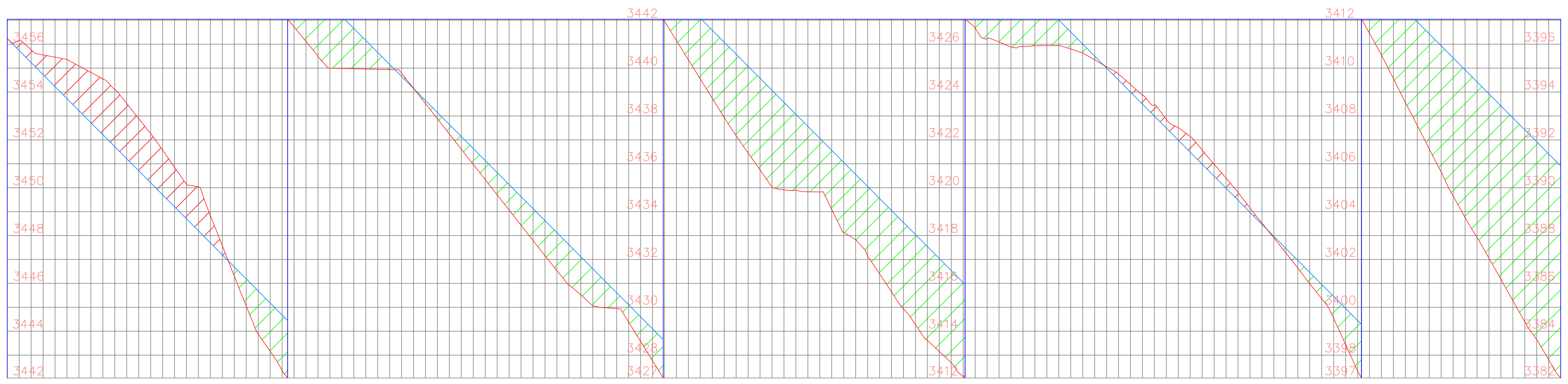


Curva 1  
 E: 730826.2902  
 N: 9714964.5363  
 Espiral 1 L: 73.000  
 $\Delta$ : 122° 08' 39"  
 R: 500.000  
 P: 0+315.35  
 M: 0+820.53  
 Espiral 2 L: 73.000



COTA TERRENO	3456.24	3455.46	3454.55	3452.26	3450.03	3445.05	3441.72	3439.99	3439.94	3437.88	3435.34	3432.79	3430.52	3429.38	3426.16	3422.94	3420.03	3418.82	3417.15	3414.28	3412.11	3410.88	3410.94	3410.05	3408.46	3406.58	3404.16	3401.64	3398.45	3394.56	3390.66	3387.05	3383.64	3382.04																								
COTA RASANTE	3456.24	3454.23	3452.22	3450.21	3448.20	3446.19	3444.18	3442.17	3440.16	3438.15	3436.14	3434.13	3432.12	3430.11	3428.09	3426.08	3424.07	3422.06	3420.05	3418.04	3416.03	3414.02	3412.01	3410.00	3407.99	3405.98	3403.97	3401.96	3399.95	3397.94	3395.93	3393.92	3391.91	3389.90																								
ALTURA CORTE	0.00	1.23	2.34	2.06	1.84	1.13	2.45	2.18	0.22	0.26	0.80	1.33	1.59	0.72	1.94	3.15	4.05	2.24	2.91	3.76	3.93	3.14	1.07	0.05	0.46	0.59	0.18	0.32	1.51	3.38	5.28	6.87	8.27	8.86																								
ALTURA RELLENO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00																							
ALINEAMIENTO	L=242.35m																																	Ls=73.00m										L=505.18m R=500.00m														
ABSCISAS	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260	0+280	0+300	0+320	0+340	0+360	0+380	0+400	0+420	0+440	0+460	0+480	0+500	0+520	0+540	0+560	0+580	0+600	0+620	0+640	0+660																								

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTADO
- BORDE CALZADA
- PI HORIZONTAL
- ▲ CORTE
- ▲ RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
 E.H.: 1:1000  
 E.V.: 1:100

ESCALAS GRÁFICAS:  
 ESC. 1:100  
 ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA	FECHA: 22 de mayo del 2023
ESCUELA: INGENIERIA CIVIL	ESCALAS: LAMINA: 1/21
CARRAN, EL TAMBO DISEÑO GEOMÉTRICO DE VÍA ABSCISAS 0+000 - 0+660	
REALIZADO POR: Santiago Mollaco Rebeca Cordero	PROFESOR: Ing. Juan Antón
CONTIENE: Diseño geométrico horizontal Diseño vertical	OBSERVACIONES:

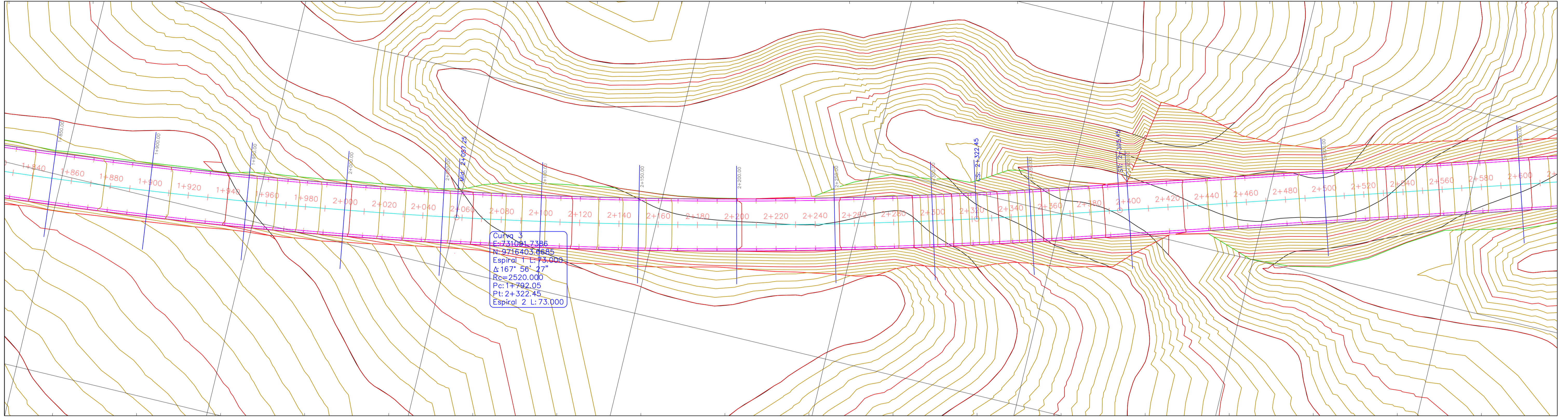




731000

### ALINEAMIENTO HORIZONTAL

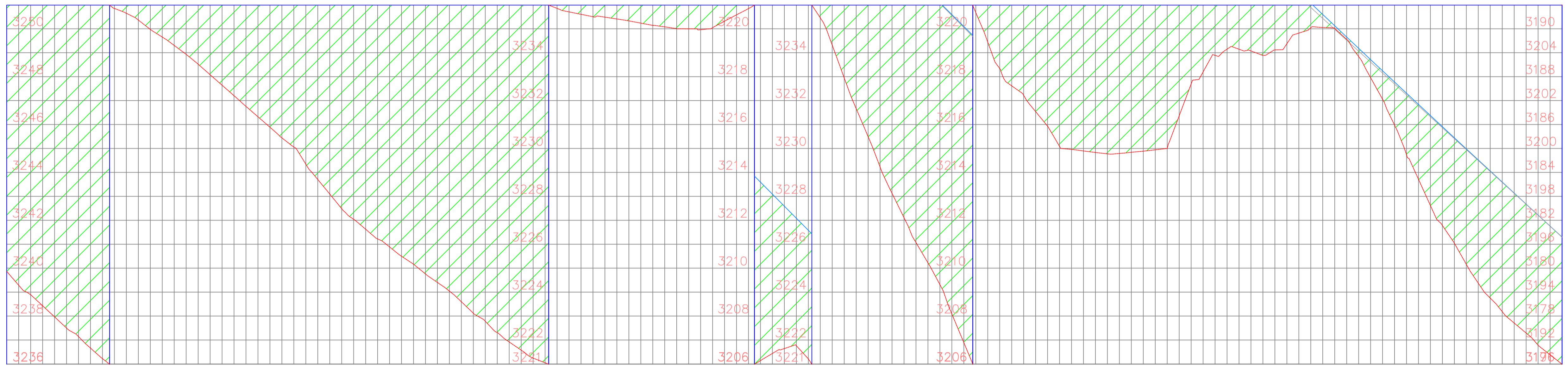
730900



731200

### ALINEAMIENTO VERTICAL

731100



COTA TERRENO	3260.25	3259.86	3257.24	3237.14	3235.65	3234.30	3232.64	3230.89	3228.70	3226.63	3225.17	3223.60	3221.92	3220.85	3220.48	3220.14	3219.96	3219.85	3219.76	3219.55	3219.11	3204.44	3201.57	3200.15	3200.12	3200.05	3200.96	3198.71	3195.16	3192.71	3190.99			
COTA RASANTE	3260.25	3259.25	3257.24	3237.14	3235.65	3234.30	3232.64	3230.89	3228.70	3226.63	3225.17	3223.60	3221.92	3220.85	3220.48	3220.14	3219.96	3219.85	3219.76	3219.55	3219.11	3204.44	3201.57	3200.15	3200.12	3200.05	3200.96	3201.84	3198.98	3195.16	3192.71	3190.99		
ALTURA CORTE	20.39	20.35	20.10	19.58	18.91	18.56	18.31	18.48	18.55	18.00	17.56	17.23	16.28	14.64	12.98	11.15	8.25	5.32	7.13	9.95	11.77	14.67	15.29	13.40	9.95	5.25	3.37	0.54	0.76	3.13	4.82	5.43	5.31	
ALTURA RELLENO	20.39	20.35	20.10	19.58	18.91	18.56	18.31	18.48	18.55	18.00	17.56	17.23	16.28	14.64	12.98	11.15	8.25	5.32	7.13	9.95	11.77	14.67	15.29	13.40	9.95	5.25	3.37	0.54	0.76	3.13	4.82	5.43	5.31	
ALINEAMIENTO	L=530.40m R=2520.00m																	Ls=73.00m				L=2163.75m												
ABSCISAS	1+860	1+900	1+980	2+000	2+020	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	2+200	2+220	2+240	2+260	2+280	2+300	2+320	2+340	2+360	2+380	2+400	2+420	2+440	2+460	2+480	2+500	2+520	2+540	2+560	2+580	2+600

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- ▲ CORTE
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN  
 E.H.: 1:1000  
 E.V.: 1:100

ESCALAS GRAFICAS:  
 ESC. 1:100  
 ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA CIVIL  
 ESCUELA: INGENIERIA CIVIL  
 CÁTEDRA: EL TERRENO  
 DISEÑO GEOMÉTRICO DE VÍA ABSCISAS 1+860 - 2+600

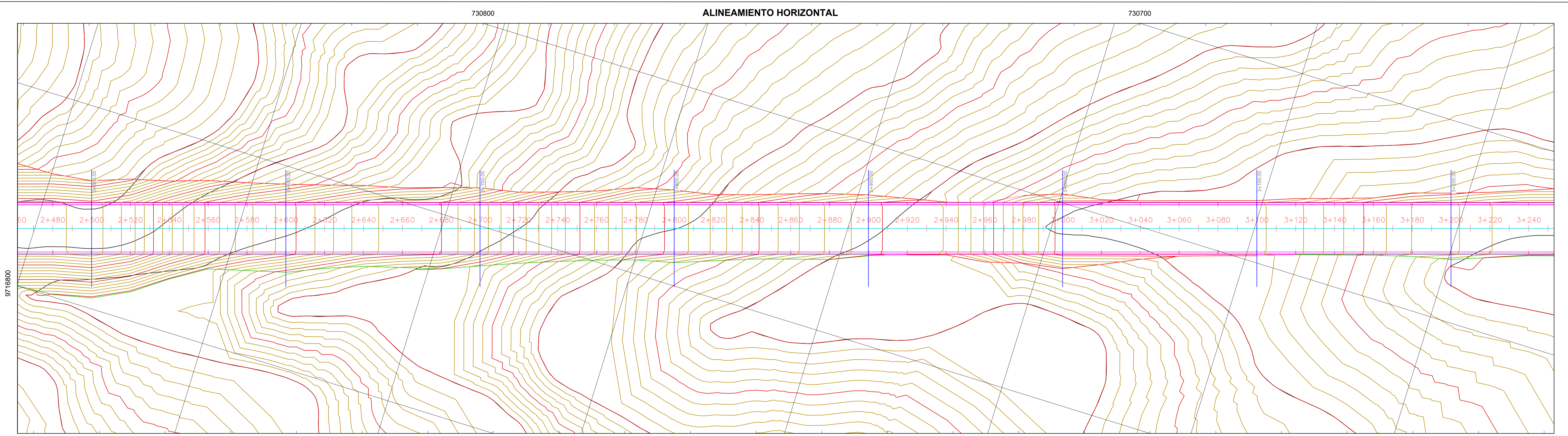
FECHA: 22 de mayo del 2023  
 ESCALAS: E.H.: 1:1000  
 E.V.: 1:100  
 LAMINA: 4/21

REALIZADO POR: Santiago Muroso  
 Rebeca Ochoa

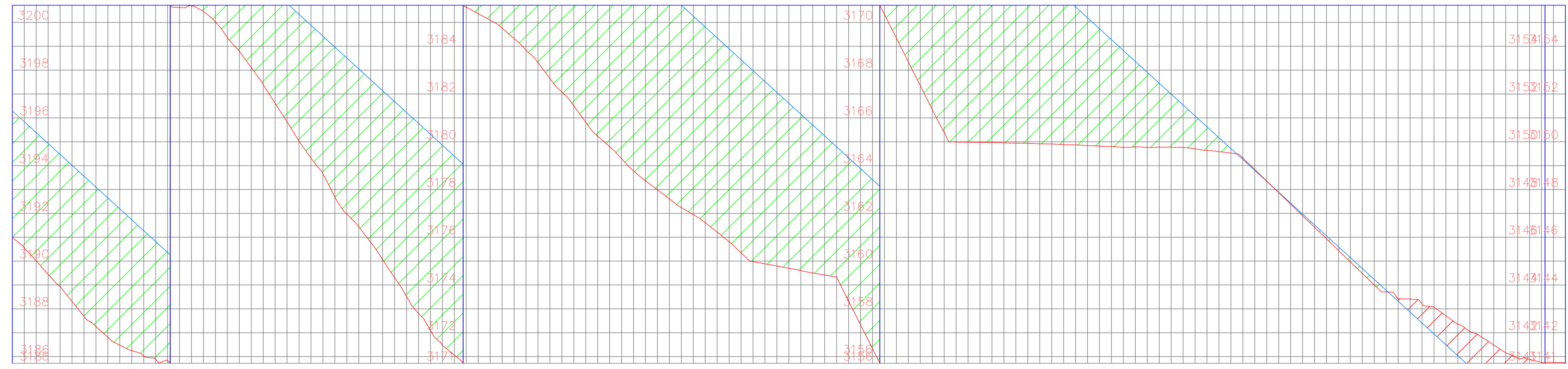
PROFESOR: Ing. Juan Añata

CONTIENE: Diseño geométrico horizontal  
 Diseño vertical

OBSERVACIONES:



731000 **ALINEAMIENTO VERTICAL** 730900



COTA TERRENO	3190.99	3188.93	3186.81	3185.88	3185.46	3183.11	3180.02	3176.97	3174.31	3171.48	3170.10	3168.31	3165.82	3163.78	3162.24	3160.81	3159.79	3159.42	3156.33	3152.35	3149.98	3149.94	3149.88	3148.80	3148.84	3146.90	3144.97	3143.42	3142.71	3141.49	3137.84	3140.76		
COTA RASANTE	3196.30	3194.47	3192.64	3190.82	3188.99	3187.16	3185.34	3183.51	3181.68	3179.86	3178.03	3176.20	3174.38	3172.55	3170.72	3168.90	3167.07	3165.24	3163.41	3161.59	3159.76	3157.93	3156.11	3154.28	3152.45	3150.63	3148.80	3146.97	3145.15	3143.32	3141.49	3139.67	3137.84	
ALTURA CORTE																																		
ALTURA RELLENO	5.31	5.54	5.84	4.94	3.53	4.05	5.31	6.54	7.38	8.38	7.93	7.89	8.56	8.76	8.48	8.08	7.28	5.83	7.08	9.24	9.78	7.99	6.22	4.48	2.68	0.99	0.04	0.07	0.18	0.10	1.22	1.82	2.92	
ALINEAMIENTO	L=2163.75m																																	
ABSCISAS	2+600	2+620	2+640	2+660	2+680	2+700	2+720	2+740	2+760	2+780	2+800	2+820	2+840	2+860	2+880	2+900	2+920	2+940	2+960	2+980	3+000	3+020	3+040	3+060	3+080	3+100	3+120	3+140	3+160	3+180	3+200	3+220	3+240	3+250

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- CURVA
- RILLENDO
- CURVA MENOR
- CURVA MAYOR

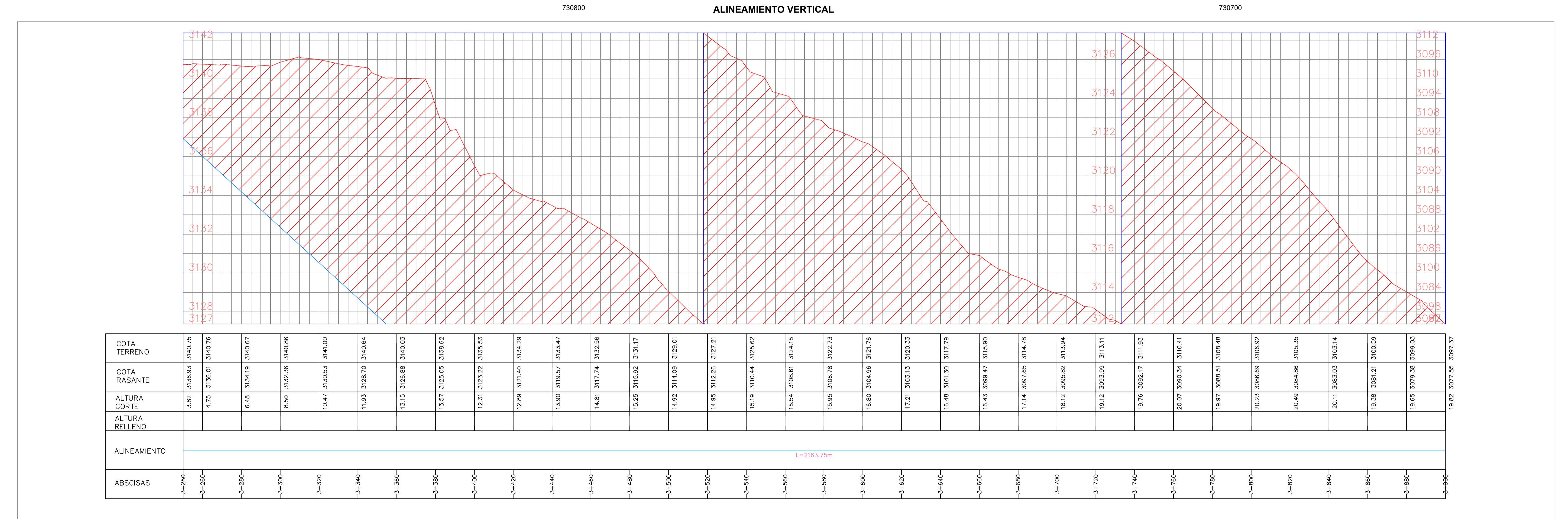
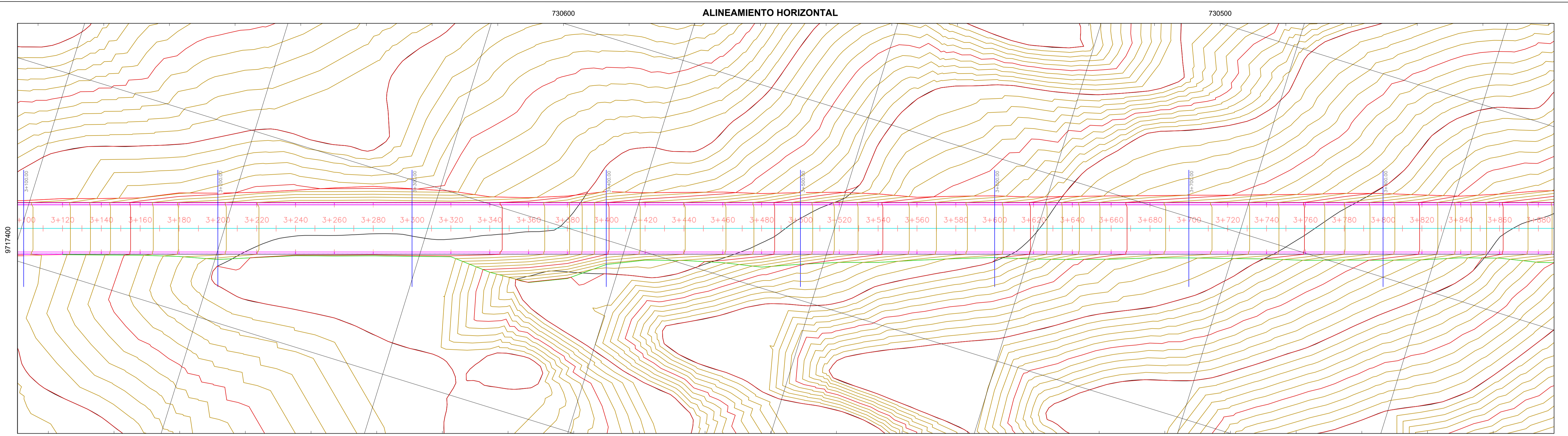
**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.H.: 1:1000  
E.V.: 1:100

ESCALAS GRÁFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA CIVIL	FECHA: 22 de marzo del 2023
ESCUELA: CANAR - EL TAMBOR	ESCALAS: LAMINA: E.V.: 1:1000 E.H.: 1:1000
DISEÑO GEOMÉTRICO DE VÍA ABSCSAS 2+600 - 3+250	<b>5/21</b>
REALIZADO POR: Santiago Mollaco Rebeca Chirino	PROFESOR: Ing. Juan Antón
CONTIENE: Diseño geométrico horizontal Diseño vertical	OBSERVACIONES:



**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- / / / RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- E-E PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- ▲ CURVA
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.H.: 1:1000  
E.V.: 1:100

ESCALAS GRÁFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA  
ESCUELA: INGENIERIA CIVIL  
CARRERA: EL TAMBOR  
DISEÑO GEOMÉTRICO DE VÍA ABSISAS 3+250 - 3+900

FECHA: 22 de mayo del 2023  
ESCALAS: E.H.: 1:1000  
E.V.: 1:100  
LAMINA: 6/21

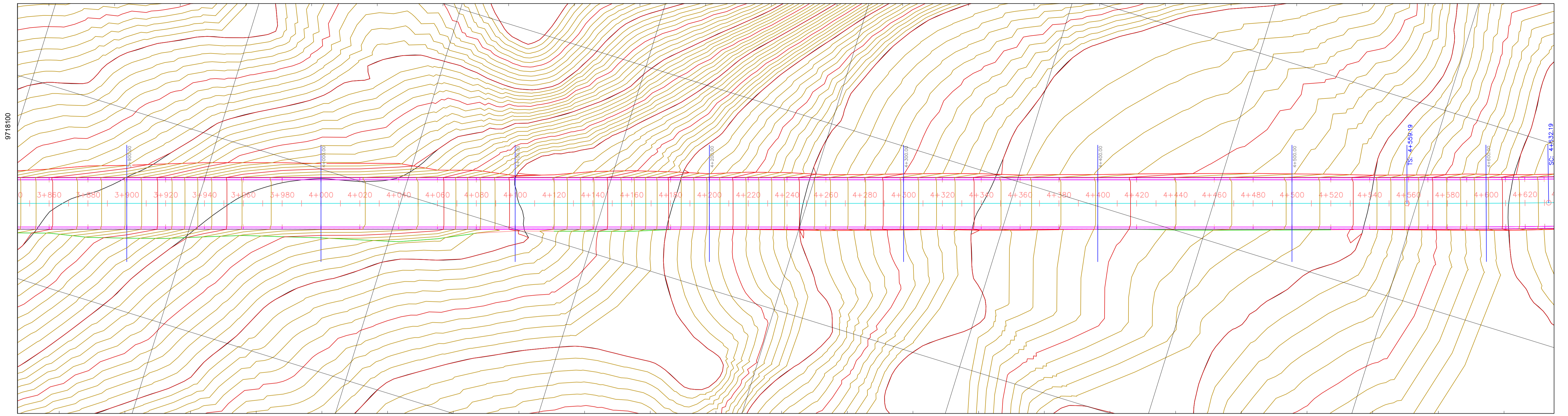
REALIZADO POR: Santiago Muroso  
Rebeca Chirba  
PROFESOR: Ing. Juan Añata

