



PREFEITURA MUNICIPAL DE ERECHIM/RS

IMPLANTAÇÃO DE TREVO DE ACESSO À BARRA DO RIO AZUL

- NOTAS DE SERVIÇOS –

RODOVIA: ERS-420 – KM 15+760 (SRE: 420ERS0010)

TRECHO: Erechim - Aratiba

OUTUBRO/2025

RAMO 1

RAMO 01

Lado Esquerdo	Eixo					Lado Direito																				
Estaca	Pontos Notáveis da Geometria Horizontal	Pontos Notáveis da Geometria Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	OFFSET_SUB			P2			JUNTA			VALETA_OUT			OFFSET			COROAMENTO_SUB-			BORDO_SUB-BASE		
						Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)
0+000.000		PCV	765.830	765.830	0.000	6.375	765.282	-16.43	6.875	765.272	-2.00	7.426	764.451	-149.25	7.826	764.451	0.00	8.468	765.092	99.84						
0+020.000			765.225	765.236	-0.010	5.585	764.815	0.17	6.085	764.805	-2.00	6.636	763.984	-149.25	7.036	763.984	0.00	7.569	764.516	99.81						
0+037.909	PC		764.609	764.655	-0.046	4.818	764.501	-5.90	5.318	764.491	-2.00							6.039	764.011	-66.57						
0+040.000			764.530	764.582	-0.051	4.742	764.452	-4.66	5.242	764.442	-2.00							6.045	763.908	-66.58						
0+050.000			764.133	764.216	-0.083	4.727	764.082	-1.88	5.227	764.072	-2.00							6.101	763.489	-66.59						
0+053.589			763.982	764.062	-0.080	4.727	763.931	-1.46	5.227	763.921	-2.00							6.168	763.294	-66.60						
0+060.000			763.702	763.764	-0.062	4.727	763.651	-1.02	5.227	763.641	-2.00							6.201	762.992	-66.60						
0+069.269	PT		763.273	763.349	-0.076	4.744	763.166	6.48	5.244	763.156	-2.00							6.068	762.606	-66.59						
0+080.000		PTV	762.741	762.793	-0.052	4.797	762.455	2.70	5.297	762.445	-2.00							5.590	762.251	-66.44						
0+100.000			761.690	761.719	-0.029	4.876	761.173	-2.00	5.376	761.163	-2.00	5.927	760.342	-148.99	6.327	760.342	0.00	7.772	761.785	99.93	0.000	761.270	0.00	4.000	761.190	-2.00
0+120.000			760.637	760.621	0.016	4.876	760.120	-2.00	5.376	760.110	-2.00	5.927	759.289	-148.99	6.327	759.289	0.00	7.832	760.792	99.93	0.000	760.217	0.00	4.000	760.137	-2.00
0+140.000			759.584	759.565	0.019	4.876	759.067	-2.00	5.376	759.057	-2.00	5.927	758.236	-148.99	6.327	758.236	0.00	7.635	759.543	99.92	0.000	759.164	0.00	4.000	759.084	-2.00
0+160.000			758.531	758.465	0.066	4.876	758.014	-2.00	5.376	758.004	-2.00	5.927	757.183	-148.99	6.327	757.183	0.00	7.320	758.175	99.90	0.000	758.111	0.00	4.000	758.031	-2.00
