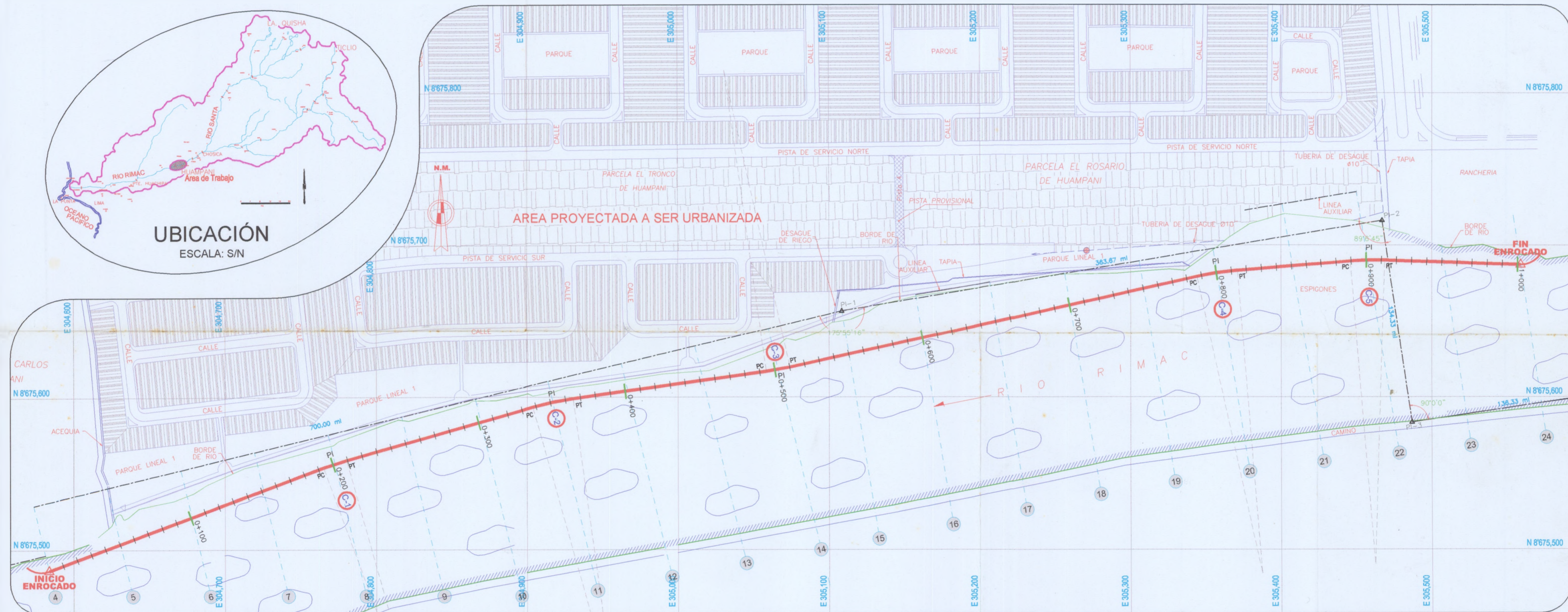


DEFENSA RIBEREÑA



UBICACIÓN
ESCALA: S/N



PLANTA
ESCALA: 1/2000

NOTA:
- Secciones a cada 50 m

ELEMENTOS DE CURVA

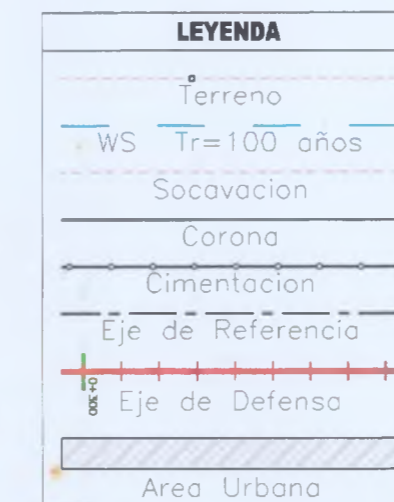
N°c	Sentido	Angulo	Radio	TG	LC	PC	PI	PT	Coordenadas PI	
									Este	Norte
1	D	4°35'05"	200	8.01	16.00	0+193.45	0+201.45	0+209.45	304772.540	8675556.459
2	D	7°49'40"	200	13.68	27.32	0+337.88	0+351.55	0+365.21	304917.016	8675597.238
3	I	4°31'29"	200	7.90	15.80	0+494.32	0+502.22	0+510.12	305066.274	8675618.040
4	D	7°47'00"	200	13.60	27.17	0+786.92	0+800.50	0+814.09	305357.555	8675682.398
5	D	6°29'56"	200	11.36	22.69	0+889.46	0+900.81	0+912.15	305457.559	8675690.577

METRADOS		Unidad	METRADO
MOVIMIENTO DE TIERRAS			
3.30	EXCAVACION NO CLASIFICADA	M3	7978.87
3.40	EXCAVACION NO CLASIFICADA (BAJO AGUA)	M3	11433.81
3.50	RELLENO CON MATERIAL DE RIO EN TERRAPLEN	M3	2572.74
ENROCADO			
4.10	EXTRACCION DE CANTERA (ROCA DE BANCO)	M3	23965.00
4.20	SELECCION, CARGO Y TRANSPORTE	M3	26840.80
4.30	DESCARGA Y COLOCACION	M3	16775.50
FILTRO			
6.00	GEOTEXTIL	M2	14052.75

Datos Generales

COORDENADAS DE LA DEFENSA
 Inicio: Este : 304583.656 Norte : 8675486.413
 Fin: Este : 305558.776 Norte : 8675687.355
 LONGITUD DE DEFENSA
 Longitud total: 1002 m

NOTA:
 - Eficiencia de Contera = 70%
 - Esponjamiento = 60%



UNIVERSIDAD NACIONAL DE INGENIERIA
 FACULTAD DE INGENIERIA CIVIL
 TITULACION PROFESIONAL
 ESCUELA PROFESIONAL

ESTUDIO:
DISEÑO DE DEFENSA RIBEREÑA PARA LA URBANIZACIÓN SOL DE HUAMPANI MARGEN DERECHA DEL RÍO RIMAC
 PLANTA y PERFIL - ENROCADO

ASESOR: Ph.D JULIO KUROIWA ZEVALLOS

PLANO N°:

