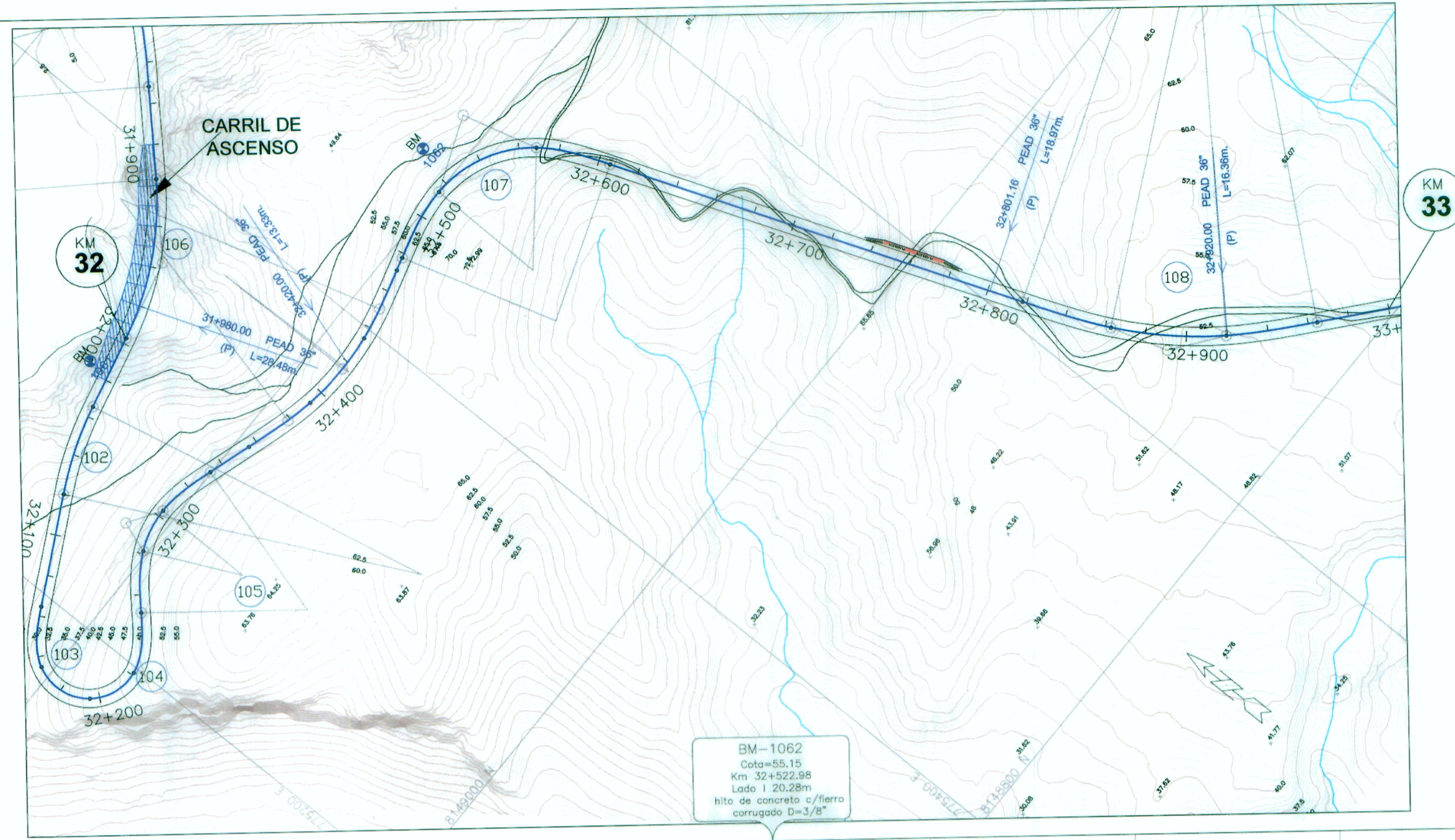


ELEMENTOS DE CURVAS HORIZONTALES																
C.No	S	A.D.	R	T.G	L.C.	Lsp e	TS	SC o PC	PI	CS o PT	ST	Lsp s	S.A	P %	NORTE	ESTE
102	I	12°09'	180.000	18.923	37.707			32+038.281	32+057.204	32+075.988			0.7	6.0	8149260.059	775263.616
103	I	103°42'32"	22.000	13.920	24.821	30.000	32+137.604	32+167.604	32+182.522	32+192.426			2.8	8.0	8149206.748	775150.050
104	I	86°10'48"	22.000	9.592	18.091			32+196.268	32+216.848	32+214.359	32+244.359	30.000	2.8	8.0	8149165.916	775182.945
105	D	49°10'13"	50.000	6.491	12.909	30.000	32+243.459	32+273.459	32+281.633	32+286.369	32+316.369	30.000	1.8	8.0	8149208.509	775243.694
106	I	29°58'41"	73.000	0.597	1.195	37.000	32+374.789	32+411.789	32+413.004	32+412.984	32+449.984	37.000	1.3	8.0	8149175.588	775374.421
107	D	85°23'50"	60.000	28.020	52.428	37.000	32+478.323	32+515.323	32+553.003	32+567.751	32+604.751	37.000	1.5	8.0	8149214.145	775510.289
108	I	29°88'	200.000	28.543	56.703	45.000	32+817.832	32+862.832	32+892.408	32+919.535	32+964.535	45.000	0.6	5.5	8148874.634	775636.861



