



Estación de mercancías en el polígono de A Sionlla

“Goods station at A Sionlla’s industrial park”

PRESUPUESTO

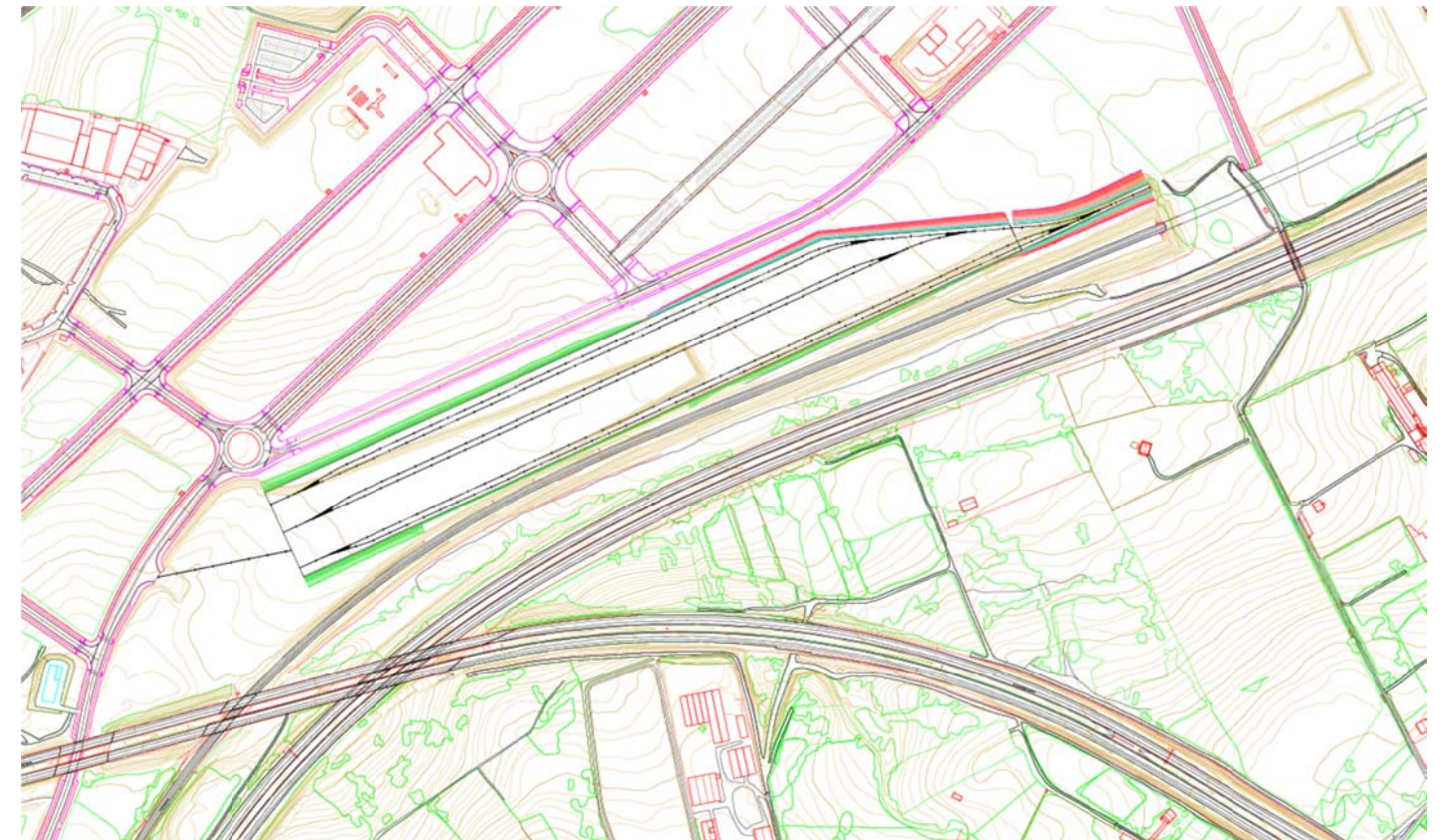
GRADO EN TECNOLOGÍA DE LA INGENIERÍA CIVIL

TRABAJO DE FIN DE GRADO

ANTEPROYECTO

DAVID LÓPEZ PÉREZ

SEPTIEMBRE DE 2016





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PRESUPUESTO



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1- Mediciones auxiliares

1.1- Movimiento de tierras

TERMINAL:

