
Cur	1.098,000	605.520,934	4.659.305,501	376,236	376,236	0,000	341,1248	-25	0,00%			
Cur	1.099,000	605.520,124	4.659.306,087	376,236	376,236	0,000	338,5783	-25	0,00%			
Cur	1.100,000	605.519,291	4.659.306,640	376,236	376,236	0,000	336,0318	-25	0,00%			
Cur	1.101,000	605.518,436	4.659.307,159	376,236	376,236	0,000	333,4854	-25	0,00%			
Cur	1.102,000	605.517,561	4.659.307,644	376,236	376,236	0,000	330,9389	-25	0,00%			
Cur	1.103,000	605.516,668	4.659.308,093	376,236	376,236	0,000	328,3924	-25	0,00%			
Cur	1.104,000	605.515,758	4.659.308,506	376,236	376,236	0,000	325,8459	-25	0,00%			
Cur	1.105,000	605.514,831	4.659.308,883	376,236	376,236	0,000	323,2995	-25	0,00%			
Cur	1.106,000	605.513,891	4.659.309,222	376,236	376,236	0,000	320,7530	-25	0,00%			
Cur	1.107,000	605.512,937	4.659.309,523	376,236	376,236	0,000	318,2065	-25	0,00%			
Cur	1.108,000	605.511,972	4.659.309,786	376,236	376,236	0,000	315,6600	-25	0,00%			
Cur	1.109,000	605.510,998	4.659.310,010	376,236	376,236	0,000	313,1135	-25	0,00%			
Cur	1.110,000	605.510,015	4.659.310,195	376,236	376,236	0,000	310,5671	-25	0,00%			
Cur	1.111,000	605.509,026	4.659.310,340	376,236	376,236	0,000	308,0206	-25	0,00%			
Cur	1.112,000	605.508,031	4.659.310,446	376,236	376,236	0,000	305,4741	-25	0,00%			
Cur	1.113,000	605.507,034	4.659.310,512	376,236	376,236	0,000	302,9276	-25	0,00%			
Cur	1.114,000	605.506,034	4.659.310,538	376,236	376,236	0,000	300,3811	-25	0,00%			
Cur	1.115,000	605.505,034	4.659.310,524	376,236	376,236	0,000	297,8347	-25	0,00%			
Cur	1.116,000	605.504,036	4.659.310,470	376,236	376,236	0,000	295,2882	-25	0,00%			
Cur	1.117,000	605.503,040	4.659.310,376	376,236	376,236	0,000	292,7417	-25	0,00%			
Cur	1.118,000	605.502,049	4.659.310,243	376,236	376,236	0,000	290,1952	-25	0,00%			
Cur	1.119,000	605.501,064	4.659.310,070	376,236	376,236	0,000	287,6487	-25	0,00%			
Cur	1.120,000	605.500,087	4.659.309,857	376,236	376,236	0,000	285,1023	-25	0,00%			
Cur	1.121,000	605.499,119	4.659.309,606	376,236	376,236	0,000	282,5558	-25	0,00%			
Cur	1.122,000	605.498,162	4.659.309,316	376,236	376,236	0,000	280,0093	-25	0,00%			
Cur	1.123,000	605.497,218	4.659.308,988	376,236	376,236	0,000	277,4628	-25	0,00%			
Cur	1.124,000	605.496,287	4.659.308,623	376,236	376,236	0,000	274,9163	-25	0,00%			
Cur	1.125,000	605.495,372	4.659.308,221	376,236	376,236	0,000	272,3699	-25	0,00%			
Cur	1.126,000	605.494,473	4.659.307,782	376,236	376,236	0,000	269,8234	-25	0,00%			
Cur	1.127,000	605.493,593	4.659.307,308	376,236	376,236	0,000	267,2769	-25	0,00%			
Rec	1.127,663	605.493,020	4.659.306,974	376,236	376,236	0,000	265,5885	0	0,00%	P.S.		
Rec	1.128,000	605.492,731	4.659.306,801	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.129,000	605.491,873	4.659.306,286	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.130,000	605.491,016	4.659.305,772	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.131,000	605.490,158	4.659.305,257	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.132,000	605.489,301	4.659.304,743	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.133,000	605.488,443	4.659.304,228	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.134,000	605.487,586	4.659.303,713	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.135,000	605.486,729	4.659.303,199	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.136,000	605.485,871	4.659.302,684	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.137,000	605.485,014	4.659.302,170	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.138,000	605.484,156	4.659.301,655	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.139,000	605.483,299	4.659.301,140	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.140,000	605.482,441	4.659.300,626	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.141,000	605.481,584	4.659.300,111	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.142,000	605.480,727	4.659.299,597	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.143,000	605.479,869	4.659.299,082	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.144,000	605.479,012	4.659.298,568	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.145,000	605.478,154	4.659.298,053	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.146,000	605.477,297	4.659.297,538	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.147,000	605.476,439	4.659.297,024	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.148,000	605.475,582	4.659.296,509	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.149,000	605.474,725	4.659.295,995	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.150,000	605.473,867	4.659.295,480	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.151,000	605.473,010	4.659.294,965	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.152,000	605.472,152	4.659.294,451	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.153,000	605.471,295	4.659.293,936	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.154,000	605.470,437	4.659.293,422	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.155,000	605.469,580	4.659.292,907	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.156,000	605.468,722	4.659.292,392	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.157,000	605.467,865	4.659.291,878	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.158,000	605.467,008	4.659.291,363	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.159,000	605.466,150	4.659.290,849	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.160,000	605.465,293	4.659.290,334	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.161,000	605.464,435	4.659.289,819	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.162,000	605.463,578	4.659.289,305	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.163,000	605.462,720	4.659.288,790	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.164,000	605.461,863	4.659.288,276	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.165,000	605.461,006	4.659.287,761	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.166,000	605.460,148	4.659.287,246	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.167,000	605.459,291	4.659.286,732	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.168,000	605.458,433	4.659.286,217	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.169,000	605.457,576	4.659.285,703	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.170,000	605.456,718	4.659.285,188	376,236	376,236	0,000	265,5885	0	0,00%			
Rec	1.171,000	605.455,861	4.659.284,673	376,236	376,236	0,000	265,5885	0	0,00%			
	1.171,792	605.455,182	4.659.284,266	376,236	376,236	0,000	265,5885		0,00%		V.	

P.S. = PUNTO SINGULAR EN PLANTA
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 T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T13BIS-BT C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
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P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	604.533,659	4.658.758,223	365,620	365,620	0,000	52,5486	0	1,25%		V.	
Rec	1,000	604.534,393	4.658.758,902	365,619	365,633	0,014	52,5486	0	1,25%			
Rec	2,000	604.535,128	4.658.759,580	365,619	365,645	0,026	52,5486	0	1,25%			
Rec	3,000	604.535,863	4.658.760,258	365,619	365,658	0,039	52,5486	0	1,25%			
Rec	4,000	604.536,598	4.658.760,936	365,609	365,670	0,061	52,5486	0	1,25%			
Rec	5,000	604.537,333	4.658.761,615	365,570	365,683	0,113	52,5486	0	1,25%			
Rec	6,000	604.538,068	4.658.762,293	365,571	365,695	0,124	52,5486	0	1,25%			
Cur	6,912	604.538,738	4.658.762,912	365,542	365,707	0,165	52,5486	5	1,25%	P.S.		
Cur	7,000	604.538,803	4.658.762,971	365,533	365,708	0,175	53,6635	5	1,25%			
Cur	8,000	604.539,611	4.658.763,557	365,513	365,720	0,207	66,3959	5	1,25%			
Cur	9,000	604.540,519	4.658.763,971	365,489	365,733	0,244	79,1283	5	1,25%			
Cur	10,000	604.541,492	4.658.764,197	365,422	365,745	0,323	91,8607	5	1,25%			
Cur	11,000	604.542,490	4.658.764,224	365,498	365,758	0,260	104,5931	5	1,25%			
Cur	12,000	604.543,473	4.658.764,053	365,549	365,770	0,221	117,3255	5	1,25%			
Rec	12,294	604.543,754	4.658.763,966	365,541	365,774	0,233	121,0692	0	1,25%	P.S.		
Rec	13,000	604.544,422	4.658.763,737	365,518	365,783	0,265	121,0692	0	1,25%			
Rec	14,000	604.545,367	4.658.763,412	365,487	365,795	0,308	121,0692	0	1,25%			
Rec	15,000	604.546,313	4.658.763,087	365,455	365,808	0,353	121,0692	0	1,25%			
Rec	16,000	604.547,259	4.658.762,762	365,423	365,820	0,397	121,0692	0	1,25%			
Rec	17,000	604.548,205	4.658.762,437	365,391	365,833	0,442	121,0692	0	1,25%			
Rec	18,000	604.549,150	4.658.762,112	365,410	365,846	0,436	121,0692	0	1,25%			
Rec	19,000	604.550,096	4.658.761,787	365,435	365,858	0,423	121,0692	0	1,25%			
Rec	20,000	604.551,042	4.658.761,462	365,463	365,871	0,408	121,0692	0	1,25%			
Rec	21,000	604.551,988	4.658.761,137	365,491	365,883	0,392	121,0692	0	1,25%			
Rec	22,000	604.552,933	4.658.760,812	365,519	365,896	0,377	121,0692	0	1,25%			
Rec	23,000	604.553,879	4.658.760,487	365,547	365,908	0,361	121,0692	0	1,25%			
Cur	23,153	604.554,024	4.658.760,437	365,551	365,910	0,359	121,0692	-150	1,25%	P.S.		
Cur	24,000	604.554,826	4.658.760,165	365,574	365,921	0,347	120,7099	-150	1,25%			
Cur	25,000	604.555,774	4.658.759,848	365,589	365,933	0,344	120,2855	-150	1,25%			
Cur	26,000	604.556,725	4.658.759,538	365,606	365,946	0,340	119,8611	-150	1,25%			
Cur	27,000	604.557,678	4.658.759,234	365,624	365,958	0,334	119,4367	-150	1,25%			
Cur	28,000	604.558,632	4.658.758,937	365,643	365,971	0,328	119,0122	-150	1,25%			
Cur	29,000	604.559,589	4.658.758,646	365,667	365,983	0,316	118,5878	-150	1,25%			
Cur	30,000	604.560,548	4.658.758,361	365,691	365,996	0,305	118,1634	-150	1,25%			
Cur	31,000	604.561,508	4.658.758,083	365,716	366,008	0,292	117,7390	-150	1,25%			
Cur	32,000	604.562,471	4.658.757,811	365,715	366,021	0,306	117,3146	-150	1,25%			
Cur	33,000	604.563,435	4.658.757,546	365,709	366,034	0,325	116,8902	-150	1,25%			
Cur	34,000	604.564,401	4.658.757,287	365,702	366,046	0,344	116,4658	-150	1,25%			
Cur	35,000	604.565,368	4.658.757,034	365,697	366,059	0,362	116,0413	-150	1,25%			
Cur	36,000	604.566,337	4.658.756,788	365,692	366,071	0,379	115,6169	-150	1,25%			
Cur	37,000	604.567,308	4.658.756,548	365,690	366,084	0,394	115,1925	-150	1,25%			
Cur	37,987	604.568,268	4.658.756,318	365,706	366,096	0,390	114,7736	-150	1,25%		T.E.	
Cur	38,000	604.568,281	4.658.756,315	365,706	366,096	0,390	114,7681	-150	1,25%			
Cur	39,000	604.569,255	4.658.756,089	365,729	366,109	0,380	114,3437	-150	1,35%			
Cur	40,000	604.570,230	4.658.755,868	365,753	366,123	0,370	113,9193	-150	1,45%			
Cur	41,000	604.571,207	4.658.755,655	365,777	366,138	0,361	113,4949	-150	1,55%			
Cur	42,000	604.572,185	4.658.755,448	365,792	366,154	0,362	113,0705	-150	1,65%			
Cur	43,000	604.573,165	4.658.755,247	365,818	366,171	0,353	112,6460	-150	1,75%			
Cur	44,000	604.574,146	4.658.755,053	365,851	366,189	0,338	112,2216	-150	1,85%			
Cur	45,000	604.575,128	4.658.754,865	365,884	366,208	0,324	111,7972	-150	1,95%			
Cur	46,000	604.576,112	4.658.754,685	365,918	366,229	0,311	111,3728	-150	2,05%			
Cur	47,000	604.577,096	4.658.754,510	365,946	366,250	0,304	110,9484	-150	2,15%			
Cur	48,000	604.578,082	4.658.754,342	365,955	366,272	0,317	110,5240	-150	2,25%			
Cur	49,000	604.579,069	4.658.754,181	365,968	366,295	0,327	110,0996	-150	2,35%			
Cur	50,000	604.580,057	4.658.754,026	365,983	366,319	0,336	109,6752	-150	2,45%			
Cur	51,000	604.581,046	4.658.753,878	365,997	366,344	0,347	109,2507	-150	2,55%			
Rec	51,235	604.581,279	4.658.753,844	366,007	366,350	0,343	109,1510	0	2,58%	P.S.	V.	
Rec	52,000	604.582,036	4.658.753,735	366,112	366,370	0,258	109,1510	0	2,65%			
Rec	53,000	604.583,025	4.658.753,592	366,180	366,397	0,217	109,1510	0	2,75%			
Rec	54,000	604.584,015	4.658.753,448	366,236	366,425	0,189	109,1510	0	2,85%			
Rec	55,000	604.585,005	4.658.753,305	366,293	366,454	0,161	109,1510	0	2,95%			
Rec	56,000	604.585,995	4.658.753,162	366,350	366,484	0,134	109,1510	0	3,05%			
Rec	57,000	604.586,984	4.658.753,019	366,403	366,515	0,112	109,1510	0	3,15%			
Rec	58,000	604.587,974	4.658.752,875	366,430	366,547	0,117	109,1510	0	3,25%			
Rec	59,000	604.588,964	4.658.752,732	366,453	366,580	0,127	109,1510	0	3,35%			
Rec	60,000	604.589,953	4.658.752,589	366,476	366,614	0,138	109,1510	0	3,45%			
Rec	61,000	604.590,943	4.658.752,446	366,499	366,649	0,150	109,1510	0	3,55%			
Rec	62,000	604.591,933	4.658.752,302	366,526	366,685	0,159	109,1510	0	3,65%			
Rec	63,000	604.592,922	4.658.752,159	366,540	366,722	0,182	109,1510	0	3,75%			
Rec	64,000	604.593,912	4.658.752,016	366,554	366,760	0,206	109,1510	0	3,85%			
Rec	64,483	604.594,390	4.658.751,947	366,561	366,779	0,217	109,1510	0	3,90%		T.S.	
Rec	65,000	604.594,902	4.658.751,873	366,569	366,799	0,230	109,1510	0	3,90%			
Rec	66,000	604.595,891	4.658.751,729	366,583	366,838	0,255	109,1510	0	3,90%			
Rec	67,000	604.596,881	4.658.751,586	366,598	366,877	0,279	109,1510	0	3,90%			
Rec	68,000	604.597,871	4.658.751,443	366,615	366,916	0,301	109,1510	0	3,90%			
Rec	69,000	604.598,860	4.658.751,300	366,632	366,955	0,323	109,1510	0	3,90%			
Rec	70,000	604.599,850	4.658.751,156	366,649	366,994	0,345	109,1510	0	3,90%			
Rec	71,000	604.600,840	4.658.751,013	366,667	367,033	0,366	109,1510	0	3,90%			
Rec	72,000	604.601,829	4.658.750,870	366,684	367,072	0,388	109,1510	0	3,90%			
Rec	73,000	604.602,819	4.658.750,727	366,701	367,111	0,410	109,1510	0	3,90%			
Rec	74,000	604.603,809	4.658.750,583	366,725	367,150	0,425	109,1510	0	3,90%			
Rec	75,000	604.604,799	4.658.750,440	366,756	367,189	0,433	109,1510	0	3,90%			
Rec	76,000	604.605,788	4.658.750,297	366,788	367,228	0,440	109,1510	0	3,90%			
Rec	77,000	604.606,778	4.658.750,154	366,821	367,267	0,446	109,1510	0	3,90%			
Rec	78,000	604.607,768	4.658.750,010	366,853	367,306	0,453	109,1510	0	3,90%			
Rec	79,000	604.608,757	4.658.749,867	366,885	367,345	0,460	109,1510	0	3,90%			
Rec	80,000	604.609,747	4.658.749,724	366,963	367,384	0,421	109,1510	0	3,90%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	81,000	604.610,737	4.658.749,581	367,031	367,423	0,392	109,1510	0	3,90%			
Rec	81,851	604.611,579	4.658.749,459	367,066	367,456	0,390	109,1510	0	3,90%		T.E.	
Rec	82,000	604.611,726	4.658.749,437	367,072	367,462	0,390	109,1510	0	3,93%			
Rec	83,000	604.612,716	4.658.749,294	367,114	367,502	0,388	109,1510	0	4,13%			
Rec	84,000	604.613,706	4.658.749,151	367,156	367,545	0,389	109,1510	0	4,33%			
Rec	85,000	604.614,695	4.658.749,008	367,197	367,589	0,392	109,1510	0	4,53%			
Rec	86,000	604.615,685	4.658.748,864	367,255	367,635	0,380	109,1510	0	4,73%			
Rec	87,000	604.616,675	4.658.748,721	367,312	367,684	0,372	109,1510	0	4,93%			
Rec	88,000	604.617,664	4.658.748,578	367,368	367,734	0,366	109,1510	0	5,13%			
Rec	89,000	604.618,654	4.658.748,435	367,425	367,786	0,361	109,1510	0	5,33%			
Rec	90,000	604.619,644	4.658.748,291	367,482	367,840	0,358	109,1510	0	5,53%			
Rec	91,000	604.620,634	4.658.748,148	367,538	367,897	0,359	109,1510	0	5,73%			
Cur	91,332	604.620,962	4.658.748,100	367,562	367,916	0,354	109,1510	-250	5,80%	P.S.	V.	
Cur	92,000	604.621,623	4.658.748,006	367,607	367,955	0,348	108,9809	-250	5,93%			
Cur	93,000	604.622,614	4.658.747,867	367,658	368,015	0,357	108,7263	-250	6,13%			
Cur	94,000	604.623,605	4.658.747,732	367,711	368,078	0,367	108,4716	-250	6,33%			
Cur	95,000	604.624,596	4.658.747,602	367,764	368,142	0,378	108,2170	-250	6,53%			
Cur	96,000	604.625,588	4.658.747,475	367,819	368,208	0,389	107,9623	-250	6,73%			
Cur	97,000	604.626,580	4.658.747,352	367,868	368,277	0,409	107,7077	-250	6,93%			
Cur	98,000	604.627,573	4.658.747,233	367,897	368,347	0,450	107,4530	-250	7,13%			
Cur	99,000	604.628,567	4.658.747,119	367,928	368,419	0,491	107,1984	-250	7,33%			
Cur	100,000	604.629,561	4.658.747,008	367,959	368,493	0,534	106,9437	-250	7,53%			
Cur	100,813	604.630,369	4.658.746,921	367,992	368,556	0,564	106,7367	-250	7,69%		T.S.	
Cur	101,000	604.630,555	4.658.746,901	367,999	368,570	0,571	106,6891	-250	7,70%			
Cur	102,000	604.631,549	4.658.746,798	368,113	368,647	0,534	106,4344	-250	7,70%			
Cur	103,000	604.632,545	4.658.746,699	368,216	368,724	0,508	106,1798	-250	7,70%			
Cur	104,000	604.633,540	4.658.746,604	368,290	368,801	0,511	105,9251	-250	7,70%			
Cur	105,000	604.634,536	4.658.746,513	368,407	368,878	0,471	105,6705	-250	7,70%			
Cur	106,000	604.635,532	4.658.746,426	368,504	368,955	0,451	105,4159	-250	7,70%			
Cur	107,000	604.636,529	4.658.746,343	368,602	369,032	0,430	105,1612	-250	7,70%			
Cur	108,000	604.637,526	4.658.746,264	368,706	369,109	0,403	104,9066	-250	7,70%			
Cur	109,000	604.638,523	4.658.746,189	368,803	369,186	0,383	104,6519	-250	7,70%			
Cur	110,000	604.639,520	4.658.746,118	368,899	369,263	0,364	104,3973	-250	7,70%			
Cur	111,000	604.640,518	4.658.746,051	368,997	369,340	0,343	104,1426	-250	7,70%			
Cur	112,000	604.641,516	4.658.745,988	369,070	369,417	0,347	103,8880	-250	7,70%			
Cur	113,000	604.642,514	4.658.745,929	369,172	369,494	0,322	103,6333	-250	7,70%			
Cur	114,000	604.643,513	4.658.745,874	369,276	369,570	0,294	103,3787	-250	7,70%			
Cur	115,000	604.644,511	4.658.745,823	369,474	369,647	0,173	103,1240	-250	7,70%			
Cur	116,000	604.645,510	4.658.745,776	369,624	369,724	0,100	102,8694	-250	7,70%			
Cur	116,137	604.645,647	4.658.745,770	369,640	369,735	0,095	102,8345	-250	7,70%		T.E.	
Cur	117,000	604.646,509	4.658.745,733	369,742	369,800	0,058	102,6147	-250	7,35%			
Cur	118,000	604.647,509	4.658.745,694	369,849	369,871	0,022	102,3601	-250	6,95%			
Cur	119,000	604.648,508	4.658.745,659	369,922	369,939	0,017	102,1054	-250	6,55%			
Cur	120,000	604.649,508	4.658.745,628	369,984	370,002	0,018	101,8508	-250	6,15%			
Cur	121,000	604.650,507	4.658.745,601	370,019	370,062	0,043	101,5961	-250	5,75%			
Cur	122,000	604.651,507	4.658.745,578	370,039	370,117	0,078	101,3415	-250	5,35%			
Cur	123,000	604.652,507	4.658.745,559	370,057	370,169	0,112	101,0868	-250	4,95%			
Cur	124,000	604.653,507	4.658.745,543	370,067	370,216	0,149	100,8322	-250	4,55%			
Cur	125,000	604.654,507	4.658.745,532	370,056	370,260	0,204	100,5775	-250	4,15%		V.	
Cur	126,000	604.655,506	4.658.745,525	370,045	370,299	0,254	100,3229	-250	3,75%			
Cur	127,000	604.656,506	4.658.745,522	370,035	370,335	0,300	100,0682	-250	3,35%			
Cur	128,000	604.657,506	4.658.745,523	370,025	370,366	0,341	99,8136	-250	2,95%			
Cur	129,000	604.658,506	4.658.745,528	370,004	370,394	0,390	99,5590	-250	2,55%			
Cur	130,000	604.659,506	4.658.745,537	369,921	370,417	0,496	99,3043	-250	2,15%			
Cur	131,000	604.660,506	4.658.745,550	369,878	370,437	0,559	99,0497	-250	1,75%			
Cur	132,000	604.661,506	4.658.745,567	369,835	370,452	0,617	98,7950	-250	1,35%			
Cur	133,000	604.662,506	4.658.745,588	369,763	370,464	0,701	98,5404	-250	0,95%			
Cur	133,863	604.663,369	4.658.745,609	369,697	370,470	0,774	98,3206	-250	0,61%		T.S.	
Cur	134,000	604.663,506	4.658.745,613	369,686	370,471	0,785	98,2857	-250	0,60%			
Cur	135,000	604.664,505	4.658.745,642	369,620	370,477	0,857	98,0311	-250	0,60%			
Cur	136,000	604.665,505	4.658.745,675	369,584	370,483	0,899	97,7764	-250	0,60%			
Cur	137,000	604.666,504	4.658.745,712	369,549	370,489	0,940	97,5218	-250	0,60%			
Cur	138,000	604.667,503	4.658.745,752	369,514	370,495	0,981	97,2671	-250	0,60%			
Cur	139,000	604.668,502	4.658.745,797	369,475	370,501	1,026	97,0125	-250	0,60%			
Cur	140,000	604.669,501	4.658.745,846	369,445	370,507	1,063	96,7578	-250	0,60%			
Cur	141,000	604.670,500	4.658.745,899	369,389	370,514	1,125	96,5032	-250	0,60%			
Cur	142,000	604.671,498	4.658.745,956	369,331	370,520	1,189	96,2485	-250	0,60%			
Cur	143,000	604.672,496	4.658.746,017	369,273	370,526	1,253	95,9939	-250	0,60%			
Cur	144,000	604.673,494	4.658.746,082	369,226	370,532	1,306	95,7392	-250	0,60%			
Cur	145,000	604.674,492	4.658.746,151	369,200	370,538	1,338	95,4846	-250	0,60%			
Cur	146,000	604.675,489	4.658.746,224	369,207	370,544	1,337	95,2299	-250	0,60%			
Cur	146,210	604.675,698	4.658.746,239	369,208	370,545	1,336	95,1765	-250	0,60%		T.E.	
Cur	147,000	604.676,486	4.658.746,300	369,214	370,550	1,336	94,9753	-250	0,56%			
Cur	148,000	604.677,483	4.658.746,381	369,222	370,555	1,333	94,7206	-250	0,51%			
Cur	149,000	604.678,479	4.658.746,466	369,213	370,560	1,347	94,4660	-250	0,46%			
Cur	150,000	604.679,475	4.658.746,555	369,239	370,564	1,325	94,2113	-250	0,41%			
Cur	151,000	604.680,471	4.658.746,648	369,265	370,568	1,303	93,9567	-250	0,36%			
Cur	152,000	604.681,466	4.658.746,744	369,292	370,572	1,280	93,7021	-250	0,31%			
Cur	153,000	604.682,461	4.658.746,845	369,294	370,574	1,280	93,4474	-250	0,26%			
Cur	154,000	604.683,456	4.658.746,950	369,355	370,577	1,222	93,1928	-250	0,21%			
Cur	155,000	604.684,450	4.658.747,059	369,338	370,579	1,241	92,9381	-250	0,16%		V.	ODT Ø1.000 L=8,00m
Cur	156,000	604.685,443	4.658.747,171	369,322	370,580	1,258	92,6835	-250	0,11%			
Cur	157,000	604.686,436	4.658.747,288	369,307	370,581	1,274	92,4288	-250	0,06%			
Cur	158,000	604.687,429	4.658.747,409	369,292	370,581	1,289	92,1742	-250	0,01%			
Cur	159,000	604.688,421	4.658.747,533	369,304	370,581	1,277	91,9195	-250	-0,04%			
Cur	160,000	604.689,413	4.658.747,662	369,317	370,581	1,264	91,6649	-250	-0,09%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	161,000	604.690,404	4.658.747,794	369,330	370,580	1,250	91,4102	-250	-0,14%			
Cur	162,000	604.691,395	4.658.747,931	369,344	370,578	1,234	91,1556	-250	-0,19%			
Cur	163,000	604.692,385	4.658.748,071	369,345	370,576	1,231	90,9009	-250	-0,24%			
Cur	163,790	604.693,167	4.658.748,185	369,279	370,574	1,295	90,6998	-250	-0,28%		T.S.	
Cur	164,000	604.693,374	4.658.748,216	369,261	370,573	1,312	90,6463	-250	-0,28%			
Cur	165,000	604.694,363	4.658.748,364	369,284	370,570	1,286	90,3916	-250	-0,28%			
Cur	166,000	604.695,352	4.658.748,516	369,307	370,568	1,261	90,1370	-250	-0,28%			
Cur	167,000	604.696,339	4.658.748,673	369,321	370,565	1,244	89,8823	-250	-0,28%			
Cur	168,000	604.697,327	4.658.748,833	369,322	370,562	1,240	89,6277	-250	-0,28%			
Cur	169,000	604.698,313	4.658.748,997	369,337	370,559	1,222	89,3730	-250	-0,28%			
Cur	170,000	604.699,299	4.658.749,165	369,351	370,557	1,206	89,1184	-250	-0,28%			
Cur	171,000	604.700,284	4.658.749,337	369,365	370,554	1,189	88,8637	-250	-0,28%			
Cur	172,000	604.701,268	4.658.749,513	369,362	370,551	1,189	88,6091	-250	-0,28%			
Cur	173,000	604.702,252	4.658.749,693	369,360	370,548	1,188	88,3544	-250	-0,28%			
Cur	174,000	604.703,235	4.658.749,877	369,359	370,546	1,187	88,0998	-250	-0,28%			
Cur	175,000	604.704,217	4.658.750,065	369,357	370,543	1,186	87,8451	-250	-0,28%			
Cur	176,000	604.705,198	4.658.750,257	369,353	370,540	1,187	87,5905	-250	-0,28%			
Cur	177,000	604.706,179	4.658.750,452	369,353	370,537	1,184	87,3359	-250	-0,28%			
Cur	178,000	604.707,159	4.658.750,652	369,353	370,535	1,182	87,0812	-250	-0,28%			
Cur	179,000	604.708,138	4.658.750,855	369,354	370,532	1,178	86,8266	-250	-0,28%			
Cur	180,000	604.709,116	4.658.751,063	369,353	370,529	1,176	86,5719	-250	-0,28%			
Cur	181,000	604.710,094	4.658.751,274	369,363	370,526	1,163	86,3173	-250	-0,28%			
Rec	181,700	604.710,778	4.658.751,424	369,372	370,525	1,153	86,1389	0	-0,28%	P.S.		
Rec	182,000	604.711,070	4.658.751,489	369,376	370,524	1,148	86,1389	0	-0,28%			
Rec	183,000	604.712,047	4.658.751,705	369,389	370,521	1,132	86,1389	0	-0,28%			
Rec	184,000	604.713,023	4.658.751,921	369,402	370,518	1,116	86,1389	0	-0,28%			
Rec	185,000	604.714,000	4.658.752,137	369,401	370,515	1,114	86,1389	0	-0,28%			
Rec	186,000	604.714,976	4.658.752,353	369,398	370,513	1,115	86,1389	0	-0,28%			
Rec	187,000	604.715,952	4.658.752,569	369,395	370,510	1,115	86,1389	0	-0,28%			
Rec	188,000	604.716,929	4.658.752,785	369,391	370,507	1,116	86,1389	0	-0,28%			
Rec	189,000	604.717,905	4.658.753,001	369,389	370,504	1,115	86,1389	0	-0,28%			
Rec	190,000	604.718,881	4.658.753,217	369,383	370,502	1,119	86,1389	0	-0,28%			
Rec	191,000	604.719,858	4.658.753,433	369,371	370,499	1,128	86,1389	0	-0,28%			
Rec	192,000	604.720,834	4.658.753,649	369,360	370,496	1,136	86,1389	0	-0,28%			
Rec	193,000	604.721,811	4.658.753,865	369,349	370,493	1,144	86,1389	0	-0,28%			
Rec	194,000	604.722,787	4.658.754,081	369,338	370,491	1,153	86,1389	0	-0,28%			
Rec	195,000	604.723,763	4.658.754,297	369,327	370,488	1,161	86,1389	0	-0,28%			
Rec	196,000	604.724,740	4.658.754,513	369,336	370,485	1,149	86,1389	0	-0,28%			
Cur	196,491	604.725,219	4.658.754,619	369,339	370,484	1,145	86,1389	-750	-0,28%	P.S.		
Cur	197,000	604.725,716	4.658.754,730	369,342	370,482	1,140	86,0957	-750	-0,28%			
Cur	198,000	604.726,692	4.658.754,947	369,348	370,480	1,132	86,0109	-750	-0,28%			
Cur	199,000	604.727,668	4.658.755,166	369,355	370,477	1,122	85,9260	-750	-0,28%			
Cur	200,000	604.728,644	4.658.755,385	369,361	370,474	1,113	85,8411	-750	-0,28%			
Cur	201,000	604.729,619	4.658.755,607	369,368	370,471	1,103	85,7562	-750	-0,28%			
Cur	202,000	604.730,594	4.658.755,829	369,401	370,469	1,068	85,6713	-750	-0,28%			
Cur	203,000	604.731,568	4.658.756,053	369,439	370,466	1,027	85,5864	-750	-0,28%			
Cur	204,000	604.732,543	4.658.756,278	369,477	370,463	0,986	85,5016	-750	-0,28%			
Cur	205,000	604.733,517	4.658.756,505	369,514	370,460	0,946	85,4167	-750	-0,28%			
Cur	206,000	604.734,490	4.658.756,732	369,547	370,458	0,911	85,3318	-750	-0,28%			
Cur	207,000	604.735,464	4.658.756,961	369,565	370,455	0,890	85,2469	-750	-0,28%			
Cur	208,000	604.736,437	4.658.757,192	369,586	370,452	0,866	85,1620	-750	-0,28%			
Cur	209,000	604.737,410	4.658.757,423	369,607	370,449	0,842	85,0771	-750	-0,28%			
Cur	210,000	604.738,382	4.658.757,656	369,628	370,447	0,819	84,9923	-750	-0,28%			
Cur	211,000	604.739,354	4.658.757,890	369,650	370,444	0,794	84,9074	-750	-0,28%			
Cur	212,000	604.740,326	4.658.758,126	369,667	370,441	0,774	84,8225	-750	-0,28%			
Cur	213,000	604.741,298	4.658.758,363	369,657	370,438	0,781	84,7376	-750	-0,28%			
Cur	214,000	604.742,269	4.658.758,601	369,644	370,436	0,792	84,6527	-750	-0,28%			
Cur	215,000	604.743,240	4.658.758,840	369,632	370,433	0,801	84,5679	-750	-0,28%			
Cur	216,000	604.744,211	4.658.759,081	369,619	370,430	0,811	84,4830	-750	-0,28%			
Cur	217,000	604.745,181	4.658.759,323	369,623	370,427	0,804	84,3981	-750	-0,28%			
Cur	218,000	604.746,151	4.658.759,566	369,657	370,425	0,768	84,3132	-750	-0,28%			
Cur	219,000	604.747,121	4.658.759,811	369,691	370,422	0,731	84,2283	-750	-0,28%			
Cur	220,000	604.748,090	4.658.760,057	369,726	370,419	0,693	84,1434	-750	-0,28%			
Cur	221,000	604.749,059	4.658.760,304	369,749	370,416	0,667	84,0586	-750	-0,28%			
Cur	222,000	604.750,027	4.658.760,552	369,749	370,414	0,665	83,9737	-750	-0,28%			
Cur	223,000	604.750,996	4.658.760,802	369,749	370,411	0,662	83,8888	-750	-0,28%			
Cur	224,000	604.751,964	4.658.761,053	369,749	370,408	0,659	83,8039	-750	-0,28%			
Cur	225,000	604.752,931	4.658.761,305	369,751	370,405	0,654	83,7190	-750	-0,28%			
Cur	226,000	604.753,899	4.658.761,559	369,801	370,403	0,602	83,6341	-750	-0,28%			
Cur	227,000	604.754,866	4.658.761,814	369,852	370,400	0,548	83,5493	-750	-0,28%			
Cur	228,000	604.755,832	4.658.762,070	369,897	370,397	0,500	83,4644	-750	-0,28%			
Cur	229,000	604.756,799	4.658.762,327	369,940	370,394	0,454	83,3795	-750	-0,28%			
Cur	230,000	604.757,765	4.658.762,586	369,948	370,392	0,444	83,2946	-750	-0,28%			
Cur	231,000	604.758,730	4.658.762,846	370,005	370,389	0,384	83,2097	-750	-0,28%			
Cur	232,000	604.759,695	4.658.763,108	370,016	370,386	0,370	83,1248	-750	-0,28%			
Cur	232,630	604.760,303	4.658.763,273	370,023	370,384	0,362	83,0714	-750	-0,28%		T.E.	
Cur	233,000	604.760,660	4.658.763,370	370,027	370,384	0,357	83,0400	-750	-0,21%			
Cur	234,000	604.761,625	4.658.763,634	370,033	370,382	0,349	82,9551	-750	-0,05%			
Cur	235,000	604.762,589	4.658.763,899	369,956	370,383	0,427	82,8702	-750	0,12%			
Cur	236,000	604.763,553	4.658.764,166	369,880	370,385	0,505	82,7853	-750	0,29%			
Cur	237,000	604.764,516	4.658.764,434	369,856	370,388	0,532	82,7004	-750	0,45%			
Cur	238,000	604.765,479	4.658.764,703	369,903	370,394	0,491	82,6156	-750	0,62%			
Cur	239,000	604.766,442	4.658.764,973	369,950	370,401	0,451	82,5307	-750	0,79%			
Cur	240,000	604.767,405	4.658.765,245	369,998	370,409	0,411	82,4458	-750	0,95%			
Cur	241,000	604.768,367	4.658.765,517	370,045	370,420	0,375	82,3609	-750	1,12%			
Cur	242,000	604.769,328	4.658.765,792	370,086	370,432	0,346	82,2760	-750	1,29%			
Cur	243,000	604.770,290	4.658.766,067	370,128	370,446	0,318	82,1911	-750	1,45%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	243,329	604.770,606	4.658.766,158	370,142	370,450	0,308	82,1632	0	1,51%	P.S.	V.	
Rec	244,000	604.771,251	4.658.766,344	370,170	370,461	0,291	82,1632	0	1,62%			
Rec	245,000	604.772,212	4.658.766,620	370,212	370,478	0,266	82,1632	0	1,79%			
Rec	246,000	604.773,173	4.658.766,897	370,253	370,497	0,244	82,1632	0	1,95%			
Rec	247,000	604.774,134	4.658.767,173	370,286	370,517	0,231	82,1632	0	2,12%			
Rec	248,000	604.775,095	4.658.767,450	370,319	370,539	0,220	82,1632	0	2,29%			
Rec	249,000	604.776,056	4.658.767,726	370,353	370,563	0,210	82,1632	0	2,45%			
Rec	250,000	604.777,017	4.658.768,003	370,386	370,588	0,202	82,1632	0	2,62%			
Rec	251,000	604.777,978	4.658.768,279	370,422	370,615	0,193	82,1632	0	2,79%			
Rec	252,000	604.778,939	4.658.768,556	370,455	370,644	0,189	82,1632	0	2,95%			
Rec	253,000	604.779,900	4.658.768,832	370,476	370,674	0,198	82,1632	0	3,12%			
Rec	254,000	604.780,861	4.658.769,109	370,497	370,706	0,209	82,1632	0	3,29%			
Rec	254,028	604.780,888	4.658.769,117	370,498	370,707	0,210	82,1632	0	3,29%		T.S.	
Rec	255,000	604.781,822	4.658.769,385	370,519	370,739	0,220	82,1632	0	3,29%			
Rec	256,000	604.782,783	4.658.769,662	370,540	370,772	0,232	82,1632	0	3,29%			
Rec	257,000	604.783,744	4.658.769,938	370,562	370,805	0,243	82,1632	0	3,29%			
Rec	258,000	604.784,705	4.658.770,215	370,573	370,838	0,265	82,1632	0	3,29%			
Rec	259,000	604.785,666	4.658.770,492	370,573	370,871	0,298	82,1632	0	3,29%			
Rec	260,000	604.786,627	4.658.770,768	370,573	370,904	0,331	82,1632	0	3,29%			
Rec	261,000	604.787,588	4.658.771,045	370,574	370,937	0,363	82,1632	0	3,29%			
Rec	262,000	604.788,549	4.658.771,321	370,574	370,970	0,396	82,1632	0	3,29%			
Rec	263,000	604.789,510	4.658.771,598	370,581	371,003	0,422	82,1632	0	3,29%			
Rec	264,000	604.790,471	4.658.771,874	370,632	371,035	0,403	82,1632	0	3,29%			
Rec	265,000	604.791,432	4.658.772,151	370,693	371,068	0,375	82,1632	0	3,29%			
Rec	266,000	604.792,393	4.658.772,427	370,753	371,101	0,348	82,1632	0	3,29%			
Rec	267,000	604.793,354	4.658.772,704	370,813	371,134	0,321	82,1632	0	3,29%			
Rec	268,000	604.794,315	4.658.772,980	370,874	371,167	0,293	82,1632	0	3,29%			
Rec	269,000	604.795,276	4.658.773,257	370,900	371,200	0,300	82,1632	0	3,29%			
Rec	270,000	604.796,237	4.658.773,533	370,911	371,233	0,322	82,1632	0	3,29%			
Rec	271,000	604.797,198	4.658.773,810	370,922	371,266	0,344	82,1632	0	3,29%			
Rec	272,000	604.798,159	4.658.774,086	370,934	371,299	0,365	82,1632	0	3,29%			
Rec	273,000	604.799,120	4.658.774,363	370,945	371,332	0,387	82,1632	0	3,29%			
Rec	274,000	604.800,081	4.658.774,639	370,954	371,365	0,411	82,1632	0	3,29%			
Rec	275,000	604.801,042	4.658.774,916	370,959	371,398	0,439	82,1632	0	3,29%			
Rec	276,000	604.802,003	4.658.775,192	370,965	371,430	0,465	82,1632	0	3,29%			
Rec	277,000	604.802,964	4.658.775,469	370,971	371,463	0,492	82,1632	0	3,29%			
Rec	278,000	604.803,925	4.658.775,746	370,977	371,496	0,519	82,1632	0	3,29%			
Rec	279,000	604.804,886	4.658.776,022	370,984	371,529	0,545	82,1632	0	3,29%			
Rec	280,000	604.805,847	4.658.776,299	370,991	371,562	0,571	82,1632	0	3,29%			
Rec	281,000	604.806,808	4.658.776,575	370,998	371,595	0,597	82,1632	0	3,29%			
Rec	282,000	604.807,769	4.658.776,852	371,033	371,628	0,595	82,1632	0	3,29%			
Rec	283,000	604.808,730	4.658.777,128	371,065	371,661	0,596	82,1632	0	3,29%			
Rec	284,000	604.809,691	4.658.777,405	371,104	371,694	0,590	82,1632	0	3,29%			
Rec	285,000	604.810,652	4.658.777,681	371,150	371,727	0,577	82,1632	0	3,29%			
Rec	286,000	604.811,613	4.658.777,958	371,198	371,760	0,562	82,1632	0	3,29%			
Rec	287,000	604.812,574	4.658.778,234	371,245	371,793	0,548	82,1632	0	3,29%			
Rec	288,000	604.813,535	4.658.778,511	371,293	371,825	0,532	82,1632	0	3,29%			
Rec	289,000	604.814,496	4.658.778,787	371,338	371,858	0,520	82,1632	0	3,29%			
Rec	290,000	604.815,457	4.658.779,064	371,366	371,891	0,525	82,1632	0	3,29%			
Rec	291,000	604.816,418	4.658.779,340	371,390	371,924	0,534	82,1632	0	3,29%			
Rec	292,000	604.817,379	4.658.779,617	371,414	371,957	0,543	82,1632	0	3,29%			
Rec	293,000	604.818,340	4.658.779,893	371,438	371,990	0,552	82,1632	0	3,29%			
Rec	294,000	604.819,301	4.658.780,170	371,493	372,023	0,530	82,1632	0	3,29%			
Rec	295,000	604.820,262	4.658.780,447	371,571	372,056	0,485	82,1632	0	3,29%			
Rec	296,000	604.821,223	4.658.780,723	371,650	372,089	0,439	82,1632	0	3,29%			
Rec	297,000	604.822,184	4.658.781,000	371,728	372,122	0,394	82,1632	0	3,29%			
Rec	298,000	604.823,145	4.658.781,276	371,740	372,155	0,415	82,1632	0	3,29%			
Rec	299,000	604.824,106	4.658.781,553	371,758	372,188	0,430	82,1632	0	3,29%			
Rec	300,000	604.825,067	4.658.781,829	371,779	372,220	0,441	82,1632	0	3,29%			
Rec	301,000	604.826,028	4.658.782,106	371,800	372,253	0,453	82,1632	0	3,29%			
Rec	302,000	604.826,989	4.658.782,382	371,820	372,286	0,466	82,1632	0	3,29%			
Rec	303,000	604.827,950	4.658.782,659	371,841	372,319	0,478	82,1632	0	3,29%			
Rec	304,000	604.828,911	4.658.782,935	371,860	372,352	0,492	82,1632	0	3,29%			
Rec	305,000	604.829,872	4.658.783,212	371,875	372,385	0,510	82,1632	0	3,29%			
Rec	306,000	604.830,833	4.658.783,488	371,916	372,418	0,502	82,1632	0	3,29%			
Rec	307,000	604.831,794	4.658.783,765	371,964	372,451	0,487	82,1632	0	3,29%			
Rec	308,000	604.832,755	4.658.784,041	372,007	372,484	0,477	82,1632	0	3,29%			
Rec	309,000	604.833,716	4.658.784,318	372,043	372,517	0,474	82,1632	0	3,29%			
Rec	310,000	604.834,677	4.658.784,594	372,074	372,550	0,476	82,1632	0	3,29%			
Rec	311,000	604.835,638	4.658.784,871	372,101	372,583	0,482	82,1632	0	3,29%			
Rec	312,000	604.836,599	4.658.785,148	372,127	372,615	0,488	82,1632	0	3,29%			
Rec	313,000	604.837,560	4.658.785,424	372,154	372,648	0,494	82,1632	0	3,29%			
Rec	314,000	604.838,521	4.658.785,701	372,181	372,681	0,500	82,1632	0	3,29%			
Rec	315,000	604.839,482	4.658.785,977	372,223	372,714	0,491	82,1632	0	3,29%			
Rec	316,000	604.840,443	4.658.786,254	372,268	372,747	0,479	82,1632	0	3,29%			
Rec	317,000	604.841,404	4.658.786,530	372,313	372,780	0,467	82,1632	0	3,29%			
Rec	318,000	604.842,365	4.658.786,807	372,358	372,813	0,455	82,1632	0	3,29%			
Rec	319,000	604.843,326	4.658.787,083	372,386	372,846	0,460	82,1632	0	3,29%			
Rec	320,000	604.844,287	4.658.787,360	372,395	372,879	0,484	82,1632	0	3,29%			
Rec	321,000	604.845,248	4.658.787,636	372,405	372,912	0,507	82,1632	0	3,29%			
Rec	322,000	604.846,209	4.658.787,913	372,414	372,945	0,531	82,1632	0	3,29%			
Rec	323,000	604.847,170	4.658.788,189	372,423	372,978	0,555	82,1632	0	3,29%			
Rec	324,000	604.848,131	4.658.788,466	372,441	373,010	0,569	82,1632	0	3,29%			
Rec	325,000	604.849,092	4.658.788,742	372,468	373,043	0,575	82,1632	0	3,29%			
Rec	326,000	604.850,053	4.658.789,019	372,496	373,076	0,580	82,1632	0	3,29%			
Rec	327,000	604.851,014	4.658.789,295	372,523	373,109	0,586	82,1632	0	3,29%			
Rec	328,000	604.851,975	4.658.789,572	372,551	373,142	0,591	82,1632	0	3,29%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	329,000	604.852,936	4.658.789,848	372,578	373,175	0,597	82,1632	0	3,29%			
Rec	330,000	604.853,897	4.658.790,125	372,608	373,208	0,600	82,1632	0	3,29%			
Rec	331,000	604.854,858	4.658.790,402	372,643	373,241	0,598	82,1632	0	3,29%			
Rec	332,000	604.855,819	4.658.790,678	372,664	373,274	0,610	82,1632	0	3,29%			
Rec	333,000	604.856,780	4.658.790,955	372,679	373,307	0,628	82,1632	0	3,29%			
Rec	334,000	604.857,741	4.658.791,231	372,693	373,340	0,647	82,1632	0	3,29%			
Rec	335,000	604.858,702	4.658.791,508	372,707	373,373	0,666	82,1632	0	3,29%			
Rec	336,000	604.859,663	4.658.791,784	372,722	373,405	0,683	82,1632	0	3,29%			
Rec	337,000	604.860,624	4.658.792,061	372,825	373,438	0,613	82,1632	0	3,29%			
Rec	338,000	604.861,585	4.658.792,337	373,018	373,471	0,453	82,1632	0	3,29%			
Rec	339,000	604.862,546	4.658.792,614	373,038	373,504	0,466	82,1632	0	3,29%			
Rec	340,000	604.863,507	4.658.792,890	373,059	373,537	0,478	82,1632	0	3,29%			
Rec	341,000	604.864,468	4.658.793,167	373,070	373,570	0,500	82,1632	0	3,29%			
Rec	342,000	604.865,429	4.658.793,443	373,076	373,603	0,527	82,1632	0	3,29%			
Rec	343,000	604.866,390	4.658.793,720	373,081	373,636	0,555	82,1632	0	3,29%			
Rec	344,000	604.867,351	4.658.793,996	373,087	373,669	0,582	82,1632	0	3,29%			
Rec	345,000	604.868,312	4.658.794,273	373,092	373,702	0,610	82,1632	0	3,29%			
Rec	346,000	604.869,273	4.658.794,549	373,089	373,735	0,646	82,1632	0	3,29%			
Rec	347,000	604.870,234	4.658.794,826	373,087	373,768	0,681	82,1632	0	3,29%			
Rec	348,000	604.871,195	4.658.795,103	373,089	373,800	0,711	82,1632	0	3,29%			
Rec	349,000	604.872,156	4.658.795,379	373,090	373,833	0,743	82,1632	0	3,29%			
Rec	350,000	604.873,117	4.658.795,656	373,092	373,866	0,774	82,1632	0	3,29%			
Rec	351,000	604.874,078	4.658.795,932	373,094	373,899	0,805	82,1632	0	3,29%			
Rec	352,000	604.875,039	4.658.796,209	373,097	373,932	0,835	82,1632	0	3,29%			
Rec	353,000	604.876,000	4.658.796,485	373,101	373,965	0,864	82,1632	0	3,29%			
Rec	354,000	604.876,961	4.658.796,762	373,106	373,998	0,892	82,1632	0	3,29%			
Rec	355,000	604.877,922	4.658.797,038	373,114	374,031	0,917	82,1632	0	3,29%			
Rec	356,000	604.878,883	4.658.797,315	373,141	374,064	0,923	82,1632	0	3,29%			
Rec	357,000	604.879,844	4.658.797,591	373,183	374,097	0,914	82,1632	0	3,29%			
Rec	358,000	604.880,805	4.658.797,868	373,218	374,130	0,912	82,1632	0	3,29%			
Rec	359,000	604.881,766	4.658.798,144	373,241	374,163	0,922	82,1632	0	3,29%			
Rec	360,000	604.882,727	4.658.798,421	373,264	374,195	0,931	82,1632	0	3,29%			
Rec	361,000	604.883,688	4.658.798,697	373,275	374,228	0,953	82,1632	0	3,29%			
Rec	362,000	604.884,649	4.658.798,974	373,349	374,261	0,912	82,1632	0	3,29%			
Cur	362,965	604.885,577	4.658.799,241	373,430	374,293	0,863	82,1632	-400	3,29%	P.S.		
Cur	363,000	604.885,610	4.658.799,250	373,433	374,294	0,861	82,1577	-400	3,29%			
Cur	364,000	604.886,571	4.658.799,528	373,498	374,327	0,829	81,9985	-400	3,29%			
Cur	365,000	604.887,531	4.658.799,808	373,563	374,360	0,797	81,8394	-400	3,29%			
Cur	366,000	604.888,490	4.658.800,091	373,628	374,393	0,765	81,6802	-400	3,29%			
Cur	367,000	604.889,449	4.658.800,376	373,714	374,426	0,712	81,5211	-400	3,29%			
Cur	368,000	604.890,407	4.658.800,663	373,836	374,459	0,623	81,3619	-400	3,29%			
Cur	369,000	604.891,364	4.658.800,953	373,946	374,492	0,546	81,2028	-400	3,29%			
Cur	370,000	604.892,320	4.658.801,245	374,041	374,525	0,484	81,0436	-400	3,29%			
Cur	371,000	604.893,276	4.658.801,540	374,070	374,558	0,488	80,8845	-400	3,29%			
Cur	372,000	604.894,231	4.658.801,837	374,081	374,590	0,509	80,7253	-400	3,29%			
Cur	373,000	604.895,185	4.658.802,136	374,089	374,623	0,534	80,5662	-400	3,29%			
Cur	374,000	604.896,138	4.658.802,438	374,098	374,656	0,558	80,4070	-400	3,29%			
Cur	375,000	604.897,091	4.658.802,742	374,107	374,689	0,582	80,2478	-400	3,29%			
Cur	376,000	604.898,043	4.658.803,049	374,119	374,722	0,603	80,0887	-400	3,29%			
Cur	377,000	604.898,994	4.658.803,358	374,128	374,755	0,627	79,9295	-400	3,29%			
Cur	378,000	604.899,944	4.658.803,669	374,142	374,788	0,646	79,7704	-400	3,29%			
Cur	379,000	604.900,894	4.658.803,983	374,160	374,821	0,661	79,6112	-400	3,29%			
Cur	380,000	604.901,842	4.658.804,299	374,203	374,854	0,651	79,4521	-400	3,29%			
Cur	380,243	604.902,073	4.658.804,376	374,218	374,862	0,644	79,4134	-400	3,29%		T.E.	
Cur	381,000	604.902,790	4.658.804,617	374,263	374,887	0,624	79,2929	-400	3,24%			
Cur	382,000	604.903,737	4.658.804,938	374,310	374,919	0,609	79,1338	-400	3,17%			
Cur	383,000	604.904,684	4.658.805,261	374,357	374,950	0,593	78,9746	-400	3,11%			
Cur	384,000	604.905,629	4.658.805,586	374,403	374,981	0,578	78,8155	-400	3,04%			
Cur	385,000	604.906,574	4.658.805,914	374,473	375,011	0,538	78,6563	-400	2,97%			
Cur	386,000	604.907,518	4.658.806,244	374,565	375,040	0,475	78,4971	-400	2,91%			
Cur	387,000	604.908,461	4.658.806,577	374,654	375,069	0,415	78,3380	-400	2,84%			
Cur	388,000	604.909,403	4.658.806,912	374,694	375,097	0,403	78,1788	-400	2,77%			
Cur	389,000	604.910,345	4.658.807,249	374,764	375,125	0,361	78,0197	-400	2,71%			
Cur	390,000	604.911,285	4.658.807,589	374,947	375,151	0,204	77,8605	-400	2,64%		V.	
Cur	391,000	604.912,225	4.658.807,931	375,005	375,177	0,172	77,7014	-400	2,57%			
Cur	392,000	604.913,164	4.658.808,275	375,004	375,203	0,199	77,5422	-400	2,51%			
Cur	393,000	604.914,102	4.658.808,622	374,991	375,228	0,237	77,3831	-400	2,44%			
Cur	394,000	604.915,039	4.658.808,971	374,973	375,252	0,279	77,2239	-400	2,37%			
Cur	395,000	604.915,975	4.658.809,322	374,948	375,275	0,327	77,0647	-400	2,31%			
Cur	396,000	604.916,911	4.658.809,676	374,916	375,298	0,382	76,9056	-400	2,24%			
Cur	397,000	604.917,845	4.658.810,032	374,865	375,320	0,455	76,7464	-400	2,17%			
Cur	398,000	604.918,779	4.658.810,390	374,799	375,341	0,542	76,5873	-400	2,11%			
Cur	399,000	604.919,711	4.658.810,751	374,768	375,362	0,594	76,4281	-400	2,04%			
Cur	399,757	604.920,417	4.658.811,025	374,786	375,377	0,591	76,3076	-400	1,99%		T.S.	
Cur	400,000	604.920,643	4.658.811,114	374,792	375,382	0,590	76,2690	-400	1,99%			
Cur	401,000	604.921,574	4.658.811,479	374,860	375,402	0,542	76,1098	-400	1,99%			
Cur	402,000	604.922,504	4.658.811,847	374,954	375,422	0,468	75,9507	-400	1,99%			
Cur	403,000	604.923,433	4.658.812,217	374,989	375,442	0,453	75,7915	-400	1,99%			
Cur	404,000	604.924,361	4.658.812,589	374,978	375,462	0,484	75,6324	-400	1,99%			
Cur	405,000	604.925,288	4.658.812,964	375,029	375,481	0,452	75,4732	-400	1,99%			
Cur	406,000	604.926,214	4.658.813,341	375,106	375,501	0,395	75,3140	-400	1,99%			
Cur	407,000	604.927,140	4.658.813,720	375,159	375,521	0,362	75,1549	-400	1,99%			
Cur	408,000	604.928,064	4.658.814,102	375,215	375,541	0,326	74,9957	-400	1,99%			
Cur	409,000	604.928,987	4.658.814,486	375,253	375,561	0,308	74,8366	-400	1,99%			
Cur	410,000	604.929,910	4.658.814,872	375,292	375,581	0,289	74,6774	-400	1,99%			
Cur	411,000	604.930,831	4.658.815,260	375,330	375,601	0,271	74,5183	-400	1,99%			
Cur	412,000	604.931,752	4.658.815,651	375,369	375,621	0,252	74,3591	-400	1,99%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	412,144	604.931,884	4.658.815,707	375,374	375,624	0,250	74,3363	0	1,99%	P.S.		
Rec	413,000	604.932,672	4.658.816,043	375,417	375,641	0,224	74,3363	0	1,99%			
Rec	414,000	604.933,591	4.658.816,436	375,461	375,661	0,200	74,3363	0	1,99%			
Rec	415,000	604.934,511	4.658.816,828	375,508	375,680	0,173	74,3363	0	1,99%			
Rec	416,000	604.935,431	4.658.817,220	375,547	375,700	0,153	74,3363	0	1,99%			
Rec	417,000	604.936,351	4.658.817,613	375,584	375,720	0,136	74,3363	0	1,99%			
Rec	418,000	604.937,271	4.658.818,005	375,623	375,740	0,117	74,3363	0	1,99%			
Rec	419,000	604.938,191	4.658.818,397	375,656	375,760	0,104	74,3363	0	1,99%			
Rec	420,000	604.939,110	4.658.818,789	375,682	375,780	0,098	74,3363	0	1,99%			
Rec	421,000	604.940,030	4.658.819,182	375,700	375,800	0,100	74,3363	0	1,99%			
Rec	422,000	604.940,950	4.658.819,574	375,719	375,820	0,101	74,3363	0	1,99%			
Rec	423,000	604.941,870	4.658.819,966	375,740	375,840	0,100	74,3363	0	1,99%			
Rec	424,000	604.942,790	4.658.820,359	375,756	375,860	0,104	74,3363	0	1,99%			
Rec	425,000	604.943,710	4.658.820,751	375,779	375,880	0,101	74,3363	0	1,99%			
Rec	426,000	604.944,629	4.658.821,143	375,792	375,899	0,107	74,3363	0	1,99%			
Rec	427,000	604.945,549	4.658.821,535	375,808	375,919	0,111	74,3363	0	1,99%			
Rec	428,000	604.946,469	4.658.821,928	375,828	375,939	0,111	74,3363	0	1,99%			
Rec	429,000	604.947,389	4.658.822,320	375,841	375,959	0,118	74,3363	0	1,99%			
Rec	430,000	604.948,309	4.658.822,712	375,851	375,979	0,128	74,3363	0	1,99%			
Rec	431,000	604.949,229	4.658.823,105	375,853	375,999	0,146	74,3363	0	1,99%			
Rec	432,000	604.950,148	4.658.823,497	375,855	376,019	0,164	74,3363	0	1,99%			
Rec	433,000	604.951,068	4.658.823,889	375,866	376,039	0,173	74,3363	0	1,99%			
Rec	434,000	604.951,988	4.658.824,282	375,879	376,059	0,180	74,3363	0	1,99%			
Rec	435,000	604.952,908	4.658.824,674	375,887	376,079	0,192	74,3363	0	1,99%			
Rec	436,000	604.953,828	4.658.825,066	375,883	376,098	0,215	74,3363	0	1,99%			
Rec	437,000	604.954,748	4.658.825,458	375,873	376,118	0,245	74,3363	0	1,99%			
Rec	438,000	604.955,668	4.658.825,851	375,863	376,138	0,275	74,3363	0	1,99%			
Rec	439,000	604.956,587	4.658.826,243	375,856	376,158	0,302	74,3363	0	1,99%			
Rec	440,000	604.957,507	4.658.826,635	375,855	376,178	0,323	74,3363	0	1,99%			
Rec	441,000	604.958,427	4.658.827,028	375,855	376,198	0,343	74,3363	0	1,99%			
Rec	442,000	604.959,347	4.658.827,420	375,836	376,218	0,382	74,3363	0	1,99%			
Rec	443,000	604.960,267	4.658.827,812	375,821	376,238	0,417	74,3363	0	1,99%			
Rec	444,000	604.961,187	4.658.828,204	375,823	376,258	0,435	74,3363	0	1,99%			
Rec	445,000	604.962,106	4.658.828,597	375,834	376,278	0,444	74,3363	0	1,99%			
Rec	446,000	604.963,026	4.658.828,989	375,850	376,297	0,447	74,3363	0	1,99%			
Rec	447,000	604.963,946	4.658.829,381	375,876	376,317	0,441	74,3363	0	1,99%			
Rec	448,000	604.964,866	4.658.829,774	375,895	376,337	0,442	74,3363	0	1,99%			
Rec	449,000	604.965,786	4.658.830,166	375,902	376,357	0,455	74,3363	0	1,99%			
Rec	450,000	604.966,706	4.658.830,558	375,904	376,377	0,473	74,3363	0	1,99%			
Rec	450,259	604.966,944	4.658.830,660	375,902	376,382	0,480	74,3363	0	1,99%		T.E.	
Rec	451,000	604.967,625	4.658.830,951	375,897	376,397	0,500	74,3363	0	1,93%			
Rec	452,000	604.968,545	4.658.831,343	375,884	376,416	0,532	74,3363	0	1,85%			
Rec	453,000	604.969,465	4.658.831,735	375,860	376,434	0,574	74,3363	0	1,77%			
Rec	454,000	604.970,385	4.658.832,127	375,859	376,451	0,592	74,3363	0	1,69%			
Cur	454,100	604.970,477	4.658.832,167	375,859	376,453	0,594	74,3363	-400	1,68%	P.S.		
Cur	455,000	604.971,304	4.658.832,521	375,890	376,468	0,578	74,1930	-400	1,61%			
Cur	456,000	604.972,223	4.658.832,916	375,960	376,483	0,523	74,0339	-400	1,53%			
Cur	457,000	604.973,140	4.658.833,314	376,054	376,498	0,444	73,8747	-400	1,45%			
Cur	458,000	604.974,057	4.658.833,714	376,150	376,512	0,362	73,7156	-400	1,37%			
Cur	459,000	604.974,972	4.658.834,116	376,218	376,526	0,308	73,5564	-400	1,29%			
Cur	460,000	604.975,887	4.658.834,521	376,289	376,538	0,249	73,3973	-400	1,21%		V.	
Cur	461,000	604.976,800	4.658.834,928	376,326	376,550	0,224	73,2381	-400	1,13%			
Cur	462,000	604.977,713	4.658.835,337	376,363	376,561	0,198	73,0790	-400	1,05%			
Cur	463,000	604.978,624	4.658.835,749	376,410	376,571	0,161	72,9198	-400	0,97%			
Cur	464,000	604.979,534	4.658.836,163	376,411	376,580	0,169	72,7606	-400	0,89%			
Cur	465,000	604.980,444	4.658.836,579	376,389	376,589	0,200	72,6015	-400	0,81%			
Cur	466,000	604.981,352	4.658.836,997	376,344	376,596	0,252	72,4423	-400	0,73%			
Cur	467,000	604.982,259	4.658.837,418	376,323	376,603	0,280	72,2832	-400	0,65%			
Cur	468,000	604.983,165	4.658.837,841	376,276	376,609	0,333	72,1240	-400	0,57%			
Cur	469,000	604.984,071	4.658.838,266	376,282	376,615	0,333	71,9649	-400	0,49%			
Cur	469,741	604.984,741	4.658.838,582	376,289	376,618	0,329	71,8469	-400	0,43%		T.S.	
Cur	470,000	604.984,975	4.658.838,693	376,291	376,619	0,328	71,8057	-400	0,43%			
Cur	471,000	604.985,878	4.658.839,123	376,307	376,624	0,317	71,6466	-400	0,43%			
Cur	472,000	604.986,779	4.658.839,555	376,322	376,628	0,306	71,4874	-400	0,43%			
Cur	473,000	604.987,680	4.658.839,989	376,338	376,632	0,294	71,3283	-400	0,43%			
Cur	474,000	604.988,580	4.658.840,425	376,352	376,636	0,284	71,1691	-400	0,43%			
Cur	474,078	604.988,650	4.658.840,459	376,353	376,637	0,283	71,1567	-400	0,43%		T.E.	
Cur	475,000	604.989,479	4.658.840,864	376,370	376,640	0,270	71,0099	-400	0,31%			
Cur	476,000	604.990,376	4.658.841,305	376,386	376,643	0,257	70,8508	-400	0,18%			
Cur	477,000	604.991,273	4.658.841,748	376,395	376,644	0,249	70,6916	-400	0,04%			
Cur	478,000	604.992,168	4.658.842,193	376,397	376,644	0,247	70,5325	-400	-0,09%			
Cur	479,000	604.993,062	4.658.842,641	376,396	376,642	0,246	70,3733	-400	-0,22%			
Cur	480,000	604.993,955	4.658.843,091	376,398	376,639	0,241	70,2142	-400	-0,36%			
Cur	481,000	604.994,847	4.658.843,543	376,428	376,635	0,207	70,0550	-400	-0,49%			
Cur	482,000	604.995,738	4.658.843,997	376,458	376,629	0,171	69,8959	-400	-0,62%			
Cur	483,000	604.996,628	4.658.844,454	376,484	376,622	0,138	69,7367	-400	-0,76%			
Cur	484,000	604.997,516	4.658.844,913	376,462	376,614	0,152	69,5775	-400	-0,89%			
Cur	485,000	604.998,404	4.658.845,374	376,441	376,604	0,163	69,4184	-400	-1,02%		V.	
Cur	486,000	604.999,290	4.658.845,837	376,419	376,594	0,175	69,2592	-400	-1,16%			
Cur	487,000	605.000,175	4.658.846,302	376,378	376,581	0,203	69,1001	-400	-1,29%			
Cur	488,000	605.001,059	4.658.846,770	376,332	376,568	0,236	68,9409	-400	-1,42%			
Cur	489,000	605.001,942	4.658.847,240	376,284	376,553	0,269	68,7818	-400	-1,56%			
Cur	490,000	605.002,823	4.658.847,712	376,235	376,537	0,302	68,6226	-400	-1,69%			
Cur	491,000	605.003,704	4.658.848,186	376,186	376,519	0,333	68,4635	-400	-1,82%			
Cur	492,000	605.004,583	4.658.848,663	376,138	376,500	0,362	68,3043	-400	-1,96%			
Cur	493,000	605.005,461	4.658.849,141	376,100	376,480	0,380	68,1452	-400	-2,09%			
Cur	494,000	605.006,338	4.658.849,622	376,064	376,458	0,394	67,9860	-400	-2,22%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	495,000	605.007,213	4.658.850,105	376,026	376,435	0,409	67,8268	-400	-2,36%			
Cur	495,922	605.008,020	4.658.850,553	375,998	376,413	0,415	67,6801	-400	-2,48%		T.S.	
Cur	496,000	605.008,088	4.658.850,591	375,996	376,411	0,415	67,6677	-400	-2,48%			
Cur	497,000	605.008,961	4.658.851,078	375,966	376,386	0,420	67,5085	-400	-2,48%			
Cur	498,000	605.009,833	4.658.851,568	375,939	376,362	0,423	67,3494	-400	-2,48%			
Cur	499,000	605.010,704	4.658.852,059	375,916	376,337	0,421	67,1902	-400	-2,48%			
Cur	500,000	605.011,573	4.658.852,553	375,884	376,312	0,428	67,0311	-400	-2,48%			
Cur	501,000	605.012,441	4.658.853,049	375,854	376,287	0,433	66,8719	-400	-2,48%			
Cur	502,000	605.013,308	4.658.853,548	375,825	376,262	0,437	66,7128	-400	-2,48%			
Cur	503,000	605.014,174	4.658.854,048	375,803	376,238	0,435	66,5536	-400	-2,48%			
Cur	504,000	605.015,039	4.658.854,551	375,778	376,213	0,435	66,3944	-400	-2,48%			
Cur	505,000	605.015,902	4.658.855,055	375,759	376,188	0,429	66,2353	-400	-2,48%			
Cur	506,000	605.016,764	4.658.855,562	375,749	376,163	0,414	66,0761	-400	-2,48%			
Cur	507,000	605.017,624	4.658.856,072	375,744	376,138	0,394	65,9170	-400	-2,48%			
Rec	507,833	605.018,341	4.658.856,497	375,733	376,118	0,385	65,7843	0	-2,48%	P.S.		
Rec	508,000	605.018,484	4.658.856,583	375,729	376,113	0,384	65,7843	0	-2,48%			
Rec	509,000	605.019,343	4.658.857,095	375,701	376,089	0,388	65,7843	0	-2,48%			
Rec	510,000	605.020,202	4.658.857,607	375,684	376,064	0,380	65,7843	0	-2,48%			
Rec	511,000	605.021,061	4.658.858,119	375,680	376,039	0,359	65,7843	0	-2,48%			
Rec	512,000	605.021,920	4.658.858,631	375,675	376,014	0,339	65,7843	0	-2,48%			
Rec	513,000	605.022,779	4.658.859,143	375,671	375,989	0,318	65,7843	0	-2,48%			
Rec	514,000	605.023,638	4.658.859,654	375,653	375,965	0,312	65,7843	0	-2,48%			
Rec	515,000	605.024,497	4.658.860,166	375,632	375,940	0,308	65,7843	0	-2,48%			
Rec	516,000	605.025,356	4.658.860,678	375,612	375,915	0,303	65,7843	0	-2,48%			
Rec	517,000	605.026,215	4.658.861,190	375,592	375,890	0,298	65,7843	0	-2,48%			
Rec	518,000	605.027,074	4.658.861,702	375,572	375,865	0,293	65,7843	0	-2,48%			
Rec	519,000	605.027,933	4.658.862,214	375,545	375,841	0,296	65,7843	0	-2,48%			
Rec	520,000	605.028,792	4.658.862,726	375,529	375,816	0,287	65,7843	0	-2,48%			
Rec	521,000	605.029,651	4.658.863,238	375,513	375,791	0,278	65,7843	0	-2,48%			
Rec	522,000	605.030,510	4.658.863,750	375,497	375,766	0,269	65,7843	0	-2,48%			
Rec	523,000	605.031,369	4.658.864,262	375,481	375,741	0,260	65,7843	0	-2,48%			
Rec	524,000	605.032,228	4.658.864,774	375,465	375,717	0,252	65,7843	0	-2,48%			
Rec	525,000	605.033,087	4.658.865,286	375,450	375,692	0,242	65,7843	0	-2,48%			
Rec	526,000	605.033,946	4.658.865,798	375,434	375,667	0,233	65,7843	0	-2,48%			
Rec	527,000	605.034,805	4.658.866,310	375,407	375,642	0,235	65,7843	0	-2,48%			
Rec	528,000	605.035,664	4.658.866,822	375,387	375,617	0,230	65,7843	0	-2,48%			
Rec	529,000	605.036,523	4.658.867,334	375,371	375,593	0,222	65,7843	0	-2,48%			
Rec	530,000	605.037,382	4.658.867,846	375,356	375,568	0,212	65,7843	0	-2,48%			
Rec	531,000	605.038,241	4.658.868,358	375,335	375,543	0,208	65,7843	0	-2,48%			
Rec	532,000	605.039,100	4.658.868,870	375,292	375,518	0,226	65,7843	0	-2,48%			
Rec	533,000	605.039,959	4.658.869,382	375,224	375,493	0,269	65,7843	0	-2,48%			
Rec	534,000	605.040,818	4.658.869,894	375,133	375,469	0,336	65,7843	0	-2,48%			
Rec	535,000	605.041,677	4.658.870,405	375,044	375,444	0,400	65,7843	0	-2,48%			
Rec	536,000	605.042,536	4.658.870,917	374,935	375,419	0,484	65,7843	0	-2,48%			
Rec	537,000	605.043,395	4.658.871,429	374,860	375,394	0,534	65,7843	0	-2,48%			
Rec	538,000	605.044,254	4.658.871,941	374,845	375,369	0,524	65,7843	0	-2,48%			
Rec	539,000	605.045,113	4.658.872,453	374,842	375,345	0,503	65,7843	0	-2,48%			
Rec	540,000	605.045,972	4.658.872,965	374,825	375,320	0,495	65,7843	0	-2,48%			
Rec	541,000	605.046,831	4.658.873,477	374,794	375,295	0,501	65,7843	0	-2,48%			
Rec	542,000	605.047,690	4.658.873,989	374,765	375,270	0,505	65,7843	0	-2,48%			
Rec	543,000	605.048,549	4.658.874,501	374,738	375,245	0,507	65,7843	0	-2,48%			
Rec	544,000	605.049,408	4.658.875,013	374,714	375,220	0,506	65,7843	0	-2,48%			
Rec	545,000	605.050,267	4.658.875,525	374,690	375,196	0,506	65,7843	0	-2,48%			
Rec	546,000	605.051,126	4.658.876,037	374,667	375,171	0,504	65,7843	0	-2,48%			
Rec	547,000	605.051,985	4.658.876,549	374,646	375,146	0,500	65,7843	0	-2,48%			
Rec	548,000	605.052,844	4.658.877,061	374,626	375,121	0,495	65,7843	0	-2,48%			
Rec	549,000	605.053,703	4.658.877,573	374,615	375,096	0,481	65,7843	0	-2,48%			
Rec	550,000	605.054,562	4.658.878,085	374,612	375,072	0,460	65,7843	0	-2,48%			
Rec	551,000	605.055,421	4.658.878,597	374,603	375,047	0,444	65,7843	0	-2,48%			
Rec	552,000	605.056,281	4.658.879,109	374,582	375,022	0,440	65,7843	0	-2,48%			
Rec	553,000	605.057,140	4.658.879,621	374,560	374,997	0,437	65,7843	0	-2,48%			
Rec	554,000	605.057,999	4.658.880,133	374,539	374,972	0,433	65,7843	0	-2,48%			
Rec	555,000	605.058,858	4.658.880,645	374,517	374,948	0,431	65,7843	0	-2,48%			
Rec	556,000	605.059,717	4.658.881,157	374,512	374,923	0,411	65,7843	0	-2,48%			
Rec	557,000	605.060,576	4.658.881,668	374,513	374,898	0,385	65,7843	0	-2,48%			
Rec	558,000	605.061,435	4.658.882,180	374,513	374,873	0,360	65,7843	0	-2,48%			
Rec	559,000	605.062,294	4.658.882,692	374,514	374,848	0,334	65,7843	0	-2,48%			
Rec	560,000	605.063,153	4.658.883,204	374,515	374,824	0,309	65,7843	0	-2,48%			
Rec	561,000	605.064,012	4.658.883,716	374,505	374,799	0,294	65,7843	0	-2,48%			
Rec	562,000	605.064,871	4.658.884,228	374,484	374,774	0,290	65,7843	0	-2,48%			
Rec	563,000	605.065,730	4.658.884,740	374,462	374,749	0,287	65,7843	0	-2,48%			
Rec	564,000	605.066,589	4.658.885,252	374,444	374,724	0,280	65,7843	0	-2,48%			
Rec	565,000	605.067,448	4.658.885,764	374,441	374,700	0,259	65,7843	0	-2,48%			
Rec	566,000	605.068,307	4.658.886,276	374,439	374,675	0,236	65,7843	0	-2,48%			
Rec	567,000	605.069,166	4.658.886,788	374,425	374,650	0,225	65,7843	0	-2,48%			
Rec	568,000	605.070,025	4.658.887,300	374,387	374,625	0,238	65,7843	0	-2,48%			
Rec	569,000	605.070,884	4.658.887,812	374,349	374,600	0,251	65,7843	0	-2,48%			
Rec	570,000	605.071,743	4.658.888,324	374,310	374,576	0,266	65,7843	0	-2,48%			
Rec	571,000	605.072,602	4.658.888,836	374,272	374,551	0,279	65,7843	0	-2,48%			
Rec	572,000	605.073,461	4.658.889,348	374,234	374,526	0,292	65,7843	0	-2,48%			
Rec	573,000	605.074,320	4.658.889,860	374,195	374,501	0,306	65,7843	0	-2,48%			
Rec	574,000	605.075,179	4.658.890,372	374,193	374,476	0,283	65,7843	0	-2,48%			
Rec	575,000	605.076,038	4.658.890,884	374,192	374,452	0,260	65,7843	0	-2,48%			
Rec	576,000	605.076,897	4.658.891,396	374,190	374,427	0,237	65,7843	0	-2,48%			
Rec	577,000	605.077,756	4.658.891,908	374,187	374,402	0,215	65,7843	0	-2,48%			
Rec	578,000	605.078,615	4.658.892,420	374,181	374,377	0,196	65,7843	0	-2,48%			
Rec	579,000	605.079,474	4.658.892,931	374,177	374,352	0,175	65,7843	0	-2,48%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	580,000	605.080,333	4.658.893,443	374,165	374,327	0,162	65,7843	0	-2,48%			
Rec	581,000	605.081,192	4.658.893,955	374,144	374,303	0,159	65,7843	0	-2,48%			
Rec	582,000	605.082,051	4.658.894,467	374,124	374,278	0,154	65,7843	0	-2,48%			
Rec	583,000	605.082,910	4.658.894,979	374,105	374,253	0,148	65,7843	0	-2,48%			
Rec	584,000	605.083,769	4.658.895,491	374,087	374,228	0,141	65,7843	0	-2,48%			
Rec	585,000	605.084,628	4.658.896,003	374,068	374,203	0,135	65,7843	0	-2,48%			
Rec	586,000	605.085,487	4.658.896,515	374,049	374,179	0,130	65,7843	0	-2,48%			
Rec	587,000	605.086,346	4.658.897,027	374,030	374,154	0,124	65,7843	0	-2,48%			
Rec	588,000	605.087,205	4.658.897,539	374,012	374,129	0,117	65,7843	0	-2,48%			
Rec	589,000	605.088,064	4.658.898,051	373,967	374,104	0,137	65,7843	0	-2,48%			
Rec	590,000	605.088,923	4.658.898,563	373,880	374,079	0,199	65,7843	0	-2,48%			
Rec	591,000	605.089,782	4.658.899,075	373,797	374,055	0,258	65,7843	0	-2,48%			
Rec	592,000	605.090,641	4.658.899,587	373,723	374,030	0,307	65,7843	0	-2,48%			
Rec	593,000	605.091,500	4.658.900,099	373,721	374,005	0,284	65,7843	0	-2,48%			
Rec	594,000	605.092,359	4.658.900,611	373,712	373,980	0,268	65,7843	0	-2,48%			
Rec	595,000	605.093,218	4.658.901,123	373,667	373,955	0,288	65,7843	0	-2,48%			
Rec	596,000	605.094,077	4.658.901,635	373,624	373,931	0,307	65,7843	0	-2,48%			
Rec	597,000	605.094,936	4.658.902,147	373,581	373,906	0,325	65,7843	0	-2,48%			
Rec	598,000	605.095,795	4.658.902,659	373,576	373,881	0,305	65,7843	0	-2,48%			
Rec	599,000	605.096,654	4.658.903,171	373,577	373,856	0,279	65,7843	0	-2,48%			
Rec	600,000	605.097,513	4.658.903,683	373,549	373,831	0,282	65,7843	0	-2,48%			
Rec	601,000	605.098,372	4.658.904,194	373,508	373,807	0,299	65,7843	0	-2,48%			
Rec	602,000	605.099,231	4.658.904,706	373,486	373,782	0,296	65,7843	0	-2,48%			
Rec	603,000	605.100,090	4.658.905,218	373,487	373,757	0,270	65,7843	0	-2,48%			
Rec	604,000	605.100,949	4.658.905,730	373,488	373,732	0,244	65,7843	0	-2,48%			
Rec	605,000	605.101,808	4.658.906,242	373,462	373,707	0,245	65,7843	0	-2,48%			
Rec	606,000	605.102,667	4.658.906,754	373,439	373,683	0,244	65,7843	0	-2,48%			
Rec	607,000	605.103,526	4.658.907,266	373,416	373,658	0,242	65,7843	0	-2,48%			
Rec	608,000	605.104,385	4.658.907,778	373,393	373,633	0,240	65,7843	0	-2,48%			
Rec	609,000	605.105,244	4.658.908,290	373,369	373,608	0,239	65,7843	0	-2,48%			
Rec	610,000	605.106,103	4.658.908,802	373,346	373,583	0,237	65,7843	0	-2,48%			
Rec	611,000	605.106,962	4.658.909,314	373,323	373,559	0,236	65,7843	0	-2,48%			
Rec	612,000	605.107,821	4.658.909,826	373,300	373,534	0,234	65,7843	0	-2,48%			
Rec	613,000	605.108,680	4.658.910,338	373,276	373,509	0,233	65,7843	0	-2,48%			
Rec	614,000	605.109,539	4.658.910,850	373,262	373,484	0,222	65,7843	0	-2,48%			
Rec	615,000	605.110,398	4.658.911,362	373,263	373,459	0,196	65,7843	0	-2,48%			
Rec	616,000	605.111,257	4.658.911,874	373,265	373,434	0,169	65,7843	0	-2,48%			
Rec	616,091	605.111,335	4.658.911,920	373,265	373,432	0,167	65,7843	0	-2,48%		T.E.	
Rec	617,000	605.112,116	4.658.912,386	373,268	373,409	0,141	65,7843	0	-2,61%			
Rec	618,000	605.112,975	4.658.912,898	373,271	373,382	0,111	65,7843	0	-2,75%			
Rec	619,000	605.113,834	4.658.913,410	373,209	373,354	0,145	65,7843	0	-2,90%			
Rec	620,000	605.114,693	4.658.913,922	373,191	373,324	0,133	65,7843	0	-3,04%			
Rec	621,000	605.115,552	4.658.914,434	373,161	373,293	0,132	65,7843	0	-3,18%			
Rec	622,000	605.116,411	4.658.914,946	373,110	373,261	0,151	65,7843	0	-3,32%			
Rec	623,000	605.117,270	4.658.915,457	373,070	373,227	0,157	65,7843	0	-3,47%			
Rec	624,000	605.118,129	4.658.915,969	373,035	373,191	0,156	65,7843	0	-3,61%			
Rec	625,000	605.118,988	4.658.916,481	373,001	373,155	0,154	65,7843	0	-3,75%			
Cur	625,010	605.118,997	4.658.916,487	373,000	373,154	0,154	65,7843	100	-3,75%	P.S.	V.	
Cur	626,000	605.119,850	4.658.916,989	372,939	373,116	0,177	66,4143	100	-3,90%			
Cur	627,000	605.120,716	4.658.917,488	372,942	373,077	0,135	67,0509	100	-4,04%			
Cur	628,000	605.121,588	4.658.917,979	372,877	373,036	0,159	67,6875	100	-4,18%			
Cur	629,000	605.122,464	4.658.918,460	372,805	372,993	0,188	68,3242	100	-4,32%			
Cur	630,000	605.123,345	4.658.918,933	372,745	372,949	0,204	68,9608	100	-4,47%			
Cur	631,000	605.124,231	4.658.919,397	372,694	372,904	0,210	69,5974	100	-4,61%			
Cur	632,000	605.125,122	4.658.919,852	372,641	372,857	0,216	70,2340	100	-4,75%			
Cur	633,000	605.126,017	4.658.920,299	372,589	372,809	0,220	70,8706	100	-4,90%			
Cur	633,929	605.126,852	4.658.920,705	372,540	372,762	0,223	71,4621	100	-5,03%		T.S.	
Cur	634,000	605.126,916	4.658.920,736	372,536	372,759	0,223	71,5073	100	-5,03%			
Cur	635,000	605.127,820	4.658.921,164	372,483	372,709	0,226	72,1439	100	-5,03%			
Cur	636,000	605.128,727	4.658.921,583	372,429	372,658	0,229	72,7805	100	-5,03%			
Cur	637,000	605.129,639	4.658.921,993	372,364	372,608	0,244	73,4171	100	-5,03%			
Cur	638,000	605.130,556	4.658.922,394	372,296	372,558	0,262	74,0537	100	-5,03%			
Cur	639,000	605.131,476	4.658.922,786	372,228	372,507	0,279	74,6904	100	-5,03%			
Cur	640,000	605.132,400	4.658.923,169	372,160	372,457	0,297	75,3270	100	-5,03%			
Cur	641,000	605.133,327	4.658.923,542	372,095	372,407	0,312	75,9636	100	-5,03%			
Cur	642,000	605.134,259	4.658.923,906	372,034	372,357	0,323	76,6002	100	-5,03%			
Cur	643,000	605.135,194	4.658.924,261	371,976	372,306	0,330	77,2368	100	-5,03%			
Cur	644,000	605.136,132	4.658.924,606	371,924	372,256	0,332	77,8735	100	-5,03%			
Cur	645,000	605.137,074	4.658.924,942	371,872	372,206	0,334	78,5101	100	-5,03%			
Cur	646,000	605.138,019	4.658.925,268	371,820	372,155	0,335	79,1467	100	-5,03%			
Cur	647,000	605.138,968	4.658.925,585	371,768	372,105	0,337	79,7833	100	-5,03%			
Cur	648,000	605.139,919	4.658.925,893	371,716	372,055	0,339	80,4199	100	-5,03%			
Cur	649,000	605.140,874	4.658.926,191	371,664	372,005	0,341	81,0566	100	-5,03%			
Cur	650,000	605.141,831	4.658.926,479	371,612	371,954	0,342	81,6932	100	-5,03%			
Cur	651,000	605.142,792	4.658.926,758	371,559	371,904	0,345	82,3298	100	-5,03%			
Cur	652,000	605.143,755	4.658.927,027	371,504	371,854	0,350	82,9664	100	-5,03%			
Cur	653,000	605.144,720	4.658.927,287	371,447	371,803	0,356	83,6030	100	-5,03%			
Cur	654,000	605.145,689	4.658.927,537	371,390	371,753	0,363	84,2397	100	-5,03%			
Cur	655,000	605.146,659	4.658.927,777	371,334	371,703	0,369	84,8763	100	-5,03%			
Cur	656,000	605.147,632	4.658.928,007	371,284	371,653	0,369	85,5129	100	-5,03%			
Cur	657,000	605.148,608	4.658.928,228	371,256	371,602	0,346	86,1495	100	-5,03%			
Cur	658,000	605.149,585	4.658.928,439	371,239	371,552	0,313	86,7861	100	-5,03%			
Cur	659,000	605.150,565	4.658.928,640	371,178	371,502	0,324	87,4228	100	-5,03%			
Cur	660,000	605.151,546	4.658.928,832	371,146	371,451	0,305	88,0594	100	-5,03%			
Cur	661,000	605.152,530	4.658.929,013	371,121	371,401	0,280	88,6960	100	-5,03%			
Cur	662,000	605.153,515	4.658.929,185	371,097	371,351	0,254	89,3326	100	-5,03%			
Cur	663,000	605.154,502	4.658.929,347	371,065	371,301	0,236	89,9692	100	-5,03%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	663,056	605.154,557	4.658.929,356	371,063	371,298	0,235	90,0049	100	-5,03%		T.E.	
Cur	664,000	605.155,490	4.658.929,499	371,026	371,251	0,225	90,6059	100	-4,95%			
Cur	665,000	605.156,480	4.658.929,641	370,993	371,202	0,209	91,2425	100	-4,87%			
Cur	666,000	605.157,471	4.658.929,773	370,958	371,153	0,195	91,8791	100	-4,79%			
Cur	667,000	605.158,464	4.658.929,895	370,922	371,106	0,184	92,5157	100	-4,71%			
Cur	668,000	605.159,457	4.658.930,008	370,885	371,059	0,174	93,1523	100	-4,63%			
Cur	669,000	605.160,452	4.658.930,110	370,847	371,013	0,166	93,7890	100	-4,55%			
Cur	670,000	605.161,448	4.658.930,202	370,808	370,968	0,160	94,4256	100	-4,47%			
Cur	671,000	605.162,444	4.658.930,285	370,767	370,924	0,157	95,0622	100	-4,39%			
Cur	672,000	605.163,442	4.658.930,357	370,724	370,880	0,156	95,6988	100	-4,31%			
Cur	673,000	605.164,440	4.658.930,420	370,681	370,837	0,156	96,3354	100	-4,23%			
Cur	674,000	605.165,438	4.658.930,472	370,635	370,795	0,160	96,9721	100	-4,15%			
Cur	675,000	605.166,437	4.658.930,515	370,589	370,754	0,165	97,6087	100	-4,07%			
Rec	675,600	605.167,037	4.658.930,536	370,556	370,730	0,174	97,9905	0	-4,03%	P.S.	V.	
Rec	676,000	605.167,437	4.658.930,548	370,534	370,714	0,180	97,9905	0	-3,99%			
Rec	677,000	605.168,436	4.658.930,580	370,484	370,674	0,190	97,9905	0	-3,91%			
Rec	678,000	605.169,436	4.658.930,611	370,433	370,636	0,203	97,9905	0	-3,83%			
Rec	679,000	605.170,435	4.658.930,643	370,385	370,598	0,213	97,9905	0	-3,75%			
Rec	680,000	605.171,435	4.658.930,675	370,341	370,561	0,220	97,9905	0	-3,67%			
Rec	681,000	605.172,434	4.658.930,706	370,297	370,524	0,227	97,9905	0	-3,59%			
Rec	682,000	605.173,434	4.658.930,738	370,252	370,489	0,237	97,9905	0	-3,51%			
Rec	683,000	605.174,433	4.658.930,769	370,199	370,454	0,255	97,9905	0	-3,43%			
Rec	684,000	605.175,433	4.658.930,801	370,155	370,420	0,265	97,9905	0	-3,35%			
Rec	685,000	605.176,432	4.658.930,832	370,113	370,387	0,274	97,9905	0	-3,27%			
Rec	686,000	605.177,432	4.658.930,864	370,070	370,355	0,285	97,9905	0	-3,19%			
Rec	687,000	605.178,431	4.658.930,895	370,028	370,323	0,295	97,9905	0	-3,11%			
Rec	688,000	605.179,431	4.658.930,927	369,989	370,292	0,303	97,9905	0	-3,03%			
Rec	688,144	605.179,575	4.658.930,932	369,984	370,288	0,304	97,9905	0	-3,02%		T.S.	
Rec	689,000	605.180,430	4.658.930,959	369,955	370,262	0,307	97,9905	0	-3,02%			
Rec	690,000	605.181,430	4.658.930,990	369,921	370,232	0,311	97,9905	0	-3,02%			
Rec	691,000	605.182,429	4.658.931,022	369,886	370,202	0,316	97,9905	0	-3,02%			
Rec	692,000	605.183,429	4.658.931,053	369,852	370,171	0,319	97,9905	0	-3,02%			
Rec	693,000	605.184,428	4.658.931,085	369,821	370,141	0,320	97,9905	0	-3,02%			
Rec	694,000	605.185,428	4.658.931,116	369,794	370,111	0,317	97,9905	0	-3,02%			
Rec	695,000	605.186,427	4.658.931,148	369,770	370,081	0,311	97,9905	0	-3,02%			
Rec	696,000	605.187,427	4.658.931,179	369,748	370,051	0,303	97,9905	0	-3,02%			
Rec	697,000	605.188,426	4.658.931,211	369,727	370,020	0,293	97,9905	0	-3,02%			
Rec	698,000	605.189,426	4.658.931,243	369,706	369,990	0,284	97,9905	0	-3,02%			
Rec	699,000	605.190,425	4.658.931,274	369,683	369,960	0,277	97,9905	0	-3,02%			
Rec	700,000	605.191,425	4.658.931,306	369,660	369,930	0,270	97,9905	0	-3,02%			
Rec	701,000	605.192,424	4.658.931,337	369,637	369,899	0,262	97,9905	0	-3,02%			
Rec	702,000	605.193,424	4.658.931,369	369,614	369,869	0,255	97,9905	0	-3,02%			
Rec	703,000	605.194,423	4.658.931,400	369,590	369,839	0,249	97,9905	0	-3,02%			
Rec	704,000	605.195,423	4.658.931,432	369,565	369,809	0,244	97,9905	0	-3,02%			
Rec	705,000	605.196,422	4.658.931,464	369,548	369,779	0,231	97,9905	0	-3,02%			
Rec	706,000	605.197,422	4.658.931,495	369,534	369,748	0,214	97,9905	0	-3,02%			
Rec	707,000	605.198,421	4.658.931,527	369,520	369,718	0,198	97,9905	0	-3,02%			
Rec	708,000	605.199,421	4.658.931,558	369,505	369,688	0,183	97,9905	0	-3,02%			
Rec	709,000	605.200,420	4.658.931,590	369,491	369,658	0,167	97,9905	0	-3,02%			
Rec	710,000	605.201,420	4.658.931,621	369,477	369,628	0,151	97,9905	0	-3,02%			
Rec	711,000	605.202,419	4.658.931,653	369,462	369,597	0,135	97,9905	0	-3,02%			
Rec	712,000	605.203,419	4.658.931,684	369,448	369,567	0,119	97,9905	0	-3,02%			
Rec	713,000	605.204,418	4.658.931,716	369,434	369,537	0,103	97,9905	0	-3,02%			
Rec	714,000	605.205,418	4.658.931,748	369,419	369,507	0,088	97,9905	0	-3,02%			
Rec	715,000	605.206,417	4.658.931,779	369,405	369,476	0,071	97,9905	0	-3,02%			
Rec	716,000	605.207,417	4.658.931,811	369,391	369,446	0,055	97,9905	0	-3,02%			
Rec	717,000	605.208,416	4.658.931,842	369,376	369,416	0,040	97,9905	0	-3,02%			
Rec	718,000	605.209,416	4.658.931,874	369,365	369,386	0,021	97,9905	0	-3,02%			
Rec	719,000	605.210,415	4.658.931,905	369,344	369,356	0,012	97,9905	0	-3,02%			
Rec	720,000	605.211,415	4.658.931,937	369,321	369,325	0,004	97,9905	0	-3,02%			
Rec	721,000	605.212,414	4.658.931,968	369,299	369,295	-0,004	97,9905	0	-3,02%			
Rec	722,000	605.213,414	4.658.932,000	369,276	369,265	-0,011	97,9905	0	-3,02%			
Rec	723,000	605.214,413	4.658.932,032	369,254	369,235	-0,019	97,9905	0	-3,02%			
Rec	724,000	605.215,413	4.658.932,063	369,232	369,205	-0,027	97,9905	0	-3,02%			
Rec	725,000	605.216,412	4.658.932,095	369,209	369,174	-0,035	97,9905	0	-3,02%			
Rec	726,000	605.217,412	4.658.932,126	369,187	369,144	-0,043	97,9905	0	-3,02%			
Rec	727,000	605.218,411	4.658.932,158	369,165	369,114	-0,051	97,9905	0	-3,02%			
Rec	728,000	605.219,411	4.658.932,189	369,142	369,084	-0,058	97,9905	0	-3,02%			
Rec	729,000	605.220,410	4.658.932,221	369,120	369,053	-0,067	97,9905	0	-3,02%			
Rec	730,000	605.221,410	4.658.932,253	369,097	369,023	-0,074	97,9905	0	-3,02%			
Rec	731,000	605.222,409	4.658.932,284	369,075	368,993	-0,082	97,9905	0	-3,02%			
Rec	732,000	605.223,409	4.658.932,316	369,053	368,963	-0,090	97,9905	0	-3,02%			
Rec	733,000	605.224,408	4.658.932,347	369,030	368,933	-0,097	97,9905	0	-3,02%			
Rec	734,000	605.225,408	4.658.932,379	369,008	368,902	-0,106	97,9905	0	-3,02%			
Rec	735,000	605.226,407	4.658.932,410	368,947	368,872	-0,075	97,9905	0	-3,02%			
Rec	736,000	605.227,407	4.658.932,442	368,866	368,842	-0,024	97,9905	0	-3,02%			
Rec	737,000	605.228,406	4.658.932,473	368,789	368,812	0,023	97,9905	0	-3,02%			
Rec	738,000	605.229,406	4.658.932,505	368,713	368,781	0,068	97,9905	0	-3,02%			
Rec	739,000	605.230,405	4.658.932,537	368,649	368,751	0,102	97,9905	0	-3,02%			
Rec	740,000	605.231,405	4.658.932,568	368,586	368,721	0,135	97,9905	0	-3,02%			
Rec	741,000	605.232,404	4.658.932,600	368,529	368,691	0,162	97,9905	0	-3,02%			
Rec	742,000	605.233,404	4.658.932,631	368,490	368,661	0,171	97,9905	0	-3,02%			
Rec	743,000	605.234,404	4.658.932,663	368,440	368,630	0,190	97,9905	0	-3,02%			
Rec	744,000	605.235,403	4.658.932,694	368,366	368,600	0,234	97,9905	0	-3,02%			
Rec	745,000	605.236,403	4.658.932,726	368,313	368,570	0,257	97,9905	0	-3,02%			
Rec	746,000	605.237,402	4.658.932,758	368,253	368,540	0,287	97,9905	0	-3,02%			
Rec	747,000	605.238,402	4.658.932,789	368,183	368,510	0,327	97,9905	0	-3,02%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	748,000	605.239,401	4.658.932,821	368,107	368,479	0,372	97,9905	0	-3,02%			
Rec	749,000	605.240,401	4.658.932,852	368,025	368,449	0,424	97,9905	0	-3,02%			
Rec	750,000	605.241,400	4.658.932,884	367,979	368,419	0,440	97,9905	0	-3,02%			
Rec	751,000	605.242,400	4.658.932,915	367,949	368,389	0,440	97,9905	0	-3,02%			
Rec	752,000	605.243,399	4.658.932,947	367,919	368,358	0,439	97,9905	0	-3,02%			
Rec	753,000	605.244,399	4.658.932,978	367,889	368,328	0,439	97,9905	0	-3,02%			
Rec	754,000	605.245,398	4.658.933,010	367,860	368,298	0,438	97,9905	0	-3,02%			
Rec	755,000	605.246,398	4.658.933,042	367,830	368,268	0,438	97,9905	0	-3,02%			
Rec	756,000	605.247,397	4.658.933,073	367,800	368,238	0,438	97,9905	0	-3,02%			
Rec	757,000	605.248,397	4.658.933,105	367,771	368,207	0,436	97,9905	0	-3,02%			
Rec	758,000	605.249,396	4.658.933,136	367,741	368,177	0,436	97,9905	0	-3,02%			
Rec	759,000	605.250,396	4.658.933,168	367,711	368,147	0,436	97,9905	0	-3,02%			
Rec	760,000	605.251,395	4.658.933,199	367,682	368,117	0,435	97,9905	0	-3,02%			
Rec	761,000	605.252,395	4.658.933,231	367,652	368,086	0,434	97,9905	0	-3,02%			
Rec	762,000	605.253,394	4.658.933,262	367,624	368,056	0,432	97,9905	0	-3,02%			
Rec	763,000	605.254,394	4.658.933,294	367,595	368,026	0,431	97,9905	0	-3,02%			
Rec	764,000	605.255,393	4.658.933,326	367,567	367,996	0,429	97,9905	0	-3,02%			
Rec	765,000	605.256,393	4.658.933,357	367,538	367,966	0,428	97,9905	0	-3,02%			
Rec	766,000	605.257,392	4.658.933,389	367,509	367,935	0,426	97,9905	0	-3,02%			
Rec	767,000	605.258,392	4.658.933,420	367,475	367,905	0,430	97,9905	0	-3,02%			
Rec	768,000	605.259,391	4.658.933,452	367,441	367,875	0,434	97,9905	0	-3,02%			
Rec	769,000	605.260,391	4.658.933,483	367,407	367,845	0,438	97,9905	0	-3,02%			
Rec	770,000	605.261,390	4.658.933,515	367,373	367,815	0,442	97,9905	0	-3,02%			
Rec	771,000	605.262,390	4.658.933,547	367,340	367,784	0,444	97,9905	0	-3,02%			
Rec	772,000	605.263,389	4.658.933,578	367,307	367,754	0,447	97,9905	0	-3,02%			
Rec	773,000	605.264,389	4.658.933,610	367,274	367,724	0,450	97,9905	0	-3,02%			
Rec	774,000	605.265,388	4.658.933,641	367,241	367,694	0,453	97,9905	0	-3,02%			
Rec	775,000	605.266,388	4.658.933,673	367,209	367,663	0,454	97,9905	0	-3,02%			
Rec	776,000	605.267,387	4.658.933,704	367,176	367,633	0,457	97,9905	0	-3,02%			
Rec	777,000	605.268,387	4.658.933,736	367,144	367,603	0,459	97,9905	0	-3,02%			
Rec	778,000	605.269,386	4.658.933,767	367,111	367,573	0,462	97,9905	0	-3,02%			
Rec	779,000	605.270,386	4.658.933,799	367,079	367,543	0,464	97,9905	0	-3,02%			
Rec	780,000	605.271,385	4.658.933,831	367,046	367,512	0,466	97,9905	0	-3,02%			
Rec	781,000	605.272,385	4.658.933,862	367,013	367,482	0,469	97,9905	0	-3,02%			
Rec	782,000	605.273,384	4.658.933,894	366,983	367,452	0,469	97,9905	0	-3,02%			
Rec	783,000	605.274,384	4.658.933,925	366,954	367,422	0,468	97,9905	0	-3,02%			
Rec	784,000	605.275,383	4.658.933,957	366,925	367,392	0,467	97,9905	0	-3,02%			
Rec	785,000	605.276,383	4.658.933,988	366,897	367,361	0,464	97,9905	0	-3,02%			
Rec	786,000	605.277,382	4.658.934,020	366,872	367,331	0,459	97,9905	0	-3,02%			
Rec	787,000	605.278,382	4.658.934,051	366,850	367,301	0,451	97,9905	0	-3,02%			
Cur	787,483	605.278,864	4.658.934,067	366,840	367,286	0,446	97,9905	-10	-3,02%	P.S.		ODT Ø1.000 L=7,00m
Cur	788,000	605.279,380	4.658.934,096	366,826	367,271	0,445	94,6971	-10	-3,02%			
Cur	789,000	605.280,371	4.658.934,229	366,802	367,240	0,438	88,3309	-10	-3,02%			
Cur	790,000	605.281,344	4.658.934,460	366,780	367,210	0,430	81,9647	-10	-3,02%			
Cur	790,538	605.281,856	4.658.934,625	366,769	367,194	0,425	78,5397	-10	-3,02%		T.E.	
Cur	791,000	605.282,288	4.658.934,787	366,760	367,180	0,420	75,5985	-10	-2,91%			
Cur	792,000	605.283,195	4.658.935,207	366,743	367,152	0,409	69,2323	-10	-2,66%			
Cur	793,000	605.284,056	4.658.935,715	366,697	367,127	0,430	62,8661	-10	-2,41%			
Cur	794,000	605.284,862	4.658.936,307	366,723	367,104	0,381	56,4999	-10	-2,16%			
Cur	795,000	605.285,605	4.658.936,976	366,637	367,084	0,447	50,1337	-10	-1,91%			
Cur	796,000	605.286,277	4.658.937,716	366,598	367,066	0,468	43,7676	-10	-1,66%			
Cur	797,000	605.286,872	4.658.938,519	366,582	367,051	0,469	37,4014	-10	-1,41%			
Cur	798,000	605.287,383	4.658.939,378	366,570	367,038	0,468	31,0352	-10	-1,16%			
Cur	799,000	605.287,807	4.658.940,283	366,564	367,028	0,464	24,6690	-10	-0,91%			
Cur	800,000	605.288,138	4.658.941,226	366,561	367,020	0,459	18,3028	-10	-0,66%			
Cur	801,000	605.288,373	4.658.942,198	366,563	367,015	0,452	11,9366	-10	-0,41%			
Rec	801,391	605.288,439	4.658.942,583	366,566	367,013	0,447	9,4474	0	-0,31%	P.S.	V.	
Rec	802,000	605.288,529	4.658.943,185	366,569	367,012	0,443	9,4474	0	-0,16%			
Rec	803,000	605.288,676	4.658.944,174	366,579	367,012	0,433	9,4474	0	0,09%			
Rec	804,000	605.288,824	4.658.945,164	366,598	367,014	0,416	9,4474	0	0,34%			
Rec	805,000	605.288,972	4.658.946,153	366,619	367,018	0,399	9,4474	0	0,59%			
Cur	805,639	605.289,067	4.658.946,785	366,636	367,023	0,387	9,4474	300	0,75%	P.S.		
Cur	806,000	605.289,120	4.658.947,141	366,646	367,026	0,380	9,5239	300	0,84%			
Cur	807,000	605.289,271	4.658.948,130	366,686	367,035	0,349	9,7361	300	1,09%			
Cur	808,000	605.289,425	4.658.949,118	366,760	367,047	0,287	9,9483	300	1,34%			
Cur	809,000	605.289,582	4.658.950,106	366,833	367,062	0,229	10,1606	300	1,59%			
Cur	810,000	605.289,743	4.658.951,093	366,876	367,079	0,203	10,3728	300	1,84%			
Cur	811,000	605.289,907	4.658.952,079	366,874	367,099	0,225	10,5850	300	2,09%			
Cur	812,000	605.290,074	4.658.953,065	366,887	367,121	0,234	10,7972	300	2,34%			
Cur	812,244	605.290,115	4.658.953,306	366,914	367,127	0,213	10,8490	300	2,40%		T.S.	
Cur	813,000	605.290,244	4.658.954,051	366,996	367,145	0,149	11,0094	300	2,41%			
Cur	814,000	605.290,418	4.658.955,035	366,871	367,169	0,298	11,2216	300	2,41%			
Cur	815,000	605.290,595	4.658.956,020	366,833	367,193	0,360	11,4338	300	2,41%			
Cur	816,000	605.290,775	4.658.957,003	366,859	367,217	0,358	11,6460	300	2,41%			
Cur	817,000	605.290,959	4.658.957,986	366,884	367,241	0,357	11,8582	300	2,41%			
Cur	818,000	605.291,146	4.658.958,969	366,909	367,266	0,357	12,0704	300	2,41%			
Cur	819,000	605.291,336	4.658.959,950	366,929	367,290	0,361	12,2826	300	2,41%			
Cur	820,000	605.291,529	4.658.960,931	366,945	367,314	0,369	12,4948	300	2,41%			
Cur	820,538	605.291,634	4.658.961,459	366,957	367,327	0,370	12,6090	300	2,41%		T.E.	
Cur	821,000	605.291,726	4.658.961,912	366,967	367,338	0,371	12,7070	300	2,48%			
Cur	822,000	605.291,926	4.658.962,892	367,000	367,364	0,364	12,9192	300	2,65%			
Cur	823,000	605.292,129	4.658.963,871	367,037	367,391	0,354	13,1314	300	2,82%			
Cur	824,000	605.292,335	4.658.964,849	367,085	367,420	0,335	13,3437	300	2,98%			
Cur	825,000	605.292,545	4.658.965,827	367,133	367,451	0,318	13,5559	300	3,15%			
Cur	826,000	605.292,758	4.658.966,804	367,178	367,483	0,305	13,7681	300	3,32%			
Cur	827,000	605.292,974	4.658.967,780	367,222	367,517	0,295	13,9803	300	3,48%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	828,000	605.293,194	4.658.968,756	367,255	367,553	0,298	14,1925	300	3,65%			
Cur	829,000	605.293,416	4.658.969,731	367,286	367,590	0,304	14,4047	300	3,82%			
Cur	830,000	605.293,642	4.658.970,705	367,325	367,629	0,304	14,6169	300	3,98%			
Rec	830,697	605.293,802	4.658.971,384	367,354	367,657	0,303	14,7649	0	4,10%	P.S.	V.	
Rec	831,000	605.293,871	4.658.971,679	367,366	367,670	0,304	14,7649	0	4,15%			
Rec	832,000	605.294,101	4.658.972,652	367,466	367,712	0,246	14,7649	0	4,32%			
Rec	833,000	605.294,331	4.658.973,625	367,616	367,756	0,140	14,7649	0	4,48%			
Rec	834,000	605.294,561	4.658.974,598	367,715	367,801	0,086	14,7649	0	4,65%			
Rec	835,000	605.294,791	4.658.975,571	367,795	367,849	0,054	14,7649	0	4,82%			
Rec	836,000	605.295,021	4.658.976,545	367,897	367,898	0,001	14,7649	0	4,98%			
Rec	837,000	605.295,250	4.658.977,518	367,982	367,948	-0,034	14,7649	0	5,15%			
Rec	838,000	605.295,480	4.658.978,491	368,016	368,001	-0,015	14,7649	0	5,32%			
Rec	839,000	605.295,710	4.658.979,464	368,049	368,055	0,006	14,7649	0	5,48%			
Rec	840,000	605.295,940	4.658.980,438	368,071	368,110	0,039	14,7649	0	5,65%			
Rec	840,856	605.296,137	4.658.981,271	368,066	368,159	0,093	14,7649	0	5,79%		T.S.	
Rec	841,000	605.296,170	4.658.981,411	368,065	368,168	0,103	14,7649	0	5,79%			
Rec	842,000	605.296,400	4.658.982,384	368,060	368,226	0,166	14,7649	0	5,79%			
Rec	843,000	605.296,630	4.658.983,357	368,124	368,283	0,159	14,7649	0	5,79%			
Rec	844,000	605.296,859	4.658.984,330	368,172	368,341	0,169	14,7649	0	5,79%			
Rec	845,000	605.297,089	4.658.985,304	368,215	368,399	0,184	14,7649	0	5,79%			
Rec	846,000	605.297,319	4.658.986,277	368,254	368,457	0,203	14,7649	0	5,79%			
Rec	847,000	605.297,549	4.658.987,250	368,293	368,515	0,222	14,7649	0	5,79%			
Rec	848,000	605.297,779	4.658.988,223	368,347	368,573	0,226	14,7649	0	5,79%			
Rec	849,000	605.298,009	4.658.989,197	368,420	368,631	0,211	14,7649	0	5,79%			
Rec	850,000	605.298,238	4.658.990,170	368,486	368,689	0,203	14,7649	0	5,79%			
Rec	851,000	605.298,468	4.658.991,143	368,527	368,747	0,220	14,7649	0	5,79%			
Rec	852,000	605.298,698	4.658.992,116	368,568	368,805	0,237	14,7649	0	5,79%			
Rec	853,000	605.298,928	4.658.993,089	368,609	368,862	0,253	14,7649	0	5,79%			
Rec	854,000	605.299,158	4.658.994,063	368,650	368,920	0,270	14,7649	0	5,79%			
Rec	855,000	605.299,388	4.658.995,036	368,750	368,978	0,228	14,7649	0	5,79%			
Rec	856,000	605.299,618	4.658.996,009	368,865	369,036	0,171	14,7649	0	5,79%			
Rec	857,000	605.299,847	4.658.996,982	368,979	369,094	0,115	14,7649	0	5,79%			
Rec	858,000	605.300,077	4.658.997,956	369,026	369,152	0,126	14,7649	0	5,79%			
Rec	859,000	605.300,307	4.658.998,929	369,049	369,210	0,161	14,7649	0	5,79%			
Rec	860,000	605.300,537	4.658.999,902	369,030	369,268	0,238	14,7649	0	5,79%			
Rec	861,000	605.300,767	4.659.000,875	369,034	369,326	0,292	14,7649	0	5,79%			
Rec	862,000	605.300,997	4.659.001,849	369,090	369,384	0,294	14,7649	0	5,79%			
Rec	863,000	605.301,227	4.659.002,822	369,142	369,442	0,300	14,7649	0	5,79%			
Rec	864,000	605.301,456	4.659.003,795	369,193	369,499	0,306	14,7649	0	5,79%			
Rec	865,000	605.301,686	4.659.004,768	369,244	369,557	0,313	14,7649	0	5,79%			
Rec	866,000	605.301,916	4.659.005,741	369,295	369,615	0,320	14,7649	0	5,79%			
Rec	867,000	605.302,146	4.659.006,715	369,347	369,673	0,326	14,7649	0	5,79%			
Rec	868,000	605.302,376	4.659.007,688	369,429	369,731	0,302	14,7649	0	5,79%			
Rec	869,000	605.302,606	4.659.008,661	369,528	369,789	0,261	14,7649	0	5,79%			
Rec	870,000	605.302,836	4.659.009,634	369,627	369,847	0,220	14,7649	0	5,79%			
Rec	871,000	605.303,065	4.659.010,608	369,726	369,905	0,179	14,7649	0	5,79%			
Rec	872,000	605.303,295	4.659.011,581	369,825	369,963	0,138	14,7649	0	5,79%			
Rec	873,000	605.303,525	4.659.012,554	369,903	370,021	0,118	14,7649	0	5,79%			
Rec	874,000	605.303,755	4.659.013,527	370,010	370,078	0,068	14,7649	0	5,79%			
Rec	875,000	605.303,985	4.659.014,500	370,038	370,136	0,098	14,7649	0	5,79%			
Rec	876,000	605.304,215	4.659.015,474	370,066	370,194	0,128	14,7649	0	5,79%			
Rec	877,000	605.304,444	4.659.016,447	370,094	370,252	0,158	14,7649	0	5,79%			
Rec	878,000	605.304,674	4.659.017,420	370,122	370,310	0,188	14,7649	0	5,79%			
Rec	879,000	605.304,904	4.659.018,393	370,160	370,368	0,208	14,7649	0	5,79%			
Rec	880,000	605.305,134	4.659.019,367	370,233	370,426	0,193	14,7649	0	5,79%			
Rec	881,000	605.305,364	4.659.020,340	370,306	370,484	0,178	14,7649	0	5,79%			
Rec	882,000	605.305,594	4.659.021,313	370,380	370,542	0,162	14,7649	0	5,79%			
Rec	883,000	605.305,824	4.659.022,286	370,453	370,600	0,147	14,7649	0	5,79%			
Rec	884,000	605.306,053	4.659.023,259	370,526	370,658	0,132	14,7649	0	5,79%			
Rec	885,000	605.306,283	4.659.024,233	370,599	370,715	0,116	14,7649	0	5,79%			
Rec	886,000	605.306,513	4.659.025,206	370,649	370,773	0,124	14,7649	0	5,79%			
Rec	887,000	605.306,743	4.659.026,179	370,703	370,831	0,128	14,7649	0	5,79%			
Rec	888,000	605.306,973	4.659.027,152	370,746	370,889	0,143	14,7649	0	5,79%			
Rec	888,795	605.307,156	4.659.027,926	370,776	370,935	0,159	14,7649	0	5,79%		T.E.	
Rec	889,000	605.307,203	4.659.028,126	370,784	370,947	0,163	14,7649	0	5,78%			
Rec	890,000	605.307,433	4.659.029,099	370,822	371,005	0,183	14,7649	0	5,73%			
Rec	891,000	605.307,662	4.659.030,072	370,860	371,062	0,202	14,7649	0	5,68%			
Rec	892,000	605.307,892	4.659.031,045	370,898	371,118	0,220	14,7649	0	5,63%			
Rec	893,000	605.308,122	4.659.032,019	371,011	371,174	0,163	14,7649	0	5,58%			
Rec	894,000	605.308,352	4.659.032,992	371,050	371,230	0,180	14,7649	0	5,53%			
Rec	895,000	605.308,582	4.659.033,965	371,090	371,285	0,195	14,7649	0	5,48%			
Rec	896,000	605.308,812	4.659.034,938	371,130	371,339	0,209	14,7649	0	5,43%			
Rec	897,000	605.309,042	4.659.035,911	371,170	371,393	0,223	14,7649	0	5,38%			
Rec	898,000	605.309,271	4.659.036,885	371,205	371,447	0,242	14,7649	0	5,33%			
Rec	899,000	605.309,501	4.659.037,858	371,246	371,500	0,254	14,7649	0	5,28%			
Rec	900,000	605.309,731	4.659.038,831	371,310	371,553	0,243	14,7649	0	5,23%		V.	
Rec	901,000	605.309,961	4.659.039,804	371,376	371,605	0,229	14,7649	0	5,18%			
Rec	902,000	605.310,191	4.659.040,778	371,442	371,656	0,214	14,7649	0	5,13%			
Rec	903,000	605.310,421	4.659.041,751	371,508	371,707	0,199	14,7649	0	5,08%			
Rec	904,000	605.310,650	4.659.042,724	371,574	371,758	0,184	14,7649	0	5,03%			
Rec	905,000	605.310,880	4.659.043,697	371,622	371,808	0,186	14,7649	0	4,98%			
Rec	906,000	605.311,110	4.659.044,670	371,648	371,857	0,209	14,7649	0	4,93%			
Rec	907,000	605.311,340	4.659.045,644	371,675	371,906	0,231	14,7649	0	4,88%			
Rec	908,000	605.311,570	4.659.046,617	371,702	371,955	0,253	14,7649	0	4,83%			
Rec	909,000	605.311,800	4.659.047,590	371,729	372,003	0,274	14,7649	0	4,78%			
Rec	910,000	605.312,030	4.659.048,563	371,756	372,051	0,295	14,7649	0	4,73%			
Rec	911,000	605.312,259	4.659.049,537	371,792	372,098	0,306	14,7649	0	4,68%			