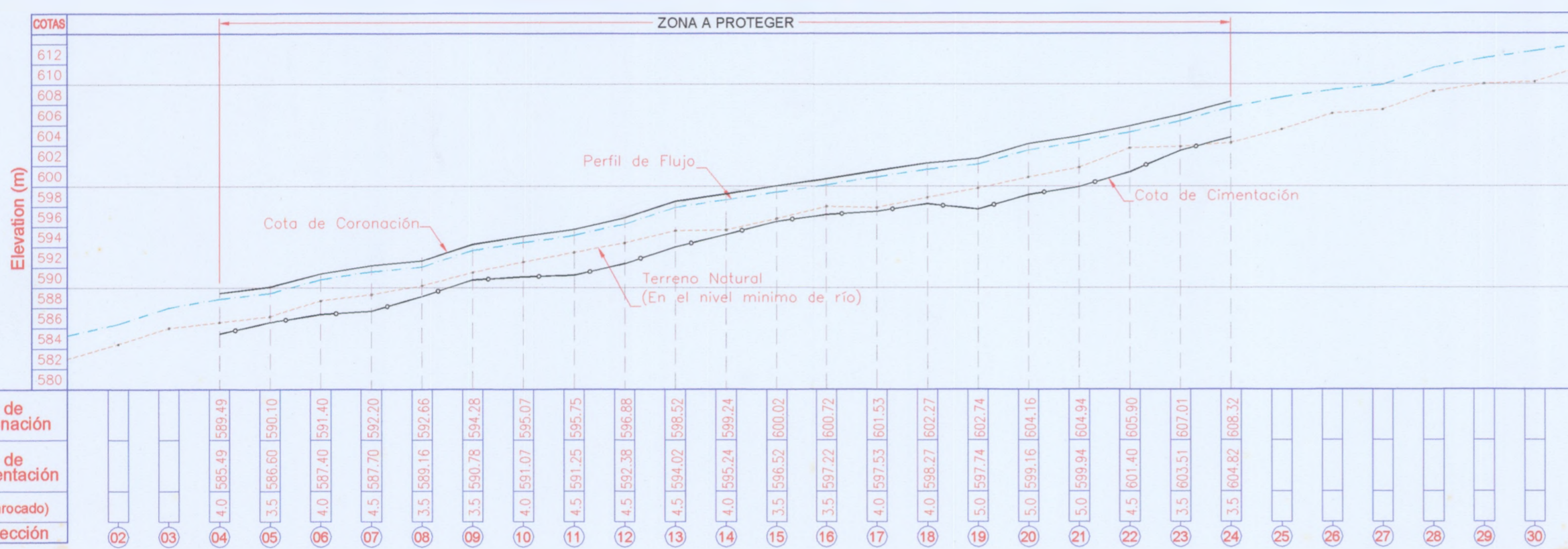
BACH: Ing. JHONNY CHARLES ACHIC CHATA

01

ESCALA: INDICADA
 0 100 500 1000

FECHA:
 ABRIL 2004

Defensa Ribereña Plan: Analisis de Flujo

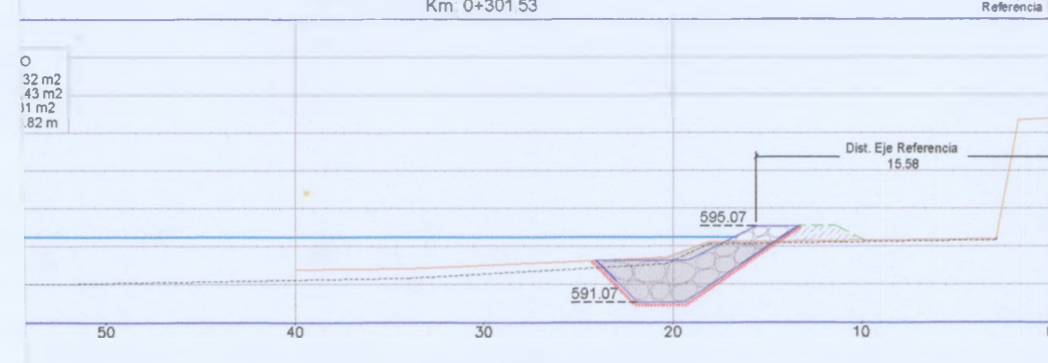


PERFIL
ESCALA: 1/5000

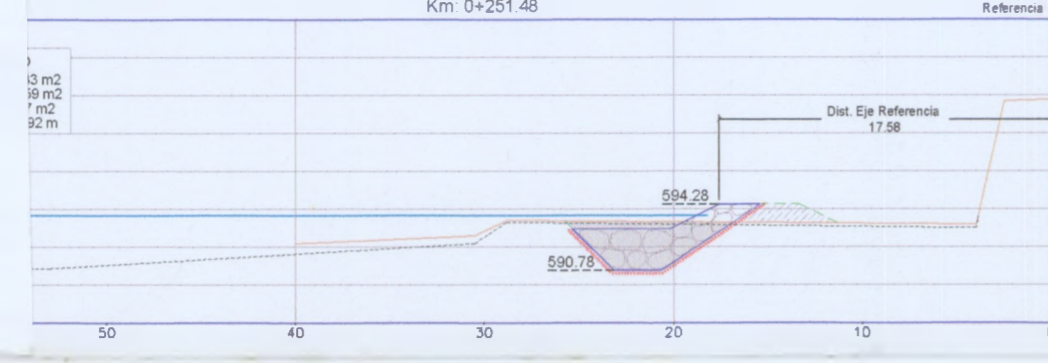
Cota de Coronación	Cota de Cimentación	H (enrocado)	N° Sección
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591.40	591.40	4.0	04
592.20	592.20	4.5	05
592.66	592.66	3.5	06
594.18	594.18	3.5	07
595.07	595.07	4.0	08
595.75	595.75	4.5	09
596.88	596.88	4.5	10
598.52	598.52	4.5	11
599.24	599.24	4.0	12
600.02	600.02	3.5	13
600.72	600.72	3.5	14
601.53	601.53	4.0	15
602.27	602.27	4.0	16
602.74	602.74	5.0	17
604.16	604.16	5.0	18
604.94	604.94	5.0	19
605.90	605.90	4.5	20
607.01	607.01	3.5	21
608.32	608.32	3.5	22
			23
			24
			25
			26
			27
			28
			29
			30

DEFENSA RIBEREÑA

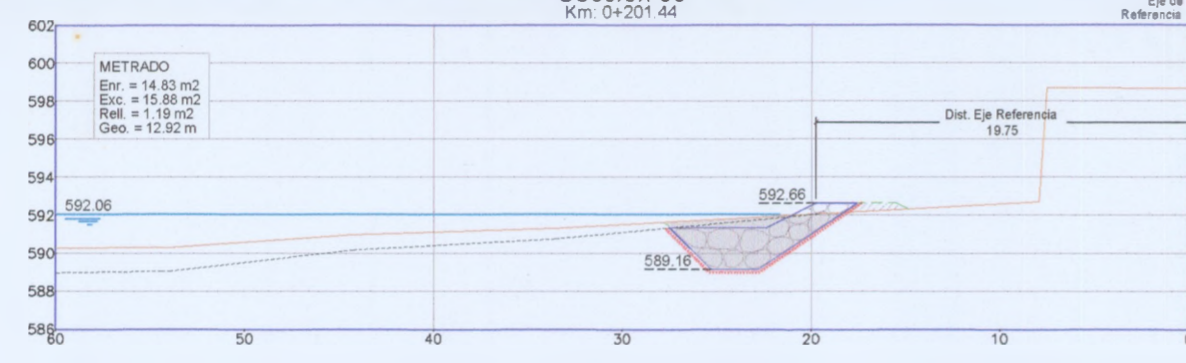
Seccion 10
Km. 0+301.53



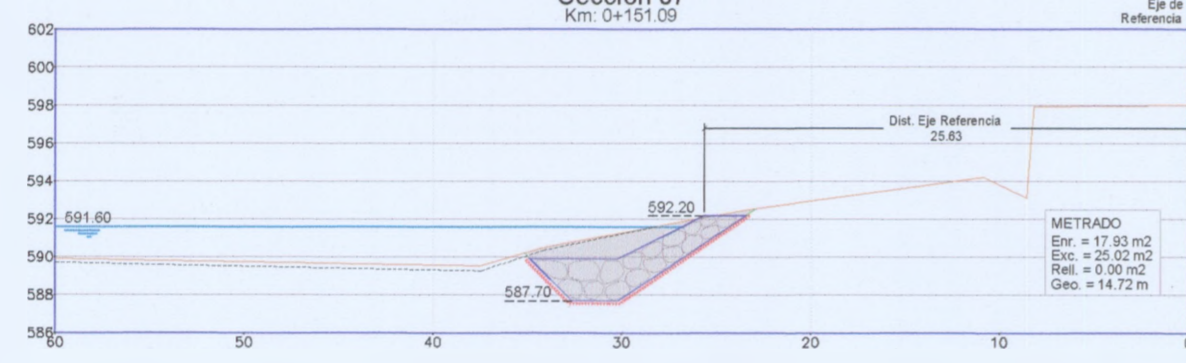
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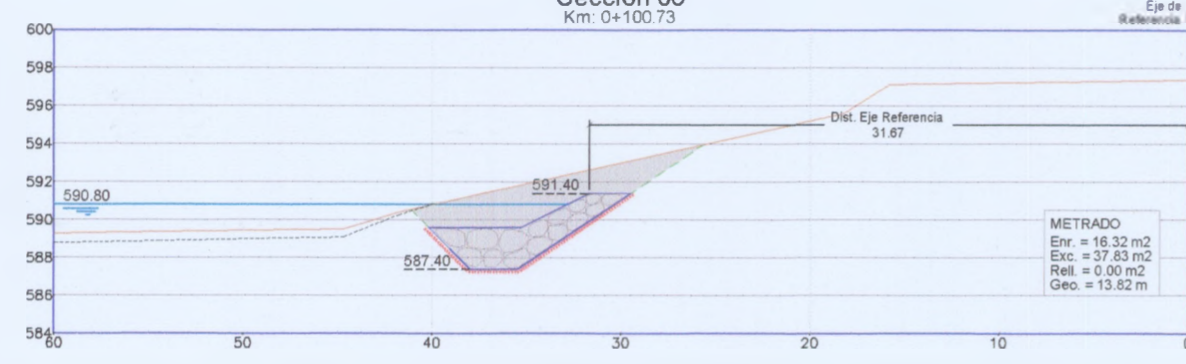
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Km. 0+201.44



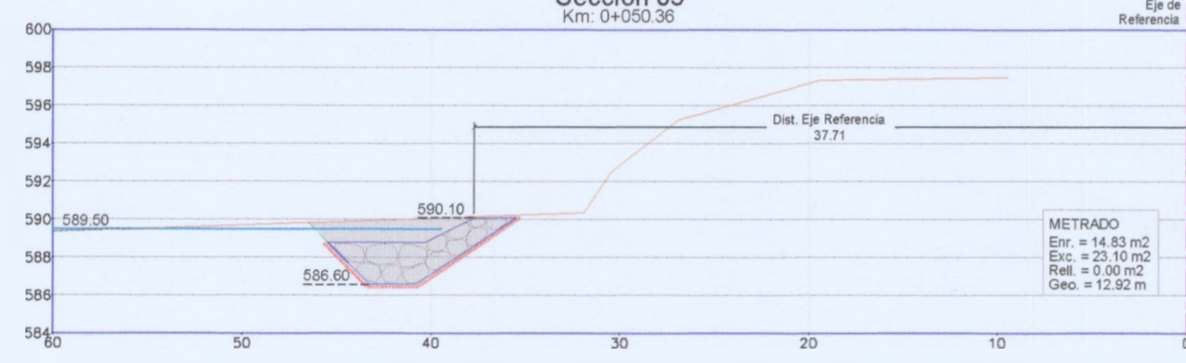
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Km. 0+151.09



