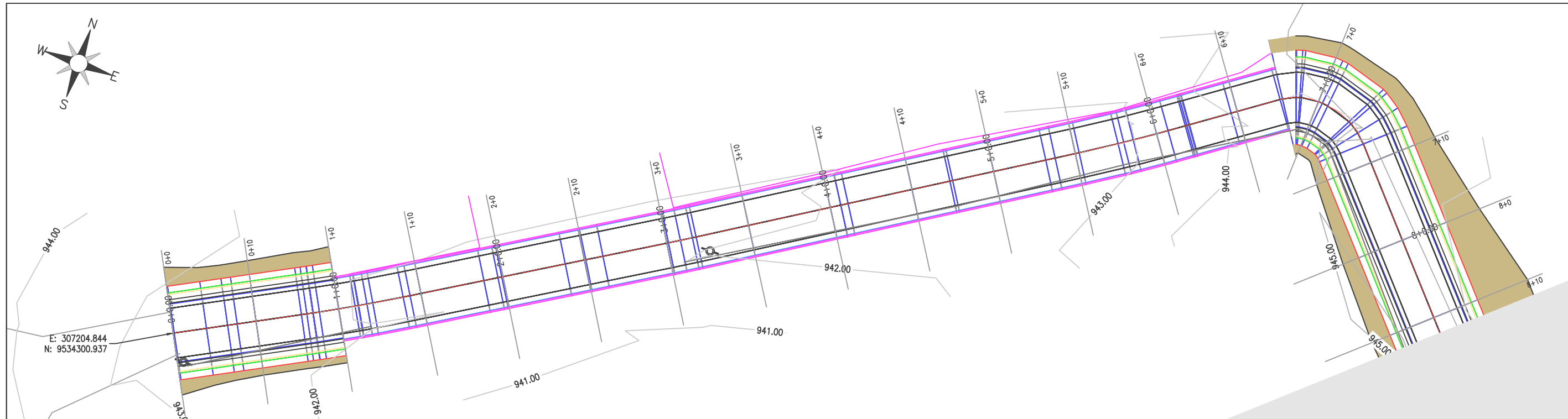
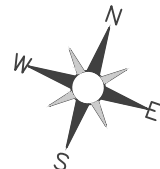


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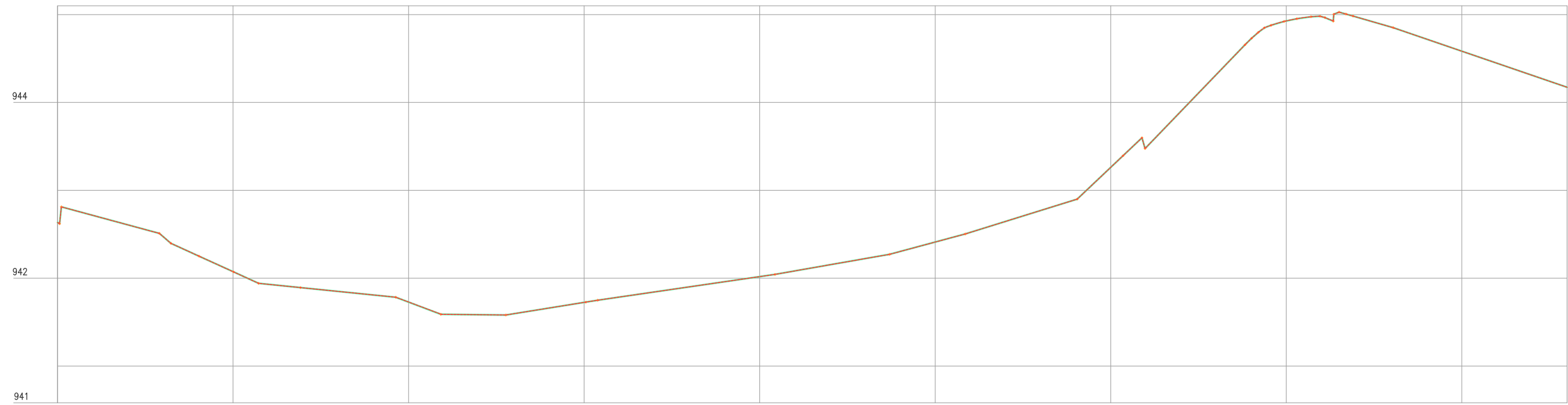
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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 /01
PLANTA GERAL - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/4000
ARQUIVO:	PLANTA GERAL_BICA DE CRUZ DAS ALMAS_R0.DWG	



EST BICA DE CRUZ DAS ALMAS



Estaca	0	1	2	3	4	5	6	7	8
Cota do terreno	942,635	942,074	941,729	941,725	942,018	942,412	943,262	944,928	944,928
Cota da terraplenagem	942,635	942,074	941,728	941,725	942,018	942,412	943,262	944,928	944,928
Cota vertical	0,000	0,000	-0,001	0,000	0,000	0,000	0,000	0,000	0,000

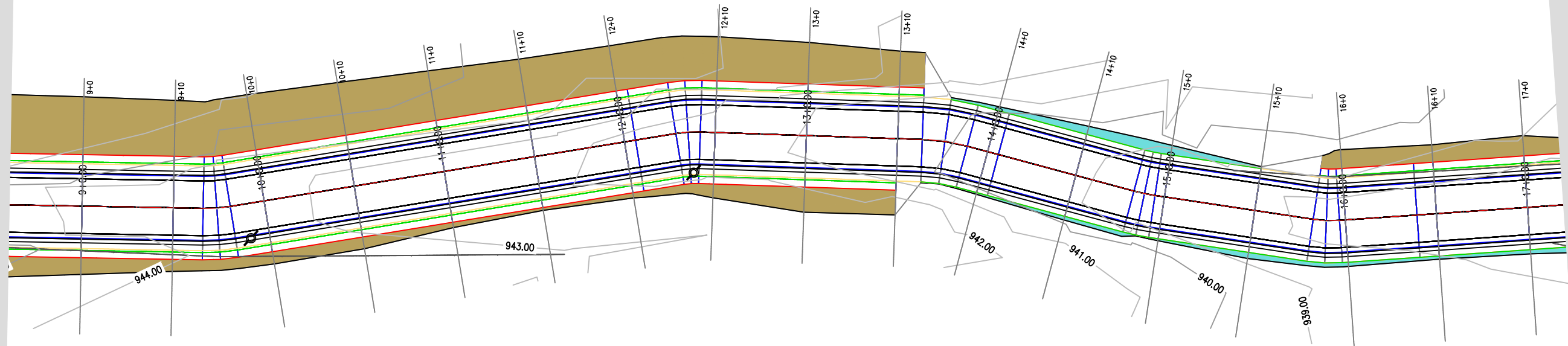
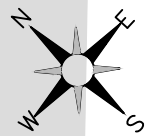

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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL



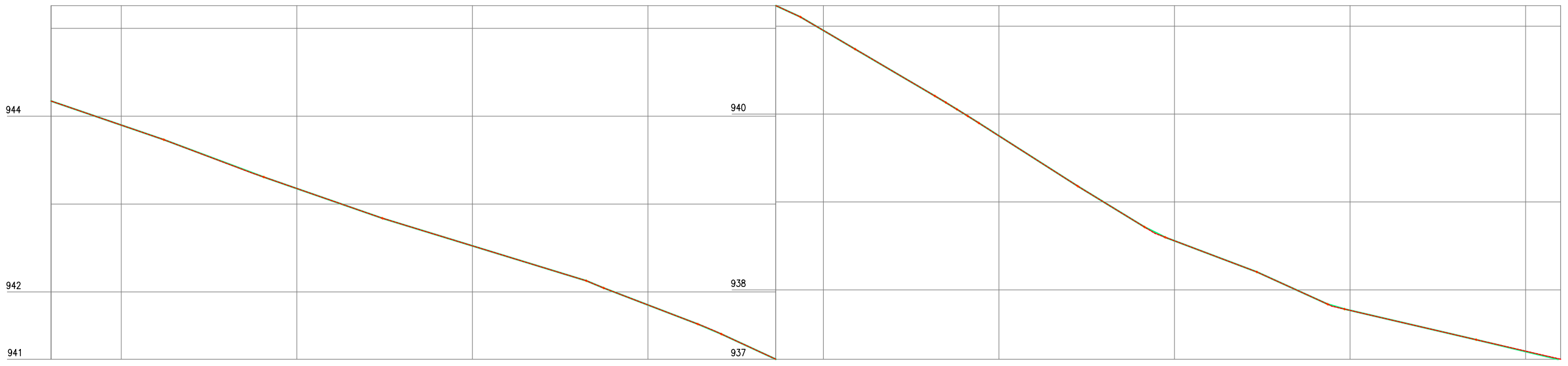
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	1 /08
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS

EST BICA DE CRUZ DAS ALMAS



Cota Vermelha	Cota da terraplenagem	Cota do terreno	Estaca
0,000	944,173	944,173	8
0,000	943,899	943,899	9
0,000	943,177	943,177	10
0,000	942,525	942,525	11
0,000	941,853	941,853	12
0,000	940,952	940,952	13
0,000	939,752	939,752	14
0,000	938,558	938,558	15
0,000	937,766	937,766	16
-0,0			17
-0,0			17

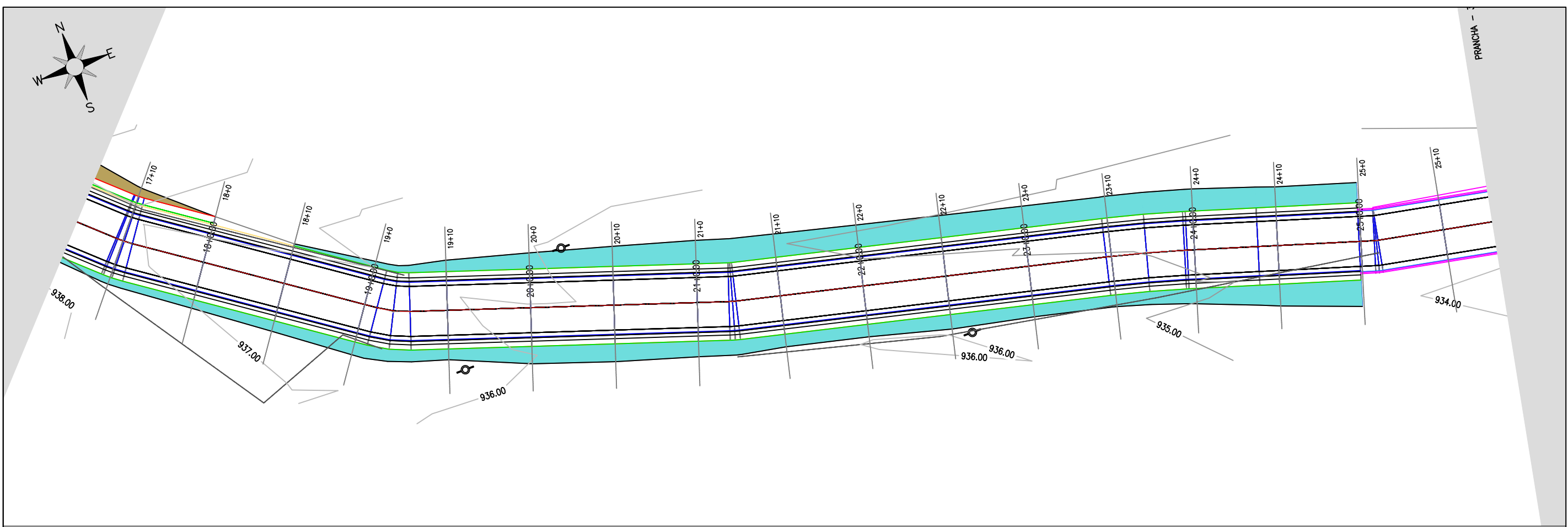
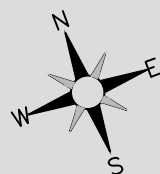
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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL

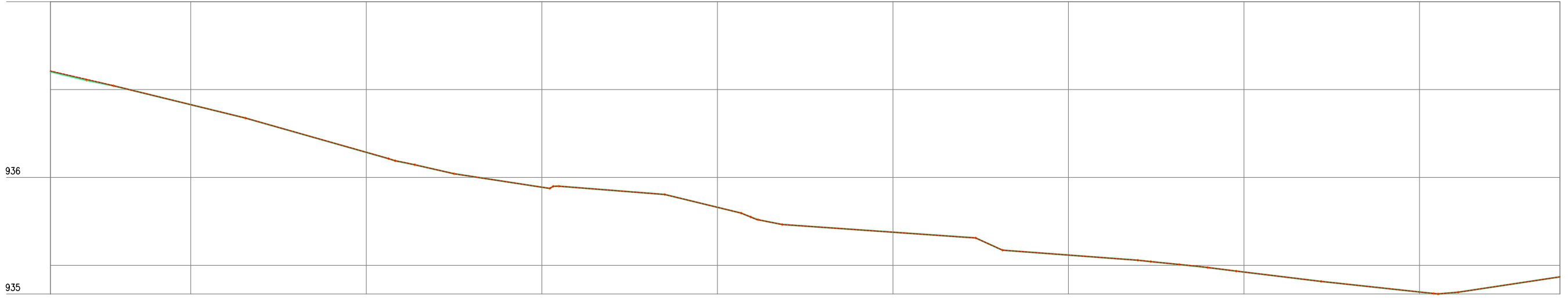


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	2 /08
ESCALA:	H 1/500 V 1/50

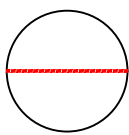
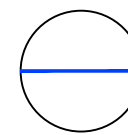
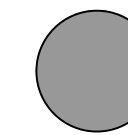
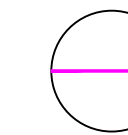
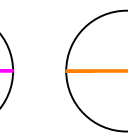
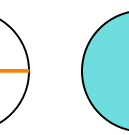
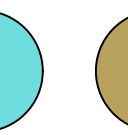
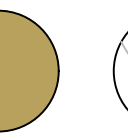


938 EST BICA DE CRUZ DAS ALMAS



Cota vermelha	Cota da terraplenagem	Cota do terreno	Escala
-0,007	937,204	937,210	17
0,000	936,628	936,628	18
-0,001	936,285	936,286	19
0,000	935,889	935,889	20
0,000	935,660	935,660	21
0,001	935,377	935,376	22
0,000	935,116	935,116	23
0,000	934,923	934,923	24
0,000	934,923	934,923	25

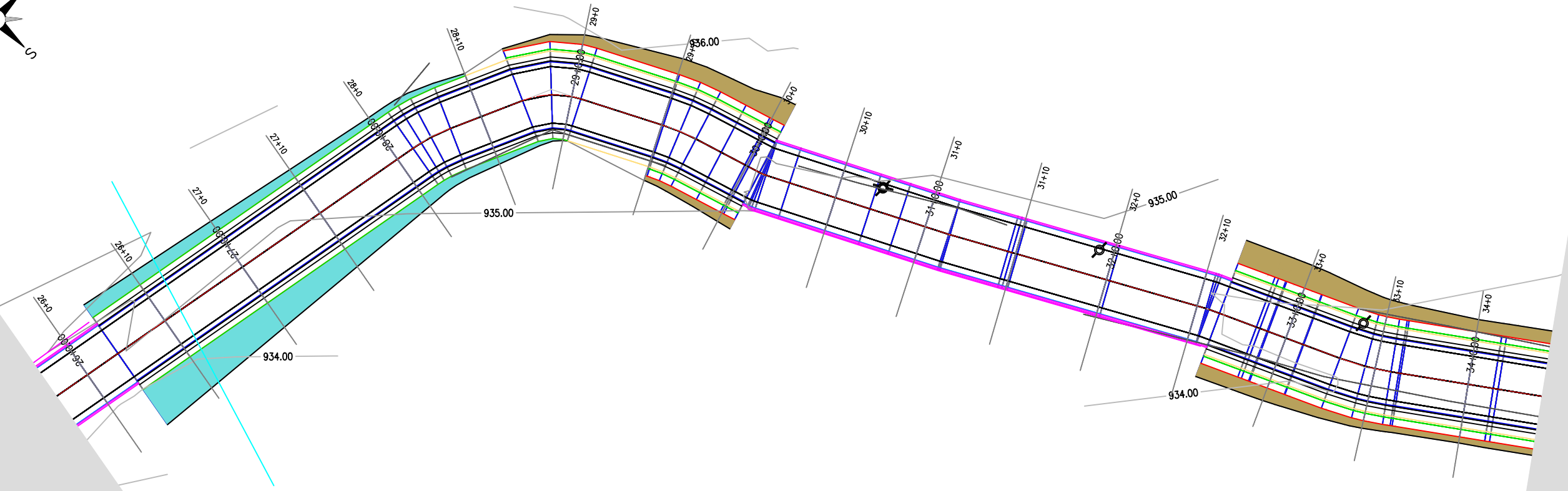
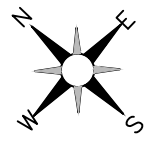

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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL

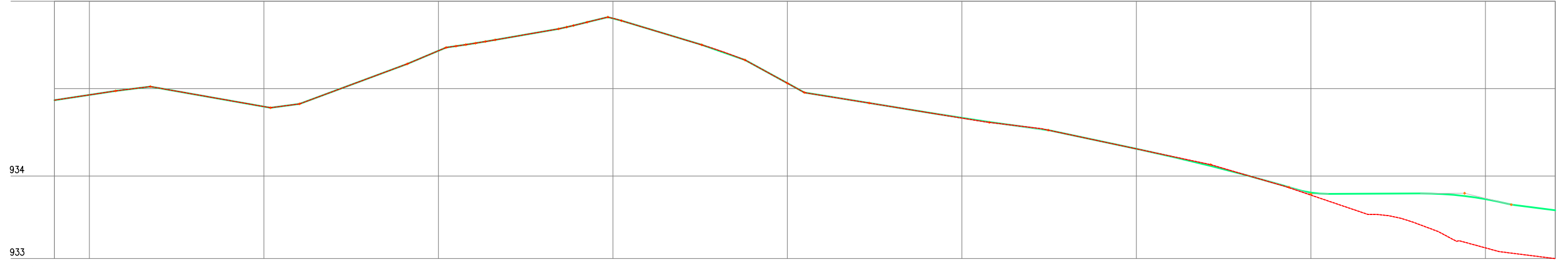


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	3 /08
ESCALA:	H 1/500 V 1/50



936 EST BICA DE CRUZ DAS ALMAS



Estaca	25	26	27	28	29	30	31	32	33	34	34
Cota do terreno	934,869	934,929	934,795	935,434	935,805	935,062	934,663	934,312	933,782	933,179	933,056
Cota da terraplenagem	934,869	934,929	934,795	935,434	935,803	935,062	934,666	934,312	933,811		
Cota vermelha	0,000	0,000	0,000	0,000	-0,001	0,000	0,003	0,000	0,028		

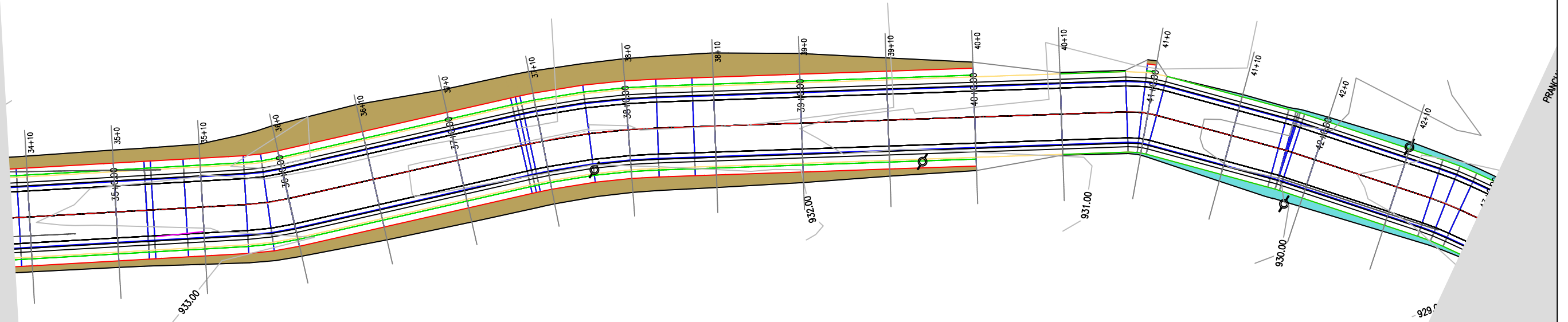
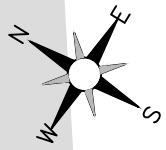
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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL

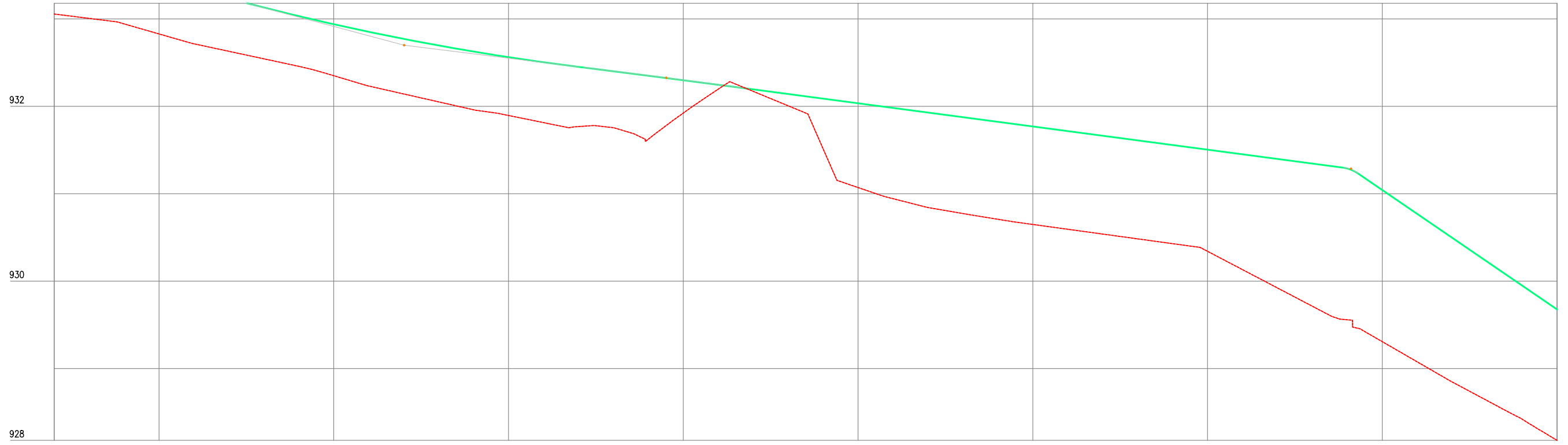


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	4 /08
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS