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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	911,205	605.312,307	4.659.049,736	371,805	372,107	0,303	14,7649	0	4,67%		T.S.	
Rec	912,000	605.312,489	4.659.050,510	371,854	372,145	0,291	14,7649	0	4,67%			
Rec	913,000	605.312,719	4.659.051,483	371,915	372,191	0,276	14,7649	0	4,67%			
Rec	914,000	605.312,949	4.659.052,456	371,976	372,238	0,262	14,7649	0	4,67%			
Rec	915,000	605.313,179	4.659.053,429	372,004	372,285	0,281	14,7649	0	4,67%			
Rec	916,000	605.313,409	4.659.054,403	372,009	372,331	0,322	14,7649	0	4,67%			
Rec	917,000	605.313,639	4.659.055,376	372,013	372,378	0,365	14,7649	0	4,67%			
Rec	918,000	605.313,868	4.659.056,349	372,016	372,425	0,409	14,7649	0	4,67%			
Rec	919,000	605.314,098	4.659.057,322	372,009	372,472	0,463	14,7649	0	4,67%			
Rec	920,000	605.314,328	4.659.058,296	372,076	372,518	0,442	14,7649	0	4,67%			
Rec	921,000	605.314,558	4.659.059,269	372,149	372,565	0,416	14,7649	0	4,67%			
Rec	922,000	605.314,788	4.659.060,242	372,222	372,612	0,390	14,7649	0	4,67%			
Rec	923,000	605.315,018	4.659.061,215	372,295	372,658	0,363	14,7649	0	4,67%			
Rec	924,000	605.315,248	4.659.062,188	372,368	372,705	0,337	14,7649	0	4,67%			
Rec	925,000	605.315,477	4.659.063,162	372,437	372,752	0,315	14,7649	0	4,67%			
Rec	926,000	605.315,707	4.659.064,135	372,495	372,799	0,304	14,7649	0	4,67%			
Rec	927,000	605.315,937	4.659.065,108	372,554	372,845	0,291	14,7649	0	4,67%			
Rec	928,000	605.316,167	4.659.066,081	372,614	372,892	0,278	14,7649	0	4,67%			
Rec	929,000	605.316,397	4.659.067,055	372,673	372,939	0,266	14,7649	0	4,67%			
Rec	930,000	605.316,627	4.659.068,028	372,732	372,985	0,253	14,7649	0	4,67%			
Rec	931,000	605.316,856	4.659.069,001	372,792	373,032	0,240	14,7649	0	4,67%			
Rec	932,000	605.317,086	4.659.069,974	372,836	373,079	0,243	14,7649	0	4,67%			
Rec	933,000	605.317,316	4.659.070,948	372,871	373,126	0,255	14,7649	0	4,67%			
Rec	934,000	605.317,546	4.659.071,921	372,906	373,172	0,266	14,7649	0	4,67%			
Rec	935,000	605.317,776	4.659.072,894	372,938	373,219	0,281	14,7649	0	4,67%			
Rec	936,000	605.318,006	4.659.073,867	372,957	373,266	0,309	14,7649	0	4,67%			
Rec	937,000	605.318,236	4.659.074,840	373,001	373,312	0,311	14,7649	0	4,67%			
Rec	938,000	605.318,465	4.659.075,814	373,025	373,359	0,334	14,7649	0	4,67%			
Rec	939,000	605.318,695	4.659.076,787	373,049	373,406	0,357	14,7649	0	4,67%			
Rec	940,000	605.318,925	4.659.077,760	373,069	373,452	0,383	14,7649	0	4,67%			
Rec	941,000	605.319,155	4.659.078,733	373,090	373,499	0,409	14,7649	0	4,67%			
Rec	942,000	605.319,385	4.659.079,707	373,121	373,546	0,425	14,7649	0	4,67%			
Rec	943,000	605.319,615	4.659.080,680	373,152	373,593	0,441	14,7649	0	4,67%			
Rec	944,000	605.319,845	4.659.081,653	373,184	373,639	0,455	14,7649	0	4,67%			
Rec	945,000	605.320,074	4.659.082,626	373,215	373,686	0,471	14,7649	0	4,67%			
Rec	946,000	605.320,304	4.659.083,599	373,246	373,733	0,487	14,7649	0	4,67%			
Rec	947,000	605.320,534	4.659.084,573	373,285	373,779	0,494	14,7649	0	4,67%			
Rec	948,000	605.320,764	4.659.085,546	373,361	373,826	0,465	14,7649	0	4,67%			
Rec	949,000	605.320,994	4.659.086,519	373,421	373,873	0,452	14,7649	0	4,67%			
Rec	950,000	605.321,224	4.659.087,492	373,461	373,920	0,459	14,7649	0	4,67%			
Rec	951,000	605.321,454	4.659.088,466	373,501	373,966	0,465	14,7649	0	4,67%			
Rec	952,000	605.321,683	4.659.089,439	373,541	374,013	0,472	14,7649	0	4,67%			
Rec	953,000	605.321,913	4.659.090,412	373,582	374,060	0,478	14,7649	0	4,67%			
Rec	954,000	605.322,143	4.659.091,385	373,641	374,106	0,465	14,7649	0	4,67%			
Rec	955,000	605.322,373	4.659.092,358	373,707	374,153	0,446	14,7649	0	4,67%			
Rec	956,000	605.322,603	4.659.093,332	373,768	374,200	0,432	14,7649	0	4,67%			
Rec	957,000	605.322,833	4.659.094,305	373,841	374,247	0,406	14,7649	0	4,67%			
Rec	958,000	605.323,063	4.659.095,278	373,918	374,293	0,375	14,7649	0	4,67%			
Rec	959,000	605.323,292	4.659.096,251	373,987	374,340	0,353	14,7649	0	4,67%			
Rec	960,000	605.323,522	4.659.097,225	373,969	374,387	0,418	14,7649	0	4,67%			
Rec	961,000	605.323,752	4.659.098,198	374,024	374,433	0,409	14,7649	0	4,67%			
Rec	962,000	605.323,982	4.659.099,171	374,096	374,480	0,384	14,7649	0	4,67%			
Rec	963,000	605.324,212	4.659.100,144	374,168	374,527	0,359	14,7649	0	4,67%			
Rec	964,000	605.324,442	4.659.101,118	374,240	374,574	0,334	14,7649	0	4,67%			
Rec	965,000	605.324,671	4.659.102,091	374,302	374,620	0,318	14,7649	0	4,67%			
Cur	965,940	605.324,887	4.659.103,005	374,356	374,664	0,308	14,7649	50	4,67%	P.S.		
Cur	966,000	605.324,901	4.659.103,064	374,359	374,667	0,308	14,8415	50	4,67%			
Cur	967,000	605.325,142	4.659.104,035	374,436	374,714	0,278	16,1148	50	4,67%			
Cur	968,000	605.325,402	4.659.105,000	374,528	374,760	0,232	17,3880	50	4,67%			
Cur	969,000	605.325,682	4.659.105,960	374,620	374,807	0,187	18,6613	50	4,67%			
Cur	970,000	605.325,980	4.659.106,915	374,712	374,854	0,142	19,9345	50	4,67%			
Cur	971,000	605.326,298	4.659.107,863	374,782	374,901	0,119	21,2077	50	4,67%			
Cur	972,000	605.326,634	4.659.108,805	374,838	374,947	0,109	22,4810	50	4,67%			
Cur	973,000	605.326,989	4.659.109,739	374,892	374,994	0,102	23,7542	50	4,67%			
Cur	974,000	605.327,363	4.659.110,667	374,945	375,041	0,096	25,0275	50	4,67%			
Cur	975,000	605.327,755	4.659.111,587	374,997	375,087	0,090	26,3007	50	4,67%			
Cur	976,000	605.328,166	4.659.112,498	375,003	375,134	0,131	27,5739	50	4,67%			
Cur	977,000	605.328,595	4.659.113,402	375,011	375,181	0,170	28,8472	50	4,67%			
Cur	978,000	605.329,041	4.659.114,296	375,037	375,228	0,191	30,1204	50	4,67%			
Cur	979,000	605.329,506	4.659.115,182	375,067	375,274	0,207	31,3937	50	4,67%			
Cur	979,629	605.329,807	4.659.115,734	375,102	375,304	0,202	32,1945	50	4,67%		T.E.	
Cur	980,000	605.329,988	4.659.116,058	375,122	375,321	0,199	32,6669	50	4,60%			
Cur	981,000	605.330,488	4.659.116,924	375,176	375,366	0,190	33,9401	50	4,40%			
Cur	982,000	605.331,005	4.659.117,780	375,218	375,409	0,191	35,2134	50	4,20%			
Cur	983,000	605.331,538	4.659.118,626	375,269	375,450	0,181	36,4866	50	4,00%			
Cur	984,000	605.332,089	4.659.119,461	375,317	375,489	0,172	37,7598	50	3,80%			
Cur	985,000	605.332,656	4.659.120,284	375,360	375,526	0,166	39,0331	50	3,60%			
Cur	986,000	605.333,240	4.659.121,096	375,368	375,561	0,193	40,3063	50	3,40%			
Cur	987,000	605.333,839	4.659.121,897	375,342	375,594	0,252	41,5796	50	3,20%			
Cur	988,000	605.334,455	4.659.122,685	375,316	375,625	0,309	42,8528	50	3,00%			
Cur	989,000	605.335,086	4.659.123,460	375,316	375,654	0,338	44,1260	50	2,80%			
Rec	989,591	605.335,467	4.659.123,913	375,300	375,670	0,370	44,8792	0	2,68%	P.S.	V.	
Rec	990,000	605.335,732	4.659.124,224	375,289	375,681	0,392	44,8792	0	2,60%			
Rec	991,000	605.336,380	4.659.124,986	375,262	375,706	0,444	44,8792	0	2,40%			
Rec	992,000	605.337,028	4.659.125,747	375,261	375,728	0,467	44,8792	0	2,20%			
Rec	993,000	605.337,676	4.659.126,509	375,240	375,749	0,509	44,8792	0	2,00%			
Rec	994,000	605.338,324	4.659.127,271	375,212	375,768	0,556	44,8792	0	1,80%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	995,000	605.338,972	4.659.128,032	375,184	375,785	0,601	44,8792	0	1,60%			
Rec	996,000	605.339,620	4.659.128,794	375,160	375,800	0,640	44,8792	0	1,40%			
Rec	997,000	605.340,268	4.659.129,556	375,158	375,813	0,655	44,8792	0	1,20%			
Rec	998,000	605.340,916	4.659.130,317	375,155	375,824	0,669	44,8792	0	1,00%			
Rec	999,000	605.341,564	4.659.131,079	375,155	375,833	0,678	44,8792	0	0,80%			
Rec	999,553	605.341,922	4.659.131,500	375,159	375,837	0,678	44,8792	0	0,69%		T.S.	
Rec	1.000,000	605.342,212	4.659.131,840	375,163	375,840	0,677	44,8792	0	0,69%			
Rec	1.001,000	605.342,860	4.659.132,602	375,172	375,847	0,675	44,8792	0	0,69%			
Rec	1.002,000	605.343,508	4.659.133,364	375,180	375,854	0,674	44,8792	0	0,69%			
Rec	1.003,000	605.344,156	4.659.134,125	375,189	375,861	0,672	44,8792	0	0,69%			
Rec	1.004,000	605.344,804	4.659.134,887	375,198	375,868	0,670	44,8792	0	0,69%			
Rec	1.005,000	605.345,452	4.659.135,649	375,203	375,875	0,672	44,8792	0	0,69%			
Rec	1.006,000	605.346,100	4.659.136,410	375,180	375,881	0,701	44,8792	0	0,69%			
Rec	1.007,000	605.346,748	4.659.137,172	375,154	375,888	0,734	44,8792	0	0,69%			
Rec	1.008,000	605.347,396	4.659.137,934	375,140	375,895	0,755	44,8792	0	0,69%			
Rec	1.009,000	605.348,044	4.659.138,695	375,146	375,902	0,756	44,8792	0	0,69%			
Rec	1.010,000	605.348,692	4.659.139,457	375,161	375,909	0,748	44,8792	0	0,69%			
Rec	1.011,000	605.349,340	4.659.140,218	375,175	375,916	0,741	44,8792	0	0,69%			
Rec	1.012,000	605.349,988	4.659.140,980	375,189	375,923	0,734	44,8792	0	0,69%			
Rec	1.013,000	605.350,636	4.659.141,742	375,189	375,929	0,740	44,8792	0	0,69%			
Rec	1.014,000	605.351,284	4.659.142,503	375,184	375,936	0,752	44,8792	0	0,69%			
Rec	1.015,000	605.351,932	4.659.143,265	375,176	375,943	0,767	44,8792	0	0,69%			
Rec	1.016,000	605.352,580	4.659.144,027	375,179	375,950	0,771	44,8792	0	0,69%			
Rec	1.017,000	605.353,228	4.659.144,788	375,186	375,957	0,771	44,8792	0	0,69%			
Rec	1.018,000	605.353,876	4.659.145,550	375,170	375,964	0,794	44,8792	0	0,69%			
Rec	1.019,000	605.354,524	4.659.146,312	375,149	375,971	0,822	44,8792	0	0,69%			
Rec	1.020,000	605.355,172	4.659.147,073	375,143	375,977	0,834	44,8792	0	0,69%			
Rec	1.021,000	605.355,820	4.659.147,835	375,115	375,984	0,869	44,8792	0	0,69%			
Rec	1.022,000	605.356,468	4.659.148,596	375,085	375,991	0,906	44,8792	0	0,69%			
Rec	1.023,000	605.357,116	4.659.149,358	375,068	375,998	0,930	44,8792	0	0,69%			
Rec	1.024,000	605.357,764	4.659.150,120	375,064	376,005	0,941	44,8792	0	0,69%			
Rec	1.025,000	605.358,412	4.659.150,881	375,068	376,012	0,944	44,8792	0	0,69%			
Rec	1.026,000	605.359,060	4.659.151,643	375,082	376,019	0,937	44,8792	0	0,69%			
Rec	1.027,000	605.359,708	4.659.152,405	375,098	376,025	0,927	44,8792	0	0,69%			
Rec	1.028,000	605.360,356	4.659.153,166	375,129	376,032	0,903	44,8792	0	0,69%			
Rec	1.029,000	605.361,004	4.659.153,928	375,147	376,039	0,892	44,8792	0	0,69%			
Rec	1.030,000	605.361,652	4.659.154,690	375,158	376,046	0,888	44,8792	0	0,69%			
Rec	1.031,000	605.362,300	4.659.155,451	375,215	376,053	0,838	44,8792	0	0,69%			
Rec	1.032,000	605.362,948	4.659.156,213	375,273	376,060	0,787	44,8792	0	0,69%			
Rec	1.033,000	605.363,596	4.659.156,974	375,283	376,067	0,784	44,8792	0	0,69%			
Rec	1.034,000	605.364,244	4.659.157,736	375,319	376,073	0,754	44,8792	0	0,69%			
Rec	1.035,000	605.364,892	4.659.158,498	375,352	376,080	0,728	44,8792	0	0,69%			
Rec	1.036,000	605.365,540	4.659.159,259	375,379	376,087	0,708	44,8792	0	0,69%			
Cur	1.036,116	605.365,615	4.659.159,348	375,379	376,088	0,709	44,8792	-50	0,69%	P.S.		
Cur	1.037,000	605.366,182	4.659.160,026	375,379	376,094	0,715	43,7536	-50	0,69%			
Cur	1.038,000	605.366,808	4.659.160,805	375,395	376,101	0,706	42,4804	-50	0,69%			
Cur	1.039,000	605.367,419	4.659.161,597	375,395	376,108	0,713	41,2072	-50	0,69%			
Cur	1.040,000	605.368,014	4.659.162,401	375,421	376,115	0,694	39,9339	-50	0,69%			
Cur	1.041,000	605.368,593	4.659.163,216	375,448	376,121	0,673	38,6607	-50	0,69%			
Cur	1.042,000	605.369,156	4.659.164,043	375,477	376,128	0,651	37,3874	-50	0,69%			
Cur	1.043,000	605.369,701	4.659.164,881	375,504	376,135	0,631	36,1142	-50	0,69%			
Cur	1.044,000	605.370,230	4.659.165,730	375,498	376,142	0,644	34,8410	-50	0,69%			ODT Ø1.000 L=10,75m
Cur	1.045,000	605.370,742	4.659.166,589	375,474	376,149	0,675	33,5677	-50	0,69%			
Cur	1.046,000	605.371,237	4.659.167,458	375,458	376,156	0,698	32,2945	-50	0,69%			
Cur	1.047,000	605.371,714	4.659.168,337	375,449	376,163	0,714	31,0213	-50	0,69%			
Cur	1.047,434	605.371,915	4.659.168,721	375,464	376,165	0,702	30,4687	-50	0,69%		T.E.	
Cur	1.048,000	605.372,173	4.659.169,225	375,483	376,169	0,686	29,7480	-50	0,67%			
Cur	1.049,000	605.372,614	4.659.170,122	375,495	376,176	0,681	28,4748	-50	0,63%			
Cur	1.050,000	605.373,038	4.659.171,028	375,508	376,182	0,674	27,2015	-50	0,60%			
Cur	1.051,000	605.373,443	4.659.171,942	375,522	376,188	0,666	25,9283	-50	0,57%			
Cur	1.052,000	605.373,830	4.659.172,864	375,537	376,193	0,656	24,6551	-50	0,53%			
Cur	1.053,000	605.374,198	4.659.173,794	375,553	376,198	0,645	23,3818	-50	0,50%			
Cur	1.054,000	605.374,548	4.659.174,731	375,580	376,203	0,623	22,1086	-50	0,47%			
Cur	1.055,000	605.374,879	4.659.175,674	375,616	376,208	0,592	20,8353	-50	0,43%			
Cur	1.056,000	605.375,191	4.659.176,625	375,652	376,212	0,560	19,5621	-50	0,40%			
Cur	1.057,000	605.375,484	4.659.177,581	375,609	376,216	0,607	18,2889	-50	0,37%			
Rec	1.057,722	605.375,684	4.659.178,275	375,540	376,218	0,678	17,3690	0	0,34%	P.S.	V.	
Rec	1.058,000	605.375,758	4.659.178,542	375,525	376,219	0,694	17,3690	0	0,33%			
Rec	1.059,000	605.376,028	4.659.179,505	375,466	376,222	0,756	17,3690	0	0,30%			
Rec	1.060,000	605.376,297	4.659.180,468	375,402	376,225	0,823	17,3690	0	0,27%			
Rec	1.061,000	605.376,567	4.659.181,431	375,345	376,228	0,883	17,3690	0	0,23%			
Rec	1.062,000	605.376,836	4.659.182,394	375,320	376,230	0,910	17,3690	0	0,20%			
Rec	1.063,000	605.377,106	4.659.183,357	375,286	376,232	0,946	17,3690	0	0,17%			
Rec	1.064,000	605.377,375	4.659.184,320	375,235	376,233	0,998	17,3690	0	0,13%			
Rec	1.065,000	605.377,645	4.659.185,283	375,182	376,234	1,052	17,3690	0	0,10%			
Rec	1.066,000	605.377,914	4.659.186,246	375,111	376,235	1,124	17,3690	0	0,07%			
Rec	1.067,000	605.378,184	4.659.187,209	375,039	376,236	1,197	17,3690	0	0,03%			
Rec	1.068,000	605.378,453	4.659.188,172	374,948	376,236	1,288	17,3690	0	0,00%			
Rec	1.068,010	605.378,456	4.659.188,182	374,947	376,236	1,289	17,3690	0	0,00%		T.S.	
Rec	1.069,000	605.378,723	4.659.189,135	374,852	376,236	1,384	17,3690	0	0,00%			
Rec	1.070,000	605.378,992	4.659.190,098	374,756	376,236	1,480	17,3690	0	0,00%			
Rec	1.071,000	605.379,261	4.659.191,061	374,910	376,236	1,326	17,3690	0	0,00%			
Rec	1.072,000	605.379,531	4.659.192,024	375,368	376,236	0,868	17,3690	0	0,00%			
Rec	1.073,000	605.379,800	4.659.192,987	375,826	376,236	0,410	17,3690	0	0,00%			
Rec	1.073,894	605.380,041	4.659.193,849	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.074,000	605.380,070	4.659.193,950	376,236	376,236	0,000	17,3690	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.075,000	605.380,339	4.659.194,913	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.076,000	605.380,609	4.659.195,876	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.077,000	605.380,878	4.659.196,839	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.078,000	605.381,148	4.659.197,802	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.079,000	605.381,417	4.659.198,765	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.080,000	605.381,687	4.659.199,728	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.081,000	605.381,956	4.659.200,691	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.082,000	605.382,226	4.659.201,655	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.083,000	605.382,495	4.659.202,618	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.084,000	605.382,764	4.659.203,581	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.085,000	605.383,034	4.659.204,544	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.086,000	605.383,303	4.659.205,507	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.087,000	605.383,573	4.659.206,470	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.088,000	605.383,842	4.659.207,433	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.089,000	605.384,112	4.659.208,396	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.090,000	605.384,381	4.659.209,359	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.091,000	605.384,651	4.659.210,322	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.092,000	605.384,920	4.659.211,285	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.093,000	605.385,190	4.659.212,248	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.094,000	605.385,459	4.659.213,211	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.095,000	605.385,728	4.659.214,174	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.096,000	605.385,998	4.659.215,137	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.097,000	605.386,267	4.659.216,100	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.098,000	605.386,537	4.659.217,063	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.099,000	605.386,806	4.659.218,026	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.100,000	605.387,076	4.659.218,989	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.101,000	605.387,345	4.659.219,952	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.102,000	605.387,615	4.659.220,915	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.103,000	605.387,884	4.659.221,878	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.104,000	605.388,154	4.659.222,841	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.105,000	605.388,423	4.659.223,804	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.106,000	605.388,693	4.659.224,767	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.107,000	605.388,962	4.659.225,730	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.108,000	605.389,231	4.659.226,693	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.109,000	605.389,501	4.659.227,656	376,236	376,236	0,000	17,3690	0	0,00%			
Rec	1.110,000	605.389,770	4.659.228,619	376,236	376,236	0,000	17,3690	0	0,00%			
Cur	1.110,558	605.389,921	4.659.229,156	376,236	376,236	0,000	17,3690	50	0,00%	P.S.		
Cur	1.111,000	605.390,042	4.659.229,581	376,236	376,236	0,000	17,9315	50	0,00%			
Cur	1.112,000	605.390,329	4.659.230,539	376,236	376,236	0,000	19,2047	50	0,00%			
Cur	1.113,000	605.390,636	4.659.231,491	376,236	376,236	0,000	20,4780	50	0,00%			
Cur	1.114,000	605.390,962	4.659.232,436	376,236	376,236	0,000	21,7512	50	0,00%			
Cur	1.115,000	605.391,306	4.659.233,375	376,236	376,236	0,000	23,0244	50	0,00%			
Cur	1.116,000	605.391,669	4.659.234,307	376,236	376,236	0,000	24,2977	50	0,00%			
Cur	1.117,000	605.392,051	4.659.235,231	376,236	376,236	0,000	25,5709	50	0,00%			
Cur	1.118,000	605.392,451	4.659.236,148	376,236	376,236	0,000	26,8442	50	0,00%			
Cur	1.119,000	605.392,869	4.659.237,056	376,236	376,236	0,000	28,1174	50	0,00%			
Cur	1.120,000	605.393,306	4.659.237,956	376,236	376,236	0,000	29,3906	50	0,00%			
Cur	1.121,000	605.393,760	4.659.238,846	376,236	376,236	0,000	30,6639	50	0,00%			
Cur	1.122,000	605.394,232	4.659.239,728	376,236	376,236	0,000	31,9371	50	0,00%			
Cur	1.123,000	605.394,722	4.659.240,600	376,236	376,236	0,000	33,2104	50	0,00%			
Cur	1.124,000	605.395,229	4.659.241,462	376,236	376,236	0,000	34,4836	50	0,00%			
Cur	1.125,000	605.395,753	4.659.242,313	376,236	376,236	0,000	35,7568	50	0,00%			
Cur	1.126,000	605.396,294	4.659.243,154	376,236	376,236	0,000	37,0301	50	0,00%			
Cur	1.127,000	605.396,852	4.659.243,984	376,236	376,236	0,000	38,3033	50	0,00%			
Cur	1.128,000	605.397,426	4.659.244,803	376,236	376,236	0,000	39,5766	50	0,00%			
Cur	1.129,000	605.398,016	4.659.245,610	376,236	376,236	0,000	40,8498	50	0,00%			
Cur	1.130,000	605.398,623	4.659.246,405	376,236	376,236	0,000	42,1230	50	0,00%			
Cur	1.131,000	605.399,245	4.659.247,188	376,236	376,236	0,000	43,3963	50	0,00%			
Cur	1.132,000	605.399,883	4.659.247,958	376,236	376,236	0,000	44,6695	50	0,00%			
Cur	1.133,000	605.400,536	4.659.248,715	376,236	376,236	0,000	45,9428	50	0,00%			
Cur	1.134,000	605.401,204	4.659.249,459	376,236	376,236	0,000	47,2160	50	0,00%			
Cur	1.135,000	605.401,887	4.659.250,190	376,236	376,236	0,000	48,4892	50	0,00%			
Cur	1.136,000	605.402,584	4.659.250,907	376,236	376,236	0,000	49,7625	50	0,00%			
Cur	1.137,000	605.403,296	4.659.251,609	376,236	376,236	0,000	51,0357	50	0,00%			
Cur	1.138,000	605.404,021	4.659.252,298	376,236	376,236	0,000	52,3090	50	0,00%			
Cur	1.139,000	605.404,760	4.659.252,971	376,236	376,236	0,000	53,5822	50	0,00%			
Cur	1.140,000	605.405,513	4.659.253,630	376,236	376,236	0,000	54,8554	50	0,00%			
Cur	1.141,000	605.406,278	4.659.254,273	376,236	376,236	0,000	56,1287	50	0,00%			
Cur	1.142,000	605.407,056	4.659.254,902	376,236	376,236	0,000	57,4019	50	0,00%			
Cur	1.143,000	605.407,847	4.659.255,514	376,236	376,236	0,000	58,6752	50	0,00%			
Cur	1.144,000	605.408,649	4.659.256,110	376,236	376,236	0,000	59,9484	50	0,00%			
Cur	1.145,000	605.409,464	4.659.256,691	376,236	376,236	0,000	61,2216	50	0,00%			
Cur	1.146,000	605.410,290	4.659.257,255	376,236	376,236	0,000	62,4949	50	0,00%			
Cur	1.147,000	605.411,126	4.659.257,802	376,236	376,236	0,000	63,7681	50	0,00%			
Cur	1.148,000	605.411,974	4.659.258,332	376,236	376,236	0,000	65,0414	50	0,00%			
Rec	1.148,430	605.412,342	4.659.258,555	376,236	376,236	0,000	65,5886	0	0,00%	P.S.		
Rec	1.149,000	605.412,831	4.659.258,849	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.150,000	605.413,688	4.659.259,363	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.151,000	605.414,546	4.659.259,878	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.152,000	605.415,403	4.659.260,392	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.153,000	605.416,260	4.659.260,907	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.154,000	605.417,118	4.659.261,422	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.155,000	605.417,975	4.659.261,936	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.156,000	605.418,833	4.659.262,451	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.157,000	605.419,690	4.659.262,965	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.158,000	605.420,548	4.659.263,480	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.159,000	605.421,405	4.659.263,995	376,236	376,236	0,000	65,5886	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO BT-DC C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	1.160,000	605.422,262	4.659.264,509	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.161,000	605.423,120	4.659.265,024	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.162,000	605.423,977	4.659.265,538	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.163,000	605.424,835	4.659.266,053	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.164,000	605.425,692	4.659.266,567	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.165,000	605.426,550	4.659.267,082	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.166,000	605.427,407	4.659.267,597	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.167,000	605.428,264	4.659.268,111	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.168,000	605.429,122	4.659.268,626	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.169,000	605.429,979	4.659.269,140	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.170,000	605.430,837	4.659.269,655	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.171,000	605.431,694	4.659.270,170	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.172,000	605.432,552	4.659.270,684	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.173,000	605.433,409	4.659.271,199	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.174,000	605.434,266	4.659.271,713	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.175,000	605.435,124	4.659.272,228	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.176,000	605.435,981	4.659.272,743	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.177,000	605.436,839	4.659.273,257	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.178,000	605.437,696	4.659.273,772	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.179,000	605.438,554	4.659.274,286	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.180,000	605.439,411	4.659.274,801	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.181,000	605.440,269	4.659.275,316	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.182,000	605.441,126	4.659.275,830	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.183,000	605.441,983	4.659.276,345	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.184,000	605.442,841	4.659.276,859	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.185,000	605.443,698	4.659.277,374	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.186,000	605.444,556	4.659.277,889	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.187,000	605.445,413	4.659.278,403	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.188,000	605.446,271	4.659.278,918	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.189,000	605.447,128	4.659.279,432	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.190,000	605.447,985	4.659.279,947	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.191,000	605.448,843	4.659.280,462	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.192,000	605.449,700	4.659.280,976	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.193,000	605.450,558	4.659.281,491	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.194,000	605.451,415	4.659.282,005	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.195,000	605.452,273	4.659.282,520	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.196,000	605.453,130	4.659.283,034	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.197,000	605.453,987	4.659.283,549	376,236	376,236	0,000	65,5886	0	0,00%			
Rec	1.198,000	605.454,845	4.659.284,064	376,236	376,236	0,000	65,5886	0	0,00%			
	1.198,393	605.455,182	4.659.284,266	376,236	376,236	0,000	65,5886		0,00%		V.	

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO BT-DC A-DC

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	604.218,594	4.658.806,890	367,570	367,570	0,000	391,2837	0	2,72%			
Rec	1,000	604.218,458	4.658.807,880	367,633	367,597	-0,036	391,2837	0	2,72%			
Cur	1,249	604.218,424	4.658.808,127	367,634	367,604	-0,030	391,2837	-8	2,72%	P.S.		
Cur	2,000	604.218,287	4.658.808,865	367,663	367,624	-0,039	385,3102	-8	2,72%			
Cur	3,000	604.217,998	4.658.809,822	367,704	367,652	-0,052	377,3524	-8	2,72%			
Cur	4,000	604.217,592	4.658.810,735	367,715	367,679	-0,036	369,3947	-8	2,72%			
Cur	5,000	604.217,075	4.658.811,590	367,689	367,706	0,017	361,4369	-8	2,72%			
Cur	6,000	604.216,456	4.658.812,375	367,723	367,733	0,010	353,4792	-8	2,72%			
Cur	7,000	604.215,744	4.658.813,076	367,766	367,760	-0,006	345,5214	-8	2,72%			
Cur	8,000	604.214,950	4.658.813,683	367,780	367,788	0,008	337,5637	-8	2,72%			
Cur	9,000	604.214,086	4.658.814,186	367,795	367,815	0,020	329,6059	-8	2,72%			
Cur	10,000	604.213,167	4.658.814,577	367,798	367,842	0,044	321,6482	-8	2,72%			
Cur	11,000	604.212,206	4.658.814,851	367,799	367,869	0,070	313,6904	-8	2,72%			
Rec	11,422	604.211,792	4.658.814,930	367,800	367,881	0,081	310,3349	0	2,72%	P.S.		
Rec	12,000	604.211,221	4.658.815,024	367,801	367,897	0,096	310,3349	0	2,72%			
Rec	13,000	604.210,234	4.658.815,185	367,802	367,924	0,122	310,3349	0	2,72%			
Rec	14,000	604.209,247	4.658.815,347	367,845	367,951	0,106	310,3349	0	2,72%			
Rec	15,000	604.208,260	4.658.815,509	367,905	367,978	0,073	310,3349	0	2,72%			
Rec	16,000	604.207,273	4.658.815,670	367,965	368,005	0,040	310,3349	0	2,72%			
Rec	17,000	604.206,287	4.658.815,832	367,995	368,033	0,038	310,3349	0	2,72%			
Rec	18,000	604.205,300	4.658.815,994	367,960	368,060	0,100	310,3349	0	2,72%			
Rec	19,000	604.204,313	4.658.816,155	367,961	368,087	0,126	310,3349	0	2,72%			
Rec	20,000	604.203,326	4.658.816,317	367,962	368,114	0,152	310,3349	0	2,72%			
Rec	21,000	604.202,339	4.658.816,478	367,977	368,142	0,165	310,3349	0	2,72%			
Rec	22,000	604.201,352	4.658.816,640	368,002	368,169	0,167	310,3349	0	2,72%			
Rec	23,000	604.200,365	4.658.816,802	368,027	368,196	0,169	310,3349	0	2,72%			
Rec	24,000	604.199,379	4.658.816,963	368,061	368,223	0,162	310,3349	0	2,72%			
Rec	25,000	604.198,392	4.658.817,125	368,100	368,250	0,150	310,3349	0	2,72%			
Rec	26,000	604.197,405	4.658.817,287	368,126	368,278	0,152	310,3349	0	2,72%			
Rec	27,000	604.196,418	4.658.817,448	368,182	368,305	0,123	310,3349	0	2,72%			
Rec	28,000	604.195,431	4.658.817,610	368,238	368,332	0,094	310,3349	0	2,72%			
Rec	29,000	604.194,444	4.658.817,771	368,285	368,359	0,074	310,3349	0	2,72%			
Rec	30,000	604.193,458	4.658.817,933	368,327	368,386	0,059	310,3349	0	2,72%			
Rec	31,000	604.192,471	4.658.818,095	368,336	368,414	0,078	310,3349	0	2,72%			
Rec	32,000	604.191,484	4.658.818,256	368,348	368,441	0,093	310,3349	0	2,72%			
Rec	33,000	604.190,497	4.658.818,418	368,360	368,468	0,108	310,3349	0	2,72%			
Rec	34,000	604.189,510	4.658.818,580	368,373	368,495	0,122	310,3349	0	2,72%			
Rec	35,000	604.188,523	4.658.818,741	368,387	368,523	0,136	310,3349	0	2,72%			
Rec	36,000	604.187,536	4.658.818,903	368,396	368,550	0,154	310,3349	0	2,72%			
Rec	37,000	604.186,550	4.658.819,064	368,407	368,577	0,170	310,3349	0	2,72%			
Rec	38,000	604.185,563	4.658.819,226	368,419	368,604	0,185	310,3349	0	2,72%			
Rec	39,000	604.184,576	4.658.819,388	368,430	368,631	0,201	310,3349	0	2,72%			
Rec	40,000	604.183,589	4.658.819,549	368,441	368,659	0,218	310,3349	0	2,72%			
Rec	41,000	604.182,602	4.658.819,711	368,452	368,686	0,234	310,3349	0	2,72%			
Rec	42,000	604.181,615	4.658.819,873	368,463	368,713	0,250	310,3349	0	2,72%			
Rec	43,000	604.180,628	4.658.820,034	368,474	368,740	0,266	310,3349	0	2,72%			
Rec	44,000	604.179,642	4.658.820,196	368,490	368,767	0,277	310,3349	0	2,72%			
Rec	45,000	604.178,655	4.658.820,357	368,509	368,795	0,286	310,3349	0	2,72%			
Rec	46,000	604.177,668	4.658.820,519	368,529	368,822	0,293	310,3349	0	2,72%			
Rec	47,000	604.176,681	4.658.820,681	368,555	368,849	0,294	310,3349	0	2,72%			
Rec	48,000	604.175,694	4.658.820,842	368,605	368,876	0,271	310,3349	0	2,72%			
Rec	49,000	604.174,707	4.658.821,004	368,653	368,904	0,250	310,3349	0	2,72%			
Rec	50,000	604.173,720	4.658.821,166	368,697	368,931	0,234	310,3349	0	2,72%			
Rec	51,000	604.172,734	4.658.821,327	368,741	368,958	0,217	310,3349	0	2,72%			
Rec	52,000	604.171,747	4.658.821,489	368,785	368,985	0,200	310,3349	0	2,72%			
Rec	53,000	604.170,760	4.658.821,650	368,829	369,012	0,183	310,3349	0	2,72%			
Rec	54,000	604.169,773	4.658.821,812	368,872	369,040	0,168	310,3349	0	2,72%			
Rec	55,000	604.168,786	4.658.821,974	368,914	369,067	0,153	310,3349	0	2,72%			
Rec	56,000	604.167,799	4.658.822,135	368,955	369,094	0,139	310,3349	0	2,72%			
Rec	57,000	604.166,813	4.658.822,297	368,988	369,121	0,133	310,3349	0	2,72%			
Rec	58,000	604.165,826	4.658.822,459	369,004	369,148	0,144	310,3349	0	2,72%			
Rec	58,889	604.164,948	4.658.822,602	369,031	369,173	0,142	310,3349	0	2,72%		T.E.	
Rec	59,000	604.164,839	4.658.822,620	369,034	369,176	0,142	310,3349	0	2,72%			
Rec	60,000	604.163,852	4.658.822,782	369,087	369,203	0,116	310,3349	0	2,70%			
Rec	61,000	604.162,865	4.658.822,944	369,149	369,230	0,081	310,3349	0	2,68%			
Rec	62,000	604.161,878	4.658.823,105	369,211	369,256	0,045	310,3349	0	2,66%			
Rec	63,000	604.160,891	4.658.823,267	369,273	369,283	0,010	310,3349	0	2,64%			
Rec	64,000	604.159,905	4.658.823,428	369,304	369,309	0,005	310,3349	0	2,62%			
Rec	65,000	604.158,918	4.658.823,590	369,322	369,335	0,013	310,3349	0	2,60%			
Rec	66,000	604.157,931	4.658.823,752	369,340	369,361	0,021	310,3349	0	2,58%			
Rec	67,000	604.156,944	4.658.823,913	369,354	369,387	0,033	310,3349	0	2,56%			
Rec	68,000	604.155,957	4.658.824,075	369,365	369,412	0,047	310,3349	0	2,54%			
Rec	69,000	604.154,970	4.658.824,237	369,395	369,438	0,043	310,3349	0	2,52%			
Rec	70,000	604.153,983	4.658.824,398	369,427	369,463	0,036	310,3349	0	2,50%		V.	
Rec	71,000	604.152,997	4.658.824,560	369,460	369,488	0,028	310,3349	0	2,48%			
Rec	72,000	604.152,010	4.658.824,721	369,494	369,512	0,018	310,3349	0	2,46%			
Rec	73,000	604.151,023	4.658.824,883	369,521	369,537	0,016	310,3349	0	2,44%			
Rec	74,000	604.150,036	4.658.825,045	369,520	369,561	0,041	310,3349	0	2,42%			
Rec	75,000	604.149,049	4.658.825,206	369,507	369,585	0,078	310,3349	0	2,40%			
Rec	76,000	604.148,062	4.658.825,368	369,494	369,609	0,115	310,3349	0	2,38%			
Rec	77,000	604.147,075	4.658.825,530	369,503	369,633	0,130	310,3349	0	2,36%			
Rec	78,000	604.146,089	4.658.825,691	369,543	369,656	0,113	310,3349	0	2,34%			
Rec	79,000	604.145,102	4.658.825,853	369,590	369,679	0,089	310,3349	0	2,32%			
Rec	80,000	604.144,115	4.658.826,014	369,607	369,703	0,096	310,3349	0	2,30%			
Rec	81,000	604.143,128	4.658.826,176	369,622	369,725	0,103	310,3349	0	2,28%			
Rec	81,111	604.143,019	4.658.826,194	369,625	369,728	0,103	310,3349	0	2,28%		T.S.	
Rec	82,000	604.142,141	4.658.826,338	369,646	369,748	0,102	310,3349	0	2,28%			

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REPLANTEO CAMINO TRAMO BT-DC A-DC

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	83,000	604.141,154	4.658.826,499	369,670	369,771	0,101	310,3349	0	2,28%			
Rec	84,000	604.140,168	4.658.826,661	369,693	369,794	0,101	310,3349	0	2,28%			
Rec	85,000	604.139,181	4.658.826,823	369,706	369,816	0,110	310,3349	0	2,28%			
Rec	86,000	604.138,194	4.658.826,984	369,719	369,839	0,120	310,3349	0	2,28%			
Rec	87,000	604.137,207	4.658.827,146	369,733	369,862	0,129	310,3349	0	2,28%			
Rec	88,000	604.136,220	4.658.827,307	369,754	369,885	0,131	310,3349	0	2,28%			
Rec	89,000	604.135,233	4.658.827,469	369,775	369,907	0,132	310,3349	0	2,28%			
Rec	90,000	604.134,246	4.658.827,631	369,796	369,930	0,134	310,3349	0	2,28%			
Rec	91,000	604.133,260	4.658.827,792	369,822	369,953	0,131	310,3349	0	2,28%			
Rec	92,000	604.132,273	4.658.827,954	369,849	369,976	0,127	310,3349	0	2,28%			
Rec	93,000	604.131,286	4.658.828,116	369,876	369,999	0,123	310,3349	0	2,28%			
Rec	94,000	604.130,299	4.658.828,277	369,912	370,021	0,109	310,3349	0	2,28%			
Rec	95,000	604.129,312	4.658.828,439	369,949	370,044	0,095	310,3349	0	2,28%			
Rec	96,000	604.128,325	4.658.828,600	369,987	370,067	0,080	310,3349	0	2,28%			
Rec	97,000	604.127,338	4.658.828,762	370,014	370,090	0,076	310,3349	0	2,28%			
Rec	98,000	604.126,352	4.658.828,924	370,037	370,112	0,075	310,3349	0	2,28%			
Rec	99,000	604.125,365	4.658.829,085	370,059	370,135	0,076	310,3349	0	2,28%			
Rec	100,000	604.124,378	4.658.829,247	370,017	370,158	0,141	310,3349	0	2,28%			
Rec	101,000	604.123,391	4.658.829,409	370,034	370,181	0,147	310,3349	0	2,28%			
Rec	102,000	604.122,404	4.658.829,570	370,121	370,203	0,082	310,3349	0	2,28%			
Rec	103,000	604.121,417	4.658.829,732	370,132	370,226	0,094	310,3349	0	2,28%			
Rec	104,000	604.120,430	4.658.829,893	370,143	370,249	0,106	310,3349	0	2,28%			
Rec	105,000	604.119,444	4.658.830,055	370,153	370,272	0,119	310,3349	0	2,28%			
Rec	106,000	604.118,457	4.658.830,217	370,163	370,294	0,131	310,3349	0	2,28%			
Rec	107,000	604.117,470	4.658.830,378	370,174	370,317	0,143	310,3349	0	2,28%			
Rec	108,000	604.116,483	4.658.830,540	370,188	370,340	0,152	310,3349	0	2,28%			
Rec	109,000	604.115,496	4.658.830,702	370,216	370,363	0,147	310,3349	0	2,28%			
Rec	110,000	604.114,509	4.658.830,863	370,256	370,385	0,130	310,3349	0	2,28%			
Rec	111,000	604.113,523	4.658.831,025	370,296	370,408	0,112	310,3349	0	2,28%			
Rec	112,000	604.112,536	4.658.831,187	370,336	370,431	0,095	310,3349	0	2,28%			
Rec	113,000	604.111,549	4.658.831,348	370,375	370,454	0,079	310,3349	0	2,28%			
Rec	114,000	604.110,562	4.658.831,510	370,413	370,477	0,064	310,3349	0	2,28%			
Rec	115,000	604.109,575	4.658.831,671	370,413	370,499	0,086	310,3349	0	2,28%			
Rec	116,000	604.108,588	4.658.831,833	370,418	370,522	0,104	310,3349	0	2,28%			
Rec	117,000	604.107,601	4.658.831,995	370,427	370,545	0,118	310,3349	0	2,28%			
Rec	118,000	604.106,615	4.658.832,156	370,436	370,568	0,132	310,3349	0	2,28%			
Rec	119,000	604.105,628	4.658.832,318	370,445	370,590	0,145	310,3349	0	2,28%			
Rec	120,000	604.104,641	4.658.832,480	370,455	370,613	0,158	310,3349	0	2,28%			
Rec	121,000	604.103,654	4.658.832,641	370,470	370,636	0,166	310,3349	0	2,28%			
Rec	122,000	604.102,667	4.658.832,803	370,485	370,659	0,174	310,3349	0	2,28%			
Rec	123,000	604.101,680	4.658.832,964	370,502	370,681	0,179	310,3349	0	2,28%			
Rec	124,000	604.100,693	4.658.833,126	370,518	370,704	0,186	310,3349	0	2,28%			
Rec	125,000	604.099,707	4.658.833,288	370,534	370,727	0,193	310,3349	0	2,28%			
Rec	126,000	604.098,720	4.658.833,449	370,551	370,750	0,199	310,3349	0	2,28%			
Rec	127,000	604.097,733	4.658.833,611	370,575	370,772	0,197	310,3349	0	2,28%			
Rec	128,000	604.096,746	4.658.833,773	370,600	370,795	0,195	310,3349	0	2,28%			
Rec	129,000	604.095,759	4.658.833,934	370,619	370,818	0,199	310,3349	0	2,28%			
Rec	130,000	604.094,772	4.658.834,096	370,647	370,841	0,194	310,3349	0	2,28%			
Rec	131,000	604.093,785	4.658.834,257	370,676	370,864	0,188	310,3349	0	2,28%			
Rec	132,000	604.092,799	4.658.834,419	370,705	370,886	0,181	310,3349	0	2,28%			
Rec	133,000	604.091,812	4.658.834,581	370,730	370,909	0,179	310,3349	0	2,28%			
Rec	134,000	604.090,825	4.658.834,742	370,747	370,932	0,185	310,3349	0	2,28%			
Rec	135,000	604.089,838	4.658.834,904	370,790	370,955	0,165	310,3349	0	2,28%			
Rec	136,000	604.088,851	4.658.835,066	370,839	370,977	0,138	310,3349	0	2,28%			
Rec	137,000	604.087,864	4.658.835,227	370,883	371,000	0,117	310,3349	0	2,28%			
Rec	138,000	604.086,878	4.658.835,389	370,916	371,023	0,107	310,3349	0	2,28%			
Rec	139,000	604.085,891	4.658.835,550	370,950	371,046	0,096	310,3349	0	2,28%			
Rec	140,000	604.084,904	4.658.835,712	370,973	371,068	0,095	310,3349	0	2,28%			
Rec	140,693	604.084,220	4.658.835,824	370,986	371,084	0,098	310,3349	0	2,28%		T.E.	
Rec	141,000	604.083,917	4.658.835,874	370,992	371,091	0,099	310,3349	0	2,27%			
Rec	142,000	604.082,930	4.658.836,035	371,007	371,114	0,107	310,3349	0	2,23%			
Rec	143,000	604.081,943	4.658.836,197	371,021	371,136	0,115	310,3349	0	2,20%			
Rec	144,000	604.080,956	4.658.836,359	371,017	371,158	0,141	310,3349	0	2,17%			
Rec	145,000	604.079,970	4.658.836,520	371,008	371,179	0,171	310,3349	0	2,13%			
Rec	146,000	604.078,983	4.658.836,682	371,086	371,200	0,114	310,3349	0	2,10%			
Rec	147,000	604.077,996	4.658.836,843	371,165	371,221	0,056	310,3349	0	2,07%			
Rec	148,000	604.077,009	4.658.837,005	371,190	371,242	0,052	310,3349	0	2,03%			
Rec	149,000	604.076,022	4.658.837,167	371,219	371,262	0,043	310,3349	0	2,00%			
Rec	150,000	604.075,035	4.658.837,328	371,252	371,282	0,030	310,3349	0	1,97%		V.	
Rec	151,000	604.074,048	4.658.837,490	371,288	371,301	0,013	310,3349	0	1,93%			
Rec	152,000	604.073,062	4.658.837,652	371,314	371,320	0,006	310,3349	0	1,90%			
Rec	153,000	604.072,075	4.658.837,813	371,349	371,339	-0,010	310,3349	0	1,87%			
Rec	154,000	604.071,088	4.658.837,975	371,374	371,358	-0,016	310,3349	0	1,83%			
Rec	155,000	604.070,101	4.658.838,136	371,398	371,376	-0,022	310,3349	0	1,80%			
Rec	156,000	604.069,114	4.658.838,298	371,387	371,394	0,007	310,3349	0	1,77%			
Rec	157,000	604.068,127	4.658.838,460	371,377	371,411	0,034	310,3349	0	1,73%			
Rec	158,000	604.067,140	4.658.838,621	371,377	371,428	0,051	310,3349	0	1,70%			
Rec	159,000	604.066,154	4.658.838,783	371,377	371,445	0,068	310,3349	0	1,67%			
Rec	159,307	604.065,851	4.658.838,833	371,380	371,450	0,070	310,3349	0	1,66%		T.S.	
Rec	160,000	604.065,167	4.658.838,945	371,387	371,461	0,074	310,3349	0	1,65%			
Rec	161,000	604.064,180	4.658.839,106	371,403	371,478	0,075	310,3349	0	1,65%			
Rec	162,000	604.063,193	4.658.839,268	371,416	371,495	0,079	310,3349	0	1,65%			
Rec	163,000	604.062,206	4.658.839,430	371,426	371,511	0,085	310,3349	0	1,65%			
Rec	164,000	604.061,219	4.658.839,591	371,441	371,528	0,087	310,3349	0	1,65%			
Rec	165,000	604.060,233	4.658.839,753	371,476	371,544	0,068	310,3349	0	1,65%			
Rec	166,000	604.059,246	4.658.839,914	371,495	371,561	0,066	310,3349	0	1,65%			
Rec	167,000	604.058,259	4.658.840,076	371,504	371,577	0,073	310,3349	0	1,65%			

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REPLANTEO CAMINO TRAMO BT-DC A-DC

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	168,000	604.057,272	4.658.840,238	371,514	371,594	0,080	310,3349	0	1,65%			
Rec	168,302	604.056,974	4.658.840,286	371,517	371,599	0,082	310,3349	0	1,65%		T.E.	
Rec	169,000	604.056,285	4.658.840,399	371,523	371,611	0,088	310,3349	0	1,93%			
Rec	170,000	604.055,298	4.658.840,561	371,524	371,633	0,109	310,3349	0	2,33%			
Rec	171,000	604.054,311	4.658.840,723	371,525	371,658	0,133	310,3349	0	2,73%			
Rec	172,000	604.053,325	4.658.840,884	371,527	371,687	0,160	310,3349	0	3,13%			
Rec	173,000	604.052,338	4.658.841,046	371,527	371,721	0,194	310,3349	0	3,53%			
Rec	174,000	604.051,351	4.658.841,207	371,527	371,758	0,231	310,3349	0	3,93%			
Rec	175,000	604.050,364	4.658.841,369	371,541	371,799	0,258	310,3349	0	4,33%			
Rec	176,000	604.049,377	4.658.841,531	371,565	371,845	0,280	310,3349	0	4,73%			
Rec	177,000	604.048,390	4.658.841,692	371,610	371,894	0,284	310,3349	0	5,13%			
Rec	178,000	604.047,403	4.658.841,854	371,660	371,947	0,287	310,3349	0	5,53%			
Cur	178,584	604.046,827	4.658.841,948	371,690	371,980	0,290	310,3349	15	5,77%	P.S.	V.	
Cur	179,000	604.046,418	4.658.842,021	371,715	372,005	0,290	312,1007	15	5,93%			
Cur	180,000	604.045,443	4.658.842,243	371,799	372,066	0,267	316,3448	15	6,33%			
Cur	181,000	604.044,485	4.658.842,529	371,921	372,131	0,210	320,5889	15	6,73%			
Cur	182,000	604.043,548	4.658.842,878	372,001	372,201	0,200	324,8331	15	7,13%			
Cur	183,000	604.042,636	4.658.843,289	372,062	372,274	0,212	329,0772	15	7,53%			
Cur	184,000	604.041,754	4.658.843,759	372,139	372,351	0,212	333,3213	15	7,93%			
Cur	185,000	604.040,905	4.658.844,288	372,218	372,433	0,215	337,5655	15	8,33%			
Cur	186,000	604.040,093	4.658.844,871	372,296	372,518	0,222	341,8096	15	8,73%			
Cur	187,000	604.039,322	4.658.845,508	372,380	372,607	0,227	346,0537	15	9,13%			
Cur	188,000	604.038,595	4.658.846,194	372,496	372,701	0,205	350,2978	15	9,53%			
Cur	188,866	604.038,004	4.658.846,827	372,590	372,785	0,195	353,9733	15	9,88%		T.S.	
Cur	189,000	604.037,916	4.658.846,928	372,605	372,798	0,193	354,5420	15	9,88%			
Cur	190,000	604.037,287	4.658.847,705	372,824	372,897	0,073	358,7861	15	9,88%			
Cur	191,000	604.036,711	4.658.848,522	372,978	372,996	0,018	363,0302	15	9,88%			
Cur	192,000	604.036,190	4.658.849,375	372,991	373,095	0,104	367,2744	15	9,88%			
Cur	193,000	604.035,728	4.658.850,262	373,100	373,193	0,093	371,5185	15	9,88%			
Rec	193,118	604.035,677	4.658.850,369	373,119	373,205	0,086	372,0204	0	9,88%	P.S.		
Rec	194,000	604.035,302	4.658.851,167	373,268	373,292	0,024	372,0204	0	9,88%			
Rec	195,000	604.034,876	4.658.852,072	373,338	373,391	0,053	372,0204	0	9,88%			
Rec	196,000	604.034,451	4.658.852,977	373,413	373,490	0,077	372,0204	0	9,88%			
Rec	197,000	604.034,025	4.658.853,882	373,480	373,589	0,109	372,0204	0	9,88%			
Cur	197,532	604.033,799	4.658.854,363	373,516	373,641	0,125	372,0204	15	9,88%	P.S.		
Cur	198,000	604.033,607	4.658.854,790	373,547	373,688	0,141	374,0046	15	9,88%			
Cur	199,000	604.033,240	4.658.855,720	373,614	373,786	0,172	378,2488	15	9,88%			
Cur	200,000	604.032,937	4.658.856,673	373,698	373,885	0,187	382,4929	15	9,88%			
Cur	201,000	604.032,698	4.658.857,643	373,797	373,984	0,187	386,7370	15	9,88%			
Cur	202,000	604.032,524	4.658.858,628	373,898	374,083	0,185	390,9812	15	9,88%			
Cur	203,000	604.032,416	4.658.859,622	373,940	374,182	0,242	395,2253	15	9,88%			
Cur	204,000	604.032,374	4.658.860,621	374,041	374,280	0,239	399,4694	15	9,88%			
Cur	205,000	604.032,399	4.658.861,620	374,111	374,379	0,268	3,7135	15	9,88%			
Cur	206,000	604.032,490	4.658.862,616	374,206	374,478	0,272	7,9577	15	9,88%			
Cur	207,000	604.032,648	4.658.863,603	374,302	374,577	0,275	12,2018	15	9,88%			
Rec	207,790	604.032,819	4.658.864,375	374,381	374,655	0,274	15,5557	0	9,88%	P.S.		
Rec	208,000	604.032,870	4.658.864,578	374,401	374,676	0,275	15,5557	0	9,88%			
Rec	209,000	604.033,112	4.658.865,548	374,489	374,775	0,286	15,5557	0	9,88%			
Rec	210,000	604.033,354	4.658.866,519	374,574	374,873	0,299	15,5557	0	9,88%			
Rec	211,000	604.033,595	4.658.867,489	374,657	374,972	0,315	15,5557	0	9,88%			
Rec	211,521	604.033,722	4.658.867,995	374,701	375,024	0,323	15,5557	0	9,88%		T.E.	
Rec	212,000	604.033,837	4.658.868,459	374,741	375,070	0,329	15,5557	0	9,64%			
Rec	213,000	604.034,079	4.658.869,430	374,811	375,164	0,353	15,5557	0	9,14%			
Rec	214,000	604.034,321	4.658.870,400	374,809	375,253	0,444	15,5557	0	8,64%			
Rec	215,000	604.034,563	4.658.871,370	374,807	375,337	0,530	15,5557	0	8,14%			
Rec	216,000	604.034,805	4.658.872,341	374,805	375,416	0,611	15,5557	0	7,64%			
Rec	217,000	604.035,047	4.658.873,311	374,803	375,490	0,687	15,5557	0	7,14%			
Rec	218,000	604.035,289	4.658.874,281	374,801	375,559	0,758	15,5557	0	6,64%			
Rec	219,000	604.035,531	4.658.875,251	374,842	375,623	0,781	15,5557	0	6,14%			
Rec	220,000	604.035,773	4.658.876,222	374,937	375,682	0,745	15,5557	0	5,64%			
Rec	221,000	604.036,015	4.658.877,192	374,995	375,736	0,741	15,5557	0	5,14%			
Cur	221,402	604.036,112	4.658.877,582	374,986	375,756	0,770	15,5557	-50	4,94%	P.S.	V.	
Cur	222,000	604.036,253	4.658.878,163	374,976	375,785	0,809	14,7946	-50	4,64%			
Cur	223,000	604.036,474	4.658.879,139	374,959	375,828	0,869	13,5214	-50	4,14%			
Cur	224,000	604.036,675	4.658.880,118	374,949	375,867	0,918	12,2481	-50	3,64%			
Cur	225,000	604.036,856	4.658.881,101	375,115	375,901	0,786	10,9749	-50	3,14%			
Cur	226,000	604.037,018	4.658.882,088	375,222	375,930	0,708	9,7017	-50	2,64%			
Cur	227,000	604.037,160	4.658.883,078	375,337	375,954	0,617	8,4284	-50	2,14%			
Cur	228,000	604.037,282	4.658.884,071	375,405	375,973	0,568	7,1552	-50	1,64%			
Cur	229,000	604.037,384	4.658.885,065	375,490	375,987	0,497	5,8819	-50	1,14%			
Cur	230,000	604.037,466	4.658.886,062	375,587	375,996	0,409	4,6087	-50	0,64%			
Rec	230,603	604.037,506	4.658.886,664	375,647	375,999	0,352	3,8406	0	0,34%	P.S.	P.S.	
Rec	231,000	604.037,530	4.658.887,060	375,687	376,000	0,313	3,8406	0	0,14%			
Rec	231,283	604.037,547	4.658.887,342	375,689	376,000	0,311	3,8406	0	0,00%		T.S.	
Rec	232,000	604.037,591	4.658.888,058	375,694	376,000	0,306	3,8406	0	0,00%			
Rec	233,000	604.037,651	4.658.889,056	375,826	376,000	0,174	3,8406	0	0,00%			
Rec	234,000	604.037,711	4.658.890,055	375,981	376,000	0,019	3,8406	0	0,00%			
Rec	235,000	604.037,771	4.658.891,053	376,028	376,000	-0,028	3,8406	0	0,00%			
Rec	236,000	604.037,832	4.658.892,051	376,065	376,000	-0,065	3,8406	0	0,00%			
Rec	237,000	604.037,892	4.658.893,049	376,099	376,000	-0,099	3,8406	0	0,00%			
Rec	238,000	604.037,952	4.658.894,047	376,132	376,000	-0,132	3,8406	0	0,00%			
Rec	239,000	604.038,013	4.658.895,045	376,174	376,000	-0,174	3,8406	0	0,00%			
Rec	240,000	604.038,073	4.658.896,044	376,252	376,000	-0,252	3,8406	0	0,00%			
Rec	241,000	604.038,133	4.658.897,042	376,317	376,000	-0,317	3,8406	0	0,00%			
Rec	242,000	604.038,193	4.658.898,040	376,382	376,000	-0,382	3,8406	0	0,00%			
Rec	243,000	604.038,254	4.658.899,038	376,443	376,000	-0,443	3,8406	0	0,00%			
Rec	244,000	604.038,314	4.658.900,036	376,504	376,000	-0,504	3,8406	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO BT-DC A-DC

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	245,000	604.038,374	4.658.901,035	376,564	376,000	-0,564	3,8406	0	0,00%		T.E.	
Rec	246,000	604.038,435	4.658.902,033	376,624	376,015	-0,609	3,8406	0	3,01%			
Rec	247,000	604.038,495	4.658.903,031	376,683	376,060	-0,623	3,8406	0	6,02%			
Rec	248,000	604.038,555	4.658.904,029	376,741	376,135	-0,606	3,8406	0	9,03%		V.	
Rec	249,000	604.038,615	4.658.905,027	376,798	376,241	-0,557	3,8406	0	12,04%			
Rec	250,000	604.038,676	4.658.906,025	376,855	376,376	-0,479	3,8406	0	15,05%			
Rec	251,000	604.038,736	4.658.907,024	376,912	376,542	-0,370	3,8406	0	18,06%		T.S.	
Rec	252,000	604.038,796	4.658.908,022	376,970	376,722	-0,248	3,8406	0	18,06%			
Rec	253,000	604.038,857	4.658.909,020	377,021	376,903	-0,118	3,8406	0	18,06%			
Rec	254,000	604.038,917	4.658.910,018	377,093	377,083	-0,010	3,8406	0	18,06%			
	254,081	604.038,922	4.658.910,099	377,098	377,098	0,000	3,8406		18,06%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO DC-T17 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	603.630,600	4.657.825,599	371,567	371,567	0,000	373,4176	0	14,00%			
Rec	1,000	603.630,195	4.657.826,513	371,656	371,707	0,051	373,4176	0	14,00%			ODT Ø500 L=9,25m
Rec	1,702	603.629,910	4.657.827,155	371,708	371,805	0,097	373,4176	0	14,00%		T.E.	
Rec	2,000	603.629,789	4.657.827,427	371,730	371,847	0,117	373,4176	0	13,80%			
Rec	3,000	603.629,384	4.657.828,341	371,806	371,981	0,175	373,4176	0	13,13%			
Rec	4,000	603.628,978	4.657.829,255	371,882	372,109	0,227	373,4176	0	12,47%			
Rec	5,000	603.628,572	4.657.830,169	371,959	372,231	0,272	373,4176	0	11,80%			
Rec	6,000	603.628,167	4.657.831,084	372,243	372,345	0,102	373,4176	0	11,13%			
Rec	7,000	603.627,761	4.657.831,998	372,575	372,453	-0,122	373,4176	0	10,47%			
Rec	8,000	603.627,356	4.657.832,912	372,823	372,555	-0,268	373,4176	0	9,80%			
Rec	9,000	603.626,950	4.657.833,826	372,980	372,649	-0,331	373,4176	0	9,13%			
Rec	10,000	603.626,545	4.657.834,740	372,999	372,737	-0,262	373,4176	0	8,47%		V.	
Rec	11,000	603.626,139	4.657.835,654	372,983	372,819	-0,164	373,4176	0	7,80%			
Rec	12,000	603.625,734	4.657.836,568	372,956	372,894	-0,062	373,4176	0	7,13%			
Rec	13,000	603.625,328	4.657.837,482	372,932	372,962	0,030	373,4176	0	6,47%			
Rec	14,000	603.624,923	4.657.838,396	372,924	373,023	0,099	373,4176	0	5,80%			
Rec	15,000	603.624,517	4.657.839,310	372,949	373,078	0,129	373,4176	0	5,13%			
Rec	16,000	603.624,112	4.657.840,224	372,937	373,126	0,189	373,4176	0	4,47%			
Rec	17,000	603.623,706	4.657.841,138	372,927	373,167	0,240	373,4176	0	3,80%			
Rec	18,000	603.623,301	4.657.842,053	372,917	373,202	0,285	373,4176	0	3,13%			
Rec	18,298	603.623,180	4.657.842,325	372,916	373,211	0,295	373,4176	0	2,94%		T.S.	
Rec	19,000	603.622,895	4.657.842,967	372,913	373,231	0,318	373,4176	0	2,94%			
Rec	20,000	603.622,490	4.657.843,881	372,914	373,261	0,347	373,4176	0	2,94%			
Rec	21,000	603.622,084	4.657.844,795	372,913	373,290	0,377	373,4176	0	2,94%			
Rec	22,000	603.621,679	4.657.845,709	372,913	373,319	0,406	373,4176	0	2,94%			
Rec	23,000	603.621,273	4.657.846,623	372,913	373,349	0,436	373,4176	0	2,94%			
Rec	24,000	603.620,867	4.657.847,537	372,913	373,378	0,465	373,4176	0	2,94%			
Rec	25,000	603.620,462	4.657.848,451	372,923	373,408	0,485	373,4176	0	2,94%			
Rec	26,000	603.620,056	4.657.849,365	372,944	373,437	0,493	373,4176	0	2,94%			
Rec	27,000	603.619,651	4.657.850,279	372,983	373,466	0,483	373,4176	0	2,94%			
Rec	28,000	603.619,245	4.657.851,193	373,071	373,496	0,425	373,4176	0	2,94%			
Rec	29,000	603.618,840	4.657.852,107	373,175	373,525	0,350	373,4176	0	2,94%			
Rec	30,000	603.618,434	4.657.853,021	373,277	373,554	0,277	373,4176	0	2,94%			
Rec	31,000	603.618,029	4.657.853,936	373,377	373,584	0,207	373,4176	0	2,94%			
Rec	32,000	603.617,623	4.657.854,850	373,468	373,613	0,145	373,4176	0	2,94%			
Rec	32,738	603.617,324	4.657.855,524	373,531	373,635	0,103	373,4176	0	2,94%		T.E.	
Rec	33,000	603.617,218	4.657.855,764	373,554	373,642	0,088	373,4176	0	2,90%			
Rec	34,000	603.616,812	4.657.856,678	373,635	373,671	0,036	373,4176	0	2,77%			
Rec	35,000	603.616,407	4.657.857,592	373,690	373,698	0,008	373,4176	0	2,64%			
Rec	36,000	603.616,001	4.657.858,506	373,734	373,723	-0,011	373,4176	0	2,50%			
Rec	37,000	603.615,596	4.657.859,420	373,771	373,748	-0,023	373,4176	0	2,37%			
Rec	38,000	603.615,190	4.657.860,334	373,807	373,771	-0,036	373,4176	0	2,24%			
Rec	39,000	603.614,785	4.657.861,248	373,868	373,792	-0,076	373,4176	0	2,10%			
Rec	40,000	603.614,379	4.657.862,162	373,848	373,813	-0,035	373,4176	0	1,97%		V.	
Rec	41,000	603.613,973	4.657.863,076	373,845	373,832	-0,013	373,4176	0	1,84%			
Rec	42,000	603.613,568	4.657.863,990	373,843	373,850	0,007	373,4176	0	1,70%			
Rec	43,000	603.613,162	4.657.864,905	373,846	373,866	0,020	373,4176	0	1,57%			
Rec	44,000	603.612,757	4.657.865,819	373,851	373,881	0,030	373,4176	0	1,44%			
Rec	45,000	603.612,351	4.657.866,733	373,862	373,895	0,033	373,4176	0	1,30%			
Rec	46,000	603.611,946	4.657.867,647	373,873	373,907	0,034	373,4176	0	1,17%			
Rec	47,000	603.611,540	4.657.868,561	373,882	373,918	0,036	373,4176	0	1,04%			
Rec	47,262	603.611,434	4.657.868,800	373,884	373,921	0,036	373,4176	0	1,00%		T.S.	
Rec	48,000	603.611,135	4.657.869,475	373,891	373,928	0,037	373,4176	0	1,00%			
Rec	49,000	603.610,729	4.657.870,389	373,898	373,938	0,040	373,4176	0	1,00%			
Rec	50,000	603.610,324	4.657.871,303	373,902	373,948	0,046	373,4176	0	1,00%			
Rec	51,000	603.609,918	4.657.872,217	373,906	373,958	0,052	373,4176	0	1,00%			
Rec	52,000	603.609,513	4.657.873,131	373,910	373,968	0,058	373,4176	0	1,00%			
Rec	52,503	603.609,309	4.657.873,591	373,913	373,973	0,061	373,4176	0	1,00%		T.E.	
Rec	53,000	603.609,107	4.657.874,045	373,915	373,978	0,063	373,4176	0	1,20%			
Rec	54,000	603.608,702	4.657.874,959	373,919	373,992	0,073	373,4176	0	1,60%			
Rec	55,000	603.608,296	4.657.875,874	373,923	374,010	0,087	373,4176	0	2,00%			
Rec	56,000	603.607,891	4.657.876,788	373,927	374,032	0,105	373,4176	0	2,40%			
Rec	57,000	603.607,485	4.657.877,702	373,931	374,058	0,127	373,4176	0	2,80%			
Rec	58,000	603.607,080	4.657.878,616	373,941	374,088	0,147	373,4176	0	3,20%			
Rec	59,000	603.606,674	4.657.879,530	373,945	374,122	0,177	373,4176	0	3,60%			
Rec	60,000	603.606,268	4.657.880,444	373,947	374,160	0,213	373,4176	0	4,00%		V.	
Rec	61,000	603.605,863	4.657.881,358	373,941	374,202	0,261	373,4176	0	4,40%			
Rec	62,000	603.605,457	4.657.882,272	373,937	374,248	0,311	373,4176	0	4,80%			
Rec	63,000	603.605,052	4.657.883,186	373,933	374,298	0,365	373,4176	0	5,20%			
Rec	64,000	603.604,646	4.657.884,100	373,933	374,352	0,419	373,4176	0	5,60%			
Rec	65,000	603.604,241	4.657.885,014	373,929	374,410	0,481	373,4176	0	6,00%			
Rec	66,000	603.603,835	4.657.885,928	373,926	374,472	0,546	373,4176	0	6,40%			
Rec	67,000	603.603,430	4.657.886,843	373,923	374,538	0,615	373,4176	0	6,80%			
Rec	64,497	603.604,445	4.657.884,555	373,921	374,573	0,652	373,4176	0	7,00%		T.S.	
Rec	68,000	603.603,024	4.657.887,757	373,919	374,608	0,689	373,4176	0	7,00%			
Rec	69,000	603.602,619	4.657.888,671	373,916	374,678	0,762	373,4176	0	7,00%			
Rec	70,000	603.602,213	4.657.889,585	373,913	374,748	0,835	373,4176	0	7,00%			
Rec	71,000	603.601,808	4.657.890,499	373,926	374,818	0,892	373,4176	0	7,00%			
Rec	72,000	603.601,402	4.657.891,413	373,944	374,888	0,944	373,4176	0	7,00%			
Rec	73,000	603.600,997	4.657.892,327	373,966	374,958	0,992	373,4176	0	7,00%			
Rec	74,000	603.600,591	4.657.893,241	373,997	375,028	1,031	373,4176	0	7,00%			
Rec	74,146	603.600,532	4.657.893,375	374,026	375,038	1,012	373,4176	0	7,00%		T.E.	
Rec	75,000	603.600,186	4.657.894,155	374,195	375,096	0,901	373,4176	0	6,66%			
Rec	76,000	603.599,780	4.657.895,069	374,387	375,161	0,774	373,4176	0	6,26%			
Rec	77,000	603.599,375	4.657.895,983	374,409	375,221	0,812	373,4176	0	5,86%			
Rec	78,000	603.598,969	4.657.896,897	374,511	375,278	0,767	373,4176	0	5,46%			

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REPLANTEO CAMINO TRAMO DC-T17 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	79,000	603.598,563	4.657.897,812	374,490	375,330	0,840	373,4176	0	5,06%			
Rec	80,000	603.598,158	4.657.898,726	374,423	375,379	0,956	373,4176	0	4,66%			
Rec	81,000	603.597,752	4.657.899,640	374,427	375,424	0,997	373,4176	0	4,26%			
Rec	82,000	603.597,347	4.657.900,554	374,507	375,464	0,957	373,4176	0	3,86%			
Cur	82,893	603.596,985	4.657.901,370	374,594	375,497	0,903	373,4176	-20	3,50%	P.S.	V.	
Cur	83,000	603.596,941	4.657.901,468	374,604	375,501	0,897	373,0771	-20	3,46%			
Cur	84,000	603.596,508	4.657.902,369	374,696	375,533	0,837	369,8940	-20	3,06%			
Cur	85,000	603.596,031	4.657.903,248	374,782	375,562	0,780	366,7109	-20	2,66%			
Cur	86,000	603.595,510	4.657.904,101	374,863	375,586	0,723	363,5278	-20	2,26%			
Cur	87,000	603.594,947	4.657.904,927	374,940	375,607	0,667	360,3447	-20	1,86%			
Cur	88,000	603.594,343	4.657.905,725	375,006	375,624	0,618	357,1616	-20	1,46%			
Cur	89,000	603.593,701	4.657.906,491	375,036	375,636	0,600	353,9785	-20	1,06%			
Cur	90,000	603.593,021	4.657.907,224	375,065	375,645	0,580	350,7954	-20	0,66%			
Cur	91,000	603.592,305	4.657.907,922	375,090	375,649	0,559	347,6123	-20	0,26%			
Cur	91,640	603.591,829	4.657.908,350	375,105	375,650	0,545	345,5751	-20	0,00%		T.S.	
Cur	92,000	603.591,555	4.657.908,584	375,113	375,650	0,537	344,4292	-20	0,00%			
Rec	92,220	603.591,386	4.657.908,724	375,118	375,650	0,532	343,7283	0	0,00%	P.S.		
Rec	93,000	603.590,783	4.657.909,219	375,133	375,650	0,517	343,7283	0	0,00%			
Rec	94,000	603.590,009	4.657.909,853	375,152	375,650	0,498	343,7283	0	0,00%			
Rec	95,000	603.589,236	4.657.910,487	375,173	375,650	0,477	343,7283	0	0,00%			
Rec	96,000	603.588,463	4.657.911,121	375,220	375,650	0,430	343,7283	0	0,00%			
Rec	97,000	603.587,690	4.657.911,755	375,254	375,650	0,396	343,7283	0	0,00%			
Rec	98,000	603.586,917	4.657.912,389	375,285	375,650	0,365	343,7283	0	0,00%			
Rec	99,000	603.586,143	4.657.913,023	375,316	375,650	0,334	343,7283	0	0,00%			
Rec	100,000	603.585,370	4.657.913,657	375,350	375,650	0,300	343,7283	0	0,00%			
Rec	101,000	603.584,597	4.657.914,292	375,389	375,650	0,261	343,7283	0	0,00%			
Rec	102,000	603.583,824	4.657.914,926	375,429	375,650	0,221	343,7283	0	0,00%			
	102,889	603.583,136	4.657.915,490	375,466	375,650	0,184	343,7283		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO DC-T17 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	603.260,958	4.657.688,493	388,465	388,465	0,000	137,6165	0	-3,01%			
Rec	1,000	603.261,789	4.657.687,936	388,426	388,435	0,009	137,6165	0	-3,01%			
Rec	2,000	603.262,619	4.657.687,379	388,387	388,405	0,018	137,6165	0	-3,01%			
Rec	3,000	603.263,450	4.657.686,822	388,361	388,375	0,014	137,6165	0	-3,01%			
Rec	4,000	603.264,280	4.657.686,265	388,340	388,345	0,005	137,6165	0	-3,01%			
Rec	5,000	603.265,111	4.657.685,708	388,312	388,315	0,003	137,6165	0	-3,01%			
Rec	6,000	603.265,941	4.657.685,151	388,283	388,285	0,002	137,6165	0	-3,01%			
Rec	7,000	603.266,771	4.657.684,594	388,251	388,254	0,003	137,6165	0	-3,01%			
Rec	8,000	603.267,602	4.657.684,037	388,217	388,224	0,007	137,6165	0	-3,01%			
Rec	9,000	603.268,432	4.657.683,479	388,182	388,194	0,012	137,6165	0	-3,01%			
Rec	10,000	603.269,263	4.657.682,922	388,146	388,164	0,018	137,6165	0	-3,01%			
Rec	11,000	603.270,093	4.657.682,365	388,108	388,134	0,026	137,6165	0	-3,01%			
Rec	12,000	603.270,924	4.657.681,808	388,070	388,104	0,034	137,6165	0	-3,01%			
Rec	13,000	603.271,754	4.657.681,251	388,031	388,074	0,043	137,6165	0	-3,01%			
Rec	14,000	603.272,585	4.657.680,694	387,993	388,044	0,051	137,6165	0	-3,01%			
Rec	15,000	603.273,415	4.657.680,137	387,967	388,014	0,047	137,6165	0	-3,01%			
Rec	16,000	603.274,246	4.657.679,580	387,941	387,984	0,043	137,6165	0	-3,01%			
Rec	17,000	603.275,076	4.657.679,023	387,914	387,954	0,040	137,6165	0	-3,01%			
Rec	18,000	603.275,906	4.657.678,466	387,887	387,924	0,037	137,6165	0	-3,01%			
Rec	19,000	603.276,737	4.657.677,909	387,860	387,894	0,034	137,6165	0	-3,01%			
Rec	20,000	603.277,567	4.657.677,351	387,832	387,864	0,032	137,6165	0	-3,01%			
Rec	21,000	603.278,398	4.657.676,794	387,803	387,833	0,030	137,6165	0	-3,01%			
Rec	22,000	603.279,228	4.657.676,237	387,774	387,803	0,029	137,6165	0	-3,01%			
Rec	23,000	603.280,059	4.657.675,680	387,741	387,773	0,032	137,6165	0	-3,01%			
Rec	24,000	603.280,889	4.657.675,123	387,655	387,743	0,088	137,6165	0	-3,01%			
Rec	25,000	603.281,720	4.657.674,566	387,629	387,713	0,084	137,6165	0	-3,01%			
Rec	26,000	603.282,550	4.657.674,009	387,610	387,683	0,073	137,6165	0	-3,01%			
Rec	27,000	603.283,380	4.657.673,452	387,571	387,653	0,082	137,6165	0	-3,01%			
Rec	28,000	603.284,211	4.657.672,895	387,527	387,623	0,096	137,6165	0	-3,01%			
Rec	29,000	603.285,041	4.657.672,338	387,482	387,593	0,111	137,6165	0	-3,01%			
Rec	30,000	603.285,872	4.657.671,781	387,436	387,563	0,127	137,6165	0	-3,01%			
Rec	31,000	603.286,702	4.657.671,223	387,390	387,533	0,143	137,6165	0	-3,01%			
Rec	32,000	603.287,533	4.657.670,666	387,344	387,503	0,159	137,6165	0	-3,01%			
Rec	33,000	603.288,363	4.657.670,109	387,297	387,473	0,176	137,6165	0	-3,01%			
Rec	34,000	603.289,194	4.657.669,552	387,250	387,442	0,192	137,6165	0	-3,01%			
Rec	34,508	603.289,616	4.657.669,269	387,227	387,427	0,201	137,6165	0	-3,01%		T.E.	
Rec	35,000	603.290,024	4.657.668,995	387,204	387,412	0,208	137,6165	0	-3,25%			
Rec	36,000	603.290,855	4.657.668,438	387,157	387,377	0,220	137,6165	0	-3,75%			
Rec	37,000	603.291,685	4.657.667,881	387,110	387,337	0,227	137,6165	0	-4,25%			
Rec	38,000	603.292,515	4.657.667,324	387,063	387,292	0,229	137,6165	0	-4,75%			
Rec	39,000	603.293,346	4.657.666,767	387,016	387,242	0,226	137,6165	0	-5,25%			
Cur	39,635	603.293,874	4.657.666,413	386,907	387,207	0,300	137,6165	100	-5,57%	P.S.	V.	ODT Ø500 L=6,25m
Cur	40,000	603.294,176	4.657.666,209	386,787	387,187	0,400	137,8486	100	-5,75%			
Cur	41,000	603.295,002	4.657.665,645	386,548	387,127	0,579	138,4852	100	-6,25%			
Cur	42,000	603.295,821	4.657.665,072	386,444	387,062	0,618	139,1219	100	-6,75%			
Cur	43,000	603.296,636	4.657.664,492	386,357	386,992	0,635	139,7585	100	-7,25%			
Cur	44,000	603.297,444	4.657.663,903	386,273	386,916	0,643	140,3951	100	-7,75%			
Cur	44,500	603.297,846	4.657.663,606	386,289	386,877	0,589	140,7134	100	-8,00%			ODT Ø500 L=6,25m
Cur	44,762	603.298,056	4.657.663,449	386,297	386,856	0,559	140,8802	100	-8,13%		T.S.	
Cur	45,000	603.298,246	4.657.663,306	386,304	386,837	0,533	141,0317	100	-8,14%			
Cur	46,000	603.299,043	4.657.662,701	386,256	386,755	0,499	141,6683	100	-8,14%			
Cur	47,000	603.299,833	4.657.662,089	386,209	386,674	0,465	142,3050	100	-8,14%			
Cur	47,147	603.299,949	4.657.661,998	386,202	386,662	0,460	142,3985	100	-8,14%		T.E.	
Cur	48,000	603.300,617	4.657.661,468	386,162	386,594	0,432	142,9416	100	-7,71%			
Cur	49,000	603.301,395	4.657.660,840	386,125	386,520	0,395	143,5782	100	-7,21%			
Cur	50,000	603.302,166	4.657.660,203	386,103	386,450	0,347	144,2148	100	-6,71%			
Cur	51,000	603.302,932	4.657.659,560	386,082	386,385	0,303	144,8514	100	-6,21%			
Cur	52,000	603.303,690	4.657.658,908	386,060	386,326	0,266	145,4881	100	-5,71%			
Cur	53,000	603.304,442	4.657.658,249	386,039	386,271	0,232	146,1247	100	-5,21%			
Cur	54,000	603.305,188	4.657.657,583	386,015	386,222	0,207	146,7613	100	-4,71%			
Cur	55,000	603.305,927	4.657.656,909	385,993	386,177	0,184	147,3979	100	-4,21%			
Rec	55,282	603.306,134	4.657.656,717	385,985	386,165	0,180	147,5773	0	-4,07%	P.S.	V.	
Rec	56,000	603.306,660	4.657.656,229	385,964	386,138	0,174	147,5773	0	-3,71%			
Rec	57,000	603.307,394	4.657.655,549	385,948	386,103	0,155	147,5773	0	-3,21%			
Rec	58,000	603.308,127	4.657.654,870	385,931	386,073	0,142	147,5773	0	-2,71%			
Rec	59,000	603.308,861	4.657.654,190	385,924	386,049	0,125	147,5773	0	-2,21%			
Rec	60,000	603.309,594	4.657.653,510	385,894	386,029	0,135	147,5773	0	-1,71%			
Rec	61,000	603.310,328	4.657.652,831	385,863	386,015	0,152	147,5773	0	-1,21%			
Rec	62,000	603.311,061	4.657.652,151	385,831	386,005	0,174	147,5773	0	-0,71%			
Rec	63,000	603.311,795	4.657.651,471	385,800	386,000	0,200	147,5773	0	-0,21%			
Rec	63,147	603.311,903	4.657.651,371	385,787	386,000	0,213	147,5773	0	0,00%		T.S.	
Rec	64,000	603.312,528	4.657.650,792	385,769	386,000	0,231	147,5773	0	0,00%			
Rec	65,000	603.313,262	4.657.650,112	385,738	386,000	0,262	147,5773	0	0,00%			
Rec	66,000	603.313,995	4.657.649,432	385,707	386,000	0,293	147,5773	0	0,00%			
Rec	67,000	603.314,729	4.657.648,753	385,676	386,000	0,324	147,5773	0	0,00%			
Rec	68,000	603.315,462	4.657.648,073	385,644	386,000	0,356	147,5773	0	0,00%			
Rec	69,000	603.316,196	4.657.647,393	385,613	386,000	0,387	147,5773	0	0,00%			
Rec	70,000	603.316,929	4.657.646,713	385,582	386,000	0,418	147,5773	0	0,00%			
Rec	71,000	603.317,663	4.657.646,034	385,574	386,000	0,426	147,5773	0	0,00%			
Rec	72,000	603.318,396	4.657.645,354	385,574	386,000	0,426	147,5773	0	0,00%			
Rec	73,000	603.319,130	4.657.644,674	385,575	386,000	0,425	147,5773	0	0,00%			
Rec	74,000	603.319,863	4.657.643,995	385,570	386,000	0,430	147,5773	0	0,00%			
Rec	75,000	603.320,597	4.657.643,315	385,568	386,000	0,432	147,5773	0	0,00%			
	75,047	603.320,631	4.657.643,283	385,568	386,000	0,432	147,5773		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO DC-T17 A-T17