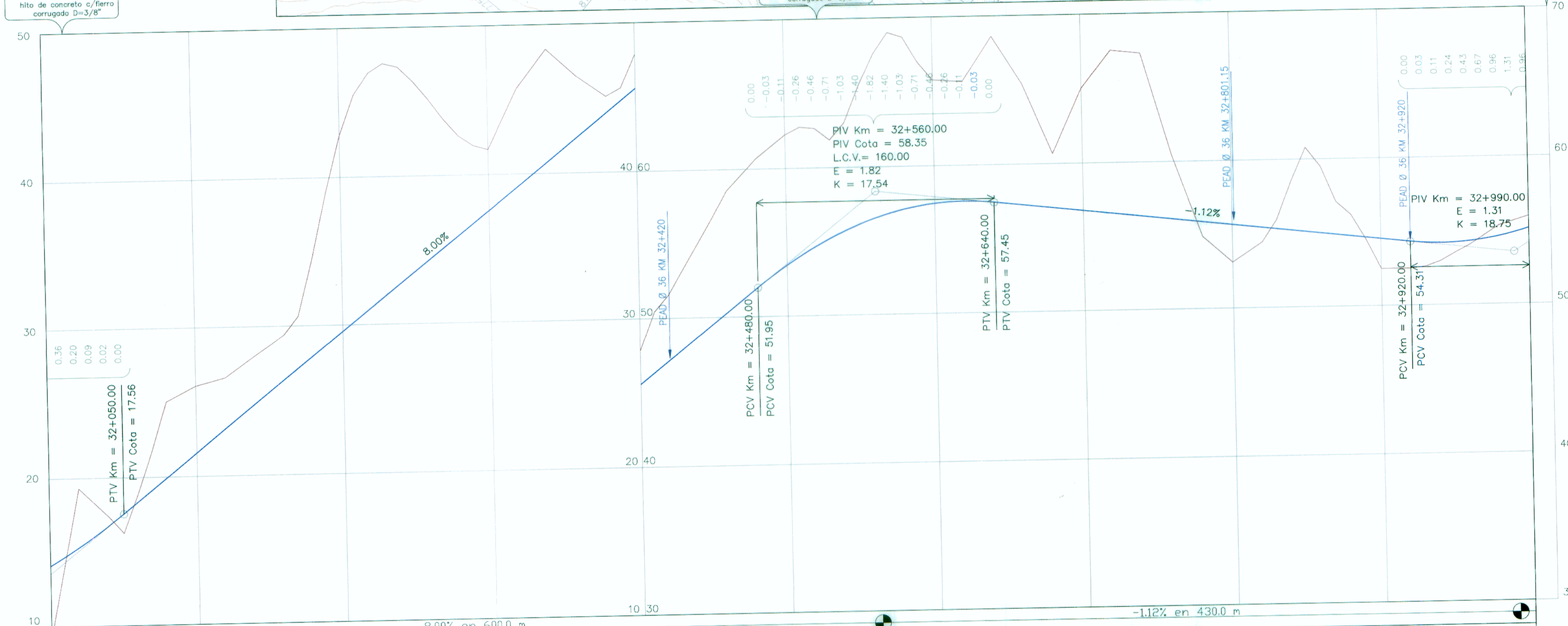
ESCALA
H : 1/2000

BM-1061
Cota=11.98
Km 32+014.82
Lado D 11.01m
hitos de concreto c/ hierro
corrugado D=3/8"

BM-1062
Cota=55.15
Km 32+522.98
Lado I 20.28m
hitos de concreto c/ hierro
corrugado D=3/8"

BM-1063
Cota=53.89
Km 33+015.11
Lado D 12.35m
hitos de concreto c/ hierro
corrugado D=3/8"

ESCALA
H : 1/2000
V : 1/200



LEYENDA

- EJE
- BORDE DE VIA (EXISTENTE)
- BORDE DE CASA
- CERCO
- BORDILLO
- CURVA NIVEL MADRE
- CURVA NIVEL SIMPLE
- POSTE ENERGIA, MADERA
- BM
- ALCANTARILLA
- PUENTE
- CANAL
- ACCESO
- LIMT. PROPIEDAD

PERFIL:

- PERFIL DE TERRENO EJE PROYECTADO
- PERFIL RASANTE EJE PROYECTADO

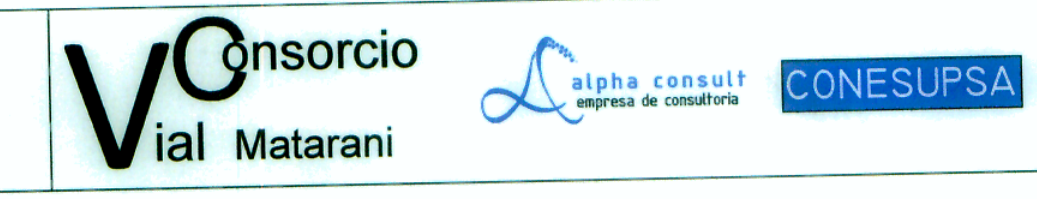
CC = 120m → CUNETA DE TIERRA
 CR = 120m → CUNETA REVESTIDA
 ZD = 120m → ZANJA DE DRENAJE