Estaca	34	35	36	37	38	39	40	41	42	43
Cota da terraplenagem	933,609	933,420	932,939	932,562	932,299	932,035	931,769	931,504	931,041	929,307
Cota do terreno	933,056	932,628	932,350	931,895	931,623	931,070	930,648	930,341	929,307	927,714
Cota vermelha	0,553	0,592	0,589	0,667	0,776	0,964	1,121	1,163	1,734	1,497

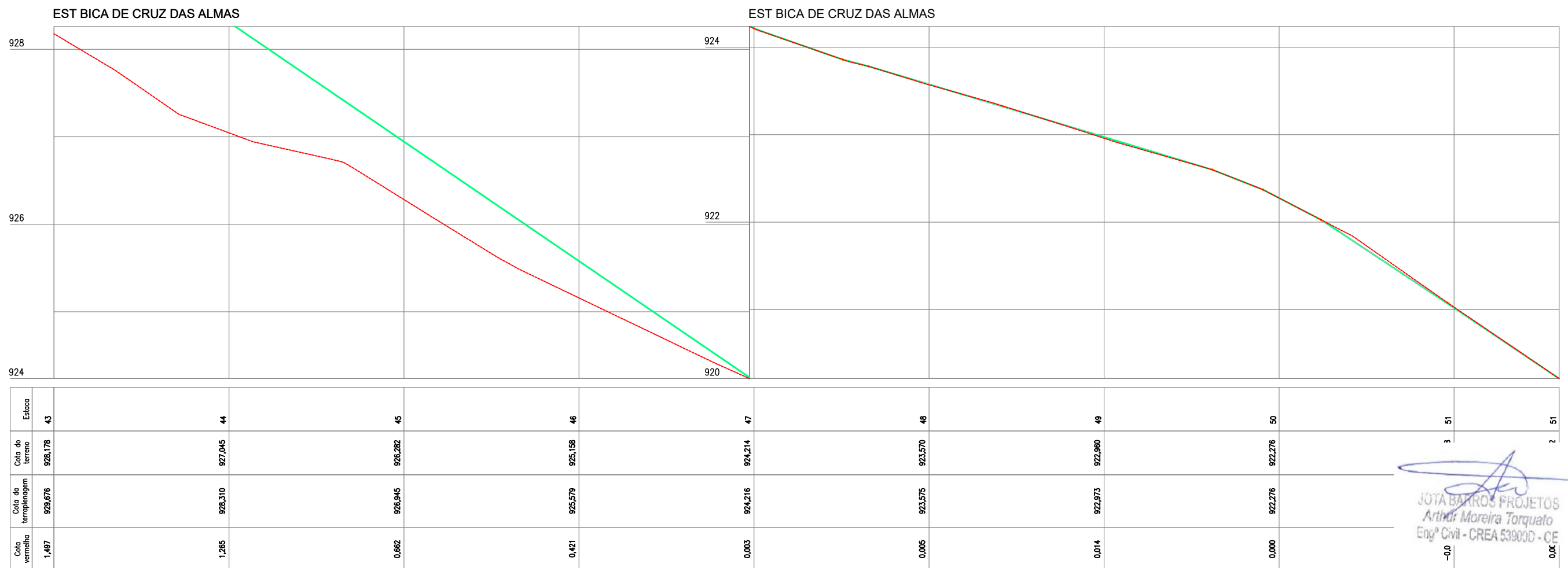
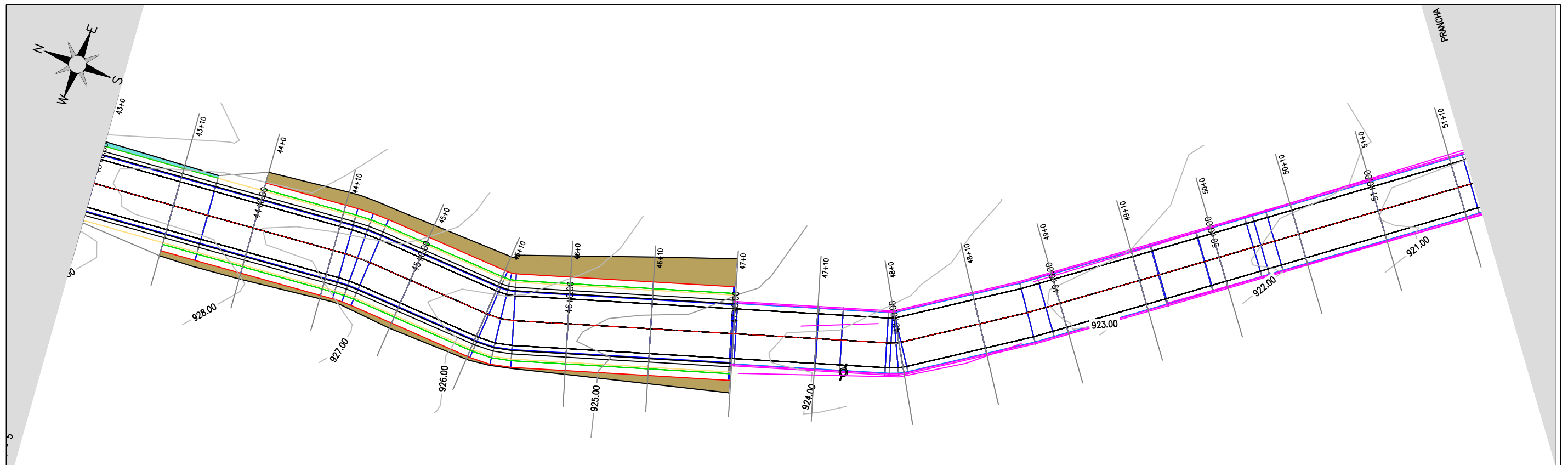

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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL

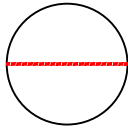
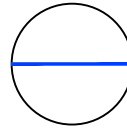
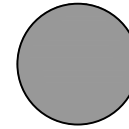
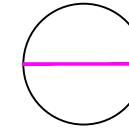
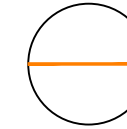
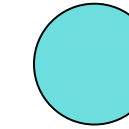
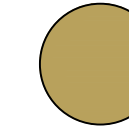
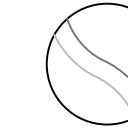


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	5 /08
ESCALA:	H 1/500 V 1/50



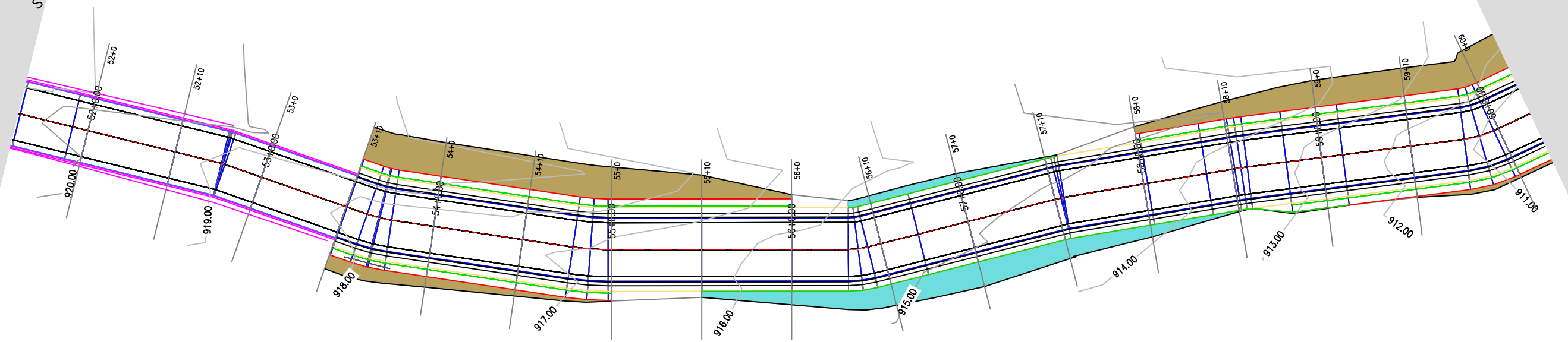

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TERRENO NATURAL	PROJETADO	ESTRADA	EDIFICAÇÃO	CALÇADA	ATERRO	CORTE	CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	6 / 08
ESCALA:	H 1/500 V 1/50

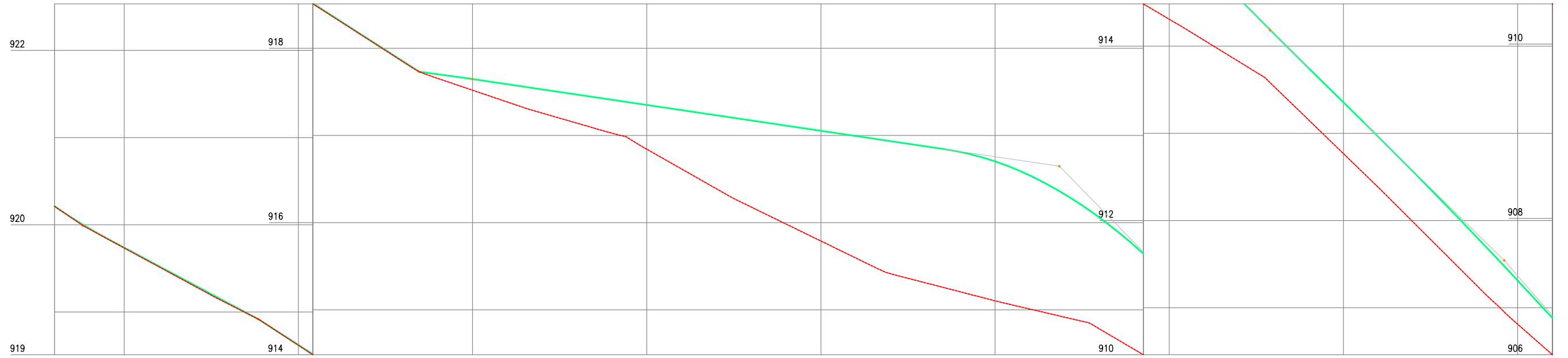


EST BICA DE CRUZ DAS ALMAS

EST BICA DE CRUZ DAS ALMAS

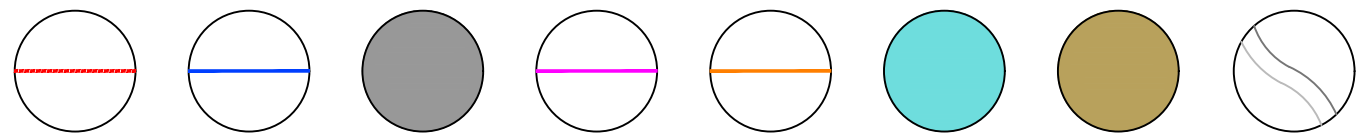
EST BICA DE CRUZ DAS ALMAS

EST BICA



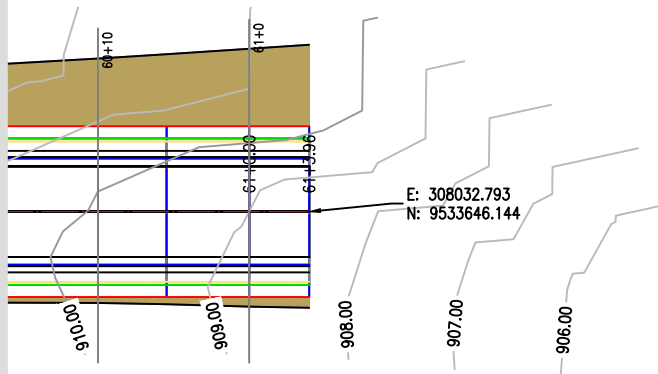
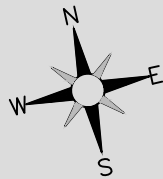
Cota vermelha	Cota da terraplenagem	Cota do terreno	Estaca
0,000	920,212	920,212	51
0,004	919,738	919,734	52
0,004	918,622	918,618	53
0,128	917,647	917,519	54
0,507	917,350	916,843	55
1,264	917,054	915,789	56
1,599	916,703	915,104	57
1,052	915,361	914,309	58
0,968	913,356	912,767	59
0,5			60
0,4			60

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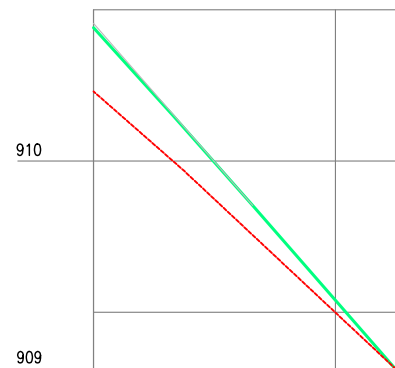
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	7 /08
ESCALA:	H 1/500 V 1/50



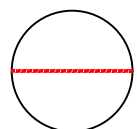
PRANCHA - 7

EST BICA DE CRUZ DAS ALMAS

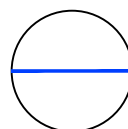


Cota vermelha	Cota de terraplenagem	Cota do terreno	Escala
0,421	910,882	910,461	60
0,082	909,080	908,999	61
			61

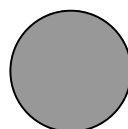
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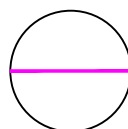
TERRENO NATURAL



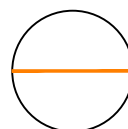
PROJETADO



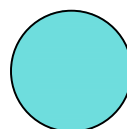
ESTRADA



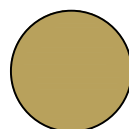
EDIFICAÇÃO



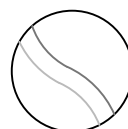
CALÇADA



ATERRO



CORTE



CURVAS DE NÍVEL



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

PROJETO GEOMÉTRICO - ESTRADA BICA DE CRUZ DAS ALMAS

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

ARQUIVO: GEO_BICA DE CRUZ DAS ALMAS_R1.DWG

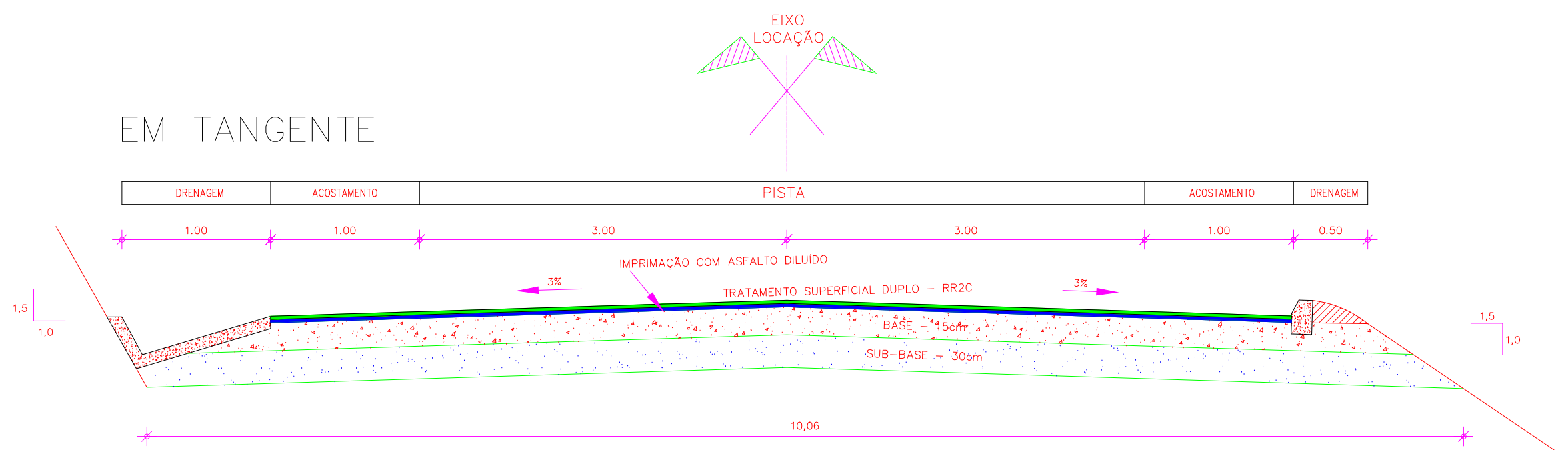
PRANCHA:

8 /08

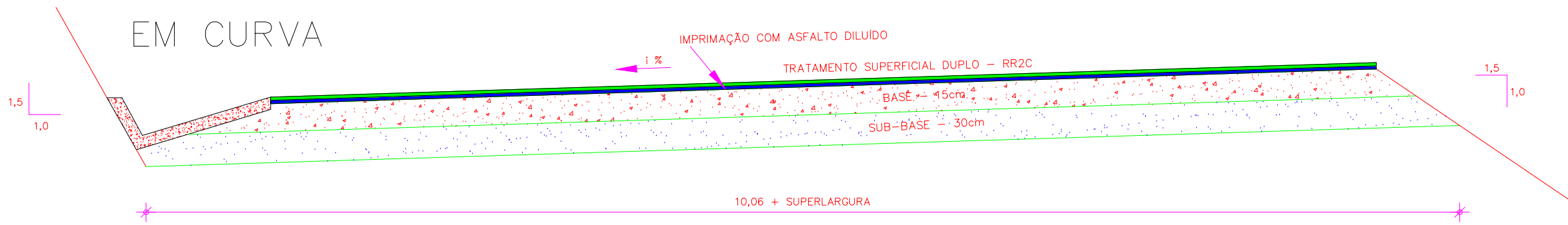
ESCALA:

H 1/500
V 1/50

EM TANGENTE



EM CURVA



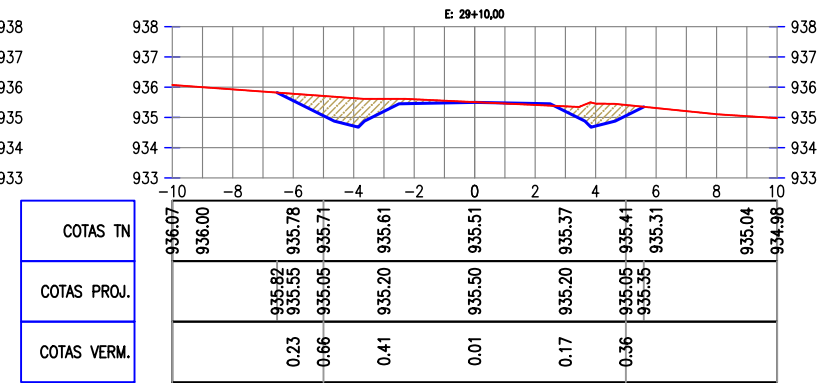
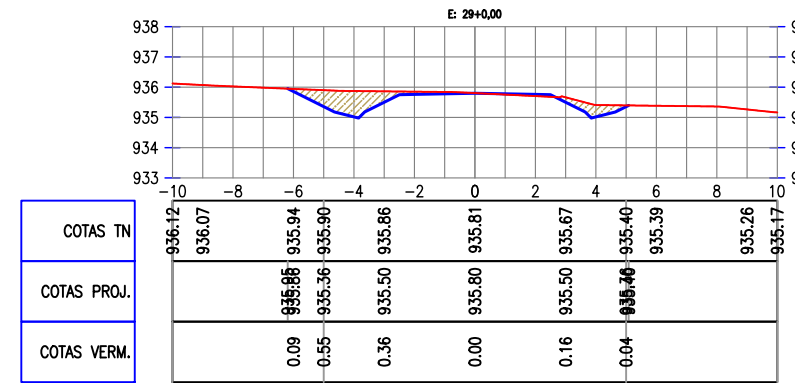
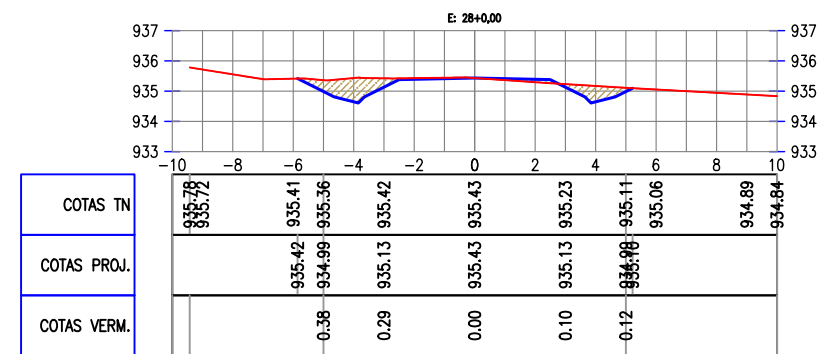
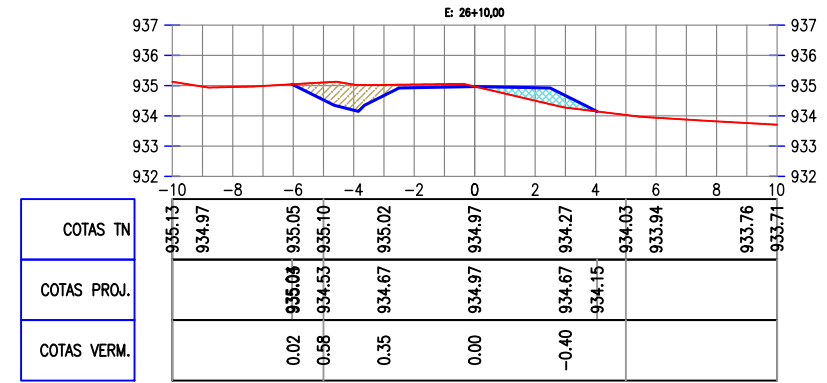
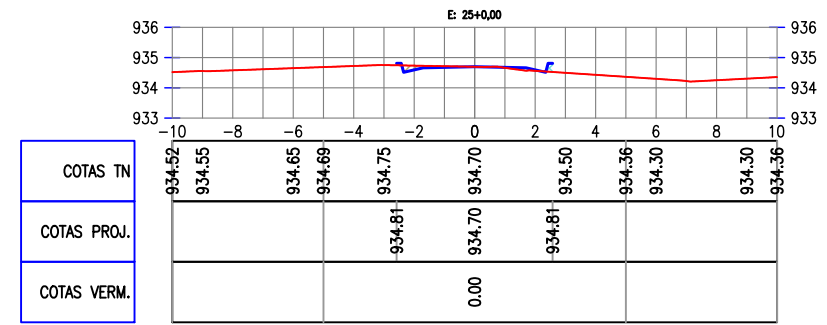
SEQUÊNCIA EXECUTIVA