CONTIENE: Diseño geométrico horizontal  
Diseño vertical  
OBSERVACIONES:

730400

### ALINEAMIENTO HORIZONTAL

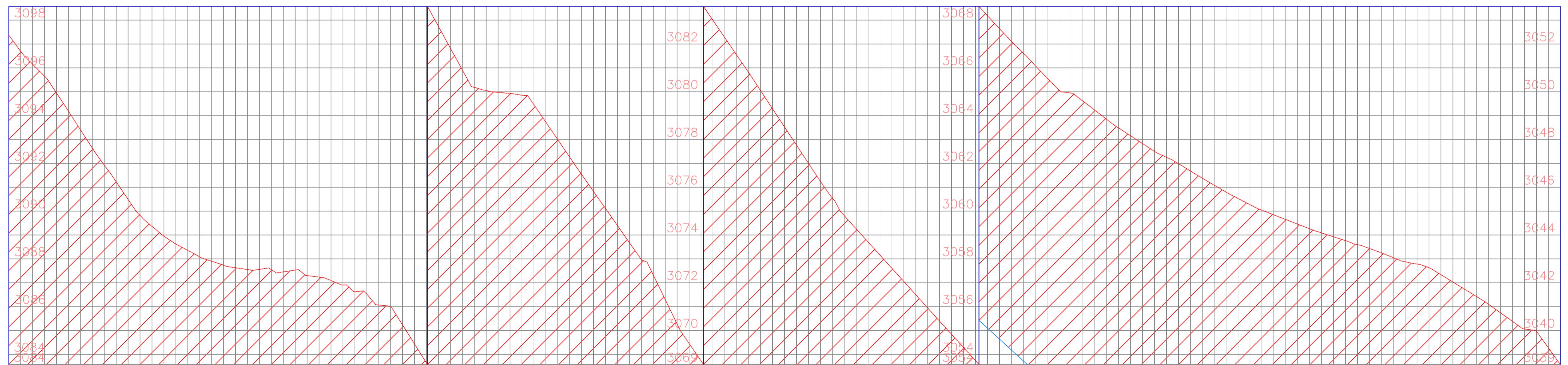
730300



730600

### ALINEAMIENTO VERTICAL

730500



COTA TERRENO	3097.37	3094.95	3091.93	3089.36	3088.09	3087.55	3087.53	3086.91	3085.98	3082.74	3080.05	3079.46	3076.53	3073.68	3070.27	3067.26	3064.28	3061.25	3058.71	3056.50	3054.29	3052.12	3050.07	3048.84	3047.50	3046.38	3045.27	3044.45	3043.76	3043.05	3042.34	3041.09	3039.97	3038.98
COTA RASANTE	3077.55	3075.73	3073.90	3072.07	3070.24	3068.42	3066.59	3064.76	3062.94	3061.11	3059.28	3057.46	3055.63	3053.80	3051.98	3050.15	3048.32	3046.50	3044.67	3042.84	3041.01	3039.19	3037.36	3035.53	3033.71	3031.88	3030.05	3028.23	3026.40	3024.57	3022.75	3020.92	3019.09	3018.18
ALTURA CORTE	19.82	19.22	18.03	17.29	17.84	19.14	20.94	22.14	23.05	21.63	20.77	22.00	20.90	19.88	18.30	17.11	15.96	14.76	14.04	13.65	13.27	12.93	12.71	13.31	13.79	14.50	15.22	16.23	17.36	18.48	19.59	20.17	20.88	20.40
ALTURA RELLENO																																		
ALINEAMIENTO	L=2163.75m																																	
ABSCISAS	3+850	3+920	3+940	3+960	3+980	4+000	4+020	4+040	4+060	4+080	4+100	4+120	4+140	4+160	4+180	4+200	4+220	4+240	4+260	4+280	4+300	4+320	4+340	4+360	4+380	4+400	4+420	4+440	4+460	4+480	4+500	4+520	4+540	4+560

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- P.I. HORIZONTAL
- CURVA
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
 E.H.: 1:1000  
 E.V.: 1:100

ESCALAS GRÁFICAS:  
 ESC. 1:100  
 ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA  
 ESCUELA: INGENIERIA CIVIL  
 CÁTEDRA: EL TALLER  
 DISEÑO GEOMÉTRICO DE VÍA ABCISAS 3+800 - 4+550

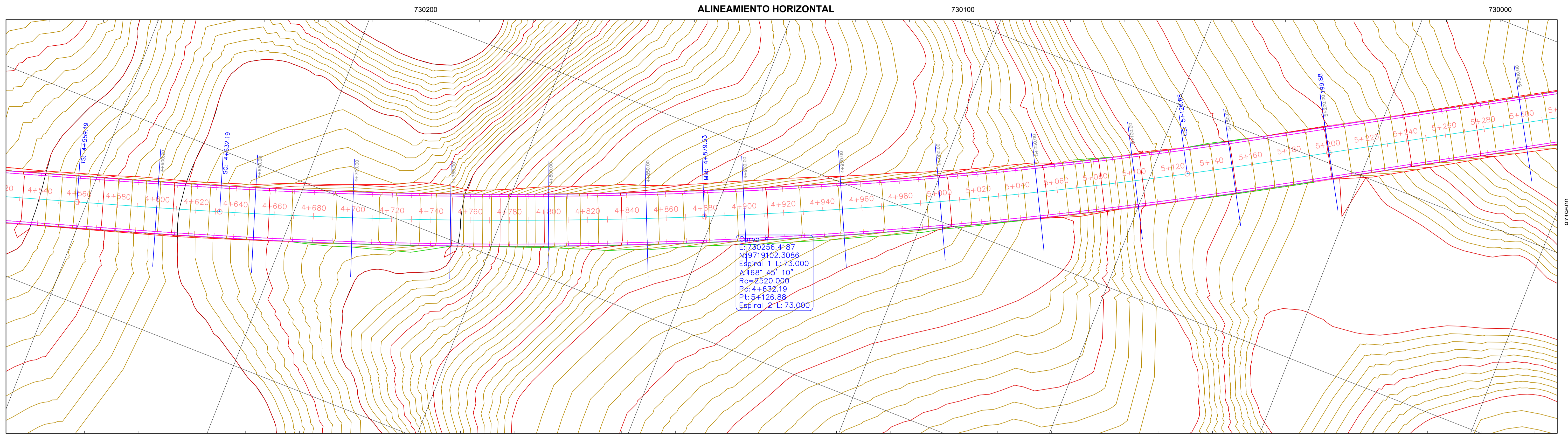
FECHA: 22 de mayo del 2023  
 ESCALAS: E.H.: 1:1000  
 E.V.: 1:100  
 LAMINA: 7/21

REALIZADO POR: Santiago Mollaco  
 Roberto Córdova

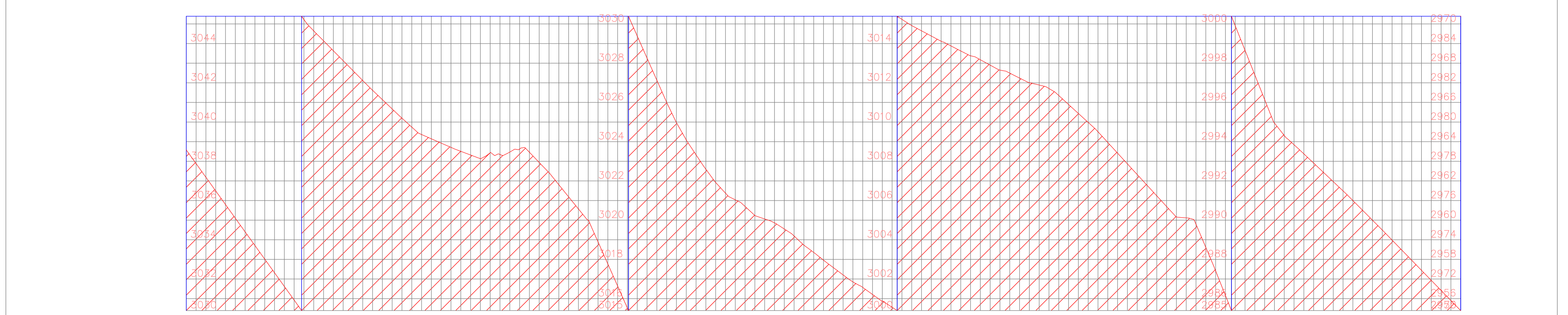
PROFESOR: Ing. Juan Antón

CONTIENE: Diseño geométrico horizontal  
 Diseño vertical

OBSERVACIONES:



730200 **ALINEAMIENTO HORIZONTAL** 730100 730000



COTA TERRENO	3038.58	3038.58	3037.19	3034.40	3031.62	3028.14	3027.12	3025.20	3023.93	3023.13	3023.62	3021.81	3018.89	3014.39	3009.97	3006.92	3005.24	3004.19	3002.58	3001.21	2999.92	2998.88	2997.90	2997.01	2995.89	2993.96	2991.76	2990.12	2986.16	2981.15	2978.39	2976.49	2974.50	2972.44	2970.30																									
COTA RASANTE	3018.18	3017.27	3015.44	3013.61	3011.79	3009.96	3008.13	3006.30	3004.48	3002.65	3000.82	3001.81	2999.00	2997.17	2995.34	2993.52	2991.69	2989.86	2988.04	2986.21	2984.38	2982.56	2980.73	2978.90	2977.07	2975.25	2973.42	2971.59	2969.77	2967.94	2966.11	2964.29	2962.46	2960.63	2958.81																									
ALTURA CORTE	20.40	19.92	18.97	18.01	17.35	17.16	17.07	17.62	18.65	20.97	20.98	19.90	17.22	14.63	13.40	13.55	14.33	14.55	15.00	15.54	16.33	17.17	18.10	18.82	18.71	18.36	18.52	16.40	13.21	12.27	12.20	12.04	11.81	11.59																										
ALTURA RELLENO																																																												
ALINEAMIENTO	L=3163.75m																				L=73.00m										L=494.68m R=2520.00m										L=73.00m										L=541.49m									
ABSCISAS	4+550	4+560	4+580	4+600	4+620	4+640	4+660	4+680	4+700	4+720	4+740	4+760	4+780	4+800	4+820	4+840	4+860	4+880	4+900	4+920	4+940	4+960	4+980	5+000	5+020	5+040	5+060	5+080	5+100	5+120	5+140	5+160	5+180	5+200																										

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- ▲ CORTE
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.H.: 1:1000  
E.V.: 1:500

ESCALAS GRAFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA  
ESCUELA: INGENIERIA CIVIL  
CANAL: EL TABO  
DISEÑO GEOMÉTRICO DE VÍA ABSCSAS 4+550 - 5200

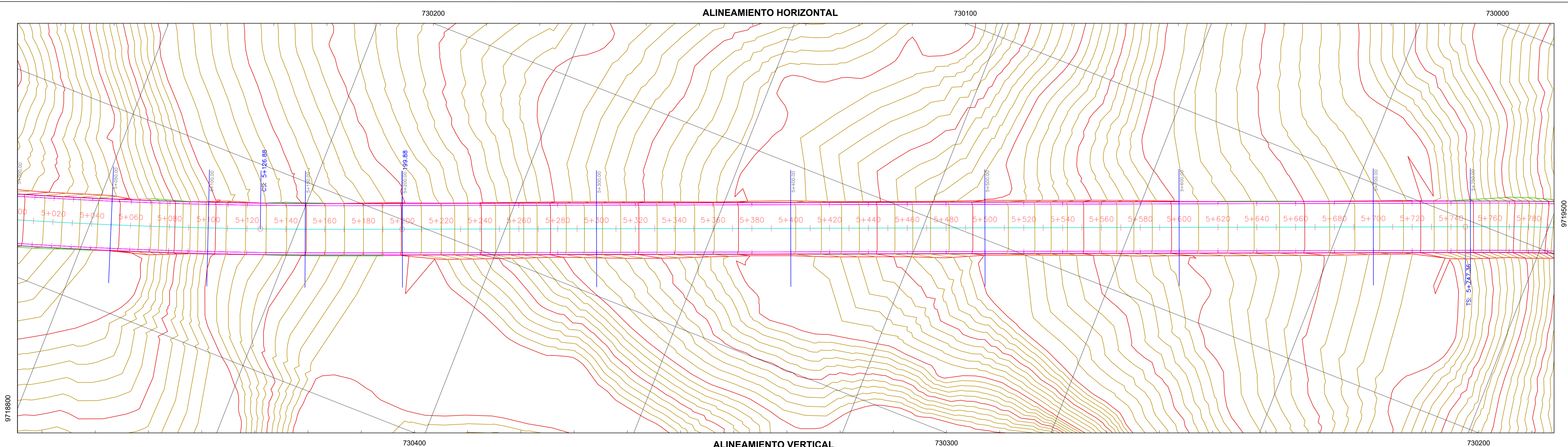
FECHA: 22 de mayo del 2023  
ESCALAS: E.H.: 1:1000  
E.V.: 1:500  
LAMINA: 8/21

REALIZADO POR: Santiago Mollaco  
Rebeca Chirva  
PROFESOR: Ing. Juan Antón

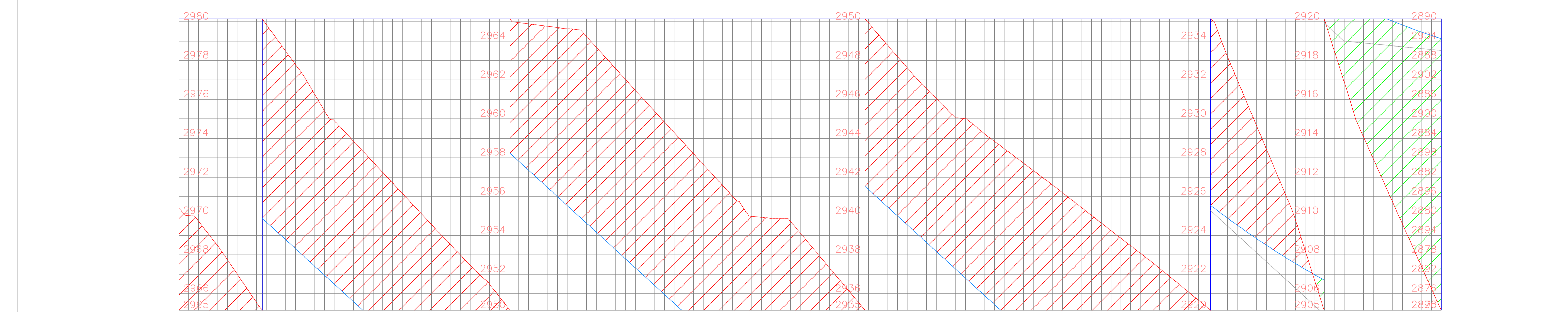
CONTIENE: Diseño geométrico horizontal  
Diseño vertical

OBSERVACIONES:





ALINEAMIENTO VERTICAL



COTA TERRENO	2970.39	2970.39	2968.46	2965.55	2962.80	2959.92	2957.78	2955.64	2953.51	2951.49	2949.89	2948.64	2946.13	2945.93	2943.75	2941.57	2939.93	2938.74	2936.36	2932.07	2930.05	2928.84	2927.34	2925.81	2924.25	2922.71	2921.08	2918.19	2913.45	2908.22	2901.92	2896.84	2892.37	2890.15		
COTA RASANTE	2958.81	2956.98	2955.15	2953.33	2951.50	2949.67	2947.84	2946.02	2944.19	2942.36	2940.54	2938.71	2936.88	2935.06	2933.23	2931.40	2929.58	2927.75	2925.92	2924.10	2922.27	2920.44	2918.61	2916.79	2914.96	2913.14	2911.31	2909.49	2907.66	2905.84	2904.01	2902.19	2900.37	2898.54	2896.72	
ALTURA CÔRTE	11.59	11.48	10.40	9.48	8.42	8.11	7.79	7.49	7.30	7.53	9.10	9.42	9.05	8.70	8.34	8.53	9.55	8.99	8.44	7.97	7.78	8.40	8.73	9.02	9.29	9.57	9.64	8.30	4.95	0.96	4.25	8.40	12.09	13.98		
ALTURA RELLENO																																				
ALINEAMIENTO	L=547.49m																	Ls=73.00m					L=299.71m R=500.00m													
ABSCISAS	5+260	5+280	5+300	5+320	5+340	5+360	5+380	5+400	5+420	5+440	5+460	5+480	5+500	5+520	5+540	5+560	5+580	5+600	5+620	5+640	5+660	5+680	5+700	5+720	5+740	5+760	5+780	5+800	5+820	5+840	5+860					

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CÔRTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- CÔRTE
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.H.: 1:1000  
E.V.: 1:100

ESCALAS GRÁFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA  
ESCUELA: INGENIERIA CIVIL  
CÁTEDRA: EL TÁBULO  
DISEÑO GEOMÉTRICO DE VÍA ABCISAS 5+200 - 5+850

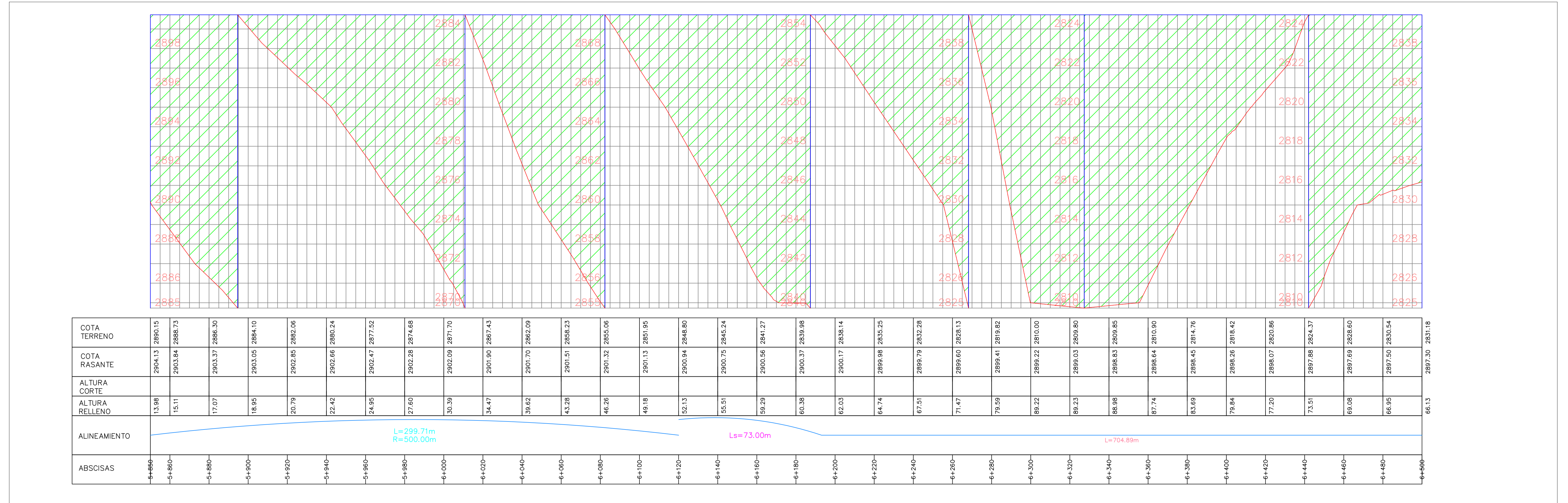
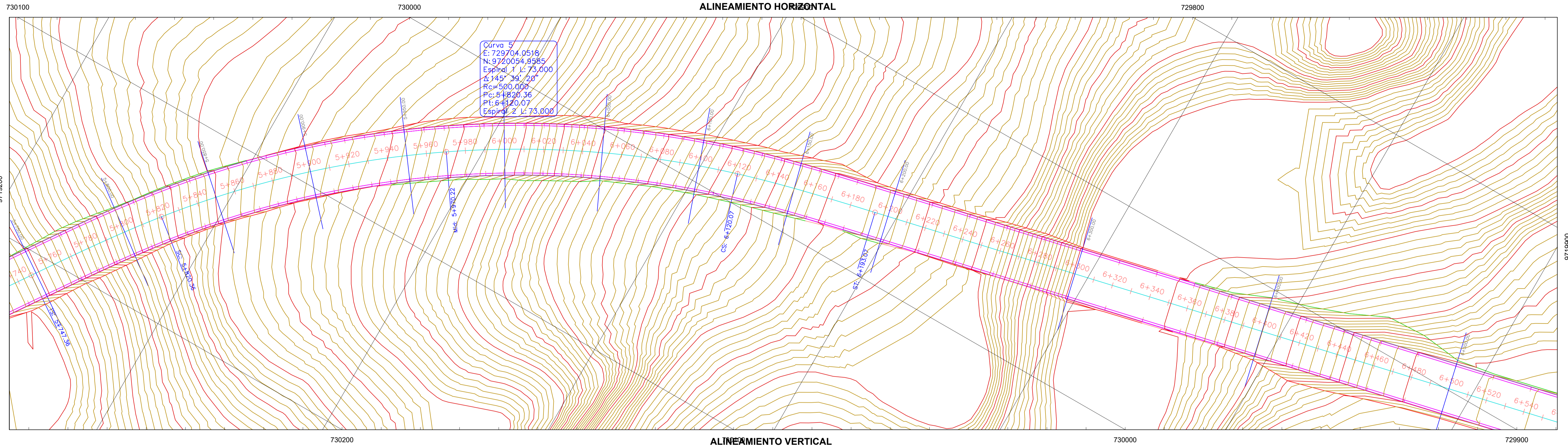
FECHA: 22 de mayo del 2023  
ESCALAS: E.H.: 1:1000  
E.V.: 1:100  
LAMINA: 9/21

REALIZADO POR: Santiago Mollaco  
Rebeca Ochoa

PROFESOR: Ing. Juan Antón

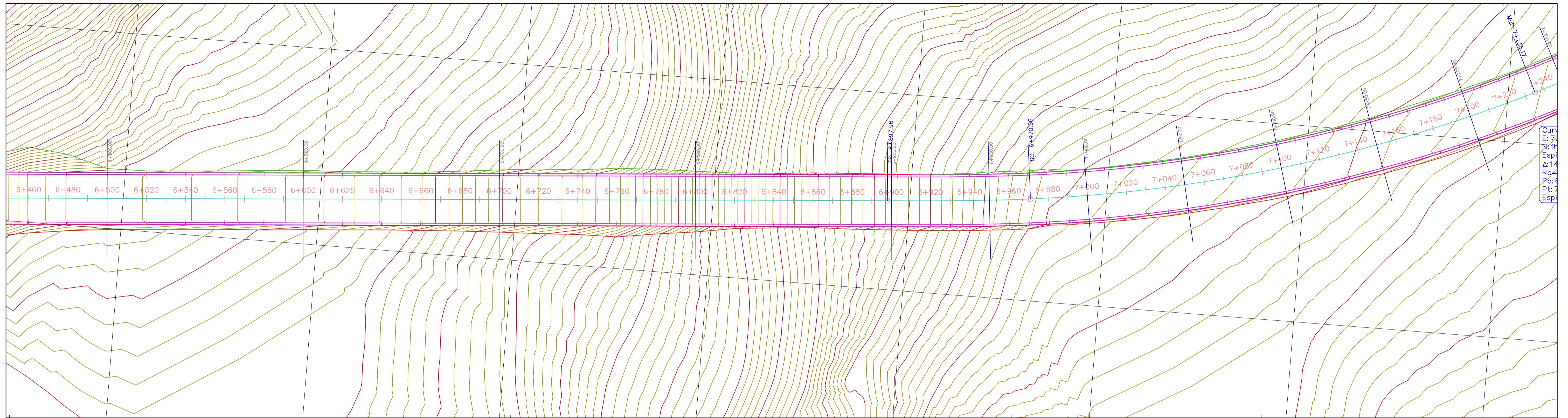
CONTIENE: Diseño geométrico horizontal  
Diseño vertical

OBSERVACIONES:



