

QUADRO DE ALINHAMENTO HORIZONTAL – FERROVIA

DEFLEXÃO	CURVA N°	CURVA DE TRANSIÇÃO					CURVA CIRCULAR				ESTACAS				COORDENADAS						
		Lc (m)	Tl (m)	Tc (m)	Xc (m)	Yc (m)	R (m)	D (m)	T (m)	AC	TE/PC/PI	EC	CE	ET/PT	PONTO	CC	TE/PC	EC	PI	CE	ET/PT
	INICIAL										542+850,000				N				9435666,5992		
															E				215334,1555		
21°13'0,022"	1	40,000	26,667	13,334	39,999	0,155	1725,000	598,954	302,523	19°53'0,039"	543+618,107	543+658,107	544+257,061	544+297,061	N	9436953,7751	9435370,1299	9435354,8337	9435237,6682	9435229,9845	9435228,7959
															E	213941,2993	214625,5698	214588,6103	214308,9757	214005,8846	213965,9025
26°08'0,025"	2	80,000	53,339	26,672	79,983	1,240	860,000	312,359	157,920	20°48'0,037"	545+15,118	545+95,118	545+407,477	545+487,477	N	9434349,1759	9435210,2324	9435206,9250	9435204,0350	9435128,8754	9435092,8919
															E	213230,3431	213248,0858	213168,1619	213008,4419	212867,4814	212796,0394
42°11'0,031"	3	80,000	53,339	26,672	79,983	1,233	865,000	556,976	288,527	36°53'0,035"	545+848,855	545+928,855	546+485,831	546+565,831	N	9435673,4909	9434925,3464	9434889,3564	9434752,0314	9434827,1457	9434846,0737
															E	212039,2270	212475,8480	212404,4092	212144,6307	211860,5517	211782,8310
	FINAL										546+919,000				N				9434934,9202		
															E				211441,0204		