P.K.	PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000		-2.658	15.775	22.097	0.000	0.000	0.000	0.00
20.000		-3.011	14.462	21.462	737.950	1002.962	0.000	2540.21
40.000		-1.201	14.462	20.831	1450.107	1928.458	0.000	4972.20
45.393		-1.078	14.351	20.655	1639.668	2165.484	0.000	5645.77
45.413		-1.077	14.351	0.000	1640.162	2166.084	0.000	5647.25
60.000		-0.743	14.038	0.185	1848.564	2413.582	0.000	5935.21
80.000		0.148	13.529	1.125	2137.333	2759.162	0.000	6232.40
85.291		0.112	13.355	1.424	2215.200	2851.713	0.000	6301.82
85.311		0.112	13.355	-0.000	2215.482	2852.040	0.000	6302.06
100.000		0.013	12.723	0.344	2409.537	3071.928	0.000	6450.15
120.000		-0.169	12.568	1.612	2682.009	3383.925	0.000	6624.21
140.000		-0.158	12.181	2.759	2973.201	3719.970	0.000	6780.53
153.931		-0.208	11.498	3.178	3179.487	3957.070	0.000	6886.87
153.941		-0.208	2.835	2.835	3179.588	3957.154	0.000	6886.91
160.000		-0.230	2.835	2.835	3213.938	3957.154	0.000	6886.91
180.000		-0.926	2.835	2.835	3327.322	3957.154	0.000	6886.91
200.000		-0.959	2.835	2.835	3440.706	3957.154	0.000	6886.91
220.000		-0.174	2.835	2.835	3554.090	3957.154	0.000	6886.91
240.000		0.711	2.835	2.835	3667.474	3957.154	0.000	6886.91
260.000		0.801	2.835	2.835	3780.858	3957.154	0.000	6886.91
280.000		0.464	2.835	2.835	3894.242	3957.154	0.000	6886.91
300.000		0.121	2.835	2.835	4007.626	3957.154	0.000	6886.91
320.000		-0.043	2.835	2.835	4121.010	3957.154	0.000	6886.91
340.000		0.085	2.835	2.835	4234.394	3957.154	0.000	6886.91
360.000		0.177	2.835	2.835	4347.778	3957.154	0.000	6886.91
380.000		0.183	2.835	2.835	4461.162	3957.154	0.000	6886.91
400.000		0.096	2.835	2.835	4574.546	3957.154	0.000	6886.91
420.000		-0.128	2.835	2.835	4687.930	3957.154	0.000	6886.91
440.000		-0.124	2.835	2.835	4801.314	3957.154	0.000	6886.91
460.000		-0.266	2.835	2.835	4914.698	3957.154	0.000	6886.91
480.000		-0.986	2.835	2.835	5028.082	3957.154	0.000	6886.91
500.000		-1.177	2.835	2.835	5141.466	3957.154	0.000	6886.91
520.000		-1.195	2.835	2.835	5254.850	3957.154	0.000	6886.91
540.000		-0.902	2.835	2.835	5368.234	3957.154	0.000	6886.91
560.000		-0.021	2.835	2.835	5481.618	3957.154	0.000	6886.91
580.000		0.195	2.835	2.835	5595.002	3957.154	0.000	6886.91
600.000		0.707	2.835	2.835	5708.386	3957.154	0.000	6886.91
620.000		1.044	2.835	2.835	5821.770	3957.154	0.000	6886.91
640.000		1.721	2.835	2.835	5935.154	3957.154	0.000	6886.91
660.000		2.567	2.835	2.835	6048.538	3957.154	0.000	6886.91
680.000		3.419	2.835	2.835	6161.922	3957.154	0.000	6886.91
700.000		4.189	2.835	2.835	6275.306	3957.154	0.000	6886.91
720.000		5.126	2.835	2.835	6388.690	3957.154	0.000	6886.91
740.000		5.817	2.835	2.835	6502.074	3957.154	0.000	6886.91
760.000		6.175	2.835	2.835	6615.458	3957.154	0.000	6886.91
780.000		6.437	2.835	2.835	6728.842	3957.154	0.000	6886.91
820.000		7.112	2.835	2.835	6955.610	3957.154	0.000	6886.91
880.000		7.146	2.835	2.835	7295.762	3957.154	0.000	6886.91
900.000		7.144	2.835	2.835	7409.146	3957.154	0.000	6886.91
920.000		7.136	2.835	2.835	7522.530	3957.154	0.000	6886.91
940.000		7.152	2.835	1.005	7617.620	3957.154	0.000	6886.91
960.000		7.588	2.835	-1.594	7668.419	3957.154	0.000	6886.91
979.393		8.225	2.835	2.835	7735.415	3957.154	0.000	6886.91



