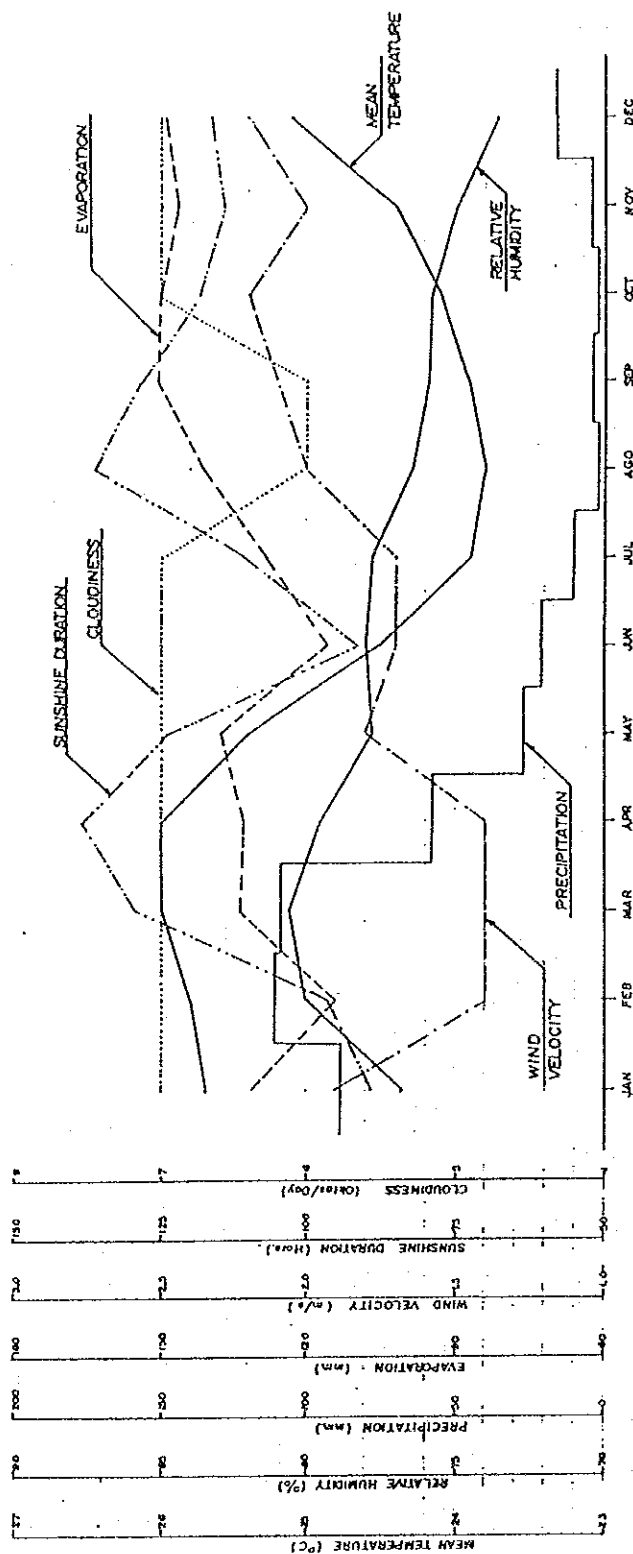


Fig. 4.1 Mapa de Isoyetas del Area del Estudio

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Mean/Annual
Mean Temperature (°C)	25.7	25.8	26.0	26.0	25.4	24.5	23.9	23.8	23.9	24.1	24.4	25.1	24.9
Relative Humidity (%)	76.8	80.0	80.6	79.6	77.8	78.0	77.8	76.4	75.9	75.9	74.9	73.6	77.3
Precipitation (mm/month)	88.4	111.0	109.3	58.1	27.8	21.6	11.1	2.3	4.5	2.7	4.8	17.0	458.6
Evaporation (mm/month)	131.4	114.1	132.9	137.4	136.7	128.3	148.2	150.7	150.1	146.7	149.1	1639.3	1639.3
Wind Velocity (m/sec)	1.9	1.4	1.4	1.4	1.8	1.7	1.7	2.0	2.1	2.2	2.0	2.2	1.8
Sunshine Duration (hrs/month)	89.1	93.5	129.3	139.3	123.9	91.7	110.8	136.1	128.6	118.6	114.1	116.2	1390.2
Mean Cloudiness (oktas/day)	7	7	7	7	7	7	7	6	6	7	7	7	7

Fig. 4.2 Datos Meteorológicos e Hidrológicos  
Promedios de la Estación Portoviejo  
UTM

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY

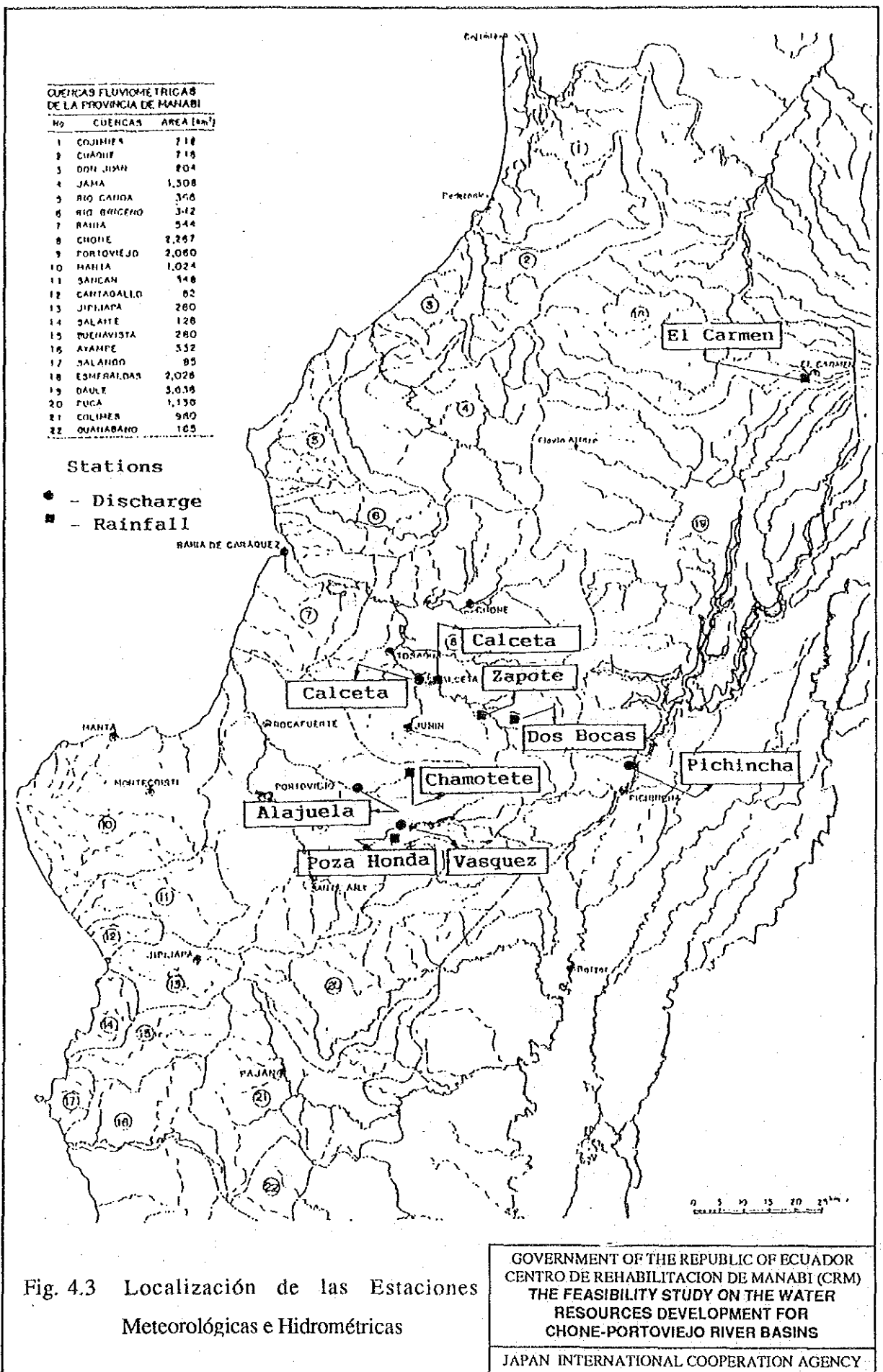


Fig. 4.3 Localización de las Estaciones Meteorológicas e Hidrométricas

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
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Cultivos	Días	Carrizal - Chone (ha.)	Amarillos (ha.)	Guarango (ha.)	Rb Chico (ha.)	Pechiche - Pasaje (ha.)	Santa Ana (ha.)	Mejía (ha.)	Ceibal - Guayaba (ha.)	Mes														
										J	F	M	A	M	J	J	A	S	O	N	D			
Arroz	135	5,970	400	595	680	340	1,310	500	1,850															
Arroz	135	5,970	400	595	680	340	1,310	500	1,850															
Maíz	120	740	50	75	90	40	165	60	230															
Maíz	120	740	50	75	90	40	165	60	230															
Verduras	120	740	50	80	80	40	165	60	230															
Verduras	120	1,780	110	180	200	90	385	150	550															
Algodón	150	2,320	150	230	260	130	510	190	720															
Maní/Soya	120	1,280	90	130	140	80	290	110	400															
Cítricos	365	2,220	150	220	250	130	490	180	690															
Plátano	365	3,010	200	300	340	170	660	250	930															
<b>Total</b>		<b>24,770</b>	<b>1,650</b>	<b>2,480</b>	<b>2,810</b>	<b>1,400</b>	<b>5,450</b>	<b>2,060</b>	<b>7,680</b>															

Fig. 5.1 Patrón de Cultivos Propuestos

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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 THE FEASIBILITY STUDY ON THE WATER  
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 CHONE-PORTOVIEJO RIVER BASINS  
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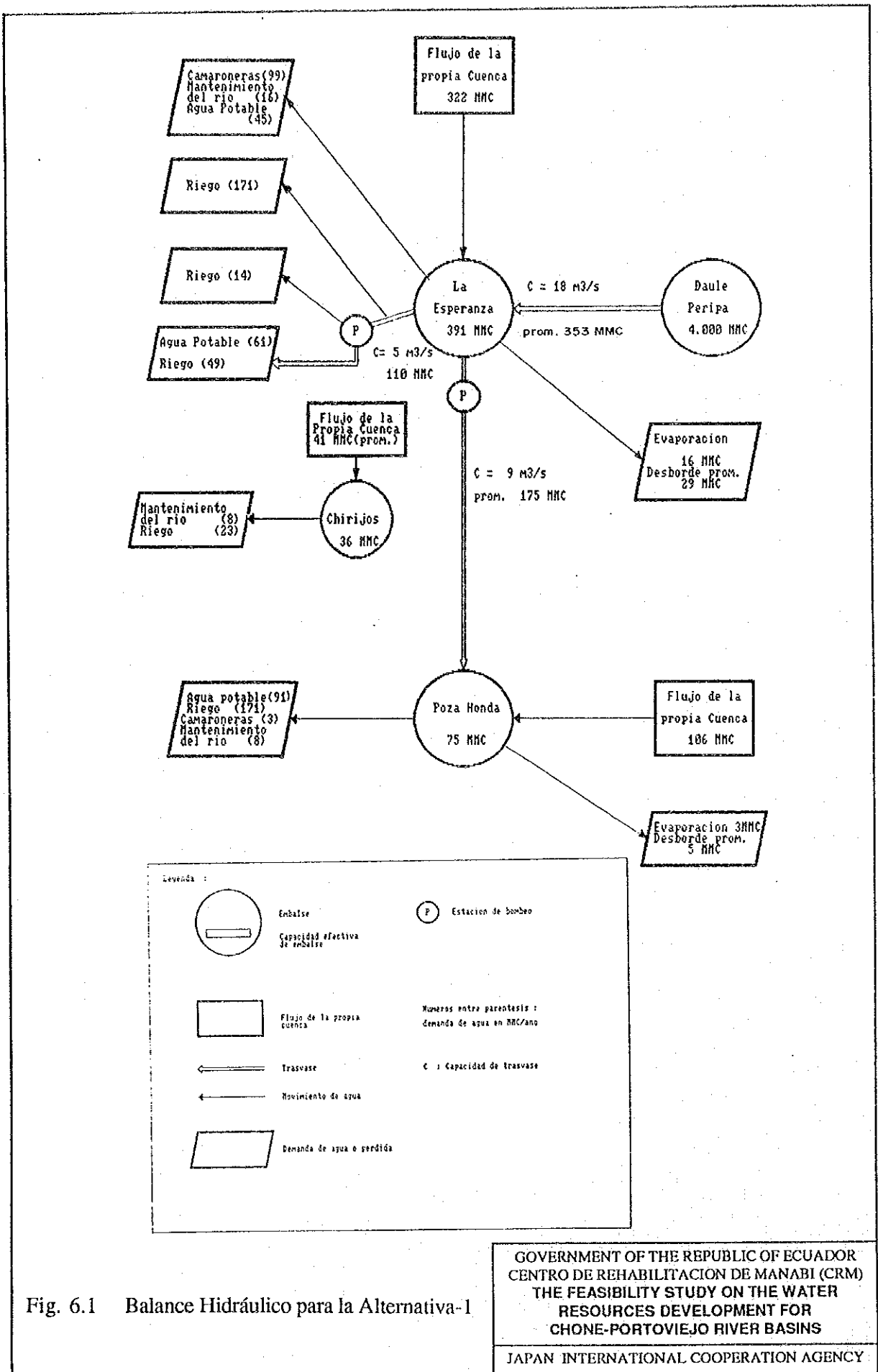


Fig. 6.1 Balance Hidráulico para la Alternativa-1

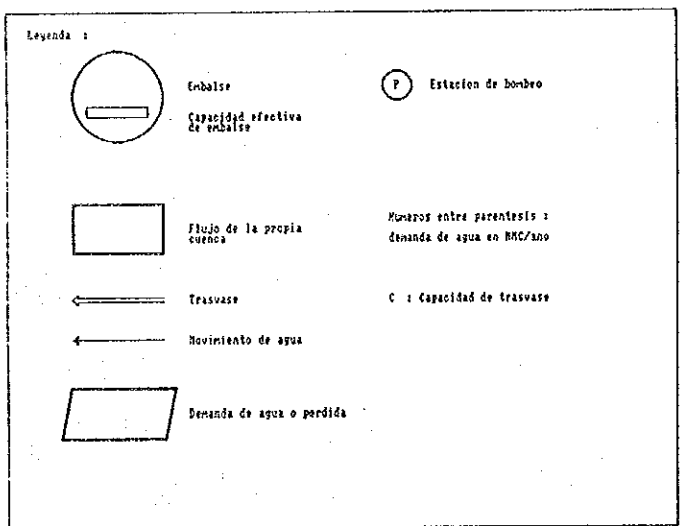
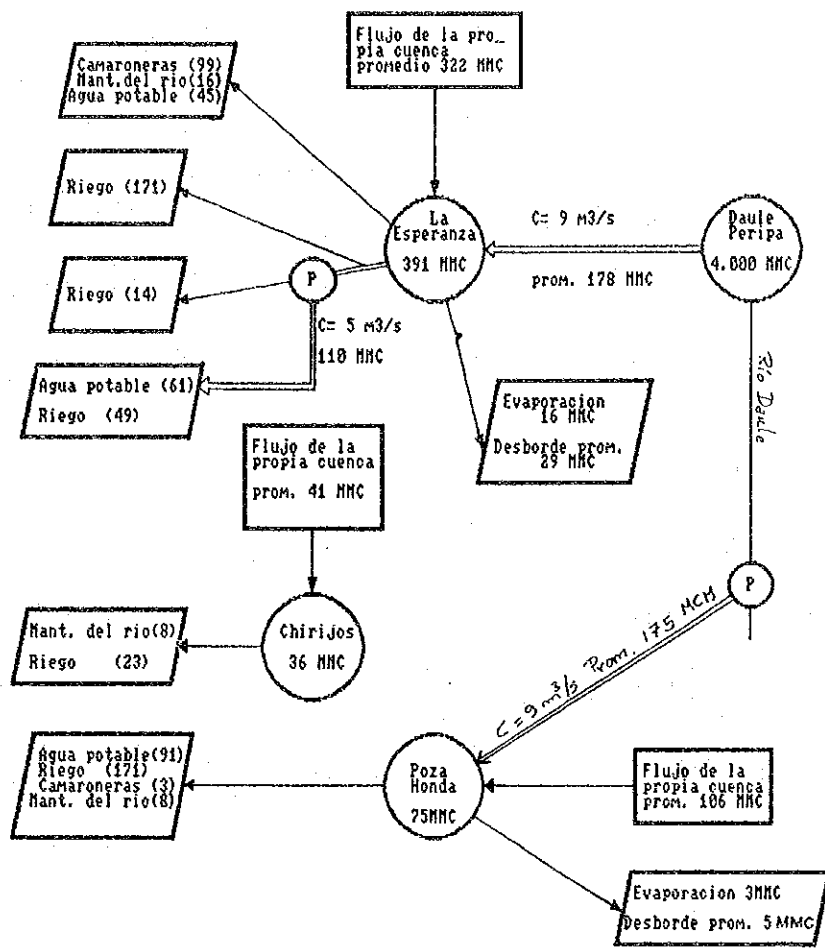


Fig. 6.2 Balance Hidráulico para la Alternativa-2

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

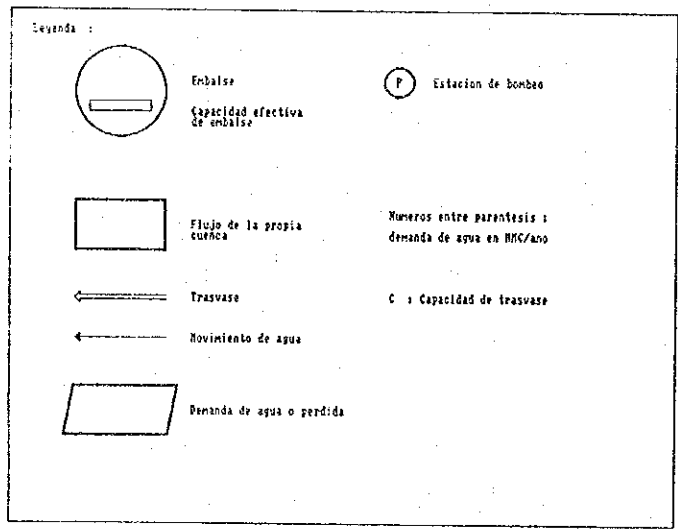
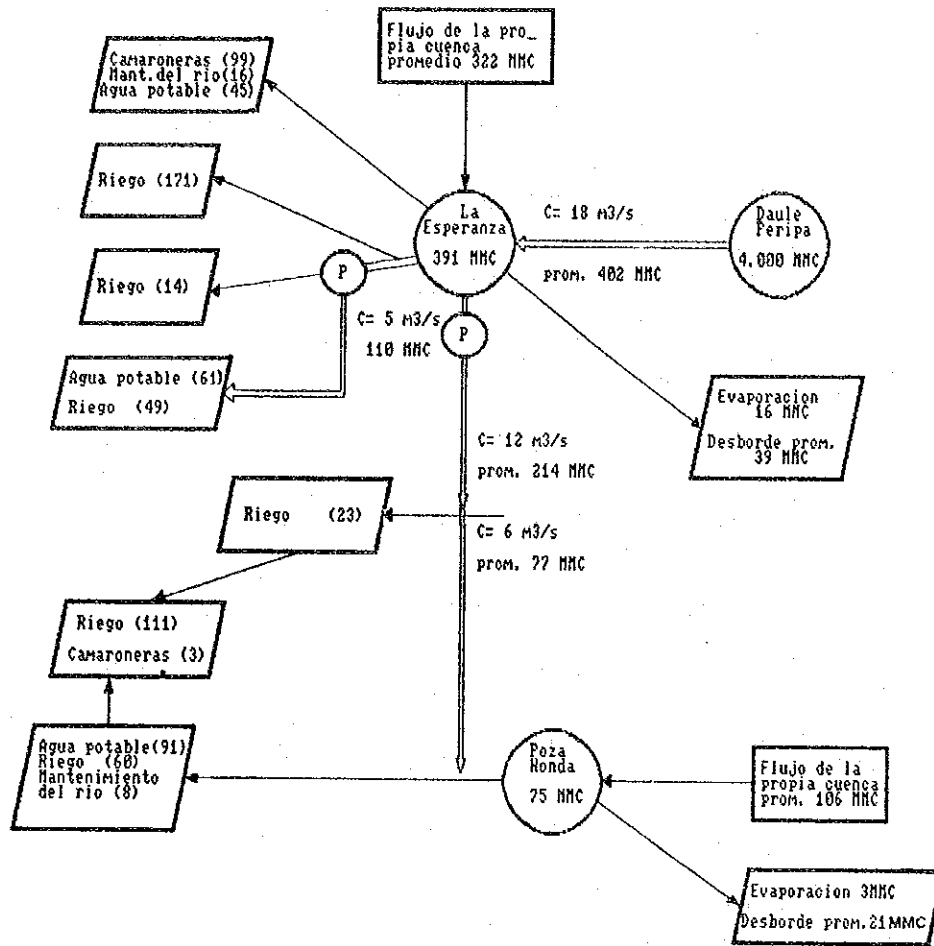