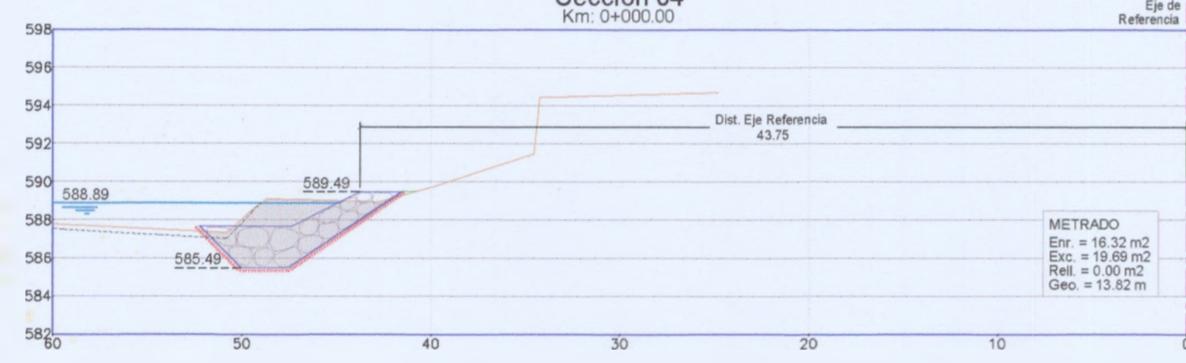
Seccion 06
Km. 0+101.73



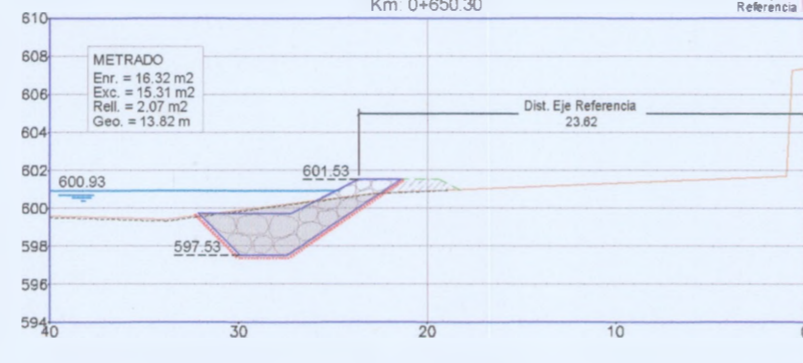
Seccion 05
Km. 0+050.36



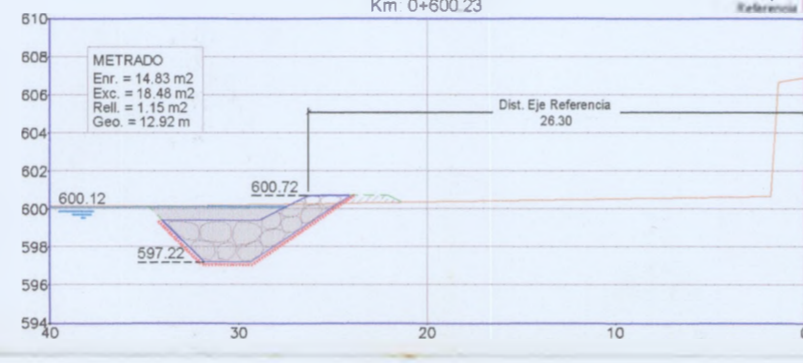
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Km. 0+000.00



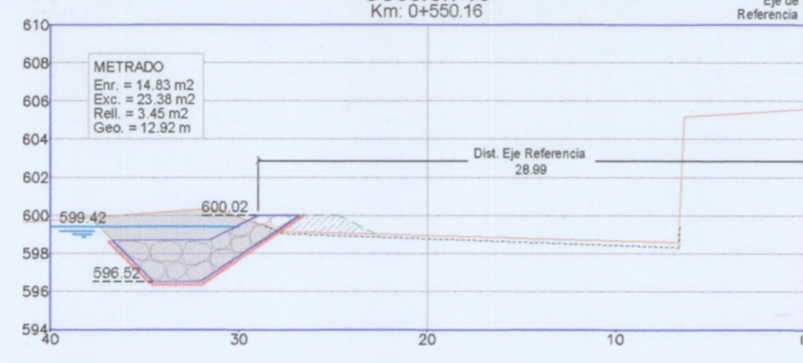
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Km. 0+650.30



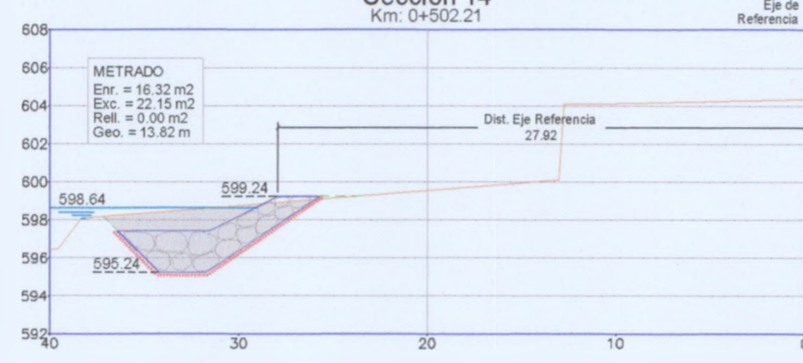
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Km. 0+600.23



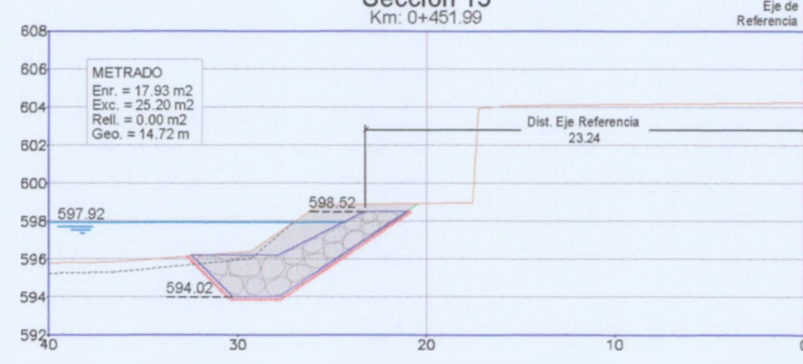
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Km. 0+550.16



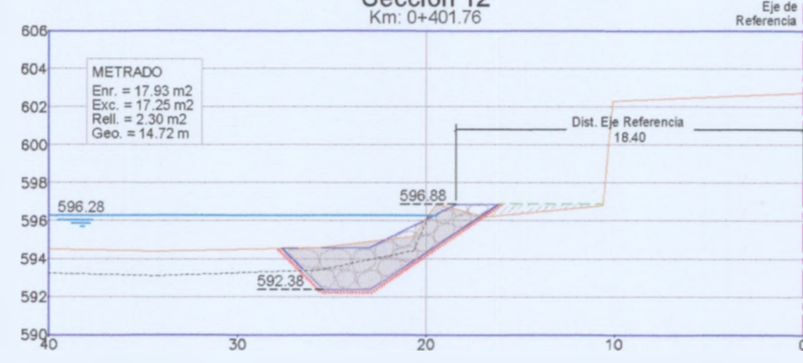
Seccion 14
Km. 0+502.21



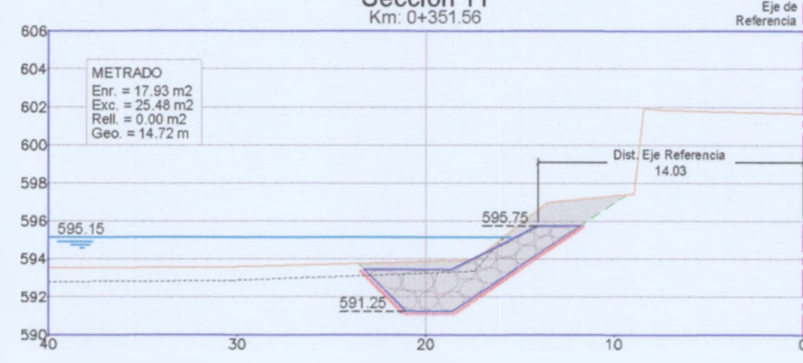
Seccion 13
Km. 0+451.99



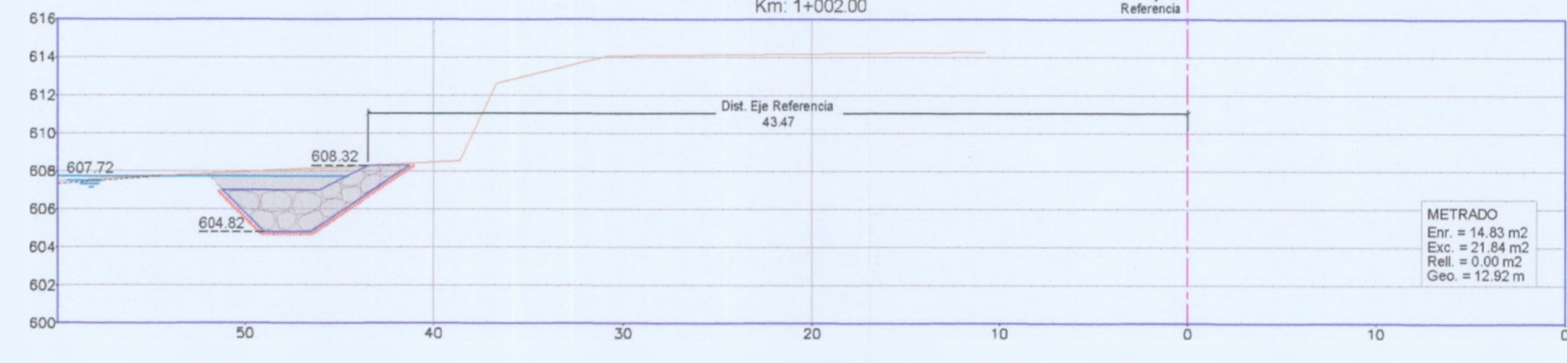
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Km. 0+401.78