P.K.	PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000		-0.702	0.000	20.743	0.000	0.000	0.000	0.00
20.000		-1.770	0.367	20.087	411.972	516.712	0.000	2143.63
40.000		-3.233	1.358	19.366	823.753	1003.443	0.000	4351.30
60.000		-5.556	2.259	18.756	1241.139	1474.806	0.000	6700.99
80.000		-8.576	3.955	18.781	1678.647	1945.289	0.000	9443.62
100.000		-9.538	6.242	18.761	2156.041	2439.401	0.000	12728.49
108.700		-9.450	7.160	18.689	2377.248	2663.685	0.000	14308.72
108.800		-9.449	2.835	2.835	2378.824	2664.991	0.000	14317.97
120.000		-9.337	2.835	2.835	2442.319	2664.991	0.000	14317.97
140.000		-9.154	2.835	2.835	2555.703	2664.991	0.000	14317.97
150.291		-9.028	2.835	2.835	2614.045	2664.991	0.000	14317.97
150.311		-9.027	0.000	2.835	2614.130	2664.991	0.000	14317.97
160.000		-8.908	0.176	2.835	2642.447	2664.991	0.000	14317.97
180.000		-8.651	1.297	2.835	2713.865	2664.991	0.000	14317.97
200.000		-8.372	2.721	2.835	2810.739	2664.991	0.000	14317.97
220.000		-7.920	2.835	2.835	2922.990	2664.991	0.000	14317.97
240.000		-7.447	2.835	2.835	3036.374	2664.991	0.000	14317.97
250.291		-7.248	2.835	2.835	3094.716	2664.991	0.000	14317.97
250.311		-7.247	0.000	2.835	3094.801	2664.991	0.000	14317.97
260.000		-7.060	0.148	2.835	3122.983	2664.991	0.000	14317.97
280.000		-6.698	1.370	2.835	3194.851	2664.991	0.000	14317.97
300.000		-6.245	2.084	2.835	3286.075	2664.991	0.000	14317.97
320.000		-5.943	2.835	2.835	3391.949	2664.991	0.000	14317.97
340.000		-5.586	2.835	2.835	3505.333	2664.991	0.000	14317.97
360.000		-5.467	2.835	2.835	3618.717	2664.991	0.000	14317.97
380.000		-5.109	2.835	2.835	3732.101	2664.991	0.000	14317.97
400.000		-4.541	2.835	2.835	3845.485	2664.991	0.000	14317.97
420.000		-3.826	2.835	2.835	3958.869	2664.991	0.000	14317.97
440.000		-2.935	2.835	2.835	4072.253	2664.991	0.000	14317.97
460.000		-2.531	2.835	2.835	4185.637	2664.991	0.000	14317.97
480.000		-1.989	2.835	2.835	4299.021	2664.991	0.000	14317.97
500.000		-1.443	2.835	2.835	4412.405	2664.991	0.000	14317.97
520.000		-1.572	2.835	2.835	4525.789	2664.991	0.000	14317.97
540.000		-1.353	2.835	2.835	4639.173	2664.991	0.000	14317.97
560.000		-1.294	2.835	2.835	4752.557	2664.991	0.000	14317.97
580.000		-1.216	2.835	2.835	4865.941	2664.991	0.000	14317.97
600.000		-0.829	2.835	2.835	4979.325	2664.991	0.000	14317.97
620.000		-0.465	2.835	2.835	5092.709	2664.991	0.000	14317.97
640.000		-0.095	2.835	2.835	5206.093	2664.991	0.000	14317.97
660.000		0.250	2.835	2.835	5319.477	2664.991	0.000	14317.97
680.000		0.250	2.835	2.835	5432.861	2664.991	0.000	14317.97
700.000		0.250	2.835	2.835	5546.245	2664.991	0.000	14317.97
720.000		0.250	2.835	2.835	5659.629	2664.991	0.000	14317.97
740.000		0.250	2.835	2.835	5773.013	2664.991	0.000	14317.97
760.000		0.250	2.835	2.835	5886.397	2664.991	0.000	14317.97
780.000		0.356	2.835	2.835	5999.781	2664.991	0.000	14317.97
800.000		0.853	2.835	2.835	6113.165	2664.991	0.000	14317.97
820.000		1.039	2.835	2.835	6226.549	2664.991	0.000	14317.97
840.000		1.119	2.835	2.835	6339.933	2664.991	0.000	14317.97
860.000		1.243	2.835	2.835	6453.317	2664.991	0.000	14317.97
880.000		1.250	2.835	2.835	6566.701	2664.991	0.000	14317.97
900.000		1.250	2.446	2.835	6676.199	2664.991	0.000	14317.97
920.000		3.786	1.178	2.835	6769.127	2664.991	0.000	14317.97
940.000		6.293	0.125	2.835	6838.841	2664.991	0.000	14317.97
947.934		7.252	2.835	2.835	6873.070	2664.991	0.000	14317.97