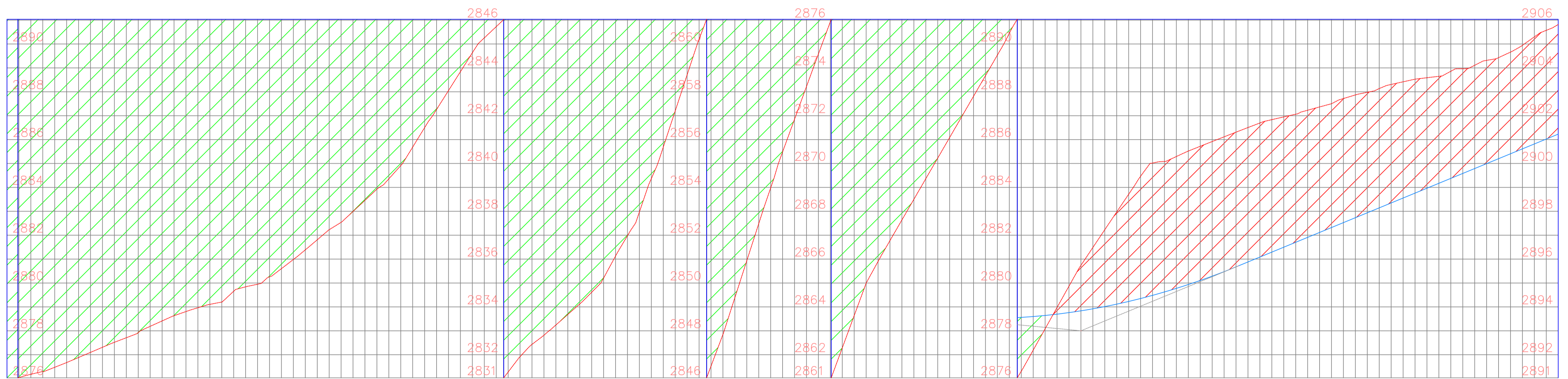
<b>SIMBOLOGÍA DISEÑO VERTICAL</b> 		<b>SIMBOLOGÍA ALINEAMIENTO HORIZONTAL</b> 		<b>ESCALAS Y PROYECCIÓN</b> ESCALAS DE IMPRESIÓN: E.H.: 1:1000 E.V.: 1:100 ESCALAS GRÁFICAS: 		<b>UNIVERSIDAD DE CUENCA</b> FACULTAD: INGENIERÍA ESCUELA: INGENIERÍA CIVIL CÁTEDRA: EL TERRENO DISEÑO GEOMÉTRICO DE VÍA ABCISAS 5+850 - 6+500 REALIZADO POR: Santiago Mollaco, Robinson Chirino PROFESOR: Ing. Juan Añata CONTIENE: Diseño geométrico horizontal, Diseño vertical OBSERVACIONES:	
FECHA: 23 de marzo del 2023 ESCALAS: E.H.: 1:1000, E.V.: 1:100 LAMINA: 10/21							

ALINEAMIENTO HORIZONTAL



729900

ALINEAMIENTO VERTICAL



COTA TERRENO	2831.16	2831.47	2832.31	2833.19	2833.97	2834.84	2835.98	2837.54	2839.36	2842.26	2846.25	2847.43	2849.12	2851.98	2857.20	2862.85	2866.98	2874.58	2879.99	2883.50	2886.95	2890.45	2893.98	2897.23	2900.02	2900.72	2901.50	2902.06	2902.72	2903.31	2903.65	2904.32	2905.30	2905.81																													
COTA RASANTE	2897.30	2897.11	2896.92	2896.73	2896.54	2896.35	2896.16	2895.97	2895.77	2895.58	2895.39	2895.20	2895.01	2894.82	2894.63	2894.43	2894.24	2894.05	2893.86	2893.67	2893.48	2893.29	2893.10	2892.91	2892.72	2892.53	2892.34	2892.15	2891.96	2891.77	2891.58	2891.39	2891.20	2891.01	2889.81																												
ALTURA CORTE																																																															
ALTURA RELLENO	66.13	65.64	64.61	63.54	62.37	61.51	60.17	58.43	56.42	53.32	50.14	47.77	45.88	42.84	37.43	31.59	25.27	19.47	13.87	10.17	6.58	3.09	0.28	3.22	5.54	5.61	5.62	5.36	5.19	4.96	4.48	4.32	4.48	4.59																													
ALINEAMIENTO	L=704.89m																																	Ls=73.00m			L=528.42m R=800.00m																										
ABSCISAS	6+560	6+520	6+540	6+560	6+580	6+600	6+620	6+640	6+660	6+680	6+700	6+720	6+740	6+760	6+780	6+800	6+820	6+840	6+860	6+880	6+900	6+920	6+940	6+960	6+980	7+000	7+020	7+040	7+060	7+080	7+100	7+120	7+140	7+160																													

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- E-E PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- CURVA
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.V.: 1:1000  
E.H.: 1:100

ESCALAS GRAFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA  
ESCUELA: INGENIERIA CIVIL  
CARRER: EL TAMBO  
DISEÑO GEOMÉTRICO DE VÍA ABSICISAS 6+500 - 7+150

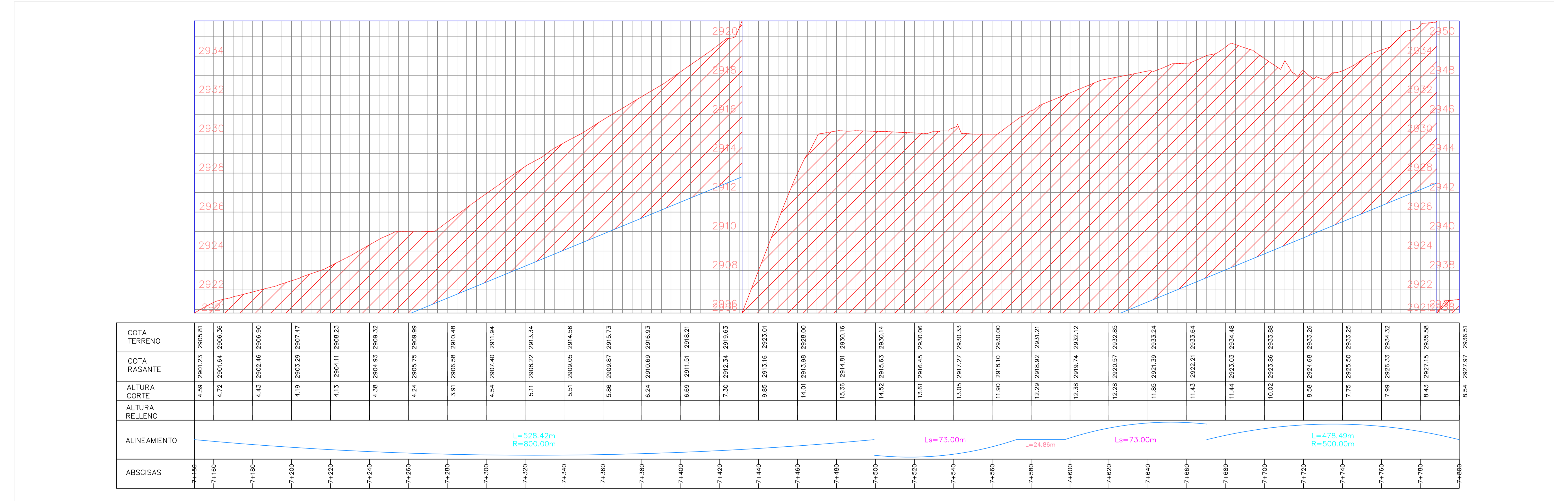
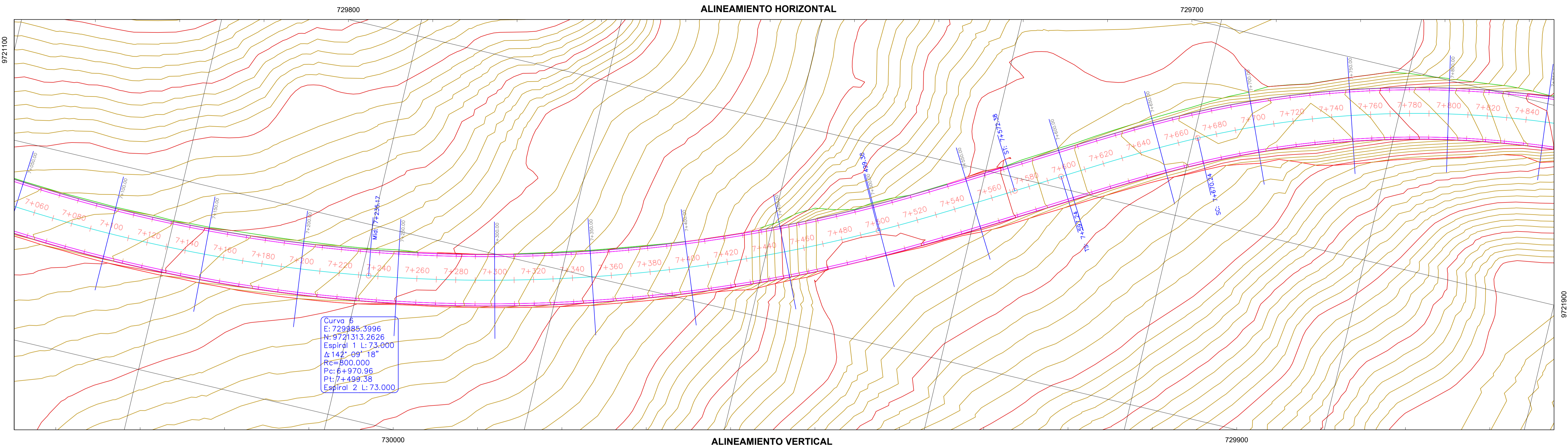
FECHA: 22 de mayo del 2023  
ESCALAS: E.V.: 1:1000  
E.H.: 1:100  
LAMINA: 11/21

REALIZADO POR: Santiago Muroso  
Rebeca Ochoa

PROFESOR: Ing. Juan Añata

CONTIENE: Diseño geométrico horizontal  
Diseño vertical

OBSERVACIONES:



**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:  
E.H.: 1:1000  
E.V.: 1:100

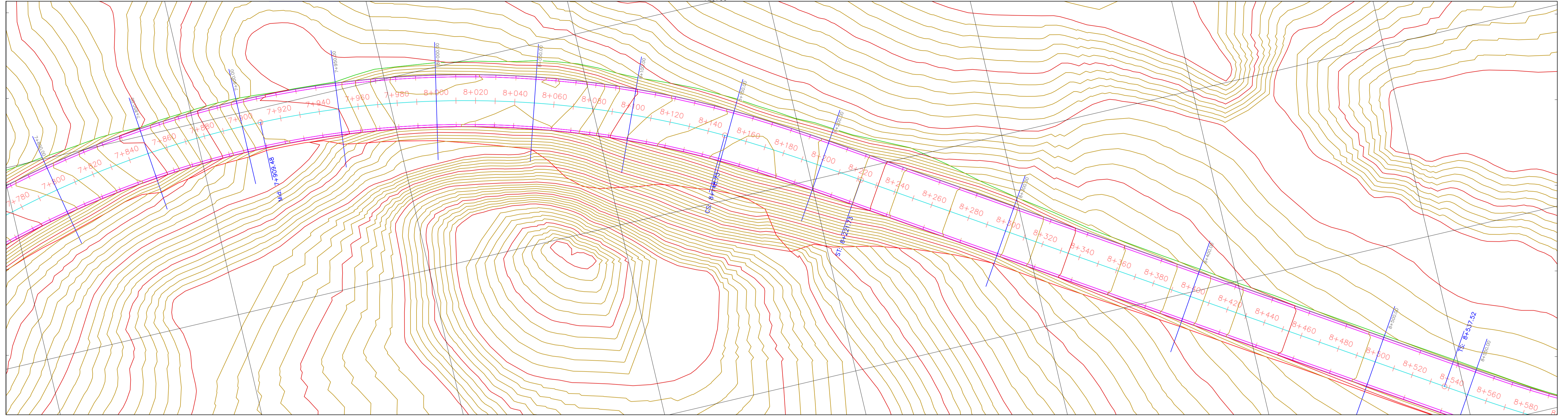
ESCALAS GRÁFICAS:  
ESC. 1:100  
ESC. 1:1000

**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERÍA CIVIL	FECHA: 23 de mayo del 2023
ESCUELA: INGENIERÍA CIVIL	ESCALAS: E.H.: 1:1000 E.V.: 1:100
CÁDAR: EL TERRENO DISEÑO GEOMÉTRICO DE VÍA ABCISAS 7+150 - 7+800	LAMINA: <b>12/21</b>
REALIZADO POR: Santiago Mollaco Rebeca Chirino	PROFESOR: Ing. Juan Antón
CONTIENE: Diseño geométrico horizontal Diseño vertical	OBSERVACIONES:

ALINEAMIENTO HORIZONTAL

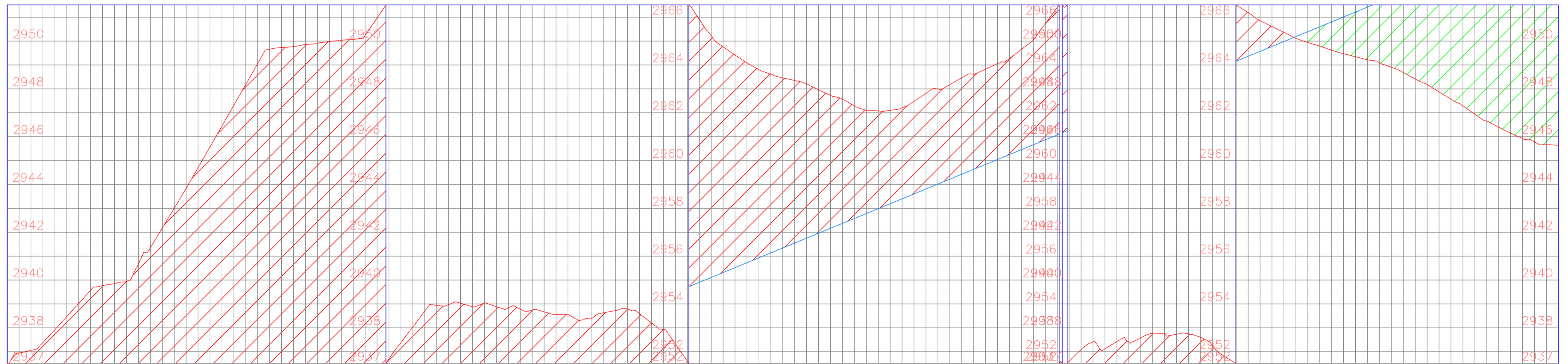
729700



729900

ALINEAMIENTO VERTICAL

730000



COTA TERRENO	2935.51	2937.97	2936.51	2937.92	2939.77	2941.35	2944.70	2945.19	2950.03	2951.70	2953.94	2954.04	2953.75	2953.31	2953.79	2952.32	2949.76	2946.62	2947.96	2947.11	2947.46	2948.46	2949.27	2951.40	2952.12	2952.78	2952.61	2951.20	2950.12	2949.47	2945.91	2947.88	2946.65	2945.78	2945.64		
COTA RASANTE	2927.97	2928.79	2929.62	2930.44	2931.26	2932.09	2932.91	2933.73	2934.55	2935.38	2936.20	2937.02	2937.85	2938.67	2939.49	2940.31	2941.14	2941.96	2942.78	2943.61	2944.43	2945.25	2946.07	2946.89	2947.72	2948.54	2949.37	2950.19	2951.01	2951.83	2952.66	2953.48	2954.30	2955.12	2955.94		
ALTURA CORTE	0.15	0.13	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24
ALTURA RELLENO	0.54	0.18	0.12	0.10	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24
ALINEAMIENTO	<p><math>L = 478.49m</math> <math>R = 500.00m</math></p> <p><math>L_s = 73.00m</math></p> <p><math>L = 315.79m</math></p>																																				
ABSCISAS	7+800	7+820	7+840	7+860	7+880	7+900	7+920	7+940	7+960	7+980	8+000	8+020	8+040	8+060	8+080	8+100	8+120	8+140	8+160	8+180	8+200	8+220	8+240	8+260	8+280	8+300	8+320	8+340	8+360	8+380	8+400	8+420	8+440	8+450			

**SIMBOLOGÍA DISEÑO VERTICAL**

- TERRENO NATURAL
- RASANTE LINEAL
- RASANTE CURVAS
- CORTE
- RELLENO
- INICIO Y FIN DE CURVA

**SIMBOLOGÍA ALINEAMIENTO HORIZONTAL**

- EJE PROYECTO
- BORDE CALZADA
- PI HORIZONTAL
- CURVA
- RELLENO
- CURVA MENOR
- CURVA MAYOR

**ESCALAS Y PROYECCIÓN**

ESCALAS DE IMPRESIÓN:

E.H.: 1:1000

E.V.: 1:100

ESCALAS GRÁFICAS:

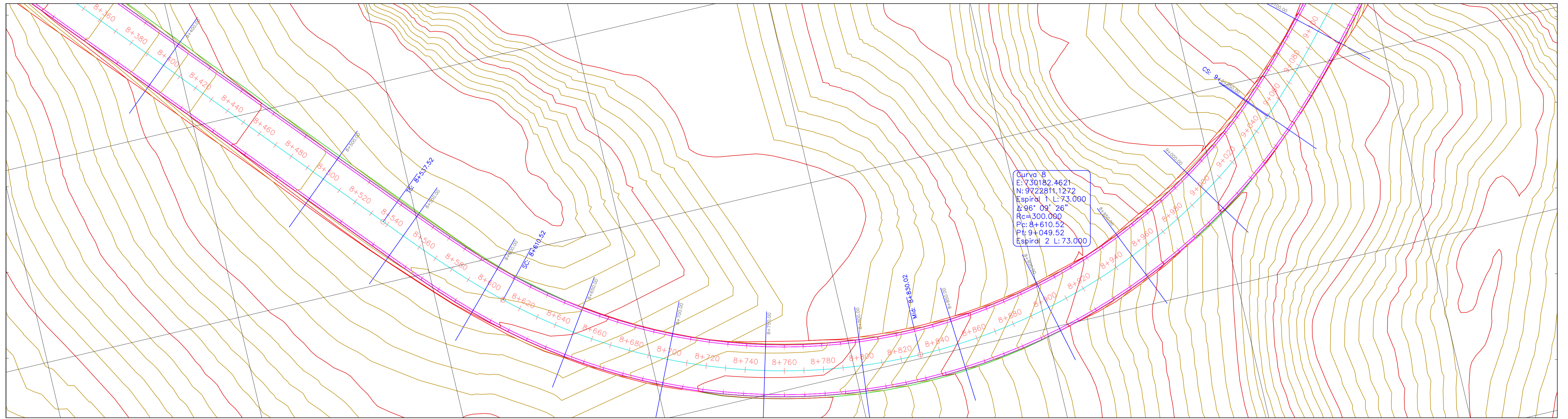
ESC. 1:100

ESC. 1:1000

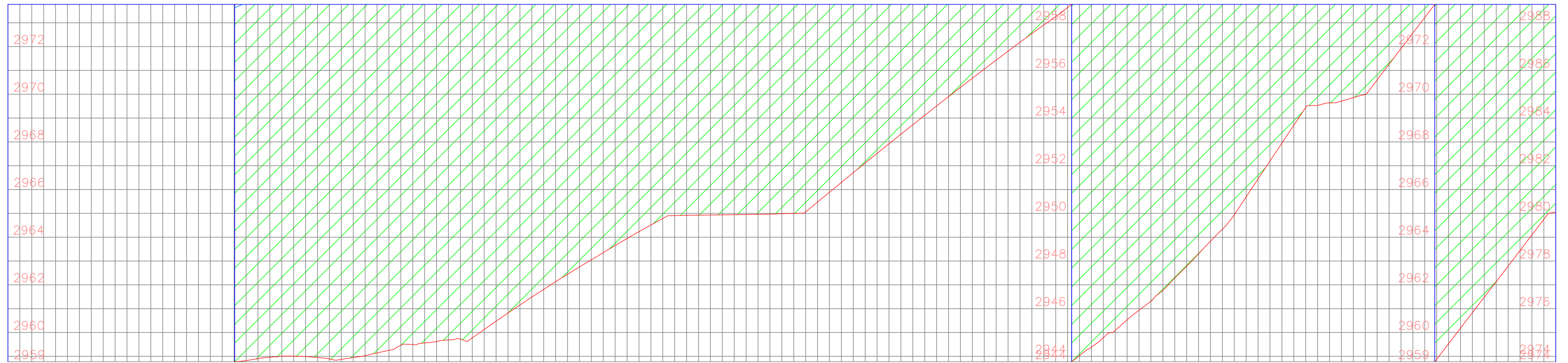
**UNIVERSIDAD DE CUENCA**

FACULTAD: INGENIERIA CIVIL ESCUELA: INGENIERIA CIVIL CÁTEDRA: EL TERRENO DISEÑO GEOMÉTRICO DE VÍA ABSISAS 7+800 - 8+450 REALIZADO POR: Santiago Mollaco, Robinson Chiriqui	FECHA: 23 de marzo del 2023 ESCALAS: E.H.: 1:1000, E.V.: 1:100 LAMINA: 13/21 PROFESOR: Ing. Juan Añata
CONTIENE: Diseño geométrico horizontal, Diseño vertical	OBSERVACIONES:

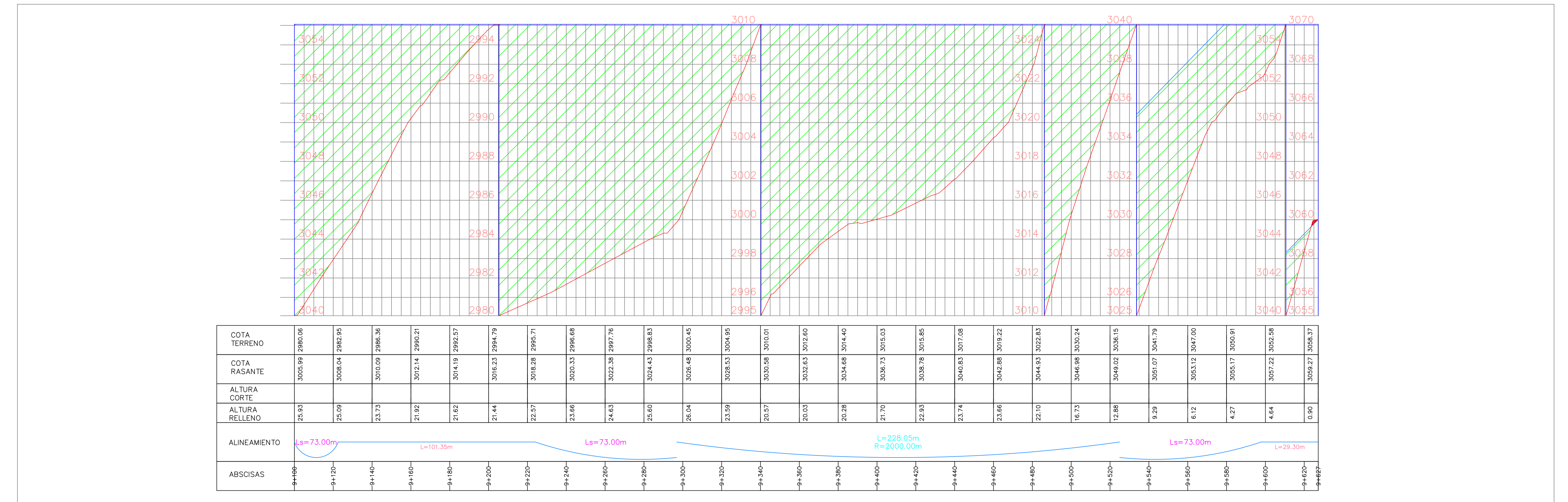
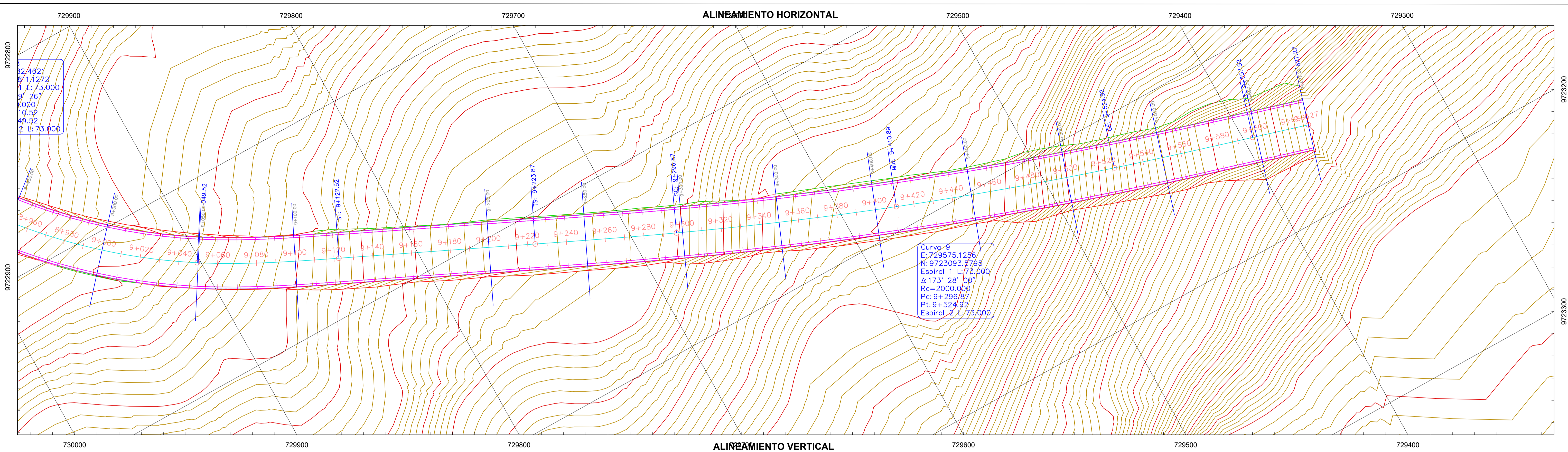
ALINEAMIENTO HORIZONTAL



