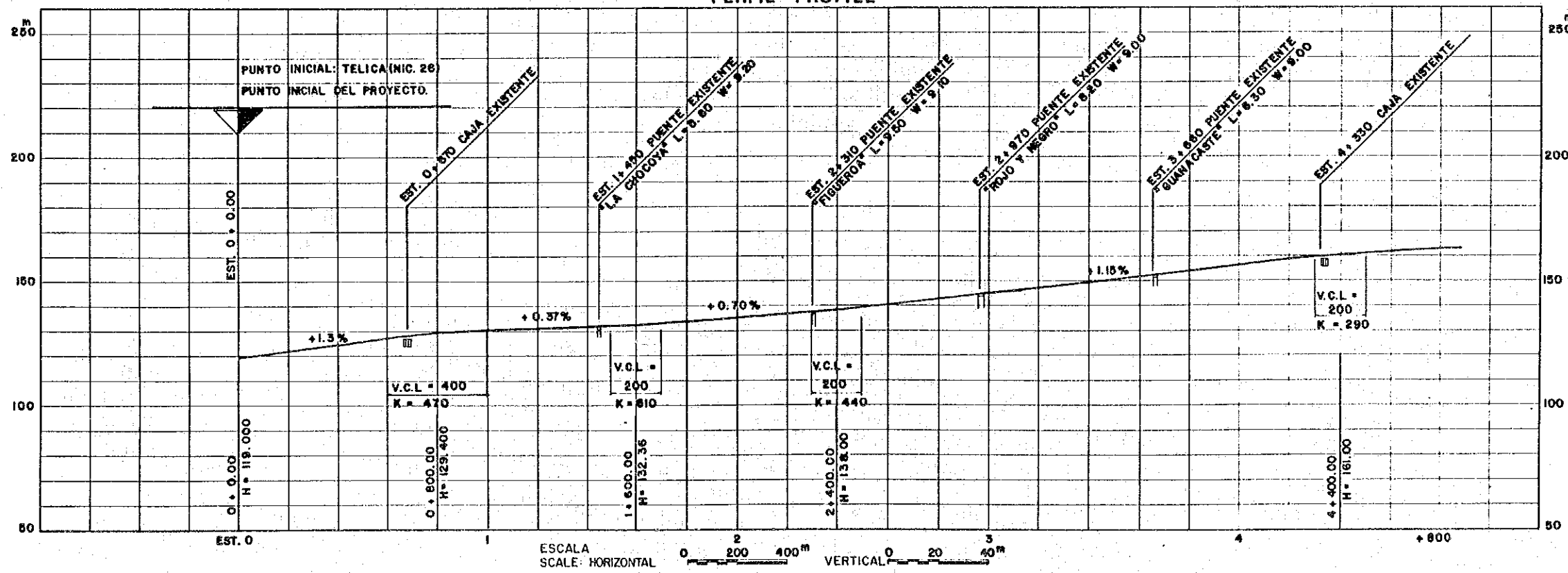
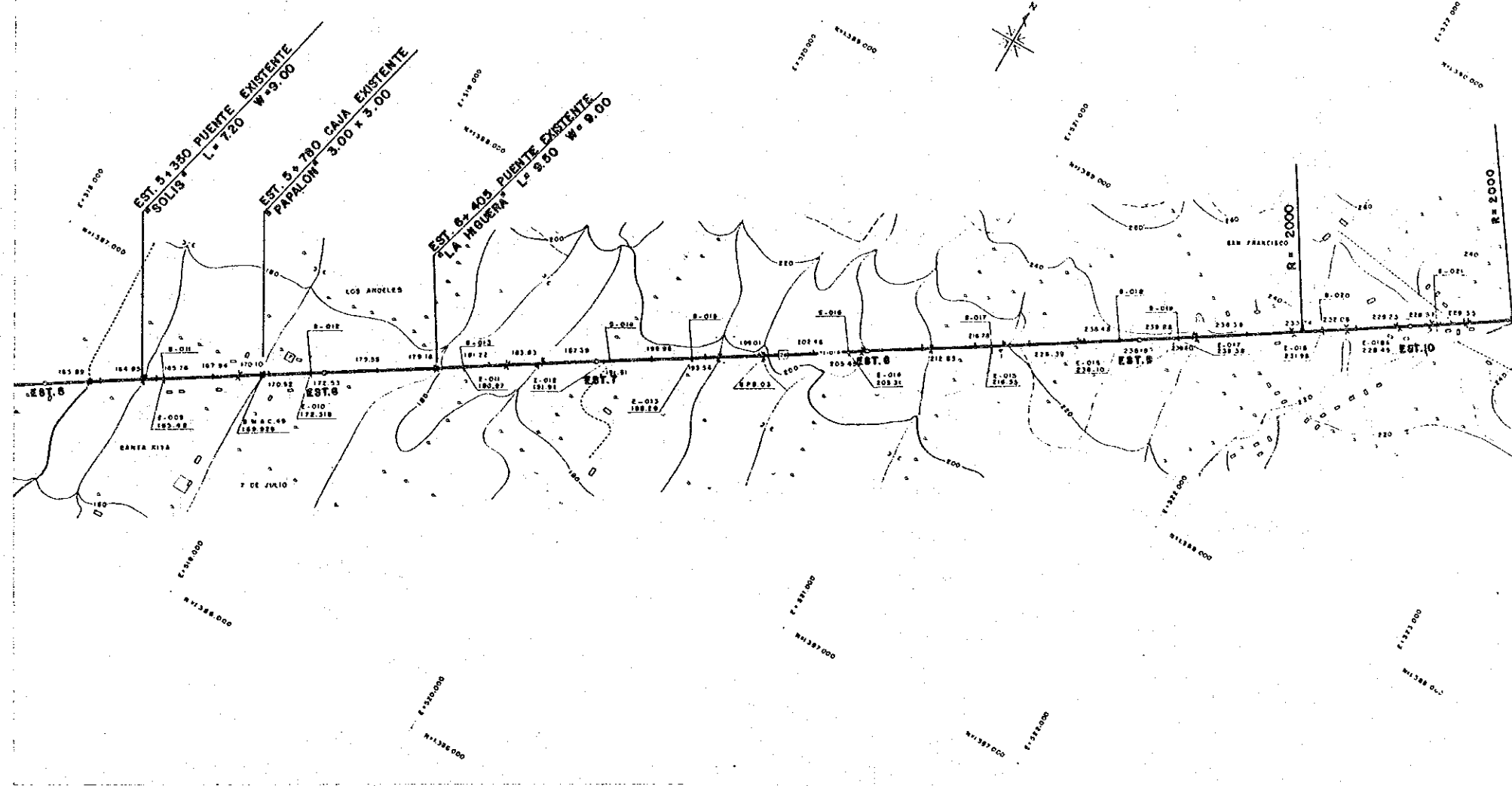
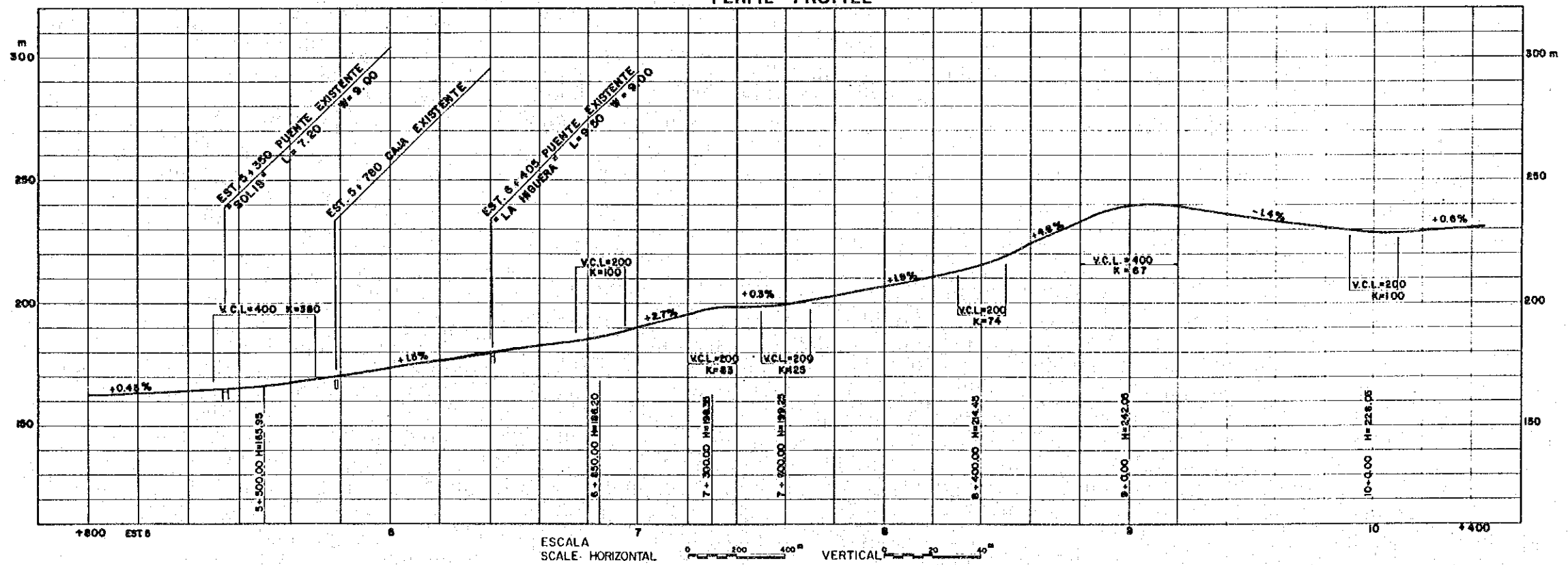


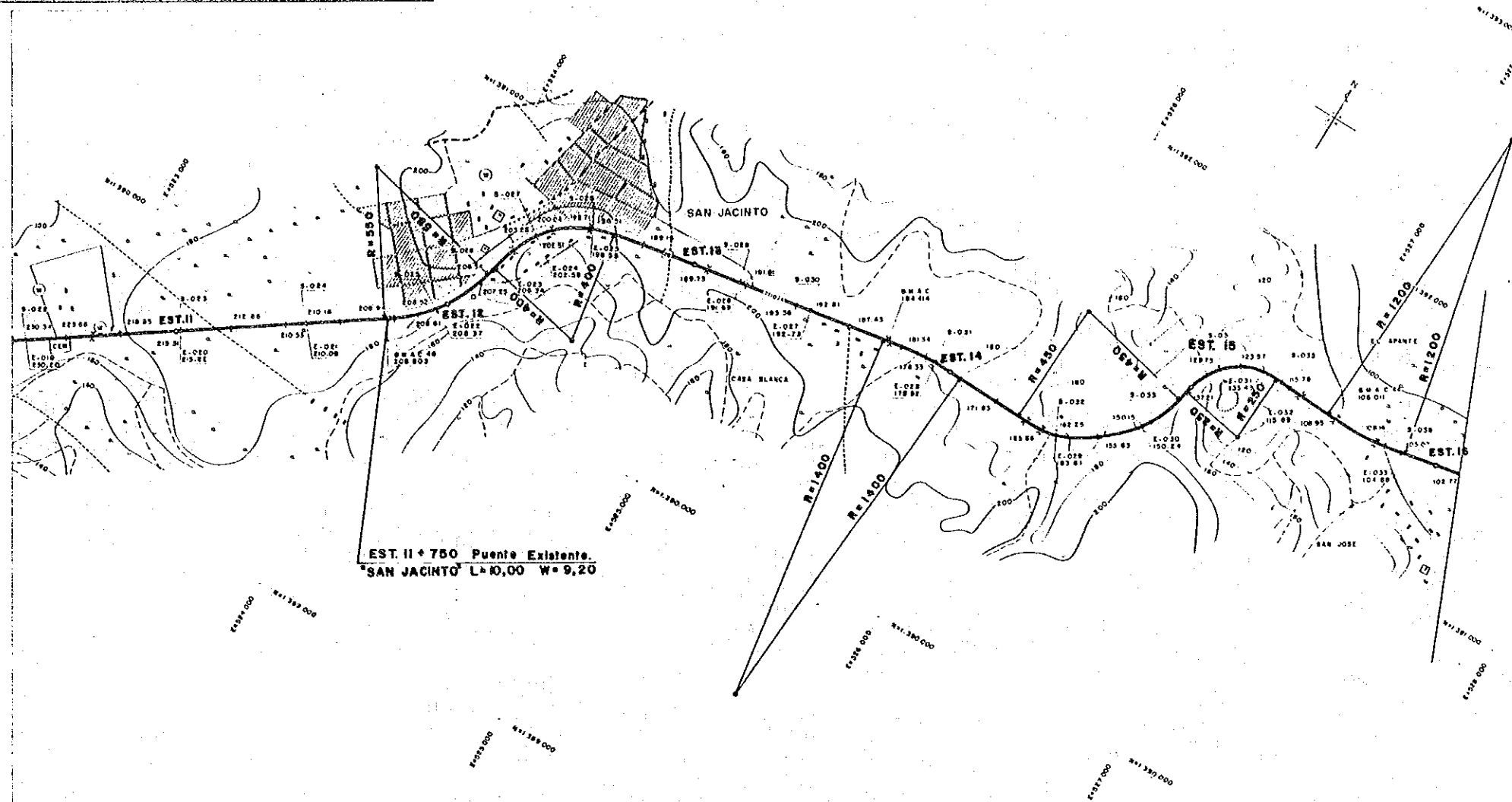
PERFIL - PROFILE



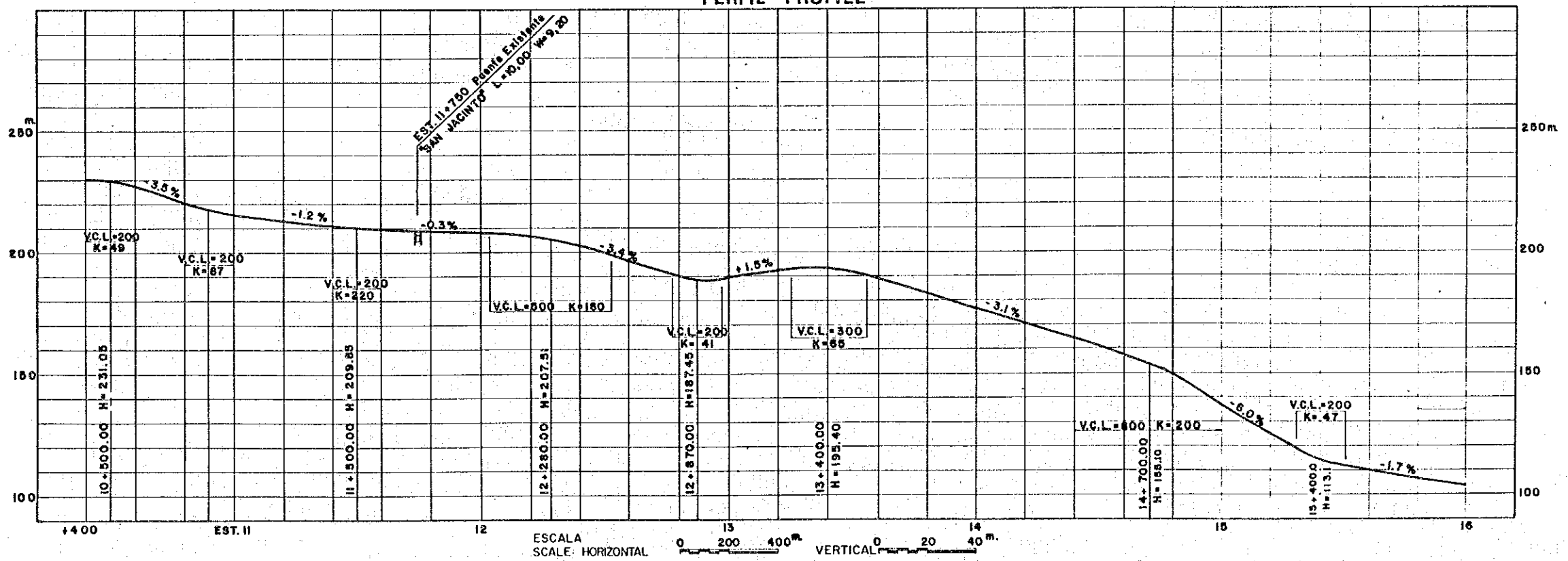


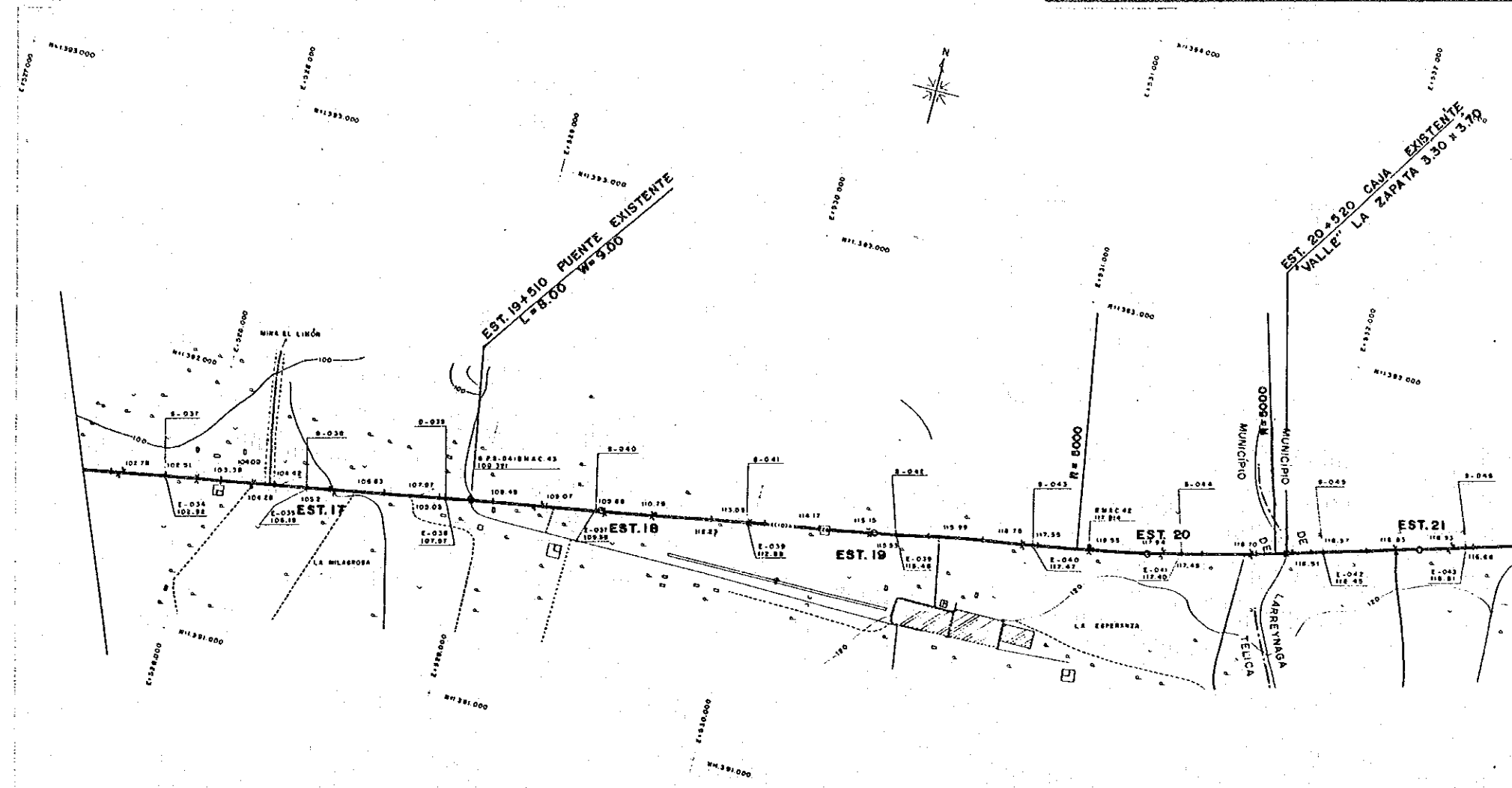
PERFIL - PROFILE



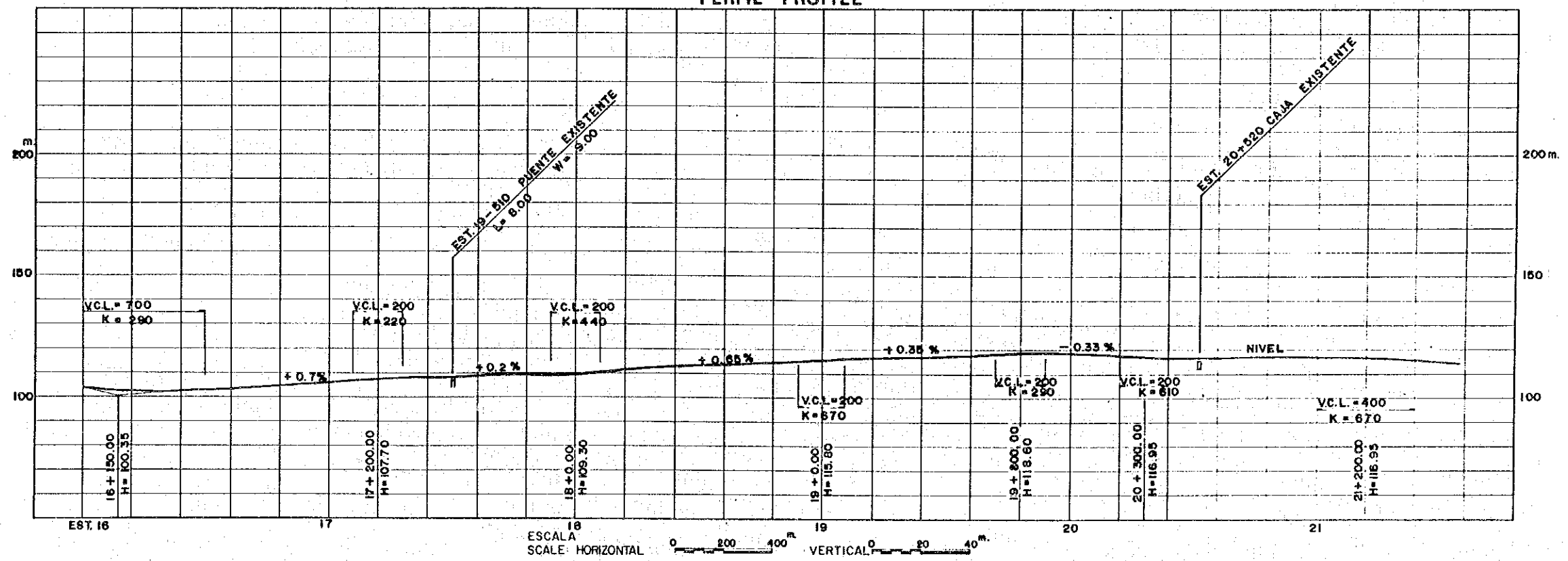


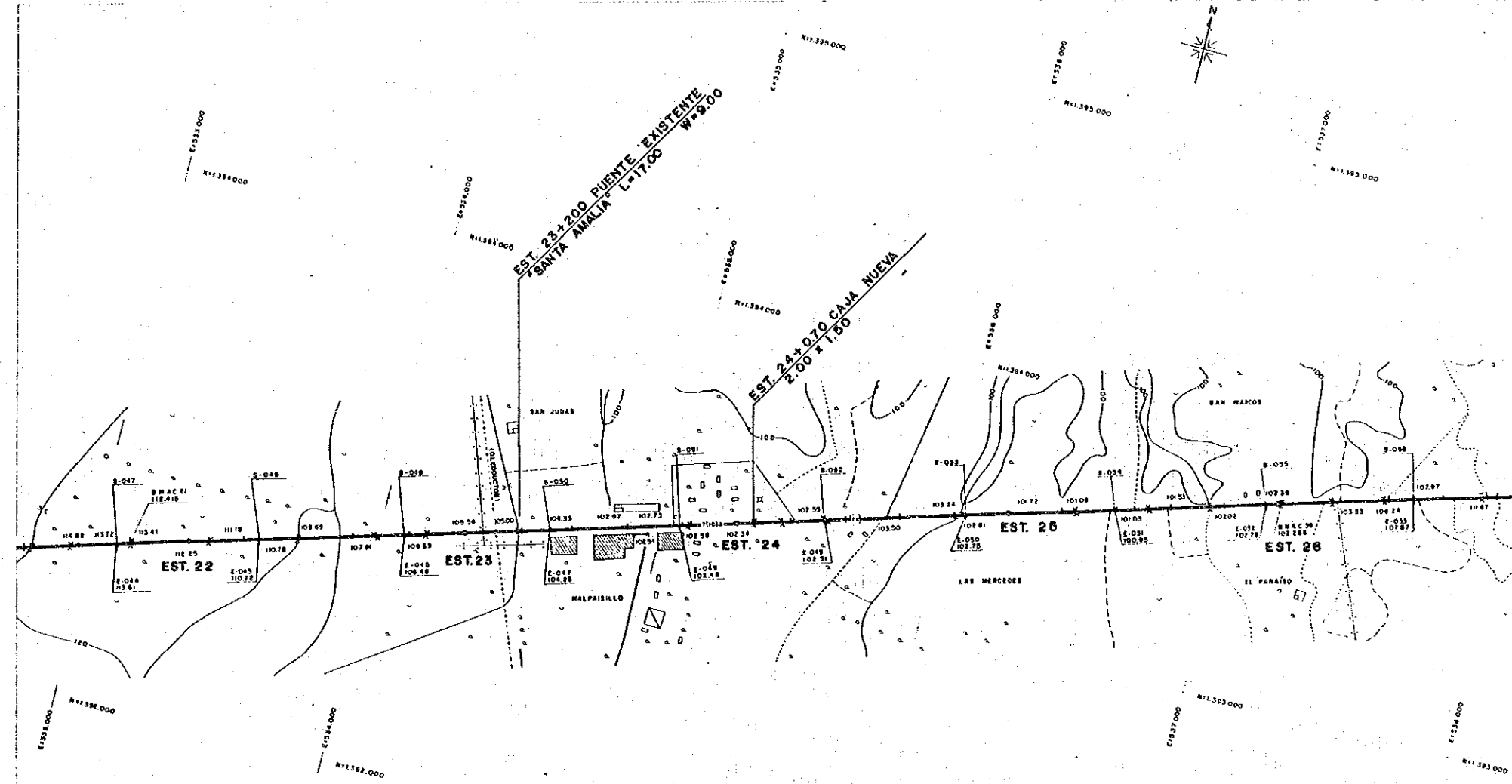
PERFIL - PROFILE



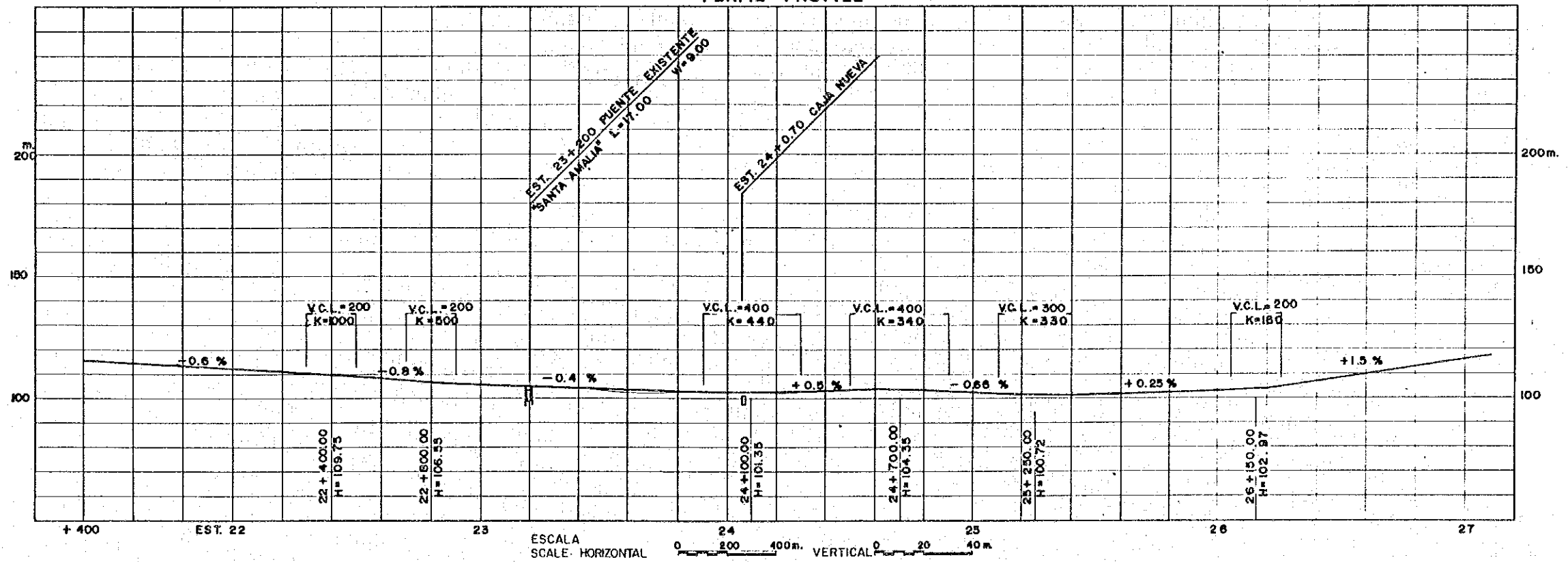


PERFIL - PROFILE

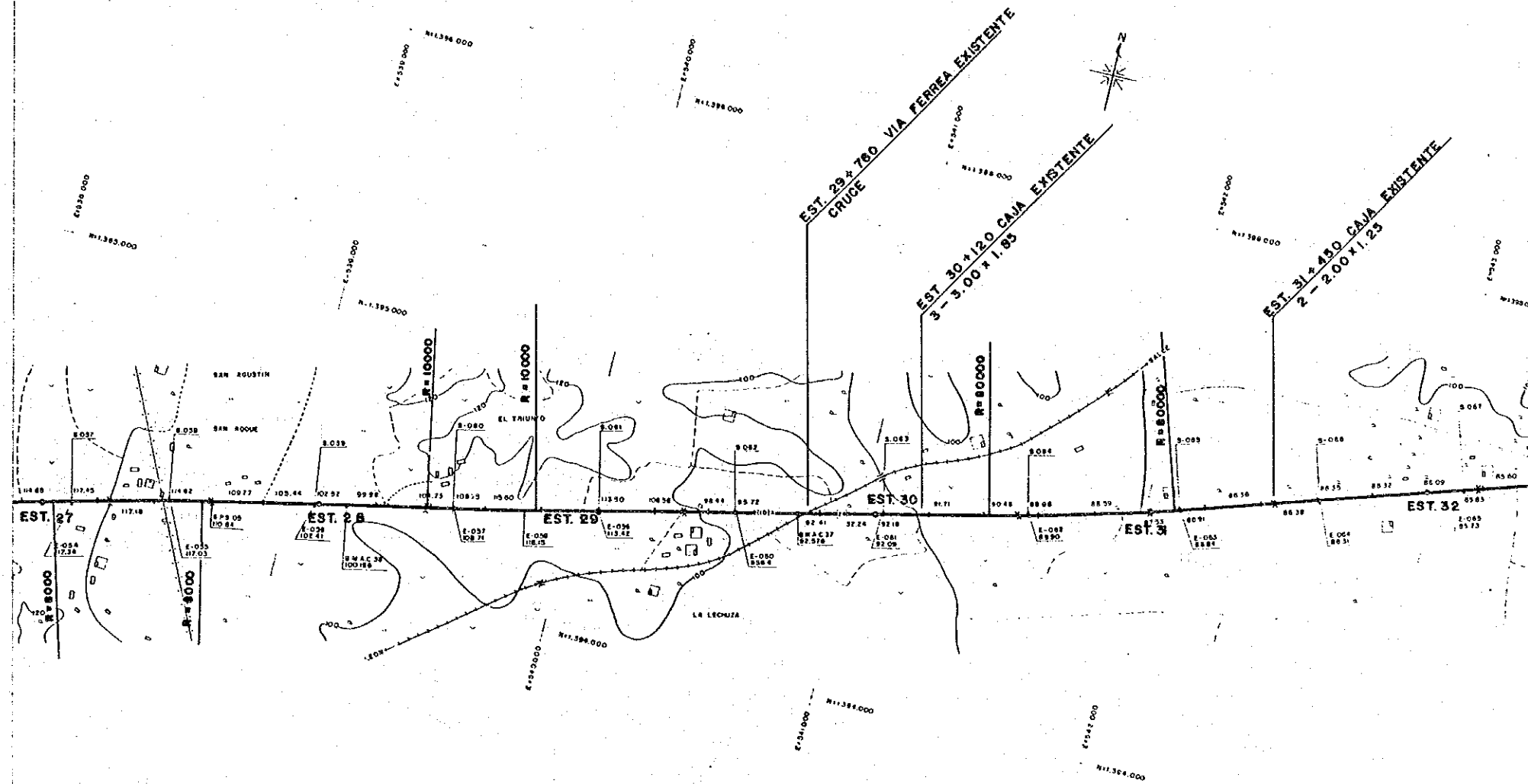




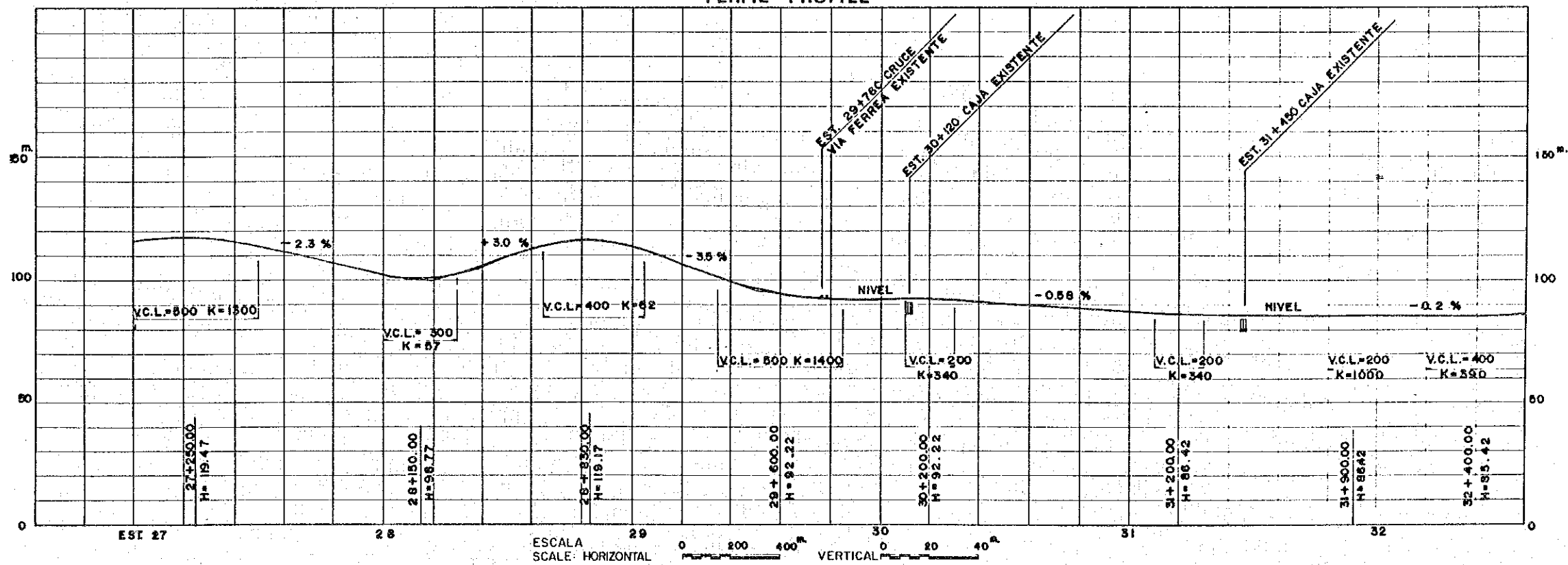
PERFIL - PROFILE

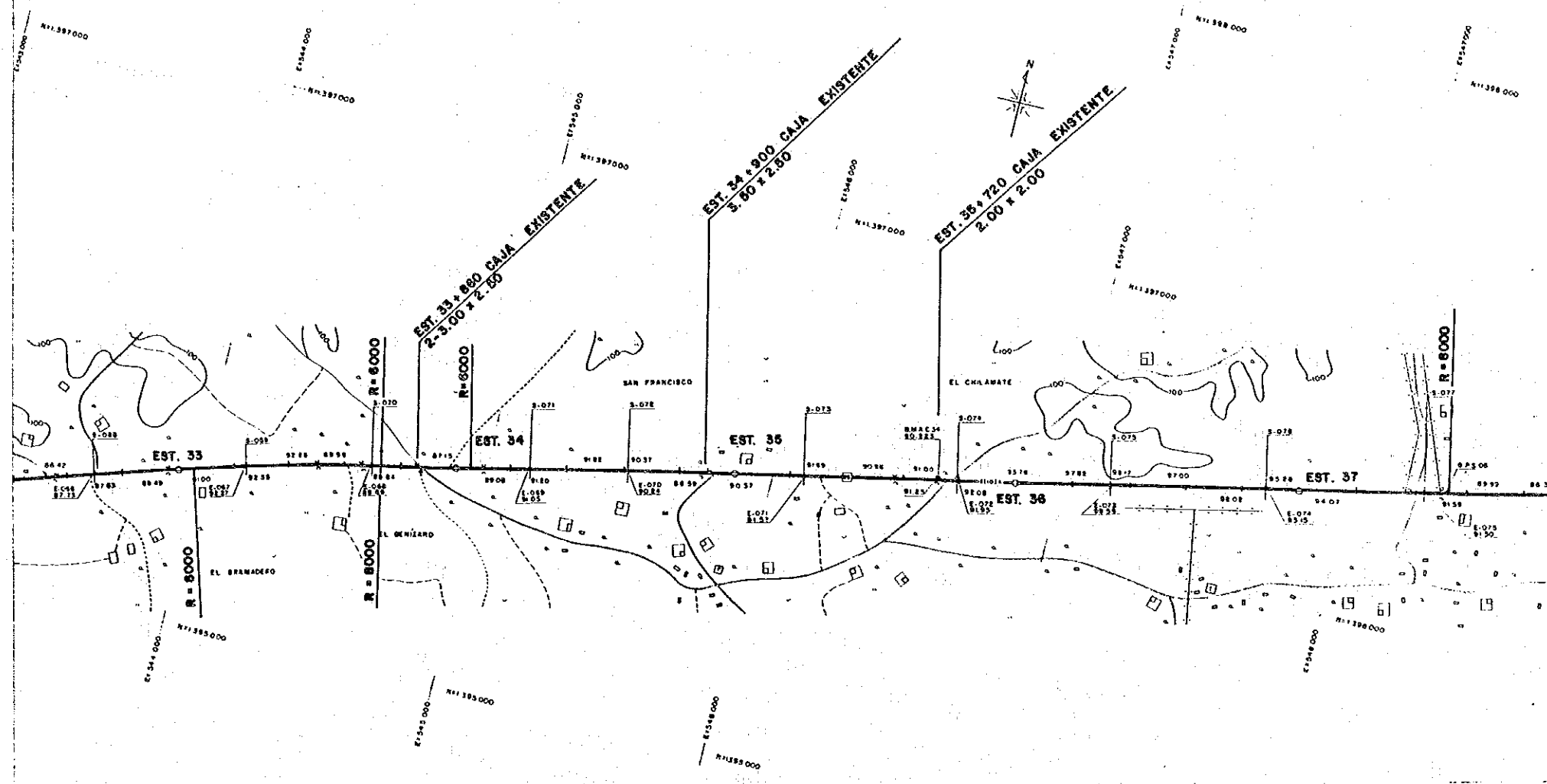


ESCALA SCALE: HORIZONTAL 0 200 400m. VERTICAL 0 20 40m.