P.K. PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000	0.112	0.000	1.349	0.000	0.000	0.000	0.00
20.000	-1.287	0.655	2.227	42.314	63.653	0.000	94.46
40.000	-2.827	1.993	3.388	124.946	173.887	0.000	377.35
60.000	-3.738	3.019	5.939	268.342	347.862	0.000	1027.54
68.980	-3.768	3.089	7.954	358.148	452.515	0.000	1495.95
68.990	-3.768	16.596	34.310	358.458	452.851	0.000	1497.51
80.000	-3.804	14.091	38.159	926.334	1056.483	0.000	4451.15
100.000	-3.805	12.790	45.009	2026.827	2209.244	0.000	10654.13
120.000	-4.240	11.383	51.950	3238.153	3442.107	30.569	17965.08
140.000	-4.454	11.969	58.704	4578.218	4762.237	109.077	26312.31
160.000	-3.693	12.468	65.484	6064.473	6203.914	214.554	35453.50
180.000	-3.746	12.786	72.176	7693.621	7771.084	332.100	45107.85
200.000	-3.132	12.786	78.916	9460.269	9471.933	451.532	55187.77
220.000	-2.797	13.850	85.558	11371.373	11313.930	570.576	65523.10
240.000	-2.590	14.286	92.279	13431.112	13299.077	689.381	75957.10
260.000	-2.079	14.286	99.022	15629.856	15418.630	812.463	86424.99
280.000	-2.082	14.341	98.537	17891.720	17593.196	943.819	96521.24
300.000	-2.146	15.364	98.159	20155.727	19756.029	1087.914	105927.49
320.000	-2.506	15.758	97.740	22425.936	21912.312	1244.025	114669.08
340.000	-2.734	16.162	97.321	24695.751	24064.128	1403.937	122784.00
360.000	-2.519	16.209	96.859	26961.263	26207.781	1565.785	130182.35
380.000	-2.077	16.054	96.539	29217.868	28338.563	1725.885	136869.70
400.000	-1.951	14.315	95.716	31444.115	30469.167	1849.128	142765.17
420.000	-1.965	12.813	95.159	33624.152	32605.492	1915.368	147778.28
440.000	-1.750	14.856	94.221	35794.644	34501.924	2230.084	150612.97
460.000	-1.185	17.228	92.917	37986.867	35922.777	3092.388	149390.36
464.990	-0.887	17.869	92.456	38536.938	36213.726	3380.418	148445.70
465.000	-0.886	13.211	92.455	38538.018	36214.310	3380.966	148443.71
480.000	0.009	13.072	91.786	40116.949	36770.186	4475.641	144921.60
500.000	1.050	13.042	94.786	42243.818	37042.638	6408.714	138312.71
520.000	2.351	13.090	96.460	44417.606	37266.267	8422.196	129728.16
540.000	3.802	13.062	97.786	46621.596	37439.132	10512.879	119742.79
560.000	4.908	13.121	97.786	48839.156	37536.680	12689.549	109094.20
580.000	6.250	13.168	96.538	51045.292	37580.631	14898.845	98709.63
600.000	6.250	13.178	97.751	53251.640	37624.911	17094.941	88123.21
620.000	6.250	13.026	96.637	55457.551	37668.443	19279.796	77401.57
640.000	6.250	13.262	96.691	57653.714	37711.502	21446.412	67002.08
660.000	6.250	13.444	97.131	59858.999	37755.216	23615.659	56233.44
680.000	6.250	13.543	97.604	62076.219	37800.844	25791.560	44990.11
700.000	6.699	13.658	97.878	64303.052	37847.887	27972.677	33206.67
720.000	7.035	13.882	98.462	66541.848	37897.344	30162.360	20772.45
740.000	7.029	13.886	98.677	68790.909	37948.835	32359.985	7890.72
760.000	7.017	13.887	98.312	71038.522	38000.373	34556.118	-4918.40
779.990	7.008	13.888	98.347	73281.733	38051.904	36747.863	-17552.29
780.000	7.008	20.270	98.171	73282.887	38051.917	36749.004	-17558.74
800.000	7.057	21.276	98.473	75664.779	38051.917	39131.257	-30873.50
820.000	7.074	20.879	98.155	78052.601	38051.917	41519.591	-44232.47
840.000	7.071	20.777	98.155	80432.267	38051.917	43899.596	-57459.91
860.000	7.142	20.979	98.749	82818.875	38051.917	46286.480	-71036.81
880.000	7.758	21.565	99.327	85225.080	38051.917	48692.898	-85547.00
900.000	8.371	22.368	100.139	87659.070	38051.917	51127.056	-101308.72
919.109	8.603	22.847	100.976	90012.623	38051.917	53480.758	-117546.16