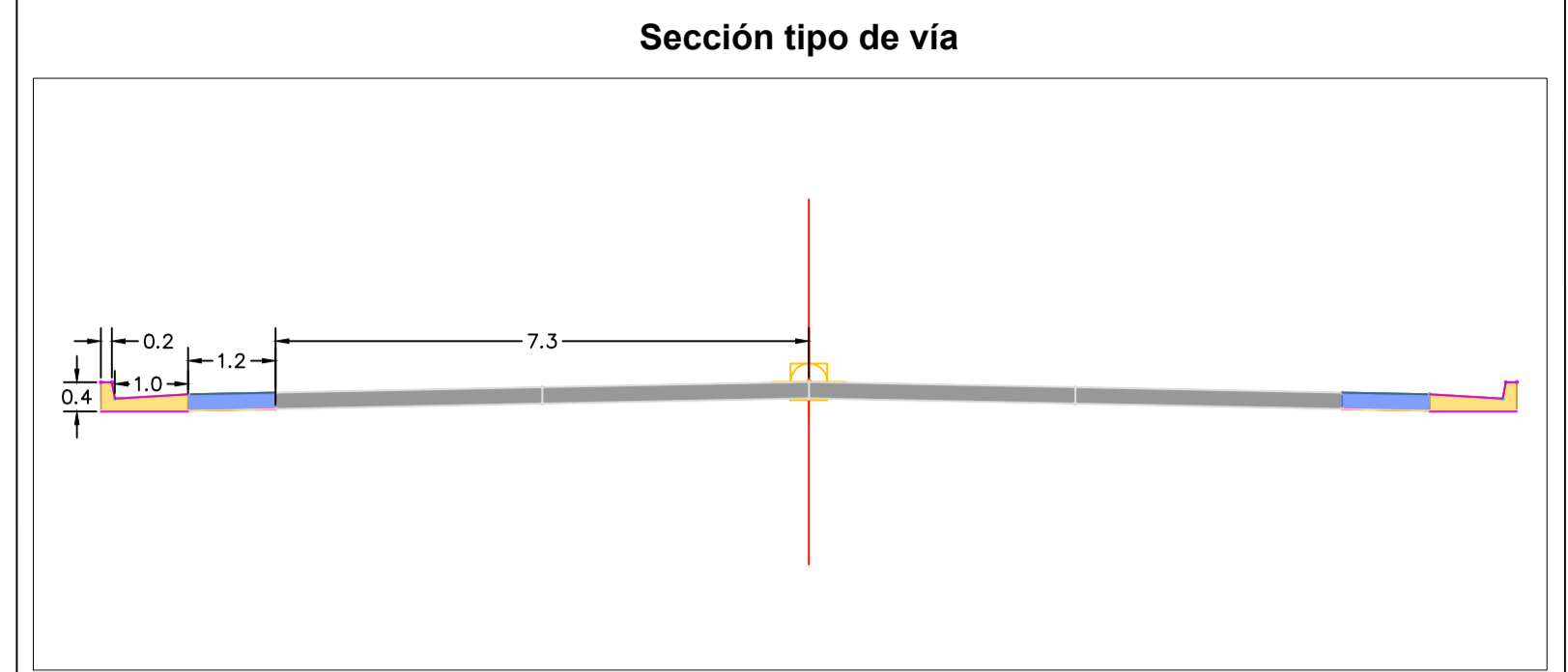
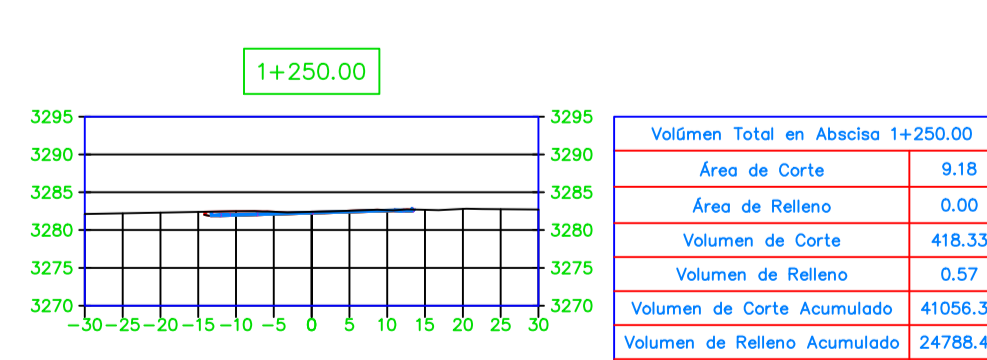
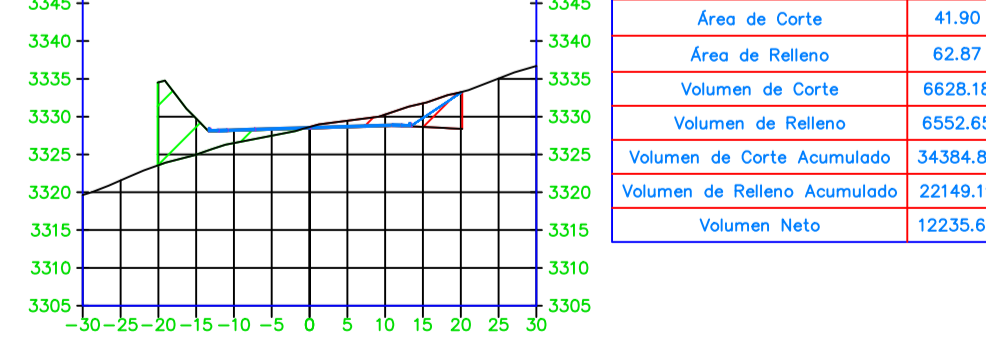
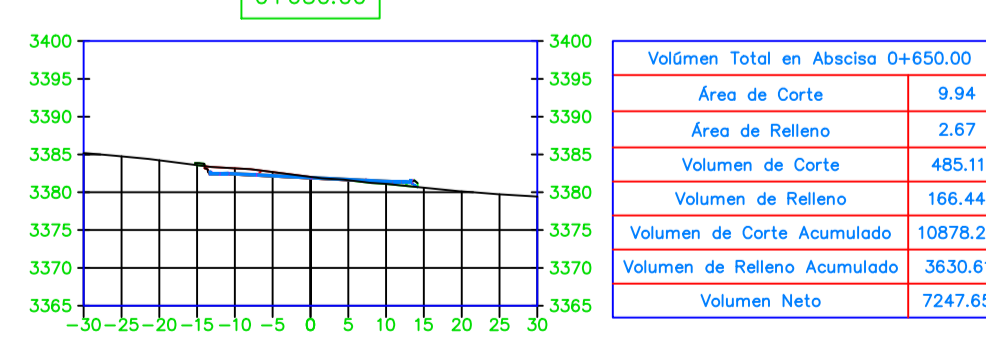
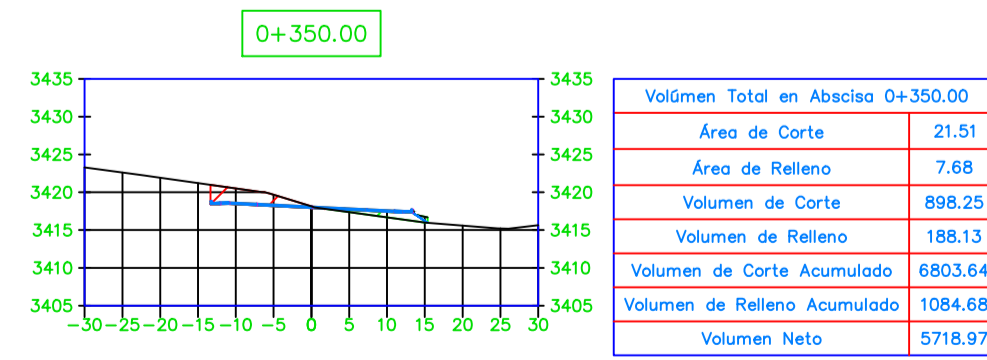
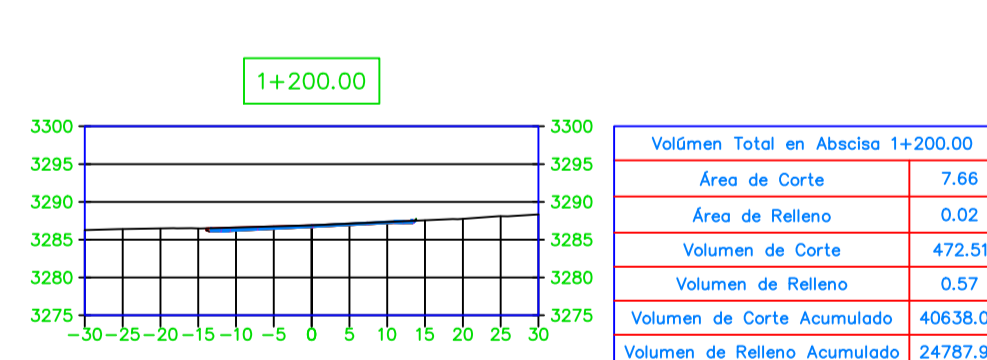
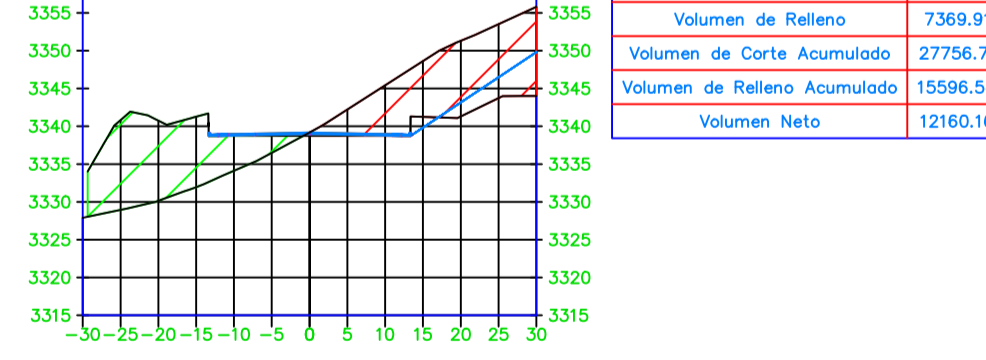
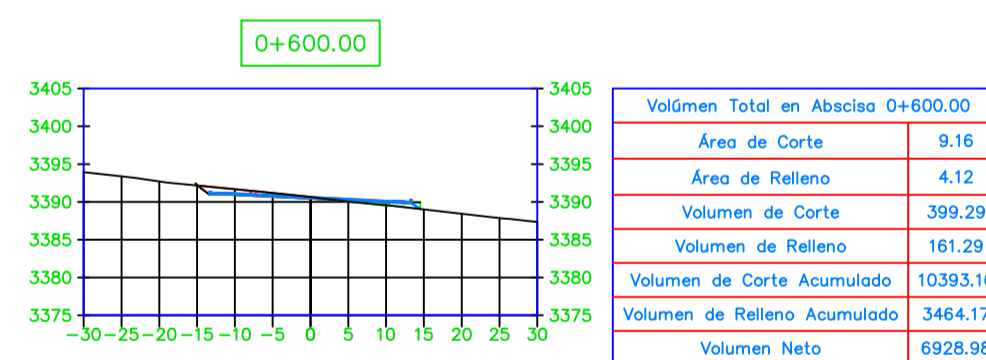
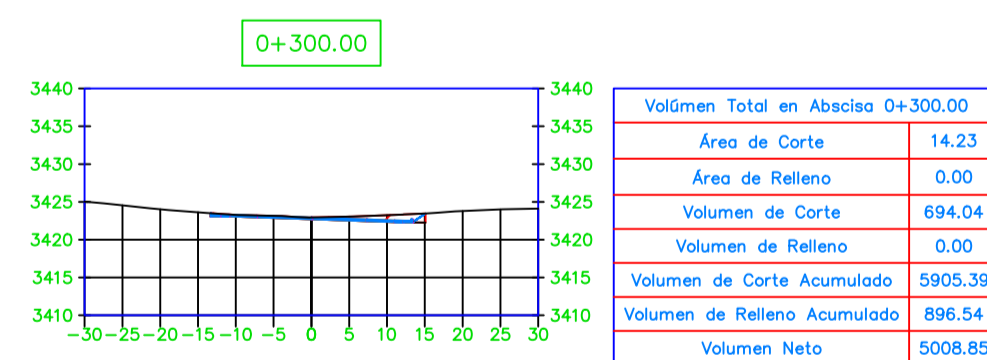
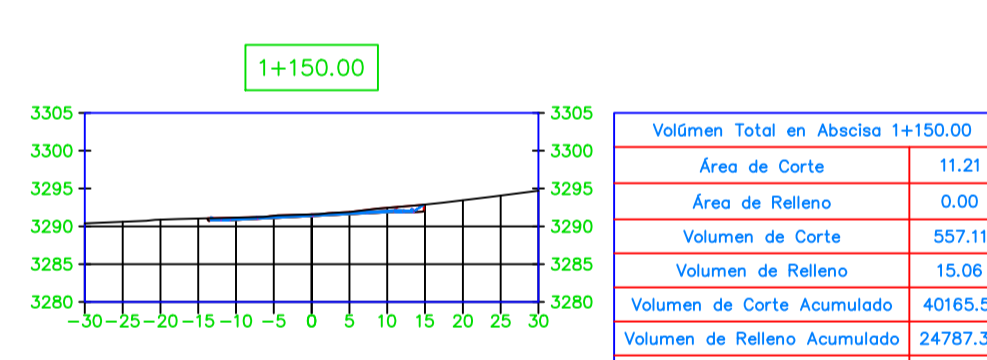
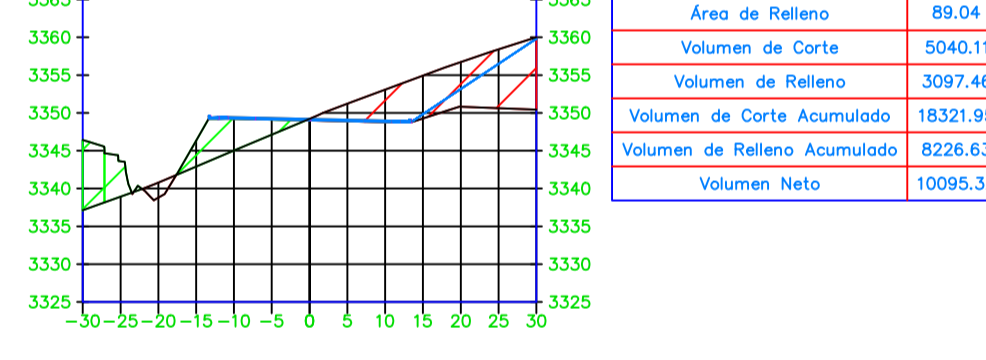
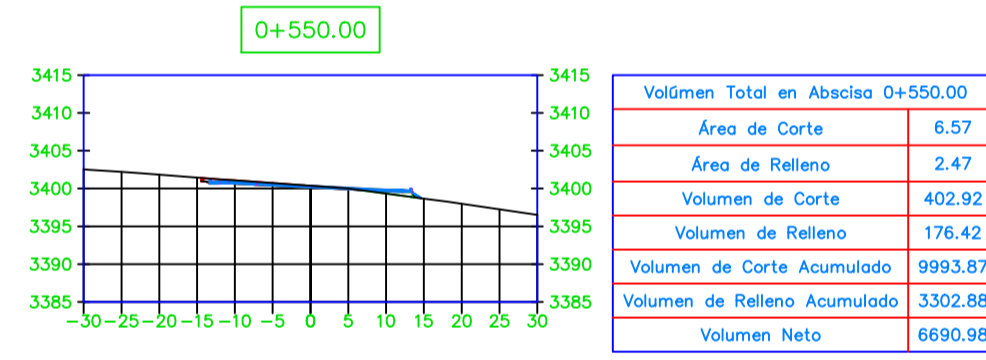
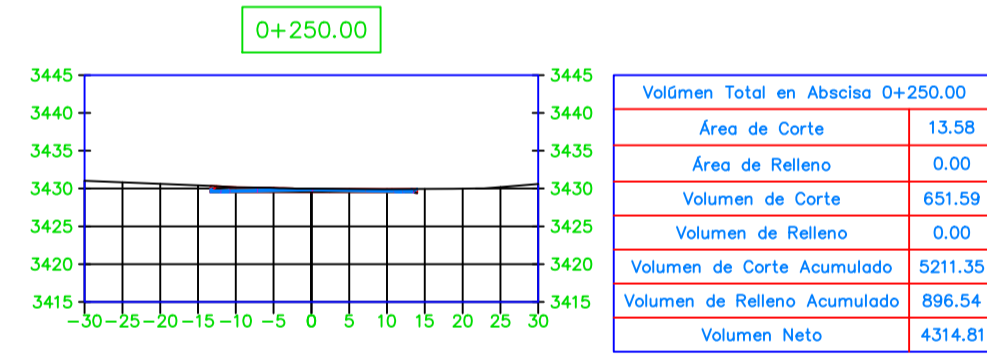
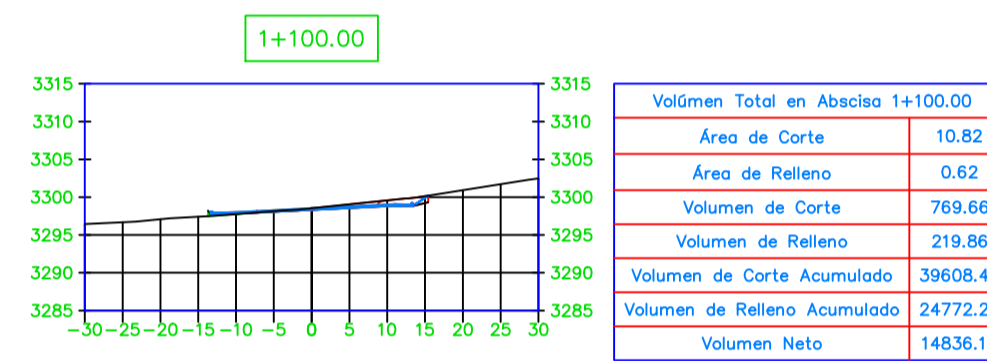
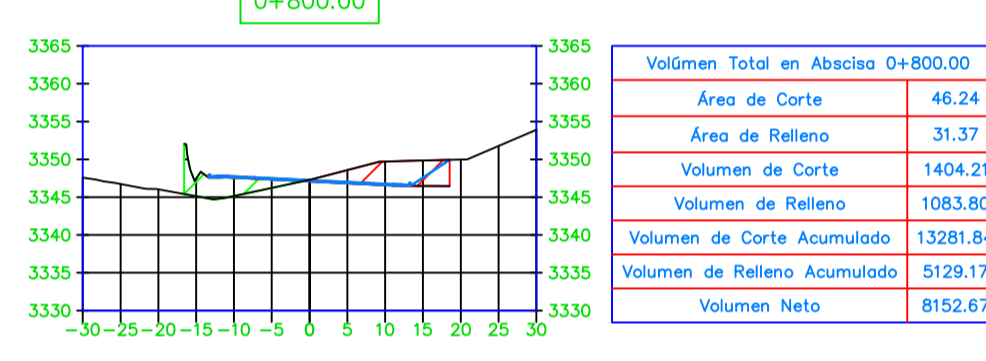
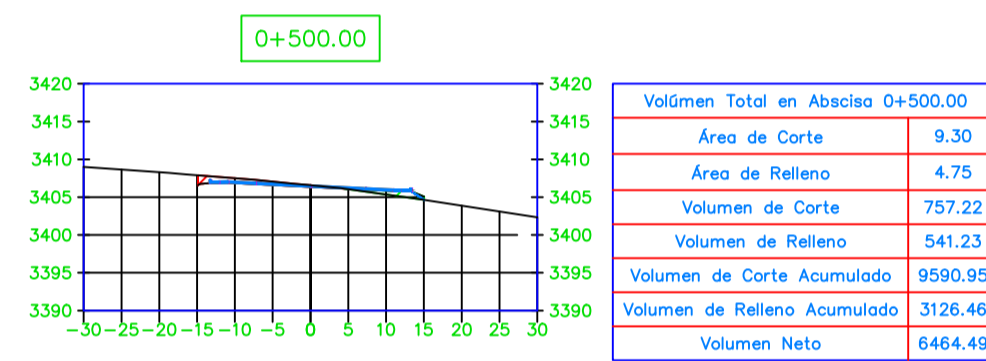
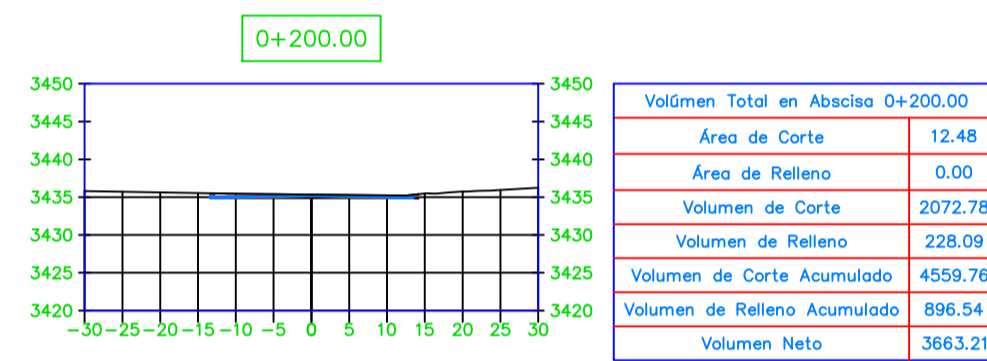
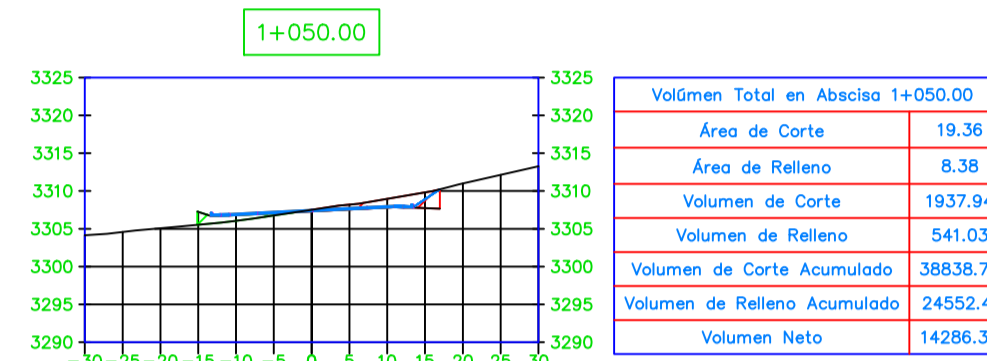
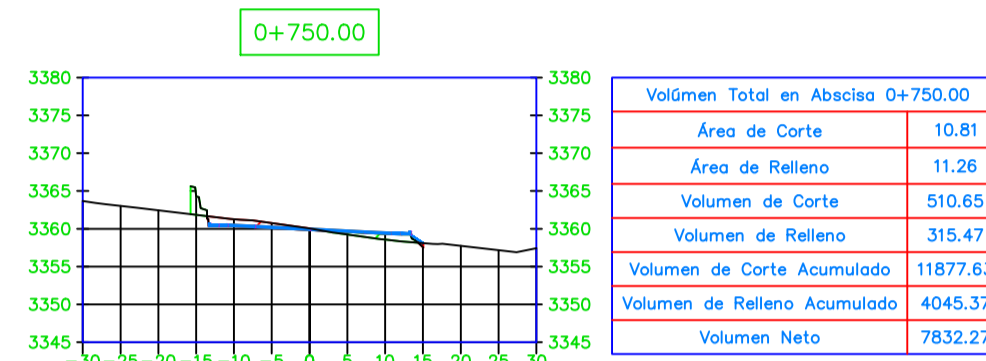
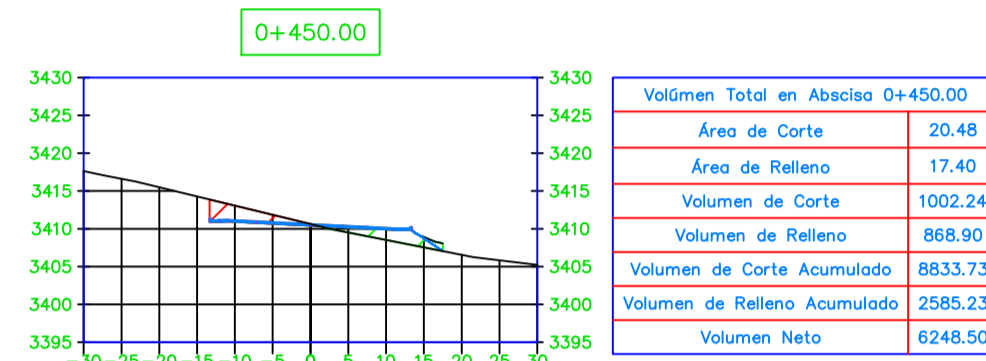
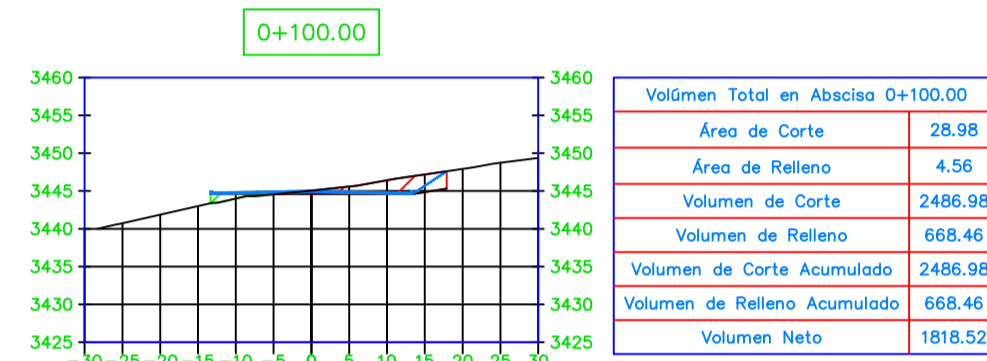
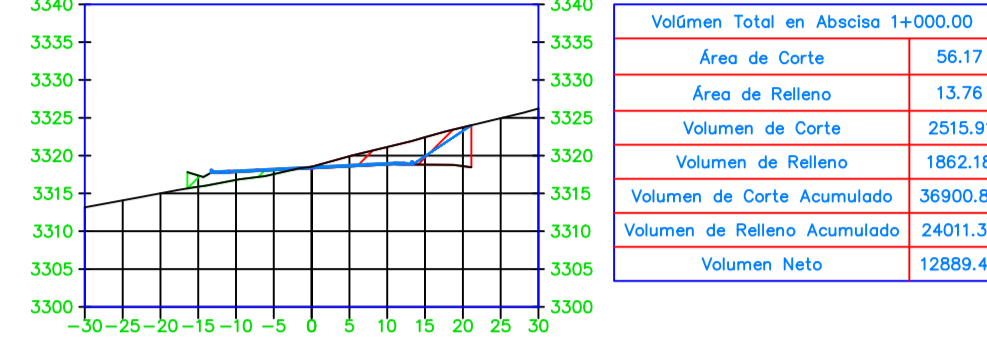
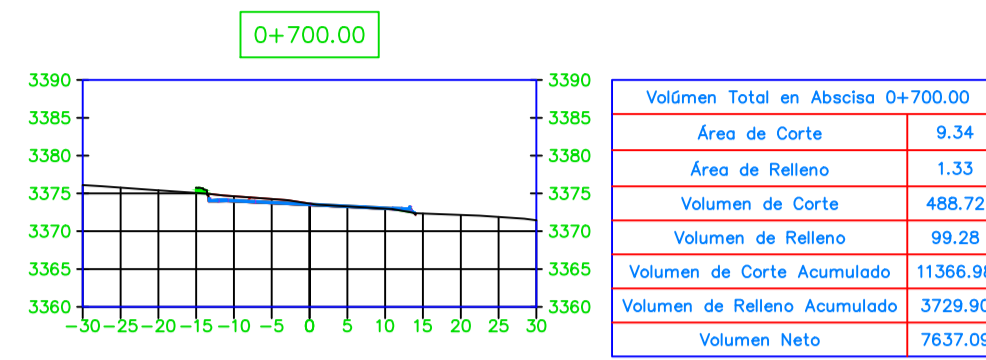
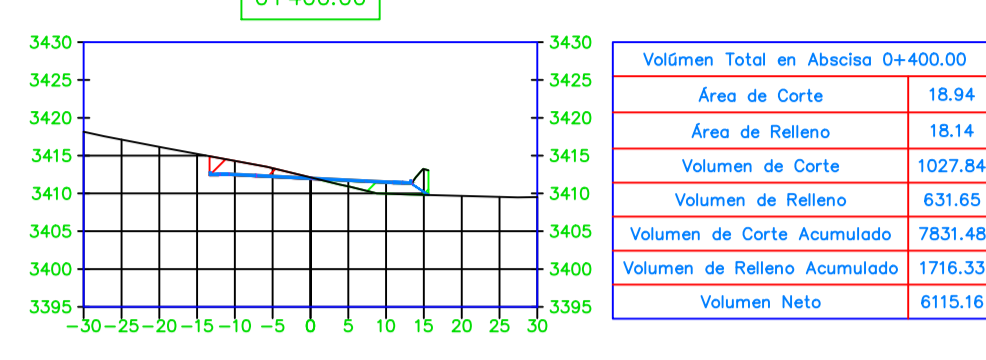
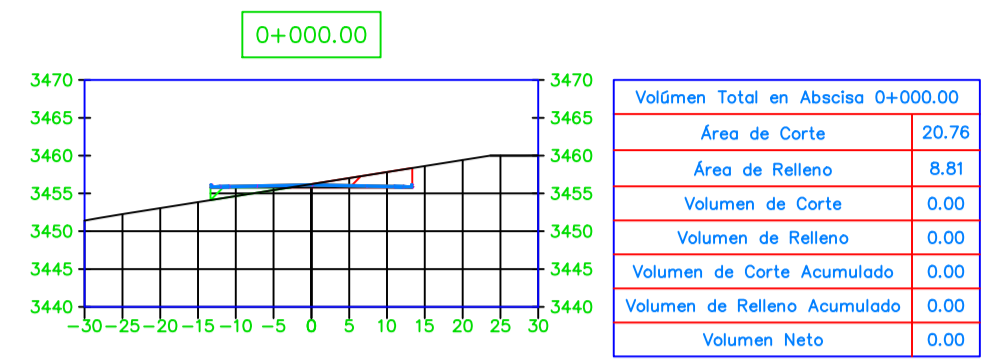
ALINEAMIENTO VERTICAL