0+180.000			757.478	757.512	-0.034	4.876	756.961	-2.00	5.376	756.951	-2.00	5.927	756.130	-148.99	6.327	756.130	0.00	7.266	757.067	99.89	0.000	757.058	0.00	4.000	756.978	-2.00
0+200.000			756.425	756.471	-0.046	4.876	755.908	-2.00	5.376	755.898	-2.00							5.915	755.539	-66.54	0.000	756.005	0.00	4.000	755.925	-2.00
0+220.000			755.372	755.443	-0.071	4.876	754.855	-2.00	5.376	754.845	-2.00							6.038	754.404	-66.57	0.000	754.952	0.00	4.000	754.872	-2.00
0+240.000			754.319	754.331	-0.012	4.876	753.802	-2.00	5.376	753.792	-2.00	5.927	752.971	-148.99	6.327	752.971	0.00	7.448	754.090	99.91	0.000	753.899	0.00	4.000	753.819	-2.00
0+260.000			753.266	753.282	-0.016	4.876	752.749	-2.00	5.376	752.739	-2.00	5.927	751.918	-148.99	6.327	751.918	0.00	7.702	753.292	99.93	0.000	752.846	0.00	4.000	752.766	-2.00
0+280.000			752.213	752.175	0.039	4.876	751.696	-2.00	5.376	751.686	-2.00	5.927	750.865	-148.99	6.327	750.865	0.00	7.953	752.490	99.94	0.000	751.793	0.00	4.000	751.713	-2.00
0+300.000			751.160	751.150	0.010	4.876	750.643	-2.00	5.376	750.633	-2.00	5.927	749.812	-148.99	6.327	749.812	0.00	8.238	751.722	99.95	0.000	750.740	0.00	4.000	750.660	-2.00
0+320.000			750.107	750.125	-0.018	4.876	749.590	-2.00	5.376	749.580	-2.00	5.927	748.759	-148.99	6.327	748.759	0.00	8.059	750.490	99.94	0.000	749.687	0.00	4.000	749.607	-2.00
0+340.000		PCV	749.054	749.049	0.005	4.876	748.536	-2.00	5.376	748.526	-2.00	5.927	747.706	-148.99	6.327	747.706	0.00	8.079	749.457	99.94	0.000	748.634	0.00	4.000	748.554	-2.00
0+350.000			748.528	748.563	-0.036	4.876	748.010	-2.00	5.376	748.000	-2.00	5.927	747.179	-148.99	6.327	747.179	0.00	8.079	748.930	99.94	0.000	748.108	0.00	4.000	748.028	-2.00
0+360.000			748.006	748.046	-0.040	4.876	747.489	-10.51	5.376	747.479	-2.00	5.927	746.658	-148.99	6.327	746.658	0.00	8.159	748.488	99.95						
0+370.000			747.495	747.476	0.018	4.876	746.977	-10.51	5.376	746.967	-2.00	5.927	746.146	-148.99	6.327	746.146	0.00	8.159	747.977	99.95						
0+380.411	PC	PTV	746.973	746.966	0.006	5.319	746.326	-14.37	5.819	746.316	-2.00	6.370	745.496	-148.99	6.770	745.496	0.00	8.878	747.603	99.95						
0+400.792			745.966	746.001	-0.035	6.500	745.026	-19.72	7.000	745.016	-2.00	7.551	744.195	-148.99	7.951	744.195	0.00	10.417	746.660	99.96						
0+421.173			744.959	744.959	0.000	6.441	744.410	-16.43	6.941	744.400	-2.00	7.492	743.579	-148.99	7.892	743.579	0.00	10.352	746.039	99.96						