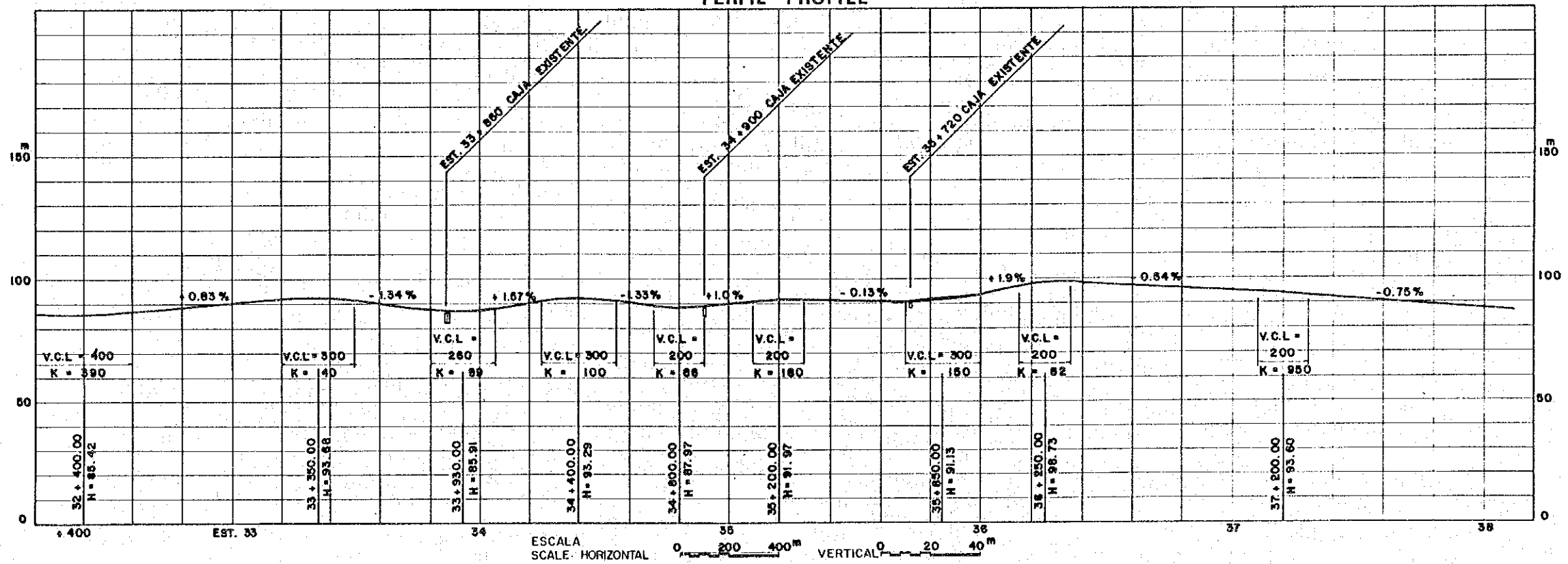


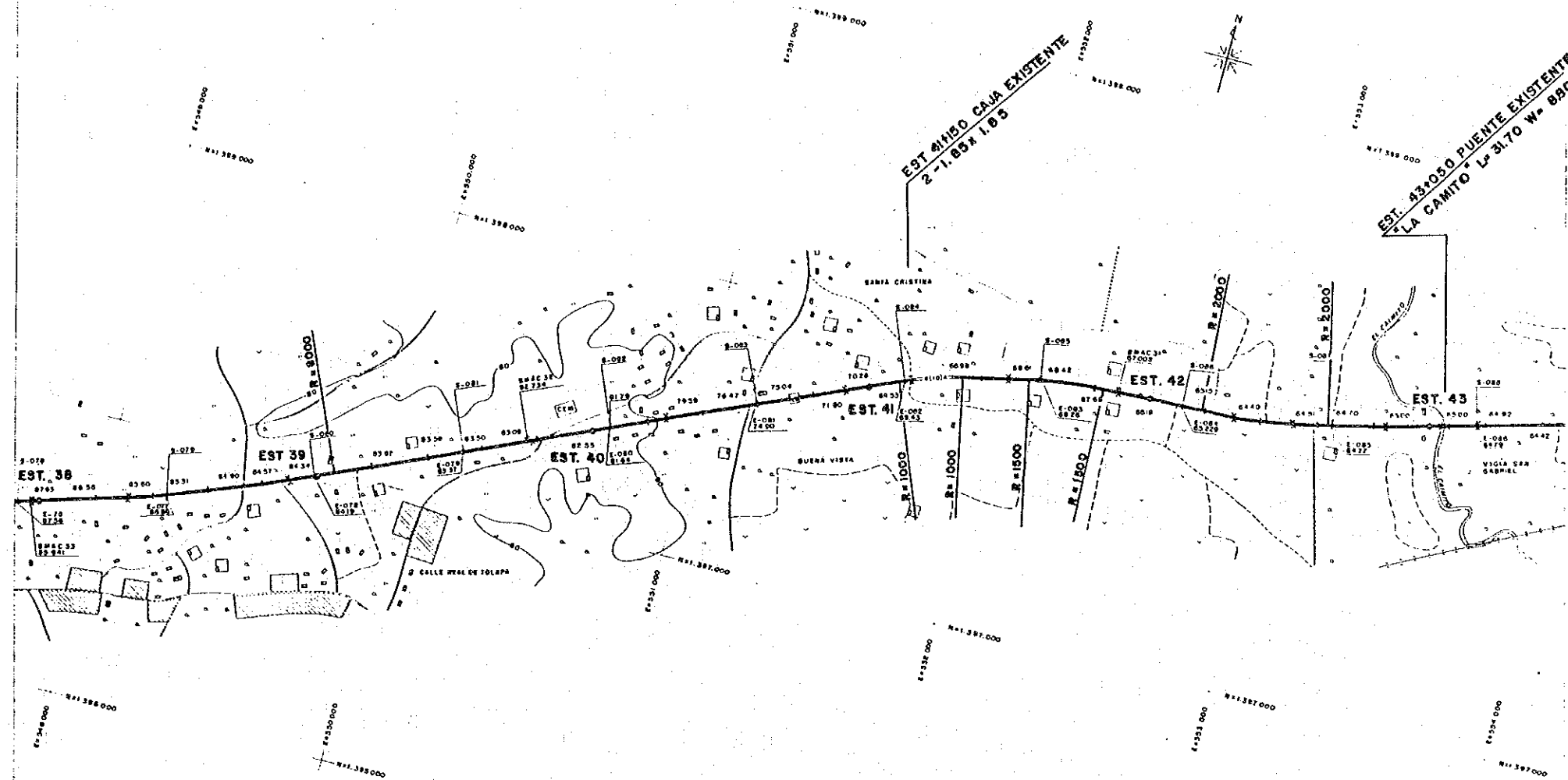
PERFIL - PROFILE



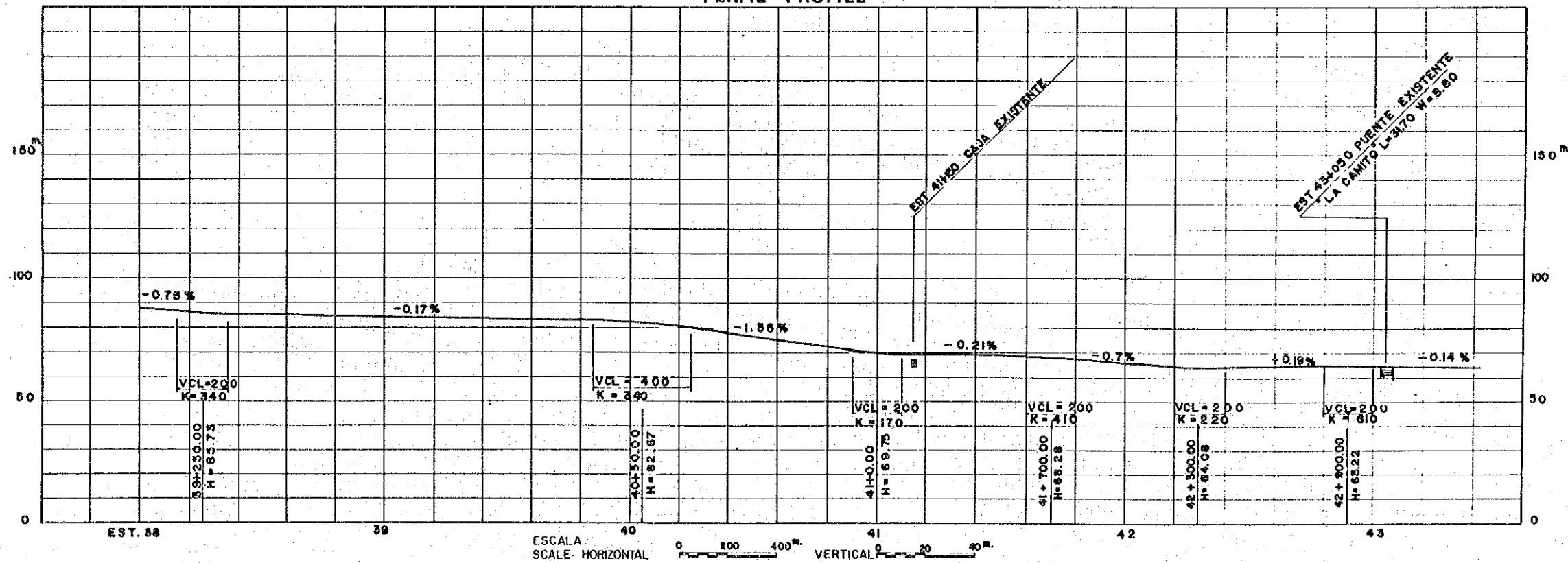


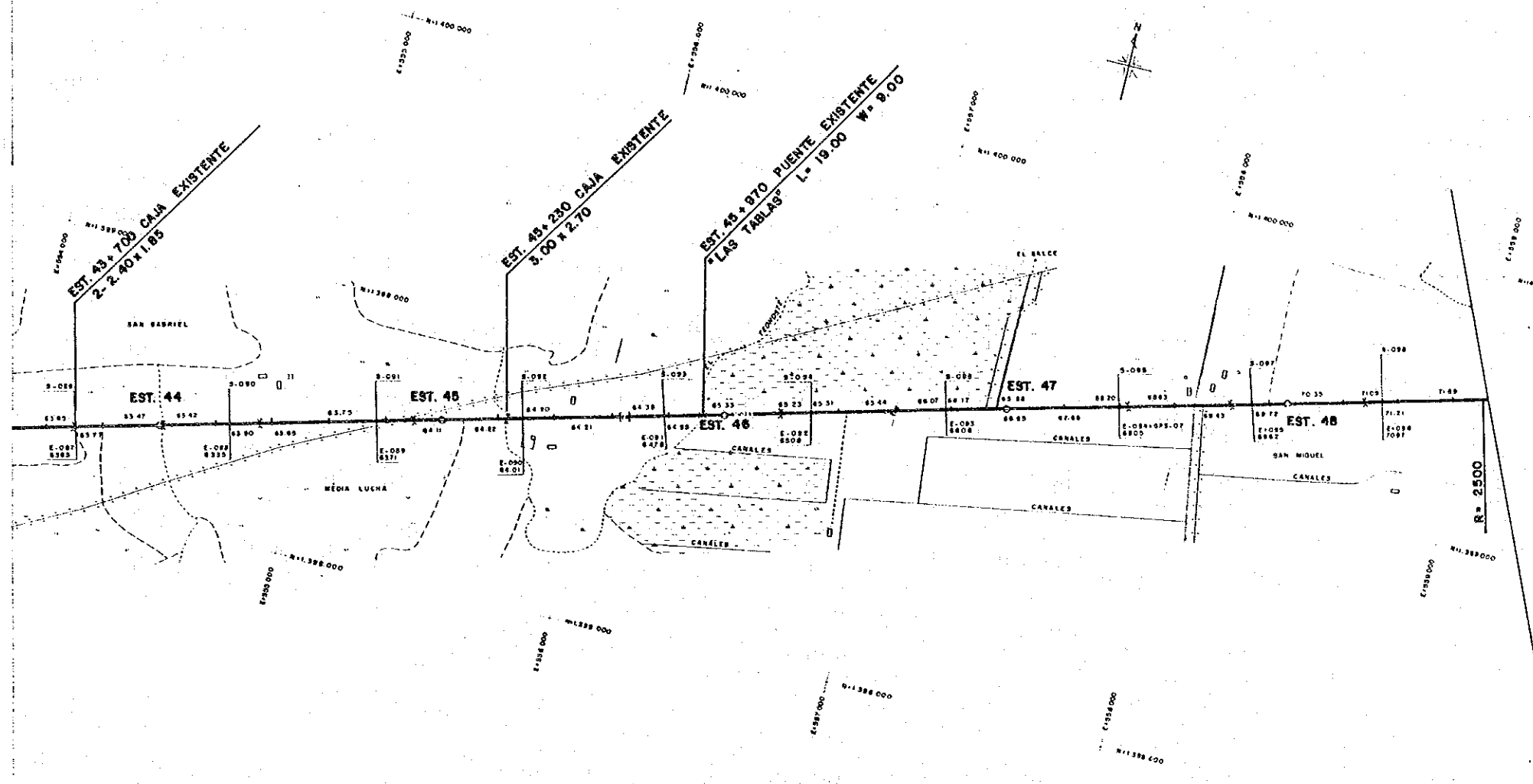
PERFIL - PROFILE



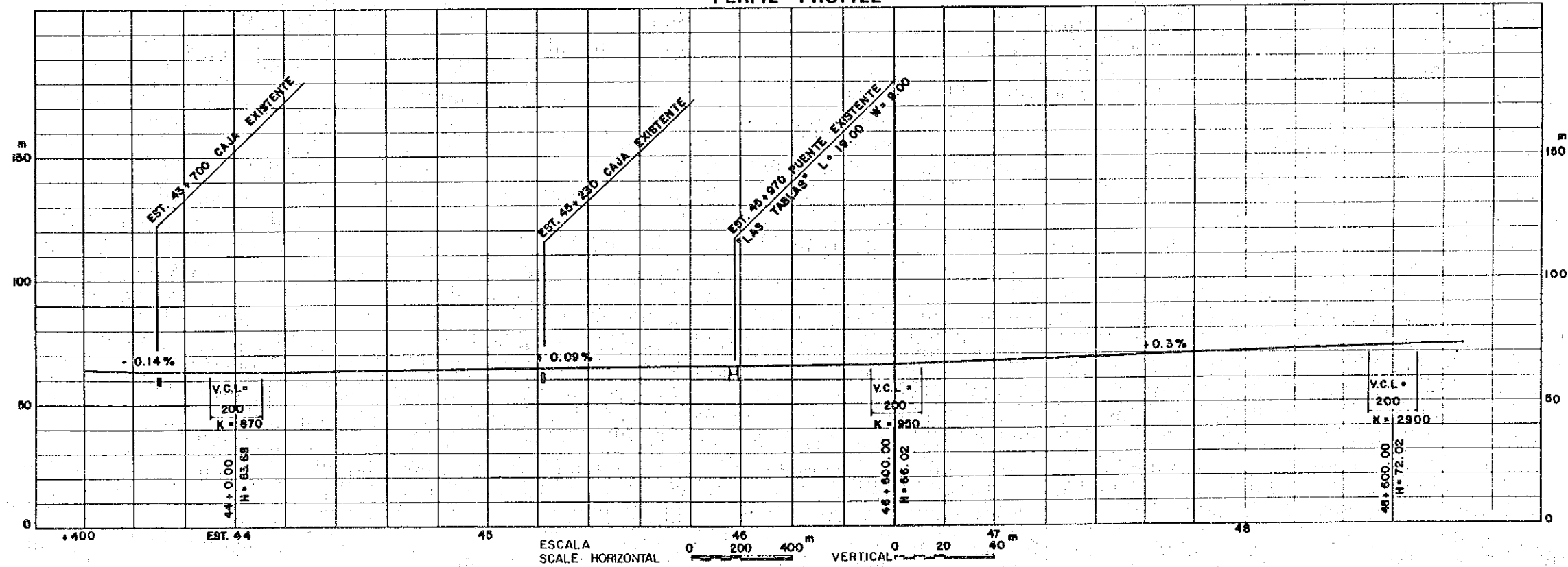


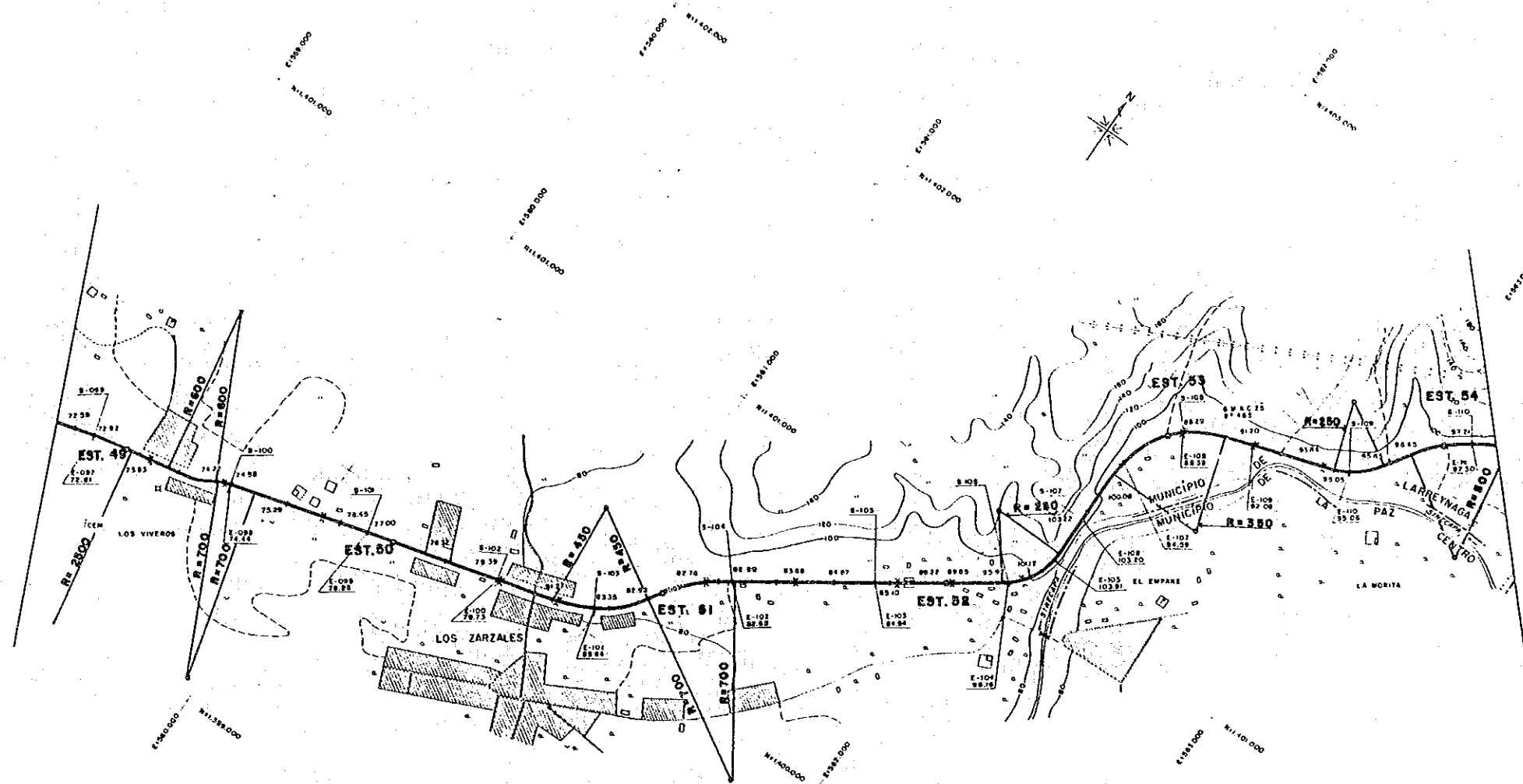
PERFIL - PROFILE



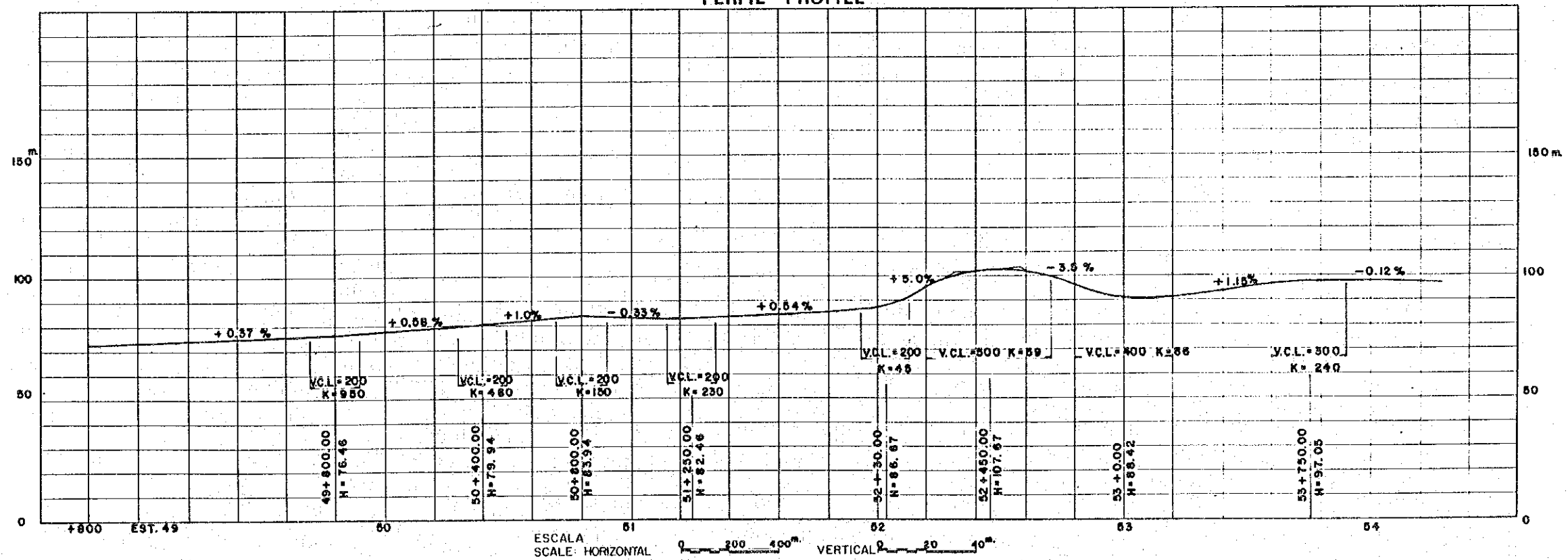


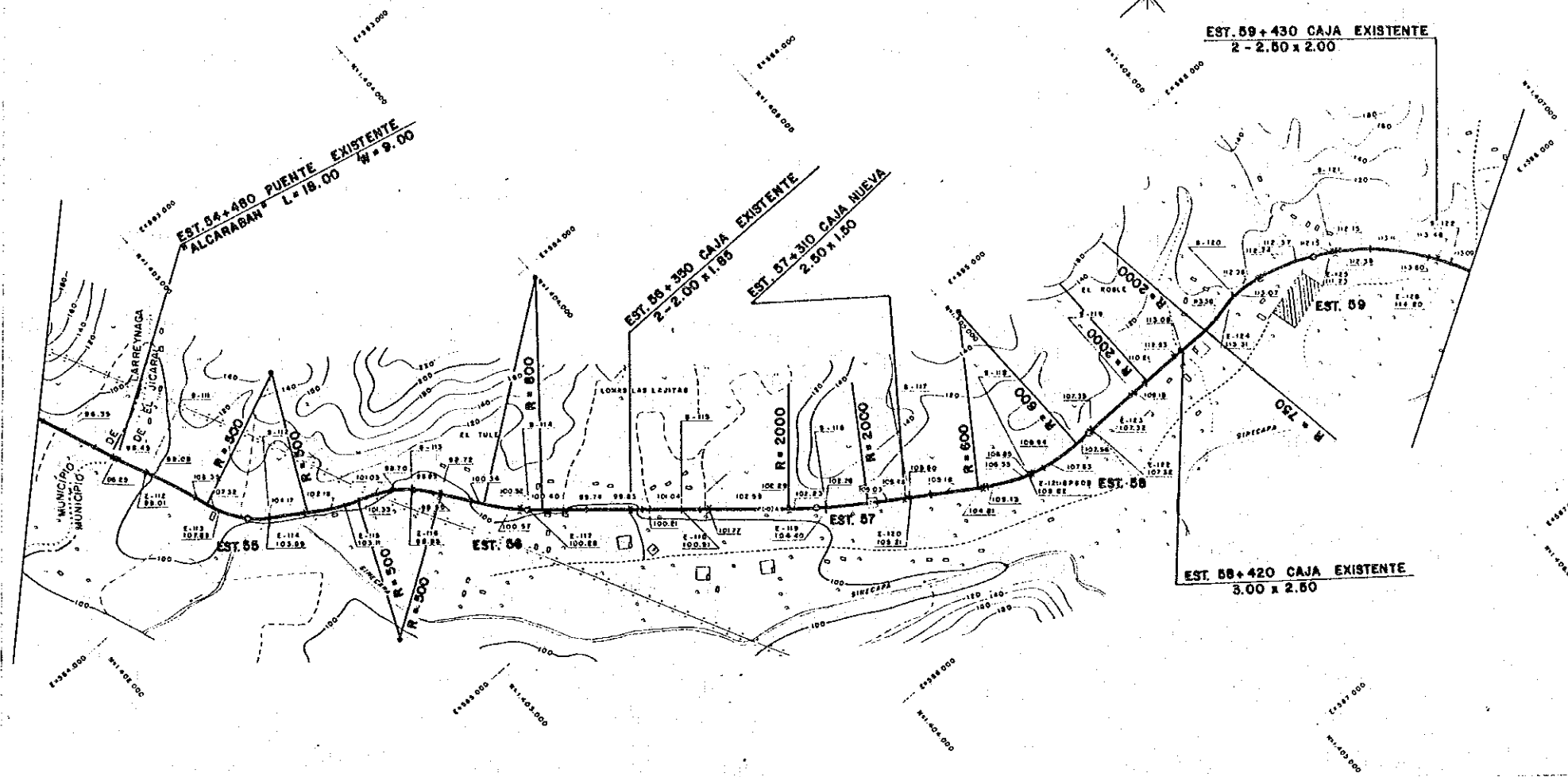
PERFIL - PROFILE



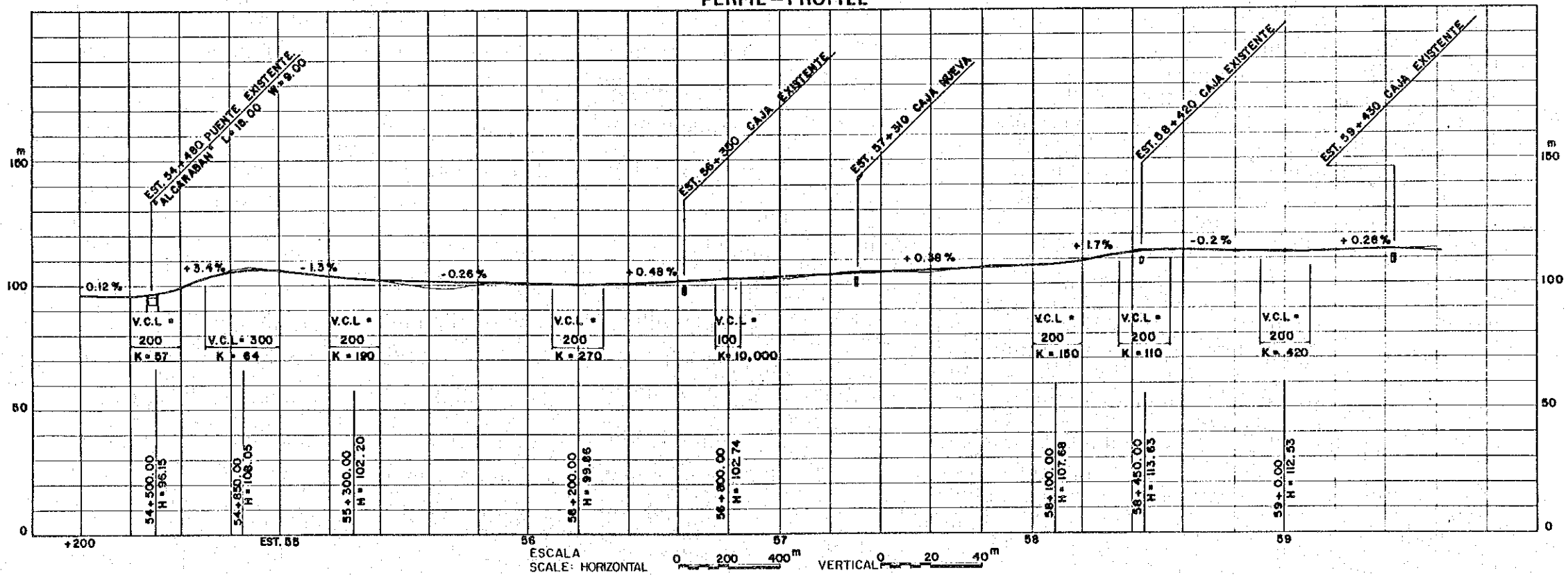


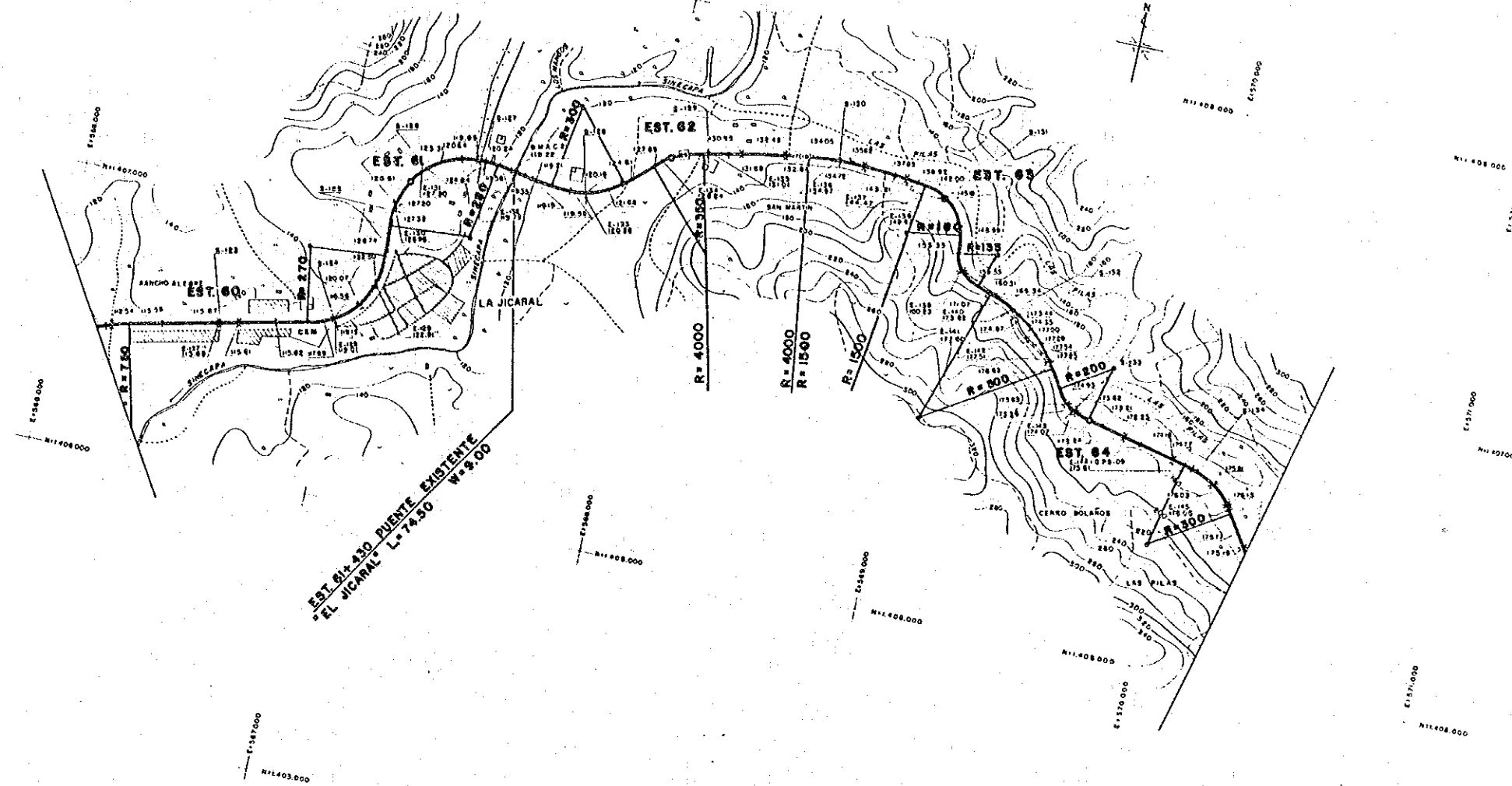
PERFIL - PROFILE



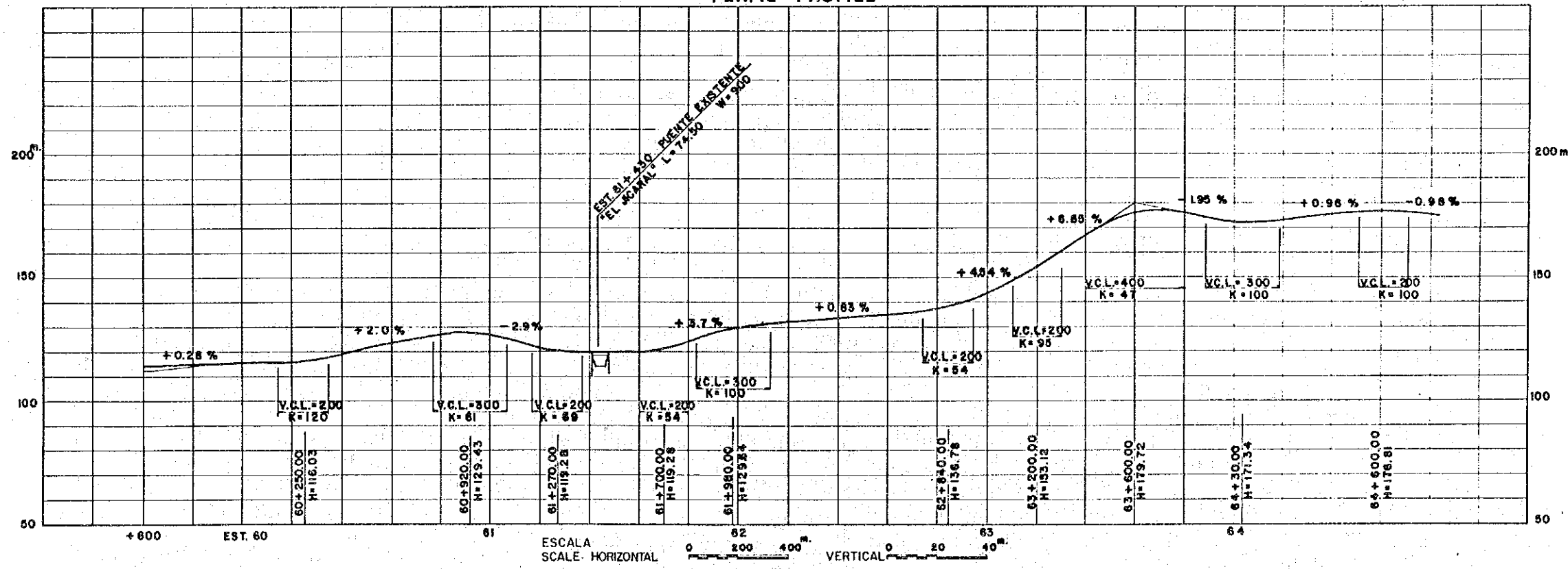


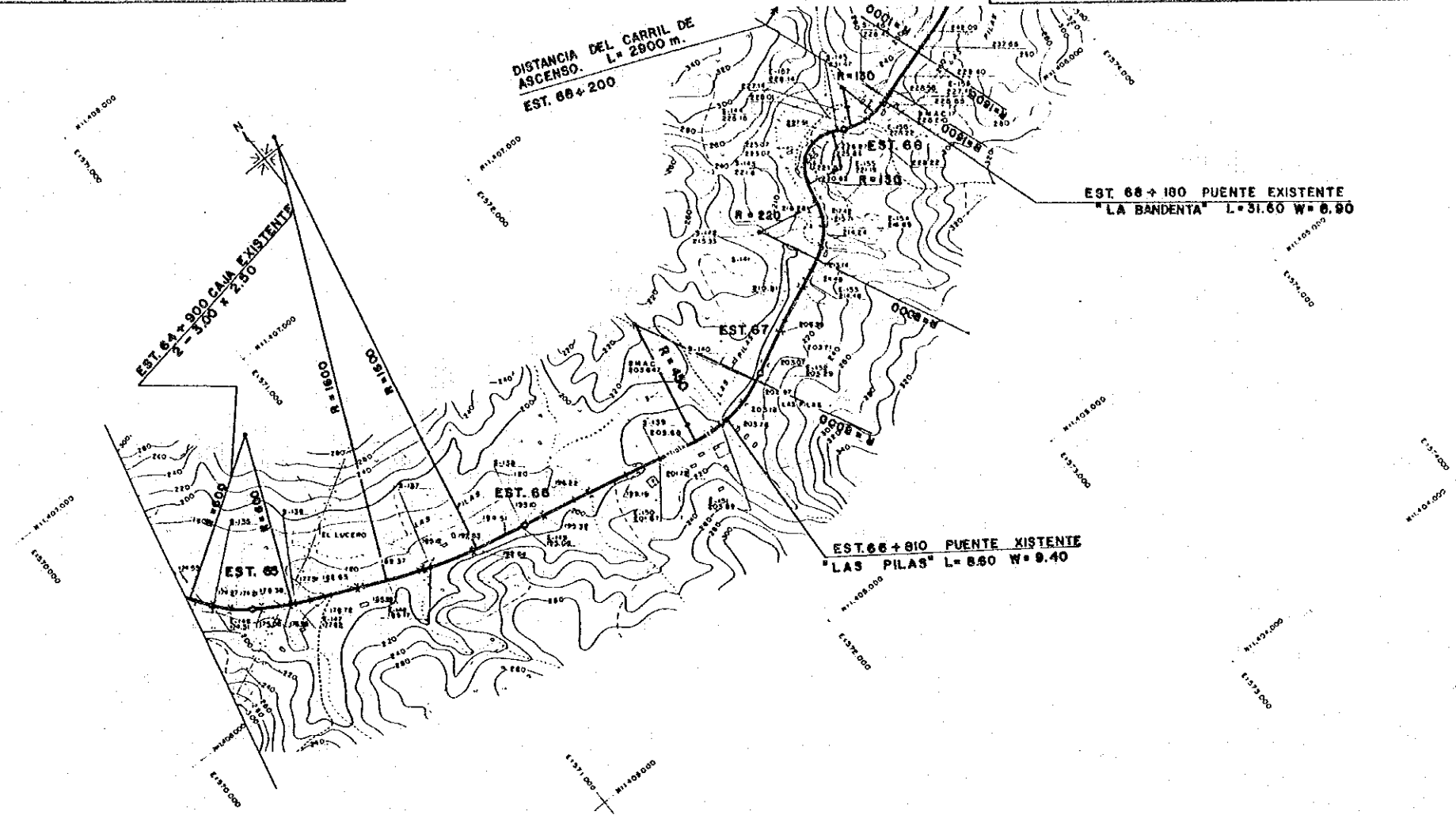
PERFIL -- PROFILE



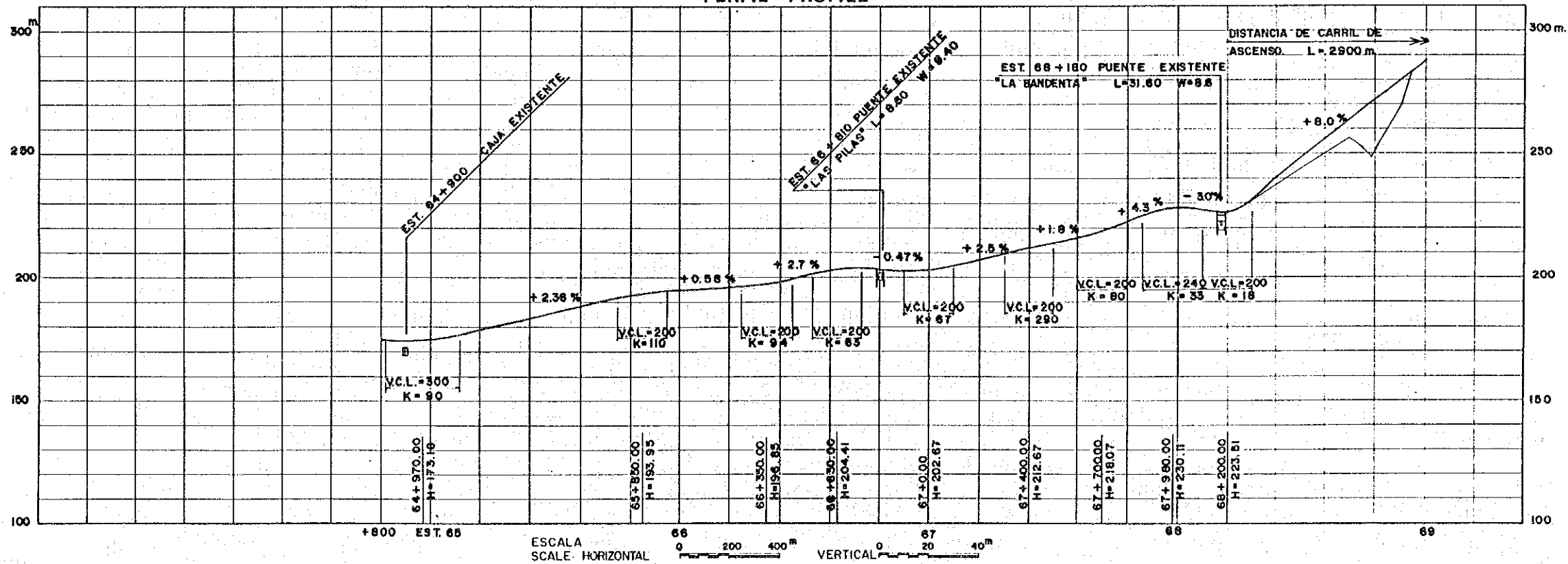