COTA TERRENO	2959.64	2959.71	2959.78	2959.85	2959.92	2959.99	2960.06	2960.13	2960.20	2960.27	2960.34	2960.41	2960.48	2960.55	2960.62	2960.69	2960.76	2960.83	2960.90	2960.97	2961.04	2961.11	2961.18	2961.25	2961.32	2961.39	2961.46	2961.53	2961.60	2961.67	2961.74	2961.81	2961.88	2961.95	2962.02	2962.09	2962.16	2962.23	2962.30	2962.37	2962.44	2962.51	2962.58	2962.65	2962.72	2962.79	2962.86	2962.93	2963.00	2963.07	2963.14	2963.21	2963.28	2963.35	2963.42	2963.49	2963.56	2963.63	2963.70	2963.77	2963.84	2963.91	2963.98	2964.05	2964.12	2964.19	2964.26	2964.33	2964.40	2964.47	2964.54	2964.61	2964.68	2964.75	2964.82	2964.89	2964.96	2965.03	2965.10	2965.17	2965.24	2965.31	2965.38	2965.45	2965.52	2965.59	2965.66	2965.73	2965.80	2965.87	2965.94	2966.01	2966.08	2966.15	2966.22	2966.29	2966.36	2966.43	2966.50	2966.57	2966.64	2966.71	2966.78	2966.85	2966.92	2966.99	2967.06	2967.13	2967.20	2967.27	2967.34	2967.41	2967.48	2967.55	2967.62	2967.69	2967.76	2967.83	2967.90	2967.97	2968.04	2968.11	2968.18	2968.25	2968.32	2968.39	2968.46	2968.53	2968.60	2968.67	2968.74	2968.81	2968.88	2968.95	2969.02	2969.09	2969.16	2969.23	2969.30	2969.37	2969.44	2969.51	2969.58	2969.65	2969.72	2969.79	2969.86	2969.93	2969.99	3000.06	3000.13	3000.20	3000.27	3000.34	3000.41	3000.48	3000.55	3000.62	3000.69	3000.76	3000.83	3000.90	3000.97	3001.04	3001.11	3001.18	3001.25	3001.32	3001.39	3001.46	3001.53	3001.60	3001.67	3001.74	3001.81	3001.88	3001.95	3002.02	3002.09	3002.16	3002.23	3002.30	3002.37	3002.44	3002.51	3002.58	3002.65	3002.72	3002.79	3002.86	3002.93	3003.00	3003.07	3003.14	3003.21	3003.28	3003.35	3003.42	3003.49	3003.56	3003.63	3003.70	3003.77	3003.84	3003.91	3003.98	3004.05	3004.12	3004.19	3004.26	3004.33	3004.40	3004.47	3004.54	3004.61	3004.68	3004.75	3004.82	3004.89	3004.96	3005.03	3005.10	3005.17	3005.24	3005.31	3005.38	3005.45	3005.52	3005.59	3005.66	3005.73	3005.80	3005.87	3005.94	3006.01	3006.08	3006.15	3006.22	3006.29	3006.36	3006.43	3006.50	3006.57	3006.64	3006.71	3006.78	3006.85	3006.92	3006.99	3007.06	3007.13	3007.20	3007.27	3007.34	3007.41	3007.48	3007.55	3007.62	3007.69	3007.76	3007.83	3007.90	3007.97	3008.04	3008.11	3008.18	3008.25	3008.32	3008.39	3008.46	3008.53	3008.60	3008.67	3008.74	3008.81	3008.88	3008.95	3009.02	3009.09	3009.16	3009.23	3009.30	3009.37	3009.44	3009.51	3009.58	3009.65	3009.72	3009.79	3009.86	3009.93	3009.99	3010.06	3010.13	3010.20	3010.27	3010.34	3010.41	3010.48	3010.55	3010.62	3010.69	3010.76	3010.83	3010.90	3010.97	3011.04	3011.11	3011.18	3011.25	3011.32	3011.39	3011.46	3011.53	3011.60	3011.67	3011.74	3011.81	3011.88	3011.95	3012.02	3012.09	3012.16	3012.23	3012.30	3012.37	3012.44	3012.51	3012.58	3012.65	3012.72	3012.79	3012.86	3012.93	3013.00	3013.07	3013.14	3013.21	3013.28	3013.35	3013.42	3013.49	3013.56	3013.63	3013.70	3013.77	3013.84	3013.91	3013.98	3014.05	3014.12	3014.19	3014.26	3014.33	3014.40	3014.47	3014.54	3014.61	3014.68	3014.75	3014.82	3014.89	3014.96	3015.03	3015.10	3015.17	3015.24	3015.31	3015.38	3015.45	3015.52	3015.59	3015.66	3015.73	3015.80	3015.87	3015.94	3016.01	3016.08	3016.15	3016.22	3016.29	3016.36	3016.43	3016.50	3016.57	3016.64	3016.71	3016.78	3016.85	3016.92	3016.99	3017.06	3017.13	3017.20	3017.27	3017.34	3017.41	3017.48	3017.55	3017.62	3017.69	3017.76	3017.83	3017.90	3017.97	3018.04	3018.11	3018.18	3018.25	3018.32	3018.39	3018.46	3018.53	3018.60	3018.67	3018.74	3018.81	3018.88	3018.95	3019.02	3019.09	3019.16	3019.23	3019.30	3019.37	3019.44	3019.51	3019.58	3019.65	3019.72	3019.79	3019.86	3019.93	3020.00	3020.07	3020.14	3020.21	3020.28	3020.35	3020.42	3020.49	3020.56	3020.63	3020.70	3020.77	3020.84	3020.91	3020.98	3021.05	3021.12	3021.19	3021.26	3021.33	3021.40	3021.47	3021.54	3021.61	3021.68	3021.75	3021.82	3021.89	3021.96	3022.03	3022.10	3022.17	3022.24	3022.31	3022.38	3022.45	3022.52	3022.59	3022.66	3022.73	3022.80	3022.87	3022.94	3023.01	3023.08	3023.15	3023.22	3023.29	3023.36	3023.43	3023.50	3023.57	3023.64	3023.71	3023.78	3023.85	3023.92	3023.99	3024.06	3024.13	3024.20	3024.27	3024.34	3024.41	3024.48	3024.55	3024.62	3024.69	3024.76	3024.83	3024.90	3024.97	3025.04	3025.11	3025.18	3025.25	3025.32	3025.39	3025.46	3025.53	3025.60	3025.67	3025.74	3025.81	3025.88	3025.95	3026.02	3026.09	3026.16	3026.23	3026.30	3026.37	3026.44	3026.51	3026.58	3026.65	3026.72	3026.79	3026.86	3026.93	3027.00	3027.07	3027.14	3027.21	3027.28	3027.35	3027.42	3027.49	3027.56	3027.63	3027.70	3027.77	3027.84	3027.91	3027.98	3028.05	3028.12	3028.19	3028.26	3028.33	3028.40	3028.47	3028.54	3028.61	3028.68	3028.75	3028.82	3028.89	3028.96	3029.03	3029.10	3029.17	3029.24	3029.31	3029.38	3029.45	3029.52	3029.59	3029.66	3029.73	3029.80	3029.87	3029.94	3030.01	3030.08	3030.15	3030.22	3030.29	3030.36	3030.43	3030.50	3030.57	3030.64	3030.71	3030.78	3030.85	3030.92	3030.99	3031.06	3031.13	3031.20	3031.27	3031.34	3031.41	3031.48	3031.55	3031.62	3031.69	3031.76	3031.83	3031.90	3031.97	3032.04	3032.11	3032.18	3032.25	3032.32	3032.39	3032.46	3032.53	3032.60	3032.67	3032.74	3032.81	3032.88	3032.95	3033.02	3033.09	3033.16	3033.23	3033.30	3033.37	3033.44	3033.51	3033.58	3033.65	3033.72	3033.79	3033.86	3033.93	3034.00	3034.07	3034.14	3034.21	3034.28	3034.35	3034.42	3034.49	3034.56	3034.63	3034.70	3034.77	3034.84	3034.91	3034.98	3035.05	3035.12	3035.19	3035.26	3035.33	3035.40	3035.47	3035.54	3035.61	3035.68	3035.75	3035.82	3035.89	3035.96	3036.03	3036.10	3036.17	3036.24	3036.31	3036.38	3036.45	3036.52	3036.59	3036.66	3036.73	3036.80	3036.87	3036.94	3037.01	3037.08	3037.15	3037.22	3037.29	3037.36	3037.43	3037.50	3037.57	3037.64	3037.71	3037.78	3037.85	3037.92	3037.99	3038.06	3038.13	3038.20	3038.27	3038.34	3038.41	3038.48	3038.55	3038.62	3038.69	3038.76	3038.83	3038.90	3038.97	3039.04	3039.11	3039.18	3039.25	3039.32	3039.39	3039.46	3039.53	3039.60	3039.67	3039.74	3039.81	3039.88	3039.95	3040.02	3040.09	3040.16	3040.23	3040.30	3040.37	3040.44	3040.51	3040.58	3040.65	3040.72	3040.79	3040.86	3040.93	3041.00	3041.07	3041.14	3041.21	3041.28	3041.35	3041.42	3041.49	3041.56	3041.63	3041.70	3041.77	3041.84	3041.91	3041.98	3042.05	3042.12	3042.19	3042.26	3042.33	3042.40	3042.47	3042.54	3042.61	3042.68	3042.75	3042.82	3042.89	3042.96	3043.03	3043.10	3043.17	3043.24	3043.31	3043.38	3043.45	3043.52	3043.59	3043.66	3043.73	3043.80	3043.87	3043.94	3044.01	3044.08	3044.15	3044.22	3044.29	3044.36	3044.43	3044.50	3044.57	3044.64	3044.71	3044.78	3044.85	3044.92	3044.99	3045.06	3045.13	3045.20	3045.27	3045.34	3045.41	3045.48	3045.55	3045.62	3045.69	3045.76	3045.83	3045.90	3045.97	3046.04	3046.11	3046.18	3046.25	3046.32	3046.39	3046.46	3046.53	3046.60	3046.67	3046.74	3046.81	3046.88	3046.95	3047.02	3047.09	3047.16	3047.23	3047.30	3047.37	3047.44	3047.51	3047.58	3047.65	3047.72	3047.79	3047.86	3047.93	3048.00	3048.07	3048.14	3048.21	3048.28	3048.35	3048.42	3048.49	3048.56	3048.63	3048.70	3048.77	3048.84	3048.91	3048.98	3049.05	3049.12	3049.19	3049.26	3049.33	3049.40	3049.47	3049.54	3049.61	3049.68	3049.75	3049.82	3049.89	3049.96	3050.03	3050.10	3050.17	3050.24	3050.31	3050.38	3050.45	3050.52	3050.59	3050.66	3050.73	3050.80	3050.87	3050.94	3051.01	3051.08	3051.15	3051.22	3051.29	3051.36	3051.43	3051.50	3051.57	3051.64	3051.71	3051.78	3051.85	3051.92	3051.99	3052.06	3052.13	3052.20	3052.27	3052.34	3052.41	3052.48	3052.55	3052.62	3052.69	3052.76	3052.83	3052.90	3052.97	3053.04	3053.11	3053.18	3053.25	3053.32	3053.39	3053.46	3053.53	3053.60	3053.67	3053.74	3053.81	3053.88	3053.95	3054.02	3054.09	3054.16	3054.23	3054.30	3054.37	3054.44	3054.51	3054.58	3054.65	3054.72	3054.79	3054.86	3054.93	3055.00	3055.07	3055.14	3055.21	3055.28	3055.35	3055.42	3055.49	3055.56	3055.63	3055.70	3055.77	3055.84	3055.91	3055.98	3056.05	3056.12	3056.19	3056.26	3056.33	3056.40	3056.47	3056.54	3056.61	3056.68	3056.75	3056.82	3056.89	3056.96	3057.03	3057.10	3057.17	3057.24	3057.31	3057.38	3057.45	3057.52	3057.59	3057.66	3057.73	3057.80	3057.87	3057.94	3058.01	3058.08	3058.15	3058.22	3058.29	3058.36	3058.43	3058.50	3058.57	3058.64	3058.71	3058.78	3058.85	3058.92
--------------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------



<b>SIMBOLOGÍA DISEÑO VERTICAL</b> 	<b>SIMBOLOGÍA ALINEAMIENTO HORIZONTAL</b> 	<b>ESCALAS Y PROYECCIÓN</b> ESCALAS DE IMPRESIÓN: E.H.: 1:1000 E.V.: 1:100 ESCALAS GRÁFICAS: ESC. 1:100 ESC. 1:1000	<b>UNIVERSIDAD DE CUENCA</b> FACULTAD: INGENIERIA ESCUELA: INGENIERIA CIVIL CÁTEDRA: EL TALLER DISEÑO GEOMÉTRICO DE VÍA ABCISAS 9+100 - 9+627 REALIZADO POR: Santiago Muroso Roberto Ochoa CONTIENE: Diseño geométrico horizontal Diseño vertical
			FECHA: 23 de marzo del 2023 ESCALAS: E.H.: 1:1000 E.V.: 1:100 LAMINA: 15/21 PROFESOR: Ing. Juan Antón



**SIMBOLOGÍA**

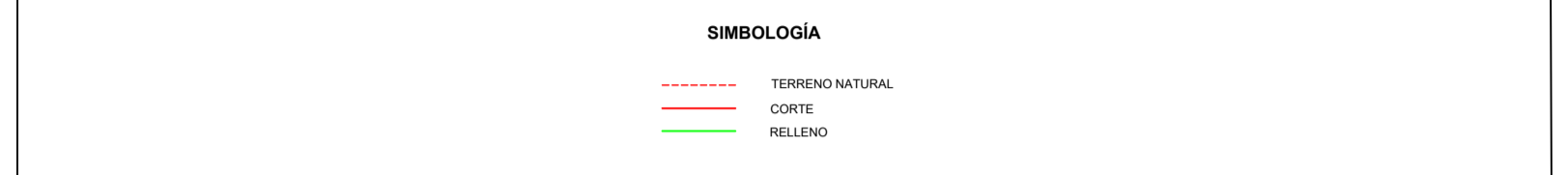
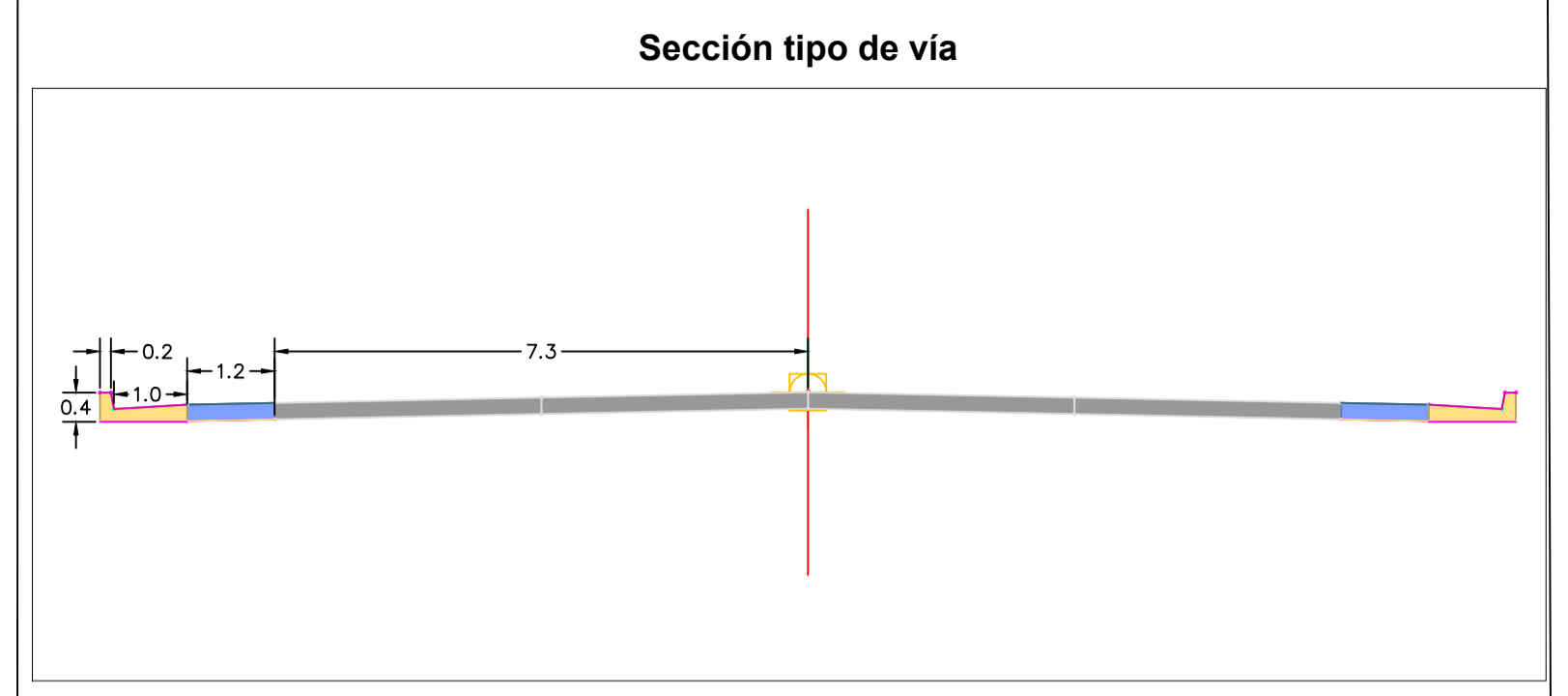
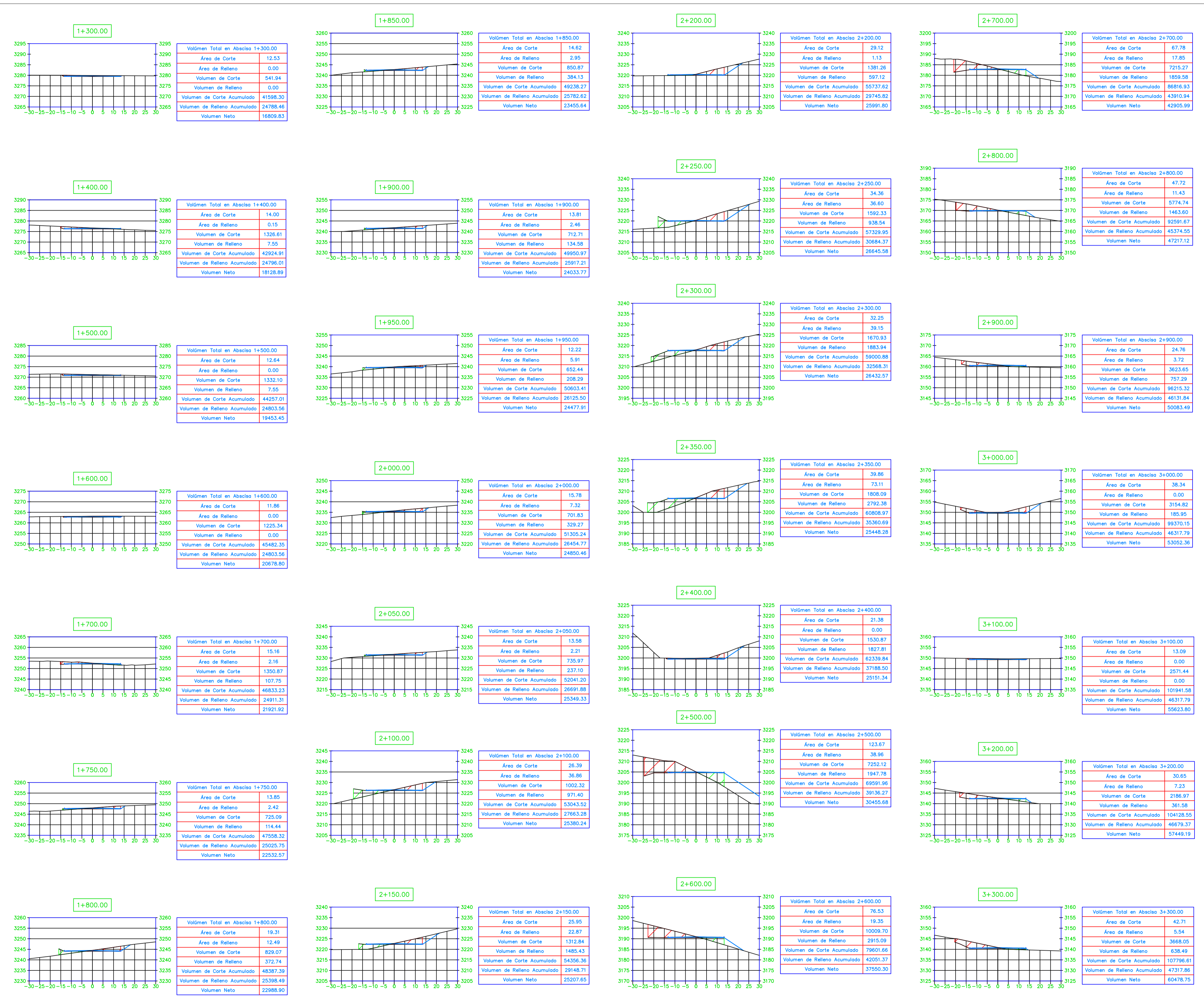
- TERRENO NATURAL
- CORTE
- RELLENO