RAMO 2

RAMO 02

Lado Esquerdo	Eixo					Lado Direito																										
Estaca	Pontos Notáveis da Geometria Horizontal	Pontos Notáveis da Geometria Vertical	Cota Projeto	Cota Terreno	Cota Vermelha	BORDO_SUB-BASE			OFFSET_SUB			P2			JUNTA			VALETA_OUT						OFFSET			JUNTA_CORTE					
						Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)			
0+000.000			749.519	749.519	0.000	2.000	749.059	-2.00	2.876	749.042	-2.00	3.376	749.032	-2.00	3.927	748.211	-	4.327	748.211	0.00							5.284	749.167	99.89	4.337	748.221	100.00
0+020.000			750.574	750.488	0.087	2.727	750.100	-2.00	3.603	750.082	-2.00	4.103	750.072	-2.00	4.654	749.251	-	5.054	749.251	0.00	5.064	749.261	100.00				6.361	750.557	100.00	5.065	749.261	0.00
0+040.000			751.629	751.453	0.176	3.455	751.140	-2.00	4.331	751.123	-2.00	4.831	751.113	-2.00	5.382	750.292	-	5.782	750.292	0.00	3.456	751.140	-2.00				7.597	752.106	99.94	5.792	750.302	100.00
0+060.000			752.684	752.481	0.203	4.000	752.184	-2.00	4.876	752.166	-2.00	5.376	752.156	-2.00	5.927	751.336	-	6.327	751.336	0.00							9.440	754.448	99.97	6.337	751.346	100.00
0+080.000			753.739	753.824	-0.085	4.000	753.239	-2.00	4.876	753.221	-2.00	5.376	753.211	-2.00	5.927	752.390	-	6.327	752.390	0.00							11.807	757.870	99.98	6.337	752.400	100.00
0+100.000			754.794	754.780	0.014	4.000	754.294	-2.00	4.876	754.276	-2.00	5.376	754.266	-2.00	5.927	753.445	-	6.327	753.445	0.00							11.351	758.468	99.98	6.337	753.455	100.00
0+120.000			755.849	755.891	-0.043	4.000	755.349	-2.00	4.876	755.331	-2.00	5.376	755.321	-2.00	5.927	754.500	-	6.327	754.500	0.00							8.360	756.532	99.95	6.337	754.510	100.00
0+140.000			756.903	756.929	-0.026	4.000	756.403	-2.00	4.876	756.386	-2.00	5.376	756.376	-2.00	5.927	755.555	-	6.327	755.555	0.00							7.384	756.610	99.90	6.337	755.565	100.00
0+160.000			757.958	757.912	0.046	4.000	757.458	-2.00	4.876	757.441	-2.00	5.376	757.431	-2.00	5.927	756.610	-	6.327	756.610	0.00							7.360	757.642	99.90	6.337	756.620	100.00
0+180.000		PCV	759.013	758.952	0.061	4.000	758.513	-2.00	4.876	758.496	-2.00	5.376	758.486	-2.00	5.927	757.665	-	6.327	757.665	0.00							7.956	759.293	99.94	6.337	757.675	100.00
0+200.000			760.061	759.926	0.135	3.991	759.562	-2.00	4.867	759.544	-2.00	5.367	759.534	-2.00	5.918	758.713	-	6.318	758.713	0.00							7.623	760.017	99.92	6.328	758.723	100.00
0+220.000		PTV	761.074	760.987	0.087	3.265	760.588	-2.00	4.141	760.571	-2.00	4.641	760.561	-2.00	5.192	759.740	-	5.592	759.740	0.00	3.266	760.588	-2.00				6.692	760.839	99.91	5.602	759.750	100.00
0+240.000			762.048	762.040	0.008	2.538	761.577	-2.00	3.414	761.559	-2.00	3.914	761.549	-2.00	4.465	760.728	-	4.865	760.728	0.00	4.875	760.738	100.00				5.910	761.772	100.00	4.876	760.738	0.00
0+254.803			762.761	762.761	0.000	2.000	762.301	-2.00	2.876	762.284	-2.00	3.376	762.274	-2.00													4.061	761.818	-66.57			