Fig. 6.3 Balance Hidráulico para la Alternativa-3

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

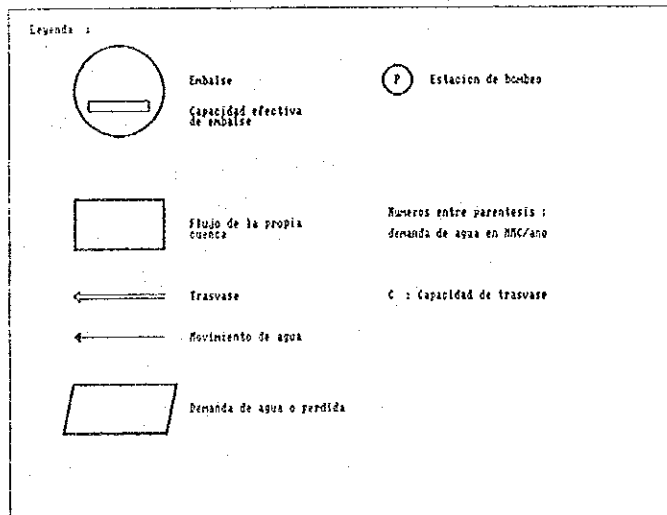
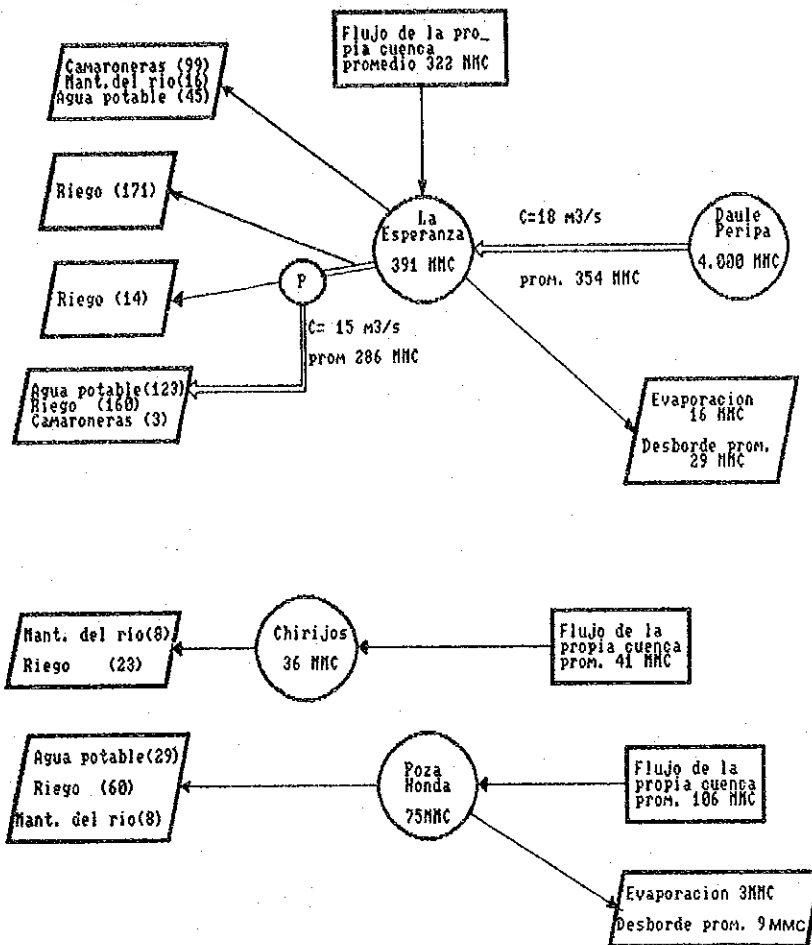


Fig. 6.4 Balance Hidráulico para la Alternativa-4



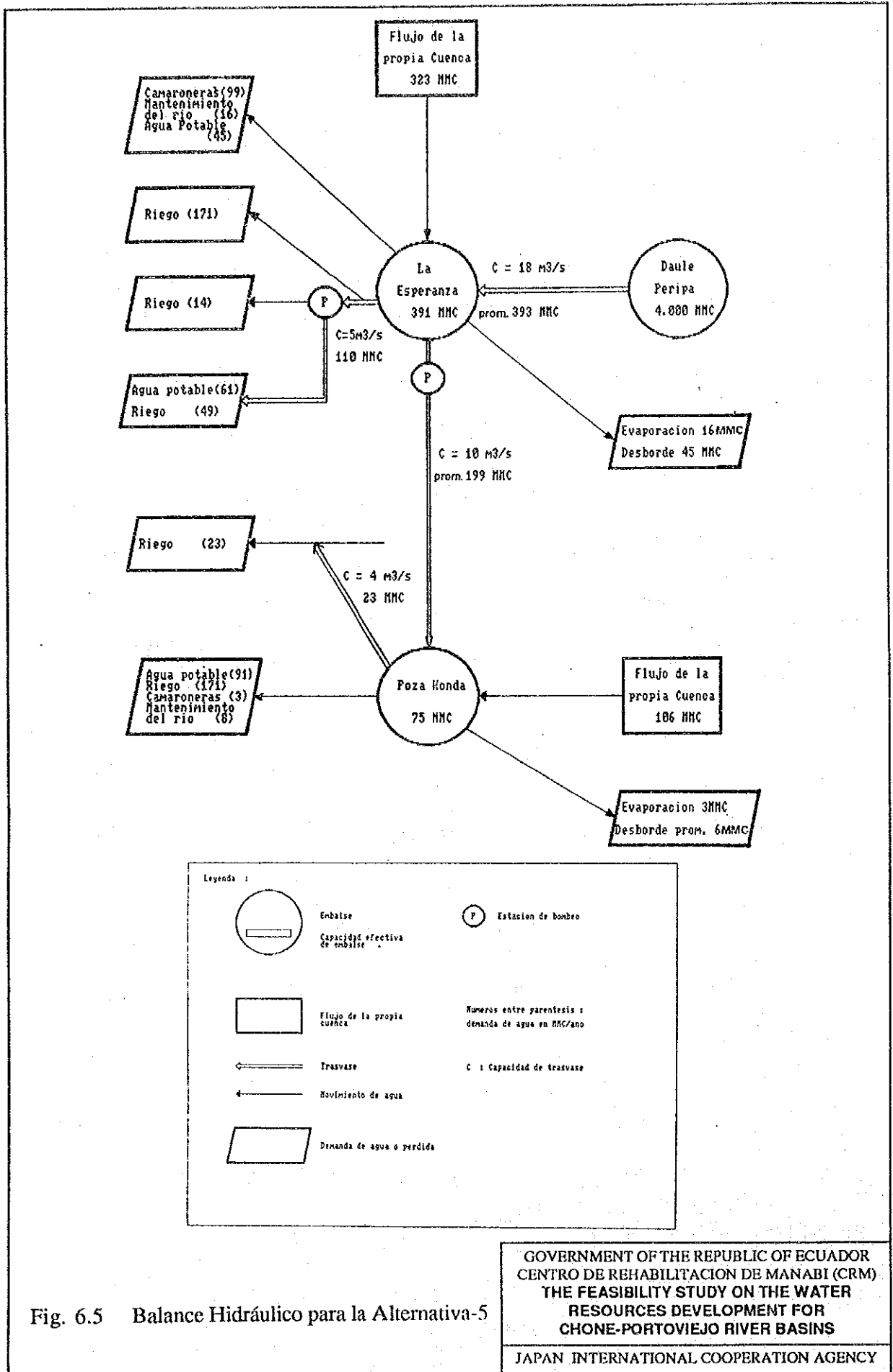


Fig. 6.5 Balance Hidráulico para la Alternativa-5

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

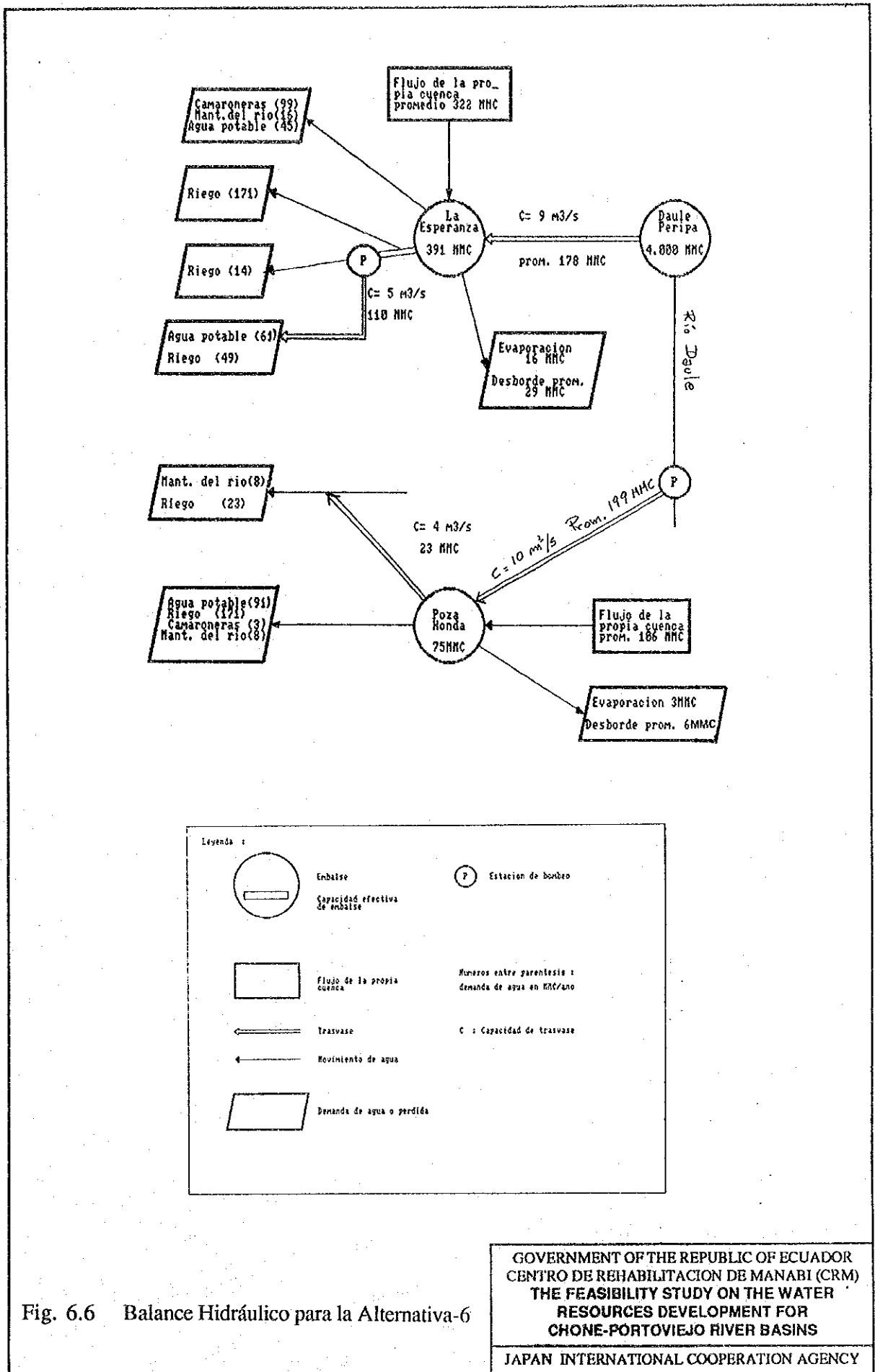


Fig. 6.6 Balance Hidráulico para la Alternativa-6

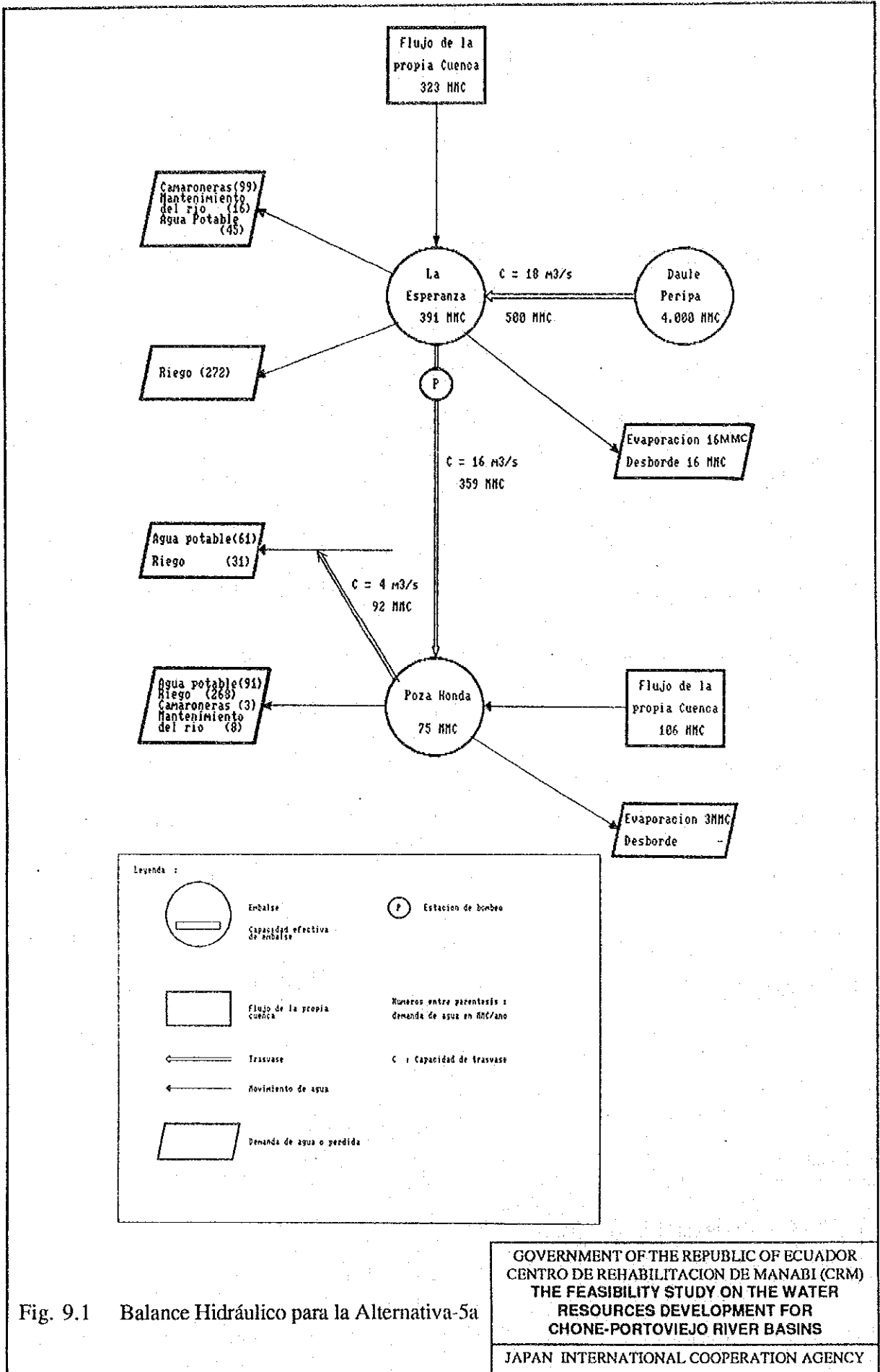


Fig. 9.1 Balance Hidráulico para la Alternativa-5a

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS

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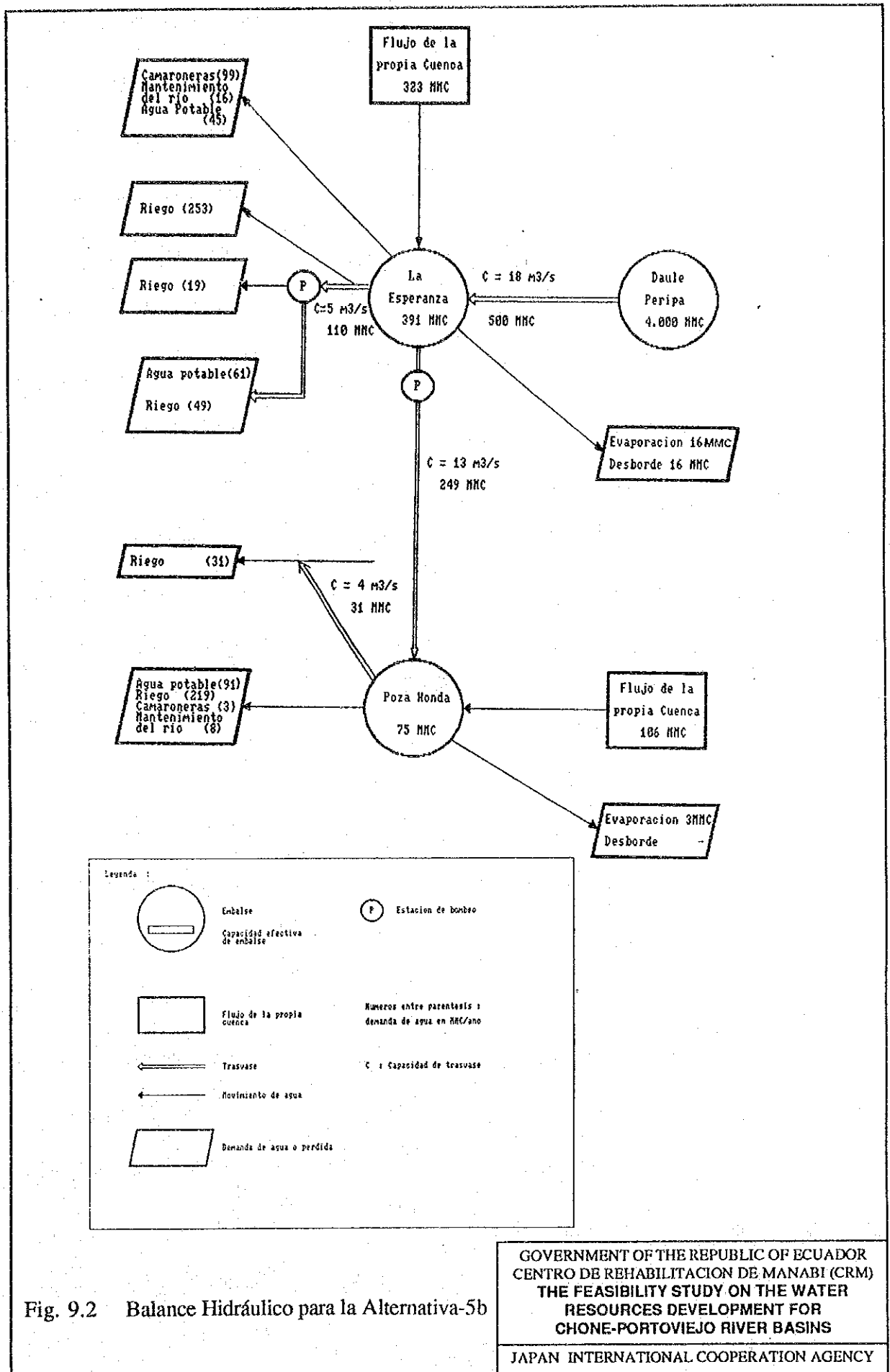
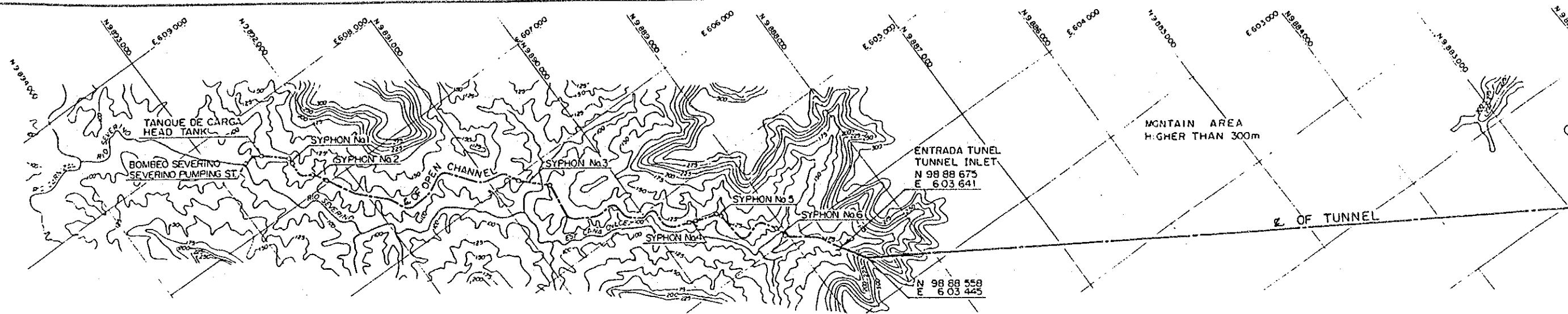