Tabla de Volúmenes Totales						
Abscisa	Área de Relleno	Área de Corte	Volumen de Relleno	Volumen de Corte	Volumen de Relleno Acumulado	Volumen de Corte Acumulado
0+000.00	8.81	20.76	0.00	0.00	0.00	0.00
0+100.00	4.56	28.98	668.46	2486.98	668.46	2486.98
0+200.00	0.00	12.48	228.09	2072.78	896.54	4559.76
0+250.00	0.00	13.58	0.00	651.59	896.54	5211.35
0+300.00	0.00	14.23	0.00	694.04	896.54	5905.39
0+350.00	7.68	21.51	188.13	898.25	1084.68	6803.64
0+400.00	18.14	18.94	631.65	1027.84	1716.33	7831.48
0+450.00	17.40	20.48	868.90	1002.24	2585.23	8833.73
0+500.00	4.75	9.30	541.23	757.22	3126.46	9990.95
0+550.00	2.47	6.57	176.42	402.92	3302.88	9993.87
0+600.00	4.12	9.16	161.29	399.29	3464.17	10303.16
0+650.00	2.67	9.94	166.44	485.11	3630.61	10878.26
0+700.00	1.33	9.34	99.28	488.72	3729.90	11366.98
0+750.00	11.26	10.81	315.47	510.65	4045.37	11877.63
0+800.00	31.37	46.24	1083.80	1404.21	5129.17	13281.84
0+850.00	89.04	161.28	3097.46	5040.11	8226.63	18321.95
0+900.00	202.93	219.68	7369.91	9434.76	15596.54	27756.71
0+950.00	62.87	41.90	6552.65	6628.18	22149.19	34384.89
1+000.00	13.76	56.17	1862.18	2515.91	24011.37	36900.80
1+050.00	8.38	19.36	541.03	1937.94	24552.41	38838.74
1+100.00	0.62	10.82	219.86	769.66	24772.27	39608.40
1+150.00	0.00	11.21	15.06	557.11	24787.33	40165.51
1+200.00	0.02	7.66	0.57	472.51	24787.90	40638.02
1+250.00	0.00	9.18	0.57	418.33	24788.46	41056.36

**UNIVERSIDAD DE CUENCA**

FACULTAD:	INGENIERIA	FECHA:	22 de marzo del 2023
ESCUELA:	INGENIERIA CIVIL	ESCALAS:	H: 1:1000 V: 1:500
CASAS - EL TAMBO		LAMINA:	<b>17/21</b>
SECCIONES TRANSVERSALES ABSCIAS 0+000 - 1+250		REALIZADO POR:	PROFESOR:
Ing. Juan Andrés		Ing. Juan Andrés	
CONTIENE:		OBSERVACIONES:	
Secciones de vía			

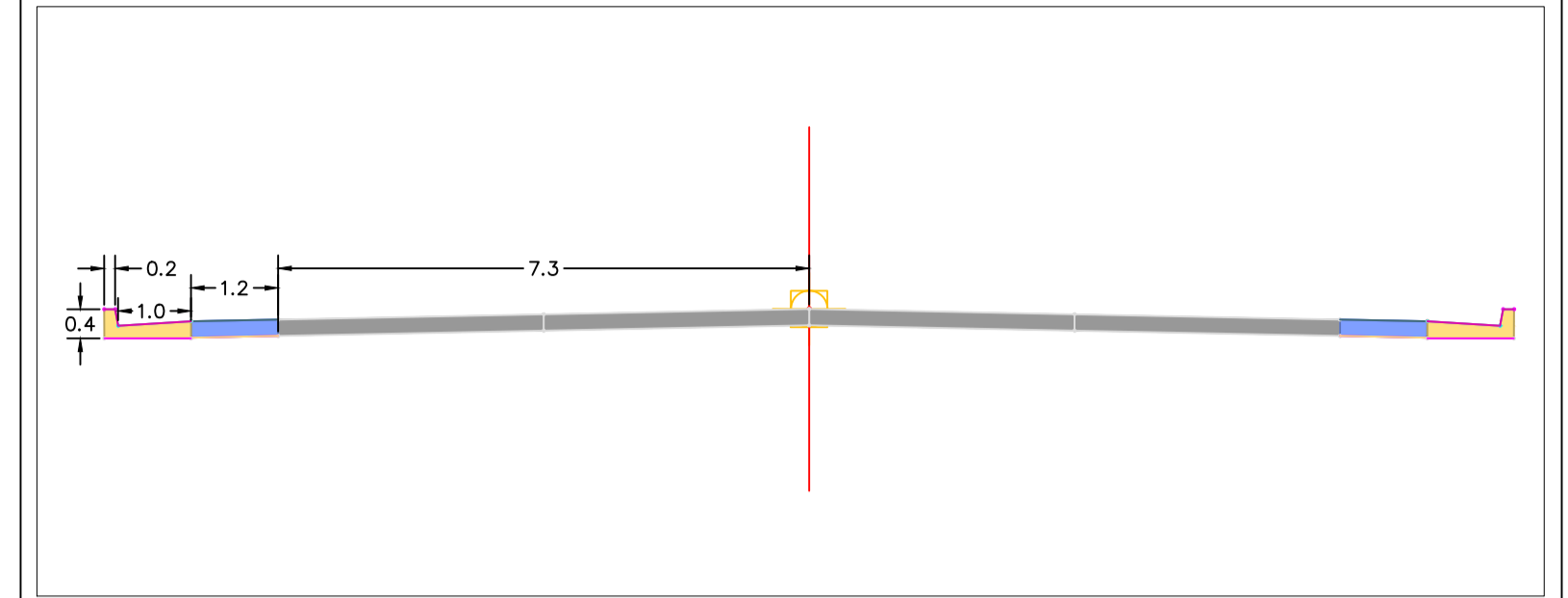




### Tabla de Volúmenes Totales

Abscisa	Área de Relleno	Área de Corte	Volumen de Relleno	Volumen de Corte	Volumen de Relleno Acumulado	Volumen de Corte Acumulado
1+300.00	0.00	12.53	0.00	541.94	24788.46	41598.30
1+400.00	0.15	14.00	7.55	1326.61	24796.01	42924.91
1+500.00	0.00	12.64	7.55	1332.10	24803.56	44257.01
1+600.00	0.00	11.86	0.00	1225.34	24803.56	45482.35
1+700.00	2.16	15.16	107.75	1350.87	24911.31	46833.23
1+750.00	2.42	13.85	114.44	725.09	25025.75	47556.32
1+800.00	12.49	19.31	372.74	829.07	25398.49	48387.39
1+850.00	2.95	14.62	384.13	850.87	25782.82	49236.27
1+900.00	2.46	13.81	134.58	712.71	25917.21	49950.97
1+950.00	5.91	12.22	208.29	652.44	26125.50	50603.41
2+000.00	7.32	15.78	329.27	701.83	26454.77	51305.24
2+050.00	2.21	13.58	237.10	735.97	26691.88	52041.20
2+100.00	36.86	26.39	971.40	1002.32	27663.28	53043.52
2+150.00	22.87	25.95	1485.43	1312.84	29148.71	54356.36
2+200.00	1.13	20.12	597.12	1381.26	29745.82	55737.62
2+250.00	36.60	34.36	938.54	1592.33	30684.37	57329.95
2+300.00	39.15	32.25	1883.94	1670.93	32568.31	59000.88
2+350.00	73.11	39.86	2792.38	1808.09	35360.69	60808.97
2+400.00	0.00	21.38	1827.81	1530.87	37188.50	62336.84
2+500.00	38.96	123.67	1947.78	7252.12	39136.27	69591.96
2+600.00	19.35	76.53	2915.09	10009.70	42061.37	79601.66
2+700.00	17.85	67.78	1859.58	7215.27	43910.94	86816.93
2+800.00	11.43	47.72	1463.60	5774.74	45374.55	92591.67
2+900.00	3.72	24.76	757.29	3623.65	46131.84	96215.32
3+000.00	0.00	38.34	185.95	3154.82	46317.79	99370.15
3+100.00	0.00	13.09	0.00	2571.44	46317.79	101941.58
3+200.00	7.23	30.65	361.58	2186.97	46679.37	104128.55
3+300.00	5.54	42.71	638.49	3668.05	47317.86	107796.61

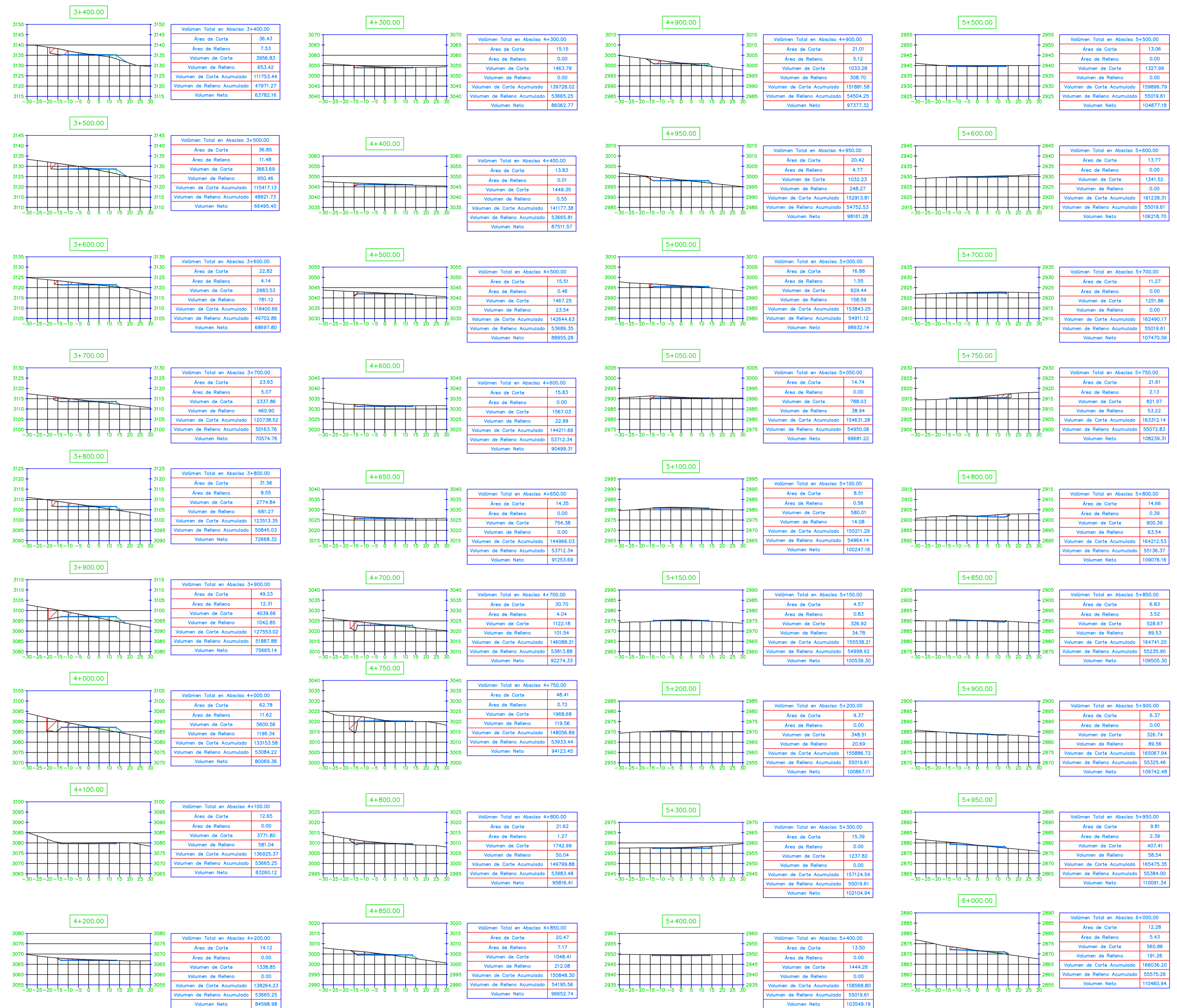
Sección tipo de vía



SIMBOLOGÍA

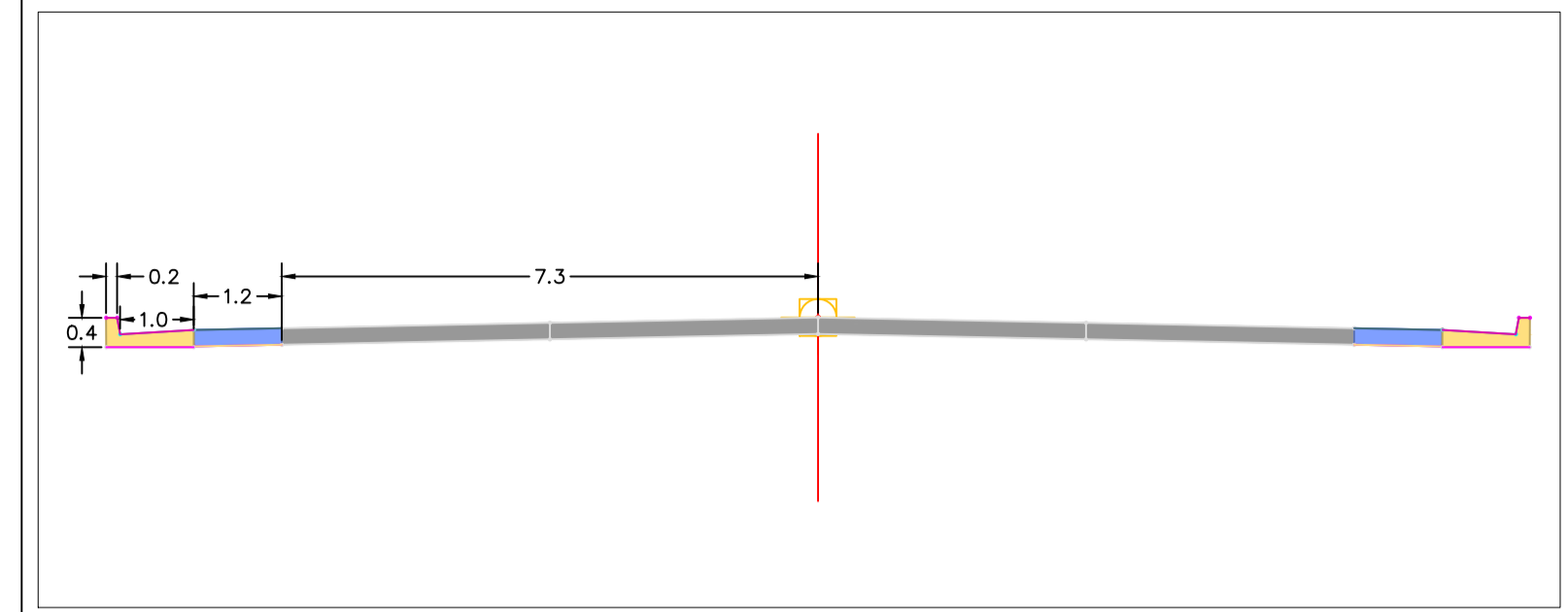
- TERRENO NATURAL
- CORTE
- RELLENO

Tabla de Volúmenes Totales						
Abscisa	Área de Relleno	Área de Corte	Volumen de Relleno	Volumen de Corte	Volumen de Relleno Acumulado	Volumen de Corte Acumulado
3+400.00	7.53	36.43	653.42	3956.83	47971.27	111753.44
3+500.00	11.48	36.85	950.46	3663.69	48921.73	115417.13
3+600.00	4.14	22.82	781.12	2983.53	49702.86	118400.66
3+700.00	5.07	23.93	460.90	2337.86	50163.76	120738.52
3+800.00	8.55	31.56	681.27	2774.84	50845.03	123513.35
3+900.00	12.31	49.23	1042.85	4039.66	51887.88	127553.02
4+000.00	11.62	62.78	1196.34	5600.56	53084.22	131513.58
4+100.00	0.00	12.65	581.04	3771.80	53665.25	136923.37
4+200.00	0.00	14.12	0.00	1338.85	53665.25	138264.23
4+300.00	0.00	15.15	0.00	1463.79	53665.25	139728.02
4+400.00	0.01	13.83	0.55	1449.35	53665.81	141177.38
4+500.00	0.46	15.51	23.54	1467.25	53689.35	142644.63
4+600.00	0.00	15.83	22.99	1567.03	53712.34	144211.66
4+650.00	0.00	14.35	0.00	754.38	53712.34	144966.03
4+700.00	4.04	30.70	101.54	1122.18	53813.88	146088.21
4+750.00	0.72	48.41	119.56	1968.68	53933.44	148056.89
4+800.00	1.27	21.62	50.04	1742.99	53983.48	149799.88
4+850.00	7.17	20.47	212.08	1048.41	54195.56	150848.30
4+900.00	5.12	21.01	308.70	1033.28	54504.25	151881.58
4+950.00	4.77	20.42	248.27	1032.23	54752.53	152913.81
5+000.00	1.55	16.88	158.59	929.44	54911.12	153843.23
5+100.00	0.83	4.57	0.56	326.92	54986.21	154586.72
5+200.00	0.00	9.37	0.00	348.51	55019.61	155235.46
5+300.00	0.00	15.39	0.00	1237.82	55019.61	157124.54
5+400.00	0.00	13.50	0.00	1444.26	55019.61	158568.80
5+500.00	0.00	13.06	0.00	1327.99	55019.61	159896.79
5+600.00	0.00	13.77	0.00	1341.52	55019.61	161238.31
5+700.00	0.00	11.27	0.00	1251.86	55019.61	162490.17
5+750.00	0.13	11.61	53.22	821.97	55072.83	163314.11
5+800.00	2.39	14.66	63.54	900.39	55136.37	164212.53
5+850.00	3.52	6.83	99.53	528.67	55235.90	164741.20
5+900.00	0.00	6.37	89.56	326.74	55325.46	165067.94
5+950.00	2.39	9.81	58.54	407.41	55384.00	165475.35
6+000.00	5.43	12.28	191.26	560.86	55575.26	166036.20



UNIVERSIDAD DE CUENCA			
FACULTAD:	INGENIERIA CIVIL	FECHA:	23 de marzo del 2023
ESCALA:	1:1000	ESCALAS:	1:1000
CÁRABAS - EL TAMBOR		LÁMINA:	18/21
REALIZADO POR:	Diego Moya	PROFESOR:	Ing. Juan Rojas
CONTIENE:	Secciones de vía	OBSERVACIONES:	