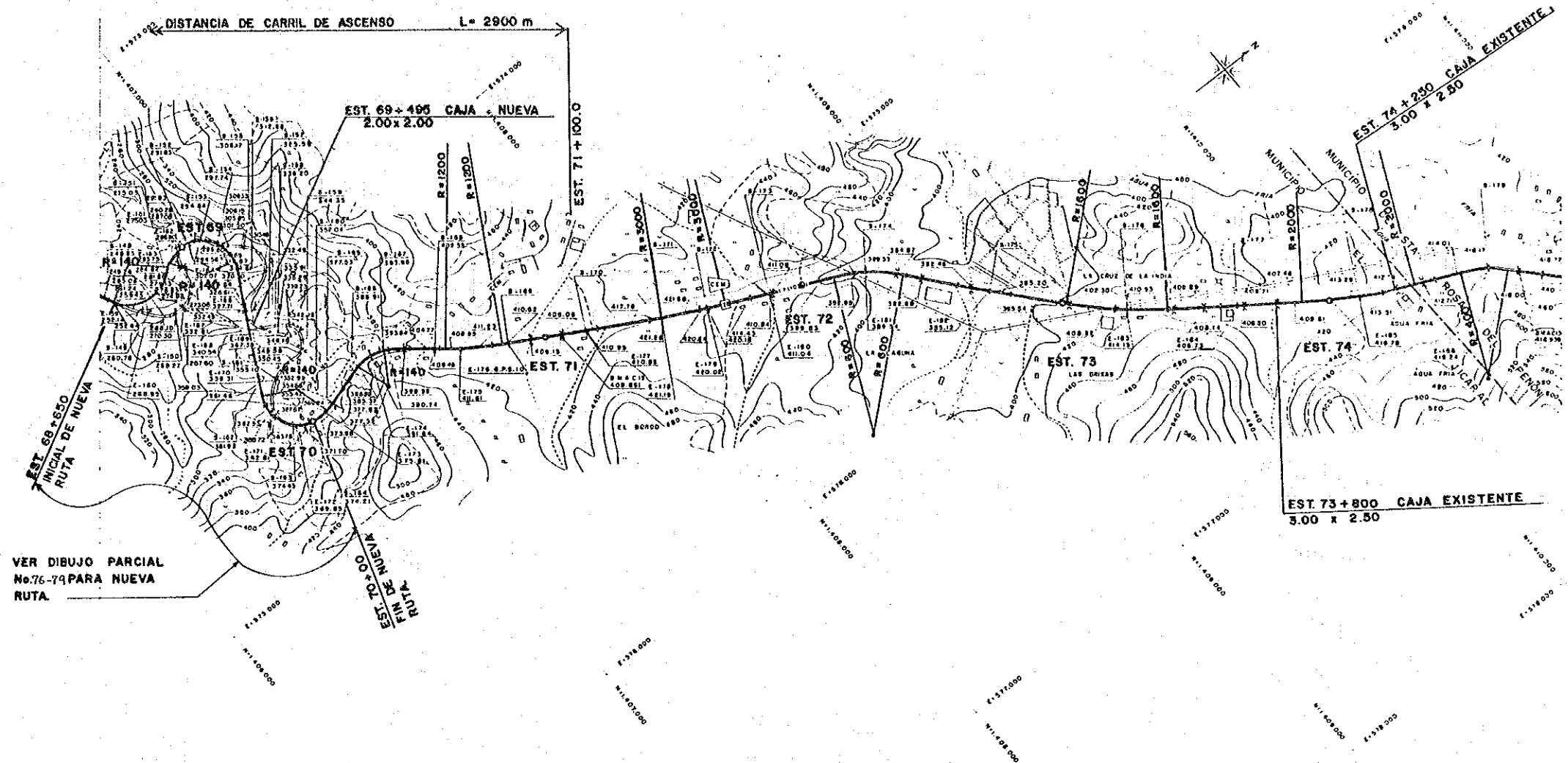
PERFIL - PROFILE



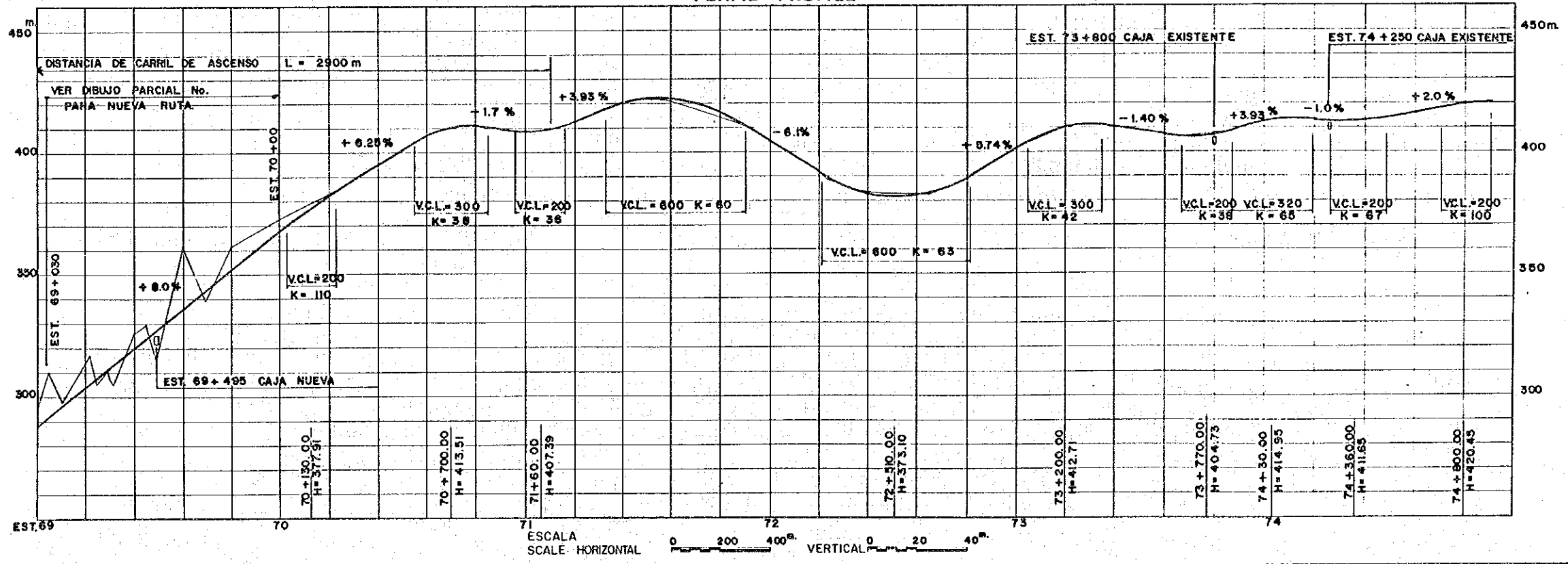


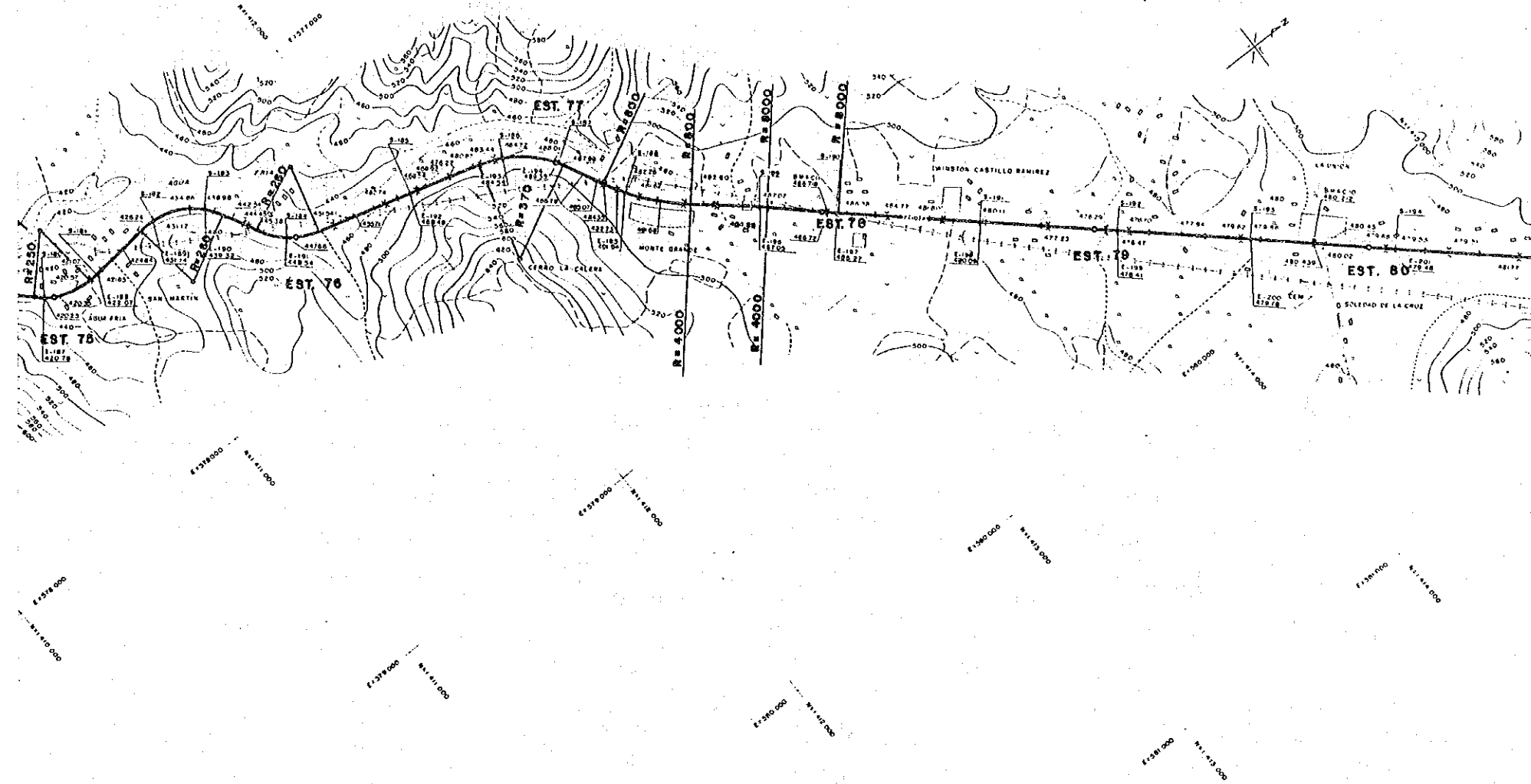
PERFIL - PROFILE



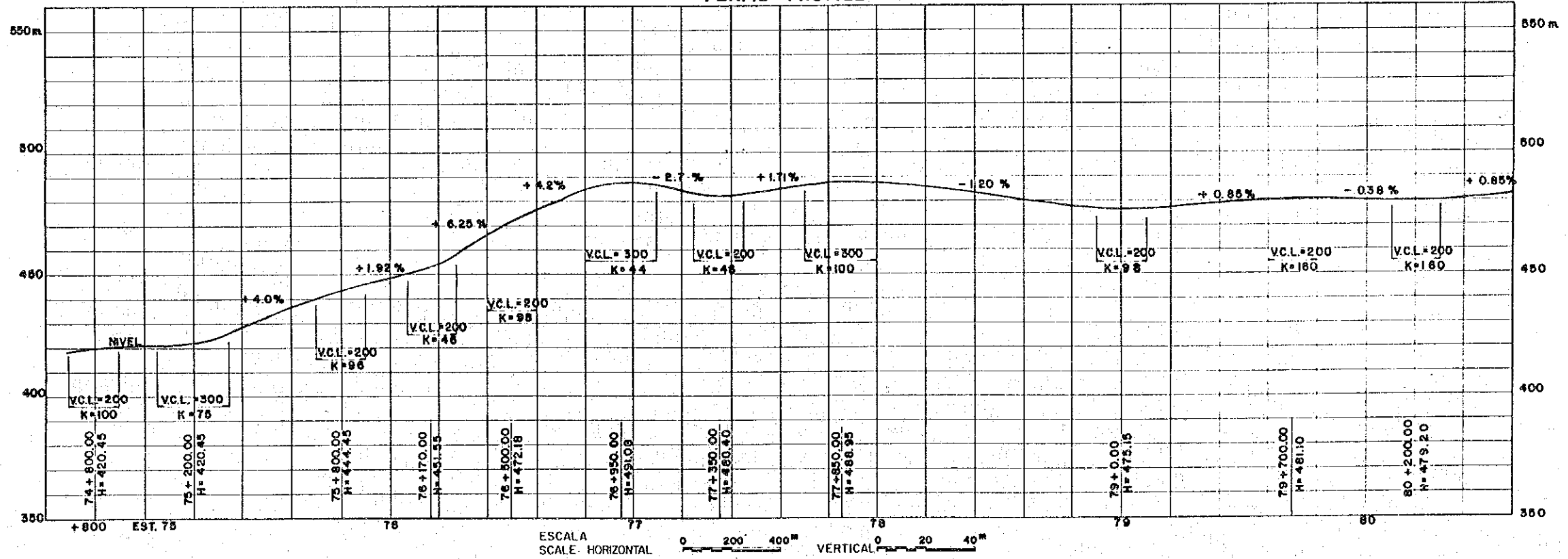


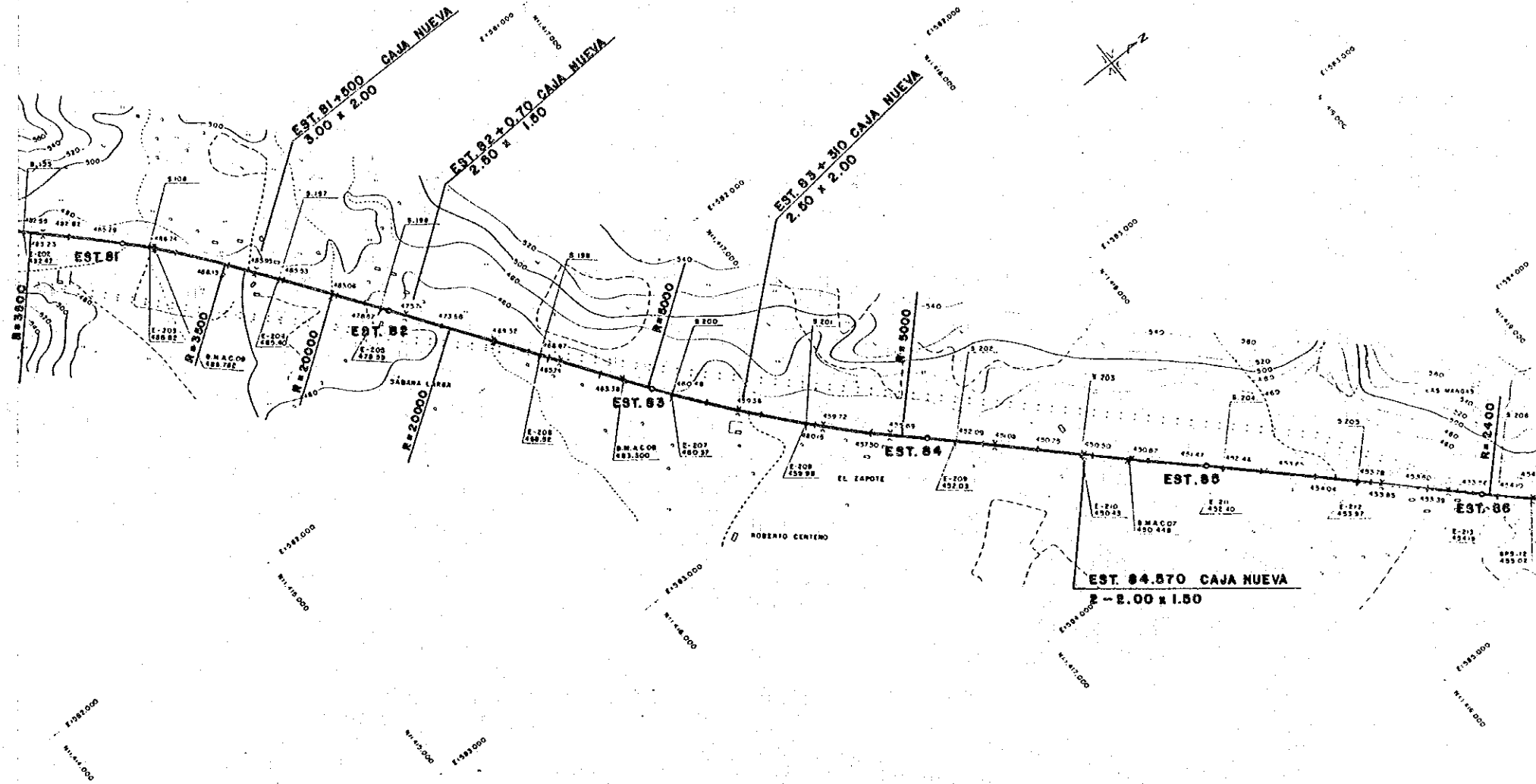
PERFIL - PROFILE



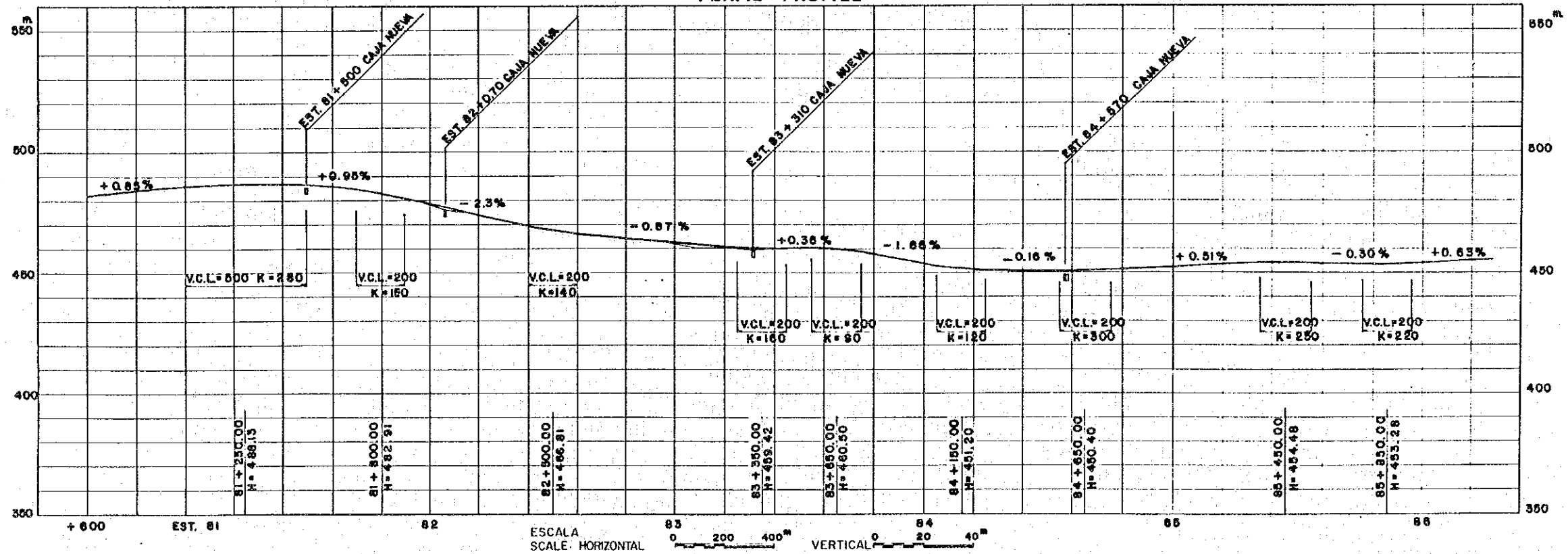


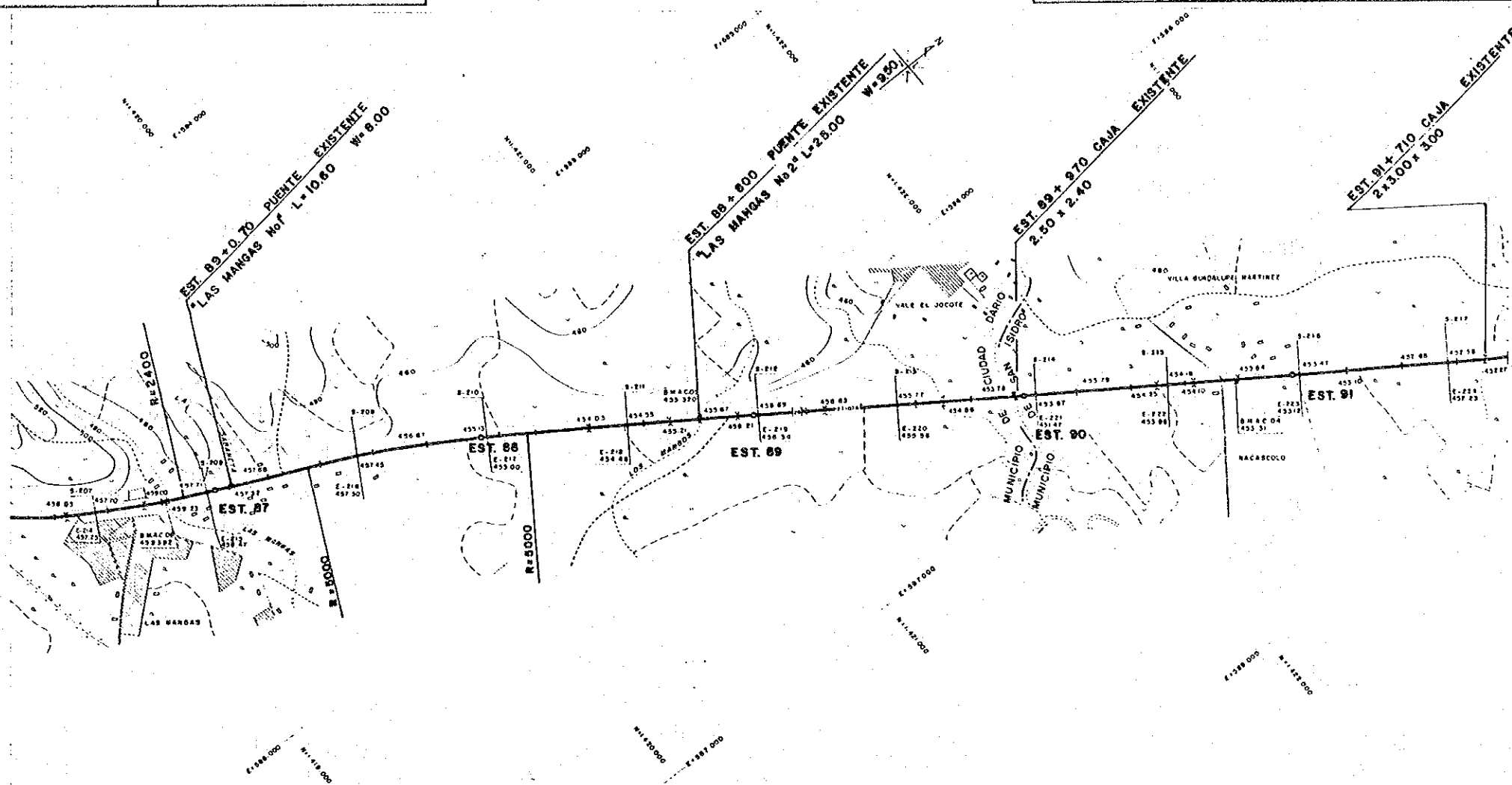
PERFIL - PROFILE



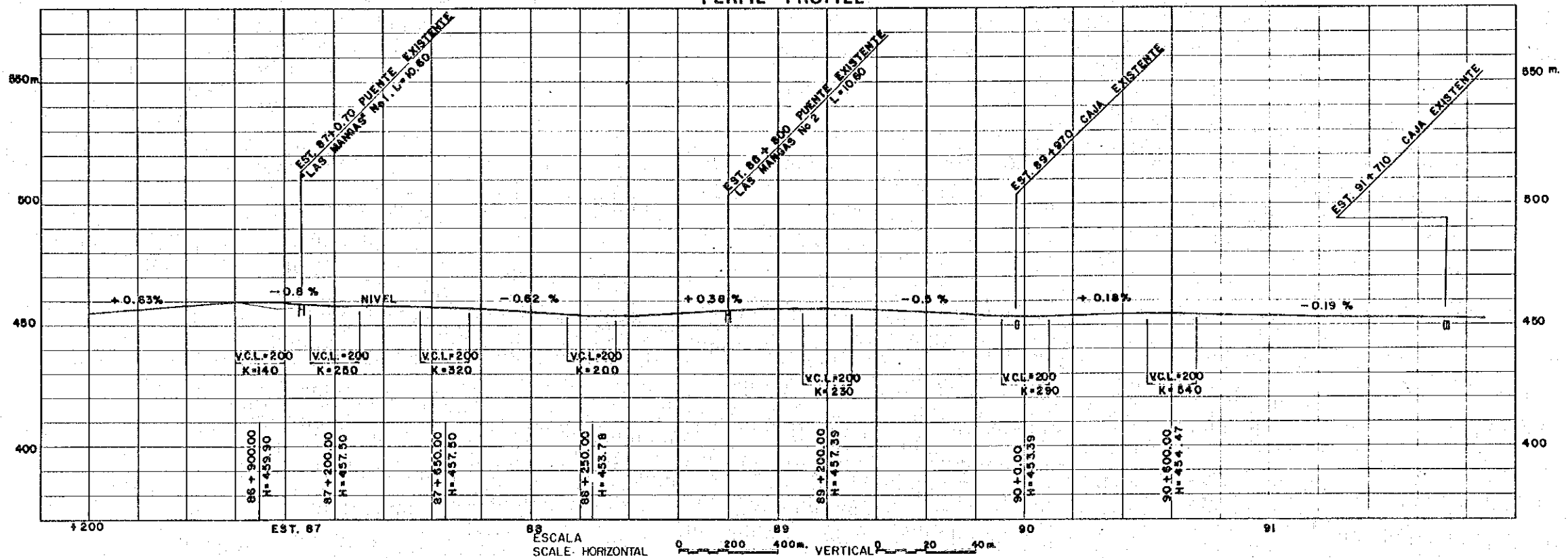


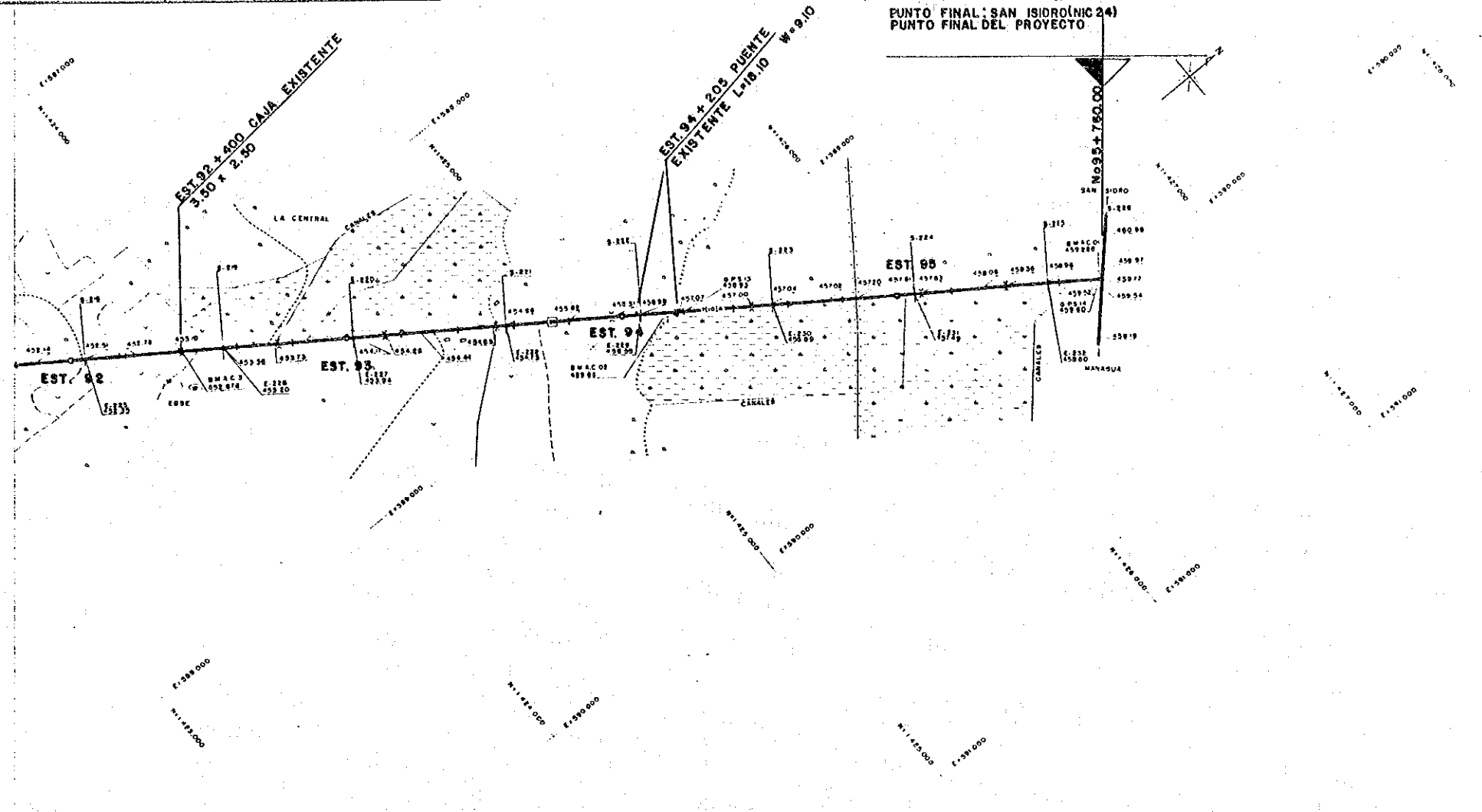
PERFIL - PROFILE



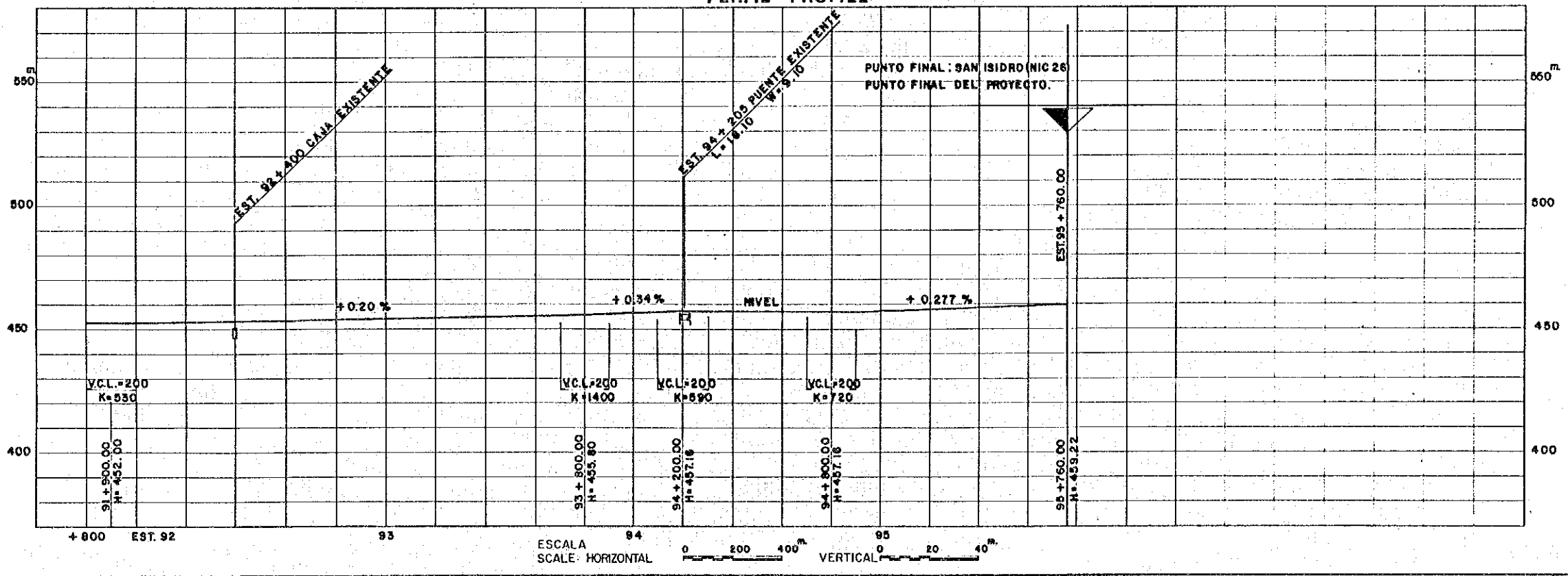


PERFIL - PROFILE

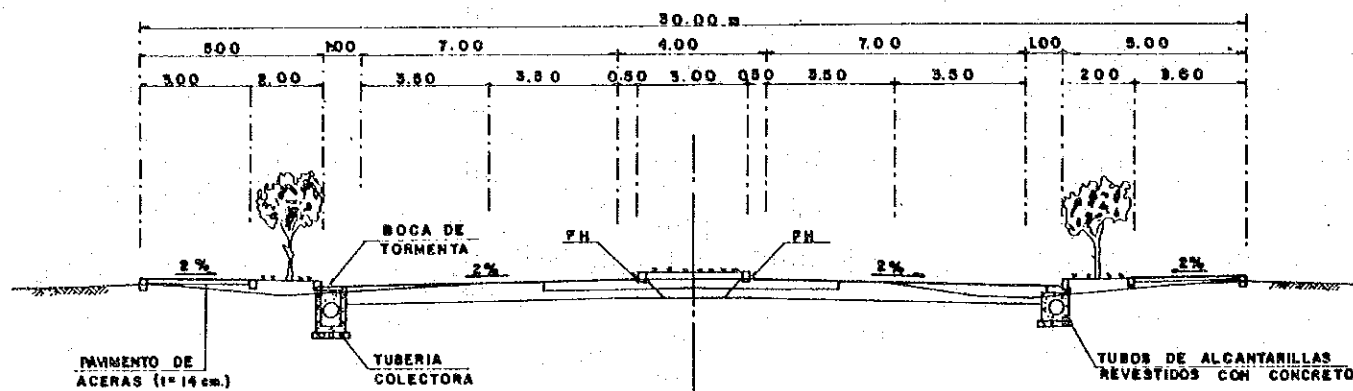




PERFIL - PROFILE

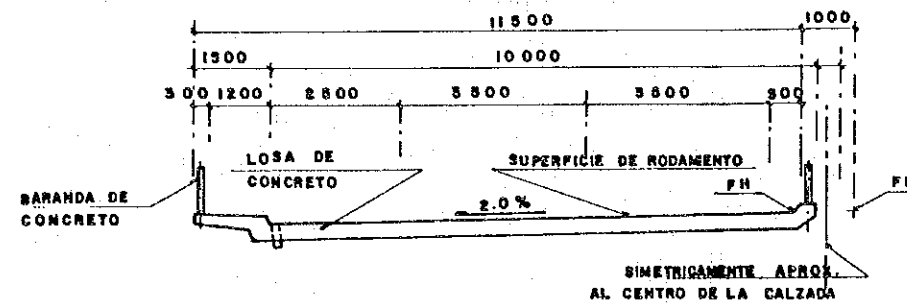


MANAGUA — MASAYA

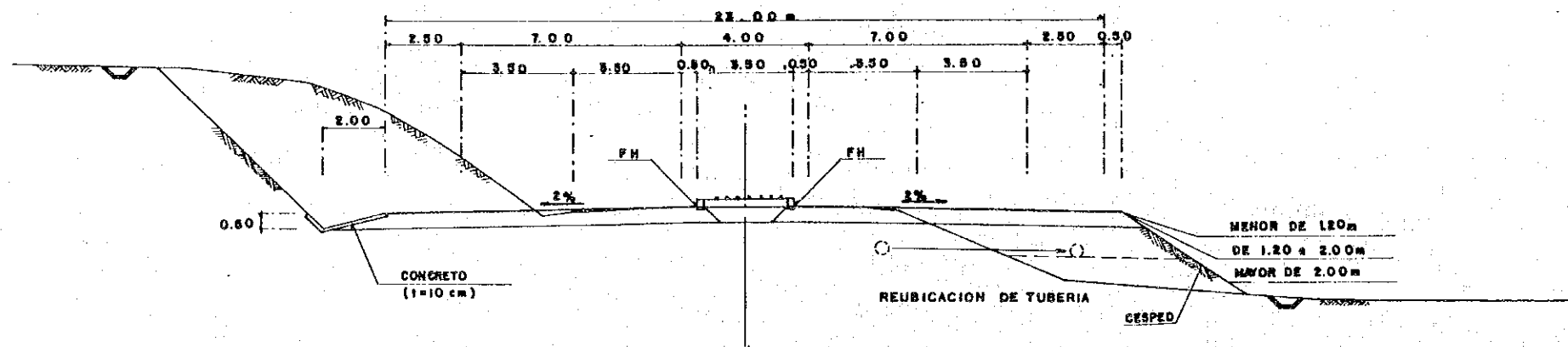


