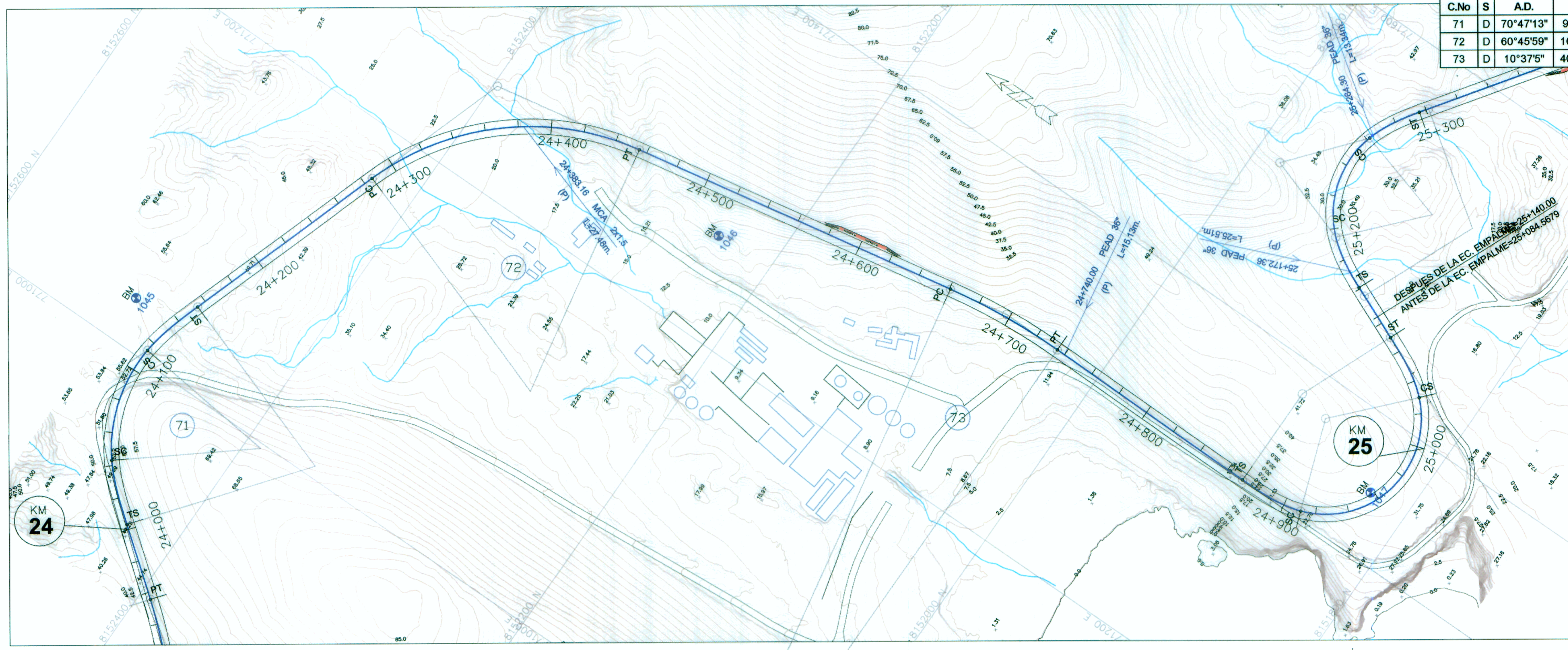
## ELEMENTOS DE CURVAS HORIZONTALES

| C.No | S | A.D. | R | T.G. | L.C. | Lsp e | TS | SC ò PC | PI | CS ò PT | ST | Lsp s | S.A. | P % | NORTE | ESTE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71 | D | 70°47'13" | 90.000 | 37.576 | 71.192 | 40.000 | 24+003.192 | 24+043.192 | 24+087.628 | 24+114.384 | 24+154.384 | 40.000 | 1.1 | 8.0 | 8152496.936 | 770965.249 |
| 72 | D | 60°45'59" | 160.000 | 93.808 | 169.692 | | | 24+285.420 | 24+379.228 | 24+455.111 | | | 0.7 | 6.5 | 8152397.472 | 771258.100 |
| 73 | D | 10°37'5" | 400.000 | 37.170 | 74.128 | | | 24+660.615 | 24+697.785 | 24+734.742 | | | 0.4 | 4.0 | 8152066.597 | 771319.269 |