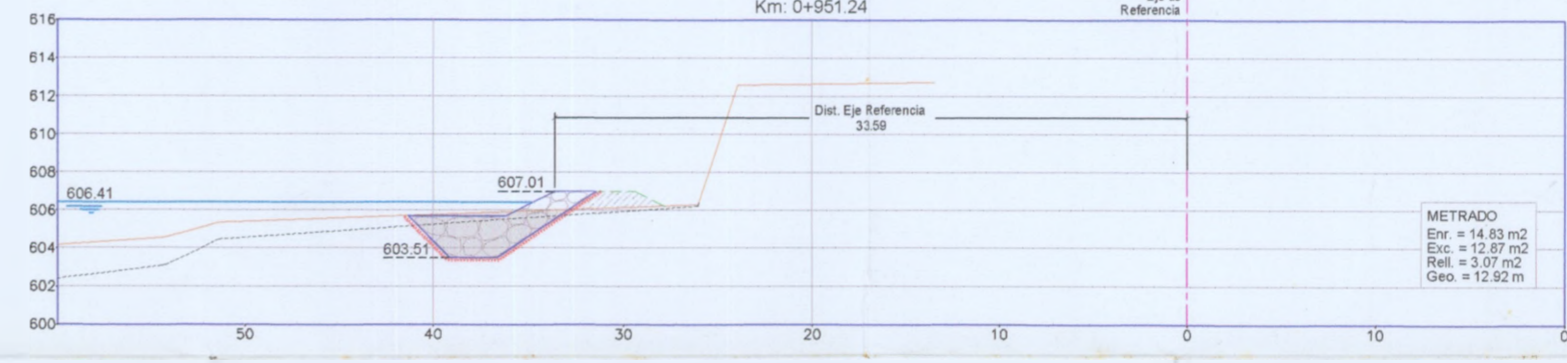
Seccion 11
Km. 0+351.56



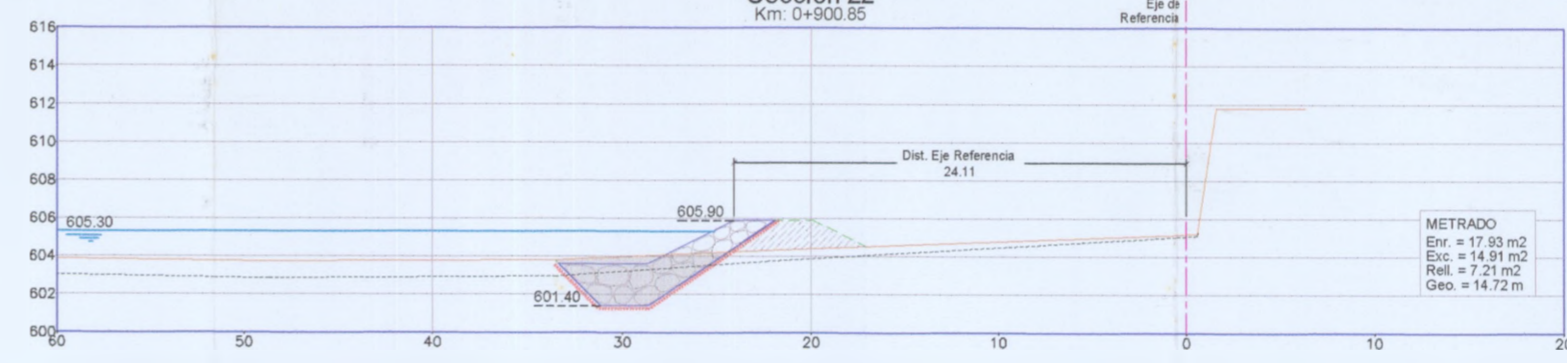
Seccion 24
Km. 1+002.00



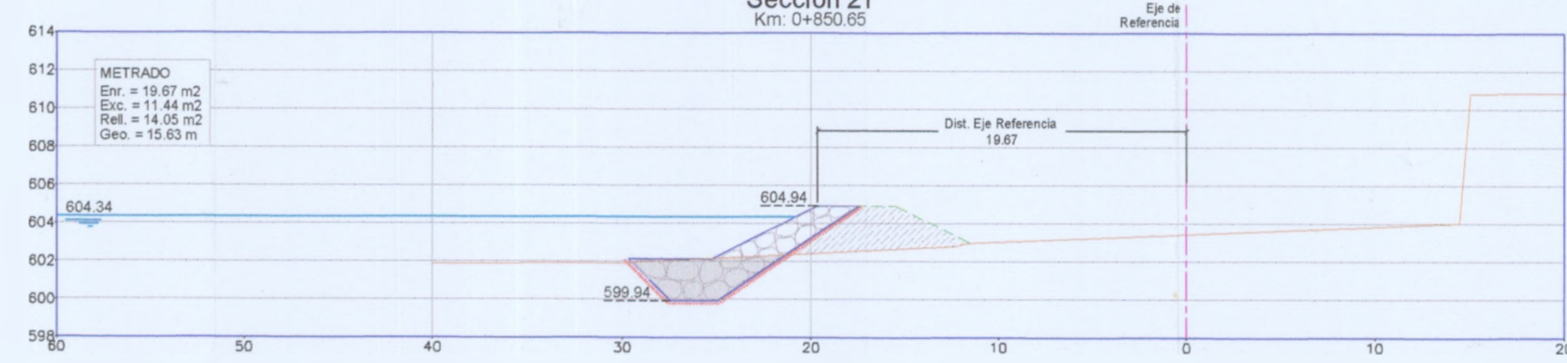
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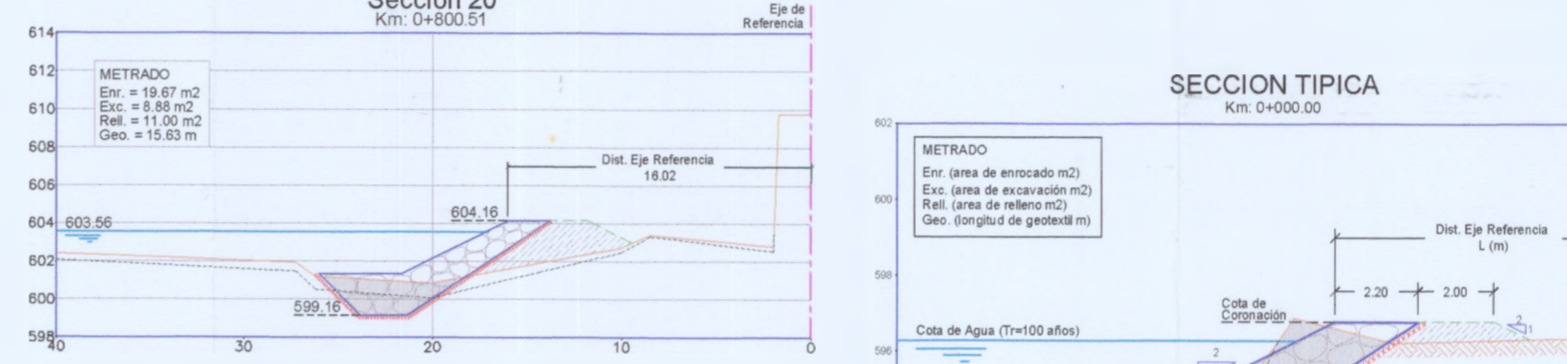
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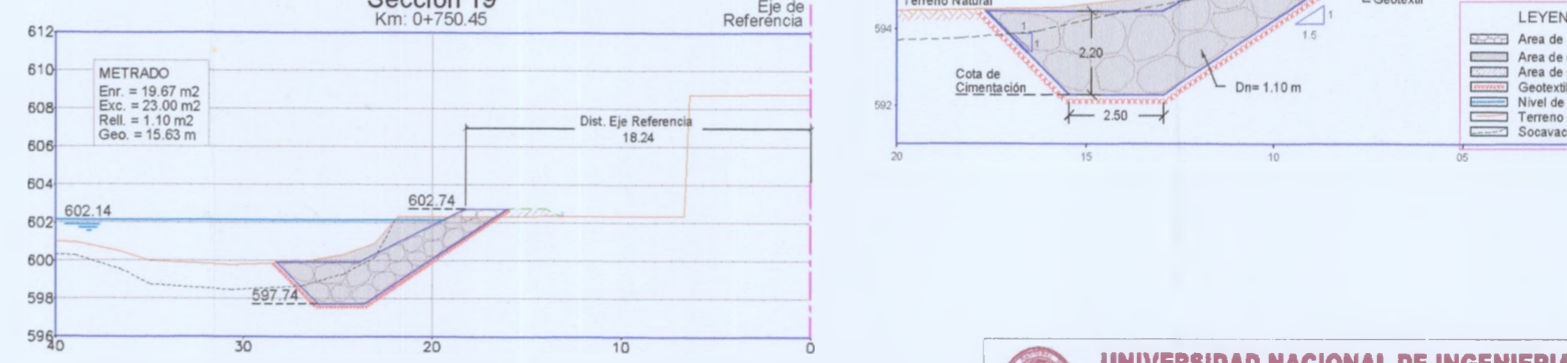
Seccion 21
Km. 0+850.65