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	602.809,077	4.656.680,043	378,928	378,928	0,000	194,7350	0	-1,00%			
Rec	1,000	602.809,160	4.656.679,047	378,992	378,918	-0,074	194,7350	0	-1,00%			
Rec	2,000	602.809,242	4.656.678,050	379,020	378,908	-0,112	194,7350	0	-1,00%			
Rec	3,000	602.809,325	4.656.677,054	379,019	378,898	-0,121	194,7350	0	-1,00%			
Rec	4,000	602.809,408	4.656.676,057	379,012	378,888	-0,124	194,7350	0	-1,00%			
Rec	5,000	602.809,490	4.656.675,060	379,001	378,878	-0,123	194,7350	0	-1,00%			
Rec	6,000	602.809,573	4.656.674,062	377,668	378,868	1,200	194,7350	0	-1,00%		T.E.	
Rec	6,002	602.809,573	4.656.674,062	377,668	378,868	1,200	194,7350	0	-1,01%	P.S.		ODT Ø1.000 L=6,50m
Rec	7,000	602.809,655	4.656.673,067	378,961	378,842	-0,119	194,7350	0	-4,26%			
Rec	8,000	602.809,738	4.656.672,071	378,940	378,783	-0,157	194,7350	0	-7,52%		V.	
Rec	9,000	602.809,821	4.656.671,074	378,933	378,691	-0,242	194,7350	0	-10,78%			
Rec	10,000	602.809,903	4.656.670,077	378,929	378,567	-0,362	194,7350	0	-14,04%		T.S.	
	10,478	602.809,943	4.656.669,601	378,500	378,500	0,000	194,7350		-14,04%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	602.806,376	4.655.861,576	377,063	377,063	0,000	81,8554	0	10,67%			
Rec	1,000	602.807,336	4.655.861,858	377,217	377,170	-0,047	81,8554	0	10,67%			ODT Ø500 L=7,50m
Rec	2,000	602.808,295	4.655.862,139	377,371	377,276	-0,095	81,8554	0	10,67%			
Rec	3,000	602.809,255	4.655.862,420	377,524	377,383	-0,141	81,8554	0	10,67%			
Rec	4,000	602.810,215	4.655.862,701	377,678	377,490	-0,188	81,8554	0	10,67%			
Rec	4,122	602.810,332	4.655.862,735	377,695	377,503	-0,192	81,8554	0	10,67%		T.E.	
Rec	5,000	602.811,174	4.655.862,982	377,816	377,595	-0,221	81,8554	0	10,17%			
Rec	6,000	602.812,134	4.655.863,263	377,936	377,693	-0,243	81,8554	0	9,60%			
Rec	7,000	602.813,093	4.655.863,545	378,061	377,787	-0,274	81,8554	0	9,03%			
Rec	8,000	602.814,053	4.655.863,826	378,190	377,874	-0,316	81,8554	0	8,46%			
Rec	9,000	602.815,013	4.655.864,107	378,313	377,956	-0,357	81,8554	0	7,89%			
Rec	10,000	602.815,972	4.655.864,388	378,418	378,032	-0,386	81,8554	0	7,32%			
Rec	11,000	602.816,932	4.655.864,669	378,492	378,102	-0,390	81,8554	0	6,74%			
Rec	12,000	602.817,892	4.655.864,951	378,534	378,167	-0,367	81,8554	0	6,17%			
Rec	13,000	602.818,851	4.655.865,232	378,565	378,225	-0,340	81,8554	0	5,60%			
Cur	13,462	602.819,295	4.655.865,362	378,562	378,251	-0,311	81,8554	20	5,34%	P.S.	V.	
Cur	14,000	602.819,813	4.655.865,506	378,588	378,279	-0,309	83,5681	20	5,03%			
Cur	15,000	602.820,786	4.655.865,737	378,627	378,326	-0,301	86,7512	20	4,46%			
Cur	16,000	602.821,769	4.655.865,919	378,614	378,368	-0,246	89,9343	20	3,89%			
Cur	17,000	602.822,760	4.655.866,052	378,579	378,404	-0,175	93,1174	20	3,32%			
Cur	18,000	602.823,757	4.655.866,135	378,551	378,434	-0,117	96,3005	20	2,74%			
Cur	19,000	602.824,757	4.655.866,168	378,532	378,459	-0,073	99,4836	20	2,17%			
Cur	20,000	602.825,756	4.655.866,151	378,529	378,478	-0,051	102,6667	20	1,60%			
Cur	21,000	602.826,753	4.655.866,084	378,506	378,491	-0,015	105,8498	20	1,03%			
Cur	22,000	602.827,746	4.655.865,967	378,496	378,498	0,002	109,0329	20	0,46%			
Cur	22,802	602.828,538	4.655.865,838	378,513	378,500	-0,013	111,5858	20	0,00%		T.S.	
Cur	23,000	602.828,732	4.655.865,801	378,517	378,500	-0,017	112,2160	20	0,00%			
Rec	23,919	602.829,630	4.655.865,606	378,541	378,500	-0,041	115,1400	0	0,00%	P.S.		
Rec	24,000	602.829,709	4.655.865,586	378,540	378,500	-0,040	115,1400	0	0,00%			
Rec	25,000	602.830,681	4.655.865,351	378,530	378,500	-0,030	115,1400	0	0,00%			
Rec	26,000	602.831,653	4.655.865,115	378,495	378,500	0,005	115,1400	0	0,00%			
Rec	27,000	602.832,624	4.655.864,880	378,489	378,500	0,011	115,1400	0	0,00%			
Rec	28,000	602.833,596	4.655.864,644	378,440	378,500	0,060	115,1400	0	0,00%			
Rec	29,000	602.834,568	4.655.864,408	378,353	378,500	0,147	115,1400	0	0,00%			
Rec	30,000	602.835,540	4.655.864,173	378,265	378,500	0,235	115,1400	0	0,00%			
Rec	31,000	602.836,512	4.655.863,937	378,178	378,500	0,322	115,1400	0	0,00%			
Rec	32,000	602.837,484	4.655.863,702	378,093	378,500	0,407	115,1400	0	0,00%			
Rec	33,000	602.838,456	4.655.863,466	378,087	378,500	0,413	115,1400	0	0,00%			
Rec	34,000	602.839,427	4.655.863,230	378,086	378,500	0,414	115,1400	0	0,00%			
Rec	35,000	602.840,399	4.655.862,995	378,082	378,500	0,418	115,1400	0	0,00%			
Rec	36,000	602.841,371	4.655.862,759	378,004	378,500	0,496	115,1400	0	0,00%			
Rec	37,000	602.842,343	4.655.862,524	378,036	378,500	0,464	115,1400	0	0,00%			
Rec	38,000	602.843,315	4.655.862,288	378,067	378,500	0,433	115,1400	0	0,00%			
Rec	39,000	602.844,287	4.655.862,053	378,098	378,500	0,402	115,1400	0	0,00%			
Rec	40,000	602.845,259	4.655.861,817	378,130	378,500	0,370	115,1400	0	0,00%			
Rec	41,000	602.846,230	4.655.861,581	378,161	378,500	0,339	115,1400	0	0,00%			
Rec	42,000	602.847,202	4.655.861,346	378,192	378,500	0,308	115,1400	0	0,00%			
Rec	43,000	602.848,174	4.655.861,110	378,224	378,500	0,276	115,1400	0	0,00%			
Rec	44,000	602.849,146	4.655.860,875	378,255	378,500	0,245	115,1400	0	0,00%			
Rec	45,000	602.850,118	4.655.860,639	378,287	378,500	0,213	115,1400	0	0,00%			
Rec	46,000	602.851,090	4.655.860,403	378,318	378,500	0,182	115,1400	0	0,00%			
Rec	47,000	602.852,062	4.655.860,168	378,344	378,500	0,156	115,1400	0	0,00%			
Rec	48,000	602.853,033	4.655.859,932	378,350	378,500	0,150	115,1400	0	0,00%			
Rec	49,000	602.854,005	4.655.859,697	378,360	378,500	0,140	115,1400	0	0,00%			
Rec	50,000	602.854,977	4.655.859,461	378,367	378,500	0,133	115,1400	0	0,00%			
Rec	51,000	602.855,949	4.655.859,226	378,366	378,500	0,134	115,1400	0	0,00%			
Rec	52,000	602.856,921	4.655.858,990	378,353	378,500	0,147	115,1400	0	0,00%			
Rec	53,000	602.857,893	4.655.858,754	378,338	378,500	0,162	115,1400	0	0,00%			
Rec	54,000	602.858,865	4.655.858,519	378,320	378,500	0,180	115,1400	0	0,00%			
Rec	55,000	602.859,836	4.655.858,283	378,304	378,500	0,196	115,1400	0	0,00%			
Rec	56,000	602.860,808	4.655.858,048	378,287	378,500	0,213	115,1400	0	0,00%			
	56,689	602.861,478	4.655.857,885	378,274	378,500	0,226	115,1400		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	603.475,714	4.655.607,853	367,202	367,202	0,000	328,1135	0	-1,34%			
Rec	1,000	603.474,810	4.655.608,280	367,224	367,189	-0,035	328,1135	0	-1,34%			
Rec	2,000	603.473,906	4.655.608,708	367,239	367,175	-0,064	328,1135	0	-1,34%			
Cur	2,740	603.473,237	4.655.609,024	367,250	367,165	-0,085	328,1135	10	-1,34%	P.S.		
Cur	3,000	603.473,004	4.655.609,138	367,254	367,162	-0,092	329,7657	10	-1,34%			
Cur	4,000	603.472,135	4.655.609,633	367,266	367,149	-0,117	336,1319	10	-1,34%			
Cur	5,000	603.471,320	4.655.610,212	367,273	367,135	-0,138	342,4981	10	-1,34%			
Cur	6,000	603.470,567	4.655.610,869	367,276	367,122	-0,154	348,8643	10	-1,34%			
Rec	6,906	603.469,944	4.655.611,527	367,275	367,110	-0,165	354,6322	0	-1,34%	P.S.		
Rec	7,000	603.469,883	4.655.611,598	367,275	367,108	-0,167	354,6322	0	-1,34%			
Rec	8,000	603.469,229	4.655.612,354	367,271	367,095	-0,176	354,6322	0	-1,34%			
Rec	9,000	603.468,575	4.655.613,111	367,268	367,082	-0,186	354,6322	0	-1,34%			
Rec	10,000	603.467,921	4.655.613,868	367,265	367,068	-0,197	354,6322	0	-1,34%			
Rec	11,000	603.467,268	4.655.614,624	367,262	367,055	-0,207	354,6322	0	-1,34%			
Rec	12,000	603.466,614	4.655.615,381	367,259	367,042	-0,217	354,6322	0	-1,34%			
Rec	13,000	603.465,960	4.655.616,138	367,242	367,028	-0,214	354,6322	0	-1,34%			
Rec	14,000	603.465,306	4.655.616,894	367,211	367,015	-0,196	354,6322	0	-1,34%			
Rec	15,000	603.464,652	4.655.617,651	367,174	367,001	-0,173	354,6322	0	-1,34%			
Rec	16,000	603.463,998	4.655.618,407	367,135	366,988	-0,147	354,6322	0	-1,34%			
Rec	17,000	603.463,345	4.655.619,164	367,102	366,975	-0,127	354,6322	0	-1,34%			
Rec	18,000	603.462,691	4.655.619,921	367,072	366,961	-0,111	354,6322	0	-1,34%			
Rec	19,000	603.462,037	4.655.620,677	367,043	366,948	-0,095	354,6322	0	-1,34%			
Rec	20,000	603.461,383	4.655.621,434	367,013	366,935	-0,078	354,6322	0	-1,34%			
Rec	21,000	603.460,729	4.655.622,191	366,998	366,921	-0,077	354,6322	0	-1,34%			
Rec	22,000	603.460,075	4.655.622,947	366,994	366,908	-0,086	354,6322	0	-1,34%			
Rec	23,000	603.459,422	4.655.623,704	366,958	366,894	-0,064	354,6322	0	-1,34%			
Rec	24,000	603.458,768	4.655.624,461	366,943	366,881	-0,062	354,6322	0	-1,34%			
Cur	24,399	603.458,507	4.655.624,762	366,937	366,876	-0,061	354,6322	-50	-1,34%	P.S.		
Cur	25,000	603.458,111	4.655.625,215	366,929	366,868	-0,061	353,8664	-50	-1,34%			
Cur	26,000	603.457,441	4.655.625,957	366,902	366,854	-0,048	352,5932	-50	-1,34%			
Cur	27,000	603.456,756	4.655.626,685	366,866	366,841	-0,025	351,3199	-50	-1,34%			
Cur	28,000	603.456,056	4.655.627,400	366,830	366,828	-0,002	350,0467	-50	-1,34%			
Cur	29,000	603.455,343	4.655.628,101	366,794	366,814	0,020	348,7734	-50	-1,34%			
Cur	30,000	603.454,615	4.655.628,787	366,758	366,801	0,043	347,5002	-50	-1,34%			
Cur	31,000	603.453,874	4.655.629,458	366,774	366,787	0,013	346,2270	-50	-1,34%			
Cur	32,000	603.453,120	4.655.630,115	366,771	366,774	0,003	344,9537	-50	-1,34%			
Cur	33,000	603.452,353	4.655.630,756	366,768	366,761	-0,007	343,6805	-50	-1,34%			
Cur	34,000	603.451,573	4.655.631,382	366,765	366,747	-0,018	342,4072	-50	-1,34%			
Cur	35,000	603.450,780	4.655.631,992	366,748	366,734	-0,014	341,1340	-50	-1,34%			
Cur	36,000	603.449,976	4.655.632,586	366,732	366,721	-0,011	339,8608	-50	-1,34%			
Cur	37,000	603.449,160	4.655.633,164	366,716	366,707	-0,009	338,5875	-50	-1,34%			
Cur	38,000	603.448,332	4.655.633,725	366,701	366,694	-0,007	337,3143	-50	-1,34%			
Cur	39,000	603.447,494	4.655.634,270	366,685	366,680	-0,005	336,0410	-50	-1,34%			
Cur	40,000	603.446,644	4.655.634,798	366,670	366,667	-0,003	334,7678	-50	-1,34%			
Cur	41,000	603.445,785	4.655.635,308	366,541	366,654	0,113	333,4946	-50	-1,34%			
Cur	42,000	603.444,915	4.655.635,802	366,487	366,640	0,153	332,2213	-50	-1,34%			
Cur	43,000	603.444,036	4.655.636,278	366,433	366,627	0,194	330,9481	-50	-1,34%			
Cur	44,000	603.443,147	4.655.636,736	366,378	366,614	0,236	329,6748	-50	-1,34%			
Cur	44,625	603.442,587	4.655.637,014	366,343	366,605	0,262	328,8791	-50	-1,34%		T.E.	
Cur	45,000	603.442,249	4.655.637,177	366,322	366,600	0,278	328,4016	-50	-1,29%			
Cur	46,000	603.441,343	4.655.637,599	366,266	366,588	0,322	327,1284	-50	-1,15%			
Cur	47,000	603.440,428	4.655.638,003	366,258	366,577	0,319	325,8551	-50	-1,02%			
Cur	48,000	603.439,506	4.655.638,389	366,288	366,568	0,280	324,5819	-50	-0,89%			
Cur	49,000	603.438,575	4.655.638,757	366,317	366,559	0,242	323,3086	-50	-0,75%			
Cur	50,000	603.437,638	4.655.639,105	366,347	366,553	0,206	322,0354	-50	-0,62%			
Cur	51,000	603.436,694	4.655.639,435	366,376	366,547	0,171	320,7622	-50	-0,49%			
Cur	52,000	603.435,744	4.655.639,746	366,405	366,543	0,138	319,4889	-50	-0,35%			
Cur	53,000	603.434,787	4.655.640,038	366,424	366,540	0,116	318,2157	-50	-0,22%			
Cur	54,000	603.433,825	4.655.640,310	366,434	366,538	0,104	316,9424	-50	-0,09%			
Rec	54,513	603.433,329	4.655.640,443	366,440	366,538	0,098	316,2886	0	-0,02%	P.S.	V.	ODT Ø500 L=6,00m
Rec	55,000	603.432,858	4.655.640,566	366,446	366,538	0,092	316,2886	0	0,05%			
Rec	56,000	603.431,891	4.655.640,819	366,458	366,539	0,081	316,2886	0	0,18%			
Rec	57,000	603.430,924	4.655.641,072	366,470	366,542	0,072	316,2886	0	0,31%			
Rec	58,000	603.429,956	4.655.641,325	366,482	366,546	0,064	316,2886	0	0,45%			
Rec	59,000	603.428,989	4.655.641,578	366,492	366,551	0,059	316,2886	0	0,58%			
Rec	60,000	603.428,021	4.655.641,831	366,496	366,557	0,061	316,2886	0	0,71%			
Rec	61,000	603.427,054	4.655.642,085	366,504	366,565	0,061	316,2886	0	0,85%			
Rec	62,000	603.426,086	4.655.642,338	366,512	366,574	0,062	316,2886	0	0,98%			
Rec	63,000	603.425,119	4.655.642,591	366,519	366,585	0,066	316,2886	0	1,11%			
Rec	64,000	603.424,151	4.655.642,844	366,527	366,596	0,069	316,2886	0	1,25%			
Rec	64,401	603.423,764	4.655.642,945	366,530	366,601	0,072	316,2886	0	1,30%		T.S.	
Rec	65,000	603.423,184	4.655.643,097	366,534	366,609	0,075	316,2886	0	1,30%			
Rec	66,000	603.422,217	4.655.643,350	366,542	366,622	0,080	316,2886	0	1,30%			
Rec	67,000	603.421,249	4.655.643,603	366,549	366,635	0,086	316,2886	0	1,30%			
Rec	68,000	603.420,282	4.655.643,856	366,557	366,648	0,091	316,2886	0	1,30%			
Rec	69,000	603.419,314	4.655.644,109	366,557	366,661	0,104	316,2886	0	1,30%			
Rec	70,000	603.418,347	4.655.644,362	366,557	366,674	0,117	316,2886	0	1,30%			
Rec	71,000	603.417,379	4.655.644,615	366,557	366,687	0,130	316,2886	0	1,30%			
Rec	72,000	603.416,412	4.655.644,868	366,557	366,700	0,143	316,2886	0	1,30%			
Rec	73,000	603.415,444	4.655.645,121	366,557	366,713	0,156	316,2886	0	1,30%			
Rec	74,000	603.414,477	4.655.645,375	366,557	366,726	0,169	316,2886	0	1,30%			
Rec	75,000	603.413,510	4.655.645,628	366,608	366,739	0,131	316,2886	0	1,30%			
Rec	76,000	603.412,542	4.655.645,881	366,656	366,752	0,096	316,2886	0	1,30%			
Rec	77,000	603.411,575	4.655.646,134	366,683	366,765	0,082	316,2886	0	1,30%			
Rec	78,000	603.410,607	4.655.646,387	366,711	366,778	0,067	316,2886	0	1,30%			
Rec	79,000	603.409,640	4.655.646,640	366,739	366,791	0,052	316,2886	0	1,30%			

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REPLANTEO CAMINO TRAMO T17-T18 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	80,000	603.408,672	4.655.646,893	366,766	366,804	0,038	316,2886	0	1,30%			
Rec	81,000	603.407,705	4.655.647,146	366,794	366,817	0,023	316,2886	0	1,30%			
Rec	82,000	603.406,737	4.655.647,399	366,821	366,830	0,009	316,2886	0	1,30%			
Rec	83,000	603.405,770	4.655.647,652	366,849	366,843	-0,006	316,2886	0	1,30%			
Rec	84,000	603.404,803	4.655.647,905	366,875	366,856	-0,019	316,2886	0	1,30%			
Rec	85,000	603.403,835	4.655.648,158	366,888	366,869	-0,019	316,2886	0	1,30%			
Rec	85,211	603.403,631	4.655.648,212	366,891	366,872	-0,019	316,2886	0	1,30%		T.E.	
Rec	86,000	603.402,868	4.655.648,411	366,901	366,883	-0,018	316,2886	0	1,52%			
Rec	87,000	603.401,900	4.655.648,665	366,914	366,900	-0,014	316,2886	0	1,81%			
Rec	88,000	603.400,933	4.655.648,918	366,927	366,919	-0,008	316,2886	0	2,10%			
Rec	89,000	603.399,965	4.655.649,171	366,940	366,942	0,002	316,2886	0	2,38%			
Rec	90,000	603.398,998	4.655.649,424	366,953	366,967	0,014	316,2886	0	2,67%			
Rec	91,000	603.398,030	4.655.649,677	366,964	366,995	0,031	316,2886	0	2,95%			
Rec	92,000	603.397,063	4.655.649,930	366,971	367,026	0,055	316,2886	0	3,24%			
Rec	93,000	603.396,096	4.655.650,183	366,980	367,060	0,080	316,2886	0	3,52%			
Rec	94,000	603.395,128	4.655.650,436	366,989	367,096	0,107	316,2886	0	3,81%			
Rec	95,000	603.394,161	4.655.650,689	366,999	367,136	0,137	316,2886	0	4,10%		V.	
Rec	96,000	603.393,193	4.655.650,942	367,092	367,178	0,086	316,2886	0	4,38%			
Rec	97,000	603.392,226	4.655.651,195	367,125	367,224	0,099	316,2886	0	4,67%			
Rec	98,000	603.391,258	4.655.651,448	367,159	367,272	0,113	316,2886	0	4,95%			
Rec	99,000	603.390,291	4.655.651,702	367,193	367,323	0,130	316,2886	0	5,24%			
Rec	100,000	603.389,323	4.655.651,955	367,226	367,376	0,150	316,2886	0	5,52%			
Rec	101,000	603.388,356	4.655.652,208	367,267	367,433	0,166	316,2886	0	5,81%			
Rec	102,000	603.387,389	4.655.652,461	367,316	367,493	0,177	316,2886	0	6,10%			
Rec	103,000	603.386,421	4.655.652,714	367,359	367,555	0,196	316,2886	0	6,38%			
Rec	104,000	603.385,454	4.655.652,967	367,390	367,620	0,230	316,2886	0	6,67%			
Rec	104,789	603.384,690	4.655.653,167	367,444	367,674	0,229	316,2886	0	6,89%		T.S.	
Rec	105,000	603.384,486	4.655.653,220	367,459	367,688	0,229	316,2886	0	6,89%			
Rec	106,000	603.383,519	4.655.653,473	367,579	367,757	0,178	316,2886	0	6,89%			
Rec	107,000	603.382,551	4.655.653,726	367,700	367,826	0,126	316,2886	0	6,89%			
Rec	108,000	603.381,584	4.655.653,979	367,811	367,895	0,084	316,2886	0	6,89%			
Rec	109,000	603.380,616	4.655.654,232	367,877	367,964	0,087	316,2886	0	6,89%			
Rec	110,000	603.379,649	4.655.654,485	367,723	368,033	0,310	316,2886	0	6,89%			
Rec	111,000	603.378,682	4.655.654,738	367,779	368,102	0,323	316,2886	0	6,89%			
Rec	112,000	603.377,714	4.655.654,992	367,875	368,171	0,296	316,2886	0	6,89%			
Rec	113,000	603.376,747	4.655.655,245	367,984	368,240	0,256	316,2886	0	6,89%			
Rec	114,000	603.375,779	4.655.655,498	368,114	368,309	0,195	316,2886	0	6,89%			
Rec	115,000	603.374,812	4.655.655,751	368,120	368,378	0,258	316,2886	0	6,89%			
Rec	116,000	603.373,844	4.655.656,004	368,153	368,446	0,293	316,2886	0	6,89%			
Rec	117,000	603.372,877	4.655.656,257	368,247	368,515	0,268	316,2886	0	6,89%			
Rec	118,000	603.371,909	4.655.656,510	368,398	368,584	0,186	316,2886	0	6,89%			
Rec	119,000	603.370,942	4.655.656,763	368,540	368,653	0,113	316,2886	0	6,89%			
Rec	120,000	603.369,974	4.655.657,016	368,680	368,722	0,042	316,2886	0	6,89%			
Rec	121,000	603.369,007	4.655.657,269	368,816	368,791	-0,025	316,2886	0	6,89%			
Rec	122,000	603.368,040	4.655.657,522	368,927	368,860	-0,067	316,2886	0	6,89%			
Rec	123,000	603.367,072	4.655.657,775	369,026	368,929	-0,097	316,2886	0	6,89%			
Rec	123,795	603.366,303	4.655.657,977	369,125	368,984	-0,142	316,2886	0	6,89%		T.E.	
Rec	124,000	603.366,105	4.655.658,028	369,151	368,998	-0,153	316,2886	0	6,76%			
Rec	125,000	603.365,137	4.655.658,282	369,218	369,062	-0,156	316,2886	0	6,09%			
Rec	126,000	603.364,170	4.655.658,535	369,310	369,120	-0,190	316,2886	0	5,42%			
Rec	127,000	603.363,202	4.655.658,788	369,387	369,170	-0,217	316,2886	0	4,76%			
Rec	128,000	603.362,235	4.655.659,041	369,231	369,215	-0,016	316,2886	0	4,09%			
Rec	129,000	603.361,267	4.655.659,294	369,206	369,252	0,046	316,2886	0	3,42%			
Rec	130,000	603.360,300	4.655.659,547	369,136	369,283	0,147	316,2886	0	2,76%			
Rec	131,000	603.359,333	4.655.659,800	369,164	369,307	0,143	316,2886	0	2,09%			
Rec	132,000	603.358,365	4.655.660,053	369,281	369,325	0,044	316,2886	0	1,42%			
Cur	132,880	603.357,514	4.655.660,276	369,323	369,335	0,012	316,2886	15	0,84%	P.S.	V.	
Cur	133,000	603.357,398	4.655.660,307	369,323	369,336	0,013	316,7975	15	0,76%			
Cur	134,000	603.356,442	4.655.660,599	369,331	369,340	0,009	321,0416	15	0,09%			
Cur	135,000	603.355,507	4.655.660,955	369,376	369,338	-0,038	325,2857	15	-0,58%			
Cur	136,000	603.354,599	4.655.661,373	369,411	369,329	-0,082	329,5299	15	-1,24%			
Cur	137,000	603.353,720	4.655.661,849	369,435	369,313	-0,122	333,7740	15	-1,91%			
Cur	138,000	603.352,875	4.655.662,384	369,385	369,290	-0,095	338,0181	15	-2,58%			
Cur	139,000	603.352,068	4.655.662,973	369,318	369,261	-0,057	342,2623	15	-3,24%			
Cur	140,000	603.351,301	4.655.663,615	369,243	369,225	-0,018	346,5064	15	-3,91%			
Cur	141,000	603.350,579	4.655.664,307	369,156	369,183	0,027	350,7505	15	-4,58%			
Cur	141,965	603.349,927	4.655.665,018	369,166	369,136	-0,030	354,8461	15	-5,22%		T.S.	
Cur	142,000	603.349,905	4.655.665,045	369,166	369,134	-0,032	354,9947	15	-5,22%			
Cur	143,000	603.349,281	4.655.665,826	369,204	369,082	-0,122	359,2388	15	-5,22%			
Cur	144,000	603.348,711	4.655.666,648	369,195	369,030	-0,165	363,4829	15	-5,22%			
Cur	145,000	603.348,196	4.655.667,505	369,157	368,977	-0,180	367,7270	15	-5,22%			
Cur	146,000	603.347,740	4.655.668,395	369,107	368,925	-0,182	371,9712	15	-5,22%			
Cur	147,000	603.347,345	4.655.669,313	369,067	368,873	-0,194	376,2153	15	-5,22%			
Rec	147,244	603.347,257	4.655.669,541	369,056	368,860	-0,196	377,2518	0	-5,22%	P.S.		
Rec	148,000	603.346,993	4.655.670,249	369,022	368,821	-0,201	377,2518	0	-5,22%			
Rec	149,000	603.346,643	4.655.671,186	368,977	368,768	-0,209	377,2518	0	-5,22%			
Rec	150,000	603.346,293	4.655.672,123	368,917	368,716	-0,201	377,2518	0	-5,22%			
Rec	151,000	603.345,944	4.655.673,060	368,841	368,664	-0,177	377,2518	0	-5,22%			
Rec	152,000	603.345,594	4.655.673,996	368,760	368,612	-0,148	377,2518	0	-5,22%			
Rec	153,000	603.345,244	4.655.674,933	368,651	368,560	-0,091	377,2518	0	-5,22%			
Rec	154,000	603.344,894	4.655.675,870	368,555	368,507	-0,048	377,2518	0	-5,22%			
Rec	155,000	603.344,545	4.655.676,807	368,422	368,455	0,033	377,2518	0	-5,22%			
Rec	156,000	603.344,195	4.655.677,744	368,304	368,403	0,099	377,2518	0	-5,22%			
Rec	157,000	603.343,845	4.655.678,681	368,157	368,351	0,194	377,2518	0	-5,22%			
Rec	158,000	603.343,495	4.655.679,617	368,018	368,299	0,281	377,2518	0	-5,22%			
Rec	159,000	603.343,146	4.655.680,554	367,968	368,246	0,278	377,2518	0	-5,22%			
Rec	160,000	603.342,796	4.655.681,491	367,950	368,194	0,244	377,2518	0	-5,22%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	160,449	603.342,639	4.655.681,912	367,947	368,171	0,224	377,2518	-15	-5,22%	P.S.		
Cur	161,000	603.342,437	4.655.682,424	367,949	368,142	0,193	374,9146	-15	-5,22%			
Cur	162,000	603.342,022	4.655.683,334	367,925	368,090	0,165	370,6704	-15	-5,22%			
Cur	163,000	603.341,548	4.655.684,214	367,855	368,038	0,183	366,4263	-15	-5,22%			
Cur	164,000	603.341,016	4.655.685,061	367,840	367,985	0,145	362,1822	-15	-5,22%			
Cur	165,000	603.340,429	4.655.685,871	367,789	367,933	0,144	357,9380	-15	-5,22%			
Cur	166,000	603.339,790	4.655.686,639	367,698	367,881	0,183	353,6939	-15	-5,22%			
Cur	167,000	603.339,101	4.655.687,363	367,591	367,829	0,238	349,4498	-15	-5,22%			
Cur	168,000	603.338,365	4.655.688,040	367,477	367,777	0,300	345,2056	-15	-5,22%			
Cur	168,074	603.338,308	4.655.688,088	367,469	367,773	0,304	344,8916	-15	-5,22%		T.E.	
Cur	169,000	603.337,585	4.655.688,666	367,364	367,727	0,363	340,9615	-15	-4,76%			
Cur	170,000	603.336,766	4.655.689,239	367,254	367,681	0,427	336,7174	-15	-4,26%			
Cur	171,000	603.335,910	4.655.689,756	367,170	367,641	0,471	332,4732	-15	-3,76%			
Cur	172,000	603.335,022	4.655.690,215	367,049	367,606	0,557	328,2291	-15	-3,26%			
Cur	173,000	603.334,105	4.655.690,613	366,960	367,576	0,616	323,9850	-15	-2,76%			
Cur	174,000	603.333,163	4.655.690,950	366,920	367,551	0,631	319,7408	-15	-2,26%			
Cur	175,000	603.332,201	4.655.691,223	366,891	367,531	0,640	315,4967	-15	-1,76%			
Cur	176,000	603.331,224	4.655.691,432	366,859	367,516	0,657	311,2526	-15	-1,26%		V.	ODT Ø500 L=9,00m
Cur	177,000	603.330,234	4.655.691,575	366,866	367,506	0,640	307,0084	-15	-0,76%			
Cur	178,000	603.329,237	4.655.691,651	366,997	367,501	0,504	302,7643	-15	-0,26%			
Cur	179,000	603.328,237	4.655.691,661	367,019	367,501	0,482	298,5202	-15	0,24%			
Cur	180,000	603.327,239	4.655.691,605	367,033	367,506	0,473	294,2760	-15	0,74%			
Cur	181,000	603.326,247	4.655.691,482	367,061	367,516	0,455	290,0319	-15	1,24%			
Cur	182,000	603.325,265	4.655.691,293	367,120	367,531	0,411	285,7878	-15	1,74%			
Cur	183,000	603.324,298	4.655.691,039	367,177	367,551	0,374	281,5437	-15	2,24%			
Cur	183,926	603.323,419	4.655.690,747	367,213	367,573	0,360	277,6136	-15	2,71%		T.S.	
Cur	184,000	603.323,350	4.655.690,722	367,216	367,575	0,359	277,2995	-15	2,71%			
Cur	185,000	603.322,425	4.655.690,342	367,240	367,602	0,362	273,0554	-15	2,71%			
Cur	186,000	603.321,528	4.655.689,901	367,234	367,630	0,396	268,8113	-15	2,71%			
Cur	187,000	603.320,662	4.655.689,401	367,228	367,657	0,429	264,5671	-15	2,71%			
Rec	187,401	603.320,324	4.655.689,185	367,226	367,667	0,441	262,8632	0	2,71%	P.S.		
Rec	187,885	603.319,920	4.655.688,918	367,224	367,680	0,457	262,8632	0	2,71%		T.E.	
Rec	188,000	603.319,824	4.655.688,855	367,223	367,684	0,461	262,8632	0	2,69%			
Rec	189,000	603.318,990	4.655.688,304	367,222	367,710	0,488	262,8632	0	2,52%			
Rec	190,000	603.318,155	4.655.687,753	367,234	367,734	0,500	262,8632	0	2,35%			
Rec	191,000	603.317,320	4.655.687,203	367,245	367,757	0,512	262,8632	0	2,19%			
Rec	192,000	603.316,486	4.655.686,652	367,257	367,778	0,521	262,8632	0	2,02%			
Rec	193,000	603.315,651	4.655.686,101	367,275	367,797	0,522	262,8632	0	1,85%			
Rec	194,000	603.314,817	4.655.685,550	367,293	367,815	0,522	262,8632	0	1,69%			
Rec	195,000	603.313,982	4.655.684,999	367,311	367,831	0,520	262,8632	0	1,52%			
Rec	196,000	603.313,147	4.655.684,449	367,329	367,845	0,516	262,8632	0	1,35%		V.	
Rec	197,000	603.312,313	4.655.683,898	367,353	367,858	0,505	262,8632	0	1,19%			
Rec	198,000	603.311,478	4.655.683,347	367,424	367,869	0,445	262,8632	0	1,02%			
Rec	199,000	603.310,643	4.655.682,796	367,490	367,878	0,388	262,8632	0	0,85%			
Rec	200,000	603.309,809	4.655.682,245	367,535	367,886	0,351	262,8632	0	0,69%			
Rec	201,000	603.308,974	4.655.681,694	367,579	367,892	0,313	262,8632	0	0,52%			
Rec	202,000	603.308,139	4.655.681,144	367,624	367,896	0,272	262,8632	0	0,35%			
Rec	203,000	603.307,305	4.655.680,593	367,668	367,899	0,231	262,8632	0	0,19%			
Rec	204,000	603.306,470	4.655.680,042	367,705	367,900	0,195	262,8632	0	0,02%			
Rec	204,115	603.306,374	4.655.679,979	367,706	367,900	0,194	262,8632	0	0,00%		T.S.	
Rec	205,000	603.305,636	4.655.679,491	367,715	367,900	0,185	262,8632	0	0,00%			
Rec	206,000	603.304,801	4.655.678,940	367,726	367,900	0,174	262,8632	0	0,00%			
Rec	207,000	603.303,966	4.655.678,390	367,734	367,900	0,166	262,8632	0	0,00%			
Rec	208,000	603.303,132	4.655.677,839	367,733	367,900	0,167	262,8632	0	0,00%			
Rec	209,000	603.302,297	4.655.677,288	367,733	367,900	0,167	262,8632	0	0,00%			
Rec	210,000	603.301,462	4.655.676,737	367,732	367,900	0,168	262,8632	0	0,00%			
Rec	211,000	603.300,628	4.655.676,186	367,732	367,900	0,168	262,8632	0	0,00%			
Rec	212,000	603.299,793	4.655.675,635	367,731	367,900	0,169	262,8632	0	0,00%			
Rec	213,000	603.298,959	4.655.675,085	367,730	367,900	0,170	262,8632	0	0,00%			
Rec	214,000	603.298,124	4.655.674,534	367,730	367,900	0,170	262,8632	0	0,00%			
Rec	215,000	603.297,289	4.655.673,983	367,745	367,900	0,155	262,8632	0	0,00%			
	215,611	603.296,779	4.655.673,646	367,734	367,900	0,166	262,8632		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	604.050,427	4.655.349,277	370,983	370,983	0,000	335,0253	0	0,10%			
Rec	1,000	604.049,574	4.655.349,800	371,189	370,984	-0,205	335,0253	0	0,10%			
Rec	2,000	604.048,722	4.655.350,322	371,558	370,985	-0,573	335,0253	0	0,10%			ODT Ø500 L=11,00m
Rec	3,000	604.047,870	4.655.350,845	371,804	370,986	-0,818	335,0253	0	0,10%			
Rec	4,000	604.047,017	4.655.351,368	371,948	370,987	-0,961	335,0253	0	0,10%			
Rec	5,000	604.046,165	4.655.351,891	372,001	370,988	-1,013	335,0253	0	0,10%			
Rec	6,000	604.045,312	4.655.352,414	372,001	370,989	-1,012	335,0253	0	0,10%			
Rec	7,000	604.044,460	4.655.352,937	372,001	370,990	-1,011	335,0253	0	0,10%			
Rec	8,000	604.043,607	4.655.353,459	372,000	370,991	-1,009	335,0253	0	0,10%			
Rec	9,000	604.042,755	4.655.353,982	371,964	370,992	-0,972	335,0253	0	0,10%			
Rec	10,000	604.041,903	4.655.354,505	371,907	370,993	-0,914	335,0253	0	0,10%		T.E.	
Rec	11,000	604.041,050	4.655.355,028	371,850	370,994	-0,856	335,0253	0	0,10%			
Rec	12,000	604.040,198	4.655.355,551	371,794	370,995	-0,799	335,0253	0	0,09%			
Rec	13,000	604.039,345	4.655.356,074	371,731	370,996	-0,735	335,0253	0	0,09%			
Rec	14,000	604.038,493	4.655.356,596	371,633	370,997	-0,636	335,0253	0	0,08%			
Rec	15,000	604.037,640	4.655.357,119	371,535	370,997	-0,538	335,0253	0	0,08%			
Rec	16,000	604.036,788	4.655.357,642	371,440	370,998	-0,442	335,0253	0	0,07%			
Rec	17,000	604.035,936	4.655.358,165	371,359	370,999	-0,360	335,0253	0	0,07%			
Rec	18,000	604.035,083	4.655.358,688	371,277	370,999	-0,278	335,0253	0	0,06%			
Rec	19,000	604.034,231	4.655.359,211	371,196	371,000	-0,196	335,0253	0	0,06%			
Rec	20,000	604.033,378	4.655.359,734	371,114	371,000	-0,113	335,0253	0	0,05%		V.	
Rec	21,000	604.032,526	4.655.360,256	371,033	371,001	-0,032	335,0253	0	0,05%			
Rec	22,000	604.031,673	4.655.360,779	370,996	371,001	0,005	335,0253	0	0,04%			
Rec	23,000	604.030,821	4.655.361,302	370,991	371,002	0,011	335,0253	0	0,04%			
Rec	24,000	604.029,969	4.655.361,825	370,986	371,002	0,016	335,0253	0	0,03%			
Rec	25,000	604.029,116	4.655.362,348	370,980	371,002	0,022	335,0253	0	0,03%			
Rec	26,000	604.028,264	4.655.362,871	370,974	371,003	0,029	335,0253	0	0,02%			
Rec	27,000	604.027,411	4.655.363,393	370,969	371,003	0,034	335,0253	0	0,02%			
Rec	28,000	604.026,559	4.655.363,916	370,963	371,003	0,040	335,0253	0	0,01%			
Rec	29,000	604.025,706	4.655.364,439	370,966	371,003	0,037	335,0253	0	0,01%			
Rec	30,000	604.024,854	4.655.364,962	370,961	371,003	0,042	335,0253	0	0,00%		T.S.	
Rec	31,000	604.024,002	4.655.365,485	370,959	371,003	0,044	335,0253	0	0,00%			
Rec	32,000	604.023,149	4.655.366,008	370,956	371,003	0,047	335,0253	0	0,00%			
Rec	33,000	604.022,297	4.655.366,530	370,952	371,003	0,051	335,0253	0	0,00%			
Rec	34,000	604.021,444	4.655.367,053	370,948	371,003	0,055	335,0253	0	0,00%			
Rec	35,000	604.020,592	4.655.367,576	370,951	371,003	0,052	335,0253	0	0,00%			
Rec	36,000	604.019,739	4.655.368,099	370,953	371,003	0,050	335,0253	0	0,00%			
Rec	37,000	604.018,887	4.655.368,622	370,949	371,003	0,054	335,0253	0	0,00%			
Rec	38,000	604.018,034	4.655.369,145	370,944	371,003	0,059	335,0253	0	0,00%			
Rec	39,000	604.017,182	4.655.369,667	370,940	371,003	0,063	335,0253	0	0,00%			
Rec	40,000	604.016,330	4.655.370,190	370,937	371,003	0,066	335,0253	0	0,00%			
Rec	41,000	604.015,477	4.655.370,713	370,933	371,003	0,070	335,0253	0	0,00%			
Rec	42,000	604.014,625	4.655.371,236	370,929	371,003	0,074	335,0253	0	0,00%			
Rec	43,000	604.013,772	4.655.371,759	370,925	371,003	0,078	335,0253	0	0,00%			
Rec	44,000	604.012,920	4.655.372,282	370,920	371,003	0,083	335,0253	0	0,00%			
Rec	45,000	604.012,067	4.655.372,804	370,915	371,003	0,088	335,0253	0	0,00%			
Rec	46,000	604.011,215	4.655.373,327	370,911	371,003	0,092	335,0253	0	0,00%			
Rec	47,000	604.010,363	4.655.373,850	370,906	371,003	0,097	335,0253	0	0,00%			
Rec	48,000	604.009,510	4.655.374,373	370,900	371,003	0,103	335,0253	0	0,00%			
Rec	49,000	604.008,658	4.655.374,896	370,895	371,003	0,108	335,0253	0	0,00%			
Rec	50,000	604.007,805	4.655.375,419	370,891	371,003	0,112	335,0253	0	0,00%			
Rec	51,000	604.006,953	4.655.375,941	370,887	371,003	0,116	335,0253	0	0,00%			
Rec	52,000	604.006,100	4.655.376,464	370,885	371,003	0,118	335,0253	0	0,00%			
Rec	53,000	604.005,248	4.655.376,987	370,884	371,003	0,119	335,0253	0	0,00%			
Rec	54,000	604.004,396	4.655.377,510	370,861	371,003	0,142	335,0253	0	0,00%			
Rec	55,000	604.003,543	4.655.378,033	370,837	371,003	0,166	335,0253	0	0,00%			
Rec	56,000	604.002,691	4.655.378,556	370,814	371,003	0,189	335,0253	0	0,00%			
Rec	57,000	604.001,838	4.655.379,078	370,791	371,003	0,212	335,0253	0	0,00%			
Rec	58,000	604.000,986	4.655.379,601	370,784	371,003	0,219	335,0253	0	0,00%			
Rec	59,000	604.000,133	4.655.380,124	370,781	371,003	0,222	335,0253	0	0,00%			
Rec	60,000	603.999,281	4.655.380,647	370,782	371,003	0,221	335,0253	0	0,00%			
Rec	61,000	603.998,429	4.655.381,170	370,787	371,003	0,216	335,0253	0	0,00%			
Rec	62,000	603.997,576	4.655.381,693	370,792	371,003	0,211	335,0253	0	0,00%			
Rec	63,000	603.996,724	4.655.382,216	370,793	371,003	0,210	335,0253	0	0,00%			
Rec	64,000	603.995,871	4.655.382,738	370,785	371,003	0,218	335,0253	0	0,00%			
Rec	65,000	603.995,019	4.655.383,261	370,775	371,003	0,228	335,0253	0	0,00%			
Rec	66,000	603.994,166	4.655.383,784	370,770	371,003	0,233	335,0253	0	0,00%			
Rec	67,000	603.993,314	4.655.384,307	370,764	371,003	0,239	335,0253	0	0,00%			
Rec	68,000	603.992,462	4.655.384,830	370,756	371,003	0,247	335,0253	0	0,00%			
Rec	69,000	603.991,609	4.655.385,353	370,745	371,003	0,258	335,0253	0	0,00%			
Rec	70,000	603.990,757	4.655.385,875	370,733	371,003	0,270	335,0253	0	0,00%			
Rec	71,000	603.989,904	4.655.386,398	370,722	371,003	0,281	335,0253	0	0,00%			
Rec	72,000	603.989,052	4.655.386,921	370,712	371,003	0,291	335,0253	0	0,00%			
Rec	73,000	603.988,199	4.655.387,444	370,702	371,003	0,301	335,0253	0	0,00%			
Rec	74,000	603.987,347	4.655.387,967	370,693	371,003	0,310	335,0253	0	0,00%			
Rec	75,000	603.986,494	4.655.388,490	370,683	371,003	0,320	335,0253	0	0,00%			
Rec	76,000	603.985,642	4.655.389,012	370,674	371,003	0,329	335,0253	0	0,00%			
Rec	77,000	603.984,790	4.655.389,535	370,665	371,003	0,338	335,0253	0	0,00%			
Rec	78,000	603.983,937	4.655.390,058	370,661	371,003	0,342	335,0253	0	0,00%			
Rec	79,000	603.983,085	4.655.390,581	370,659	371,003	0,344	335,0253	0	0,00%			
Rec	80,000	603.982,232	4.655.391,104	370,657	371,003	0,346	335,0253	0	0,00%			
Rec	81,000	603.981,380	4.655.391,627	370,654	371,003	0,349	335,0253	0	0,00%			
Rec	82,000	603.980,527	4.655.392,149	370,648	371,003	0,355	335,0253	0	0,00%			
Rec	83,000	603.979,675	4.655.392,672	370,647	371,003	0,356	335,0253	0	0,00%			
Rec	84,000	603.978,823	4.655.393,195	370,643	371,003	0,360	335,0253	0	0,00%			
Rec	85,000	603.977,970	4.655.393,718	370,680	371,003	0,323	335,0253	0	0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	86,000	603.977,118	4.655.394,241	370,722	371,003	0,281	335,0253	0	0,00%			
Rec	87,000	603.976,265	4.655.394,764	370,765	371,003	0,238	335,0253	0	0,00%			
Rec	88,000	603.975,413	4.655.395,286	370,808	371,003	0,195	335,0253	0	0,00%			
Rec	89,000	603.974,560	4.655.395,809	370,850	371,003	0,153	335,0253	0	0,00%			
Rec	90,000	603.973,708	4.655.396,332	370,893	371,003	0,110	335,0253	0	0,00%			
Rec	91,000	603.972,856	4.655.396,855	370,915	371,003	0,088	335,0253	0	0,00%			
Rec	92,000	603.972,003	4.655.397,378	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	93,000	603.971,151	4.655.397,901	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	94,000	603.970,298	4.655.398,423	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	95,000	603.969,446	4.655.398,946	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	96,000	603.968,593	4.655.399,469	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	97,000	603.967,741	4.655.399,992	370,912	371,003	0,091	335,0253	0	0,00%			
Rec	98,000	603.966,889	4.655.400,515	370,910	371,003	0,093	335,0253	0	0,00%			
Rec	99,000	603.966,036	4.655.401,038	370,911	371,003	0,092	335,0253	0	0,00%			
Rec	100,000	603.965,184	4.655.401,561	370,912	371,003	0,091	335,0253	0	0,00%			
Rec	101,000	603.964,331	4.655.402,083	370,914	371,003	0,089	335,0253	0	0,00%			
Rec	102,000	603.963,479	4.655.402,606	370,916	371,003	0,087	335,0253	0	0,00%			
Rec	103,000	603.962,626	4.655.403,129	370,919	371,003	0,084	335,0253	0	0,00%			
Rec	104,000	603.961,774	4.655.403,652	370,921	371,003	0,082	335,0253	0	0,00%			
Rec	105,000	603.960,922	4.655.404,175	370,923	371,003	0,080	335,0253	0	0,00%			
Rec	106,000	603.960,069	4.655.404,698	370,926	371,003	0,077	335,0253	0	0,00%			
Rec	107,000	603.959,217	4.655.405,220	370,928	371,003	0,075	335,0253	0	0,00%			
Rec	108,000	603.958,364	4.655.405,743	370,931	371,003	0,072	335,0253	0	0,00%			
Rec	109,000	603.957,512	4.655.406,266	370,933	371,003	0,070	335,0253	0	0,00%			
Rec	109,700	603.956,915	4.655.406,632	370,934	371,003	0,069	335,0253	0	0,00%		T.E.	
Rec	110,000	603.956,659	4.655.406,789	370,935	371,003	0,068	335,0253	0	0,01%			
Rec	111,000	603.955,807	4.655.407,312	370,938	371,003	0,065	335,0253	0	0,03%			
Rec	112,000	603.954,954	4.655.407,835	370,940	371,004	0,064	335,0253	0	0,06%			
Rec	113,000	603.954,102	4.655.408,357	370,943	371,004	0,061	335,0253	0	0,08%			
Rec	114,000	603.953,250	4.655.408,880	370,945	371,005	0,060	335,0253	0	0,11%			
Rec	115,000	603.952,397	4.655.409,403	370,948	371,007	0,059	335,0253	0	0,13%			
Rec	116,000	603.951,545	4.655.409,926	370,950	371,008	0,058	335,0253	0	0,16%			
Rec	117,000	603.950,692	4.655.410,449	370,953	371,010	0,057	335,0253	0	0,18%			
Rec	118,000	603.949,840	4.655.410,972	370,955	371,012	0,057	335,0253	0	0,21%			
Rec	119,000	603.948,987	4.655.411,494	370,958	371,014	0,056	335,0253	0	0,23%			
Rec	120,000	603.948,135	4.655.412,017	370,961	371,016	0,055	335,0253	0	0,26%		V.	
Rec	121,000	603.947,283	4.655.412,540	370,963	371,019	0,056	335,0253	0	0,28%			
Rec	122,000	603.946,430	4.655.413,063	370,966	371,022	0,056	335,0253	0	0,31%			
Rec	123,000	603.945,578	4.655.413,586	370,968	371,025	0,057	335,0253	0	0,33%			
Rec	124,000	603.944,725	4.655.414,109	370,971	371,029	0,058	335,0253	0	0,36%			
Rec	125,000	603.943,873	4.655.414,631	370,973	371,032	0,059	335,0253	0	0,38%			
Rec	126,000	603.943,020	4.655.415,154	370,976	371,036	0,060	335,0253	0	0,41%			
Rec	127,000	603.942,168	4.655.415,677	370,978	371,040	0,062	335,0253	0	0,43%			
Rec	128,000	603.941,316	4.655.416,200	370,981	371,045	0,064	335,0253	0	0,46%			
Rec	129,000	603.940,463	4.655.416,723	370,983	371,050	0,067	335,0253	0	0,48%			
Rec	130,000	603.939,611	4.655.417,246	370,986	371,055	0,069	335,0253	0	0,51%			
Rec	130,300	603.939,355	4.655.417,402	370,987	371,056	0,069	335,0253	0	0,52%		T.S.	
Rec	131,000	603.938,758	4.655.417,768	370,989	371,060	0,071	335,0253	0	0,52%			
Rec	132,000	603.937,906	4.655.418,291	370,991	371,065	0,074	335,0253	0	0,52%			
Rec	133,000	603.937,053	4.655.418,814	370,994	371,070	0,076	335,0253	0	0,52%			
Rec	134,000	603.936,201	4.655.419,337	370,996	371,075	0,079	335,0253	0	0,52%			
Rec	135,000	603.935,349	4.655.419,860	370,999	371,080	0,081	335,0253	0	0,52%			
Rec	136,000	603.934,496	4.655.420,383	371,203	371,085	-0,118	335,0253	0	0,52%			
Rec	137,000	603.933,644	4.655.420,906	371,581	371,091	-0,490	335,0253	0	0,52%			
Rec	138,000	603.932,791	4.655.421,428	371,220	371,096	-0,124	335,0253	0	0,52%			
Rec	139,000	603.931,939	4.655.421,951	371,213	371,101	-0,112	335,0253	0	0,52%			
Rec	140,000	603.931,086	4.655.422,474	371,206	371,106	-0,100	335,0253	0	0,52%			
Rec	141,000	603.930,234	4.655.422,997	371,200	371,111	-0,089	335,0253	0	0,52%			
Rec	142,000	603.929,382	4.655.423,520	371,192	371,116	-0,076	335,0253	0	0,52%			
Rec	143,000	603.928,529	4.655.424,043	371,185	371,121	-0,064	335,0253	0	0,52%			
Rec	144,000	603.927,677	4.655.424,565	371,179	371,127	-0,052	335,0253	0	0,52%			
Rec	145,000	603.926,824	4.655.425,088	371,176	371,132	-0,044	335,0253	0	0,52%			
Rec	146,000	603.925,972	4.655.425,611	371,175	371,137	-0,038	335,0253	0	0,52%			
Rec	147,000	603.925,119	4.655.426,134	371,173	371,142	-0,031	335,0253	0	0,52%			
Rec	148,000	603.924,267	4.655.426,657	371,172	371,147	-0,025	335,0253	0	0,52%			
Rec	149,000	603.923,414	4.655.427,180	371,174	371,152	-0,022	335,0253	0	0,52%			
Rec	150,000	603.922,562	4.655.427,702	371,177	371,158	-0,019	335,0253	0	0,52%			
Rec	150,337	603.922,275	4.655.427,879	371,179	371,159	-0,019	335,0253	0	0,52%		T.E.	
Rec	151,000	603.921,710	4.655.428,225	371,182	371,163	-0,019	335,0253	0	0,56%			
Rec	152,000	603.920,857	4.655.428,748	371,186	371,169	-0,017	335,0253	0	0,63%			
Rec	153,000	603.920,005	4.655.429,271	371,189	371,175	-0,014	335,0253	0	0,69%			
Rec	154,000	603.919,152	4.655.429,794	371,189	371,183	-0,006	335,0253	0	0,76%			
Rec	155,000	603.918,300	4.655.430,317	371,191	371,190	-0,001	335,0253	0	0,83%			
Rec	156,000	603.917,447	4.655.430,839	371,194	371,199	0,005	335,0253	0	0,89%			
Rec	157,000	603.916,595	4.655.431,362	371,197	371,208	0,011	335,0253	0	0,96%			
Rec	158,000	603.915,743	4.655.431,885	371,201	371,218	0,017	335,0253	0	1,03%			
Rec	159,000	603.914,890	4.655.432,408	371,205	371,229	0,024	335,0253	0	1,09%			
Rec	160,000	603.914,038	4.655.432,931	371,209	371,240	0,031	335,0253	0	1,16%		V.	
Rec	161,000	603.913,185	4.655.433,454	371,210	371,252	0,042	335,0253	0	1,23%			
Rec	162,000	603.912,333	4.655.433,976	371,213	371,265	0,052	335,0253	0	1,29%			
Rec	163,000	603.911,480	4.655.434,499	371,210	371,278	0,068	335,0253	0	1,36%			
Rec	164,000	603.910,628	4.655.435,022	371,200	371,292	0,092	335,0253	0	1,43%			
Rec	165,000	603.909,776	4.655.435,545	371,190	371,306	0,116	335,0253	0	1,49%			
Rec	166,000	603.908,923	4.655.436,068	371,179	371,322	0,143	335,0253	0	1,56%			
Rec	167,000	603.908,071	4.655.436,591	371,180	371,338	0,158	335,0253	0	1,63%			
Rec	168,000	603.907,218	4.655.437,113	371,184	371,354	0,170	335,0253	0	1,69%			
Rec	169,000	603.906,366	4.655.437,636	371,189	371,371	0,182	335,0253	0	1,76%			

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REPLANTEO CAMINO TRAMO T17-T18 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	169,663	603.905,801	4.655.437,983	371,191	371,383	0,192	335,0253	0	1,80%		T.S.	
Rec	170,000	603.905,513	4.655.438,159	371,192	371,389	0,197	335,0253	0	1,80%			
Rec	171,000	603.904,661	4.655.438,682	371,194	371,407	0,213	335,0253	0	1,80%			
Rec	172,000	603.903,809	4.655.439,205	371,195	371,425	0,230	335,0253	0	1,80%			
Rec	173,000	603.902,956	4.655.439,728	371,196	371,443	0,247	335,0253	0	1,80%			
Rec	174,000	603.902,104	4.655.440,250	371,197	371,461	0,264	335,0253	0	1,80%			
Rec	175,000	603.901,251	4.655.440,773	371,200	371,480	0,280	335,0253	0	1,80%			
Rec	176,000	603.900,399	4.655.441,296	371,203	371,498	0,295	335,0253	0	1,80%			
Rec	177,000	603.899,546	4.655.441,819	371,215	371,516	0,301	335,0253	0	1,80%			
Rec	178,000	603.898,694	4.655.442,342	371,232	371,534	0,302	335,0253	0	1,80%			
Rec	179,000	603.897,842	4.655.442,865	371,250	371,552	0,302	335,0253	0	1,80%			
Rec	180,000	603.896,989	4.655.443,388	371,267	371,570	0,303	335,0253	0	1,80%			
Rec	180,983	603.896,151	4.655.443,901	371,285	371,587	0,303	335,0253	0	1,80%		T.E.	
Rec	181,000	603.896,137	4.655.443,910	371,285	371,588	0,303	335,0253	0	1,80%			
Rec	182,000	603.895,284	4.655.444,433	371,301	371,605	0,304	335,0253	0	1,70%			
Rec	183,000	603.894,432	4.655.444,956	371,301	371,622	0,321	335,0253	0	1,60%			
Rec	184,000	603.893,579	4.655.445,479	371,301	371,637	0,336	335,0253	0	1,50%			
Rec	185,000	603.892,727	4.655.446,002	371,303	371,652	0,349	335,0253	0	1,40%			
Rec	186,000	603.891,874	4.655.446,525	371,307	371,665	0,358	335,0253	0	1,30%			
Rec	187,000	603.891,022	4.655.447,047	371,308	371,678	0,370	335,0253	0	1,20%			
Rec	188,000	603.890,170	4.655.447,570	371,314	371,689	0,375	335,0253	0	1,10%			
Rec	189,000	603.889,317	4.655.448,093	371,322	371,700	0,378	335,0253	0	1,00%			
Rec	190,000	603.888,465	4.655.448,616	371,327	371,709	0,382	335,0253	0	0,90%		V.	
Rec	191,000	603.887,612	4.655.449,139	371,332	371,718	0,386	335,0253	0	0,80%			
Rec	192,000	603.886,760	4.655.449,662	371,363	371,725	0,362	335,0253	0	0,70%			
Rec	193,000	603.885,907	4.655.450,184	371,373	371,732	0,359	335,0253	0	0,60%			
Rec	194,000	603.885,055	4.655.450,707	371,362	371,737	0,375	335,0253	0	0,50%			
Rec	195,000	603.884,203	4.655.451,230	371,354	371,742	0,388	335,0253	0	0,40%			
Rec	196,000	603.883,350	4.655.451,753	371,349	371,745	0,396	335,0253	0	0,30%			
Rec	197,000	603.882,498	4.655.452,276	371,347	371,748	0,401	335,0253	0	0,20%			
Rec	198,000	603.881,645	4.655.452,799	371,337	371,749	0,412	335,0253	0	0,10%			
Rec	199,000	603.880,793	4.655.453,321	371,329	371,750	0,421	335,0253	0	0,00%			
Rec	190,017	603.888,450	4.655.448,625	371,329	371,750	0,421	335,0253	0	0,00%		T.S.	
Rec	200,000	603.879,940	4.655.453,844	371,321	371,750	0,429	335,0253	0	0,00%			
Rec	201,000	603.879,088	4.655.454,367	371,308	371,750	0,442	335,0253	0	0,00%			
Rec	202,000	603.878,236	4.655.454,890	371,295	371,750	0,455	335,0253	0	0,00%			
Rec	203,000	603.877,383	4.655.455,413	371,276	371,750	0,474	335,0253	0	0,00%			
Rec	204,000	603.876,531	4.655.455,936	371,261	371,750	0,489	335,0253	0	0,00%			
Rec	205,000	603.875,678	4.655.456,458	371,211	371,750	0,539	335,0253	0	0,00%			
Rec	206,000	603.874,826	4.655.456,981	371,270	371,750	0,480	335,0253	0	0,00%			
Rec	207,000	603.873,973	4.655.457,504	371,279	371,750	0,471	335,0253	0	0,00%			
Rec	208,000	603.873,121	4.655.458,027	371,285	371,750	0,465	335,0253	0	0,00%			
Rec	209,000	603.872,269	4.655.458,550	371,292	371,750	0,458	335,0253	0	0,00%			
	209,380	603.871,944	4.655.458,749	371,304	371,750	0,446	335,0253		0,00%			

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REPLANTEO CAMINO TRAMO T17-T18 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	604.052,695	4.655.347,910	371,251	371,251	0,000	135,1411	0	4,48%			
Rec	1,000	604.053,547	4.655.347,386	371,329	371,296	-0,033	135,1411	0	4,48%			
Rec	2,000	604.054,398	4.655.346,861	371,350	371,341	-0,009	135,1411	0	4,48%			ODT Ø500 L=12,00m
Rec	3,000	604.055,250	4.655.346,337	371,372	371,385	0,013	135,1411	0	4,48%			
Rec	4,000	604.056,101	4.655.345,812	371,353	371,430	0,077	135,1411	0	4,48%			
Rec	5,000	604.056,952	4.655.345,288	371,334	371,475	0,141	135,1411	0	4,48%			
Rec	6,000	604.057,804	4.655.344,764	371,315	371,520	0,205	135,1411	0	4,48%			
Rec	7,000	604.058,655	4.655.344,239	371,296	371,564	0,268	135,1411	0	4,48%			
Rec	8,000	604.059,507	4.655.343,715	371,277	371,609	0,332	135,1411	0	4,48%			
Rec	9,000	604.060,358	4.655.343,190	371,280	371,654	0,374	135,1411	0	4,48%			
Rec	10,000	604.061,210	4.655.342,666	371,284	371,699	0,415	135,1411	0	4,48%			
Rec	11,000	604.062,061	4.655.342,142	371,288	371,743	0,455	135,1411	0	4,48%			
Rec	12,000	604.062,913	4.655.341,617	371,324	371,788	0,464	135,1411	0	4,48%			
Rec	13,000	604.063,764	4.655.341,093	371,365	371,833	0,468	135,1411	0	4,48%			
Rec	14,000	604.064,616	4.655.340,569	371,406	371,878	0,472	135,1411	0	4,48%			
Rec	15,000	604.065,467	4.655.340,044	371,446	371,922	0,476	135,1411	0	4,48%			
Rec	16,000	604.066,319	4.655.339,520	371,499	371,967	0,468	135,1411	0	4,48%			
Rec	17,000	604.067,170	4.655.338,995	371,547	372,012	0,465	135,1411	0	4,48%			
Rec	18,000	604.068,022	4.655.338,471	371,594	372,057	0,463	135,1411	0	4,48%			
Rec	19,000	604.068,873	4.655.337,947	371,638	372,101	0,463	135,1411	0	4,48%			
Rec	20,000	604.069,725	4.655.337,422	371,685	372,146	0,461	135,1411	0	4,48%			
Rec	21,000	604.070,576	4.655.336,898	371,745	372,191	0,446	135,1411	0	4,48%			
Rec	22,000	604.071,428	4.655.336,373	371,797	372,236	0,439	135,1411	0	4,48%			
Rec	23,000	604.072,279	4.655.335,849	371,836	372,281	0,445	135,1411	0	4,48%			
Rec	24,000	604.073,131	4.655.335,325	371,859	372,325	0,466	135,1411	0	4,48%			
Rec	25,000	604.073,982	4.655.334,800	371,919	372,370	0,451	135,1411	0	4,48%			
Rec	26,000	604.074,834	4.655.334,276	371,980	372,415	0,435	135,1411	0	4,48%			
Rec	27,000	604.075,685	4.655.333,752	371,974	372,460	0,486	135,1411	0	4,48%			
Rec	28,000	604.076,537	4.655.333,227	371,965	372,504	0,539	135,1411	0	4,48%			
Rec	29,000	604.077,388	4.655.332,703	371,948	372,549	0,601	135,1411	0	4,48%			
Rec	30,000	604.078,239	4.655.332,178	371,940	372,594	0,654	135,1411	0	4,48%			
Rec	31,000	604.079,091	4.655.331,654	371,936	372,639	0,703	135,1411	0	4,48%			
Rec	32,000	604.079,942	4.655.331,130	371,935	372,683	0,748	135,1411	0	4,48%			
Rec	33,000	604.080,794	4.655.330,605	371,934	372,728	0,794	135,1411	0	4,48%			
Rec	34,000	604.081,645	4.655.330,081	371,928	372,773	0,845	135,1411	0	4,48%			
Rec	35,000	604.082,497	4.655.329,556	371,923	372,818	0,895	135,1411	0	4,48%			
Rec	36,000	604.083,348	4.655.329,032	371,937	372,862	0,925	135,1411	0	4,48%			
Rec	37,000	604.084,200	4.655.328,508	371,934	372,907	0,973	135,1411	0	4,48%			
Rec	38,000	604.085,051	4.655.327,983	371,934	372,952	1,018	135,1411	0	4,48%			
Rec	39,000	604.085,903	4.655.327,459	371,886	372,997	1,111	135,1411	0	4,48%			
Rec	40,000	604.086,754	4.655.326,935	371,995	373,041	1,046	135,1411	0	4,48%			
Rec	41,000	604.087,606	4.655.326,410	372,034	373,086	1,052	135,1411	0	4,48%			
Rec	42,000	604.088,457	4.655.325,886	372,069	373,131	1,062	135,1411	0	4,48%			
Rec	43,000	604.089,309	4.655.325,361	372,103	373,176	1,073	135,1411	0	4,48%			
Rec	44,000	604.090,160	4.655.324,837	372,187	373,221	1,034	135,1411	0	4,48%			
Rec	44,500	604.090,586	4.655.324,575	372,221	373,243	1,021	135,1411	0	4,48%			ODT Ø1.000 L=10,50m
Rec	45,000	604.091,012	4.655.324,313	372,256	373,265	1,009	135,1411	0	4,48%			
Rec	46,000	604.091,863	4.655.323,788	372,323	373,310	0,987	135,1411	0	4,48%			
Rec	47,000	604.092,715	4.655.323,264	372,390	373,355	0,965	135,1411	0	4,48%			
Rec	48,000	604.093,566	4.655.322,739	372,457	373,400	0,943	135,1411	0	4,48%			
Rec	49,000	604.094,418	4.655.322,215	372,524	373,444	0,920	135,1411	0	4,48%			
Rec	50,000	604.095,269	4.655.321,691	372,580	373,489	0,909	135,1411	0	4,48%			
Rec	51,000	604.096,121	4.655.321,166	372,634	373,534	0,900	135,1411	0	4,48%			
Rec	52,000	604.096,972	4.655.320,642	372,688	373,579	0,891	135,1411	0	4,48%			
Rec	53,000	604.097,824	4.655.320,117	372,985	373,623	0,638	135,1411	0	4,48%			
Rec	54,000	604.098,675	4.655.319,593	373,257	373,668	0,411	135,1411	0	4,48%			
Rec	55,000	604.099,526	4.655.319,069	373,324	373,713	0,389	135,1411	0	4,48%			
Rec	56,000	604.100,378	4.655.318,544	373,335	373,758	0,423	135,1411	0	4,48%			
Rec	57,000	604.101,229	4.655.318,020	373,346	373,802	0,456	135,1411	0	4,48%			
Rec	58,000	604.102,081	4.655.317,496	373,356	373,847	0,491	135,1411	0	4,48%			
Rec	59,000	604.102,932	4.655.316,971	373,376	373,892	0,516	135,1411	0	4,48%			
Rec	60,000	604.103,784	4.655.316,447	373,419	373,937	0,518	135,1411	0	4,48%			
Rec	61,000	604.104,635	4.655.315,922	373,462	373,981	0,519	135,1411	0	4,48%			
Rec	62,000	604.105,487	4.655.315,398	373,501	374,026	0,525	135,1411	0	4,48%			
Rec	63,000	604.106,338	4.655.314,874	373,547	374,071	0,524	135,1411	0	4,48%			
Rec	64,000	604.107,190	4.655.314,349	373,624	374,116	0,492	135,1411	0	4,48%			
Rec	65,000	604.108,041	4.655.313,825	373,632	374,160	0,528	135,1411	0	4,48%			
Rec	66,000	604.108,893	4.655.313,300	373,615	374,205	0,590	135,1411	0	4,48%			
Rec	67,000	604.109,744	4.655.312,776	374,062	374,250	0,188	135,1411	0	4,48%			
Rec	68,000	604.110,596	4.655.312,252	374,482	374,295	-0,187	135,1411	0	4,48%			
Rec	69,000	604.111,447	4.655.311,727	374,631	374,340	-0,291	135,1411	0	4,48%			
Rec	70,000	604.112,299	4.655.311,203	374,589	374,384	-0,205	135,1411	0	4,48%			
Cur	70,113	604.112,395	4.655.311,143	374,584	374,389	-0,195	135,1411	-200	4,48%	P.S.		
Cur	71,000	604.113,151	4.655.310,680	374,553	374,429	-0,124	134,8589	-200	4,48%			
Cur	72,000	604.114,006	4.655.310,162	374,579	374,474	-0,105	134,5405	-200	4,48%			
Cur	73,000	604.114,864	4.655.309,648	374,606	374,519	-0,087	134,2222	-200	4,48%			
Cur	74,000	604.115,724	4.655.309,138	374,634	374,563	-0,071	133,9039	-200	4,48%			
Cur	75,000	604.116,587	4.655.308,632	374,661	374,608	-0,053	133,5856	-200	4,48%			
Cur	76,000	604.117,452	4.655.308,131	374,688	374,653	-0,035	133,2673	-200	4,48%			
Cur	77,000	604.118,320	4.655.307,634	374,708	374,698	-0,010	132,9490	-200	4,48%			
Cur	78,000	604.119,190	4.655.307,141	374,726	374,742	0,016	132,6307	-200	4,48%			
Cur	79,000	604.120,063	4.655.306,653	374,745	374,787	0,042	132,3124	-200	4,48%			
Cur	80,000	604.120,938	4.655.306,169	374,766	374,832	0,066	131,9941	-200	4,48%			
Cur	81,000	604.121,816	4.655.305,690	374,791	374,877	0,086	131,6758	-200	4,48%			
Cur	82,000	604.122,696	4.655.305,215	374,821	374,921	0,100	131,3574	-200	4,48%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	83,000	604.123,578	4.655.304,744	374,856	374,966	0,110	131,0391	-200	4,48%			
Cur	84,000	604.124,463	4.655.304,278	374,899	375,011	0,112	130,7208	-200	4,48%			
Cur	85,000	604.125,350	4.655.303,816	374,943	375,056	0,113	130,4025	-200	4,48%			
Cur	86,000	604.126,239	4.655.303,358	374,989	375,100	0,111	130,0842	-200	4,48%			
Cur	87,000	604.127,130	4.655.302,906	375,114	375,145	0,031	129,7659	-200	4,48%			
Cur	88,000	604.128,024	4.655.302,457	375,229	375,190	-0,039	129,4476	-200	4,48%			
Cur	89,000	604.128,920	4.655.302,013	375,350	375,235	-0,115	129,1293	-200	4,48%			
Cur	90,000	604.129,818	4.655.301,574	375,436	375,280	-0,156	128,8110	-200	4,48%			
Cur	91,000	604.130,719	4.655.301,139	375,479	375,324	-0,155	128,4927	-200	4,48%			
Cur	92,000	604.131,621	4.655.300,708	375,557	375,369	-0,188	128,1743	-200	4,48%			
Cur	93,000	604.132,526	4.655.300,282	375,635	375,414	-0,221	127,8560	-200	4,48%			
Cur	94,000	604.133,433	4.655.299,861	375,713	375,459	-0,254	127,5377	-200	4,48%			
Cur	95,000	604.134,342	4.655.299,444	375,792	375,503	-0,289	127,2194	-200	4,48%			
Cur	96,000	604.135,253	4.655.299,031	375,864	375,548	-0,316	126,9011	-200	4,48%			
Cur	97,000	604.136,166	4.655.298,623	375,871	375,593	-0,278	126,5828	-200	4,48%			
Cur	98,000	604.137,081	4.655.298,220	375,875	375,638	-0,237	126,2645	-200	4,48%			
Cur	99,000	604.137,998	4.655.297,822	375,879	375,682	-0,197	125,9462	-200	4,48%			
Cur	100,000	604.138,917	4.655.297,427	375,882	375,727	-0,155	125,6279	-200	4,48%			
Cur	101,000	604.139,838	4.655.297,038	375,880	375,772	-0,108	125,3096	-200	4,48%			
Cur	102,000	604.140,761	4.655.296,653	375,873	375,817	-0,056	124,9912	-200	4,48%			
Cur	103,000	604.141,686	4.655.296,273	375,863	375,861	-0,002	124,6729	-200	4,48%			
Cur	104,000	604.142,613	4.655.295,897	375,869	375,906	0,037	124,3546	-200	4,48%			
Cur	105,000	604.143,542	4.655.295,526	375,890	375,951	0,061	124,0363	-200	4,48%			
Cur	106,000	604.144,472	4.655.295,160	375,919	375,996	0,077	123,7180	-200	4,48%			
Cur	107,000	604.145,404	4.655.294,798	375,951	376,040	0,089	123,3997	-200	4,48%			
Cur	108,000	604.146,338	4.655.294,441	375,986	376,085	0,099	123,0814	-200	4,48%			
Cur	109,000	604.147,274	4.655.294,089	376,018	376,130	0,112	122,7631	-200	4,48%			
Cur	110,000	604.148,212	4.655.293,741	376,211	376,175	-0,036	122,4448	-200	4,48%			
Cur	111,000	604.149,151	4.655.293,398	376,404	376,220	-0,184	122,1265	-200	4,48%			
Cur	112,000	604.150,092	4.655.293,060	376,467	376,264	-0,203	121,8081	-200	4,48%			
Cur	113,000	604.151,035	4.655.292,727	376,528	376,309	-0,219	121,4898	-200	4,48%			
Cur	114,000	604.151,980	4.655.292,398	376,558	376,354	-0,204	121,1715	-200	4,48%			
Cur	115,000	604.152,926	4.655.292,074	376,585	376,399	-0,186	120,8532	-200	4,48%			
Rec	115,538	604.153,436	4.655.291,901	376,600	376,423	-0,177	120,6818	0	4,48%	P.S.		
Rec	116,000	604.153,873	4.655.291,754	376,613	376,443	-0,170	120,6818	0	4,48%			
Rec	117,000	604.154,821	4.655.291,435	376,768	376,488	-0,280	120,6818	0	4,48%			
Rec	118,000	604.155,768	4.655.291,115	376,914	376,533	-0,381	120,6818	0	4,48%			
Rec	119,000	604.156,716	4.655.290,796	376,927	376,578	-0,349	120,6818	0	4,48%			
Rec	120,000	604.157,664	4.655.290,477	376,940	376,622	-0,318	120,6818	0	4,48%			
Rec	120,476	604.158,115	4.655.290,325	376,946	376,644	-0,302	120,6818	0	4,48%		T.E.	
Rec	121,000	604.158,611	4.655.290,158	376,953	376,668	-0,285	120,6818	0	4,74%			
Rec	122,000	604.159,559	4.655.289,839	376,966	376,718	-0,248	120,6818	0	5,24%			
Rec	123,000	604.160,507	4.655.289,519	376,979	376,773	-0,206	120,6818	0	5,74%			
Rec	124,000	604.161,455	4.655.289,200	376,992	376,832	-0,160	120,6818	0	6,24%			
Rec	125,000	604.162,402	4.655.288,881	377,004	376,897	-0,107	120,6818	0	6,74%			
Rec	126,000	604.163,350	4.655.288,562	377,017	376,967	-0,050	120,6818	0	7,24%			
Rec	127,000	604.164,298	4.655.288,243	377,030	377,042	0,012	120,6818	0	7,74%			
Rec	128,000	604.165,245	4.655.287,923	377,042	377,122	0,080	120,6818	0	8,24%			
Rec	129,000	604.166,193	4.655.287,604	377,055	377,207	0,152	120,6818	0	8,74%			
Rec	130,000	604.167,141	4.655.287,285	377,068	377,297	0,229	120,6818	0	9,24%		V.	
Rec	131,000	604.168,088	4.655.286,966	377,117	377,392	0,275	120,6818	0	9,74%			
Rec	132,000	604.169,036	4.655.286,647	377,166	377,492	0,326	120,6818	0	10,24%			
Rec	133,000	604.169,984	4.655.286,328	377,213	377,596	0,383	120,6818	0	10,74%			
Rec	134,000	604.170,931	4.655.286,008	377,237	377,706	0,469	120,6818	0	11,24%			
Rec	135,000	604.171,879	4.655.285,689	377,290	377,821	0,531	120,6818	0	11,74%			
Rec	136,000	604.172,827	4.655.285,370	377,352	377,941	0,589	120,6818	0	12,24%			
Rec	137,000	604.173,775	4.655.285,051	377,410	378,066	0,656	120,6818	0	12,74%			
Rec	138,000	604.174,722	4.655.284,732	377,471	378,196	0,725	120,6818	0	13,24%			
Rec	139,000	604.175,670	4.655.284,412	377,534	378,331	0,797	120,6818	0	13,74%			
Rec	139,524	604.176,167	4.655.284,245	377,567	378,403	0,836	120,6818	0	14,00%		T.S.	
Rec	140,000	604.176,618	4.655.284,093	377,597	378,470	0,873	120,6818	0	14,00%			
Rec	141,000	604.177,565	4.655.283,774	377,660	378,610	0,950	120,6818	0	14,00%			
Rec	142,000	604.178,513	4.655.283,455	377,723	378,750	1,027	120,6818	0	14,00%			
Rec	143,000	604.179,461	4.655.283,136	377,786	378,890	1,104	120,6818	0	14,00%			
Rec	144,000	604.180,408	4.655.282,817	377,849	379,030	1,181	120,6818	0	14,00%			
Rec	145,000	604.181,356	4.655.282,497	377,912	379,170	1,258	120,6818	0	14,00%			
Rec	146,000	604.182,304	4.655.282,178	377,975	379,310	1,335	120,6818	0	14,00%			
Rec	147,000	604.183,251	4.655.281,859	378,073	379,450	1,377	120,6818	0	14,00%			
Rec	148,000	604.184,199	4.655.281,540	378,213	379,590	1,377	120,6818	0	14,00%			
Rec	149,000	604.185,147	4.655.281,221	378,380	379,730	1,350	120,6818	0	14,00%			
Rec	150,000	604.186,095	4.655.280,901	378,433	379,870	1,437	120,6818	0	14,00%			
Rec	151,000	604.187,042	4.655.280,582	378,476	380,010	1,534	120,6818	0	14,00%			
Rec	152,000	604.187,990	4.655.280,263	378,521	380,150	1,629	120,6818	0	14,00%			
Rec	153,000	604.188,938	4.655.279,944	378,563	380,290	1,727	120,6818	0	14,00%			
Rec	154,000	604.189,885	4.655.279,625	378,611	380,430	1,819	120,6818	0	14,00%			
Rec	155,000	604.190,833	4.655.279,305	378,663	380,570	1,907	120,6818	0	14,00%			
Rec	156,000	604.191,781	4.655.278,986	378,715	380,710	1,995	120,6818	0	14,00%			
Rec	157,000	604.192,728	4.655.278,667	378,767	380,850	2,083	120,6818	0	14,00%			
Rec	158,000	604.193,676	4.655.278,348	378,824	380,990	2,166	120,6818	0	14,00%			
Rec	159,000	604.194,624	4.655.278,029	378,890	381,130	2,240	120,6818	0	14,00%			
Rec	160,000	604.195,571	4.655.277,710	378,948	381,270	2,322	120,6818	0	14,00%			
Rec	161,000	604.196,519	4.655.277,390	378,985	381,410	2,425	120,6818	0	14,00%			
Rec	162,000	604.197,467	4.655.277,071	379,051	381,550	2,499	120,6818	0	14,00%			
Rec	162,100	604.197,562	4.655.277,039	379,060	381,564	2,505	120,6818	0	14,00%		T.E.	
Rec	163,000	604.198,415	4.655.276,752	379,136	381,684	2,548	120,6818	0	12,71%			
Rec	164,000	604.199,362	4.655.276,433	379,220	381,804	2,584	120,6818	0	11,29%			
Rec	165,000	604.200,310	4.655.276,114	379,301	381,910	2,609	120,6818	0	9,86%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	166,000	604.201,258	4.655.275,794	379,383	382,001	2,618	120,6818	0	8,43%			
Rec	167,000	604.202,205	4.655.275,475	379,467	382,079	2,612	120,6818	0	7,00%		V.	
Rec	168,000	604.203,153	4.655.275,156	379,551	382,141	2,590	120,6818	0	5,57%			
Rec	169,000	604.204,101	4.655.274,837	379,635	382,190	2,555	120,6818	0	4,14%			
Rec	170,000	604.205,048	4.655.274,518	379,715	382,224	2,509	120,6818	0	2,71%			
Rec	171,000	604.205,996	4.655.274,199	379,793	382,244	2,451	120,6818	0	1,29%			
Rec	171,900	604.206,849	4.655.273,911	379,863	382,250	2,387	120,6818	0	0,00%	T.S.	T.S.	
Rec	172,000	604.206,944	4.655.273,879	379,871	382,250	2,379	120,6818	0	0,00%			
Rec	173,000	604.207,891	4.655.273,560	379,949	382,250	2,301	120,6818	0	0,00%			
Rec	174,000	604.208,839	4.655.273,241	380,063	382,250	2,187	120,6818	0	0,00%			
Rec	175,000	604.209,787	4.655.272,922	380,250	382,250	2,000	120,6818	0	0,00%			
Rec	176,000	604.210,735	4.655.272,603	380,362	382,250	1,888	120,6818	0	0,00%			
Rec	177,000	604.211,682	4.655.272,283	380,512	382,250	1,738	120,6818	0	0,00%			
Rec	178,000	604.212,630	4.655.271,964	380,614	382,250	1,636	120,6818	0	0,00%			
Rec	179,000	604.213,578	4.655.271,645	380,654	382,250	1,596	120,6818	0	0,00%			
Rec	180,000	604.214,525	4.655.271,326	380,704	382,250	1,546	120,6818	0	0,00%			
Rec	181,000	604.215,473	4.655.271,007	380,761	382,250	1,489	120,6818	0	0,00%			
Rec	182,000	604.216,421	4.655.270,687	380,829	382,250	1,421	120,6818	0	0,00%			
Rec	183,000	604.217,368	4.655.270,368	380,898	382,250	1,352	120,6818	0	0,00%			
Rec	184,000	604.218,316	4.655.270,049	380,968	382,250	1,282	120,6818	0	0,00%			
Rec	185,000	604.219,264	4.655.269,730	381,068	382,250	1,182	120,6818	0	0,00%			
Rec	186,000	604.220,211	4.655.269,411	381,193	382,250	1,057	120,6818	0	0,00%			
Rec	187,000	604.221,159	4.655.269,092	381,326	382,250	0,924	120,6818	0	0,00%			
Rec	188,000	604.222,107	4.655.268,772	381,457	382,250	0,793	120,6818	0	0,00%			
Rec	189,000	604.223,055	4.655.268,453	381,593	382,250	0,657	120,6818	0	0,00%			
Rec	190,000	604.224,002	4.655.268,134	381,733	382,250	0,517	120,6818	0	0,00%			
	190,639	604.224,608	4.655.267,930	381,822	382,250	0,428	120,6818		0,00%			

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	604.978,927	4.654.805,722	360,000	360,000	0,000	355,4010	0	4,07%			
Rec	1,000	604.978,282	4.654.806,487	360,716	360,041	-0,675	355,4010	0	4,07%			
Rec	2,000	604.977,637	4.654.807,251	360,728	360,081	-0,647	355,4010	0	4,07%			ODT Ø500 L=10,00m
Rec	3,000	604.976,993	4.654.808,016	360,744	360,122	-0,622	355,4010	0	4,07%			
Rec	4,000	604.976,348	4.654.808,780	360,766	360,163	-0,603	355,4010	0	4,07%			
Rec	5,000	604.975,703	4.654.809,545	360,792	360,204	-0,588	355,4010	0	4,07%			
Rec	6,000	604.975,059	4.654.810,309	360,818	360,244	-0,574	355,4010	0	4,07%			
Rec	7,000	604.974,414	4.654.811,074	360,847	360,285	-0,562	355,4010	0	4,07%			
Rec	8,000	604.973,770	4.654.811,838	360,880	360,326	-0,554	355,4010	0	4,07%			
Rec	9,000	604.973,125	4.654.812,603	360,910	360,367	-0,543	355,4010	0	4,07%			
Rec	10,000	604.972,480	4.654.813,367	360,932	360,407	-0,525	355,4010	0	4,07%			
Rec	11,000	604.971,836	4.654.814,132	360,953	360,448	-0,505	355,4010	0	4,07%			
Rec	12,000	604.971,191	4.654.814,896	360,973	360,489	-0,484	355,4010	0	4,07%			
Rec	13,000	604.970,546	4.654.815,661	360,992	360,530	-0,462	355,4010	0	4,07%			
Rec	14,000	604.969,902	4.654.816,425	361,024	360,570	-0,454	355,4010	0	4,07%			
Rec	15,000	604.969,257	4.654.817,190	361,069	360,611	-0,458	355,4010	0	4,07%			
Rec	16,000	604.968,612	4.654.817,954	361,117	360,652	-0,465	355,4010	0	4,07%			
Rec	17,000	604.967,968	4.654.818,719	361,153	360,693	-0,460	355,4010	0	4,07%			
Rec	18,000	604.967,323	4.654.819,483	361,201	360,733	-0,468	355,4010	0	4,07%			
Rec	19,000	604.966,678	4.654.820,248	361,252	360,774	-0,478	355,4010	0	4,07%			
Rec	20,000	604.966,034	4.654.821,012	361,298	360,815	-0,483	355,4010	0	4,07%			
Rec	21,000	604.965,389	4.654.821,777	361,338	360,856	-0,482	355,4010	0	4,07%			
Rec	21,450	604.965,099	4.654.822,121	361,356	360,874	-0,482	355,4010	0	4,07%		T.E.	
Rec	22,000	604.964,744	4.654.822,541	361,377	360,896	-0,481	355,4010	0	3,96%			
Rec	23,000	604.964,100	4.654.823,306	361,407	360,935	-0,472	355,4010	0	3,76%			
Rec	24,000	604.963,455	4.654.824,070	361,432	360,971	-0,461	355,4010	0	3,56%			
Rec	25,000	604.962,811	4.654.824,834	361,467	361,006	-0,461	355,4010	0	3,36%			
Rec	26,000	604.962,166	4.654.825,599	361,497	361,039	-0,458	355,4010	0	3,16%			
Rec	27,000	604.961,521	4.654.826,363	361,507	361,069	-0,438	355,4010	0	2,96%			
Rec	28,000	604.960,877	4.654.827,128	361,518	361,098	-0,420	355,4010	0	2,76%			
Rec	29,000	604.960,232	4.654.827,892	361,464	361,125	-0,339	355,4010	0	2,56%			
Rec	30,000	604.959,587	4.654.828,657	361,337	361,149	-0,188	355,4010	0	2,36%			
Rec	31,000	604.958,943	4.654.829,421	361,263	361,172	-0,091	355,4010	0	2,16%		V.	
Rec	32,000	604.958,298	4.654.830,186	361,294	361,192	-0,102	355,4010	0	1,96%			
Rec	33,000	604.957,653	4.654.830,950	361,318	361,211	-0,107	355,4010	0	1,76%			
Rec	34,000	604.957,009	4.654.831,715	361,351	361,228	-0,123	355,4010	0	1,56%			
Rec	35,000	604.956,364	4.654.832,479	361,387	361,242	-0,145	355,4010	0	1,36%			
Rec	36,000	604.955,719	4.654.833,244	361,422	361,255	-0,167	355,4010	0	1,16%			
Rec	37,000	604.955,075	4.654.834,008	361,428	361,266	-0,162	355,4010	0	0,96%			
Rec	38,000	604.954,430	4.654.834,773	361,478	361,274	-0,204	355,4010	0	0,76%			
Rec	39,000	604.953,785	4.654.835,537	361,505	361,281	-0,224	355,4010	0	0,56%			
Rec	40,000	604.953,141	4.654.836,302	361,525	361,286	-0,239	355,4010	0	0,36%			
Rec	40,550	604.952,786	4.654.836,722	361,523	361,287	-0,236	355,4010	0	0,25%		T.S.	
Rec	41,000	604.952,496	4.654.837,066	361,521	361,288	-0,233	355,4010	0	0,25%			
Rec	42,000	604.951,852	4.654.837,831	361,516	361,291	-0,225	355,4010	0	0,25%			
Rec	43,000	604.951,207	4.654.838,595	361,555	361,294	-0,261	355,4010	0	0,25%			
Rec	44,000	604.950,562	4.654.839,360	361,618	361,296	-0,322	355,4010	0	0,25%			
Rec	45,000	604.949,918	4.654.840,124	361,624	361,299	-0,325	355,4010	0	0,25%			
Rec	46,000	604.949,273	4.654.840,889	361,620	361,301	-0,319	355,4010	0	0,25%			
Rec	47,000	604.948,628	4.654.841,653	361,616	361,304	-0,312	355,4010	0	0,25%			
Rec	48,000	604.947,984	4.654.842,418	361,616	361,306	-0,310	355,4010	0	0,25%			
Rec	49,000	604.947,339	4.654.843,182	361,638	361,309	-0,329	355,4010	0	0,25%			
Rec	50,000	604.946,694	4.654.843,947	361,652	361,311	-0,341	355,4010	0	0,25%			
Rec	51,000	604.946,050	4.654.844,711	361,644	361,314	-0,330	355,4010	0	0,25%			
Rec	52,000	604.945,405	4.654.845,475	361,641	361,316	-0,325	355,4010	0	0,25%			
Rec	53,000	604.944,760	4.654.846,240	361,637	361,319	-0,318	355,4010	0	0,25%			
Rec	54,000	604.944,116	4.654.847,004	361,633	361,321	-0,312	355,4010	0	0,25%			
Rec	55,000	604.943,471	4.654.847,769	361,629	361,324	-0,305	355,4010	0	0,25%			
Rec	56,000	604.942,827	4.654.848,533	361,621	361,327	-0,294	355,4010	0	0,25%			
Rec	57,000	604.942,182	4.654.849,298	361,616	361,329	-0,287	355,4010	0	0,25%			
Rec	58,000	604.941,537	4.654.850,062	361,610	361,332	-0,278	355,4010	0	0,25%			
Rec	59,000	604.940,893	4.654.850,827	361,604	361,334	-0,270	355,4010	0	0,25%			
Rec	60,000	604.940,248	4.654.851,591	361,598	361,337	-0,261	355,4010	0	0,25%			
Rec	61,000	604.939,603	4.654.852,356	361,592	361,339	-0,253	355,4010	0	0,25%			
Rec	62,000	604.938,959	4.654.853,120	361,592	361,342	-0,250	355,4010	0	0,25%			
Rec	63,000	604.938,314	4.654.853,885	361,595	361,344	-0,251	355,4010	0	0,25%			
Rec	64,000	604.937,669	4.654.854,649	361,596	361,347	-0,249	355,4010	0	0,25%			
Rec	65,000	604.937,025	4.654.855,414	361,589	361,349	-0,240	355,4010	0	0,25%			
Rec	66,000	604.936,380	4.654.856,178	361,585	361,352	-0,233	355,4010	0	0,25%			
Rec	67,000	604.935,735	4.654.856,943	361,579	361,355	-0,224	355,4010	0	0,25%			
Rec	68,000	604.935,091	4.654.857,707	361,573	361,357	-0,216	355,4010	0	0,25%			
Rec	69,000	604.934,446	4.654.858,472	361,568	361,360	-0,208	355,4010	0	0,25%			
Rec	70,000	604.933,801	4.654.859,236	361,562	361,362	-0,200	355,4010	0	0,25%			
Rec	71,000	604.933,157	4.654.860,001	361,556	361,365	-0,191	355,4010	0	0,25%			
Rec	72,000	604.932,512	4.654.860,765	361,550	361,367	-0,183	355,4010	0	0,25%			
Rec	73,000	604.931,868	4.654.861,530	361,544	361,370	-0,174	355,4010	0	0,25%			
Rec	74,000	604.931,223	4.654.862,294	361,544	361,372	-0,172	355,4010	0	0,25%			
Rec	75,000	604.930,578	4.654.863,059	361,553	361,375	-0,178	355,4010	0	0,25%			
Rec	76,000	604.929,934	4.654.863,823	361,570	361,377	-0,193	355,4010	0	0,25%			
Rec	77,000	604.929,289	4.654.864,588	361,581	361,380	-0,201	355,4010	0	0,25%			
Rec	78,000	604.928,644	4.654.865,352	361,587	361,383	-0,204	355,4010	0	0,25%			
Rec	79,000	604.928,000	4.654.866,116	361,594	361,385	-0,209	355,4010	0	0,25%			
Rec	80,000	604.927,355	4.654.866,881	361,592	361,388	-0,204	355,4010	0	0,25%			
Cur	80,099	604.927,291	4.654.866,957	361,591	361,388	-0,203	355,4010	-200	0,25%	P.S.		
Cur	81,000	604.926,709	4.654.867,644	361,588	361,390	-0,198	355,1142	-200	0,25%			
Cur	82,000	604.926,059	4.654.868,404	361,585	361,393	-0,192	354,7959	-200	0,25%			

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	83,000	604.925,405	4.654.869,161	361,582	361,395	-0,187	354,4776	-200	0,25%			
Cur	84,000	604.924,748	4.654.869,914	361,592	361,398	-0,194	354,1593	-200	0,25%			
Cur	85,000	604.924,086	4.654.870,664	361,607	361,400	-0,207	353,8409	-200	0,25%			
Cur	86,000	604.923,421	4.654.871,411	361,628	361,403	-0,225	353,5226	-200	0,25%			
Cur	87,000	604.922,752	4.654.872,155	361,646	361,405	-0,241	353,2043	-200	0,25%			
Cur	88,000	604.922,080	4.654.872,895	361,657	361,408	-0,249	352,8860	-200	0,25%			
Cur	89,000	604.921,404	4.654.873,631	361,657	361,410	-0,247	352,5677	-200	0,25%			
Cur	90,000	604.920,724	4.654.874,365	361,655	361,413	-0,242	352,2494	-200	0,25%			
Cur	91,000	604.920,040	4.654.875,095	361,654	361,416	-0,238	351,9311	-200	0,25%			
Cur	92,000	604.919,353	4.654.875,821	361,653	361,418	-0,235	351,6128	-200	0,25%			
Cur	93,000	604.918,662	4.654.876,544	361,654	361,421	-0,233	351,2945	-200	0,25%			
Cur	94,000	604.917,968	4.654.877,264	361,654	361,423	-0,231	350,9762	-200	0,25%			
Cur	95,000	604.917,270	4.654.877,980	361,655	361,426	-0,229	350,6578	-200	0,25%			
Cur	96,000	604.916,568	4.654.878,693	361,657	361,428	-0,229	350,3395	-200	0,25%			
Cur	97,000	604.915,863	4.654.879,402	361,659	361,431	-0,228	350,0212	-200	0,25%			
Cur	98,000	604.915,155	4.654.880,107	361,661	361,433	-0,228	349,7029	-200	0,25%			
Cur	99,000	604.914,443	4.654.880,809	361,665	361,436	-0,229	349,3846	-200	0,25%			
Cur	100,000	604.913,727	4.654.881,508	361,668	361,438	-0,230	349,0663	-200	0,25%			
Cur	101,000	604.913,008	4.654.882,203	361,672	361,441	-0,231	348,7480	-200	0,25%			
Cur	102,000	604.912,285	4.654.882,894	361,677	361,444	-0,233	348,4297	-200	0,25%			
Cur	103,000	604.911,559	4.654.883,582	361,682	361,446	-0,236	348,1114	-200	0,25%			
Rec	103,070	604.911,508	4.654.883,629	361,683	361,446	-0,237	348,0892	0	0,25%	P.S.		
Rec	104,000	604.910,831	4.654.884,267	361,688	361,449	-0,239	348,0892	0	0,25%			
Rec	105,000	604.910,103	4.654.884,953	361,693	361,451	-0,242	348,0892	0	0,25%			
Rec	106,000	604.909,375	4.654.885,638	361,699	361,454	-0,245	348,0892	0	0,25%			
Rec	107,000	604.908,647	4.654.886,324	361,707	361,456	-0,251	348,0892	0	0,25%			
Rec	108,000	604.907,919	4.654.887,009	361,710	361,459	-0,251	348,0892	0	0,25%			
Rec	109,000	604.907,191	4.654.887,695	361,710	361,461	-0,249	348,0892	0	0,25%			
Rec	110,000	604.906,463	4.654.888,380	361,720	361,464	-0,256	348,0892	0	0,25%			
Rec	111,000	604.905,735	4.654.889,066	361,726	361,466	-0,260	348,0892	0	0,25%			
Rec	112,000	604.905,007	4.654.889,752	361,729	361,469	-0,260	348,0892	0	0,25%			
Rec	113,000	604.904,279	4.654.890,437	361,737	361,472	-0,265	348,0892	0	0,25%			
Rec	114,000	604.903,551	4.654.891,123	361,746	361,474	-0,272	348,0892	0	0,25%			
Rec	115,000	604.902,823	4.654.891,808	361,755	361,477	-0,278	348,0892	0	0,25%			
Rec	116,000	604.902,095	4.654.892,494	361,764	361,479	-0,285	348,0892	0	0,25%			
Rec	117,000	604.901,367	4.654.893,179	361,773	361,482	-0,291	348,0892	0	0,25%			
Rec	118,000	604.900,639	4.654.893,865	361,758	361,484	-0,274	348,0892	0	0,25%			
Rec	119,000	604.899,911	4.654.894,551	361,752	361,487	-0,265	348,0892	0	0,25%			
Rec	120,000	604.899,183	4.654.895,236	361,725	361,489	-0,236	348,0892	0	0,25%			
Rec	121,000	604.898,455	4.654.895,922	361,720	361,492	-0,228	348,0892	0	0,25%			
Rec	122,000	604.897,727	4.654.896,607	361,731	361,494	-0,237	348,0892	0	0,25%			
Rec	123,000	604.896,999	4.654.897,293	361,742	361,497	-0,245	348,0892	0	0,25%			
Rec	124,000	604.896,271	4.654.897,978	361,733	361,499	-0,234	348,0892	0	0,25%			
Rec	125,000	604.895,543	4.654.898,664	361,689	361,502	-0,187	348,0892	0	0,25%			
Rec	126,000	604.894,815	4.654.899,350	361,655	361,505	-0,150	348,0892	0	0,25%			
Rec	127,000	604.894,087	4.654.900,035	361,613	361,507	-0,106	348,0892	0	0,25%			
Rec	128,000	604.893,359	4.654.900,721	361,519	361,510	-0,009	348,0892	0	0,25%			
Rec	129,000	604.892,631	4.654.901,406	361,498	361,512	0,014	348,0892	0	0,25%			
Rec	130,000	604.891,903	4.654.902,092	361,506	361,515	0,009	348,0892	0	0,25%			
Rec	131,000	604.891,175	4.654.902,777	361,513	361,517	0,004	348,0892	0	0,25%			
Rec	132,000	604.890,447	4.654.903,463	361,432	361,520	0,088	348,0892	0	0,25%			
Rec	133,000	604.889,719	4.654.904,149	361,419	361,522	0,103	348,0892	0	0,25%			
Rec	134,000	604.888,991	4.654.904,834	361,432	361,525	0,093	348,0892	0	0,25%			
Rec	135,000	604.888,263	4.654.905,520	361,444	361,527	0,083	348,0892	0	0,25%			
Rec	136,000	604.887,535	4.654.906,205	361,449	361,530	0,081	348,0892	0	0,25%			
Rec	137,000	604.886,807	4.654.906,891	361,450	361,533	0,083	348,0892	0	0,25%			
Rec	138,000	604.886,079	4.654.907,576	361,452	361,535	0,083	348,0892	0	0,25%			
Rec	139,000	604.885,351	4.654.908,262	361,453	361,538	0,085	348,0892	0	0,25%			
Rec	140,000	604.884,623	4.654.908,948	361,454	361,540	0,086	348,0892	0	0,25%			
Rec	141,000	604.883,895	4.654.909,633	361,456	361,543	0,087	348,0892	0	0,25%			
Rec	142,000	604.883,167	4.654.910,319	361,459	361,545	0,086	348,0892	0	0,25%			
Rec	143,000	604.882,439	4.654.911,004	361,465	361,548	0,083	348,0892	0	0,25%			
Rec	144,000	604.881,711	4.654.911,690	361,472	361,550	0,078	348,0892	0	0,25%			
Rec	145,000	604.880,983	4.654.912,375	361,478	361,553	0,075	348,0892	0	0,25%			
Rec	146,000	604.880,255	4.654.913,061	361,474	361,555	0,081	348,0892	0	0,25%			
Rec	147,000	604.879,527	4.654.913,746	361,451	361,558	0,107	348,0892	0	0,25%			
Rec	148,000	604.878,799	4.654.914,432	361,429	361,561	0,132	348,0892	0	0,25%			
Rec	149,000	604.878,071	4.654.915,118	361,404	361,563	0,159	348,0892	0	0,25%			
Rec	150,000	604.877,343	4.654.915,803	361,385	361,566	0,181	348,0892	0	0,25%			
Rec	151,000	604.876,615	4.654.916,489	361,358	361,568	0,210	348,0892	0	0,25%			
Rec	152,000	604.875,887	4.654.917,174	361,359	361,571	0,212	348,0892	0	0,25%			
Cur	152,872	604.875,252	4.654.917,772	361,361	361,573	0,212	348,0892	100	0,25%	P.S.		
Cur	153,000	604.875,159	4.654.917,860	361,361	361,573	0,212	348,1705	100	0,25%			
Cur	154,000	604.874,435	4.654.918,550	361,359	361,576	0,217	348,8071	100	0,25%			
Cur	155,000	604.873,718	4.654.919,247	361,354	361,578	0,224	349,4437	100	0,25%			
Cur	156,000	604.873,009	4.654.919,952	361,352	361,581	0,229	350,0804	100	0,25%			
Cur	157,000	604.872,306	4.654.920,663	361,343	361,583	0,240	350,7170	100	0,25%			
Cur	158,000	604.871,610	4.654.921,382	361,322	361,586	0,264	351,3536	100	0,25%			
Cur	159,000	604.870,922	4.654.922,107	361,275	361,588	0,313	351,9902	100	0,25%			
Cur	160,000	604.870,241	4.654.922,840	361,239	361,591	0,352	352,6268	100	0,25%			
Cur	161,000	604.869,567	4.654.923,579	361,198	361,594	0,396	353,2635	100	0,25%			
Cur	162,000	604.868,901	4.654.924,324	361,150	361,596	0,446	353,9001	100	0,25%			
Cur	163,000	604.868,243	4.654.925,077	361,098	361,599	0,501	354,5367	100	0,25%			
Cur	164,000	604.867,591	4.654.925,836	361,039	361,601	0,562	355,1733	100	0,25%			
Cur	165,000	604.866,948	4.654.926,601	360,999	361,604	0,605	355,8099	100	0,25%			
Cur	166,000	604.866,312	4.654.927,373	360,991	361,606	0,615	356,4466	100	0,25%			
Rec	166,870	604.865,765	4.654.928,050	360,987	361,608	0,621	357,0007	0	0,25%	P.S.		