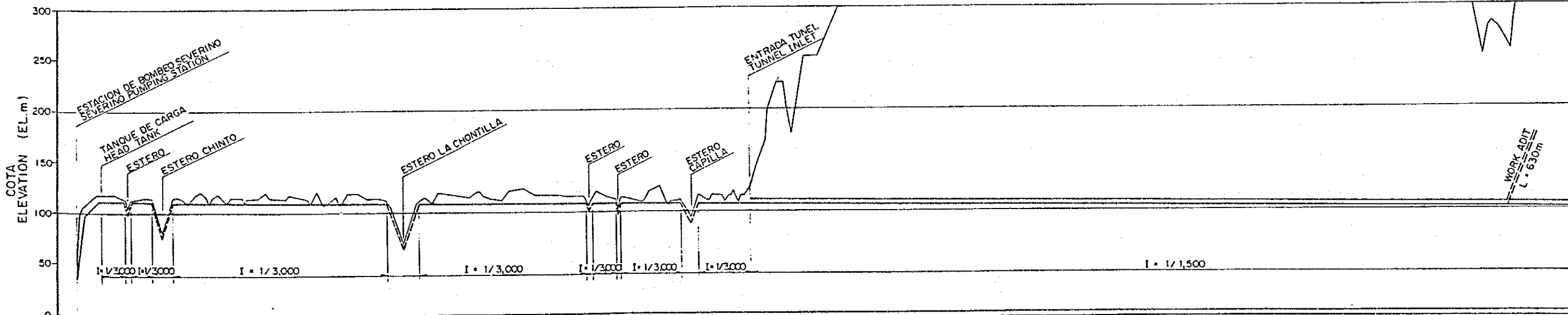
Fig. 9.2 Balance Hidráulico para la Alternativa-5b

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

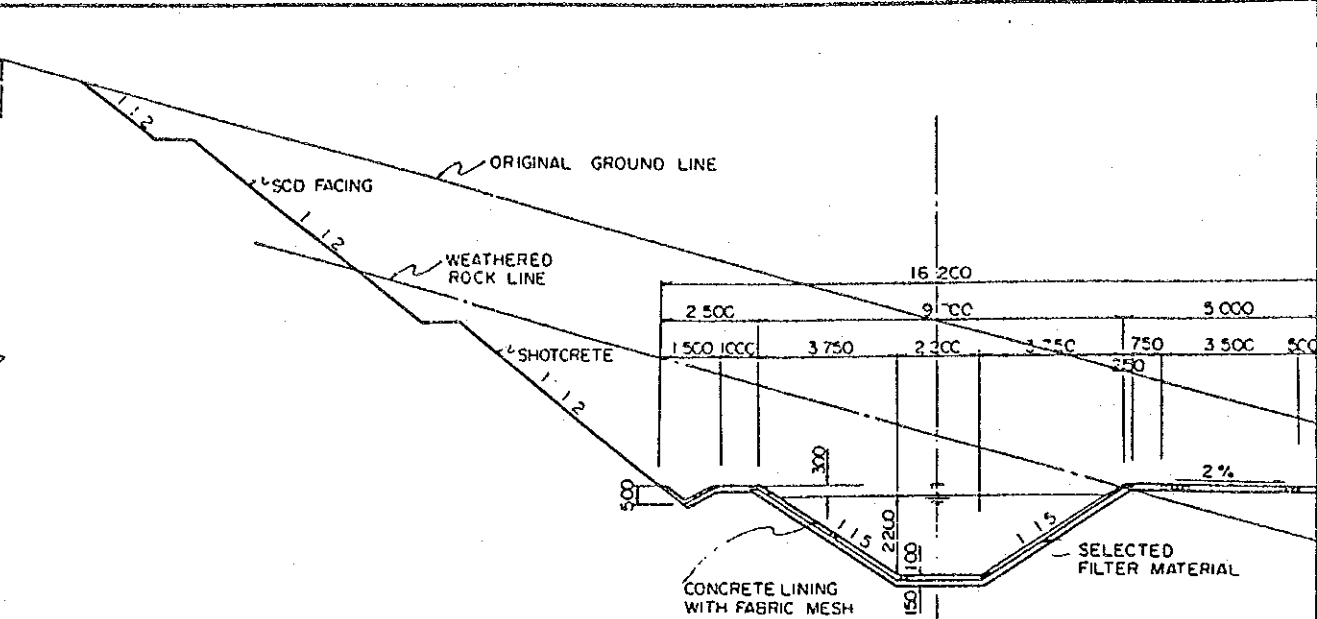
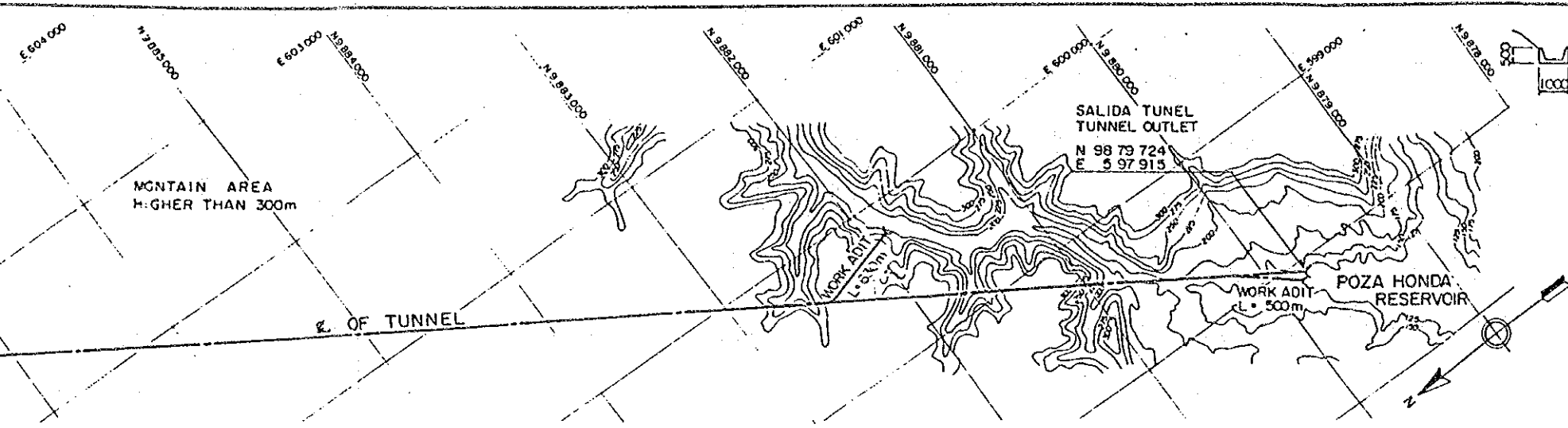


PLATA PLAN SCALE A

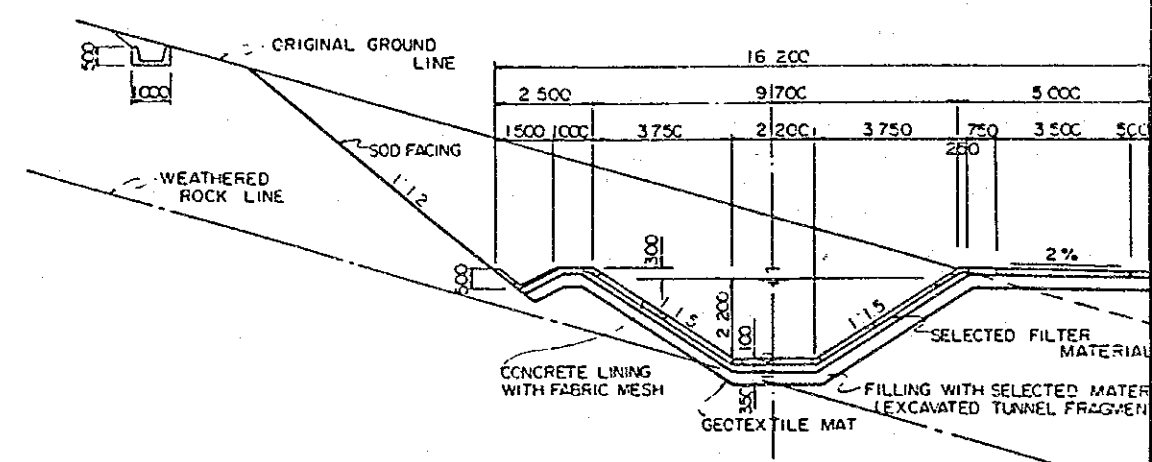


TIPO DE ESTRUCTURAS TYPE OF STRUCTURE	PIPELINE	OPEN CHANNEL	OPEN CHANNEL	OPEN CHANNEL	SYPHON	OPEN CHANNEL	OPEN CHANNEL	SYPHON	OPEN CHANNEL	TUNEL																
	SYPHON	SYPHON					SYPHON	SYPHON		L = 10,650m																
COTA DE ESTRUCTURAS ELEVATION OF STRUCTURE (EL. m)	38.20	111.195	111.129	110.825	110.435		109.760	109.282		108.734	108.502	108.422	108.195	107.998	107.673	107.503	106.800		106.13	105.47	104.80	104.13	103.47	102.80	102.13	
COTA DE TERRENO ELEVATION OF GROUND (EL. m)	36	119	114	113	114		112	113		114	113	114	113	112	117	125				106.13	105.47	104.80	104.13	103.47	102.80	102.13
DISTANCIA ACUMULADA ACCUMULATE DISTANCE (m)	0	250	270	480	535	725	935		2965	3275		4920	4970	5210	5255	5845	6030	6540		7540	8540	9540	10540	11540	12540	13540
DISTANCIA DISTANCE (m)	0	250	20	210	35	190	210		2030	310		1645	50	240	45	590	185	510		1,000	1,000	1,000	1,000	1,000	1,000	1,000
ESTACION STATION	0+000	0+250	0+270	0+480	0+535	0+725	0+935		2+965	3+275		4+920	4+970	5+210	5+255	5+845	6+030	6+540		7+540	8+540	9+540	10+540	11+540	12+540	13+540