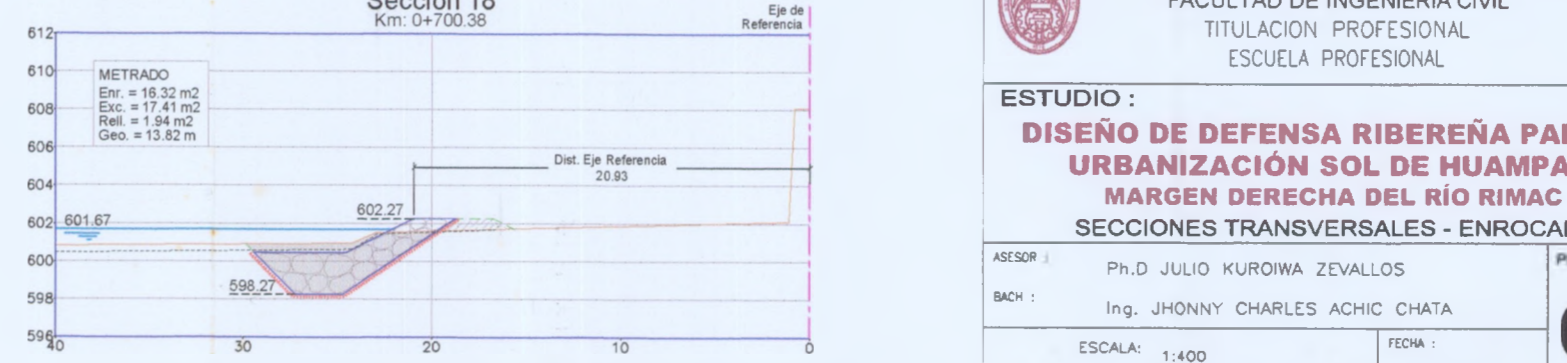
Seccion 20
Km. 0+800.51



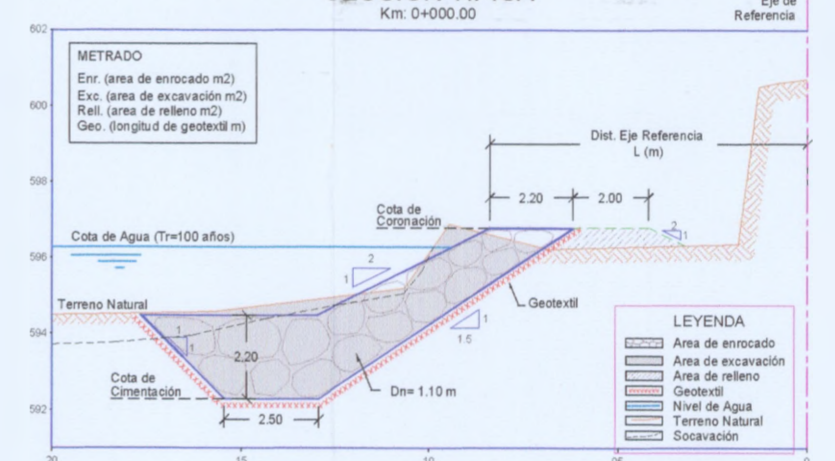
Seccion 19
Km. 0+750.45



Seccion 18
Km. 0+700.38



SECCION TIPICA
Km. 0+000.00



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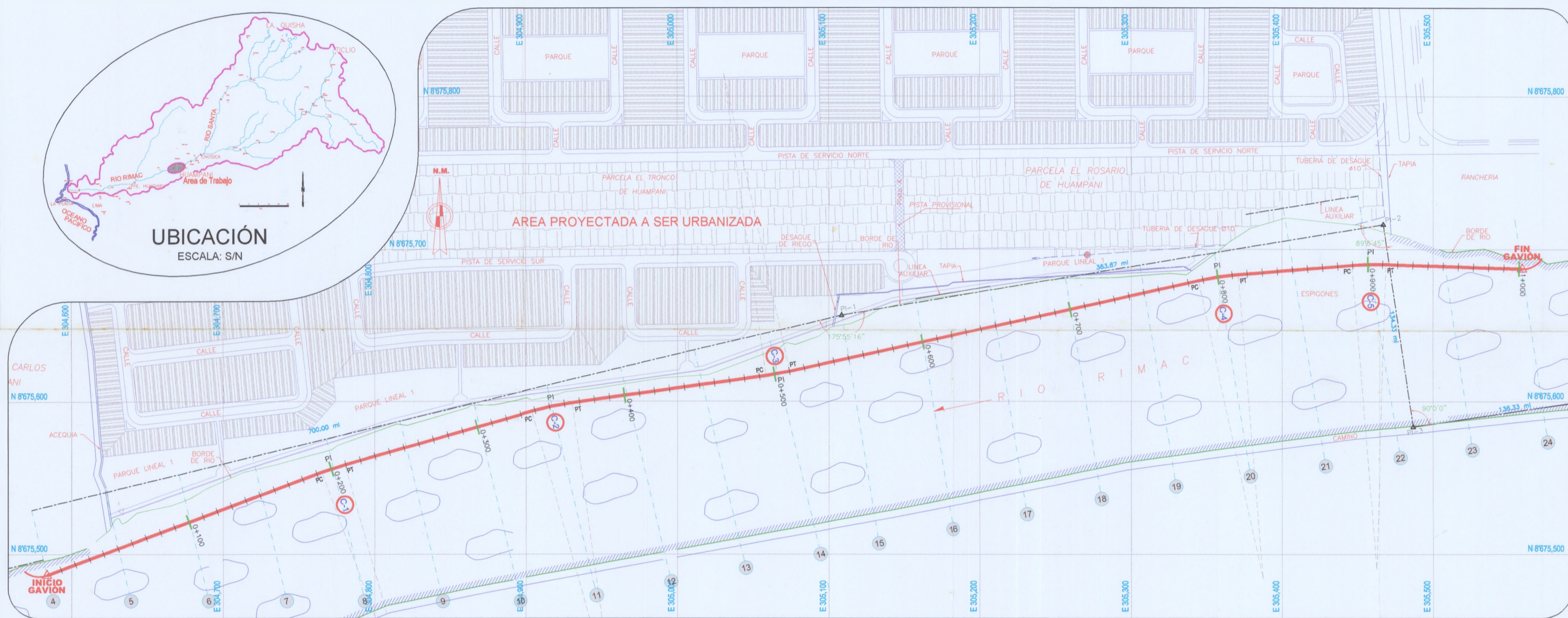
ESTUDIO:
DISEÑO DE DEFENSA RIBEREÑA PARA LA
URBANIZACIÓN SOL DE HUAMPANI
MARGEN DERECHA DEL RIO RIMAC
SECCIONES TRANSVERSALES - ENROCADO

ASESOR: Ph.D JULIO KURIWA ZEVALLOS
 BACH: Ing. JHONNY CHARLES ACHIC CHATA

ESCALA: 1:400
 FECHA: ABRIL 2004

PLANO N°: **02**

DEFENSA RIBEREÑA



PLANTA
ESCALA: 1/2000

NOTA:
- Secciones a cada 50 m

ELEMENTOS DE CURVA

N°c	Sentido	Angulo	Radio	TG	LC	PC	PI	PT	Coordenadas PI	
									Este	Norte
1	D	4°35'05"	200	8.01	16.00	0+193.45	0+201.45	0+209.45	304772.540	8675556.459
2	D	7°49'40"	200	13.68	27.32	0+337.88	0+351.55	0+365.21	304917.016	8675597.238
3	I	4°31'29"	200	7.90	15.80	0+494.32	0+502.22	0+510.12	305066.274	8675618.040
4	D	7°47'00"	200	13.60	27.17	0+786.92	0+800.50	0+814.09	305357.555	8675682.398
5	D	6°29'56"	200	11.36	22.69	0+889.46	0+900.81	0+912.15	305457.559	8675690.577