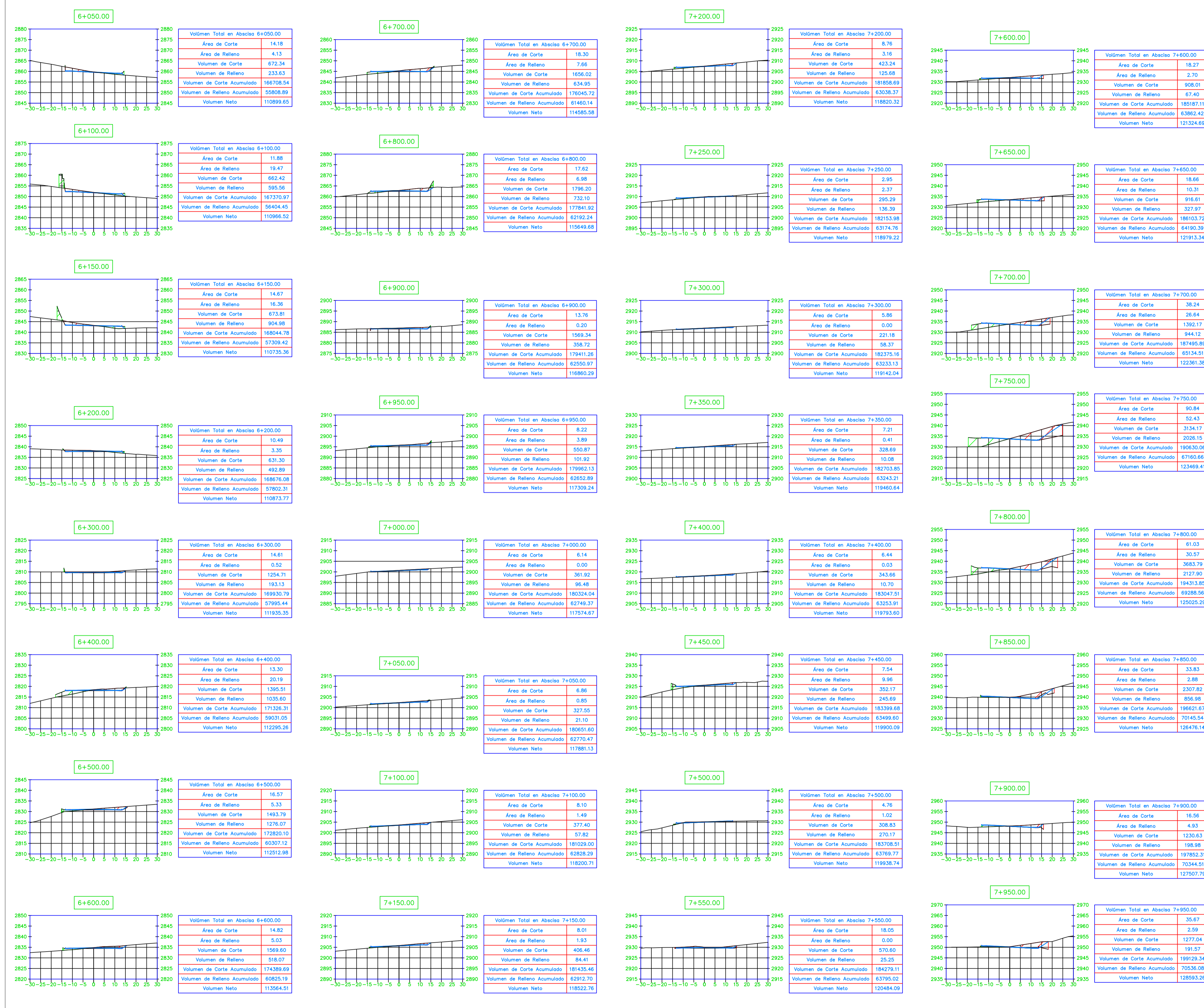
Sección tipo de vía



SIMBOLOGÍA

- TERRENO NATURAL
- CORTE
- RELLENO

Tabla de Volúmenes Totales						
Abscisa	Área de Relleno	Área de Corte	Volumen de Relleno	Volumen de Corte	Volumen de Relleno Acumulado	Volumen de Corte Acumulado
6+050.00	4.13	14.18	233.63	672.34	55808.89	166708.54
6+100.00	19.47	11.88	595.56	662.42	56404.45	167370.97
6+150.00	16.36	14.67	904.98	673.81	57309.42	168044.78
6+200.00	3.35	10.49	492.89	631.30	57802.31	168676.08
6+300.00	0.52	14.61	193.13	1254.71	57995.44	169930.79
6+400.00	20.19	13.30	1035.60	1395.51	59031.05	171326.31
6+500.00	5.33	16.57	1276.07	1493.79	60307.12	172820.10
6+600.00	5.03	14.82	518.07	1569.60	60825.19	174389.69
6+700.00	7.66	18.30	634.95	1656.02	61460.14	176045.72
6+800.00	6.98	17.62	732.10	1796.20	62192.24	177841.92
6+900.00	0.20	13.76	358.72	1569.34	62550.97	179411.26
6+950.00	3.89	8.22	101.92	550.87	62652.89	179962.13
7+000.00	0.00	6.14	96.48	361.92	62749.37	180324.04
7+050.00	0.85	6.86	21.10	327.55	62770.47	180651.60
7+100.00	1.49	8.10	57.82	377.40	62828.29	181029.00
7+150.00	1.93	8.01	84.41	406.46	62912.70	181435.46
7+200.00	3.16	8.76	125.68	423.24	63038.37	181858.69
7+250.00	2.37	2.95	136.39	295.29	63174.76	182153.98
7+300.00	0.00	5.86	58.37	221.18	63233.13	182375.16
7+350.00	0.41	7.21	10.08	328.69	63243.21	182703.85
7+400.00	0.03	6.44	10.70	343.66	63253.91	183047.51
7+450.00	9.96	7.54	245.69	352.17	63499.60	183399.68
7+500.00	1.02	4.76	270.17	308.83	63769.77	183708.51
7+550.00	0.00	18.05	25.25	570.60	63795.02	184279.11
7+600.00	2.70	18.27	67.40	908.01	63862.42	185187.11
7+650.00	10.31	18.66	327.97	916.61	64190.39	186103.72
7+700.00	26.64	38.24	944.12	1392.17	65134.51	187495.89
7+750.00	52.43	2026.15	3134.17	67160.66	67160.66	190630.06
7+800.00	30.57	61.03	2127.90	3683.79	69288.56	194313.85
7+850.00	2.88	33.83	856.98	2307.82	70145.54	196621.67
7+900.00	4.93	16.56	198.98	1230.63	70344.51	197852.31
7+950.00	2.59	35.67	191.57	1277.04	70536.08	199129.34



UNIVERSIDAD DE CUENCA			
FACULTAD:	INGENIERÍA	FECHA:	22 de mayo del 2023
ESCUELA:	INGENIERÍA CIVIL	ESCALAS:	LAMINA:
CAÑAR - EL TAMBO		E.V.: 1:200	19/21
SECCIONES TRANSVERSALES ABSCSIBAS 6+050 - 7+950			
REALIZADO POR:	PROFESOR:		
Jorge Muñoz Sebastián Ordóñez	Ing. Juan Andrés		
CONTIENE:	OBSERVACIONES:		
Secciones de vía			