APARTADERO:

P.K. PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000	9.615	19.182	17.460	0.000	0.000	0.000	0.00
20.000	11.773	21.646	20.918	792.065	0.000	792.572	-5081.43
40.000	13.996	24.497	24.471	1707.382	0.000	1708.053	-12044.89
60.000	16.770	29.004	29.302	2780.118	0.000	2781.135	-21588.92
70.000	18.344	31.030	32.556	3389.576	0.000	3390.956	-27634.43
80.000	19.922	33.090	40.694	4076.425	0.000	4082.700	-35090.10
90.000	22.707	33.194	39.564	4809.135	0.000	4821.500	-43965.79
100.000	22.898	33.194	39.298	5535.385	0.000	5550.487	-53385.52
110.000	23.035	33.194	39.598	6261.807	0.000	6279.426	-62846.15
115.291	23.088	33.194	39.504	6646.701	0.000	6665.538	-67852.27
115.311	23.088	0.000	39.503	6647.823	0.000	6666.663	-67867.00
120.000	23.134	0.035	39.413	6832.926	0.000	6852.022	-70332.47
140.000	23.330	0.972	39.289	7630.012	0.000	7649.890	-80939.54
160.000	23.177	2.156	38.650	8440.672	0.000	8460.873	-91749.02
180.000	22.811	2.524	37.920	9253.175	0.000	9273.476	-102553.71
200.000	22.426	2.475	37.163	10054.001	0.000	10074.368	-113069.29
220.000	21.990	2.496	36.439	10839.732	0.000	10860.136	-123221.73
240.000	21.546	2.501	35.745	11611.546	0.000	11631.975	-133028.25
260.000	21.101	2.505	35.060	12369.662	0.000	12390.112	-142491.44
280.000	20.656	2.508	34.378	13114.180	0.000	13134.649	-151617.18
300.000	20.211	2.543	33.692	13845.396	0.000	13865.880	-160416.72
320.000	19.677	2.499	33.044	14563.173	0.000	14583.674	-168880.33
340.000	19.236	2.555	32.557	15269.722	0.000	15290.250	-177044.18
360.000	18.906	2.424	32.188	15966.971	0.000	15987.547	-184958.78
380.000	18.654	2.543	31.790	16656.429	0.000	16677.064	-192680.79
400.000	18.397	2.530	31.401	17339.073	0.000	17359.765	-200244.41
420.000	18.146	2.461	31.101	18014.001	0.000	18034.758	-207624.62
440.000	17.981	2.440	30.856	18682.580	0.000	18703.410	-214856.12
460.000	17.856	2.477	30.722	19347.534	0.000	19368.445	-221999.65
480.000	17.833	2.518	30.738	20012.089	0.000	20033.093	-229117.54
500.000	17.855	2.537	30.775	20677.780	0.000	20698.883	-236251.21
520.000	17.843	2.576	30.744	21344.106	0.000	21365.307	-243397.14
540.000	17.833	2.553	30.732	22010.146	0.000	22031.444	-250537.31
560.000	17.852	2.517	30.755	22675.705	0.000	22697.099	-257670.29
580.000	17.882	2.563	30.793	23341.981	0.000	23363.470	-264820.29
600.000	17.840	2.661	30.700	24009.150	0.000	24030.730	-271987.18
620.000	17.699	2.560	30.298	24671.341	0.000	24692.989	-279070.56
640.000	17.391	2.674	29.854	25325.194	0.000	25346.895	-285981.95
660.000	17.087	2.932	29.407	25973.857	0.000	25995.619	-292752.05
680.000	16.764	2.990	28.982	26616.972	0.000	26638.803	-299383.94
700.000	16.485	2.849	28.781	27253.002	0.000	27274.931	-305829.65
720.000	16.310	2.508	28.666	27881.042	0.000	27903.125	-312093.78
740.000	16.060	2.658	28.080	28500.155	0.000	28522.387	-318194.98
760.000	15.605	2.674	27.262	29106.889	0.000	29129.216	-324065.37
780.000	15.074	2.490	26.282	29693.969	0.000	29716.360	-329590.61
800.000	13.904	2.452	24.394	30250.151	0.000	30272.676	-334598.10
820.000	12.731	2.473	22.139	30764.728	0.000	30787.492	-338933.54
840.000	11.679	2.405	20.435	31239.243	0.000	31262.173	-342596.16
860.000	10.485	1.617	19.790	31681.704	0.000	31704.760	-345679.57
880.000	10.401	0.368	19.457	32094.017	0.000	32117.213	-348352.54
887.783	10.617	0.069	19.659	32247.939	0.000	32271.170	-349336.60
887.803	10.617	0.069	19.660	32248.334	0.000	32271.564	-349339.14
900.000	10.954	18.749	19.972	32604.792	0.000	32628.133	-351669.44
920.000	11.413	19.621	21.019	33398.409	0.000	33422.051	-357008.18
920.690	11.428	19.653	21.065	33426.477	0.000	33450.130	-357200.76