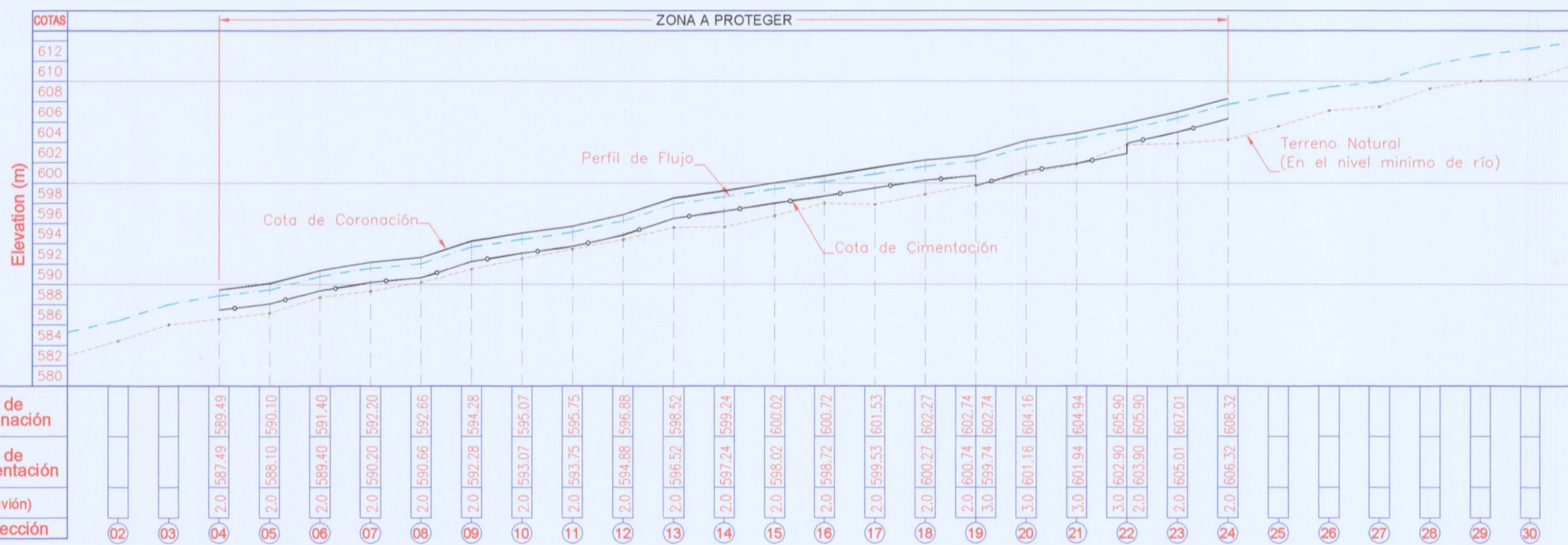
METRADOS

CODIGO	DESCRIPCION	Unidad	METRADO
MOVIMIENTO DE TIERRAS			
3.30	EXCAVACION NO CLASIFICADA	M3	6735.16
3.60	RELLENO P/ESPALDAR DE GAVION C/MAT. PROPIO	M3	2499.00
GAVION			
5.10	GAVION CAJA 5x1x1 m MALLA 10x12 PVC	M3	1302.80
5.20	GAVION CAJA 5x1.5x1 m MALLA 10x12 PVC	M3	1002.00
5.30	COLCHON RENO 5x2x0.3 m MALLA 6x8 PVC	M2	2004.00
FILTRO			
6.00	GEOTEXTIL	M2	5736.60

Datos Generales

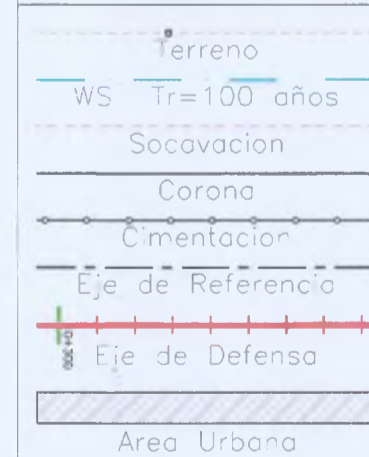
COORDENADAS DE LA DEFENSA
 Inicio Este: 304583.656 Norte: 8675486.413
 Fin Este: 305558.776 Norte: 8675687.355