ESCALA

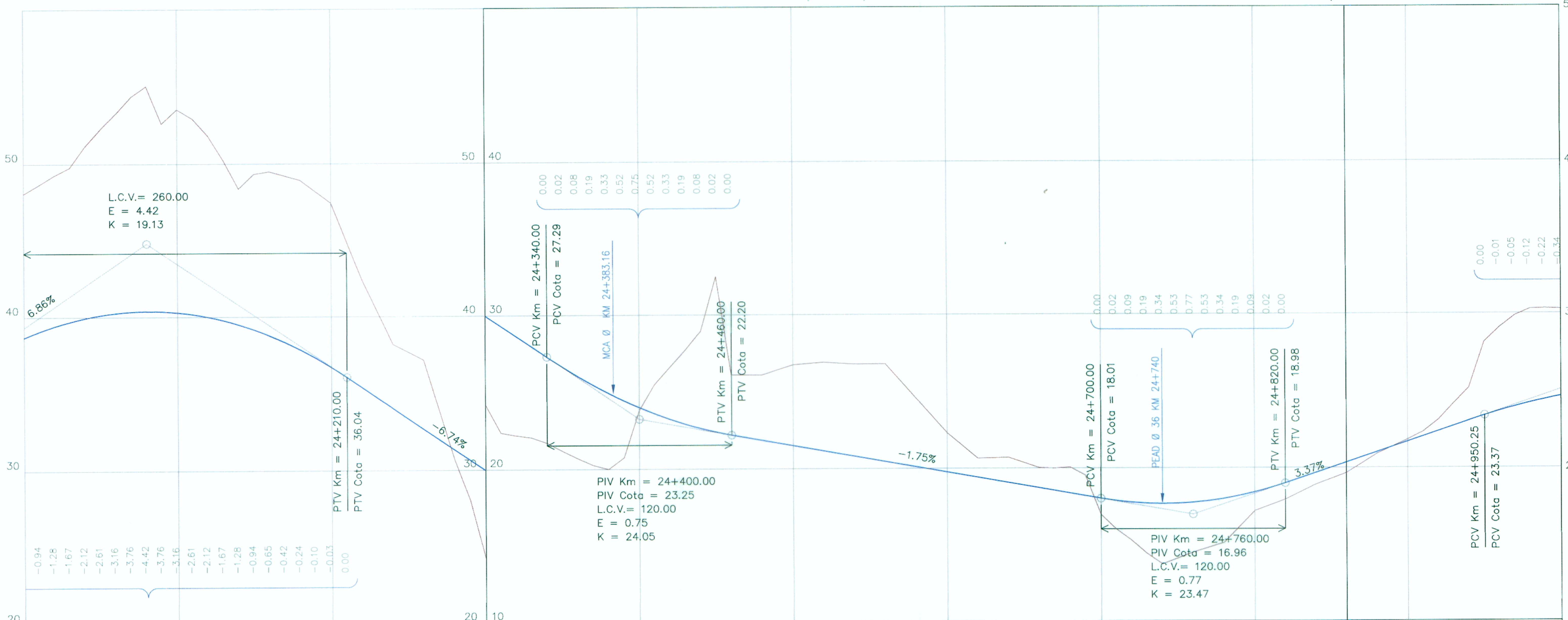
H : 1/2000




ESCALA

H : 1/2000

V : 1/200




PENDIENTE: -6.74% en 320.0 m · -1.75% en 360.0 m · 3.37% en 240.0 m

| COTA DE SUBRASANTE | COTA DE TERRENO |
|---|---|
| 38.66 | 48.06 |
| 39.06 | 48.64 |
| 39.40 | 49.25 |
| 39.70 | 49.76 |
| 39.94 | 51.15 |
| 40.13 | 52.26 |
| 40.27 | 53.25 |
| 40.35 | 54.34 |
| 40.38 | 55.03 |
| 40.36 | 52.62 |
| 40.29 | 53.54 |
| 40.17 | 52.95 |
| 39.99 | 51.83 |
| 39.76 | 50.24 |
| 39.48 | 48.37 |
| 39.14 | 49.32 |
| 38.76 | 49.48 |
| 38.32 | 49.20 |
| 37.83 | 48.92 |
| 37.29 | 48.18 |
| 36.69 | 47.43 |
| 36.04 | 44.91 |
| 35.37 | 42.39 |
| 34.70 | 40.28 |
| 34.02 | 38.18 |
| 33.35 | 37.66 |
| 32.68 | 37.15 |
| 32.00 | 33.91 |
| 31.33 | 30.67 |
| 30.66 | 28.03 |
| 29.98 | 24.21 |
| 29.31 | 22.38 |
| 28.63 | 22.20 |
| 27.96 | 22.06 |
| 27.29 | 21.72 |
| 26.63 | 21.19 |
| 26.02 | 20.70 |
| 25.45 | 20.26 |
| 24.93 | 20.00 |
| 24.44 | 20.75 |
| 23.99 | 23.80 |
| 23.59 | 25.48 |
| 23.23 | 26.60 |
| 22.91 | 27.71 |
| 22.63 | 28.93 |
| 22.39 | 32.50 |
| 22.20 | 26.07 |
| 22.02 | 26.07 |
| 21.85 | 26.06 |
| 21.67 | 26.39 |
| 21.50 | 26.72 |
| 21.33 | 26.80 |
| 21.15 | 26.88 |
| 20.98 | 26.82 |
| 20.80 | 26.75 |
| 20.63 | 26.76 |
| 20.45 | 26.77 |
| 20.28 | 25.65 |
| 20.10 | 24.53 |
| 19.93 | 23.42 |
| 19.75 | 22.31 |
| 19.58 | 21.48 |
| 19.40 | 20.64 |
| 19.23 | 20.67 |
| 19.06 | 20.70 |
| 18.88 | 20.36 |
| 18.71 | 20.02 |
| 18.53 | 19.99 |
| 18.36 | 20.05 |
| 18.18 | 19.52 |
| 18.01 | 16.95 |
| 17.85 | 15.99 |
| 17.74 | 15.25 |
| 17.68 | 14.39 |
| 17.65 | 13.70 |
| 17.67 | 14.09 |
| 17.73 | 14.48 |
| 17.83 | 14.79 |
| 17.97 | 15.10 |
| 18.16 | 16.13 |
| 18.39 | 17.16 |