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	167,000	604.865,684	4.654.928,151	360,986	361,609	0,623	357,0007	0	0,25%			
Rec	168,000	604.865,058	4.654.928,931	360,980	361,611	0,631	357,0007	0	0,25%			
Rec	169,000	604.864,433	4.654.929,712	360,974	361,614	0,640	357,0007	0	0,25%			
Rec	170,000	604.863,808	4.654.930,492	360,968	361,616	0,648	357,0007	0	0,25%			
Rec	171,000	604.863,183	4.654.931,273	360,963	361,619	0,656	357,0007	0	0,25%			
Rec	172,000	604.862,558	4.654.932,053	360,959	361,622	0,663	357,0007	0	0,25%			
Rec	173,000	604.861,932	4.654.932,834	360,959	361,624	0,665	357,0007	0	0,25%			
Rec	174,000	604.861,307	4.654.933,614	360,960	361,627	0,667	357,0007	0	0,25%			
Rec	175,000	604.860,682	4.654.934,394	360,961	361,629	0,668	357,0007	0	0,25%			
Rec	176,000	604.860,057	4.654.935,175	360,962	361,632	0,670	357,0007	0	0,25%			
Rec	177,000	604.859,431	4.654.935,955	360,965	361,634	0,669	357,0007	0	0,25%			
Rec	178,000	604.858,806	4.654.936,736	360,967	361,637	0,670	357,0007	0	0,25%			
Rec	179,000	604.858,181	4.654.937,516	360,968	361,639	0,671	357,0007	0	0,25%			
Rec	180,000	604.857,556	4.654.938,297	360,971	361,642	0,671	357,0007	0	0,25%			
Rec	181,000	604.856,930	4.654.939,077	360,973	361,644	0,671	357,0007	0	0,25%			
Rec	182,000	604.856,305	4.654.939,857	360,976	361,647	0,671	357,0007	0	0,25%			
Rec	183,000	604.855,680	4.654.940,638	360,979	361,650	0,671	357,0007	0	0,25%			
Cur	183,860	604.855,142	4.654.941,309	360,978	361,652	0,674	357,0007	-100	0,25%	P.S.		
Cur	184,000	604.855,055	4.654.941,418	360,978	361,652	0,674	356,9114	-100	0,25%			
Cur	185,000	604.854,424	4.654.942,195	360,977	361,655	0,678	356,2747	-100	0,25%			
Cur	186,000	604.853,787	4.654.942,965	360,977	361,657	0,680	355,6381	-100	0,25%			
Cur	187,000	604.853,141	4.654.943,728	360,978	361,660	0,682	355,0015	-100	0,25%			
Cur	188,000	604.852,488	4.654.944,486	360,980	361,662	0,682	354,3649	-100	0,25%			
Cur	189,000	604.851,827	4.654.945,236	360,983	361,665	0,682	353,7283	-100	0,25%			
Cur	190,000	604.851,159	4.654.945,980	360,987	361,667	0,680	353,0916	-100	0,25%			
Cur	191,000	604.850,483	4.654.946,717	360,991	361,670	0,679	352,4550	-100	0,25%			
Cur	192,000	604.849,800	4.654.947,448	360,994	361,672	0,678	351,8184	-100	0,25%			
Cur	193,000	604.849,110	4.654.948,171	360,990	361,675	0,685	351,1818	-100	0,25%			
Cur	194,000	604.848,412	4.654.948,888	360,987	361,677	0,690	350,5452	-100	0,25%			
Cur	195,000	604.847,708	4.654.949,598	360,986	361,680	0,694	349,9085	-100	0,25%			
Cur	196,000	604.846,996	4.654.950,300	360,985	361,683	0,698	349,2719	-100	0,25%			
Cur	197,000	604.846,278	4.654.950,996	360,987	361,685	0,698	348,6353	-100	0,25%			
Cur	198,000	604.845,552	4.654.951,684	360,985	361,688	0,703	347,9987	-100	0,25%			
Cur	199,000	604.844,820	4.654.952,365	360,985	361,690	0,705	347,3621	-100	0,25%			
Cur	200,000	604.844,080	4.654.953,038	360,986	361,693	0,707	346,7254	-100	0,25%			
Cur	201,000	604.843,335	4.654.953,704	360,987	361,695	0,708	346,0888	-100	0,25%			
Cur	202,000	604.842,582	4.654.954,363	360,990	361,698	0,708	345,4522	-100	0,25%			
Cur	203,000	604.841,823	4.654.955,014	360,991	361,700	0,709	344,8156	-100	0,25%			
Cur	204,000	604.841,058	4.654.955,657	360,993	361,703	0,710	344,1790	-100	0,25%			
Cur	205,000	604.840,286	4.654.956,293	360,995	361,705	0,710	343,5423	-100	0,25%			
Cur	206,000	604.839,507	4.654.956,921	360,998	361,708	0,710	342,9057	-100	0,25%			
Cur	207,000	604.838,723	4.654.957,541	361,015	361,711	0,696	342,2691	-100	0,25%			
Cur	208,000	604.837,932	4.654.958,153	361,054	361,713	0,659	341,6325	-100	0,25%			
Cur	209,000	604.837,136	4.654.958,758	361,121	361,716	0,595	340,9959	-100	0,25%			
Cur	210,000	604.836,333	4.654.959,354	361,169	361,718	0,549	340,3592	-100	0,25%			
Cur	211,000	604.835,524	4.654.959,942	361,220	361,721	0,501	339,7226	-100	0,25%			
Cur	212,000	604.834,710	4.654.960,523	361,278	361,723	0,445	339,0860	-100	0,25%			
Cur	213,000	604.833,890	4.654.961,095	361,360	361,726	0,366	338,4494	-100	0,25%			
Cur	214,000	604.833,064	4.654.961,658	361,460	361,728	0,268	337,8128	-100	0,25%			
Cur	215,000	604.832,232	4.654.962,214	361,549	361,731	0,182	337,1761	-100	0,25%			
Rec	215,246	604.832,027	4.654.962,349	361,571	361,732	0,161	337,0197	0	0,25%	P.S.		
Rec	216,000	604.831,397	4.654.962,763	361,633	361,733	0,100	337,0197	0	0,25%			
Rec	217,000	604.830,561	4.654.963,313	361,702	361,736	0,034	337,0197	0	0,25%			
Rec	218,000	604.829,725	4.654.963,862	361,759	361,739	-0,020	337,0197	0	0,25%			
Rec	219,000	604.828,890	4.654.964,411	361,794	361,741	-0,053	337,0197	0	0,25%			
Rec	220,000	604.828,054	4.654.964,961	361,796	361,744	-0,052	337,0197	0	0,25%			
Rec	221,000	604.827,218	4.654.965,510	361,805	361,746	-0,059	337,0197	0	0,25%			
Rec	222,000	604.826,383	4.654.966,059	361,798	361,749	-0,049	337,0197	0	0,25%			
Rec	223,000	604.825,547	4.654.966,608	361,778	361,751	-0,027	337,0197	0	0,25%			
Rec	224,000	604.824,712	4.654.967,158	361,759	361,754	-0,005	337,0197	0	0,25%			
Rec	225,000	604.823,876	4.654.967,707	361,726	361,756	0,030	337,0197	0	0,25%			
Rec	226,000	604.823,040	4.654.968,256	361,683	361,759	0,076	337,0197	0	0,25%			
Rec	227,000	604.822,205	4.654.968,806	361,656	361,761	0,105	337,0197	0	0,25%			
Rec	228,000	604.821,369	4.654.969,355	361,626	361,764	0,138	337,0197	0	0,25%			
Rec	229,000	604.820,533	4.654.969,904	361,593	361,766	0,173	337,0197	0	0,25%			
Rec	230,000	604.819,698	4.654.970,453	361,545	361,769	0,224	337,0197	0	0,25%			
Rec	231,000	604.818,862	4.654.971,003	361,498	361,772	0,274	337,0197	0	0,25%			
Rec	232,000	604.818,026	4.654.971,552	361,456	361,774	0,318	337,0197	0	0,25%			
Rec	233,000	604.817,191	4.654.972,101	361,433	361,777	0,344	337,0197	0	0,25%			
Rec	234,000	604.816,355	4.654.972,651	361,375	361,779	0,404	337,0197	0	0,25%			
Rec	235,000	604.815,520	4.654.973,200	361,317	361,782	0,465	337,0197	0	0,25%			
Rec	236,000	604.814,684	4.654.973,749	361,247	361,784	0,537	337,0197	0	0,25%			
Rec	237,000	604.813,848	4.654.974,298	361,198	361,787	0,589	337,0197	0	0,25%			
Rec	238,000	604.813,013	4.654.974,848	361,154	361,789	0,635	337,0197	0	0,25%			
Rec	239,000	604.812,177	4.654.975,397	361,110	361,792	0,682	337,0197	0	0,25%			
Rec	240,000	604.811,341	4.654.975,946	361,066	361,794	0,728	337,0197	0	0,25%			
Rec	241,000	604.810,506	4.654.976,496	361,022	361,797	0,775	337,0197	0	0,25%			
Rec	242,000	604.809,670	4.654.977,045	360,997	361,800	0,803	337,0197	0	0,25%			
Rec	243,000	604.808,834	4.654.977,594	360,995	361,802	0,807	337,0197	0	0,25%			
Rec	244,000	604.807,999	4.654.978,143	360,995	361,805	0,810	337,0197	0	0,25%			
Rec	245,000	604.807,163	4.654.978,693	360,994	361,807	0,813	337,0197	0	0,25%			
Rec	246,000	604.806,328	4.654.979,242	360,994	361,810	0,816	337,0197	0	0,25%			
Rec	247,000	604.805,492	4.654.979,791	360,993	361,812	0,819	337,0197	0	0,25%			
Cur	247,468	604.805,100	4.654.980,049	360,993	361,813	0,820	337,0197	-200	0,25%	P.S.		
Cur	248,000	604.804,656	4.654.980,340	360,993	361,815	0,822	336,8505	-200	0,25%			
Cur	249,000	604.803,817	4.654.980,885	360,993	361,817	0,824	336,5322	-200	0,25%			
Cur	250,000	604.802,976	4.654.981,426	360,994	361,820	0,826	336,2139	-200	0,25%			

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	251,000	604.802,132	4.654.981,962	361,016	361,822	0,806	335,8956	-200	0,25%			
Cur	252,000	604.801,286	4.654.982,494	361,065	361,825	0,760	335,5773	-200	0,25%			
Cur	253,000	604.800,437	4.654.983,023	361,118	361,828	0,710	335,2590	-200	0,25%			
Cur	254,000	604.799,585	4.654.983,546	361,174	361,830	0,656	334,9407	-200	0,25%			
Cur	255,000	604.798,730	4.654.984,066	361,234	361,833	0,599	334,6224	-200	0,25%			
Cur	256,000	604.797,873	4.654.984,581	361,296	361,835	0,539	334,3041	-200	0,25%			
Cur	257,000	604.797,014	4.654.985,092	361,363	361,838	0,475	333,9858	-200	0,25%			
Cur	258,000	604.796,152	4.654.985,599	361,421	361,840	0,419	333,6674	-200	0,25%			
Cur	259,000	604.795,287	4.654.986,101	361,464	361,843	0,379	333,3491	-200	0,25%			
Cur	260,000	604.794,420	4.654.986,599	361,511	361,845	0,334	333,0308	-200	0,25%			
Cur	261,000	604.793,550	4.654.987,093	361,577	361,848	0,271	332,7125	-200	0,25%			
Cur	262,000	604.792,678	4.654.987,582	361,637	361,850	0,213	332,3942	-200	0,25%			
Cur	263,000	604.791,804	4.654.988,067	361,650	361,853	0,203	332,0759	-200	0,25%			
Cur	264,000	604.790,927	4.654.988,548	361,654	361,855	0,201	331,7576	-200	0,25%			
Cur	265,000	604.790,047	4.654.989,024	361,683	361,858	0,175	331,4393	-200	0,25%			
Cur	266,000	604.789,166	4.654.989,496	361,688	361,861	0,173	331,1210	-200	0,25%			
Cur	267,000	604.788,282	4.654.989,963	361,693	361,863	0,170	330,8027	-200	0,25%			
Cur	268,000	604.787,395	4.654.990,426	361,699	361,866	0,167	330,4843	-200	0,25%			
Cur	269,000	604.786,507	4.654.990,885	361,714	361,868	0,154	330,1660	-200	0,25%			
Cur	270,000	604.785,616	4.654.991,339	361,728	361,871	0,143	329,8477	-200	0,25%			
Cur	271,000	604.784,722	4.654.991,789	361,735	361,873	0,138	329,5294	-200	0,25%			
Cur	272,000	604.783,827	4.654.992,234	361,741	361,876	0,135	329,2111	-200	0,25%			
Cur	273,000	604.782,929	4.654.992,675	361,749	361,878	0,129	328,8928	-200	0,25%			
Rec	273,297	604.782,663	4.654.992,804	361,748	361,879	0,131	328,7984	0	0,25%	P.S.		
Rec	274,000	604.782,030	4.654.993,112	361,746	361,881	0,135	328,7984	0	0,25%			
Rec	275,000	604.781,131	4.654.993,549	361,744	361,883	0,139	328,7984	0	0,25%			
Rec	276,000	604.780,231	4.654.993,986	361,718	361,886	0,168	328,7984	0	0,25%			
Rec	277,000	604.779,332	4.654.994,423	361,679	361,889	0,210	328,7984	0	0,25%			
Rec	278,000	604.778,432	4.654.994,860	361,629	361,891	0,262	328,7984	0	0,25%			
Rec	279,000	604.777,533	4.654.995,297	361,583	361,894	0,311	328,7984	0	0,25%			
Rec	280,000	604.776,633	4.654.995,734	361,530	361,896	0,366	328,7984	0	0,25%			
Rec	281,000	604.775,734	4.654.996,171	361,448	361,899	0,451	328,7984	0	0,25%			
Rec	282,000	604.774,835	4.654.996,609	361,354	361,901	0,547	328,7984	0	0,25%			
Rec	283,000	604.773,935	4.654.997,046	361,267	361,904	0,637	328,7984	0	0,25%			
Rec	284,000	604.773,036	4.654.997,483	361,191	361,906	0,715	328,7984	0	0,25%			
Rec	285,000	604.772,136	4.654.997,920	361,132	361,909	0,777	328,7984	0	0,25%			
Rec	286,000	604.771,237	4.654.998,357	361,081	361,911	0,830	328,7984	0	0,25%			
Rec	287,000	604.770,338	4.654.998,794	361,009	361,914	0,905	328,7984	0	0,25%			
Rec	288,000	604.769,438	4.654.999,231	360,988	361,917	0,929	328,7984	0	0,25%			
Rec	289,000	604.768,539	4.654.999,668	360,976	361,919	0,943	328,7984	0	0,25%			
Rec	290,000	604.767,639	4.655.000,105	360,969	361,922	0,953	328,7984	0	0,25%			
Rec	291,000	604.766,740	4.655.000,542	360,962	361,924	0,962	328,7984	0	0,25%			
Rec	292,000	604.765,840	4.655.000,979	360,959	361,927	0,968	328,7984	0	0,25%			
Rec	293,000	604.764,941	4.655.001,417	360,963	361,929	0,966	328,7984	0	0,25%			
Rec	294,000	604.764,042	4.655.001,854	360,967	361,932	0,965	328,7984	0	0,25%			
Rec	295,000	604.763,142	4.655.002,291	360,972	361,934	0,962	328,7984	0	0,25%			
Rec	296,000	604.762,243	4.655.002,728	360,978	361,937	0,959	328,7984	0	0,25%			
Rec	297,000	604.761,343	4.655.003,165	360,987	361,939	0,952	328,7984	0	0,25%			
Rec	298,000	604.760,444	4.655.003,602	360,997	361,942	0,945	328,7984	0	0,25%			
Rec	299,000	604.759,545	4.655.004,039	361,077	361,944	0,867	328,7984	0	0,25%			
Rec	300,000	604.758,645	4.655.004,476	361,177	361,947	0,770	328,7984	0	0,25%			
Rec	301,000	604.757,746	4.655.004,913	361,259	361,950	0,691	328,7984	0	0,25%			
Rec	302,000	604.756,846	4.655.005,350	361,343	361,952	0,609	328,7984	0	0,25%			
Rec	303,000	604.755,947	4.655.005,788	361,429	361,955	0,526	328,7984	0	0,25%			
Rec	304,000	604.755,047	4.655.006,225	361,513	361,957	0,444	328,7984	0	0,25%			
Rec	305,000	604.754,148	4.655.006,662	361,619	361,960	0,341	328,7984	0	0,25%			
Rec	306,000	604.753,249	4.655.007,099	361,721	361,962	0,241	328,7984	0	0,25%			
Rec	307,000	604.752,349	4.655.007,536	361,798	361,965	0,167	328,7984	0	0,25%			
Rec	308,000	604.751,450	4.655.007,973	361,827	361,967	0,140	328,7984	0	0,25%			
Rec	309,000	604.750,550	4.655.008,410	361,881	361,970	0,089	328,7984	0	0,25%			
Cur	309,440	604.750,155	4.655.008,602	361,891	361,971	0,080	328,7984	-200	0,25%	P.S.		
Cur	310,000	604.749,651	4.655.008,846	361,896	361,972	0,076	328,6200	-200	0,25%			
Cur	311,000	604.748,749	4.655.009,279	361,895	361,975	0,080	328,3017	-200	0,25%			
Cur	312,000	604.747,845	4.655.009,707	361,890	361,978	0,088	327,9834	-200	0,25%			
Cur	313,000	604.746,939	4.655.010,130	361,875	361,980	0,105	327,6651	-200	0,25%			
Cur	314,000	604.746,031	4.655.010,549	361,858	361,983	0,125	327,3468	-200	0,25%			
Cur	315,000	604.745,121	4.655.010,963	361,835	361,985	0,150	327,0285	-200	0,25%			
Cur	316,000	604.744,209	4.655.011,372	361,820	361,988	0,168	326,7102	-200	0,25%			
Cur	317,000	604.743,294	4.655.011,778	361,789	361,990	0,201	326,3919	-200	0,25%			
Cur	318,000	604.742,378	4.655.012,178	361,734	361,993	0,259	326,0736	-200	0,25%			
Cur	319,000	604.741,460	4.655.012,574	361,685	361,995	0,310	325,7553	-200	0,25%			
Cur	320,000	604.740,539	4.655.012,965	361,630	361,998	0,368	325,4369	-200	0,25%			
Cur	321,000	604.739,617	4.655.013,352	361,585	362,000	0,415	325,1186	-200	0,25%			
Cur	322,000	604.738,693	4.655.013,734	361,555	362,003	0,448	324,8003	-200	0,25%			
Cur	323,000	604.737,767	4.655.014,112	361,531	362,006	0,475	324,4820	-200	0,25%			
Cur	324,000	604.736,839	4.655.014,484	361,508	362,008	0,500	324,1637	-200	0,25%			
Cur	325,000	604.735,909	4.655.014,853	361,462	362,011	0,549	323,8454	-200	0,25%			
Cur	326,000	604.734,978	4.655.015,216	361,418	362,013	0,595	323,5271	-200	0,25%			
Cur	327,000	604.734,044	4.655.015,575	361,377	362,016	0,639	323,2088	-200	0,25%			
Cur	328,000	604.733,109	4.655.015,929	361,338	362,018	0,680	322,8905	-200	0,25%			
Cur	329,000	604.732,172	4.655.016,279	361,301	362,021	0,720	322,5722	-200	0,25%			
Cur	330,000	604.731,234	4.655.016,624	361,272	362,023	0,751	322,2538	-200	0,25%			
Cur	331,000	604.730,293	4.655.016,964	361,262	362,026	0,764	321,9355	-200	0,25%			
Cur	332,000	604.729,351	4.655.017,299	361,264	362,028	0,764	321,6172	-200	0,25%			
Cur	333,000	604.728,408	4.655.017,630	361,263	362,031	0,768	321,2989	-200	0,25%			
Rec	333,722	604.727,725	4.655.017,866	361,234	362,033	0,799	321,0692	0	0,25%	P.S.		
Rec	334,000	604.727,462	4.655.017,956	361,229	362,033	0,804	321,0692	0	0,25%			

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	335,000	604.726,516	4.655.018,281	361,207	362,036	0.829	321,0692	0	0,25%			
Rec	336,000	604.725,571	4.655.018,606	361,226	362,039	0.813	321,0692	0	0,25%			
Rec	337,000	604.724,625	4.655.018,931	361,283	362,041	0.758	321,0692	0	0,25%			
Rec	338,000	604.723,679	4.655.019,256	361,291	362,044	0.753	321,0692	0	0,25%			
Rec	339,000	604.722,734	4.655.019,581	361,316	362,046	0.730	321,0692	0	0,25%			
Rec	340,000	604.721,788	4.655.019,906	361,379	362,049	0.670	321,0692	0	0,25%			
Rec	341,000	604.720,842	4.655.020,231	361,401	362,051	0.650	321,0692	0	0,25%			
Rec	342,000	604.719,896	4.655.020,556	361,404	362,054	0.650	321,0692	0	0,25%			
Rec	343,000	604.718,951	4.655.020,880	361,428	362,056	0.628	321,0692	0	0,25%			
Rec	344,000	604.718,005	4.655.021,205	361,453	362,059	0.606	321,0692	0	0,25%			
Rec	345,000	604.717,059	4.655.021,530	361,475	362,061	0.586	321,0692	0	0,25%			
Rec	346,000	604.716,113	4.655.021,855	361,494	362,064	0.570	321,0692	0	0,25%			
Rec	347,000	604.715,168	4.655.022,180	361,513	362,067	0.554	321,0692	0	0,25%			
Rec	348,000	604.714,222	4.655.022,505	361,532	362,069	0.537	321,0692	0	0,25%			
Rec	349,000	604.713,276	4.655.022,830	361,552	362,072	0.520	321,0692	0	0,25%			
Rec	350,000	604.712,330	4.655.023,155	361,531	362,074	0.543	321,0692	0	0,25%			
Rec	351,000	604.711,385	4.655.023,480	361,503	362,077	0.574	321,0692	0	0,25%			
Rec	352,000	604.710,439	4.655.023,805	361,464	362,079	0.615	321,0692	0	0,25%			
Rec	353,000	604.709,493	4.655.024,130	361,419	362,082	0.663	321,0692	0	0,25%			
Rec	354,000	604.708,548	4.655.024,455	361,389	362,084	0.695	321,0692	0	0,25%			
Rec	355,000	604.707,602	4.655.024,780	361,350	362,087	0.737	321,0692	0	0,25%			
Rec	356,000	604.706,656	4.655.025,105	361,307	362,089	0.782	321,0692	0	0,25%			
Rec	357,000	604.705,710	4.655.025,430	361,258	362,092	0.834	321,0692	0	0,25%			
Rec	358,000	604.704,765	4.655.025,755	361,197	362,095	0.898	321,0692	0	0,25%			
Rec	359,000	604.703,819	4.655.026,080	361,127	362,097	0.970	321,0692	0	0,25%			
Rec	360,000	604.702,873	4.655.026,405	361,057	362,100	1.043	321,0692	0	0,25%			
Rec	361,000	604.701,927	4.655.026,730	360,999	362,102	1.103	321,0692	0	0,25%			
Rec	362,000	604.700,982	4.655.027,054	360,991	362,105	1.114	321,0692	0	0,25%			
Rec	363,000	604.700,036	4.655.027,379	360,984	362,107	1.123	321,0692	0	0,25%			
Rec	364,000	604.699,090	4.655.027,704	360,980	362,110	1.130	321,0692	0	0,25%			
Rec	365,000	604.698,144	4.655.028,029	360,980	362,112	1.132	321,0692	0	0,25%			
Rec	366,000	604.697,199	4.655.028,354	360,980	362,115	1.135	321,0692	0	0,25%			
Rec	367,000	604.696,253	4.655.028,679	360,980	362,117	1.137	321,0692	0	0,25%			
Rec	368,000	604.695,307	4.655.029,004	360,980	362,120	1.140	321,0692	0	0,25%			
Rec	369,000	604.694,362	4.655.029,329	360,980	362,122	1.142	321,0692	0	0,25%			
Rec	370,000	604.693,416	4.655.029,654	360,981	362,125	1.144	321,0692	0	0,25%			
Rec	371,000	604.692,470	4.655.029,979	360,982	362,128	1.146	321,0692	0	0,25%			
Rec	372,000	604.691,524	4.655.030,304	360,980	362,130	1.150	321,0692	0	0,25%			
Rec	373,000	604.690,579	4.655.030,629	360,983	362,133	1.150	321,0692	0	0,25%			
Rec	374,000	604.689,633	4.655.030,954	360,986	362,135	1.149	321,0692	0	0,25%			
Rec	375,000	604.688,687	4.655.031,279	360,989	362,138	1.149	321,0692	0	0,25%			
Rec	376,000	604.687,741	4.655.031,604	360,992	362,140	1.148	321,0692	0	0,25%			
Rec	377,000	604.686,796	4.655.031,929	360,998	362,143	1.145	321,0692	0	0,25%			
Rec	378,000	604.685,850	4.655.032,254	361,059	362,145	1.086	321,0692	0	0,25%			
Rec	379,000	604.684,904	4.655.032,579	361,116	362,148	1.032	321,0692	0	0,25%			
Rec	380,000	604.683,959	4.655.032,903	361,183	362,150	0.967	321,0692	0	0,25%			
Rec	381,000	604.683,013	4.655.033,228	361,248	362,153	0.905	321,0692	0	0,25%			
Rec	382,000	604.682,067	4.655.033,553	361,286	362,156	0.870	321,0692	0	0,25%			
Rec	383,000	604.681,121	4.655.033,878	361,342	362,158	0.816	321,0692	0	0,25%			
Rec	384,000	604.680,176	4.655.034,203	361,404	362,161	0.757	321,0692	0	0,25%			
Rec	385,000	604.679,230	4.655.034,528	361,437	362,163	0.726	321,0692	0	0,25%			
Rec	386,000	604.678,284	4.655.034,853	361,470	362,166	0.696	321,0692	0	0,25%			
Rec	387,000	604.677,338	4.655.035,178	361,523	362,168	0.645	321,0692	0	0,25%			
Rec	388,000	604.676,393	4.655.035,503	361,584	362,171	0.587	321,0692	0	0,25%			
Rec	389,000	604.675,447	4.655.035,828	361,620	362,173	0.553	321,0692	0	0,25%			
Rec	390,000	604.674,501	4.655.036,153	361,641	362,176	0.535	321,0692	0	0,25%			
Rec	391,000	604.673,555	4.655.036,478	361,690	362,178	0.488	321,0692	0	0,25%			
Rec	392,000	604.672,610	4.655.036,803	361,748	362,181	0.433	321,0692	0	0,25%			
Rec	393,000	604.671,664	4.655.037,128	361,806	362,184	0.378	321,0692	0	0,25%			
Rec	394,000	604.670,718	4.655.037,453	361,879	362,186	0.307	321,0692	0	0,25%			
Rec	395,000	604.669,773	4.655.037,778	361,949	362,189	0.240	321,0692	0	0,25%			
Rec	396,000	604.668,827	4.655.038,103	362,004	362,191	0.187	321,0692	0	0,25%			
Rec	397,000	604.667,881	4.655.038,428	362,009	362,194	0.185	321,0692	0	0,25%			
Rec	398,000	604.666,935	4.655.038,753	362,011	362,196	0.185	321,0692	0	0,25%			
Rec	399,000	604.665,990	4.655.039,077	362,009	362,199	0.190	321,0692	0	0,25%			
Rec	400,000	604.665,044	4.655.039,402	362,006	362,201	0.195	321,0692	0	0,25%			
Rec	401,000	604.664,098	4.655.039,727	362,004	362,204	0.200	321,0692	0	0,25%			
Rec	402,000	604.663,152	4.655.040,052	362,001	362,206	0.205	321,0692	0	0,25%			
Rec	403,000	604.662,207	4.655.040,377	361,970	362,209	0.239	321,0692	0	0,25%			
Rec	404,000	604.661,261	4.655.040,702	361,942	362,211	0.269	321,0692	0	0,25%			
Rec	405,000	604.660,315	4.655.041,027	361,934	362,214	0.280	321,0692	0	0,25%			
Rec	406,000	604.659,369	4.655.041,352	361,913	362,217	0.304	321,0692	0	0,25%			
Rec	407,000	604.658,424	4.655.041,677	361,893	362,219	0.326	321,0692	0	0,25%			
Rec	408,000	604.657,478	4.655.042,002	361,876	362,222	0.346	321,0692	0	0,25%			
Rec	409,000	604.656,532	4.655.042,327	361,847	362,224	0.377	321,0692	0	0,25%			
Rec	410,000	604.655,587	4.655.042,652	361,810	362,227	0.417	321,0692	0	0,25%			
Rec	411,000	604.654,641	4.655.042,977	361,781	362,229	0.448	321,0692	0	0,25%			
Rec	412,000	604.653,695	4.655.043,302	361,757	362,232	0.475	321,0692	0	0,25%			
Rec	413,000	604.652,749	4.655.043,627	361,743	362,234	0.491	321,0692	0	0,25%			
Rec	414,000	604.651,804	4.655.043,952	361,721	362,237	0.516	321,0692	0	0,25%			
Rec	415,000	604.650,858	4.655.044,277	361,693	362,239	0.546	321,0692	0	0,25%			
Rec	416,000	604.649,912	4.655.044,602	361,665	362,242	0.577	321,0692	0	0,25%			
Rec	417,000	604.648,966	4.655.044,926	361,646	362,245	0.599	321,0692	0	0,25%			
Rec	418,000	604.648,021	4.655.045,251	361,627	362,247	0.620	321,0692	0	0,25%			
Rec	419,000	604.647,075	4.655.045,576	361,632	362,250	0.618	321,0692	0	0,25%			
Rec	420,000	604.646,129	4.655.045,901	361,613	362,252	0.639	321,0692	0	0,25%			
Rec	421,000	604.645,183	4.655.046,226	361,577	362,255	0.678	321,0692	0	0,25%			

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REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	422,000	604.644,238	4.655.046,551	361,555	362,257	0,702	321,0692	0	0,25%			
Rec	423,000	604.643,292	4.655.046,876	361,554	362,260	0,706	321,0692	0	0,25%			
Rec	424,000	604.642,346	4.655.047,201	361,520	362,262	0,742	321,0692	0	0,25%			
Rec	425,000	604.641,401	4.655.047,526	361,503	362,265	0,762	321,0692	0	0,25%			
Rec	426,000	604.640,455	4.655.047,851	361,485	362,267	0,782	321,0692	0	0,25%			
Rec	427,000	604.639,509	4.655.048,176	361,468	362,270	0,802	321,0692	0	0,25%			
Rec	428,000	604.638,563	4.655.048,501	361,467	362,273	0,806	321,0692	0	0,25%			
Rec	429,000	604.637,618	4.655.048,826	361,464	362,275	0,811	321,0692	0	0,25%			
Rec	430,000	604.636,672	4.655.049,151	361,475	362,278	0,803	321,0692	0	0,25%			
Rec	431,000	604.635,726	4.655.049,476	361,478	362,280	0,802	321,0692	0	0,25%			
Rec	432,000	604.634,780	4.655.049,801	361,495	362,283	0,788	321,0692	0	0,25%			
Rec	433,000	604.633,835	4.655.050,126	361,542	362,285	0,743	321,0692	0	0,25%			
Rec	434,000	604.632,889	4.655.050,451	361,625	362,288	0,663	321,0692	0	0,25%			
Rec	435,000	604.631,943	4.655.050,776	361,711	362,290	0,579	321,0692	0	0,25%			
Rec	436,000	604.630,997	4.655.051,100	361,796	362,293	0,497	321,0692	0	0,25%			
Rec	437,000	604.630,052	4.655.051,425	361,882	362,295	0,413	321,0692	0	0,25%			
Rec	438,000	604.629,106	4.655.051,750	361,967	362,298	0,331	321,0692	0	0,25%			
Rec	439,000	604.628,160	4.655.052,075	362,003	362,300	0,297	321,0692	0	0,25%			
Rec	440,000	604.627,215	4.655.052,400	362,023	362,303	0,280	321,0692	0	0,25%			
Rec	441,000	604.626,269	4.655.052,725	362,037	362,306	0,269	321,0692	0	0,25%			
Rec	442,000	604.625,323	4.655.053,050	362,051	362,308	0,257	321,0692	0	0,25%			
Rec	443,000	604.624,377	4.655.053,375	362,066	362,311	0,245	321,0692	0	0,25%			
Rec	444,000	604.623,432	4.655.053,700	362,080	362,313	0,233	321,0692	0	0,25%			
Rec	445,000	604.622,486	4.655.054,025	362,094	362,316	0,222	321,0692	0	0,25%			
Rec	446,000	604.621,540	4.655.054,350	362,283	362,318	0,035	321,0692	0	0,25%			
Rec	447,000	604.620,594	4.655.054,675	362,330	362,321	-0,009	321,0692	0	0,25%			
Rec	448,000	604.619,649	4.655.055,000	362,462	362,323	-0,139	321,0692	0	0,25%			
Rec	449,000	604.618,703	4.655.055,325	362,566	362,326	-0,240	321,0692	0	0,25%			
Rec	450,000	604.617,757	4.655.055,650	362,703	362,328	-0,375	321,0692	0	0,25%			
Rec	451,000	604.616,811	4.655.055,975	362,867	362,331	-0,536	321,0692	0	0,25%			
Rec	452,000	604.615,866	4.655.056,300	362,992	362,334	-0,658	321,0692	0	0,25%			
Rec	453,000	604.614,920	4.655.056,625	363,001	362,336	-0,665	321,0692	0	0,25%			
Rec	453,017	604.614,904	4.655.056,630	363,001	362,336	-0,665	321,0692	0	0,25%		T.E.	
Rec	454,000	604.613,974	4.655.056,949	363,001	362,339	-0,662	321,0692	0	0,29%			
Rec	455,000	604.613,029	4.655.057,274	363,001	362,342	-0,659	321,0692	0	0,32%			
Rec	456,000	604.612,083	4.655.057,599	363,001	362,345	-0,656	321,0692	0	0,35%			
Rec	457,000	604.611,137	4.655.057,924	363,001	362,349	-0,652	321,0692	0	0,39%			
Rec	458,000	604.610,191	4.655.058,249	363,001	362,353	-0,648	321,0692	0	0,42%			
Rec	459,000	604.609,246	4.655.058,574	363,002	362,357	-0,645	321,0692	0	0,45%			
Rec	460,000	604.608,300	4.655.058,899	363,002	362,362	-0,640	321,0692	0	0,49%			
Rec	461,000	604.607,354	4.655.059,224	363,001	362,367	-0,634	321,0692	0	0,52%			
Rec	462,000	604.606,408	4.655.059,549	363,001	362,372	-0,629	321,0692	0	0,55%			
Cur	462,404	604.606,026	4.655.059,680	363,000	362,375	-0,625	321,0692	50	0,57%	P.S.	V.	
Cur	463,000	604.605,464	4.655.059,877	362,994	362,378	-0,616	321,8279	50	0,59%			
Cur	464,000	604.604,525	4.655.060,223	362,962	362,384	-0,578	323,1011	50	0,62%			
Cur	465,000	604.603,594	4.655.060,587	362,921	362,391	-0,530	324,3744	50	0,65%			
Cur	466,000	604.602,670	4.655.060,970	362,851	362,397	-0,454	325,6476	50	0,69%			
Cur	467,000	604.601,754	4.655.061,371	362,743	362,404	-0,339	326,9208	50	0,72%			
Cur	468,000	604.600,847	4.655.061,791	362,635	362,412	-0,223	328,1941	50	0,75%			
Cur	469,000	604.599,948	4.655.062,228	362,503	362,419	-0,084	329,4673	50	0,79%			
Cur	470,000	604.599,057	4.655.062,684	362,318	362,427	0,109	330,7406	50	0,82%			
Cur	471,000	604.598,176	4.655.063,157	362,265	362,436	0,171	332,0138	50	0,85%			
Cur	471,791	604.597,486	4.655.063,544	362,257	362,443	0,186	333,0209	50	0,88%		T.S.	
Cur	472,000	604.597,305	4.655.063,648	362,255	362,444	0,189	333,2870	50	0,88%			
Rec	472,204	604.597,128	4.655.063,750	362,275	362,446	0,171	333,5471	0	0,88%	P.S.		
Rec	473,000	604.596,440	4.655.064,150	362,329	362,453	0,124	333,5471	0	0,88%			
Rec	474,000	604.595,576	4.655.064,653	362,453	362,462	0,009	333,5471	0	0,88%			
Rec	475,000	604.594,712	4.655.065,156	362,576	362,471	-0,105	333,5471	0	0,88%			
Rec	476,000	604.593,847	4.655.065,659	362,668	362,480	-0,188	333,5471	0	0,88%			
Cur	476,329	604.593,563	4.655.065,824	362,649	362,483	-0,166	333,5471	-50	0,88%	P.S.		
Cur	477,000	604.592,981	4.655.066,158	362,668	362,488	-0,180	332,6925	-50	0,88%			
Cur	478,000	604.592,105	4.655.066,640	362,698	362,497	-0,201	331,4193	-50	0,88%			
Cur	479,000	604.591,220	4.655.067,105	362,730	362,506	-0,224	330,1460	-50	0,88%			
Cur	480,000	604.590,325	4.655.067,552	362,763	362,515	-0,248	328,8728	-50	0,88%			
Cur	481,000	604.589,422	4.655.067,981	362,797	362,524	-0,273	327,5996	-50	0,88%			
Cur	482,000	604.588,510	4.655.068,392	362,832	362,532	-0,300	326,3263	-50	0,88%			
Cur	483,000	604.587,591	4.655.068,785	362,868	362,541	-0,327	325,0531	-50	0,88%			
Cur	484,000	604.586,663	4.655.069,159	362,906	362,550	-0,356	323,7798	-50	0,88%			
Cur	485,000	604.585,729	4.655.069,515	362,901	362,559	-0,342	322,5066	-50	0,88%			
Cur	486,000	604.584,787	4.655.069,852	362,933	362,568	-0,365	321,2334	-50	0,88%			
Cur	487,000	604.583,839	4.655.070,170	362,969	362,576	-0,393	319,9601	-50	0,88%			
Cur	488,000	604.582,885	4.655.070,468	362,959	362,585	-0,374	318,6869	-50	0,88%			
Cur	489,000	604.581,925	4.655.070,748	362,898	362,594	-0,304	317,4136	-50	0,88%			
Cur	490,000	604.580,959	4.655.071,009	362,896	362,603	-0,293	316,1404	-50	0,88%			
Cur	491,000	604.579,989	4.655.071,250	362,865	362,612	-0,253	314,8672	-50	0,88%			
Cur	492,000	604.579,014	4.655.071,472	362,833	362,620	-0,213	313,5939	-50	0,88%			
Cur	493,000	604.578,034	4.655.071,674	362,828	362,629	-0,199	312,3207	-50	0,88%			
Cur	494,000	604.577,051	4.655.071,856	362,828	362,638	-0,190	311,0474	-50	0,88%			
Cur	495,000	604.576,064	4.655.072,019	362,819	362,647	-0,172	309,7742	-50	0,88%			
Rec	495,714	604.575,359	4.655.072,123	362,809	362,653	-0,156	308,8657	0	0,88%	P.S.		
Rec	496,000	604.575,075	4.655.072,163	362,807	362,656	-0,151	308,8657	0	0,88%			
Rec	497,000	604.574,085	4.655.072,302	362,806	362,664	-0,142	308,8657	0	0,88%			
Rec	498,000	604.573,094	4.655.072,440	362,806	362,673	-0,133	308,8657	0	0,88%			
Rec	499,000	604.572,104	4.655.072,579	362,805	362,682	-0,123	308,8657	0	0,88%			
Rec	500,000	604.571,114	4.655.072,718	362,870	362,691	-0,179	308,8657	0	0,88%			
Rec	501,000	604.570,123	4.655.072,857	362,846	362,700	-0,146	308,8657	0	0,88%			
Rec	502,000	604.569,133	4.655.072,996	362,858	362,708	-0,150	308,8657	0	0,88%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	503,000	604.568,143	4.655.073,135	362,899	362,717	-0,182	308,8657	0	0,88%			
Rec	504,000	604.567,152	4.655.073,273	362,866	362,726	-0,140	308,8657	0	0,88%			
Rec	505,000	604.566,162	4.655.073,412	362,865	362,735	-0,130	308,8657	0	0,88%			
Rec	506,000	604.565,172	4.655.073,551	362,880	362,744	-0,136	308,8657	0	0,88%			
Rec	507,000	604.564,181	4.655.073,690	362,926	362,752	-0,174	308,8657	0	0,88%			
Rec	508,000	604.563,191	4.655.073,829	362,925	362,761	-0,164	308,8657	0	0,88%			
Rec	509,000	604.562,201	4.655.073,967	362,922	362,770	-0,152	308,8657	0	0,88%			
Rec	510,000	604.561,210	4.655.074,106	362,896	362,779	-0,117	308,8657	0	0,88%			
Rec	511,000	604.560,220	4.655.074,245	362,870	362,788	-0,082	308,8657	0	0,88%			
Rec	512,000	604.559,230	4.655.074,384	362,932	362,796	-0,136	308,8657	0	0,88%			
Rec	513,000	604.558,239	4.655.074,523	362,935	362,805	-0,130	308,8657	0	0,88%			
Rec	514,000	604.557,249	4.655.074,661	363,002	362,814	-0,188	308,8657	0	0,88%			
Rec	515,000	604.556,259	4.655.074,800	363,004	362,823	-0,181	308,8657	0	0,88%			
Cur	515,582	604.555,682	4.655.074,881	363,057	362,828	-0,229	308,8657	20	0,88%	P.S.		
Cur	516,000	604.555,269	4.655.074,943	363,072	362,832	-0,240	310,1955	20	0,88%			
Cur	517,000	604.554,286	4.655.075,127	363,092	362,840	-0,252	313,3786	20	0,88%			
Cur	518,000	604.553,314	4.655.075,360	363,105	362,849	-0,256	316,5617	20	0,88%			
Cur	519,000	604.552,354	4.655.075,642	363,171	362,858	-0,313	319,7448	20	0,88%			
Cur	520,000	604.551,410	4.655.075,971	363,176	362,867	-0,309	322,9279	20	0,88%			
Cur	521,000	604.550,484	4.655.076,346	363,177	362,876	-0,301	326,1110	20	0,88%			
Cur	522,000	604.549,577	4.655.076,768	363,178	362,884	-0,294	329,2941	20	0,88%			
Cur	523,000	604.548,692	4.655.077,234	363,178	362,893	-0,285	332,4772	20	0,88%			
Cur	524,000	604.547,832	4.655.077,744	363,175	362,902	-0,273	335,6603	20	0,88%			
Cur	525,000	604.546,999	4.655.078,296	363,179	362,911	-0,268	338,8434	20	0,88%			
Rec	525,233	604.546,809	4.655.078,431	363,179	362,913	-0,266	339,5836	0	0,88%	P.S.		
Rec	526,000	604.546,185	4.655.078,878	363,178	362,920	-0,259	339,5836	0	0,88%			
Rec	527,000	604.545,372	4.655.079,460	363,178	362,928	-0,250	339,5836	0	0,88%			
Rec	528,000	604.544,559	4.655.080,043	363,108	362,937	-0,171	339,5836	0	0,88%			
Rec	529,000	604.543,747	4.655.080,625	363,108	362,946	-0,162	339,5836	0	0,88%			
Rec	530,000	604.542,934	4.655.081,208	363,105	362,955	-0,150	339,5836	0	0,88%			
Rec	531,000	604.542,121	4.655.081,790	363,100	362,964	-0,136	339,5836	0	0,88%			
Rec	532,000	604.541,308	4.655.082,372	363,100	362,972	-0,128	339,5836	0	0,88%			
Rec	533,000	604.540,495	4.655.082,955	363,099	362,981	-0,118	339,5836	0	0,88%			
Rec	534,000	604.539,682	4.655.083,537	363,096	362,990	-0,106	339,5836	0	0,88%			
Rec	535,000	604.538,869	4.655.084,120	363,096	362,999	-0,097	339,5836	0	0,88%			
Rec	536,000	604.538,057	4.655.084,702	363,095	363,008	-0,087	339,5836	0	0,88%			
Rec	537,000	604.537,244	4.655.085,285	363,094	363,016	-0,078	339,5836	0	0,88%			
Rec	538,000	604.536,431	4.655.085,867	363,093	363,025	-0,068	339,5836	0	0,88%			
Rec	539,000	604.535,618	4.655.086,450	363,092	363,034	-0,058	339,5836	0	0,88%			
Rec	540,000	604.534,805	4.655.087,032	363,092	363,043	-0,049	339,5836	0	0,88%			
Rec	541,000	604.533,992	4.655.087,615	363,092	363,052	-0,040	339,5836	0	0,88%			
Rec	541,198	604.533,831	4.655.087,730	363,092	363,053	-0,039	339,5836	0	0,88%		T.E.	
Rec	542,000	604.533,180	4.655.088,197	363,093	363,057	-0,036	339,5836	0	0,08%			
Rec	543,000	604.532,367	4.655.088,780	363,095	363,053	-0,042	339,5836	0	-0,92%			
Rec	544,000	604.531,554	4.655.089,362	363,097	363,039	-0,058	339,5836	0	-1,92%			
Rec	545,000	604.530,741	4.655.089,945	363,099	363,014	-0,085	339,5836	0	-2,92%			
Rec	546,000	604.529,928	4.655.090,527	363,101	362,980	-0,121	339,5836	0	-3,92%			
Cur	546,844	604.529,242	4.655.091,019	363,103	362,944	-0,159	339,5836	10	-4,77%	P.S.	V.	
Cur	547,000	604.529,116	4.655.091,111	363,103	362,936	-0,167	340,5760	10	-4,92%			
Cur	548,000	604.528,343	4.655.091,745	363,106	362,882	-0,224	346,9422	10	-5,92%			
Cur	549,000	604.527,638	4.655.092,453	363,111	362,818	-0,293	353,3084	10	-6,92%			
Cur	550,000	604.527,007	4.655.093,228	363,114	362,743	-0,371	359,6746	10	-7,92%			
Cur	551,000	604.526,456	4.655.094,062	362,841	362,659	-0,182	366,0408	10	-8,92%			
Cur	552,000	604.525,992	4.655.094,947	362,458	362,565	0,107	372,4070	10	-9,92%			
Cur	552,490	604.525,797	4.655.095,397	362,273	362,515	0,242	375,5265	10	-10,41%		T.S.	
Cur	553,000	604.525,618	4.655.095,874	362,081	362,462	0,381	378,7732	10	-10,41%			
Cur	554,000	604.525,338	4.655.096,834	361,869	362,358	0,489	385,1394	10	-10,41%			
Cur	555,000	604.525,156	4.655.097,817	361,689	362,254	0,565	391,5056	10	-10,41%			
Cur	556,000	604.525,072	4.655.098,813	361,546	362,150	0,604	397,8718	10	-10,41%			
Cur	556,073	604.525,070	4.655.098,886	361,538	362,142	0,604	398,3366	10	-10,41%		T.E.	
Cur	557,000	604.525,089	4.655.099,813	361,441	362,050	0,609	4,2380	10	-9,49%			
Cur	558,000	604.525,205	4.655.100,805	361,350	361,960	0,610	10,6042	10	-8,49%			
Cur	559,000	604.525,420	4.655.101,782	361,364	361,880	0,516	16,9704	10	-7,49%			
Cur	560,000	604.525,731	4.655.102,731	361,245	361,810	0,565	23,3366	10	-6,49%			
Cur	561,000	604.526,136	4.655.103,646	361,130	361,750	0,620	29,7028	10	-5,49%			
Rec	561,279	604.526,265	4.655.103,893	361,093	361,736	0,643	31,4794	0	-5,21%	P.S.	V.	
Rec	562,000	604.526,607	4.655.104,528	360,999	361,701	0,702	31,4794	0	-4,49%			
Rec	563,000	604.527,081	4.655.105,408	360,996	361,661	0,665	31,4794	0	-3,49%			
Rec	564,000	604.527,556	4.655.106,288	360,993	361,631	0,638	31,4794	0	-2,49%			
Rec	565,000	604.528,031	4.655.107,168	360,990	361,611	0,621	31,4794	0	-1,49%			
Rec	566,000	604.528,505	4.655.108,048	360,989	361,601	0,612	31,4794	0	-0,49%			
Rec	566,485	604.528,735	4.655.108,475	360,989	361,600	0,611	31,4794	0	0,00%		T.S.	
Rec	567,000	604.528,980	4.655.108,929	360,988	361,600	0,612	31,4794	0	0,00%			
Rec	568,000	604.529,454	4.655.109,809	360,987	361,600	0,613	31,4794	0	0,00%			
Rec	569,000	604.529,929	4.655.110,689	360,986	361,600	0,614	31,4794	0	0,00%			
Rec	570,000	604.530,403	4.655.111,569	360,986	361,600	0,614	31,4794	0	0,00%			
Rec	571,000	604.530,878	4.655.112,450	360,987	361,600	0,613	31,4794	0	0,00%			
Rec	572,000	604.531,353	4.655.113,330	360,987	361,600	0,613	31,4794	0	0,00%			
Rec	573,000	604.531,827	4.655.114,210	360,988	361,600	0,612	31,4794	0	0,00%			
Rec	574,000	604.532,302	4.655.115,090	360,991	361,600	0,609	31,4794	0	0,00%			
Rec	575,000	604.532,776	4.655.115,970	360,994	361,600	0,606	31,4794	0	0,00%			
Rec	576,000	604.533,251	4.655.116,851	360,998	361,600	0,602	31,4794	0	0,00%			
Rec	577,000	604.533,725	4.655.117,731	361,049	361,600	0,551	31,4794	0	0,00%			
Rec	578,000	604.534,200	4.655.118,611	361,137	361,600	0,463	31,4794	0	0,00%			
Rec	579,000	604.534,675	4.655.119,491	361,077	361,600	0,523	31,4794	0	0,00%			
	579,093	604.534,719	4.655.119,573	361,071	361,600	0,529	31,4794		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T17-T18 A-T11

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	605.029,930	4.654.743,719	360,353	360,353	0,000	371,4855	0	6,16%			
Rec	1,000	605.029,497	4.654.744,620	360,246	360,415	0,169	371,4855	0	6,16%			
Rec	1,500	605.029,280	4.654.745,071	360,197	360,445	0,248	371,4855	0	6,16%			ODT Ø500 L=7,50m
Rec	2,000	605.029,064	4.654.745,522	360,148	360,476	0,328	371,4855	0	6,16%			
Rec	3,000	605.028,631	4.654.746,423	360,191	360,538	0,347	371,4855	0	6,16%			
Rec	4,000	605.028,198	4.654.747,324	360,301	360,600	0,299	371,4855	0	6,16%		T.E.	
Rec	5,000	605.027,765	4.654.748,226	360,425	360,651	0,226	371,4855	0	4,17%			
Rec	6,000	605.027,331	4.654.749,127	360,442	360,683	0,241	371,4855	0	2,17%			
Rec	7,000	605.026,898	4.654.750,028	360,436	360,695	0,259	371,4855	0	0,18%			
Rec	8,000	605.026,465	4.654.750,930	360,446	360,686	0,240	371,4855	0	-1,82%		V.	
Rec	9,000	605.026,032	4.654.751,831	360,435	360,658	0,223	371,4855	0	-3,81%			
Rec	10,000	605.025,599	4.654.752,732	360,439	360,610	0,171	371,4855	0	-5,81%			
Rec	11,000	605.025,166	4.654.753,634	360,412	360,542	0,130	371,4855	0	-7,80%			
Rec	12,000	605.024,733	4.654.754,535	360,377	360,454	0,077	371,4855	0	-9,80%		T.S.	
Rec	13,000	605.024,300	4.654.755,436	360,342	360,356	0,014	371,4855	0	-9,80%			
Rec	13,500	605.024,083	4.654.755,887	360,325	360,307	-0,017	371,4855	0	-9,80%			ODT Ø500 L=10,00m
Rec	14,000	605.023,867	4.654.756,338	360,307	360,258	-0,049	371,4855	0	-9,80%			
Rec	15,000	605.023,434	4.654.757,239	360,272	360,160	-0,112	371,4855	0	-9,80%			
Rec	16,000	605.023,001	4.654.758,141	360,237	360,062	-0,175	371,4855	0	-9,80%			
	16,636	605.022,725	4.654.758,714	360,000	360,000	0,000	371,4855		-9,80%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	605.016,565	4.654.602,813	368,663	368,663	0,000	114,3039	0	-5,24%			
Rec	1,000	605.017,540	4.654.602,590	368,582	368,611	0,029	114,3039	0	-5,24%			
Rec	2,000	605.018,515	4.654.602,367	368,542	368,558	0,016	114,3039	0	-5,24%			
Rec	3,000	605.019,490	4.654.602,144	368,480	368,506	0,026	114,3039	0	-5,24%			
Rec	4,000	605.020,465	4.654.601,922	368,452	368,453	0,001	114,3039	0	-5,24%			
Cur	4,099	605.020,562	4.654.601,899	368,448	368,448	0,000	114,3039	-10	-5,24%	P.S.		
Cur	5,000	605.021,448	4.654.601,739	368,400	368,401	0,001	108,5708	-10	-5,24%			
Cur	6,000	605.022,444	4.654.601,654	368,306	368,349	0,043	102,2046	-10	-5,24%			
Cur	7,000	605.023,443	4.654.601,669	368,230	368,296	0,066	95,8384	-10	-5,24%			
Cur	8,000	605.024,436	4.654.601,784	368,162	368,244	0,082	89,4722	-10	-5,24%			
Cur	9,000	605.025,413	4.654.601,998	368,137	368,191	0,054	83,1060	-10	-5,24%			
Cur	10,000	605.026,363	4.654.602,308	368,113	368,139	0,026	76,7398	-10	-5,24%			
Rec	10,839	605.027,133	4.654.602,640	368,095	368,095	0,000	71,4016	0	-5,24%	P.S.		
Rec	11,000	605.027,278	4.654.602,710	368,091	368,087	-0,004	71,4016	0	-5,24%			
Rec	12,000	605.028,179	4.654.603,145	368,051	368,034	-0,017	71,4016	0	-5,24%			
Rec	13,000	605.029,080	4.654.603,579	368,010	367,982	-0,028	71,4016	0	-5,24%			
Rec	14,000	605.029,980	4.654.604,013	367,968	367,929	-0,039	71,4016	0	-5,24%			
Rec	15,000	605.030,881	4.654.604,447	367,966	367,877	-0,089	71,4016	0	-5,24%			
Rec	16,000	605.031,782	4.654.604,882	367,996	367,825	-0,171	71,4016	0	-5,24%			
Rec	17,000	605.032,683	4.654.605,316	367,965	367,772	-0,193	71,4016	0	-5,24%			
Rec	18,000	605.033,583	4.654.605,750	367,867	367,720	-0,147	71,4016	0	-5,24%			
Rec	19,000	605.034,484	4.654.606,184	367,770	367,667	-0,103	71,4016	0	-5,24%			
Rec	20,000	605.035,385	4.654.606,619	367,645	367,615	-0,030	71,4016	0	-5,24%			
Cur	20,949	605.036,240	4.654.607,031	367,534	367,565	0,031	71,4016	25	-5,24%	P.S.		
Cur	21,000	605.036,286	4.654.607,053	367,532	367,563	0,031	71,5319	25	-5,24%			
Cur	22,000	605.037,196	4.654.607,467	367,492	367,510	0,018	74,0784	25	-5,24%			
Cur	23,000	605.038,122	4.654.607,845	367,444	367,458	0,014	76,6249	25	-5,24%			
Cur	24,000	605.039,062	4.654.608,185	367,376	367,405	0,029	79,1713	25	-5,24%			
Cur	25,000	605.040,015	4.654.608,487	367,348	367,353	0,005	81,7178	25	-5,24%			
Cur	26,000	605.040,980	4.654.608,751	367,331	367,301	-0,030	84,2643	25	-5,24%			
Cur	27,000	605.041,954	4.654.608,976	367,238	367,248	0,010	86,8108	25	-5,24%			
Cur	28,000	605.042,936	4.654.609,163	367,155	367,196	0,041	89,3573	25	-5,24%			
Cur	29,000	605.043,926	4.654.609,309	367,084	367,143	0,059	91,9037	25	-5,24%			
Cur	29,707	605.044,628	4.654.609,389	367,050	367,106	0,056	93,7041	25	-5,24%		T.E.	
Cur	30,000	605.044,920	4.654.609,416	367,036	367,091	0,055	94,4502	25	-5,18%			
Cur	31,000	605.045,917	4.654.609,483	366,989	367,040	0,051	96,9967	25	-4,98%			
Cur	32,000	605.046,917	4.654.609,510	366,902	366,991	0,089	99,5432	25	-4,78%			
Cur	33,000	605.047,917	4.654.609,498	366,812	366,945	0,133	102,0897	25	-4,58%			
Cur	34,000	605.048,915	4.654.609,445	366,765	366,900	0,135	104,6361	25	-4,38%			
Cur	35,000	605.049,911	4.654.609,352	366,795	366,857	0,062	107,1826	25	-4,18%			
Cur	36,000	605.050,902	4.654.609,220	366,744	366,816	0,072	109,7291	25	-3,98%			
Cur	37,000	605.051,887	4.654.609,048	366,665	366,777	0,112	112,2756	25	-3,78%			
Cur	38,000	605.052,865	4.654.608,837	366,582	366,741	0,159	114,8221	25	-3,58%			
Cur	39,000	605.053,833	4.654.608,586	366,551	366,706	0,155	117,3685	25	-3,38%			
Cur	40,000	605.054,790	4.654.608,298	366,508	366,673	0,165	119,9150	25	-3,18%		V.	
Cur	41,000	605.055,735	4.654.607,971	366,510	366,642	0,132	122,4615	25	-2,98%			
Cur	42,000	605.056,666	4.654.607,607	366,474	366,613	0,139	125,0080	25	-2,78%			
Cur	43,000	605.057,582	4.654.607,206	366,433	366,587	0,154	127,5545	25	-2,58%			
Cur	44,000	605.058,481	4.654.606,768	366,429	366,562	0,133	130,1009	25	-2,38%			
Cur	45,000	605.059,362	4.654.606,295	366,429	366,539	0,110	132,6474	25	-2,18%			
Cur	46,000	605.060,224	4.654.605,787	366,430	366,518	0,088	135,1939	25	-1,98%			
Cur	47,000	605.061,064	4.654.605,245	366,429	366,499	0,070	137,7404	25	-1,78%			
Cur	48,000	605.061,882	4.654.604,670	366,416	366,482	0,066	140,2868	25	-1,58%			
Cur	49,000	605.062,676	4.654.604,063	366,400	366,468	0,068	142,8333	25	-1,38%			
Cur	50,000	605.063,446	4.654.603,424	366,384	366,455	0,071	145,3798	25	-1,18%			
Cur	50,293	605.063,666	4.654.603,231	366,379	366,451	0,073	146,1259	25	-1,12%		T.S.	
Cur	51,000	605.064,189	4.654.602,755	366,366	366,444	0,078	147,9263	25	-1,12%			
Rec	51,147	605.064,296	4.654.602,655	366,364	366,442	0,078	148,2996	0	-1,12%	P.S.		
Rec	52,000	605.064,915	4.654.602,067	366,351	366,432	0,081	148,2996	0	-1,12%			
Rec	53,000	605.065,641	4.654.601,379	366,329	366,421	0,092	148,2996	0	-1,12%			
Rec	54,000	605.066,366	4.654.600,692	366,269	366,410	0,141	148,2996	0	-1,12%			
Rec	55,000	605.067,092	4.654.600,004	366,252	366,399	0,147	148,2996	0	-1,12%			
Rec	56,000	605.067,818	4.654.599,316	366,235	366,387	0,152	148,2996	0	-1,12%			
Cur	56,658	605.068,295	4.654.598,863	366,234	366,380	0,146	148,2996	100	-1,12%	P.S.		
Cur	57,000	605.068,543	4.654.598,627	366,235	366,376	0,141	148,5176	100	-1,12%			
Cur	58,000	605.069,263	4.654.597,933	366,237	366,365	0,128	149,1542	100	-1,12%			
Cur	59,000	605.069,976	4.654.597,232	366,236	366,354	0,118	149,7908	100	-1,12%			
Cur	60,000	605.070,682	4.654.596,524	366,216	366,343	0,127	150,4274	100	-1,12%			
Cur	61,000	605.071,381	4.654.595,808	366,197	366,331	0,134	151,0641	100	-1,12%			
Cur	62,000	605.072,072	4.654.595,086	366,172	366,320	0,148	151,7007	100	-1,12%			
Cur	63,000	605.072,757	4.654.594,357	366,140	366,309	0,169	152,3373	100	-1,12%			
Cur	64,000	605.073,434	4.654.593,621	366,119	366,298	0,179	152,9739	100	-1,12%			
Cur	65,000	605.074,103	4.654.592,878	366,106	366,286	0,180	153,6105	100	-1,12%			
Cur	66,000	605.074,765	4.654.592,129	366,093	366,275	0,182	154,2472	100	-1,12%			
Cur	67,000	605.075,420	4.654.591,373	366,079	366,264	0,185	154,8838	100	-1,12%			
Cur	68,000	605.076,067	4.654.590,610	366,064	366,253	0,189	155,5204	100	-1,12%			
Cur	69,000	605.076,706	4.654.589,841	366,048	366,242	0,194	156,1570	100	-1,12%			
Cur	70,000	605.077,338	4.654.589,066	366,033	366,230	0,197	156,7936	100	-1,12%			
Cur	71,000	605.077,962	4.654.588,285	366,018	366,219	0,201	157,4302	100	-1,12%			
Cur	72,000	605.078,578	4.654.587,497	366,003	366,208	0,205	158,0669	100	-1,12%			
Cur	73,000	605.079,186	4.654.586,703	365,990	366,197	0,207	158,7035	100	-1,12%			
Cur	74,000	605.079,786	4.654.585,903	366,003	366,185	0,182	159,3401	100	-1,12%			
Cur	75,000	605.080,378	4.654.585,097	366,009	366,174	0,165	159,9767	100	-1,12%			
Cur	76,000	605.080,962	4.654.584,286	366,010	366,163	0,153	160,6133	100	-1,12%			
Cur	77,000	605.081,538	4.654.583,468	366,010	366,152	0,142	161,2500	100	-1,12%			
Cur	78,000	605.082,106	4.654.582,645	365,992	366,141	0,149	161,8866	100	-1,12%			
Cur	79,000	605.082,665	4.654.581,816	365,965	366,129	0,164	162,5232	100	-1,12%			

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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	79,165	605.082,757	4.654.581,679	365,960	366,127	0,167	162,6282	0	-1,12%	P.S.		
Rec	80,000	605.083,219	4.654.580,983	365,937	366,118	0,181	162,6282	0	-1,12%			
Rec	81,000	605.083,773	4.654.580,151	365,906	366,107	0,201	162,6282	0	-1,12%			
Rec	82,000	605.084,327	4.654.579,318	365,876	366,096	0,220	162,6282	0	-1,12%			
Rec	83,000	605.084,881	4.654.578,486	365,849	366,084	0,235	162,6282	0	-1,12%			
Rec	84,000	605.085,435	4.654.577,653	365,822	366,073	0,251	162,6282	0	-1,12%			
Rec	85,000	605.085,989	4.654.576,821	365,795	366,062	0,267	162,6282	0	-1,12%			
Rec	86,000	605.086,543	4.654.575,988	365,769	366,051	0,282	162,6282	0	-1,12%			
Rec	87,000	605.087,097	4.654.575,155	365,741	366,040	0,299	162,6282	0	-1,12%			
Rec	88,000	605.087,651	4.654.574,323	365,699	366,028	0,329	162,6282	0	-1,12%			
Rec	89,000	605.088,204	4.654.573,490	365,658	366,017	0,359	162,6282	0	-1,12%			
Rec	90,000	605.088,758	4.654.572,658	365,652	366,006	0,354	162,6282	0	-1,12%			
Rec	91,000	605.089,312	4.654.571,825	365,652	365,995	0,343	162,6282	0	-1,12%			
Rec	92,000	605.089,866	4.654.570,992	365,649	365,983	0,334	162,6282	0	-1,12%			
Rec	93,000	605.090,420	4.654.570,160	365,646	365,972	0,326	162,6282	0	-1,12%			
Rec	94,000	605.090,974	4.654.569,327	365,643	365,961	0,318	162,6282	0	-1,12%			
Rec	95,000	605.091,528	4.654.568,495	365,665	365,950	0,285	162,6282	0	-1,12%			
Rec	96,000	605.092,082	4.654.567,662	365,692	365,938	0,246	162,6282	0	-1,12%			
Rec	97,000	605.092,636	4.654.566,829	365,711	365,927	0,216	162,6282	0	-1,12%			
Rec	98,000	605.093,189	4.654.565,997	365,699	365,916	0,217	162,6282	0	-1,12%			
Rec	99,000	605.093,743	4.654.565,164	365,687	365,905	0,218	162,6282	0	-1,12%			
Rec	100,000	605.094,297	4.654.564,332	365,674	365,894	0,220	162,6282	0	-1,12%			
Rec	101,000	605.094,851	4.654.563,499	365,659	365,882	0,223	162,6282	0	-1,12%			
Rec	102,000	605.095,405	4.654.562,667	365,643	365,871	0,228	162,6282	0	-1,12%			
Cur	102,257	605.095,547	4.654.562,453	365,639	365,868	0,229	162,6282	75	-1,12%	P.S.		
Cur	103,000	605.095,956	4.654.561,832	365,648	365,860	0,212	163,2590	75	-1,12%			
Cur	104,000	605.096,496	4.654.560,990	365,662	365,849	0,187	164,1078	75	-1,12%			
Cur	105,000	605.097,025	4.654.560,142	365,675	365,837	0,162	164,9567	75	-1,12%			
Cur	106,000	605.097,542	4.654.559,286	365,689	365,826	0,137	165,8055	75	-1,12%			
Cur	106,874	605.097,985	4.654.558,532	365,701	365,816	0,115	166,5474	75	-1,12%		T.E.	
Cur	107,000	605.098,048	4.654.558,423	365,703	365,815	0,112	166,6543	75	-1,11%			
Cur	108,000	605.098,542	4.654.557,554	365,709	365,805	0,096	167,5031	75	-0,97%			
Cur	109,000	605.099,025	4.654.556,678	365,692	365,796	0,104	168,3520	75	-0,84%			
Cur	110,000	605.099,496	4.654.555,796	365,676	365,788	0,112	169,2008	75	-0,71%			
Cur	111,000	605.099,955	4.654.554,908	365,672	365,782	0,110	170,0496	75	-0,57%			
Cur	112,000	605.100,403	4.654.554,013	365,662	365,776	0,114	170,8985	75	-0,44%			
Cur	113,000	605.100,838	4.654.553,113	365,650	365,773	0,123	171,7473	75	-0,31%			
Cur	114,000	605.101,261	4.654.552,207	365,642	365,770	0,128	172,5961	75	-0,17%			
Cur	115,000	605.101,673	4.654.551,296	365,627	365,769	0,142	173,4449	75	-0,04%			
Cur	116,000	605.102,072	4.654.550,379	365,609	365,770	0,161	174,2938	75	0,09%			
Cur	117,000	605.102,458	4.654.549,457	365,594	365,771	0,177	175,1426	75	0,23%			
Rec	117,607	605.102,687	4.654.548,894	365,586	365,773	0,187	175,6580	0	0,31%	P.S.	V.	ODT Ø500 L=5,30m
Rec	118,000	605.102,834	4.654.548,530	365,581	365,774	0,193	175,6580	0	0,36%			
Rec	119,000	605.103,207	4.654.547,602	365,567	365,778	0,211	175,6580	0	0,49%			
Rec	120,000	605.103,580	4.654.546,674	365,586	365,784	0,198	175,6580	0	0,63%			
Rec	121,000	605.103,953	4.654.545,746	365,615	365,791	0,176	175,6580	0	0,76%			
Rec	122,000	605.104,326	4.654.544,819	365,642	365,799	0,157	175,6580	0	0,89%			
Rec	123,000	605.104,699	4.654.543,891	365,656	365,809	0,153	175,6580	0	1,03%			
Rec	124,000	605.105,072	4.654.542,963	365,671	365,820	0,149	175,6580	0	1,16%			
Rec	125,000	605.105,446	4.654.542,035	365,665	365,832	0,167	175,6580	0	1,29%			
Rec	126,000	605.105,819	4.654.541,107	365,641	365,846	0,205	175,6580	0	1,43%			
Cur	126,148	605.105,874	4.654.540,970	365,642	365,848	0,206	175,6580	-20	1,45%	P.S.		
Cur	127,000	605.106,209	4.654.540,187	365,665	365,861	0,196	172,9460	-20	1,56%			
Cur	128,000	605.106,643	4.654.539,286	365,644	365,877	0,233	169,7629	-20	1,69%			
Cur	128,340	605.106,801	4.654.538,985	365,649	365,883	0,234	168,6807	-20	1,74%		T.S.	
Cur	129,000	605.107,123	4.654.538,409	365,659	365,894	0,235	166,5798	-20	1,74%			
Cur	130,000	605.107,645	4.654.537,556	365,676	365,912	0,236	163,3967	-20	1,74%			
Cur	131,000	605.108,210	4.654.536,731	365,702	365,929	0,227	160,2136	-20	1,74%			
Cur	132,000	605.108,815	4.654.535,935	365,741	365,946	0,205	157,0305	-20	1,74%			
Cur	133,000	605.109,459	4.654.535,170	365,790	365,964	0,174	153,8474	-20	1,74%			
Cur	134,000	605.110,141	4.654.534,439	365,838	365,981	0,143	150,6643	-20	1,74%			
Cur	135,000	605.110,858	4.654.533,742	365,942	365,998	0,056	147,4813	-20	1,74%			
Cur	136,000	605.111,609	4.654.533,082	365,994	366,016	0,022	144,2982	-20	1,74%			
Cur	137,000	605.112,392	4.654.532,460	366,089	366,033	-0,056	141,1151	-20	1,74%			
Cur	138,000	605.113,206	4.654.531,879	366,123	366,051	-0,072	137,9320	-20	1,74%			
Cur	139,000	605.114,047	4.654.531,339	366,137	366,068	-0,069	134,7489	-20	1,74%			
Cur	140,000	605.114,914	4.654.530,841	366,145	366,085	-0,060	131,5658	-20	1,74%			
Cur	141,000	605.115,805	4.654.530,387	366,121	366,103	-0,018	128,3827	-20	1,74%			
Cur	141,083	605.115,880	4.654.530,352	366,122	366,104	-0,017	128,1185	-20	1,74%		T.E.	
Cur	142,000	605.116,718	4.654.529,979	366,129	366,119	-0,010	125,1996	-20	1,56%			
Cur	143,000	605.117,650	4.654.529,617	366,117	366,134	0,017	122,0165	-20	1,36%			
Cur	144,000	605.118,599	4.654.529,301	366,112	366,146	0,034	118,8334	-20	1,16%			
Cur	145,000	605.119,562	4.654.529,034	366,144	366,157	0,013	115,6503	-20	0,96%			
Cur	146,000	605.120,538	4.654.528,815	366,156	366,166	0,010	112,4672	-20	0,76%			
Rec	146,420	605.120,950	4.654.528,737	366,156	366,169	0,013	111,1316	0	0,67%	P.S.		
Rec	147,000	605.121,522	4.654.528,636	366,156	366,172	0,016	111,1316	0	0,56%			
Rec	148,000	605.122,507	4.654.528,462	366,139	366,177	0,038	111,1316	0	0,36%			
Rec	149,000	605.123,491	4.654.528,288	366,119	366,179	0,060	111,1316	0	0,16%			
Rec	150,000	605.124,476	4.654.528,114	366,098	366,180	0,082	111,1316	0	-0,04%			
Rec	151,000	605.125,461	4.654.527,941	366,077	366,178	0,101	111,1316	0	-0,24%			
Cur	151,420	605.125,875	4.654.527,867	366,068	366,177	0,109	111,1316	40	-0,33%	P.S.	V.	
Cur	152,000	605.126,445	4.654.527,762	366,057	366,175	0,118	112,0539	40	-0,44%			
Cur	153,000	605.127,425	4.654.527,562	366,063	366,169	0,106	113,6455	40	-0,64%			
Cur	154,000	605.128,399	4.654.527,337	366,076	366,162	0,086	115,2370	40	-0,84%			
Cur	155,000	605.129,367	4.654.527,088	366,053	366,153	0,100	116,8286	40	-1,04%			
Cur	156,000	605.130,329	4.654.526,815	366,028	366,141	0,113	118,4201	40	-1,24%			

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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	157,000	605.131,284	4.654.526,517	366,011	366,128	0,117	120,0117	40	-1,44%			
Cur	158,000	605.132,231	4.654.526,196	365,988	366,112	0,124	121,6032	40	-1,64%			
Cur	159,000	605.133,170	4.654.525,852	365,936	366,095	0,159	123,1948	40	-1,84%			
Cur	160,000	605.134,100	4.654.525,484	365,851	366,075	0,224	124,7863	40	-2,04%			
Cur	161,000	605.135,020	4.654.525,093	365,768	366,054	0,286	126,3779	40	-2,24%			
Cur	161,757	605.135,710	4.654.524,781	365,707	366,036	0,330	127,5827	40	-2,40%		T.S.	
Cur	162,000	605.135,930	4.654.524,679	365,687	366,031	0,344	127,9694	40	-2,40%			
Cur	163,000	605.136,830	4.654.524,242	365,633	366,007	0,374	129,5610	40	-2,40%			
Cur	164,000	605.137,718	4.654.523,783	365,599	365,983	0,384	131,1525	40	-2,40%			
Cur	165,000	605.138,595	4.654.523,302	365,585	365,959	0,374	132,7441	40	-2,40%			
Cur	166,000	605.139,459	4.654.522,799	365,585	365,935	0,350	134,3356	40	-2,40%			
Rec	166,489	605.139,877	4.654.522,546	365,586	365,923	0,337	135,1132	0	-2,40%	P.S.		
Rec	167,000	605.140,313	4.654.522,278	365,587	365,911	0,324	135,1132	0	-2,40%			
Rec	168,000	605.141,164	4.654.521,754	365,587	365,887	0,300	135,1132	0	-2,40%			
Rec	169,000	605.142,016	4.654.521,230	365,587	365,863	0,276	135,1132	0	-2,40%			
Rec	170,000	605.142,868	4.654.520,706	365,587	365,839	0,252	135,1132	0	-2,40%			
Rec	171,000	605.143,719	4.654.520,182	365,582	365,815	0,233	135,1132	0	-2,40%			
Rec	172,000	605.144,571	4.654.519,658	365,538	365,791	0,253	135,1132	0	-2,40%			
Rec	173,000	605.145,423	4.654.519,134	365,494	365,767	0,273	135,1132	0	-2,40%			
Rec	174,000	605.146,274	4.654.518,610	365,570	365,743	0,173	135,1132	0	-2,40%			
Cur	174,433	605.146,643	4.654.518,383	365,572	365,733	0,161	135,1132	-25	-2,40%	P.S.		
Cur	175,000	605.147,130	4.654.518,091	365,539	365,719	0,180	133,6687	-25	-2,40%			
Cur	176,000	605.148,003	4.654.517,604	365,493	365,695	0,202	131,1223	-25	-2,40%			
Cur	177,000	605.148,895	4.654.517,152	365,511	365,671	0,160	128,5758	-25	-2,40%			
Cur	178,000	605.149,804	4.654.516,736	365,531	365,647	0,116	126,0293	-25	-2,40%			
Cur	179,000	605.150,729	4.654.516,357	365,545	365,623	0,078	123,4828	-25	-2,40%			
Cur	180,000	605.151,669	4.654.516,015	365,563	365,599	0,036	120,9363	-25	-2,40%			
Cur	181,000	605.152,622	4.654.515,711	365,550	365,576	0,026	118,3899	-25	-2,40%			
Cur	182,000	605.153,586	4.654.515,446	365,563	365,552	-0,011	115,8434	-25	-2,40%			
Cur	183,000	605.154,560	4.654.515,219	365,524	365,528	0,004	113,2969	-25	-2,40%			
Rec	183,578	605.155,126	4.654.515,106	365,500	365,514	0,014	111,8261	0	-2,40%	P.S.		
Rec	184,000	605.155,541	4.654.515,028	365,480	365,504	0,024	111,8261	0	-2,40%			
Rec	185,000	605.156,524	4.654.514,843	365,417	365,480	0,063	111,8261	0	-2,40%			
Rec	186,000	605.157,507	4.654.514,658	365,350	365,456	0,106	111,8261	0	-2,40%			
Rec	187,000	605.158,490	4.654.514,474	365,283	365,432	0,149	111,8261	0	-2,40%			
Rec	188,000	605.159,472	4.654.514,289	365,236	365,408	0,172	111,8261	0	-2,40%			
Rec	189,000	605.160,455	4.654.514,104	365,202	365,384	0,182	111,8261	0	-2,40%			
Rec	190,000	605.161,438	4.654.513,919	365,168	365,360	0,192	111,8261	0	-2,40%			
Rec	191,000	605.162,421	4.654.513,735	365,142	365,336	0,194	111,8261	0	-2,40%			
Rec	192,000	605.163,403	4.654.513,550	365,105	365,312	0,207	111,8261	0	-2,40%			
Rec	193,000	605.164,386	4.654.513,365	365,064	365,288	0,224	111,8261	0	-2,40%			
Rec	194,000	605.165,369	4.654.513,181	365,035	365,264	0,229	111,8261	0	-2,40%			
Rec	195,000	605.166,352	4.654.512,996	365,006	365,240	0,234	111,8261	0	-2,40%			
Rec	196,000	605.167,335	4.654.512,811	364,965	365,216	0,251	111,8261	0	-2,40%			
Cur	196,870	605.168,190	4.654.512,651	364,920	365,195	0,275	111,8261	50	-2,40%	P.S.		
Cur	197,000	605.168,317	4.654.512,626	364,913	365,192	0,279	111,9913	50	-2,40%			
Cur	198,000	605.169,298	4.654.512,429	364,860	365,168	0,308	113,2645	50	-2,40%			
Cur	199,000	605.170,274	4.654.512,213	364,825	365,144	0,319	114,5378	50	-2,40%			
Cur	200,000	605.171,246	4.654.511,977	364,776	365,120	0,344	115,8110	50	-2,40%			
Cur	201,000	605.172,213	4.654.511,721	364,734	365,097	0,363	117,0842	50	-2,40%			
Cur	202,000	605.173,174	4.654.511,446	364,708	365,073	0,365	118,3575	50	-2,40%			
Cur	203,000	605.174,130	4.654.511,152	364,631	365,049	0,418	119,6307	50	-2,40%			
Cur	204,000	605.175,080	4.654.510,839	364,595	365,025	0,430	120,9040	50	-2,40%			
Cur	205,000	605.176,023	4.654.510,508	364,456	365,001	0,545	122,1772	50	-2,40%			
Cur	206,000	605.176,959	4.654.510,157	364,396	364,977	0,581	123,4504	50	-2,40%			
Cur	207,000	605.177,889	4.654.509,787	364,322	364,953	0,631	124,7237	50	-2,40%			
Cur	208,000	605.178,810	4.654.509,399	364,212	364,929	0,717	125,9969	50	-2,40%			
Rec	208,310	605.179,094	4.654.509,276	364,183	364,921	0,738	126,3914	0	-2,40%	P.S.		
Rec	209,000	605.179,726	4.654.508,998	364,125	364,905	0,780	126,3914	0	-2,40%			
Rec	210,000	605.180,641	4.654.508,595	364,072	364,881	0,809	126,3914	0	-2,40%			
Rec	211,000	605.181,557	4.654.508,192	364,103	364,857	0,754	126,3914	0	-2,40%			
Rec	212,000	605.182,472	4.654.507,789	364,118	364,833	0,715	126,3914	0	-2,40%			
Rec	213,000	605.183,387	4.654.507,386	364,146	364,809	0,663	126,3914	0	-2,40%			
Rec	214,000	605.184,302	4.654.506,984	364,186	364,785	0,599	126,3914	0	-2,40%			
Rec	215,000	605.185,218	4.654.506,581	364,233	364,761	0,528	126,3914	0	-2,40%			
Rec	216,000	605.186,133	4.654.506,178	364,251	364,737	0,486	126,3914	0	-2,40%			
Rec	217,000	605.187,048	4.654.505,775	364,325	364,713	0,388	126,3914	0	-2,40%			
Rec	218,000	605.187,964	4.654.505,373	364,365	364,689	0,324	126,3914	0	-2,40%			
Rec	219,000	605.188,879	4.654.504,970	364,369	364,665	0,296	126,3914	0	-2,40%			
Rec	220,000	605.189,794	4.654.504,567	364,349	364,641	0,292	126,3914	0	-2,40%			
Rec	221,000	605.190,710	4.654.504,164	364,311	364,618	0,307	126,3914	0	-2,40%			
Rec	222,000	605.191,625	4.654.503,761	364,251	364,594	0,343	126,3914	0	-2,40%			
Rec	223,000	605.192,540	4.654.503,359	364,213	364,570	0,357	126,3914	0	-2,40%			
Rec	224,000	605.193,455	4.654.502,956	364,231	364,546	0,315	126,3914	0	-2,40%			
Rec	225,000	605.194,371	4.654.502,553	364,259	364,522	0,263	126,3914	0	-2,40%			
Rec	226,000	605.195,286	4.654.502,150	364,287	364,498	0,211	126,3914	0	-2,40%			
Rec	227,000	605.196,201	4.654.501,748	364,275	364,474	0,199	126,3914	0	-2,40%			
Rec	228,000	605.197,117	4.654.501,345	364,285	364,450	0,165	126,3914	0	-2,40%			
Rec	229,000	605.198,032	4.654.500,942	364,249	364,426	0,177	126,3914	0	-2,40%			
Rec	230,000	605.198,947	4.654.500,539	364,198	364,402	0,204	126,3914	0	-2,40%			
Rec	231,000	605.199,862	4.654.500,136	364,199	364,378	0,179	126,3914	0	-2,40%			
Rec	232,000	605.200,778	4.654.499,734	364,219	364,354	0,135	126,3914	0	-2,40%			
Rec	233,000	605.201,693	4.654.499,331	364,226	364,330	0,104	126,3914	0	-2,40%			
Rec	234,000	605.202,608	4.654.498,928	364,203	364,306	0,103	126,3914	0	-2,40%			
Rec	235,000	605.203,524	4.654.498,525	364,165	364,282	0,117	126,3914	0	-2,40%			
Rec	236,000	605.204,439	4.654.498,122	364,162	364,258	0,096	126,3914	0	-2,40%			
Rec	237,000	605.205,354	4.654.497,720	364,161	364,234	0,073	126,3914	0	-2,40%			

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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	238,000	605.206,270	4.654.497,317	364,149	364,210	0,061	126,3914	0	-2,40%			
Rec	239,000	605.207,185	4.654.496,914	364,121	364,186	0,065	126,3914	0	-2,40%			
Rec	240,000	605.208,100	4.654.496,511	364,071	364,162	0,091	126,3914	0	-2,40%			
Rec	241,000	605.209,015	4.654.496,109	364,014	364,139	0,125	126,3914	0	-2,40%			
Rec	242,000	605.209,931	4.654.495,706	363,959	364,115	0,156	126,3914	0	-2,40%			
Rec	243,000	605.210,846	4.654.495,303	363,928	364,091	0,163	126,3914	0	-2,40%			
Rec	244,000	605.211,761	4.654.494,900	363,910	364,067	0,157	126,3914	0	-2,40%			
Rec	245,000	605.212,677	4.654.494,497	363,834	364,043	0,209	126,3914	0	-2,40%			
Rec	246,000	605.213,592	4.654.494,095	363,770	364,019	0,249	126,3914	0	-2,40%			
Rec	247,000	605.214,507	4.654.493,692	363,685	363,995	0,310	126,3914	0	-2,40%			
Cur	247,257	605.214,742	4.654.493,588	363,663	363,989	0,326	126,3914	50	-2,40%	P.S.		
Cur	248,000	605.215,420	4.654.493,284	363,611	363,971	0,360	127,3377	50	-2,40%			
Cur	249,000	605.216,325	4.654.492,859	363,521	363,947	0,426	128,6110	50	-2,40%			
Cur	250,000	605.217,222	4.654.492,415	363,447	363,923	0,476	129,8842	50	-2,40%			
Cur	251,000	605.218,109	4.654.491,954	363,380	363,899	0,519	131,1574	50	-2,40%			
Cur	252,000	605.218,987	4.654.491,475	363,338	363,875	0,537	132,4307	50	-2,40%			
Cur	253,000	605.219,855	4.654.490,979	363,308	363,851	0,543	133,7039	50	-2,40%			
Cur	254,000	605.220,713	4.654.490,465	363,279	363,827	0,548	134,9772	50	-2,40%			
Cur	255,000	605.221,560	4.654.489,934	363,256	363,803	0,547	136,2504	50	-2,40%			
Cur	256,000	605.222,397	4.654.489,387	363,231	363,779	0,548	137,5236	50	-2,40%			
Cur	257,000	605.223,223	4.654.488,823	363,235	363,755	0,520	138,7969	50	-2,40%			
Cur	258,000	605.224,037	4.654.488,242	363,252	363,731	0,479	140,0701	50	-2,40%			
Cur	259,000	605.224,839	4.654.487,645	363,275	363,707	0,432	141,3434	50	-2,40%			
Cur	260,000	605.225,630	4.654.487,033	363,298	363,683	0,385	142,6166	50	-2,40%			
Cur	261,000	605.226,408	4.654.486,404	363,368	363,660	0,292	143,8898	50	-2,40%			
Cur	262,000	605.227,173	4.654.485,761	363,379	363,636	0,257	145,1631	50	-2,40%			
Cur	263,000	605.227,925	4.654.485,102	363,368	363,612	0,244	146,4363	50	-2,40%			
Cur	264,000	605.228,664	4.654.484,428	363,301	363,588	0,287	147,7096	50	-2,40%			
Rec	264,212	605.228,819	4.654.484,283	363,262	363,583	0,321	147,9799	0	-2,40%	P.S.		
Rec	265,000	605.229,393	4.654.483,744	363,085	363,564	0,479	147,9799	0	-2,40%			
Rec	265,197	605.229,537	4.654.483,609	363,062	363,559	0,497	147,9799	0	-2,40%		T.E.	
Rec	266,000	605.230,122	4.654.483,060	362,966	363,537	0,571	147,9799	0	-3,20%			
Rec	267,000	605.230,852	4.654.482,375	362,893	363,500	0,607	147,9799	0	-4,20%			
Rec	268,000	605.231,581	4.654.481,691	362,820	363,453	0,633	147,9799	0	-5,20%			
Rec	269,000	605.232,310	4.654.481,007	362,750	363,396	0,646	147,9799	0	-6,20%			
Rec	270,000	605.233,039	4.654.480,322	362,685	363,329	0,644	147,9799	0	-7,20%			
Rec	271,000	605.233,768	4.654.479,638	362,620	363,252	0,632	147,9799	0	-8,20%		V.	ODT Ø500 L=6,50m
Rec	272,000	605.234,498	4.654.478,954	362,521	363,165	0,644	147,9799	0	-9,20%			
Rec	273,000	605.235,227	4.654.478,269	362,393	363,068	0,675	147,9799	0	-10,20%			
Rec	274,000	605.235,956	4.654.477,585	362,266	362,961	0,695	147,9799	0	-11,20%			
Rec	275,000	605.236,685	4.654.476,901	362,138	362,844	0,706	147,9799	0	-12,20%			
Rec	276,000	605.237,414	4.654.476,216	362,011	362,717	0,706	147,9799	0	-13,20%			
Rec	276,803	605.238,000	4.654.475,667	361,894	362,608	0,714	147,9799	0	-14,00%		T.S.	
Rec	277,000	605.238,143	4.654.475,532	361,865	362,580	0,715	147,9799	0	-14,00%			
Rec	278,000	605.238,873	4.654.474,848	361,716	362,440	0,724	147,9799	0	-14,00%			
Rec	279,000	605.239,602	4.654.474,163	361,562	362,300	0,738	147,9799	0	-14,00%			
Rec	280,000	605.240,331	4.654.473,479	361,409	362,160	0,751	147,9799	0	-14,00%			
Rec	281,000	605.241,060	4.654.472,795	361,256	362,020	0,764	147,9799	0	-14,00%			
Rec	282,000	605.241,789	4.654.472,110	361,103	361,880	0,777	147,9799	0	-14,00%			
Rec	283,000	605.242,519	4.654.471,426	360,950	361,740	0,790	147,9799	0	-14,00%			
Rec	284,000	605.243,248	4.654.470,742	360,797	361,600	0,803	147,9799	0	-14,00%			
Rec	285,000	605.243,977	4.654.470,058	360,644	361,460	0,816	147,9799	0	-14,00%			
Rec	286,000	605.244,706	4.654.469,373	360,491	361,320	0,829	147,9799	0	-14,00%			
Rec	287,000	605.245,435	4.654.468,689	360,339	361,180	0,841	147,9799	0	-14,00%			
Rec	288,000	605.246,165	4.654.468,005	360,196	361,040	0,844	147,9799	0	-14,00%			
Rec	289,000	605.246,894	4.654.467,320	360,068	360,900	0,832	147,9799	0	-14,00%			
Rec	290,000	605.247,623	4.654.466,636	359,968	360,760	0,792	147,9799	0	-14,00%			
Rec	290,272	605.247,821	4.654.466,450	359,950	360,722	0,772	147,9799	0	-14,00%		T.E.	
Rec	291,000	605.248,352	4.654.465,952	359,900	360,621	0,721	147,9799	0	-13,64%			
Rec	292,000	605.249,081	4.654.465,267	359,832	360,487	0,655	147,9799	0	-13,14%			
Rec	293,000	605.249,810	4.654.464,583	359,764	360,359	0,595	147,9799	0	-12,64%			
Rec	294,000	605.250,540	4.654.463,899	359,701	360,235	0,534	147,9799	0	-12,14%			
Rec	295,000	605.251,269	4.654.463,214	359,640	360,116	0,476	147,9799	0	-11,64%			
Rec	296,000	605.251,998	4.654.462,530	359,583	360,002	0,419	147,9799	0	-11,14%			
Rec	297,000	605.252,727	4.654.461,846	359,529	359,893	0,364	147,9799	0	-10,64%			
Rec	298,000	605.253,456	4.654.461,161	359,477	359,789	0,312	147,9799	0	-10,14%			
Rec	299,000	605.254,186	4.654.460,477	359,426	359,690	0,264	147,9799	0	-9,64%			
Rec	300,000	605.254,915	4.654.459,793	359,356	359,597	0,241	147,9799	0	-9,14%		V.	
Rec	301,000	605.255,644	4.654.459,108	359,271	359,508	0,237	147,9799	0	-8,64%			
Rec	302,000	605.256,373	4.654.458,424	359,209	359,424	0,215	147,9799	0	-8,14%			
Rec	303,000	605.257,102	4.654.457,740	359,191	359,345	0,154	147,9799	0	-7,64%			
Rec	304,000	605.257,831	4.654.457,056	359,232	359,271	0,039	147,9799	0	-7,14%			
Rec	305,000	605.258,561	4.654.456,371	359,252	359,202	-0,050	147,9799	0	-6,64%			
Rec	306,000	605.259,290	4.654.455,687	359,274	359,138	-0,136	147,9799	0	-6,14%			
Rec	307,000	605.260,019	4.654.455,003	359,259	359,080	-0,179	147,9799	0	-5,64%			
Rec	308,000	605.260,748	4.654.454,318	359,235	359,026	-0,209	147,9799	0	-5,14%			
Rec	309,000	605.261,477	4.654.453,634	359,209	358,977	-0,232	147,9799	0	-4,64%			
Rec	309,728	605.262,008	4.654.453,136	359,184	358,944	-0,239	147,9799	0	-4,27%		T.S.	
Rec	310,000	605.262,207	4.654.452,950	359,174	358,933	-0,241	147,9799	0	-4,27%			
Rec	311,000	605.262,936	4.654.452,265	359,137	358,890	-0,247	147,9799	0	-4,27%			
Rec	312,000	605.263,665	4.654.451,581	359,099	358,847	-0,252	147,9799	0	-4,27%			
Rec	313,000	605.264,394	4.654.450,897	359,059	358,805	-0,254	147,9799	0	-4,27%			
Rec	314,000	605.265,123	4.654.450,212	359,020	358,762	-0,258	147,9799	0	-4,27%			
Rec	315,000	605.265,853	4.654.449,528	358,915	358,719	-0,196	147,9799	0	-4,27%			
Rec	316,000	605.266,582	4.654.448,844	358,748	358,676	-0,072	147,9799	0	-4,27%			
Rec	317,000	605.267,311	4.654.448,159	358,570	358,634	0,064	147,9799	0	-4,27%			

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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	318,000	605.268,040	4.654.447,475	358,402	358,591	0,189	147,9799	0	-4,27%			
Rec	319,000	605.268,769	4.654.446,791	358,239	358,548	0,309	147,9799	0	-4,27%			
Rec	320,000	605.269,498	4.654.446,106	358,096	358,506	0,410	147,9799	0	-4,27%			
Rec	321,000	605.270,228	4.654.445,422	357,987	358,463	0,476	147,9799	0	-4,27%			
Rec	322,000	605.270,957	4.654.444,738	357,952	358,420	0,468	147,9799	0	-4,27%			
Rec	323,000	605.271,686	4.654.444,054	357,914	358,377	0,463	147,9799	0	-4,27%			
Rec	324,000	605.272,415	4.654.443,369	357,883	358,335	0,452	147,9799	0	-4,27%			
Rec	325,000	605.273,144	4.654.442,685	357,845	358,292	0,447	147,9799	0	-4,27%			
Rec	326,000	605.273,874	4.654.442,001	357,804	358,249	0,445	147,9799	0	-4,27%			
Cur	326,188	605.274,011	4.654.441,872	357,797	358,241	0,444	147,9799	50	-4,27%	P.S.		
Cur	327,000	605.274,598	4.654.441,311	357,768	358,207	0,439	149,0140	50	-4,27%			
Cur	328,000	605.275,309	4.654.440,608	357,713	358,164	0,451	150,2872	50	-4,27%			
Cur	329,000	605.276,006	4.654.439,891	357,668	358,121	0,453	151,5604	50	-4,27%			
Cur	330,000	605.276,688	4.654.439,160	357,612	358,078	0,466	152,8337	50	-4,27%			
Cur	331,000	605.277,356	4.654.438,415	357,556	358,036	0,480	154,1069	50	-4,27%			
Cur	332,000	605.278,008	4.654.437,658	357,502	357,993	0,491	155,3802	50	-4,27%			
Cur	333,000	605.278,645	4.654.436,887	357,432	357,950	0,518	156,6534	50	-4,27%			
Cur	334,000	605.279,267	4.654.436,104	357,379	357,907	0,528	157,9266	50	-4,27%			
Cur	335,000	605.279,873	4.654.435,308	357,311	357,865	0,554	159,1999	50	-4,27%			
Cur	336,000	605.280,463	4.654.434,501	357,244	357,822	0,578	160,4731	50	-4,27%			
Cur	337,000	605.281,036	4.654.433,681	357,165	357,779	0,614	161,7464	50	-4,27%			
Cur	338,000	605.281,593	4.654.432,851	357,108	357,737	0,629	163,0196	50	-4,27%			
Cur	339,000	605.282,134	4.654.432,010	357,039	357,694	0,655	164,2928	50	-4,27%			
Cur	340,000	605.282,657	4.654.431,158	356,994	357,651	0,657	165,5661	50	-4,27%			
Cur	341,000	605.283,164	4.654.430,295	356,986	357,608	0,622	166,8393	50	-4,27%			
Cur	342,000	605.283,653	4.654.429,423	356,993	357,566	0,573	168,1126	50	-4,27%			
Cur	343,000	605.284,124	4.654.428,541	357,012	357,523	0,511	169,3858	50	-4,27%			
Cur	344,000	605.284,578	4.654.427,650	357,019	357,480	0,461	170,6590	50	-4,27%			
Cur	345,000	605.285,013	4.654.426,750	357,028	357,438	0,410	171,9323	50	-4,27%			
Cur	346,000	605.285,431	4.654.425,841	357,028	357,395	0,367	173,2055	50	-4,27%			
Cur	347,000	605.285,830	4.654.424,925	357,031	357,352	0,321	174,4788	50	-4,27%			
Rec	347,058	605.285,853	4.654.424,871	357,031	357,350	0,319	174,5527	0	-4,27%	P.S.		
Rec	348,000	605.286,220	4.654.424,003	357,035	357,309	0,274	174,5527	0	-4,27%			
Rec	349,000	605.286,609	4.654.423,082	357,040	357,267	0,227	174,5527	0	-4,27%			
Rec	350,000	605.286,998	4.654.422,161	357,037	357,224	0,187	174,5527	0	-4,27%			
Rec	351,000	605.287,387	4.654.421,240	357,044	357,181	0,137	174,5527	0	-4,27%			
Rec	352,000	605.287,776	4.654.420,319	357,051	357,138	0,087	174,5527	0	-4,27%			
Rec	353,000	605.288,165	4.654.419,398	357,057	357,096	0,039	174,5527	0	-4,27%			
Rec	354,000	605.288,555	4.654.418,476	357,058	357,053	-0,005	174,5527	0	-4,27%			
Rec	355,000	605.288,944	4.654.417,555	357,067	357,010	-0,057	174,5527	0	-4,27%			
Rec	356,000	605.289,333	4.654.416,634	357,075	356,968	-0,107	174,5527	0	-4,27%			
Rec	357,000	605.289,722	4.654.415,713	357,084	356,925	-0,159	174,5527	0	-4,27%			
Cur	357,489	605.289,912	4.654.415,263	357,088	356,904	-0,184	174,5527	-50	-4,27%	P.S.		
Cur	358,000	605.290,114	4.654.414,793	357,092	356,882	-0,210	173,9016	-50	-4,27%			
Cur	359,000	605.290,521	4.654.413,880	357,076	356,839	-0,237	172,6284	-50	-4,27%			
Cur	360,000	605.290,947	4.654.412,975	357,078	356,797	-0,281	171,3552	-50	-4,27%			
Cur	361,000	605.291,391	4.654.412,079	357,069	356,754	-0,315	170,0819	-50	-4,27%			
Cur	362,000	605.291,853	4.654.411,192	357,049	356,711	-0,338	168,8087	-50	-4,27%			
Cur	363,000	605.292,332	4.654.410,314	357,010	356,669	-0,341	167,5354	-50	-4,27%			
Cur	364,000	605.292,829	4.654.409,446	356,852	356,626	-0,226	166,2622	-50	-4,27%			
Cur	365,000	605.293,343	4.654.408,589	356,675	356,583	-0,092	164,9890	-50	-4,27%			
Cur	366,000	605.293,874	4.654.407,741	356,520	356,540	0,020	163,7157	-50	-4,27%			
Cur	367,000	605.294,422	4.654.406,905	356,374	356,498	0,124	162,4425	-50	-4,27%			
Cur	368,000	605.294,987	4.654.406,080	356,314	356,455	0,141	161,1692	-50	-4,27%			
Cur	369,000	605.295,568	4.654.405,266	356,180	356,412	0,232	159,8960	-50	-4,27%			
Cur	370,000	605.296,165	4.654.404,464	356,165	356,370	0,205	158,6228	-50	-4,27%			
Cur	371,000	605.296,778	4.654.403,674	356,147	356,327	0,180	157,3495	-50	-4,27%			
Cur	372,000	605.297,407	4.654.402,896	356,126	356,284	0,158	156,0763	-50	-4,27%			
Cur	372,950	605.298,018	4.654.402,169	356,103	356,243	0,140	154,8667	-50	-4,27%		T.E.	
Cur	373,000	605.298,051	4.654.402,131	356,102	356,241	0,139	154,8030	-50	-4,26%			
Rec	373,846	605.298,608	4.654.401,494	356,079	356,206	0,127	153,7256	0	-4,14%	P.S.		
Rec	374,000	605.298,710	4.654.401,379	356,074	356,199	0,125	153,7256	0	-4,12%			
Rec	375,000	605.299,375	4.654.400,632	356,046	356,159	0,113	153,7256	0	-3,98%			
Rec	376,000	605.300,039	4.654.399,885	356,017	356,120	0,103	153,7256	0	-3,84%			
Rec	377,000	605.300,704	4.654.399,137	355,996	356,082	0,086	153,7256	0	-3,69%			
Rec	378,000	605.301,368	4.654.398,390	355,985	356,046	0,061	153,7256	0	-3,55%			
Rec	379,000	605.302,033	4.654.397,643	355,972	356,011	0,039	153,7256	0	-3,41%			
Rec	380,000	605.302,697	4.654.396,896	355,960	355,978	0,018	153,7256	0	-3,26%			
Rec	381,000	605.303,362	4.654.396,148	355,948	355,946	-0,002	153,7256	0	-3,12%			
Rec	382,000	605.304,027	4.654.395,401	355,935	355,915	-0,020	153,7256	0	-2,98%			
Rec	383,000	605.304,691	4.654.394,654	355,923	355,886	-0,037	153,7256	0	-2,84%			
Cur	383,401	605.304,958	4.654.394,354	355,918	355,875	-0,043	153,7256	50	-2,78%	P.S.	V.	
Cur	384,000	605.305,353	4.654.393,904	355,903	355,859	-0,044	154,4880	50	-2,69%			
Cur	385,000	605.306,001	4.654.393,143	355,894	355,832	-0,062	155,7613	50	-2,55%			
Cur	386,000	605.306,633	4.654.392,368	355,839	355,808	-0,031	157,0345	50	-2,41%			
Cur	387,000	605.307,250	4.654.391,581	355,782	355,784	0,002	158,3078	50	-2,26%			
Cur	388,000	605.307,852	4.654.390,782	355,772	355,762	-0,010	159,5810	50	-2,12%			
Cur	389,000	605.308,437	4.654.389,971	355,764	355,742	-0,022	160,8542	50	-1,98%			
Cur	390,000	605.309,005	4.654.389,148	355,760	355,723	-0,037	162,1275	50	-1,84%			
Cur	391,000	605.309,557	4.654.388,315	355,659	355,705	0,046	163,4007	50	-1,69%			
Cur	392,000	605.310,093	4.654.387,470	355,487	355,689	0,202	164,6740	50	-1,55%			
Cur	393,000	605.310,611	4.654.386,615	355,339	355,674	0,335	165,9472	50	-1,41%			
Cur	393,852	605.311,039	4.654.385,878	355,235	355,663	0,427	167,0320	50	-1,29%		T.S.	
Cur	394,000	605.311,112	4.654.385,750	355,217	355,661	0,444	167,2204	50	-1,29%			
Cur	395,000	605.311,596	4.654.384,874	355,097	355,648	0,551	168,4937	50	-1,29%			
Cur	396,000	605.312,062	4.654.383,990	355,052	355,635	0,583	169,7669	50	-1,29%			
Cur	397,000	605.312,510	4.654.383,096	355,028	355,622	0,594	171,0402	50	-1,29%			