P.K.	PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000		23.089	33.194	39.665	0.000	0.000	0.000	0.00
10.000		23.150	33.191	0.179	531.143	0.000	533.170	-6861.19
20.000		23.138	33.184	0.668	867.251	0.000	871.013	-11156.69
40.000		23.057	33.194	1.958	1557.287	0.000	1564.532	-20120.49
50.000		22.980	33.194	2.307	1910.550	0.000	1919.470	-24774.63
60.000		22.805	33.194	2.498	2266.513	0.000	2276.982	-29492.48
80.000		22.439	33.194	2.558	2980.952	0.000	2994.132	-39003.33
100.000		22.071	33.194	2.525	3695.665	0.000	3711.045	-48510.12
120.000		21.664	33.329	2.514	4411.286	0.000	4428.298	-57931.96
140.000		21.226	33.581	2.504	5130.571	0.000	5148.553	-67204.16
160.000		20.782	33.633	2.496	5852.715	0.000	5871.060	-76253.65
180.000		20.338	33.167	2.462	6570.295	0.000	6588.728	-85023.85
200.000		19.838	32.720	2.539	7279.175	0.000	7297.661	-93512.50
220.000		19.294	32.206	2.456	7978.382	0.000	7996.891	-101657.29
240.000		18.927	31.259	2.577	8663.356	0.000	8681.879	-109442.39
260.000		18.641	30.634	2.493	9332.983	0.000	9351.538	-116948.31
280.000		18.393	30.190	2.486	9991.012	0.000	10009.617	-124234.36
300.000		18.138	29.823	2.586	10641.867	0.000	10660.527	-131364.38
320.000		17.941	29.455	2.611	11286.624	0.000	11305.345	-138356.65
340.000		17.795	29.214	2.554	11924.967	0.000	11943.761	-145218.77
360.000		17.741	29.072	2.522	12558.594	0.000	12577.470	-151992.32
380.000		17.782	29.117	2.510	13190.804	0.000	13209.771	-158747.16
400.000		17.760	29.083	2.492	13822.820	0.000	13841.881	-165501.59
420.000		17.741	29.062	2.472	14453.909	0.000	14473.062	-172236.80
440.000		17.760	29.090	2.547	15085.611	0.000	15104.856	-178981.83
460.000		17.789	29.142	2.530	15718.696	0.000	15738.032	-185753.41
480.000		17.775	29.146	2.389	16350.769	0.000	16370.191	-192507.08
500.000		17.679	29.038	2.448	16980.973	0.000	17000.474	-199218.22
520.000		17.400	28.774	2.447	17608.031	0.000	17627.592	-205837.71
540.000		17.063	28.321	2.145	18224.897	0.000	18244.499	-212229.99
560.000		16.776	27.824	2.044	18828.242	0.000	18847.888	-218358.63
580.000		16.463	27.381	2.143	19422.168	0.000	19441.864	-224295.65
600.000		16.209	26.901	2.442	20010.836	0.000	20030.595	-230106.84
620.000		16.056	26.447	2.396	20592.685	0.000	20612.552	-235807.32
640.000		15.615	25.928	2.336	21163.751	0.000	21183.732	-241312.25
660.000		15.096	24.629	2.478	21717.459	0.000	21737.631	-246522.39
680.000		13.952	22.877	2.585	22243.145	0.000	22263.636	-251252.79
700.000		12.775	21.108	2.522	22734.061	0.000	22754.930	-255352.51
720.000		11.669	19.475	2.560	23190.701	0.000	23212.018	-258880.89
730.000		11.299	18.680	2.326	23405.902	0.000	23427.487	-260449.31
740.000		10.569	18.194	1.865	23611.224	0.000	23633.059	-261875.89
760.000		10.323	18.185	0.560	23999.260	0.000	24021.361	-264414.62
770.000		10.564	18.295	0.121	24185.066	0.000	24207.245	-265600.35
774.689		10.739	18.434	0.015	24271.497	0.000	24293.722	-266158.02
774.709		10.740	18.435	0.014	24271.866	0.000	24294.092	-266160.41
778.480		10.880	18.545	20.302	24379.898	0.000	24402.168	-266869.09