RAMO 3

RAMO 03

Lado Esquerdo													Eixo					Lado Direto																																	
VALETA_OUT			JUNTA			OFFSET			JUNTA_CORTE			P2			Estaca	Pontos Notáveis da Geometria	Pontos Notáveis da Geometria	Cota Projeto	Cota Terreno	Cota Vermelha	JUNTA_ATERRO			ORTE			BERMA_IN			BERMA_OUT			BORDO_SUB-BASE			P2			JUNTA			VALETA_OUT			OFFSET						
Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)							Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)	Afast. (m)	Cota (m)	Incl. (%)				
-5.681	728.708	0.00	-5.281	728.708	-148.99	-7.182	730.208	99.93	-5.691	728.718	100.00	-4.730	729.529	-2.00	0+000.000				729.974	729.974	0.000				5.691	728.718	100.00							3.500	729.554	-2.00	4.730	729.529	-2.00	5.281	728.708	-148.99	5.681	728.708	0.00				6.781	729.807	99.91
-5.749	730.191	0.00	-5.349	730.191	-148.99	-7.003	731.444	99.92	-5.759	730.201	100.00	-4.798	731.012	-2.00	0+020.000				731.458	731.365	0.093													3.568	731.037	-2.00	4.798	731.012	-2.00							4.974	730.895	-66.29			
-5.902	731.600	0.00	-5.502	731.600	-148.99	-7.342	733.039	99.93	-5.912	731.610	100.00	-4.951	732.421	-2.00	0+040.000				732.943	732.385	0.558												3.695	732.673	2.19	4.867	732.678	-2.00							5.588	732.198	-66.57				
-5.981	732.888	0.00	-5.581	732.888	-148.99	-7.132	734.038	99.91	-5.991	732.898	100.00	-5.030	733.709	-2.00	0+056.401	PC			734.160	733.363	0.797	4.975		733.889	0.00								3.800	733.886	2.00	4.974	733.889	-2.00							5.771	733.359	-66.67				
-5.981	733.156	0.00	-5.581	733.156	-148.99	-7.070	734.243	99.91	-5.991	733.166	100.00	-5.030	733.977	-2.00	0+060.000				734.427	733.783	0.644	4.975		734.157	0.00								3.800	734.153	2.00	4.974	734.157	-2.00							5.784	733.618	-66.67				
-5.981	733.555	0.00	-5.581	733.555	-148.99	-7.047	734.620	99.91	-5.991	733.565	100.00	-5.030	734.376	-2.00	0+065.380				734.826	734.358	0.469	4.975		734.556	0.00								3.800	734.552	2.00	4.974	734.556	-2.00							5.717	734.061	-66.67				
-5.981	733.898	0.00	-5.581	733.898	-148.99	-7.210	735.126	99.92	-5.991	733.908	100.00	-5.030	734.719	-2.00	0+070.000				735.169	734.800	0.369	4.975		734.899	0.00								3.800	734.895	2.00	4.974	734.899	-2.00							5.261	734.708	-66.67				
-5.981	734.221	0.00	-5.581	734.221	-148.99	-7.260	735.499	99.92	-5.991	734.231	100.00	-5.030	735.042	-2.00	0+074.359	PT			735.493	735.553	-0.060				5.935	734.411	100.00						3.800	735.219	2.00	4.974	735.222	-2.00	5.525	734.401	-149.25	5.925	734.401	0.00	4.975	735.222	-2.00	6.682	735.158	99.87	
-5.945	734.641	0.00	-5.545	734.641	-149.25	-7.352	736.047	99.93	-5.955	734.651	100.00	-4.994	735.462	-2.00	0+080.000				735.912	735.923	-0.012				5.899	734.829	100.00						3.764	735.637	2.00	4.938	735.640	-2.00	5.489	734.819	-148.99	5.889	734.819	0.00				6.938	735.867	99.90	
-5.818	736.128	0.00	-5.418	736.128	-148.99	-9.493	739.802	99.97	-5.828	736.138	100.00	-4.867	736.949	-2.00	0+100.000		PCV		737.396	737.707	-0.311				5.816	736.176	0.00						3.636	737.005	-1.14	4.854	736.987	-2.00	5.405	736.166	-148.99	5.805	736.166	0.00	5.815	736.176	100.00	7.316	737.676	100.00	
-5.690	737.609	0.00	-5.290	737.609	-148.99	-9.190	741.109	99.97	-5.700	737.619	100.00	-4.739	738.430	-2.00	0+120.000				738.875	738.268	0.607												3.509	738.517	-0.24	4.713	738.505	-2.00							5.194	738.185	-66.53				
						-7.691	742.501	99.97				-4.822	739.633	-2.00	0+137.841	PC			740.112	738.784	1.328	4.745		739.869	0.00							3.580	739.861	2.76	4.744	739.869	-2.00							6.437	738.741	-66.67					
						-7.647	742.567	99.96				-4.838	739.759	-2.00	0+140.000				740.254	738.852	1.403											3.591	740.017	3.12	4.750	740.027	-2.00							6.564	738.819	-66.63					