- 1 - EXECUÇÃO DA REGULARIZAÇÃO DO SUBLEITO COM OS ÚLTIMOS 60cm DA TERRAPLENAGEM
- 2 - EXECUÇÃO DA SUB-BASE (30cm) COM SOLOS DAS JAZIDA
- 3 - EXECUÇÃO DA BASE DE SOLO CIMENTO (20%)
- 4 - IMPRIMAÇÃO DA BASE CM- 15
- 5 - TRATAMENTO SUPERCIAL DUPLO - RR2C


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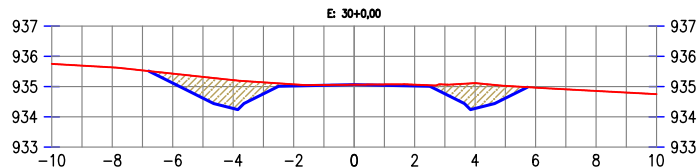
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 / 1
SEÇÃO TRANSVERSAL (SEÇÃO TIPO)		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	S/ESCALA
ARQUIVO:	ST_BICA DE CRUZ DAS ALMAS_R0.DWG	



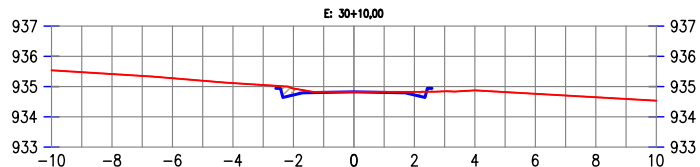

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 Arthur Moreira Torquato
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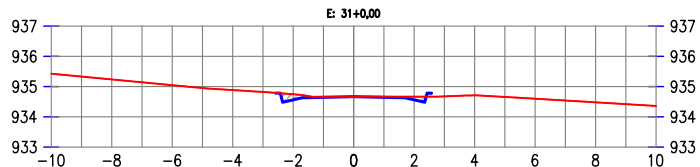
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 /07
SEÇÕES TRANSVERSAIS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	1/250



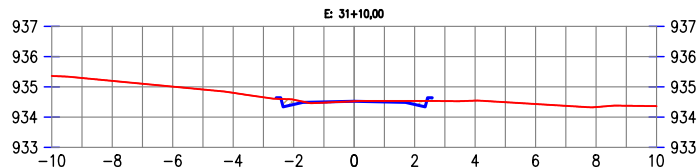
COTAS TN	935.75	935.69	935.51	935.12	935.32	935.14	935.06	935.07	935.02	934.97	934.80	934.75
COTAS PROJ.			-935.51	935.12	-934.62	934.76	935.06	934.76	-934.62	934.97		
COTAS VERM.			0.31	-0.70	0.38	0.00	0.31	0.41	-0.34	0.00		



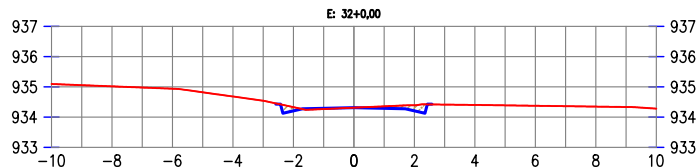
COTAS TN	935.54	935.48	935.28	935.19	935.05	934.83	934.83	934.84	934.82	934.76	934.59	934.55
COTAS PROJ.					-934.94	934.83	934.84					
COTAS VERM.					0.00							



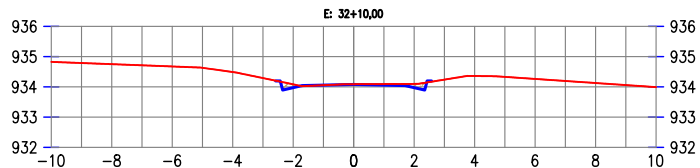
COTAS TN	935.45	935.33	935.05	934.95	934.82	934.66	934.66	934.68	934.66	934.60	934.42	934.36
COTAS PROJ.					-934.78	934.67	934.78					
COTAS VERM.					0.00							



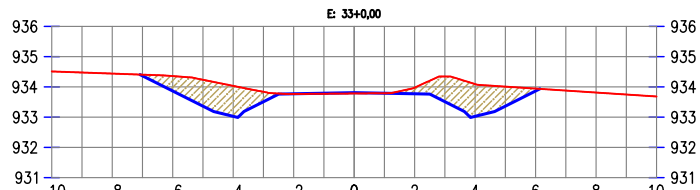
COTAS TN	935.36	935.29	935.01	934.91	934.66	934.52	934.53	934.49	934.43	934.38	934.36	934.36
COTAS PROJ.					-934.64	934.52	934.64					
COTAS VERM.					0.00							



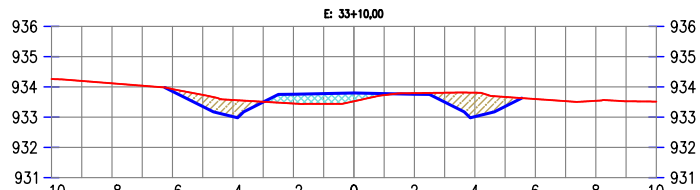
COTAS TN	935.09	935.06	934.94	934.82	934.54	934.31	934.41	934.39	934.38	934.33	934.28	934.28
COTAS PROJ.					-934.43	934.31	934.43					
COTAS VERM.					0.00							



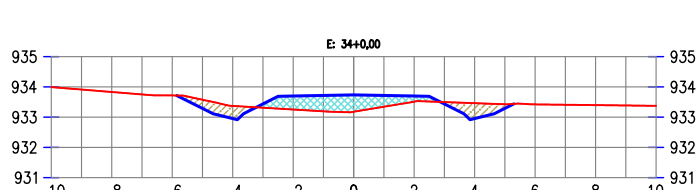
COTAS TN	934.85	934.79	934.67	934.63	934.29	934.09	934.24	934.33	934.26	934.06	933.99	933.99
COTAS PROJ.					-934.19	934.08	934.19					
COTAS VERM.					0.01							



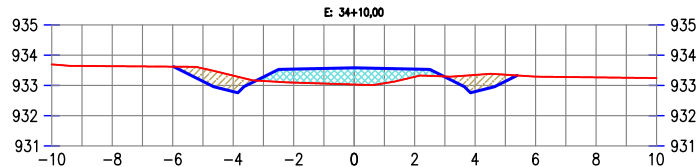
COTAS TN	934.51	934.48	934.36	934.24	933.84	933.78	934.34	934.01	933.94	933.75	933.68	933.68
COTAS PROJ.			-934.41	933.86	933.36	933.51	933.51	933.36	933.84	933.68		
COTAS VERM.			0.49	-0.87	0.33	-0.03	0.83	-0.64	0.08	0.00		



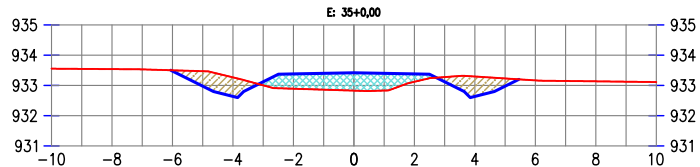
COTAS TN	934.26	934.20	933.93	933.74	933.51	933.53	933.81	933.67	933.60	933.53	933.51	933.51
COTAS PROJ.			933.88	933.35	933.50	933.80	933.50	933.35	933.65	933.60	933.53	933.51
COTAS VERM.			0.07	-0.38	0.01	-0.27	0.31	-0.31	0.05	0.00		



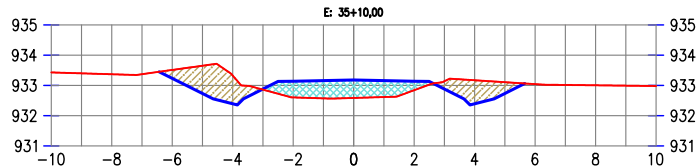
COTAS TN	933.99	933.91	933.72	933.58	933.31	933.18	933.50	933.43	933.42	933.39	933.37	933.37
COTAS PROJ.			-933.72	933.29	933.44	933.74	933.44	933.43	933.42	933.39	933.37	933.37
COTAS VERM.			0.29	-0.12	-0.56	0.06	0.14	0.00	0.00	0.00		



COTAS TN	933.70	933.64	933.62	933.56	933.15	933.03	933.30	933.36	933.29	933.26	933.24	933.24
COTAS PROJ.			-933.62	933.14	933.28	933.58	933.28	933.36	933.29	933.26	933.24	933.24
COTAS VERM.			0.43	-0.13	-0.55	0.02	0.22	0.00	0.00	0.00		



COTAS TN	933.55	933.55	933.50	933.47	933.00	932.83	933.28	933.23	933.17	933.12	933.11	933.11
COTAS PROJ.			933.50	932.97	933.12	933.42	933.12	933.23	933.17	933.12	933.11	933.11
COTAS VERM.			0.03	-0.50	-0.12	-0.59	0.16	-0.26	0.00	0.00		

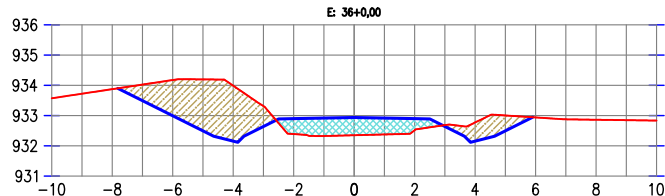


COTAS TN	933.45	933.40	933.51	933.65	932.86	932.59	933.14	933.11	933.04	932.99	932.98	932.98
COTAS PROJ.			933.45	932.75	932.88	933.18	932.88	933.11	933.04	932.99	932.98	932.98
COTAS VERM.			0.28	-0.92	-0.02	-0.59	0.26	-0.37	0.00	0.00		

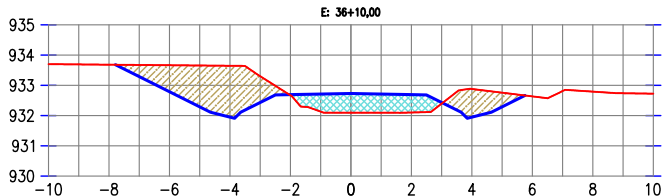
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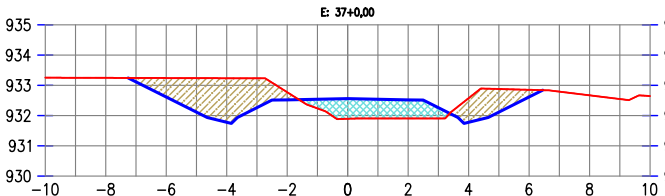
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		2 /07
SEÇÕES TRANSVERSAIS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	



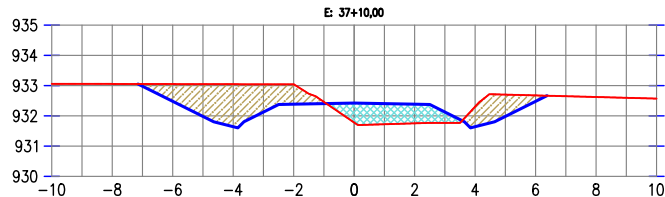
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COTAS PROJ.			-933.90														
COTAS VERM.				1.18	-1.70		0.88		-0.59	0.05	0.51						



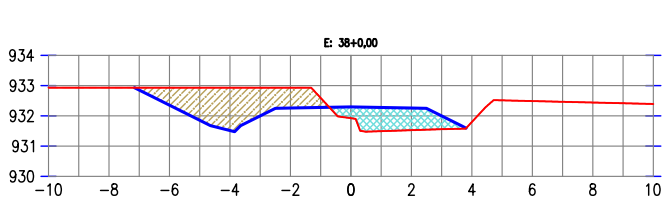
COTAS TN	933.70	933.69	933.68	932.79	933.67	933.66	932.43	933.30	932.10	932.40	932.40	932.29	932.76	932.64	932.74	932.74	932.75
COTAS PROJ.			-933.68														
COTAS VERM.				0.88	-1.37		0.87		-0.64	-0.04	0.47						



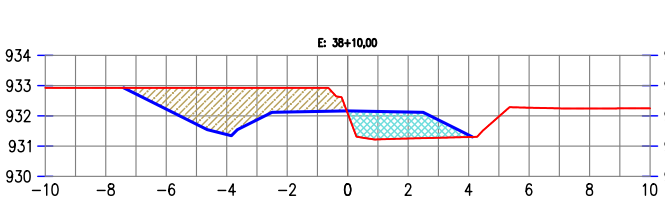
COTAS TN	933.25	933.25	933.25	932.62	933.24	933.24	932.26	933.23	931.90	932.56	931.90	931.90	932.86	932.85	932.85	932.55	932.65
COTAS PROJ.			-933.25														
COTAS VERM.				0.63	-1.12		0.97		-0.67	-0.36	0.76						



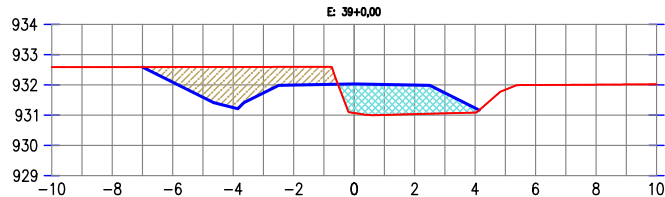
COTAS TN	933.06	933.06	933.05	932.48	933.05	933.05	932.13	933.04	931.78	931.77	932.70	932.68	932.68	932.68	932.60	932.57	932.57
COTAS PROJ.			-933.05														
COTAS VERM.				0.57	-1.07		0.92		-0.65	-0.36	0.72						



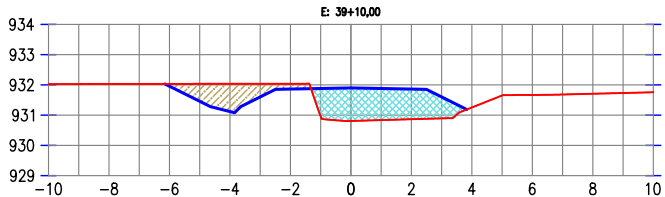
COTAS TN	932.93	932.93	932.93	932.35	932.93	932.93	932.00	932.93	931.92	931.56	931.56	931.56	931.56	931.56	931.56	931.42	931.39
COTAS PROJ.			-932.93														
COTAS VERM.				0.58	-1.08		0.93		-0.38	-0.44	0.51						



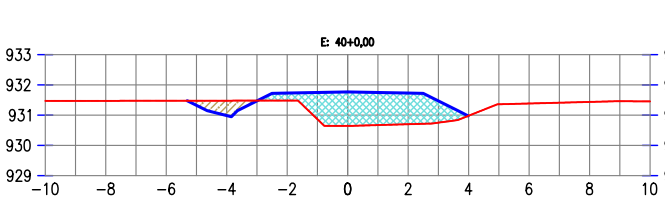
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COTAS PROJ.			-932.92														
COTAS VERM.				0.70	-1.20		1.06		-0.08	-0.59	0.51						



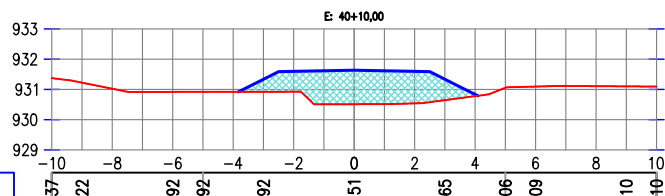
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COTAS PROJ.			-932.59														
COTAS VERM.				0.50	-1.00		0.86		-0.96	-0.67	0.51						



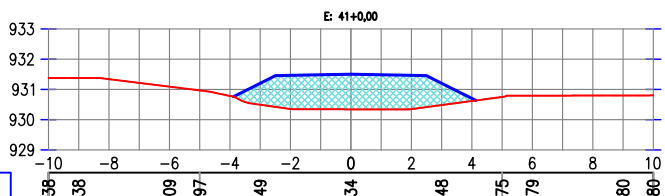
COTAS TN	932.03	932.03	932.03	931.46	932.03	932.03	931.60	932.03	930.81	931.65	931.67	931.67	931.67	931.67	931.73	931.76	931.76
COTAS PROJ.			-932.03														
COTAS VERM.				0.08	-0.58		0.44		-1.09	-0.71	0.51						



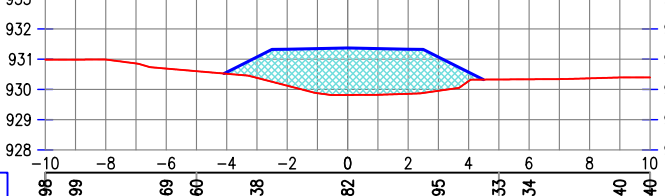
COTAS TN	931.47	931.47	931.48	931.48	931.48	931.48	931.47	931.47	930.65	931.77	930.75	930.75	931.36	931.39	931.46	931.45	931.45
COTAS PROJ.			-931.48														
COTAS VERM.				0.15	-0.01		0.01		-1.12	-0.72	0.51						



COTAS TN	931.37	931.22	930.92	930.92	930.92	930.92	931.34	930.92	930.51	930.65	931.06	931.09	931.09	931.10	931.10	931.10	931.10
COTAS PROJ.			-930.92														
COTAS VERM.				-0.41			-1.13		-0.69	0.51							



COTAS TN	931.36	931.38	931.09	930.97	930.97	930.97	931.20	930.97	930.34	931.50	930.48	930.75	930.79	930.80	930.80	930.80	930.80
COTAS PROJ.			-931.09														
COTAS VERM.				-0.71			-1.16		-0.72	0.51							