NOTA: INSTALACION DE BOCAS DE TORMENTA A CADA 50m

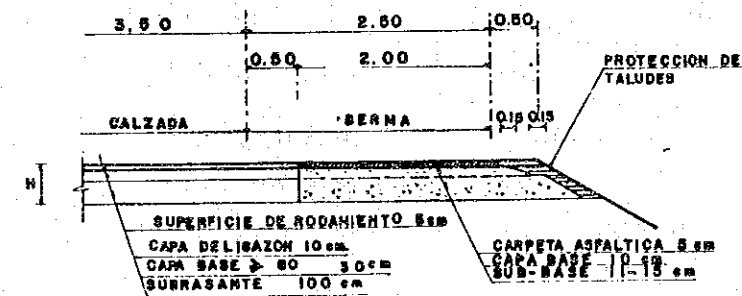
SECCION TIPICA CON ACERA
ESCALA 1:100



SECCION DE PUENTE
ESCALA 1:100

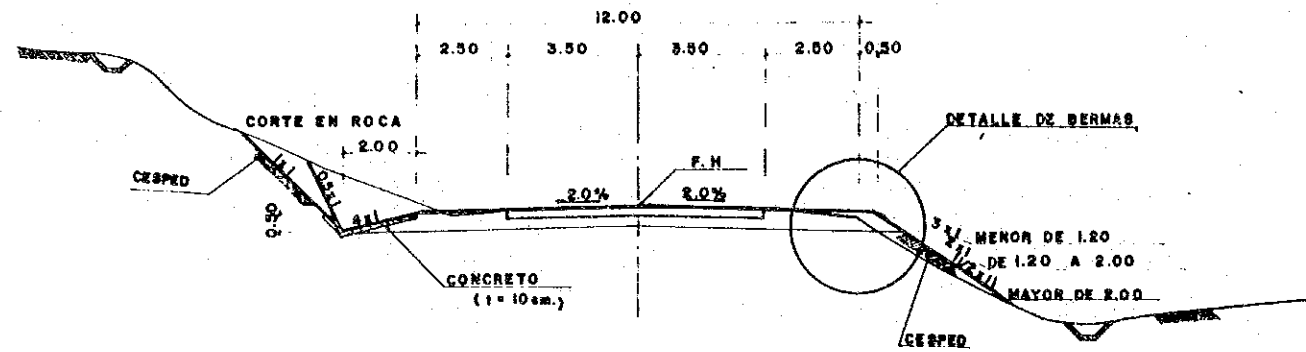


SECCION TIPICA SIN ACERA
ESCALA 1:100

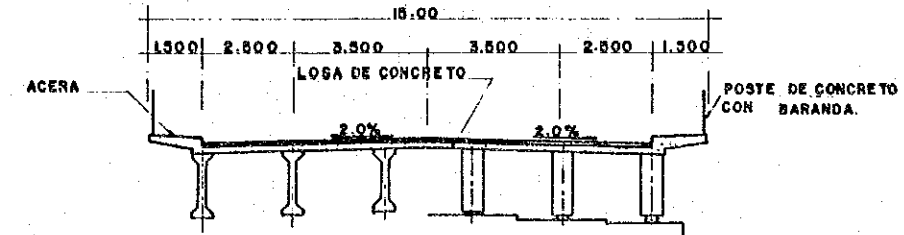


DETALLE DE BERMAS
SIN ESCALA

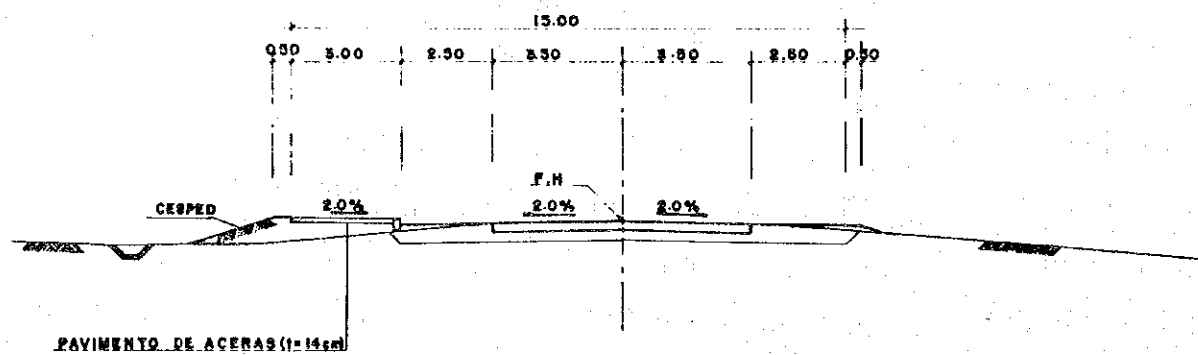
NANDAIME - MASAYA - TIPITAPA - SAN BENITO, TIPITAPA - SAN CRISTOBAL



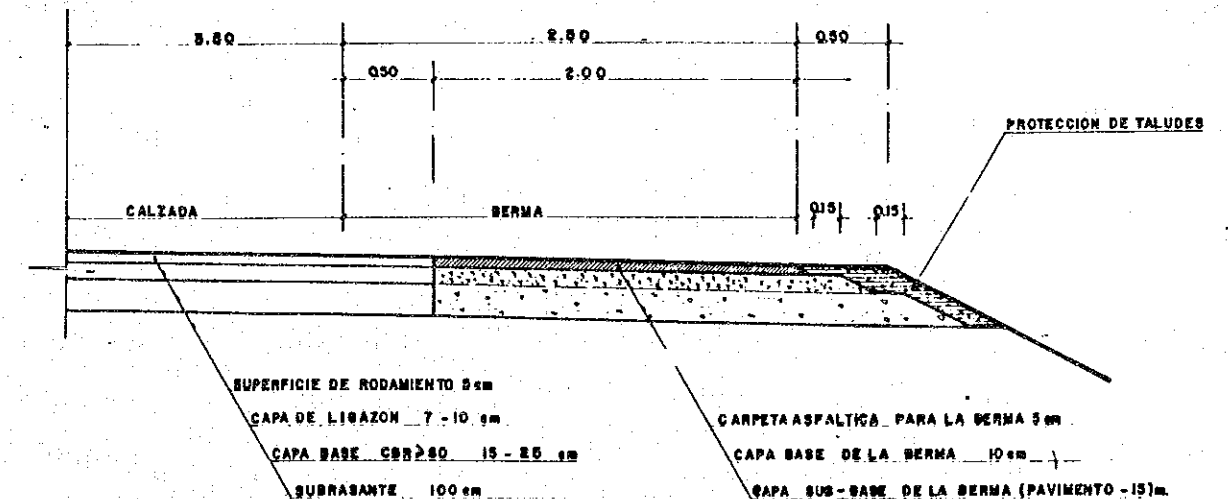
SECCION TIPICA
ESCALA 1:100



SECCION DE PUENTE
ESCALA 1:100

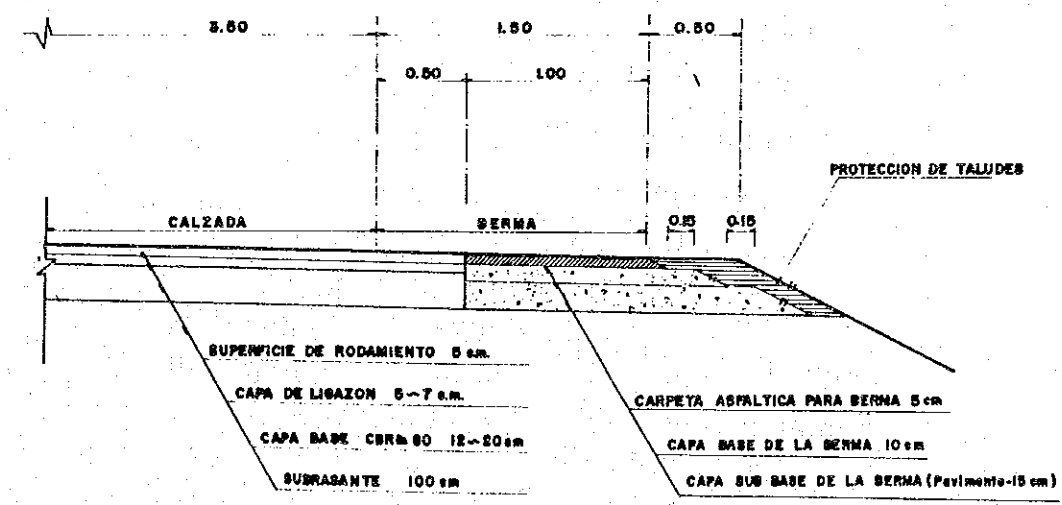
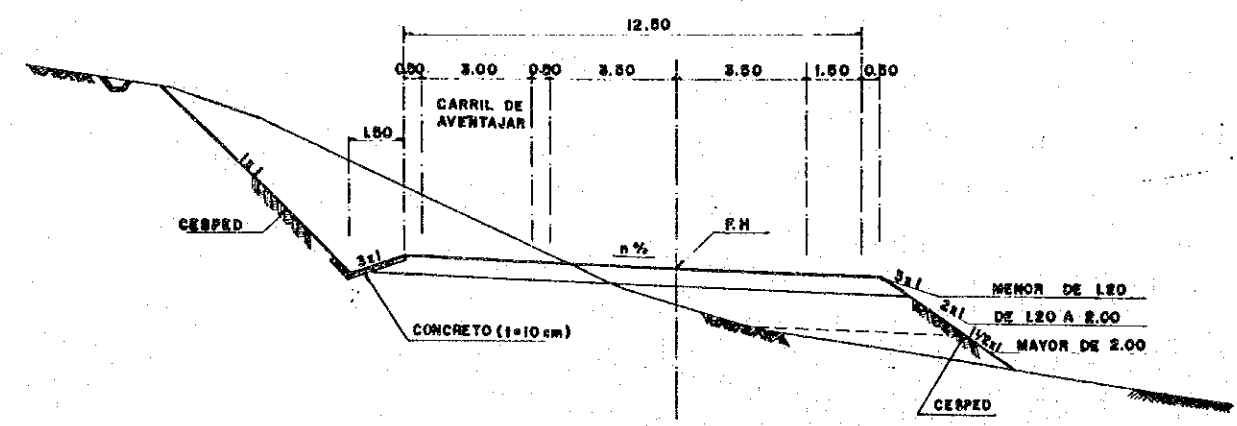
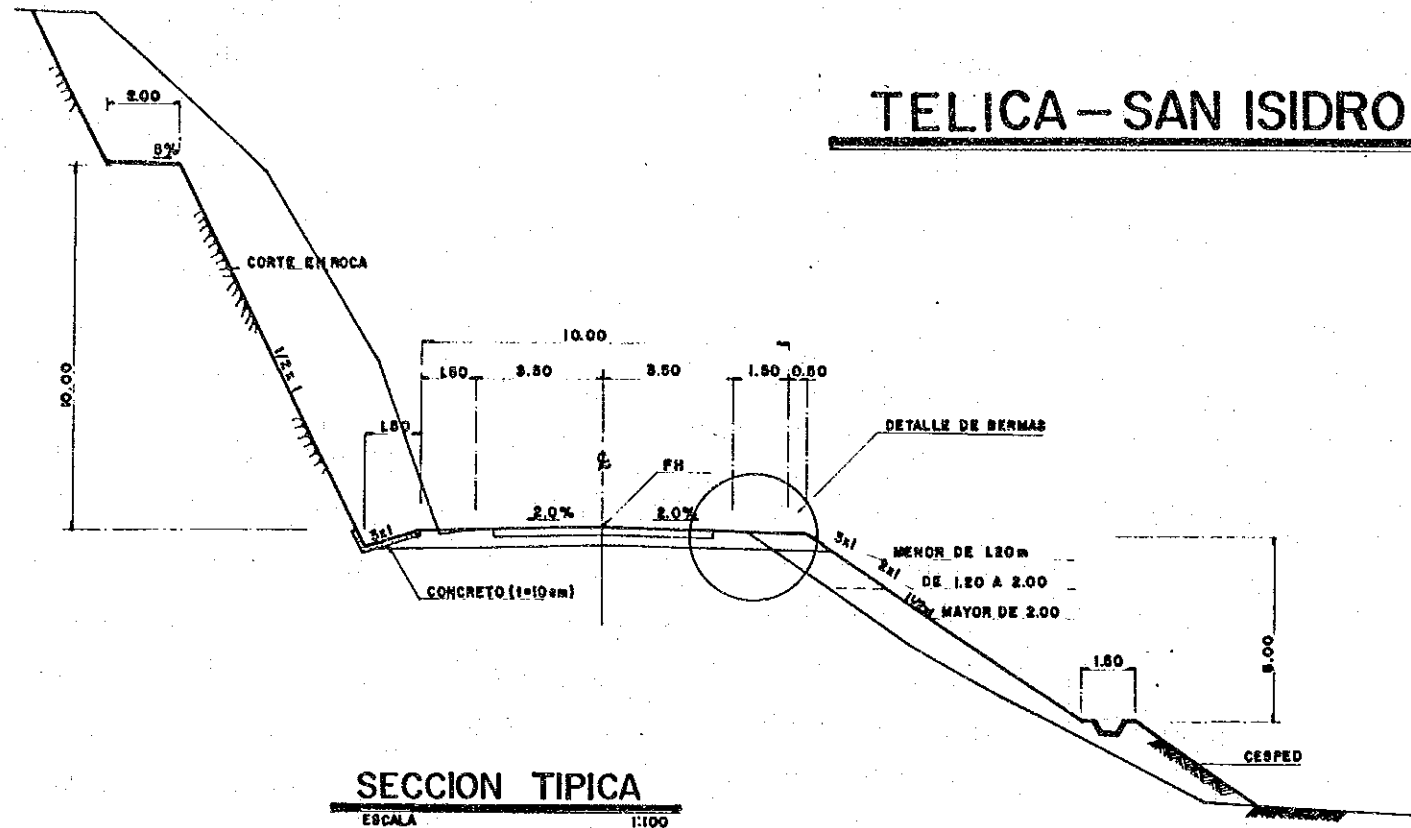