ENLACE:

P.K.	PERFIL	COTA ROJA	ANCHO IZQUDA.	ANCHO DERCHA.	AREA OCUPADA	DESBR DESMON.	DESBR TERRAP.	VOLUMENES
0.000		-1.000	24.857	18.749	0.000	0.000	0.000	0.00
20.000		-1.142	21.343	17.704	826.540	1000.054	0.000	2220.51
40.000		-1.284	16.787	16.315	1548.035	1848.681	0.000	3956.73
60.000		-1.121	9.913	11.795	2096.140	2449.255	0.000	5068.04
80.000		-1.114	8.661	11.465	2514.476	2871.699	0.000	5768.26
100.000		-1.721	8.485	11.801	2918.591	3281.379	0.000	6457.82
120.000		-2.090	9.717	11.129	3329.916	3697.537	0.000	7299.77
140.000		-1.996	10.707	10.707	3752.521	4121.689	0.000	8228.06
160.000		-2.138	10.849	10.221	4177.365	4546.851	0.000	9156.21
180.000		-0.395	10.089	8.317	4572.123	4942.778	0.000	9819.96
200.000		-0.647	10.391	8.513	4945.220	5317.657	0.000	10249.67
210.000		-0.922	10.597	8.899	5137.223	5510.496	0.000	10507.45
220.000		-1.212	11.030	9.027	5334.988	5709.131	0.000	10812.28
240.000		-1.592	11.781	9.199	5745.355	6122.087	0.000	11540.79
260.000		-1.772	12.040	9.328	6168.835	6548.879	0.000	12373.52
280.000		-2.111	12.304	9.840	6603.953	6987.108	0.000	13304.58
281.250		-2.177	12.343	9.916	6631.705	7015.031	0.000	13367.41

RESUMEN:

	Volumen terraplén	Volumen capa vegetal	Volumen desmonte
Terminal	272.389,2	47.569,9	194.292,8
Apartadero y enlace	624.127,6	32.144	14.852,7
TOTAL	896.516,8	79.713,9	209.145,5



1.2- Estructuras

	Pk de inicio	Pk final	Altura (m)	Ancho (m)	Superficie (m)
Muro	0+465	0+780	6,25	0,6	1.968,75

	Ancho (m)	Largo (m)	Superficie (m2)
Paso inferior	9	26	234

1.3- Expropiaciones

	Precio unitario (€/m2)	Medición (m2)	Precio estimado (€)
Suelo rústico de protección	6	117.266,65	703.599,90
Suelo industrial	20	51.993,24	1.039.864,80
Suelo destinado a uso ferroviario	0	72.000	0
TOTAL			1.743.464,70