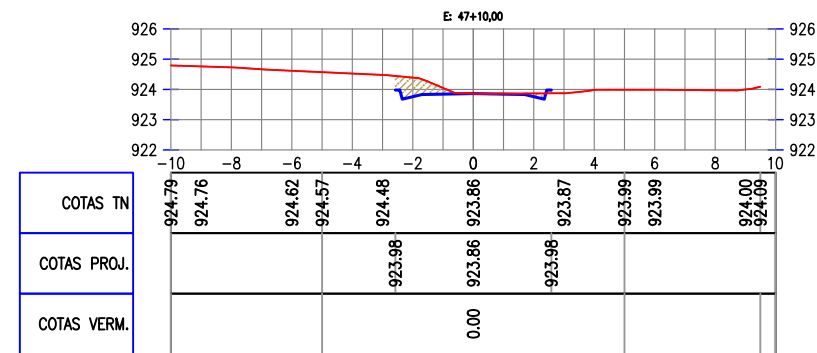
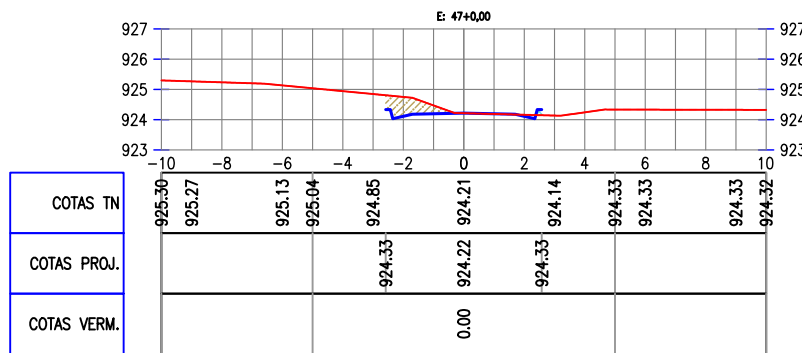
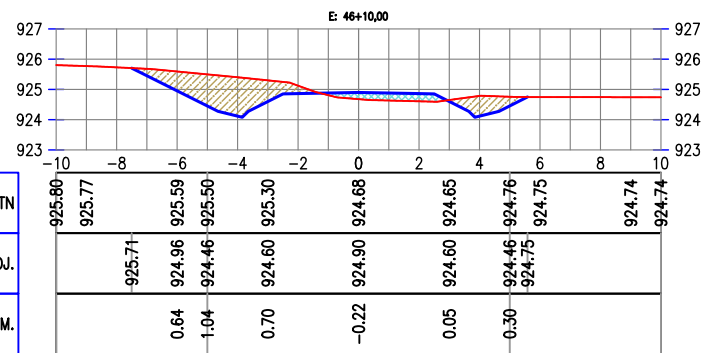
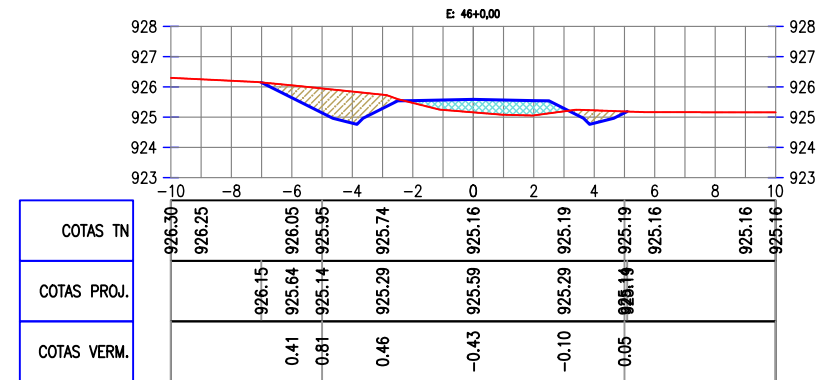
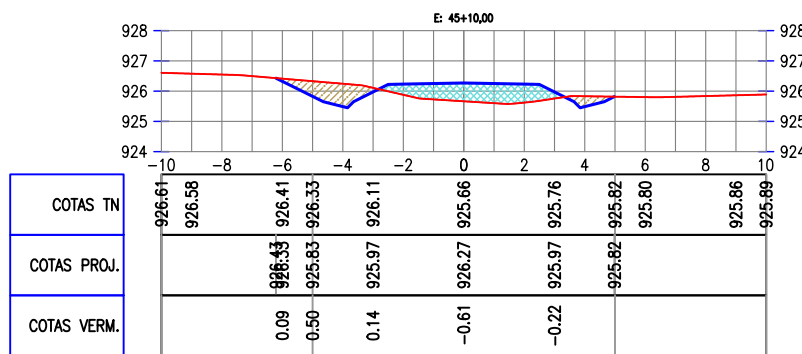
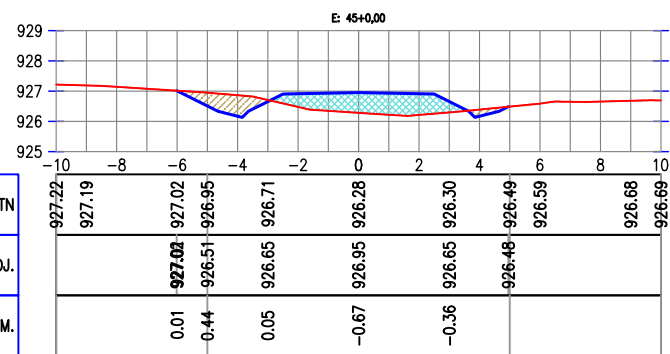
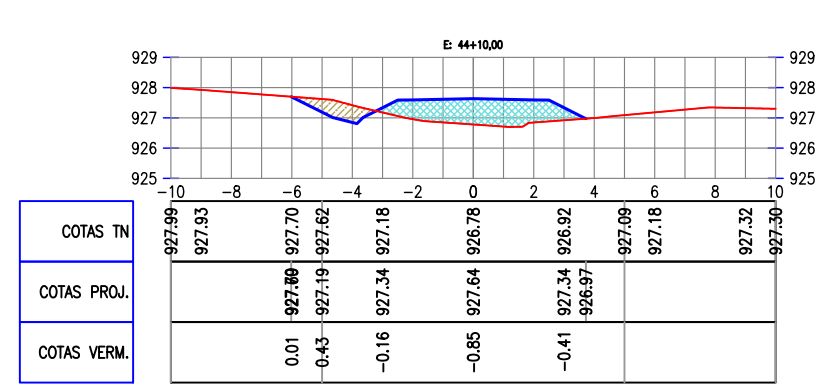
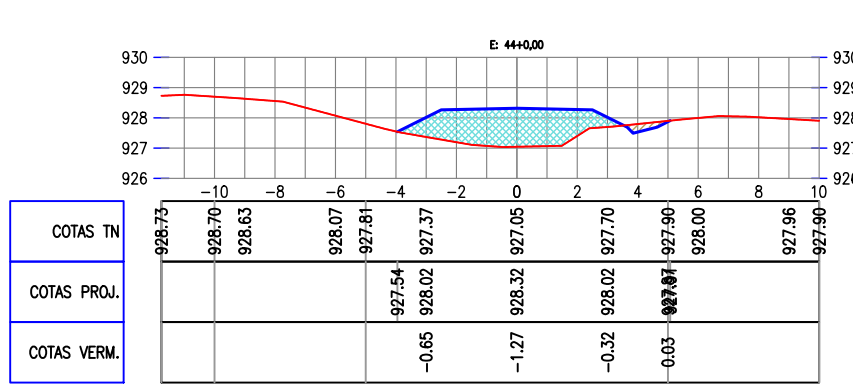
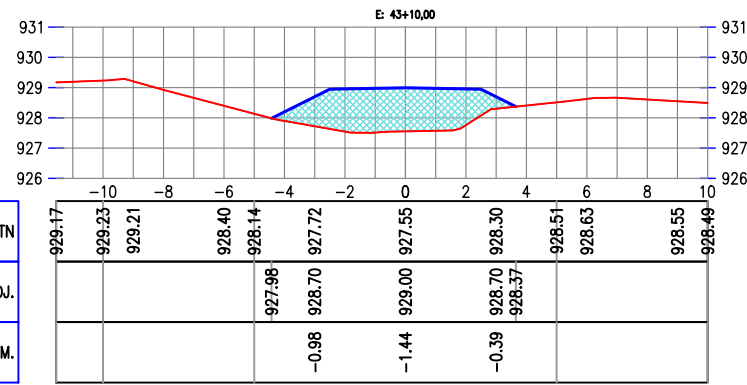
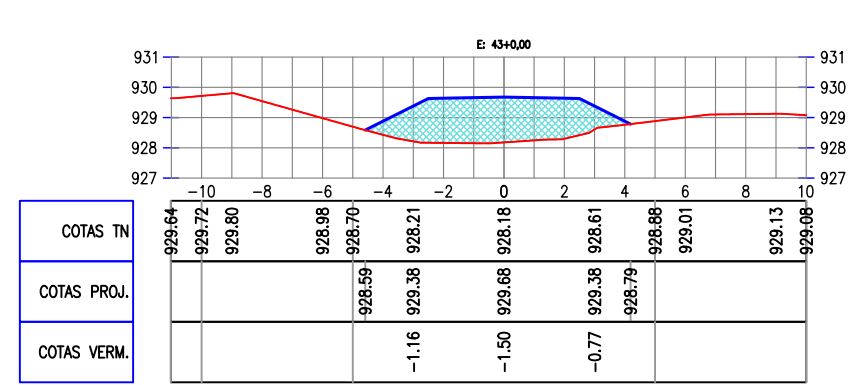
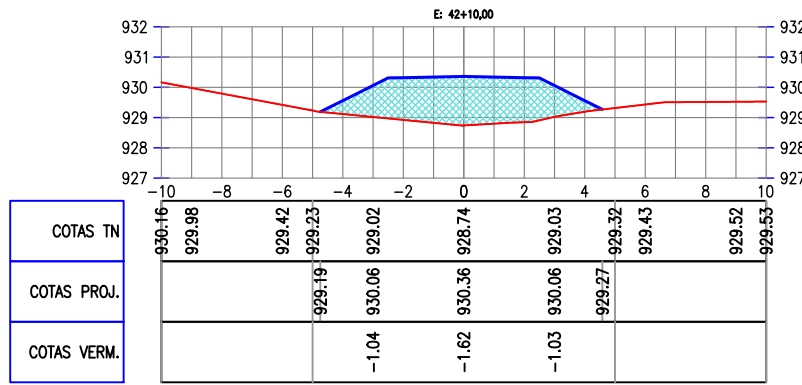
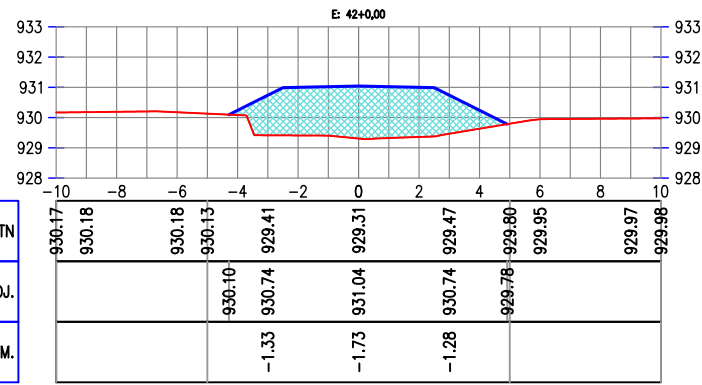


COTAS TN	930.96	930.99	930.69	930.60	930.60	930.60	931.07	930.38	929.82	931.37	929.95	929.95	930.33	930.34	930.40	930.40	930.40
COTAS PROJ.			-930.69														
COTAS VERM.				-0.69			-1.55		-1.12	0.51							

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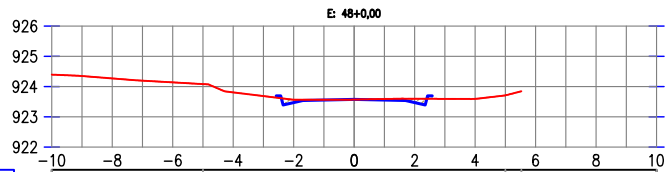
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		3 /07
SEÇÕES TRANSVERSAIS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	



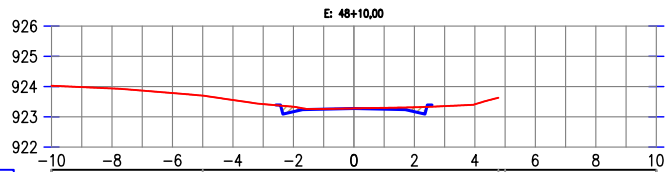
JOTA BARROS PROJETOS
Arthur Moreira Torquato
Engº Civil - CREA 53900D - CE



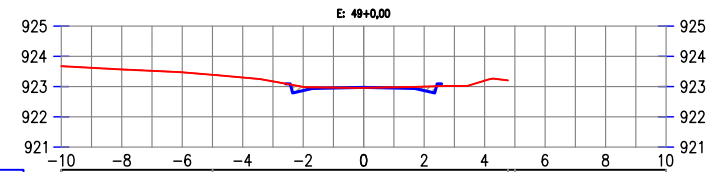
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		4 /07
SEÇÕES TRANSVERSAIS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	



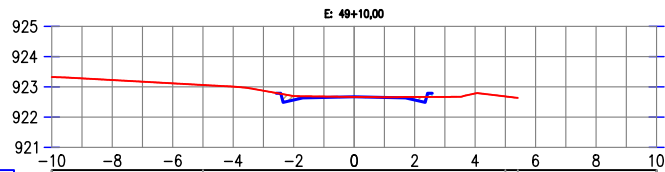
COTAS TN	924.46	924.35	924.14	924.08	923.69	923.57	923.59	923.71	923.84
COTAS PROJ.					-923.69	923.57	-923.69		
COTAS VERM.						0.00			



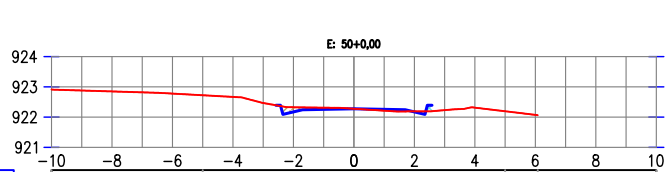
COTAS TN	924.03	923.98	923.79	923.70	923.42	923.28	923.35	923.63	
COTAS PROJ.					-923.39	923.27	-923.39		
COTAS VERM.						0.00			



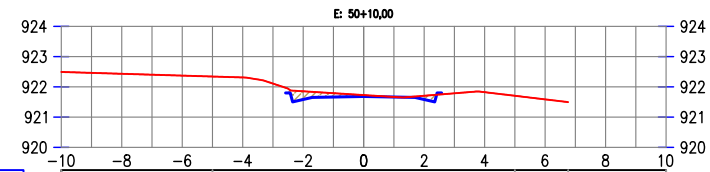
COTAS TN	923.68	923.62	923.47	923.39	923.17	922.96	923.02	923.21	
COTAS PROJ.					-923.09	922.97	-923.09		
COTAS VERM.						-0.01			



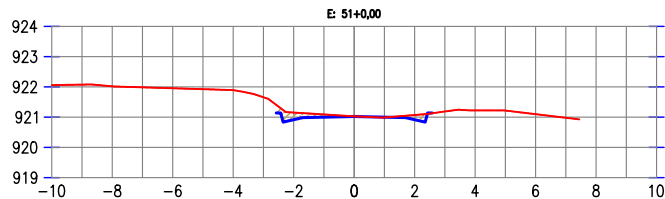
COTAS TN	923.32	923.28	923.12	923.06	922.87	922.67	922.67	922.68	922.64
COTAS PROJ.					-922.79	922.67	-922.79		
COTAS VERM.						0.00			



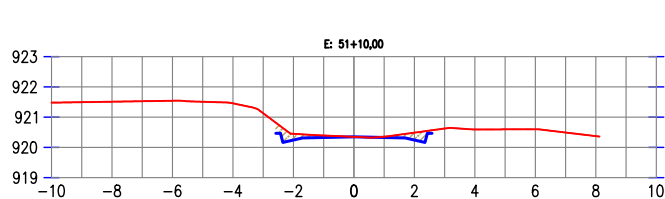
COTAS TN	922.91	922.88	922.78	922.72	922.47	922.28	922.23	922.19	922.07
COTAS PROJ.					-922.39	922.28	-922.39		
COTAS VERM.						0.00			



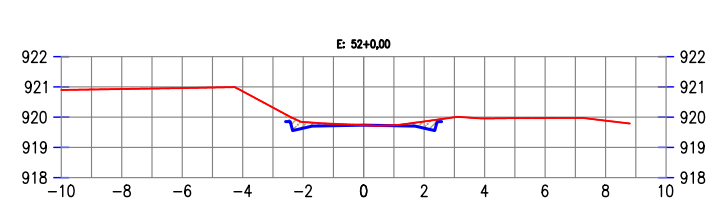
COTAS TN	922.49	922.46	922.37	922.34	922.11	921.73	921.79	921.71	921.59
COTAS PROJ.					-921.80	921.68	-921.80		
COTAS VERM.						0.04			



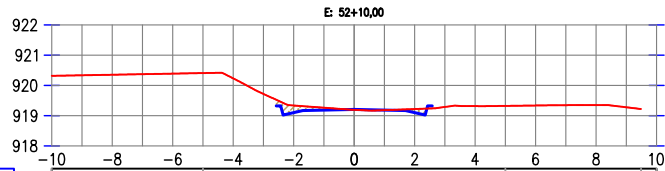
COTAS TN	922.06	922.08	921.96	921.93	921.66	921.03	921.19	921.22	921.10
COTAS PROJ.					-921.14	921.02	-921.14		
COTAS VERM.						0.01			



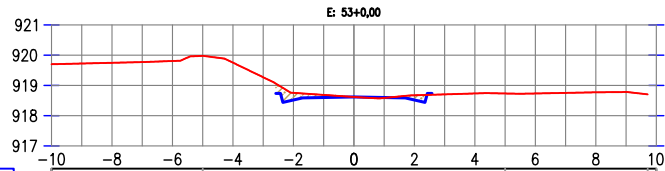
COTAS TN	921.46	921.50	921.54	921.51	921.13	920.35	920.62	920.60	920.36
COTAS PROJ.					-920.46	920.35	-920.46		
COTAS VERM.						0.00			



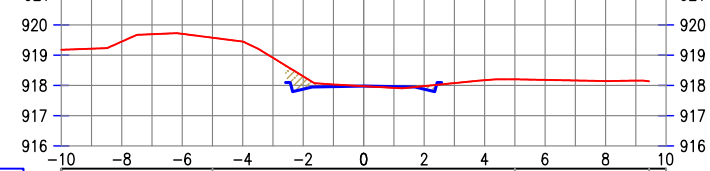
COTAS TN	920.90	920.91	920.96	920.98	920.32	919.73	920.00	919.97	919.79
COTAS PROJ.					-919.85	919.74	-919.85		
COTAS VERM.						0.00			



COTAS TN	920.32	920.34	920.39	920.41	919.72	919.19	919.29	919.32	919.34
COTAS PROJ.					-919.32	919.20	-919.32		
COTAS VERM.						-0.01			



COTAS TN	919.70	919.72	919.81	919.98	919.27	918.62	918.70	918.73	918.78
COTAS PROJ.					-918.74	918.62	-918.74		
COTAS VERM.						0.00			

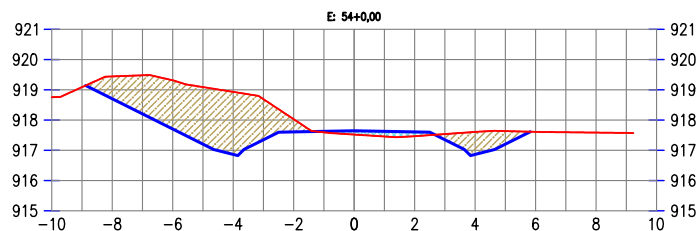


COTAS TN	919.16	919.22	919.71	919.58	918.91	917.98	918.08	918.20	918.18
COTAS PROJ.					-918.10	917.98	-918.10		
COTAS VERM.						0.00			

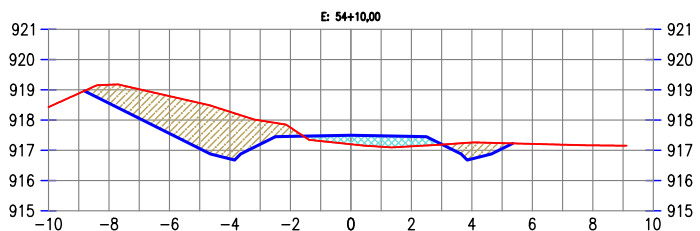

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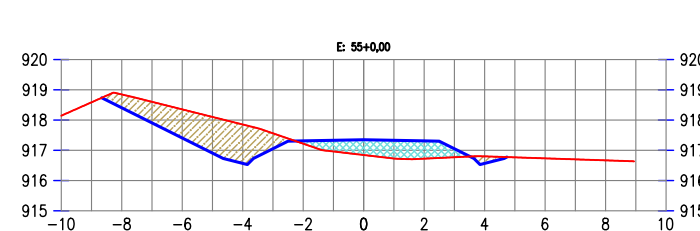
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		5 /07
SEÇÕES TRANSVERSAIS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/250
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	



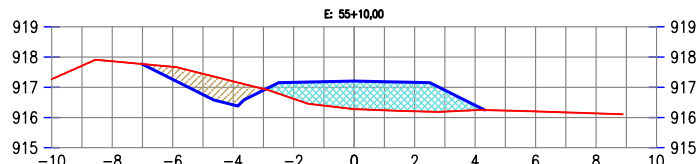
COTAS TN	918.76	919.09	919.31	919.09	918.69	917.52	917.54	917.63	917.61	917.57
COTAS PROJ.	919.14	917.70	917.20	917.35	917.65	917.35	917.20	917.61	917.61	
COTAS VERM.		1.61	-1.89	1.34	-0.13	0.19	-0.43	-0.17	0.00	



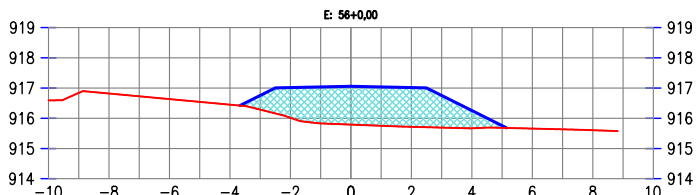
COTAS TN	918.43	918.88	918.79	918.56	917.98	917.20	917.19	917.24	917.21	917.16
COTAS PROJ.	918.96	917.55	917.05	917.20	917.50	917.20	917.05	917.25	917.21	
COTAS VERM.		1.24	-1.51	0.79	-0.30	-0.01	-0.18	-0.17	0.00	



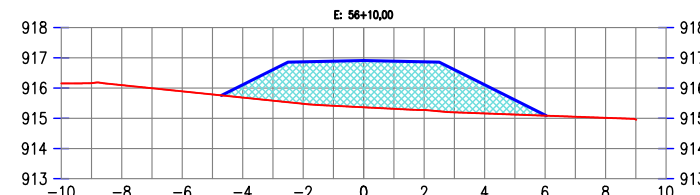
COTAS TN	918.14	918.59	918.35	918.10	917.56	916.84	916.77	916.77	916.73	916.64
COTAS PROJ.	918.74	917.40	916.90	917.05	917.35	917.05	916.77	916.77	916.73	
COTAS VERM.		0.95	-1.20	0.51	-0.51	-0.28	0.00	0.00	0.00	



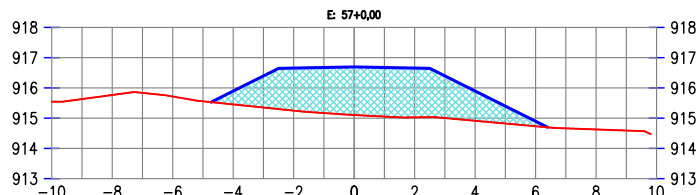
COTAS TN	917.27	917.71	917.67	917.44	916.94	916.28	916.19	916.23	916.20	916.11
COTAS PROJ.	917.77	917.26	916.76	916.90	917.20	916.90	916.25	916.20	916.20	
COTAS VERM.		0.42	-0.69	0.04	-0.93	-0.71	-0.16	0.00	0.00	



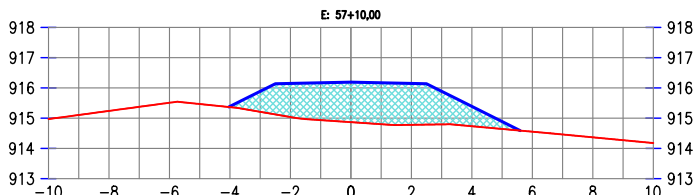
COTAS TN	916.59	916.84	916.63	916.54	916.28	915.79	915.69	915.68	915.66	915.58
COTAS PROJ.	916.42	916.75	916.28	916.28	917.05	916.75	915.68	915.68	915.66	
COTAS VERM.		-0.47	-1.26	-1.06	-0.07	-0.07	0.00	0.00	0.00	



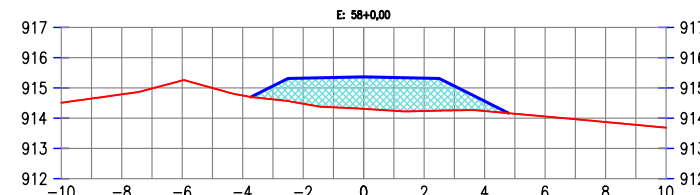
COTAS TN	916.15	916.16	915.89	915.79	915.58	915.36	915.20	915.12	915.09	914.96
COTAS PROJ.	915.76	915.76	916.61	916.61	916.91	916.61	915.12	915.09	915.09	
COTAS VERM.		-1.03	-1.54	-1.41	-0.48	-0.02	0.00	0.00	0.00	