SECCION CON UNA ACERA
ESCALA 1:100

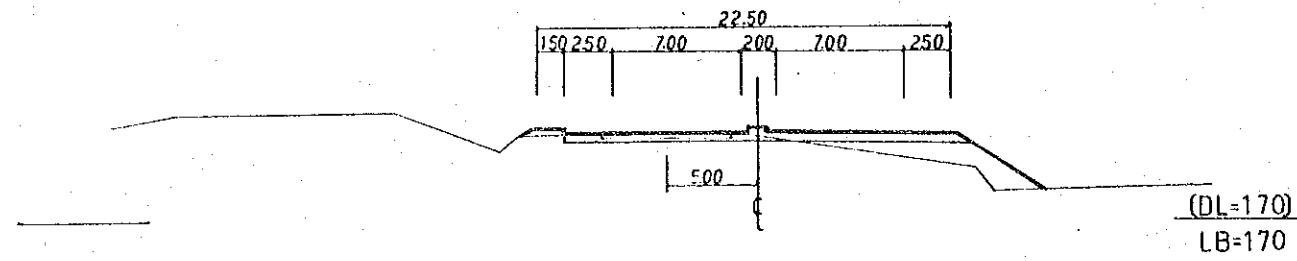


DETALLE DE BERMAS
ESCALA 1:20

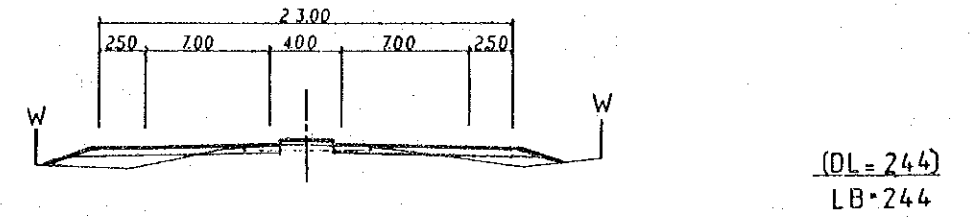
TELICA - SAN ISIDRO



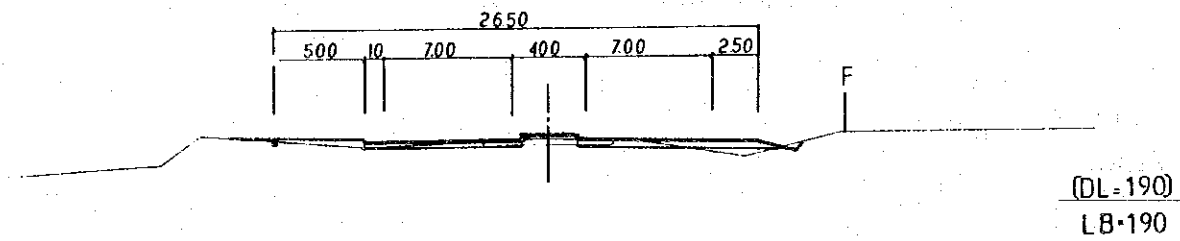
EST 0+520



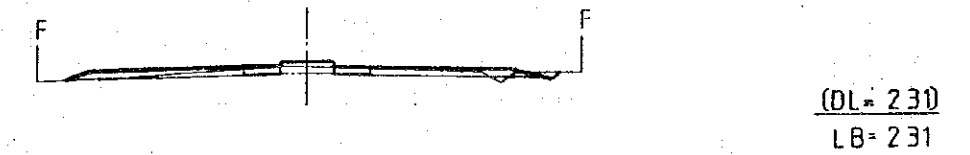
EST 4+500



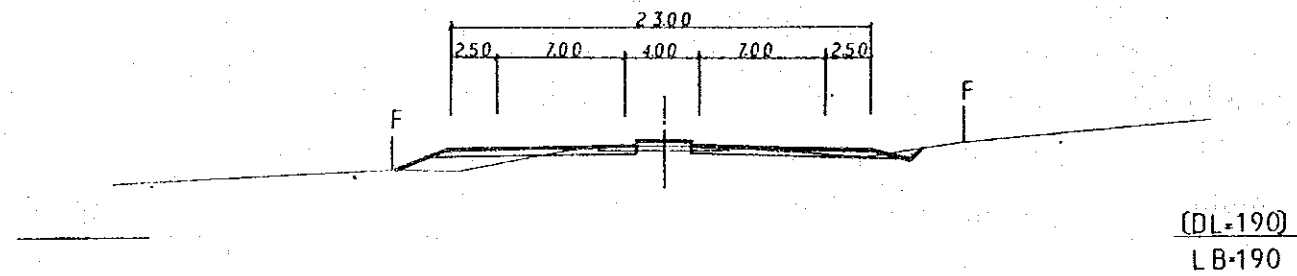
EST. 1+000



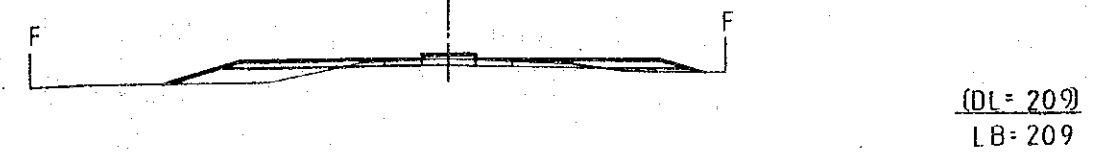
EST. 5+970



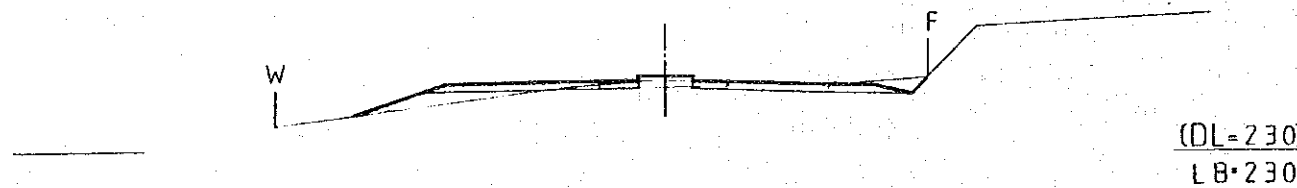
EST. 1+500



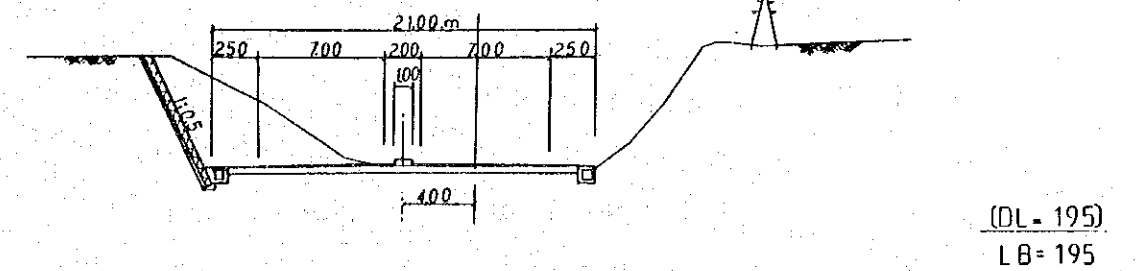
EST. 7+470



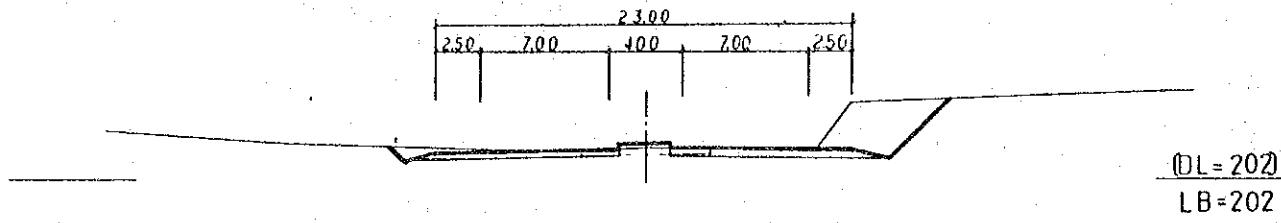
EST. 3+000



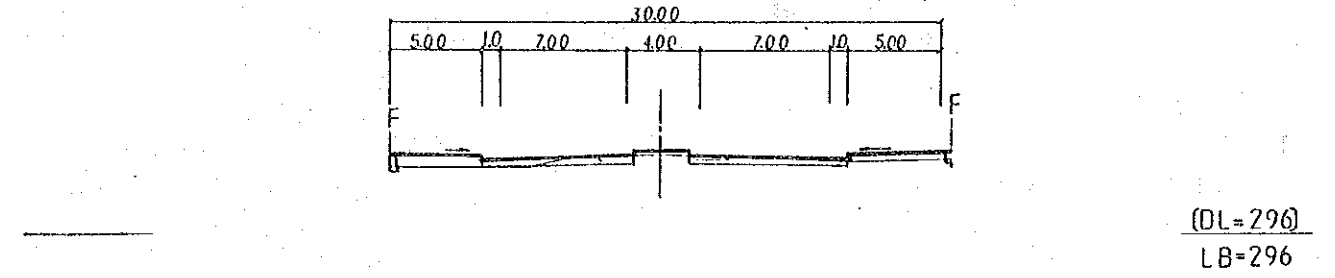
EST. 8+100



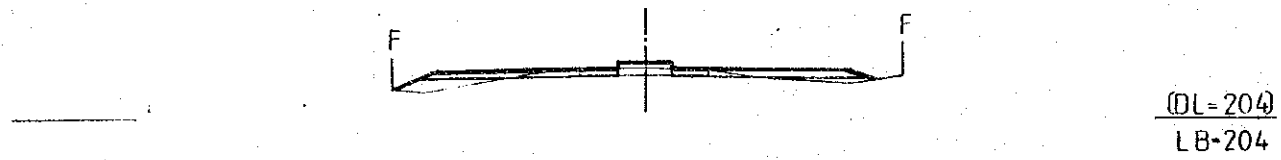
EST 8+490



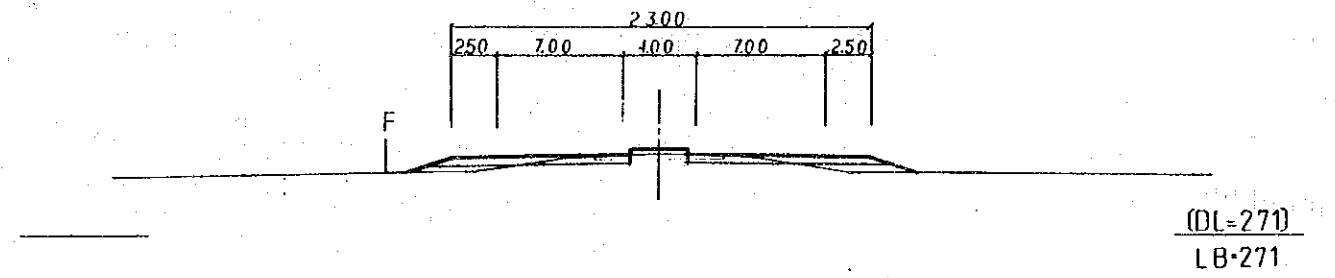
EST 13+950



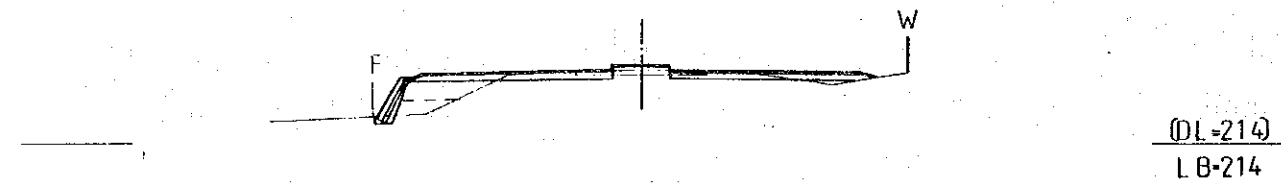
EST 8+970



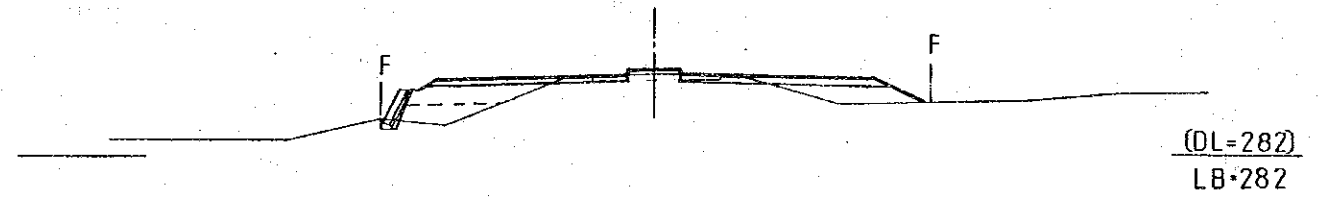
EST 15+450



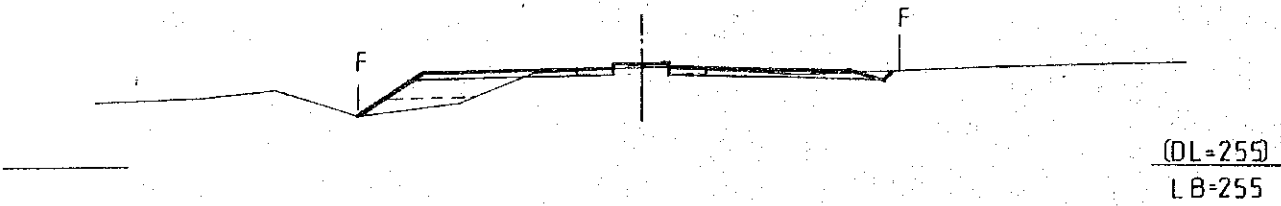
EST 9+970



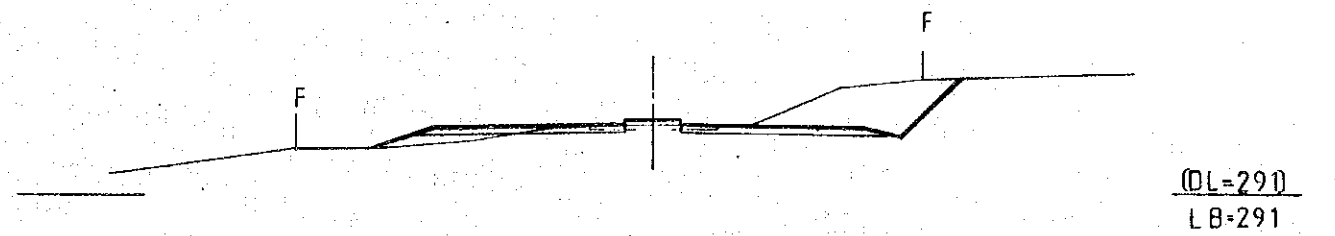
EST 16+450



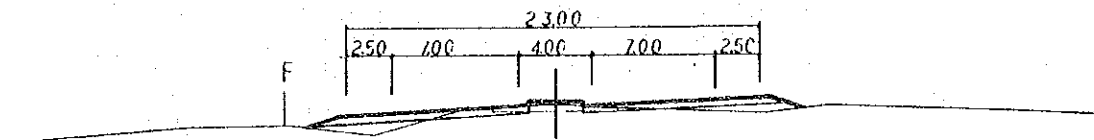
EST 11+960



EST 17+950

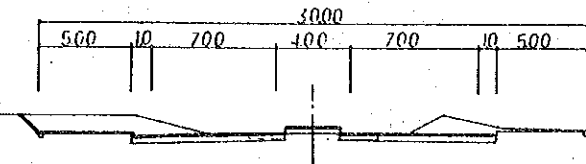


EST. 18+950



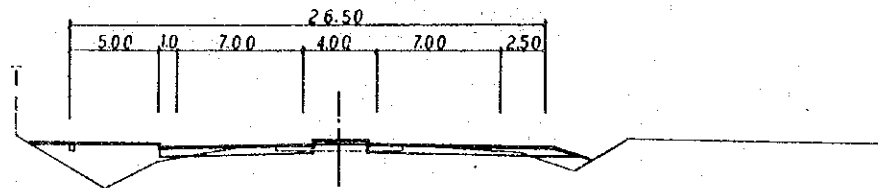
(DL-244)
LB-244

EST. 22+630



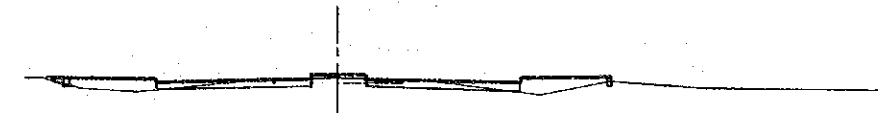
(DL-286)
LB-286

EST. 20+130



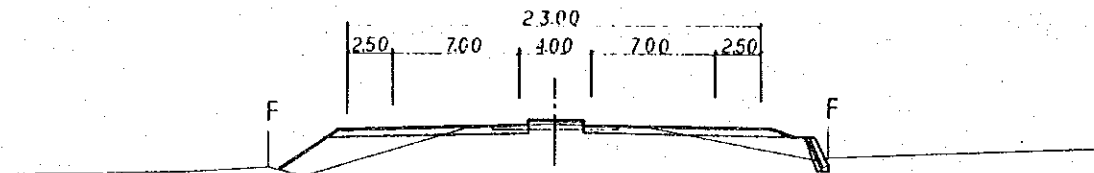
(DL-210)
LB-210

EST. 23+630



(DL-235)
LB-235

EST. 21+630



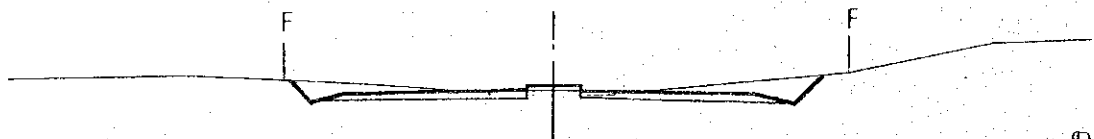
(DL-216)
LB-216

EST. 24+620



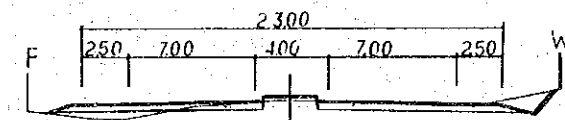
(DL-242)
LB-242

EST. 21+950



(DL-223)
LB-223

EST. 25+620



(DL-248)
LB-248

MASAYA - NANDAIME

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

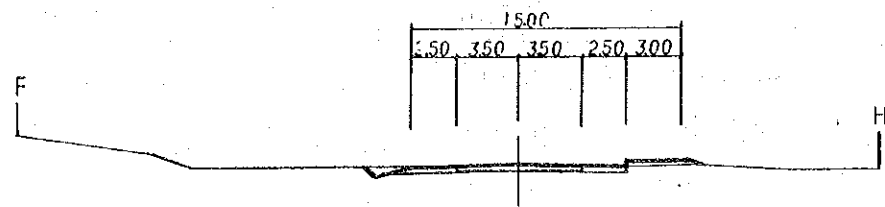
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

JAPAN INTERNATIONAL COOPERATION AGENCY

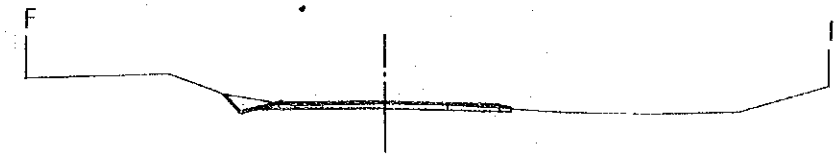
48/79

EST. 0+730



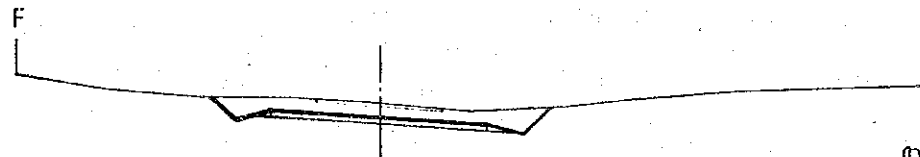
DL-252
LB-252

EST. 3+250



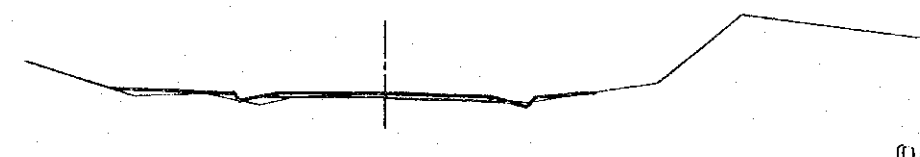
DL-291
LB-291

EST. 1+750



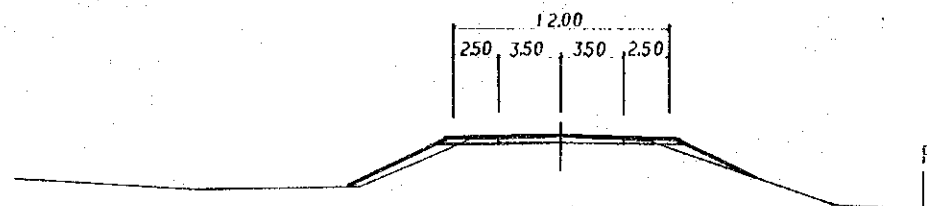
DL-265
LB-265

EST. 4+230



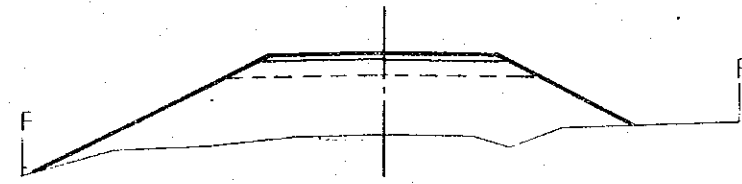
DL-334
LB-334

EST. 2+250



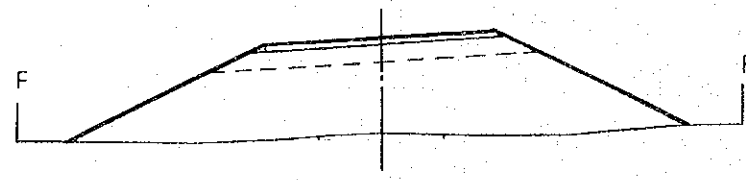
DL-264
LB-264

EST. 4+730



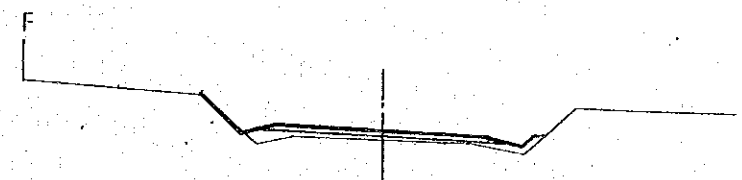
DL-353
LB-353

EST. 2+750



DL-269
LB-269

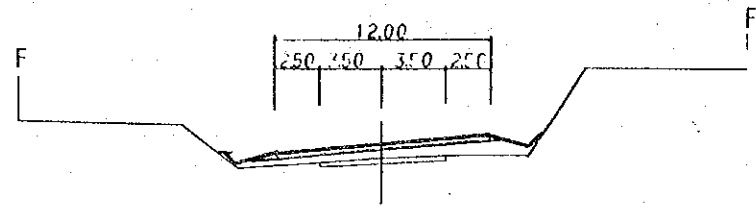
EST. 5+230



DL-385
LB-385

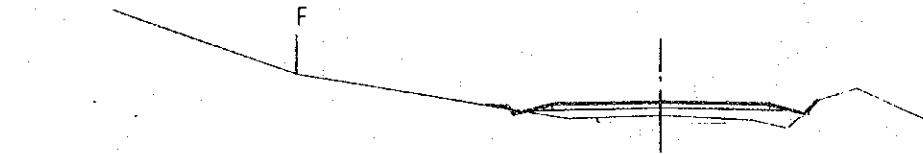
MASAYA - NANDAIME

EST 5+720



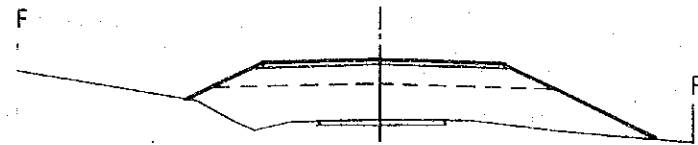
(DL=400)
LB=400

EST 7+720



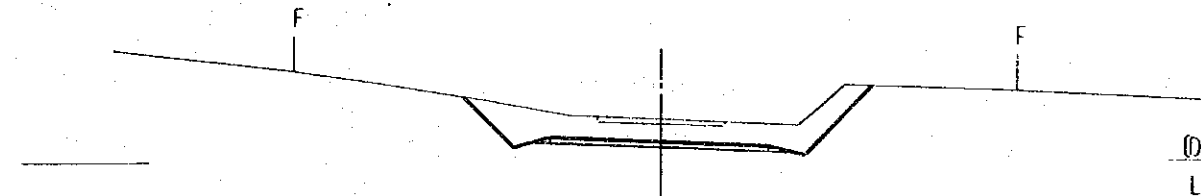
(DL=478)
LB=478

EST 6+220



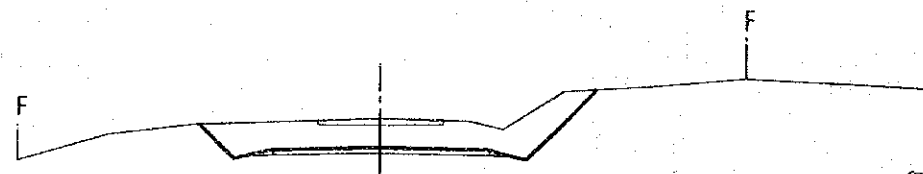
(DL=420)
LB=420

EST 8+210



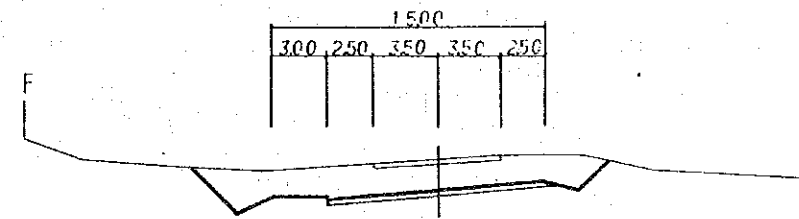
(DL=506)
LB=506

EST 6+720



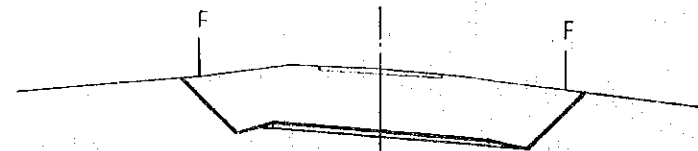
(DL=453)
LB=453

EST 8+700



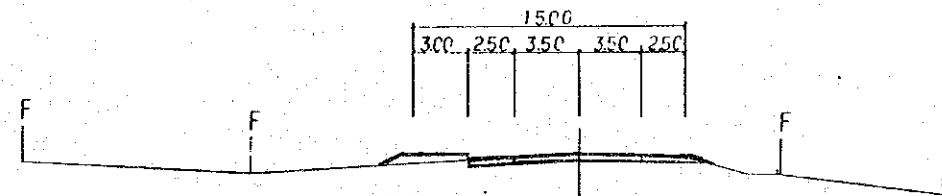
(DL=499)
LB=499

EST 7+220



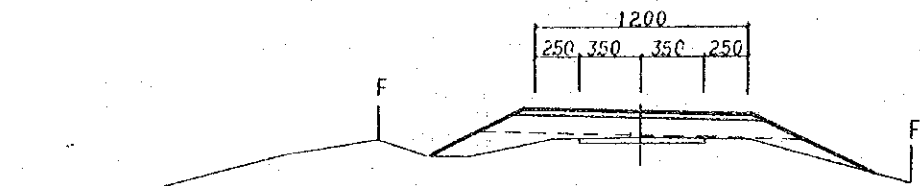
(DL=461)
LB=461

EST 9+200



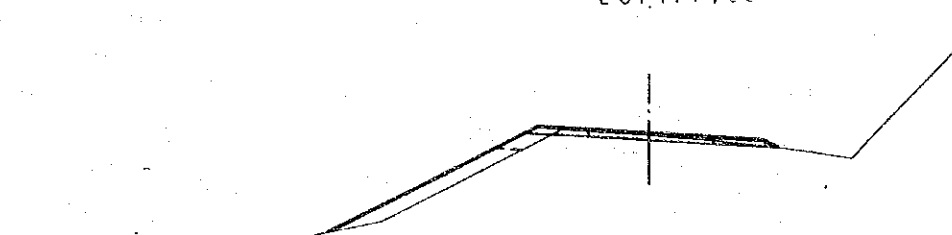
(DL=496)
LB=496

EST. 9+700



(DL=476)
LB=476

EST. 11+700



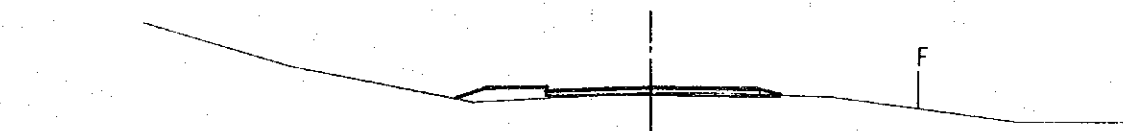
(DL=369)
LB=369

EST. 10+200



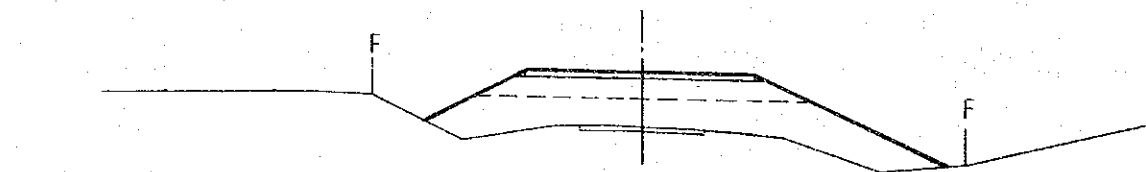
(DL=452)
LB=452

EST. 12+200



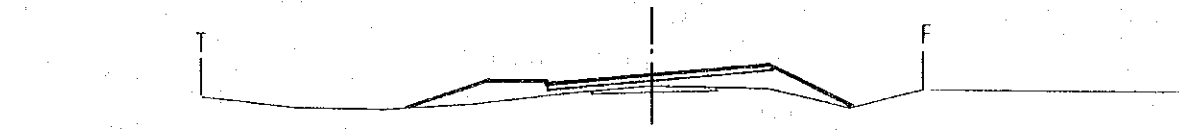
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LB=349

EST. 10+700



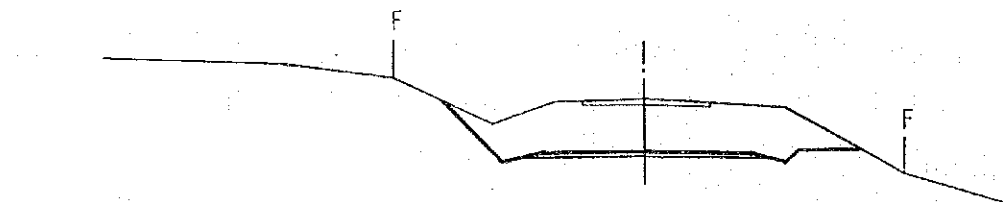
(DL=427)
LB=427

EST. 12+700



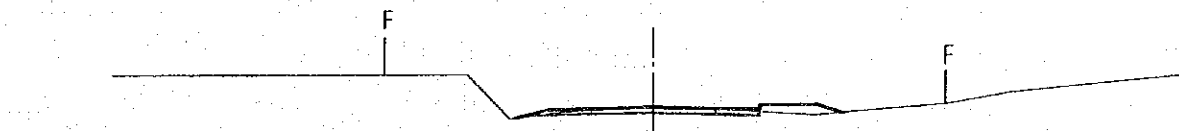
(DL=345)
LB=345

EST. 11+200



(DL=407)
LB=407

EST. 13+200



(DL=341)
LB=341

MASAYA - NANAIME

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

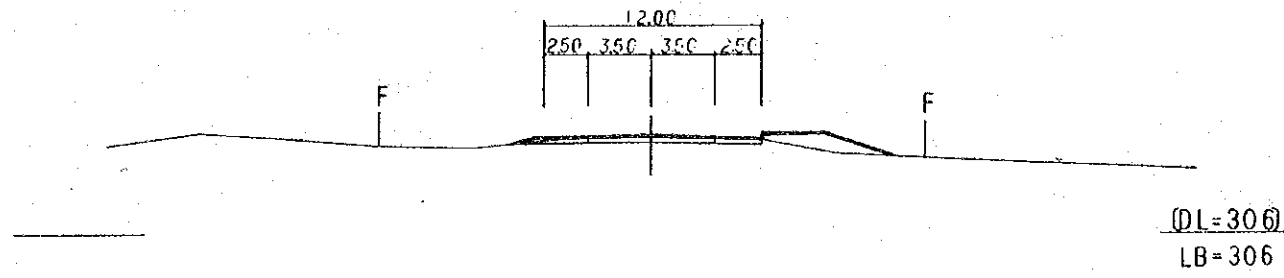
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

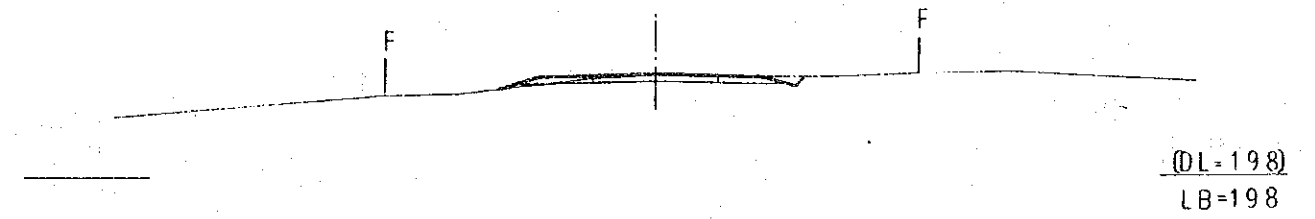
JAPAN INTERNATIONAL COOPERATION AGENCY

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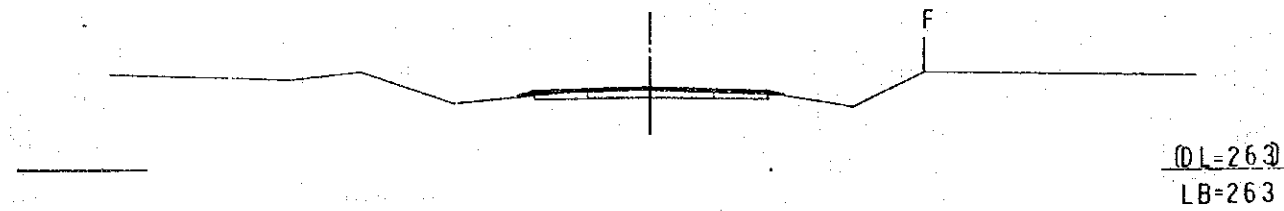
EST. 15+220