2- Presupuesto

Unidad	Descripción	Precio unitario	Medición	Coste (€)
Capítulo 1: Movimiento de tierras				
m2	Despeje y desbroce:			
	-Terminal	0,55	99.429,826	54.686,40
	-Apartadero (incluye enlace)	0,55	64.440,714	35.442,39
m3	Excavación de tierra vegetal:			
	-Terminal	1,90	47.569,9	90.382,81
	-Apartadero (incluye enlace)	1,90	32.144	61.073,6
m3	Excavación en desmonte:			
	-Terminal	3,25	194.292,8	631.451,60
	-Apartadero (incluye enlace)	3,25	14.852,7	48.271,28
m3	Terraplén con materiales procedentes de la excavación:			
	-Terminal	1,15	194.292,8	223.436,72
	-Apartadero (incluye enlace)	1,15	14.852,7	17.080,61
m3	Terraplén con materiales procedentes de préstamo:			
	-Terminal	4,54	78.096,4	354.557,66
	-Apartadero (incluye enlace)	4,54	609.274,9	2.766.108,05
Total capítulo				4.282.491,11
Capítulo 2: Drenaje				
km	Drenaje longitudinal	130.000	1,145	148.850
km	Drenaje transversal	120.000	1,145	137.400
km	Drenaje longitudinal (terminal)	125.000	0,851	106.375
km	Drenaje transversal (terminal)	95.000	0,851	80.845
Total capítulo				473.470
Capítulo 3: Superestructura de la vía, subbalasto y capa de forma hasta la terminal				
m3	Subbalasto	20,20	494,1	9.980,82
m3	Capa de forma	10,50	881,1	9.251,55
km	Montaje de vía única, incluyendo vía, balasto, traviesas, carriles, etc.	375.000	0,332	124.500
ud	Desvíos	130.000	2	260.000
Total capítulo				403.732,37



Capítulo 4: Terminal				
m3	Capa de forma	10,50	31.640,4	332.224,20
m3	Subbalasto	20,20	19.499,3	393.885,86
m3	Hormigón en firme	86,20	54.175,7	4.669.945,34
km	Montaje de playa de vías incluyendo vía, hormigón, traviesas, carriles, etc.	700	4,765	3.335,50
ud	Desvíos	130.000	6	780.000
m2	Muro	190	1.968,75	374.062,50
Total capítulo				6.553.453,40
Capítulo 5: Apartadero (incluye enlace)				
m3	Subbalasto	20,20	3.452,8	69.746,56
m3	Capa de forma	10,50	6.219,3	65.302,65
km	Montaje de vía única, incluyendo vía, balasto, traviesas, carriles, etc.	375.000	1,98	742.500
ud	Desvíos	130.000	5	650.000
m2	Paso inferior	700	234	163.800
Total capítulo				1.691.349,21
Capítulo 6: Impacto ambiental				
Km	Medidas correctoras de impacto ambiental	70.000	1,996	139.720
Km	Programa de vigilancia ambiental	20.000	1,996	39.920
Total capítulo				179.640
Capítulo 7: Instalaciones				
m	Instalaciones de seguridad y comunicación	250	1.145	286.250
Total capítulo				286.250
Capítulo 8: Varios				
m	Acceso a la terminal	1.200	210	252.000
m	Reposición de carreteras secundarias	180	730	131.400
m	Reposición de caminos	120	140	16.800
m	Reposición de caminos agrícolas	70	1.190	83.300
km	Renovación de vía antigua entre la terminal y el apartadero	2.000.000	0,55	1.100.000
Total capítulo				1.452.100



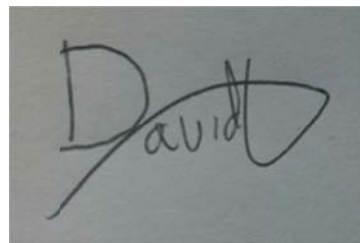
PRESUPUESTO DE EJECUCIÓN MATERIAL INICIAL		15.384.148,46
Imprevistos (4% P.E.M inicial)	4%	615.365,94
Seguridad y salud (1,5% P.E.M inicial)	1,5%	230.762,23
PRESUPUESTO DE EJECUCIÓN MATERIAL		16.230.276,62
Gastos generales (13% P.E.M)	3%	486.908,30
Beneficio industrial (6% P.E.M)	6%	973.816,60
PRESUPUESTO BASE DE LICITACIÓN		17.691.001,52
IVA (21%P.B.L.)	21%	3.715.110,32
PRESUPUESTO BASE DE LICITACIÓN MÁS IVA		21.406.111,84
Expropiaciones		1.743.464,70
PRESUPUESTO DE INVERSIÓN		23.149.576,54

El presupuesto de esta inversión asciende a la cantidad de:

Veintitrés millones ciento cuarenta y nueve mil quinientos setenta y seis euros con cincuenta y cuatro céntimos.

A Coruña, Septiembre de 2016

El autor del anteproyecto:



David López Pérez