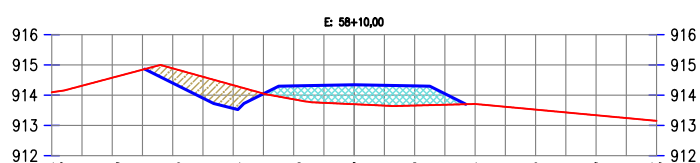
COTAS TN	915.55	915.63	915.72	915.56	915.35	915.10	915.00	914.82	914.73	914.59
COTAS PROJ.	915.55	915.56	916.40	916.40	916.70	916.40	915.00	914.73	914.73	
COTAS VERM.		-1.04	-1.59	-1.39	-0.57	-0.16	0.00	0.00	0.00	



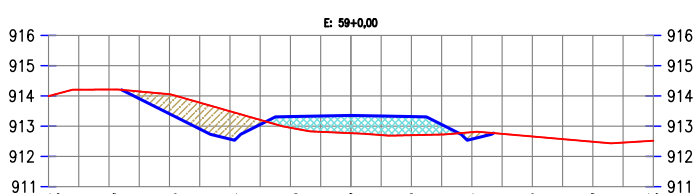
COTAS TN	914.97	915.11	915.51	915.47	915.21	914.87	914.80	914.64	914.55	914.27
COTAS PROJ.	915.37	915.89	915.21	915.21	916.19	914.87	914.55	914.55	914.55	
COTAS VERM.		-0.68	-1.32	-1.09	-0.25	0.00	0.00	0.00	0.00	



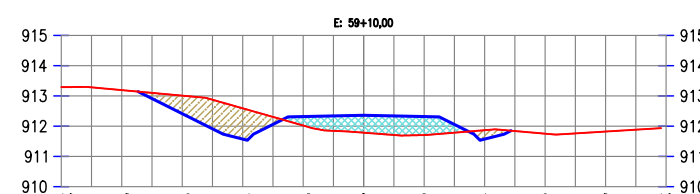
COTAS TN	914.51	914.65	915.25	915.00	914.62	914.31	914.26	914.15	914.06	913.78
COTAS PROJ.	914.70	915.06	915.36	915.36	914.31	914.26	914.15	914.06	914.06	
COTAS VERM.		-0.44	-1.05	-0.80	-0.44	-0.44	-0.44	-0.44	-0.44	



COTAS TN	914.10	914.31	914.86	914.89	914.61	914.05	913.70	913.68	913.62	913.52
COTAS PROJ.	914.86	914.40	913.90	914.05	914.35	914.05	913.70	913.62	913.52	
COTAS VERM.		0.49	-0.71	0.01	-0.65	-0.36	0.00	0.00	0.00	



COTAS TN	913.99	914.21	914.06	913.78	913.21	912.77	912.75	912.66	912.46	912.52
COTAS PROJ.	914.20	913.41	912.91	913.06	913.36	913.06	912.77	912.66	912.46	
COTAS VERM.		0.65	-0.87	0.15	-0.59	-0.33	0.00	0.00	0.00	

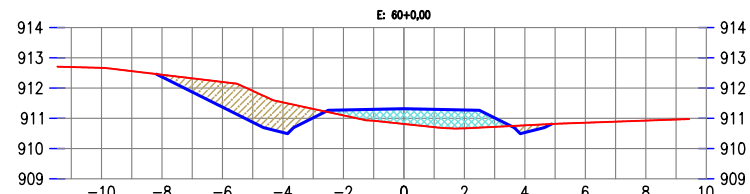


COTAS TN	913.29	913.28	913.01	912.87	912.31	911.78	911.78	911.84	911.75	911.88
COTAS PROJ.	913.14	912.41	911.91	912.06	912.36	912.06	911.84	911.75	911.75	
COTAS VERM.		0.60	-0.96	0.25	-0.57	-0.27	0.00	0.00	0.00	

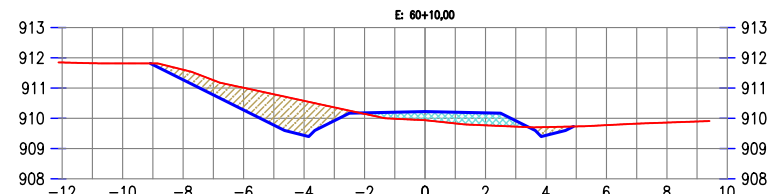

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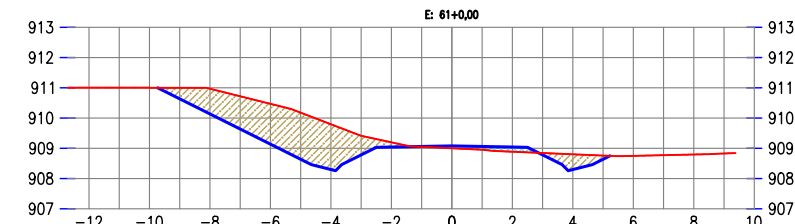
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		6 /07
SEÇÕES TRANSVERSAIS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	1/250



COTAS TN	912.74	912.67	912.56	912.20	911.91	911.31	910.81	910.72	910.82	910.85	910.96	910.97
COTAS PROJ.		912.46	911.37	910.87	911.01	911.31	910.81	910.81	910.81	910.85		
COTAS VERM.			0.83	-1.04	0.30	-0.50	-0.30					



COTAS TN	911.85	911.82	911.81	911.01	910.79	910.36	909.94	909.72	909.73	909.77	908.89	908.89
COTAS PROJ.		911.81	911.81	910.27	909.77	909.92	910.22	909.92	909.73	909.77		
COTAS VERM.		0.04	0.74	-1.02	0.44	-0.28	-0.19					

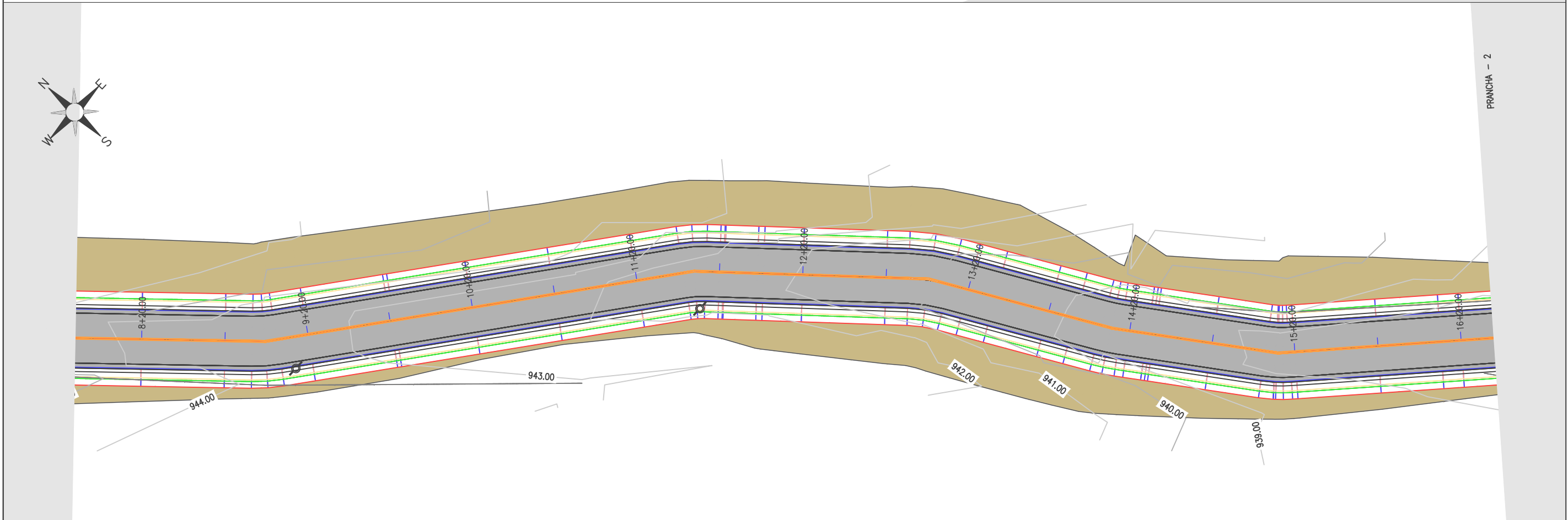
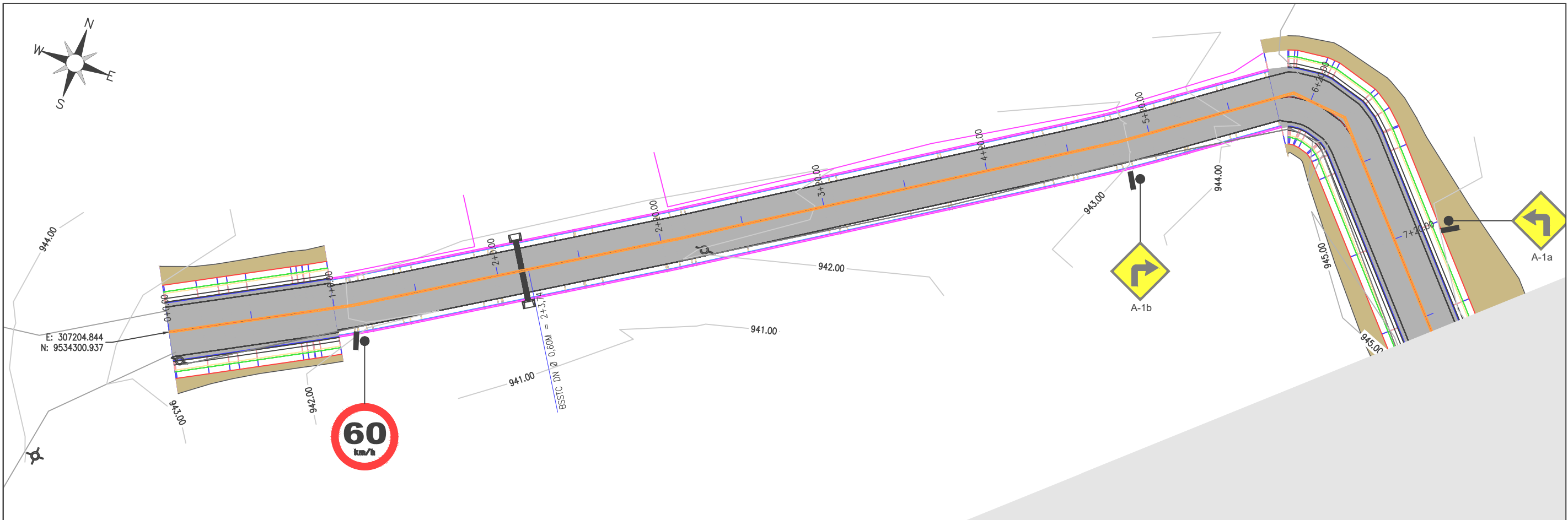


COTAS TN	911.00	911.00	911.00	910.47	910.18	909.41	909.00	908.84	908.76	908.75	908.84	908.84
COTAS PROJ.		911.00	910.63	909.13	908.63	908.78	909.08	908.78	908.78	908.75	908.75	908.84
COTAS VERM.		0.37	1.34	-1.54	0.63	-0.08	0.06	-0.12				


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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		7 /07
SEÇÕES TRANSVERSAIS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	TERRA_BICA DE CRUZ DAS ALMAS_R1.DWG	1/250

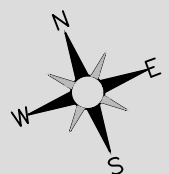


PRANCHA - 2

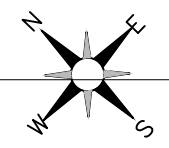
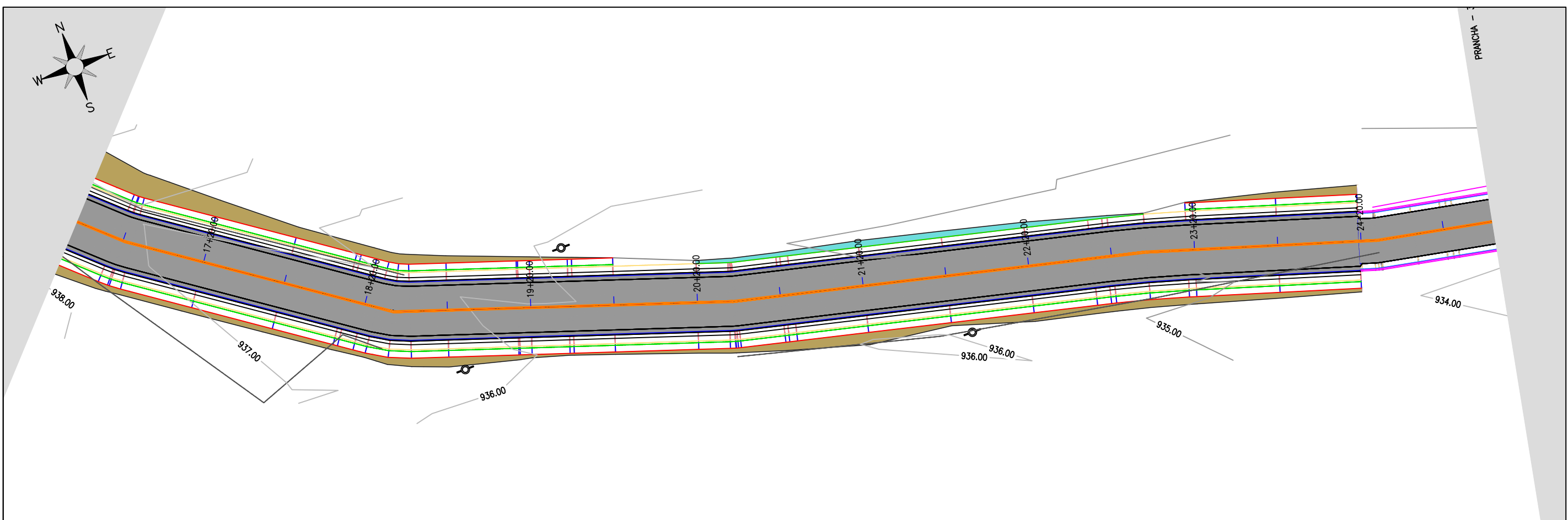
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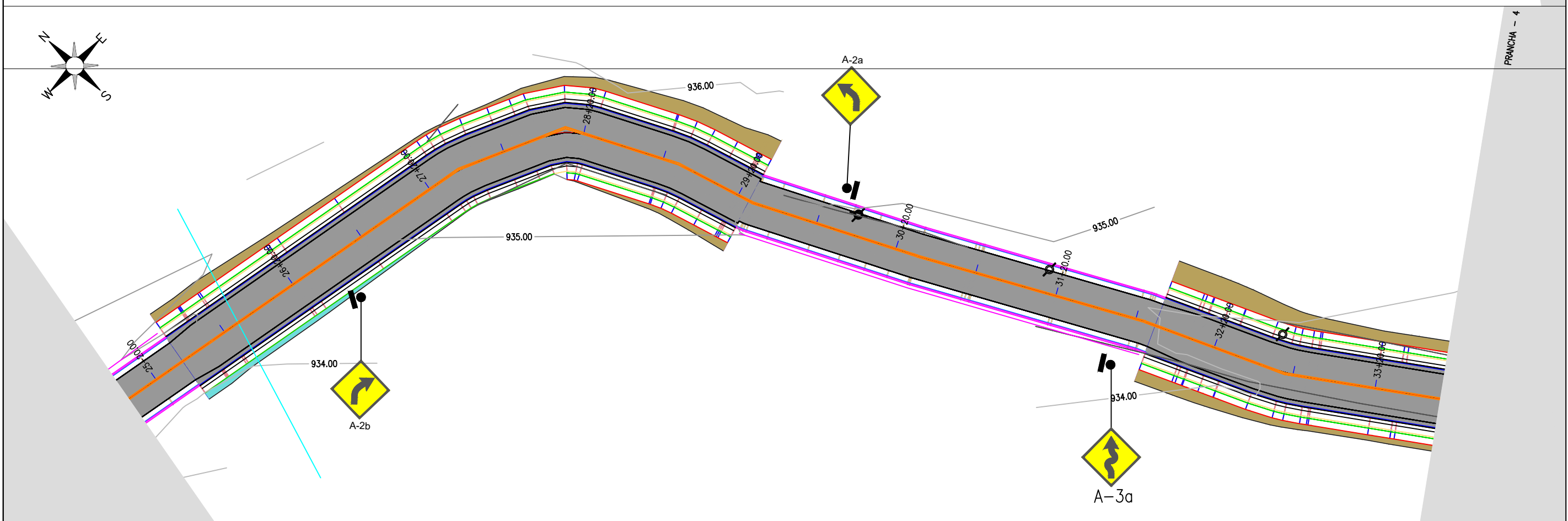
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		1 /05
PROJETO DE SINALIZAÇÃO - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/500
ARQUIVO:	SIN_BICA DE CRUZ DAS ALMAS_R0.DWG	



PRANCHA - 3



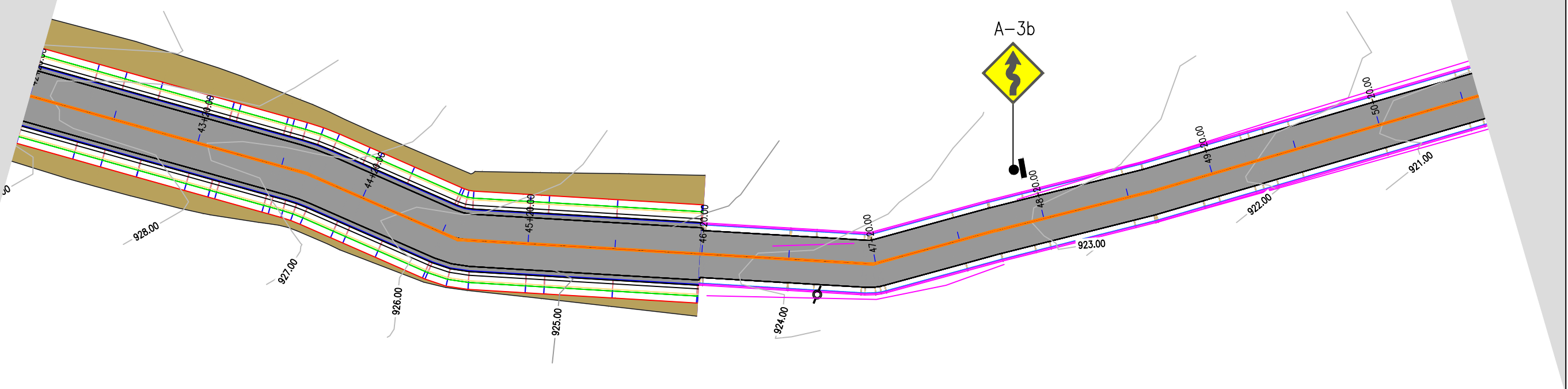
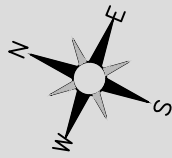
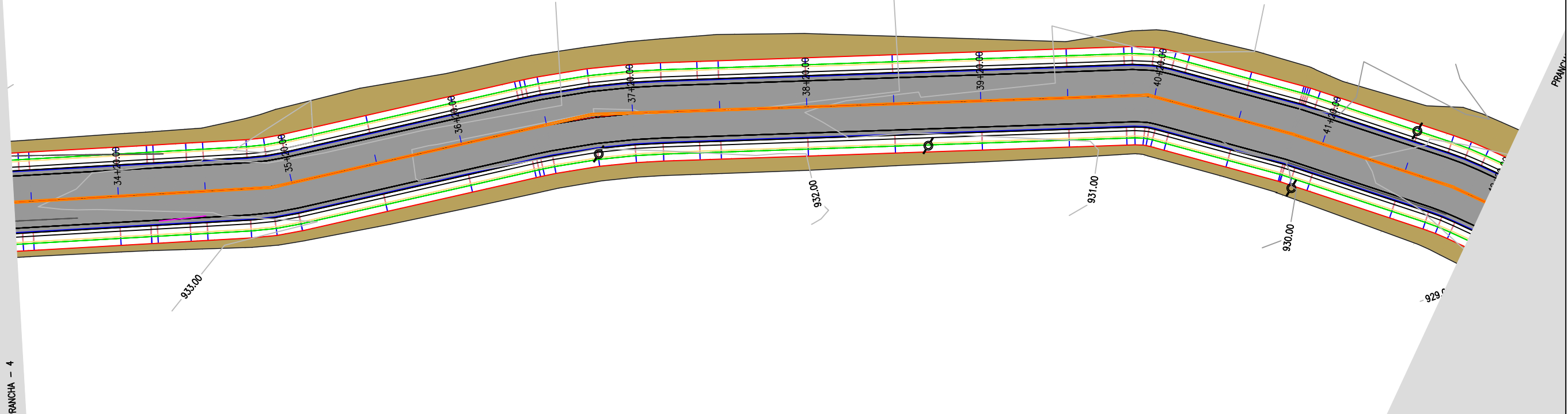
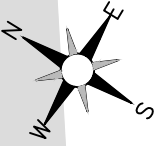
PRANCHA - 4