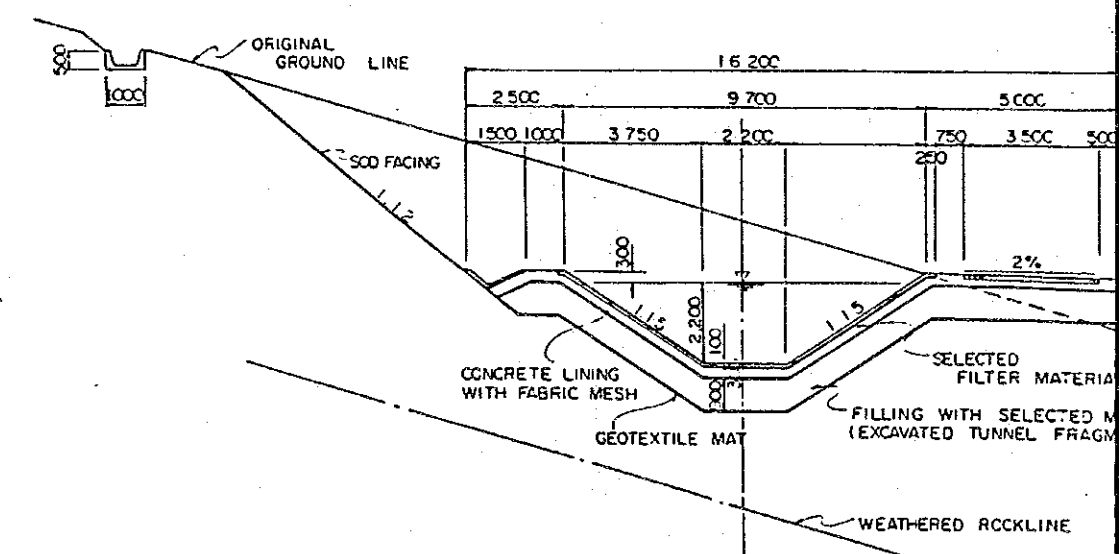
PERFIL PROFILE H; SCALE A V; SCALE B



TYPE I



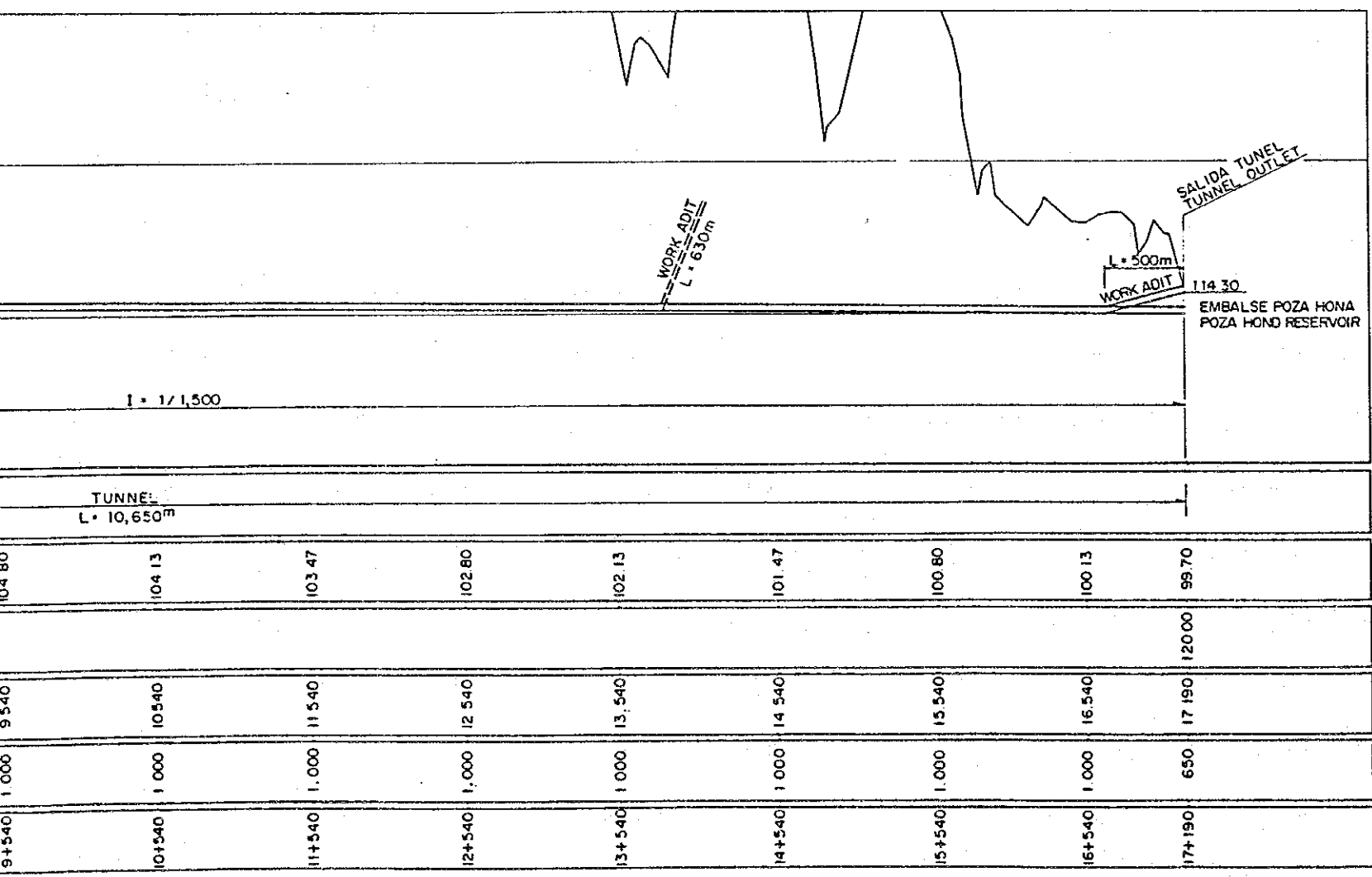
TYPE II



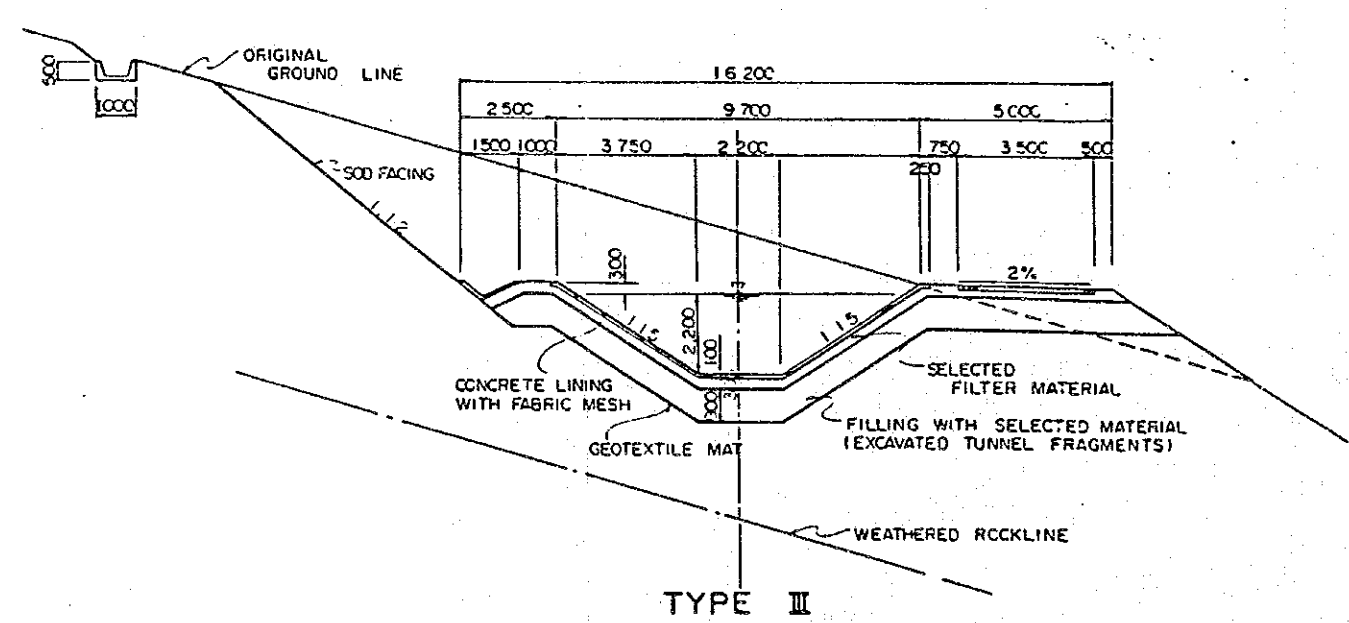
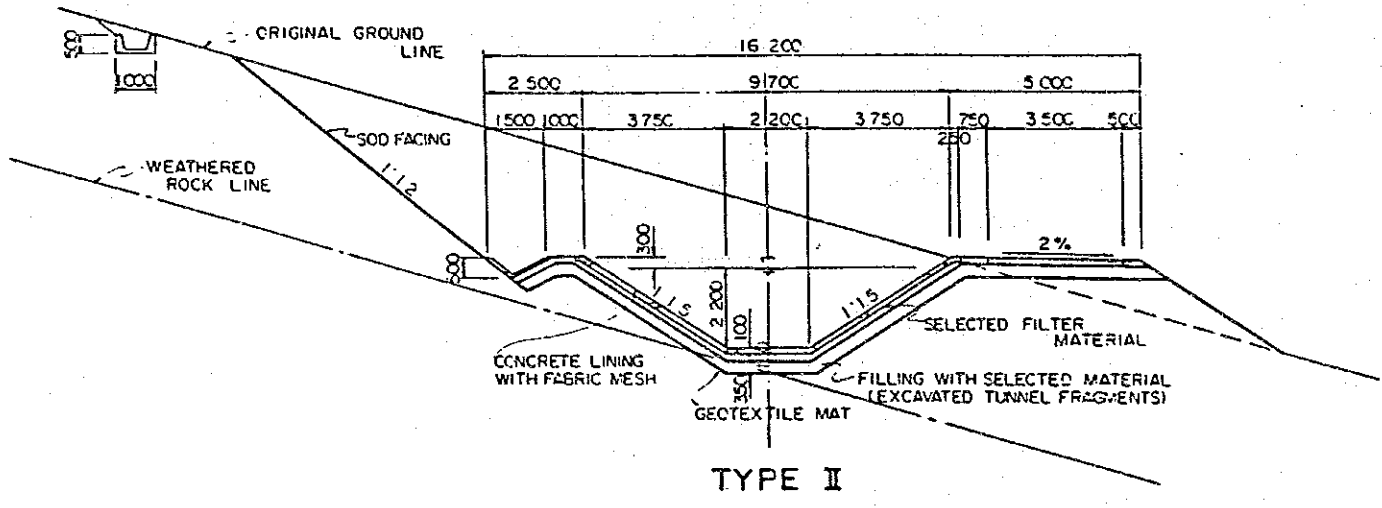
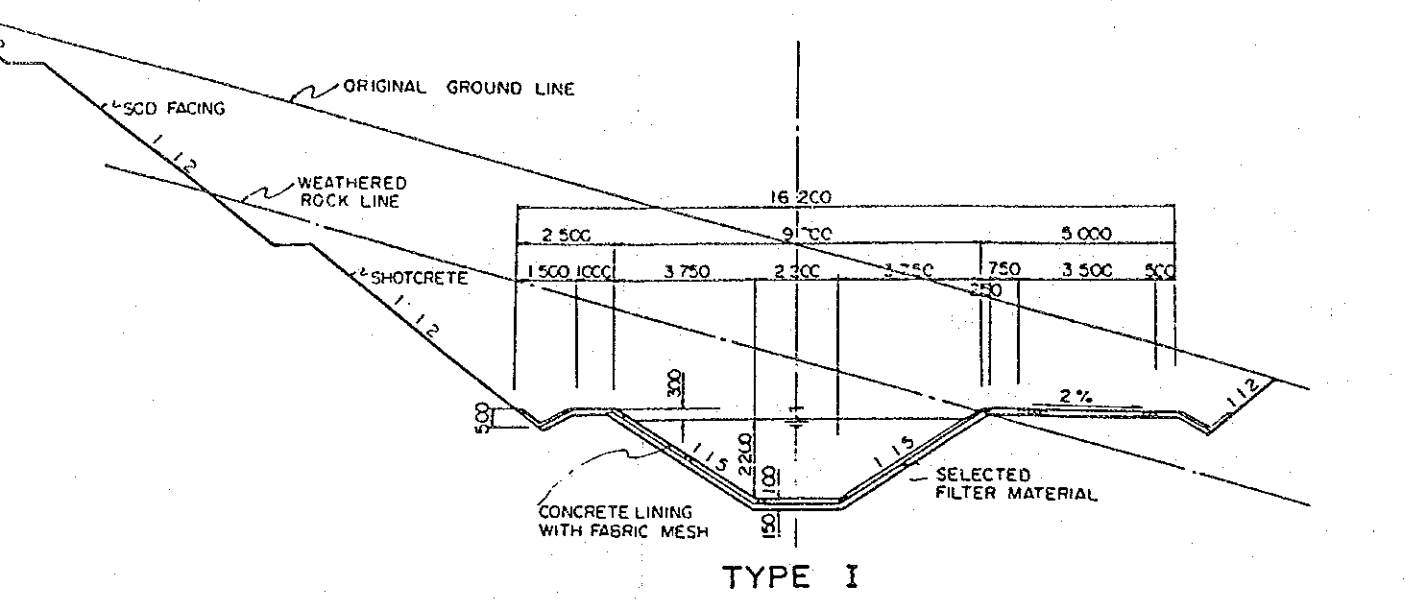
TYPE III

OPEN CHANNEL SECTION SCALE C

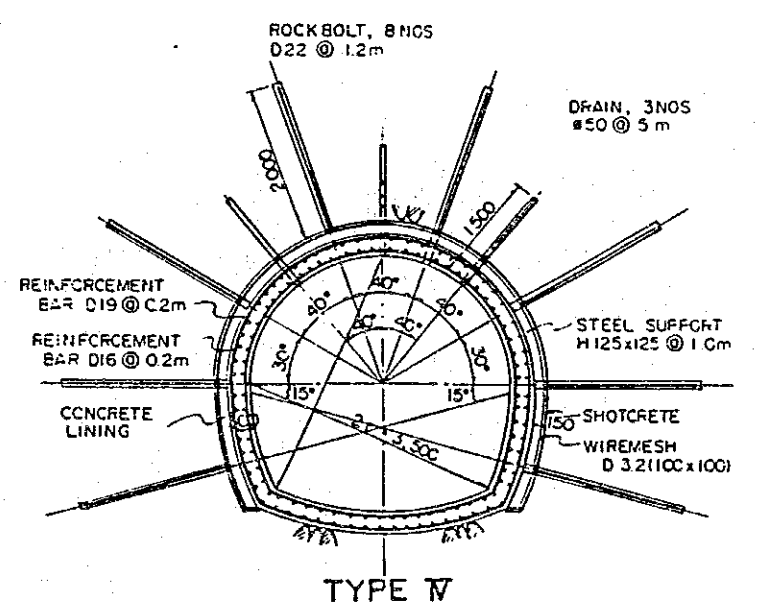
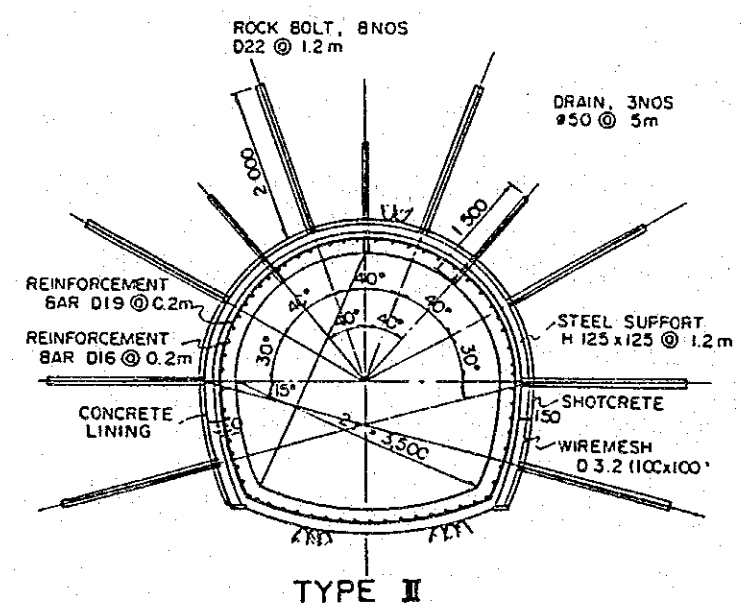
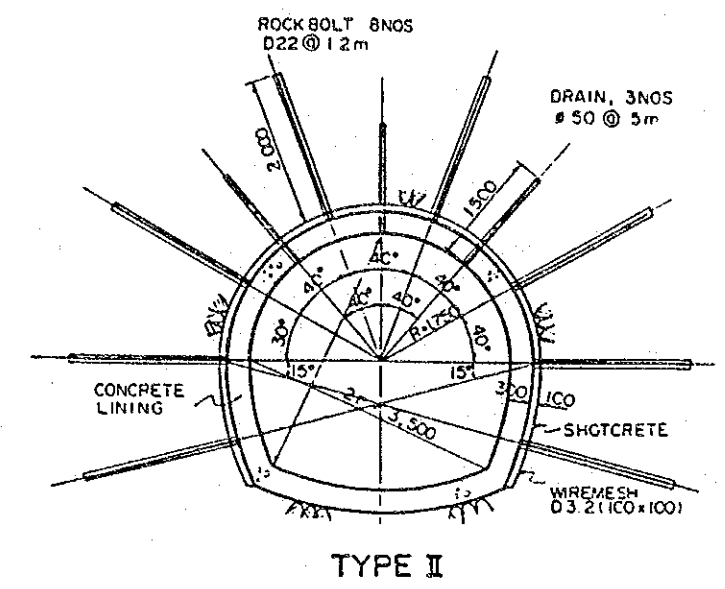
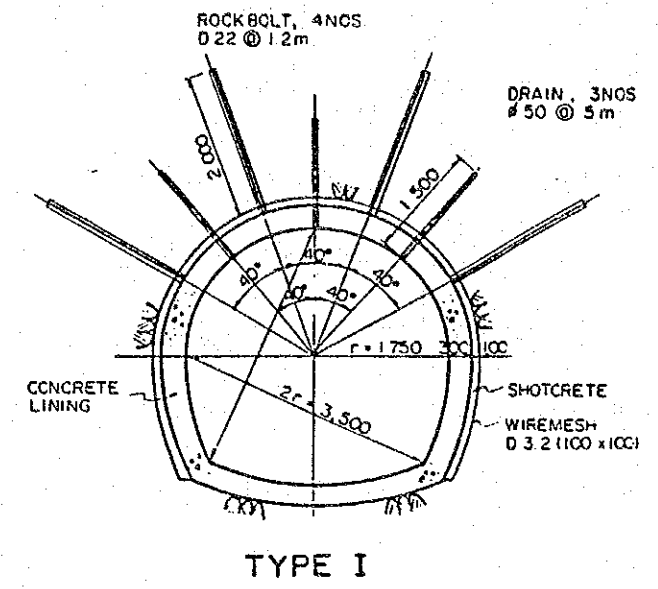
PLATA PLAN SCALE A



H: SCALE A  
V: SCALE B



OPEN CHANNEL SECTION SCALE C



TUNNEL SECTION SCALE D

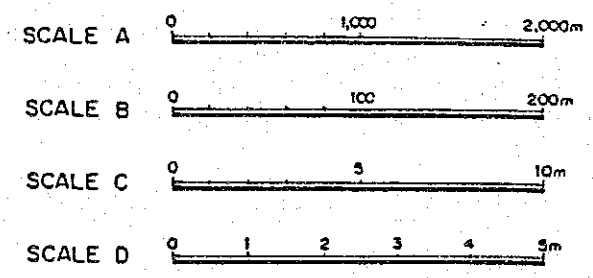
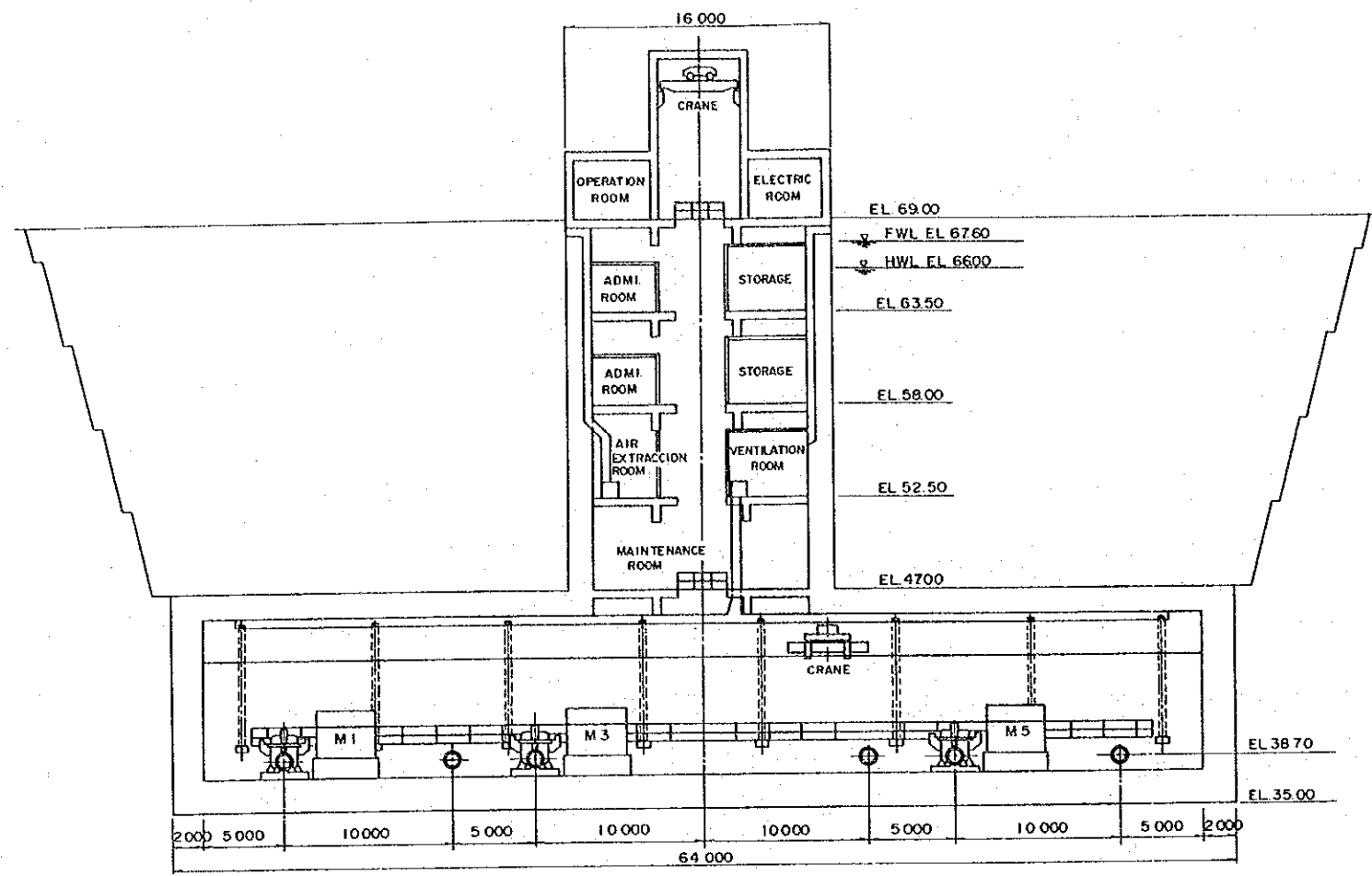
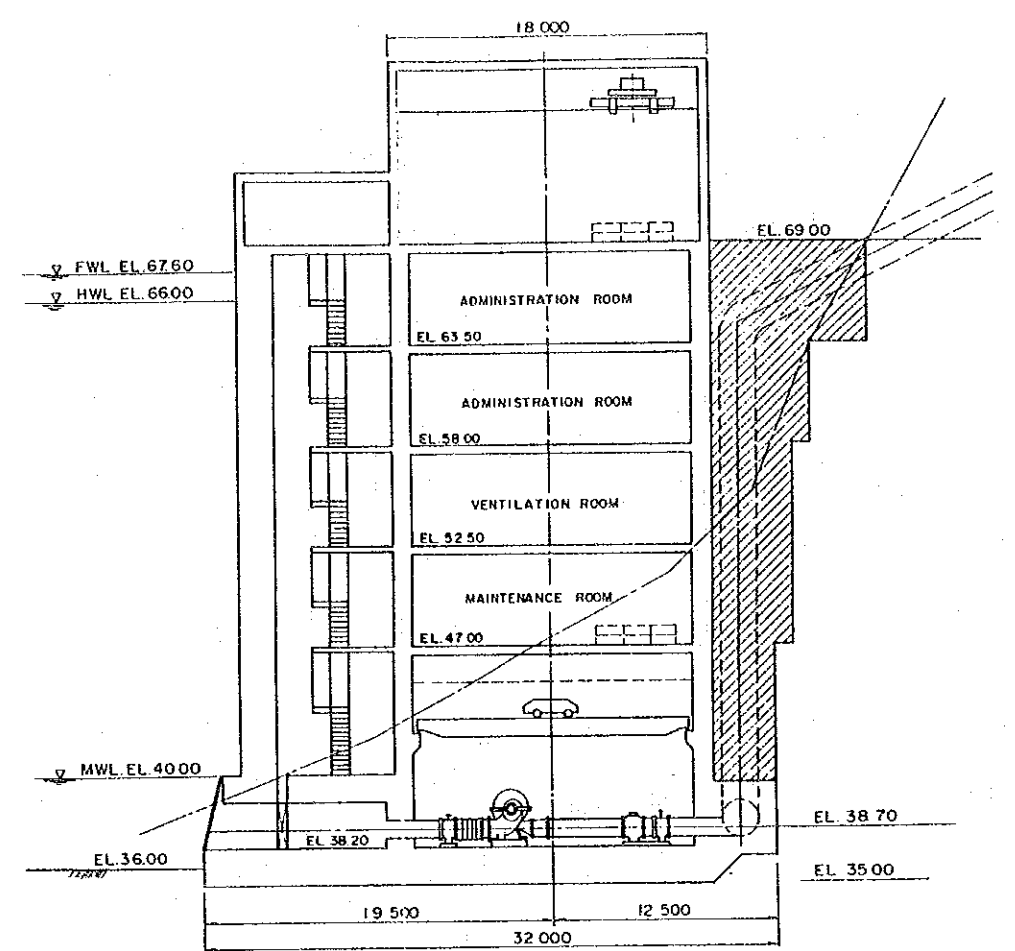