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REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	398,000	605.312,941	4.654.382,193	355,009	355,609	0,600	172,3134	50	-1,29%			
Cur	399,000	605.313,353	4.654.381,282	355,010	355,596	0,586	173,5866	50	-1,29%			
Cur	400,000	605.313,747	4.654.380,363	355,012	355,583	0,571	174,8599	50	-1,29%			
Cur	401,000	605.314,122	4.654.379,436	355,013	355,571	0,558	176,1331	50	-1,29%			
Cur	402,000	605.314,479	4.654.378,502	355,016	355,558	0,542	177,4064	50	-1,29%			
Cur	403,000	605.314,817	4.654.377,561	355,017	355,545	0,528	178,6796	50	-1,29%			
Rec	403,008	605.314,820	4.654.377,553	355,017	355,545	0,528	178,6904	0	-1,29%	P.S.		
Rec	404,000	605.315,146	4.654.376,616	355,022	355,532	0,510	178,6904	0	-1,29%			
Rec	405,000	605.315,474	4.654.375,672	355,025	355,519	0,494	178,6904	0	-1,29%			
Rec	406,000	605.315,803	4.654.374,727	355,030	355,506	0,476	178,6904	0	-1,29%			
Rec	407,000	605.316,131	4.654.373,783	355,035	355,493	0,458	178,6904	0	-1,29%			
Rec	408,000	605.316,460	4.654.372,838	355,040	355,480	0,440	178,6904	0	-1,29%			
Rec	409,000	605.316,788	4.654.371,894	355,043	355,468	0,425	178,6904	0	-1,29%			
Rec	410,000	605.317,117	4.654.370,949	355,047	355,455	0,408	178,6904	0	-1,29%			
Rec	411,000	605.317,445	4.654.370,005	355,047	355,442	0,395	178,6904	0	-1,29%			
Rec	412,000	605.317,774	4.654.369,060	355,044	355,429	0,385	178,6904	0	-1,29%			
Rec	413,000	605.318,102	4.654.368,116	355,040	355,416	0,376	178,6904	0	-1,29%			
Rec	414,000	605.318,431	4.654.367,171	355,032	355,403	0,371	178,6904	0	-1,29%			
Rec	415,000	605.318,759	4.654.366,227	355,021	355,390	0,369	178,6904	0	-1,29%			
Rec	416,000	605.319,088	4.654.365,282	355,010	355,378	0,368	178,6904	0	-1,29%			
Rec	417,000	605.319,416	4.654.364,338	354,999	355,365	0,366	178,6904	0	-1,29%			
Rec	418,000	605.319,745	4.654.363,393	354,990	355,352	0,362	178,6904	0	-1,29%			
Rec	419,000	605.320,073	4.654.362,449	354,983	355,339	0,356	178,6904	0	-1,29%			
Rec	420,000	605.320,402	4.654.361,504	354,978	355,326	0,348	178,6904	0	-1,29%			
Rec	421,000	605.320,730	4.654.360,560	354,973	355,313	0,340	178,6904	0	-1,29%			
Rec	422,000	605.321,059	4.654.359,615	354,969	355,300	0,331	178,6904	0	-1,29%			
Rec	422,856	605.321,340	4.654.358,807	354,970	355,289	0,319	178,6904	0	-1,29%		T.E.	
Rec	423,000	605.321,387	4.654.358,671	354,970	355,288	0,318	178,6904	0	-1,27%			
Rec	424,000	605.321,716	4.654.357,726	354,971	355,275	0,304	178,6904	0	-1,17%			
Rec	425,000	605.322,044	4.654.356,782	354,971	355,264	0,293	178,6904	0	-1,07%			
Rec	426,000	605.322,373	4.654.355,837	354,973	355,254	0,281	178,6904	0	-0,97%			
Rec	427,000	605.322,701	4.654.354,893	354,974	355,245	0,271	178,6904	0	-0,87%			
Rec	428,000	605.323,030	4.654.353,948	354,977	355,236	0,259	178,6904	0	-0,77%			
Rec	429,000	605.323,359	4.654.353,004	354,982	355,229	0,247	178,6904	0	-0,67%			
Rec	430,000	605.323,687	4.654.352,059	354,986	355,223	0,237	178,6904	0	-0,57%			
Rec	431,000	605.324,016	4.654.351,115	354,990	355,218	0,228	178,6904	0	-0,47%			
Rec	432,000	605.324,344	4.654.350,170	354,995	355,213	0,218	178,6904	0	-0,37%			
Rec	433,000	605.324,673	4.654.349,226	355,000	355,210	0,210	178,6904	0	-0,27%			
Rec	434,000	605.325,001	4.654.348,281	355,004	355,208	0,204	178,6904	0	-0,17%			
Rec	435,000	605.325,330	4.654.347,337	355,008	355,207	0,199	178,6904	0	-0,07%			
Cur	435,318	605.325,434	4.654.347,037	355,010	355,207	0,197	178,6904	-200	-0,04%	P.S.	V.	ODT Ø500 L=5,00m
Cur	436,000	605.325,659	4.654.346,393	355,013	355,207	0,194	178,4732	-200	0,03%			
Cur	437,000	605.325,993	4.654.345,450	355,016	355,207	0,191	178,1549	-200	0,13%			
Cur	438,000	605.326,332	4.654.344,509	355,022	355,209	0,187	177,8365	-200	0,23%			
Cur	439,000	605.326,676	4.654.343,570	355,028	355,212	0,184	177,5182	-200	0,33%			
Cur	440,000	605.327,024	4.654.342,633	355,035	355,216	0,181	177,1999	-200	0,43%			
Cur	441,000	605.327,377	4.654.341,697	355,041	355,220	0,179	176,8816	-200	0,53%			
Cur	442,000	605.327,734	4.654.340,763	355,047	355,226	0,179	176,5633	-200	0,63%			
Cur	443,000	605.328,096	4.654.339,831	355,052	355,233	0,181	176,2450	-200	0,73%			
Cur	444,000	605.328,463	4.654.338,901	355,056	355,241	0,185	175,9267	-200	0,83%			
Cur	445,000	605.328,835	4.654.337,972	355,063	355,250	0,187	175,6084	-200	0,93%			
Cur	446,000	605.329,211	4.654.337,046	355,067	355,259	0,192	175,2901	-200	1,03%			
Cur	447,000	605.329,592	4.654.336,121	355,070	355,270	0,200	174,9718	-200	1,13%			
Cur	447,780	605.329,892	4.654.335,401	355,072	355,279	0,207	174,7235	-200	1,21%		T.S.	
Cur	448,000	605.329,977	4.654.335,198	355,073	355,282	0,209	174,6534	-200	1,21%			
Cur	449,000	605.330,367	4.654.334,278	355,076	355,294	0,218	174,3351	-200	1,21%			
Cur	450,000	605.330,762	4.654.333,359	355,078	355,306	0,228	174,0168	-200	1,21%			
Cur	451,000	605.331,161	4.654.332,442	355,081	355,318	0,237	173,6985	-200	1,21%			
Cur	452,000	605.331,565	4.654.331,527	355,083	355,330	0,247	173,3802	-200	1,21%			
Cur	453,000	605.331,973	4.654.330,614	355,085	355,342	0,257	173,0619	-200	1,21%			
Cur	454,000	605.332,386	4.654.329,704	355,080	355,354	0,274	172,7436	-200	1,21%			
Cur	455,000	605.332,803	4.654.328,795	355,067	355,367	0,300	172,4253	-200	1,21%			
Cur	456,000	605.333,225	4.654.327,888	355,061	355,379	0,318	172,1070	-200	1,21%			
Cur	457,000	605.333,652	4.654.326,984	355,064	355,391	0,327	171,7887	-200	1,21%			
Cur	458,000	605.334,083	4.654.326,081	355,069	355,403	0,334	171,4703	-200	1,21%			
Cur	459,000	605.334,519	4.654.325,181	355,070	355,415	0,345	171,1520	-200	1,21%			
Cur	460,000	605.334,959	4.654.324,283	355,071	355,427	0,356	170,8337	-200	1,21%			
Cur	461,000	605.335,403	4.654.323,388	355,069	355,439	0,370	170,5154	-200	1,21%			
Cur	462,000	605.335,852	4.654.322,494	355,064	355,451	0,387	170,1971	-200	1,21%			
Cur	463,000	605.336,306	4.654.321,603	355,063	355,463	0,400	169,8788	-200	1,21%			
Cur	464,000	605.336,763	4.654.320,714	355,068	355,475	0,407	169,5605	-200	1,21%			
Cur	465,000	605.337,226	4.654.319,827	355,068	355,487	0,419	169,2422	-200	1,21%			
Cur	466,000	605.337,693	4.654.318,943	355,067	355,499	0,432	168,9239	-200	1,21%			
Cur	467,000	605.338,164	4.654.318,061	355,062	355,511	0,449	168,6056	-200	1,21%			
Cur	468,000	605.338,639	4.654.317,181	355,057	355,523	0,466	168,2873	-200	1,21%			
Cur	469,000	605.339,119	4.654.316,304	355,051	355,535	0,484	167,9689	-200	1,21%			
Cur	470,000	605.339,604	4.654.315,429	355,046	355,548	0,502	167,6506	-200	1,21%			
Cur	471,000	605.340,093	4.654.314,556	355,052	355,560	0,508	167,3323	-200	1,21%			
Cur	472,000	605.340,586	4.654.313,686	355,050	355,572	0,522	167,0140	-200	1,21%			
Cur	473,000	605.341,083	4.654.312,819	355,049	355,584	0,535	166,6957	-200	1,21%			
Cur	473,587	605.341,377	4.654.312,311	355,048	355,591	0,543	166,5089	-200	1,21%		T.E.	
Cur	474,000	605.341,585	4.654.311,954	355,047	355,596	0,549	166,3774	-200	1,18%			
Cur	475,000	605.342,091	4.654.311,091	355,045	355,607	0,562	166,0591	-200	1,11%			
Cur	476,000	605.342,601	4.654.310,231	355,042	355,618	0,576	165,7408	-200	1,05%			
Cur	477,000	605.343,116	4.654.309,374	355,039	355,628	0,589	165,4225	-200	0,98%			
Cur	478,000	605.343,635	4.654.308,519	355,040	355,638	0,598	165,1042	-200	0,91%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	479,000	605.344,158	4.654.307,667	355,046	355,646	0,600	164,7858	-200	0,85%			
Cur	480,000	605.344,686	4.654.306,818	355,051	355,655	0,604	164,4675	-200	0,78%			
Rec	480,950	605.345,190	4.654.306,013	355,056	355,662	0,606	164,1653	0	0,72%	P.S.		
Rec	481,000	605.345,217	4.654.305,971	355,056	355,662	0,606	164,1653	0	0,71%			
Rec	482,000	605.345,751	4.654.305,125	355,060	355,669	0,609	164,1653	0	0,65%			
Rec	482,632	605.346,088	4.654.304,590	355,063	355,673	0,610	164,1653	0	0,60%		V.	
Rec	483,000	605.346,285	4.654.304,279	355,065	355,675	0,610	164,1653	0	0,58%			
Rec	484,000	605.346,818	4.654.303,433	355,069	355,680	0,611	164,1653	0	0,51%			
Rec	485,000	605.347,352	4.654.302,588	355,074	355,685	0,611	164,1653	0	0,45%			
Rec	486,000	605.347,886	4.654.301,742	355,079	355,689	0,610	164,1653	0	0,38%			
Rec	487,000	605.348,419	4.654.300,896	355,084	355,693	0,609	164,1653	0	0,31%			
Rec	488,000	605.348,953	4.654.300,051	355,086	355,696	0,610	164,1653	0	0,25%			
Rec	489,000	605.349,486	4.654.299,205	355,087	355,698	0,611	164,1653	0	0,18%			
Rec	490,000	605.350,020	4.654.298,359	355,088	355,699	0,611	164,1653	0	0,11%			
Rec	491,000	605.350,554	4.654.297,513	355,090	355,700	0,610	164,1653	0	0,05%			
Rec	491,677	605.350,915	4.654.296,941	355,091	355,700	0,609	164,1653	0	0,00%		T.S.	
Rec	492,000	605.351,087	4.654.296,668	355,091	355,700	0,609	164,1653	0	0,00%			
Rec	493,000	605.351,621	4.654.295,822	355,093	355,700	0,607	164,1653	0	0,00%			
Rec	494,000	605.352,155	4.654.294,976	355,094	355,700	0,606	164,1653	0	0,00%			
Rec	495,000	605.352,688	4.654.294,131	355,096	355,700	0,604	164,1653	0	0,00%			
Rec	496,000	605.353,222	4.654.293,285	355,097	355,700	0,603	164,1653	0	0,00%			
Rec	497,000	605.353,756	4.654.292,439	355,100	355,700	0,600	164,1653	0	0,00%			
Rec	498,000	605.354,289	4.654.291,593	355,112	355,700	0,588	164,1653	0	0,00%			
Rec	499,000	605.354,823	4.654.290,748	355,115	355,700	0,585	164,1653	0	0,00%			
Rec	500,000	605.355,356	4.654.289,902	355,117	355,700	0,583	164,1653	0	0,00%			
Rec	501,000	605.355,890	4.654.289,056	355,119	355,700	0,581	164,1653	0	0,00%			
Rec	502,000	605.356,424	4.654.288,211	355,121	355,700	0,579	164,1653	0	0,00%			
	502,632	605.356,761	4.654.287,676	355,122	355,700	0,578	164,1653		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	605.756,370	4.653.404,307	372,758	372,758	0,000	361,3233	0	9,17%			
Rec	1,000	605.755,799	4.653.405,128	372,865	372,850	-0,015	361,3233	0	9,17%			ODT Ø500 L=8,00m
Rec	2,000	605.755,228	4.653.405,949	372,972	372,941	-0,031	361,3233	0	9,17%			
Rec	3,000	605.754,657	4.653.406,770	373,069	373,033	-0,036	361,3233	0	9,17%			
Rec	3,965	605.754,106	4.653.407,563	373,159	373,121	-0,037	361,3233	0	9,17%		T.E.	
Rec	4,000	605.754,086	4.653.407,591	373,162	373,125	-0,037	361,3233	0	9,16%			
Rec	5,000	605.753,516	4.653.408,413	373,254	373,215	-0,039	361,3233	0	8,91%			
Rec	6,000	605.752,945	4.653.409,234	373,343	373,303	-0,040	361,3233	0	8,66%			
Rec	7,000	605.752,374	4.653.410,055	373,426	373,388	-0,038	361,3233	0	8,41%			
Rec	8,000	605.751,803	4.653.410,876	373,490	373,471	-0,019	361,3233	0	8,16%			
Rec	9,000	605.751,232	4.653.411,697	373,541	373,551	0,010	361,3233	0	7,91%			
Rec	10,000	605.750,661	4.653.412,518	373,583	373,629	0,046	361,3233	0	7,66%			
Rec	11,000	605.750,090	4.653.413,339	373,646	373,704	0,058	361,3233	0	7,41%			
Rec	12,000	605.749,520	4.653.414,160	373,716	373,777	0,061	361,3233	0	7,16%			
Rec	13,000	605.748,949	4.653.414,981	373,760	373,847	0,087	361,3233	0	6,91%			
Cur	13,867	605.748,454	4.653.415,693	373,790	373,906	0,116	361,3233	200	6,69%	P.S.	V.	
Cur	14,000	605.748,378	4.653.415,802	373,795	373,915	0,120	361,3656	200	6,66%			
Cur	15,000	605.747,810	4.653.416,625	373,889	373,981	0,092	361,6839	200	6,41%			
Cur	16,000	605.747,246	4.653.417,451	373,960	374,043	0,083	362,0022	200	6,16%			
Cur	17,000	605.746,686	4.653.418,279	374,005	374,104	0,099	362,3205	200	5,91%			
Cur	18,000	605.746,130	4.653.419,110	374,023	374,162	0,139	362,6388	200	5,66%			
Cur	19,000	605.745,578	4.653.419,944	374,039	374,217	0,178	362,9571	200	5,41%			
Cur	20,000	605.745,031	4.653.420,781	374,053	374,270	0,217	363,2754	200	5,16%			
Cur	21,000	605.744,487	4.653.421,621	374,069	374,320	0,251	363,5937	200	4,91%			
Cur	22,000	605.743,948	4.653.422,463	374,085	374,368	0,283	363,9120	200	4,66%			
Cur	23,000	605.743,413	4.653.423,308	374,099	374,413	0,314	364,2304	200	4,41%			
Cur	23,769	605.743,005	4.653.423,960	374,102	374,446	0,344	364,4751	200	4,21%		T.S.	
Cur	24,000	605.742,883	4.653.424,156	374,103	374,456	0,353	364,5487	200	4,21%			
Cur	25,000	605.742,356	4.653.425,006	374,100	374,498	0,398	364,8670	200	4,21%			
Cur	26,000	605.741,834	4.653.425,859	374,108	374,540	0,432	365,1853	200	4,21%			
Cur	27,000	605.741,316	4.653.426,714	374,145	374,582	0,437	365,5036	200	4,21%			
Cur	28,000	605.740,803	4.653.427,572	374,182	374,624	0,442	365,8219	200	4,21%			
Cur	29,000	605.740,293	4.653.428,433	374,196	374,666	0,470	366,1402	200	4,21%			
Cur	30,000	605.739,788	4.653.429,296	374,196	374,708	0,512	366,4585	200	4,21%			
Cur	31,000	605.739,288	4.653.430,162	374,182	374,750	0,568	366,7768	200	4,21%			
Cur	32,000	605.738,791	4.653.431,030	374,165	374,792	0,627	367,0951	200	4,21%			
Cur	33,000	605.738,299	4.653.431,900	374,149	374,835	0,686	367,4135	200	4,21%			
Cur	34,000	605.737,812	4.653.432,773	374,131	374,877	0,746	367,7318	200	4,21%			
Cur	35,000	605.737,328	4.653.433,649	374,114	374,919	0,805	368,0501	200	4,21%			
Cur	36,000	605.736,850	4.653.434,527	374,100	374,961	0,861	368,3684	200	4,21%			
Cur	37,000	605.736,375	4.653.435,407	374,144	375,003	0,859	368,6867	200	4,21%			
Cur	37,938	605.735,934	4.653.436,235	374,186	375,043	0,856	368,9853	200	4,21%		T.E.	
Cur	38,000	605.735,905	4.653.436,290	374,189	375,045	0,856	369,0050	200	4,18%			
Cur	39,000	605.735,439	4.653.437,175	374,234	375,084	0,850	369,3233	200	3,68%			
Cur	40,000	605.734,978	4.653.438,062	374,229	375,119	0,890	369,6416	200	3,18%			
Cur	41,000	605.734,521	4.653.438,951	374,351	375,148	0,797	369,9599	200	2,68%			
Cur	42,000	605.734,069	4.653.439,843	374,395	375,172	0,777	370,2782	200	2,18%			
Cur	43,000	605.733,621	4.653.440,737	374,506	375,192	0,686	370,5966	200	1,68%			
Cur	44,000	605.733,178	4.653.441,634	374,716	375,206	0,490	370,9149	200	1,18%			
Cur	45,000	605.732,739	4.653.442,532	374,671	375,215	0,544	371,2332	200	0,68%			
Cur	46,000	605.732,305	4.653.443,433	374,382	375,219	0,837	371,5515	200	0,18%			
Cur	46,500	605.732,089	4.653.443,884	374,404	375,220	0,815	371,7106	200	-0,07%		V.	ODT Ø500 L=9,00m
Cur	47,000	605.731,875	4.653.444,336	374,427	375,219	0,792	371,8698	200	-0,32%			
Cur	48,000	605.731,449	4.653.445,241	374,666	375,213	0,547	372,1881	200	-0,82%			
Cur	49,000	605.731,028	4.653.446,148	374,874	375,202	0,328	372,5064	200	-1,32%			
Cur	50,000	605.730,612	4.653.447,057	374,563	375,187	0,624	372,8247	200	-1,82%			
Cur	51,000	605.730,200	4.653.447,968	374,239	375,166	0,927	373,1430	200	-2,32%			
Rec	51,941	605.729,817	4.653.448,828	373,996	375,142	1,146	373,4424	0	-2,79%	P.S.		
Rec	52,000	605.729,793	4.653.448,882	373,995	375,140	1,145	373,4424	0	-2,82%			
Rec	53,000	605.729,388	4.653.449,796	373,977	375,110	1,133	373,4424	0	-3,32%			
Rec	54,000	605.728,983	4.653.450,710	373,961	375,074	1,113	373,4424	0	-3,82%			
Rec	55,000	605.728,578	4.653.451,625	373,947	375,033	1,086	373,4424	0	-4,32%			
Rec	56,000	605.728,173	4.653.452,539	373,946	375,030	1,084	373,4424	0	-4,35%		T.S.	
Rec	55,062	605.728,553	4.653.451,681	373,937	374,990	1,053	373,4424	0	-4,35%			
Rec	57,000	605.727,767	4.653.453,453	373,927	374,946	1,019	373,4424	0	-4,35%			
Rec	58,000	605.727,362	4.653.454,367	373,916	374,903	0,987	373,4424	0	-4,35%			
Rec	59,000	605.726,957	4.653.455,282	373,902	374,859	0,957	373,4424	0	-4,35%			
Rec	60,000	605.726,552	4.653.456,196	373,895	374,816	0,921	373,4424	0	-4,35%			
Rec	61,000	605.726,147	4.653.457,110	373,888	374,772	0,884	373,4424	0	-4,35%			
Rec	62,000	605.725,742	4.653.458,024	373,883	374,735	0,852	373,4424	0	-4,35%		T.E.	
Rec	61,864	605.725,797	4.653.457,900	373,882	374,729	0,847	373,4424	0	-4,32%			
Rec	63,000	605.725,336	4.653.458,938	373,886	374,687	0,801	373,4424	0	-4,07%			
Rec	64,000	605.724,931	4.653.459,853	373,889	374,647	0,758	373,4424	0	-3,82%			
Rec	65,000	605.724,526	4.653.460,767	373,895	374,610	0,715	373,4424	0	-3,57%			
Rec	66,000	605.724,121	4.653.461,681	373,903	374,576	0,673	373,4424	0	-3,32%			
Rec	67,000	605.723,716	4.653.462,595	373,912	374,544	0,632	373,4424	0	-3,07%			
Rec	68,000	605.723,311	4.653.463,510	373,923	374,515	0,592	373,4424	0	-2,82%			
Rec	69,000	605.722,905	4.653.464,424	373,933	374,488	0,555	373,4424	0	-2,57%			
Rec	70,000	605.722,500	4.653.465,338	373,945	374,463	0,518	373,4424	0	-2,32%			
Rec	71,000	605.722,095	4.653.466,252	373,957	374,441	0,484	373,4424	0	-2,07%			
Rec	72,000	605.721,690	4.653.467,167	373,969	374,422	0,453	373,4424	0	-1,82%			
Rec	73,000	605.721,285	4.653.468,081	373,981	374,405	0,424	373,4424	0	-1,57%			
Rec	74,000	605.720,880	4.653.468,995	373,993	374,391	0,398	373,4424	0	-1,32%			
Rec	75,000	605.720,474	4.653.469,909	374,015	374,379	0,364	373,4424	0	-1,07%			
Rec	76,000	605.720,069	4.653.470,824	374,048	374,369	0,321	373,4424	0	-0,82%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	77,000	605.719,664	4.653.471,738	374,080	374,362	0,282	373,4424	0	-0,57%		V.	ODT Ø500 L=6,00m
Rec	78,000	605.719,259	4.653.472,652	374,114	374,358	0,244	373,4424	0	-0,32%			
Rec	79,000	605.718,854	4.653.473,566	374,149	374,356	0,207	373,4424	0	-0,07%			
Rec	80,000	605.718,448	4.653.474,481	374,188	374,357	0,169	373,4424	0	0,18%			
Rec	81,000	605.718,043	4.653.475,395	374,234	374,360	0,126	373,4424	0	0,43%			
Rec	82,000	605.717,638	4.653.476,309	374,266	374,365	0,099	373,4424	0	0,68%			
Rec	83,000	605.717,233	4.653.477,223	374,298	374,373	0,075	373,4424	0	0,93%			
Rec	84,000	605.716,828	4.653.478,138	374,330	374,384	0,054	373,4424	0	1,18%			
Rec	85,000	605.716,423	4.653.479,052	374,362	374,397	0,035	373,4424	0	1,43%			
Rec	86,000	605.716,017	4.653.479,966	374,394	374,413	0,019	373,4424	0	1,68%			
Rec	87,000	605.715,612	4.653.480,880	374,426	374,431	0,005	373,4424	0	1,93%			
Rec	88,000	605.715,207	4.653.481,795	374,458	374,451	-0,007	373,4424	0	2,18%			
Rec	89,000	605.714,802	4.653.482,709	374,490	374,474	-0,016	373,4424	0	2,43%			
Rec	90,000	605.714,397	4.653.483,623	374,522	374,500	-0,022	373,4424	0	2,68%			
Rec	91,000	605.713,992	4.653.484,537	374,554	374,528	-0,026	373,4424	0	2,93%			
Rec	92,000	605.713,586	4.653.485,451	374,586	374,559	-0,027	373,4424	0	3,18%			
Rec	92,136	605.713,531	4.653.485,576	374,590	374,563	-0,027	373,4424	0	3,22%		T.S.	
Rec	93,000	605.713,181	4.653.486,366	374,618	374,591	-0,027	373,4424	0	3,22%			
Rec	94,000	605.712,776	4.653.487,280	374,649	374,623	-0,026	373,4424	0	3,22%			
Rec	95,000	605.712,371	4.653.488,194	374,675	374,655	-0,020	373,4424	0	3,22%			
Rec	96,000	605.711,966	4.653.489,108	374,693	374,687	-0,006	373,4424	0	3,22%			
Rec	97,000	605.711,561	4.653.490,023	374,711	374,720	0,009	373,4424	0	3,22%			
Rec	98,000	605.711,155	4.653.490,937	374,729	374,752	0,023	373,4424	0	3,22%			
Rec	99,000	605.710,750	4.653.491,851	374,747	374,784	0,037	373,4424	0	3,22%			
Rec	100,000	605.710,345	4.653.492,765	374,765	374,816	0,051	373,4424	0	3,22%			
Rec	101,000	605.709,940	4.653.493,680	374,783	374,848	0,065	373,4424	0	3,22%			
Rec	102,000	605.709,535	4.653.494,594	374,801	374,881	0,080	373,4424	0	3,22%			
Cur	102,959	605.709,146	4.653.495,471	374,818	374,911	0,093	373,4424	200	3,22%	P.S.		
Cur	103,000	605.709,130	4.653.495,508	374,819	374,913	0,094	373,4554	200	3,22%			
Cur	104,000	605.708,727	4.653.496,423	374,837	374,945	0,108	373,7737	200	3,22%			
Cur	105,000	605.708,329	4.653.497,341	374,854	374,977	0,123	374,0920	200	3,22%			
Cur	106,000	605.707,935	4.653.498,260	374,872	375,009	0,137	374,4103	200	3,22%			
Cur	107,000	605.707,546	4.653.499,181	374,890	375,041	0,151	374,7286	200	3,22%			
Cur	108,000	605.707,162	4.653.500,105	374,908	375,074	0,166	375,0469	200	3,22%			
Cur	109,000	605.706,782	4.653.501,030	374,925	375,106	0,181	375,3653	200	3,22%			
Cur	110,000	605.706,407	4.653.501,957	374,943	375,138	0,195	375,6836	200	3,22%			
Cur	111,000	605.706,037	4.653.502,886	374,958	375,170	0,212	376,0019	200	3,22%			
Cur	112,000	605.705,671	4.653.503,816	374,971	375,202	0,231	376,3202	200	3,22%			
Cur	113,000	605.705,310	4.653.504,749	374,985	375,235	0,250	376,6385	200	3,22%			
Cur	114,000	605.704,954	4.653.505,683	374,999	375,267	0,268	376,9568	200	3,22%			
Cur	115,000	605.704,602	4.653.506,619	375,064	375,299	0,235	377,2751	200	3,22%			
Cur	116,000	605.704,255	4.653.507,557	375,133	375,331	0,198	377,5934	200	3,22%			
Cur	117,000	605.703,912	4.653.508,497	375,199	375,363	0,164	377,9117	200	3,22%			
Cur	118,000	605.703,575	4.653.509,438	375,270	375,395	0,125	378,2300	200	3,22%			
Cur	119,000	605.703,242	4.653.510,381	375,342	375,428	0,086	378,5484	200	3,22%			
Cur	120,000	605.702,913	4.653.511,325	375,401	375,460	0,059	378,8667	200	3,22%			
Cur	121,000	605.702,590	4.653.512,272	375,471	375,492	0,021	379,1850	200	3,22%			
Cur	122,000	605.702,271	4.653.513,219	375,529	375,524	-0,005	379,5033	200	3,22%			
Cur	123,000	605.701,957	4.653.514,169	375,595	375,556	-0,039	379,8216	200	3,22%			
Cur	124,000	605.701,648	4.653.515,120	375,648	375,589	-0,059	380,1399	200	3,22%			
Cur	125,000	605.701,343	4.653.516,072	375,710	375,621	-0,089	380,4582	200	3,22%			
Cur	126,000	605.701,043	4.653.517,026	375,760	375,653	-0,107	380,7765	200	3,22%			
Cur	127,000	605.700,748	4.653.517,982	375,816	375,685	-0,131	381,0948	200	3,22%			
Cur	128,000	605.700,458	4.653.518,939	375,862	375,717	-0,145	381,4131	200	3,22%			
Cur	129,000	605.700,173	4.653.519,897	375,908	375,750	-0,158	381,7315	200	3,22%			
Cur	130,000	605.699,892	4.653.520,857	375,954	375,782	-0,172	382,0498	200	3,22%			
Cur	131,000	605.699,616	4.653.521,818	375,999	375,814	-0,185	382,3681	200	3,22%			
Cur	132,000	605.699,345	4.653.522,781	376,040	375,846	-0,194	382,6864	200	3,22%			
Cur	133,000	605.699,079	4.653.523,745	376,080	375,878	-0,202	383,0047	200	3,22%			
Cur	134,000	605.698,818	4.653.524,710	376,117	375,910	-0,207	383,3230	200	3,22%			
Cur	135,000	605.698,561	4.653.525,676	376,156	375,943	-0,213	383,6413	200	3,22%			
Cur	136,000	605.698,309	4.653.526,644	376,194	375,975	-0,219	383,9596	200	3,22%			
Cur	137,000	605.698,062	4.653.527,613	376,224	376,007	-0,217	384,2779	200	3,22%			
Cur	138,000	605.697,820	4.653.528,583	376,256	376,039	-0,217	384,5962	200	3,22%			
Cur	139,000	605.697,583	4.653.529,555	376,280	376,071	-0,209	384,9146	200	3,22%			
Cur	140,000	605.697,351	4.653.530,528	376,303	376,104	-0,199	385,2329	200	3,22%			
Cur	141,000	605.697,123	4.653.531,501	376,326	376,136	-0,190	385,5512	200	3,22%			
Cur	142,000	605.696,901	4.653.532,476	376,349	376,168	-0,181	385,8695	200	3,22%			
Cur	143,000	605.696,683	4.653.533,452	376,372	376,200	-0,172	386,1878	200	3,22%			
Cur	144,000	605.696,470	4.653.534,429	376,394	376,232	-0,162	386,5061	200	3,22%			
Cur	145,000	605.696,262	4.653.535,408	376,417	376,264	-0,153	386,8244	200	3,22%			
Cur	146,000	605.696,059	4.653.536,387	376,438	376,297	-0,141	387,1427	200	3,22%			
Cur	147,000	605.695,861	4.653.537,367	376,463	376,329	-0,134	387,4610	200	3,22%			
Cur	148,000	605.695,668	4.653.538,348	376,490	376,361	-0,129	387,7793	200	3,22%			
Cur	149,000	605.695,480	4.653.539,330	376,517	376,393	-0,124	388,0977	200	3,22%			
Cur	150,000	605.695,296	4.653.540,313	376,544	376,425	-0,119	388,4160	200	3,22%			
Cur	151,000	605.695,118	4.653.541,297	376,568	376,458	-0,110	388,7343	200	3,22%			
Cur	152,000	605.694,944	4.653.542,282	376,602	376,490	-0,112	389,0526	200	3,22%			
Cur	153,000	605.694,775	4.653.543,268	376,635	376,522	-0,113	389,3709	200	3,22%			
Cur	154,000	605.694,612	4.653.544,254	376,656	376,554	-0,102	389,6892	200	3,22%			
Cur	155,000	605.694,453	4.653.545,241	376,676	376,586	-0,090	390,0075	200	3,22%			
Cur	156,000	605.694,299	4.653.546,230	376,696	376,618	-0,078	390,3258	200	3,22%			
Cur	157,000	605.694,150	4.653.547,218	376,716	376,651	-0,065	390,6441	200	3,22%			
Cur	158,000	605.694,006	4.653.548,208	376,736	376,683	-0,053	390,9624	200	3,22%			
Cur	159,000	605.693,867	4.653.549,198	376,756	376,715	-0,041	391,2807	200	3,22%			
Cur	159,418	605.693,811	4.653.549,612	376,764	376,728	-0,036	391,4138	200	3,22%		T.E.	

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REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	160,000	605.693,733	4.653.550,189	376,776	376,745	-0,031	391,5991	200	2,44%			
Cur	161,000	605.693,604	4.653.551,181	376,795	376,763	-0,032	391,9174	200	1,11%			
Cur	162,000	605.693,480	4.653.552,173	376,814	376,767	-0,047	392,2357	200	-0,22%			
Cur	163,000	605.693,361	4.653.553,166	376,833	376,758	-0,075	392,5540	200	-1,56%			
Cur	164,000	605.693,247	4.653.554,159	376,852	376,736	-0,116	392,8723	200	-2,89%			
Cur	165,000	605.693,137	4.653.555,153	376,871	376,700	-0,171	393,1906	200	-4,22%			
Cur	166,000	605.693,033	4.653.556,148	376,889	376,651	-0,238	393,5089	200	-5,56%			
Cur	167,000	605.692,934	4.653.557,143	376,908	376,589	-0,319	393,8272	200	-6,89%			
Cur	168,000	605.692,839	4.653.558,139	376,926	376,514	-0,412	394,1455	200	-8,22%			
Cur	169,000	605.692,750	4.653.559,135	376,944	376,425	-0,519	394,4638	200	-9,56%			
Cur	170,000	605.692,666	4.653.560,131	376,979	376,322	-0,657	394,7822	200	-10,89%		V.	ODT Ø500 L=6,50m
Cur	171,000	605.692,586	4.653.561,128	377,024	376,207	-0,817	395,1005	200	-12,22%			
Cur	172,000	605.692,512	4.653.562,125	377,018	376,078	-0,940	395,4188	200	-13,56%			
Cur	173,000	605.692,443	4.653.563,123	376,923	375,936	-0,987	395,7371	200	-14,89%			
Cur	174,000	605.692,378	4.653.564,121	376,813	375,780	-1,033	396,0554	200	-16,22%			
Cur	175,000	605.692,319	4.653.565,119	376,703	375,611	-1,092	396,3737	200	-17,56%			
Cur	176,000	605.692,264	4.653.566,117	376,593	375,429	-1,164	396,6920	200	-18,89%			
Cur	177,000	605.692,215	4.653.567,116	376,483	375,233	-1,250	397,0103	200	-20,22%			
Cur	178,000	605.692,170	4.653.568,115	376,373	375,025	-1,348	397,3286	200	-21,56%			
Cur	179,000	605.692,131	4.653.569,114	376,264	374,802	-1,462	397,6469	200	-22,89%			
Cur	180,000	605.692,096	4.653.570,114	376,155	374,567	-1,588	397,9653	200	-24,22%			
Cur	180,582	605.692,079	4.653.570,695	376,091	374,423	-1,667	398,1505	200	-25,00%		T.S.	
Cur	181,000	605.692,067	4.653.571,113	376,045	374,319	-1,726	398,2836	200	-25,00%			
Cur	182,000	605.692,043	4.653.572,113	375,654	374,069	-1,585	398,6019	200	-25,00%			
Cur	183,000	605.692,023	4.653.573,113	375,017	373,819	-1,198	398,9202	200	-25,00%			
Cur	184,000	605.692,009	4.653.574,113	374,443	373,569	-0,874	399,2385	200	-25,00%			
Cur	185,000	605.691,999	4.653.575,113	373,880	373,319	-0,561	399,5568	200	-25,00%			
Rec	185,626	605.691,996	4.653.575,738	373,515	373,163	-0,352	399,7559	0	-25,00%	P.S.		
Rec	186,000	605.691,994	4.653.576,113	373,297	373,069	-0,228	399,7559	0	-25,00%			
Rec	187,000	605.691,991	4.653.577,113	372,748	372,819	0,071	399,7559	0	-25,00%			
Rec	188,000	605.691,987	4.653.578,113	372,231	372,569	0,338	399,7559	0	-25,00%			
Rec	189,000	605.691,983	4.653.579,113	371,782	372,319	0,537	399,7559	0	-25,00%			
Rec	190,000	605.691,979	4.653.580,113	371,389	372,069	0,680	399,7559	0	-25,00%			
Rec	191,000	605.691,975	4.653.581,113	370,997	371,819	0,822	399,7559	0	-25,00%			
Rec	192,000	605.691,971	4.653.582,113	370,609	371,569	0,960	399,7559	0	-25,00%			
Rec	193,000	605.691,968	4.653.583,113	370,221	371,319	1,098	399,7559	0	-25,00%			
Rec	194,000	605.691,964	4.653.584,113	369,855	371,069	1,214	399,7559	0	-25,00%			
Rec	195,000	605.691,960	4.653.585,113	369,524	370,819	1,295	399,7559	0	-25,00%			
Rec	196,000	605.691,956	4.653.586,113	369,200	370,569	1,369	399,7559	0	-25,00%			
Rec	197,000	605.691,952	4.653.587,113	368,892	370,319	1,427	399,7559	0	-25,00%			
Rec	198,000	605.691,948	4.653.588,113	368,610	370,069	1,459	399,7559	0	-25,00%			
Rec	199,000	605.691,944	4.653.589,113	368,322	369,819	1,497	399,7559	0	-25,00%			
Rec	200,000	605.691,941	4.653.590,113	368,022	369,569	1,547	399,7559	0	-25,00%			
Rec	201,000	605.691,937	4.653.591,113	367,484	369,319	1,835	399,7559	0	-25,00%			
Rec	202,000	605.691,933	4.653.592,113	366,969	369,069	2,100	399,7559	0	-25,00%			
Rec	203,000	605.691,929	4.653.593,113	366,691	368,819	2,128	399,7559	0	-25,00%			
Rec	204,000	605.691,925	4.653.594,113	366,519	368,569	2,050	399,7559	0	-25,00%			
Rec	205,000	605.691,921	4.653.595,113	366,330	368,319	1,989	399,7559	0	-25,00%			
Rec	206,000	605.691,918	4.653.596,113	366,211	368,069	1,858	399,7559	0	-25,00%			
Rec	207,000	605.691,914	4.653.597,113	366,089	367,819	1,730	399,7559	0	-25,00%			
Rec	208,000	605.691,910	4.653.598,113	365,975	367,569	1,594	399,7559	0	-25,00%			
Rec	209,000	605.691,906	4.653.599,112	365,872	367,319	1,447	399,7559	0	-25,00%			
Rec	210,000	605.691,902	4.653.600,112	365,755	367,069	1,314	399,7559	0	-25,00%			
Rec	211,000	605.691,898	4.653.601,112	365,632	366,819	1,187	399,7559	0	-25,00%			
Rec	211,528	605.691,896	4.653.601,640	365,564	366,687	1,123	399,7559	0	-25,00%		T.E.	
Rec	212,000	605.691,895	4.653.602,112	365,503	366,570	1,067	399,7559	0	-24,37%			
Rec	213,000	605.691,891	4.653.603,112	365,372	366,333	0,961	399,7559	0	-23,04%			
Rec	214,000	605.691,887	4.653.604,112	365,240	366,110	0,870	399,7559	0	-21,70%			
Rec	215,000	605.691,883	4.653.605,112	365,107	365,899	0,792	399,7559	0	-20,37%			
Rec	216,000	605.691,879	4.653.606,112	364,993	365,702	0,709	399,7559	0	-19,04%			
Rec	217,000	605.691,875	4.653.607,112	364,899	365,519	0,620	399,7559	0	-17,70%			
Rec	218,000	605.691,872	4.653.608,112	364,807	365,348	0,541	399,7559	0	-16,37%			
Rec	219,000	605.691,868	4.653.609,112	364,716	365,191	0,475	399,7559	0	-15,04%			
Rec	220,000	605.691,864	4.653.610,112	364,629	365,047	0,418	399,7559	0	-13,70%		V.	
Rec	221,000	605.691,860	4.653.611,112	364,548	364,917	0,369	399,7559	0	-12,37%			
Rec	222,000	605.691,856	4.653.612,112	364,534	364,800	0,266	399,7559	0	-11,04%			
Rec	223,000	605.691,852	4.653.613,112	364,483	364,696	0,213	399,7559	0	-9,70%			
Rec	224,000	605.691,849	4.653.614,112	364,445	364,606	0,161	399,7559	0	-8,37%			
Rec	225,000	605.691,845	4.653.615,112	364,317	364,529	0,212	399,7559	0	-7,04%			
Rec	226,000	605.691,841	4.653.616,112	364,250	364,465	0,215	399,7559	0	-5,70%			
Rec	227,000	605.691,837	4.653.617,112	364,111	364,415	0,304	399,7559	0	-4,37%			
Rec	228,000	605.691,833	4.653.618,112	364,049	364,378	0,329	399,7559	0	-3,04%			
Rec	228,472	605.691,831	4.653.618,584	364,025	364,365	0,340	399,7559	0	-2,41%		T.S.	
Rec	229,000	605.691,829	4.653.619,112	363,999	364,353	0,354	399,7559	0	-2,41%			
Rec	230,000	605.691,826	4.653.620,112	363,986	364,329	0,343	399,7559	0	-2,41%			
Rec	231,000	605.691,822	4.653.621,112	363,971	364,304	0,333	399,7559	0	-2,41%			
Rec	232,000	605.691,818	4.653.622,112	363,963	364,280	0,317	399,7559	0	-2,41%			
Rec	232,919	605.691,814	4.653.623,031	363,953	364,258	0,305	399,7559	0	-2,41%		T.E.	
Rec	233,000	605.691,814	4.653.623,112	363,952	364,256	0,304	399,7559	0	-2,36%			
Rec	234,000	605.691,810	4.653.624,112	363,946	364,235	0,289	399,7559	0	-1,86%			
Rec	235,000	605.691,806	4.653.625,112	363,938	364,219	0,281	399,7559	0	-1,36%			
Rec	236,000	605.691,803	4.653.626,112	363,936	364,208	0,272	399,7559	0	-0,86%			
Rec	237,000	605.691,799	4.653.627,112	363,919	364,202	0,283	399,7559	0	-0,36%			
Rec	238,000	605.691,795	4.653.628,112	363,917	364,201	0,284	399,7559	0	0,14%			
Rec	239,000	605.691,791	4.653.629,112	363,917	364,204	0,287	399,7559	0	0,64%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	240,000	605.691,787	4.653.630,112	363,918	364,213	0,295	399,7559	0	1,14%		V.	ODT Ø500 L=5,80m
Rec	241,000	605.691,783	4.653.631,112	363,895	364,227	0,332	399,7559	0	1,64%			
Rec	242,000	605.691,780	4.653.632,112	363,903	364,246	0,343	399,7559	0	2,14%			
Rec	243,000	605.691,776	4.653.633,112	363,910	364,270	0,360	399,7559	0	2,64%			
Rec	244,000	605.691,772	4.653.634,112	363,917	364,299	0,382	399,7559	0	3,14%			
Rec	245,000	605.691,768	4.653.635,112	363,913	364,333	0,420	399,7559	0	3,64%			
Rec	246,000	605.691,764	4.653.636,112	363,951	364,371	0,420	399,7559	0	4,14%			
Rec	247,000	605.691,760	4.653.637,112	363,990	364,415	0,425	399,7559	0	4,64%			
Rec	247,081	605.691,760	4.653.637,193	363,995	364,419	0,424	399,7559	0	4,68%		T.S.	
Rec	248,000	605.691,757	4.653.638,112	364,049	364,462	0,413	399,7559	0	4,67%			
Rec	249,000	605.691,753	4.653.639,112	364,117	364,508	0,391	399,7559	0	4,67%			
Rec	250,000	605.691,749	4.653.640,112	364,232	364,555	0,323	399,7559	0	4,67%			
Rec	251,000	605.691,745	4.653.641,112	364,378	364,602	0,224	399,7559	0	4,67%			
Rec	252,000	605.691,741	4.653.642,112	364,509	364,648	0,139	399,7559	0	4,67%			
Rec	255,992	605.691,726	4.653.646,104	364,600	364,695	0,094	399,7559	0	4,67%		T.E.	
Rec	253,000	605.691,737	4.653.643,112	364,601	364,695	0,094	399,7559	0	4,66%			
Rec	254,000	605.691,734	4.653.644,112	364,725	364,738	0,013	399,7559	0	4,00%			
Rec	255,000	605.691,730	4.653.645,112	364,684	364,775	0,091	399,7559	0	3,33%			
Rec	256,000	605.691,726	4.653.646,112	364,672	364,805	0,133	399,7559	0	2,66%			
Rec	257,000	605.691,722	4.653.647,112	364,660	364,828	0,168	399,7559	0	2,00%			
Rec	258,000	605.691,718	4.653.648,112	364,674	364,845	0,171	399,7559	0	1,33%			
Rec	259,000	605.691,714	4.653.649,112	364,679	364,855	0,176	399,7559	0	0,66%			
Rec	260,000	605.691,711	4.653.650,112	364,722	364,858	0,136	399,7559	0	0,00%		V.	ODT Ø500 L=5,80m
Rec	261,000	605.691,707	4.653.651,112	364,533	364,855	0,322	399,7559	0	-0,67%			
Rec	262,000	605.691,703	4.653.652,112	364,173	364,845	0,672	399,7559	0	-1,34%			
Rec	263,000	605.691,699	4.653.653,112	363,936	364,828	0,892	399,7559	0	-2,00%			
Rec	264,000	605.691,695	4.653.654,112	363,840	364,805	0,965	399,7559	0	-2,67%			
Rec	265,000	605.691,691	4.653.655,112	363,813	364,775	0,962	399,7559	0	-3,34%			
Rec	266,000	605.691,688	4.653.656,112	363,795	364,738	0,943	399,7559	0	-4,00%			
Rec	267,000	605.691,684	4.653.657,112	363,801	364,695	0,894	399,7559	0	-4,67%			
Rec	267,008	605.691,684	4.653.657,120	363,801	364,695	0,894	399,7559	0	-4,67%		T.S.	
Rec	268,000	605.691,680	4.653.658,112	363,807	364,648	0,841	399,7559	0	-4,67%			
Rec	269,000	605.691,676	4.653.659,112	363,813	364,602	0,789	399,7559	0	-4,67%			
Rec	270,000	605.691,672	4.653.660,112	363,824	364,555	0,731	399,7559	0	-4,67%			
Rec	271,000	605.691,668	4.653.661,112	363,839	364,508	0,669	399,7559	0	-4,67%			
Rec	271,946	605.691,665	4.653.662,058	363,854	364,464	0,610	399,7559	0	-4,67%		T.E.	
Rec	272,000	605.691,665	4.653.662,112	363,855	364,462	0,607	399,7559	0	-4,66%			
Rec	273,000	605.691,661	4.653.663,112	363,870	364,416	0,546	399,7559	0	-4,41%			
Rec	274,000	605.691,657	4.653.664,112	363,885	364,373	0,488	399,7559	0	-4,16%			
Rec	275,000	605.691,653	4.653.665,112	363,899	364,333	0,434	399,7559	0	-3,91%			
Rec	276,000	605.691,649	4.653.666,112	363,915	364,295	0,380	399,7559	0	-3,66%			
Rec	277,000	605.691,645	4.653.667,112	363,930	364,260	0,330	399,7559	0	-3,41%			
Rec	278,000	605.691,642	4.653.668,112	363,945	364,227	0,282	399,7559	0	-3,16%			
Rec	279,000	605.691,638	4.653.669,112	363,953	364,197	0,244	399,7559	0	-2,91%			
Rec	280,000	605.691,634	4.653.670,112	363,958	364,169	0,211	399,7559	0	-2,66%		V.	
Rec	281,000	605.691,630	4.653.671,112	363,957	364,144	0,187	399,7559	0	-2,41%			
Rec	282,000	605.691,626	4.653.672,112	363,958	364,121	0,163	399,7559	0	-2,16%			
Rec	283,000	605.691,622	4.653.673,112	363,954	364,101	0,147	399,7559	0	-1,91%			
Rec	284,000	605.691,619	4.653.674,112	363,948	364,083	0,135	399,7559	0	-1,66%			
Rec	285,000	605.691,615	4.653.675,112	363,940	364,068	0,128	399,7559	0	-1,41%			
Rec	286,000	605.691,611	4.653.676,112	363,929	364,055	0,126	399,7559	0	-1,16%			
Rec	287,000	605.691,607	4.653.677,112	363,916	364,044	0,128	399,7559	0	-0,91%			
Rec	288,000	605.691,603	4.653.678,112	363,905	364,037	0,132	399,7559	0	-0,66%			
Rec	288,054	605.691,603	4.653.678,166	363,905	364,036	0,131	399,7559	0	-0,64%		T.S.	
Rec	289,000	605.691,599	4.653.679,112	363,905	364,030	0,125	399,7559	0	-0,65%			
Rec	290,000	605.691,596	4.653.680,112	363,910	364,023	0,113	399,7559	0	-0,65%			
Rec	291,000	605.691,592	4.653.681,112	363,921	364,017	0,096	399,7559	0	-0,65%			
Rec	292,000	605.691,588	4.653.682,112	363,931	364,010	0,079	399,7559	0	-0,65%			
Rec	293,000	605.691,584	4.653.683,112	363,940	364,004	0,064	399,7559	0	-0,65%			
Rec	294,000	605.691,580	4.653.684,112	363,949	363,997	0,048	399,7559	0	-0,65%			
Rec	295,000	605.691,576	4.653.685,112	363,947	363,991	0,044	399,7559	0	-0,65%			
Rec	296,000	605.691,573	4.653.686,112	363,952	363,984	0,032	399,7559	0	-0,65%			
Rec	297,000	605.691,569	4.653.687,112	363,954	363,978	0,024	399,7559	0	-0,65%			
Rec	298,000	605.691,565	4.653.688,112	363,953	363,971	0,018	399,7559	0	-0,65%			
Rec	299,000	605.691,561	4.653.689,112	363,950	363,965	0,015	399,7559	0	-0,65%			
Rec	300,000	605.691,557	4.653.690,112	363,943	363,959	0,016	399,7559	0	-0,65%			
Rec	301,000	605.691,553	4.653.691,112	363,932	363,952	0,020	399,7559	0	-0,65%			
Rec	302,000	605.691,550	4.653.692,112	363,918	363,946	0,028	399,7559	0	-0,65%			
Cur	302,883	605.691,546	4.653.692,995	363,902	363,940	0,038	399,7559	-75	-0,65%	P.S.		
Cur	303,000	605.691,546	4.653.693,112	363,899	363,939	0,040	399,6564	-75	-0,65%			
Cur	304,000	605.691,534	4.653.694,112	363,874	363,933	0,059	398,8075	-75	-0,65%			
Cur	305,000	605.691,508	4.653.695,111	363,854	363,926	0,072	397,9587	-75	-0,65%			
Cur	306,000	605.691,469	4.653.696,111	363,849	363,920	0,071	397,1099	-75	-0,65%			
Cur	307,000	605.691,417	4.653.697,109	363,833	363,913	0,080	396,2611	-75	-0,65%			
Cur	308,000	605.691,352	4.653.698,107	363,807	363,907	0,100	395,4122	-75	-0,65%			
Cur	308,639	605.691,303	4.653.698,744	363,809	363,903	0,094	394,8698	-75	-0,65%		T.E.	
Cur	309,000	605.691,273	4.653.699,104	363,810	363,900	0,090	394,5634	-75	-0,74%			
Cur	310,000	605.691,182	4.653.700,100	363,816	363,891	0,075	393,7146	-75	-0,99%			
Cur	311,000	605.691,076	4.653.701,094	363,823	363,880	0,057	392,8658	-75	-1,24%			
Cur	312,000	605.690,958	4.653.702,087	363,830	363,867	0,037	392,0169	-75	-1,49%			
Cur	313,000	605.690,826	4.653.703,078	363,825	363,851	0,026	391,1681	-75	-1,74%			
Cur	314,000	605.690,681	4.653.704,068	363,812	363,832	0,020	390,3193	-75	-1,99%			
Cur	315,000	605.690,523	4.653.705,055	363,799	363,811	0,012	389,4704	-75	-2,24%			
Cur	316,000	605.690,352	4.653.706,041	363,787	363,787	0,000	388,6216	-75	-2,49%			
Cur	317,000	605.690,168	4.653.707,023	363,774	363,761	-0,013	387,7728	-75	-2,74%			

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REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	318,000	605.689,970	4.653.708,004	363,761	363,732	-0,029	386,9240	-75	-2,99%			
Cur	319,000	605.689,760	4.653.708,981	363,748	363,701	-0,047	386,0751	-75	-3,24%			
Cur	320,000	605.689,536	4.653.709,956	363,704	363,668	-0,036	385,2263	-75	-3,49%		V.	
Cur	321,000	605.689,300	4.653.710,928	363,655	363,632	-0,023	384,3775	-75	-3,74%			
Cur	322,000	605.689,050	4.653.711,896	363,606	363,593	-0,013	383,5287	-75	-3,99%			
Cur	323,000	605.688,788	4.653.712,861	363,557	363,552	-0,005	382,6798	-75	-4,24%			
Cur	324,000	605.688,513	4.653.713,822	363,509	363,508	-0,001	381,8310	-75	-4,49%			
Cur	325,000	605.688,225	4.653.714,780	363,461	363,462	0,001	380,9822	-75	-4,74%			
Cur	326,000	605.687,924	4.653.715,734	363,413	363,413	0,000	380,1334	-75	-4,99%			
Cur	327,000	605.687,611	4.653.716,683	363,366	363,362	-0,004	379,2845	-75	-5,24%			
Cur	328,000	605.687,285	4.653.717,629	363,318	363,309	-0,009	378,4357	-75	-5,49%			
Cur	329,000	605.686,946	4.653.718,570	363,272	363,253	-0,019	377,5869	-75	-5,74%			
Cur	330,000	605.686,595	4.653.719,506	363,225	363,194	-0,031	376,7380	-75	-5,99%			
Cur	331,000	605.686,232	4.653.720,438	363,171	363,133	-0,038	375,8892	-75	-6,24%			
Cur	331,361	605.686,098	4.653.720,773	363,151	363,110	-0,041	375,5828	-75	-6,33%		T.S.	
Cur	332,000	605.685,856	4.653.721,364	363,116	363,070	-0,046	375,0404	-75	-6,33%			
Cur	333,000	605.685,468	4.653.722,286	363,075	363,007	-0,068	374,1916	-75	-6,33%			
Cur	334,000	605.685,067	4.653.723,202	363,002	362,943	-0,059	373,3427	-75	-6,33%			
Cur	335,000	605.684,654	4.653.724,113	362,934	362,880	-0,054	372,4939	-75	-6,33%			
Cur	336,000	605.684,230	4.653.725,018	362,867	362,817	-0,050	371,6451	-75	-6,33%			
Cur	337,000	605.683,793	4.653.725,918	362,800	362,754	-0,046	370,7963	-75	-6,33%			
Cur	338,000	605.683,344	4.653.726,811	362,734	362,690	-0,043	369,9474	-75	-6,33%			
Cur	339,000	605.682,883	4.653.727,699	362,667	362,627	-0,040	369,0986	-75	-6,33%			
Cur	340,000	605.682,411	4.653.728,580	362,601	362,564	-0,037	368,2498	-75	-6,33%			
Cur	341,000	605.681,927	4.653.729,455	362,534	362,501	-0,033	367,4010	-75	-6,33%			
Cur	342,000	605.681,431	4.653.730,324	362,468	362,438	-0,031	366,5521	-75	-6,33%			
Cur	343,000	605.680,924	4.653.731,186	362,403	362,374	-0,029	365,7033	-75	-6,33%			
Cur	344,000	605.680,405	4.653.732,040	362,339	362,311	-0,028	364,8545	-75	-6,33%			
Cur	345,000	605.679,875	4.653.732,888	362,274	362,248	-0,026	364,0057	-75	-6,33%			
Cur	346,000	605.679,334	4.653.733,729	362,213	362,185	-0,029	363,1568	-75	-6,33%			
Rec	346,146	605.679,253	4.653.733,852	362,204	362,175	-0,029	363,0325	0	-6,33%	P.S.		
Rec	347,000	605.678,785	4.653.734,565	362,152	362,121	-0,031	363,0325	0	-6,33%			
Rec	348,000	605.678,236	4.653.735,401	362,091	362,058	-0,033	363,0325	0	-6,33%			
Rec	349,000	605.677,688	4.653.736,237	362,029	361,995	-0,034	363,0325	0	-6,33%			
Rec	350,000	605.677,139	4.653.737,074	361,961	361,931	-0,030	363,0325	0	-6,33%			
Rec	351,000	605.676,591	4.653.737,910	361,888	361,868	-0,020	363,0325	0	-6,33%			
Rec	352,000	605.676,042	4.653.738,746	361,817	361,805	-0,012	363,0325	0	-6,33%			
Rec	352,278	605.675,890	4.653.738,978	361,796	361,787	-0,009	363,0325	0	-6,33%		T.E.	
Rec	353,000	605.675,494	4.653.739,582	361,743	361,743	0,000	363,0325	0	-6,08%			
Rec	354,000	605.674,945	4.653.740,418	361,670	361,683	0,013	363,0325	0	-5,75%			
Rec	355,000	605.674,396	4.653.741,254	361,598	361,628	0,030	363,0325	0	-5,42%			
Rec	356,000	605.673,848	4.653.742,090	361,528	361,575	0,047	363,0325	0	-5,08%			
Rec	357,000	605.673,299	4.653.742,926	361,461	361,526	0,065	363,0325	0	-4,75%			
Rec	358,000	605.672,751	4.653.743,762	361,405	361,480	0,075	363,0325	0	-4,42%			
Rec	359,000	605.672,202	4.653.744,598	361,342	361,438	0,096	363,0325	0	-4,08%			
Rec	360,000	605.671,653	4.653.745,434	361,286	361,398	0,112	363,0325	0	-3,75%		V.	
Rec	361,000	605.671,105	4.653.746,271	361,246	361,363	0,117	363,0325	0	-3,42%			
Rec	362,000	605.670,556	4.653.747,107	361,200	361,330	0,130	363,0325	0	-3,08%			
Rec	363,000	605.670,008	4.653.747,943	361,152	361,301	0,149	363,0325	0	-2,75%			
Rec	364,000	605.669,459	4.653.748,779	361,121	361,275	0,154	363,0325	0	-2,42%			
Rec	365,000	605.668,910	4.653.749,615	361,106	361,252	0,146	363,0325	0	-2,08%			
Rec	366,000	605.668,362	4.653.750,451	361,103	361,233	0,130	363,0325	0	-1,75%			
Rec	367,000	605.667,813	4.653.751,287	361,100	361,217	0,117	363,0325	0	-1,42%			
Rec	367,722	605.667,417	4.653.751,891	361,096	361,208	0,111	363,0325	0	-1,18%		T.S.	
Rec	368,000	605.667,265	4.653.752,123	361,095	361,205	0,110	363,0325	0	-1,18%			
Rec	369,000	605.666,716	4.653.752,959	361,075	361,193	0,118	363,0325	0	-1,18%			
Rec	370,000	605.666,167	4.653.753,795	361,065	361,181	0,116	363,0325	0	-1,18%			
Rec	371,000	605.665,619	4.653.754,631	361,054	361,169	0,115	363,0325	0	-1,18%			
Rec	371,163	605.665,529	4.653.754,768	361,050	361,167	0,118	363,0325	0	-1,18%		T.E.	
Rec	372,000	605.665,070	4.653.755,467	361,028	361,158	0,130	363,0325	0	-1,07%			
Rec	373,000	605.664,522	4.653.756,304	361,022	361,148	0,126	363,0325	0	-0,94%			
Rec	374,000	605.663,973	4.653.757,140	361,016	361,139	0,123	363,0325	0	-0,80%			
Rec	375,000	605.663,424	4.653.757,976	361,010	361,132	0,122	363,0325	0	-0,67%			
Rec	376,000	605.662,876	4.653.758,812	361,004	361,126	0,122	363,0325	0	-0,54%			
Rec	377,000	605.662,327	4.653.759,648	361,001	361,121	0,120	363,0325	0	-0,40%			
Rec	378,000	605.661,779	4.653.760,484	360,999	361,118	0,119	363,0325	0	-0,27%			
Rec	379,000	605.661,230	4.653.761,320	360,997	361,116	0,119	363,0325	0	-0,14%			
Rec	380,000	605.660,681	4.653.762,156	360,996	361,115	0,119	363,0325	0	0,00%		V.	ODT Ø500 L=6,00m
Rec	381,000	605.660,133	4.653.762,992	360,995	361,116	0,121	363,0325	0	0,13%			
Rec	382,000	605.659,584	4.653.763,828	360,994	361,118	0,124	363,0325	0	0,26%			
Rec	383,000	605.659,036	4.653.764,664	360,996	361,121	0,125	363,0325	0	0,40%			
Rec	384,000	605.658,487	4.653.765,501	360,998	361,126	0,128	363,0325	0	0,53%			
Rec	385,000	605.657,938	4.653.766,337	361,000	361,132	0,132	363,0325	0	0,66%			
Rec	386,000	605.657,390	4.653.767,173	361,003	361,139	0,136	363,0325	0	0,80%			
Rec	387,000	605.656,841	4.653.768,009	361,006	361,148	0,142	363,0325	0	0,93%			
Rec	388,000	605.656,293	4.653.768,845	361,010	361,158	0,148	363,0325	0	1,06%			
Rec	388,837	605.655,833	4.653.769,545	361,011	361,167	0,156	363,0325	0	1,18%		T.S.	
Rec	389,000	605.655,744	4.653.769,681	361,011	361,169	0,158	363,0325	0	1,18%			
Rec	390,000	605.655,195	4.653.770,517	361,012	361,181	0,169	363,0325	0	1,18%			
Rec	391,000	605.654,647	4.653.771,353	361,014	361,193	0,179	363,0325	0	1,18%			
Rec	392,000	605.654,098	4.653.772,189	361,016	361,205	0,189	363,0325	0	1,18%			
Rec	393,000	605.653,550	4.653.773,025	361,018	361,216	0,198	363,0325	0	1,18%			
Rec	394,000	605.653,001	4.653.773,861	361,019	361,228	0,209	363,0325	0	1,18%			
Rec	395,000	605.652,452	4.653.774,698	361,021	361,240	0,219	363,0325	0	1,18%			
Rec	396,000	605.651,904	4.653.775,534	361,022	361,252	0,230	363,0325	0	1,18%			
Rec	397,000	605.651,355	4.653.776,370	361,021	361,264	0,243	363,0325	0	1,18%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	398,000	605.650,807	4.653.777,206	361,018	361,275	0,257	363,0325	0	1,18%			
Rec	399,000	605.650,258	4.653.778,042	361,015	361,287	0,272	363,0325	0	1,18%			
Rec	400,000	605.649,709	4.653.778,878	361,016	361,299	0,283	363,0325	0	1,18%			
Rec	401,000	605.649,161	4.653.779,714	361,012	361,311	0,299	363,0325	0	1,18%			
Rec	402,000	605.648,612	4.653.780,550	361,007	361,323	0,316	363,0325	0	1,18%			
Rec	403,000	605.648,064	4.653.781,386	361,003	361,334	0,331	363,0325	0	1,18%			
Rec	404,000	605.647,515	4.653.782,222	360,999	361,346	0,347	363,0325	0	1,18%			
Rec	405,000	605.646,967	4.653.783,058	360,996	361,358	0,362	363,0325	0	1,18%			
Rec	406,000	605.646,418	4.653.783,894	360,992	361,370	0,378	363,0325	0	1,18%			
Rec	407,000	605.645,869	4.653.784,731	360,990	361,382	0,392	363,0325	0	1,18%			
Rec	407,764	605.645,450	4.653.785,369	360,988	361,391	0,402	363,0325	0	1,18%		T.E.	
Rec	408,000	605.645,321	4.653.785,567	360,988	361,393	0,405	363,0325	0	1,21%			
Rec	409,000	605.644,772	4.653.786,403	360,986	361,406	0,420	363,0325	0	1,34%			
Rec	410,000	605.644,224	4.653.787,239	360,984	361,420	0,436	363,0325	0	1,48%			
Rec	411,000	605.643,675	4.653.788,075	360,986	361,436	0,450	363,0325	0	1,61%			
Rec	412,000	605.643,126	4.653.788,911	361,013	361,453	0,440	363,0325	0	1,74%			
Rec	413,000	605.642,578	4.653.789,747	361,138	361,471	0,333	363,0325	0	1,88%			
Rec	414,000	605.642,029	4.653.790,583	361,267	361,490	0,223	363,0325	0	2,01%			
Rec	415,000	605.641,481	4.653.791,419	361,441	361,511	0,070	363,0325	0	2,14%			
Rec	416,000	605.640,932	4.653.792,255	361,595	361,533	-0,062	363,0325	0	2,28%			
Rec	417,000	605.640,383	4.653.793,091	361,650	361,556	-0,094	363,0325	0	2,41%			
Rec	418,000	605.639,835	4.653.793,928	361,780	361,581	-0,199	363,0325	0	2,54%			
Rec	419,000	605.639,286	4.653.794,764	361,779	361,607	-0,172	363,0325	0	2,68%			
Rec	420,000	605.638,738	4.653.795,600	361,806	361,635	-0,171	363,0325	0	2,81%		V.	
Rec	421,000	605.638,189	4.653.796,436	361,824	361,664	-0,160	363,0325	0	2,94%			
Rec	422,000	605.637,640	4.653.797,272	361,851	361,694	-0,157	363,0325	0	3,08%			
Rec	423,000	605.637,092	4.653.798,108	361,874	361,725	-0,149	363,0325	0	3,21%			
Rec	424,000	605.636,543	4.653.798,944	361,893	361,758	-0,135	363,0325	0	3,34%			
Rec	425,000	605.635,995	4.653.799,780	361,915	361,792	-0,123	363,0325	0	3,48%			
Rec	426,000	605.635,446	4.653.800,616	361,926	361,828	-0,098	363,0325	0	3,61%			
Rec	427,000	605.634,897	4.653.801,452	361,943	361,864	-0,079	363,0325	0	3,74%			
Rec	428,000	605.634,349	4.653.802,288	361,947	361,902	-0,045	363,0325	0	3,88%			
Rec	429,000	605.633,800	4.653.803,124	361,957	361,942	-0,015	363,0325	0	4,01%			
Rec	430,000	605.633,252	4.653.803,961	361,959	361,983	0,024	363,0325	0	4,14%			
Rec	431,000	605.632,703	4.653.804,797	361,962	362,025	0,063	363,0325	0	4,28%			
Rec	432,000	605.632,154	4.653.805,633	361,960	362,068	0,108	363,0325	0	4,41%			
Rec	432,236	605.632,025	4.653.805,830	361,960	362,078	0,119	363,0325	0	4,44%		T.S.	
Rec	433,000	605.631,606	4.653.806,469	361,959	362,112	0,153	363,0325	0	4,44%			
Rec	434,000	605.631,057	4.653.807,305	361,957	362,157	0,200	363,0325	0	4,44%			
Rec	435,000	605.630,509	4.653.808,141	361,958	362,201	0,243	363,0325	0	4,44%			
Rec	436,000	605.629,960	4.653.808,977	361,964	362,245	0,281	363,0325	0	4,44%			
Rec	437,000	605.629,411	4.653.809,813	362,013	362,290	0,277	363,0325	0	4,44%			
Rec	438,000	605.628,863	4.653.810,649	362,136	362,334	0,198	363,0325	0	4,44%			
Rec	439,000	605.628,314	4.653.811,485	362,276	362,379	0,103	363,0325	0	4,44%			
Rec	440,000	605.627,766	4.653.812,321	362,417	362,423	0,006	363,0325	0	4,44%			
Rec	441,000	605.627,217	4.653.813,158	362,558	362,467	-0,091	363,0325	0	4,44%			
Rec	442,000	605.626,668	4.653.813,994	362,626	362,512	-0,114	363,0325	0	4,44%			
Cur	442,633	605.626,321	4.653.814,523	362,692	362,540	-0,152	363,0325	10	4,44%	P.S.		
Cur	443,000	605.626,126	4.653.814,833	362,700	362,556	-0,144	365,3689	10	4,44%			
Cur	444,000	605.625,652	4.653.815,713	362,722	362,601	-0,121	371,7351	10	4,44%			
Cur	445,000	605.625,268	4.653.816,636	362,766	362,645	-0,121	378,1013	10	4,44%			
Cur	446,000	605.624,978	4.653.817,593	362,828	362,690	-0,138	384,4675	10	4,44%			
Cur	447,000	605.624,786	4.653.818,574	362,896	362,734	-0,162	390,8337	10	4,44%			
Cur	448,000	605.624,692	4.653.819,569	362,965	362,778	-0,187	397,1999	10	4,44%			
Cur	449,000	605.624,698	4.653.820,569	363,039	362,823	-0,216	3,5661	10	4,44%			
Cur	450,000	605.624,804	4.653.821,563	363,129	362,867	-0,262	9,9323	10	4,44%			
Cur	450,897	605.624,982	4.653.822,441	363,197	362,907	-0,290	15,6428	10	4,44%		T.E.	
Cur	451,000	605.625,008	4.653.822,541	363,205	362,912	-0,293	16,2985	10	4,42%			
Cur	452,000	605.625,309	4.653.823,494	363,278	362,955	-0,323	22,6647	10	4,22%			
Cur	453,000	605.625,704	4.653.824,413	363,354	362,996	-0,358	29,0309	10	4,02%			
Cur	454,000	605.626,188	4.653.825,287	363,421	363,035	-0,386	35,3971	10	3,82%			
Cur	455,000	605.626,758	4.653.826,108	363,462	363,072	-0,390	41,7633	10	3,62%			
Rec	455,234	605.626,903	4.653.826,292	363,470	363,081	-0,389	43,2529	0	3,57%	P.S.		
Rec	456,000	605.627,384	4.653.826,888	363,490	363,108	-0,382	43,2529	0	3,42%			
Rec	457,000	605.628,012	4.653.827,666	363,477	363,141	-0,336	43,2529	0	3,22%			
Rec	458,000	605.628,641	4.653.828,444	363,499	363,172	-0,327	43,2529	0	3,02%			
Rec	459,000	605.629,269	4.653.829,222	363,475	363,201	-0,274	43,2529	0	2,82%			
Rec	460,000	605.629,897	4.653.830,000	363,472	363,228	-0,244	43,2529	0	2,62%			
Rec	461,000	605.630,526	4.653.830,778	363,418	363,254	-0,164	43,2529	0	2,42%			
Rec	462,000	605.631,154	4.653.831,556	363,409	363,277	-0,132	43,2529	0	2,22%		V.	
Rec	463,000	605.631,782	4.653.832,334	363,373	363,298	-0,075	43,2529	0	2,02%			
Rec	464,000	605.632,411	4.653.833,112	363,370	363,317	-0,053	43,2529	0	1,82%			
Rec	465,000	605.633,039	4.653.833,890	363,346	363,334	-0,012	43,2529	0	1,62%			
Rec	466,000	605.633,667	4.653.834,668	363,343	363,350	0,007	43,2529	0	1,42%			
Rec	467,000	605.634,296	4.653.835,445	363,335	363,363	0,028	43,2529	0	1,22%			
Rec	468,000	605.634,924	4.653.836,223	363,309	363,374	0,065	43,2529	0	1,02%			
Rec	469,000	605.635,552	4.653.837,001	363,250	363,383	0,133	43,2529	0	0,82%			
Rec	470,000	605.636,181	4.653.837,779	363,156	363,390	0,234	43,2529	0	0,62%			
Rec	471,000	605.636,809	4.653.838,557	363,069	363,396	0,327	43,2529	0	0,42%			
Rec	472,000	605.637,437	4.653.839,335	362,971	363,399	0,428	43,2529	0	0,22%			
Rec	473,000	605.638,066	4.653.840,113	362,904	363,400	0,496	43,2529	0	0,02%			
Rec	473,103	605.638,130	4.653.840,193	362,898	363,400	0,502	43,2529	0	0,00%		T.S.	
Rec	474,000	605.638,694	4.653.840,891	362,849	363,400	0,551	43,2529	0	0,00%			
Rec	475,000	605.639,322	4.653.841,669	362,812	363,400	0,588	43,2529	0	0,00%			
Rec	476,000	605.639,951	4.653.842,447	362,793	363,400	0,607	43,2529	0	0,00%			
Rec	477,000	605.640,579	4.653.843,225	362,781	363,400	0,619	43,2529	0	0,00%			
Rec	478,000	605.641,207	4.653.844,003	362,764	363,400	0,636	43,2529	0	0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	479,000	605.641,836	4.653.844,781	362,747	363,400	0,653	43,2529	0	0,00%			
Rec	480,000	605.642,464	4.653.845,559	362,738	363,400	0,662	43,2529	0	0,00%			
Rec	481,000	605.643,092	4.653.846,337	362,724	363,400	0,676	43,2529	0	0,00%			
Rec	482,000	605.643,721	4.653.847,115	362,720	363,400	0,680	43,2529	0	0,00%			
Rec	483,000	605.644,349	4.653.847,892	362,706	363,400	0,694	43,2529	0	0,00%			
Rec	484,000	605.644,977	4.653.848,670	362,697	363,400	0,703	43,2529	0	0,00%			
Rec	485,000	605.645,606	4.653.849,448	362,688	363,400	0,712	43,2529	0	0,00%			
Rec	486,000	605.646,234	4.653.850,226	362,676	363,400	0,724	43,2529	0	0,00%			
Rec	487,000	605.646,862	4.653.851,004	362,663	363,400	0,737	43,2529	0	0,00%			
Rec	488,000	605.647,491	4.653.851,782	362,645	363,400	0,755	43,2529	0	0,00%			
Rec	489,000	605.648,119	4.653.852,560	362,588	363,400	0,812	43,2529	0	0,00%			
Rec	490,000	605.648,747	4.653.853,338	362,578	363,400	0,822	43,2529	0	0,00%			
Rec	491,000	605.649,376	4.653.854,116	362,581	363,400	0,819	43,2529	0	0,00%			
Rec	492,000	605.650,004	4.653.854,894	362,541	363,400	0,859	43,2529	0	0,00%			
Rec	493,000	605.650,633	4.653.855,672	362,487	363,400	0,913	43,2529	0	0,00%			
Rec	494,000	605.651,261	4.653.856,450	362,445	363,400	0,955	43,2529	0	0,00%			
Rec	495,000	605.651,889	4.653.857,228	362,375	363,400	1,025	43,2529	0	0,00%			
Rec	496,000	605.652,518	4.653.858,006	362,309	363,400	1,091	43,2529	0	0,00%			
Rec	497,000	605.653,146	4.653.858,784	362,190	363,400	1,210	43,2529	0	0,00%			
	497,519	605.653,472	4.653.859,187	362,130	363,400	1,270	43,2529		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	606.088,882	4.652.990,660	365,261	365,261	0,000	214,0047	0	7,57%			
Rec	1,000	606.088,664	4.652.989,684	365,442	365,337	-0,105	214,0047	0	7,57%			ODT Ø300 L=9,30m
Rec	2,000	606.088,445	4.652.988,708	365,622	365,412	-0,210	214,0047	0	7,57%			
Rec	3,000	606.088,227	4.652.987,732	365,763	365,488	-0,275	214,0047	0	7,57%			
Rec	4,000	606.088,009	4.652.986,756	365,876	365,564	-0,312	214,0047	0	7,57%			
Rec	5,000	606.087,791	4.652.985,780	365,974	365,640	-0,334	214,0047	0	7,57%			
Rec	5,121	606.087,764	4.652.985,662	365,979	365,649	-0,330	214,0047	0	7,57%		T.E.	
Rec	6,000	606.087,573	4.652.984,805	366,013	365,715	-0,298	214,0047	0	7,40%			
Rec	7,000	606.087,354	4.652.983,829	366,029	365,787	-0,242	214,0047	0	7,20%			
Rec	8,000	606.087,136	4.652.982,853	366,037	365,858	-0,179	214,0047	0	7,00%			
Rec	9,000	606.086,918	4.652.981,877	366,043	365,927	-0,116	214,0047	0	6,80%			
Rec	10,000	606.086,700	4.652.980,901	366,048	365,994	-0,054	214,0047	0	6,60%			
Rec	11,000	606.086,482	4.652.979,925	366,053	366,059	0,006	214,0047	0	6,40%			
Rec	12,000	606.086,263	4.652.978,949	366,057	366,122	0,065	214,0047	0	6,20%			
Rec	13,000	606.086,045	4.652.977,973	366,060	366,183	0,123	214,0047	0	6,00%			
Cur	13,841	606.085,862	4.652.977,153	366,064	366,233	0,169	214,0047	100	5,83%	P.S.	V.	
Cur	14,000	606.085,827	4.652.976,997	366,066	366,242	0,176	214,1059	100	5,80%			
Cur	15,000	606.085,602	4.652.976,023	366,089	366,299	0,210	214,7425	100	5,60%			
Cur	16,000	606.085,368	4.652.975,051	366,107	366,354	0,247	215,3792	100	5,40%			
Cur	17,000	606.085,124	4.652.974,081	366,126	366,407	0,281	216,0158	100	5,20%			
Cur	18,000	606.084,870	4.652.973,114	366,172	366,458	0,286	216,6524	100	5,00%			
Cur	19,000	606.084,606	4.652.972,149	366,227	366,507	0,280	217,2890	100	4,80%			
Cur	20,000	606.084,333	4.652.971,187	366,264	366,554	0,290	217,9256	100	4,60%			
Cur	21,000	606.084,051	4.652.970,228	366,302	366,599	0,297	218,5623	100	4,40%			
Cur	22,000	606.083,758	4.652.969,272	366,341	366,642	0,301	219,1989	100	4,20%			
Cur	22,561	606.083,590	4.652.968,736	366,369	366,665	0,296	219,5560	100	4,08%		T.S.	
Cur	23,000	606.083,457	4.652.968,318	366,391	366,683	0,292	219,8355	100	4,09%			
Cur	24,000	606.083,145	4.652.967,368	366,438	366,724	0,286	220,4721	100	4,09%			
Rec	24,631	606.082,944	4.652.966,770	366,467	366,750	0,283	220,8739	0	4,09%	P.S.		
Rec	25,000	606.082,825	4.652.966,421	366,490	366,765	0,275	220,8739	0	4,09%			
Rec	26,000	606.082,503	4.652.965,474	366,553	366,806	0,253	220,8739	0	4,09%			
Rec	27,000	606.082,181	4.652.964,527	366,617	366,847	0,230	220,8739	0	4,09%			
Rec	28,000	606.081,859	4.652.963,580	366,683	366,888	0,205	220,8739	0	4,09%			
Rec	29,000	606.081,537	4.652.962,634	366,748	366,929	0,181	220,8739	0	4,09%			
Rec	30,000	606.081,215	4.652.961,687	366,803	366,969	0,166	220,8739	0	4,09%			
Rec	31,000	606.080,893	4.652.960,740	366,866	367,010	0,144	220,8739	0	4,09%			
Rec	32,000	606.080,571	4.652.959,793	366,930	367,051	0,121	220,8739	0	4,09%			
Rec	33,000	606.080,249	4.652.958,847	366,987	367,092	0,105	220,8739	0	4,09%			
Rec	34,000	606.079,927	4.652.957,900	367,004	367,133	0,129	220,8739	0	4,09%			
Rec	35,000	606.079,605	4.652.956,953	367,017	367,174	0,157	220,8739	0	4,09%			
Rec	36,000	606.079,283	4.652.956,007	367,023	367,215	0,192	220,8739	0	4,09%			
Rec	37,000	606.078,961	4.652.955,060	367,026	367,255	0,229	220,8739	0	4,09%			
Rec	38,000	606.078,639	4.652.954,113	367,037	367,296	0,259	220,8739	0	4,09%			
Rec	39,000	606.078,317	4.652.953,166	367,065	367,337	0,272	220,8739	0	4,09%			
Rec	40,000	606.077,995	4.652.952,220	367,100	367,378	0,278	220,8739	0	4,09%			
Rec	41,000	606.077,673	4.652.951,273	367,136	367,419	0,283	220,8739	0	4,09%			
Rec	42,000	606.077,350	4.652.950,326	367,184	367,460	0,276	220,8739	0	4,09%			
Rec	43,000	606.077,028	4.652.949,379	367,239	367,501	0,262	220,8739	0	4,09%			
Rec	44,000	606.076,706	4.652.948,433	367,300	367,542	0,242	220,8739	0	4,09%			
Rec	45,000	606.076,384	4.652.947,486	367,367	367,582	0,215	220,8739	0	4,09%			
Rec	46,000	606.076,062	4.652.946,539	367,430	367,623	0,193	220,8739	0	4,09%			
Rec	47,000	606.075,740	4.652.945,593	367,493	367,664	0,171	220,8739	0	4,09%			
Rec	48,000	606.075,418	4.652.944,646	367,548	367,705	0,157	220,8739	0	4,09%			
Rec	49,000	606.075,096	4.652.943,699	367,603	367,746	0,143	220,8739	0	4,09%			
Rec	49,806	606.074,837	4.652.942,936	367,647	367,779	0,132	220,8739	0	4,09%		T.E.	
Rec	50,000	606.074,774	4.652.942,752	367,657	367,787	0,130	220,8739	0	4,18%			
Rec	51,000	606.074,452	4.652.941,806	367,711	367,831	0,120	220,8739	0	4,68%			
Rec	52,000	606.074,130	4.652.940,859	367,769	367,880	0,111	220,8739	0	5,18%			
Rec	53,000	606.073,808	4.652.939,912	367,827	367,935	0,108	220,8739	0	5,68%			
Rec	54,000	606.073,486	4.652.938,965	367,886	367,994	0,108	220,8739	0	6,18%			
Rec	55,000	606.073,164	4.652.938,019	367,945	368,059	0,114	220,8739	0	6,68%			
Rec	56,000	606.072,842	4.652.937,072	368,001	368,128	0,127	220,8739	0	7,18%			
Cur	56,173	606.072,786	4.652.936,908	368,039	368,140	0,101	220,8739	-10	7,27%	P.S.	V.	
Cur	57,000	606.072,552	4.652.936,115	368,214	368,202	-0,012	215,6116	-10	7,68%			
Cur	58,000	606.072,359	4.652.935,135	368,391	368,282	-0,109	209,2454	-10	8,18%			
Cur	59,000	606.072,264	4.652.934,140	368,670	368,366	-0,304	202,8792	-10	8,68%			
Cur	60,000	606.072,268	4.652.933,140	369,051	368,455	-0,596	196,5130	-10	9,18%			
Cur	61,000	606.072,373	4.652.932,146	369,305	368,550	-0,755	190,1468	-10	9,68%			
Cur	62,000	606.072,576	4.652.931,167	369,295	368,649	-0,646	183,7806	-10	10,18%			
Cur	62,540	606.072,726	4.652.930,649	369,290	368,704	-0,585	180,3428	-10	10,45%		T.S.	
Cur	63,000	606.072,876	4.652.930,214	369,285	368,753	-0,532	177,4144	-10	10,45%			
Cur	64,000	606.073,270	4.652.929,295	369,276	368,857	-0,419	171,0482	-10	10,45%			
Cur	64,448	606.073,475	4.652.928,897	369,274	368,904	-0,370	168,1961	-10	10,45%		T.E.	
Cur	65,000	606.073,753	4.652.928,420	369,272	368,960	-0,312	164,6820	-10	9,90%			
Cur	66,000	606.074,321	4.652.927,598	369,282	369,054	-0,228	158,3158	-10	8,90%			
Cur	67,000	606.074,969	4.652.926,836	369,358	369,138	-0,220	151,9496	-10	7,90%			
Cur	68,000	606.075,689	4.652.926,143	369,431	369,212	-0,219	145,5834	-10	6,90%			
Cur	69,000	606.076,475	4.652.925,526	369,500	369,276	-0,224	139,2172	-10	5,90%			
Cur	70,000	606.077,319	4.652.924,990	369,510	369,330	-0,180	132,8510	-10	4,90%			
Cur	71,000	606.078,212	4.652.924,540	369,491	369,374	-0,117	126,4848	-10	3,90%			
Rec	71,089	606.078,293	4.652.924,505	369,489	369,377	-0,112	125,9201	0	3,81%	P.S.	V.	
Rec	72,000	606.079,130	4.652.924,144	369,468	369,408	-0,060	125,9201	0	2,90%			
Rec	73,000	606.080,048	4.652.923,748	369,447	369,432	-0,015	125,9201	0	1,90%			
Rec	74,000	606.080,967	4.652.923,352	369,388	369,446	0,058	125,9201	0	0,90%			
Rec	75,000	606.081,885	4.652.922,956	369,326	369,450	0,124	125,9201	0	-0,10%			
Rec	76,000	606.082,803	4.652.922,560	369,264	369,444	0,180	125,9201	0	-1,10%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	77,000	606.083,721	4.652.922,164	369,203	369,428	0,225	125,9201	0	-2,10%			
Rec	77,730	606.084,392	4.652.921,875	369,158	369,410	0,252	125,9201	0	-2,83%		T.S.	
Rec	78,000	606.084,640	4.652.921,768	369,141	369,403	0,262	125,9201	0	-2,83%			
Rec	79,000	606.085,558	4.652.921,372	369,079	369,374	0,295	125,9201	0	-2,83%			
Rec	80,000	606.086,476	4.652.920,976	369,017	369,346	0,329	125,9201	0	-2,83%			
Rec	81,000	606.087,394	4.652.920,580	368,991	369,318	0,327	125,9201	0	-2,83%			
Rec	82,000	606.088,313	4.652.920,184	368,978	369,289	0,311	125,9201	0	-2,83%			
Rec	83,000	606.089,231	4.652.919,788	368,965	369,261	0,296	125,9201	0	-2,83%			
Rec	84,000	606.090,149	4.652.919,392	368,960	369,233	0,273	125,9201	0	-2,83%			
Rec	85,000	606.091,067	4.652.918,996	368,955	369,205	0,250	125,9201	0	-2,83%			
Rec	86,000	606.091,986	4.652.918,600	368,951	369,176	0,225	125,9201	0	-2,83%			
Rec	87,000	606.092,904	4.652.918,204	368,946	369,148	0,202	125,9201	0	-2,83%			
Rec	88,000	606.093,822	4.652.917,808	368,945	369,120	0,175	125,9201	0	-2,83%			
Rec	89,000	606.094,740	4.652.917,412	368,945	369,091	0,146	125,9201	0	-2,83%			
Rec	90,000	606.095,659	4.652.917,016	368,943	369,063	0,120	125,9201	0	-2,83%			
Rec	91,000	606.096,577	4.652.916,620	368,941	369,035	0,094	125,9201	0	-2,83%			
Rec	92,000	606.097,495	4.652.916,224	368,938	369,007	0,069	125,9201	0	-2,83%			
Rec	93,000	606.098,413	4.652.915,828	368,936	368,978	0,042	125,9201	0	-2,83%			
Rec	94,000	606.099,332	4.652.915,432	368,954	368,950	-0,004	125,9201	0	-2,83%			
Rec	95,000	606.100,250	4.652.915,036	368,953	368,922	-0,031	125,9201	0	-2,83%			
Rec	96,000	606.101,168	4.652.914,640	368,893	368,893	0,000	125,9201	0	-2,83%			
Rec	97,000	606.102,086	4.652.914,244	368,820	368,865	0,045	125,9201	0	-2,83%			
Rec	98,000	606.103,005	4.652.913,848	368,738	368,837	0,099	125,9201	0	-2,83%			
Rec	99,000	606.103,923	4.652.913,452	368,695	368,809	0,114	125,9201	0	-2,83%			
Rec	100,000	606.104,841	4.652.913,056	368,686	368,780	0,094	125,9201	0	-2,83%			
Rec	101,000	606.105,759	4.652.912,660	368,665	368,752	0,087	125,9201	0	-2,83%			
Rec	102,000	606.106,678	4.652.912,264	368,652	368,724	0,072	125,9201	0	-2,83%			
Rec	102,842	606.107,451	4.652.911,931	368,615	368,700	0,085	125,9201	0	-2,83%		T.E.	
Rec	103,000	606.107,596	4.652.911,868	368,608	368,696	0,088	125,9201	0	-2,81%			
Rec	104,000	606.108,514	4.652.911,472	368,624	368,668	0,044	125,9201	0	-2,67%			
Rec	105,000	606.109,432	4.652.911,076	368,529	368,642	0,113	125,9201	0	-2,54%			
Rec	106,000	606.110,351	4.652.910,680	368,524	368,617	0,093	125,9201	0	-2,41%			
Rec	107,000	606.111,269	4.652.910,284	368,529	368,594	0,065	125,9201	0	-2,27%			
Rec	108,000	606.112,187	4.652.909,888	368,428	368,572	0,144	125,9201	0	-2,14%			
Rec	109,000	606.113,105	4.652.909,492	368,377	368,551	0,174	125,9201	0	-2,01%			
Rec	110,000	606.114,024	4.652.909,096	368,327	368,532	0,205	125,9201	0	-1,87%			
Rec	111,000	606.114,942	4.652.908,700	368,277	368,514	0,237	125,9201	0	-1,74%			
Rec	112,000	606.115,860	4.652.908,304	368,226	368,497	0,271	125,9201	0	-1,61%			
Rec	113,000	606.116,778	4.652.907,908	368,176	368,481	0,305	125,9201	0	-1,47%			
Cur	113,449	606.117,190	4.652.907,731	368,153	368,475	0,322	125,9201	50	-1,41%	P.S.	V.	
Cur	114,000	606.117,696	4.652.907,509	368,126	368,467	0,341	126,6223	50	-1,34%			
Cur	115,000	606.118,605	4.652.907,094	368,076	368,455	0,379	127,8956	50	-1,21%			
Cur	116,000	606.119,506	4.652.906,661	368,027	368,443	0,416	129,1688	50	-1,07%			
Cur	117,000	606.120,399	4.652.906,210	367,994	368,433	0,439	130,4420	50	-0,94%			
Cur	118,000	606.121,282	4.652.905,741	367,983	368,424	0,441	131,7153	50	-0,81%			
Cur	119,000	606.122,156	4.652.905,254	367,956	368,417	0,461	132,9885	50	-0,67%			
Cur	120,000	606.123,019	4.652.904,750	367,949	368,411	0,462	134,2618	50	-0,54%			
Cur	121,000	606.123,873	4.652.904,229	367,942	368,406	0,464	135,5350	50	-0,41%			
Cur	122,000	606.124,716	4.652.903,691	367,926	368,403	0,477	136,8082	50	-0,27%			
Cur	123,000	606.125,548	4.652.903,136	367,918	368,401	0,483	138,0815	50	-0,14%			
Cur	124,000	606.126,368	4.652.902,565	367,910	368,400	0,490	139,3547	50	-0,01%			
Cur	124,056	606.126,414	4.652.902,532	367,910	368,400	0,490	139,4260	50	0,00%		T.S.	
Cur	125,000	606.127,177	4.652.901,977	367,903	368,400	0,497	140,6280	50	0,00%			
Cur	126,000	606.127,975	4.652.901,373	367,900	368,400	0,500	141,9012	50	0,00%			
Cur	127,000	606.128,759	4.652.900,754	367,894	368,400	0,506	143,1744	50	0,00%			
Cur	128,000	606.129,532	4.652.900,119	367,892	368,400	0,508	144,4477	50	0,00%			
Cur	129,000	606.130,291	4.652.899,468	367,888	368,400	0,512	145,7209	50	0,00%			
Cur	130,000	606.131,038	4.652.898,803	367,886	368,400	0,514	146,9942	50	0,00%			
Cur	131,000	606.131,771	4.652.898,122	367,881	368,400	0,519	148,2674	50	0,00%			
Cur	132,000	606.132,490	4.652.897,428	367,880	368,400	0,520	149,5406	50	0,00%			
Cur	133,000	606.133,195	4.652.896,718	367,873	368,400	0,527	150,8139	50	0,00%			
Cur	134,000	606.133,886	4.652.895,995	367,862	368,400	0,538	152,0871	50	0,00%			
Cur	135,000	606.134,562	4.652.895,259	367,851	368,400	0,549	153,3604	50	0,00%			
Cur	136,000	606.135,223	4.652.894,509	367,840	368,400	0,560	154,6336	50	0,00%			
Rec	136,943	606.135,833	4.652.893,789	367,838	368,400	0,562	155,8345	0	0,00%	P.S.		
Rec	137,000	606.135,870	4.652.893,746	367,836	368,400	0,564	155,8345	0	0,00%			
Rec	138,000	606.136,509	4.652.892,977	367,830	368,400	0,570	155,8345	0	0,00%			
Rec	139,000	606.137,148	4.652.892,208	367,831	368,400	0,569	155,8345	0	0,00%			
Rec	140,000	606.137,788	4.652.891,439	367,856	368,400	0,544	155,8345	0	0,00%			
Rec	141,000	606.138,427	4.652.890,670	367,899	368,400	0,501	155,8345	0	0,00%			
Rec	142,000	606.139,067	4.652.889,901	367,872	368,400	0,528	155,8345	0	0,00%			
Rec	143,000	606.139,706	4.652.889,132	367,834	368,400	0,566	155,8345	0	0,00%			
Rec	144,000	606.140,345	4.652.888,364	367,797	368,400	0,603	155,8345	0	0,00%			
Rec	145,000	606.140,985	4.652.887,595	367,759	368,400	0,641	155,8345	0	0,00%			
Rec	146,000	606.141,624	4.652.886,826	367,722	368,400	0,678	155,8345	0	0,00%			
Rec	147,000	606.142,264	4.652.886,057	367,684	368,400	0,716	155,8345	0	0,00%			
Rec	148,000	606.142,903	4.652.885,288	367,647	368,400	0,753	155,8345	0	0,00%			
Rec	149,000	606.143,543	4.652.884,519	367,635	368,400	0,765	155,8345	0	0,00%			
Rec	150,000	606.144,182	4.652.883,750	367,644	368,400	0,756	155,8345	0	0,00%			ODT Ø500 L=9,00m
Rec	151,000	606.144,821	4.652.882,982	367,681	368,400	0,719	155,8345	0	0,00%			
Rec	152,000	606.145,461	4.652.882,213	367,719	368,400	0,681	155,8345	0	0,00%			
Rec	153,000	606.146,100	4.652.881,444	367,756	368,400	0,644	155,8345	0	0,00%			
Rec	154,000	606.146,740	4.652.880,675	367,793	368,400	0,607	155,8345	0	0,00%			
Rec	155,000	606.147,379	4.652.879,906	367,831	368,400	0,569	155,8345	0	0,00%			
Rec	156,000	606.148,019	4.652.879,137	367,868	368,400	0,532	155,8345	0	0,00%			
Rec	157,000	606.148,658	4.652.878,368	367,905	368,400	0,495	155,8345	0	0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	158,000	606.149,297	4.652.877,600	367,950	368,400	0,450	155,8345	0	0,00%			
Rec	159,000	606.149,937	4.652.876,831	367,951	368,400	0,449	155,8345	0	0,00%			
Rec	160,000	606.150,576	4.652.876,062	367,988	368,400	0,412	155,8345	0	0,00%			
Rec	161,000	606.151,216	4.652.875,293	367,988	368,400	0,412	155,8345	0	0,00%			
Rec	162,000	606.151,855	4.652.874,524	367,987	368,400	0,413	155,8345	0	0,00%			
Rec	163,000	606.152,495	4.652.873,755	367,968	368,400	0,432	155,8345	0	0,00%			
Rec	164,000	606.153,134	4.652.872,987	367,974	368,400	0,426	155,8345	0	0,00%			
Rec	165,000	606.153,773	4.652.872,218	367,991	368,400	0,409	155,8345	0	0,00%			
Rec	166,000	606.154,413	4.652.871,449	368,007	368,400	0,393	155,8345	0	0,00%			
Rec	167,000	606.155,052	4.652.870,680	368,007	368,400	0,393	155,8345	0	0,00%			
Rec	168,000	606.155,692	4.652.869,911	368,004	368,400	0,396	155,8345	0	0,00%			
Rec	169,000	606.156,331	4.652.869,142	368,053	368,400	0,347	155,8345	0	0,00%			
Rec	170,000	606.156,971	4.652.868,373	368,079	368,400	0,321	155,8345	0	0,00%			
Rec	171,000	606.157,610	4.652.867,605	368,007	368,400	0,393	155,8345	0	0,00%			
Rec	172,000	606.158,249	4.652.866,836	367,984	368,400	0,416	155,8345	0	0,00%			
Rec	173,000	606.158,889	4.652.866,067	367,970	368,400	0,430	155,8345	0	0,00%			
Rec	174,000	606.159,528	4.652.865,298	367,978	368,400	0,422	155,8345	0	0,00%			
Rec	175,000	606.160,168	4.652.864,529	367,971	368,400	0,429	155,8345	0	0,00%			
Rec	176,000	606.160,807	4.652.863,760	367,967	368,400	0,433	155,8345	0	0,00%			
Rec	177,000	606.161,446	4.652.862,991	367,966	368,400	0,434	155,8345	0	0,00%			
Rec	178,000	606.162,086	4.652.862,223	367,971	368,400	0,429	155,8345	0	0,00%			
	178,162	606.162,190	4.652.862,098	367,973	368,400	0,427	155,8345		0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	606.695,835	4.652.196,671	363,844	363,844	0,000	311,5736	0	-2,28%			
Rec	1,000	606.694,851	4.652.196,851	363,817	363,821	0,004	311,5736	0	-2,28%			
Rec	2,000	606.693,868	4.652.197,032	363,789	363,798	0,009	311,5736	0	-2,28%			
Rec	3,000	606.692,884	4.652.197,213	363,762	363,776	0,014	311,5736	0	-2,28%			
Rec	4,000	606.691,900	4.652.197,394	363,734	363,753	0,019	311,5736	0	-2,28%			
Rec	5,000	606.690,917	4.652.197,575	363,706	363,730	0,024	311,5736	0	-2,28%			
Rec	6,000	606.689,933	4.652.197,755	363,679	363,707	0,028	311,5736	0	-2,28%			
Rec	7,000	606.688,950	4.652.197,936	363,651	363,684	0,033	311,5736	0	-2,28%			
Rec	8,000	606.687,966	4.652.198,117	363,623	363,662	0,039	311,5736	0	-2,28%			
Rec	9,000	606.686,983	4.652.198,298	363,596	363,639	0,043	311,5736	0	-2,28%			
Rec	10,000	606.685,999	4.652.198,479	363,568	363,616	0,048	311,5736	0	-2,28%			
Rec	11,000	606.685,016	4.652.198,659	363,540	363,593	0,053	311,5736	0	-2,28%			
Rec	12,000	606.684,032	4.652.198,840	363,513	363,570	0,057	311,5736	0	-2,28%			
Rec	13,000	606.683,049	4.652.199,021	363,485	363,548	0,063	311,5736	0	-2,28%			
Rec	14,000	606.682,065	4.652.199,202	363,457	363,525	0,068	311,5736	0	-2,28%			
Rec	15,000	606.681,082	4.652.199,383	363,430	363,502	0,072	311,5736	0	-2,28%			
Rec	16,000	606.680,098	4.652.199,563	363,402	363,479	0,077	311,5736	0	-2,28%			
Rec	17,000	606.679,115	4.652.199,744	363,374	363,456	0,082	311,5736	0	-2,28%			
Rec	18,000	606.678,131	4.652.199,925	363,347	363,433	0,086	311,5736	0	-2,28%			
Rec	19,000	606.677,148	4.652.200,106	363,319	363,411	0,092	311,5736	0	-2,28%			
Rec	20,000	606.676,164	4.652.200,287	363,291	363,388	0,097	311,5736	0	-2,28%			
Rec	21,000	606.675,181	4.652.200,467	363,264	363,365	0,101	311,5736	0	-2,28%			
Rec	22,000	606.674,197	4.652.200,648	363,236	363,342	0,106	311,5736	0	-2,28%			
Rec	23,000	606.673,214	4.652.200,829	363,208	363,319	0,111	311,5736	0	-2,28%			
Rec	24,000	606.672,230	4.652.201,010	363,181	363,297	0,116	311,5736	0	-2,28%			
Rec	25,000	606.671,247	4.652.201,191	363,153	363,274	0,121	311,5736	0	-2,28%			
Rec	26,000	606.670,263	4.652.201,371	363,126	363,251	0,125	311,5736	0	-2,28%			
Rec	27,000	606.669,279	4.652.201,552	363,098	363,228	0,130	311,5736	0	-2,28%			
Rec	28,000	606.668,296	4.652.201,733	363,070	363,205	0,135	311,5736	0	-2,28%			
Rec	29,000	606.667,312	4.652.201,914	363,043	363,183	0,140	311,5736	0	-2,28%			
Rec	30,000	606.666,329	4.652.202,095	363,015	363,160	0,145	311,5736	0	-2,28%			
Rec	31,000	606.665,345	4.652.202,275	362,987	363,137	0,150	311,5736	0	-2,28%			
Rec	32,000	606.664,362	4.652.202,456	362,960	363,114	0,154	311,5736	0	-2,28%			
Rec	33,000	606.663,378	4.652.202,637	362,932	363,091	0,159	311,5736	0	-2,28%			
Cur	33,949	606.662,445	4.652.202,809	362,906	363,070	0,164	311,5736	50	-2,28%	P.S.		
Cur	34,000	606.662,395	4.652.202,818	362,904	363,069	0,165	311,6383	50	-2,28%			
Cur	35,000	606.661,413	4.652.203,009	362,876	363,046	0,170	312,9115	50	-2,28%			
Cur	36,000	606.660,436	4.652.203,221	362,848	363,023	0,175	314,1847	50	-2,28%			
Cur	37,000	606.659,463	4.652.203,451	362,819	363,000	0,181	315,4580	50	-2,28%			
Cur	38,000	606.658,495	4.652.203,701	362,789	362,977	0,188	316,7312	50	-2,28%			
Cur	39,000	606.657,532	4.652.203,971	362,759	362,955	0,196	318,0045	50	-2,28%			
Cur	40,000	606.656,574	4.652.204,260	362,728	362,932	0,204	319,2777	50	-2,28%			
Cur	41,000	606.655,623	4.652.204,567	362,696	362,909	0,213	320,5509	50	-2,28%			
Cur	42,000	606.654,678	4.652.204,894	362,664	362,886	0,222	321,8242	50	-2,28%			
Cur	43,000	606.653,739	4.652.205,239	362,645	362,863	0,218	323,0974	50	-2,28%			
Cur	44,000	606.652,808	4.652.205,604	362,643	362,841	0,198	324,3707	50	-2,28%			
Cur	45,000	606.651,884	4.652.205,987	362,641	362,818	0,177	325,6439	50	-2,28%			
Cur	46,000	606.650,968	4.652.206,388	362,638	362,795	0,157	326,9171	50	-2,28%			
Cur	47,000	606.650,061	4.652.206,807	362,635	362,772	0,137	328,1904	50	-2,28%			
Cur	47,705	606.649,426	4.652.207,114	362,633	362,756	0,123	329,0880	50	-2,28%		T.E.	
Cur	48,000	606.649,161	4.652.207,245	362,632	362,749	0,117	329,4636	50	-2,21%			
Cur	49,000	606.648,271	4.652.207,700	362,629	362,729	0,100	330,7369	50	-1,96%			
Cur	50,000	606.647,390	4.652.208,173	362,625	362,710	0,085	332,0101	50	-1,71%			
Cur	51,000	606.646,519	4.652.208,664	362,621	362,694	0,073	333,2833	50	-1,46%			
Cur	52,000	606.645,657	4.652.209,172	362,616	362,681	0,065	334,5566	50	-1,21%			
Cur	53,000	606.644,806	4.652.209,697	362,611	362,670	0,059	335,8298	50	-0,96%			
Cur	54,000	606.643,966	4.652.210,239	362,609	362,662	0,056	337,1031	50	-0,71%			
Rec	54,371	606.643,657	4.652.210,444	362,604	362,660	0,056	337,5753	0	-0,61%	P.S.	V.	ODT Ø300 L=5,70m
Rec	55,000	606.643,134	4.652.210,794	362,601	362,656	0,055	337,5753	0	-0,46%			
Rec	56,000	606.642,304	4.652.211,351	362,595	362,653	0,058	337,5753	0	-0,21%			
Rec	57,000	606.641,473	4.652.211,907	362,590	362,652	0,062	337,5753	0	0,04%			
Rec	58,000	606.640,642	4.652.212,464	362,584	362,654	0,070	337,5753	0	0,29%			
Rec	59,000	606.639,811	4.652.213,020	362,579	362,658	0,079	337,5753	0	0,54%			
Rec	60,000	606.638,980	4.652.213,577	362,573	362,665	0,092	337,5753	0	0,79%			
Rec	61,000	606.638,150	4.652.214,133	362,568	362,674	0,106	337,5753	0	1,04%			
Rec	61,037	606.638,119	4.652.214,154	362,568	362,674	0,106	337,5753	0	1,05%		T.S.	
Rec	62,000	606.637,319	4.652.214,690	362,562	362,684	0,122	337,5753	0	1,05%			
Rec	63,000	606.636,488	4.652.215,247	362,557	362,695	0,138	337,5753	0	1,05%			
Rec	64,000	606.635,657	4.652.215,803	362,551	362,705	0,154	337,5753	0	1,05%			
Rec	65,000	606.634,826	4.652.216,360	362,546	362,716	0,170	337,5753	0	1,05%			
Rec	65,109	606.634,736	4.652.216,420	362,545	362,717	0,172	337,5753	0	1,05%		T.E.	
Rec	66,000	606.633,995	4.652.216,916	362,540	362,726	0,186	337,5753	0	0,99%			
Rec	67,000	606.633,165	4.652.217,473	362,535	362,736	0,201	337,5753	0	0,93%			
Rec	68,000	606.632,334	4.652.218,029	362,529	362,745	0,216	337,5753	0	0,86%			
Rec	69,000	606.631,503	4.652.218,586	362,524	362,753	0,229	337,5753	0	0,79%			
Rec	70,000	606.630,672	4.652.219,142	362,518	362,760	0,242	337,5753	0	0,73%			
Rec	71,000	606.629,841	4.652.219,699	362,513	362,767	0,254	337,5753	0	0,66%			
Rec	72,000	606.629,011	4.652.220,256	362,507	362,774	0,267	337,5753	0	0,59%			
Rec	73,000	606.628,180	4.652.220,812	362,502	362,779	0,277	337,5753	0	0,53%		V.	
Rec	74,000	606.627,349	4.652.221,369	362,496	362,784	0,288	337,5753	0	0,46%			
Rec	75,000	606.626,518	4.652.221,925	362,491	362,788	0,297	337,5753	0	0,39%			
Rec	76,000	606.625,687	4.652.222,482	362,485	362,792	0,307	337,5753	0	0,33%			
Rec	77,000	606.624,857	4.652.223,038	362,480	362,795	0,315	337,5753	0	0,26%			
Rec	78,000	606.624,026	4.652.223,595	362,474	362,797	0,323	337,5753	0	0,19%			
Rec	79,000	606.623,195	4.652.224,151	362,469	362,799	0,330	337,5753	0	0,13%			
Rec	80,000	606.622,364	4.652.224,708	362,463	362,800	0,337	337,5753	0	0,06%			