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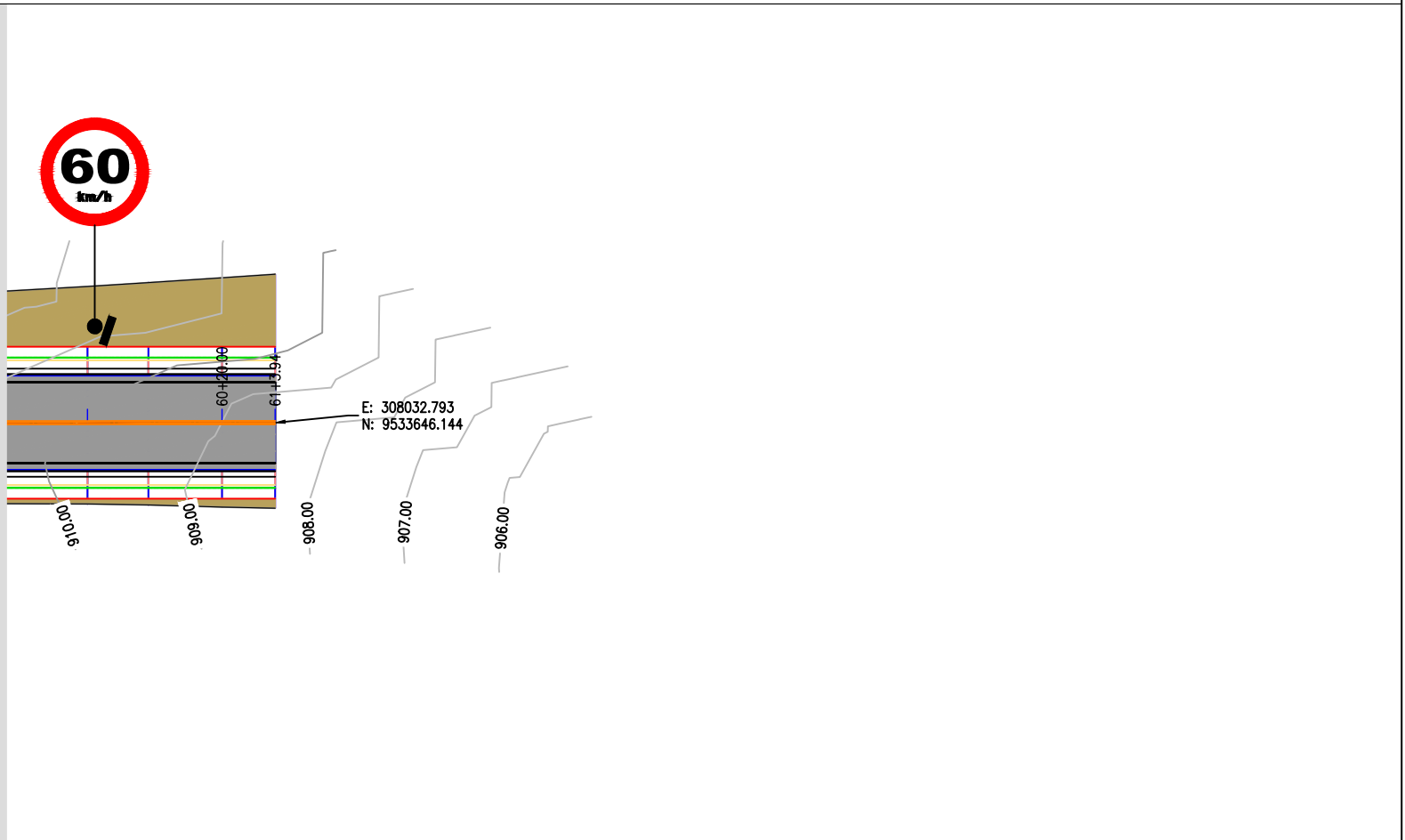
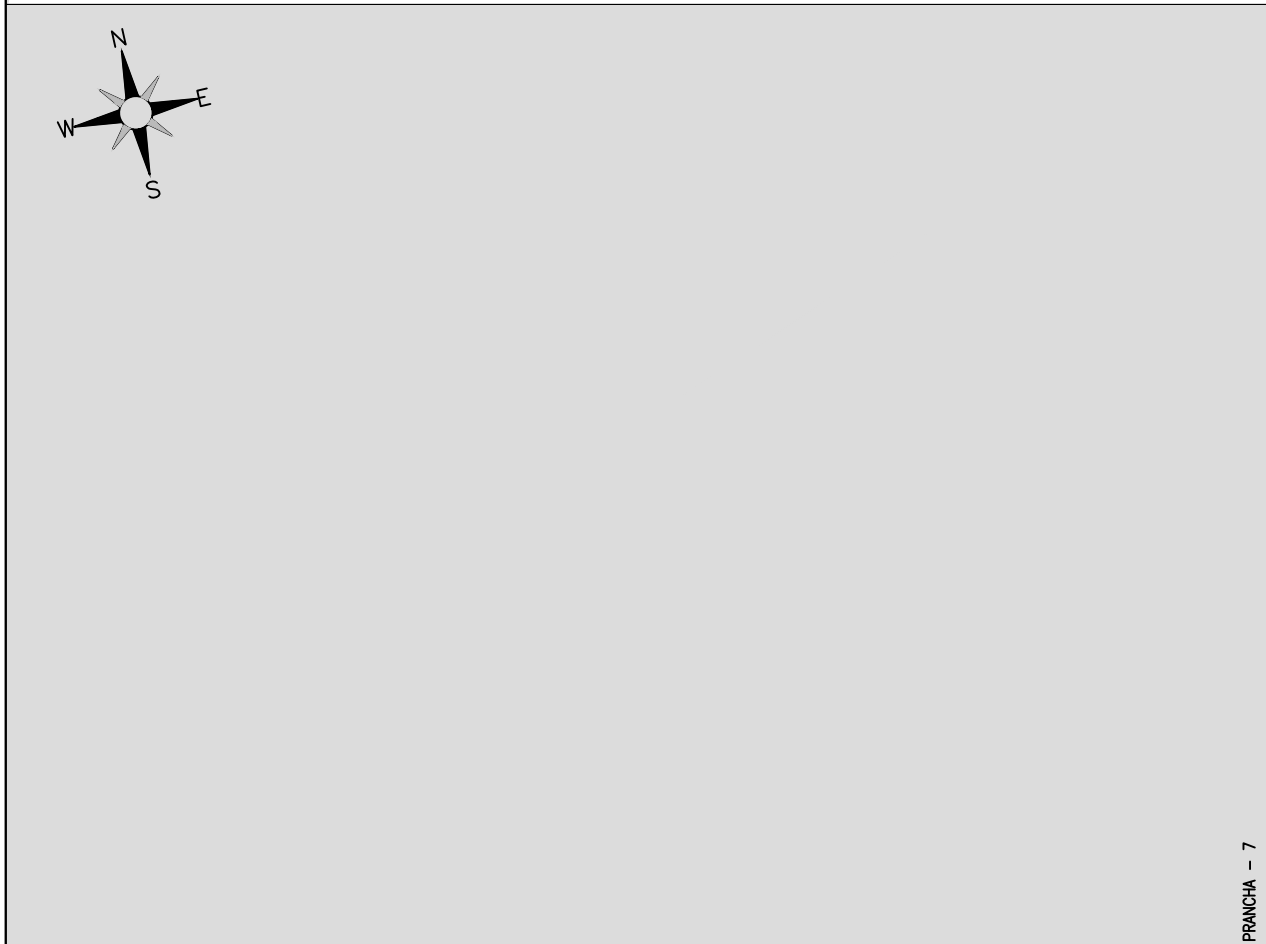
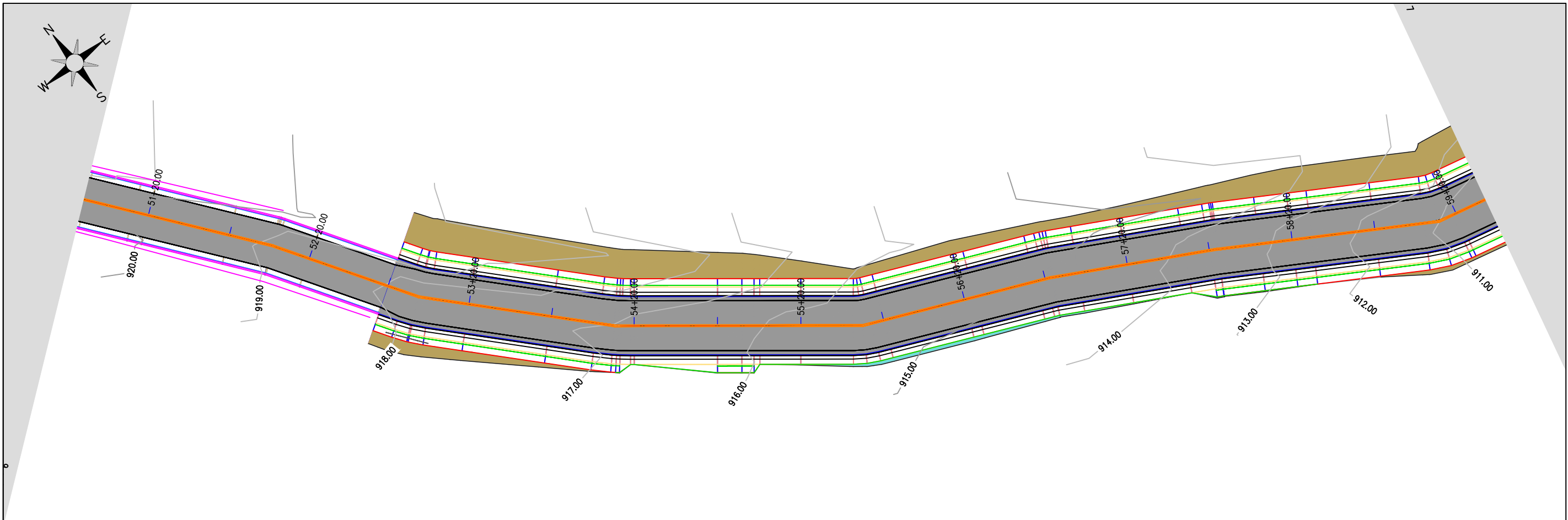
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		2 /05
PROJETO DE SINALIZAÇÃO - ESTRADA BICA DE CRUZ DAS ALMAS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	SIN_BICA DE CRUZ DAS ALMAS_R0.DWG	1/500



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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		3 /05
PROJETO DE SINALIZAÇÃO - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	1/500
ARQUIVO:	SIN_BICA DE CRUZ DAS ALMAS_R0.DWG	



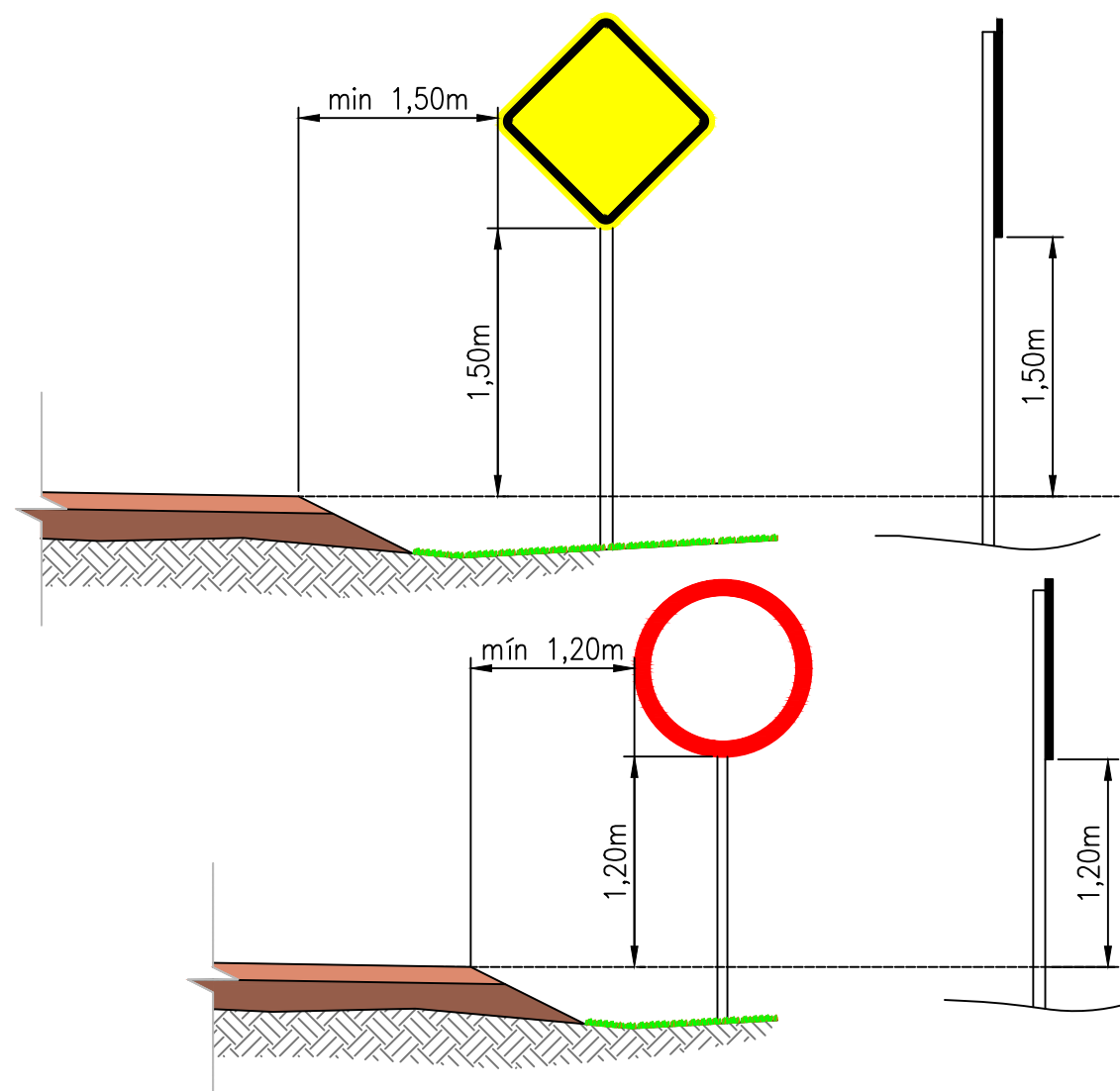
PRANCHA - 7


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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		4 /05
PROJETO DE SINALIZAÇÃO - ESTRADA BICA DE CRUZ DAS ALMAS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	SIN_BICA DE CRUZ DAS ALMAS_R0.DWG	1/500

Posicionamento transversal



PLACAS DE ADVERTÊNCIA

PLACAS	CÓDIGO	DIMENSÕES (m)	QUANTIDADE (un)
	A - 1a	0,80x0,80	01
	A - 1b	0,80x0,80	01
	A - 2a	0,80x0,80	01
	A - 2b	0,80x0,80	01
	A - 3a	0,80x0,80	01
	A - 3b	0,80x0,80	01

PLACAS DE ADVERTÊNCIA

PLACAS	CÓDIGO	DIMENSÕES (m)	QUANTIDADE (un)
	R - 19	Ø = 0,60	02

NOTA 1:

As Placas Regulamentares tem as seguintes características:

Diâmetro	- 0,80m	Fundo	- Branco
Tarja Circular e Diagonal	- 0,07m	Tarja	- Vermelha
		Símbolo	- Preto
		Letra	- Preto
		Verso	- Preto

NOTA 2:

As Placas de Advertência tem as seguintes características:

Lado	- 0,80m	Fundo	- Amarelo
Orla externa	- 0,01m	Orla interna	- Preta
Orla interna	- 0,02m	Orla externa	- Amarela
		Símbolo	- Preto
		Verso	- Preto

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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE

RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3

PROJETO DE SINALIZAÇÃO - ESTRADA BICA DE CRUZ DAS ALMAS

PROJETISTA: ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE

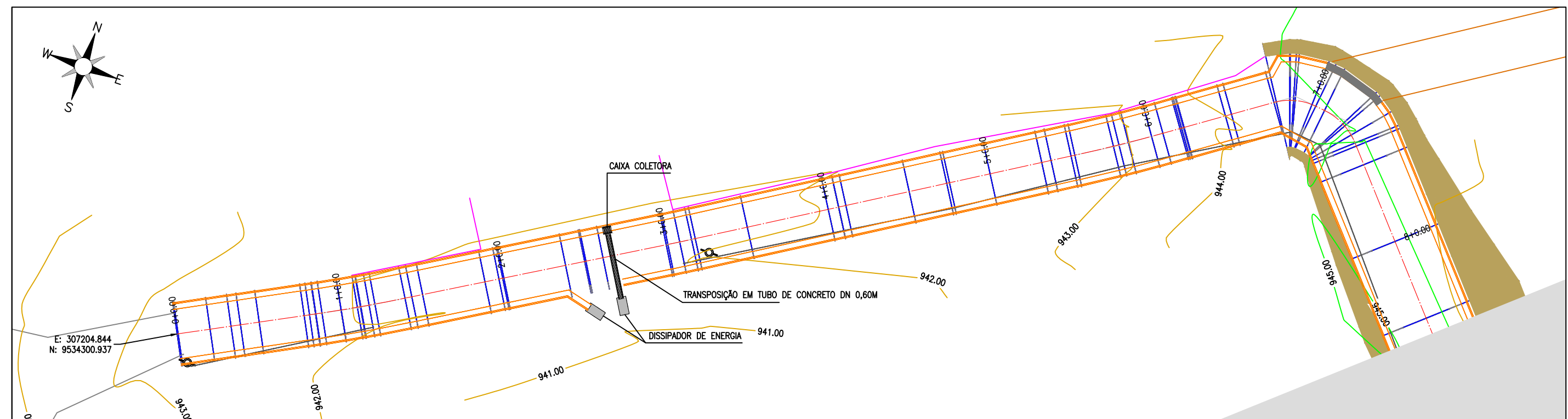
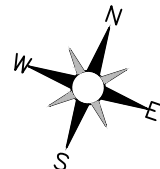
ARQUIVO: SIN_BICA DE CRUZ DAS ALMAS_R0.DWG

PRANCHA:

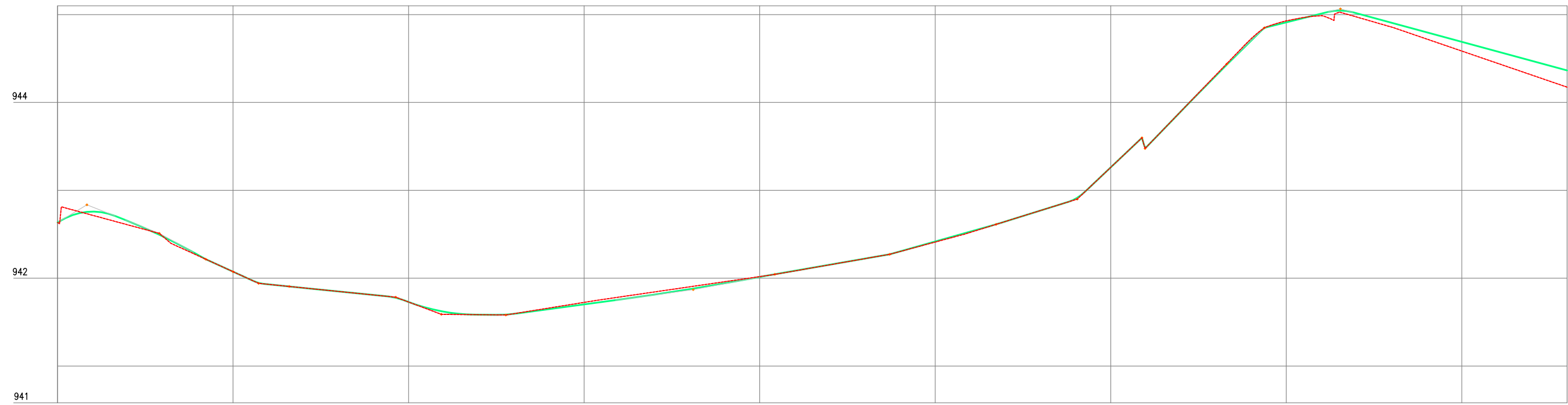
5 /05

ESCALA:

S/ ESC



EST BICA DE CRUZ DAS ALMAS



Estaca	0	1	2	3	4	5	6	7	8	
Cota do terreno	942,635	942,074	941,729	941,725	942,018	942,412	943,262	944,928	944,585	944,174
Cota da terraplenagem	942,635	942,074	941,729	941,702	942,013	942,418	943,262	944,911	944,690	944,364
Cota vertical	0,000	0,000	0,000	-0,023	-0,005	0,006	0,000	-0,016	0,105	0,190

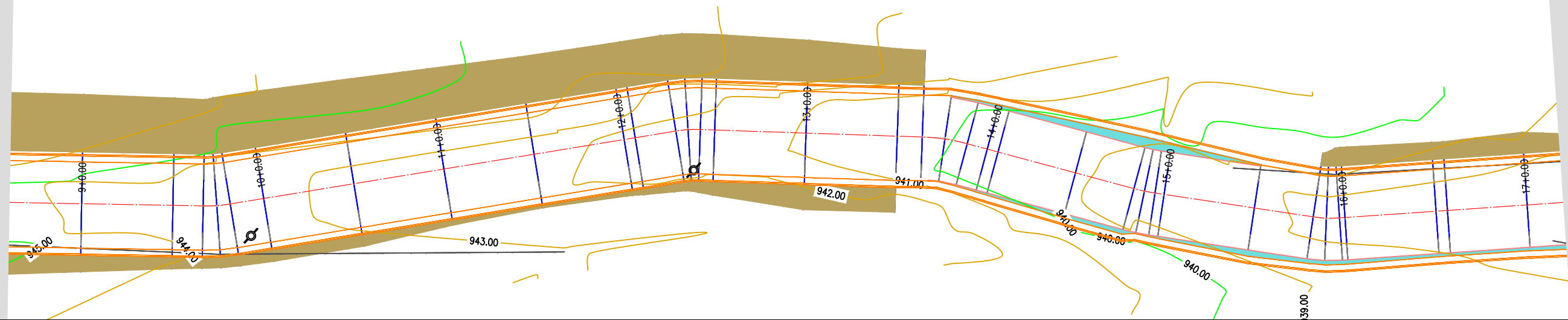
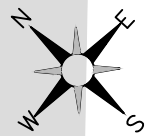
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