Felix
Ing. FELIX RAUL CHIRTO SPAN
"Especialista en Topografía, Trazo y Diseño Vial"
"N° 53117"

Miguel
Ing. Jorge Peralanda Castañeda
"Jefe de Estudios"
CIP 6882

PENDIENTE	8.00% en 600.0 m	-1.12% en 430.0 m																																																																																																																																					
COTA DE SUBRASANTE	14.11	14.71	15.36	16.05	16.78	17.56	18.36	19.16	19.96	20.76	21.56	22.36	23.16	23.96	24.76	25.56	26.36	27.16	27.96	28.76	29.56	30.36	31.16	31.96	32.76	33.56	34.36	35.16	35.95	36.75	37.55	38.35	39.15	39.95	40.75	41.55	42.35	43.15	43.95	44.75	45.55	46.35	47.15	47.95	48.75	49.55	50.35	51.15	51.95	52.72	53.44	54.09	54.69	55.24	55.72	56.15	56.53	56.84	57.10	57.30	57.44	57.53	57.56	57.54	57.45	57.34	57.23	57.11	57.00	56.89	56.78	56.67	56.55	56.44	56.33	56.22	56.10	55.99	55.88	55.77	55.65	55.54	55.43	55.32	55.20	55.09	54.98	54.87	54.76	54.64	54.50	54.35	54.22	54.10	54.00	53.90	53.80	53.70	53.60	53.50	53.40	53.30	53.20	53.10	53.00	52.90	52.80	52.70	52.60	52.50	52.40	52.30	52.20	52.10	52.00	51.90	51.80	51.70	51.60	51.50	51.40	51.30	51.20	51.10	51.00	50.90	50.80	50.70	50.60	50.50	50.40	50.30	50.20	50.10	50.00
COTA DE TERRENO	9.15	14.24	19.32	18.35	17.39	16.26	18.88	21.79	25.00	28.51	26.03	22.36	26.55	27.27	24.76	28.66	29.38	30.66	34.52	38.98	42.78	45.47	46.93	47.55	47.29	46.31	45.11	43.76	42.62	41.96	41.66	43.69	45.71	47.02	48.32	47.40	46.47	45.76	45.06	44.75	45.59	47.64	50.45	51.61	53.35	55.05	56.76	58.56	60.68	61.46	62.24	62.73	62.63	61.86	62.99	65.42	67.54	68.99	68.66	66.94	65.73	65.65	65.57	67.09	68.60	66.99	65.38	63.02	60.66	62.82	65.99	66.25	67.52	67.41	67.30	63.67	60.44	57.66	54.88	53.99	53.10	53.76	54.43	55.93	58.53	60.77	59.46	57.11	54.50	52.50	52.50	52.60	52.95	53.51	54.02	54.67	55.31	55.62	55.93	55.11																																			
ALINEAMIENTO	CN 102 I		CN 103 I		CN 104 I		CN 105 D		CN 106 I		CN 107 D		CN 108 I																																																																																																																										
DIAGRAMA DE PERALTES	CN 102 I P=0.5% LT=16.5m		CN 103 I P=0.5% LT=22m		CN 104 I P=0.5% LT=30m		CN 105 D P=0.5% LT=30m		CN 106 I P=0.5% LT=37m		CN 107 D P=0.5% LT=37m		CN 108 I P=0.5% LT=43m																																																																																																																										
DRENAJE	CR = 270m		CR = 270m		CR = 270m		CR = 270m		CR = 270m		CR = 270m		CR = 270m																																																																																																																										
OBRAS DE ARTE	CR = 350m		CR = 350m		CR = 350m		CR = 350m		CR = 350m		CR = 350m		CR = 350m																																																																																																																										
KILOMETRAJE	32+000	32+100	32+200	32+300	32+400	32+500	32+600	32+700	32+800	32+900	33+000																																																																																																																												

NOTA :
ESCALA MOSTRADA PARA EL FORMATO A1
PARA EL FORMATO A3 CONSIDERAR EL DOBLE



Diseño: ING. RAUL CHIRTO
 Verifico: ING. J. PERARANDA C.
 Dibujó: E. SANCHEZ Q.

Aprobó: N° FECHA DESCRIPCION

ESTUDIO DEFINITIVO DE LA CARRETERA: CAMANA - DESVIO QUILCA - MATARANI - ILO - TACNA, TRAMO: DESVIO QUILCA - MATARANI
 CONTRATO N°233-2008-MTC/20

PLANTA Y PERFIL
 KM 32+000 - KM 33+000
 ESCALA : INDICADA
 FECHA: SETIEMBRE-2011
 DV-PP-033-R-01A