						-5.147	740.553	100.00	-4.916	740.322	0.00	-4.915	740.322	-2.00	0+150.000		PTV		740.894	739.414	1.480												3.639	740.719	4.81	4.779	740.740	-2.00							6.572	739.545	-66.63				
-5.944	740.039	0.00	-5.544	740.039	-148.99	-9.282	743.375	100.00	-5.955	740.049	0.00	-4.993	740.860	-2.00	0+160.000				741.511	740.063	1.449												3.688	741.401	6.49	4.809	741.431	-2.00							6.713	740.162	-66.63				
-5.964	740.636	0.00	-5.564	740.636	-148.99	-9.169	743.840	100.00	-5.975	740.646	0.00	-5.013	741.457	-2.00	0+170.000				742.128	741.073	1.055												3.700	742.033	6.90	4.816	742.066	-2.00							6.493	740.949	-66.63				
-5.964	741.252	0.00	-5.564	741.252	-148.99	-9.264	744.552	100.00	-5.975	741.262	0.00	-5.013	742.073	-2.00	0+180.000				742.745	742.297	0.447												3.700	742.650	6.90	4.816	742.682	-2.00							5.820	742.014	-66.60				
-5.964	741.869	0.00	-5.564	741.869	-148.99	-8.301	744.205	100.00	-5.975	741.879	0.00	-5.013	742.690	-2.00	0+190.000				743.361	742.981	0.381												3.700	743.267	6.90	4.816	743.299	-2.00							5.411	742.903	-66.55				
-5.964	742.486	0.00	-5.564	742.486	-148.99	-8.915	745.436	100.00	-5.975	742.496	0.00	-5.013	743.307	-2.00	0+200.000				743.978	743.953	0.025												3.700	743.883	6.90	4.816	743.916	-2.00							4.896	743.863	-65.83				
-5.964	742.711	0.00	-5.564	742.711	-148.99	-8.777	745.522	100.00	-5.975	742.721	0.00	-5.013	743.532	-2.00	0+203.645				744.203	744.293	-0.090				5.777	743.330	100.00						3.700	744.108	6.90	4.816	744.141	-2.00	5.367	743.320	-148.99	5.767	743.320	0.00				6.759	744.311	99.90	
-5.964	743.102	0.00	-5.564	743.102	-148.99	-8.050	745.187	100.00	-5.975	743.112	0.00	-5.013	743.923	-2.00	0+210.000				744.595	744.793	-0.199				5.777	743.722	100.00						3.700	744.500	6.90	4.816	744.532	-2.00	5.367	743.712	-148.99	5.767	743.712	0.00				6.362	744.305	99.83	
-5.964	743.719	0.00	-5.564	743.719	-148.99	-7.907	745.661	100.00	-5.975	743.729	0.00	-5.013	744.540	-2.00	0+220.000				745.211	745.735	-0.524												3.700	745.117	6.90	4.816	745.149	-2.00							5.992	744.366	-66.61				
-5.964	744.336	0.00	-5.564	744.336	-148.99	-8.173	746.544	100.00	-5.975	744.346	0.00	-5.013	745.157	-2.00	0+230.000				745.828	746.089	-0.261												3.700	745.733	6.90	4.816	745.766	-2.00							9.318	742.765	-66.65				
-5.964	744.952	0.00	-5.564	744.952	-148.99	-8.160	747.147	100.00	-5.975	744.962	0.00	-5.013	745.773	-2.00	0+240.000				746.445	745.153	1.292												3.700	746.350	6.90	4.816	746.382	-2.00							11.356	742.023	-66.66				
						-5.271	746.684	99.61				-5.015	746.429	-2.00	0+250.000				747.061	744.550	2.512												3.718	746.936	6.03	4.844	746.963	-2.00							11.043	742.832	-66.66				
						-5.796	746.606	-66.58				-5.021	747.121	-2.00	0+260.000				747.678	745.855	1.823												3.754	747.491	4.35	4.899	747.509	-2.00							9.114	744.700	-66.65				
						-5.775	747.279	-66.58				-5.029	747.776	-2.00	0+269.449	PT			748.261	747.334	0.927												3.787	748.015	2.76	4.952	748.024	-2.00							7.294	746.463	-66.64				
						-5.855	747.987	-66.59				-5.030	748.537	-2.00	0+280.000				748.911	747.660	1.252												3.825	748.599	0.98	5.012	748.596	-2.00							3.826	748.599	-2.00	6.461	747.631	-66.62	
-5.990	749.170	0.00	-5.590	749.170	-148.99	-6.863	750.042	99.88	-6.000	749.180	100.00	-5.039	749.991	-2.00	0+300.000				750.145	750.055	0.089				6.128	748.762	100.00						3.896	749.618	-4.54	5.167	749.573	-2.00	5.718	748.752	-148.99	6.118	748.752	0.00				7.364	749.997	99.92	
-5.988	749.261	0.00	-5.588	749.261	-148.99	-6.855	750.127	99.88	-5.998	749.271	100.00	-5.037	750.082	-2.00	0+301.134	PC			750.215	750.140	0.075				6.140	748.809	100.00																								