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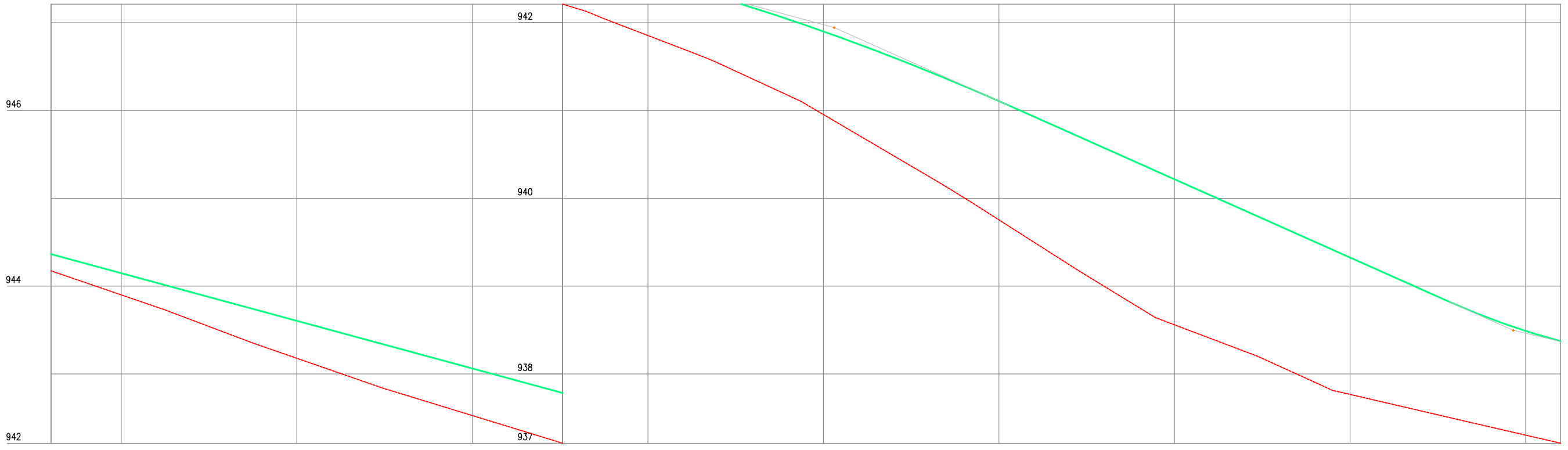
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	1 / 12
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS

EST BICA DE CRUZ DAS ALMAS



Cota Vermelha	Cota da terraplenagem	Cota do terreno	Escala
0,190	944,364	944,174	8
0,247	944,147	943,900	9
0,426	943,665	943,179	10
0,536	943,062	942,526	11
0,665	942,520	941,854	12
0,946	941,900	940,954	13
1,352	941,107	939,755	14
1,657	940,217	938,560	15
1,556	939,326	937,767	16
1,186	938,469	937,304	17
1,161	938,373	937,211	17

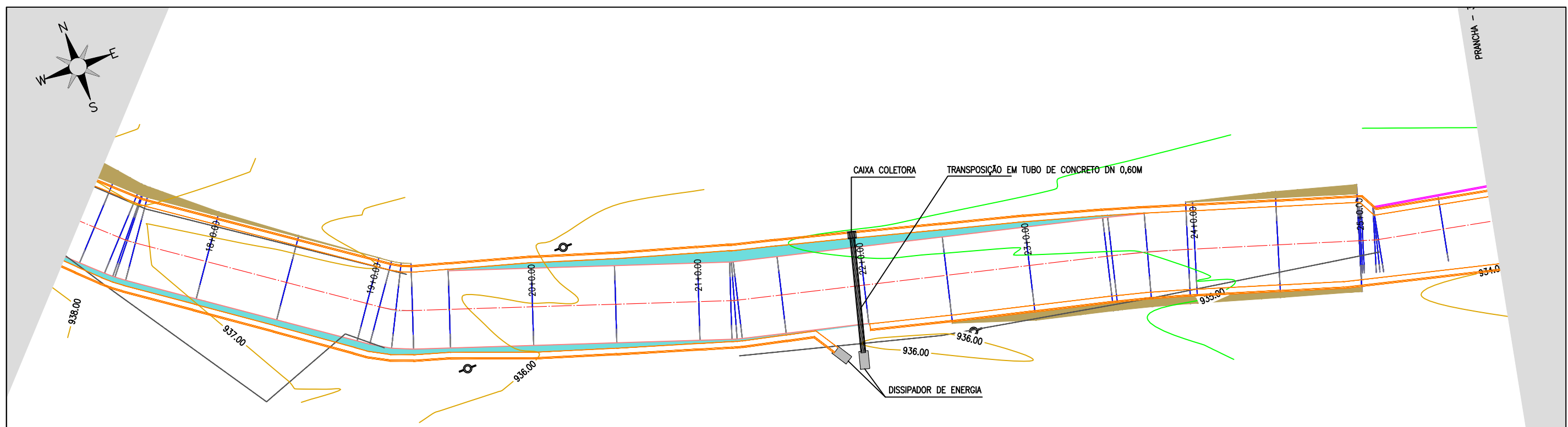
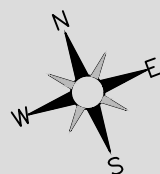
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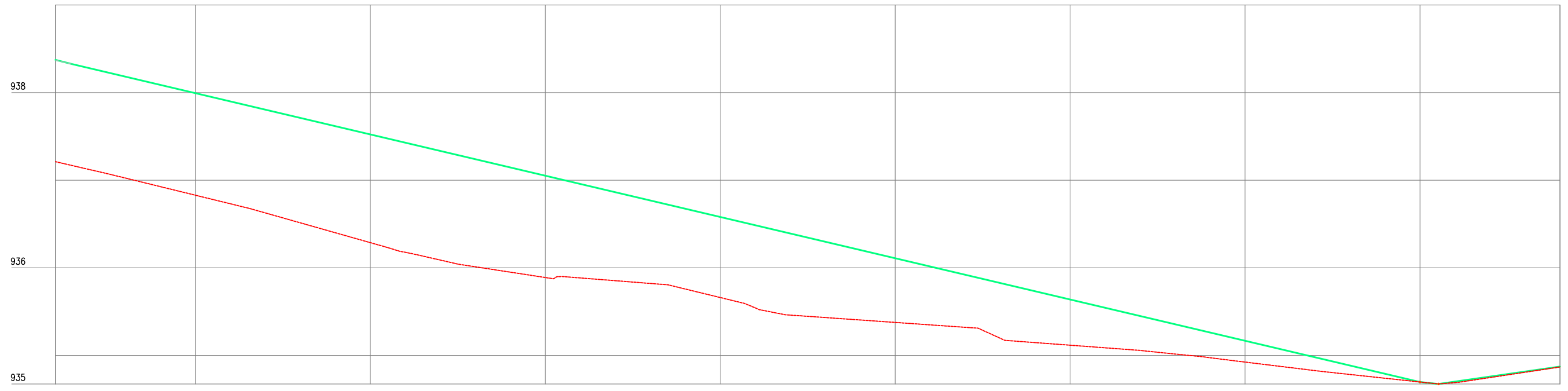


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	2 / 12
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS



Estaca	17	18	19	20	21	22	23	24	25
Cota do terreno	937,211	936,629	936,287	935,889	935,661	935,377	935,117	934,924	934,668
Cota da terraplenagem	938,373	937,993	937,522	937,051	936,590	936,109	935,638	935,167	934,697
Cota vermelha	1,161	1,165	1,235	1,162	0,919	0,733	0,522	0,243	0,005

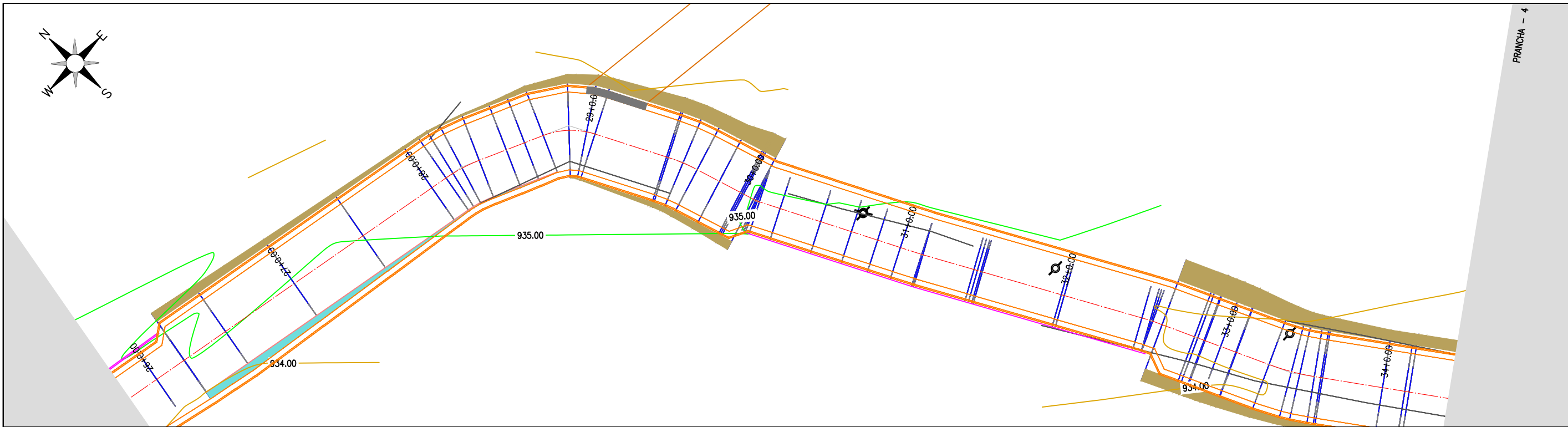
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
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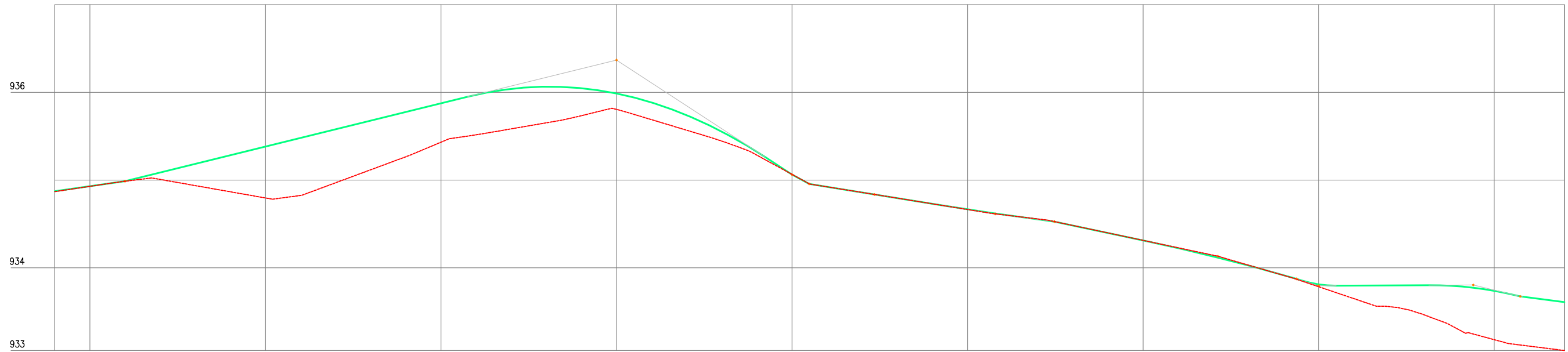


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	3 / 12
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS



Cota Vermelha	Cota da terraplanagem	Cota do terreno	Estaca
0,005	934,873	934,868	25
0,001	934,930	934,928	26
0,586	935,362	934,796	27
0,443	935,875	935,432	28
0,181	935,987	935,806	29
-0,001	935,063	935,064	30
0,002	934,666	934,664	31
-0,001	934,312	934,312	32
0,027	933,811	933,784	33
0,557	933,737	933,180	34
0,552	933,609	933,056	34

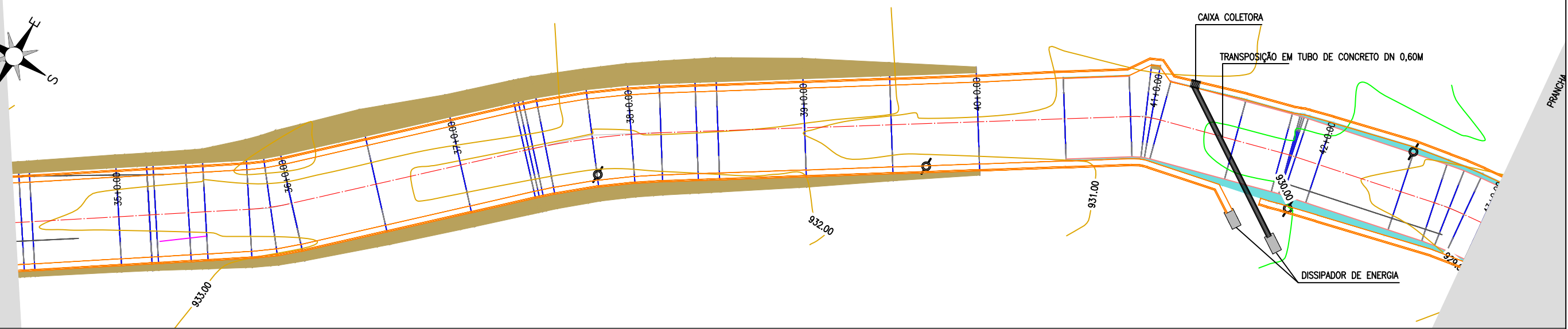
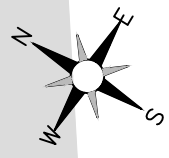
- Transposição de segmentos de sarjeta
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- Sarjeta rtc 88-20
- Dispositivo de transposição

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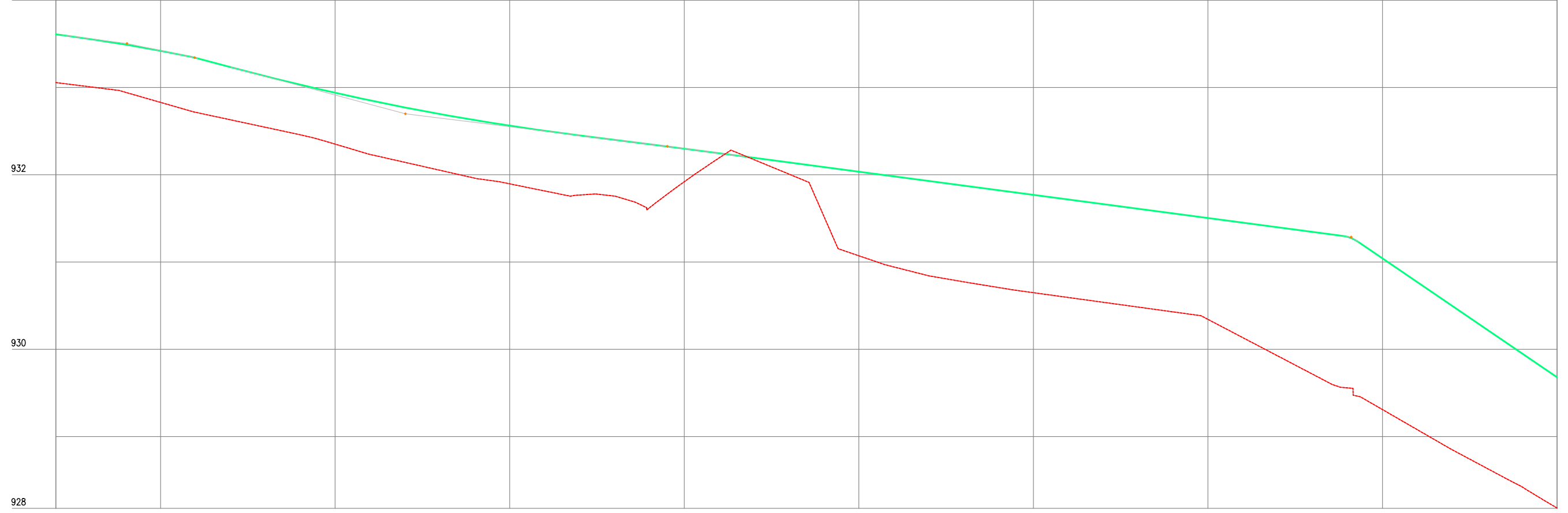


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG





PRANCHA:	4 / 12
ESCALA:	H 1/500 V 1/50



934 EST BICA DE CRUZ DAS ALMAS



Estaca	34	35	36	37	38	39	40	41	42	43
Cota do terreno	933,056	932,829	932,351	931,896	931,820	931,072	930,649	930,343	929,309	928,181
Cota da terraplenagem	933,609	933,420	932,939	932,562	932,299	932,035	931,769	931,504	931,042	929,679
Cota vermelha	0,552	0,591	0,587	0,666	0,379	0,963	1,121	1,161	1,732	1,489

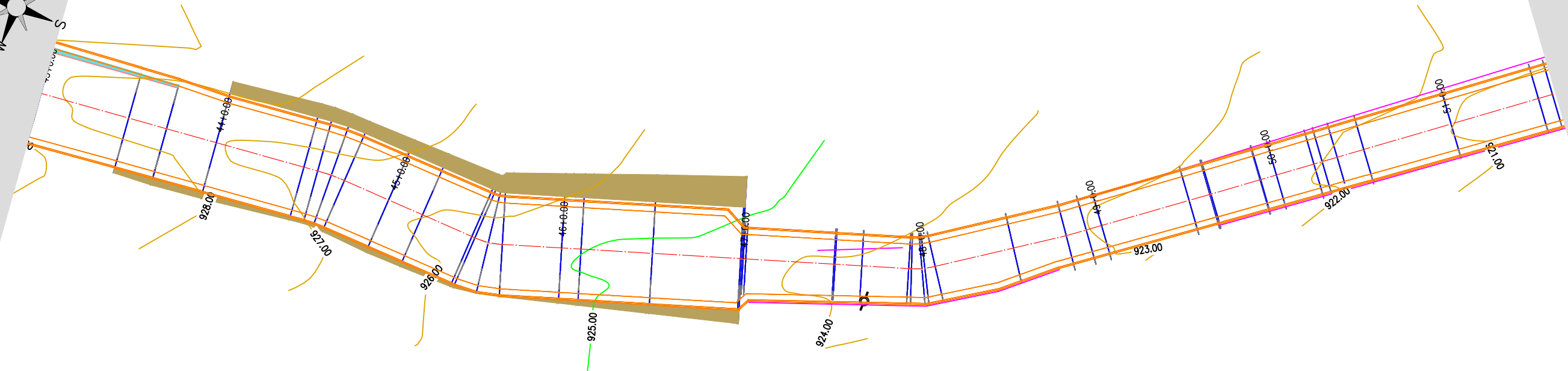
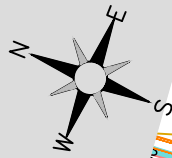
-  Transposição de segmentos de sarjeta
-  Vala de Drenagem - Tipo 02: 0,4mx0,4m
-  Sarjeta rtc 88-20
-  Dispositivo de transposição


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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE	
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3	
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS	
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG

PRANCHA:	5 / 12
ESCALA:	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS

EST BICA DE CRUZ DAS ALMAS



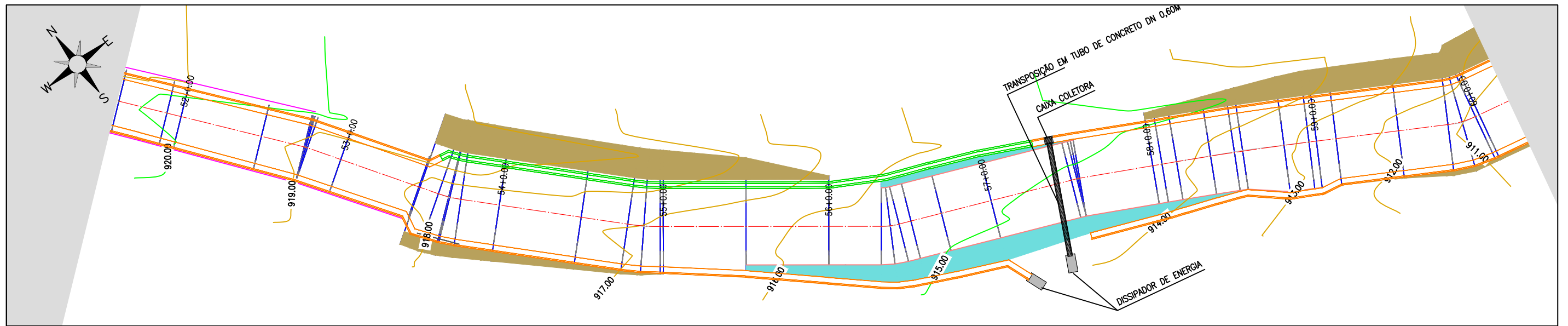
Estaca	43	44	45	46	47	48	49	50	51	51
Coça do terreno	928,181	927,047	926,285	925,160	924,215	923,570	922,960	922,278	921,030	920,214
Coça da terraplenagem	929,679	928,317	926,954	925,588	924,216	923,575	922,973	922,276	921,021	920,212
Coça vermelha	1,498	1,270	0,669	0,428	0,001	0,005	0,013	-0,002	-0,009	-0,002

- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

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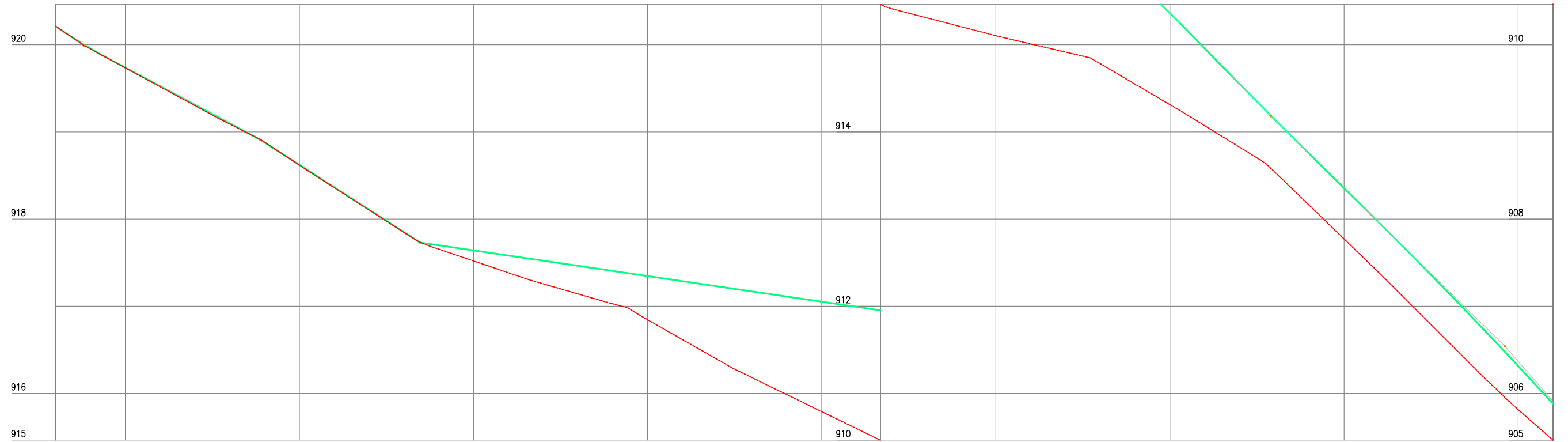
PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		6 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	H 1/500
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	V 1/50