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REPLANTEO CAMINO TRAMO T18-T19 C-04

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	80,891	606.621,624	4.652.225,204	362,459	362,800	0,341	337,5753	0	0,00%		T.S.	
Rec	81,000	606.621,533	4.652.225,264	362,458	362,800	0,342	337,5753	0	0,00%			
Rec	82,000	606.620,702	4.652.225,821	362,452	362,800	0,348	337,5753	0	0,00%			
Rec	83,000	606.619,872	4.652.226,378	362,447	362,800	0,353	337,5753	0	0,00%			
Rec	84,000	606.619,041	4.652.226,934	362,441	362,800	0,359	337,5753	0	0,00%			
Rec	85,000	606.618,210	4.652.227,491	362,436	362,800	0,364	337,5753	0	0,00%			
Rec	86,000	606.617,379	4.652.228,047	362,430	362,800	0,370	337,5753	0	0,00%			
Rec	87,000	606.616,548	4.652.228,604	362,427	362,800	0,373	337,5753	0	0,00%			
Rec	88,000	606.615,718	4.652.229,160	362,428	362,800	0,372	337,5753	0	0,00%			
Rec	89,000	606.614,887	4.652.229,717	362,428	362,800	0,372	337,5753	0	0,00%			
Rec	90,000	606.614,056	4.652.230,273	362,428	362,800	0,372	337,5753	0	0,00%			
Rec	91,000	606.613,225	4.652.230,830	362,428	362,800	0,372	337,5753	0	0,00%			
Rec	92,000	606.612,394	4.652.231,387	362,429	362,800	0,371	337,5753	0	0,00%			
Rec	93,000	606.611,564	4.652.231,943	362,429	362,800	0,371	337,5753	0	0,00%			
	93,119	606.611,465	4.652.232,009	362,429	362,800	0,371	337,5753		0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-05

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	606.822,535	4.651.816,337	371,447	371,447	0,000	301,6977	0	-11,67%			
Rec	1,000	606.821,536	4.651.816,364	371,209	371,330	0,121	301,6977	0	-11,67%			
Rec	2,000	606.820,536	4.651.816,391	370,985	371,214	0,229	301,6977	0	-11,67%			
Rec	2,233	606.820,303	4.651.816,397	370,933	371,186	0,254	301,6977	0	-11,67%		T.E.	
Rec	3,000	606.819,536	4.651.816,417	370,761	371,098	0,337	301,6977	0	-11,28%			
Rec	4,000	606.818,537	4.651.816,444	370,540	370,988	0,448	301,6977	0	-10,78%			
Rec	5,000	606.817,537	4.651.816,471	370,371	370,883	0,512	301,6977	0	-10,28%			
Rec	6,000	606.816,537	4.651.816,497	370,279	370,782	0,503	301,6977	0	-9,78%			
Cur	6,240	606.816,297	4.651.816,504	370,251	370,759	0,508	301,6977	10	-9,66%	P.S.		
Cur	7,000	606.815,539	4.651.816,553	370,180	370,687	0,507	306,5348	10	-9,28%			
Cur	8,000	606.814,551	4.651.816,705	370,100	370,597	0,497	312,9010	10	-8,78%			
Cur	9,000	606.813,584	4.651.816,955	369,998	370,511	0,513	319,2672	10	-8,28%			
Cur	10,000	606.812,645	4.651.817,300	369,988	370,431	0,443	325,6334	10	-7,78%			
Cur	11,000	606.811,747	4.651.817,737	369,976	370,356	0,380	331,9996	10	-7,28%			
Cur	12,000	606.810,896	4.651.818,262	369,962	370,285	0,323	338,3658	10	-6,78%		V.	
Cur	13,000	606.810,102	4.651.818,869	369,947	370,220	0,273	344,7320	10	-6,28%			
Cur	14,000	606.809,372	4.651.819,552	369,931	370,160	0,229	351,0982	10	-5,78%			
Cur	15,000	606.808,714	4.651.820,305	369,915	370,104	0,189	357,4644	10	-5,28%			
Cur	16,000	606.808,135	4.651.821,119	369,899	370,054	0,155	363,8306	10	-4,78%			
Cur	17,000	606.807,640	4.651.821,988	369,882	370,009	0,127	370,1968	10	-4,28%			
Rec	17,101	606.807,595	4.651.822,078	369,880	370,005	0,125	370,8391	0	-4,23%	P.S.		
Rec	18,000	606.807,197	4.651.822,884	369,865	369,968	0,103	370,8391	0	-3,78%			
Rec	19,000	606.806,955	4.651.823,781	369,848	369,933	0,085	370,8391	0	-3,28%			
Rec	20,000	606.806,313	4.651.824,678	369,831	369,903	0,072	370,8391	0	-2,78%			
Rec	21,000	606.805,871	4.651.825,575	369,814	369,878	0,064	370,8391	0	-2,28%			
Rec	21,767	606.805,531	4.651.826,263	369,801	369,861	0,060	370,8391	0	-1,90%		T.S.	
Rec	22,000	606.805,428	4.651.826,472	369,797	369,857	0,060	370,8391	0	-1,90%			
Rec	23,000	606.804,986	4.651.827,369	369,780	369,838	0,058	370,8391	0	-1,90%			
Rec	24,000	606.804,544	4.651.828,266	369,763	369,819	0,056	370,8391	0	-1,90%			
Rec	25,000	606.804,102	4.651.829,163	369,746	369,800	0,054	370,8391	0	-1,90%			
Rec	26,000	606.803,660	4.651.830,060	369,729	369,781	0,052	370,8391	0	-1,90%			
Rec	27,000	606.803,217	4.651.830,957	369,712	369,762	0,050	370,8391	0	-1,90%			
Cur	27,737	606.802,892	4.651.831,617	369,700	369,748	0,048	370,8391	-50	-1,90%	P.S.		
Cur	28,000	606.802,775	4.651.831,853	369,695	369,743	0,048	370,5040	-50	-1,90%			
Cur	29,000	606.802,319	4.651.832,743	369,678	369,724	0,046	369,2308	-50	-1,90%			
Cur	30,000	606.801,845	4.651.833,624	369,661	369,704	0,043	367,9575	-50	-1,90%			
Cur	31,000	606.801,354	4.651.834,495	369,644	369,685	0,041	366,6843	-50	-1,90%			
Cur	32,000	606.800,846	4.651.835,356	369,628	369,666	0,038	365,4111	-50	-1,90%			
Cur	33,000	606.800,320	4.651.836,207	369,611	369,647	0,036	364,1378	-50	-1,90%			
Cur	34,000	606.799,778	4.651.837,047	369,594	369,628	0,034	362,8646	-50	-1,90%			
Cur	35,000	606.799,219	4.651.837,876	369,577	369,609	0,032	361,5913	-50	-1,90%			
Rec	35,998	606.798,644	4.651.838,693	369,561	369,590	0,029	360,3200	0	-1,90%	P.S.		
Rec	36,000	606.798,644	4.651.838,693	369,561	369,590	0,029	360,3200	0	-1,90%			
Rec	36,490	606.798,357	4.651.839,092	369,553	369,581	0,028	360,3200	0	-1,90%		T.E.	
Rec	37,000	606.798,059	4.651.839,506	369,544	369,571	0,027	360,3200	0	-1,85%			
Rec	38,000	606.797,476	4.651.840,318	369,527	369,553	0,026	360,3200	0	-1,75%			
Rec	39,000	606.796,892	4.651.841,130	369,511	369,536	0,025	360,3200	0	-1,65%			
Rec	40,000	606.796,308	4.651.841,942	369,502	369,520	0,018	360,3200	0	-1,55%			
Rec	41,000	606.795,725	4.651.842,754	369,495	369,505	0,010	360,3200	0	-1,45%			
Rec	42,000	606.795,141	4.651.843,566	369,470	369,491	0,021	360,3200	0	-1,35%			
Rec	43,000	606.794,557	4.651.844,378	369,444	369,478	0,034	360,3200	0	-1,25%			
Rec	44,000	606.793,973	4.651.845,190	369,418	369,466	0,048	360,3200	0	-1,15%			
Rec	45,000	606.793,390	4.651.846,002	369,392	369,455	0,063	360,3200	0	-1,05%			
Rec	46,000	606.792,806	4.651.846,814	369,368	369,445	0,077	360,3200	0	-0,95%		V.	
Rec	47,000	606.792,222	4.651.847,625	369,345	369,436	0,091	360,3200	0	-0,85%			
Rec	48,000	606.791,639	4.651.848,437	369,322	369,428	0,106	360,3200	0	-0,75%			
Rec	49,000	606.791,055	4.651.849,249	369,299	369,421	0,122	360,3200	0	-0,65%			
Cur	49,330	606.790,862	4.651.849,518	369,291	369,419	0,128	360,3200	-20	-0,62%	P.S.		
Cur	50,000	606.790,462	4.651.850,055	369,275	369,415	0,140	358,1889	-20	-0,55%			
Cur	51,000	606.789,832	4.651.850,831	369,253	369,410	0,157	355,0058	-20	-0,45%			
Cur	52,000	606.789,164	4.651.851,575	369,230	369,406	0,176	351,8227	-20	-0,35%			
Cur	53,000	606.788,459	4.651.852,285	369,209	369,403	0,194	348,6396	-20	-0,25%			
Cur	54,000	606.787,720	4.651.852,958	369,188	369,401	0,213	345,4565	-20	-0,15%			
Cur	55,000	606.786,949	4.651.853,594	369,167	369,400	0,233	342,2734	-20	-0,05%			ODT Ø500 L=5,80m
Cur	55,510	606.786,543	4.651.853,903	369,157	369,400	0,243	340,6500	-20	0,00%		T.S.	
Cur	56,000	606.786,146	4.651.854,190	369,148	369,400	0,252	339,0903	-20	0,00%			
Cur	57,000	606.785,315	4.651.854,746	369,129	369,400	0,271	335,9072	-20	0,00%			
Cur	58,000	606.784,457	4.651.855,259	369,111	369,400	0,289	332,7241	-20	0,00%			
Rec	58,755	606.783,792	4.651.855,618	369,098	369,400	0,302	330,3216	0	0,00%	P.S.		
Rec	59,000	606.783,575	4.651.855,730	369,094	369,400	0,306	330,3216	0	0,00%			
Rec	60,000	606.782,686	4.651.856,188	369,077	369,400	0,323	330,3216	0	0,00%			
Rec	61,000	606.781,797	4.651.856,647	369,059	369,400	0,341	330,3216	0	0,00%			
Rec	62,000	606.780,908	4.651.857,105	369,042	369,400	0,358	330,3216	0	0,00%			
Rec	63,000	606.780,020	4.651.857,564	369,025	369,400	0,375	330,3216	0	0,00%			
Rec	64,000	606.779,131	4.651.858,022	369,007	369,400	0,393	330,3216	0	0,00%			
Rec	65,000	606.778,242	4.651.858,481	368,853	369,400	0,547	330,3216	0	0,00%			
Rec	66,000	606.777,354	4.651.858,939	368,606	369,400	0,794	330,3216	0	0,00%			
Cur	66,053	606.777,307	4.651.858,964	368,593	369,400	0,807	330,3216		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	606.899,802	4.650.863,177	374,360	374,360	0,000	84,3710	0	0,28%			
Rec	1,000	606.900,772	4.650.863,420	374,277	374,363	0,086	84,3710	0	0,28%			
Rec	2,000	606.901,742	4.650.863,664	374,251	374,366	0,115	84,3710	0	0,28%			
Rec	3,000	606.902,712	4.650.863,907	374,254	374,368	0,114	84,3710	0	0,28%			
Rec	4,000	606.903,682	4.650.864,150	374,229	374,371	0,142	84,3710	0	0,28%			
Rec	5,000	606.904,652	4.650.864,393	374,205	374,374	0,169	84,3710	0	0,28%			
Cur	5,426	606.905,065	4.650.864,496	374,195	374,375	0,180	84,3710	15	0,28%	P.S.		
Cur	6,000	606.905,624	4.650.864,625	374,180	374,377	0,197	86,8057	15	0,28%			
Cur	7,000	606.906,609	4.650.864,798	374,155	374,380	0,225	91,0498	15	0,28%			
Cur	8,000	606.907,603	4.650.864,905	374,130	374,383	0,253	95,2939	15	0,28%			
Cur	9,000	606.908,602	4.650.864,946	374,103	374,385	0,282	99,5381	15	0,28%			
Cur	10,000	606.909,601	4.650.864,920	374,076	374,388	0,312	103,7822	15	0,28%			
Cur	11,000	606.910,597	4.650.864,827	374,049	374,391	0,342	108,0263	15	0,28%			
Cur	12,000	606.911,584	4.650.864,668	374,022	374,394	0,372	112,2705	15	0,28%			
Cur	13,000	606.912,558	4.650.864,444	374,000	374,397	0,397	116,5146	15	0,28%			
Cur	14,000	606.913,516	4.650.864,156	374,000	374,400	0,400	120,7587	15	0,28%			
Cur	14,177	606.913,683	4.650.864,098	374,000	374,400	0,400	121,5099	15	0,28%		T.E.	
Cur	15,000	606.914,452	4.650.863,804	374,000	374,403	0,403	125,0029	15	0,32%			
Cur	16,000	606.915,362	4.650.863,391	374,001	374,406	0,405	129,2470	15	0,37%			
Cur	17,000	606.916,243	4.650.862,918	374,004	374,410	0,406	133,4911	15	0,42%			
Cur	18,000	606.917,090	4.650.862,387	374,008	374,415	0,407	137,7352	15	0,47%			
Cur	19,000	606.917,901	4.650.861,801	374,012	374,420	0,408	141,9794	15	0,52%			
Cur	20,000	606.918,670	4.650.861,163	374,015	374,425	0,410	146,2235	15	0,57%			
Cur	21,000	606.919,395	4.650.860,474	374,019	374,431	0,412	150,4676	15	0,62%			
Cur	22,000	606.920,073	4.650.859,739	374,022	374,438	0,416	154,7118	15	0,67%			
Rec	22,259	606.920,240	4.650.859,542	374,023	374,439	0,416	155,8093	0	0,69%	P.S.	V.	
Rec	23,000	606.920,714	4.650.858,972	374,026	374,445	0,419	155,8093	0	0,72%			
Rec	24,000	606.921,354	4.650.858,204	374,029	374,452	0,423	155,8093	0	0,77%			
Rec	25,000	606.921,994	4.650.857,435	374,033	374,460	0,427	155,8093	0	0,82%			
Rec	26,000	606.922,633	4.650.856,666	374,036	374,469	0,433	155,8093	0	0,87%			
Rec	27,000	606.923,273	4.650.855,898	374,039	374,478	0,439	155,8093	0	0,92%			
Rec	28,000	606.923,913	4.650.855,129	374,043	374,487	0,444	155,8093	0	0,97%			
Rec	29,000	606.924,553	4.650.854,361	374,046	374,497	0,451	155,8093	0	1,02%			
Rec	30,000	606.925,192	4.650.853,592	374,050	374,508	0,458	155,8093	0	1,07%			
Rec	30,341	606.925,410	4.650.853,330	374,051	374,511	0,460	155,8093	0	1,09%		T.S.	
Rec	31,000	606.925,832	4.650.852,823	374,053	374,518	0,465	155,8093	0	1,09%			
Rec	32,000	606.926,472	4.650.852,055	374,056	374,529	0,473	155,8093	0	1,09%			
Cur	32,379	606.926,714	4.650.851,763	374,056	374,533	0,477	155,8093	-100	1,09%	P.S.		
Cur	33,000	606.927,113	4.650.851,287	374,065	374,540	0,475	155,4141	-100	1,09%			
Cur	34,000	606.927,761	4.650.850,526	374,084	374,551	0,467	154,7775	-100	1,09%			
Cur	35,000	606.928,417	4.650.849,771	374,102	374,562	0,460	154,1409	-100	1,09%			
Cur	36,000	606.929,080	4.650.849,023	374,120	374,573	0,453	153,5043	-100	1,09%			
Cur	37,000	606.929,751	4.650.848,281	374,138	374,584	0,446	152,8677	-100	1,09%			
Cur	38,000	606.930,430	4.650.847,546	374,155	374,595	0,440	152,2310	-100	1,09%			
Cur	38,915	606.931,057	4.650.846,880	374,171	374,605	0,434	151,6485	-100	1,09%		T.E.	
Cur	39,000	606.931,115	4.650.846,818	374,172	374,606	0,434	151,5944	-100	1,08%			
Cur	40,000	606.931,808	4.650.846,097	374,188	374,616	0,428	150,9578	-100	0,95%			
Cur	41,000	606.932,508	4.650.845,383	374,204	374,625	0,421	150,3212	-100	0,81%			
Cur	42,000	606.933,215	4.650.844,676	374,219	374,632	0,413	149,6846	-100	0,68%			
Cur	43,000	606.933,929	4.650.843,976	374,234	374,638	0,404	149,0479	-100	0,55%			
Cur	44,000	606.934,650	4.650.843,283	374,249	374,643	0,394	148,4113	-100	0,41%			
Cur	45,000	606.935,378	4.650.842,597	374,263	374,646	0,383	147,7747	-100	0,28%			
Cur	46,000	606.936,113	4.650.841,919	374,277	374,649	0,372	147,1381	-100	0,15%			
Cur	47,000	606.936,854	4.650.841,248	374,290	374,649	0,359	146,5015	-100	0,01%			
Cur	48,000	606.937,603	4.650.840,585	374,303	374,649	0,346	145,8648	-100	-0,12%			
Rec	48,467	606.937,954	4.650.840,277	374,309	374,648	0,339	145,5674	0	-0,18%	P.S.	V.	
Rec	49,000	606.938,356	4.650.839,928	374,315	374,647	0,332	145,5674	0	-0,25%			
Rec	50,000	606.939,111	4.650.839,272	374,328	374,644	0,316	145,5674	0	-0,39%			
Rec	51,000	606.939,866	4.650.838,615	374,340	374,639	0,299	145,5674	0	-0,52%			
Rec	52,000	606.940,620	4.650.837,959	374,308	374,633	0,325	145,5674	0	-0,65%			
Rec	53,000	606.941,375	4.650.837,303	374,172	374,626	0,454	145,5674	0	-0,79%			
Rec	54,000	606.942,129	4.650.836,647	374,059	374,618	0,559	145,5674	0	-0,92%			
Rec	55,000	606.942,884	4.650.835,991	374,058	374,608	0,550	145,5674	0	-1,05%			
Rec	56,000	606.943,639	4.650.835,334	374,057	374,597	0,540	145,5674	0	-1,19%			
Rec	57,000	606.944,393	4.650.834,678	374,056	374,584	0,528	145,5674	0	-1,32%			
Rec	58,000	606.945,148	4.650.834,022	374,056	374,570	0,514	145,5674	0	-1,45%			
Rec	58,019	606.945,162	4.650.834,010	374,056	374,570	0,514	145,5674	0	-1,46%		T.S.	
Rec	59,000	606.945,902	4.650.833,366	374,054	374,556	0,502	145,5674	0	-1,46%			
Rec	60,000	606.946,657	4.650.832,710	374,053	374,541	0,488	145,5674	0	-1,46%			
Rec	61,000	606.947,412	4.650.832,053	374,051	374,527	0,476	145,5674	0	-1,46%			
Rec	62,000	606.948,166	4.650.831,397	374,049	374,512	0,463	145,5674	0	-1,46%			
Cur	62,723	606.948,712	4.650.830,923	374,046	374,501	0,455	145,5674	-200	-1,46%	P.S.		
Cur	63,000	606.948,921	4.650.830,741	374,044	374,497	0,453	145,4791	-200	-1,46%			
Cur	64,000	606.949,678	4.650.830,088	374,037	374,483	0,446	145,1608	-200	-1,46%			
Cur	65,000	606.950,438	4.650.829,438	374,025	374,468	0,443	144,8425	-200	-1,46%			
Cur	66,000	606.951,202	4.650.828,793	374,013	374,454	0,441	144,5242	-200	-1,46%			
Cur	67,000	606.951,969	4.650.828,151	374,003	374,439	0,436	144,2059	-200	-1,46%			
Cur	68,000	606.952,739	4.650.827,513	373,985	374,425	0,440	143,8876	-200	-1,46%			
Cur	69,000	606.953,512	4.650.826,879	373,965	374,410	0,445	143,5693	-200	-1,46%			
Cur	70,000	606.954,288	4.650.826,249	373,946	374,395	0,449	143,2510	-200	-1,46%			
Cur	71,000	606.955,068	4.650.825,622	373,927	374,381	0,454	142,9327	-200	-1,46%			
Cur	72,000	606.955,851	4.650.825,000	373,908	374,366	0,458	142,6144	-200	-1,46%			
Cur	73,000	606.956,636	4.650.824,381	373,888	374,352	0,464	142,2960	-200	-1,46%			
Cur	73,762	606.957,237	4.650.823,912	373,854	374,341	0,486	142,0535	-200	-1,46%		T.E.	
Cur	74,000	606.957,425	4.650.823,767	373,844	374,337	0,493	141,9777	-200	-1,44%			
Cur	75,000	606.958,217	4.650.823,156	373,798	374,323	0,525	141,6594	-200	-1,37%			
Cur	76,000	606.959,012	4.650.822,549	373,753	374,310	0,557	141,3411	-200	-1,31%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T18-T19 C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	77,000	606.959,810	4.650.821,947	373,712	374,297	0,585	141,0228	-200	-1,24%			
Cur	78,000	606.960,611	4.650.821,348	373,748	374,285	0,537	140,7045	-200	-1,17%			
Cur	79,000	606.961,415	4.650.820,753	373,783	374,274	0,491	140,3862	-200	-1,11%			
Cur	80,000	606.962,222	4.650.820,162	373,803	374,263	0,460	140,0679	-200	-1,04%			
Cur	81,000	606.963,032	4.650.819,576	373,802	374,253	0,451	139,7496	-200	-0,97%			
Cur	82,000	606.963,844	4.650.818,993	373,802	374,243	0,441	139,4313	-200	-0,91%			
Cur	83,000	606.964,660	4.650.818,415	373,802	374,235	0,433	139,1130	-200	-0,84%			
Rec	83,357	606.964,952	4.650.818,209	373,801	374,232	0,431	138,9994	0	-0,82%	P.S.	V.	
Rec	84,000	606.965,478	4.650.817,840	373,801	374,227	0,426	138,9994	0	-0,77%			
Rec	85,000	606.966,296	4.650.817,265	373,800	374,219	0,419	138,9994	0	-0,71%			
Rec	86,000	606.967,114	4.650.816,690	373,800	374,212	0,412	138,9994	0	-0,64%			
Rec	87,000	606.967,933	4.650.816,115	373,802	374,206	0,404	138,9994	0	-0,57%			
Rec	88,000	606.968,751	4.650.815,540	373,803	374,201	0,398	138,9994	0	-0,51%			
Rec	89,000	606.969,569	4.650.814,965	373,804	374,196	0,392	138,9994	0	-0,44%			
Rec	90,000	606.970,387	4.650.814,390	373,805	374,192	0,387	138,9994	0	-0,37%			
Rec	91,000	606.971,205	4.650.813,815	373,807	374,189	0,382	138,9994	0	-0,31%			
Rec	92,000	606.972,023	4.650.813,240	373,809	374,186	0,377	138,9994	0	-0,24%			
Rec	92,952	606.972,802	4.650.812,692	373,811	374,184	0,373	138,9994	0	-0,18%		T.S.	
Rec	93,000	606.972,842	4.650.812,665	373,811	374,184	0,373	138,9994	0	-0,18%			
Rec	94,000	606.973,660	4.650.812,090	373,813	374,182	0,369	138,9994	0	-0,18%			
Rec	95,000	606.974,478	4.650.811,515	373,815	374,180	0,365	138,9994	0	-0,18%			
Rec	96,000	606.975,296	4.650.810,940	373,822	374,179	0,357	138,9994	0	-0,18%			
Rec	97,000	606.976,114	4.650.810,365	373,830	374,177	0,347	138,9994	0	-0,18%			
Rec	98,000	606.976,932	4.650.809,790	373,837	374,175	0,338	138,9994	0	-0,18%			
Rec	99,000	606.977,750	4.650.809,215	373,845	374,173	0,328	138,9994	0	-0,18%			
Rec	100,000	606.978,569	4.650.808,640	373,852	374,172	0,320	138,9994	0	-0,18%			
Rec	101,000	606.979,387	4.650.808,065	373,860	374,170	0,310	138,9994	0	-0,18%			
Rec	102,000	606.980,205	4.650.807,490	373,867	374,168	0,301	138,9994	0	-0,18%			
Rec	103,000	606.981,023	4.650.806,915	373,875	374,166	0,291	138,9994	0	-0,18%			
Rec	104,000	606.981,841	4.650.806,340	373,882	374,165	0,283	138,9994	0	-0,18%			
Rec	105,000	606.982,659	4.650.805,765	373,890	374,163	0,273	138,9994	0	-0,18%			
Rec	106,000	606.983,478	4.650.805,190	373,897	374,161	0,264	138,9994	0	-0,18%			
Rec	107,000	606.984,296	4.650.804,615	373,898	374,159	0,261	138,9994	0	-0,18%			
Rec	108,000	606.985,114	4.650.804,040	373,898	374,157	0,259	138,9994	0	-0,18%			
Rec	109,000	606.985,932	4.650.803,465	373,897	374,156	0,259	138,9994	0	-0,18%			
Rec	110,000	606.986,750	4.650.802,890	373,897	374,154	0,257	138,9994	0	-0,18%			
Rec	111,000	606.987,568	4.650.802,315	373,897	374,152	0,255	138,9994	0	-0,18%			
Rec	112,000	606.988,386	4.650.801,740	373,897	374,150	0,253	138,9994	0	-0,18%			
Rec	113,000	606.989,205	4.650.801,165	373,896	374,149	0,253	138,9994	0	-0,18%			
Rec	114,000	606.990,023	4.650.800,590	373,895	374,147	0,252	138,9994	0	-0,18%			
Rec	115,000	606.990,841	4.650.800,015	373,894	374,145	0,251	138,9994	0	-0,18%			
Rec	116,000	606.991,659	4.650.799,440	373,893	374,143	0,250	138,9994	0	-0,18%			
Rec	117,000	606.992,477	4.650.798,865	373,892	374,142	0,250	138,9994	0	-0,18%			
Rec	118,000	606.993,295	4.650.798,290	373,890	374,140	0,250	138,9994	0	-0,18%			
Rec	119,000	606.994,114	4.650.797,715	373,887	374,138	0,251	138,9994	0	-0,18%			
Rec	120,000	606.994,932	4.650.797,140	373,886	374,136	0,250	138,9994	0	-0,18%			
Rec	121,000	606.995,750	4.650.796,565	373,887	374,135	0,248	138,9994	0	-0,18%			
Rec	122,000	606.996,568	4.650.795,990	373,888	374,133	0,245	138,9994	0	-0,18%			
Rec	123,000	606.997,386	4.650.795,415	373,889	374,131	0,242	138,9994	0	-0,18%			
Rec	124,000	606.998,204	4.650.794,840	373,891	374,129	0,238	138,9994	0	-0,18%			
Rec	125,000	606.999,022	4.650.794,265	373,892	374,127	0,235	138,9994	0	-0,18%			
Rec	126,000	606.999,841	4.650.793,690	373,893	374,126	0,233	138,9994	0	-0,18%			
Cur	126,923	607.000,595	4.650.793,159	373,895	374,124	0,229	138,9994	-100	-0,18%	P.S.		
Cur	127,000	607.000,659	4.650.793,115	373,895	374,124	0,229	138,9501	-100	-0,18%			
Cur	128,000	607.001,480	4.650.792,544	373,891	374,122	0,231	138,3135	-100	-0,18%			
Cur	129,000	607.002,307	4.650.791,982	373,870	374,120	0,250	137,6769	-100	-0,18%			
Cur	130,000	607.003,140	4.650.791,429	373,848	374,119	0,271	137,0403	-100	-0,18%			
Cur	131,000	607.003,978	4.650.790,883	373,826	374,117	0,291	136,4037	-100	-0,18%			
Cur	132,000	607.004,822	4.650.790,346	373,804	374,115	0,311	135,7670	-100	-0,18%			
Cur	133,000	607.005,671	4.650.789,818	373,781	374,113	0,332	135,1304	-100	-0,18%			
Cur	133,535	607.006,127	4.650.789,539	373,769	374,112	0,344	134,7898	-100	-0,18%		T.E.	
Cur	134,000	607.006,525	4.650.789,298	373,758	374,112	0,354	134,4938	-100	0,01%			
Cur	135,000	607.007,384	4.650.788,786	373,734	374,114	0,380	133,8572	-100	0,41%			
Cur	136,000	607.008,249	4.650.788,284	373,710	374,120	0,410	133,2206	-100	0,81%			
Cur	137,000	607.009,118	4.650.787,789	373,700	374,130	0,430	132,5839	-100	1,21%			
Cur	138,000	607.009,992	4.650.787,304	373,697	374,144	0,447	131,9473	-100	1,61%			
Cur	139,000	607.010,872	4.650.786,827	373,694	374,162	0,468	131,3107	-100	2,01%			
Cur	140,000	607.011,755	4.650.786,360	373,690	374,185	0,495	130,6741	-100	2,41%		V.	ODT Ø500 L=5,50m
Cur	141,000	607.012,644	4.650.785,901	373,686	374,211	0,525	130,0375	-100	2,81%			
Cur	142,000	607.013,537	4.650.785,451	373,682	374,241	0,559	129,4008	-100	3,21%			
Cur	143,000	607.014,434	4.650.785,010	373,678	374,275	0,597	128,7642	-100	3,61%			
Cur	144,000	607.015,336	4.650.784,577	373,677	374,313	0,636	128,1276	-100	4,01%			
Cur	145,000	607.016,242	4.650.784,154	373,681	374,355	0,674	127,4910	-100	4,41%			
Cur	146,000	607.017,152	4.650.783,740	373,685	374,401	0,716	126,8544	-100	4,81%			
Cur	146,465	607.017,577	4.650.783,551	373,686	374,424	0,738	126,5583	-100	5,00%		T.S.	
Cur	147,000	607.018,067	4.650.783,336	373,688	374,451	0,763	126,2177	-100	5,00%			
Rec	147,339	607.018,378	4.650.783,200	373,688	374,468	0,780	126,0018	0	5,00%	P.S.		
Rec	148,000	607.018,984	4.650.782,938	373,689	374,501	0,812	126,0018	0	5,00%			
Rec	149,000	607.019,902	4.650.782,541	373,692	374,551	0,859	126,0018	0	5,00%			
Rec	150,000	607.020,820	4.650.782,143	373,692	374,601	0,909	126,0018	0	5,00%			
Rec	151,000	607.021,738	4.650.781,746	373,691	374,650	0,959	126,0018	0	5,00%			
Rec	152,000	607.022,655	4.650.781,349	373,690	374,700	1,010	126,0018	0	5,00%			
Rec	153,000	607.023,573	4.650.780,952	373,686	374,750	1,064	126,0018	0	5,00%			
Rec	153,756	607.024,267	4.650.780,652	373,684	374,788	1,104	126,0018	0	5,00%		T.E.	
Rec	154,000	607.024,491	4.650.780,555	373,683	374,800	1,117	126,0018	0	4,90%			
Rec	155,000	607.025,409	4.650.780,158	373,675	374,847	1,172	126,0018	0	4,50%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-06

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	156,000	607.026,326	4.650.779,760	373,652	374,890	1,238	126,0018	0	4,10%			
Rec	157,000	607.027,244	4.650.779,363	373,630	374,929	1,299	126,0018	0	3,70%			
Cur	157,393	607.027,605	4.650.779,207	373,622	374,943	1,321	126,0018	10	3,54%	P.S.		
Cur	158,000	607.028,154	4.650.778,949	373,610	374,964	1,354	129,8647	10	3,30%			
Cur	159,000	607.029,022	4.650.778,453	373,597	374,995	1,398	136,2309	10	2,90%			
Cur	160,000	607.029,836	4.650.777,873	373,594	375,022	1,428	142,5971	10	2,50%		V.	
Cur	161,000	607.030,588	4.650.777,215	373,599	375,045	1,446	148,9633	10	2,10%			
Cur	162,000	607.031,271	4.650.776,485	373,613	375,064	1,451	155,3295	10	1,70%			
Cur	163,000	607.031,877	4.650.775,690	373,658	375,079	1,421	161,6957	10	1,30%			
Cur	164,000	607.032,401	4.650.774,839	373,670	375,090	1,420	168,0619	10	0,90%			
Cur	165,000	607.032,837	4.650.773,939	373,548	375,097	1,549	174,4281	10	0,50%			
Cur	166,000	607.033,182	4.650.773,001	373,517	375,100	1,583	180,7943	10	0,10%			
Cur	166,244	607.033,251	4.650.772,767	373,526	375,100	1,574	182,3477	10	0,00%		T.S.	
Cur	167,000	607.033,430	4.650.772,033	373,552	375,100	1,548	187,1605	10	0,00%			
Cur	168,000	607.033,581	4.650.771,045	373,702	375,100	1,398	193,5267	10	0,00%			
Cur	169,000	607.033,633	4.650.770,046	373,864	375,100	1,236	199,8929	10	0,00%			
Rec	169,389	607.033,626	4.650.769,657	373,917	375,100	1,183	202,3700	0	0,00%	P.S.	P.S.	
Rec	170,000	607.033,603	4.650.769,047	374,012	375,100	1,088	202,3700	0	0,00%			
Rec	171,000	607.033,566	4.650.768,048	374,178	375,100	0,922	202,3700	0	0,00%			
Rec	172,000	607.033,529	4.650.767,048	374,327	375,100	0,773	202,3700	0	0,00%			
Rec	173,000	607.033,492	4.650.766,049	374,372	375,100	0,728	202,3700	0	0,00%			
Rec	174,000	607.033,455	4.650.765,050	374,446	375,100	0,654	202,3700	0	0,00%			
Rec	175,000	607.033,417	4.650.764,050	374,534	375,100	0,566	202,3700	0	0,00%			
Rec	176,000	607.033,380	4.650.763,051	374,603	375,100	0,497	202,3700	0	0,00%			
Rec	177,000	607.033,343	4.650.762,052	374,650	375,100	0,450	202,3700	0	0,00%			
Rec	178,000	607.033,306	4.650.761,053	374,696	375,100	0,404	202,3700	0	0,00%			
Rec	179,000	607.033,269	4.650.760,053	374,751	375,100	0,349	202,3700	0	0,00%			
	179,575	607.033,247	4.650.759,479	374,832	375,100	0,268	202,3700		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	607.389,110	4.650.691,075	368,005	368,005	0,000	303,8299	0	14,26%			
Rec	1,000	607.388,112	4.650.691,135	368,424	368,148	-0,276	303,8299	0	14,26%			ODT Ø500 L=9,00m
Rec	2,000	607.387,114	4.650.691,196	368,616	368,290	-0,326	303,8299	0	14,26%			
Rec	2,029	607.387,085	4.650.691,197	368,620	368,294	-0,326	303,8299	0	14,26%		T.E.	
Rec	3,000	607.386,116	4.650.691,256	368,770	368,426	-0,344	303,8299	0	12,87%			
Rec	4,000	607.385,118	4.650.691,316	368,933	368,548	-0,385	303,8299	0	11,45%			
Rec	5,000	607.384,119	4.650.691,376	369,000	368,655	-0,345	303,8299	0	10,02%			
Rec	6,000	607.383,121	4.650.691,436	369,000	368,748	-0,252	303,8299	0	8,59%			
Cur	6,977	607.382,146	4.650.691,495	369,000	368,825	-0,175	303,8299	-50	7,19%	P.S.	V.	
Cur	7,000	607.382,123	4.650.691,496	369,000	368,827	-0,173	303,8004	-50	7,16%			
Cur	8,000	607.381,124	4.650.691,546	369,000	368,891	-0,109	302,5272	-50	5,73%			
Cur	9,000	607.380,125	4.650.691,575	369,001	368,941	-0,060	301,2539	-50	4,30%			
Cur	10,000	607.379,125	4.650.691,585	369,000	368,977	-0,023	299,9807	-50	2,87%			
Cur	11,000	607.378,125	4.650.691,575	369,000	368,999	-0,001	298,7075	-50	1,45%			
Cur	11,925	607.377,200	4.650.691,548	368,994	369,006	0,012	297,5297	-50	0,12%		T.S.	
Cur	12,000	607.377,125	4.650.691,545	368,994	369,006	0,012	297,4342	-50	0,12%			
Cur	13,000	607.376,127	4.650.691,494	368,990	369,008	0,018	296,1610	-50	0,12%			
Cur	14,000	607.375,129	4.650.691,424	368,998	369,009	0,011	294,8877	-50	0,12%			
Cur	15,000	607.374,133	4.650.691,334	368,997	369,010	0,013	293,6145	-50	0,12%			
Cur	16,000	607.373,139	4.650.691,224	368,997	369,011	0,014	292,3413	-50	0,12%			
Cur	17,000	607.372,148	4.650.691,094	368,996	369,012	0,016	291,0680	-50	0,12%			
Cur	18,000	607.371,159	4.650.690,944	368,995	369,014	0,019	289,7948	-50	0,12%			
Cur	19,000	607.370,174	4.650.690,775	368,994	369,015	0,021	288,5215	-50	0,12%			
Cur	20,000	607.369,192	4.650.690,585	368,993	369,016	0,023	287,2483	-50	0,12%			
Cur	21,000	607.368,214	4.650.690,377	368,993	369,017	0,024	285,9751	-50	0,12%			
Cur	22,000	607.367,240	4.650.690,148	368,993	369,019	0,026	284,7018	-50	0,12%			
Cur	23,000	607.366,271	4.650.689,901	368,993	369,020	0,027	283,4286	-50	0,12%			
Cur	24,000	607.365,308	4.650.689,634	368,993	369,021	0,028	282,1553	-50	0,12%			
Rec	24,060	607.365,250	4.650.689,617	368,993	369,021	0,028	282,0789	0	0,12%	P.S.		
Rec	25,000	607.364,347	4.650.689,356	368,993	369,022	0,029	282,0789	0	0,12%			
Rec	26,000	607.363,386	4.650.689,078	368,994	369,024	0,030	282,0789	0	0,12%			
Rec	27,000	607.362,426	4.650.688,800	368,995	369,025	0,030	282,0789	0	0,12%			
Rec	28,000	607.361,465	4.650.688,523	368,994	369,026	0,032	282,0789	0	0,12%			
Rec	29,000	607.360,504	4.650.688,245	368,994	369,027	0,033	282,0789	0	0,12%			
Rec	30,000	607.359,544	4.650.687,967	368,993	369,029	0,036	282,0789	0	0,12%			
Rec	31,000	607.358,583	4.650.687,689	368,993	369,030	0,037	282,0789	0	0,12%			
Rec	32,000	607.357,622	4.650.687,411	368,995	369,031	0,036	282,0789	0	0,12%			
Rec	33,000	607.356,662	4.650.687,134	368,994	369,032	0,038	282,0789	0	0,12%			
Rec	34,000	607.355,701	4.650.686,856	368,996	369,034	0,038	282,0789	0	0,12%			
Rec	35,000	607.354,741	4.650.686,578	368,996	369,035	0,039	282,0789	0	0,12%			
Rec	36,000	607.353,780	4.650.686,300	368,996	369,036	0,040	282,0789	0	0,12%			
Rec	37,000	607.352,819	4.650.686,022	368,995	369,037	0,042	282,0789	0	0,12%			
Rec	38,000	607.351,859	4.650.685,745	368,995	369,039	0,044	282,0789	0	0,12%			
Rec	39,000	607.350,898	4.650.685,467	368,995	369,040	0,045	282,0789	0	0,12%			
Rec	40,000	607.349,937	4.650.685,189	368,994	369,041	0,047	282,0789	0	0,12%			
Rec	41,000	607.348,977	4.650.684,911	368,994	369,042	0,048	282,0789	0	0,12%			
Rec	42,000	607.348,016	4.650.684,633	368,993	369,044	0,051	282,0789	0	0,12%			
Rec	43,000	607.347,055	4.650.684,356	368,992	369,045	0,053	282,0789	0	0,12%			
Rec	44,000	607.346,095	4.650.684,078	368,990	369,046	0,056	282,0789	0	0,12%			
Rec	45,000	607.345,134	4.650.683,800	368,988	369,047	0,059	282,0789	0	0,12%			
Rec	46,000	607.344,173	4.650.683,522	368,988	369,049	0,061	282,0789	0	0,12%			
Rec	47,000	607.343,213	4.650.683,244	368,987	369,050	0,063	282,0789	0	0,12%			
Rec	48,000	607.342,252	4.650.682,967	368,985	369,051	0,066	282,0789	0	0,12%			
Rec	49,000	607.341,292	4.650.682,689	368,983	369,052	0,069	282,0789	0	0,12%			
Rec	50,000	607.340,331	4.650.682,411	368,983	369,054	0,071	282,0789	0	0,12%			
Rec	51,000	607.339,370	4.650.682,133	368,983	369,055	0,072	282,0789	0	0,12%			
Rec	52,000	607.338,410	4.650.681,855	368,983	369,056	0,073	282,0789	0	0,12%			
Rec	53,000	607.337,449	4.650.681,578	368,983	369,057	0,074	282,0789	0	0,12%			
Rec	54,000	607.336,488	4.650.681,300	368,984	369,059	0,075	282,0789	0	0,12%			
Rec	55,000	607.335,528	4.650.681,022	368,985	369,060	0,075	282,0789	0	0,12%			
Rec	56,000	607.334,567	4.650.680,744	368,987	369,061	0,074	282,0789	0	0,12%			
Rec	57,000	607.333,606	4.650.680,466	368,988	369,062	0,074	282,0789	0	0,12%			
Rec	58,000	607.332,646	4.650.680,189	368,989	369,064	0,075	282,0789	0	0,12%			
Rec	59,000	607.331,685	4.650.679,911	368,990	369,065	0,075	282,0789	0	0,12%			
Rec	60,000	607.330,725	4.650.679,633	368,990	369,066	0,076	282,0789	0	0,12%			
Rec	61,000	607.329,764	4.650.679,355	368,991	369,067	0,076	282,0789	0	0,12%			
Rec	62,000	607.328,803	4.650.679,077	368,992	369,069	0,077	282,0789	0	0,12%			
Rec	63,000	607.327,843	4.650.678,800	368,998	369,070	0,072	282,0789	0	0,12%			
Rec	64,000	607.326,882	4.650.678,522	368,998	369,071	0,073	282,0789	0	0,12%			
Rec	65,000	607.325,921	4.650.678,244	368,998	369,072	0,074	282,0789	0	0,12%			
Rec	66,000	607.324,961	4.650.677,966	368,998	369,074	0,076	282,0789	0	0,12%			
Rec	67,000	607.324,000	4.650.677,688	368,998	369,075	0,077	282,0789	0	0,12%			
Rec	68,000	607.323,039	4.650.677,411	368,998	369,076	0,078	282,0789	0	0,12%			
Rec	69,000	607.322,079	4.650.677,133	368,998	369,077	0,079	282,0789	0	0,12%			
Rec	70,000	607.321,118	4.650.676,855	368,998	369,079	0,081	282,0789	0	0,12%			
Rec	71,000	607.320,158	4.650.676,577	368,997	369,080	0,083	282,0789	0	0,12%			
Rec	72,000	607.319,197	4.650.676,299	368,997	369,081	0,084	282,0789	0	0,12%			
Rec	73,000	607.318,236	4.650.676,022	368,997	369,082	0,085	282,0789	0	0,12%			
Rec	74,000	607.317,276	4.650.675,744	368,997	369,084	0,087	282,0789	0	0,12%			
Rec	75,000	607.316,315	4.650.675,466	368,997	369,085	0,088	282,0789	0	0,12%			
Rec	76,000	607.315,354	4.650.675,188	368,997	369,086	0,089	282,0789	0	0,12%			
Rec	77,000	607.314,394	4.650.674,910	368,998	369,087	0,089	282,0789	0	0,12%			
Rec	78,000	607.313,433	4.650.674,633	368,998	369,089	0,091	282,0789	0	0,12%			
Rec	79,000	607.312,472	4.650.674,355	368,999	369,090	0,091	282,0789	0	0,12%			
Rec	80,000	607.311,512	4.650.674,077	369,000	369,091	0,091	282,0789	0	0,12%			
Rec	81,000	607.310,551	4.650.673,799	369,000	369,092	0,092	282,0789	0	0,12%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-07

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	82,000	607.309,591	4.650.673,521	369,001	369,093	0,092	282,0789	0	0,12%			
Rec	83,000	607.308,630	4.650.673,244	369,001	369,095	0,094	282,0789	0	0,12%			
Rec	84,000	607.307,669	4.650.672,966	369,000	369,096	0,096	282,0789	0	0,12%			
Rec	85,000	607.306,709	4.650.672,688	369,000	369,097	0,097	282,0789	0	0,12%			
Rec	86,000	607.305,748	4.650.672,410	369,001	369,098	0,097	282,0789	0	0,12%			
Rec	87,000	607.304,787	4.650.672,132	369,004	369,100	0,096	282,0789	0	0,12%			
Rec	88,000	607.303,827	4.650.671,855	369,006	369,101	0,095	282,0789	0	0,12%			
Rec	89,000	607.302,866	4.650.671,577	369,009	369,102	0,093	282,0789	0	0,12%			
Rec	90,000	607.301,905	4.650.671,299	369,015	369,103	0,088	282,0789	0	0,12%			
Rec	91,000	607.300,945	4.650.671,021	369,025	369,105	0,080	282,0789	0	0,12%			
Cur	91,884	607.300,095	4.650.670,775	369,038	369,106	0,068	282,0789	200	0,12%	P.S.		
Cur	92,000	607.299,984	4.650.670,743	369,039	369,106	0,067	282,1156	200	0,12%			
Cur	93,000	607.299,023	4.650.670,468	369,063	369,107	0,044	282,4339	200	0,12%			
Cur	94,000	607.298,060	4.650.670,198	369,080	369,108	0,028	282,7523	200	0,12%			
Cur	95,000	607.297,096	4.650.669,933	369,084	369,110	0,026	283,0706	200	0,12%			
Cur	96,000	607.296,130	4.650.669,673	369,088	369,111	0,023	283,3889	200	0,12%			
Cur	97,000	607.295,163	4.650.669,417	369,091	369,112	0,021	283,7072	200	0,12%			
Cur	98,000	607.294,195	4.650.669,167	369,095	369,113	0,018	284,0255	200	0,12%			
Cur	99,000	607.293,226	4.650.668,921	369,098	369,115	0,017	284,3438	200	0,12%			
Cur	99,806	607.292,444	4.650.668,726	369,101	369,116	0,014	284,6004	200	0,12%		T.E.	
Cur	100,000	607.292,255	4.650.668,680	369,102	369,116	0,014	284,6621	200	0,15%			
Cur	101,000	607.291,284	4.650.668,443	369,105	369,118	0,013	284,9804	200	0,28%			
Cur	102,000	607.290,311	4.650.668,212	369,108	369,122	0,014	285,2987	200	0,42%			
Cur	103,000	607.289,337	4.650.667,986	369,111	369,126	0,015	285,6170	200	0,55%			
Cur	104,000	607.288,362	4.650.667,764	369,114	369,133	0,019	285,9354	200	0,68%			
Cur	105,000	607.287,385	4.650.667,547	369,117	369,140	0,023	286,2537	200	0,82%			
Cur	106,000	607.286,408	4.650.667,336	369,120	369,149	0,029	286,5720	200	0,95%			
Cur	107,000	607.285,430	4.650.667,129	369,123	369,159	0,036	286,8903	200	1,08%			
Cur	108,000	607.284,450	4.650.666,927	369,125	369,171	0,046	287,2086	200	1,22%			
Rec	108,078	607.284,374	4.650.666,911	369,126	369,172	0,046	287,2334	0	1,23%	P.S.	V.	
Rec	109,000	607.283,470	4.650.666,728	369,128	369,184	0,056	287,2334	0	1,35%			
Rec	110,000	607.282,490	4.650.666,528	369,131	369,198	0,067	287,2334	0	1,48%			
Rec	111,000	607.281,511	4.650.666,329	369,133	369,213	0,080	287,2334	0	1,62%			
Rec	112,000	607.280,531	4.650.666,130	369,136	369,230	0,094	287,2334	0	1,75%			
Rec	113,000	607.279,551	4.650.665,931	369,138	369,248	0,110	287,2334	0	1,88%			
Rec	114,000	607.278,571	4.650.665,732	369,141	369,268	0,127	287,2334	0	2,02%			
Rec	115,000	607.277,591	4.650.665,532	369,144	369,289	0,145	287,2334	0	2,15%			
Rec	116,000	607.276,611	4.650.665,333	369,146	369,311	0,165	287,2334	0	2,28%			
Rec	116,350	607.276,268	4.650.665,263	369,147	369,319	0,172	287,2334	0	2,33%		T.S.	
Rec	117,000	607.275,631	4.650.665,134	369,149	369,334	0,185	287,2334	0	2,33%			
Rec	118,000	607.274,651	4.650.664,935	369,151	369,357	0,206	287,2334	0	2,33%			
Rec	119,000	607.273,671	4.650.664,736	369,154	369,381	0,227	287,2334	0	2,33%			
Rec	120,000	607.272,691	4.650.664,536	369,157	369,404	0,247	287,2334	0	2,33%			
Rec	121,000	607.271,711	4.650.664,337	369,159	369,427	0,268	287,2334	0	2,33%			
Rec	122,000	607.270,731	4.650.664,138	369,162	369,450	0,288	287,2334	0	2,33%			
Rec	123,000	607.269,751	4.650.663,939	369,164	369,474	0,310	287,2334	0	2,33%			
Rec	124,000	607.268,771	4.650.663,740	369,167	369,497	0,330	287,2334	0	2,33%			
Rec	125,000	607.267,791	4.650.663,540	369,169	369,520	0,351	287,2334	0	2,33%			
Rec	126,000	607.266,811	4.650.663,341	369,172	369,544	0,372	287,2334	0	2,33%			
Rec	127,000	607.265,831	4.650.663,142	369,175	369,567	0,392	287,2334	0	2,33%			
Rec	128,000	607.264,851	4.650.662,943	369,177	369,590	0,413	287,2334	0	2,33%			
Rec	128,261	607.264,595	4.650.662,891	369,178	369,596	0,419	287,2334	0	2,33%		T.E.	
Rec	129,000	607.263,871	4.650.662,744	369,180	369,613	0,433	287,2334	0	2,23%			
Rec	130,000	607.262,891	4.650.662,544	369,182	369,635	0,453	287,2334	0	2,10%			
Rec	131,000	607.261,911	4.650.662,345	369,185	369,655	0,470	287,2334	0	1,97%			
Rec	132,000	607.260,931	4.650.662,146	369,187	369,674	0,487	287,2334	0	1,83%			
Rec	133,000	607.259,951	4.650.661,947	369,189	369,692	0,503	287,2334	0	1,70%			
Rec	134,000	607.258,971	4.650.661,748	369,191	369,708	0,517	287,2334	0	1,57%			
Rec	135,000	607.257,991	4.650.661,548	369,193	369,723	0,530	287,2334	0	1,43%			
Rec	136,000	607.257,012	4.650.661,349	369,195	369,737	0,542	287,2334	0	1,30%			
Rec	137,000	607.256,032	4.650.661,150	369,202	369,749	0,547	287,2334	0	1,17%		V.	
Rec	138,000	607.255,052	4.650.660,951	369,217	369,760	0,543	287,2334	0	1,03%			
Rec	139,000	607.254,072	4.650.660,752	369,231	369,770	0,539	287,2334	0	0,90%			
Rec	140,000	607.253,092	4.650.660,552	369,245	369,778	0,533	287,2334	0	0,77%			
Rec	141,000	607.252,112	4.650.660,353	369,260	369,785	0,525	287,2334	0	0,63%			
Rec	142,000	607.251,132	4.650.660,154	369,274	369,791	0,517	287,2334	0	0,50%			
Rec	143,000	607.250,152	4.650.659,955	369,288	369,795	0,507	287,2334	0	0,37%			
Rec	144,000	607.249,172	4.650.659,756	369,303	369,798	0,495	287,2334	0	0,23%			
Rec	145,000	607.248,192	4.650.659,556	369,322	369,800	0,478	287,2334	0	0,10%			
Cur	145,670	607.247,535	4.650.659,423	369,336	369,800	0,464	287,2334	-5	0,01%	P.S.		
Cur	145,739	607.247,468	4.650.659,409	369,337	369,800	0,463	286,3565	-5	0,00%		T.S.	
Cur	146,000	607.247,214	4.650.659,347	369,343	369,800	0,457	283,0333	-5	0,00%			
Cur	147,000	607.246,282	4.650.658,989	369,363	369,800	0,437	270,3009	-5	0,00%			
Cur	148,000	607.245,440	4.650.658,453	369,382	369,800	0,418	257,5685	-5	0,00%			
Cur	149,000	607.244,721	4.650.657,761	369,398	369,800	0,402	244,8361	-5	0,00%			
Cur	150,000	607.244,154	4.650.656,939	369,412	369,800	0,388	232,1037	-5	0,00%			
Cur	151,000	607.243,761	4.650.656,021	369,425	369,800	0,375	219,3713	-5	0,00%			
Rec	151,045	607.243,747	4.650.655,978	369,426	369,800	0,374	218,7933	0	0,00%	P.S.		
Rec	152,000	607.243,470	4.650.655,065	369,444	369,800	0,356	218,7933	0	0,00%			
Rec	153,000	607.243,179	4.650.654,108	369,463	369,800	0,337	218,7933	0	0,00%			
Rec	154,000	607.242,888	4.650.653,151	369,482	369,800	0,318	218,7933	0	0,00%			
Rec	155,000	607.242,597	4.650.652,194	369,501	369,800	0,299	218,7933	0	0,00%			
Rec	156,000	607.242,306	4.650.651,238	369,520	369,800	0,280	218,7933	0	0,00%			
	156,990	607.242,018	4.650.650,290	369,538	369,800	0,262	218,7933		0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-08

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	607.860,540	4.650.440,606	370,500	370,500	0,000	292,1757	0	5,71%			
Rec	1,000	607.859,548	4.650.440,484	371,108	370,557	-0,551	292,1757	0	5,71%			
Rec	2,000	607.858,555	4.650.440,361	371,417	370,614	-0,803	292,1757	0	5,71%			
Rec	3,000	607.857,563	4.650.440,239	371,390	370,671	-0,719	292,1757	0	5,71%			
Rec	4,000	607.856,570	4.650.440,116	371,331	370,728	-0,603	292,1757	0	5,71%			
Rec	4,611	607.855,964	4.650.440,041	371,274	370,763	-0,511	292,1757	0	5,71%		T.E.	
Rec	5,000	607.855,578	4.650.439,993	371,238	370,785	-0,453	292,1757	0	5,58%			
Rec	6,000	607.854,585	4.650.439,871	371,067	370,839	-0,228	292,1757	0	5,25%			
Rec	7,000	607.853,593	4.650.439,748	371,032	370,890	-0,142	292,1757	0	4,91%			
Cur	7,205	607.853,390	4.650.439,723	371,015	370,900	-0,115	292,1757	30	4,84%	P.S.		
Cur	8,000	607.852,599	4.650.439,636	370,901	370,938	0,037	293,8635	30	4,58%			
Cur	9,000	607.851,603	4.650.439,556	370,790	370,982	0,192	295,9856	30	4,25%			
Cur	10,000	607.850,604	4.650.439,510	370,738	371,022	0,284	298,1076	30	3,91%			
Cur	11,000	607.849,604	4.650.439,497	370,707	371,060	0,353	300,2297	30	3,58%			
Cur	12,000	607.848,604	4.650.439,517	370,685	371,094	0,409	302,3518	30	3,25%		V.	ODT Ø1.000 L=5,00m
Cur	13,000	607.847,606	4.650.439,571	370,613	371,125	0,512	304,4738	30	2,91%			
Cur	14,000	607.846,609	4.650.439,658	370,609	371,152	0,543	306,5959	30	2,58%			
Cur	15,000	607.845,617	4.650.439,778	370,604	371,176	0,572	308,7180	30	2,25%			
Cur	16,000	607.844,628	4.650.439,931	370,600	371,197	0,597	310,8400	30	1,91%			
Cur	17,000	607.843,646	4.650.440,116	370,589	371,215	0,626	312,9621	30	1,58%			
Rec	17,083	607.843,565	4.650.440,133	370,588	371,216	0,628	313,1376	0	1,55%	P.S.		
Rec	18,000	607.842,667	4.650.440,321	370,555	371,229	0,674	313,1376	0	1,25%			
Rec	19,000	607.841,688	4.650.440,526	370,516	371,240	0,724	313,1376	0	0,91%			
Rec	19,389	607.841,308	4.650.440,606	370,521	371,243	0,722	313,1376	0	0,78%		T.S.	
Rec	20,000	607.840,710	4.650.440,731	370,528	371,247	0,719	313,1376	0	0,78%			
Rec	21,000	607.839,731	4.650.440,936	370,580	371,255	0,675	313,1376	0	0,78%			
Rec	22,000	607.838,752	4.650.441,141	370,651	371,263	0,612	313,1376	0	0,78%			
Rec	23,000	607.837,773	4.650.441,346	370,686	371,271	0,585	313,1376	0	0,78%			
Rec	24,000	607.836,794	4.650.441,551	370,712	371,279	0,567	313,1376	0	0,78%			
Rec	25,000	607.835,816	4.650.441,756	370,727	371,287	0,560	313,1376	0	0,78%			
Rec	26,000	607.834,837	4.650.441,961	370,702	371,294	0,592	313,1376	0	0,78%			
Rec	27,000	607.833,858	4.650.442,165	370,687	371,302	0,615	313,1376	0	0,78%			
Cur	27,147	607.833,714	4.650.442,196	370,686	371,303	0,617	313,1376	-100	0,78%	P.S.		
Cur	28,000	607.832,879	4.650.442,367	370,684	371,310	0,626	312,5947	-100	0,78%			
Cur	29,000	607.831,897	4.650.442,558	370,682	371,318	0,636	311,9581	-100	0,78%			
Cur	30,000	607.830,914	4.650.442,740	370,682	371,326	0,644	311,3215	-100	0,78%			
Cur	31,000	607.829,929	4.650.442,912	370,706	371,333	0,627	310,6848	-100	0,78%			
Cur	32,000	607.828,942	4.650.443,074	370,723	371,341	0,618	310,0482	-100	0,78%			
Cur	33,000	607.827,954	4.650.443,227	370,734	371,349	0,615	309,4116	-100	0,78%			
Cur	34,000	607.826,964	4.650.443,369	370,747	371,357	0,610	308,7750	-100	0,78%			
Cur	35,000	607.825,973	4.650.443,501	370,760	371,365	0,605	308,1384	-100	0,78%			
Cur	36,000	607.824,980	4.650.443,624	370,775	371,372	0,597	307,5017	-100	0,78%			
Cur	37,000	607.823,987	4.650.443,736	370,795	371,380	0,585	306,8651	-100	0,78%			
Cur	38,000	607.822,992	4.650.443,839	370,815	371,388	0,573	306,2285	-100	0,78%			
Cur	39,000	607.821,996	4.650.443,932	370,818	371,396	0,578	305,5919	-100	0,78%			
Cur	40,000	607.821,000	4.650.444,015	370,818	371,404	0,586	304,9553	-100	0,78%			
Cur	41,000	607.820,002	4.650.444,087	370,818	371,412	0,594	304,3186	-100	0,78%			
Cur	42,000	607.819,004	4.650.444,150	370,818	371,419	0,601	303,6820	-100	0,78%			
Cur	43,000	607.818,006	4.650.444,203	370,818	371,427	0,609	303,0454	-100	0,78%			
Cur	44,000	607.817,007	4.650.444,246	370,818	371,435	0,617	302,4088	-100	0,78%			
Rec	44,206	607.816,800	4.650.444,253	370,818	371,437	0,619	302,2773	0	0,78%	P.S.		
Rec	45,000	607.816,007	4.650.444,282	370,818	371,443	0,625	302,2773	0	0,78%			
Rec	46,000	607.815,008	4.650.444,318	370,828	371,451	0,623	302,2773	0	0,78%			
Rec	47,000	607.814,008	4.650.444,353	370,844	371,458	0,614	302,2773	0	0,78%			
Rec	48,000	607.813,009	4.650.444,389	370,859	371,466	0,607	302,2773	0	0,78%			
Rec	49,000	607.812,010	4.650.444,425	370,875	371,474	0,599	302,2773	0	0,78%			
Rec	50,000	607.811,010	4.650.444,461	370,891	371,482	0,591	302,2773	0	0,78%			
Rec	51,000	607.810,011	4.650.444,496	370,908	371,490	0,582	302,2773	0	0,78%			
Rec	52,000	607.809,012	4.650.444,532	370,927	371,497	0,570	302,2773	0	0,78%			
Rec	53,000	607.808,012	4.650.444,568	370,937	371,505	0,568	302,2773	0	0,78%			
Rec	54,000	607.807,013	4.650.444,604	370,946	371,513	0,567	302,2773	0	0,78%			
Rec	55,000	607.806,014	4.650.444,639	370,954	371,521	0,567	302,2773	0	0,78%			
Rec	55,233	607.805,781	4.650.444,648	370,956	371,523	0,567	302,2773	0	0,78%		T.E.	
Rec	56,000	607.805,014	4.650.444,675	370,963	371,529	0,566	302,2773	0	0,75%			
Rec	57,000	607.804,015	4.650.444,711	370,970	371,536	0,566	302,2773	0	0,71%			
Rec	58,000	607.803,015	4.650.444,747	370,963	371,543	0,580	302,2773	0	0,67%			
Rec	59,000	607.802,016	4.650.444,782	370,971	371,549	0,578	302,2773	0	0,63%			
Rec	60,000	607.801,017	4.650.444,818	370,980	371,555	0,575	302,2773	0	0,59%			
Rec	61,000	607.800,017	4.650.444,854	370,997	371,561	0,564	302,2773	0	0,55%			
Cur	61,875	607.799,143	4.650.444,885	371,024	371,566	0,542	302,2773	10	0,52%	P.S.		
Cur	62,000	607.799,018	4.650.444,891	371,028	371,566	0,538	303,0706	10	0,51%			
Cur	63,000	607.798,023	4.650.444,989	371,055	371,571	0,516	309,4368	10	0,47%			
Cur	64,000	607.797,043	4.650.445,185	371,034	371,576	0,542	315,8030	10	0,43%			
Cur	65,000	607.796,088	4.650.445,479	371,014	371,580	0,566	322,1692	10	0,39%		V.	ODT Ø500 L=7,75m
Cur	66,000	607.795,166	4.650.445,867	371,028	371,584	0,556	328,5354	10	0,35%			
Cur	67,000	607.794,288	4.650.446,344	371,147	371,587	0,440	334,9016	10	0,31%			
Cur	68,000	607.793,462	4.650.446,907	371,278	371,590	0,312	341,2678	10	0,27%			
Cur	69,000	607.792,697	4.650.447,550	371,227	371,592	0,365	347,6340	10	0,23%			
Cur	70,000	607.791,999	4.650.448,266	371,241	371,594	0,353	354,0002	10	0,19%			
Cur	71,000	607.791,376	4.650.449,048	371,249	371,596	0,347	360,3664	10	0,15%			
Cur	72,000	607.790,835	4.650.449,888	371,266	371,597	0,331	366,7326	10	0,11%			
Cur	73,000	607.790,380	4.650.450,778	371,263	371,598	0,335	373,0988	10	0,07%			
Cur	74,000	607.790,016	4.650.451,709	371,278	371,599	0,321	379,4650	10	0,03%			
Cur	74,767	607.789,801	4.650.452,445	371,269	371,599	0,330	384,3479	10	0,00%		T.S.	
Rec	74,837	607.789,784	4.650.452,513	371,268	371,599	0,331	384,7929	0	0,00%	P.S.		

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T18-T19 C-08

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	75,000	607.789,746	4.650.452,671	371,269	371,599	0,330	384,7929	0	0,00%			
Rec	76,000	607.789,509	4.650.453,643	371,277	371,599	0,322	384,7929	0	0,00%			
Rec	77,000	607.789,272	4.650.454,615	371,242	371,599	0,357	384,7929	0	0,00%			
Rec	78,000	607.789,036	4.650.455,586	371,252	371,599	0,347	384,7929	0	0,00%			
Rec	79,000	607.788,799	4.650.456,558	371,260	371,599	0,339	384,7929	0	0,00%			
Rec	80,000	607.788,563	4.650.457,529	371,236	371,599	0,363	384,7929	0	0,00%			
Rec	81,000	607.788,326	4.650.458,501	371,208	371,599	0,391	384,7929	0	0,00%			
Rec	82,000	607.788,089	4.650.459,473	371,180	371,599	0,419	384,7929	0	0,00%			
Rec	83,000	607.787,853	4.650.460,444	371,162	371,599	0,437	384,7929	0	0,00%			
Rec	84,000	607.787,616	4.650.461,416	371,163	371,599	0,436	384,7929	0	0,00%			
Rec	85,000	607.787,379	4.650.462,387	371,164	371,599	0,435	384,7929	0	0,00%			
Rec	86,000	607.787,143	4.650.463,359	371,162	371,599	0,437	384,7929	0	0,00%			
Rec	87,000	607.786,906	4.650.464,331	371,161	371,599	0,438	384,7929	0	0,00%			
Rec	88,000	607.786,670	4.650.465,302	371,160	371,599	0,439	384,7929	0	0,00%			
Rec	89,000	607.786,433	4.650.466,274	371,158	371,599	0,441	384,7929	0	0,00%			
Rec	90,000	607.786,196	4.650.467,245	371,157	371,599	0,442	384,7929	0	0,00%			
Rec	91,000	607.785,960	4.650.468,217	371,155	371,599	0,444	384,7929	0	0,00%			
Rec	92,000	607.785,723	4.650.469,189	371,154	371,599	0,445	384,7929	0	0,00%			
Rec	93,000	607.785,487	4.650.470,160	371,153	371,599	0,446	384,7929	0	0,00%			
Rec	94,000	607.785,250	4.650.471,132	371,151	371,599	0,448	384,7929	0	0,00%			
Rec	95,000	607.785,013	4.650.472,103	371,150	371,599	0,449	384,7929	0	0,00%			
Rec	96,000	607.784,777	4.650.473,075	371,149	371,599	0,450	384,7929	0	0,00%			
Cur	96,785	607.784,591	4.650.473,838	371,150	371,599	0,449	384,7929	-100	0,00%	P.S.		
Cur	97,000	607.784,540	4.650.474,047	371,150	371,599	0,449	384,6560	-100	0,00%			
Cur	98,000	607.784,296	4.650.475,016	371,150	371,599	0,449	384,0194	-100	0,00%			
Cur	99,000	607.784,043	4.650.475,984	371,151	371,599	0,448	383,3828	-100	0,00%			
Cur	100,000	607.783,780	4.650.476,949	371,152	371,599	0,447	382,7462	-100	0,00%			
Cur	101,000	607.783,508	4.650.477,911	371,152	371,599	0,447	382,1095	-100	0,00%			
Cur	102,000	607.783,226	4.650.478,870	371,152	371,599	0,447	381,4729	-100	0,00%			
Cur	103,000	607.782,934	4.650.479,827	371,149	371,599	0,450	380,8363	-100	0,00%			
Cur	104,000	607.782,633	4.650.480,780	371,146	371,599	0,453	380,1997	-100	0,00%			
Cur	105,000	607.782,322	4.650.481,731	371,143	371,599	0,456	379,5631	-100	0,00%			
Cur	106,000	607.782,002	4.650.482,678	371,140	371,599	0,459	378,9264	-100	0,00%			
Cur	107,000	607.781,672	4.650.483,622	371,138	371,599	0,461	378,2898	-100	0,00%			
Cur	108,000	607.781,333	4.650.484,563	371,136	371,599	0,463	377,6532	-100	0,00%			
Cur	109,000	607.780,984	4.650.485,500	371,135	371,599	0,464	377,0166	-100	0,00%			
Cur	110,000	607.780,626	4.650.486,434	371,133	371,599	0,466	376,3800	-100	0,00%			
Cur	111,000	607.780,259	4.650.487,364	371,132	371,599	0,467	375,7433	-100	0,00%			
Cur	112,000	607.779,883	4.650.488,290	371,132	371,599	0,467	375,1067	-100	0,00%			
Cur	113,000	607.779,497	4.650.489,213	371,131	371,599	0,468	374,4701	-100	0,00%			
Cur	114,000	607.779,102	4.650.490,132	371,136	371,599	0,463	373,8335	-100	0,00%			
Cur	115,000	607.778,698	4.650.491,046	371,141	371,599	0,458	373,1969	-100	0,00%			
Cur	116,000	607.778,284	4.650.491,957	371,145	371,599	0,454	372,5602	-100	0,00%			
Cur	117,000	607.777,862	4.650.492,863	371,147	371,599	0,452	371,9236	-100	0,00%			
Cur	118,000	607.777,431	4.650.493,766	371,147	371,599	0,452	371,2870	-100	0,00%			
Rec	118,649	607.777,146	4.650.494,349	371,147	371,599	0,452	370,8740	0	0,00%	P.S.		
Rec	119,000	607.776,991	4.650.494,664	371,146	371,599	0,453	370,8740	0	0,00%			
Rec	120,000	607.776,549	4.650.495,561	371,145	371,599	0,454	370,8740	0	0,00%			
Rec	121,000	607.776,107	4.650.496,458	371,141	371,599	0,458	370,8740	0	0,00%			
Rec	122,000	607.775,666	4.650.497,355	371,136	371,599	0,463	370,8740	0	0,00%			
Rec	123,000	607.775,224	4.650.498,252	371,133	371,599	0,466	370,8740	0	0,00%			
Rec	124,000	607.774,782	4.650.499,149	371,131	371,599	0,468	370,8740	0	0,00%			
Rec	125,000	607.774,341	4.650.500,047	371,129	371,599	0,470	370,8740	0	0,00%			
Rec	126,000	607.773,899	4.650.500,944	371,129	371,599	0,470	370,8740	0	0,00%			
Rec	127,000	607.773,457	4.650.501,841	371,130	371,599	0,469	370,8740	0	0,00%			
Rec	128,000	607.773,015	4.650.502,738	371,130	371,599	0,469	370,8740	0	0,00%			
Rec	129,000	607.772,574	4.650.503,635	371,131	371,599	0,468	370,8740	0	0,00%			
Rec	130,000	607.772,132	4.650.504,532	371,132	371,599	0,467	370,8740	0	0,00%			
Rec	131,000	607.771,690	4.650.505,430	371,134	371,599	0,465	370,8740	0	0,00%			
Rec	132,000	607.771,249	4.650.506,327	371,139	371,599	0,460	370,8740	0	0,00%			
Rec	133,000	607.770,807	4.650.507,224	371,142	371,599	0,457	370,8740	0	0,00%			
Rec	134,000	607.770,365	4.650.508,121	371,145	371,599	0,454	370,8740	0	0,00%			
Rec	135,000	607.769,923	4.650.509,018	371,148	371,599	0,451	370,8740	0	0,00%			
Rec	136,000	607.769,482	4.650.509,915	371,148	371,599	0,451	370,8740	0	0,00%			
Rec	137,000	607.769,040	4.650.510,812	371,145	371,599	0,454	370,8740	0	0,00%			
Rec	138,000	607.768,598	4.650.511,710	371,134	371,599	0,465	370,8740	0	0,00%			
Rec	139,000	607.768,157	4.650.512,607	371,120	371,599	0,479	370,8740	0	0,00%			
Rec	140,000	607.767,715	4.650.513,504	371,107	371,599	0,492	370,8740	0	0,00%			
Rec	141,000	607.767,273	4.650.514,401	371,093	371,599	0,506	370,8740	0	0,00%			
Rec	142,000	607.766,831	4.650.515,298	371,079	371,599	0,520	370,8740	0	0,00%			
Rec	143,000	607.766,390	4.650.516,195	371,066	371,599	0,533	370,8740	0	0,00%			
Rec	144,000	607.765,948	4.650.517,093	371,052	371,599	0,547	370,8740	0	0,00%			
Rec	145,000	607.765,506	4.650.517,990	371,047	371,599	0,552	370,8740	0	0,00%			
Cur	145,105	607.765,460	4.650.518,084	371,047	371,599	0,552	370,8740	-100	0,00%	P.S.		
Cur	146,000	607.765,061	4.650.518,885	371,046	371,599	0,553	370,3043	-100	0,00%			
Cur	147,000	607.764,607	4.650.519,776	371,044	371,599	0,555	369,6676	-100	0,00%			
Cur	148,000	607.764,144	4.650.520,662	371,043	371,599	0,556	369,0310	-100	0,00%			
Cur	149,000	607.763,672	4.650.521,544	371,042	371,599	0,557	368,3944	-100	0,00%			
Cur	150,000	607.763,191	4.650.522,421	371,042	371,599	0,557	367,7578	-100	0,00%			
Cur	151,000	607.762,702	4.650.523,293	371,042	371,599	0,557	367,1212	-100	0,00%			
Cur	152,000	607.762,204	4.650.524,160	371,043	371,599	0,556	366,4845	-100	0,00%			
Cur	153,000	607.761,697	4.650.525,022	371,044	371,599	0,555	365,8479	-100	0,00%			
Cur	154,000	607.761,181	4.650.525,879	371,045	371,599	0,554	365,2113	-100	0,00%			
Cur	155,000	607.760,657	4.650.526,731	371,045	371,599	0,554	364,5747	-100	0,00%			
Cur	156,000	607.760,125	4.650.527,577	371,045	371,599	0,554	363,9381	-100	0,00%			
Cur	157,000	607.759,584	4.650.528,418	371,045	371,599	0,554	363,3014	-100	0,00%			
Cur	158,000	607.759,035	4.650.529,254	371,045	371,599	0,554	362,6648	-100	0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-08

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	159,000	607.758,477	4.650.530,084	371,045	371,599	0,554	362,0282	-100	0,00%			
Cur	160,000	607.757,911	4.650.530,909	371,045	371,599	0,554	361,3916	-100	0,00%			
Cur	161,000	607.757,337	4.650.531,727	371,044	371,599	0,555	360,7550	-100	0,00%			
Cur	162,000	607.756,755	4.650.532,540	371,042	371,599	0,557	360,1183	-100	0,00%			
Cur	163,000	607.756,165	4.650.533,348	371,039	371,599	0,560	359,4817	-100	0,00%			
Cur	164,000	607.755,567	4.650.534,149	371,036	371,599	0,563	358,8451	-100	0,00%			
Rec	164,718	607.755,132	4.650.534,720	371,034	371,599	0,565	358,3881	0	0,00%	P.S.		
Rec	165,000	607.754,960	4.650.534,944	371,033	371,599	0,566	358,3881	0	0,00%			
Rec	166,000	607.754,352	4.650.535,738	371,030	371,599	0,569	358,3881	0	0,00%			
Rec	167,000	607.753,744	4.650.536,532	371,028	371,599	0,571	358,3881	0	0,00%			
Rec	168,000	607.753,136	4.650.537,326	371,026	371,599	0,573	358,3881	0	0,00%			
Rec	169,000	607.752,528	4.650.538,120	371,024	371,599	0,575	358,3881	0	0,00%			
Rec	170,000	607.751,920	4.650.538,914	371,021	371,599	0,578	358,3881	0	0,00%			
Rec	171,000	607.751,312	4.650.539,708	371,018	371,599	0,581	358,3881	0	0,00%			
Rec	172,000	607.750,704	4.650.540,501	371,016	371,599	0,583	358,3881	0	0,00%			
Rec	173,000	607.750,096	4.650.541,295	371,013	371,599	0,586	358,3881	0	0,00%			
Rec	174,000	607.749,488	4.650.542,089	371,011	371,599	0,588	358,3881	0	0,00%			
Rec	175,000	607.748,880	4.650.542,883	371,009	371,599	0,590	358,3881	0	0,00%			
Rec	176,000	607.748,272	4.650.543,677	371,007	371,599	0,592	358,3881	0	0,00%			
Rec	177,000	607.747,664	4.650.544,471	371,005	371,599	0,594	358,3881	0	0,00%			
Rec	178,000	607.747,055	4.650.545,265	371,003	371,599	0,596	358,3881	0	0,00%			
Rec	179,000	607.746,447	4.650.546,059	371,001	371,599	0,598	358,3881	0	0,00%			
Rec	180,000	607.745,839	4.650.546,852	370,981	371,599	0,618	358,3881	0	0,00%			
Rec	181,000	607.745,231	4.650.547,646	370,967	371,599	0,632	358,3881	0	0,00%			
Rec	182,000	607.744,623	4.650.548,440	370,992	371,599	0,607	358,3881	0	0,00%			
Cur	182,686	607.744,206	4.650.548,984	371,007	371,599	0,592	358,3881	-50	0,00%	P.S.		
Cur	183,000	607.744,014	4.650.549,233	371,011	371,599	0,588	357,9877	-50	0,00%			
Cur	184,000	607.743,393	4.650.550,017	371,026	371,599	0,573	356,7144	-50	0,00%			
Cur	185,000	607.742,757	4.650.550,789	371,043	371,599	0,556	355,4412	-50	0,00%			
Cur	186,000	607.742,105	4.650.551,547	371,063	371,599	0,536	354,1680	-50	0,00%			
Cur	187,000	607.741,438	4.650.552,292	371,083	371,599	0,516	352,8947	-50	0,00%			
Cur	188,000	607.740,757	4.650.553,024	371,104	371,599	0,495	351,6215	-50	0,00%			
Cur	189,000	607.740,061	4.650.553,742	371,126	371,599	0,473	350,3482	-50	0,00%			
Cur	190,000	607.739,350	4.650.554,446	371,148	371,599	0,451	349,0750	-50	0,00%			
Cur	191,000	607.738,626	4.650.555,135	371,167	371,599	0,432	347,8018	-50	0,00%			
Cur	192,000	607.737,888	4.650.555,810	371,181	371,599	0,418	346,5285	-50	0,00%			
Cur	193,000	607.737,137	4.650.556,470	371,192	371,599	0,407	345,2553	-50	0,00%			
Cur	194,000	607.736,373	4.650.557,115	371,198	371,599	0,401	343,9821	-50	0,00%			
Cur	195,000	607.735,596	4.650.557,745	371,199	371,599	0,400	342,7088	-50	0,00%			
Cur	196,000	607.734,806	4.650.558,358	371,196	371,599	0,403	341,4356	-50	0,00%			
Cur	197,000	607.734,005	4.650.558,956	371,192	371,599	0,407	340,1623	-50	0,00%			
Cur	198,000	607.733,191	4.650.559,538	371,188	371,599	0,411	338,8891	-50	0,00%			
Cur	199,000	607.732,367	4.650.560,103	371,173	371,599	0,426	337,6159	-50	0,00%			
Cur	200,000	607.731,531	4.650.560,652	371,154	371,599	0,445	336,3426	-50	0,00%			
Cur	201,000	607.730,684	4.650.561,184	371,136	371,599	0,463	335,0694	-50	0,00%			
Cur	202,000	607.729,827	4.650.561,699	371,117	371,599	0,482	333,7961	-50	0,00%			
Cur	203,000	607.728,959	4.650.562,196	371,099	371,599	0,500	332,5229	-50	0,00%			
Cur	204,000	607.728,082	4.650.562,677	371,081	371,599	0,518	331,2497	-50	0,00%			
Rec	204,701	607.727,461	4.650.563,003	371,068	371,599	0,531	330,3566	0	0,00%	P.S.		
Rec	205,000	607.727,196	4.650.563,140	371,063	371,599	0,536	330,3566	0	0,00%			
Rec	206,000	607.726,307	4.650.563,599	371,045	371,599	0,554	330,3566	0	0,00%			
Rec	207,000	607.725,419	4.650.564,058	371,027	371,599	0,572	330,3566	0	0,00%			
Rec	208,000	607.724,531	4.650.564,517	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	209,000	607.723,642	4.650.564,976	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	210,000	607.722,754	4.650.565,435	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	211,000	607.721,865	4.650.565,894	371,021	371,599	0,578	330,3566	0	0,00%			
Rec	212,000	607.720,977	4.650.566,353	371,021	371,599	0,578	330,3566	0	0,00%			
Rec	213,000	607.720,088	4.650.566,812	371,020	371,599	0,579	330,3566	0	0,00%			
Rec	214,000	607.719,200	4.650.567,271	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	215,000	607.718,311	4.650.567,730	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	216,000	607.717,423	4.650.568,189	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	217,000	607.716,534	4.650.568,648	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	218,000	607.715,646	4.650.569,107	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	219,000	607.714,758	4.650.569,566	371,019	371,599	0,580	330,3566	0	0,00%			
Rec	220,000	607.713,869	4.650.570,025	371,020	371,599	0,579	330,3566	0	0,00%			
Rec	221,000	607.712,981	4.650.570,484	371,020	371,599	0,579	330,3566	0	0,00%			
Rec	222,000	607.712,092	4.650.570,943	371,021	371,599	0,578	330,3566	0	0,00%			
Rec	223,000	607.711,204	4.650.571,401	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	224,000	607.710,315	4.650.571,860	371,023	371,599	0,576	330,3566	0	0,00%			
Rec	225,000	607.709,427	4.650.572,319	371,024	371,599	0,575	330,3566	0	0,00%			
Rec	226,000	607.708,538	4.650.572,778	371,025	371,599	0,574	330,3566	0	0,00%			
Rec	227,000	607.707,650	4.650.573,237	371,026	371,599	0,573	330,3566	0	0,00%			
Rec	228,000	607.706,762	4.650.573,696	371,027	371,599	0,572	330,3566	0	0,00%			
Rec	229,000	607.705,873	4.650.574,155	371,027	371,599	0,572	330,3566	0	0,00%			
Rec	230,000	607.704,985	4.650.574,614	371,027	371,599	0,572	330,3566	0	0,00%			
Rec	231,000	607.704,096	4.650.575,073	371,027	371,599	0,572	330,3566	0	0,00%			
Rec	232,000	607.703,208	4.650.575,532	371,026	371,599	0,573	330,3566	0	0,00%			
Rec	233,000	607.702,319	4.650.575,991	371,026	371,599	0,573	330,3566	0	0,00%			
Rec	234,000	607.701,431	4.650.576,450	371,025	371,599	0,574	330,3566	0	0,00%			
Rec	235,000	607.700,542	4.650.576,909	371,025	371,599	0,574	330,3566	0	0,00%			
Rec	236,000	607.699,654	4.650.577,368	371,024	371,599	0,575	330,3566	0	0,00%			
Rec	237,000	607.698,766	4.650.577,827	371,023	371,599	0,576	330,3566	0	0,00%			
Rec	238,000	607.697,877	4.650.578,286	371,023	371,599	0,576	330,3566	0	0,00%			
Rec	239,000	607.696,989	4.650.578,745	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	240,000	607.696,100	4.650.579,204	371,023	371,599	0,576	330,3566	0	0,00%			
Rec	241,000	607.695,212	4.650.579,663	371,024	371,599	0,575	330,3566	0	0,00%			
Rec	242,000	607.694,323	4.650.580,122	371,024	371,599	0,575	330,3566	0	0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 C-08

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	243,000	607.693,435	4.650.580,581	371,023	371,599	0,576	330,3566	0	0,00%			
Rec	244,000	607.692,546	4.650.581,040	371,022	371,599	0,577	330,3566	0	0,00%			
Rec	245,000	607.691,658	4.650.581,499	371,020	371,599	0,579	330,3566	0	0,00%			
Rec	246,000	607.690,769	4.650.581,958	371,018	371,599	0,581	330,3566	0	0,00%			
Rec	247,000	607.689,881	4.650.582,417	371,016	371,599	0,583	330,3566	0	0,00%			
Rec	248,000	607.688,993	4.650.582,876	371,013	371,599	0,586	330,3566	0	0,00%			
Rec	249,000	607.688,104	4.650.583,335	371,010	371,599	0,589	330,3566	0	0,00%			
Rec	250,000	607.687,216	4.650.583,794	371,007	371,599	0,592	330,3566	0	0,00%			
Rec	251,000	607.686,327	4.650.584,253	371,003	371,599	0,596	330,3566	0	0,00%			
Rec	252,000	607.685,439	4.650.584,712	370,972	371,599	0,627	330,3566	0	0,00%			
Rec	253,000	607.684,550	4.650.585,171	370,894	371,599	0,705	330,3566	0	0,00%			
Rec	254,000	607.683,662	4.650.585,630	370,810	371,599	0,789	330,3566	0	0,00%			
Rec	255,000	607.682,773	4.650.586,089	370,716	371,599	0,883	330,3566	0	0,00%			
Rec	256,000	607.681,885	4.650.586,548	370,576	371,599	1,023	330,3566	0	0,00%			
Rec	257,000	607.680,997	4.650.587,007	370,555	371,599	1,044	330,3566	0	0,00%			
Rec	258,000	607.680,108	4.650.587,466	370,641	371,599	0,958	330,3566	0	0,00%			
Rec	259,000	607.679,220	4.650.587,925	370,701	371,599	0,898	330,3566	0	0,00%			
Rec	260,000	607.678,331	4.650.588,384	370,759	371,599	0,840	330,3566	0	0,00%			
Rec	261,000	607.677,443	4.650.588,843	370,815	371,599	0,784	330,3566	0	0,00%			
Rec	262,000	607.676,554	4.650.589,301	370,871	371,599	0,728	330,3566	0	0,00%			
Rec	263,000	607.675,666	4.650.589,760	370,927	371,599	0,672	330,3566	0	0,00%			
	263,022	607.675,647	4.650.589,770	370,928	371,599	0,671	330,3566		0,00%			

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REPLANTEO CAMINO TRAMO T18-T19 A-T19

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	607.922,403	4.650.468,412	368,946	368,946	0,000	259,5376	0	14,13%			
Rec	1,000	607.921,598	4.650.467,818	369,012	369,087	0,075	259,5376	0	14,13%			
Rec	2,000	607.920,794	4.650.467,225	369,038	369,229	0,191	259,5376	0	14,13%			
Cur	2,201	607.920,632	4.650.467,106	369,057	369,257	0,200	259,5376	-10	14,13%	P.S.		
Cur	3,000	607.920,008	4.650.466,606	369,132	369,370	0,238	254,4493	-10	14,13%			
Cur	4,000	607.919,288	4.650.465,913	369,317	369,511	0,194	248,0831	-10	14,13%			
Cur	5,000	607.918,640	4.650.465,152	369,538	369,652	0,114	241,7169	-10	14,13%			
Cur	6,000	607.918,071	4.650.464,330	369,730	369,794	0,064	235,3507	-10	14,13%			
Rec	6,247	607.917,943	4.650.464,119	369,773	369,829	0,056	233,7769	0	14,13%	P.S.		
Rec	7,000	607.917,562	4.650.463,469	369,905	369,935	0,030	233,7769	0	14,13%			
Rec	7,468	607.917,325	4.650.463,066	369,971	370,001	0,031	233,7769	0	14,13%		T.E.	
Rec	8,000	607.917,056	4.650.462,607	370,045	370,073	0,028	233,7769	0	13,06%			
Rec	9,000	607.916,550	4.650.461,744	370,143	370,194	0,051	233,7769	0	11,06%			
Rec	10,000	607.916,044	4.650.460,882	370,207	370,295	0,088	233,7769	0	9,06%			
Rec	11,000	607.915,538	4.650.460,019	370,221	370,375	0,154	233,7769	0	7,06%		V.	
Rec	12,000	607.915,032	4.650.459,157	370,274	370,436	0,162	233,7769	0	5,06%			
Rec	13,000	607.914,526	4.650.458,294	370,327	370,477	0,150	233,7769	0	3,06%			
Rec	14,000	607.914,020	4.650.457,432	370,345	370,497	0,152	233,7769	0	1,06%			
Rec	14,532	607.913,751	4.650.456,973	370,359	370,500	0,141	233,7769	0	0,00%		T.S.	
Rec	15,000	607.913,514	4.650.456,569	370,372	370,500	0,128	233,7769	0	0,00%			
Rec	16,000	607.913,008	4.650.455,707	370,351	370,500	0,149	233,7769	0	0,00%			
Rec	17,000	607.912,502	4.650.454,844	370,330	370,500	0,170	233,7769	0	0,00%			
Rec	18,000	607.911,996	4.650.453,982	370,309	370,500	0,191	233,7769	0	0,00%			
Rec	19,000	607.911,490	4.650.453,119	370,328	370,500	0,172	233,7769	0	0,00%			
Rec	19,610	607.911,181	4.650.452,593	370,339	370,500	0,161	233,7769	0	0,00%			ODT Ø500 L=7,50m
Rec	20,000	607.910,984	4.650.452,257	370,351	370,500	0,149	233,7769	0	0,00%			
Rec	21,000	607.910,478	4.650.451,394	370,400	370,500	0,100	233,7769	0	0,00%			
Rec	22,000	607.909,972	4.650.450,532	370,449	370,500	0,051	233,7769	0	0,00%			
Rec	23,000	607.909,466	4.650.449,669	370,498	370,500	0,002	233,7769	0	0,00%			
	23,074	607.909,428	4.650.449,605	370,500	370,500	0,000	233,7769		0,00%			