LONGITUD DE DEFENSA
 Longitud Total: 1002 m

Defensa Ribereña Plan: Analisis de Flujo



PERFIL
ESCALA: 1/5000

LEYENDA



UNIVERSIDAD NACIONAL DE INGENIERIA
 FACULTAD DE INGENIERIA CIVIL
 TITULACION PROFESIONAL
 ESCUELA PROFESIONAL

ESTUDIO:
DISEÑO DE DEFENSA RIBEREÑA PARA LA URBANIZACIÓN SOL DE HUAMPANI MARGEN DERECHA DEL RÍO RIMAC
PLANTA y PERFIL - GAVIÓN

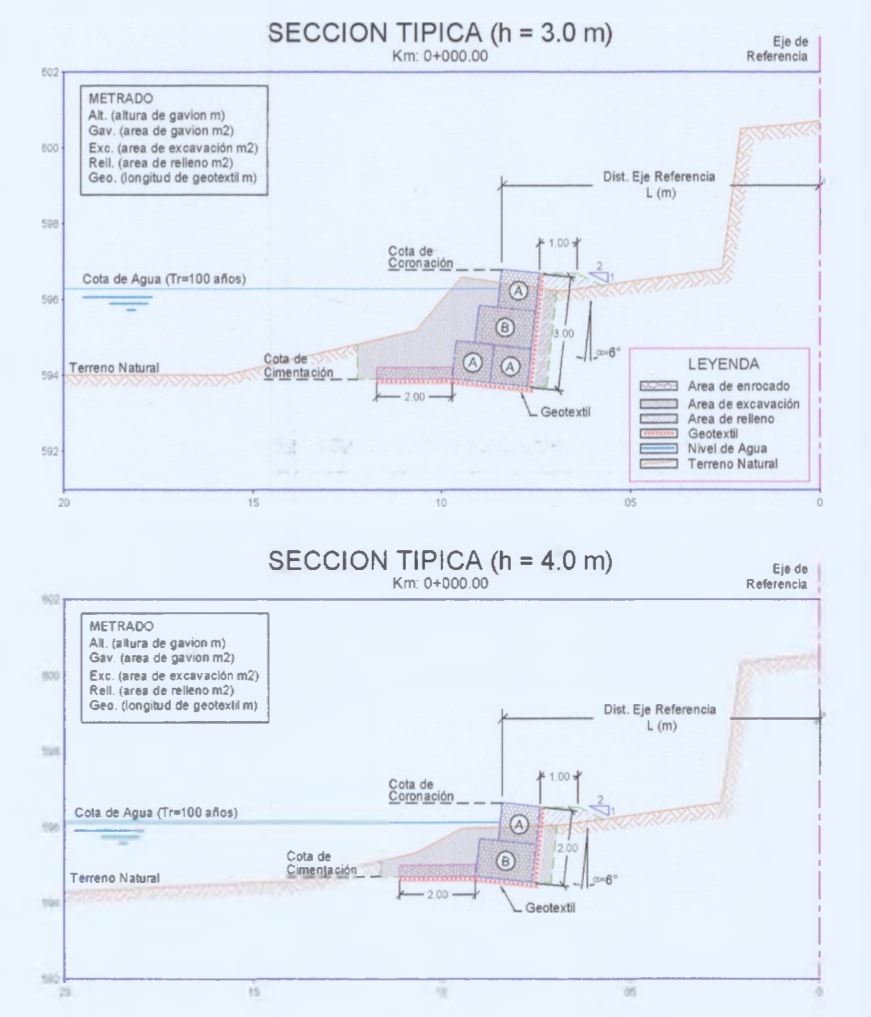
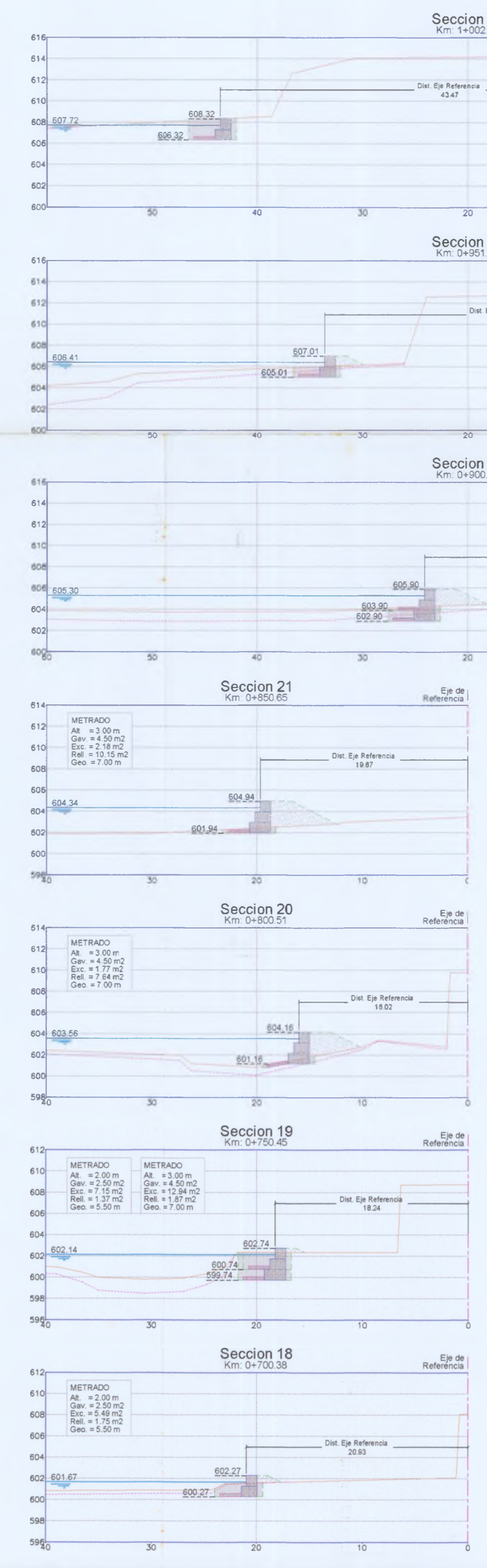
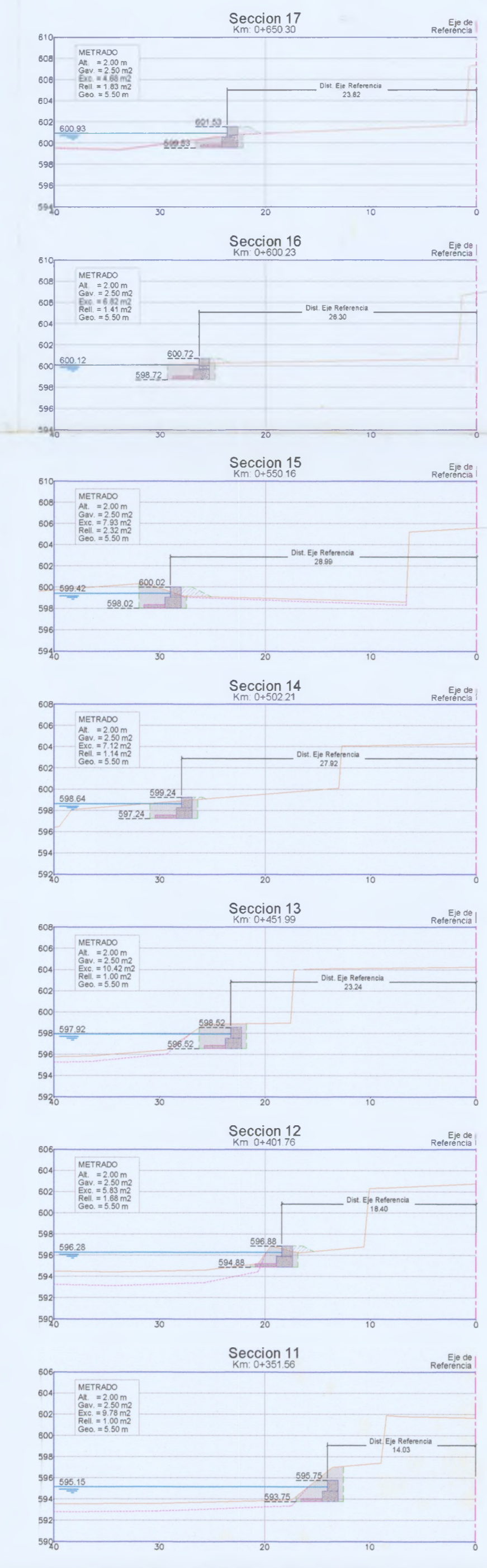
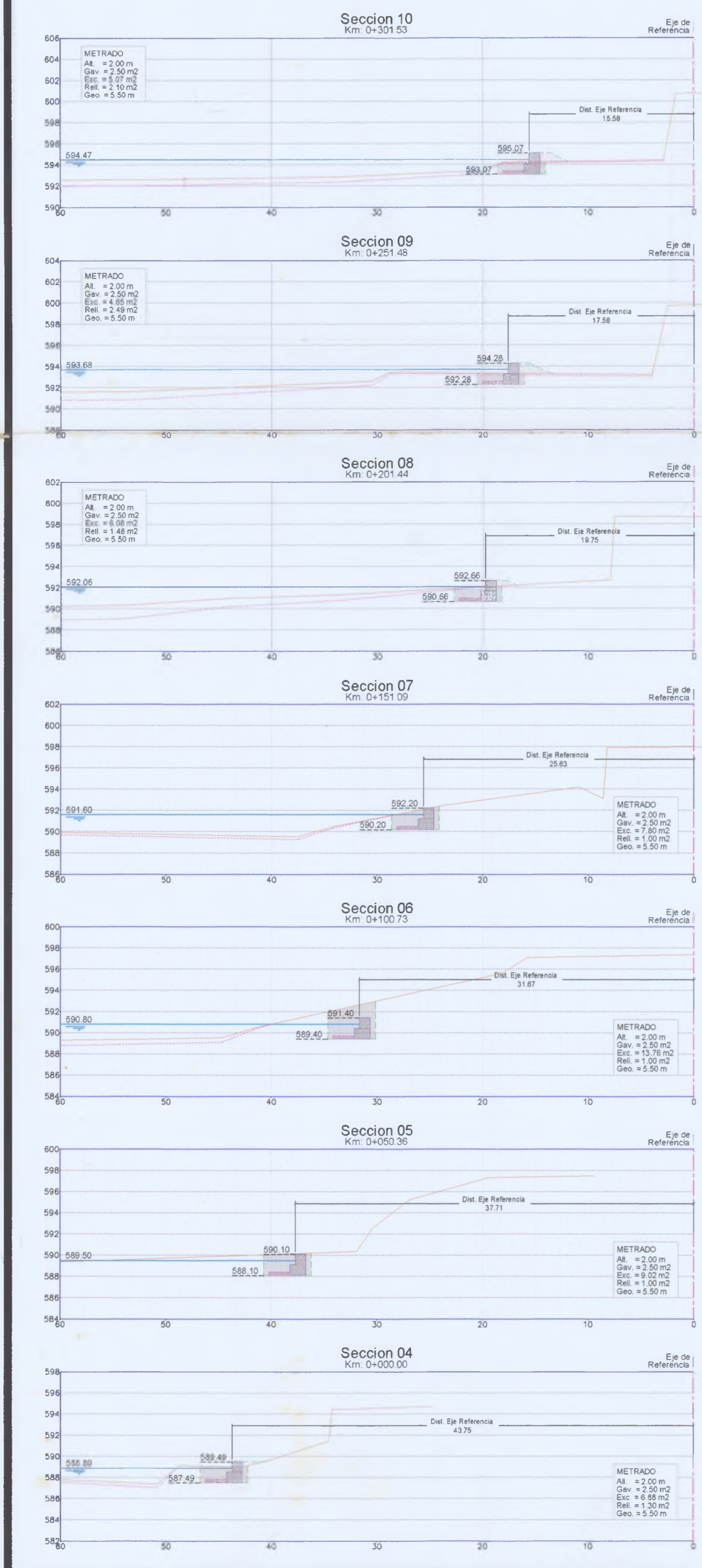
ASESOR: Ph.D JULIO KUROIWA ZEVALLOS
 BACH: Ing. JHONNY CHARLES ACHIC CHATA