QUADRO DE ALINHAMENTO HORIZONTAL – ESTRADA DE SERVIÇO

DEFLEXÃO	CURVA N°	CURVA DE TRANSIÇÃO					CURVA CIRCULAR				ESTACAS				COORDENADAS						
		Lc (m)	Tl (m)	Tc (m)	Xc (m)	Yc (m)	R (m)	D (m)	T (m)	AC	TE/PC/PI	EC	CE	ET/PT	PONTO	CC	TE/PC	EC	PI	CE	ET/PT
	INICIAL										1542+780,000				N				9435677,8314		
															E				215405,7106		
11°23'0,030"	C1	-	-	-	-	-	80,000	15,906	7,979	11°23'0,030"	1542+813,895	-	-	1542+829,801	N	9435744,0507	9435667,7047	-	9435665,3207	-	9435664,4878
															E	215349,4624	215373,3639	-	215365,7491	-	215357,8134
16°42'0,044"	C2	-	-	-	-	-	80,000	23,335	11,751	16°42'0,044"	1542+829,801	-	-	1542+853,136	N	9435584,9249	9435664,4878	-	9435663,2612	-	9435658,7256
															E	215366,1645	215357,8134	-	215346,1288	-	215335,2866
28°57'0,049"	C3	-	-	-	-	-	40,000	20,220	10,331	28°57'0,049"	1543+343,283	-	-	1543+363,503	N	9435432,6410	9435469,5413	-	9435465,5538	-	9435457,4498
															E	214898,5598	214883,1208	-	214873,5903	-	214867,1827
27°23'0,010"	C4	-	-	-	-	-	40,000	19,119	9,746	27°23'0,010"	1543+363,503	-	-	1543+382,623	N	9435482,2586	9435457,4498	-	9435449,8049	-	9435445,7972
															E	214835,8056	214867,1827	-	214861,1381	-	214852,2544
10°56'0,014"	C5	-	-	-	-	-	40,000	7,636	3,829	10°56'0,014"	1543+430,717	-	-	1543+438,353	N	9435389,5583	9435426,0197	-	9435424,4450	-	9435422,2365
															E	214824,8635	214808,4146	-	214804,9240	-	214801,7955
12°30'0,052"	C6	-	-	-	-	-	40,000	8,737	4,366	12°30'0,052"	1543+438,353	-	-	1543+447,089	N	9435454,9148	9435422,2365	-	9435419,7072	-	9435418,0144
															E	214778,7275	214801,7955	-	214798,1225	-	214794,1665
11°04'0,054"	C7	-	-	-	-	-	1746,000	337,701	169,379	11°04'0,054"	1543+840,889	-	-	1543+978,590	N	9436953,9144	9435343,2127	-	9435277,8369	-	9435243,7136
															E	213941,4734	214615,3844	-	214459,1309	-	214293,2250
13°43'0,005"	C8	-	-	-	-	-	80,000	19,154	9,623	13°43'0,005"	1543+978,590	-	-	1543+997,744	N	9435322,0733	9435243,7136	-	9435241,7749	-	9435242,1268
															E	214277,1081	214293,2250	-	214283,7992	-	214274,1826
11°28'0,033"	C9	-	-	-	-	-	100,000	20,029	10,048	11°28'0,033"	1543+997,744	-	-	1544+17,773	N	9435142,1937	9435242,1268	-	9435242,4943	-	9435240,8566
															E	214270,5258	214274,1826	-	214264,1411	-	214254,2272
31°10'0,020"	C10	-	-	-	-	-	40,000	21,762	11,158	31°10'0,020"	1544+112,953	-	-	1544+134,715	N	9435264,8088	9435225,3437	-	9435223,5251	-	9435227,6673
															E	214153,8008	214160,3202	-	214149,3117	-	214138,9513
27°43'0,041"	C11	-	-	-	-	-	40,000	19,358	9,872	27°43'0,041"	1544+134,715	-	-	1544+154,073	N	9435190,5258	9435227,6673	-	9435231,3323	-	9435230,3113
															E	214124,1018	214138,9513	-	214129,7845	-	214119,9651
04°27'0,016"	C12	-	-	-	-	-	1732,000	134,658	67,363	04°27'0,016"	1544+154,073	-	-	1544+288,731	N	9436953,0245	9435230,3113	-	9435223,3448	-	9435221,6033
															E	213940,8469	214119,9651	-	214052,9636	-	213985,8233
26°08'0,025"	C13	80,000	53,339	26,672	79,982	1,252	852,000	308,710	156,066	20°45'0,037"	1545+26,385	1545+106,385	1545+415,094	1545+495,094	N	9434349,4711	9435202,5332	9435199,2141	9435196,3838	9435122,0745	9435086,1014
															E	213230,2665	213248,2158	213168,2926	213010,4280	212871,1176	212799,6705
42°11'0,031"	C14	80,000	53,339	26,672	79,983	1,223	872,000	562,131	291,221	36°56'0,008"	1545+856,812	1545+936,812	1546+498,943	1546+578,943	N	9435672,7428	9434918,3983	9434882,3995	9434743,8318	9434819,6156	9434838,5532
															E	212039,3125	212479,1779	212407,7434	212145,5686	211858,8747	211781,1561
90°08'0,035"	C15	-	-	-	-	-	11,000	17,300	11,021	90°08'0,035"	1546+931,764	-	-	1546+949,064	N	9434916,6659	9434927,3121	-	9434930,0847	-	9434919,4127
															E	211436,9151	211439,6824	-	211429,0157	-	211426,2636
97°57'0,048"	C16	-	-	-	-	-	10,000	17,098	11,496	97°57'0,048"	1546+949,064	-	-	1546+966,162	N	9434921,9099	9434919,4127	-	9434908,2807	-	9434912,6660
															E	211416,5804	211428,2636	-	211423,3928	-	211412,7658
	FINAL										1546+980,000				N				9434917,9448		
															E				211399,9737		

NOTAS

1-TODAS AS MEDIDAS ESTÃO EM METRO.
2-SISTEMA DE COORDENADAS UTM (SAD 69).
4-ESTAQUEAMENTO ACIMA DE 1000, REFERE-SE AO EIXO DA ESTRADA DE SERVIÇO.

DOCUMENTOS DE REFERÊNCIA

251K-B-07052 - SEÇÕES TÍPICAS



PROGRAMA CAPACITACAO LOGISTICA NORTE N1030-02

FERROVIA – KM 541,05 A KM 891,361
LOCACAO 35 – KM 542,850 A KM 548,919
GEOMETRICO
QUADRO DE ALINHAMENTO HORIZONTAL

N° SUB-CONTRATADA
C0538-35-FE-2-GE-DE-108-ROD

T.E. TIPO DE EMISSÃO (A) PRELIMINAR (B) PARA APROVAÇÃO (C) PARA CONHECIMENTO (D) PARA COTAÇÃO (E) PARA CONSTRUÇÃO (F) CONFORME COMPRADO (G) CONFORME CONSTRUÍDO (H) CANCELADO ESCALA SE IND. - N° CONTRATADA DEO-3500-B02-7633 N° VALE 251K-B-07633 REVISÃO 0