| 18.66 | 17.54 |
| 18.98 | 17.91 |
| 19.32 | 18.40 |
| 19.65 | 18.89 |
| 19.99 | 19.26 |
| 20.33 | 19.63 |
| 20.66 | 20.01 |
| 21.00 | 20.93 |
| 21.34 | 21.85 |
| 21.67 | 22.49 |
| 22.01 | 25.48 |
| 22.35 | 27.70 |
| 22.68 | 30.39 |
| 23.02 | 32.23 |
| 23.36 | 33.34 |
| 23.68 | 33.84 |
| 23.98 | 33.51 |
| 24.25 | 32.62 |
| 24.50 | 30.21 |
| 24.73 | 27.42 |

ALINEAMIENTO: CN 71 D · CN 72 D · CN 73 D · CN 74 I

DIAGRAMA DE PERALTES: CN 71 D P=8% LT=40m · CN 72 D P=6.5% LT=17.9m · CN 73 D P=4% LT=11m · CN 74 I P=8% LT=40m

DRENAJE / OBRAS DE ARTE: CR = 490m. · CR = 210m. · ZD = 93m. · 24+383.16 MCA 2x1.5 L=27.48m. (PROY) · CC = 300m. · 24+740.00 PEAD 36" L=15.13m. (PROY) · CC = 270m. · CR = 500m. · CR = 190m. · CC = 220m. · CC = 50m.

KILOMETRAJE: 24+000 · 24+100 · 24+200 · 24+300 · 24+400 · 24+500 · 24+600 · 24+700 · 24+800 · 24+900 · 25+000

## LEYENDA

- EJE
- BORDE DE VÍA (EXISTENTE)
- BORDE DE CASA
- CERCO
- BORDILLO
- CURVA NIVEL MADRE
- CURVA NIVEL SIMPLE
- POSTE ENERGIA,MADERA
- BM (BM 1000)
- 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

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Jefe de Estudio
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ESP. EN ESTUDIOS UET-UGE J. ROSALES PROYECTOS NAC.

**NOTA :**

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

| | | | |
|---|---|---|---|
| Ministerio de Transportes y Comunicaciones (PERÚ) | Consorcio Vial Matarani | alpha consult empresa de consultoria | CONESUPSA |
| Diseñó: ING. RAUL CHIRITO | Verifico: ING. J. PEÑARANDA 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 24+000 - KM 25+000**

ESCALA : INDICADA
FECHA: SETIEMBRE–2011

*DV-PP-025-R-01A*