ESCALA: INDICADA
 0 100 500 1000

FECHA: ABRIL 2004

PLANO N°: **03**

DEFENSA RIBEREÑA



UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA CIVIL
TITULACION PROFESIONAL
ESCUELA PROFESIONAL

Dranaje

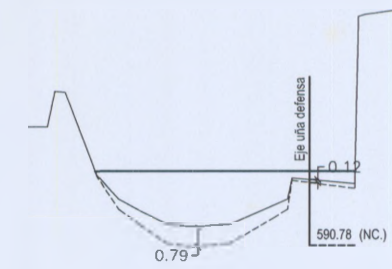
ESTUDIO:
DISEÑO DE DEFENSA RIBEREÑA PARA LA URBANIZACIÓN SOL DE HUAMPANI MARGEN DERECHA DEL RÍO RIMAC SECCIONES TRANSVERSALES - GAVION

ASESOR I: Ph.D JULIO KUROIWA ZEVALLOS
BACH: Ing. JHONNY CHARLES ACHIC CHATA

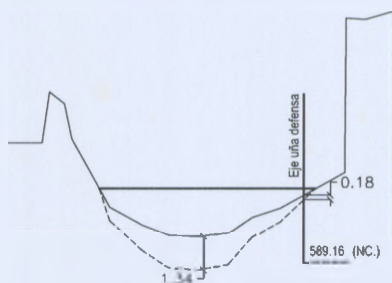
ESCALA: 1:400
FECHA: ABRIL 2004

04

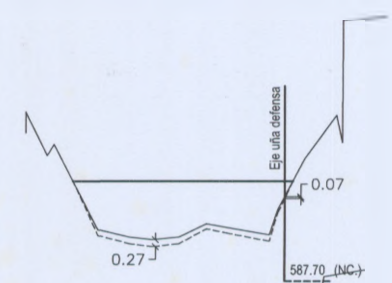
SECCION 09



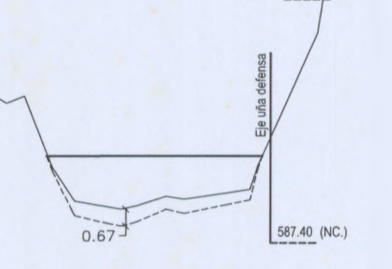
SECCION 08



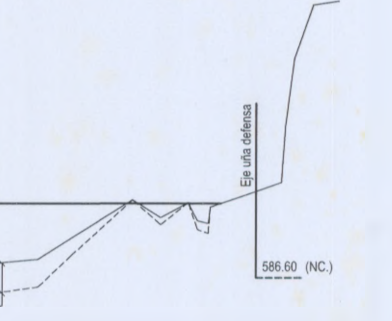
SECCION 07



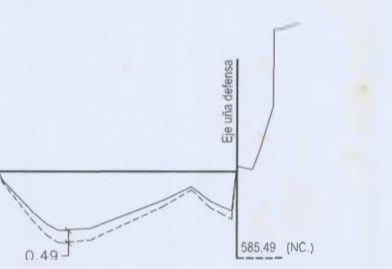
SECCION 06



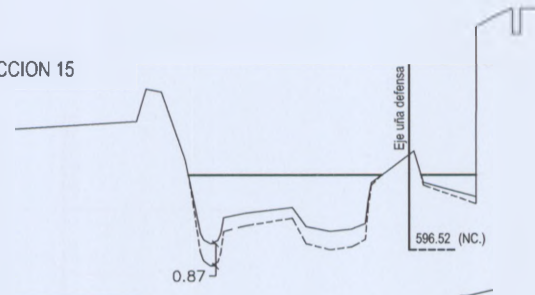
SECCION 05



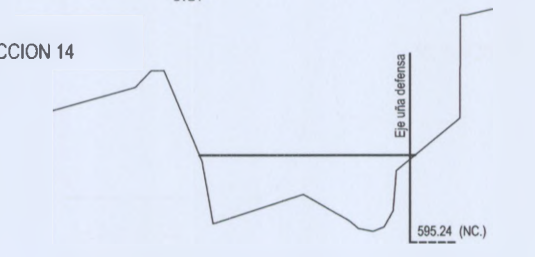
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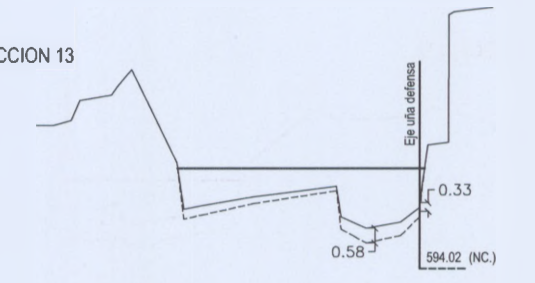
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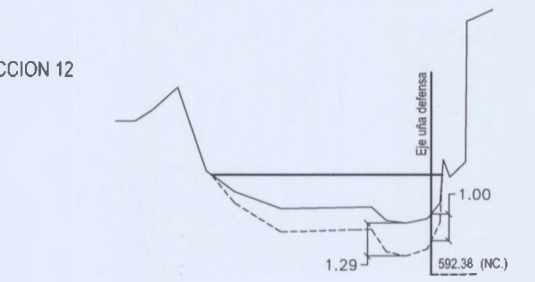
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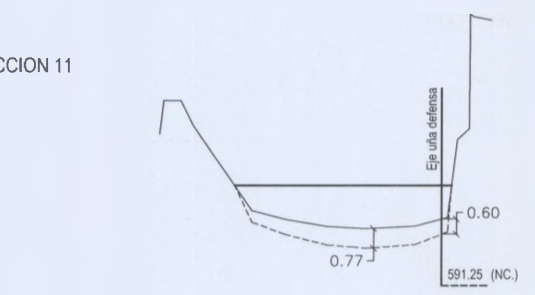
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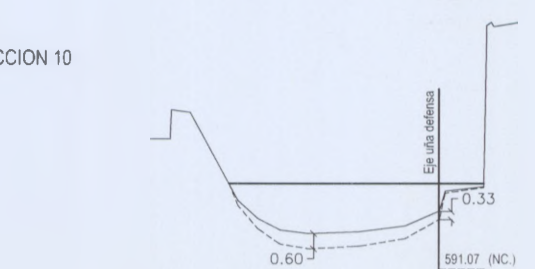
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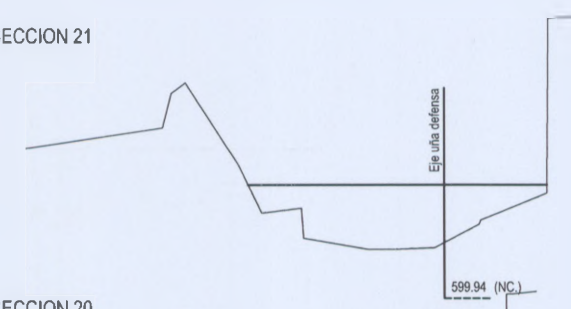
SECCION 11



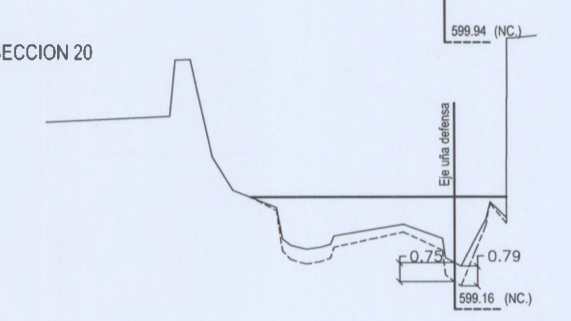
SECCION 10



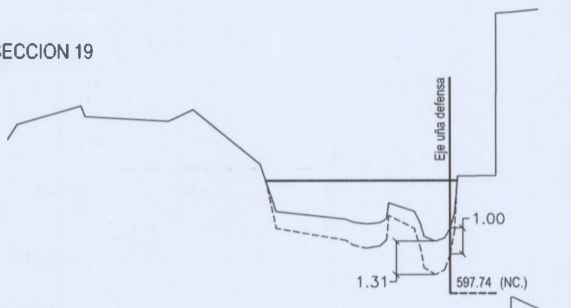
SECCION 21



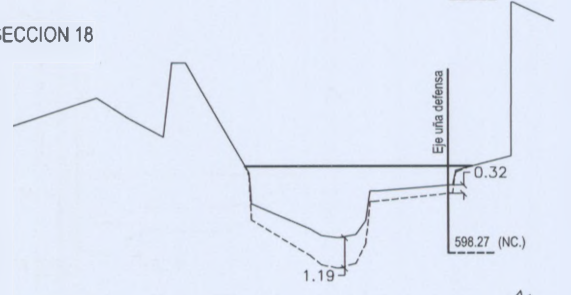
SECCION 20



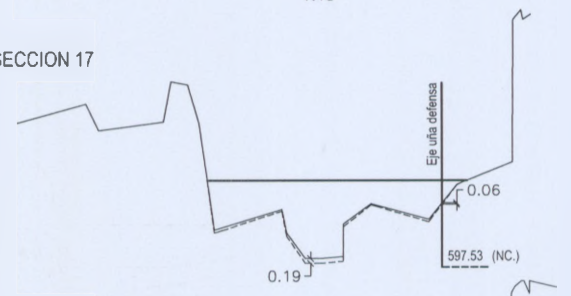
SECCION 19



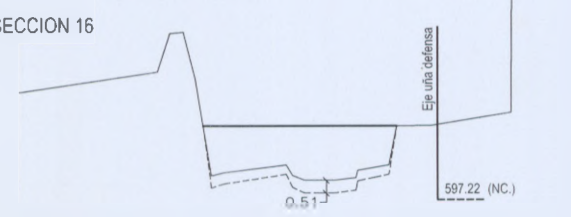
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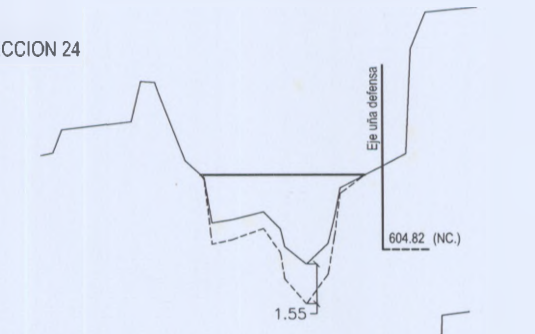
SECCION 17



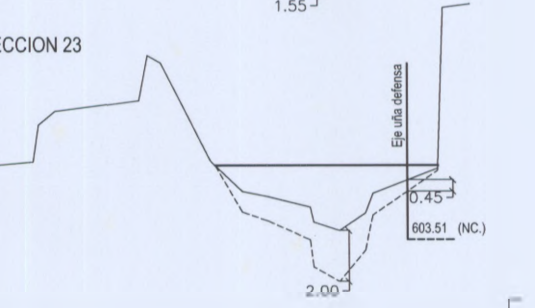
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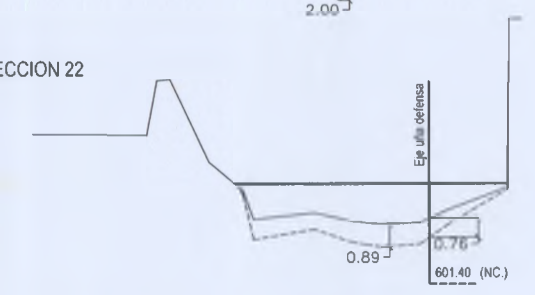
SECCION 24



SECCION 23



SECCION 22



CUADRO DE ANALISIS DE SOCAVACION

Seccion	Hydr Radius (m)	Max Chl Dpth (m)	Vel Crit (m/s)	d (m)	Socavacion maxima (m)	Socavacion Eje de uña (m)
24	1.764	3.47	3.14	1.448	1.55	0.00
23	1.215	2.55	2.95	1.787	2.00	0.45
22	1.125	1.57	2.91	1.568	0.89	0.76
21	1.692	2.51	3.11	1.000	0.00	0.00
20	1.353	2.71	3.00	1.290	0.78	0.79
19	1.422	2.36	3.02	1.557	1.31	1.00
18	1.502	2.79	3.05	1.425	1.19	0.32
17	1.553	3.06	3.07	1.064	0.20	0.06
16	1.732	2.13	3.13	1.240	0.51	0.00
15	1.384	2.66	3.01	1.329	0.88	0.00
14	1.962	2.97	3.19	1.000	0.00	0.00
13	1.391	2.33	3.01	1.248	0.58	0.33
12	1.216	1.88	2.95	1.686	1.29	1.00
11	1.37	1.68	3.01	1.457	0.77	0.60
10	1.364	1.96	3.00	1.304	0.60	0.33
9	1.31	2.17	2.98	1.364	0.79	0.12
8	1.228	1.88	2.95	1.710	1.34	0.18
7	1.769	2.28	3.14	1.120	0.27	0.07
6	1.452	2.08	3.05	1.323	0.67	0.00
5	1.137	2.34	2.91	1.500	1.17	0.00
4	1.455	2.31	3.04	1.212	0.49	0.00



UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA CIVIL
TITULACION PROFESIONAL
ESCUELA PROFESIONAL



ESTUDIO :
**DISEÑO DE DEFENSA RIBEREÑA PARA LA
URBANIZACIÓN SOL DE HUAMPANI
MARGEN DERECHA DEL RÍO RIMAC
SOCAVACIÓN EN SECCIONES**

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