Fig.11.1 Diseño Básico del Esquema de Traslase "Presa La Esperanza (Severino) - Presa Poza Honda"

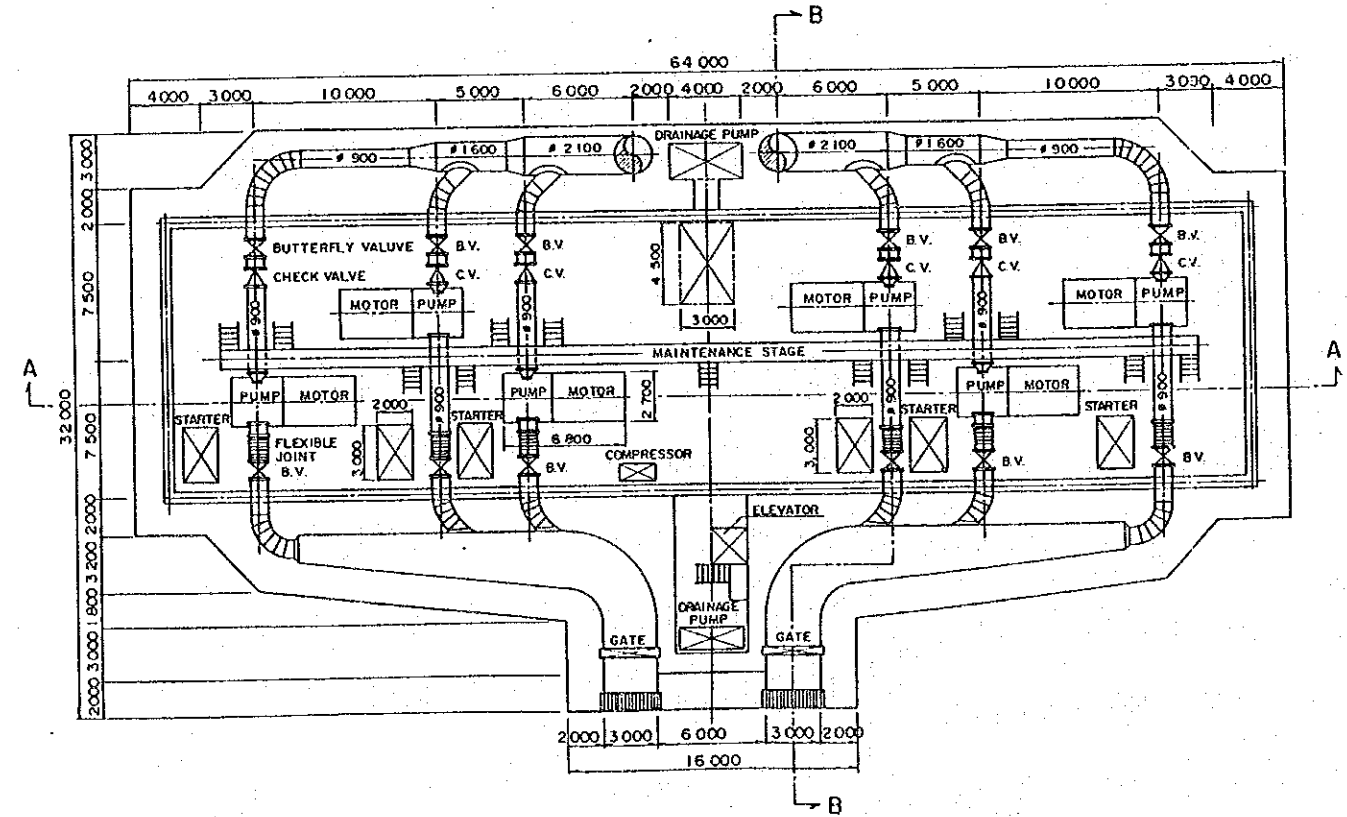
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY



SECTION A-A



SECTION B-B



PLAN

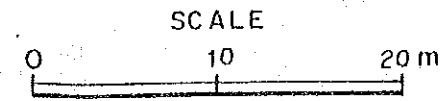


Fig.11.2 Diseño Básico de la Estación de Bombeo en Severino

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY



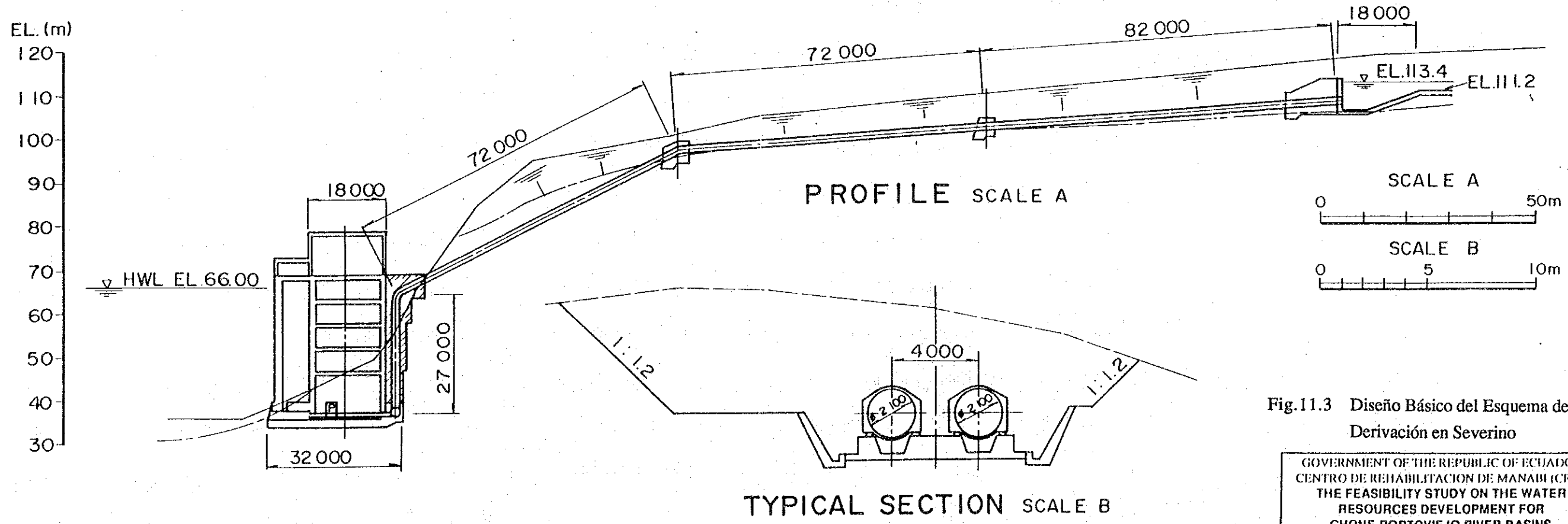
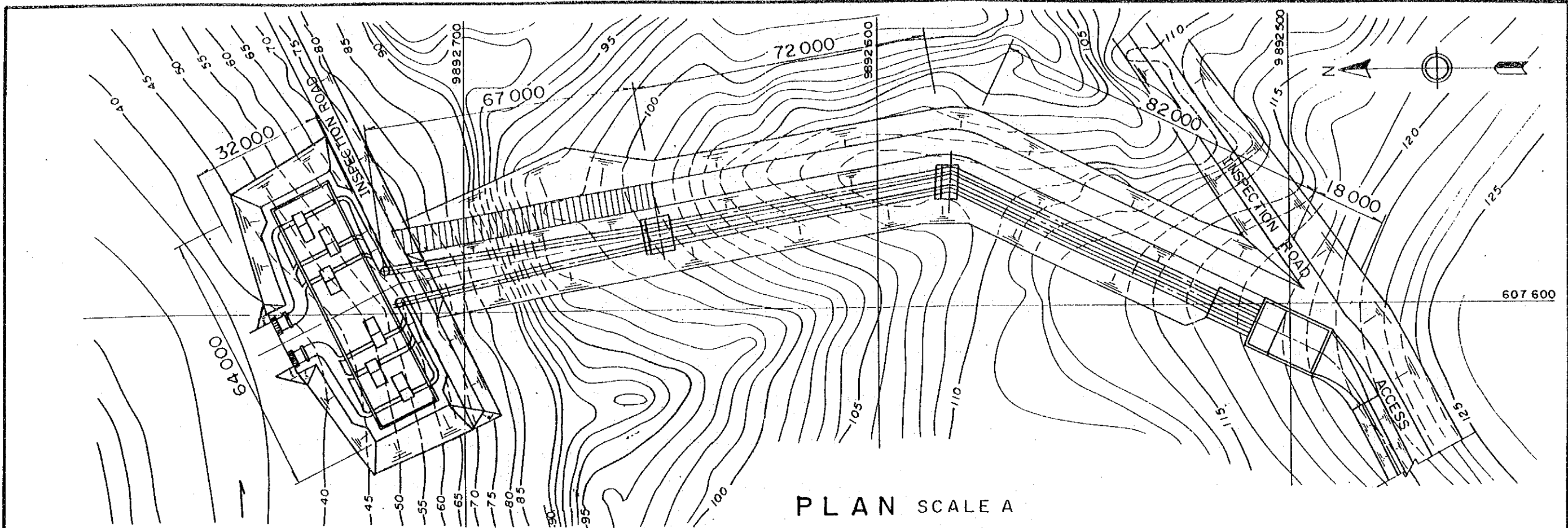


Fig.11.3 Diseño Básico del Esquema de Derivación en Severino

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

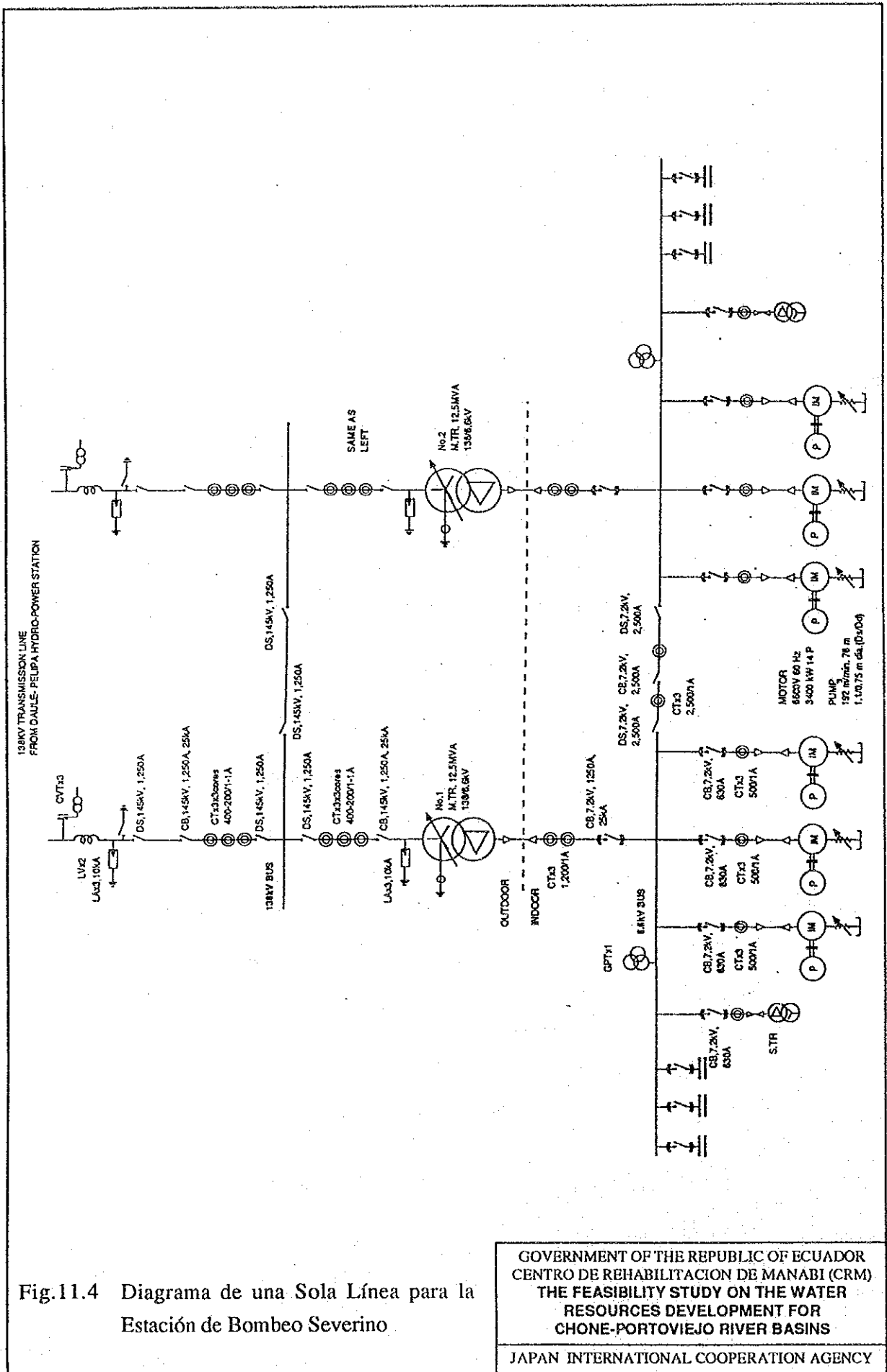
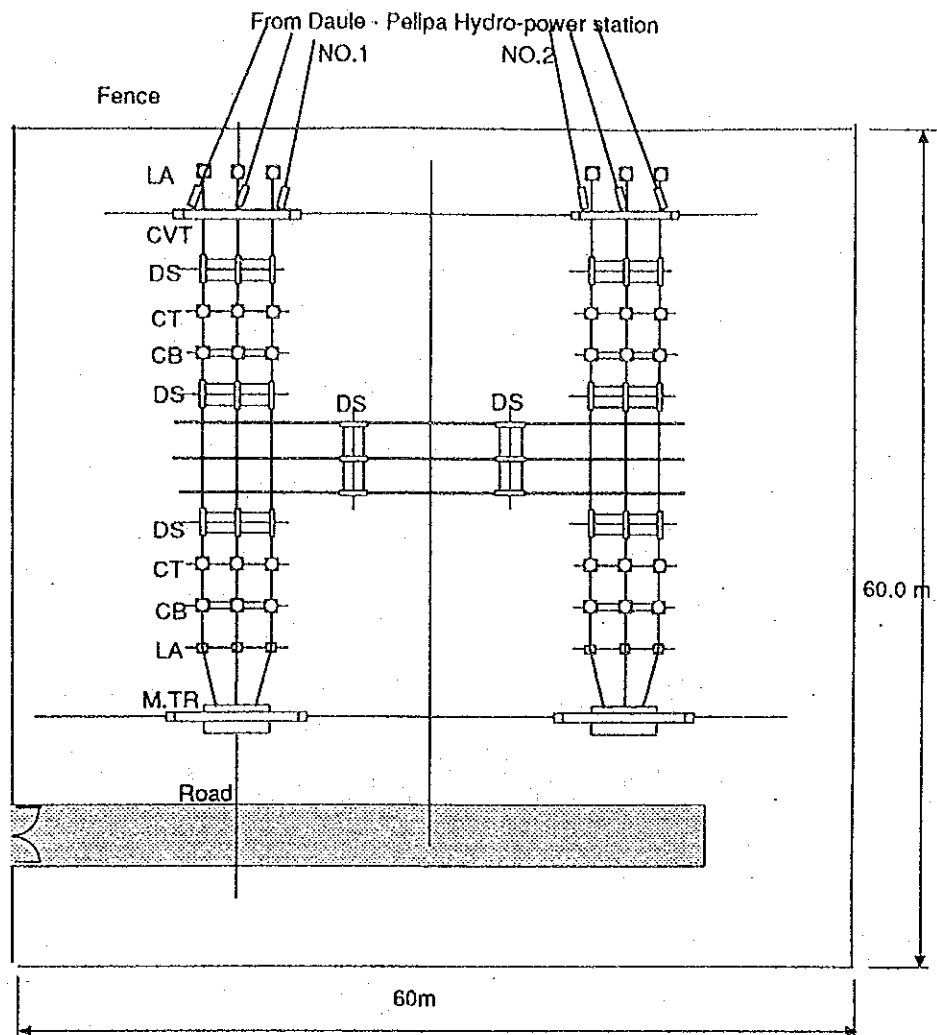