EST BICA DE CRUZ DAS ALMAS

EST BICA DE CRUZ DAS ALMAS

EST BICA D



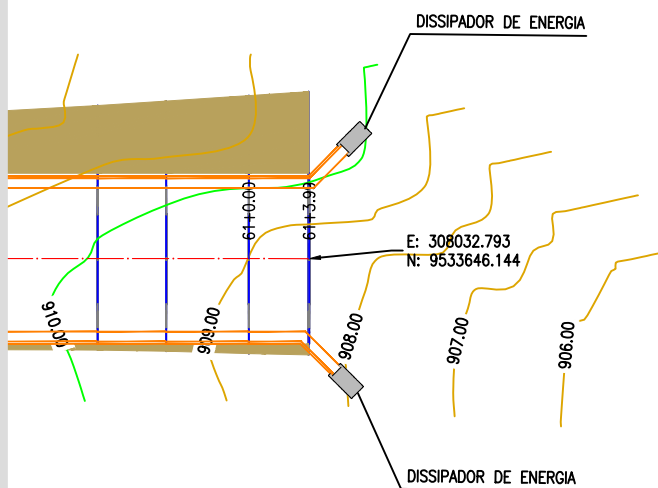
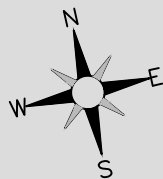
Estaca	51	52	53	54	55	56	57	58	59	60	60
Cota do terreno	920,214	919,736	918,620	917,520	916,845	915,791	915,104	914,313	912,772	910,814	910,463
Cota da terraplenagem	920,212	919,738	918,622	917,641	917,346	917,052	916,696	915,364	913,356	911,314	910,862
Cota vermelha	-0,002	0,002	0,002	0,121	0,502	1,261	1,582	1,051	0,583	0,500	0,419

-  Transposição de segmentos de sarjeta
-  Vala de Drenagem - Tipo 02: 0,4mx0,4m
-  Sarjeta rtc 88-20
-  Dispositivo de transposição

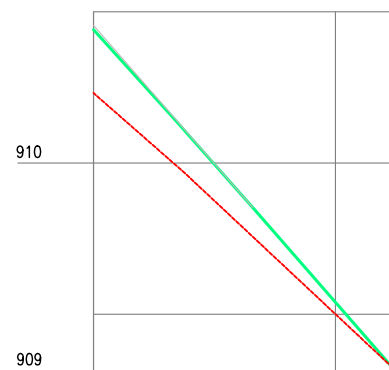

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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		7 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	H 1/500 V 1/50



EST BICA DE CRUZ DAS ALMAS



Cota vermelha	Cota de terraplenagem	Cota do terreno	Estaca
0,419	910,882	910,463	60
0,079	909,080	909,002	61
			61

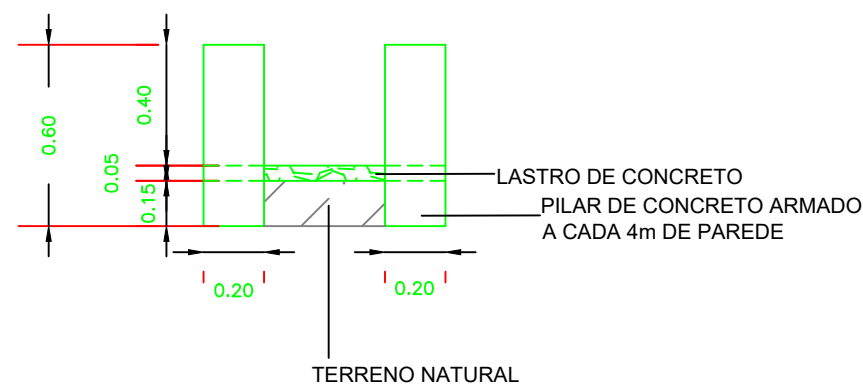
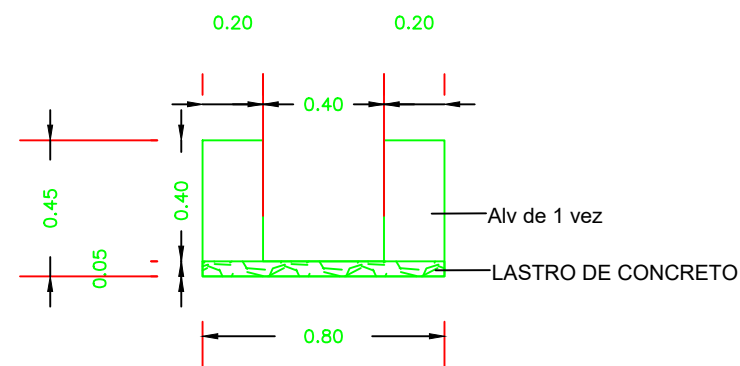
- Transposição de segmentos de sarjeta
- Vala de Drenagem - Tipo 02: 0,4mx0,4m
- Sarjeta rtc 88-20
- Dispositivo de transposição

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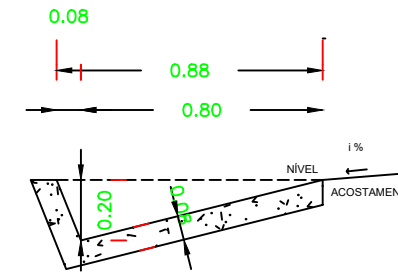


PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		8 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	H 1/500 V 1/50

Vala de Drenagem - Tipo 02: 0,4mx0,4m



Sarjeta triangular de concreto- Tipo STC 88-20



SEÇÃO TRANSVERSAL
ESCALA 1 : 20

CONSUMOS MÉDIOS*		
ESCAVAÇÃO	m³/m	0,1773
APILOAMENTO MANUAL	m²/m	1,1917
GUIA DE MADEIRA	m/m	0,5959
CONCRETO FCK ≥ 20 MPA	m³/m	0,0893
ARGAMASSA ASFÁLTICA	kg/m	0,1265
FÓRMA	m²/m	0,2154

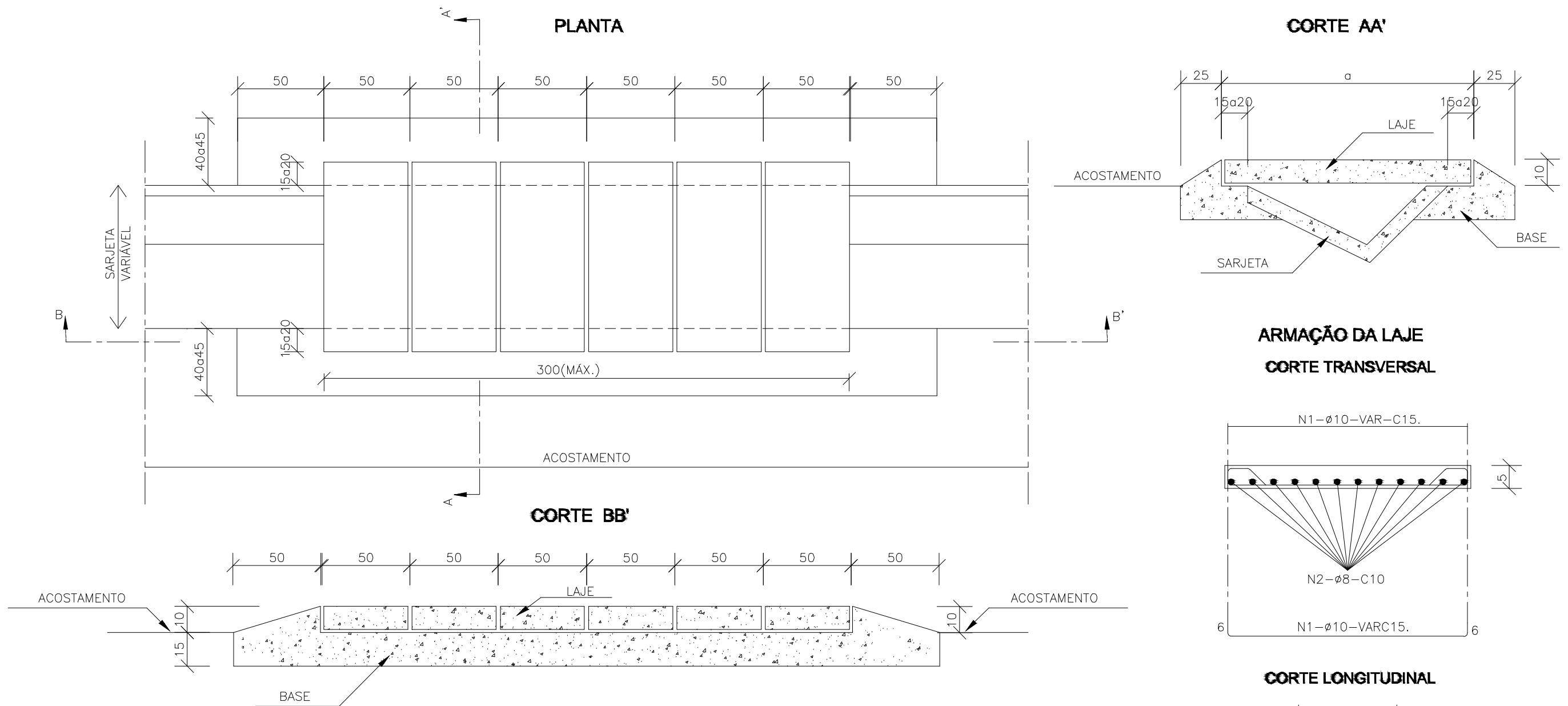
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PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		9 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	ESCALA:
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	INDICADA

TRANSPOSIÇÃO DE SEGMENTOS DE SARJETAS (II)



DIMENSÕES E CONSUMOS MÉDIOS POR METRO LINEAR

TIPO	ADAPTÁVEL EM	a (cm)	ESCAVAÇÃO (m³/m)	CONCRETO		FORMAS (m²/m)	AÇO CA-50 (kg/m)		
				fck ≥ 15MPa (m³/m)	fck ≥ 25MPa (m³/m)		N1	N2	TOTAL
TSS03	STC01	170	0.20	0.160	0.170	2.24	7.94	7.78	15.72
TSS04	STC02/SZC01	140	0.20	0.160	0.140	1.88	6.62	6.48	13.10
TSS05	STC03	120	0.20	0.160	0.120	1.64	5.73	5.62	11.35
TSS06	STC04/SZC02	110	0.20	0.160	0.110	1.52	5.29	5.18	10.47

NOTAS:

- 1 - Dimensões em cm, bitola das barras de aço em mm;
- 2 - Utilizar para a laje concreto fck ≥ 25MPa e para a base concreto fck ≥ 15MPa;
- 3 - Utilizar o número de módulos de 1m necessários a cada acesso.



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		10 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	SEM ESC
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	

CAIXA COLETORA DE SARJETA (CCS) COM GRELHA DE CONCRETO (TCC-01)

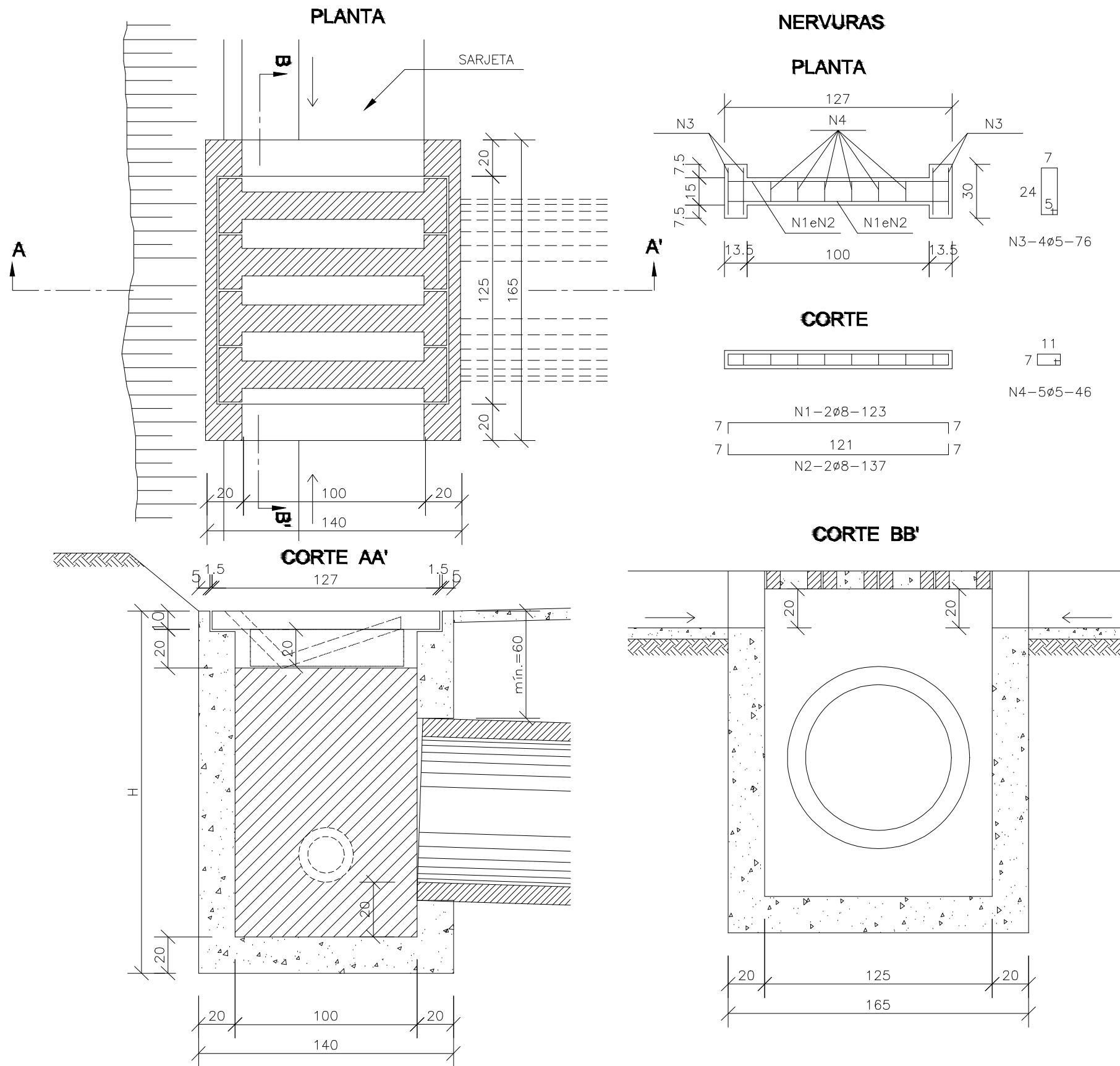


TABELA DE ARMADURA				
AÇO CA-50				
N	DIÂMETRO (mm)	COMPRIMENTO (m)	PESO UNITÁRIO (kg)	PESO TOTAL (kg)
1	8.0	2.46	0.40	0.99
2	8.0	2.74	0.40	1.10
3	5.0	3.04	0.16	0.49
4	5.0	2.76	0.16	0.44
Total				3.02

QUANTIDADES UNITÁRIAS (4 NERVURAS)		
TCC01		
Concreto fck ≥ 25MPa	m³	0.092
Aço CA-50	kg	12.08
Formas	m²	1.38

QUANTIDADES UNITÁRIAS (CAIXA)				
CONCRETO fck ≥ 15MPa (m³)				
H (m)	φ=60	φ=80	φ=100	φ=120
2.0	2.200/CCS01	2.100/CCS02	2.000/CCS03	1.900/CCS04
2.5	2.750/CCS05	2.650/CCS06	2.550/CCS07	2.450/CCS08
3.0	3.300/CCS09	3.200/CCS10	3.100/CCS11	3.000/CCS12
3.5	3.850/CCS13	3.750/CCS14	3.650/CCS15	3.550/CCS16
4.0	4.400/CCS17	4.300/CCS18	4.200/CCS19	4.100/CCS20
H (m)	CÓDIGO	FORMAS (m²)	ESCAVAÇÃO (m³)	APILOAMENTO (m³)
2.0	CCS01 a CCS04	20.30	15.00	5.00
2.5	CCS05 a CCS08	25.60	19.00	6.00
3.0	CCS09 a CCS12	30.90	23.00	7.00
3.5	CCS13 a CCS16	36.20	26.00	8.00
4.0	CCS17 a CCS20	41.50	30.00	9.00

NOTAS:

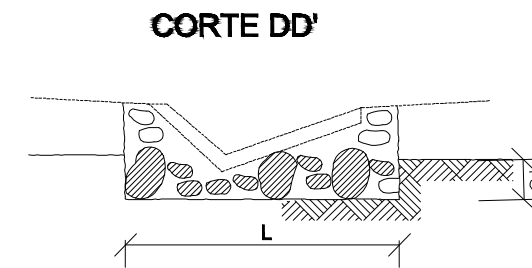
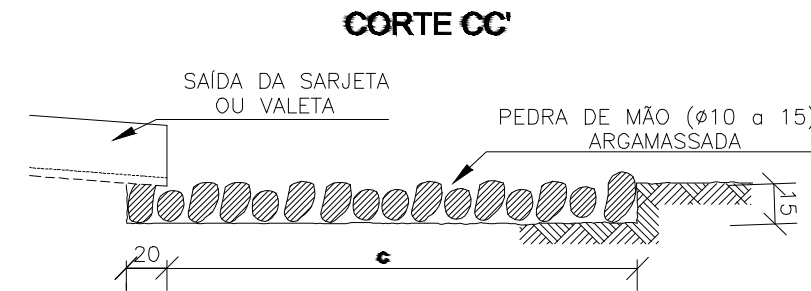
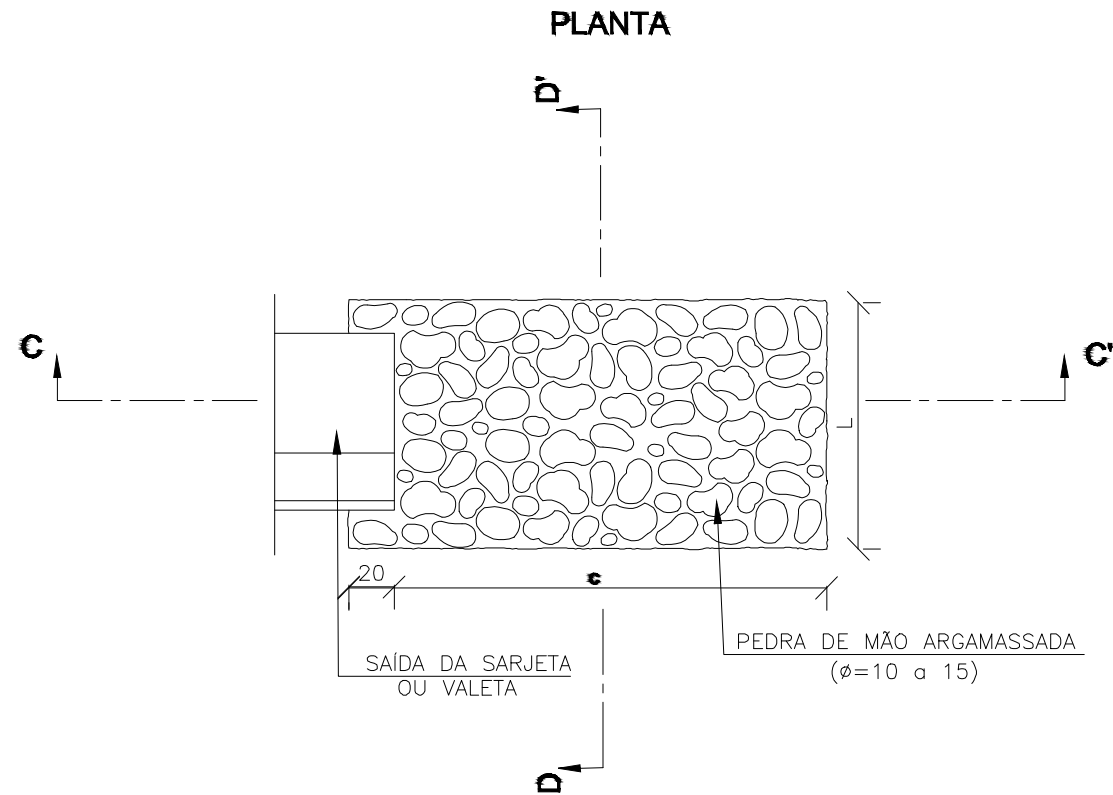
- 1 - Dimensões em cm;
- 2 - O dispositivo poderá, opcionalmente, receber a descarga de drenos rasos ou profundos;
- 3 - O dispositivo aplica-se a qualquer tipo de sarjeta especificado, inclusive do canteiro central. Ajustar, na obra, a conexão da sarjeta à caixa.



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA:
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		11 / 12
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA:
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	SEM ESC
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	

DISSIPADORES DE ENERGIA(I)

APLICÁVEIS A SAÍDAS DE SARJETAS E VALETAS - DES



DIMENSÕES E CONSUMOS MÉDIOS PARA UMA UNIDADE					
TIPO	ADAPTÁVEL EM	C	L	PEDRA ARGAMASSADA (m³)	ESCAVAÇÃO (m³)
DES_01	STC03/04-SZC02	200	110	0,48	0,33
DES_02	STC02-SZC01	200	130	0,57	0,39
DES_03	STC01-VPC02/04	200	135	0,68	0,47
DES_04	VPC01/03	200	150	0,84	0,57

Notas:
1- Dimensões em cm;



PREFEITURA MUNICIPAL DE GUARACIABA DO NORTE		PRANCHA: 12 / 12
RECUPERAÇÃO DE ESTRADAS VICINAIS - PT 1086270-3		
PROJETO DE DRENAGEM - ESTRADA BICA DE CRUZ DAS ALMAS		ESCALA: SEM ESC
PROJETISTA:	ENG. CIVIL ARTHUR MOREIRA TORQUATO - CREA 53.900D-CE	
ARQUIVO:	DREN_BICA DE CRUZ DAS ALMAS_R1.DWG	