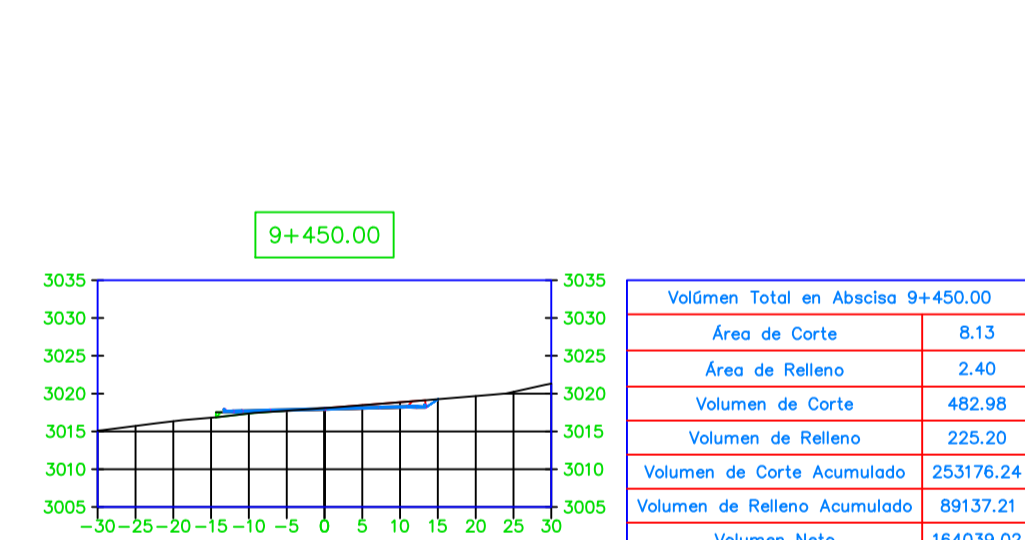
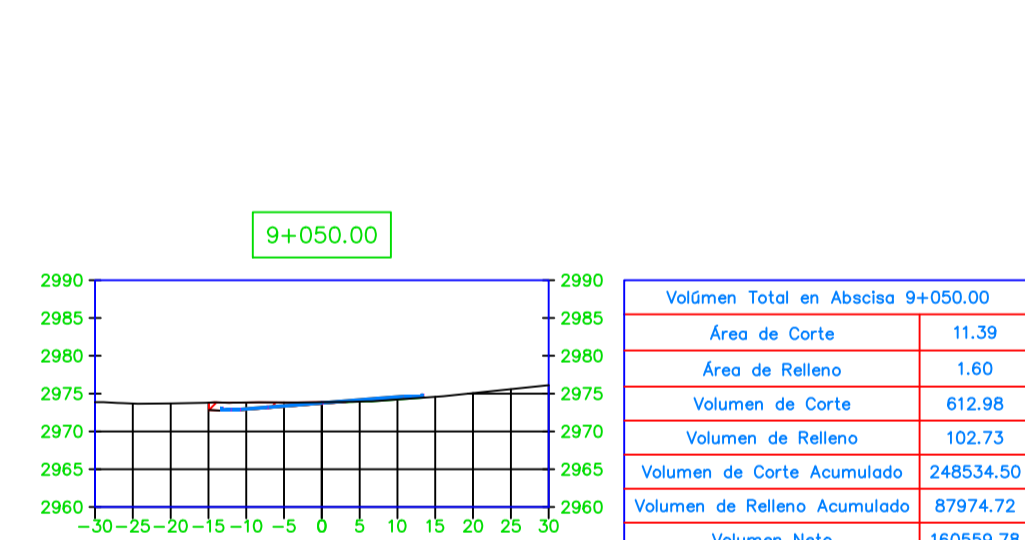
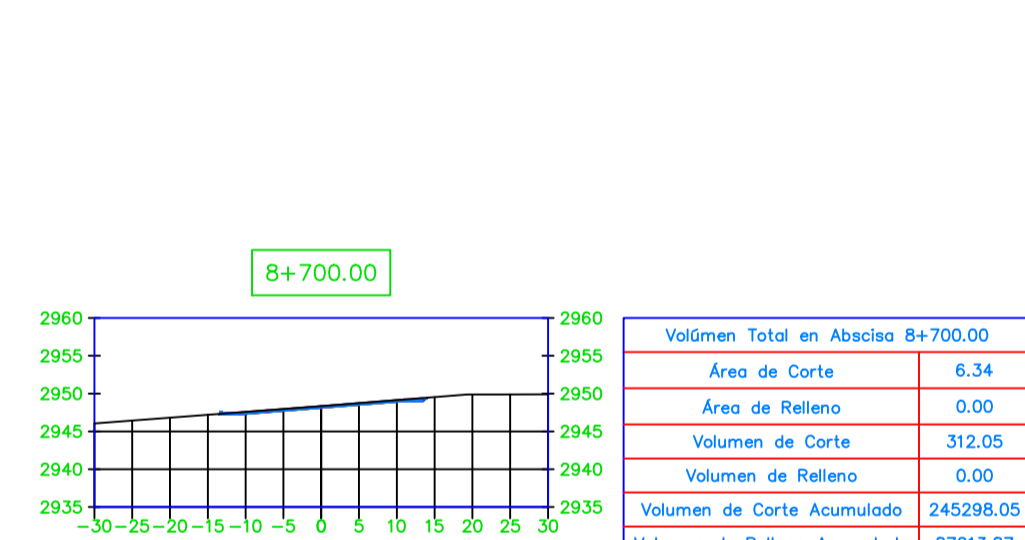
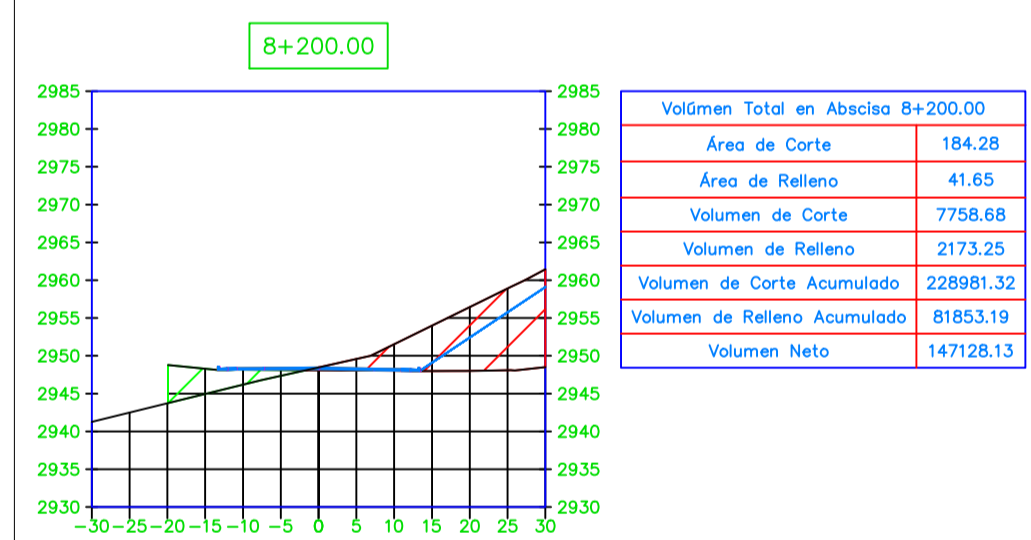
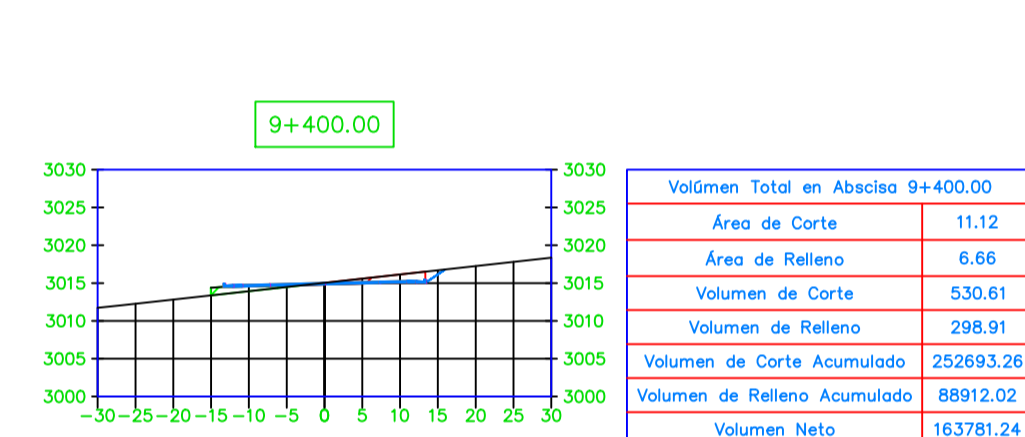
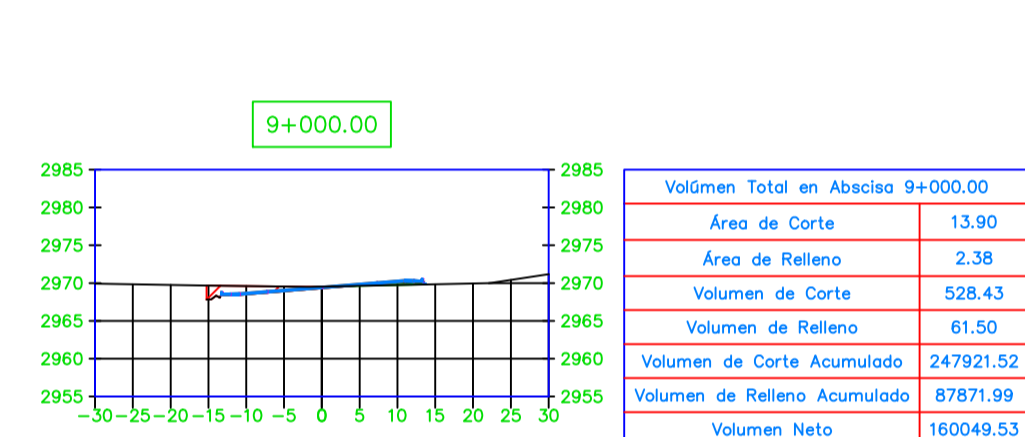
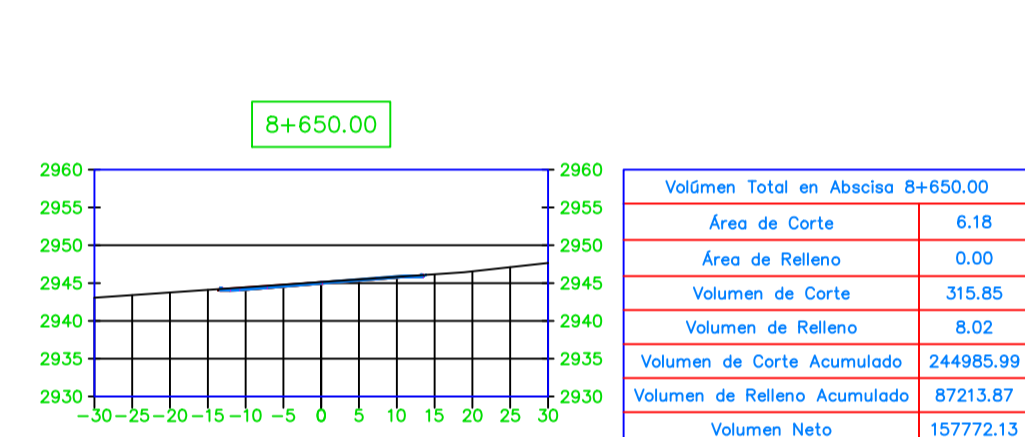
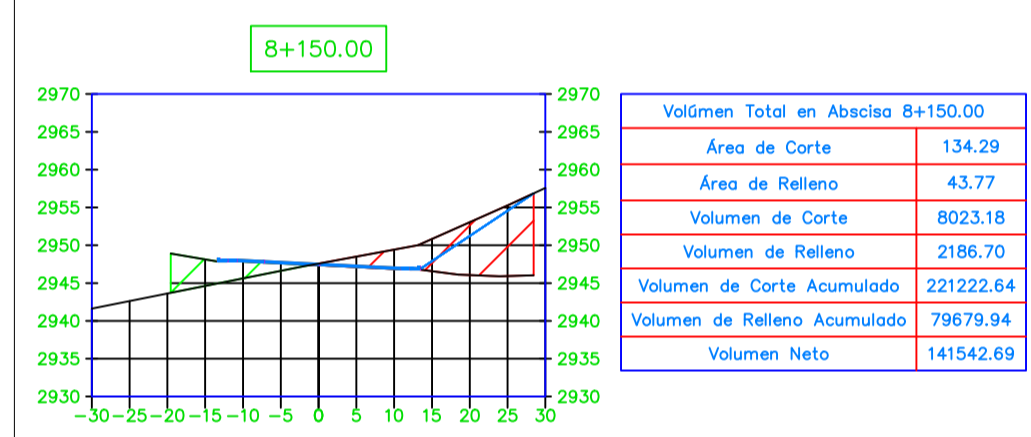
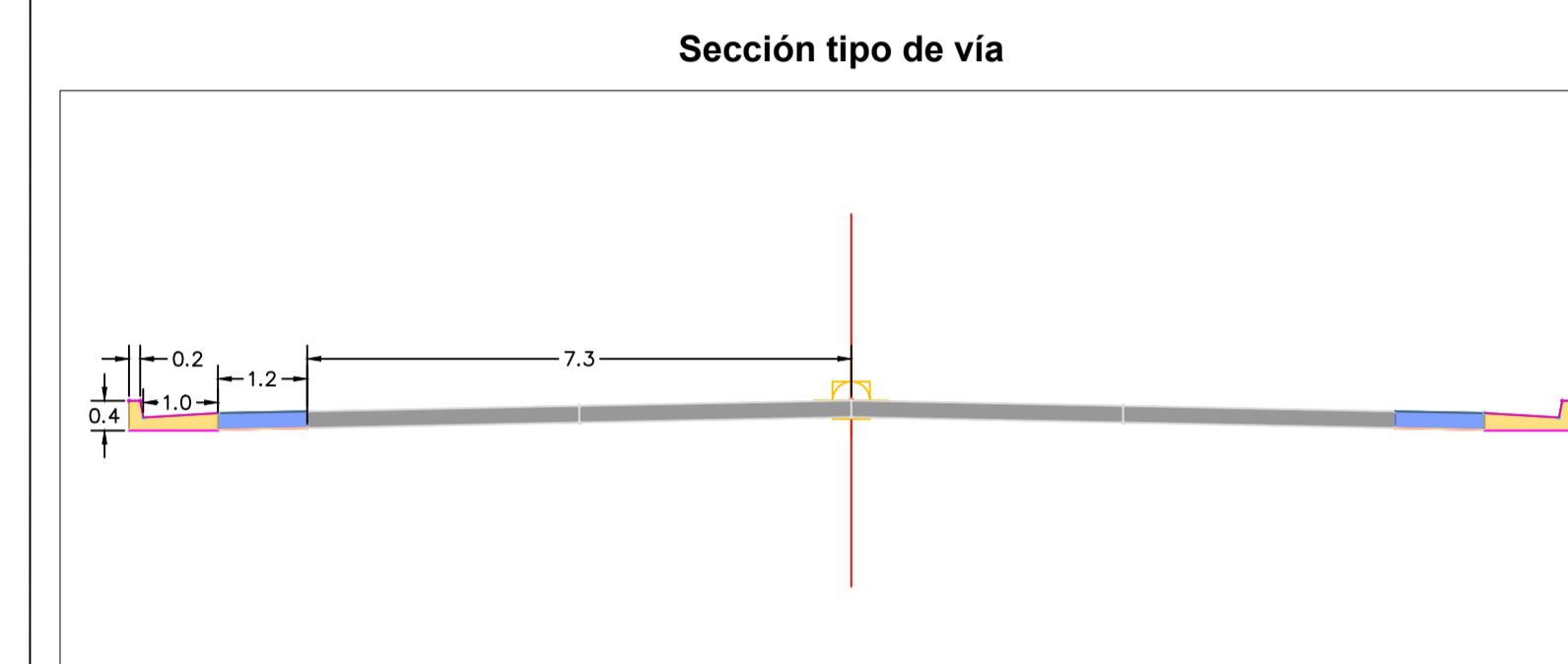
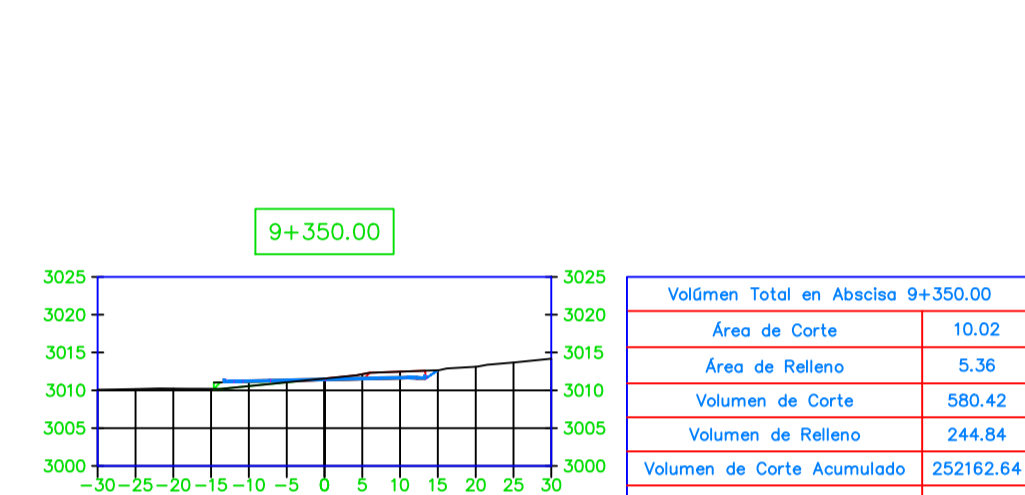
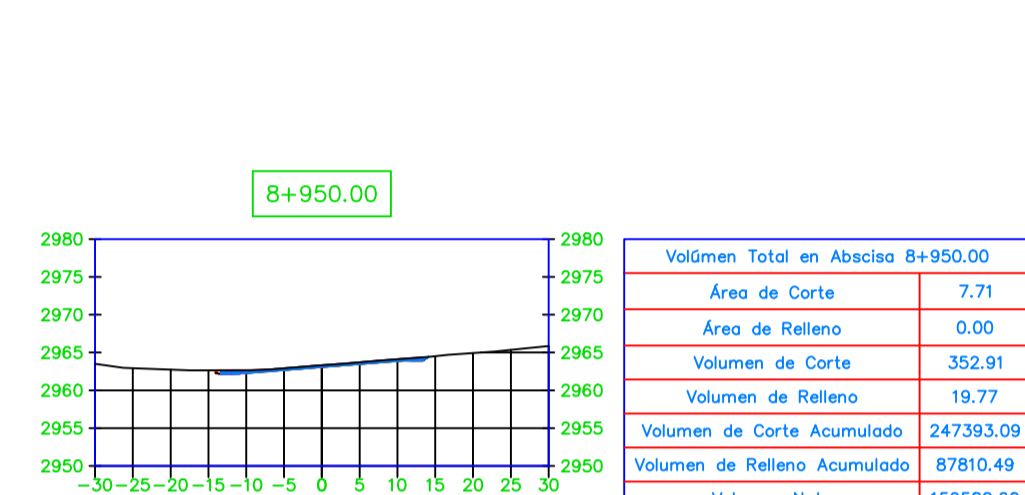
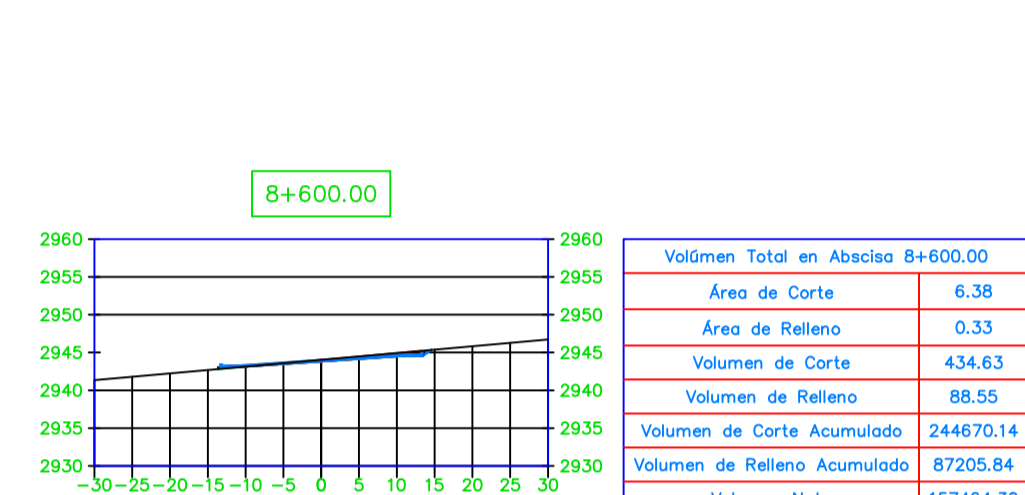
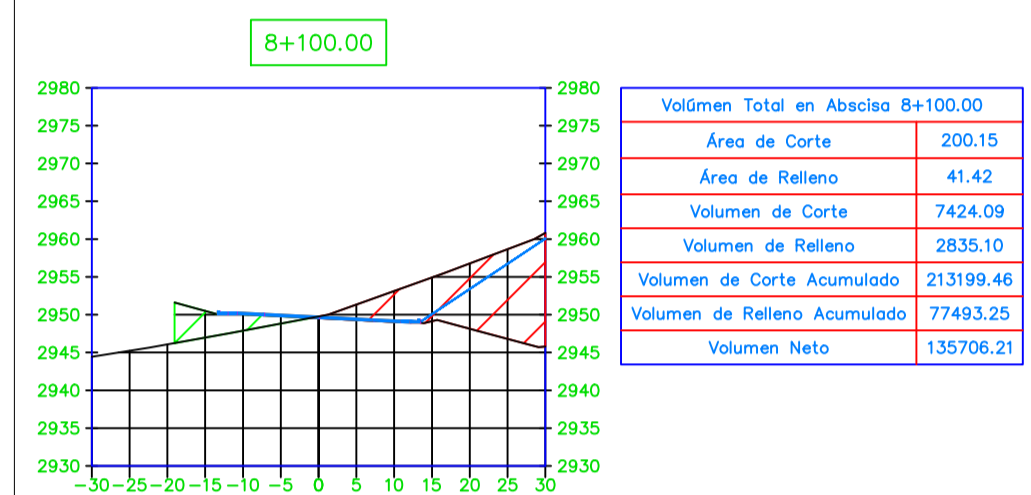
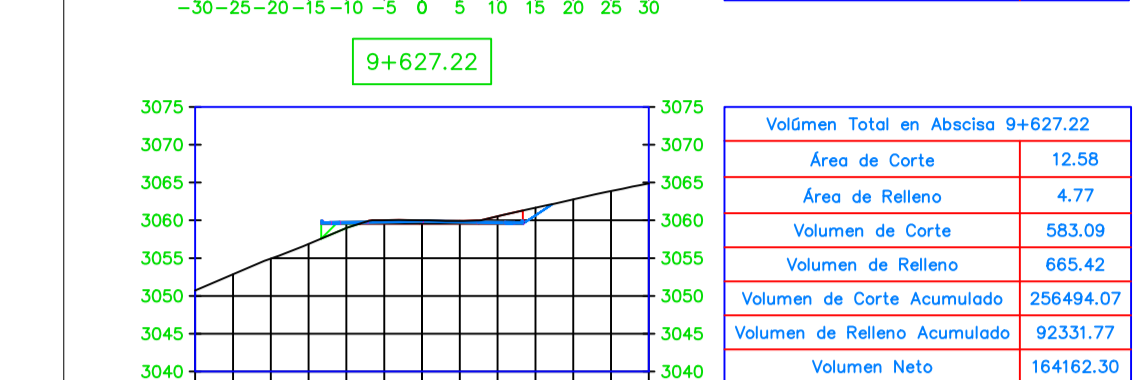
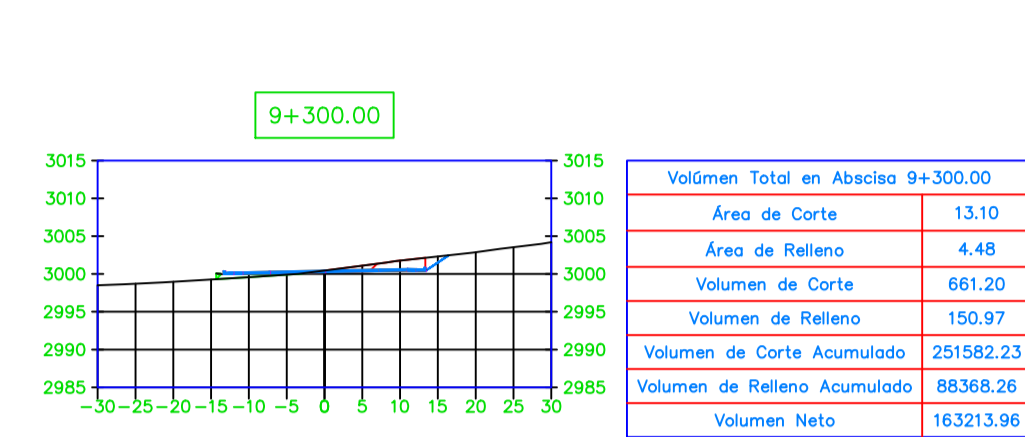
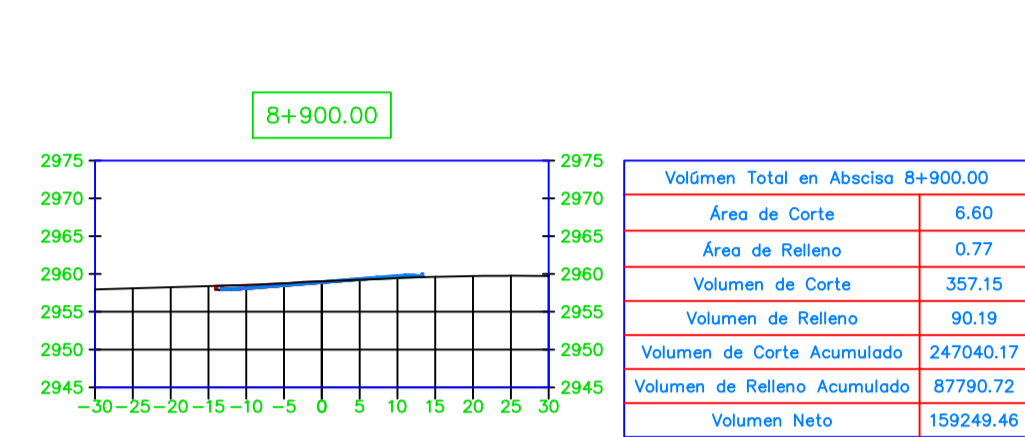
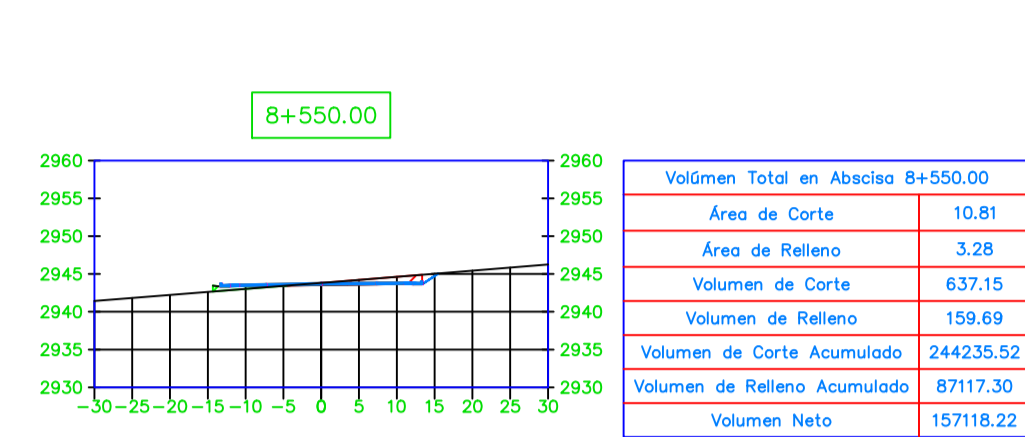
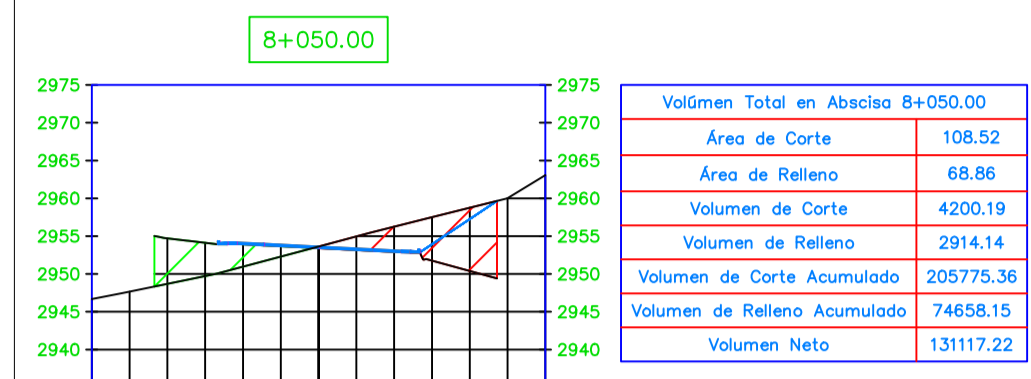
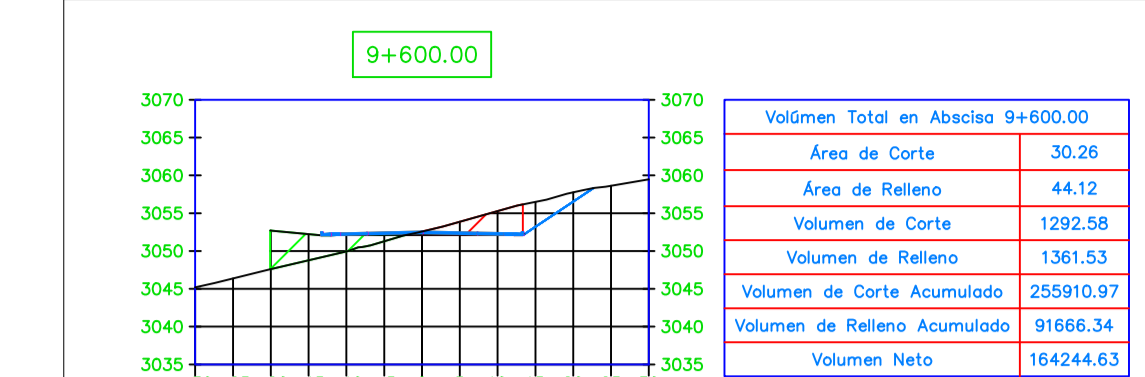
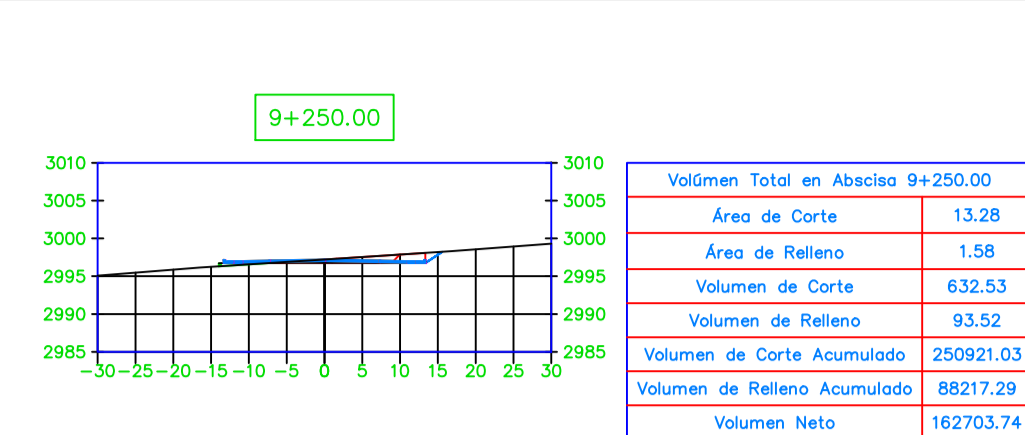
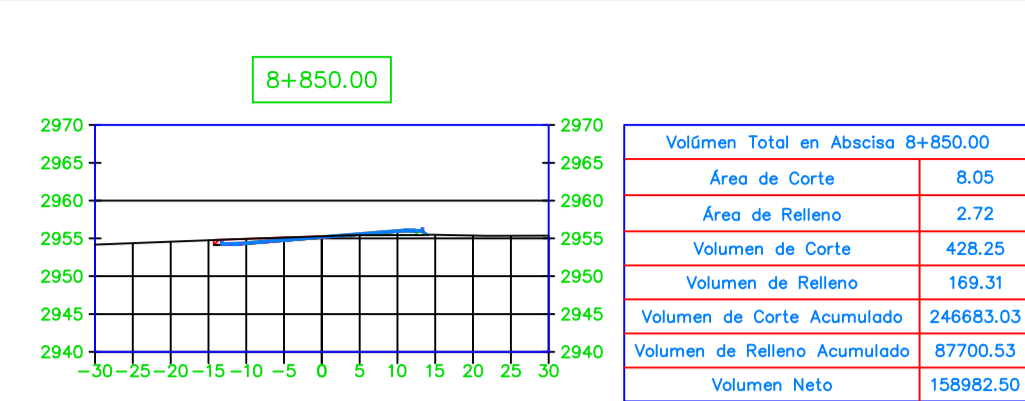
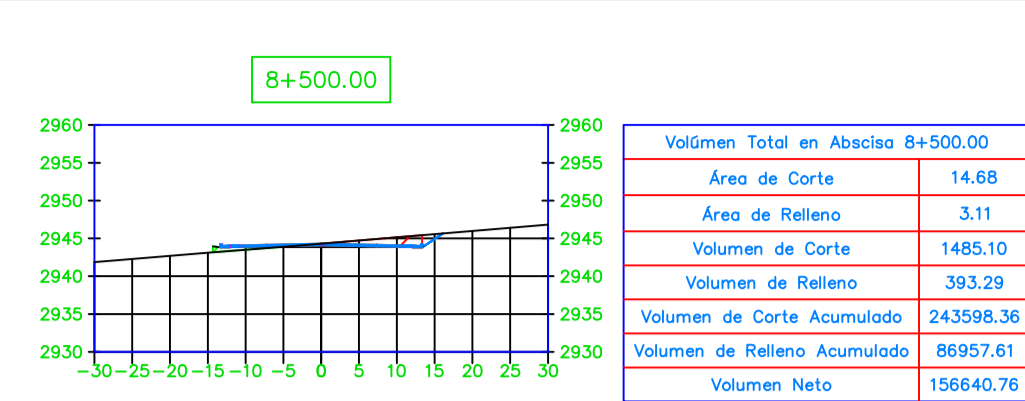
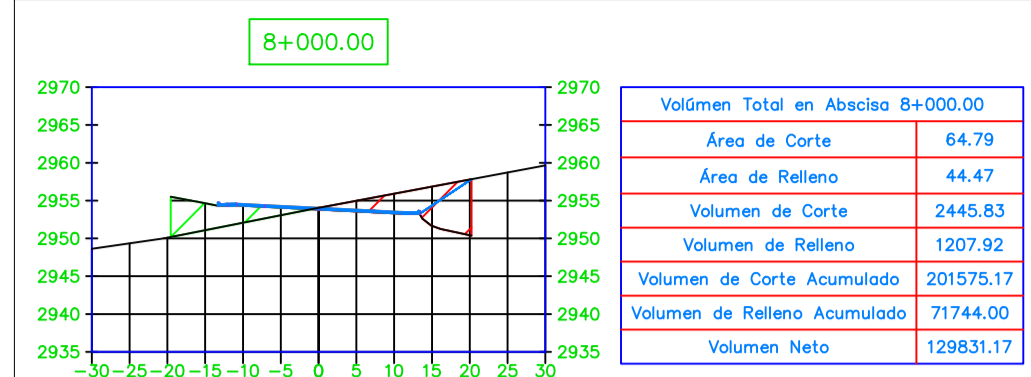
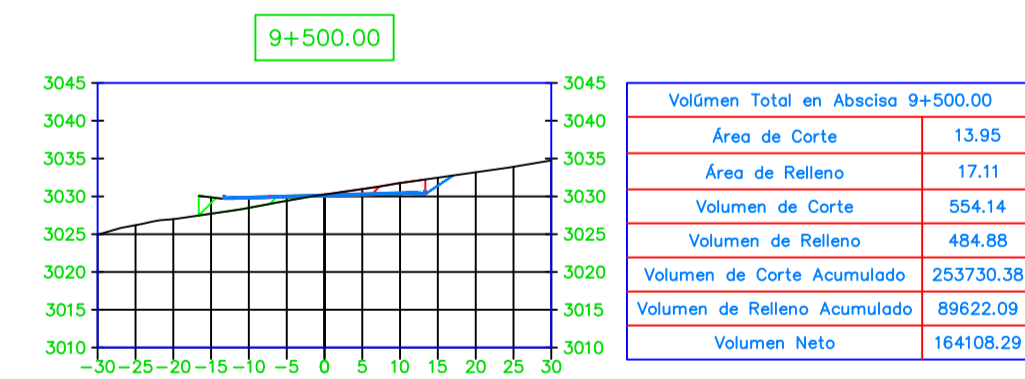
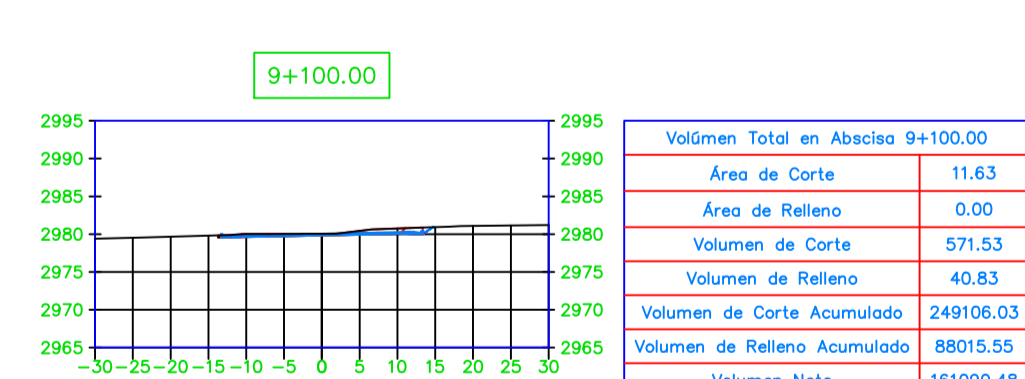
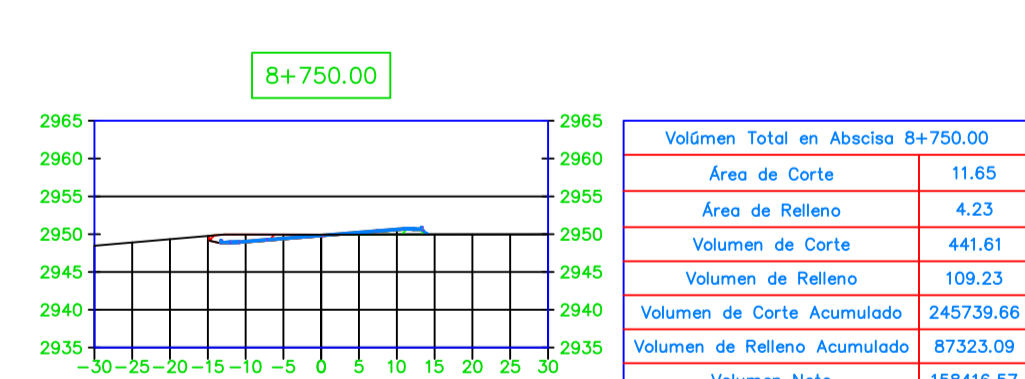
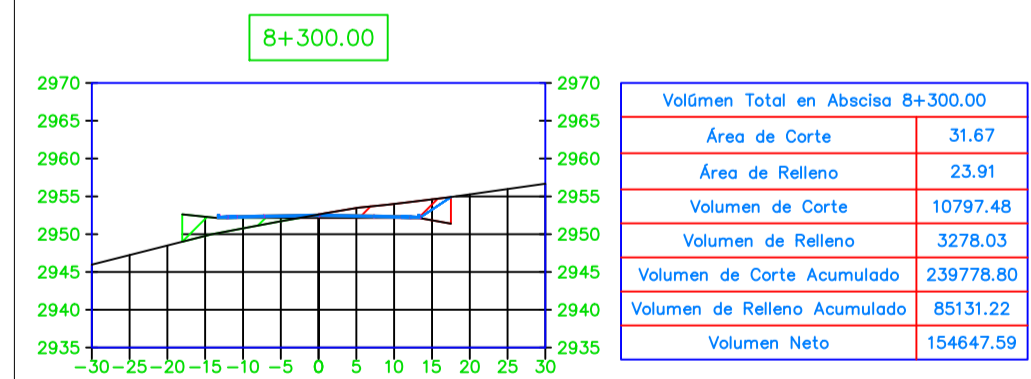


Tabla de Volúmenes Totales						
Abscisa	Área de Relleno	Área de Corte	Volumen de Relleno	Volumen de Corte	Volumen de Relleno Acumulado	Volumen de Corte Acumulado
8+000.00	44.47	64.79	1207.92	2445.83	71744.00	201575.17
8+050.00	68.86	108.52	2914.14	4200.19	74658.15	205775.36
8+100.00	41.42	200.15	2835.10	7424.09	77493.25	213199.46
8+150.00	43.77	134.29	2186.70	8023.18	79679.94	221222.64
8+200.00	41.65	184.28	2173.25	7758.68	81853.19	228981.32
8+300.00	23.91	31.67	3278.03	10797.48	85131.22	239778.80
8+400.00	4.75	15.02	1433.10	2334.46	86564.31	242133.27
8+500.00	3.11	14.68	393.29	1485.10	86957.61	243598.36
8+550.00	3.28	10.81	159.69	637.15	87117.30	244235.52
8+600.00	0.33	6.38	88.55	434.63	87205.84	244670.14
8+650.00	0.00	6.18	8.02	315.85	87213.87	244985.99
8+700.00	0.00	6.34	0.00	312.05	87213.87	245298.05
8+750.00	4.23	11.65	109.23	441.61	87323.09	245739.66
8+800.00	3.83	9.55	208.12	515.12	87531.22	246254.78
8+850.00	2.72	8.05	169.31	428.25	87700.53	246883.03
8+900.00	0.77	6.60	90.19	357.15	87790.72	247040.17
8+950.00	0.00	7.71	19.77	352.91	87810.49	247393.09
9+000.00	2.38	13.90	61.50	528.43	87871.99	247921.52
9+050.00	1.60	11.39	102.73	612.98	87974.72	248374.50
9+100.00	0.00	11.63	40.83	571.53	88015.55	249108.03
9+200.00	2.16	12.02	108.22	1182.47	88123.77	250288.50
9+250.00	1.58	13.28	93.52	632.53	88217.29	250921.03
9+300.00	4.48	11.10	150.97	661.20	88368.26	251582.23
9+350.00	5.36	10.02	244.84	580.42	88613.11	252162.64
9+400.00	6.66	11.12	298.91	530.61	88912.02	252993.28
9+450.00	2.40	8.13	225.20	482.98	89137.21	253730.38
9+500.00	17.11	13.95	484.88	554.14	89622.09	253730.38
9+550.00	10.34	21.44	682.72	888.01	90304.82	254618.39
9+600.00	44.12	30.26	1361.53	1292.58	91666.34	255910.97
9+627.22	4.77	12.58	665.42	583.09	92331.77	256494.07



# Diagrama de Masas



<b>UNIVERSIDAD DE CUENCA</b>			
<b>FACULTAD:</b> INGENIERÍA		<b>FECHA:</b> 22 de marzo del 2023	
<b>ESCUELA:</b> INGENIERÍA CIVIL		<b>ESCALAS:</b> E.H.: 1:1000 E.V.: 1:100	<b>LAMINA:</b>  <b>21/21</b>
<b>DIAGRAMA DE MASAS DEL PROYECTO</b>			
<b>REALIZADO POR:</b> Santiago Moscoso Sebastian Ordoñez		<b>PROFESOR:</b> Ing. Juan Avilés	
<b>CONTIENE:</b> Diagrama de masas del proyecto		<b>OBSERVACIONES:</b>	