Fig.11.4 Diagrama de una Sola Línea para la Estación de Bombeo Severino

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

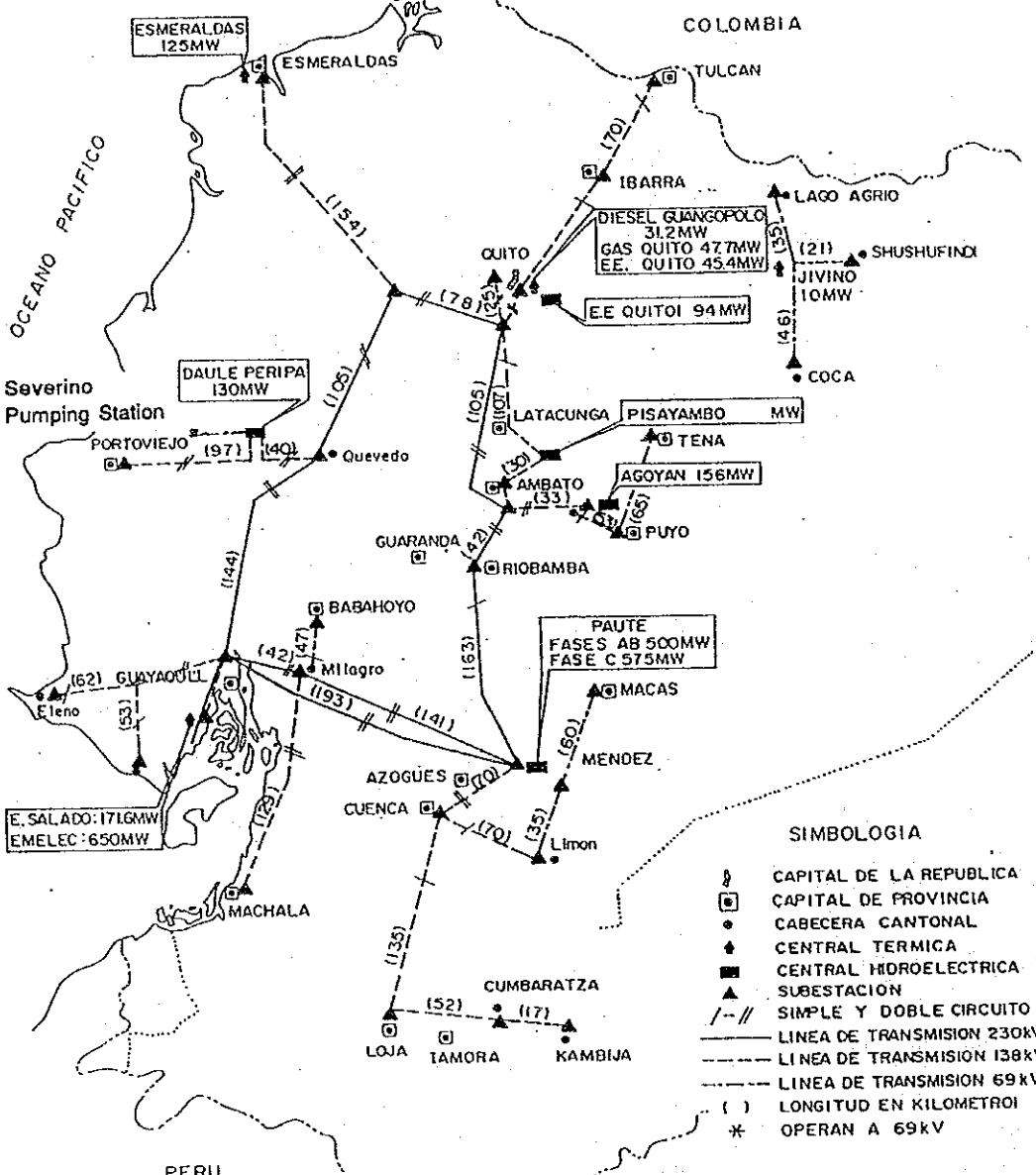
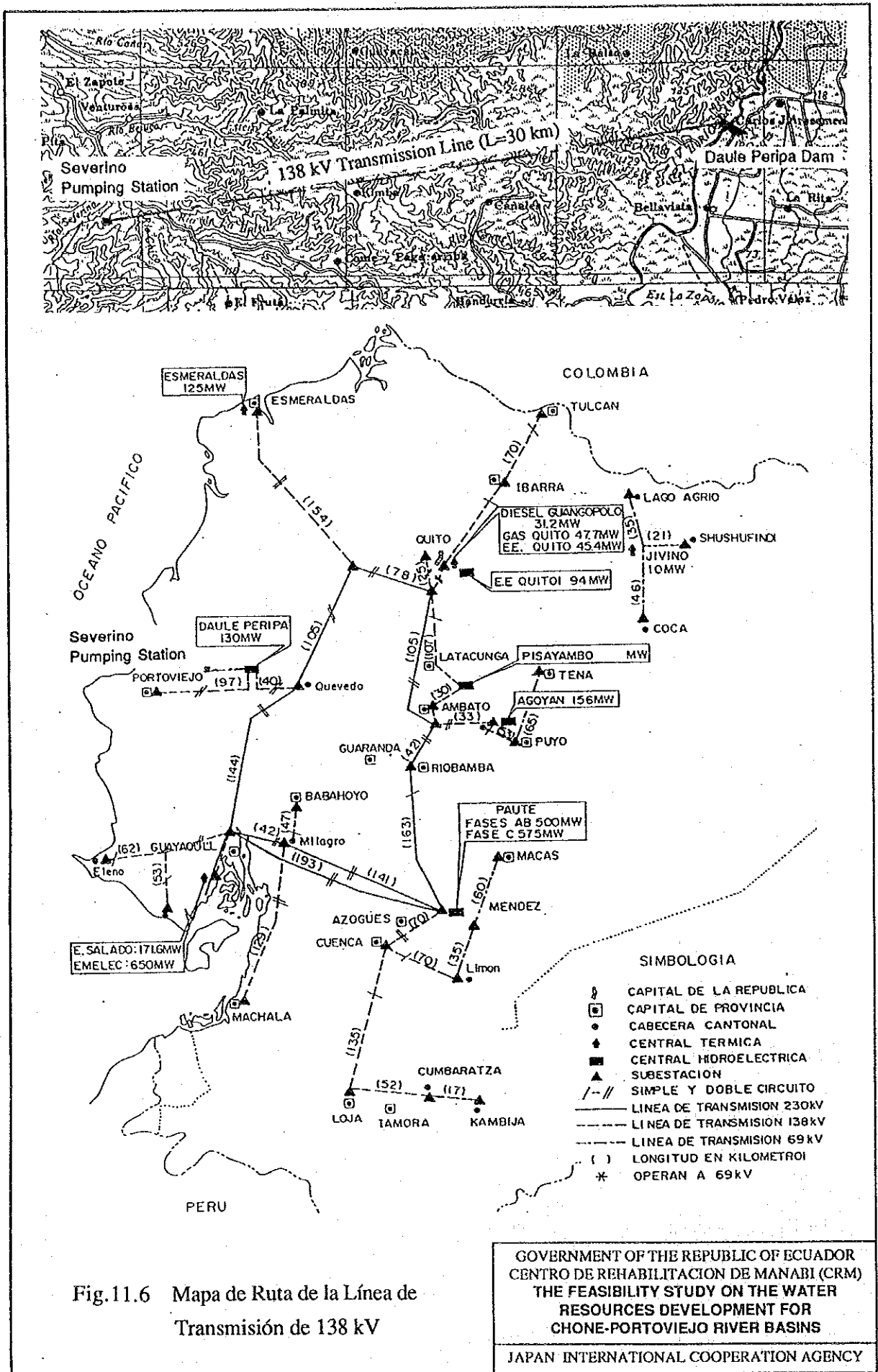


- LA : Lightning Arrester  
(Pararrayos de Protección)
- CVT : Capacitance Voltage Transformer  
(Transformador de Voltaje)
- DS : Disconnecting Switch  
(Interruptor)
- CB : Circuit Breaker  
(Interruptor de Circuito)
- M.TR : Main Transformer  
(Transformador Principal)

Fig.11.5 Distribución de los Equipos Exteriores

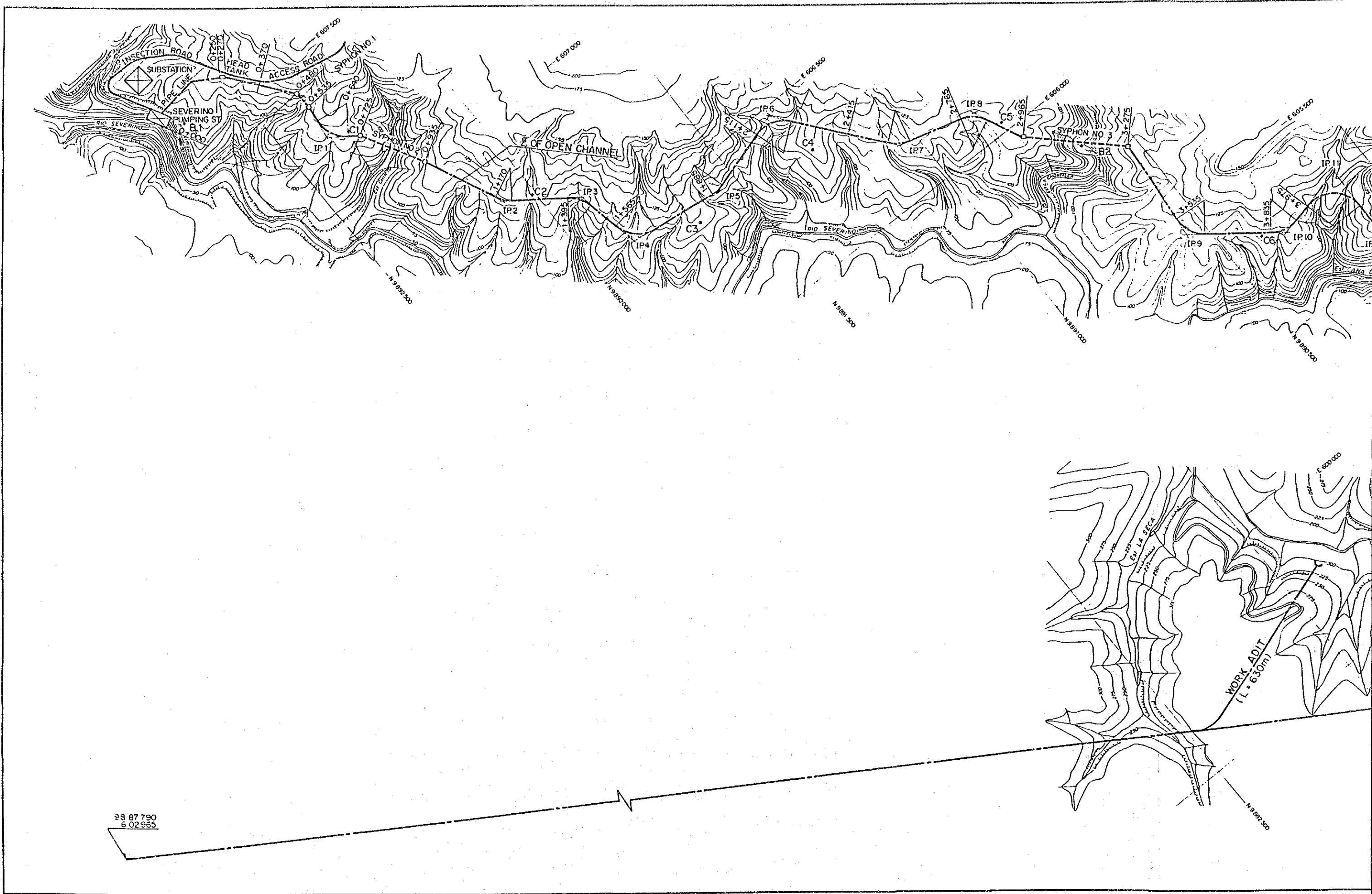
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

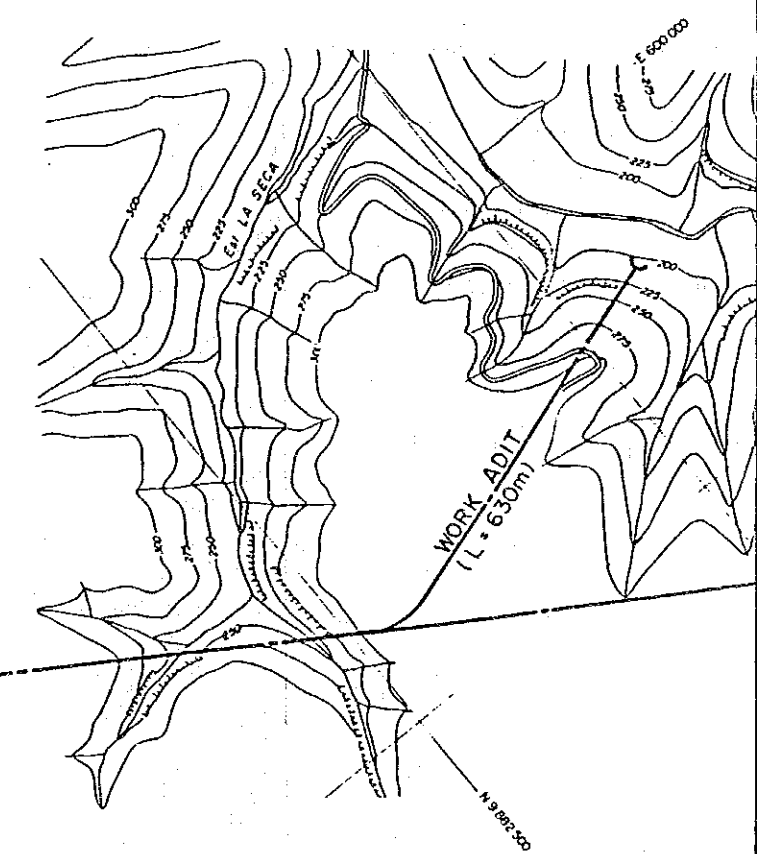
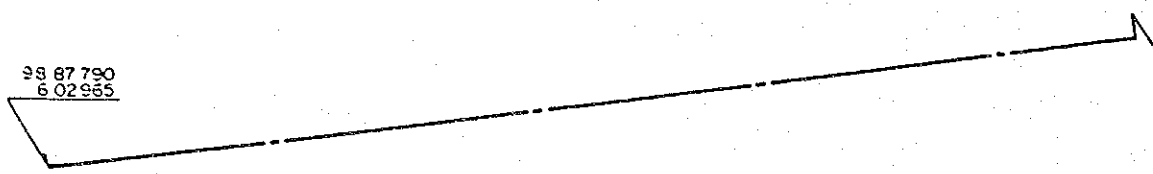


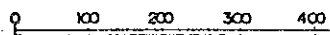
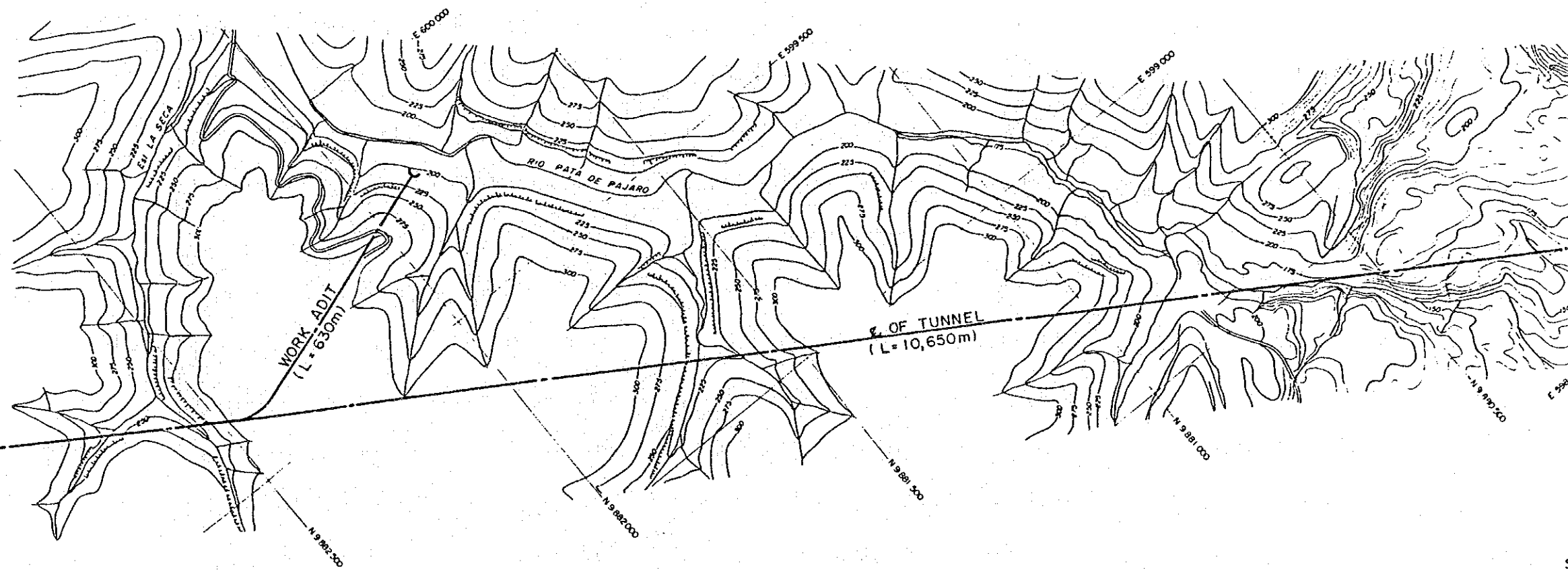
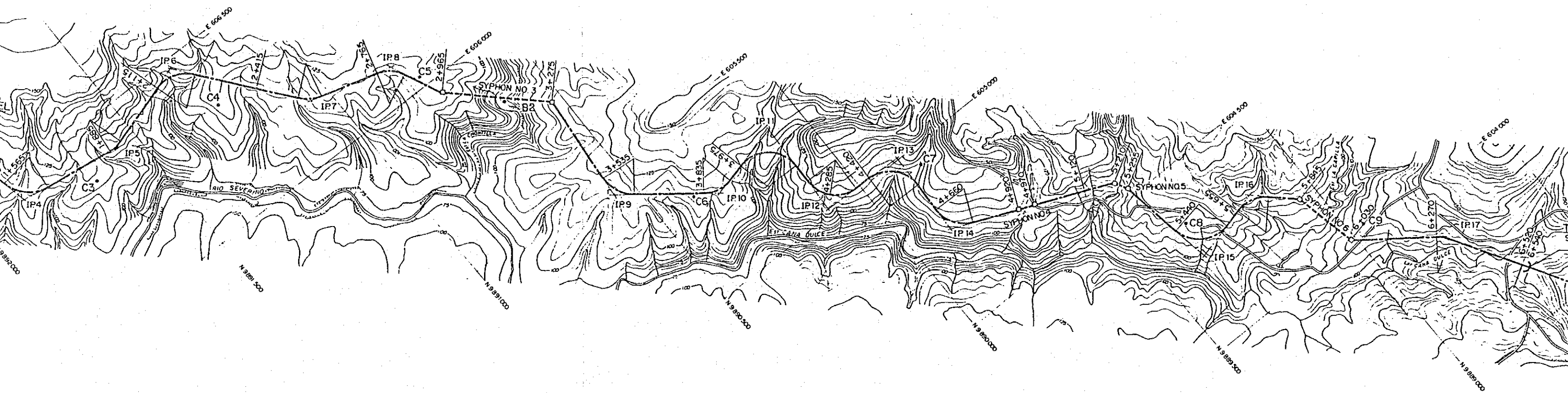
- SIMBOLOGIA**
- ◻ CAPITAL DE LA REPUBLICA
  - ◻ CAPITAL DE PROVINCIA
  - CABECERA CANTONAL
  - ◆ CENTRAL TERMICA
  - CENTRAL HIDROELECTRICA
  - ▲ SUBESTACION
  - /-// SIMPLE Y DOBLE CIRCUITO
  - LINEA DE TRANSMISION 230KV
  - LINEA DE TRANSMISION 138KV
  - - - LINEA DE TRANSMISION 69KV
  - ( ) LONGITUD EN KILOMETRO
  - \* OPERAN A 69KV





38 87 790  
6 02 665





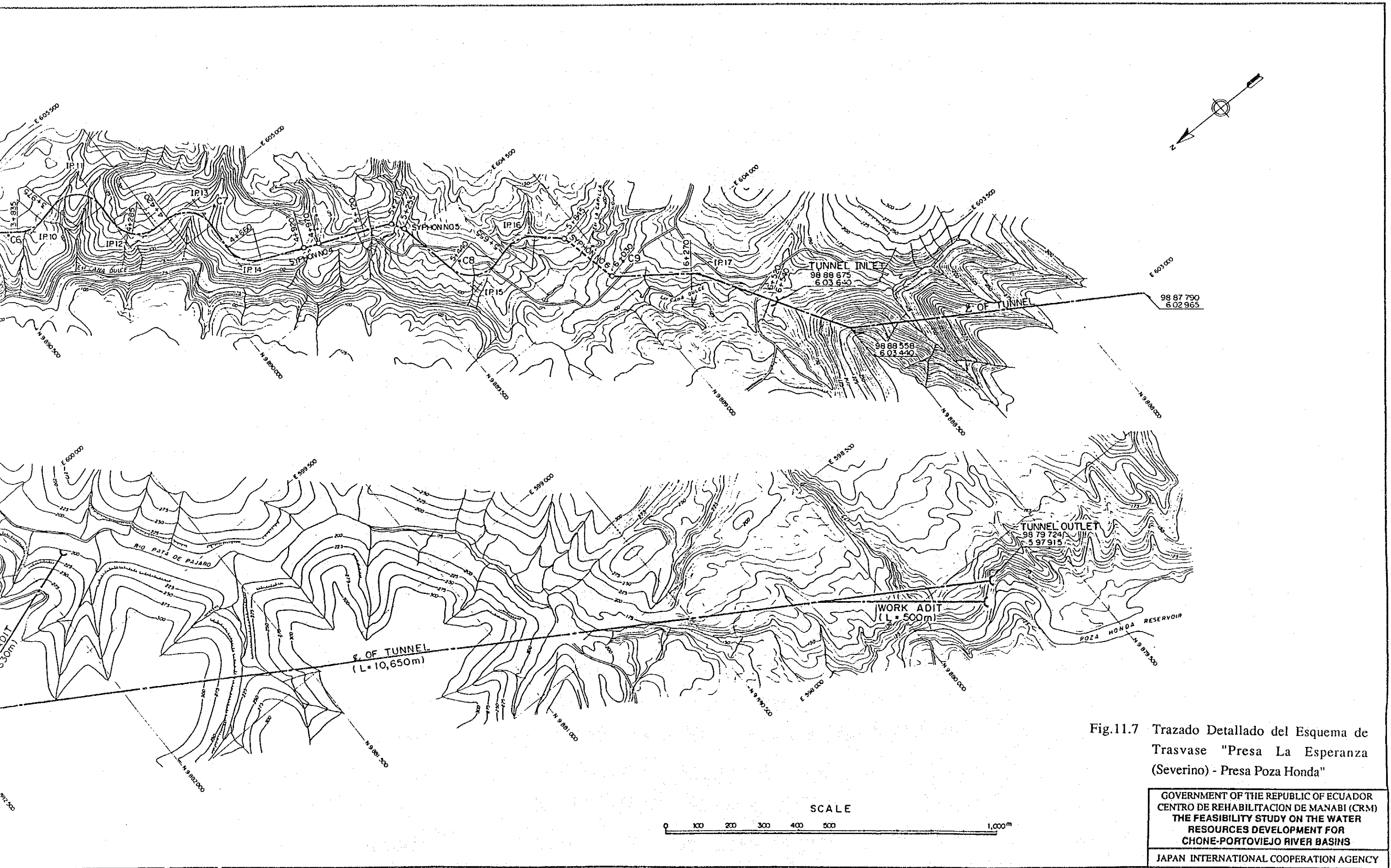


Fig.11.7 Trazado Detallado del Esquema de Trasvase "Presa La Esperanza (Severino) - Presa Poza Honda"