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REPLANTEO CAMINO TRAMO T19-T20 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	608.029,608	4.649.970,299	379,075	379,075	0,000	35,0442	0	-0,20%			
Rec	1,000	608.030,131	4.649.971,151	379,045	379,073	0,028	35,0442	0	-0,20%			
Rec	2,000	608.030,654	4.649.972,003	379,013	379,071	0,058	35,0442	0	-0,20%			
Rec	3,000	608.031,177	4.649.972,856	378,992	379,069	0,077	35,0442	0	-0,20%			
Rec	4,000	608.031,700	4.649.973,708	378,979	379,067	0,088	35,0442	0	-0,20%			
Rec	5,000	608.032,223	4.649.974,560	378,966	379,065	0,099	35,0442	0	-0,20%			
Rec	6,000	608.032,746	4.649.975,413	378,953	379,063	0,110	35,0442	0	-0,20%			
Rec	7,000	608.033,270	4.649.976,265	378,940	379,061	0,121	35,0442	0	-0,20%			
Rec	8,000	608.033,793	4.649.977,117	378,927	379,059	0,132	35,0442	0	-0,20%			
Cur	8,889	608.034,257	4.649.977,874	378,916	379,057	0,141	35,0442	-10	-0,20%	P.S.		
Cur	9,000	608.034,315	4.649.977,970	378,914	379,057	0,143	34,3349	-10	-0,20%			
Cur	10,000	608.034,785	4.649.978,852	378,901	379,055	0,154	27,9687	-10	-0,20%			
Cur	11,000	608.035,164	4.649.979,777	378,889	379,053	0,164	21,6025	-10	-0,20%			
Cur	12,000	608.035,450	4.649.980,735	378,878	379,051	0,173	15,2363	-10	-0,20%			
Cur	13,000	608.035,638	4.649.981,717	378,868	379,049	0,181	8,8701	-10	-0,20%			
Cur	14,000	608.035,727	4.649.982,712	378,859	379,047	0,188	2,5039	-10	-0,20%			
Cur	15,000	608.035,716	4.649.983,712	378,851	379,045	0,194	396,1377	-10	-0,20%			
Rec	15,292	608.035,694	4.649.984,003	378,849	379,044	0,195	394,2793	0	-0,20%	P.S.		
Rec	16,000	608.035,631	4.649.984,708	378,845	379,043	0,198	394,2793	0	-0,20%			
Rec	17,000	608.035,541	4.649.985,704	378,839	379,041	0,202	394,2793	0	-0,20%			
Rec	18,000	608.035,451	4.649.986,700	378,835	379,039	0,204	394,2793	0	-0,20%			
Rec	19,000	608.035,362	4.649.987,696	378,832	379,037	0,205	394,2793	0	-0,20%			
Rec	20,000	608.035,272	4.649.988,692	378,828	379,035	0,207	394,2793	0	-0,20%			
Rec	21,000	608.035,182	4.649.989,688	378,827	379,033	0,206	394,2793	0	-0,20%			
Rec	22,000	608.035,092	4.649.990,684	378,826	379,031	0,205	394,2793	0	-0,20%			
Rec	23,000	608.035,003	4.649.991,680	378,831	379,029	0,198	394,2793	0	-0,20%			
Rec	24,000	608.034,913	4.649.992,676	378,841	379,027	0,186	394,2793	0	-0,20%			
Rec	25,000	608.034,823	4.649.993,672	378,854	379,025	0,171	394,2793	0	-0,20%			
Rec	26,000	608.034,733	4.649.994,668	378,866	379,023	0,157	394,2793	0	-0,20%			
Rec	27,000	608.034,644	4.649.995,664	378,878	379,021	0,143	394,2793	0	-0,20%			
Rec	28,000	608.034,554	4.649.996,660	378,890	379,019	0,129	394,2793	0	-0,20%			
Rec	29,000	608.034,464	4.649.997,656	378,901	379,017	0,116	394,2793	0	-0,20%			
Rec	30,000	608.034,374	4.649.998,651	378,913	379,015	0,102	394,2793	0	-0,20%			
Rec	31,000	608.034,285	4.649.999,647	378,925	379,013	0,088	394,2793	0	-0,20%			
Rec	32,000	608.034,195	4.650.000,643	378,937	379,011	0,074	394,2793	0	-0,20%			
Rec	33,000	608.034,105	4.650.001,639	378,949	379,009	0,060	394,2793	0	-0,20%			
Rec	34,000	608.034,016	4.650.002,635	378,961	379,007	0,046	394,2793	0	-0,20%			
Rec	35,000	608.033,926	4.650.003,631	378,973	379,005	0,032	394,2793	0	-0,20%			
Rec	36,000	608.033,836	4.650.004,627	378,984	379,003	0,019	394,2793	0	-0,20%			
Rec	37,000	608.033,746	4.650.005,623	378,996	379,001	0,005	394,2793	0	-0,20%			
Rec	38,000	608.033,657	4.650.006,619	379,026	378,999	-0,027	394,2793	0	-0,20%			
Rec	39,000	608.033,567	4.650.007,615	379,068	378,997	-0,071	394,2793	0	-0,20%			
Rec	40,000	608.033,477	4.650.008,611	379,141	378,995	-0,146	394,2793	0	-0,20%			
Rec	41,000	608.033,387	4.650.009,607	379,214	378,993	-0,221	394,2793	0	-0,20%			
Rec	42,000	608.033,298	4.650.010,603	379,231	378,991	-0,240	394,2793	0	-0,20%			
Rec	43,000	608.033,208	4.650.011,599	379,157	378,989	-0,168	394,2793	0	-0,20%			
Rec	44,000	608.033,118	4.650.012,595	379,082	378,987	-0,095	394,2793	0	-0,20%			
Rec	45,000	608.033,028	4.650.013,591	378,999	378,985	-0,014	394,2793	0	-0,20%			
Rec	46,000	608.032,939	4.650.014,587	378,992	378,983	-0,009	394,2793	0	-0,20%			
Rec	47,000	608.032,849	4.650.015,583	378,984	378,981	-0,003	394,2793	0	-0,20%			
Rec	48,000	608.032,759	4.650.016,579	378,976	378,979	0,003	394,2793	0	-0,20%			
Rec	49,000	608.032,669	4.650.017,575	378,967	378,977	0,010	394,2793	0	-0,20%			
Rec	50,000	608.032,580	4.650.018,571	378,959	378,975	0,016	394,2793	0	-0,20%			
Cur	50,303	608.032,552	4.650.018,873	378,957	378,974	0,017	394,2793	100	-0,20%	P.S.		
Cur	51,000	608.032,492	4.650.019,567	378,950	378,973	0,023	394,7229	100	-0,20%			
Cur	52,000	608.032,415	4.650.020,564	378,941	378,971	0,030	395,3595	100	-0,20%			
Cur	53,000	608.032,347	4.650.021,562	378,932	378,969	0,037	395,9961	100	-0,20%			
Cur	54,000	608.032,289	4.650.022,560	378,923	378,967	0,044	396,6327	100	-0,20%			
Cur	55,000	608.032,241	4.650.023,559	378,914	378,965	0,051	397,2693	100	-0,20%			
Cur	56,000	608.032,203	4.650.024,558	378,908	378,963	0,055	397,9060	100	-0,20%			
Cur	57,000	608.032,175	4.650.025,558	378,901	378,961	0,060	398,5426	100	-0,20%			
Cur	58,000	608.032,157	4.650.026,558	378,894	378,959	0,065	399,1792	100	-0,20%			
Cur	59,000	608.032,149	4.650.027,557	378,887	378,957	0,070	399,8158	100	-0,20%			
Cur	60,000	608.032,152	4.650.028,557	378,881	378,955	0,074	0,4524	100	-0,20%			
Cur	61,000	608.032,164	4.650.029,557	378,874	378,953	0,079	1,0891	100	-0,20%			
Cur	62,000	608.032,186	4.650.030,557	378,868	378,951	0,083	1,7257	100	-0,20%			
Cur	63,000	608.032,218	4.650.031,557	378,864	378,949	0,085	2,3623	100	-0,20%			
Cur	64,000	608.032,260	4.650.032,556	378,862	378,947	0,085	2,9989	100	-0,20%			
Cur	65,000	608.032,312	4.650.033,554	378,860	378,945	0,085	3,6355	100	-0,20%			
Cur	66,000	608.032,374	4.650.034,552	378,859	378,943	0,084	4,2722	100	-0,20%			
Cur	67,000	608.032,446	4.650.035,550	378,861	378,941	0,080	4,9088	100	-0,20%			
Cur	68,000	608.032,528	4.650.036,546	378,862	378,939	0,077	5,5454	100	-0,20%			
Cur	69,000	608.032,620	4.650.037,542	378,864	378,937	0,073	6,1820	100	-0,20%			
Cur	70,000	608.032,722	4.650.038,537	378,867	378,935	0,068	6,8186	100	-0,20%			
Cur	71,000	608.032,834	4.650.039,531	378,874	378,933	0,059	7,4553	100	-0,20%			
Cur	72,000	608.032,956	4.650.040,523	378,885	378,931	0,046	8,0919	100	-0,20%			
Cur	73,000	608.033,087	4.650.041,515	378,894	378,929	0,035	8,7285	100	-0,20%			
Cur	74,000	608.033,229	4.650.042,504	378,901	378,927	0,026	9,3651	100	-0,20%			
Cur	75,000	608.033,381	4.650.043,493	378,904	378,925	0,021	10,0017	100	-0,20%			
Cur	76,000	608.033,542	4.650.044,480	378,904	378,923	0,019	10,6384	100	-0,20%			
Cur	77,000	608.033,713	4.650.045,465	378,901	378,921	0,020	11,2750	100	-0,20%			
Cur	78,000	608.033,894	4.650.046,448	378,903	378,919	0,016	11,9116	100	-0,20%			
Cur	79,000	608.034,085	4.650.047,430	378,908	378,917	0,009	12,5482	100	-0,20%			
Cur	80,000	608.034,286	4.650.048,410	378,913	378,915	0,002	13,1848	100	-0,20%			
Cur	81,000	608.034,497	4.650.049,387	378,919	378,913	-0,006	13,8215	100	-0,20%			
Cur	82,000	608.034,717	4.650.050,363	378,926	378,911	-0,015	14,4581	100	-0,20%			
Cur	83,000	608.034,947	4.650.051,336	378,934	378,909	-0,025	15,0947	100	-0,20%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T19-T20 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	84,000	608.035,187	4.650.052,307	378,943	378,907	-0,036	15,7313	100	-0,20%			
Cur	85,000	608.035,436	4.650.053,275	378,952	378,905	-0,047	16,3679	100	-0,20%			
Cur	86,000	608.035,695	4.650.054,241	378,962	378,903	-0,059	17,0046	100	-0,20%			
Rec	86,155	608.035,736	4.650.054,390	378,963	378,903	-0,060	17,1031	0	-0,20%	P.S.		
Rec	87,000	608.035,960	4.650.055,205	378,971	378,901	-0,070	17,1031	0	-0,20%			
Rec	88,000	608.036,226	4.650.056,169	378,981	378,899	-0,082	17,1031	0	-0,20%			
Rec	89,000	608.036,491	4.650.057,133	378,990	378,897	-0,093	17,1031	0	-0,20%			
Rec	89,326	608.036,578	4.650.057,448	378,993	378,896	-0,097	17,1031	0	-0,20%		T.E.	
Rec	90,000	608.036,757	4.650.058,098	379,000	378,895	-0,105	17,1031	0	-0,23%			
Rec	91,000	608.037,022	4.650.059,062	379,079	378,892	-0,187	17,1031	0	-0,28%			
Rec	92,000	608.037,288	4.650.060,026	379,132	378,889	-0,243	17,1031	0	-0,33%			
Rec	93,000	608.037,553	4.650.060,990	379,144	378,886	-0,258	17,1031	0	-0,38%			
Rec	94,000	608.037,819	4.650.061,954	379,140	378,882	-0,258	17,1031	0	-0,43%			
Rec	95,000	608.038,084	4.650.062,918	379,131	378,877	-0,254	17,1031	0	-0,48%			
Rec	96,000	608.038,349	4.650.063,882	379,119	378,872	-0,247	17,1031	0	-0,53%			
Rec	97,000	608.038,615	4.650.064,846	379,105	378,866	-0,239	17,1031	0	-0,58%			
Rec	98,000	608.038,880	4.650.065,811	379,088	378,860	-0,228	17,1031	0	-0,63%			
Rec	99,000	608.039,146	4.650.066,775	379,069	378,854	-0,215	17,1031	0	-0,68%			
Rec	100,000	608.039,411	4.650.067,739	379,046	378,847	-0,199	17,1031	0	-0,73%		V.	
Rec	101,000	608.039,677	4.650.068,703	379,021	378,839	-0,182	17,1031	0	-0,78%			
Rec	102,000	608.039,942	4.650.069,667	378,997	378,831	-0,166	17,1031	0	-0,83%			
Rec	103,000	608.040,207	4.650.070,631	378,981	378,822	-0,159	17,1031	0	-0,88%			
Rec	104,000	608.040,473	4.650.071,595	378,964	378,813	-0,151	17,1031	0	-0,93%			
Rec	105,000	608.040,738	4.650.072,559	378,908	378,804	-0,104	17,1031	0	-0,98%			
Rec	106,000	608.041,004	4.650.073,524	378,848	378,793	-0,055	17,1031	0	-1,03%			
Rec	107,000	608.041,269	4.650.074,488	378,802	378,783	-0,019	17,1031	0	-1,08%			
Rec	108,000	608.041,535	4.650.075,452	378,747	378,772	0,025	17,1031	0	-1,13%			
Rec	109,000	608.041,800	4.650.076,416	378,690	378,760	0,070	17,1031	0	-1,18%			
Rec	110,000	608.042,065	4.650.077,380	378,633	378,748	0,115	17,1031	0	-1,23%			
Rec	110,674	608.042,244	4.650.078,030	378,594	378,740	0,146	17,1031	0	-1,27%		T.S.	
Rec	111,000	608.042,331	4.650.078,344	378,575	378,736	0,161	17,1031	0	-1,27%			
Rec	112,000	608.042,596	4.650.079,308	378,516	378,723	0,207	17,1031	0	-1,27%			
Rec	113,000	608.042,862	4.650.080,272	378,455	378,710	0,255	17,1031	0	-1,27%			
Rec	114,000	608.043,127	4.650.081,237	378,392	378,698	0,306	17,1031	0	-1,27%			
Rec	115,000	608.043,393	4.650.082,201	378,328	378,685	0,357	17,1031	0	-1,27%			
Rec	116,000	608.043,658	4.650.083,165	378,262	378,672	0,410	17,1031	0	-1,27%			
Rec	117,000	608.043,924	4.650.084,129	378,197	378,660	0,463	17,1031	0	-1,27%			
Rec	118,000	608.044,189	4.650.085,093	378,131	378,647	0,516	17,1031	0	-1,27%			
Rec	119,000	608.044,454	4.650.086,057	378,065	378,634	0,569	17,1031	0	-1,27%			
Rec	120,000	608.044,720	4.650.087,021	377,988	378,622	0,634	17,1031	0	-1,27%			
Cur	120,310	608.044,802	4.650.087,321	377,884	378,618	0,734	17,1031	20	-1,27%	P.S.		
Cur	121,000	608.044,997	4.650.087,982	377,584	378,609	1,025	19,2983	20	-1,27%			
Cur	121,500	608.045,152	4.650.088,458	377,531	378,603	1,071	20,8898	20	-1,27%			ODT Ø1.000 L=8,75m
Cur	122,000	608.045,319	4.650.088,929	377,479	378,596	1,117	22,4814	20	-1,27%			
Cur	123,000	608.045,688	4.650.089,858	378,000	378,583	0,583	25,6645	20	-1,27%			
Cur	124,000	608.046,103	4.650.090,768	378,002	378,571	0,569	28,8476	20	-1,27%			
Cur	125,000	608.046,563	4.650.091,655	378,005	378,558	0,553	32,0307	20	-1,27%			
Cur	126,000	608.047,067	4.650.092,519	378,007	378,545	0,538	35,2138	20	-1,27%			
Cur	127,000	608.047,614	4.650.093,357	378,009	378,533	0,524	38,3969	20	-1,27%			
Cur	128,000	608.048,201	4.650.094,166	378,011	378,520	0,509	41,5800	20	-1,27%			
Cur	129,000	608.048,828	4.650.094,944	378,012	378,507	0,495	44,7631	20	-1,27%			
Cur	130,000	608.049,494	4.650.095,691	378,013	378,495	0,482	47,9462	20	-1,27%			
Cur	131,000	608.050,196	4.650.096,403	378,014	378,482	0,468	51,1293	20	-1,27%			
Cur	132,000	608.050,932	4.650.097,079	378,014	378,469	0,455	54,3124	20	-1,27%			
Cur	133,000	608.051,702	4.650.097,717	378,014	378,457	0,443	57,4955	20	-1,27%			
Cur	134,000	608.052,502	4.650.098,317	378,014	378,444	0,430	60,6786	20	-1,27%			
Cur	135,000	608.053,332	4.650.098,875	378,014	378,431	0,417	63,8617	20	-1,27%			
Cur	136,000	608.054,188	4.650.099,392	378,013	378,419	0,406	67,0448	20	-1,27%			
Rec	136,825	608.054,913	4.650.099,785	378,013	378,408	0,395	69,6716	0	-1,27%	P.S.		
Rec	137,000	608.055,068	4.650.099,865	378,013	378,406	0,393	69,6716	0	-1,27%			
Rec	138,000	608.055,957	4.650.100,324	378,012	378,393	0,381	69,6716	0	-1,27%			
Rec	139,000	608.056,846	4.650.100,782	378,011	378,381	0,370	69,6716	0	-1,27%			
Rec	140,000	608.057,734	4.650.101,241	378,010	378,368	0,358	69,6716	0	-1,27%			
Rec	141,000	608.058,623	4.650.101,699	378,010	378,355	0,345	69,6716	0	-1,27%			
Rec	142,000	608.059,512	4.650.102,158	378,009	378,343	0,334	69,6716	0	-1,27%			
Rec	143,000	608.060,400	4.650.102,617	378,008	378,330	0,322	69,6716	0	-1,27%			
Rec	144,000	608.061,289	4.650.103,075	378,008	378,317	0,309	69,6716	0	-1,27%			
Cur	144,512	608.061,744	4.650.103,310	378,007	378,311	0,304	69,6716	-50	-1,27%	P.S.		
Cur	145,000	608.062,177	4.650.103,536	378,007	378,305	0,298	69,0503	-50	-1,27%			
Cur	146,000	608.063,056	4.650.104,012	378,006	378,292	0,286	67,7771	-50	-1,27%			
Cur	147,000	608.063,926	4.650.104,505	378,006	378,279	0,273	66,5039	-50	-1,27%			
Cur	148,000	608.064,785	4.650.105,016	378,006	378,267	0,261	65,2306	-50	-1,27%			
Cur	149,000	608.065,635	4.650.105,544	378,019	378,254	0,235	63,9574	-50	-1,27%			
Cur	150,000	608.066,473	4.650.106,089	378,081	378,241	0,160	62,6841	-50	-1,27%			
Cur	151,000	608.067,301	4.650.106,650	378,132	378,229	0,097	61,4109	-50	-1,27%			
Cur	152,000	608.068,117	4.650.107,228	378,129	378,216	0,087	60,1377	-50	-1,27%			
Cur	153,000	608.068,921	4.650.107,822	378,125	378,203	0,078	58,8644	-50	-1,27%			
Cur	154,000	608.069,713	4.650.108,433	378,120	378,191	0,071	57,5912	-50	-1,27%			
Cur	155,000	608.070,493	4.650.109,058	378,116	378,178	0,062	56,3179	-50	-1,27%			
Cur	156,000	608.071,261	4.650.109,700	378,085	378,165	0,080	55,0447	-50	-1,27%			
Cur	157,000	608.072,015	4.650.110,356	378,037	378,153	0,116	53,7715	-50	-1,27%			
Cur	158,000	608.072,756	4.650.111,027	378,006	378,140	0,134	52,4982	-50	-1,27%			
Rec	158,238	608.072,931	4.650.111,189	378,006	378,137	0,131	52,1951	0	-1,27%	P.S.		
Rec	159,000	608.073,488	4.650.111,709	378,006	378,127	0,121	52,1951	0	-1,27%			
Rec	160,000	608.074,219	4.650.112,392	378,006	378,115	0,109	52,1951	0	-1,27%			
Rec	160,012	608.074,227	4.650.112,400	378,006	378,114	0,108	52,1951	0	-1,27%		T.E.	

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REPLANTEO CAMINO TRAMO T19-T20 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	161,000	608.074,950	4.650.113,074	378,007	378,099	0,092	52,1951	0	-1,76%			
Rec	162,000	608.075,681	4.650.113,756	378,007	378,079	0,072	52,1951	0	-2,26%			
Rec	163,000	608.076,412	4.650.114,439	378,007	378,054	0,047	52,1951	0	-2,76%			
Rec	164,000	608.077,143	4.650.115,121	378,007	378,024	0,017	52,1951	0	-3,26%			
Rec	165,000	608.077,874	4.650.115,803	378,007	377,989	-0,018	52,1951	0	-3,76%			
Rec	166,000	608.078,605	4.650.116,486	378,007	377,949	-0,058	52,1951	0	-4,26%			
Rec	167,000	608.079,336	4.650.117,168	378,007	377,904	-0,103	52,1951	0	-4,76%			
Rec	168,000	608.080,067	4.650.117,850	378,007	377,854	-0,153	52,1951	0	-5,26%			
Cur	168,487	608.080,423	4.650.118,182	378,007	377,827	-0,180	52,1951	50	-5,50%	P.S.	V.	
Cur	169,000	608.080,800	4.650.118,531	378,007	377,799	-0,208	52,8486	50	-5,76%			
Cur	170,000	608.081,545	4.650.119,198	378,007	377,738	-0,269	54,1219	50	-6,26%			
Cur	171,000	608.082,303	4.650.119,850	378,007	377,673	-0,334	55,3951	50	-6,76%			
Cur	172,000	608.083,073	4.650.120,487	378,007	377,603	-0,404	56,6683	50	-7,26%			
Cur	173,000	608.083,857	4.650.121,109	378,007	377,528	-0,479	57,9416	50	-7,76%			
Cur	174,000	608.084,653	4.650.121,714	378,006	377,448	-0,558	59,2148	50	-8,26%			
Cur	175,000	608.085,460	4.650.122,304	378,006	377,363	-0,643	60,4881	50	-8,76%			
Cur	176,000	608.086,279	4.650.122,877	378,005	377,273	-0,732	61,7613	50	-9,26%			
Cur	176,962	608.087,078	4.650.123,413	378,004	377,181	-0,823	62,9862	50	-9,74%		T.S.	
Cur	177,000	608.087,110	4.650.123,434	378,004	377,178	-0,826	63,0345	50	-9,74%			
Cur	178,000	608.087,952	4.650.123,975	378,003	377,080	-0,923	64,3078	50	-9,74%			
Cur	179,000	608.088,804	4.650.124,498	378,001	376,983	-1,018	65,5810	50	-9,74%			
Cur	180,000	608.089,666	4.650.125,004	377,825	376,885	-0,940	66,8543	50	-9,74%			
Cur	181,000	608.090,539	4.650.125,493	377,026	376,788	-0,238	68,1275	50	-9,74%			
Cur	182,000	608.091,421	4.650.125,964	376,085	376,690	0,605	69,4007	50	-9,74%			
Rec	182,314	608.091,700	4.650.126,108	375,992	376,660	0,668	69,8008	0	-9,74%	P.S.		
Rec	183,000	608.092,310	4.650.126,421	375,958	376,593	0,635	69,8008	0	-9,74%			
Rec	183,704	608.092,936	4.650.126,743	375,894	376,524	0,631	69,8008	0	-9,74%		T.E.	
Rec	184,000	608.093,199	4.650.126,878	375,867	376,496	0,629	69,8008	0	-9,59%			
Rec	185,000	608.094,089	4.650.127,335	375,775	376,402	0,627	69,8008	0	-9,09%			
Rec	186,000	608.094,978	4.650.127,792	375,683	376,314	0,631	69,8008	0	-8,59%			
Rec	187,000	608.095,868	4.650.128,249	375,591	376,231	0,640	69,8008	0	-8,09%			
Rec	188,000	608.096,758	4.650.128,705	375,499	376,152	0,653	69,8008	0	-7,59%			
Rec	189,000	608.097,647	4.650.129,162	375,407	376,079	0,672	69,8008	0	-7,09%			
Rec	190,000	608.098,537	4.650.129,619	375,315	376,010	0,695	69,8008	0	-6,59%			
Rec	191,000	608.099,426	4.650.130,076	375,253	375,947	0,694	69,8008	0	-6,09%			
Cur	191,684	608.100,035	4.650.130,388	375,247	375,906	0,659	69,8008	-50	-5,75%	P.S.	V.	
Cur	192,000	608.100,315	4.650.130,533	375,244	375,888	0,644	69,3985	-50	-5,59%			
Cur	193,000	608.101,197	4.650.131,005	375,236	375,835	0,599	68,1253	-50	-5,09%			
Cur	194,000	608.102,070	4.650.131,493	375,228	375,786	0,558	66,8520	-50	-4,59%			
Cur	195,000	608.102,932	4.650.131,999	375,221	375,743	0,522	65,5788	-50	-4,09%			
Cur	196,000	608.103,784	4.650.132,523	375,214	375,704	0,490	64,3056	-50	-3,59%			
Cur	197,000	608.104,626	4.650.133,063	375,207	375,671	0,464	63,0323	-50	-3,09%			
Cur	198,000	608.105,457	4.650.133,620	375,200	375,643	0,443	61,7591	-50	-2,59%			
Cur	199,000	608.106,276	4.650.134,193	375,192	375,619	0,427	60,4858	-50	-2,09%			
Cur	199,664	608.106,813	4.650.134,583	375,187	375,606	0,419	59,6404	-50	-1,76%		T.S.	
Cur	200,000	608.107,083	4.650.134,783	375,185	375,600	0,415	59,2126	-50	-1,76%			
Cur	201,000	608.107,879	4.650.135,389	375,178	375,583	0,405	57,9394	-50	-1,76%			
Cur	202,000	608.108,662	4.650.136,010	375,169	375,565	0,396	56,6661	-50	-1,76%			
Cur	203,000	608.109,433	4.650.136,647	375,161	375,548	0,387	55,3929	-50	-1,76%			
Cur	204,000	608.110,191	4.650.137,300	375,153	375,530	0,377	54,1196	-50	-1,76%			
Cur	205,000	608.110,936	4.650.137,967	375,144	375,512	0,368	52,8464	-50	-1,76%			
Cur	206,000	608.111,667	4.650.138,649	375,137	375,495	0,358	51,5732	-50	-1,76%			
Cur	207,000	608.112,384	4.650.139,346	375,129	375,477	0,348	50,2999	-50	-1,76%			
Cur	208,000	608.113,088	4.650.140,056	375,122	375,459	0,337	49,0267	-50	-1,76%			
Cur	209,000	608.113,777	4.650.140,781	375,114	375,442	0,328	47,7534	-50	-1,76%			
Cur	210,000	608.114,451	4.650.141,520	375,106	375,424	0,318	46,4802	-50	-1,76%			
Rec	210,865	608.115,023	4.650.142,169	375,092	375,409	0,317	45,3784	0	-1,76%	P.S.		
Rec	211,000	608.115,111	4.650.142,271	375,089	375,407	0,318	45,3784	0	-1,76%			
Rec	212,000	608.115,765	4.650.143,028	375,062	375,389	0,327	45,3784	0	-1,76%			
Rec	213,000	608.116,419	4.650.143,784	375,020	375,371	0,351	45,3784	0	-1,76%			
Rec	214,000	608.117,073	4.650.144,541	374,927	375,354	0,427	45,3784	0	-1,76%			
Rec	215,000	608.117,727	4.650.145,297	374,764	375,336	0,572	45,3784	0	-1,76%			
Rec	216,000	608.118,381	4.650.146,054	374,745	375,318	0,573	45,3784	0	-1,76%			
Rec	217,000	608.119,034	4.650.146,810	374,665	375,301	0,636	45,3784	0	-1,76%			
Rec	218,000	608.119,688	4.650.147,567	374,550	375,283	0,733	45,3784	0	-1,76%			
Rec	219,000	608.120,342	4.650.148,323	374,459	375,266	0,807	45,3784	0	-1,76%			
Rec	220,000	608.120,996	4.650.149,080	374,382	375,248	0,866	45,3784	0	-1,76%			
Rec	221,000	608.121,650	4.650.149,837	374,331	375,230	0,899	45,3784	0	-1,76%			
Rec	222,000	608.122,304	4.650.150,593	374,328	375,213	0,885	45,3784	0	-1,76%			
Rec	223,000	608.122,958	4.650.151,350	374,325	375,195	0,870	45,3784	0	-1,76%			
Rec	224,000	608.123,612	4.650.152,106	374,319	375,177	0,858	45,3784	0	-1,76%			
Rec	225,000	608.124,266	4.650.152,863	374,267	375,160	0,893	45,3784	0	-1,76%			
Rec	226,000	608.124,920	4.650.153,619	374,214	375,142	0,928	45,3784	0	-1,76%			
Rec	227,000	608.125,574	4.650.154,376	374,175	375,125	0,950	45,3784	0	-1,76%			
Rec	228,000	608.126,228	4.650.155,132	374,143	375,107	0,964	45,3784	0	-1,76%			
Rec	229,000	608.126,882	4.650.155,889	374,110	375,089	0,979	45,3784	0	-1,76%			
Rec	230,000	608.127,536	4.650.156,645	374,106	375,072	0,966	45,3784	0	-1,76%			
Rec	231,000	608.128,190	4.650.157,402	374,104	375,054	0,950	45,3784	0	-1,76%			
Rec	232,000	608.128,844	4.650.158,158	374,142	375,036	0,894	45,3784	0	-1,76%			
Rec	233,000	608.129,498	4.650.158,915	374,180	375,019	0,839	45,3784	0	-1,76%			
Rec	234,000	608.130,152	4.650.159,671	374,218	375,001	0,783	45,3784	0	-1,76%			
Rec	235,000	608.130,806	4.650.160,428	374,257	374,983	0,726	45,3784	0	-1,76%			
Rec	236,000	608.131,460	4.650.161,185	374,295	374,966	0,671	45,3784	0	-1,76%			
Rec	237,000	608.132,114	4.650.161,941	374,333	374,948	0,615	45,3784	0	-1,76%			
Rec	238,000	608.132,768	4.650.162,698	374,371	374,931	0,560	45,3784	0	-1,76%			
Rec	239,000	608.133,421	4.650.163,454	374,379	374,913	0,534	45,3784	0	-1,76%			
Rec	240,000	608.134,075	4.650.164,211	374,382	374,895	0,513	45,3784	0	-1,76%			

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REPLANTEO CAMINO TRAMO T19-T20 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	241,000	608.134,729	4.650.164,967	374,391	374,878	0,487	45,3784	0	-1,76%			
Rec	242,000	608.135,383	4.650.165,724	374,395	374,860	0,465	45,3784	0	-1,76%			
Rec	243,000	608.136,037	4.650.166,480	374,403	374,842	0,439	45,3784	0	-1,76%			
Rec	243,510	608.136,371	4.650.166,866	374,409	374,833	0,424	45,3784	0	-1,76%		T.E.	
Rec	244,000	608.136,691	4.650.167,237	374,415	374,824	0,409	45,3784	0	-2,15%			
Rec	245,000	608.137,345	4.650.167,993	374,429	374,798	0,369	45,3784	0	-2,95%			
Rec	246,000	608.137,999	4.650.168,750	374,443	374,765	0,322	45,3784	0	-3,75%			
Rec	247,000	608.138,653	4.650.169,506	374,459	374,723	0,264	45,3784	0	-4,55%			
Rec	248,000	608.139,307	4.650.170,263	374,467	374,674	0,207	45,3784	0	-5,35%			
Rec	249,000	608.139,961	4.650.171,019	374,449	374,616	0,167	45,3784	0	-6,15%			
Cur	249,665	608.140,396	4.650.171,523	374,425	374,573	0,148	45,3784	-10	-6,69%	P.S.	V.	
Cur	250,000	608.140,611	4.650.171,780	374,407	374,551	0,144	43,2462	-10	-6,95%			
Cur	251,000	608.141,199	4.650.172,588	374,338	374,477	0,139	36,8800	-10	-7,75%			
Cur	252,000	608.141,704	4.650.173,451	374,251	374,396	0,145	30,5138	-10	-8,55%			
Cur	253,000	608.142,120	4.650.174,359	374,166	374,306	0,140	24,1476	-10	-9,35%			
Cur	254,000	608.142,443	4.650.175,305	374,084	374,208	0,124	17,7814	-10	-10,15%			
Cur	255,000	608.142,670	4.650.176,279	374,006	374,103	0,097	11,4152	-10	-10,95%			
Cur	255,820	608.142,783	4.650.177,091	373,655	374,010	0,355	6,1949	-10	-11,61%		T.S.	
Cur	256,000	608.142,799	4.650.177,270	373,578	373,989	0,411	5,0490	-10	-11,61%			
Cur	257,000	608.142,829	4.650.178,269	373,176	373,873	0,697	398,6828	-10	-11,61%			
Cur	258,000	608.142,758	4.650.179,266	372,946	373,757	0,811	392,3166	-10	-11,61%			ODT Ø500 L=8,00m
Cur	258,348	608.142,710	4.650.179,611	372,921	373,717	0,795	390,1012	-10	-11,61%		T.E.	
Cur	259,000	608.142,588	4.650.180,251	372,875	373,643	0,768	385,9504	-10	-10,96%			
Cur	260,000	608.142,321	4.650.181,214	372,850	373,538	0,688	379,5842	-10	-9,96%			
Cur	261,000	608.141,959	4.650.182,146	372,816	373,444	0,628	373,2180	-10	-8,96%			
Cur	262,000	608.141,505	4.650.183,037	372,817	373,359	0,542	366,8518	-10	-7,96%			
Cur	263,000	608.140,965	4.650.183,878	372,820	373,285	0,465	360,4856	-10	-6,96%			
Cur	264,000	608.140,344	4.650.184,661	372,816	373,220	0,404	354,1194	-10	-5,96%			
Rec	264,666	608.139,888	4.650.185,147	372,853	373,183	0,330	349,8769	0	-5,29%	P.S.	V.	
Rec	265,000	608.139,652	4.650.185,382	372,853	373,165	0,312	349,8769	0	-4,96%			
Rec	266,000	608.138,943	4.650.186,088	372,854	373,121	0,267	349,8769	0	-3,96%			
Rec	267,000	608.138,235	4.650.186,794	372,855	373,086	0,231	349,8769	0	-2,96%			
Rec	268,000	608.137,526	4.650.187,500	372,857	373,062	0,205	349,8769	0	-1,96%			
Rec	269,000	608.136,818	4.650.188,205	372,876	373,047	0,171	349,8769	0	-0,96%			
Rec	270,000	608.136,109	4.650.188,911	372,919	373,042	0,123	349,8769	0	0,04%			
Rec	270,984	608.135,412	4.650.189,605	372,961	373,048	0,087	349,8769	0	1,02%		T.S.	
Rec	271,000	608.135,401	4.650.189,617	372,962	373,048	0,086	349,8769	0	1,03%			
Rec	272,000	608.134,692	4.650.190,323	372,963	373,058	0,095	349,8769	0	1,03%			
Rec	273,000	608.133,984	4.650.191,028	372,962	373,069	0,107	349,8769	0	1,03%			
Rec	274,000	608.133,275	4.650.191,734	372,961	373,079	0,118	349,8769	0	1,03%			
Rec	275,000	608.132,567	4.650.192,440	372,960	373,089	0,129	349,8769	0	1,03%			
Rec	276,000	608.131,859	4.650.193,145	372,959	373,099	0,140	349,8769	0	1,03%			
Rec	277,000	608.131,150	4.650.193,851	372,958	373,110	0,152	349,8769	0	1,03%			
Rec	278,000	608.130,442	4.650.194,557	372,957	373,120	0,163	349,8769	0	1,03%			
Rec	279,000	608.129,733	4.650.195,263	372,955	373,130	0,175	349,8769	0	1,03%			
Rec	280,000	608.129,025	4.650.195,968	372,954	373,141	0,187	349,8769	0	1,03%			
Rec	281,000	608.128,316	4.650.196,674	372,953	373,151	0,198	349,8769	0	1,03%			
Rec	282,000	608.127,608	4.650.197,380	372,952	373,161	0,209	349,8769	0	1,03%			
Rec	283,000	608.126,899	4.650.198,086	372,951	373,171	0,220	349,8769	0	1,03%			
Rec	284,000	608.126,191	4.650.198,791	372,950	373,182	0,232	349,8769	0	1,03%			
Rec	285,000	608.125,482	4.650.199,497	372,950	373,192	0,242	349,8769	0	1,03%			
Rec	286,000	608.124,774	4.650.200,203	372,949	373,202	0,253	349,8769	0	1,03%			
Rec	287,000	608.124,065	4.650.200,909	372,948	373,212	0,264	349,8769	0	1,03%			
Rec	288,000	608.123,357	4.650.201,614	372,948	373,223	0,275	349,8769	0	1,03%			
Rec	289,000	608.122,648	4.650.202,320	372,948	373,233	0,285	349,8769	0	1,03%			
Rec	290,000	608.121,940	4.650.203,026	372,948	373,243	0,295	349,8769	0	1,03%			
Rec	291,000	608.121,231	4.650.203,732	372,949	373,253	0,304	349,8769	0	1,03%			
Rec	292,000	608.120,523	4.650.204,437	372,949	373,264	0,315	349,8769	0	1,03%			
Rec	293,000	608.119,814	4.650.205,143	372,950	373,274	0,324	349,8769	0	1,03%			
Rec	294,000	608.119,106	4.650.205,849	372,950	373,284	0,334	349,8769	0	1,03%			
Rec	295,000	608.118,398	4.650.206,554	372,951	373,295	0,344	349,8769	0	1,03%			
Rec	296,000	608.117,689	4.650.207,260	372,951	373,305	0,354	349,8769	0	1,03%			
Rec	297,000	608.116,981	4.650.207,966	372,951	373,315	0,364	349,8769	0	1,03%			
Rec	298,000	608.116,272	4.650.208,672	372,951	373,325	0,374	349,8769	0	1,03%			
Rec	299,000	608.115,564	4.650.209,377	372,952	373,336	0,384	349,8769	0	1,03%			
Rec	300,000	608.114,855	4.650.210,083	372,952	373,346	0,394	349,8769	0	1,03%			
Rec	301,000	608.114,147	4.650.210,789	372,953	373,356	0,403	349,8769	0	1,03%			
Rec	302,000	608.113,438	4.650.211,495	372,954	373,366	0,412	349,8769	0	1,03%			
Rec	303,000	608.112,730	4.650.212,200	372,954	373,377	0,423	349,8769	0	1,03%			
Rec	304,000	608.112,021	4.650.212,906	372,955	373,387	0,432	349,8769	0	1,03%			
Rec	305,000	608.111,313	4.650.213,612	372,956	373,397	0,441	349,8769	0	1,03%			
Rec	306,000	608.110,604	4.650.214,318	372,957	373,408	0,451	349,8769	0	1,03%			
Cur	306,413	608.110,311	4.650.214,609	372,957	373,412	0,455	349,8769	10	1,03%	P.S.		
Cur	307,000	608.109,908	4.650.215,035	372,957	373,418	0,461	353,6114	10	1,03%			
Cur	307,302	608.109,711	4.650.215,264	372,957	373,421	0,464	355,5340	10	1,03%		T.E.	
Cur	308,000	608.109,281	4.650.215,813	372,956	373,428	0,472	359,9776	10	0,98%			
Cur	309,000	608.108,734	4.650.216,650	372,953	373,437	0,484	366,3438	10	0,91%			
Cur	310,000	608.108,274	4.650.217,537	372,950	373,446	0,496	372,7100	10	0,85%			
Cur	311,000	608.107,904	4.650.218,466	372,953	373,454	0,501	379,0762	10	0,78%			
Cur	312,000	608.107,629	4.650.219,427	372,958	373,462	0,504	385,4424	10	0,71%			
Cur	313,000	608.107,452	4.650.220,411	372,964	373,469	0,505	391,8086	10	0,65%			
Cur	314,000	608.107,373	4.650.221,407	372,971	373,475	0,504	398,1748	10	0,58%			
Cur	315,000	608.107,394	4.650.222,407	372,978	373,480	0,502	4,5410	10	0,51%		V.	
Cur	316,000	608.107,515	4.650.223,399	372,985	373,485	0,500	10,9072	10	0,45%			
Cur	317,000	608.107,735	4.650.224,374	372,991	373,489	0,498	17,2734	10	0,38%			
Cur	318,000	608.108,050	4.650.225,323	372,996	373,493	0,497	23,6396	10	0,31%			

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REPLANTEO CAMINO TRAMO T19-T20 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	319,000	608.108,459	4.650.226,235	373,002	373,495	0,493	30,0058	10	0,25%			
Cur	320,000	608.108,957	4.650.227,102	373,027	373,498	0,471	36,3720	10	0,18%			
Cur	321,000	608.109,539	4.650.227,914	373,048	373,499	0,451	42,7382	10	0,11%			
Cur	322,000	608.110,199	4.650.228,665	373,064	373,500	0,436	49,1044	10	0,05%			
Cur	322,698	608.110,703	4.650.229,148	373,070	373,500	0,430	53,5480	10	0,00%		T.S.	
Cur	323,000	608.110,931	4.650.229,346	373,073	373,500	0,427	55,4706	10	0,00%			
Rec	323,094	608.111,003	4.650.229,406	373,073	373,500	0,427	56,0695	0	0,00%	P.S.		
Rec	324,000	608.111,702	4.650.229,983	373,083	373,500	0,417	56,0695	0	0,00%			
Rec	325,000	608.112,473	4.650.230,619	373,088	373,500	0,412	56,0695	0	0,00%			
Rec	326,000	608.113,244	4.650.231,256	373,092	373,500	0,408	56,0695	0	0,00%			
Rec	327,000	608.114,015	4.650.231,893	373,095	373,500	0,405	56,0695	0	0,00%			
Rec	328,000	608.114,787	4.650.232,529	373,093	373,500	0,407	56,0695	0	0,00%			
Rec	329,000	608.115,558	4.650.233,166	373,089	373,500	0,411	56,0695	0	0,00%			
Rec	330,000	608.116,329	4.650.233,802	373,081	373,500	0,419	56,0695	0	0,00%			
Rec	331,000	608.117,100	4.650.234,439	373,070	373,500	0,430	56,0695	0	0,00%			
Rec	332,000	608.117,871	4.650.235,076	373,059	373,500	0,441	56,0695	0	0,00%			
Rec	333,000	608.118,643	4.650.235,712	373,043	373,500	0,457	56,0695	0	0,00%			
Rec	334,000	608.119,414	4.650.236,349	373,026	373,500	0,474	56,0695	0	0,00%			
	334,383	608.119,709	4.650.236,592	373,019	373,500	0,481	56,0695		0,00%			

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REPLANTEO CAMINO TRAMO T19-T20 A-T20

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	609.552,032	4.649.114,032	361,173	361,173	0,000	308,2301	0	-7,27%			
Rec	1,000	609.551,040	4.649.114,161	361,135	361,100	-0,035	308,2301	0	-7,27%			
Rec	2,000	609.550,048	4.649.114,290	361,092	361,028	-0,064	308,2301	0	-7,27%			
Rec	3,000	609.549,057	4.649.114,419	361,015	360,955	-0,060	308,2301	0	-7,27%			
Rec	4,000	609.548,065	4.649.114,548	360,950	360,882	-0,068	308,2301	0	-7,27%			
Rec	5,000	609.547,073	4.649.114,677	360,886	360,809	-0,077	308,2301	0	-7,27%			
Cur	5,256	609.546,820	4.649.114,710	360,872	360,791	-0,081	308,2301	10	-7,27%	P.S.		
Cur	6,000	609.546,086	4.649.114,833	360,830	360,737	-0,093	312,9691	10	-7,27%			
Cur	7,000	609.545,118	4.649.115,084	360,780	360,664	-0,116	319,3353	10	-7,27%			
Cur	8,000	609.544,181	4.649.115,430	360,766	360,591	-0,175	325,7015	10	-7,27%			
Cur	9,000	609.543,282	4.649.115,869	360,755	360,518	-0,237	332,0677	10	-7,27%			
Rec	9,099	609.543,196	4.649.115,917	360,749	360,511	-0,238	332,6987	0	-7,27%	P.S.		
Rec	10,000	609.542,411	4.649.116,359	360,726	360,446	-0,280	332,6987	0	-7,27%			
Rec	11,000	609.541,540	4.649.116,851	360,717	360,373	-0,344	332,6987	0	-7,27%			
Rec	12,000	609.540,669	4.649.117,342	360,707	360,300	-0,407	332,6987	0	-7,27%			
Rec	13,000	609.539,798	4.649.117,834	360,698	360,227	-0,471	332,6987	0	-7,27%			
Rec	14,000	609.538,927	4.649.118,325	360,689	360,155	-0,534	332,6987	0	-7,27%			
Rec	15,000	609.538,056	4.649.118,816	360,674	360,082	-0,592	332,6987	0	-7,27%			
Rec	15,726	609.537,424	4.649.119,173	360,662	360,029	-0,633	332,6987	0	-7,27%		T.E.	
Rec	16,000	609.537,185	4.649.119,308	360,658	360,009	-0,649	332,6987	0	-7,14%			
Rec	17,000	609.536,314	4.649.119,799	360,650	359,940	-0,710	332,6987	0	-6,64%			
Rec	18,000	609.535,443	4.649.120,290	360,642	359,877	-0,765	332,6987	0	-6,14%			
Rec	19,000	609.534,572	4.649.120,782	360,635	359,818	-0,817	332,6987	0	-5,64%			
Cur	19,816	609.533,862	4.649.121,182	360,629	359,773	-0,856	332,6987	-400	-5,23%	P.S.		
Cur	20,000	609.533,701	4.649.121,273	360,627	359,764	-0,863	332,6694	-400	-5,14%			
Cur	21,000	609.532,829	4.649.121,763	360,607	359,715	-0,892	332,5103	-400	-4,64%			
Cur	22,000	609.531,956	4.649.122,250	360,584	359,671	-0,913	332,3511	-400	-4,14%			
Cur	23,000	609.531,082	4.649.122,736	360,561	359,632	-0,929	332,1920	-400	-3,64%		V.	
Cur	24,000	609.530,207	4.649.123,219	360,538	359,598	-0,940	332,0328	-400	-3,14%			
Cur	25,000	609.529,330	4.649.123,700	360,527	359,570	-0,957	331,8737	-400	-2,64%			
Cur	26,000	609.528,452	4.649.124,179	360,509	359,546	-0,963	331,7145	-400	-2,14%			
Cur	27,000	609.527,573	4.649.124,656	360,470	359,527	-0,943	331,5554	-400	-1,64%			
Cur	28,000	609.526,693	4.649.125,130	360,427	359,513	-0,914	331,3962	-400	-1,14%			
Cur	29,000	609.525,811	4.649.125,603	360,403	359,504	-0,899	331,2371	-400	-0,64%			
Cur	30,000	609.524,929	4.649.126,073	360,406	359,500	-0,906	331,0779	-400	-0,14%			
Cur	30,274	609.524,687	4.649.126,201	360,408	359,500	-0,908	331,0343	-400	0,00%		T.S.	
Cur	31,000	609.524,045	4.649.126,541	360,413	359,500	-0,913	330,9187	-400	0,00%			
Cur	32,000	609.523,160	4.649.127,006	360,460	359,500	-0,960	330,7596	-400	0,00%			
Cur	33,000	609.522,274	4.649.127,470	360,492	359,500	-0,992	330,6004	-400	0,00%			
Cur	34,000	609.521,387	4.649.127,931	360,471	359,500	-0,971	330,4413	-400	0,00%			
Rec	34,325	609.521,098	4.649.128,081	360,462	359,500	-0,962	330,3896	0	0,00%	P.S.		
Rec	35,000	609.520,499	4.649.128,391	360,445	359,500	-0,945	330,3896	0	0,00%			
Rec	36,000	609.519,610	4.649.128,850	360,418	359,500	-0,918	330,3896	0	0,00%			
Rec	37,000	609.518,722	4.649.129,310	360,392	359,500	-0,892	330,3896	0	0,00%			
Rec	38,000	609.517,834	4.649.129,769	360,367	359,500	-0,867	330,3896	0	0,00%			
Rec	39,000	609.516,946	4.649.130,229	360,353	359,500	-0,853	330,3896	0	0,00%			
Rec	40,000	609.516,058	4.649.130,688	360,338	359,500	-0,838	330,3896	0	0,00%			
Rec	41,000	609.515,169	4.649.131,147	360,331	359,500	-0,831	330,3896	0	0,00%			
Rec	42,000	609.514,281	4.649.131,607	360,312	359,500	-0,812	330,3896	0	0,00%			
Rec	43,000	609.513,393	4.649.132,066	360,293	359,500	-0,793	330,3896	0	0,00%			
Rec	44,000	609.512,505	4.649.132,526	360,273	359,500	-0,773	330,3896	0	0,00%			
Rec	45,000	609.511,617	4.649.132,985	360,254	359,500	-0,754	330,3896	0	0,00%			
Rec	46,000	609.510,728	4.649.133,445	360,234	359,500	-0,734	330,3896	0	0,00%			
Rec	47,000	609.509,840	4.649.133,904	360,212	359,500	-0,712	330,3896	0	0,00%			
Rec	48,000	609.508,952	4.649.134,363	360,189	359,500	-0,689	330,3896	0	0,00%			
Rec	49,000	609.508,064	4.649.134,823	360,177	359,500	-0,677	330,3896	0	0,00%			
Rec	50,000	609.507,175	4.649.135,282	360,170	359,500	-0,670	330,3896	0	0,00%			
Rec	51,000	609.506,287	4.649.135,742	360,117	359,500	-0,617	330,3896	0	0,00%			
Rec	52,000	609.505,399	4.649.136,201	360,057	359,500	-0,557	330,3896	0	0,00%			
Rec	53,000	609.504,511	4.649.136,661	360,015	359,500	-0,515	330,3896	0	0,00%			
Rec	54,000	609.503,623	4.649.137,120	360,143	359,500	-0,643	330,3896	0	0,00%			
Rec	55,000	609.502,734	4.649.137,579	360,129	359,500	-0,629	330,3896	0	0,00%			
Rec	56,000	609.501,846	4.649.138,039	360,115	359,500	-0,615	330,3896	0	0,00%			
Rec	57,000	609.500,958	4.649.138,498	360,100	359,500	-0,600	330,3896	0	0,00%			
Rec	58,000	609.500,070	4.649.138,958	360,083	359,500	-0,583	330,3896	0	0,00%			
Rec	59,000	609.499,182	4.649.139,417	360,067	359,500	-0,567	330,3896	0	0,00%			
Rec	60,000	609.498,293	4.649.139,877	360,050	359,500	-0,550	330,3896	0	0,00%			
Rec	61,000	609.497,405	4.649.140,336	360,041	359,500	-0,541	330,3896	0	0,00%			
Rec	62,000	609.496,517	4.649.140,796	360,026	359,500	-0,526	330,3896	0	0,00%			
Rec	63,000	609.495,629	4.649.141,255	360,012	359,500	-0,512	330,3896	0	0,00%			
Rec	64,000	609.494,740	4.649.141,714	359,997	359,500	-0,497	330,3896	0	0,00%			
Rec	65,000	609.493,852	4.649.142,174	359,982	359,500	-0,482	330,3896	0	0,00%			
Rec	66,000	609.492,964	4.649.142,633	359,967	359,500	-0,467	330,3896	0	0,00%			
Rec	67,000	609.492,076	4.649.143,093	359,941	359,500	-0,441	330,3896	0	0,00%			
Rec	68,000	609.491,188	4.649.143,552	359,909	359,500	-0,409	330,3896	0	0,00%			
Rec	69,000	609.490,299	4.649.144,012	359,878	359,500	-0,378	330,3896	0	0,00%			
Rec	70,000	609.489,411	4.649.144,471	359,850	359,500	-0,350	330,3896	0	0,00%			
Rec	71,000	609.488,523	4.649.144,930	359,821	359,500	-0,321	330,3896	0	0,00%			
Rec	72,000	609.487,635	4.649.145,390	359,801	359,500	-0,301	330,3896	0	0,00%			
Rec	73,000	609.486,747	4.649.145,849	359,787	359,500	-0,287	330,3896	0	0,00%			
Rec	74,000	609.485,858	4.649.146,309	359,773	359,500	-0,273	330,3896	0	0,00%			
Rec	75,000	609.484,970	4.649.146,768	359,759	359,500	-0,259	330,3896	0	0,00%			
Rec	76,000	609.484,082	4.649.147,228	359,748	359,500	-0,248	330,3896	0	0,00%			
Rec	77,000	609.483,194	4.649.147,687	359,734	359,500	-0,234	330,3896	0	0,00%			
Rec	78,000	609.482,306	4.649.148,146	359,718	359,500	-0,218	330,3896	0	0,00%			
Rec	79,000	609.481,417	4.649.148,606	359,704	359,500	-0,204	330,3896	0	0,00%			
Rec	80,000	609.480,529	4.649.149,065	359,695	359,500	-0,195	330,3896	0	0,00%			

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P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T19-T20 A-T20

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	81,000	609.479,641	4.649.149,525	359,686	359,500	-0,186	330,3896	0	0,00%			
Rec	82,000	609.478,753	4.649.149,984	359,676	359,500	-0,176	330,3896	0	0,00%			
Rec	83,000	609.477,864	4.649.150,444	359,666	359,500	-0,166	330,3896	0	0,00%			
Rec	83,067	609.477,805	4.649.150,474	359,664	359,500	-0,164	330,3896	0	0,00%		T.E.	
Rec	84,000	609.476,976	4.649.150,903	359,641	359,500	-0,141	330,3896	0	-0,03%			
Rec	85,000	609.476,088	4.649.151,363	359,616	359,499	-0,117	330,3896	0	-0,06%			
Rec	86,000	609.475,200	4.649.151,822	359,593	359,499	-0,094	330,3896	0	-0,10%			
Rec	87,000	609.474,312	4.649.152,281	359,572	359,497	-0,075	330,3896	0	-0,13%			
Rec	88,000	609.473,423	4.649.152,741	359,551	359,496	-0,055	330,3896	0	-0,16%			
Rec	89,000	609.472,535	4.649.153,200	359,540	359,494	-0,046	330,3896	0	-0,20%			
Rec	90,000	609.471,647	4.649.153,660	359,530	359,492	-0,038	330,3896	0	-0,23%			
Rec	91,000	609.470,759	4.649.154,119	359,516	359,490	-0,026	330,3896	0	-0,26%			
Cur	91,874	609.469,983	4.649.154,521	359,495	359,487	-0,008	330,3896	-100	-0,29%	P.S.	V.	
Cur	92,000	609.469,871	4.649.154,578	359,492	359,487	-0,005	330,3092	-100	-0,30%			
Cur	93,000	609.468,979	4.649.155,032	359,467	359,484	0,017	329,6725	-100	-0,33%			
Cur	94,000	609.468,084	4.649.155,477	359,428	359,480	0,052	329,0359	-100	-0,36%			
Cur	95,000	609.467,184	4.649.155,913	359,390	359,476	0,086	328,3993	-100	-0,40%			
Cur	96,000	609.466,280	4.649.156,340	359,381	359,472	0,091	327,7627	-100	-0,43%			
Cur	97,000	609.465,371	4.649.156,758	359,399	359,468	0,069	327,1261	-100	-0,46%			
Cur	98,000	609.464,459	4.649.157,167	359,384	359,463	0,079	326,4894	-100	-0,50%			
Cur	99,000	609.463,542	4.649.157,566	359,367	359,458	0,091	325,8528	-100	-0,53%			
Cur	100,000	609.462,621	4.649.157,957	359,348	359,452	0,104	325,2162	-100	-0,56%			
Cur	100,681	609.461,992	4.649.158,217	359,336	359,448	0,113	324,7827	-100	-0,59%		T.S.	
Cur	101,000	609.461,697	4.649.158,338	359,330	359,446	0,116	324,5796	-100	-0,59%			
Cur	102,000	609.460,768	4.649.158,710	359,322	359,441	0,119	323,9430	-100	-0,59%			
Rec	102,793	609.460,030	4.649.158,998	359,318	359,436	0,118	323,4384	0	-0,59%	P.S.		
Rec	103,000	609.459,837	4.649.159,073	359,317	359,435	0,118	323,4384	0	-0,59%			
Rec	104,000	609.458,904	4.649.159,433	359,305	359,429	0,124	323,4384	0	-0,59%			
Rec	105,000	609.457,971	4.649.159,793	359,288	359,423	0,135	323,4384	0	-0,59%			
Rec	106,000	609.457,038	4.649.160,152	359,273	359,417	0,144	323,4384	0	-0,59%			
Rec	107,000	609.456,105	4.649.160,512	359,271	359,411	0,140	323,4384	0	-0,59%			
Rec	108,000	609.455,172	4.649.160,872	359,269	359,405	0,136	323,4384	0	-0,59%			
Rec	109,000	609.454,239	4.649.161,232	359,270	359,399	0,129	323,4384	0	-0,59%			
Rec	110,000	609.453,306	4.649.161,592	359,272	359,394	0,122	323,4384	0	-0,59%			
Rec	111,000	609.452,373	4.649.161,952	359,272	359,388	0,116	323,4384	0	-0,59%			
Rec	112,000	609.451,440	4.649.162,312	359,268	359,382	0,114	323,4384	0	-0,59%			
Rec	113,000	609.450,507	4.649.162,672	359,265	359,376	0,111	323,4384	0	-0,59%			
Rec	114,000	609.449,574	4.649.163,032	359,260	359,370	0,110	323,4384	0	-0,59%			
Rec	115,000	609.448,641	4.649.163,392	359,255	359,364	0,109	323,4384	0	-0,59%			
Rec	116,000	609.447,708	4.649.163,752	359,249	359,358	0,109	323,4384	0	-0,59%			
Rec	117,000	609.446,775	4.649.164,111	359,246	359,352	0,106	323,4384	0	-0,59%			
Rec	118,000	609.445,842	4.649.164,471	359,247	359,347	0,100	323,4384	0	-0,59%			
Rec	119,000	609.444,909	4.649.164,831	359,247	359,341	0,094	323,4384	0	-0,59%			
Rec	120,000	609.443,976	4.649.165,191	359,247	359,335	0,088	323,4384	0	-0,59%			
Rec	121,000	609.443,043	4.649.165,551	359,244	359,329	0,085	323,4384	0	-0,59%			
Rec	122,000	609.442,110	4.649.165,911	359,240	359,323	0,083	323,4384	0	-0,59%			
Rec	123,000	609.441,177	4.649.166,271	359,242	359,317	0,075	323,4384	0	-0,59%			
Rec	124,000	609.440,244	4.649.166,631	359,240	359,311	0,071	323,4384	0	-0,59%			
Rec	125,000	609.439,311	4.649.166,991	359,238	359,306	0,068	323,4384	0	-0,59%			
Rec	126,000	609.438,378	4.649.167,351	359,237	359,300	0,063	323,4384	0	-0,59%			
Rec	127,000	609.437,445	4.649.167,711	359,239	359,294	0,055	323,4384	0	-0,59%			
Rec	128,000	609.436,512	4.649.168,070	359,242	359,288	0,046	323,4384	0	-0,59%			
Rec	129,000	609.435,579	4.649.168,430	359,233	359,282	0,049	323,4384	0	-0,59%			
Rec	130,000	609.434,646	4.649.168,790	359,224	359,276	0,052	323,4384	0	-0,59%			
Rec	131,000	609.433,713	4.649.169,150	359,216	359,270	0,054	323,4384	0	-0,59%			
Rec	132,000	609.432,780	4.649.169,510	359,209	359,264	0,055	323,4384	0	-0,59%			
Rec	133,000	609.431,847	4.649.169,870	359,202	359,259	0,057	323,4384	0	-0,59%			
Rec	134,000	609.430,914	4.649.170,230	359,195	359,253	0,058	323,4384	0	-0,59%			
Rec	135,000	609.429,981	4.649.170,590	359,187	359,247	0,060	323,4384	0	-0,59%			
Rec	136,000	609.429,048	4.649.170,950	359,179	359,241	0,062	323,4384	0	-0,59%			
Rec	137,000	609.428,115	4.649.171,310	359,176	359,235	0,059	323,4384	0	-0,59%			
Rec	138,000	609.427,182	4.649.171,670	359,176	359,229	0,053	323,4384	0	-0,59%			
Rec	139,000	609.426,249	4.649.172,029	359,177	359,223	0,046	323,4384	0	-0,59%			
Cur	139,937	609.425,374	4.649.172,367	359,174	359,218	0,044	323,4384	30	-0,59%	P.S.		
Cur	140,000	609.425,316	4.649.172,389	359,174	359,217	0,043	323,5711	30	-0,59%			
Cur	141,000	609.424,390	4.649.172,767	359,166	359,212	0,046	325,6931	30	-0,59%			
Cur	142,000	609.423,477	4.649.173,175	359,152	359,206	0,054	327,8152	30	-0,59%			
Cur	143,000	609.422,578	4.649.173,613	359,134	359,200	0,066	329,9373	30	-0,59%			
Cur	144,000	609.421,695	4.649.174,081	359,116	359,194	0,078	332,0593	30	-0,59%			
Cur	145,000	609.420,827	4.649.174,578	359,094	359,188	0,094	334,1814	30	-0,59%			
Cur	146,000	609.419,976	4.649.175,104	359,055	359,182	0,127	336,3035	30	-0,59%			
Cur	147,000	609.419,144	4.649.175,657	359,024	359,176	0,152	338,4255	30	-0,59%			
Rec	147,198	609.418,981	4.649.175,770	359,016	359,175	0,159	338,8449	0	-0,59%	P.S.		
Rec	148,000	609.418,324	4.649.176,230	358,980	359,170	0,190	338,8449	0	-0,59%			
Rec	149,000	609.417,504	4.649.176,803	358,969	359,165	0,196	338,8449	0	-0,59%			
Rec	150,000	609.416,685	4.649.177,376	358,979	359,159	0,180	338,8449	0	-0,59%			
Rec	151,000	609.415,865	4.649.177,949	359,001	359,153	0,152	338,8449	0	-0,59%			
Rec	151,193	609.415,707	4.649.178,059	358,992	359,152	0,160	338,8449	0	-0,59%		T.E.	
Rec	152,000	609.415,046	4.649.178,522	358,954	359,147	0,193	338,8449	0	-0,56%			
Rec	153,000	609.414,226	4.649.179,095	358,864	359,142	0,278	338,8449	0	-0,53%			
Rec	154,000	609.413,406	4.649.179,668	358,853	359,137	0,284	338,8449	0	-0,49%			
Rec	155,000	609.412,587	4.649.180,241	358,843	359,132	0,289	338,8449	0	-0,46%			
Rec	156,000	609.411,767	4.649.180,814	358,832	359,127	0,295	338,8449	0	-0,43%			
Cur	156,036	609.411,738	4.649.180,835	358,832	359,127	0,295	338,8449	-30	-0,43%	P.S.		
Cur	157,000	609.410,939	4.649.181,374	358,823	359,123	0,300	336,8001	-30	-0,39%			
Cur	158,000	609.410,093	4.649.181,907	358,816	359,119	0,303	334,6780	-30	-0,36%			
Cur	159,000	609.409,229	4.649.182,410	358,812	359,116	0,304	332,5560	-30	-0,33%			

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REPLANTEO CAMINO TRAMO T19-T20 A-T20

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	160,000	609.408,349	4.649.182,885	358,811	359,113	0,302	330,4339	-30	-0,29%		V.	
Cur	161,000	609.407,453	4.649.183,330	358,812	359,110	0,298	328,3118	-30	-0,26%			
Cur	162,000	609.406,544	4.649.183,745	358,816	359,108	0,292	326,1898	-30	-0,23%			
Rec	162,222	609.406,339	4.649.183,834	358,818	359,107	0,289	325,7178	0	-0,22%	P.S.		
Rec	163,000	609.405,624	4.649.184,139	358,822	359,106	0,284	325,7178	0	-0,19%			
Cur	163,845	609.404,848	4.649.184,471	358,827	359,104	0,277	325,7178	-10	-0,17%	P.S.		
Cur	164,000	609.404,705	4.649.184,531	358,828	359,104	0,276	324,7286	-10	-0,16%			
Cur	165,000	609.403,762	4.649.184,863	358,839	359,102	0,263	318,3624	-10	-0,13%			
Cur	166,000	609.402,790	4.649.185,099	358,858	359,101	0,243	311,9962	-10	-0,09%			
Cur	167,000	609.401,800	4.649.185,237	358,885	359,101	0,216	305,6300	-10	-0,06%			
Cur	168,000	609.400,801	4.649.185,275	358,880	359,100	0,220	299,2638	-10	-0,03%			
Cur	168,807	609.399,996	4.649.185,234	358,875	359,100	0,225	294,1263	-10	0,00%		T.S.	
Cur	169,000	609.399,804	4.649.185,214	358,874	359,100	0,226	292,8976	-10	0,00%			
Cur	170,000	609.398,817	4.649.185,053	358,869	359,100	0,231	286,5315	-10	0,00%			
Cur	171,000	609.397,852	4.649.184,795	358,863	359,100	0,237	280,1653	-10	0,00%			
Cur	172,000	609.396,917	4.649.184,441	358,857	359,100	0,243	273,7991	-10	0,00%			
Cur	173,000	609.396,022	4.649.183,996	358,849	359,100	0,251	267,4329	-10	0,00%			
Cur	174,000	609.395,176	4.649.183,464	358,847	359,100	0,253	261,0667	-10	0,00%			
Cur	175,000	609.394,387	4.649.182,850	358,853	359,100	0,247	254,7005	-10	0,00%			
Cur	176,000	609.393,663	4.649.182,160	358,857	359,100	0,243	248,3343	-10	0,00%			
Cur	177,000	609.393,012	4.649.181,401	358,861	359,100	0,239	241,9681	-10	0,00%			ODT Ø500 L=6,80m
Cur	178,000	609.392,440	4.649.180,581	358,865	359,100	0,235	235,6019	-10	0,00%			
Rec	178,539	609.392,167	4.649.180,117	358,867	359,100	0,233	232,1707	0	0,00%	P.S.		
Rec	179,000	609.391,944	4.649.179,714	358,869	359,100	0,231	232,1707	0	0,00%			
Rec	180,000	609.391,460	4.649.178,839	358,868	359,100	0,232	232,1707	0	0,00%			
Rec	181,000	609.390,976	4.649.177,964	358,866	359,100	0,234	232,1707	0	0,00%			
Rec	182,000	609.390,491	4.649.177,089	358,864	359,100	0,236	232,1707	0	0,00%			
Rec	183,000	609.390,007	4.649.176,214	358,862	359,100	0,238	232,1707	0	0,00%			
Rec	184,000	609.389,523	4.649.175,339	358,860	359,100	0,240	232,1707	0	0,00%			
Rec	185,000	609.389,039	4.649.174,464	358,857	359,100	0,243	232,1707	0	0,00%			
Rec	186,000	609.388,555	4.649.173,589	358,855	359,100	0,245	232,1707	0	0,00%			
Rec	187,000	609.388,071	4.649.172,714	358,853	359,100	0,247	232,1707	0	0,00%			
Rec	188,000	609.387,587	4.649.171,839	358,851	359,100	0,249	232,1707	0	0,00%			
Rec	189,000	609.387,103	4.649.170,964	358,849	359,100	0,251	232,1707	0	0,00%			
Rec	189,017	609.387,094	4.649.170,949	358,849	359,100	0,251	232,1707		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T20-T21 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	609.731,824	4.648.999,810	362,541	362,541	0,000	48,9181	0	-1,49%			
Rec	1,000	609.732,519	4.649.000,529	362,525	362,526	0,001	48,9181	0	-1,49%			
Rec	2,000	609.733,214	4.649.001,248	362,498	362,511	0,013	48,9181	0	-1,49%			ODT Ø500 L=6,00m
Cur	2,573	609.733,612	4.649.001,660	362,471	362,503	0,032	48,9181	-10	-1,49%	P.S.		
Cur	3,000	609.733,902	4.649.001,973	362,456	362,496	0,040	46,1989	-10	-1,49%			
Cur	4,000	609.734,528	4.649.002,753	362,424	362,481	0,058	39,8327	-10	-1,49%			
Cur	5,000	609.735,072	4.649.003,592	362,392	362,467	0,075	33,4665	-10	-1,49%			
Cur	6,000	609.735,530	4.649.004,480	362,358	362,452	0,094	27,1003	-10	-1,49%			
Cur	7,000	609.735,896	4.649.005,410	362,325	362,437	0,112	20,7341	-10	-1,49%			
Cur	8,000	609.736,168	4.649.006,372	362,292	362,422	0,130	14,3679	-10	-1,49%			
Rec	8,232	609.736,218	4.649.006,598	362,285	362,419	0,134	12,8917	0	-1,49%	P.S.		
Rec	9,000	609.736,372	4.649.007,351	362,259	362,407	0,148	12,8917	0	-1,49%			
Rec	10,000	609.736,573	4.649.008,330	362,227	362,392	0,165	12,8917	0	-1,49%			
Rec	11,000	609.736,774	4.649.009,310	362,194	362,377	0,183	12,8917	0	-1,49%			
Rec	12,000	609.736,976	4.649.010,290	362,162	362,363	0,201	12,8917	0	-1,49%			
Rec	13,000	609.737,177	4.649.011,269	362,129	362,348	0,219	12,8917	0	-1,49%			
Rec	14,000	609.737,378	4.649.012,249	362,096	362,333	0,237	12,8917	0	-1,49%			
Rec	15,000	609.737,579	4.649.013,228	362,065	362,318	0,253	12,8917	0	-1,49%			
Rec	16,000	609.737,780	4.649.014,208	362,025	362,303	0,278	12,8917	0	-1,49%			
Rec	17,000	609.737,981	4.649.015,187	361,995	362,288	0,293	12,8917	0	-1,49%			
Rec	18,000	609.738,182	4.649.016,167	361,983	362,273	0,290	12,8917	0	-1,49%			
Rec	19,000	609.738,383	4.649.017,147	361,971	362,258	0,287	12,8917	0	-1,49%			
Rec	20,000	609.738,585	4.649.018,126	361,959	362,243	0,284	12,8917	0	-1,49%			
Rec	21,000	609.738,786	4.649.019,106	361,947	362,229	0,282	12,8917	0	-1,49%			
Rec	22,000	609.738,987	4.649.020,085	361,934	362,214	0,280	12,8917	0	-1,49%			
Rec	23,000	609.739,188	4.649.021,065	361,922	362,199	0,277	12,8917	0	-1,49%			
Rec	24,000	609.739,389	4.649.022,044	361,910	362,184	0,274	12,8917	0	-1,49%			
Rec	25,000	609.739,590	4.649.023,024	361,900	362,169	0,269	12,8917	0	-1,49%			
Rec	26,000	609.739,791	4.649.024,004	361,891	362,154	0,263	12,8917	0	-1,49%			
Rec	27,000	609.739,992	4.649.024,983	361,883	362,139	0,256	12,8917	0	-1,49%			
Rec	28,000	609.740,193	4.649.025,963	361,877	362,125	0,248	12,8917	0	-1,49%			
Rec	29,000	609.740,395	4.649.026,942	361,878	362,110	0,232	12,8917	0	-1,49%			
Rec	30,000	609.740,596	4.649.027,922	361,868	362,095	0,227	12,8917	0	-1,49%			
Rec	31,000	609.740,797	4.649.028,901	361,857	362,080	0,223	12,8917	0	-1,49%			
Rec	32,000	609.740,998	4.649.029,881	361,845	362,065	0,220	12,8917	0	-1,49%			
Rec	33,000	609.741,199	4.649.030,860	361,832	362,050	0,218	12,8917	0	-1,49%			
Rec	34,000	609.741,400	4.649.031,840	361,819	362,035	0,216	12,8917	0	-1,49%			
Rec	35,000	609.741,601	4.649.032,820	361,806	362,020	0,214	12,8917	0	-1,49%			
Rec	36,000	609.741,802	4.649.033,799	361,791	362,005	0,214	12,8917	0	-1,49%			
Rec	37,000	609.742,004	4.649.034,779	361,776	361,991	0,215	12,8917	0	-1,49%			
Rec	38,000	609.742,205	4.649.035,758	361,761	361,976	0,215	12,8917	0	-1,49%			
Rec	39,000	609.742,406	4.649.036,738	361,744	361,961	0,217	12,8917	0	-1,49%			
Rec	40,000	609.742,607	4.649.037,717	361,728	361,946	0,218	12,8917	0	-1,49%			
Rec	41,000	609.742,808	4.649.038,697	361,711	361,931	0,220	12,8917	0	-1,49%			
Rec	42,000	609.743,009	4.649.039,677	361,695	361,916	0,221	12,8917	0	-1,49%			
Rec	43,000	609.743,210	4.649.040,656	361,677	361,901	0,224	12,8917	0	-1,49%			
Rec	44,000	609.743,411	4.649.041,636	361,657	361,887	0,230	12,8917	0	-1,49%			
Rec	45,000	609.743,613	4.649.042,615	361,646	361,872	0,226	12,8917	0	-1,49%			
Rec	46,000	609.743,814	4.649.043,595	361,635	361,857	0,222	12,8917	0	-1,49%			
Rec	47,000	609.744,015	4.649.044,574	361,624	361,842	0,218	12,8917	0	-1,49%			
Rec	48,000	609.744,216	4.649.045,554	361,613	361,827	0,214	12,8917	0	-1,49%			
Rec	49,000	609.744,417	4.649.046,534	361,602	361,812	0,210	12,8917	0	-1,49%			
Rec	50,000	609.744,618	4.649.047,513	361,590	361,797	0,207	12,8917	0	-1,49%			
Rec	51,000	609.744,819	4.649.048,493	361,579	361,782	0,203	12,8917	0	-1,49%			
Rec	52,000	609.745,020	4.649.049,472	361,568	361,767	0,200	12,8917	0	-1,49%			
Rec	53,000	609.745,222	4.649.050,452	361,556	361,753	0,197	12,8917	0	-1,49%			
Rec	54,000	609.745,423	4.649.051,431	361,545	361,738	0,193	12,8917	0	-1,49%			
Rec	55,000	609.745,624	4.649.052,411	361,534	361,723	0,189	12,8917	0	-1,49%			
Rec	56,000	609.745,825	4.649.053,390	361,522	361,708	0,186	12,8917	0	-1,49%			
Rec	57,000	609.746,026	4.649.054,370	361,511	361,693	0,182	12,8917	0	-1,49%			
Rec	58,000	609.746,227	4.649.055,350	361,500	361,678	0,178	12,8917	0	-1,49%			
Rec	59,000	609.746,428	4.649.056,329	361,488	361,663	0,175	12,8917	0	-1,49%			
Rec	60,000	609.746,629	4.649.057,309	361,477	361,649	0,172	12,8917	0	-1,49%			
Rec	61,000	609.746,831	4.649.058,288	361,466	361,634	0,168	12,8917	0	-1,49%			
Rec	62,000	609.747,032	4.649.059,268	361,455	361,619	0,164	12,8917	0	-1,49%			
Rec	63,000	609.747,233	4.649.060,247	361,443	361,604	0,161	12,8917	0	-1,49%			
Rec	64,000	609.747,434	4.649.061,227	361,432	361,589	0,157	12,8917	0	-1,49%			
Rec	65,000	609.747,635	4.649.062,207	361,421	361,574	0,153	12,8917	0	-1,49%			
Rec	66,000	609.747,836	4.649.063,186	361,409	361,559	0,150	12,8917	0	-1,49%			
Rec	67,000	609.748,037	4.649.064,166	361,398	361,544	0,146	12,8917	0	-1,49%			
Rec	68,000	609.748,238	4.649.065,145	361,387	361,529	0,142	12,8917	0	-1,49%			
Rec	69,000	609.748,439	4.649.066,125	361,375	361,515	0,140	12,8917	0	-1,49%			
Rec	70,000	609.748,641	4.649.067,104	361,364	361,500	0,136	12,8917	0	-1,49%			
Rec	70,494	609.748,740	4.649.067,588	361,359	361,492	0,134	12,8917	0	-1,49%		T.E.	
Rec	71,000	609.748,842	4.649.068,084	361,353	361,485	0,132	12,8917	0	-1,45%			
Rec	72,000	609.749,043	4.649.069,064	361,341	361,471	0,130	12,8917	0	-1,39%			
Rec	73,000	609.749,244	4.649.070,043	361,330	361,457	0,127	12,8917	0	-1,32%			
Rec	74,000	609.749,445	4.649.071,023	361,319	361,444	0,125	12,8917	0	-1,25%			
Rec	75,000	609.749,646	4.649.072,002	361,308	361,432	0,124	12,8917	0	-1,19%			
Rec	76,000	609.749,847	4.649.072,982	361,296	361,421	0,125	12,8917	0	-1,12%			
Rec	77,000	609.750,048	4.649.073,961	361,285	361,410	0,125	12,8917	0	-1,05%			
Rec	78,000	609.750,250	4.649.074,941	361,274	361,400	0,126	12,8917	0	-0,99%			
Rec	79,000	609.750,451	4.649.075,921	361,262	361,390	0,128	12,8917	0	-0,92%			
Rec	80,000	609.750,652	4.649.076,900	361,251	361,381	0,130	12,8917	0	-0,85%		V.	
Rec	81,000	609.750,853	4.649.077,880	361,240	361,373	0,133	12,8917	0	-0,79%			
Rec	82,000	609.751,054	4.649.078,859	361,228	361,365	0,137	12,8917	0	-0,72%			

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REPLANTEO CAMINO TRAMO T20-T21 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	83,000	609.751,255	4.649.079,839	361,217	361,359	0,142	12,8917	0	-0,65%			
Rec	84,000	609.751,456	4.649.080,818	361,206	361,352	0,146	12,8917	0	-0,59%			
Rec	85,000	609.751,657	4.649.081,798	361,194	361,347	0,153	12,8917	0	-0,52%			
Rec	86,000	609.751,859	4.649.082,777	361,183	361,342	0,159	12,8917	0	-0,45%			
Rec	87,000	609.752,060	4.649.083,757	361,172	361,338	0,166	12,8917	0	-0,39%			
Rec	88,000	609.752,261	4.649.084,737	361,160	361,334	0,174	12,8917	0	-0,32%			
Rec	89,000	609.752,462	4.649.085,716	361,149	361,331	0,182	12,8917	0	-0,25%			
Rec	89,506	609.752,564	4.649.086,212	361,143	361,330	0,187	12,8917	0	-0,22%		T.S.	
Rec	90,000	609.752,663	4.649.086,696	361,138	361,329	0,191	12,8917	0	-0,22%			
Rec	91,000	609.752,864	4.649.087,675	361,127	361,327	0,200	12,8917	0	-0,22%			
Rec	92,000	609.753,065	4.649.088,655	361,118	361,325	0,207	12,8917	0	-0,22%			
Rec	93,000	609.753,266	4.649.089,634	361,111	361,322	0,211	12,8917	0	-0,22%			
Rec	94,000	609.753,468	4.649.090,614	361,103	361,320	0,217	12,8917	0	-0,22%			
Rec	95,000	609.753,669	4.649.091,594	361,095	361,318	0,223	12,8917	0	-0,22%			
Rec	96,000	609.753,870	4.649.092,573	361,088	361,316	0,228	12,8917	0	-0,22%			
Rec	97,000	609.754,071	4.649.093,553	361,080	361,314	0,234	12,8917	0	-0,22%			
Rec	98,000	609.754,272	4.649.094,532	361,073	361,311	0,238	12,8917	0	-0,22%			
Rec	99,000	609.754,473	4.649.095,512	361,065	361,309	0,244	12,8917	0	-0,22%			
Rec	100,000	609.754,674	4.649.096,491	361,058	361,307	0,249	12,8917	0	-0,22%			
Rec	101,000	609.754,875	4.649.097,471	361,050	361,305	0,255	12,8917	0	-0,22%			
Rec	102,000	609.755,076	4.649.098,451	361,043	361,303	0,260	12,8917	0	-0,22%			
Rec	103,000	609.755,278	4.649.099,430	361,035	361,300	0,265	12,8917	0	-0,22%			
Rec	104,000	609.755,479	4.649.100,410	361,028	361,298	0,270	12,8917	0	-0,22%			
Rec	105,000	609.755,680	4.649.101,389	361,020	361,296	0,276	12,8917	0	-0,22%			
Rec	106,000	609.755,881	4.649.102,369	361,012	361,294	0,282	12,8917	0	-0,22%			
Rec	107,000	609.756,082	4.649.103,348	361,005	361,292	0,287	12,8917	0	-0,22%			
Rec	108,000	609.756,283	4.649.104,328	361,003	361,289	0,286	12,8917	0	-0,22%			
Rec	109,000	609.756,484	4.649.105,308	361,003	361,287	0,284	12,8917	0	-0,22%			
Rec	110,000	609.756,685	4.649.106,287	361,002	361,285	0,283	12,8917	0	-0,22%			
Rec	111,000	609.756,887	4.649.107,267	361,002	361,283	0,281	12,8917	0	-0,22%			
Rec	112,000	609.757,088	4.649.108,246	361,001	361,281	0,280	12,8917	0	-0,22%			
Rec	113,000	609.757,289	4.649.109,226	361,001	361,278	0,277	12,8917	0	-0,22%			
Rec	114,000	609.757,490	4.649.110,205	361,001	361,276	0,275	12,8917	0	-0,22%			
Rec	115,000	609.757,691	4.649.111,185	361,001	361,274	0,273	12,8917	0	-0,22%			
Rec	116,000	609.757,892	4.649.112,164	361,001	361,272	0,271	12,8917	0	-0,22%			
Rec	117,000	609.758,093	4.649.113,144	361,001	361,270	0,269	12,8917	0	-0,22%			
Rec	117,789	609.758,252	4.649.113,917	361,001	361,268	0,267	12,8917	0	-0,22%		T.E.	
Rec	118,000	609.758,294	4.649.114,124	361,001	361,267	0,266	12,8917	0	-0,28%			
Rec	119,000	609.758,496	4.649.115,103	361,001	361,263	0,262	12,8917	0	-0,57%			
Rec	120,000	609.758,697	4.649.116,083	361,001	361,256	0,255	12,8917	0	-0,85%			
Rec	121,000	609.758,898	4.649.117,062	361,001	361,246	0,245	12,8917	0	-1,14%			
Rec	122,000	609.759,099	4.649.118,042	361,001	361,233	0,232	12,8917	0	-1,42%			
Rec	123,000	609.759,300	4.649.119,021	361,001	361,218	0,217	12,8917	0	-1,71%			
Rec	124,000	609.759,501	4.649.120,001	361,001	361,199	0,198	12,8917	0	-1,99%			
Rec	125,000	609.759,702	4.649.120,981	361,002	361,178	0,176	12,8917	0	-2,28%		V.	
Rec	126,000	609.759,903	4.649.121,960	361,002	361,153	0,151	12,8917	0	-2,57%			
Rec	127,000	609.760,105	4.649.122,940	361,002	361,126	0,124	12,8917	0	-2,85%			
Rec	128,000	609.760,306	4.649.123,919	361,001	361,096	0,095	12,8917	0	-3,14%			
Rec	129,000	609.760,507	4.649.124,899	361,000	361,064	0,064	12,8917	0	-3,42%			
Rec	130,000	609.760,708	4.649.125,878	360,847	361,028	0,181	12,8917	0	-3,71%			
Cur	130,487	609.760,806	4.649.126,355	360,780	361,010	0,230	12,8917	-20	-3,85%	P.S.		
Cur	131,000	609.760,903	4.649.126,859	360,687	360,989	0,302	11,2585	-20	-3,99%			
Cur	132,000	609.761,054	4.649.127,848	360,510	360,948	0,438	8,0754	-20	-4,28%			
Cur	132,211	609.761,079	4.649.128,057	360,464	360,939	0,475	7,4037	-20	-4,34%		T.S.	
Cur	133,000	609.761,155	4.649.128,842	360,292	360,905	0,613	4,8923	-20	-4,34%			
Cur	134,000	609.761,207	4.649.129,841	359,491	360,861	1,370	1,7092	-20	-4,34%			ODT Ø1.000 L=6,00m
Cur	135,000	609.761,209	4.649.130,841	360,182	360,818	0,636	398,5261	-20	-4,34%			
Cur	136,000	609.761,161	4.649.131,840	360,313	360,775	0,462	395,3430	-20	-4,34%			
Cur	137,000	609.761,063	4.649.132,835	360,185	360,731	0,546	392,1599	-20	-4,34%			
Cur	137,034	609.761,059	4.649.132,868	360,181	360,730	0,549	392,0517	-20	-4,34%		T.E.	
Cur	138,000	609.760,915	4.649.133,824	360,061	360,689	0,628	388,9768	-20	-4,06%			
Cur	139,000	609.760,719	4.649.134,804	359,970	360,650	0,680	385,7937	-20	-3,78%			
Cur	140,000	609.760,473	4.649.135,773	359,964	360,614	0,650	382,6106	-20	-3,49%			
Cur	141,000	609.760,179	4.649.136,729	359,960	360,580	0,620	379,4275	-20	-3,21%			
Cur	142,000	609.759,838	4.649.137,669	359,959	360,549	0,590	376,2444	-20	-2,92%			
Cur	143,000	609.759,450	4.649.138,591	359,957	360,522	0,565	373,0613	-20	-2,64%			
Cur	144,000	609.759,017	4.649.139,492	359,957	360,497	0,540	369,8782	-20	-2,35%			
Rec	144,630	609.758,722	4.649.140,048	359,956	360,482	0,526	367,8740	0	-2,17%	P.S.	V.	
Rec	145,000	609.758,542	4.649.140,372	359,956	360,475	0,519	367,8740	0	-2,06%			
Rec	146,000	609.758,059	4.649.141,247	359,956	360,455	0,499	367,8740	0	-1,78%			
Rec	147,000	609.757,575	4.649.142,122	359,956	360,439	0,483	367,8740	0	-1,49%			
Rec	148,000	609.757,092	4.649.142,998	359,956	360,426	0,470	367,8740	0	-1,21%			
Rec	149,000	609.756,609	4.649.143,873	359,955	360,415	0,460	367,8740	0	-0,92%			
Rec	150,000	609.756,125	4.649.144,748	359,955	360,407	0,452	367,8740	0	-0,64%			
Rec	151,000	609.755,642	4.649.145,624	359,954	360,402	0,448	367,8740	0	-0,35%			
Rec	152,000	609.755,158	4.649.146,499	359,953	360,400	0,447	367,8740	0	-0,06%			
Cur	152,159	609.755,081	4.649.146,638	359,952	360,400	0,448	367,8740	-50	-0,02%	P.S.		
Cur	152,226	609.755,049	4.649.146,697	359,952	360,400	0,448	367,7889	-50	0,00%		T.S.	
Cur	153,000	609.754,668	4.649.147,371	359,951	360,400	0,449	366,8034	-50	0,00%			
Cur	154,000	609.754,162	4.649.148,233	359,949	360,400	0,451	365,5302	-50	0,00%			
Cur	155,000	609.753,638	4.649.149,085	359,947	360,400	0,453	364,2569	-50	0,00%			
Cur	156,000	609.753,097	4.649.149,926	359,945	360,400	0,455	362,9837	-50	0,00%			
Cur	157,000	609.752,539	4.649.150,756	359,943	360,400	0,457	361,7104	-50	0,00%			
Cur	158,000	609.751,965	4.649.151,575	359,940	360,400	0,460	360,4372	-50	0,00%			
Cur	159,000	609.751,375	4.649.152,382	359,858	360,400	0,542	359,1640	-50	0,00%			
Cur	160,000	609.750,769	4.649.153,177	359,922	360,400	0,478	357,8907	-50	0,00%			

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REPLANTEO CAMINO TRAMO T20-T21 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	161,000	609.750,147	4.649.153,960	359,921	360,400	0,479	356,6175	-50	0,00%			
Cur	162,000	609.749,509	4.649.154,730	359,921	360,400	0,479	355,3443	-50	0,00%			
Cur	163,000	609.748,856	4.649.155,488	359,920	360,400	0,480	354,0710	-50	0,00%			
Cur	164,000	609.748,188	4.649.156,232	359,920	360,400	0,480	352,7978	-50	0,00%			
Cur	165,000	609.747,505	4.649.156,963	359,919	360,400	0,481	351,5245	-50	0,00%			
Cur	166,000	609.746,808	4.649.157,680	359,916	360,400	0,484	350,2513	-50	0,00%			
Rec	166,867	609.746,192	4.649.158,290	359,914	360,400	0,486	349,1471	0	0,00%	P.S.		
Rec	167,000	609.746,097	4.649.158,383	359,914	360,400	0,486	349,1471	0	0,00%			
Rec	168,000	609.745,380	4.649.159,080	359,913	360,400	0,487	349,1471	0	0,00%			
Rec	169,000	609.744,664	4.649.159,778	359,912	360,400	0,488	349,1471	0	0,00%			
Rec	170,000	609.743,947	4.649.160,475	359,911	360,400	0,489	349,1471	0	0,00%			
Rec	171,000	609.743,231	4.649.161,173	359,911	360,400	0,489	349,1471	0	0,00%			
Rec	172,000	609.742,514	4.649.161,870	359,910	360,400	0,490	349,1471	0	0,00%			
Rec	173,000	609.741,798	4.649.162,568	359,911	360,400	0,489	349,1471	0	0,00%			
Rec	174,000	609.741,081	4.649.163,266	359,912	360,400	0,488	349,1471	0	0,00%			
Rec	175,000	609.740,365	4.649.163,963	359,919	360,400	0,481	349,1471	0	0,00%			
Rec	176,000	609.739,648	4.649.164,661	359,927	360,400	0,473	349,1471	0	0,00%			
Rec	177,000	609.738,932	4.649.165,358	359,936	360,400	0,464	349,1471	0	0,00%			
Rec	178,000	609.738,215	4.649.166,056	359,944	360,400	0,456	349,1471	0	0,00%			
Rec	179,000	609.737,499	4.649.166,753	359,953	360,400	0,447	349,1471	0	0,00%			
Rec	180,000	609.736,782	4.649.167,451	359,961	360,400	0,439	349,1471	0	0,00%			
Rec	181,000	609.736,066	4.649.168,149	359,970	360,400	0,430	349,1471	0	0,00%			
Rec	182,000	609.735,349	4.649.168,846	359,967	360,400	0,433	349,1471	0	0,00%			
Rec	183,000	609.734,633	4.649.169,544	359,964	360,400	0,436	349,1471	0	0,00%			
Rec	184,000	609.733,916	4.649.170,241	359,960	360,400	0,440	349,1471	0	0,00%			
Rec	185,000	609.733,200	4.649.170,939	359,956	360,400	0,444	349,1471	0	0,00%			
Rec	186,000	609.732,483	4.649.171,636	359,952	360,400	0,448	349,1471	0	0,00%			ODT Ø500 L=6,00m
Rec	187,000	609.731,767	4.649.172,334	359,948	360,400	0,452	349,1471	0	0,00%			
Rec	188,000	609.731,050	4.649.173,032	359,945	360,400	0,455	349,1471	0	0,00%			
Rec	189,000	609.730,334	4.649.173,729	359,941	360,400	0,459	349,1471	0	0,00%			
Rec	190,000	609.729,617	4.649.174,427	359,937	360,400	0,463	349,1471	0	0,00%			
Rec	191,000	609.728,901	4.649.175,124	359,934	360,400	0,466	349,1471	0	0,00%			
Rec	192,000	609.728,184	4.649.175,822	359,935	360,400	0,465	349,1471	0	0,00%			
Rec	193,000	609.727,467	4.649.176,519	359,935	360,400	0,465	349,1471	0	0,00%			
Rec	194,000	609.726,751	4.649.177,217	359,936	360,400	0,464	349,1471	0	0,00%			
Rec	195,000	609.726,034	4.649.177,915	359,936	360,400	0,464	349,1471	0	0,00%			
Rec	196,000	609.725,318	4.649.178,612	359,936	360,400	0,464	349,1471	0	0,00%			
Rec	197,000	609.724,601	4.649.179,310	359,936	360,400	0,464	349,1471	0	0,00%			
Rec	198,000	609.723,885	4.649.180,007	359,935	360,400	0,465	349,1471	0	0,00%			
	198,480	609.723,541	4.649.180,342	359,935	360,400	0,465	349,1471		0,00%			

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REPLANTEO CAMINO TRAMO T20-T21 A-T21

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	611.416,223	4.648.647,685	368,708	368,708	0,000	282,7831	0	0,94%			
Rec	1,000	611.415,260	4.648.647,417	368,735	368,717	-0,018	282,7831	0	0,94%			
Cur	1,140	611.415,125	4.648.647,380	368,737	368,719	-0,018	282,7831	6	0,94%	P.S.		
Cur	2,000	611.414,283	4.648.647,210	368,756	368,727	-0,029	291,9113	6	0,94%			ODT Ø500 LATERAL L=8,00m
Cur	3,000	611.413,285	4.648.647,167	368,784	368,736	-0,048	302,5216	6	0,94%			
Cur	4,000	611.412,293	4.648.647,289	368,768	368,745	-0,023	313,1319	6	0,94%			
Cur	5,000	611.411,336	4.648.647,574	368,751	368,755	0,004	323,7423	6	0,94%			
Cur	6,000	611.410,439	4.648.648,015	368,732	368,764	0,032	334,3526	6	0,94%			
Cur	7,000	611.409,628	4.648.648,597	368,714	368,774	0,060	344,9629	6	0,94%			
Cur	8,000	611.408,925	4.648.649,307	368,689	368,783	0,094	355,5733	6	0,94%			
Cur	9,000	611.408,349	4.648.650,123	368,645	368,792	0,147	366,1836	6	0,94%			
Cur	10,000	611.407,916	4.648.651,023	368,635	368,802	0,167	376,7939	6	0,94%			
Rec	10,564	611.407,740	4.648.651,559	368,633	368,807	0,174	382,7831	0	0,94%	P.S.		
Rec	11,000	611.407,624	4.648.651,979	368,631	368,811	0,180	382,7831	0	0,94%			
Rec	12,000	611.407,357	4.648.652,942	368,629	368,820	0,191	382,7831	0	0,94%			
Rec	13,000	611.407,090	4.648.653,906	368,632	368,830	0,198	382,7831	0	0,94%			
Rec	14,000	611.406,822	4.648.654,870	368,635	368,839	0,204	382,7831	0	0,94%			
Rec	15,000	611.406,555	4.648.655,833	368,638	368,849	0,211	382,7831	0	0,94%			
Rec	16,000	611.406,288	4.648.656,797	368,642	368,858	0,216	382,7831	0	0,94%			
Rec	17,000	611.406,021	4.648.657,761	368,645	368,867	0,222	382,7831	0	0,94%			
Rec	18,000	611.405,754	4.648.658,724	368,648	368,877	0,229	382,7831	0	0,94%			
Rec	19,000	611.405,487	4.648.659,688	368,651	368,886	0,235	382,7831	0	0,94%			
Rec	20,000	611.405,220	4.648.660,652	368,654	368,895	0,241	382,7831	0	0,94%			
Rec	21,000	611.404,952	4.648.661,615	368,657	368,905	0,248	382,7831	0	0,94%			
Rec	22,000	611.404,685	4.648.662,579	368,660	368,914	0,254	382,7831	0	0,94%			
Rec	23,000	611.404,418	4.648.663,543	368,663	368,923	0,260	382,7831	0	0,94%			
Rec	24,000	611.404,151	4.648.664,506	368,666	368,933	0,267	382,7831	0	0,94%			
Rec	25,000	611.403,884	4.648.665,470	368,669	368,942	0,273	382,7831	0	0,94%			
Rec	26,000	611.403,617	4.648.666,434	368,672	368,952	0,280	382,7831	0	0,94%			
Rec	26,606	611.403,455	4.648.667,018	368,676	368,957	0,281	382,7831	0	0,94%		T.E.	
Rec	27,000	611.403,349	4.648.667,397	368,679	368,961	0,282	382,7831	0	1,07%			
Rec	28,000	611.403,082	4.648.668,361	368,698	368,974	0,276	382,7831	0	1,40%			
Rec	29,000	611.402,815	4.648.669,325	368,718	368,989	0,271	382,7831	0	1,73%			
Rec	30,000	611.402,548	4.648.670,288	368,734	369,008	0,274	382,7831	0	2,07%		V.	
Rec	31,000	611.402,281	4.648.671,252	368,738	369,031	0,293	382,7831	0	2,40%			
Rec	32,000	611.402,014	4.648.672,216	368,742	369,056	0,314	382,7831	0	2,73%			
Rec	33,000	611.401,746	4.648.673,179	368,746	369,085	0,339	382,7831	0	3,07%			
Rec	33,394	611.401,641	4.648.673,559	368,748	369,098	0,350	382,7831	0	3,20%		T.S.	
Rec	34,000	611.401,479	4.648.674,143	368,750	369,117	0,367	382,7831	0	3,20%			
Rec	35,000	611.401,212	4.648.675,106	368,769	369,149	0,380	382,7831	0	3,20%			
Rec	36,000	611.400,945	4.648.676,070	368,803	369,181	0,378	382,7831	0	3,20%			
Rec	37,000	611.400,678	4.648.677,034	368,839	369,213	0,374	382,7831	0	3,20%			
Rec	38,000	611.400,411	4.648.677,997	368,882	369,245	0,363	382,7831	0	3,20%			
Rec	39,000	611.400,143	4.648.678,961	368,929	369,277	0,348	382,7831	0	3,20%			
Rec	40,000	611.399,876	4.648.679,925	368,980	369,309	0,329	382,7831	0	3,20%			
Rec	41,000	611.399,609	4.648.680,888	369,024	369,341	0,317	382,7831	0	3,20%			
Rec	41,758	611.399,407	4.648.681,619	369,054	369,365	0,311	382,7831	0	3,20%		T.E.	
Rec	42,000	611.399,342	4.648.681,852	369,064	369,373	0,309	382,7831	0	3,12%			
Rec	43,000	611.399,075	4.648.682,816	369,104	369,402	0,298	382,7831	0	2,79%			
Rec	44,000	611.398,808	4.648.683,779	369,147	369,429	0,282	382,7831	0	2,45%			
Rec	45,000	611.398,541	4.648.684,743	369,188	369,451	0,263	382,7831	0	2,12%		V.	
Rec	46,000	611.398,273	4.648.685,707	369,229	369,471	0,242	382,7831	0	1,79%			
Rec	47,000	611.398,006	4.648.686,670	369,271	369,487	0,216	382,7831	0	1,45%			
Rec	48,000	611.397,739	4.648.687,634	369,316	369,500	0,184	382,7831	0	1,12%			
Rec	48,242	611.397,674	4.648.687,867	369,323	369,503	0,179	382,7831	0	1,04%		T.S.	
Rec	49,000	611.397,472	4.648.688,598	369,346	369,511	0,165	382,7831	0	1,04%			
Rec	50,000	611.397,205	4.648.689,561	369,359	369,521	0,162	382,7831	0	1,04%			
Rec	51,000	611.396,938	4.648.690,525	369,360	369,531	0,171	382,7831	0	1,04%			
Rec	52,000	611.396,670	4.648.691,489	369,360	369,542	0,182	382,7831	0	1,04%			
Cur	52,546	611.396,525	4.648.692,015	369,360	369,547	0,187	382,7831	-20	1,04%	P.S.		
Cur	53,000	611.396,398	4.648.692,451	369,360	369,552	0,192	381,3378	-20	1,04%			
Cur	54,000	611.396,086	4.648.693,401	369,363	369,563	0,200	378,1547	-20	1,04%			
Cur	55,000	611.395,726	4.648.694,333	369,368	369,573	0,205	374,9716	-20	1,04%			
Cur	55,349	611.395,589	4.648.694,655	369,370	369,577	0,206	373,8607	-20	1,04%		T.E.	
Cur	56,000	611.395,320	4.648.695,247	369,375	369,586	0,211	371,7885	-20	1,91%			
Cur	57,000	611.394,868	4.648.696,139	369,385	369,612	0,227	368,6054	-20	3,24%			
Cur	58,000	611.394,373	4.648.697,008	369,423	369,651	0,228	365,4223	-20	4,57%			
Cur	59,000	611.393,835	4.648.697,851	369,446	369,703	0,257	362,2392	-20	5,91%			
Cur	60,000	611.393,256	4.648.698,666	369,462	369,769	0,307	359,0561	-20	7,24%		V.	
Cur	61,000	611.392,636	4.648.699,451	369,480	369,848	0,368	355,8730	-20	8,57%			
Cur	62,000	611.391,978	4.648.700,204	369,501	369,941	0,440	352,6899	-20	9,91%			
Cur	63,000	611.391,284	4.648.700,923	369,536	370,046	0,510	349,5068	-20	11,24%			
Cur	64,000	611.390,554	4.648.701,606	369,589	370,166	0,577	346,3237	-20	12,57%			
Cur	64,651	611.390,061	4.648.702,031	369,624	370,250	0,626	344,2516	-20	13,44%		T.S.	
Cur	65,000	611.389,791	4.648.702,252	369,643	370,297	0,654	343,1406	-20	13,44%			
Cur	66,000	611.388,996	4.648.702,860	369,696	370,431	0,735	339,9576	-20	13,44%			
Cur	67,000	611.388,173	4.648.703,426	369,750	370,566	0,816	336,7745	-20	13,44%			
Cur	68,000	611.387,322	4.648.703,951	369,803	370,700	0,897	333,5914	-20	13,44%			
Cur	69,000	611.386,445	4.648.704,433	369,858	370,835	0,977	330,4083	-20	13,44%			
Cur	70,000	611.385,546	4.648.704,870	369,912	370,969	1,057	327,2252	-20	13,44%			
Cur	71,000	611.384,626	4.648.705,262	369,966	371,103	1,137	324,0421	-20	13,44%			ODT Ø1.000 L=8,50m
Cur	72,000	611.383,688	4.648.705,608	370,208	371,238	1,030	320,8590	-20	13,44%			
Cur	73,000	611.382,733	4.648.705,906	370,766	371,372	0,606	317,6759	-20	13,44%			
Cur	74,000	611.381,765	4.648.706,156	371,120	371,507	0,387	314,4928	-20	13,44%			
Cur	75,000	611.380,786	4.648.706,357	371,325	371,641	0,316	311,3097	-20	13,44%			
Cur	76,000	611.379,798	4.648.706,509	371,528	371,775	0,247	308,1266	-20	13,44%			

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REPLANTEO CAMINO TRAMO T20-T21 A-T21