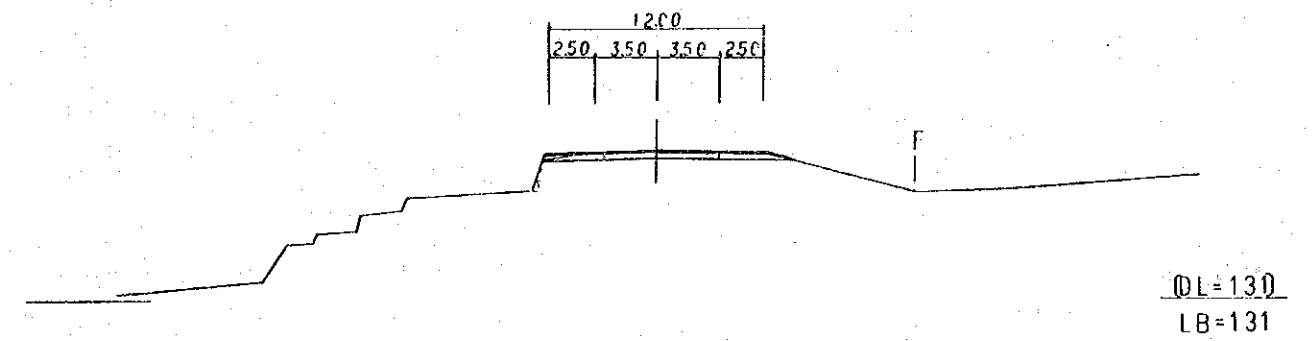
EST. 22+780



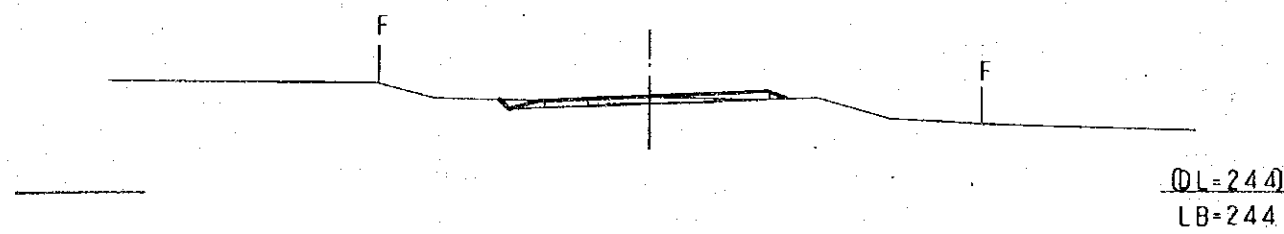
EST. 17+220



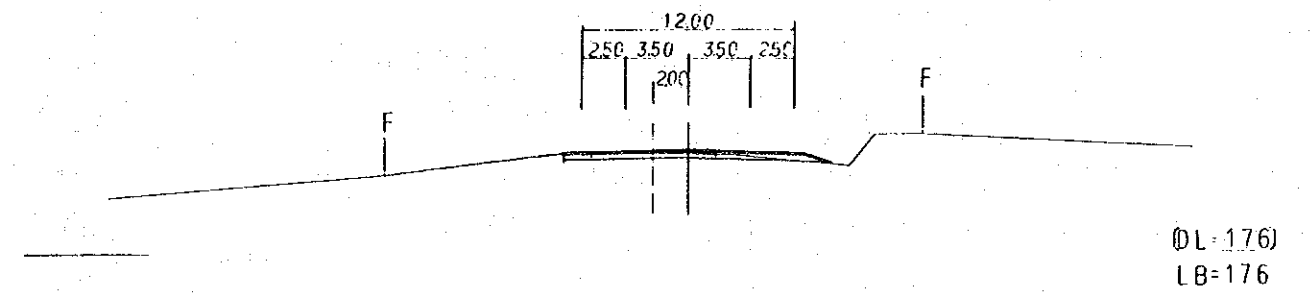
EST. 23+780



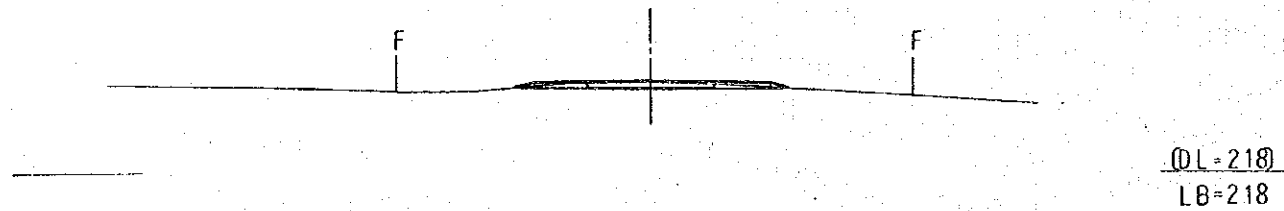
EST. 18+780



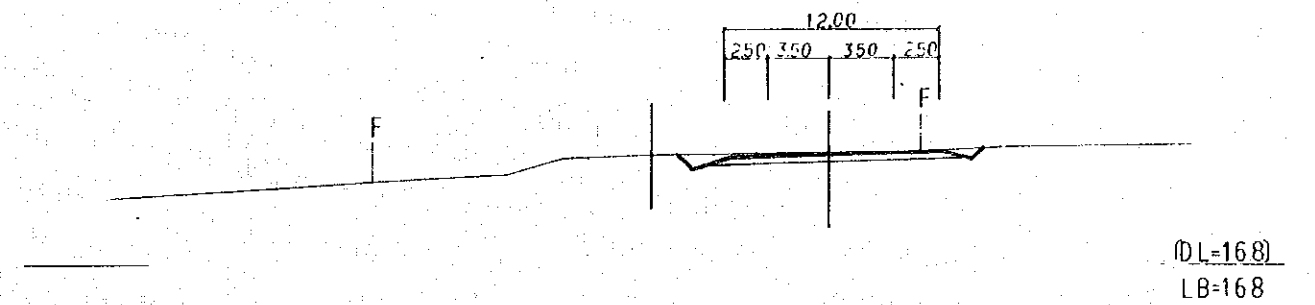
EST. 24+780

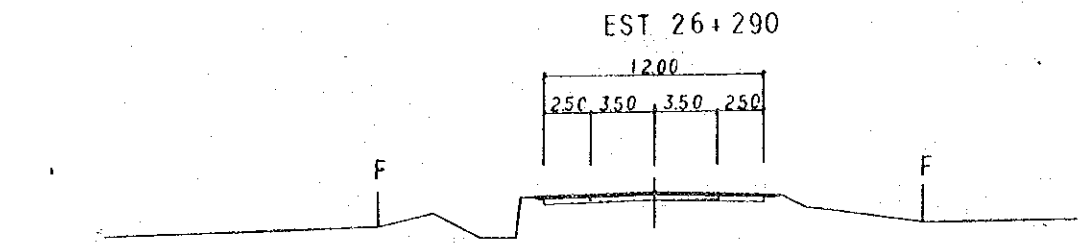


EST. 20+780

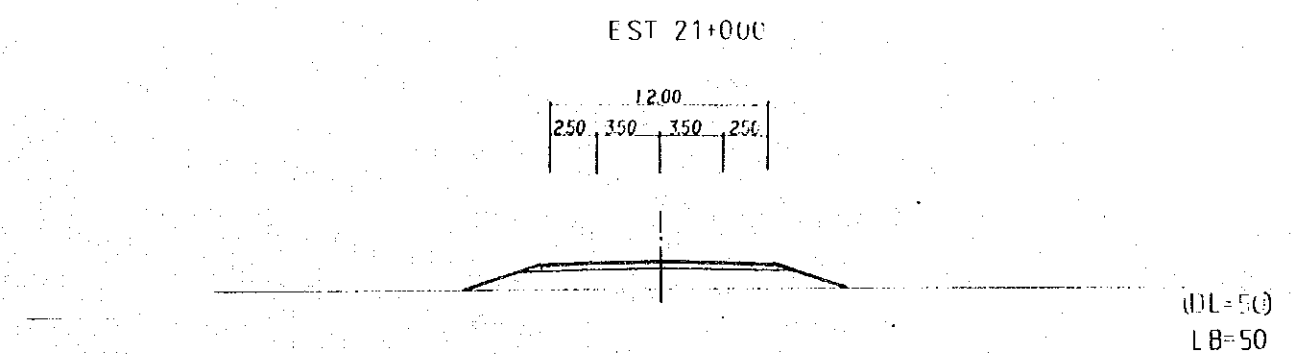
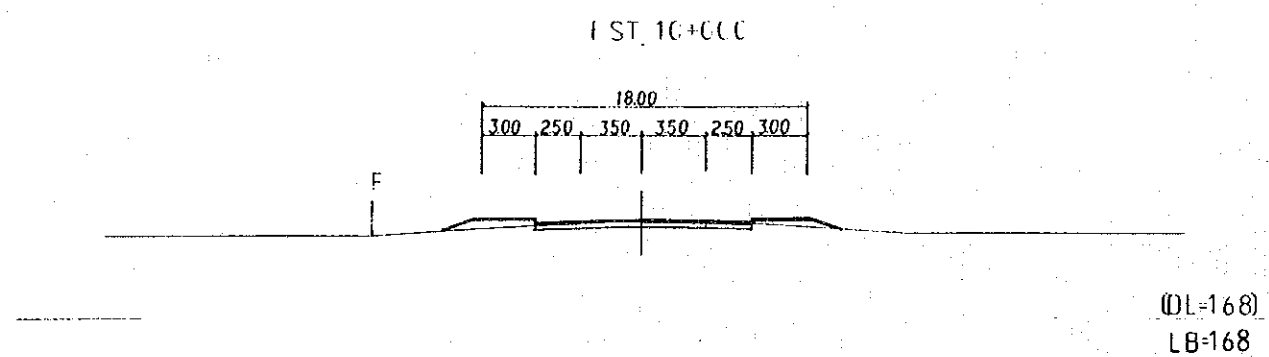
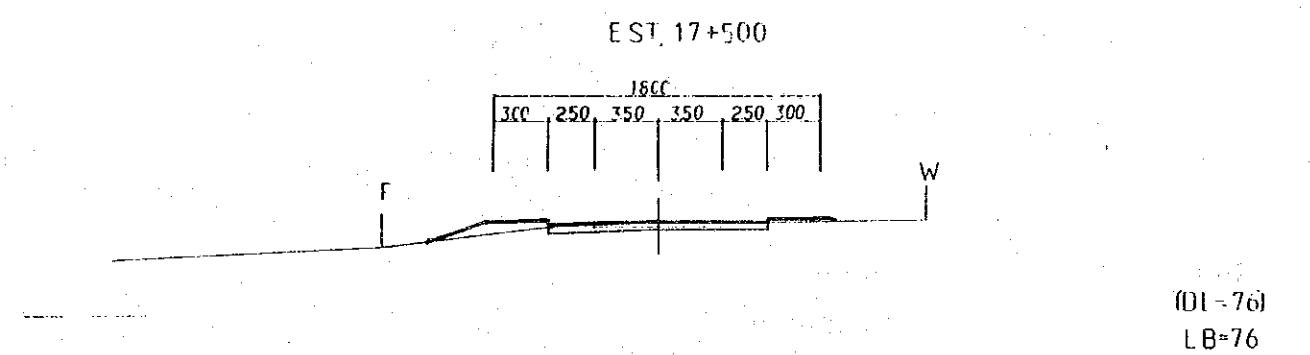
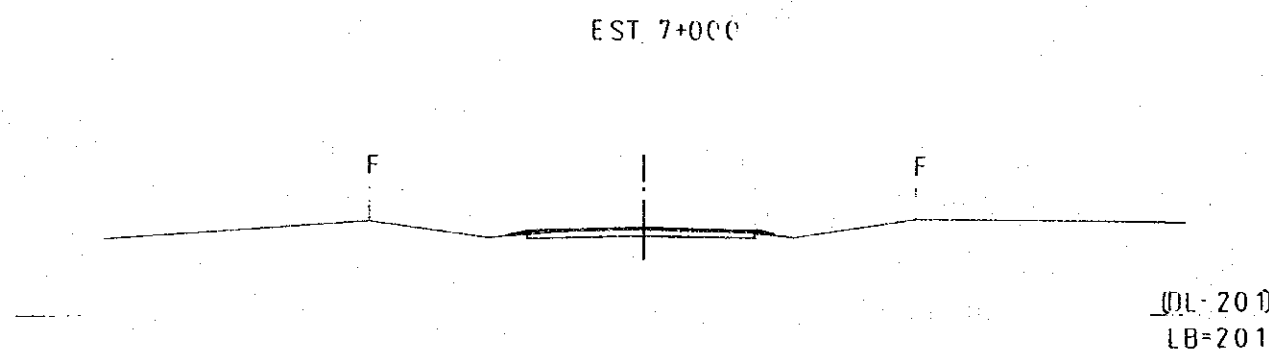
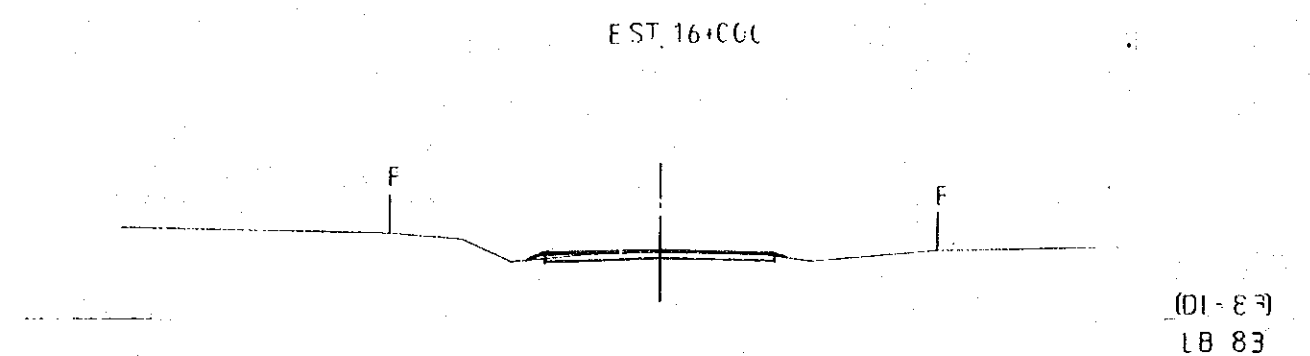
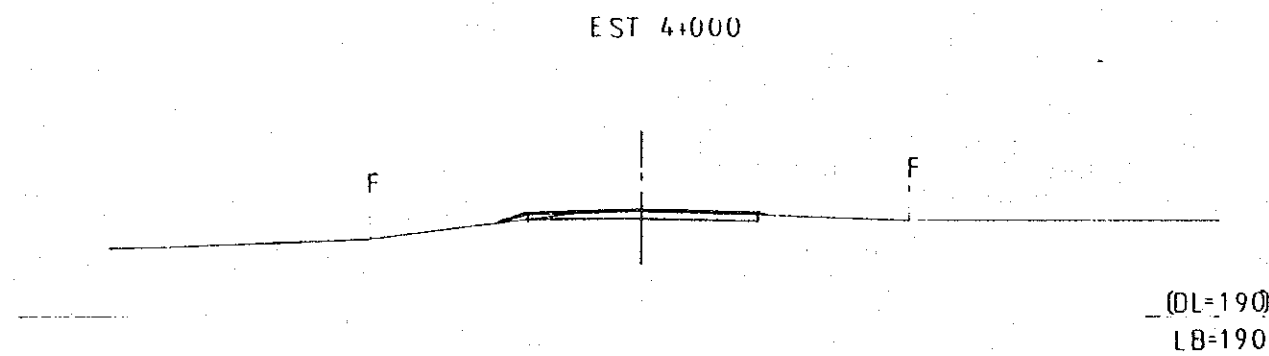
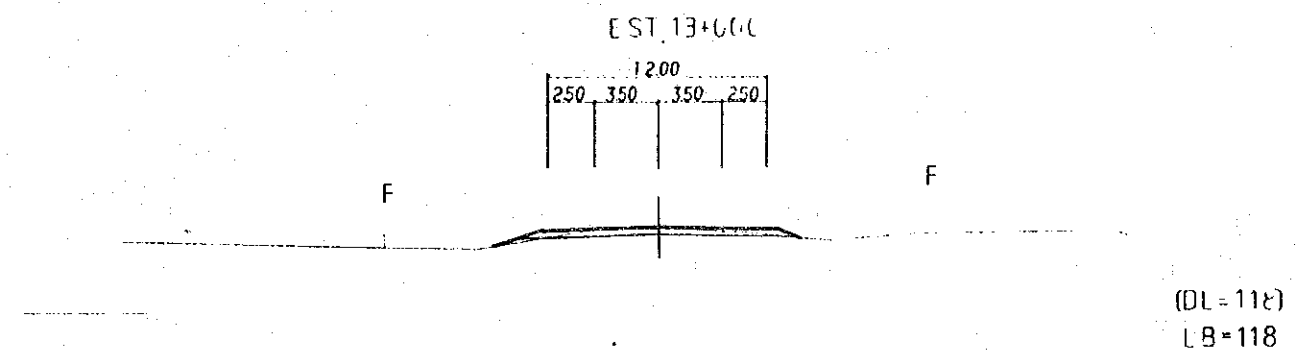
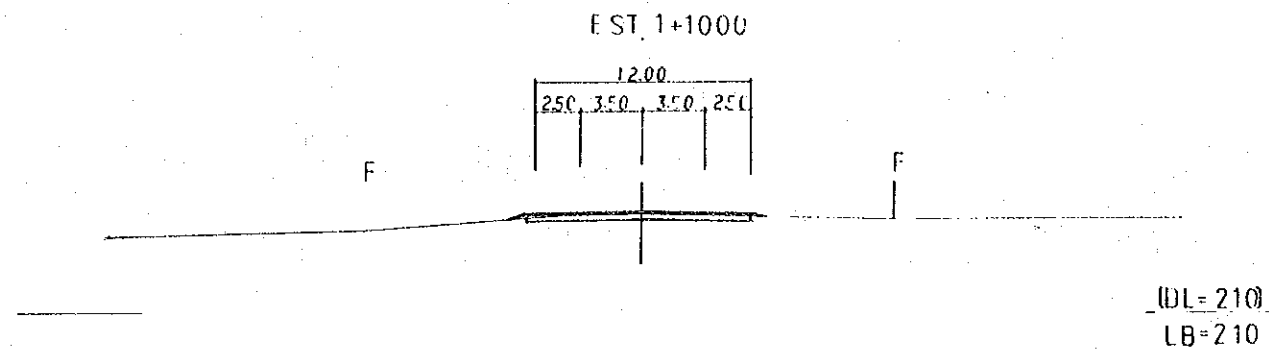


EST. 25+290





(DL-156)
LB-156



RIO PANAMA - SAN BENITO

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

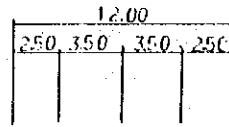
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION STUDY IN NICARAGUA

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EST. 0+930



F

F

(DL=41)
LB=41

EST. 9+960

F

F

(DL=52)
LB=52

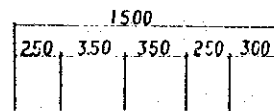
EST. 3+950

F

F

(DL=41)
LB=41

EST. 12+460



F

F

(DL=66)
LB=66

EST. 6+960

F

(DL=480)
LB=480

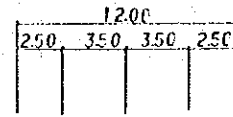
EST. 14+950

F

F

(DL=69)
LB=69

EST. 0+580



F

F

(DL=39)
LB=39

EST. 2+600

F

F

(DL=41)
LB=41

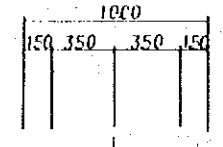
EST. 4+100

F

F

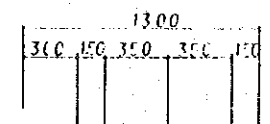
(DL=43)
LB=43

EST 0+720



(DL=120)
LB=120

EST 12+180



(DL=200)
LB=200

EST 4+880

(DL=155)
LB=155

EST 12+600

(DL=190)
LB=190

EST 9+600

(DL=225)
LB=225

EST 13+160

(DL=188)
LB=188

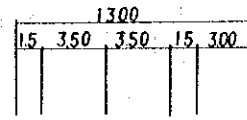
EST 11+470

(DL=205)
LB=205

EST 17+980

(DL=103)
LB=103

EST. 23+330



F

F

(DL=98)
LB=98

EST. 44+250

(DL=57)
LB=57

EST. 28+580

(DL=100)
LB=100

EST. 48+870

(DL=68)
LB=68

EST. 33+700

(DL=81)
LB=81

EST. 50+750

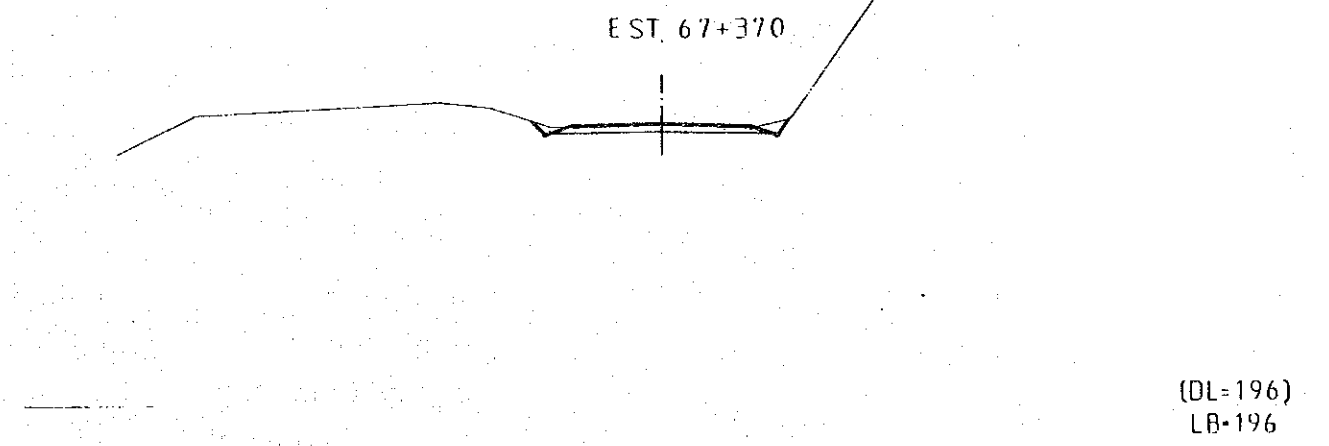
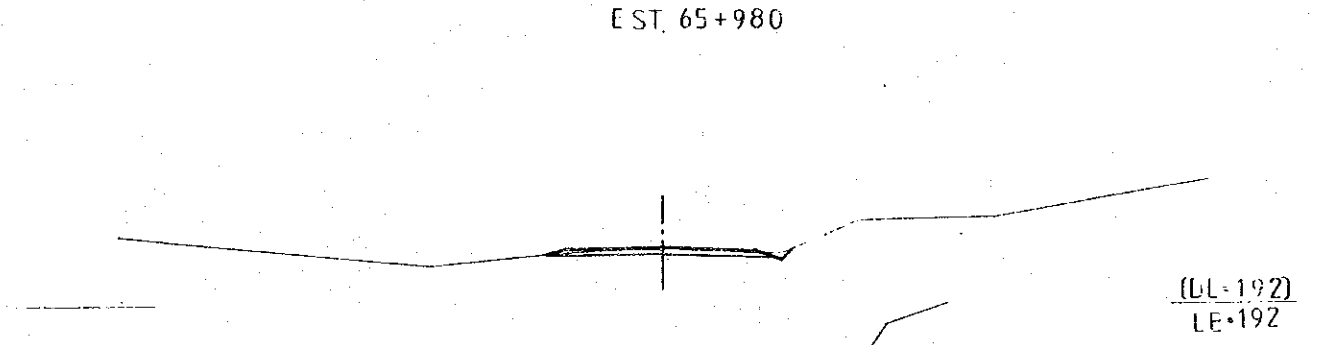
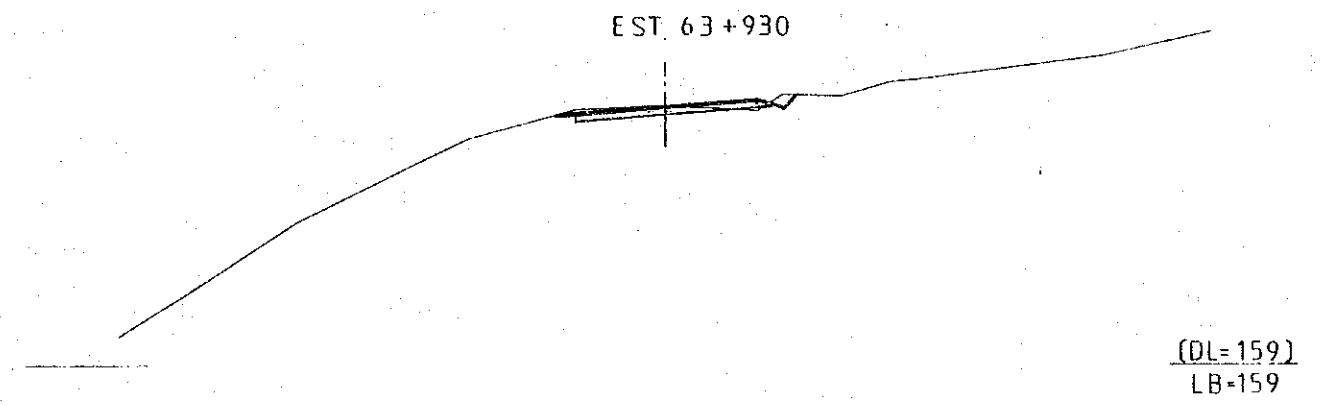
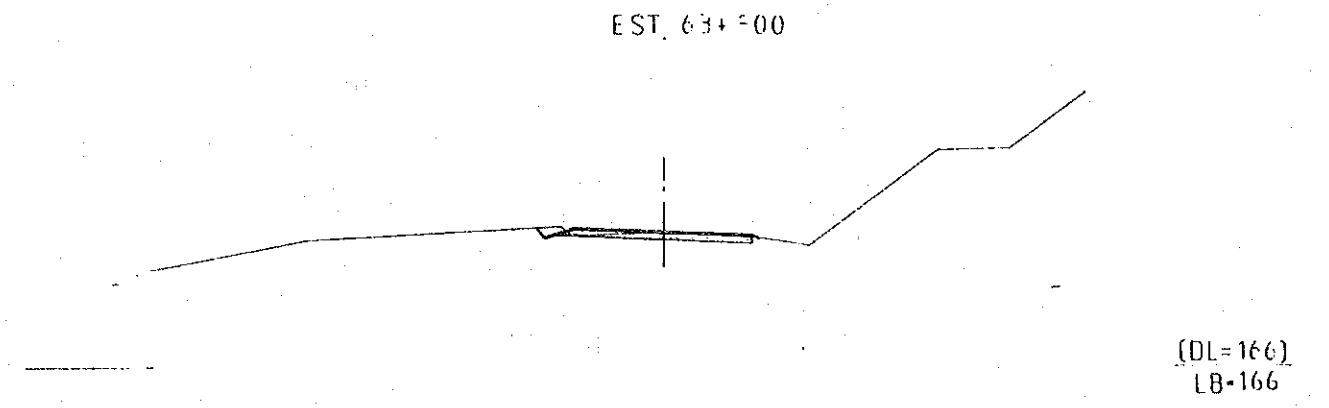
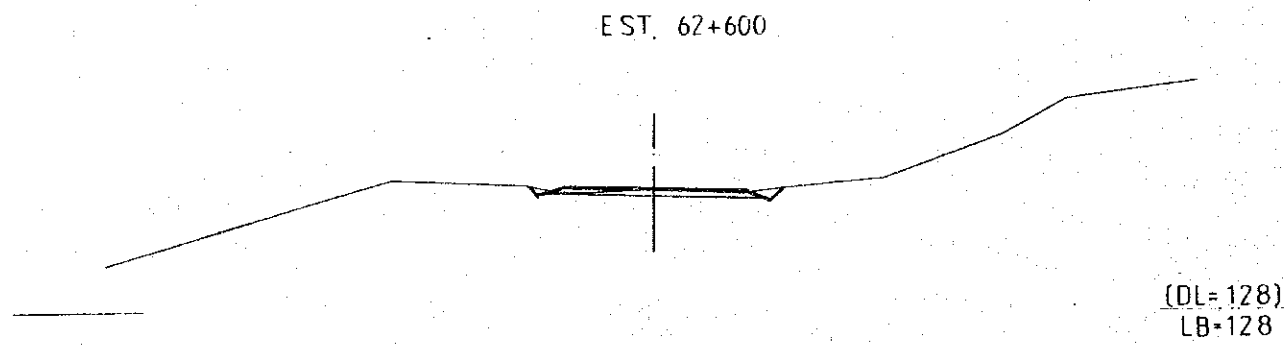
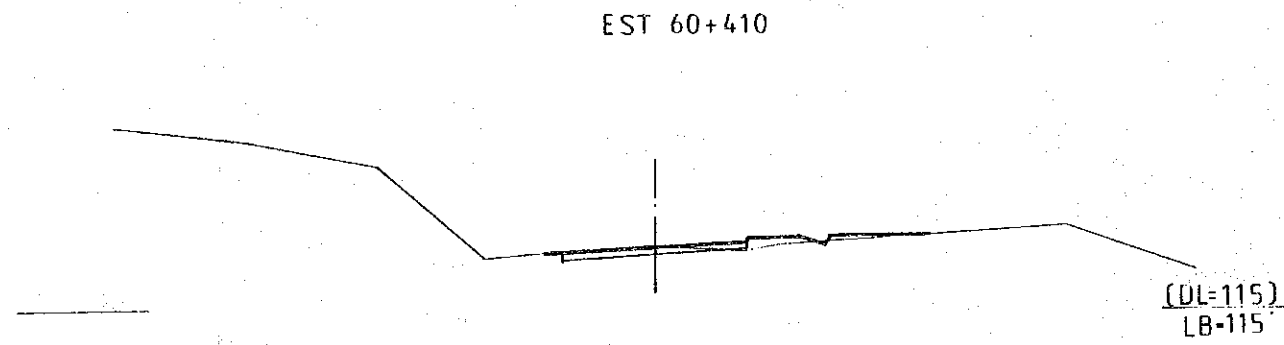
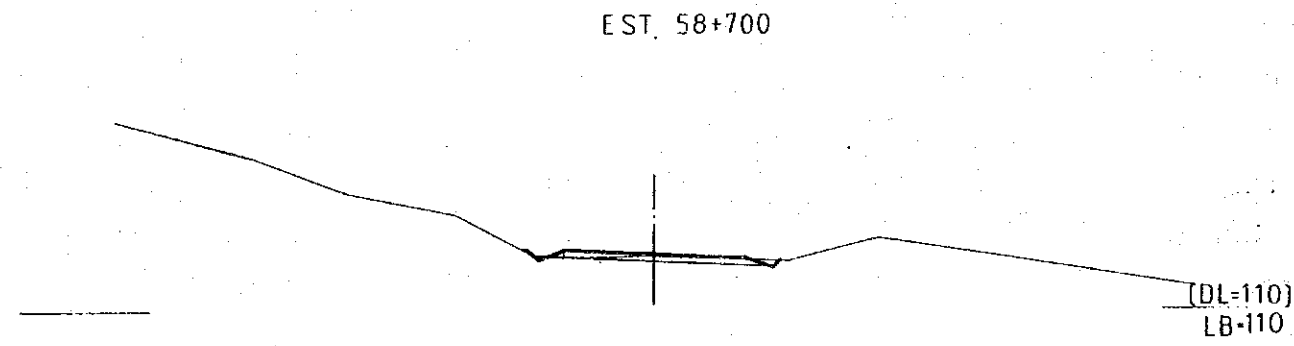
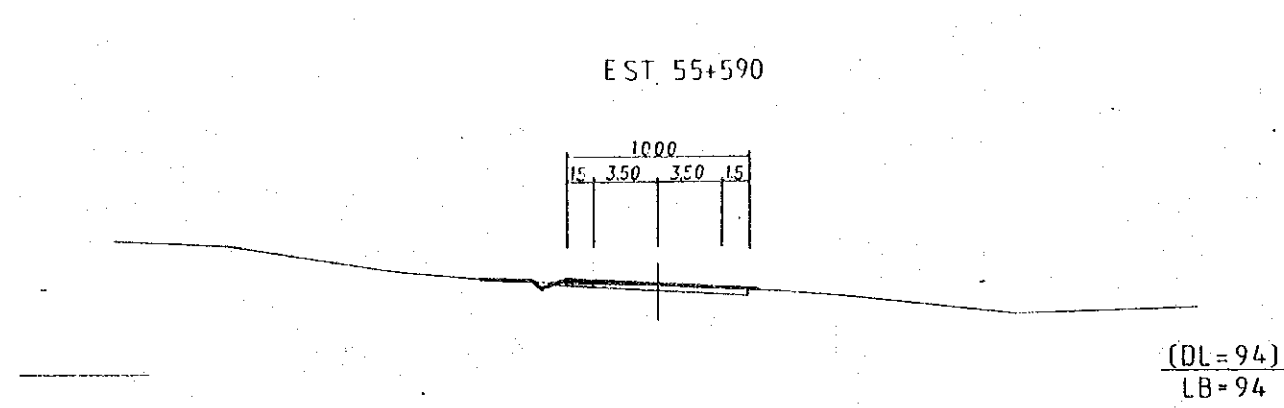
(DL=81)
LB=81

EST. 39+000

(DL=77)
LB=77

EST. 52+570

(DL=89)
LB=89



EST 67+980

1000
1.5 3.50 3.50 1.5

(DL=225)
LB=225

EST 68+410

1250
1.5 3.50 3.50 0.5 3.00 0.5

(DL=230)
LB=230

EST 68+585

(DL=245)
LB=245

TELICA - SAN ISIDRO

ESTUDIO SOBRE MEJORAMIENTO Y REHABILITACION
DE CARRETERAS EN LA REPUBLICA DE NICARAGUA

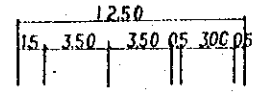
AGENCIA DE COOPERACION
INTERNACIONAL DEL JAPON

THE ROAD IMPROVEMENT AND REHABILITATION
STUDY IN NICARAGUA

JAPAN INTERNATIONAL
COOPERATION AGENCY

60
79

EST 68+785

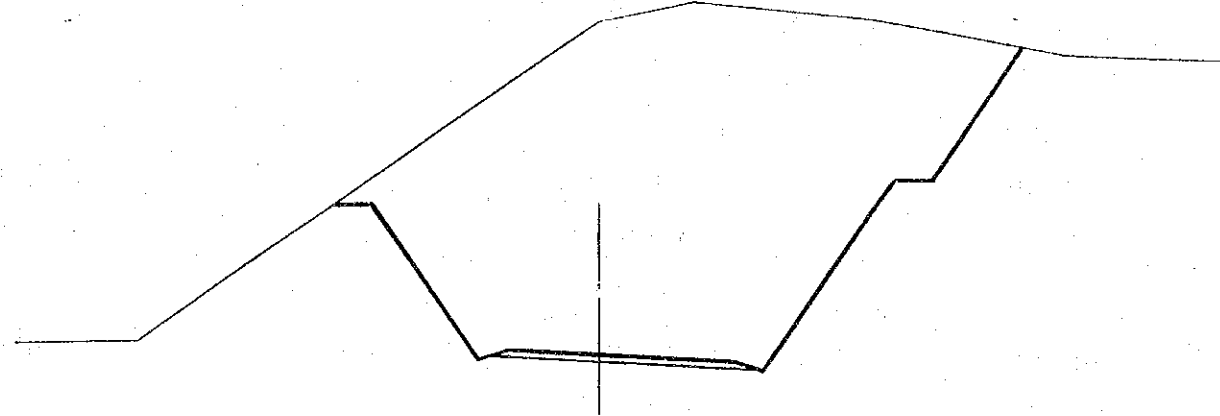
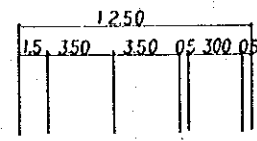


(DL=240)
LB=240

EST 68+935

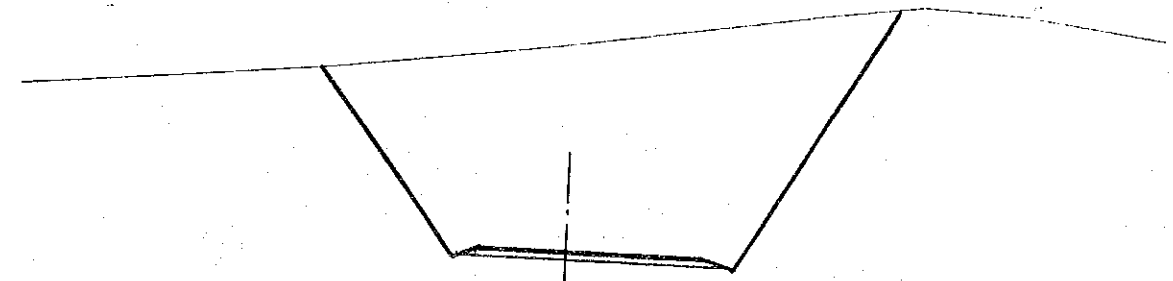
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LB=260

EST 69+050



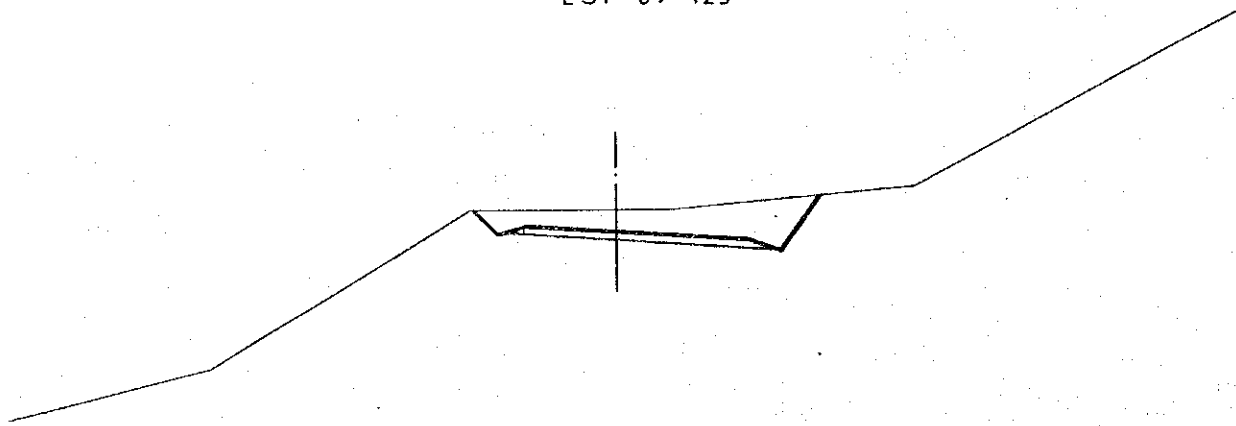
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LB=280

EST 69+215



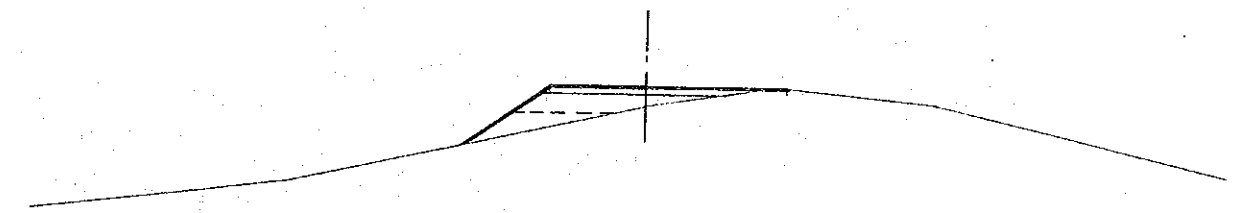
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LB=290