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY



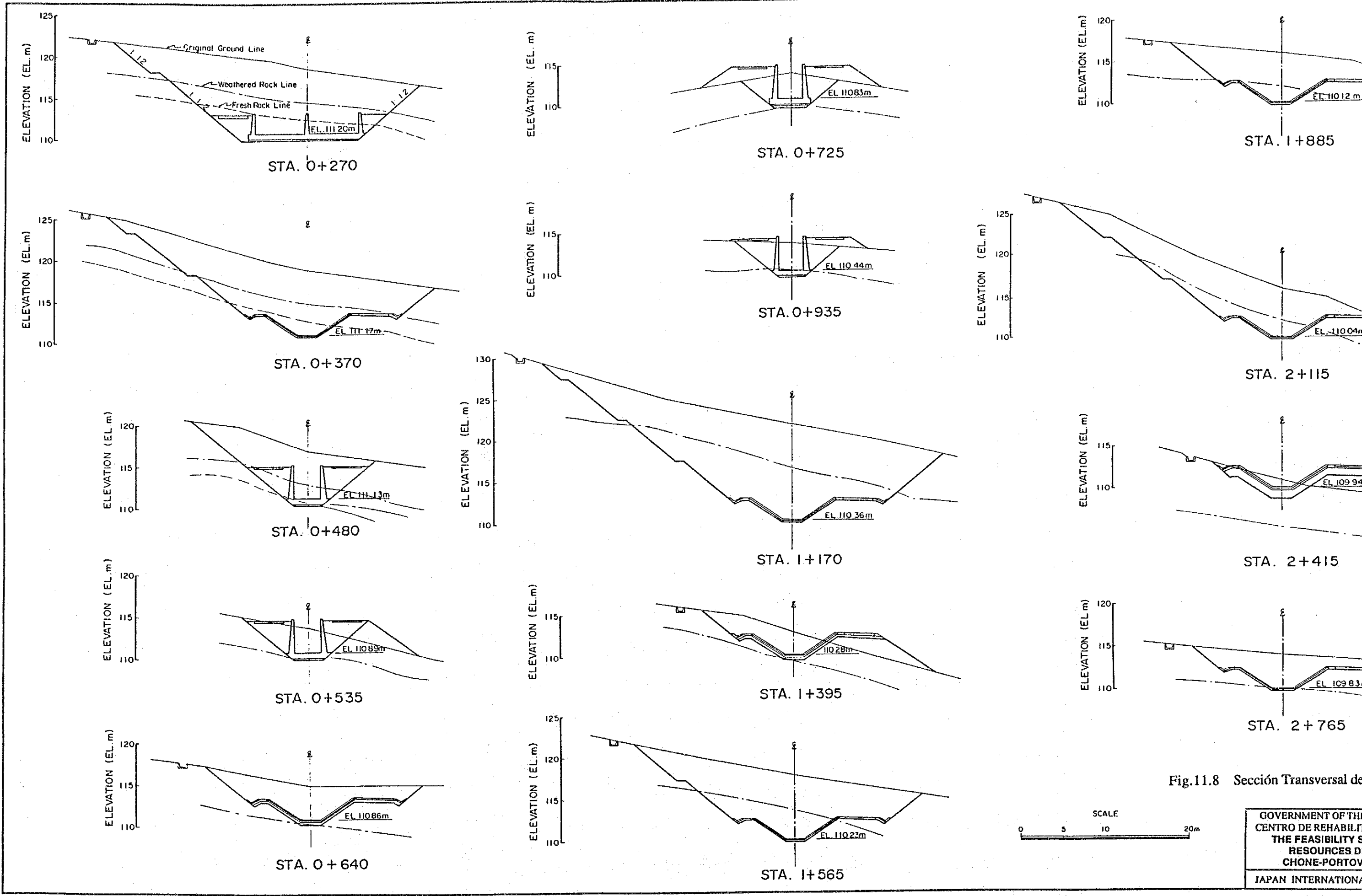


Fig.11.8 Sección Transversal del

GOVERNMENT OF THE  
CENTRO DE REHABILITACION  
THE FEASIBILITY STUDY  
RESOURCES DEVELOPMENT  
CHONE-PORTOVIEJO  
JAPAN INTERNATIONAL COOPERATION

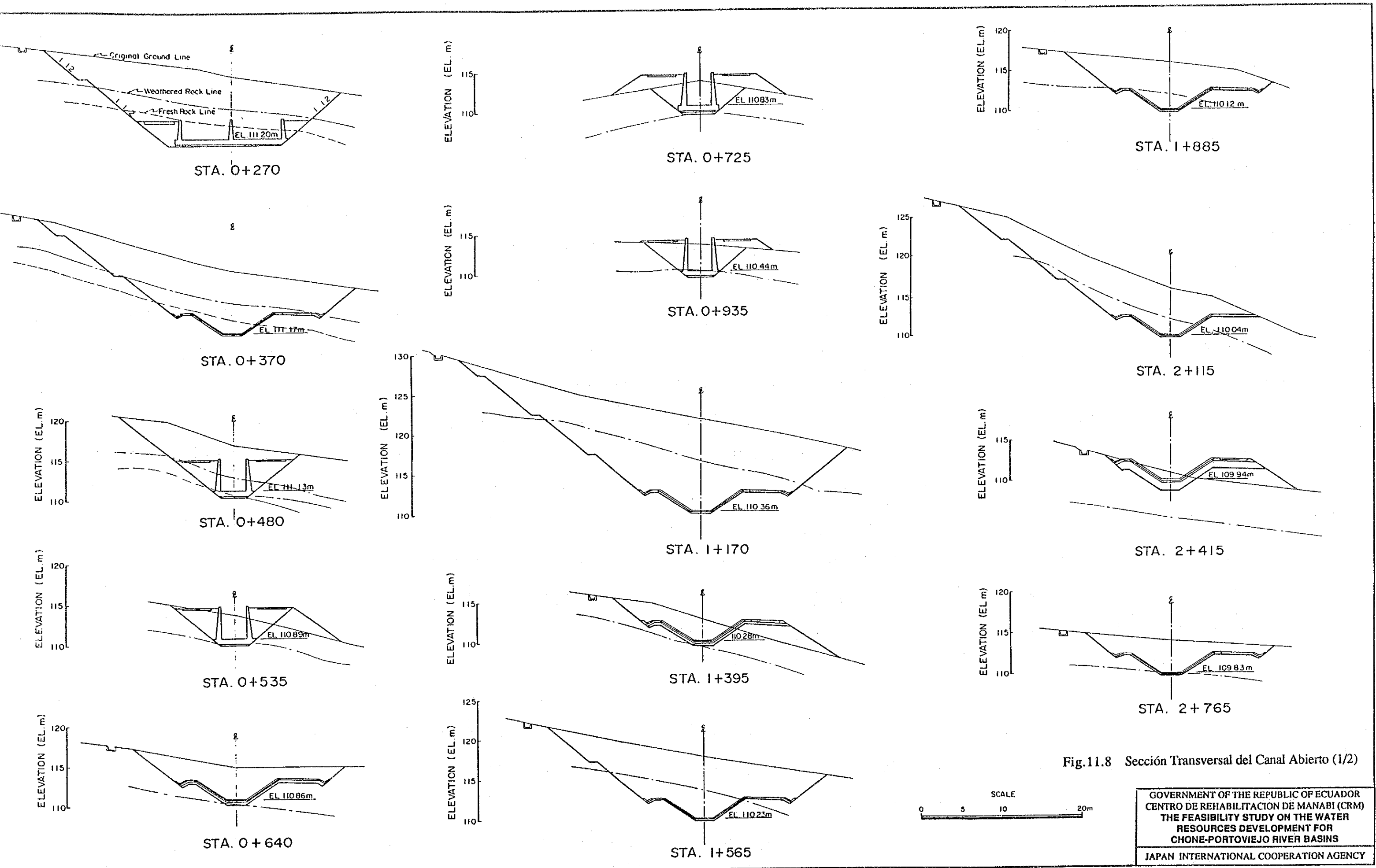
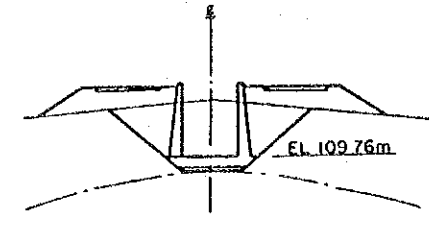


Fig.11.8 Sección Transversal del Canal Abierto (1/2)

ELEVATION (EL.m)

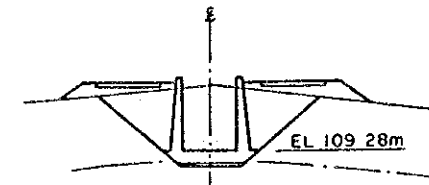
115  
110



STA. 2+965

ELEVATION (EL.m)

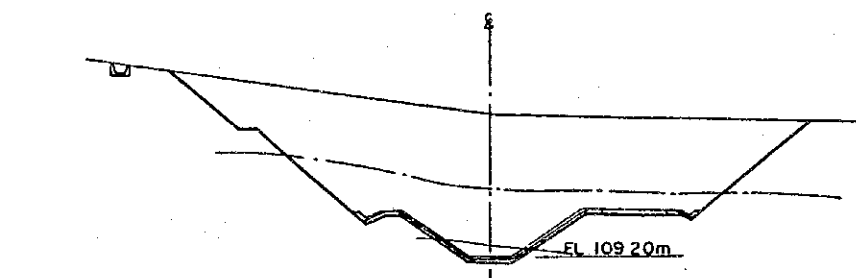
115  
110



STA. 3+275

ELEVATION (EL.m)

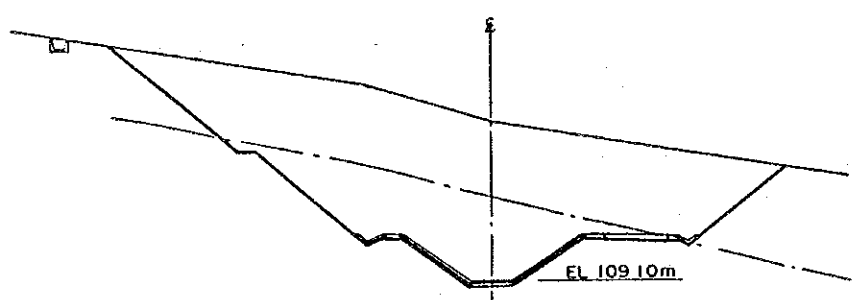
120  
115  
110



STA. 3+535

ELEVATION (EL.m)

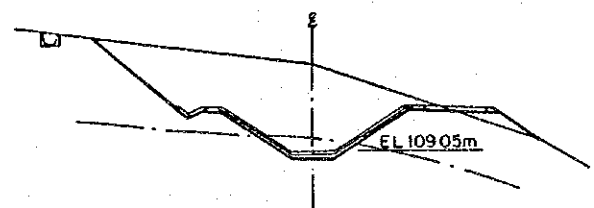
120  
115  
110



STA. 3+835

ELEVATION (EL.m)

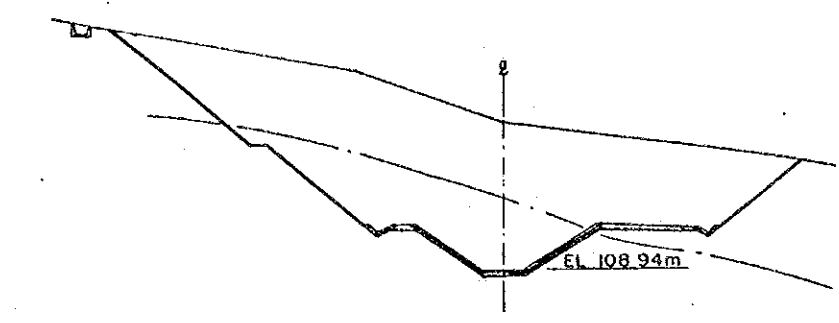
115  
110



STA. 3+975

ELEVATION (EL.m)

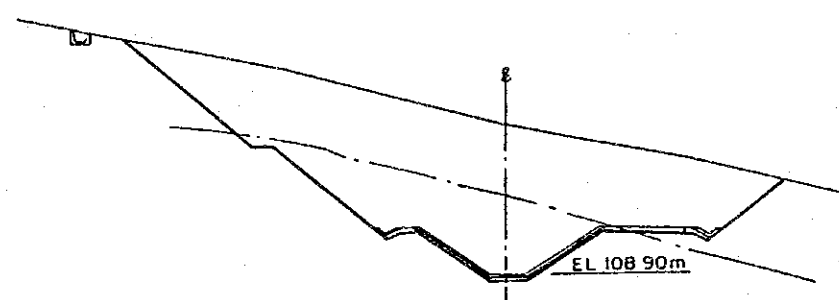
125  
120  
115  
110



STA. 4+295

ELEVATION (EL.m)

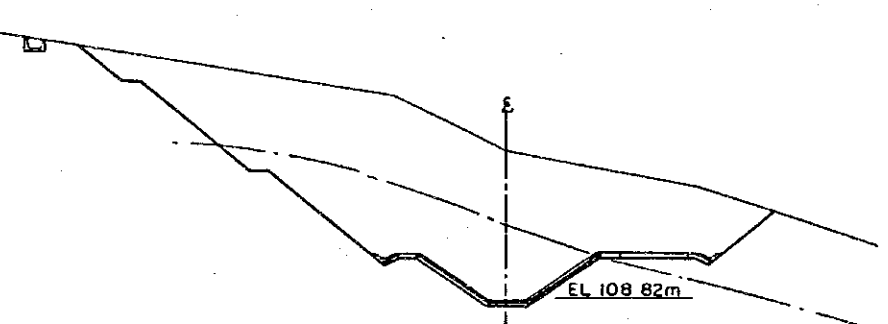
120  
115  
110



STA. 4+420

ELEVATION (EL.m)

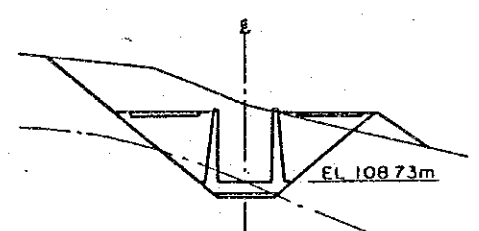
125  
120  
115  
110



STA. 4+660

ELEVATION (EL.m)

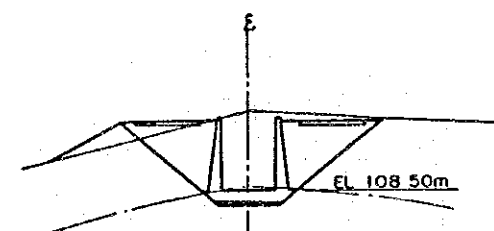
115  
110



STA. 4+920

ELEVATION (EL.m)

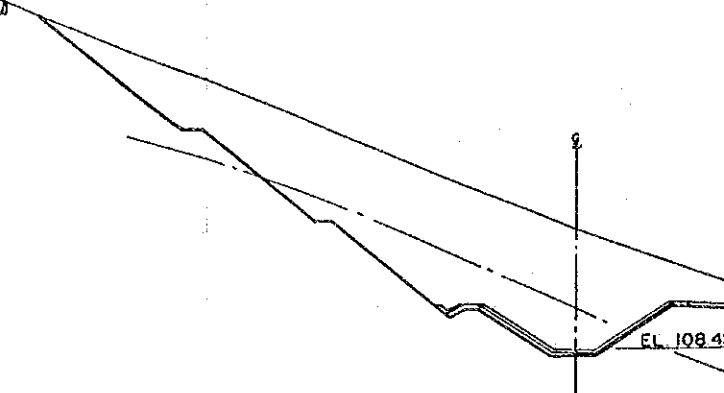
115  
110



STA. 4+970

ELEVATION (EL.m)

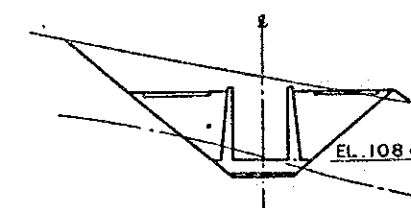
130  
125  
120  
115  
110



STA. 5+120

ELEVATION (EL.m)

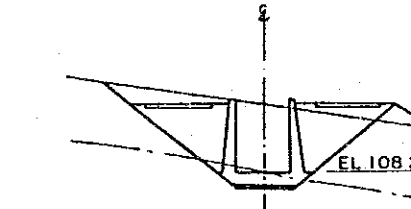
115  
110



STA. 5+210

ELEVATION (EL.m)

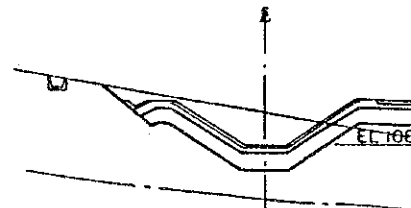
115  
110



STA. 5+255

ELEVATION (EL.m)

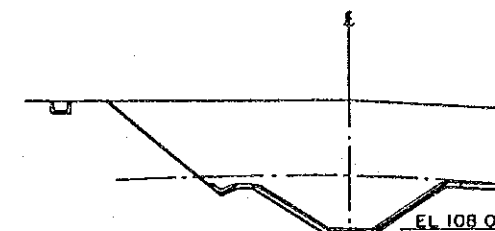
115  
110  
105



STA. 5+440

ELEVATION (EL.m)