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	77,000	611.378,803	4.648.706,611	371,728	371,910	0,182	304,9435	-20	13,44%			
Cur	78,000	611.377,804	4.648.706,664	371,926	372,044	0,118	301,7604	-20	13,44%			
Cur	79,000	611.376,805	4.648.706,667	372,096	372,179	0,083	298,5773	-20	13,44%			
Cur	80,000	611.375,806	4.648.706,619	372,244	372,313	0,069	295,3942	-20	13,44%			
Cur	80,731	611.375,078	4.648.706,553	372,345	372,411	0,066	293,0673	-20	13,44%		T.E.	
Cur	81,000	611.374,811	4.648.706,522	372,382	372,447	0,065	292,2111	-20	13,08%			
Cur	82,000	611.373,822	4.648.706,375	372,521	372,571	0,050	289,0280	-20	11,75%			
Rec	82,854	611.372,984	4.648.706,211	372,638	372,667	0,029	286,3110	0	10,61%	P.S.		
Rec	83,000	611.372,841	4.648.706,180	372,658	372,682	0,024	286,3110	0	10,41%			
Rec	84,000	611.371,864	4.648.705,966	372,793	372,779	-0,014	286,3110	0	9,08%			
Rec	85,000	611.370,887	4.648.705,753	372,927	372,864	-0,063	286,3110	0	7,75%		V.	
Rec	86,000	611.369,910	4.648.705,540	373,006	372,934	-0,072	286,3110	0	6,41%			
Rec	87,000	611.368,933	4.648.705,326	373,020	372,992	-0,028	286,3110	0	5,08%			
Rec	88,000	611.367,956	4.648.705,113	373,032	373,036	0,004	286,3110	0	3,75%			
Rec	89,000	611.366,979	4.648.704,899	373,045	373,067	0,022	286,3110	0	2,41%			
Rec	89,269	611.366,716	4.648.704,842	373,048	373,073	0,024	286,3110	0	2,06%		T.S.	
Rec	90,000	611.366,002	4.648.704,686	373,058	373,088	0,030	286,3110	0	2,06%			
Rec	91,000	611.365,025	4.648.704,473	373,071	373,109	0,038	286,3110	0	2,06%			
Rec	92,000	611.364,048	4.648.704,259	373,084	373,129	0,045	286,3110	0	2,06%			
Rec	93,000	611.363,071	4.648.704,046	373,096	373,150	0,054	286,3110	0	2,06%			
Rec	94,000	611.362,094	4.648.703,833	373,109	373,170	0,061	286,3110	0	2,06%			
Rec	95,000	611.361,117	4.648.703,619	373,121	373,191	0,070	286,3110	0	2,06%			
Rec	96,000	611.360,140	4.648.703,406	373,133	373,212	0,079	286,3110	0	2,06%			
Rec	97,000	611.359,163	4.648.703,192	373,145	373,232	0,087	286,3110	0	2,06%			
Rec	98,000	611.358,186	4.648.702,979	373,158	373,253	0,095	286,3110	0	2,06%			
Rec	99,000	611.357,209	4.648.702,766	373,170	373,273	0,103	286,3110	0	2,06%			
Rec	100,000	611.356,232	4.648.702,552	373,183	373,294	0,111	286,3110	0	2,06%			
Rec	101,000	611.355,256	4.648.702,339	373,198	373,315	0,117	286,3110	0	2,06%			
Rec	102,000	611.354,279	4.648.702,126	373,213	373,335	0,122	286,3110	0	2,06%			
Rec	103,000	611.353,302	4.648.701,912	373,228	373,356	0,128	286,3110	0	2,06%			
Rec	104,000	611.352,325	4.648.701,699	373,243	373,376	0,133	286,3110	0	2,06%			
Rec	104,854	611.351,490	4.648.701,517	373,254	373,394	0,140	286,3110	0	2,06%		T.E.	
Rec	105,000	611.351,348	4.648.701,485	373,256	373,397	0,141	286,3110	0	2,03%			
Rec	106,000	611.350,371	4.648.701,272	373,267	373,416	0,149	286,3110	0	1,83%			
Rec	107,000	611.349,394	4.648.701,059	373,268	373,434	0,166	286,3110	0	1,63%			
Rec	108,000	611.348,417	4.648.700,845	373,270	373,449	0,179	286,3110	0	1,43%			
Rec	109,000	611.347,440	4.648.700,632	373,279	373,462	0,183	286,3110	0	1,23%			
Rec	110,000	611.346,463	4.648.700,419	373,289	373,474	0,185	286,3110	0	1,03%		V.	
Rec	111,000	611.345,486	4.648.700,205	373,297	373,483	0,186	286,3110	0	0,83%			
Rec	112,000	611.344,509	4.648.699,992	373,303	373,490	0,187	286,3110	0	0,63%			
Rec	113,000	611.343,532	4.648.699,779	373,310	373,495	0,185	286,3110	0	0,43%			
Rec	114,000	611.342,555	4.648.699,565	373,319	373,499	0,180	286,3110	0	0,23%			
Rec	115,000	611.341,578	4.648.699,352	373,345	373,500	0,155	286,3110	0	0,03%			
Rec	115,146	611.341,435	4.648.699,321	373,349	373,500	0,151	286,3110	0	0,00%		T.S.	
Rec	116,000	611.340,601	4.648.699,138	373,375	373,500	0,125	286,3110	0	0,00%			
Rec	117,000	611.339,624	4.648.698,925	373,405	373,500	0,095	286,3110	0	0,00%			
Rec	118,000	611.338,647	4.648.698,712	373,435	373,500	0,065	286,3110	0	0,00%			
Rec	119,000	611.337,670	4.648.698,498	373,464	373,500	0,036	286,3110	0	0,00%			
Rec	120,000	611.336,693	4.648.698,285	373,494	373,500	0,006	286,3110	0	0,00%			
Rec	121,000	611.335,716	4.648.698,072	373,524	373,500	-0,024	286,3110	0	0,00%			
Rec	122,000	611.334,739	4.648.697,858	373,553	373,500	-0,053	286,3110	0	0,00%			
Rec	123,000	611.333,762	4.648.697,645	373,583	373,500	-0,083	286,3110	0	0,00%			
Rec	124,000	611.332,785	4.648.697,431	373,613	373,500	-0,113	286,3110	0	0,00%			
Rec	125,000	611.331,808	4.648.697,218	373,642	373,500	-0,142	286,3110	0	0,00%			
Rec	126,000	611.330,831	4.648.697,005	373,672	373,500	-0,172	286,3110	0	0,00%			
Rec	127,000	611.329,854	4.648.696,791	373,696	373,500	-0,196	286,3110	0	0,00%			
Rec	128,000	611.328,877	4.648.696,578	373,708	373,500	-0,208	286,3110	0	0,00%			
Rec	129,000	611.327,900	4.648.696,365	373,718	373,500	-0,218	286,3110	0	0,00%			
Rec	130,000	611.326,923	4.648.696,151	373,728	373,500	-0,228	286,3110	0	0,00%			
Rec	131,000	611.325,946	4.648.695,938	373,738	373,500	-0,238	286,3110	0	0,00%			
Rec	132,000	611.324,969	4.648.695,724	373,748	373,500	-0,248	286,3110	0	0,00%			
Rec	133,000	611.323,992	4.648.695,511	373,759	373,500	-0,259	286,3110	0	0,00%			
Rec	134,000	611.323,015	4.648.695,298	373,770	373,500	-0,270	286,3110	0	0,00%			
Rec	135,000	611.322,039	4.648.695,084	373,781	373,500	-0,281	286,3110	0	0,00%			
Rec	136,000	611.321,062	4.648.694,871	373,792	373,500	-0,292	286,3110	0	0,00%			
Rec	137,000	611.320,085	4.648.694,658	373,803	373,500	-0,303	286,3110	0	0,00%			
	137,941	611.319,165	4.648.694,457	373,813	373,500	-0,313	286,3110		0,00%			

OD Ø500
LATERAL
L=7,70m

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	602.776,978	4.660.980,977	377,428	377,428	0,000	247,3683	0	1,21%			
Rec	1,000	602.776,300	4.660.980,241	377,433	377,440	0,007	247,3683	0	1,21%			ODT Ø300 L=6,30m
Rec	2,000	602.775,623	4.660.979,506	377,443	377,452	0,009	247,3683	0	1,21%			
Rec	3,000	602.774,946	4.660.978,770	377,453	377,464	0,011	247,3683	0	1,21%			
Rec	4,000	602.774,269	4.660.978,034	377,464	377,476	0,012	247,3683	0	1,21%			
Rec	5,000	602.773,591	4.660.977,299	377,475	377,488	0,013	247,3683	0	1,21%			
Rec	6,000	602.772,914	4.660.976,563	377,485	377,500	0,015	247,3683	0	1,21%			
Rec	7,000	602.772,237	4.660.975,827	377,496	377,512	0,016	247,3683	0	1,21%			
Rec	8,000	602.771,560	4.660.975,091	377,506	377,525	0,019	247,3683	0	1,21%			
Rec	9,000	602.770,882	4.660.974,356	377,517	377,537	0,020	247,3683	0	1,21%			
Rec	10,000	602.770,205	4.660.973,620	377,528	377,549	0,021	247,3683	0	1,21%			
Rec	11,000	602.769,528	4.660.972,884	377,538	377,561	0,023	247,3683	0	1,21%			
Rec	12,000	602.768,850	4.660.972,148	377,549	377,573	0,024	247,3683	0	1,21%			
Rec	13,000	602.768,173	4.660.971,413	377,560	377,585	0,025	247,3683	0	1,21%			
Rec	14,000	602.767,496	4.660.970,677	377,570	377,597	0,027	247,3683	0	1,21%			
Rec	15,000	602.766,819	4.660.969,941	377,581	377,609	0,028	247,3683	0	1,21%			
Rec	16,000	602.766,141	4.660.969,206	377,592	377,621	0,029	247,3683	0	1,21%			
Rec	17,000	602.765,464	4.660.968,470	377,602	377,633	0,031	247,3683	0	1,21%			
Rec	18,000	602.764,787	4.660.967,734	377,613	377,645	0,032	247,3683	0	1,21%			
Rec	19,000	602.764,109	4.660.966,998	377,624	377,657	0,033	247,3683	0	1,21%			
Rec	20,000	602.763,432	4.660.966,263	377,634	377,669	0,035	247,3683	0	1,21%			
Rec	21,000	602.762,755	4.660.965,527	377,645	377,681	0,036	247,3683	0	1,21%			
Rec	22,000	602.762,078	4.660.964,791	377,655	377,693	0,038	247,3683	0	1,21%			
Rec	23,000	602.761,400	4.660.964,055	377,666	377,705	0,039	247,3683	0	1,21%			
Rec	24,000	602.760,723	4.660.963,320	377,677	377,718	0,041	247,3683	0	1,21%			
Rec	25,000	602.760,046	4.660.962,584	377,687	377,730	0,043	247,3683	0	1,21%			
Rec	26,000	602.759,368	4.660.961,848	377,698	377,742	0,044	247,3683	0	1,21%			
Rec	27,000	602.758,691	4.660.961,113	377,708	377,754	0,046	247,3683	0	1,21%			
Rec	28,000	602.758,014	4.660.960,377	377,719	377,766	0,047	247,3683	0	1,21%			
Rec	29,000	602.757,337	4.660.959,641	377,729	377,778	0,049	247,3683	0	1,21%			
Rec	30,000	602.756,659	4.660.958,905	377,740	377,790	0,050	247,3683	0	1,21%			
Rec	31,000	602.755,982	4.660.958,170	377,750	377,802	0,052	247,3683	0	1,21%			
Rec	32,000	602.755,305	4.660.957,434	377,761	377,814	0,053	247,3683	0	1,21%			
Rec	33,000	602.754,628	4.660.956,698	377,771	377,826	0,055	247,3683	0	1,21%			
Rec	34,000	602.753,950	4.660.955,962	377,782	377,838	0,056	247,3683	0	1,21%			
Rec	35,000	602.753,273	4.660.955,227	377,792	377,850	0,058	247,3683	0	1,21%			
Rec	36,000	602.752,596	4.660.954,491	377,802	377,862	0,060	247,3683	0	1,21%			
Rec	37,000	602.751,918	4.660.953,755	377,813	377,874	0,061	247,3683	0	1,21%			
Rec	38,000	602.751,241	4.660.953,020	377,823	377,886	0,063	247,3683	0	1,21%			
Rec	39,000	602.750,564	4.660.952,284	377,834	377,898	0,064	247,3683	0	1,21%			
Rec	40,000	602.749,887	4.660.951,548	377,844	377,911	0,067	247,3683	0	1,21%			
Rec	41,000	602.749,209	4.660.950,812	377,855	377,923	0,068	247,3683	0	1,21%			
Rec	42,000	602.748,532	4.660.950,077	377,865	377,935	0,070	247,3683	0	1,21%			
Rec	43,000	602.747,855	4.660.949,341	377,875	377,947	0,072	247,3683	0	1,21%			
Rec	44,000	602.747,177	4.660.948,605	377,886	377,959	0,073	247,3683	0	1,21%			
Rec	45,000	602.746,500	4.660.947,869	377,896	377,971	0,075	247,3683	0	1,21%			
Rec	46,000	602.745,823	4.660.947,134	377,907	377,983	0,076	247,3683	0	1,21%			
Rec	47,000	602.745,146	4.660.946,398	377,917	377,995	0,078	247,3683	0	1,21%			
Rec	48,000	602.744,468	4.660.945,662	377,928	378,007	0,079	247,3683	0	1,21%			
Rec	49,000	602.743,791	4.660.944,927	377,938	378,019	0,081	247,3683	0	1,21%			
Rec	50,000	602.743,114	4.660.944,191	377,948	378,031	0,083	247,3683	0	1,21%			
Rec	51,000	602.742,436	4.660.943,455	377,959	378,043	0,084	247,3683	0	1,21%			
Rec	52,000	602.741,759	4.660.942,719	377,969	378,055	0,086	247,3683	0	1,21%			
Rec	53,000	602.741,082	4.660.941,984	377,980	378,067	0,087	247,3683	0	1,21%			
Rec	54,000	602.740,405	4.660.941,248	377,990	378,079	0,089	247,3683	0	1,21%			
Rec	55,000	602.739,727	4.660.940,512	377,994	378,091	0,097	247,3683	0	1,21%			
Rec	56,000	602.739,050	4.660.939,777	377,995	378,104	0,109	247,3683	0	1,21%			
Rec	57,000	602.738,373	4.660.939,041	377,995	378,116	0,121	247,3683	0	1,21%			
Rec	58,000	602.737,696	4.660.938,305	377,995	378,128	0,133	247,3683	0	1,21%			
Rec	59,000	602.737,018	4.660.937,569	377,997	378,140	0,143	247,3683	0	1,21%			
Rec	60,000	602.736,341	4.660.936,834	378,001	378,152	0,151	247,3683	0	1,21%			
Rec	61,000	602.735,664	4.660.936,098	378,006	378,164	0,158	247,3683	0	1,21%			
Rec	62,000	602.734,986	4.660.935,362	378,013	378,176	0,163	247,3683	0	1,21%			
Rec	63,000	602.734,309	4.660.934,626	378,012	378,188	0,176	247,3683	0	1,21%			
Rec	64,000	602.733,632	4.660.933,891	378,009	378,200	0,191	247,3683	0	1,21%			
Rec	65,000	602.732,955	4.660.933,155	378,013	378,212	0,199	247,3683	0	1,21%			
Rec	66,000	602.732,277	4.660.932,419	378,016	378,224	0,208	247,3683	0	1,21%			
Rec	67,000	602.731,600	4.660.931,684	378,020	378,236	0,216	247,3683	0	1,21%			
Cur	67,419	602.731,316	4.660.931,376	378,022	378,241	0,219	247,3683	200	1,21%	P.S.		
Cur	68,000	602.730,922	4.660.930,948	378,028	378,248	0,220	247,5533	200	1,21%			
Cur	69,000	602.730,241	4.660.930,216	378,039	378,260	0,221	247,8717	200	1,21%			
Cur	70,000	602.729,556	4.660.929,488	378,050	378,272	0,222	248,1900	200	1,21%			
Cur	71,000	602.728,867	4.660.928,762	378,061	378,284	0,223	248,5083	200	1,21%			
Cur	72,000	602.728,175	4.660.928,041	378,072	378,297	0,225	248,8266	200	1,21%			
Cur	73,000	602.727,480	4.660.927,322	378,083	378,309	0,226	249,1449	200	1,21%			
Cur	74,000	602.726,780	4.660.926,608	378,094	378,321	0,227	249,4632	200	1,21%			
Cur	75,000	602.726,077	4.660.925,896	378,105	378,333	0,228	249,7815	200	1,21%			
Cur	76,000	602.725,371	4.660.925,189	378,115	378,345	0,230	250,0998	200	1,21%			
Cur	77,000	602.724,661	4.660.924,484	378,126	378,357	0,231	250,4181	200	1,21%			
Cur	78,000	602.723,947	4.660.923,784	378,137	378,369	0,232	250,7364	200	1,21%			
Cur	79,000	602.723,230	4.660.923,087	378,147	378,381	0,234	251,0548	200	1,21%			
Cur	80,000	602.722,510	4.660.922,393	378,158	378,393	0,235	251,3731	200	1,21%			
Cur	81,000	602.721,786	4.660.921,703	378,168	378,405	0,237	251,6914	200	1,21%			
Cur	82,000	602.721,059	4.660.921,017	378,179	378,417	0,238	252,0097	200	1,21%			
Cur	83,000	602.720,328	4.660.920,334	378,189	378,429	0,240	252,3280	200	1,21%			
Cur	84,000	602.719,594	4.660.919,655	378,200	378,441	0,241	252,6463	200	1,21%			

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REPLANTEO CAMINO TRAMO T16-T14y15 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	85,000	602.718,856	4.660.918,980	378,210	378,453	0,243	252,9646	200	1,21%			
Cur	86,000	602.718,115	4.660.918,309	378,221	378,465	0,244	253,2829	200	1,21%			
Cur	87,000	602.717,371	4.660.917,641	378,231	378,477	0,246	253,6012	200	1,21%			
Cur	88,000	602.716,623	4.660.916,977	378,241	378,490	0,249	253,9195	200	1,21%			
Cur	89,000	602.715,872	4.660.916,316	378,251	378,502	0,251	254,2379	200	1,21%			
Cur	90,000	602.715,118	4.660.915,660	378,262	378,514	0,252	254,5562	200	1,21%			
Cur	91,000	602.714,361	4.660.915,007	378,272	378,526	0,254	254,8745	200	1,21%			
Cur	92,000	602.713,600	4.660.914,358	378,282	378,538	0,256	255,1928	200	1,21%			
Cur	93,000	602.712,836	4.660.913,712	378,292	378,550	0,258	255,5111	200	1,21%			
Cur	94,000	602.712,069	4.660.913,071	378,302	378,562	0,260	255,8294	200	1,21%			
Cur	95,000	602.711,298	4.660.912,434	378,318	378,574	0,256	256,1477	200	1,21%			
Cur	96,000	602.710,525	4.660.911,800	378,338	378,586	0,248	256,4660	200	1,21%			
Cur	97,000	602.709,748	4.660.911,170	378,358	378,598	0,240	256,7843	200	1,21%			
Cur	98,000	602.708,968	4.660.910,544	378,378	378,610	0,232	257,1026	200	1,21%			
Cur	99,000	602.708,185	4.660.909,922	378,398	378,622	0,224	257,4210	200	1,21%			
Cur	100,000	602.707,399	4.660.909,304	378,418	378,634	0,216	257,7393	200	1,21%			
Cur	101,000	602.706,610	4.660.908,690	378,438	378,646	0,208	258,0576	200	1,21%			
Cur	102,000	602.705,818	4.660.908,080	378,458	378,658	0,200	258,3759	200	1,21%			
Cur	103,000	602.705,022	4.660.907,473	378,478	378,671	0,193	258,6942	200	1,21%			
Cur	104,000	602.704,224	4.660.906,871	378,498	378,683	0,185	259,0125	200	1,21%			
Cur	105,000	602.703,423	4.660.906,273	378,519	378,695	0,176	259,3308	200	1,21%			
Cur	106,000	602.702,618	4.660.905,679	378,539	378,707	0,168	259,6491	200	1,21%			
Cur	107,000	602.701,811	4.660.905,088	378,559	378,719	0,160	259,9674	200	1,21%			
Cur	108,000	602.701,001	4.660.904,502	378,579	378,731	0,152	260,2857	200	1,21%			
Cur	109,000	602.700,188	4.660.903,920	378,599	378,743	0,144	260,6041	200	1,21%			
Cur	110,000	602.699,372	4.660.903,342	378,619	378,755	0,136	260,9224	200	1,21%			
Cur	111,000	602.698,553	4.660.902,768	378,639	378,767	0,128	261,2407	200	1,21%			
Cur	112,000	602.697,731	4.660.902,198	378,659	378,779	0,120	261,5590	200	1,21%			
Rec	112,283	602.697,498	4.660.902,038	378,664	378,782	0,118	261,6490	0	1,21%	P.S.		
Rec	113,000	602.696,907	4.660.901,631	378,679	378,791	0,112	261,6490	0	1,21%			
Rec	114,000	602.696,083	4.660.901,065	378,699	378,803	0,104	261,6490	0	1,21%			
Rec	115,000	602.695,260	4.660.900,498	378,719	378,815	0,096	261,6490	0	1,21%			
Rec	116,000	602.694,436	4.660.899,931	378,739	378,827	0,088	261,6490	0	1,21%			
Rec	116,691	602.693,866	4.660.899,540	378,753	378,836	0,083	261,6490	0	1,21%		T.E.	
Rec	117,000	602.693,612	4.660.899,365	378,759	378,839	0,080	261,6490	0	1,20%			
Rec	118,000	602.692,788	4.660.898,798	378,779	378,851	0,072	261,6490	0	1,17%			
Rec	119,000	602.691,964	4.660.898,232	378,799	378,863	0,064	261,6490	0	1,15%			
Rec	120,000	602.691,140	4.660.897,665	378,819	378,874	0,055	261,6490	0	1,12%			
Rec	121,000	602.690,316	4.660.897,098	378,838	378,885	0,047	261,6490	0	1,10%			
Rec	122,000	602.689,492	4.660.896,532	378,858	378,896	0,038	261,6490	0	1,07%			
Rec	123,000	602.688,668	4.660.895,965	378,878	378,907	0,029	261,6490	0	1,05%			
Rec	124,000	602.687,844	4.660.895,398	378,898	378,917	0,019	261,6490	0	1,02%			
Rec	125,000	602.687,020	4.660.894,832	378,918	378,927	0,009	261,6490	0	1,00%			
Rec	126,000	602.686,196	4.660.894,265	378,938	378,937	-0,001	261,6490	0	0,97%			
Rec	127,000	602.685,372	4.660.893,698	378,958	378,947	-0,011	261,6490	0	0,95%			
Cur	127,164	602.685,237	4.660.893,606	378,962	378,948	-0,014	261,6490	8	0,94%	P.S.	V.	
Cur	128,000	602.684,524	4.660.893,169	378,978	378,956	-0,022	268,3037	8	0,92%			
Cur	129,000	602.683,618	4.660.892,747	378,993	378,965	-0,028	276,2615	8	0,90%			
Cur	130,000	602.682,667	4.660.892,442	379,001	378,974	-0,027	284,2192	8	0,87%			
Cur	131,000	602.681,684	4.660.892,258	379,004	378,983	-0,021	292,1770	8	0,85%			
Cur	132,000	602.680,687	4.660.892,197	379,005	378,991	-0,014	300,1347	8	0,82%			
Cur	133,000	602.679,690	4.660.892,262	379,007	378,999	-0,008	308,0925	8	0,80%			
Cur	134,000	602.678,708	4.660.892,450	379,009	379,007	-0,002	316,0502	8	0,77%			
Cur	135,000	602.677,758	4.660.892,760	379,011	379,015	0,004	324,0080	8	0,75%			
Cur	136,000	602.676,854	4.660.893,185	379,012	379,022	0,010	331,9657	8	0,72%			
Cur	137,000	602.676,009	4.660.893,720	379,011	379,029	0,018	339,9235	8	0,70%			
Rec	137,385	602.675,703	4.660.893,953	379,010	379,032	0,022	342,9910	0	0,69%	P.S.		
Rec	137,637	602.675,506	4.660.894,111	379,010	379,033	0,024	342,9910	0	0,68%		T.S.	
Rec	138,000	602.675,223	4.660.894,337	379,009	379,036	0,027	342,9910	0	0,68%			
Rec	139,000	602.674,443	4.660.894,963	379,008	379,043	0,035	342,9910	0	0,68%			
Rec	140,000	602.673,662	4.660.895,588	379,006	379,050	0,044	342,9910	0	0,68%			
Rec	141,000	602.672,882	4.660.896,213	379,005	379,056	0,051	342,9910	0	0,68%			
Rec	142,000	602.672,101	4.660.896,838	379,004	379,063	0,059	342,9910	0	0,68%			
Rec	143,000	602.671,321	4.660.897,463	379,002	379,070	0,068	342,9910	0	0,68%			
Rec	144,000	602.670,540	4.660.898,088	379,000	379,077	0,077	342,9910	0	0,68%			
Rec	145,000	602.669,760	4.660.898,713	378,999	379,084	0,085	342,9910	0	0,68%			
Rec	146,000	602.668,979	4.660.899,339	378,997	379,091	0,094	342,9910	0	0,68%			
Rec	147,000	602.668,199	4.660.899,964	378,996	379,097	0,101	342,9910	0	0,68%			
Rec	148,000	602.667,418	4.660.900,589	378,995	379,104	0,109	342,9910	0	0,68%			
Rec	149,000	602.666,637	4.660.901,214	378,994	379,111	0,117	342,9910	0	0,68%			
Rec	150,000	602.665,857	4.660.901,839	378,993	379,118	0,125	342,9910	0	0,68%			
Rec	151,000	602.665,076	4.660.902,464	378,992	379,125	0,133	342,9910	0	0,68%			
Rec	152,000	602.664,296	4.660.903,089	378,991	379,132	0,141	342,9910	0	0,68%			
Rec	153,000	602.663,515	4.660.903,714	378,991	379,138	0,147	342,9910	0	0,68%			
Rec	154,000	602.662,735	4.660.904,340	378,992	379,145	0,153	342,9910	0	0,68%			
Rec	155,000	602.661,954	4.660.904,965	378,992	379,152	0,160	342,9910	0	0,68%			
Rec	156,000	602.661,174	4.660.905,590	378,992	379,159	0,167	342,9910	0	0,68%			
Rec	157,000	602.660,393	4.660.906,215	378,993	379,166	0,173	342,9910	0	0,68%			
Rec	158,000	602.659,613	4.660.906,840	378,993	379,173	0,180	342,9910	0	0,68%			
Rec	159,000	602.658,832	4.660.907,465	378,993	379,179	0,186	342,9910	0	0,68%			
Rec	160,000	602.658,052	4.660.908,090	378,994	379,186	0,192	342,9910	0	0,68%			
Rec	161,000	602.657,271	4.660.908,715	378,995	379,193	0,198	342,9910	0	0,68%			
Rec	162,000	602.656,491	4.660.909,341	378,996	379,200	0,204	342,9910	0	0,68%			
Rec	163,000	602.655,710	4.660.909,966	378,997	379,207	0,210	342,9910	0	0,68%			
Rec	164,000	602.654,930	4.660.910,591	378,999	379,213	0,214	342,9910	0	0,68%			
Rec	165,000	602.654,149	4.660.911,216	379,000	379,220	0,220	342,9910	0	0,68%			
Rec	166,000	602.653,369	4.660.911,841	379,000	379,227	0,227	342,9910	0	0,68%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T16-T14y15 C-01

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	167,000	602.652,588	4.660.912,466	379,001	379,234	0,233	342,9910	0	0,68%			
Rec	168,000	602.651,808	4.660.913,091	379,001	379,241	0,240	342,9910	0	0,68%			
Rec	169,000	602.651,027	4.660.913,717	379,001	379,248	0,247	342,9910	0	0,68%			
Rec	170,000	602.650,247	4.660.914,342	379,002	379,254	0,252	342,9910	0	0,68%			
Rec	171,000	602.649,466	4.660.914,967	379,002	379,261	0,259	342,9910	0	0,68%			
Rec	172,000	602.648,686	4.660.915,592	379,002	379,268	0,266	342,9910	0	0,68%			
Rec	173,000	602.647,905	4.660.916,217	379,003	379,275	0,272	342,9910	0	0,68%			
Rec	174,000	602.647,124	4.660.916,842	379,003	379,282	0,279	342,9910	0	0,68%			
Rec	175,000	602.646,344	4.660.917,467	379,003	379,289	0,286	342,9910	0	0,68%			
Rec	175,467	602.645,979	4.660.917,759	379,003	379,292	0,289	342,9910	0	0,68%		T.E.	
Rec	176,000	602.645,563	4.660.918,092	379,003	379,295	0,292	342,9910	0	0,66%			
Rec	177,000	602.644,783	4.660.918,718	379,004	379,302	0,298	342,9910	0	0,62%			
Rec	178,000	602.644,002	4.660.919,343	379,004	379,308	0,304	342,9910	0	0,58%			
Rec	179,000	602.643,222	4.660.919,968	379,004	379,313	0,309	342,9910	0	0,54%			
Rec	180,000	602.642,441	4.660.920,593	379,004	379,319	0,315	342,9910	0	0,50%			
Rec	181,000	602.641,661	4.660.921,218	379,004	379,323	0,319	342,9910	0	0,46%			
Rec	182,000	602.640,880	4.660.921,843	379,004	379,328	0,324	342,9910	0	0,42%			
Rec	183,000	602.640,100	4.660.922,468	379,004	379,332	0,328	342,9910	0	0,38%			
Rec	184,000	602.639,319	4.660.923,094	379,004	379,335	0,331	342,9910	0	0,34%		V.	
Rec	185,000	602.638,539	4.660.923,719	379,004	379,339	0,335	342,9910	0	0,30%			
Rec	186,000	602.637,758	4.660.924,344	379,004	379,341	0,337	342,9910	0	0,26%			
Rec	187,000	602.636,978	4.660.924,969	379,004	379,344	0,340	342,9910	0	0,22%			
Rec	188,000	602.636,197	4.660.925,594	379,004	379,346	0,342	342,9910	0	0,18%			
Rec	189,000	602.635,417	4.660.926,219	379,004	379,348	0,344	342,9910	0	0,14%			
Rec	190,000	602.634,636	4.660.926,844	379,004	379,349	0,345	342,9910	0	0,10%			
Rec	191,000	602.633,856	4.660.927,469	379,004	379,350	0,346	342,9910	0	0,06%			
Rec	192,000	602.633,075	4.660.928,095	379,004	379,350	0,346	342,9910	0	0,02%			
Rec	192,533	602.632,659	4.660.928,428	379,004	379,350	0,346	342,9910	0	0,00%		T.S.	
Rec	193,000	602.632,295	4.660.928,720	379,004	379,350	0,346	342,9910	0	0,00%			
Rec	194,000	602.631,514	4.660.929,345	379,004	379,350	0,346	342,9910	0	0,00%			
Rec	195,000	602.630,734	4.660.929,970	379,004	379,350	0,346	342,9910	0	0,00%			
Rec	196,000	602.629,953	4.660.930,595	379,003	379,350	0,347	342,9910	0	0,00%			
Rec	197,000	602.629,173	4.660.931,220	379,003	379,350	0,347	342,9910	0	0,00%			
Rec	198,000	602.628,392	4.660.931,845	379,003	379,350	0,347	342,9910	0	0,00%			
Rec	199,000	602.627,612	4.660.932,471	379,003	379,350	0,347	342,9910	0	0,00%			
Rec	200,000	602.626,831	4.660.933,096	379,002	379,350	0,348	342,9910	0	0,00%			
Rec	201,000	602.626,050	4.660.933,721	379,002	379,350	0,348	342,9910	0	0,00%			
Rec	202,000	602.625,270	4.660.934,346	379,002	379,350	0,348	342,9910	0	0,00%			
Rec	203,000	602.624,489	4.660.934,971	379,001	379,350	0,349	342,9910	0	0,00%			
	203,165	602.624,360	4.660.935,074	379,001	379,350	0,349	342,9910		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	601.218,950	4.661.350,533	377,664	377,664	0,000	112,4332	0	1,64%			
Rec	1,000	601.219,931	4.661.350,339	377,813	377,680	-0,133	112,4332	0	1,64%			ODT Ø500 L=7,00m
Rec	2,000	601.220,912	4.661.350,145	377,902	377,697	-0,205	112,4332	0	1,64%			
Rec	3,000	601.221,893	4.661.349,951	377,957	377,713	-0,244	112,4332	0	1,64%			
Rec	4,000	601.222,874	4.661.349,757	378,000	377,730	-0,270	112,4332	0	1,64%			
Rec	5,000	601.223,855	4.661.349,563	378,001	377,746	-0,255	112,4332	0	1,64%			
Rec	6,000	601.224,836	4.661.349,369	378,002	377,762	-0,240	112,4332	0	1,64%			
Rec	7,000	601.225,817	4.661.349,175	378,002	377,779	-0,223	112,4332	0	1,64%			
Rec	8,000	601.226,798	4.661.348,981	378,001	377,795	-0,206	112,4332	0	1,64%			
Rec	9,000	601.227,779	4.661.348,787	378,000	377,812	-0,188	112,4332	0	1,64%			
Rec	9,912	601.228,674	4.661.348,610	377,988	377,827	-0,161	112,4332	0	1,64%		T.E.	
Rec	10,000	601.228,760	4.661.348,593	377,987	377,828	-0,159	112,4332	0	1,64%			
Rec	11,000	601.229,741	4.661.348,398	377,982	377,844	-0,138	112,4332	0	1,59%			
Rec	12,000	601.230,722	4.661.348,204	377,982	377,860	-0,122	112,4332	0	1,54%			
Rec	13,000	601.231,703	4.661.348,010	377,988	377,875	-0,113	112,4332	0	1,49%			
Rec	14,000	601.232,684	4.661.347,816	377,990	377,890	-0,100	112,4332	0	1,44%			
Rec	15,000	601.233,665	4.661.347,622	377,992	377,904	-0,088	112,4332	0	1,39%			
Rec	16,000	601.234,646	4.661.347,428	377,993	377,917	-0,076	112,4332	0	1,34%			
Rec	17,000	601.235,627	4.661.347,234	377,996	377,931	-0,065	112,4332	0	1,29%			
Rec	18,000	601.236,608	4.661.347,040	377,999	377,943	-0,056	112,4332	0	1,24%			
Rec	19,000	601.237,589	4.661.346,846	378,000	377,955	-0,045	112,4332	0	1,19%			
Rec	20,000	601.238,570	4.661.346,652	378,001	377,967	-0,034	112,4332	0	1,14%			
Cur	20,528	601.239,088	4.661.346,549	378,001	377,973	-0,028	112,4332	10	1,11%	P.S.	V.	
Cur	21,000	601.239,549	4.661.346,447	378,001	377,978	-0,023	115,4390	10	1,09%			
Cur	22,000	601.240,506	4.661.346,159	378,001	377,989	-0,012	121,8052	10	1,04%			
Cur	23,000	601.241,429	4.661.345,776	378,001	377,999	-0,002	128,1714	10	0,99%			
Cur	24,000	601.242,310	4.661.345,304	378,001	378,008	0,007	134,5376	10	0,94%			
Cur	25,000	601.243,139	4.661.344,745	378,001	378,018	0,017	140,9038	10	0,89%			
Cur	26,000	601.243,909	4.661.344,107	378,001	378,026	0,025	147,2700	10	0,84%			
Rec	26,246	601.244,088	4.661.343,939	378,001	378,028	0,027	148,8347	0	0,82%	P.S.		
Rec	27,000	601.244,631	4.661.343,415	378,001	378,034	0,033	148,8347	0	0,79%			
Rec	28,000	601.245,351	4.661.342,721	378,001	378,042	0,041	148,8347	0	0,74%			
Rec	29,000	601.246,070	4.661.342,027	378,001	378,049	0,048	148,8347	0	0,69%			
Rec	30,000	601.246,790	4.661.341,333	378,001	378,056	0,055	148,8347	0	0,64%			
Rec	31,000	601.247,510	4.661.340,639	378,001	378,062	0,061	148,8347	0	0,59%			
Rec	31,144	601.247,614	4.661.340,539	378,001	378,063	0,062	148,8347	0	0,58%		T.S.	
Rec	32,000	601.248,230	4.661.339,945	378,000	378,068	0,068	148,8347	0	0,58%			
Rec	33,000	601.248,950	4.661.339,251	378,000	378,073	0,073	148,8347	0	0,58%			
Rec	34,000	601.249,670	4.661.338,557	378,000	378,079	0,079	148,8347	0	0,58%			
Rec	35,000	601.250,390	4.661.337,863	378,000	378,085	0,085	148,8347	0	0,58%			
Rec	36,000	601.251,110	4.661.337,169	378,000	378,091	0,091	148,8347	0	0,58%			
Rec	37,000	601.251,830	4.661.336,475	378,000	378,097	0,097	148,8347	0	0,58%			
Rec	38,000	601.252,550	4.661.335,781	378,000	378,102	0,102	148,8347	0	0,58%			
Rec	39,000	601.253,270	4.661.335,087	378,000	378,108	0,108	148,8347	0	0,58%			
Rec	40,000	601.253,990	4.661.334,393	378,001	378,114	0,113	148,8347	0	0,58%			
Rec	41,000	601.254,710	4.661.333,699	378,000	378,120	0,120	148,8347	0	0,58%			
Rec	42,000	601.255,430	4.661.333,005	378,000	378,126	0,126	148,8347	0	0,58%			
Rec	43,000	601.256,149	4.661.332,311	378,000	378,131	0,131	148,8347	0	0,58%			
Rec	44,000	601.256,869	4.661.331,617	378,000	378,137	0,137	148,8347	0	0,58%			
Rec	45,000	601.257,589	4.661.330,923	378,000	378,143	0,143	148,8347	0	0,58%			
Rec	46,000	601.258,309	4.661.330,229	377,999	378,149	0,150	148,8347	0	0,58%			
Rec	47,000	601.259,029	4.661.329,535	378,000	378,155	0,155	148,8347	0	0,58%			
Rec	48,000	601.259,749	4.661.328,840	378,000	378,160	0,160	148,8347	0	0,58%			
Rec	49,000	601.260,469	4.661.328,146	378,000	378,166	0,166	148,8347	0	0,58%			
Rec	50,000	601.261,189	4.661.327,452	378,000	378,172	0,172	148,8347	0	0,58%			
Rec	51,000	601.261,909	4.661.326,758	378,000	378,178	0,178	148,8347	0	0,58%			
Rec	52,000	601.262,629	4.661.326,064	378,000	378,184	0,184	148,8347	0	0,58%			
Rec	53,000	601.263,349	4.661.325,370	378,000	378,189	0,189	148,8347	0	0,58%			
Rec	54,000	601.264,069	4.661.324,676	378,000	378,195	0,195	148,8347	0	0,58%			
Rec	55,000	601.264,789	4.661.323,982	378,001	378,201	0,200	148,8347	0	0,58%			
Rec	56,000	601.265,509	4.661.323,288	378,001	378,207	0,206	148,8347	0	0,58%			
Rec	57,000	601.266,228	4.661.322,594	378,001	378,213	0,212	148,8347	0	0,58%			
Rec	58,000	601.266,948	4.661.321,900	378,001	378,218	0,217	148,8347	0	0,58%			
Rec	59,000	601.267,668	4.661.321,206	378,001	378,224	0,223	148,8347	0	0,58%			
Rec	60,000	601.268,388	4.661.320,512	378,001	378,230	0,229	148,8347	0	0,58%			
Rec	61,000	601.269,108	4.661.319,818	378,002	378,236	0,234	148,8347	0	0,58%			
Rec	62,000	601.269,828	4.661.319,124	378,003	378,242	0,239	148,8347	0	0,58%			
Rec	63,000	601.270,548	4.661.318,430	378,006	378,247	0,241	148,8347	0	0,58%			
Rec	64,000	601.271,268	4.661.317,736	378,018	378,253	0,235	148,8347	0	0,58%			
Rec	65,000	601.271,988	4.661.317,042	378,033	378,259	0,226	148,8347	0	0,58%			
Rec	66,000	601.272,708	4.661.316,348	378,046	378,265	0,219	148,8347	0	0,58%			
Rec	67,000	601.273,428	4.661.315,654	378,059	378,271	0,212	148,8347	0	0,58%			
Rec	68,000	601.274,148	4.661.314,960	378,072	378,276	0,204	148,8347	0	0,58%			
Rec	69,000	601.274,868	4.661.314,266	378,085	378,282	0,197	148,8347	0	0,58%			
Rec	70,000	601.275,588	4.661.313,571	378,098	378,288	0,190	148,8347	0	0,58%			
Rec	71,000	601.276,308	4.661.312,877	378,111	378,294	0,183	148,8347	0	0,58%			
Rec	72,000	601.277,027	4.661.312,183	378,124	378,300	0,176	148,8347	0	0,58%			
Rec	73,000	601.277,747	4.661.311,489	378,137	378,305	0,168	148,8347	0	0,58%			
Rec	74,000	601.278,467	4.661.310,795	378,150	378,311	0,161	148,8347	0	0,58%			
Rec	75,000	601.279,187	4.661.310,101	378,163	378,317	0,154	148,8347	0	0,58%			
Rec	76,000	601.279,907	4.661.309,407	378,177	378,323	0,146	148,8347	0	0,58%			
Rec	77,000	601.280,627	4.661.308,713	378,190	378,329	0,139	148,8347	0	0,58%			
Rec	78,000	601.281,347	4.661.308,019	378,203	378,334	0,131	148,8347	0	0,58%			
Rec	79,000	601.282,067	4.661.307,325	378,216	378,340	0,124	148,8347	0	0,58%			
Rec	80,000	601.282,787	4.661.306,631	378,229	378,346	0,117	148,8347	0	0,58%			
Rec	81,000	601.283,507	4.661.305,937	378,242	378,352	0,110	148,8347	0	0,58%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	82,000	601.284,227	4.661.305,243	378,255	378,358	0,103	148,8347	0	0,58%			
Rec	83,000	601.284,947	4.661.304,549	378,268	378,363	0,095	148,8347	0	0,58%			
Rec	84,000	601.285,667	4.661.303,855	378,281	378,369	0,088	148,8347	0	0,58%			
Rec	85,000	601.286,387	4.661.303,161	378,292	378,375	0,083	148,8347	0	0,58%			
Rec	86,000	601.287,106	4.661.302,467	378,300	378,381	0,081	148,8347	0	0,58%			
Rec	87,000	601.287,826	4.661.301,773	378,308	378,387	0,079	148,8347	0	0,58%			
Rec	88,000	601.288,546	4.661.301,079	378,315	378,392	0,077	148,8347	0	0,58%			
Rec	89,000	601.289,266	4.661.300,385	378,323	378,398	0,075	148,8347	0	0,58%			
Rec	90,000	601.289,986	4.661.299,691	378,331	378,404	0,073	148,8347	0	0,58%			
Rec	91,000	601.290,706	4.661.298,996	378,339	378,410	0,071	148,8347	0	0,58%			
Rec	92,000	601.291,426	4.661.298,302	378,346	378,416	0,070	148,8347	0	0,58%			
Rec	93,000	601.292,146	4.661.297,608	378,354	378,421	0,067	148,8347	0	0,58%			
Rec	94,000	601.292,866	4.661.296,914	378,362	378,427	0,065	148,8347	0	0,58%			
Rec	95,000	601.293,586	4.661.296,220	378,370	378,433	0,063	148,8347	0	0,58%			
Rec	96,000	601.294,306	4.661.295,526	378,377	378,439	0,062	148,8347	0	0,58%			
Rec	97,000	601.295,026	4.661.294,832	378,385	378,445	0,060	148,8347	0	0,58%			
Rec	98,000	601.295,746	4.661.294,138	378,393	378,450	0,057	148,8347	0	0,58%			
Rec	99,000	601.296,466	4.661.293,444	378,401	378,456	0,055	148,8347	0	0,58%			
Rec	100,000	601.297,186	4.661.292,750	378,408	378,462	0,054	148,8347	0	0,58%			
Rec	101,000	601.297,905	4.661.292,056	378,416	378,468	0,052	148,8347	0	0,58%			
Rec	102,000	601.298,625	4.661.291,362	378,424	378,474	0,050	148,8347	0	0,58%			
Rec	103,000	601.299,345	4.661.290,668	378,432	378,479	0,047	148,8347	0	0,58%			
Rec	104,000	601.300,065	4.661.289,974	378,439	378,485	0,046	148,8347	0	0,58%			
Rec	105,000	601.300,785	4.661.289,280	378,447	378,491	0,044	148,8347	0	0,58%			
Rec	106,000	601.301,505	4.661.288,586	378,455	378,497	0,042	148,8347	0	0,58%			
Rec	107,000	601.302,225	4.661.287,892	378,463	378,503	0,040	148,8347	0	0,58%			
Rec	108,000	601.302,945	4.661.287,198	378,469	378,508	0,039	148,8347	0	0,58%			
Rec	109,000	601.303,665	4.661.286,504	378,474	378,514	0,040	148,8347	0	0,58%			
Rec	110,000	601.304,385	4.661.285,810	378,479	378,520	0,041	148,8347	0	0,58%			
Rec	111,000	601.305,105	4.661.285,116	378,484	378,526	0,042	148,8347	0	0,58%			
Rec	112,000	601.305,825	4.661.284,422	378,489	378,532	0,043	148,8347	0	0,58%			
Rec	113,000	601.306,545	4.661.283,727	378,494	378,537	0,043	148,8347	0	0,58%			
Rec	114,000	601.307,265	4.661.283,033	378,499	378,543	0,044	148,8347	0	0,58%			
Rec	115,000	601.307,984	4.661.282,339	378,504	378,549	0,045	148,8347	0	0,58%			
Rec	116,000	601.308,704	4.661.281,645	378,509	378,555	0,046	148,8347	0	0,58%			
Rec	117,000	601.309,424	4.661.280,951	378,514	378,561	0,047	148,8347	0	0,58%			
Rec	118,000	601.310,144	4.661.280,257	378,520	378,566	0,046	148,8347	0	0,58%			
Rec	119,000	601.310,864	4.661.279,563	378,525	378,572	0,047	148,8347	0	0,58%			
Rec	120,000	601.311,584	4.661.278,869	378,530	378,578	0,048	148,8347	0	0,58%			
Rec	121,000	601.312,304	4.661.278,175	378,535	378,584	0,049	148,8347	0	0,58%			
Rec	122,000	601.313,024	4.661.277,481	378,540	378,590	0,050	148,8347	0	0,58%			
Rec	123,000	601.313,744	4.661.276,787	378,545	378,595	0,050	148,8347	0	0,58%			
Rec	124,000	601.314,464	4.661.276,093	378,550	378,601	0,051	148,8347	0	0,58%			
Rec	125,000	601.315,184	4.661.275,399	378,555	378,607	0,052	148,8347	0	0,58%			
Rec	126,000	601.315,904	4.661.274,705	378,560	378,613	0,053	148,8347	0	0,58%			
Rec	127,000	601.316,624	4.661.274,011	378,565	378,619	0,054	148,8347	0	0,58%			
Rec	128,000	601.317,344	4.661.273,317	378,570	378,624	0,054	148,8347	0	0,58%			
Rec	129,000	601.318,064	4.661.272,623	378,575	378,630	0,055	148,8347	0	0,58%			
Rec	130,000	601.318,783	4.661.271,929	378,580	378,636	0,056	148,8347	0	0,58%			
Rec	131,000	601.319,503	4.661.271,235	378,585	378,642	0,057	148,8347	0	0,58%			
Rec	132,000	601.320,223	4.661.270,541	378,590	378,648	0,058	148,8347	0	0,58%			
Rec	133,000	601.320,943	4.661.269,847	378,595	378,653	0,058	148,8347	0	0,58%			
Rec	134,000	601.321,663	4.661.269,153	378,600	378,659	0,059	148,8347	0	0,58%			
Rec	135,000	601.322,383	4.661.268,458	378,605	378,665	0,060	148,8347	0	0,58%			
Rec	136,000	601.323,103	4.661.267,764	378,610	378,671	0,061	148,8347	0	0,58%			
Rec	137,000	601.323,823	4.661.267,070	378,615	378,677	0,062	148,8347	0	0,58%			
Rec	138,000	601.324,543	4.661.266,376	378,620	378,682	0,062	148,8347	0	0,58%			
Rec	139,000	601.325,263	4.661.265,682	378,625	378,688	0,063	148,8347	0	0,58%			
Rec	140,000	601.325,983	4.661.264,988	378,630	378,694	0,064	148,8347	0	0,58%			
Rec	141,000	601.326,703	4.661.264,294	378,636	378,700	0,064	148,8347	0	0,58%			
Rec	142,000	601.327,423	4.661.263,600	378,641	378,706	0,065	148,8347	0	0,58%			
Rec	143,000	601.328,143	4.661.262,906	378,646	378,711	0,065	148,8347	0	0,58%			
Rec	144,000	601.328,862	4.661.262,212	378,651	378,717	0,066	148,8347	0	0,58%			
Rec	145,000	601.329,582	4.661.261,518	378,656	378,723	0,067	148,8347	0	0,58%			
Rec	146,000	601.330,302	4.661.260,824	378,661	378,729	0,068	148,8347	0	0,58%			
Rec	147,000	601.331,022	4.661.260,130	378,666	378,735	0,069	148,8347	0	0,58%			
Rec	148,000	601.331,742	4.661.259,436	378,671	378,740	0,069	148,8347	0	0,58%			
Rec	149,000	601.332,462	4.661.258,742	378,676	378,746	0,070	148,8347	0	0,58%			
Rec	150,000	601.333,182	4.661.258,048	378,681	378,752	0,071	148,8347	0	0,58%			
Rec	151,000	601.333,902	4.661.257,354	378,686	378,758	0,072	148,8347	0	0,58%			
Rec	152,000	601.334,622	4.661.256,660	378,691	378,764	0,073	148,8347	0	0,58%			
Rec	153,000	601.335,342	4.661.255,966	378,696	378,769	0,073	148,8347	0	0,58%			
Rec	154,000	601.336,062	4.661.255,272	378,702	378,775	0,073	148,8347	0	0,58%			
Rec	155,000	601.336,782	4.661.254,578	378,707	378,781	0,074	148,8347	0	0,58%			
Rec	156,000	601.337,502	4.661.253,884	378,713	378,787	0,074	148,8347	0	0,58%			
Rec	157,000	601.338,222	4.661.253,189	378,718	378,793	0,075	148,8347	0	0,58%			
Rec	158,000	601.338,942	4.661.252,495	378,723	378,798	0,075	148,8347	0	0,58%			
Rec	159,000	601.339,661	4.661.251,801	378,729	378,804	0,075	148,8347	0	0,58%			
Rec	160,000	601.340,381	4.661.251,107	378,734	378,810	0,076	148,8347	0	0,58%			
Rec	161,000	601.341,101	4.661.250,413	378,739	378,816	0,077	148,8347	0	0,58%			
Rec	162,000	601.341,821	4.661.249,719	378,745	378,822	0,077	148,8347	0	0,58%			
Rec	163,000	601.342,541	4.661.249,025	378,750	378,827	0,077	148,8347	0	0,58%			
Rec	164,000	601.343,261	4.661.248,331	378,756	378,833	0,077	148,8347	0	0,58%			
Rec	165,000	601.343,981	4.661.247,637	378,760	378,839	0,079	148,8347	0	0,58%			
Rec	166,000	601.344,701	4.661.246,943	378,764	378,845	0,081	148,8347	0	0,58%			
Rec	167,000	601.345,421	4.661.246,249	378,770	378,851	0,081	148,8347	0	0,58%			
Rec	168,000	601.346,141	4.661.245,555	378,778	378,856	0,078	148,8347	0	0,58%			

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REPLANTEO CAMINO TRAMO T16-T14y15 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	169,000	601.346,861	4.661.244,861	378,786	378,862	0,076	148,8347	0	0,58%			
Rec	170,000	601.347,581	4.661.244,167	378,794	378,868	0,074	148,8347	0	0,58%			
Rec	171,000	601.348,301	4.661.243,473	378,801	378,874	0,073	148,8347	0	0,58%			
Rec	172,000	601.349,021	4.661.242,779	378,808	378,880	0,072	148,8347	0	0,58%			
Rec	173,000	601.349,740	4.661.242,085	378,816	378,885	0,069	148,8347	0	0,58%			
Rec	174,000	601.350,460	4.661.241,391	378,825	378,891	0,066	148,8347	0	0,58%			
Rec	175,000	601.351,180	4.661.240,697	378,833	378,897	0,064	148,8347	0	0,58%			
Rec	176,000	601.351,900	4.661.240,003	378,842	378,903	0,061	148,8347	0	0,58%			
Rec	177,000	601.352,620	4.661.239,309	378,850	378,909	0,059	148,8347	0	0,58%			
Rec	178,000	601.353,340	4.661.238,615	378,860	378,914	0,054	148,8347	0	0,58%			
Rec	179,000	601.354,060	4.661.237,920	378,869	378,920	0,051	148,8347	0	0,58%			
Rec	180,000	601.354,780	4.661.237,226	378,879	378,926	0,047	148,8347	0	0,58%			
Rec	180,520	601.355,154	4.661.236,866	378,884	378,929	0,045	148,8347	0	0,58%		T.E.	
Rec	181,000	601.355,500	4.661.236,532	378,888	378,932	0,044	148,8347	0	0,60%			
Rec	182,000	601.356,220	4.661.235,838	378,898	378,938	0,040	148,8347	0	0,63%			
Rec	183,000	601.356,940	4.661.235,144	378,908	378,944	0,036	148,8347	0	0,66%			
Rec	184,000	601.357,660	4.661.234,450	378,917	378,951	0,034	148,8347	0	0,70%			
Rec	185,000	601.358,380	4.661.233,756	378,927	378,958	0,031	148,8347	0	0,73%			
Rec	186,000	601.359,100	4.661.233,062	378,935	378,966	0,031	148,8347	0	0,76%			
Rec	187,000	601.359,819	4.661.232,368	378,942	378,974	0,032	148,8347	0	0,80%			
Rec	188,000	601.360,539	4.661.231,674	378,951	378,982	0,031	148,8347	0	0,83%			
Rec	189,000	601.361,259	4.661.230,980	378,967	378,990	0,023	148,8347	0	0,86%			
Rec	190,000	601.361,979	4.661.230,286	378,984	378,999	0,015	148,8347	0	0,90%		V.	
Rec	191,000	601.362,699	4.661.229,592	378,993	379,008	0,015	148,8347	0	0,93%			
Rec	192,000	601.363,419	4.661.228,898	378,999	379,018	0,019	148,8347	0	0,96%			
Rec	193,000	601.364,139	4.661.228,204	379,002	379,027	0,025	148,8347	0	1,00%			
Rec	194,000	601.364,859	4.661.227,510	379,003	379,037	0,034	148,8347	0	1,03%			
Rec	195,000	601.365,579	4.661.226,816	379,003	379,048	0,045	148,8347	0	1,06%			
Rec	196,000	601.366,299	4.661.226,122	379,004	379,059	0,055	148,8347	0	1,10%			
Rec	197,000	601.367,019	4.661.225,428	379,005	379,070	0,065	148,8347	0	1,13%			
Rec	198,000	601.367,739	4.661.224,734	379,008	379,081	0,073	148,8347	0	1,16%			
Rec	199,000	601.368,459	4.661.224,040	379,011	379,093	0,082	148,8347	0	1,20%			
Rec	199,480	601.368,804	4.661.223,706	379,012	379,099	0,086	148,8347	0	1,21%		T.S.	
Rec	200,000	601.369,179	4.661.223,345	379,014	379,105	0,091	148,8347	0	1,21%			
Rec	201,000	601.369,899	4.661.222,651	379,025	379,117	0,092	148,8347	0	1,21%			
Rec	202,000	601.370,618	4.661.221,957	379,035	379,129	0,094	148,8347	0	1,21%			
Rec	203,000	601.371,338	4.661.221,263	379,043	379,142	0,099	148,8347	0	1,21%			
Rec	204,000	601.372,058	4.661.220,569	379,049	379,154	0,105	148,8347	0	1,21%			
Rec	205,000	601.372,778	4.661.219,875	379,056	379,166	0,110	148,8347	0	1,21%			
Rec	206,000	601.373,498	4.661.219,181	379,063	379,178	0,115	148,8347	0	1,21%			
Rec	207,000	601.374,218	4.661.218,487	379,070	379,190	0,120	148,8347	0	1,21%			
Rec	208,000	601.374,938	4.661.217,793	379,079	379,202	0,123	148,8347	0	1,21%			
Rec	209,000	601.375,658	4.661.217,099	379,087	379,214	0,127	148,8347	0	1,21%			
Rec	210,000	601.376,378	4.661.216,405	379,095	379,226	0,131	148,8347	0	1,21%			
Rec	211,000	601.377,098	4.661.215,711	379,103	379,239	0,136	148,8347	0	1,21%			
Rec	212,000	601.377,818	4.661.215,017	379,111	379,251	0,140	148,8347	0	1,21%			
Rec	213,000	601.378,538	4.661.214,323	379,120	379,263	0,143	148,8347	0	1,21%			
Rec	214,000	601.379,258	4.661.213,629	379,128	379,275	0,147	148,8347	0	1,21%			
Rec	215,000	601.379,978	4.661.212,935	379,136	379,287	0,151	148,8347	0	1,21%			
Rec	216,000	601.380,697	4.661.212,241	379,144	379,299	0,155	148,8347	0	1,21%			
Rec	217,000	601.381,417	4.661.211,547	379,152	379,311	0,159	148,8347	0	1,21%			
Rec	218,000	601.382,137	4.661.210,853	379,161	379,323	0,162	148,8347	0	1,21%			
Rec	219,000	601.382,857	4.661.210,159	379,169	379,336	0,167	148,8347	0	1,21%			
Rec	220,000	601.383,577	4.661.209,465	379,177	379,348	0,171	148,8347	0	1,21%			
Rec	221,000	601.384,297	4.661.208,771	379,185	379,360	0,175	148,8347	0	1,21%			
Rec	222,000	601.385,017	4.661.208,076	379,193	379,372	0,179	148,8347	0	1,21%			
Rec	223,000	601.385,737	4.661.207,382	379,202	379,384	0,182	148,8347	0	1,21%			
Rec	224,000	601.386,457	4.661.206,688	379,210	379,396	0,186	148,8347	0	1,21%			
Rec	225,000	601.387,177	4.661.205,994	379,218	379,408	0,190	148,8347	0	1,21%			
Rec	226,000	601.387,897	4.661.205,300	379,226	379,420	0,194	148,8347	0	1,21%			
Rec	227,000	601.388,617	4.661.204,606	379,234	379,432	0,198	148,8347	0	1,21%			
Rec	228,000	601.389,337	4.661.203,912	379,242	379,445	0,203	148,8347	0	1,21%			
Rec	229,000	601.390,057	4.661.203,218	379,251	379,457	0,206	148,8347	0	1,21%			
Rec	230,000	601.390,777	4.661.202,524	379,259	379,469	0,210	148,8347	0	1,21%			
Rec	231,000	601.391,496	4.661.201,830	379,267	379,481	0,214	148,8347	0	1,21%			
Cur	231,191	601.391,634	4.661.201,698	379,269	379,483	0,214	148,8347	10	1,21%	P.S.		
Cur	232,000	601.392,193	4.661.201,113	379,275	379,493	0,218	153,9878	10	1,21%			
Cur	233,000	601.392,816	4.661.200,331	379,284	379,505	0,221	160,3540	10	1,21%			
Cur	234,000	601.393,358	4.661.199,491	379,294	379,517	0,223	166,7202	10	1,21%			
Cur	235,000	601.393,813	4.661.198,601	379,297	379,529	0,232	173,0864	10	1,21%			
Cur	236,000	601.394,177	4.661.197,670	379,274	379,542	0,268	179,4526	10	1,21%			
Cur	237,000	601.394,446	4.661.196,708	379,260	379,554	0,294	185,8188	10	1,21%			
Cur	238,000	601.394,618	4.661.195,723	379,260	379,566	0,306	192,1850	10	1,21%			
Cur	238,909	601.394,688	4.661.194,817	379,257	379,577	0,320	197,9719	10	1,21%		T.E.	
Cur	239,000	601.394,691	4.661.194,726	379,257	379,578	0,321	198,5512	10	1,21%			
Cur	240,000	601.394,663	4.661.193,727	379,244	379,590	0,346	204,9174	10	1,14%			
Cur	241,000	601.394,537	4.661.192,735	379,230	379,601	0,371	211,2836	10	1,07%			
Cur	242,000	601.394,311	4.661.191,761	379,216	379,611	0,395	217,6498	10	1,01%			
Cur	243,000	601.393,990	4.661.190,815	379,216	379,621	0,405	224,0160	10	0,94%			
Rec	243,579	601.393,761	4.661.190,283	379,216	379,626	0,410	227,7022	0	0,90%	P.S.		
Rec	244,000	601.393,584	4.661.189,901	379,216	379,630	0,414	227,7022	0	0,87%			
Rec	245,000	601.393,162	4.661.188,995	379,216	379,638	0,422	227,7022	0	0,81%			
Rec	246,000	601.392,741	4.661.188,088	379,216	379,646	0,430	227,7022	0	0,74%			
Rec	247,000	601.392,319	4.661.187,181	379,223	379,653	0,430	227,7022	0	0,67%			
Rec	248,000	601.391,898	4.661.186,274	379,254	379,659	0,405	227,7022	0	0,61%		V.	
Rec	249,000	601.391,476	4.661.185,367	379,286	379,665	0,379	227,7022	0	0,54%			
Rec	250,000	601.391,055	4.661.184,460	379,260	379,670	0,410	227,7022	0	0,47%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 C-02

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	251,000	601.390,633	4.661.183,554	379,281	379,675	0,394	227,7022	0	0,41%			
Rec	252,000	601.390,211	4.661.182,647	379,301	379,678	0,377	227,7022	0	0,34%			
Rec	253,000	601.389,790	4.661.181,740	379,268	379,681	0,413	227,7022	0	0,27%			
Rec	254,000	601.389,368	4.661.180,833	379,286	379,684	0,398	227,7022	0	0,21%			
Rec	255,000	601.388,947	4.661.179,926	379,308	379,686	0,378	227,7022	0	0,14%			
Rec	256,000	601.388,525	4.661.179,020	379,358	379,687	0,329	227,7022	0	0,07%			
Rec	257,000	601.388,104	4.661.178,113	379,381	379,687	0,306	227,7022	0	0,01%			
Rec	257,091	601.388,065	4.661.178,030	379,379	379,687	0,308	227,7022	0	0,00%		T.S.	
Rec	258,000	601.387,682	4.661.177,206	379,355	379,687	0,332	227,7022	0	0,00%			
Rec	259,000	601.387,261	4.661.176,299	379,346	379,687	0,341	227,7022	0	0,00%			
Rec	260,000	601.386,839	4.661.175,392	379,346	379,687	0,341	227,7022	0	0,00%			
Rec	261,000	601.386,418	4.661.174,486	379,346	379,687	0,341	227,7022	0	0,00%			
Rec	262,000	601.385,996	4.661.173,579	379,345	379,687	0,342	227,7022	0	0,00%			
Rec	263,000	601.385,575	4.661.172,672	379,345	379,687	0,342	227,7022	0	0,00%			
Rec	264,000	601.385,153	4.661.171,765	379,345	379,687	0,342	227,7022	0	0,00%			
Rec	265,000	601.384,731	4.661.170,858	379,345	379,687	0,342	227,7022	0	0,00%			
Rec	266,000	601.384,310	4.661.169,952	379,357	379,687	0,330	227,7022	0	0,00%			
Rec	267,000	601.383,888	4.661.169,045	379,374	379,687	0,313	227,7022	0	0,00%			
	267,739	601.383,577	4.661.168,374	379,387	379,687	0,300	227,7022		0,00%			

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T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	600.931,014	4.661.306,416	379,688	379,688	0,000	54,5037	0	-7,08%			
Rec	1,000	600.931,769	4.661.307,072	379,548	379,617	0,069	54,5037	0	-7,08%			
Rec	2,000	600.932,524	4.661.307,727	379,267	379,546	0,279	54,5037	0	-7,08%			
Rec	3,000	600.933,280	4.661.308,382	378,999	379,476	0,477	54,5037	0	-7,08%			
Rec	3,306	600.933,511	4.661.308,583	378,997	379,454	0,456	54,5037	0	-7,08%		T.E.	
Rec	4,000	600.934,035	4.661.309,038	378,994	379,406	0,412	54,5037	0	-6,73%			
Rec	5,000	600.934,790	4.661.309,693	378,988	379,341	0,353	54,5037	0	-6,23%			
Rec	6,000	600.935,546	4.661.310,348	378,983	379,281	0,298	54,5037	0	-5,73%			
Rec	7,000	600.936,301	4.661.311,004	378,982	379,227	0,245	54,5037	0	-5,23%			
Rec	8,000	600.937,056	4.661.311,659	378,981	379,177	0,196	54,5037	0	-4,73%			
Rec	9,000	600.937,812	4.661.312,315	378,980	379,132	0,152	54,5037	0	-4,23%			
Rec	10,000	600.938,567	4.661.312,970	378,980	379,092	0,112	54,5037	0	-3,73%		V.	
Rec	11,000	600.939,322	4.661.313,625	378,980	379,057	0,077	54,5037	0	-3,23%			
Rec	12,000	600.940,078	4.661.314,281	378,979	379,027	0,048	54,5037	0	-2,73%			
Rec	13,000	600.940,833	4.661.314,936	378,979	379,003	0,024	54,5037	0	-2,23%			
Rec	14,000	600.941,588	4.661.315,591	378,978	378,983	0,005	54,5037	0	-1,73%			
Rec	15,000	600.942,344	4.661.316,247	378,978	378,968	-0,010	54,5037	0	-1,23%			
Rec	16,000	600.943,099	4.661.316,902	378,978	378,958	-0,020	54,5037	0	-0,73%			
Rec	16,694	600.943,623	4.661.317,357	378,978	378,954	-0,024	54,5037	0	-0,39%		T.S.	
Rec	17,000	600.943,854	4.661.317,557	378,978	378,953	-0,025	54,5037	0	-0,39%			
Rec	18,000	600.944,609	4.661.318,213	378,977	378,949	-0,028	54,5037	0	-0,39%			
Rec	19,000	600.945,365	4.661.318,868	378,977	378,945	-0,032	54,5037	0	-0,39%			
Rec	20,000	600.946,120	4.661.319,523	378,977	378,941	-0,036	54,5037	0	-0,39%			
Rec	21,000	600.946,875	4.661.320,179	378,977	378,938	-0,039	54,5037	0	-0,39%			
Rec	22,000	600.947,631	4.661.320,834	378,977	378,934	-0,043	54,5037	0	-0,39%			
Rec	23,000	600.948,386	4.661.321,490	378,963	378,930	-0,033	54,5037	0	-0,39%			
Rec	24,000	600.949,141	4.661.322,145	378,943	378,926	-0,017	54,5037	0	-0,39%			
Rec	25,000	600.949,897	4.661.322,800	378,923	378,922	-0,001	54,5037	0	-0,39%			
Rec	26,000	600.950,652	4.661.323,456	378,904	378,918	0,014	54,5037	0	-0,39%			
Rec	27,000	600.951,407	4.661.324,111	378,884	378,914	0,030	54,5037	0	-0,39%			
Rec	28,000	600.952,163	4.661.324,766	378,865	378,911	0,046	54,5037	0	-0,39%			
Rec	29,000	600.952,918	4.661.325,422	378,845	378,907	0,062	54,5037	0	-0,39%			
Rec	30,000	600.953,673	4.661.326,077	378,825	378,903	0,078	54,5037	0	-0,39%			
Rec	31,000	600.954,429	4.661.326,732	378,806	378,899	0,093	54,5037	0	-0,39%			
Rec	32,000	600.955,184	4.661.327,388	378,794	378,895	0,101	54,5037	0	-0,39%			
Rec	33,000	600.955,939	4.661.328,043	378,794	378,891	0,097	54,5037	0	-0,39%			
Rec	34,000	600.956,695	4.661.328,698	378,793	378,887	0,094	54,5037	0	-0,39%			
Rec	35,000	600.957,450	4.661.329,354	378,793	378,884	0,091	54,5037	0	-0,39%			
Rec	36,000	600.958,205	4.661.330,009	378,791	378,880	0,089	54,5037	0	-0,39%			
Rec	37,000	600.958,961	4.661.330,664	378,790	378,876	0,086	54,5037	0	-0,39%			
Rec	38,000	600.959,716	4.661.331,320	378,790	378,872	0,082	54,5037	0	-0,39%			
Rec	39,000	600.960,471	4.661.331,975	378,790	378,868	0,078	54,5037	0	-0,39%			
Rec	40,000	600.961,227	4.661.332,631	378,791	378,864	0,073	54,5037	0	-0,39%			
Rec	41,000	600.961,982	4.661.333,286	378,790	378,860	0,070	54,5037	0	-0,39%			
Rec	42,000	600.962,737	4.661.333,941	378,789	378,857	0,068	54,5037	0	-0,39%			
Rec	43,000	600.963,492	4.661.334,597	378,788	378,853	0,065	54,5037	0	-0,39%			
Rec	44,000	600.964,248	4.661.335,252	378,788	378,849	0,061	54,5037	0	-0,39%			
Rec	45,000	600.965,003	4.661.335,907	378,787	378,845	0,058	54,5037	0	-0,39%			
Rec	46,000	600.965,758	4.661.336,563	378,786	378,841	0,055	54,5037	0	-0,39%			
Rec	47,000	600.966,514	4.661.337,218	378,785	378,837	0,052	54,5037	0	-0,39%			
Rec	48,000	600.967,269	4.661.337,873	378,785	378,833	0,048	54,5037	0	-0,39%			
Rec	49,000	600.968,024	4.661.338,529	378,784	378,830	0,046	54,5037	0	-0,39%			
Rec	50,000	600.968,780	4.661.339,184	378,784	378,826	0,042	54,5037	0	-0,39%			
Rec	51,000	600.969,535	4.661.339,839	378,784	378,822	0,038	54,5037	0	-0,39%			
Rec	52,000	600.970,290	4.661.340,495	378,784	378,818	0,034	54,5037	0	-0,39%			
Rec	53,000	600.971,046	4.661.341,150	378,784	378,814	0,030	54,5037	0	-0,39%			
Rec	54,000	600.971,801	4.661.341,806	378,782	378,810	0,028	54,5037	0	-0,39%			
Rec	55,000	600.972,556	4.661.342,461	378,780	378,806	0,026	54,5037	0	-0,39%			
Rec	56,000	600.973,312	4.661.343,116	378,779	378,803	0,024	54,5037	0	-0,39%			
Rec	57,000	600.974,067	4.661.343,772	378,778	378,799	0,021	54,5037	0	-0,39%			
Rec	58,000	600.974,822	4.661.344,427	378,777	378,795	0,018	54,5037	0	-0,39%			
Rec	59,000	600.975,578	4.661.345,082	378,777	378,791	0,014	54,5037	0	-0,39%			
Rec	60,000	600.976,333	4.661.345,738	378,777	378,787	0,010	54,5037	0	-0,39%			
Rec	61,000	600.977,088	4.661.346,393	378,776	378,783	0,007	54,5037	0	-0,39%			
Rec	62,000	600.977,844	4.661.347,048	378,778	378,779	0,001	54,5037	0	-0,39%			
Rec	63,000	600.978,599	4.661.347,704	378,774	378,776	0,002	54,5037	0	-0,39%			
Rec	64,000	600.979,354	4.661.348,359	378,771	378,772	0,001	54,5037	0	-0,39%			
Rec	65,000	600.980,109	4.661.349,014	378,767	378,768	0,001	54,5037	0	-0,39%			
Rec	66,000	600.980,865	4.661.349,670	378,764	378,764	0,000	54,5037	0	-0,39%			
Rec	67,000	600.981,620	4.661.350,325	378,760	378,760	0,000	54,5037	0	-0,39%			
Rec	68,000	600.982,375	4.661.350,981	378,757	378,756	-0,001	54,5037	0	-0,39%			
Rec	69,000	600.983,131	4.661.351,636	378,753	378,752	-0,001	54,5037	0	-0,39%			
Rec	70,000	600.983,886	4.661.352,291	378,750	378,749	-0,001	54,5037	0	-0,39%			
Rec	71,000	600.984,641	4.661.352,947	378,746	378,745	-0,001	54,5037	0	-0,39%			
Rec	71,892	600.985,315	4.661.353,531	378,742	378,741	-0,001	54,5037	0	-0,39%		T.E.	
Rec	72,000	600.985,397	4.661.353,602	378,742	378,741	-0,001	54,5037	0	-0,39%			
Rec	73,000	600.986,152	4.661.354,257	378,739	378,737	-0,002	54,5037	0	-0,46%			
Rec	74,000	600.986,907	4.661.354,913	378,735	378,732	-0,003	54,5037	0	-0,53%			
Rec	75,000	600.987,663	4.661.355,568	378,732	378,726	-0,006	54,5037	0	-0,59%			
Rec	76,000	600.988,418	4.661.356,223	378,728	378,720	-0,008	54,5037	0	-0,66%			
Rec	77,000	600.989,173	4.661.356,879	378,725	378,713	-0,012	54,5037	0	-0,73%			
Rec	78,000	600.989,929	4.661.357,534	378,724	378,705	-0,019	54,5037	0	-0,79%			
Rec	79,000	600.990,684	4.661.358,189	378,709	378,697	-0,012	54,5037	0	-0,86%			
Rec	80,000	600.991,439	4.661.358,845	378,710	378,688	-0,022	54,5037	0	-0,93%		V.	
Rec	81,000	600.992,195	4.661.359,500	378,710	378,678	-0,032	54,5037	0	-0,99%			
Rec	82,000	600.992,950	4.661.360,156	378,692	378,668	-0,024	54,5037	0	-1,06%			
Rec	83,000	600.993,705	4.661.360,811	378,664	378,657	-0,007	54,5037	0	-1,13%			

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REPLANTEO CAMINO TRAMO T16-T14y15 C-03

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	84,000	600.994,461	4.661.361,466	378,627	378,646	0,019	54,5037	0	-1,19%			
Rec	85,000	600.995,216	4.661.362,122	378,600	378,633	0,033	54,5037	0	-1,26%			
Rec	86,000	600.995,971	4.661.362,777	378,600	378,621	0,021	54,5037	0	-1,33%			
Rec	87,000	600.996,727	4.661.363,432	378,569	378,607	0,038	54,5037	0	-1,39%			
Rec	88,000	600.997,482	4.661.364,088	378,560	378,593	0,033	54,5037	0	-1,46%			
Rec	88,108	600.997,563	4.661.364,158	378,552	378,591	0,039	54,5037	0	-1,47%		T.S.	
Rec	89,000	600.998,237	4.661.364,743	378,488	378,578	0,090	54,5037	0	-1,47%			
Rec	90,000	600.998,992	4.661.365,398	378,485	378,563	0,078	54,5037	0	-1,47%			
Rec	91,000	600.999,748	4.661.366,054	378,481	378,549	0,068	54,5037	0	-1,47%			
Rec	92,000	601.000,503	4.661.366,709	378,433	378,534	0,101	54,5037	0	-1,47%			
Rec	93,000	601.001,258	4.661.367,364	378,423	378,519	0,096	54,5037	0	-1,47%			
Rec	94,000	601.002,014	4.661.368,020	378,392	378,505	0,113	54,5037	0	-1,47%			
Rec	95,000	601.002,769	4.661.368,675	378,377	378,490	0,113	54,5037	0	-1,47%			
Rec	96,000	601.003,524	4.661.369,331	378,316	378,475	0,159	54,5037	0	-1,47%			
Rec	97,000	601.004,280	4.661.369,986	378,293	378,461	0,168	54,5037	0	-1,47%			
Rec	98,000	601.005,035	4.661.370,641	378,246	378,446	0,200	54,5037	0	-1,47%			
Rec	99,000	601.005,790	4.661.371,297	378,208	378,431	0,223	54,5037	0	-1,47%			
Rec	100,000	601.006,546	4.661.371,952	378,164	378,417	0,253	54,5037	0	-1,47%			
Rec	101,000	601.007,301	4.661.372,607	378,125	378,402	0,277	54,5037	0	-1,47%			
Rec	102,000	601.008,056	4.661.373,263	378,058	378,387	0,329	54,5037	0	-1,47%			
Rec	103,000	601.008,812	4.661.373,918	378,010	378,373	0,363	54,5037	0	-1,47%			
Rec	104,000	601.009,567	4.661.374,573	377,997	378,358	0,361	54,5037	0	-1,47%			
Rec	105,000	601.010,322	4.661.375,229	377,993	378,343	0,350	54,5037	0	-1,47%			
Rec	106,000	601.011,078	4.661.375,884	377,989	378,329	0,340	54,5037	0	-1,47%			
Rec	107,000	601.011,833	4.661.376,539	377,986	378,314	0,328	54,5037	0	-1,47%			
Rec	108,000	601.012,588	4.661.377,195	377,982	378,299	0,317	54,5037	0	-1,47%			
Rec	109,000	601.013,344	4.661.377,850	377,978	378,285	0,307	54,5037	0	-1,47%			
Rec	110,000	601.014,099	4.661.378,506	377,974	378,270	0,296	54,5037	0	-1,47%			
Rec	111,000	601.014,854	4.661.379,161	377,970	378,255	0,285	54,5037	0	-1,47%			
Rec	112,000	601.015,610	4.661.379,816	377,965	378,241	0,276	54,5037	0	-1,47%			
Rec	113,000	601.016,365	4.661.380,472	377,961	378,226	0,265	54,5037	0	-1,47%			
Rec	114,000	601.017,120	4.661.381,127	377,956	378,211	0,255	54,5037	0	-1,47%			
Cur	114,487	601.017,488	4.661.381,446	377,954	378,204	0,250	54,5037	10	-1,47%	P.S.		
Cur	115,000	601.017,884	4.661.381,772	377,951	378,197	0,246	57,7708	10	-1,47%			
Cur	116,000	601.018,701	4.661.382,348	377,946	378,182	0,236	64,1370	10	-1,47%			
Cur	117,000	601.019,572	4.661.382,838	377,938	378,167	0,229	70,5032	10	-1,47%			
Cur	118,000	601.020,487	4.661.383,240	377,930	378,153	0,223	76,8694	10	-1,47%			
Cur	119,000	601.021,438	4.661.383,548	377,921	378,138	0,217	83,2356	10	-1,47%			
Cur	120,000	601.022,415	4.661.383,760	377,911	378,123	0,212	89,6018	10	-1,47%			
Cur	121,000	601.023,408	4.661.383,873	377,900	378,109	0,209	95,9680	10	-1,47%			
Cur	121,803	601.024,211	4.661.383,891	377,890	378,097	0,206	101,0801	10	-1,47%		T.E.	
Cur	122,000	601.024,408	4.661.383,886	377,888	378,094	0,206	102,3342	10	-1,44%			
Cur	123,000	601.025,404	4.661.383,800	377,876	378,080	0,204	108,7004	10	-1,33%			
Cur	124,000	601.026,386	4.661.383,614	377,862	378,067	0,205	115,0666	10	-1,22%			
Cur	125,000	601.027,345	4.661.383,331	377,847	378,056	0,209	121,4328	10	-1,11%			
Cur	126,000	601.028,271	4.661.382,954	377,831	378,045	0,214	127,7990	10	-1,00%			
Cur	127,000	601.029,154	4.661.382,487	377,815	378,036	0,221	134,1652	10	-0,89%			
Cur	128,000	601.029,987	4.661.381,934	377,798	378,027	0,229	140,5314	10	-0,78%			
Rec	128,404	601.030,306	4.661.381,687	377,791	378,024	0,233	143,1013	0	-0,73%	P.S.	V.	
Rec	129,000	601.030,771	4.661.381,314	377,781	378,020	0,239	143,1013	0	-0,67%			
Rec	130,000	601.031,550	4.661.380,687	377,764	378,014	0,250	143,1013	0	-0,56%			
Rec	131,000	601.032,330	4.661.380,061	377,746	378,009	0,263	143,1013	0	-0,44%			
Rec	132,000	601.033,109	4.661.379,434	377,729	378,005	0,276	143,1013	0	-0,33%			
Rec	133,000	601.033,889	4.661.378,808	377,712	378,002	0,290	143,1013	0	-0,22%			
Rec	134,000	601.034,668	4.661.378,181	377,695	378,001	0,306	143,1013	0	-0,11%			ODT Ø500 L=5,00m
Rec	135,000	601.035,448	4.661.377,555	377,678	378,000	0,322	143,1013	0	0,00%			
Rec	135,005	601.035,452	4.661.377,552	377,678	378,000	0,322	143,1013	0	0,00%		T.S.	
Rec	136,000	601.036,227	4.661.376,928	377,660	378,000	0,340	143,1013	0	0,00%			
Rec	137,000	601.037,007	4.661.376,302	377,643	378,000	0,357	143,1013	0	0,00%			
Rec	138,000	601.037,786	4.661.375,675	377,627	378,000	0,373	143,1013	0	0,00%			
Rec	139,000	601.038,565	4.661.375,049	377,614	378,000	0,386	143,1013	0	0,00%			
Rec	140,000	601.039,345	4.661.374,422	377,619	378,000	0,381	143,1013	0	0,00%			
Rec	141,000	601.040,124	4.661.373,796	377,626	378,000	0,374	143,1013	0	0,00%			
Rec	142,000	601.040,904	4.661.373,169	377,632	378,000	0,368	143,1013	0	0,00%			
Rec	143,000	601.041,683	4.661.372,543	377,639	378,000	0,361	143,1013	0	0,00%			
Rec	144,000	601.042,463	4.661.371,916	377,645	378,000	0,355	143,1013	0	0,00%			
Rec	145,000	601.043,242	4.661.371,290	377,652	378,000	0,348	143,1013	0	0,00%			
Rec	146,000	601.044,021	4.661.370,663	377,658	378,000	0,342	143,1013	0	0,00%			
Rec	146,558	601.044,456	4.661.370,314	377,662	378,000	0,338	143,1013		0,00%			

P.S. = PUNTO SINGULAR EN PLANTA
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T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 A-T14y15

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	0,000	600.759,678	4.661.426,215	376,310	376,310	0,000	53,2309	0	-0,10%			
Rec	1,000	600.760,420	4.661.426,885	376,296	376,309	0,013	53,2309	0	-0,10%			
Rec	2,000	600.761,162	4.661.427,556	376,282	376,308	0,026	53,2309	0	-0,10%			
Rec	3,000	600.761,904	4.661.428,226	376,267	376,307	0,040	53,2309	0	-0,10%			
Rec	4,000	600.762,647	4.661.428,896	376,253	376,306	0,053	53,2309	0	-0,10%			
Rec	5,000	600.763,389	4.661.429,567	376,229	376,305	0,076	53,2309	0	-0,10%			
Rec	6,000	600.764,131	4.661.430,237	376,205	376,304	0,099	53,2309	0	-0,10%			
Rec	7,000	600.764,873	4.661.430,907	376,180	376,303	0,123	53,2309	0	-0,10%			
Rec	8,000	600.765,615	4.661.431,578	376,156	376,302	0,146	53,2309	0	-0,10%			
Rec	9,000	600.766,357	4.661.432,248	376,131	376,301	0,170	53,2309	0	-0,10%			
Rec	10,000	600.767,099	4.661.432,918	376,107	376,300	0,193	53,2309	0	-0,10%			
Rec	11,000	600.767,841	4.661.433,589	376,083	376,299	0,216	53,2309	0	-0,10%			
Rec	12,000	600.768,583	4.661.434,259	376,061	376,298	0,237	53,2309	0	-0,10%			
Rec	13,000	600.769,325	4.661.434,929	376,060	376,297	0,237	53,2309	0	-0,10%			
Rec	14,000	600.770,067	4.661.435,600	376,059	376,296	0,237	53,2309	0	-0,10%			
Rec	15,000	600.770,809	4.661.436,270	376,059	376,295	0,236	53,2309	0	-0,10%			
Rec	16,000	600.771,551	4.661.436,940	376,058	376,294	0,236	53,2309	0	-0,10%			
Rec	17,000	600.772,293	4.661.437,611	376,057	376,293	0,236	53,2309	0	-0,10%			
Rec	18,000	600.773,035	4.661.438,281	376,056	376,292	0,236	53,2309	0	-0,10%			
Rec	19,000	600.773,778	4.661.438,951	376,056	376,291	0,235	53,2309	0	-0,10%			
Rec	20,000	600.774,520	4.661.439,622	376,056	376,290	0,234	53,2309	0	-0,10%			
Rec	21,000	600.775,262	4.661.440,292	376,056	376,289	0,233	53,2309	0	-0,10%			
Rec	22,000	600.776,004	4.661.440,962	376,056	376,288	0,232	53,2309	0	-0,10%			
Rec	23,000	600.776,746	4.661.441,633	376,056	376,287	0,231	53,2309	0	-0,10%			
Rec	24,000	600.777,488	4.661.442,303	376,056	376,286	0,230	53,2309	0	-0,10%			
Rec	25,000	600.778,230	4.661.442,973	376,056	376,285	0,229	53,2309	0	-0,10%			
Rec	26,000	600.778,972	4.661.443,644	376,056	376,284	0,228	53,2309	0	-0,10%			
Rec	27,000	600.779,714	4.661.444,314	376,056	376,283	0,227	53,2309	0	-0,10%			
Rec	28,000	600.780,456	4.661.444,984	376,056	376,282	0,226	53,2309	0	-0,10%			
Rec	29,000	600.781,198	4.661.445,655	376,056	376,281	0,225	53,2309	0	-0,10%			
Rec	30,000	600.781,940	4.661.446,325	376,056	376,280	0,224	53,2309	0	-0,10%			
Rec	31,000	600.782,682	4.661.446,995	376,056	376,279	0,223	53,2309	0	-0,10%			
Rec	32,000	600.783,424	4.661.447,666	376,056	376,278	0,222	53,2309	0	-0,10%			
Rec	33,000	600.784,166	4.661.448,336	376,056	376,277	0,221	53,2309	0	-0,10%			
Rec	34,000	600.784,909	4.661.449,006	376,056	376,276	0,220	53,2309	0	-0,10%			
Rec	35,000	600.785,651	4.661.449,677	376,057	376,275	0,218	53,2309	0	-0,10%			
Rec	36,000	600.786,393	4.661.450,347	376,057	376,274	0,217	53,2309	0	-0,10%			
Rec	37,000	600.787,135	4.661.451,017	376,058	376,273	0,215	53,2309	0	-0,10%			
Rec	38,000	600.787,877	4.661.451,688	376,059	376,272	0,213	53,2309	0	-0,10%			
Rec	39,000	600.788,619	4.661.452,358	376,060	376,271	0,211	53,2309	0	-0,10%			
Rec	40,000	600.789,361	4.661.453,028	376,061	376,270	0,209	53,2309	0	-0,10%			
Rec	41,000	600.790,103	4.661.453,699	376,062	376,269	0,207	53,2309	0	-0,10%			
Rec	42,000	600.790,845	4.661.454,369	376,063	376,268	0,205	53,2309	0	-0,10%			
Rec	43,000	600.791,587	4.661.455,039	376,064	376,267	0,203	53,2309	0	-0,10%			
Rec	44,000	600.792,329	4.661.455,709	376,065	376,266	0,201	53,2309	0	-0,10%			
Rec	45,000	600.793,071	4.661.456,380	376,066	376,265	0,199	53,2309	0	-0,10%			
Rec	46,000	600.793,813	4.661.457,050	376,067	376,264	0,197	53,2309	0	-0,10%			
Rec	47,000	600.794,555	4.661.457,720	376,069	376,263	0,194	53,2309	0	-0,10%			
Rec	48,000	600.795,297	4.661.458,391	376,070	376,262	0,192	53,2309	0	-0,10%			
Rec	49,000	600.796,040	4.661.459,061	376,070	376,261	0,191	53,2309	0	-0,10%			
Rec	50,000	600.796,782	4.661.459,731	376,071	376,260	0,189	53,2309	0	-0,10%			
Rec	51,000	600.797,524	4.661.460,402	376,071	376,259	0,188	53,2309	0	-0,10%			
Rec	52,000	600.798,266	4.661.461,072	376,072	376,258	0,186	53,2309	0	-0,10%			
Rec	53,000	600.799,008	4.661.461,742	376,072	376,257	0,185	53,2309	0	-0,10%			
Rec	54,000	600.799,750	4.661.462,413	376,072	376,256	0,184	53,2309	0	-0,10%			
Rec	55,000	600.800,492	4.661.463,083	376,073	376,255	0,182	53,2309	0	-0,10%			
Cur	55,723	600.801,029	4.661.463,568	376,073	376,254	0,181	53,2309	200	-0,10%	P.S.		
Cur	56,000	600.801,234	4.661.463,753	376,072	376,254	0,182	53,3190	200	-0,10%			
Cur	57,000	600.801,979	4.661.464,421	376,072	376,253	0,181	53,6373	200	-0,10%			
Cur	58,000	600.802,727	4.661.465,084	376,072	376,252	0,180	53,9556	200	-0,10%			
Cur	59,000	600.803,478	4.661.465,744	376,071	376,251	0,180	54,2739	200	-0,10%			
Cur	60,000	600.804,233	4.661.466,401	376,070	376,250	0,180	54,5922	200	-0,10%			
Cur	61,000	600.804,991	4.661.467,053	376,069	376,249	0,180	54,9105	200	-0,10%			
Cur	62,000	600.805,752	4.661.467,702	376,068	376,248	0,180	55,2289	200	-0,10%			
Cur	63,000	600.806,516	4.661.468,346	376,067	376,247	0,180	55,5472	200	-0,10%			
Cur	64,000	600.807,284	4.661.468,987	376,066	376,246	0,180	55,8655	200	-0,10%			
Cur	65,000	600.808,054	4.661.469,624	376,065	376,245	0,180	56,1838	200	-0,10%			
Cur	66,000	600.808,828	4.661.470,258	376,064	376,244	0,180	56,5021	200	-0,10%			
Cur	67,000	600.809,605	4.661.470,887	376,063	376,243	0,180	56,8204	200	-0,10%			
Cur	68,000	600.810,386	4.661.471,513	376,062	376,242	0,180	57,1387	200	-0,10%			
Cur	69,000	600.811,169	4.661.472,134	376,061	376,241	0,180	57,4570	200	-0,10%			
Cur	70,000	600.811,955	4.661.472,752	376,060	376,240	0,180	57,7753	200	-0,10%			
Cur	71,000	600.812,745	4.661.473,366	376,059	376,239	0,180	58,0936	200	-0,10%			
Cur	72,000	600.813,538	4.661.473,975	376,059	376,238	0,179	58,4120	200	-0,10%			
Cur	73,000	600.814,333	4.661.474,581	376,058	376,237	0,179	58,7303	200	-0,10%			
Cur	74,000	600.815,132	4.661.475,183	376,057	376,236	0,179	59,0486	200	-0,10%			
Cur	75,000	600.815,933	4.661.475,781	376,057	376,235	0,178	59,3669	200	-0,10%			
Cur	76,000	600.816,738	4.661.476,375	376,056	376,234	0,178	59,6852	200	-0,10%			
Cur	77,000	600.817,546	4.661.476,964	376,056	376,233	0,177	60,0035	200	-0,10%			
Cur	78,000	600.818,356	4.661.477,550	376,056	376,232	0,176	60,3218	200	-0,10%			
Cur	79,000	600.819,170	4.661.478,132	376,055	376,231	0,176	60,6401	200	-0,10%			
Cur	80,000	600.819,986	4.661.478,709	376,055	376,230	0,175	60,9584	200	-0,10%			
Cur	81,000	600.820,805	4.661.479,283	376,055	376,229	0,174	61,2767	200	-0,10%			
Cur	82,000	600.821,627	4.661.479,852	376,055	376,228	0,173	61,5951	200	-0,10%			
Cur	83,000	600.822,452	4.661.480,417	376,054	376,227	0,173	61,9134	200	-0,10%			
Rec	83,321	600.822,718	4.661.480,598	376,055	376,227	0,172	62,0156	0	-0,10%	P.S.		
Rec	84,000	600.823,279	4.661.480,980	376,055	376,226	0,171	62,0156	0	-0,10%			

P.S. = PUNTO SINGULAR EN PLANTA
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REPLANTEO CAMINO TRAMO T16-T14y15 A-T14y15

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimet	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Rec	85,000	600.824,106	4.661.481,541	376,056	376,225	0,169	62,0156	0	-0,10%			
Rec	86,000	600.824,934	4.661.482,103	376,057	376,224	0,167	62,0156	0	-0,10%			
Rec	87,000	600.825,761	4.661.482,665	376,057	376,223	0,166	62,0156	0	-0,10%			
Rec	88,000	600.826,588	4.661.483,227	376,058	376,222	0,164	62,0156	0	-0,10%			
Rec	89,000	600.827,415	4.661.483,789	376,059	376,221	0,162	62,0156	0	-0,10%			
Rec	90,000	600.828,242	4.661.484,351	376,059	376,220	0,161	62,0156	0	-0,10%			
Rec	91,000	600.829,070	4.661.484,913	376,059	376,219	0,160	62,0156	0	-0,10%			
Rec	92,000	600.829,897	4.661.485,475	376,058	376,218	0,160	62,0156	0	-0,10%			
Rec	93,000	600.830,724	4.661.486,036	376,058	376,217	0,159	62,0156	0	-0,10%			
Rec	94,000	600.831,551	4.661.486,598	376,058	376,216	0,158	62,0156	0	-0,10%			
Rec	95,000	600.832,379	4.661.487,160	376,058	376,215	0,157	62,0156	0	-0,10%			
Rec	96,000	600.833,206	4.661.487,722	376,058	376,214	0,156	62,0156	0	-0,10%			
Rec	97,000	600.834,033	4.661.488,284	376,058	376,213	0,155	62,0156	0	-0,10%			
Rec	98,000	600.834,860	4.661.488,846	376,058	376,212	0,154	62,0156	0	-0,10%			
Rec	99,000	600.835,687	4.661.489,408	376,058	376,211	0,153	62,0156	0	-0,10%			
Rec	100,000	600.836,515	4.661.489,970	376,058	376,210	0,152	62,0156	0	-0,10%			
Rec	101,000	600.837,342	4.661.490,531	376,058	376,209	0,151	62,0156	0	-0,10%			
Rec	102,000	600.838,169	4.661.491,093	376,058	376,208	0,150	62,0156	0	-0,10%			
Rec	103,000	600.838,996	4.661.491,655	376,058	376,207	0,149	62,0156	0	-0,10%			
Rec	104,000	600.839,824	4.661.492,217	376,056	376,206	0,150	62,0156	0	-0,10%			
Rec	105,000	600.840,651	4.661.492,779	376,052	376,205	0,153	62,0156	0	-0,10%			
Rec	106,000	600.841,478	4.661.493,341	376,049	376,204	0,155	62,0156	0	-0,10%			
Rec	107,000	600.842,305	4.661.493,903	376,044	376,203	0,159	62,0156	0	-0,10%			
Rec	108,000	600.843,132	4.661.494,465	376,039	376,202	0,163	62,0156	0	-0,10%			
Rec	109,000	600.843,960	4.661.495,027	376,035	376,201	0,166	62,0156	0	-0,10%			
Rec	110,000	600.844,787	4.661.495,588	376,031	376,200	0,169	62,0156	0	-0,10%			
Rec	111,000	600.845,614	4.661.496,150	376,026	376,199	0,173	62,0156	0	-0,10%			
Rec	112,000	600.846,441	4.661.496,712	376,022	376,198	0,176	62,0156	0	-0,10%			
Rec	113,000	600.847,268	4.661.497,274	376,017	376,197	0,180	62,0156	0	-0,10%			
Rec	114,000	600.848,096	4.661.497,836	376,013	376,196	0,183	62,0156	0	-0,10%			
Rec	115,000	600.848,923	4.661.498,398	376,009	376,195	0,186	62,0156	0	-0,10%			
Rec	116,000	600.849,750	4.661.498,960	376,005	376,194	0,189	62,0156	0	-0,10%			
Rec	117,000	600.850,577	4.661.499,522	376,001	376,193	0,192	62,0156	0	-0,10%			
Rec	118,000	600.851,405	4.661.500,083	375,910	376,192	0,282	62,0156	0	-0,10%			
Cur	118,870	600.852,124	4.661.500,572	375,808	376,191	0,383	62,0156	500	-0,10%	P.S.		
Cur	119,000	600.852,232	4.661.500,645	375,794	376,191	0,397	62,0323	500	-0,10%			
Cur	120,000	600.853,060	4.661.501,206	375,686	376,190	0,504	62,1596	500	-0,10%			
Cur	121,000	600.853,889	4.661.501,765	375,583	376,189	0,606	62,2869	500	-0,10%			
Cur	122,000	600.854,719	4.661.502,323	375,490	376,188	0,698	62,4142	500	-0,10%			
Cur	123,000	600.855,550	4.661.502,879	375,399	376,187	0,788	62,5416	500	-0,10%			
Cur	124,000	600.856,383	4.661.503,433	375,365	376,186	0,821	62,6689	500	-0,10%			ODT Ø500 L=10,75m
Cur	124,096	600.856,463	4.661.503,486	375,372	376,186	0,814	62,6811	500	-0,10%		T.E.	
Cur	125,000	600.857,216	4.661.503,985	375,439	376,184	0,745	62,7962	500	-0,40%			
Cur	126,000	600.858,051	4.661.504,536	375,664	376,178	0,514	62,9235	500	-0,73%			
Cur	127,000	600.858,886	4.661.505,085	375,864	376,169	0,305	63,0508	500	-1,07%			
Cur	128,000	600.859,723	4.661.505,633	375,940	376,157	0,217	63,1782	500	-1,40%			
Cur	129,000	600.860,561	4.661.506,179	375,832	376,141	0,309	63,3055	500	-1,73%			
Cur	130,000	600.861,400	4.661.506,723	375,772	376,122	0,350	63,4328	500	-2,07%		V.	ODT Ø500 L=7,75m
Cur	131,000	600.862,240	4.661.507,265	375,694	376,100	0,406	63,5601	500	-2,40%			
Cur	132,000	600.863,081	4.661.507,806	375,661	376,074	0,413	63,6875	500	-2,73%			
Cur	133,000	600.863,923	4.661.508,345	375,560	376,045	0,485	63,8148	500	-3,07%			
Cur	134,000	600.864,767	4.661.508,883	375,457	376,013	0,556	63,9421	500	-3,40%			
Cur	135,000	600.865,611	4.661.509,419	375,413	375,977	0,564	64,0694	500	-3,73%			
Cur	135,904	600.866,375	4.661.509,901	375,380	375,942	0,561	64,1845	500	-4,04%		T.S.	
Cur	136,000	600.866,457	4.661.509,953	375,377	375,938	0,561	64,1968	500	-4,04%			
Cur	137,000	600.867,303	4.661.510,485	375,342	375,898	0,556	64,3241	500	-4,04%			
Rec	137,957	600.868,114	4.661.510,993	375,308	375,859	0,551	64,4459	0	-4,04%	P.S.		
Rec	138,000	600.868,151	4.661.511,016	375,306	375,857	0,551	64,4459	0	-4,04%			
Rec	139,000	600.868,999	4.661.511,546	375,271	375,817	0,546	64,4459	0	-4,04%			
Rec	140,000	600.869,847	4.661.512,076	375,235	375,777	0,541	64,4459	0	-4,04%			
Rec	141,000	600.870,695	4.661.512,605	375,200	375,736	0,536	64,4459	0	-4,04%			
Rec	142,000	600.871,543	4.661.513,135	375,189	375,696	0,507	64,4459	0	-4,04%			
Rec	142,663	600.872,105	4.661.513,487	375,190	375,669	0,479	64,4459	0	-4,04%		T.E.	
Rec	143,000	600.872,391	4.661.513,665	375,191	375,656	0,465	64,4459	0	-3,87%			
Rec	144,000	600.873,239	4.661.514,195	375,193	375,620	0,427	64,4459	0	-3,37%			
Rec	145,000	600.874,087	4.661.514,725	375,194	375,588	0,394	64,4459	0	-2,87%			
Rec	146,000	600.874,935	4.661.515,255	375,197	375,562	0,365	64,4459	0	-2,37%			
Rec	147,000	600.875,783	4.661.515,785	375,199	375,541	0,342	64,4459	0	-1,87%			
Rec	148,000	600.876,631	4.661.516,315	375,202	375,525	0,323	64,4459	0	-1,37%			
Rec	149,000	600.877,479	4.661.516,845	375,204	375,514	0,310	64,4459	0	-0,87%			
Rec	150,000	600.878,327	4.661.517,375	375,206	375,508	0,302	64,4459	0	-0,37%		V.	ODT Ø500 L=7,00m
Rec	151,000	600.879,175	4.661.517,904	375,206	375,506	0,300	64,4459	0	0,13%			
Rec	152,000	600.880,024	4.661.518,434	375,207	375,510	0,303	64,4459	0	0,63%			
Rec	153,000	600.880,872	4.661.518,964	375,208	375,519	0,311	64,4459	0	1,13%			
Cur	153,319	600.881,142	4.661.519,133	375,208	375,523	0,315	64,4459	15	1,29%	P.S.		
Cur	154,000	600.881,728	4.661.519,481	375,209	375,533	0,324	67,3367	15	1,63%			
Cur	155,000	600.882,615	4.661.519,942	375,211	375,552	0,341	71,5808	15	2,13%			
Cur	156,000	600.883,530	4.661.520,344	375,216	375,576	0,360	75,8250	15	2,63%			
Cur	157,000	600.884,471	4.661.520,683	375,222	375,604	0,382	80,0691	15	3,13%			
Cur	157,337	600.884,793	4.661.520,783	375,225	375,615	0,390	81,4994	15	3,30%		T.S.	
Cur	158,000	600.885,432	4.661.520,959	375,231	375,637	0,406	84,3132	15	3,30%			
Cur	159,000	600.886,409	4.661.521,171	375,242	375,670	0,428	88,5574	15	3,30%			
Cur	160,000	600.887,398	4.661.521,316	375,256	375,703	0,447	92,8015	15	3,30%			
Cur	161,000	600.888,395	4.661.521,396	375,273	375,736	0,463	97,0456	15	3,30%			

P.S. = PUNTO SINGULAR EN PLANTA
V. = VÉRTICE DE ACUERDO VERTICAL
T.E. = TANGENTE DE ENTRADA DE ACUERDO VERTICAL
T.S. = TANGENTE DE SALIDA DE ACUERDO VERTICAL

REPLANTEO CAMINO TRAMO T16-T14y15 A-T14y15

Tipo	P.K.	Coord. X	Coord. Y	Cota Terreno Original	Cota Rasante Camino	Cota Roja Rasante Camino	Azimut	Radio de Curvatura	Pendiente	Puntos Singulares Planta	Puntos Singulares Alzado	Obras de Drenaje Transversal
Cur	162,000	600.889,394	4.661.521,409	375,292	375,769	0,477	101,2898	15	3,30%			
Cur	163,000	600.890,393	4.661.521,356	375,313	375,802	0,489	105,5339	15	3,30%			
Cur	164,000	600.891,385	4.661.521,236	375,315	375,835	0,520	109,7780	15	3,30%			
Cur	164,048	600.891,433	4.661.521,228	375,315	375,837	0,522	109,9817	15	3,30%		T.E.	
Cur	165,000	600.892,368	4.661.521,050	375,316	375,866	0,550	114,0222	15	2,98%			
Cur	166,000	600.893,336	4.661.520,799	375,318	375,895	0,577	118,2663	15	2,65%			
Cur	167,000	600.894,285	4.661.520,484	375,322	375,919	0,597	122,5104	15	2,32%			
Cur	168,000	600.895,210	4.661.520,107	375,327	375,941	0,614	126,7545	15	1,98%			
Cur	169,000	600.896,109	4.661.519,669	375,334	375,959	0,625	130,9987	15	1,65%		V.	ODT Ø500 L=6,10m
Cur	170,000	600.896,977	4.661.519,172	375,342	375,974	0,632	135,2428	15	1,32%			
Cur	171,000	600.897,809	4.661.518,618	375,352	375,985	0,633	139,4869	15	0,98%			
Cur	172,000	600.898,603	4.661.518,010	375,363	375,994	0,631	143,7311	15	0,65%			
Cur	173,000	600.899,354	4.661.517,351	375,375	375,998	0,623	147,9752	15	0,32%			
Rec	173,912	600.900,000	4.661.516,707	375,388	376,000	0,612	151,8477	0	0,01%	P.S.		
Rec	173,952	600.900,028	4.661.516,678	375,388	376,000	0,612	151,8477	0	0,00%		T.S.	
Rec	174,000	600.900,061	4.661.516,643	375,389	376,000	0,611	151,8477	0	0,00%			
Rec	175,000	600.900,747	4.661.515,916	375,403	376,000	0,597	151,8477	0	0,00%			
Rec	176,000	600.901,433	4.661.515,188	375,845	376,000	0,155	151,8477	0	0,00%			
	176,232	600.901,593	4.661.515,019	376,000	376,000	0,000	151,8477		0,00%			