EST 69+125



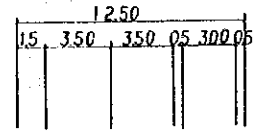
(DL=280)
LB=280

EST 69+295



(DL=290)
LB=290

EST 69+425



(DL=310)
LB=310

EST 69+595

(DL=330)
LB=330

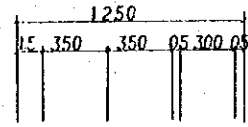
EST 69+470

(DL=300)
LB=300

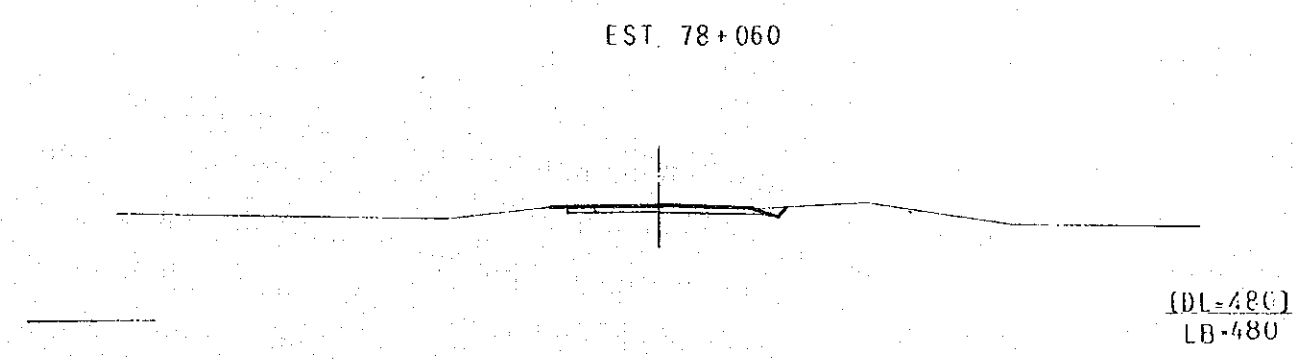
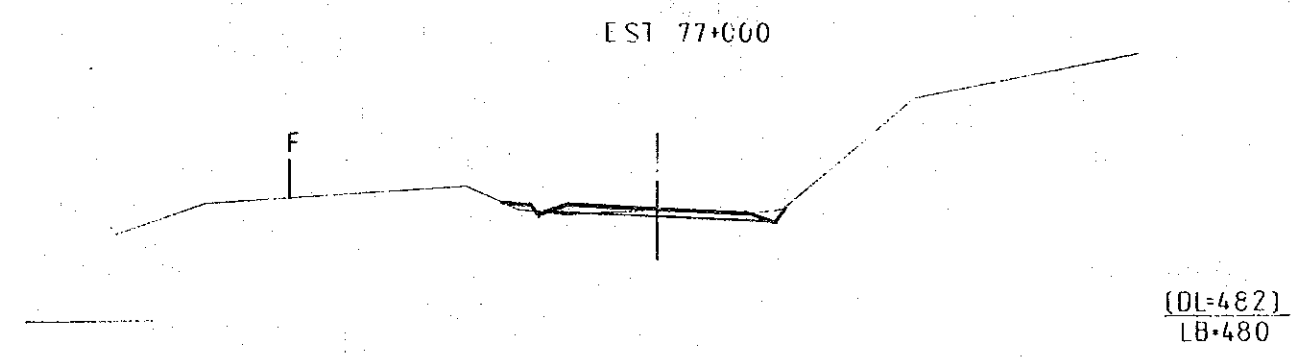
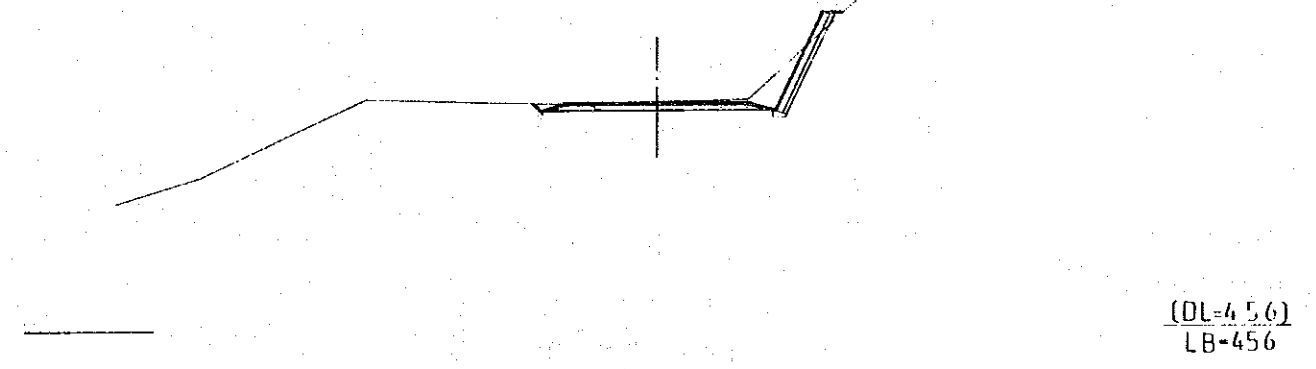
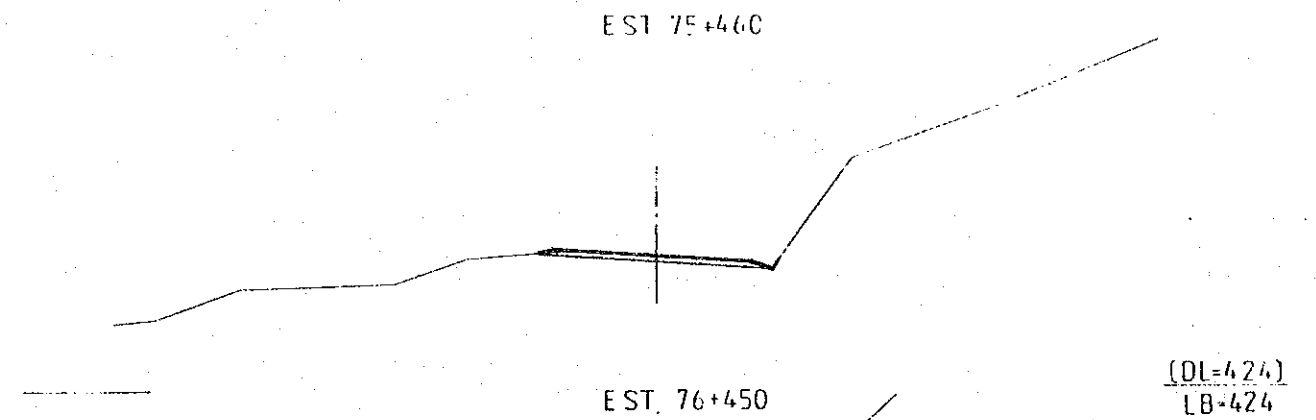
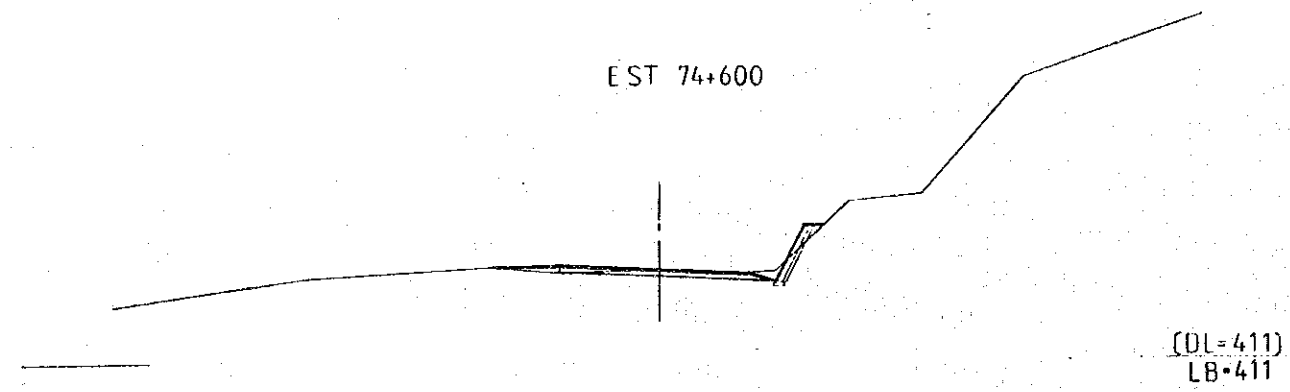
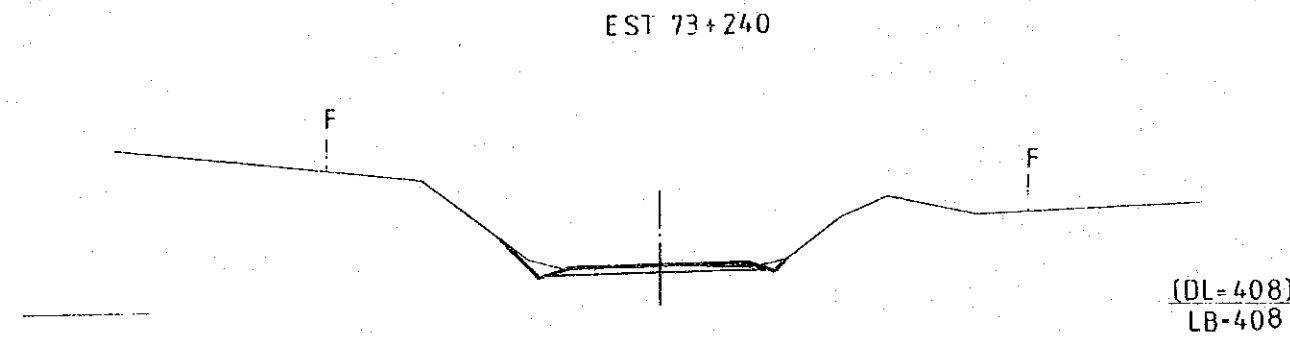
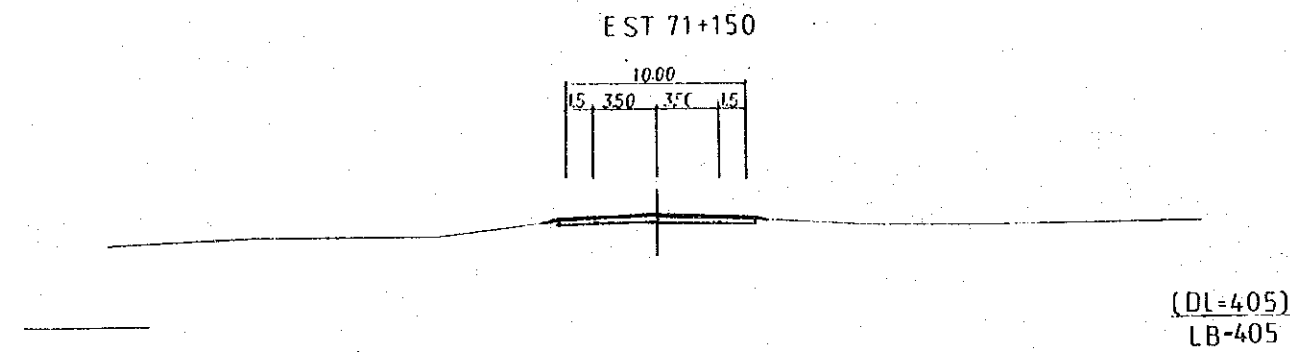
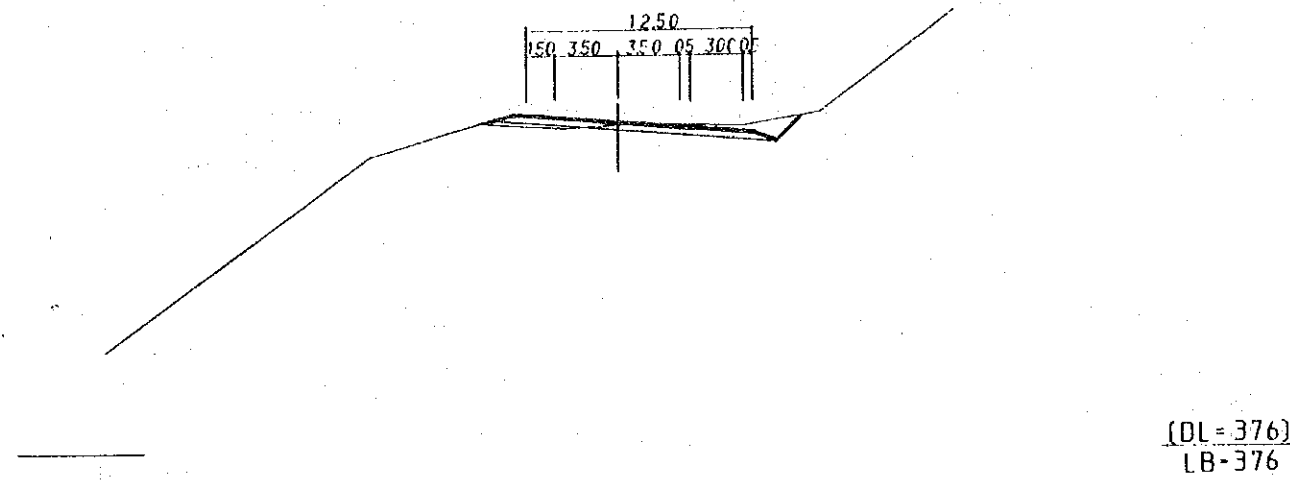
EST 69+725

(DL=330)
LB=330

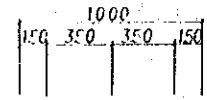
EST 69+985



(OL=365)
LB=365

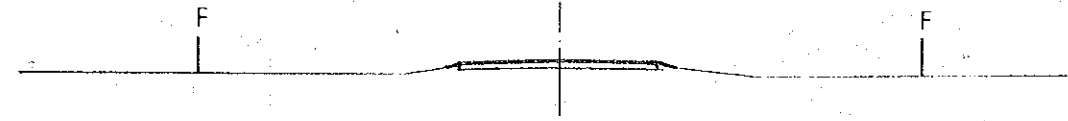


EST. 79+570



(DL=473)
LB-473

EST 89+020



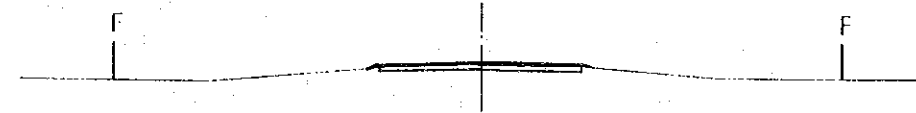
(DL=452)
LB-452

EST. 83+080



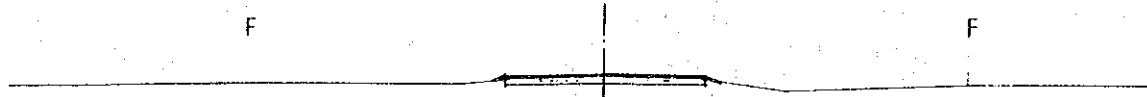
(DL=454)
LB-454

EST 91+030



(DL=448)
LB-448

EST 85+070



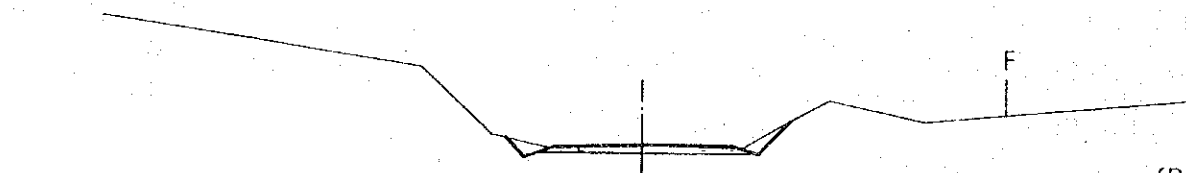
(DL=446)
LB-446

EST 93+020



(DL=448)
LB-448

EST. 86+970

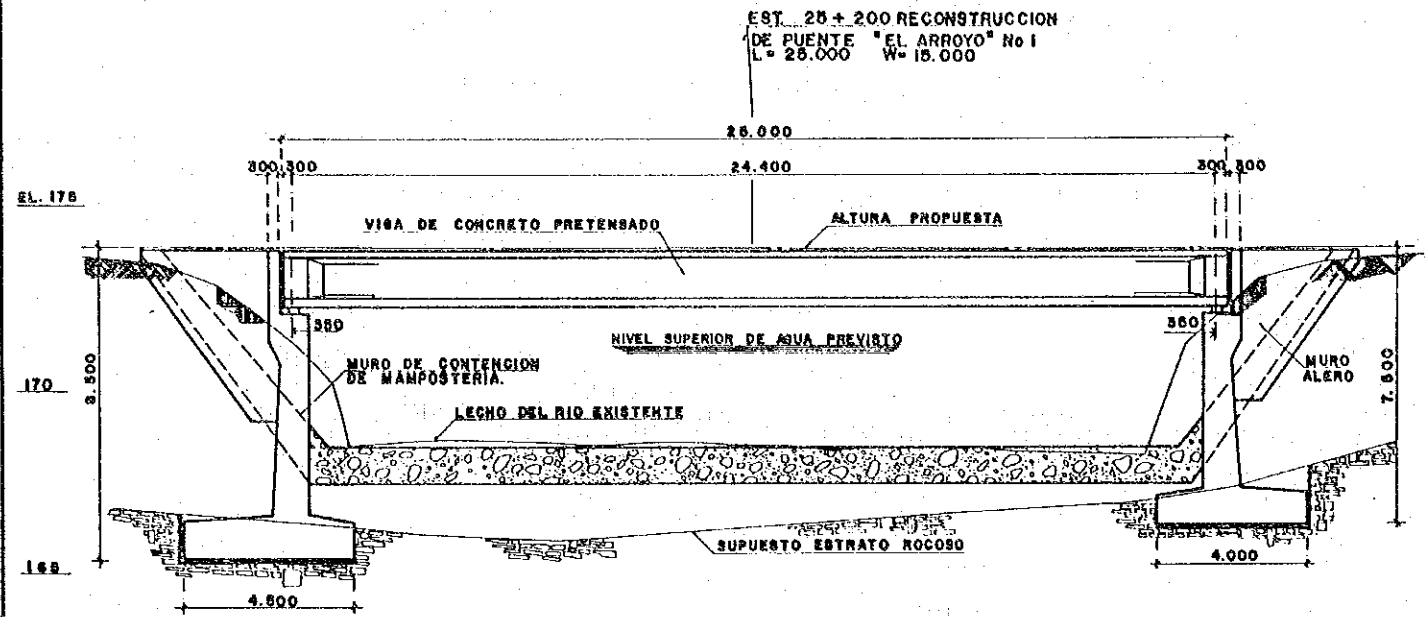


(DL=455)
LB-455

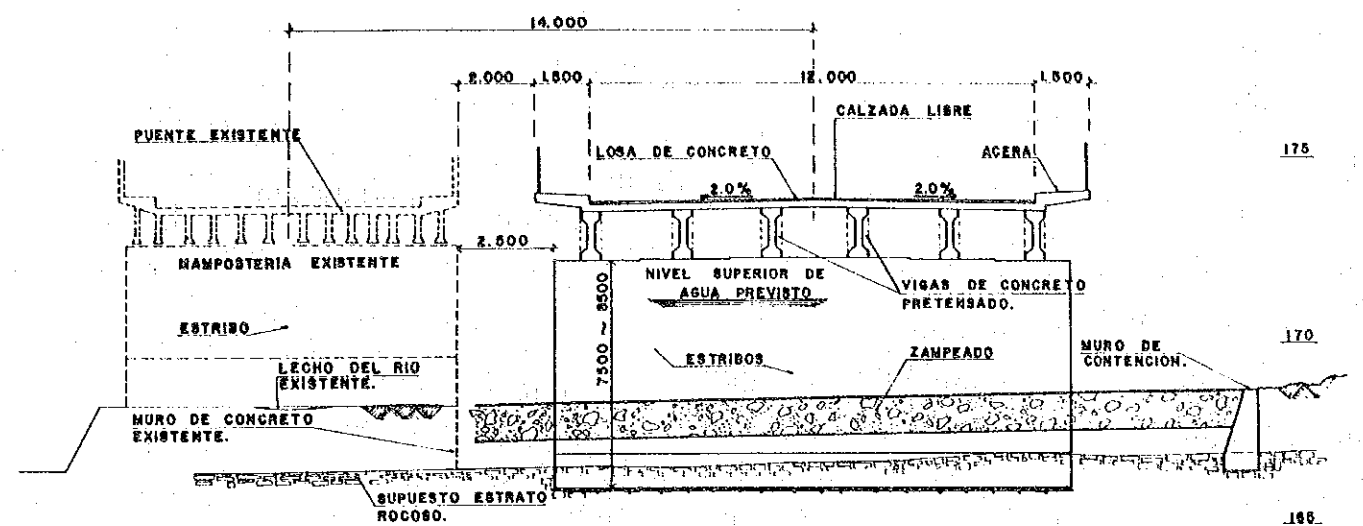
EST. 95+070



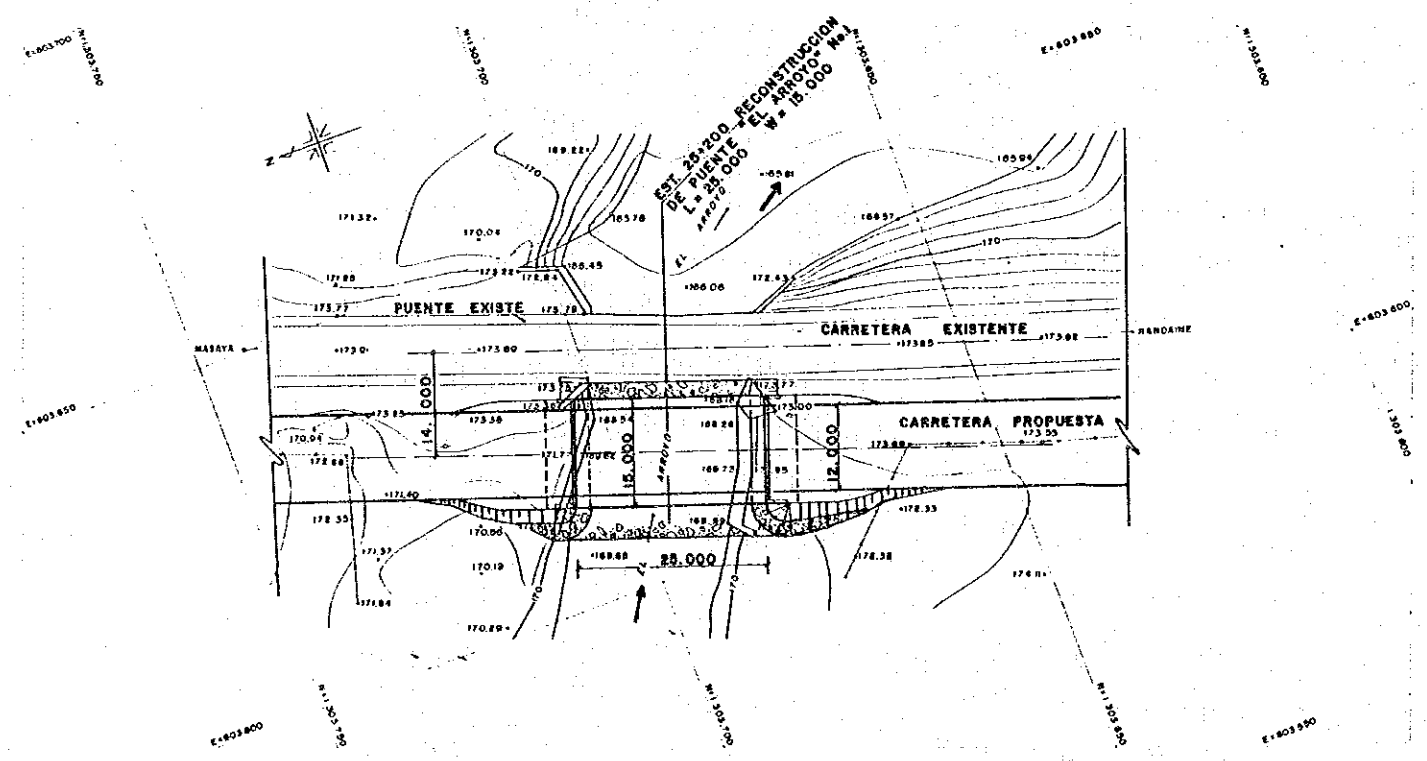
(DL=452)
LB-452



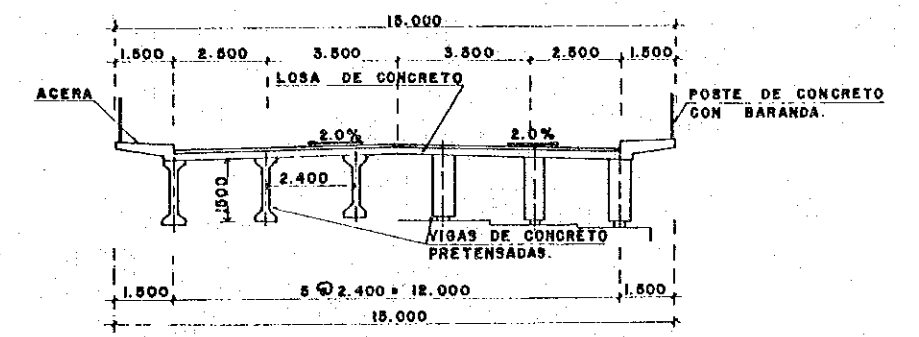
SECCION TIPICA
ESCALA 1:100



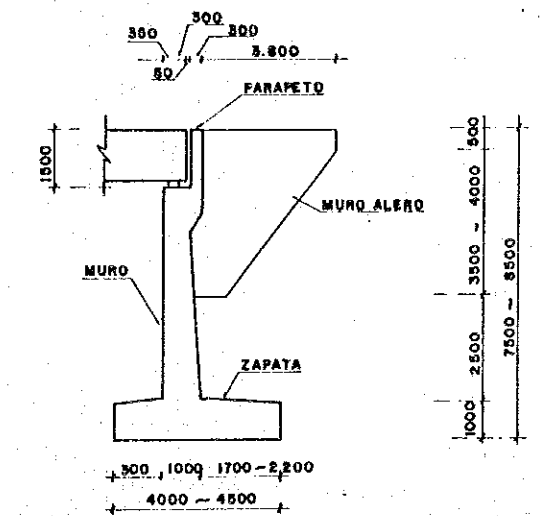
SECCION TRANSVERSAL
ESCALA 1:100



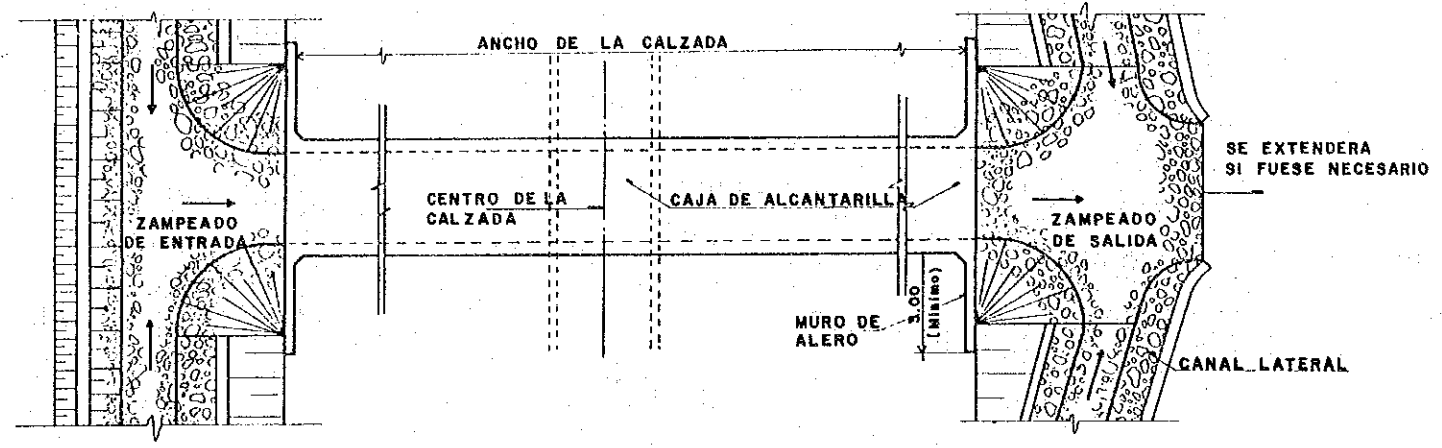
PLANTA-PLAN
ESCALA 1:500



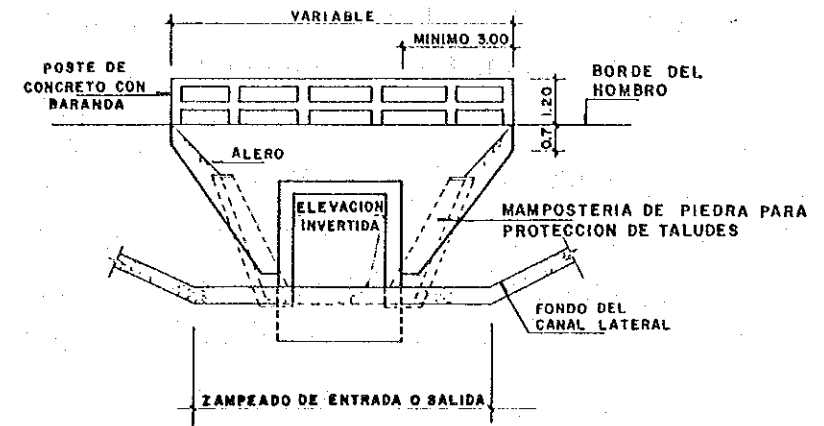
SECCION TIPICA VIGAS P.C.
ESCALA 1:100



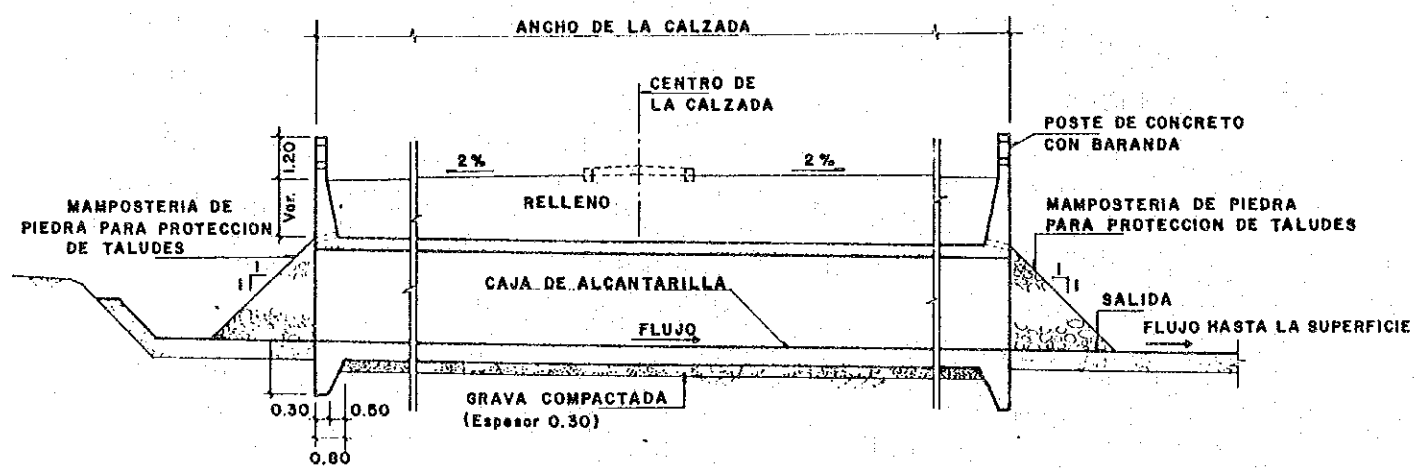
SECCION TIPICA ESTRIBOS
ESCALA 1:100



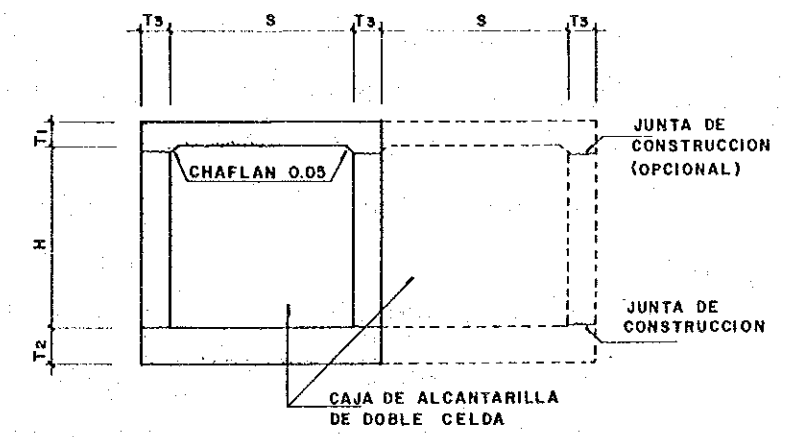
PLANTA
ESCALA 1:100



VISTA FRONTAL
ESCALA 1:100

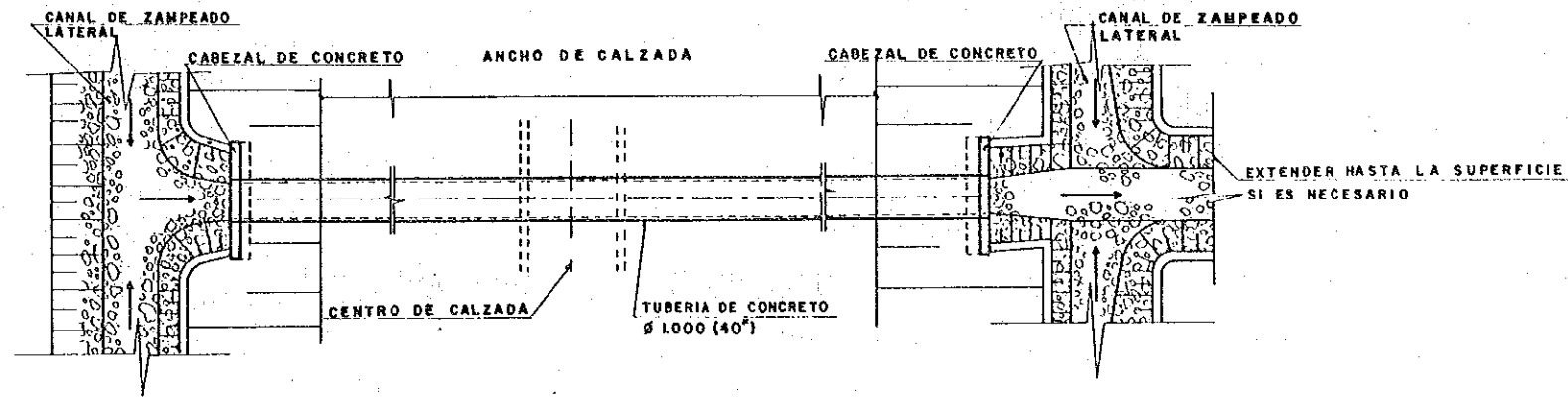


SECCION TIPICA
ESCALA 1:100

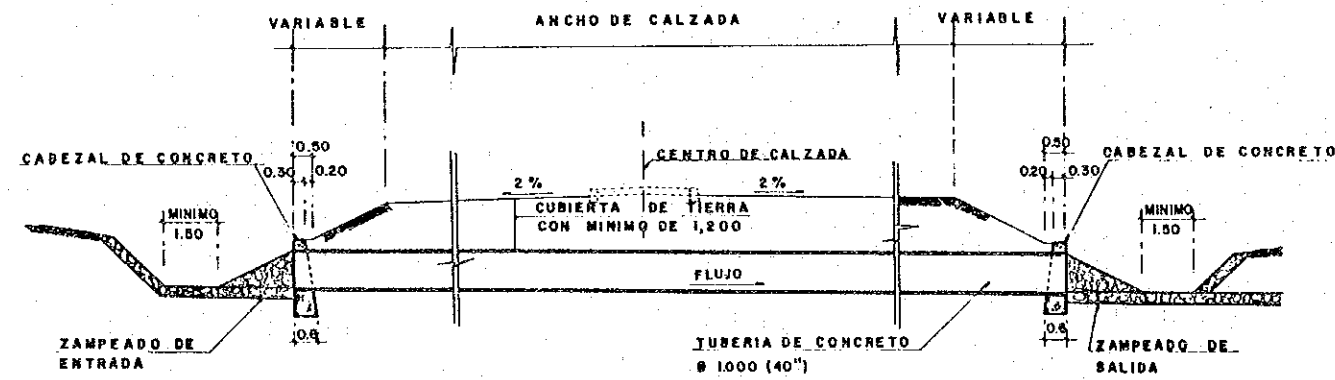


SECCION TIPICA DE ALCANTARILLA
SIN ESCALA

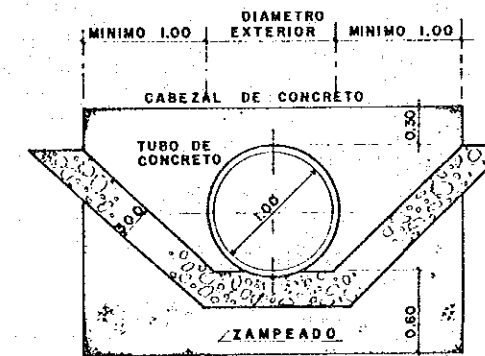
NOTA: LAS DIMENSIONES DE LAS CAJAS DE ALCANTARILLA DE CELDA DOBLE O SENCILLA, FUERON TOMADAS DE LOS PLANOS ESTANDARES DEL M.C.T.



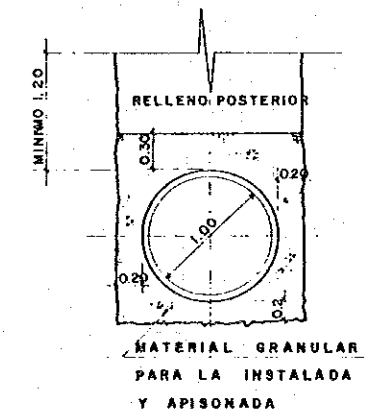
PLANTA
ESCALA 1:100



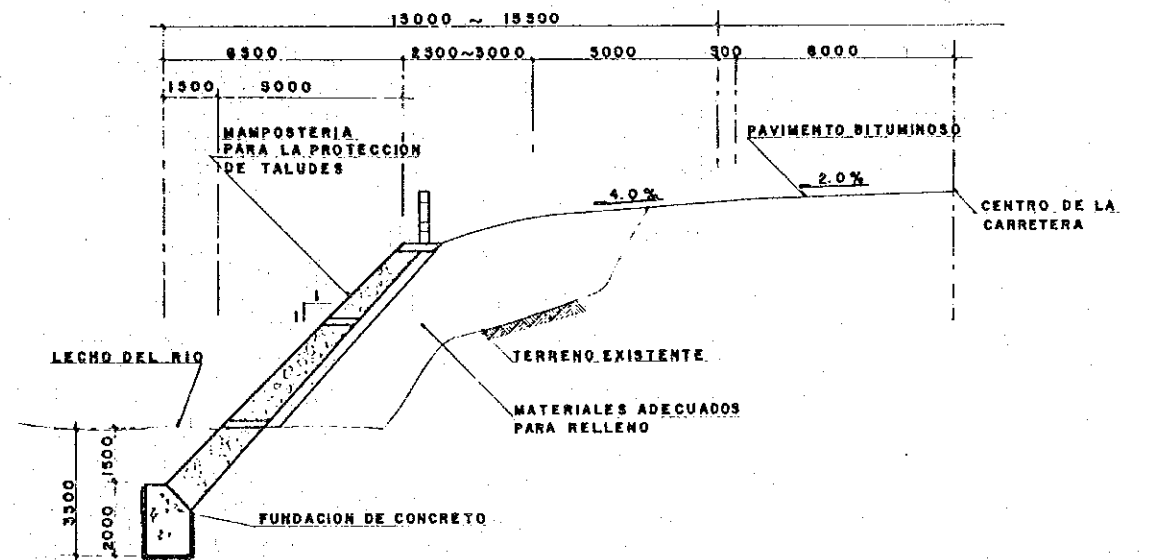
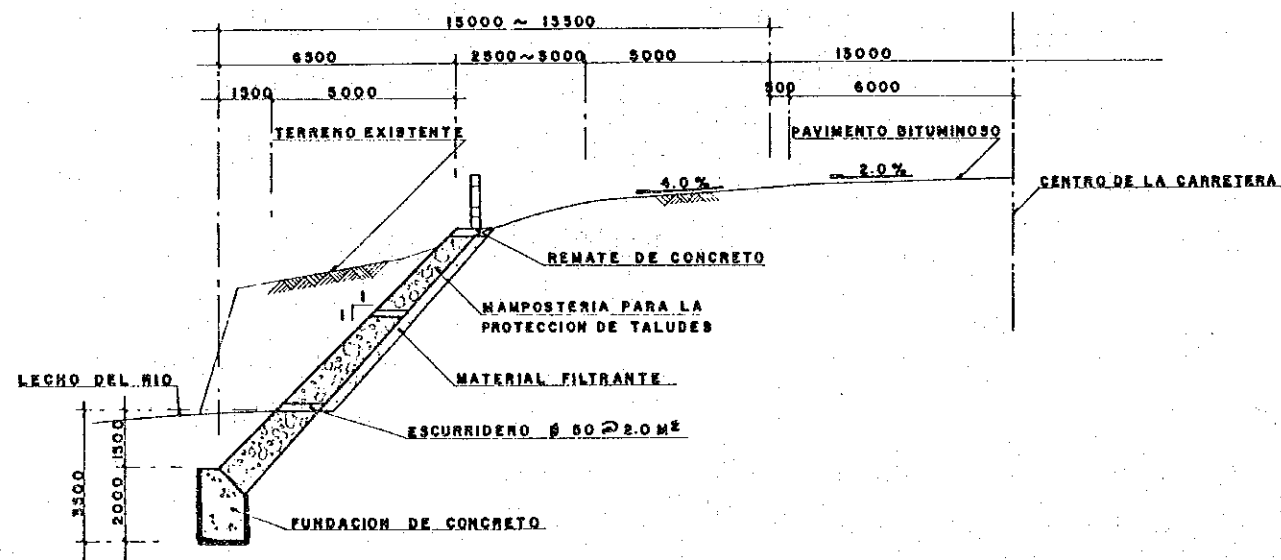
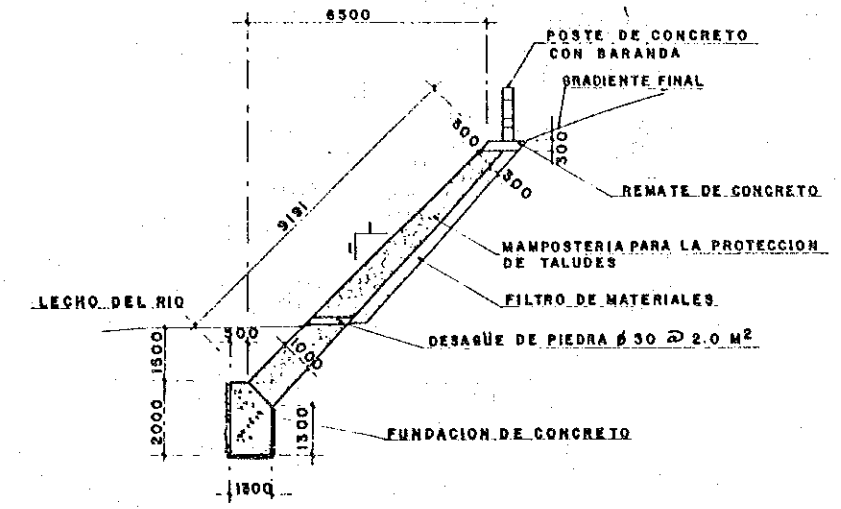
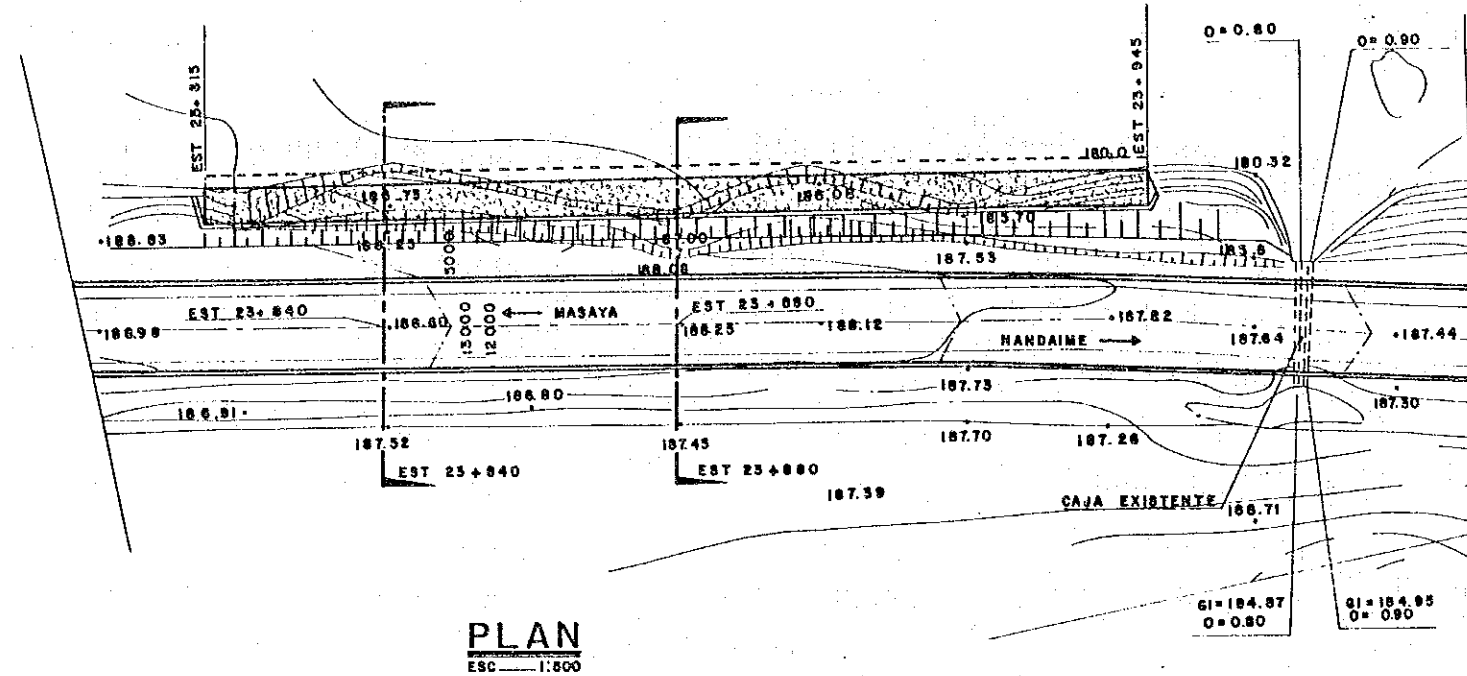
SECCION TIPICA
ESCALA 1:100

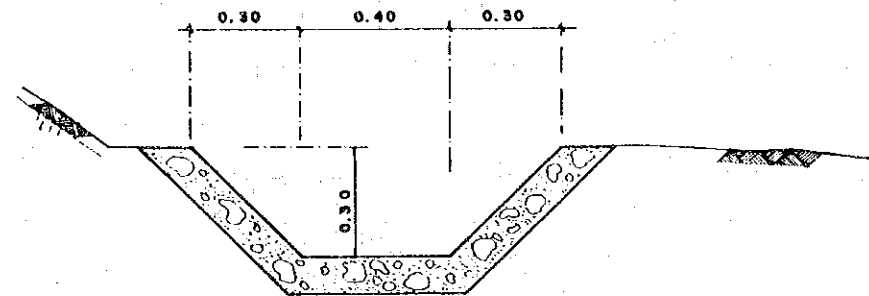


VISTA FRONTAL ENTRADA Y SALIDA
ESCALA 1:30



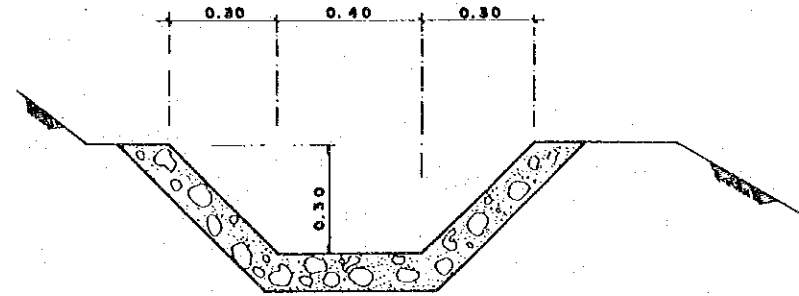
CANAL DE TUBERIA
ESCALA 1:30





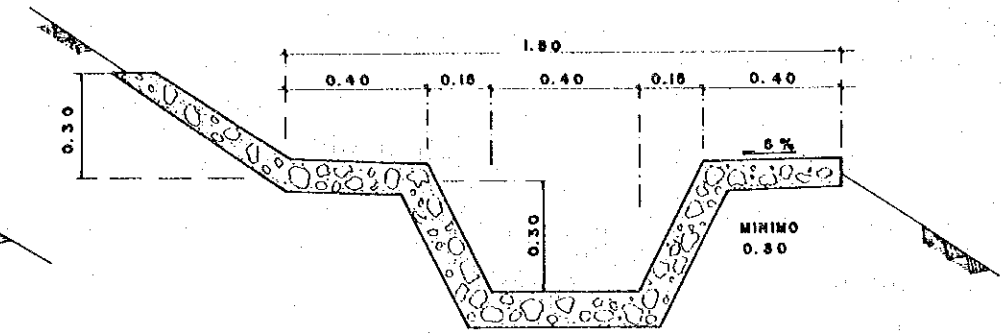
PIE DE TALUD EN RELLENO

ESCALA 1:10

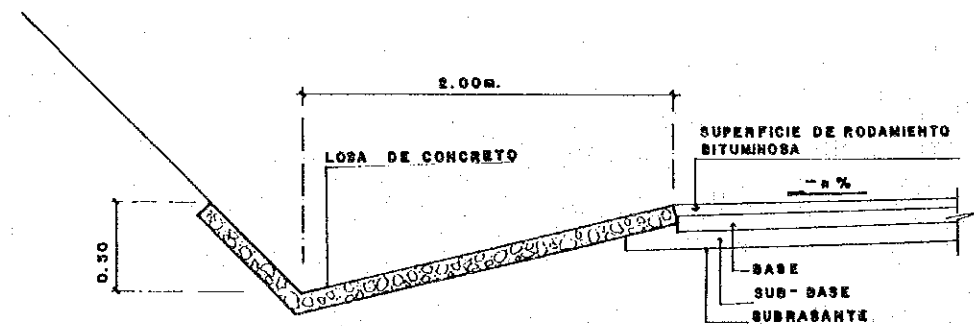


CORONAMIENTO DE TALUDES (CONTRACUNETA)

ESCALA 1:10

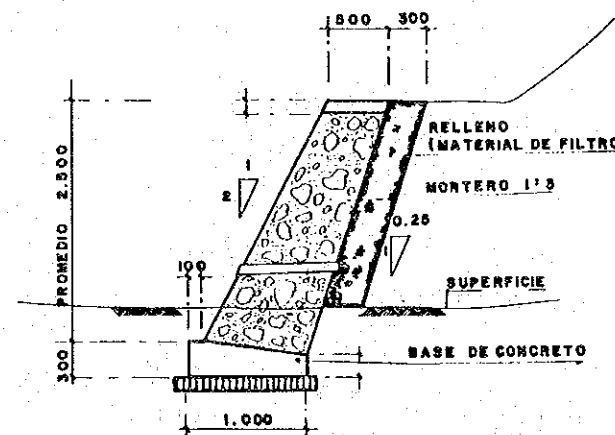


TERRAZAS



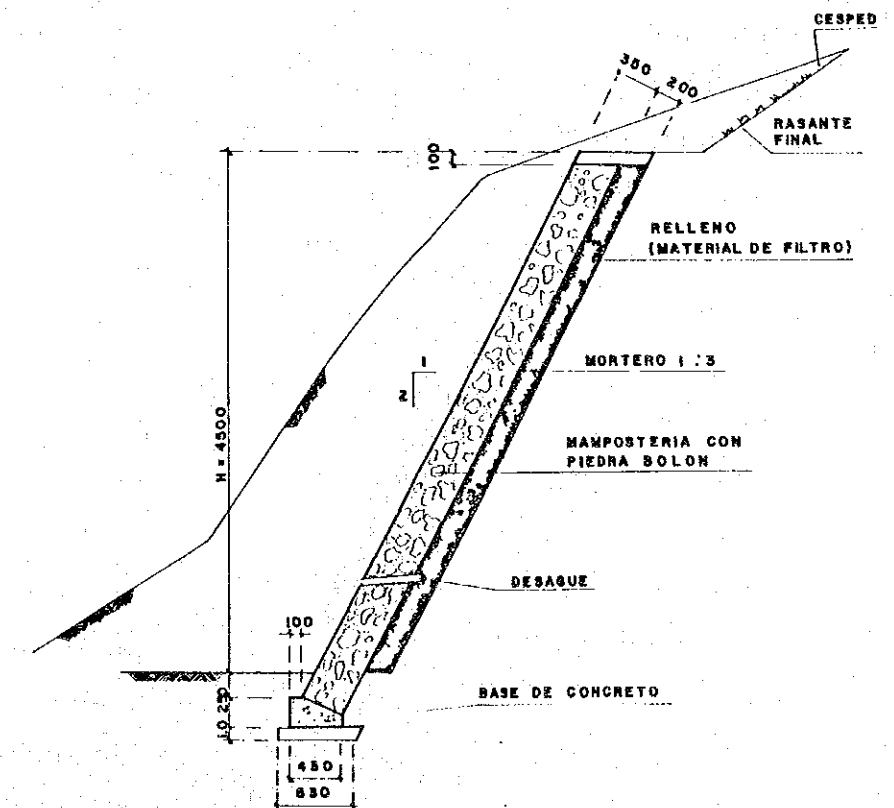
DETALLE DE CUNETAS

ESCALA 1:20



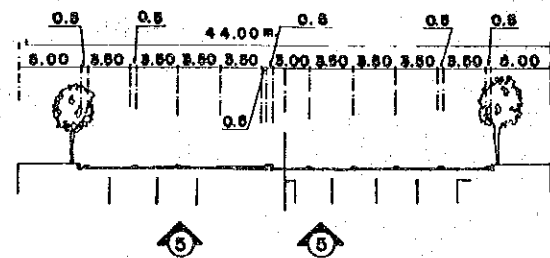
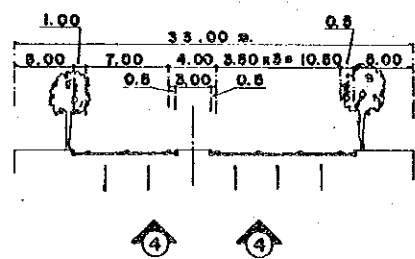
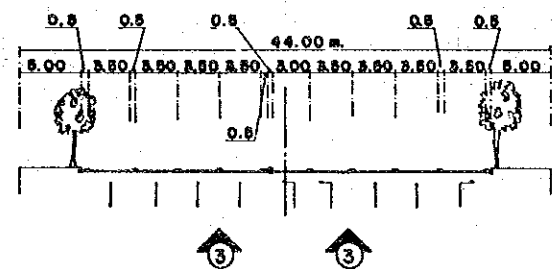
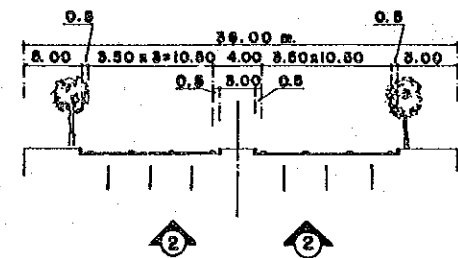
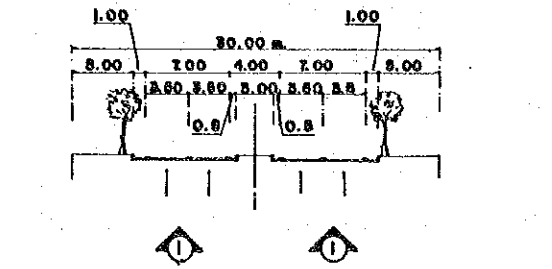
MURO DE RETENCION DE PIEDRA BOLON

ESCALA 1:30

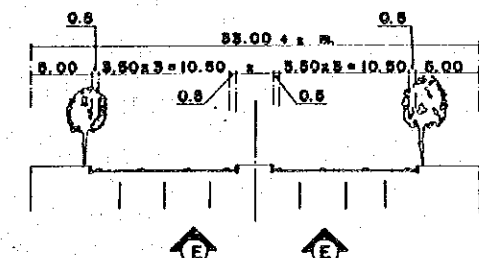
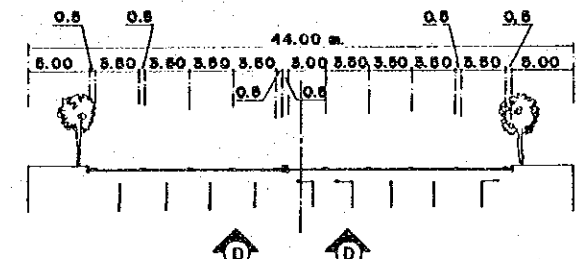
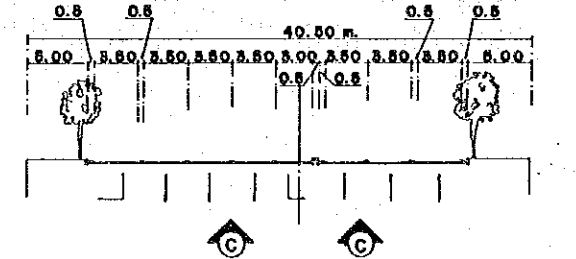
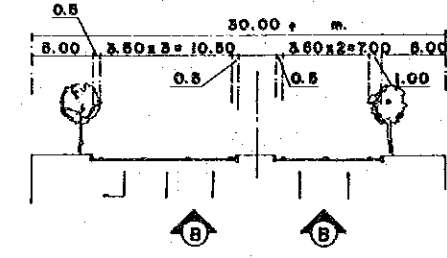
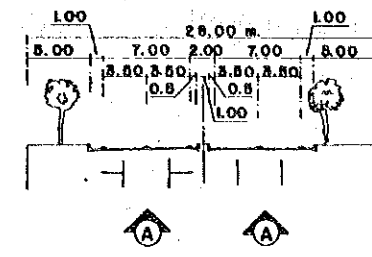


INTERSECCION "COLONIA CENTROAMERICA"

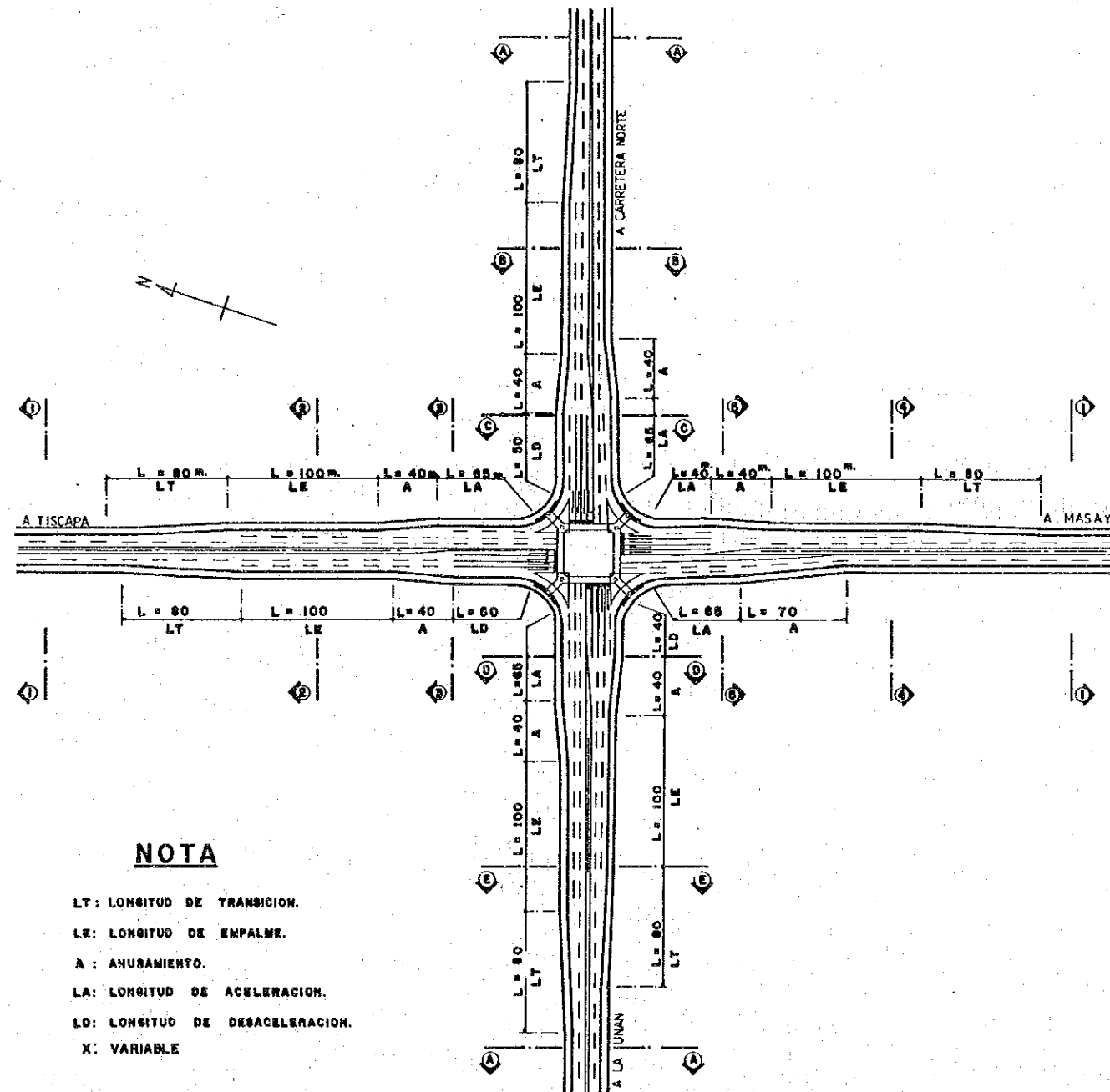
(V = 60 km/h)



ESCALA 1:300



ESCALA 1:300



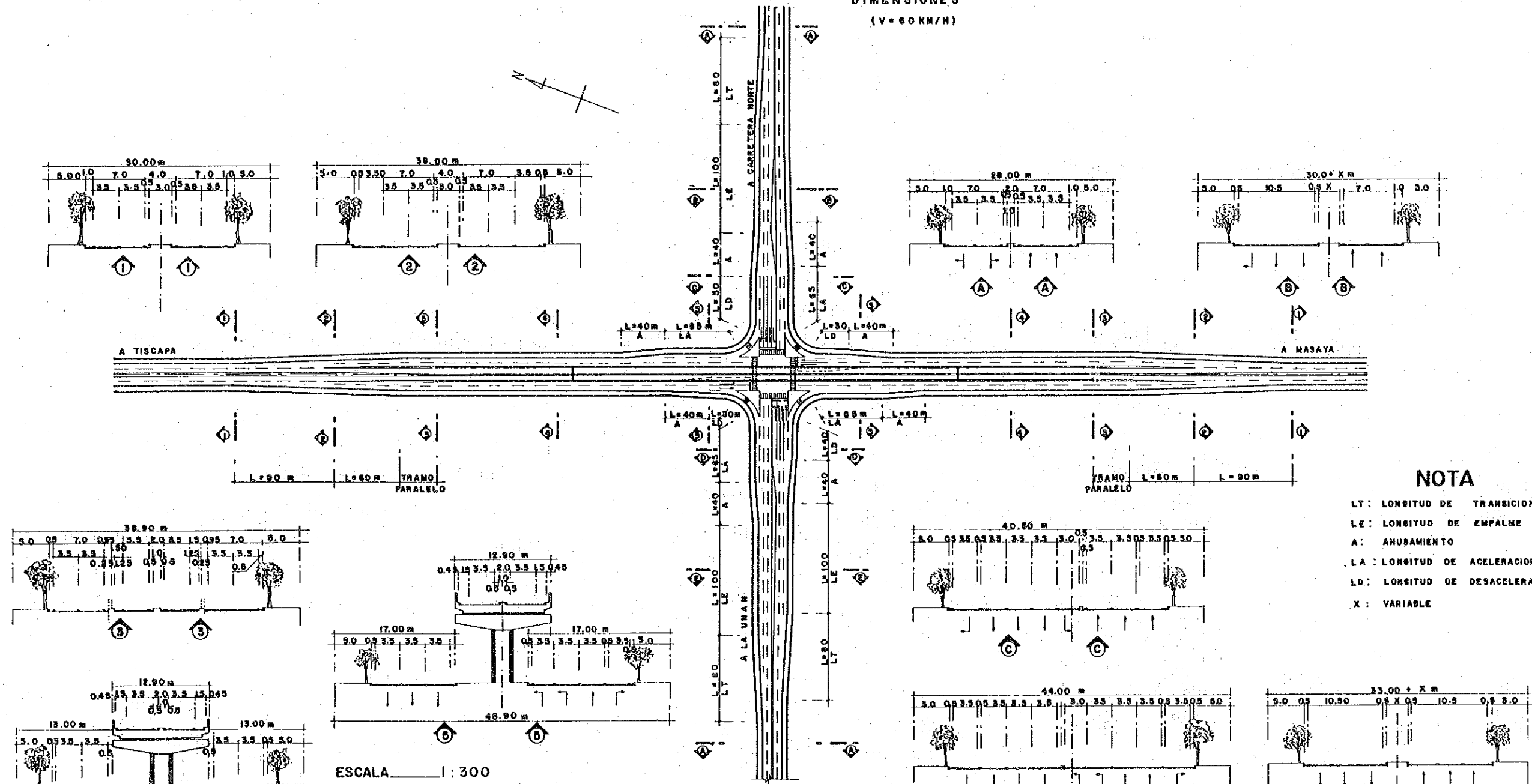
NOTA

- LT: LONGITUD DE TRANSICION.
- LE: LONGITUD DE EMPALME.
- A: ANUBAMIENTO.
- LA: LONGITUD DE ACELERACION.
- LD: LONGITUD DE DESACELERACION.
- X: VARIABLE

PLANTA
ESCALA 1:2000

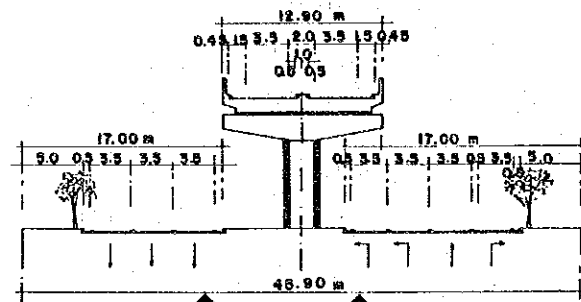
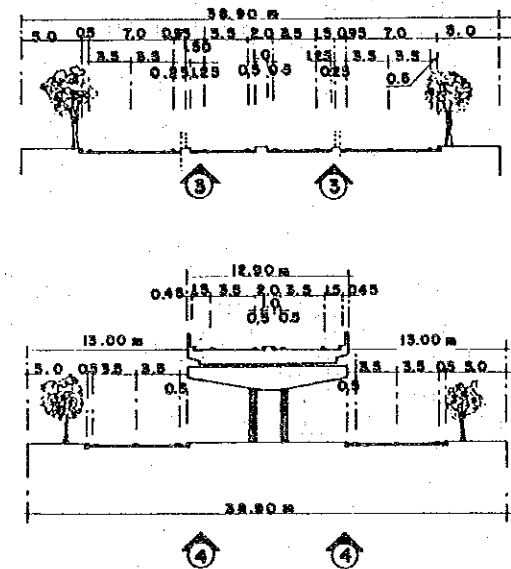
INTERSECCION "COLONIA CENTROAMERICA"

DIMENSIONES
(V = 60 KM/H)

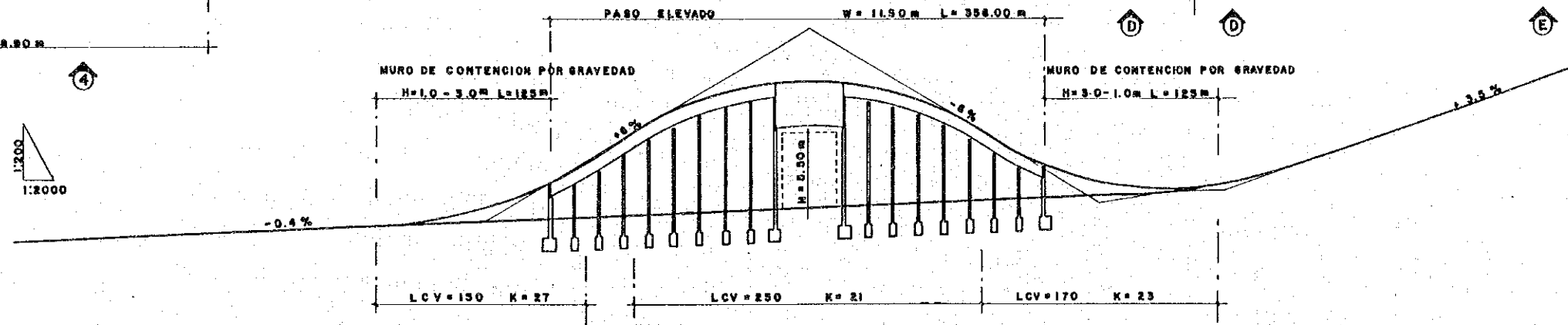


NOTA

- LT : LONGITUD DE TRANSICION
- LE : LONGITUD DE EMPALME
- A : ANUBAMIENTO
- L : LONGITUD DE ACELERACION
- LD : LONGITUD DE DESACELERACION
- X : VARIABLE



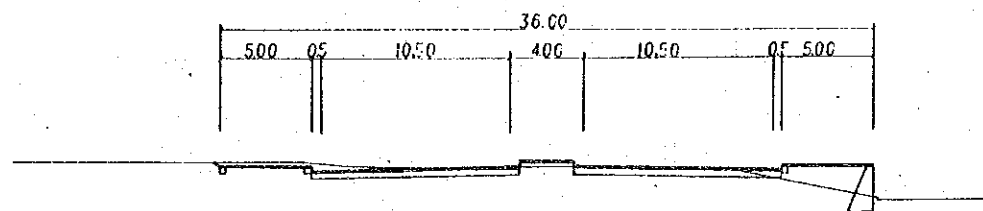
ESCALA 1:300



1:200

PASO A NIVEL

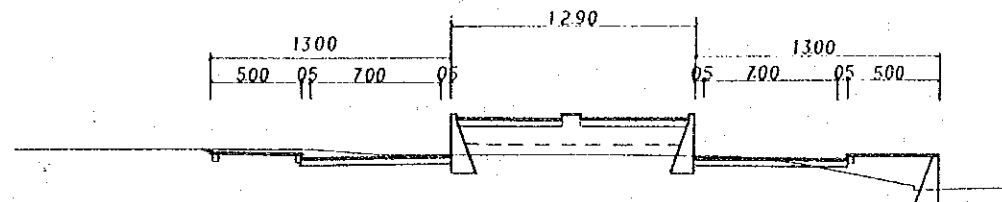
N-EST. 0+230



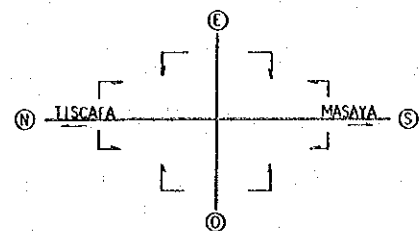
(DL=160)
LB=160

PASO A DESNIVEL

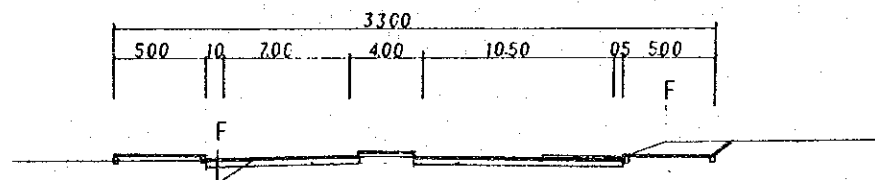
N-EST. 0+230



(DL=160)
LB=160

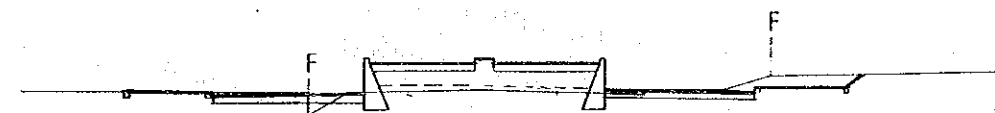


S-EST. 0+230



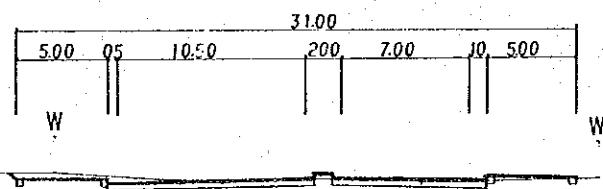
(DL=163)
LB=163

S-EST. 0+230



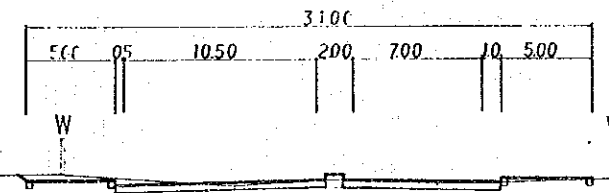
(DL=163)
LB=163

E-EST. 0+230



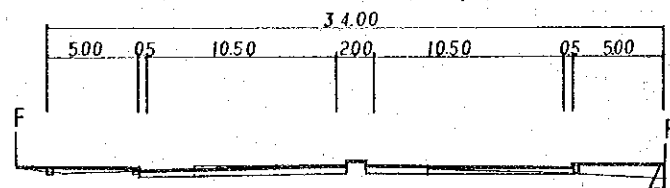
(DL=153)
LB=153

E-EST. 0+230



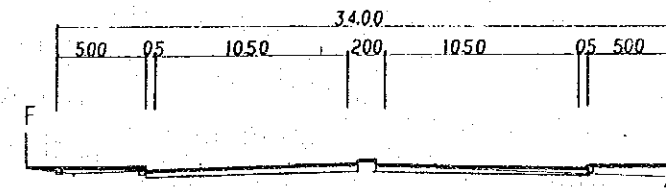
(DL=153)
LB=153

O-EST. 0+230



(DL=167)
LB=167

O-EST. 0+230



(DL=167)
LB=167