115  
110  
105



STA. 5+655

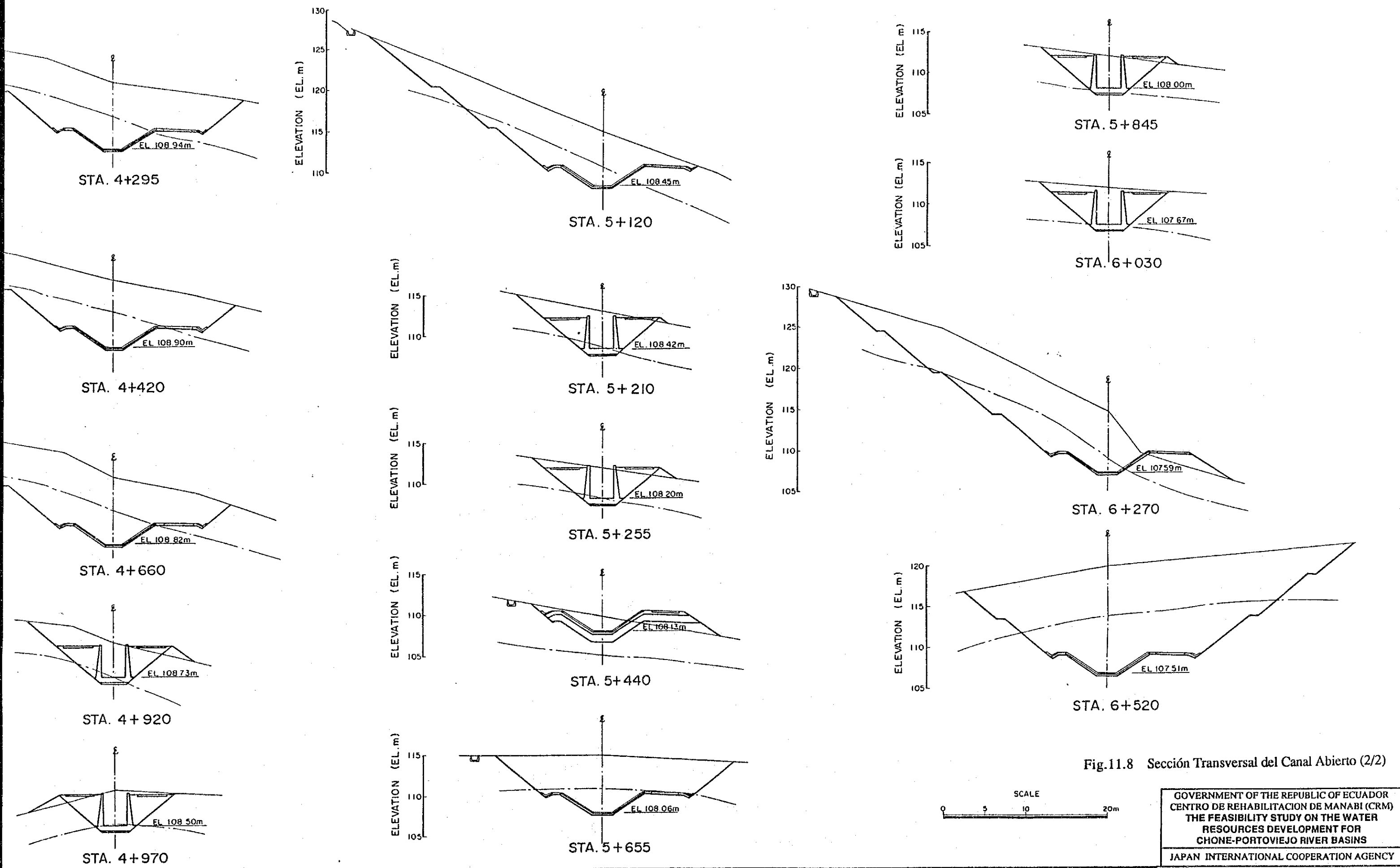
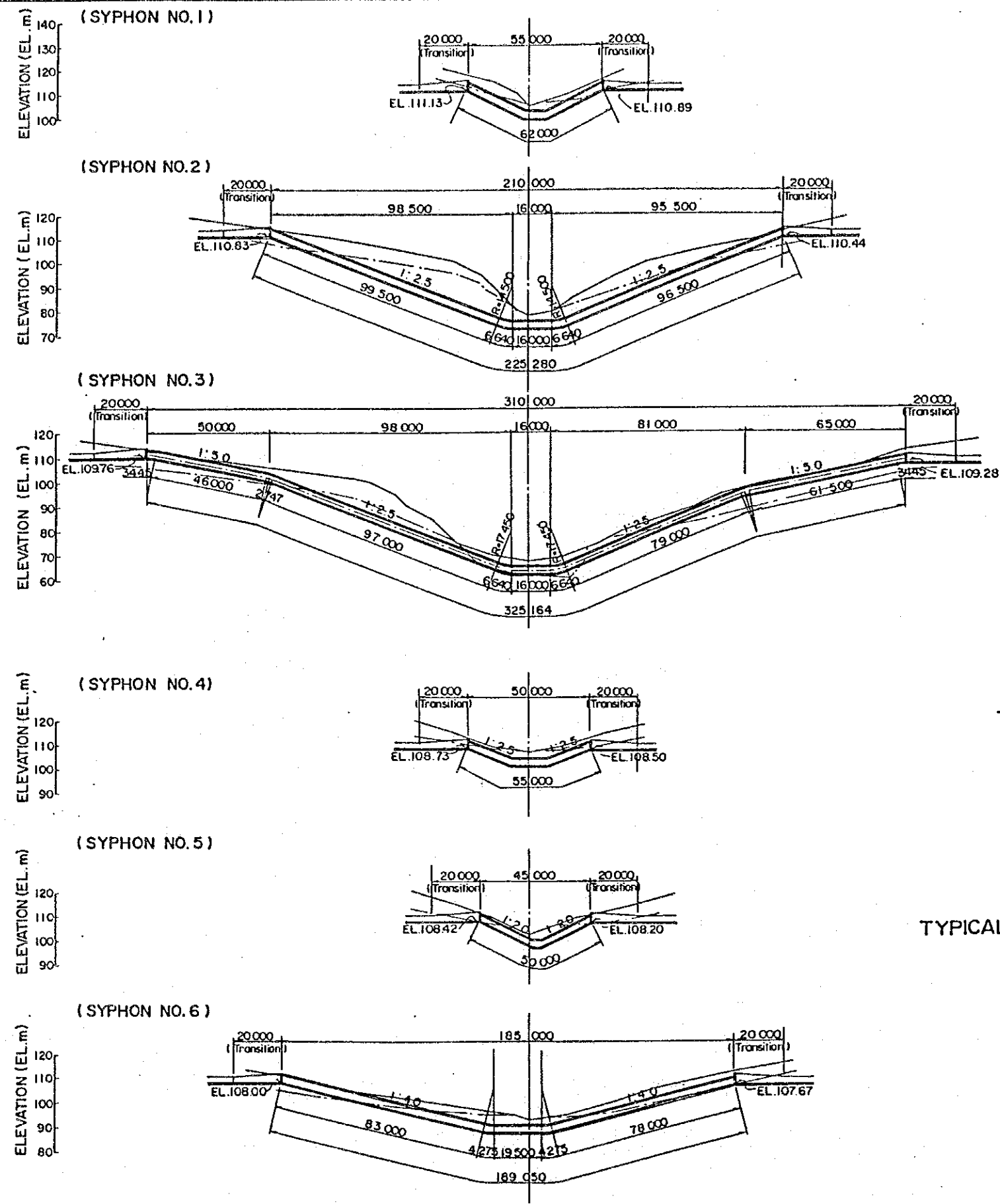
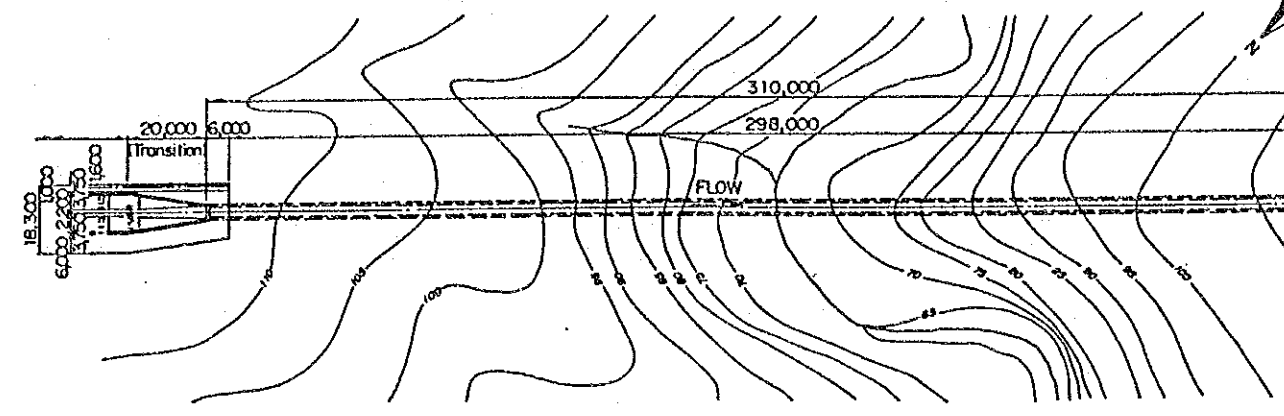


Fig.11.8 Sección Transversal del Canal Abierto (2/2)

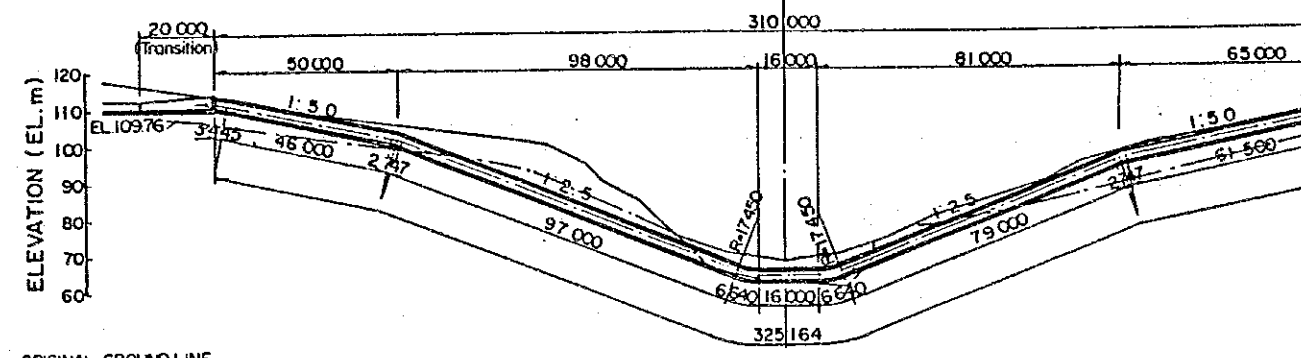
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY



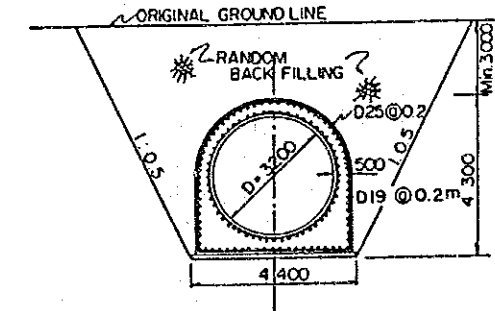
PROFILE OF SYPHON (No.1-No.6) SCALE A



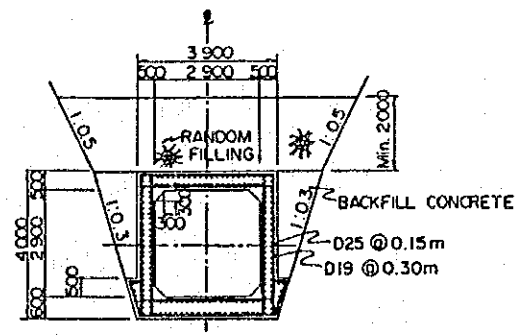
PLAN OF SYPHON No.3 SCALE A



PROFILE OF SYPHON No.3 SCALE A



TYPICAL SECTION OF SYPHON NO.2 AND NO.3 SCALE B



TYPICAL SECTION OF SYPHON NO.1, NO.4-NO.6 SCALE B

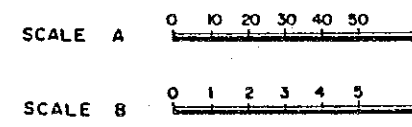
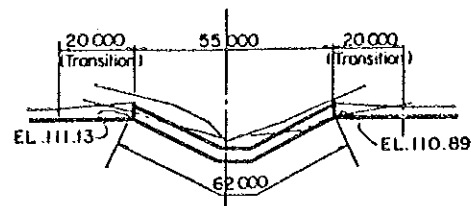
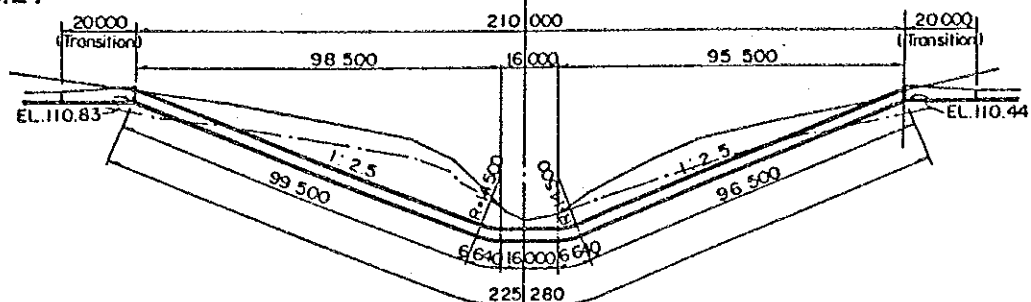


Fig.11.9 D

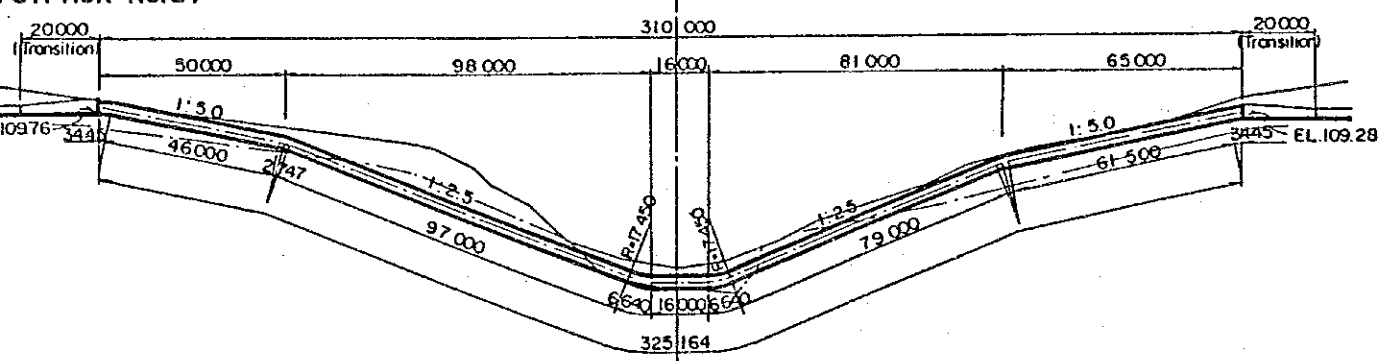
(SYPHON NO.1)



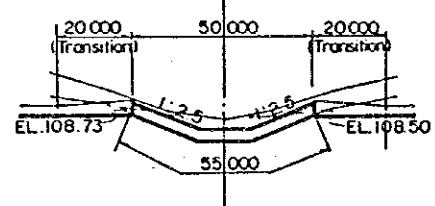
(SYPHON NO.2)



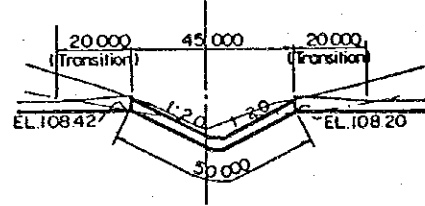
(SYPHON NO.3)



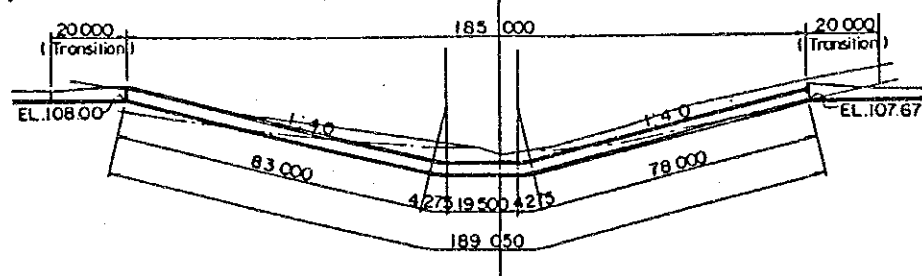
(SYPHON NO.4)



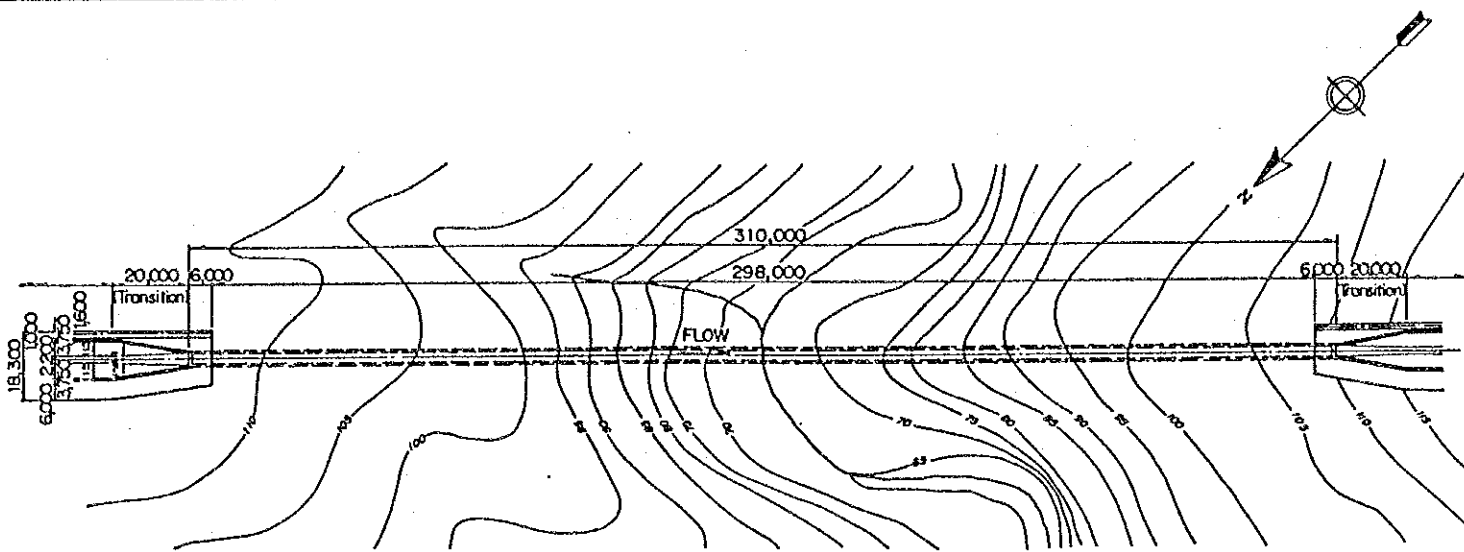
(SYPHON NO.5)



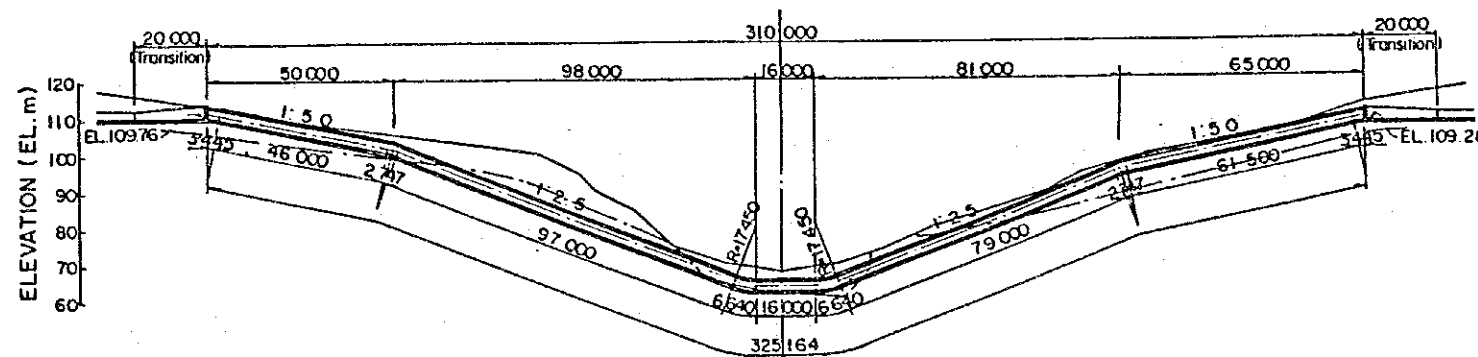
(SYPHON NO.6)



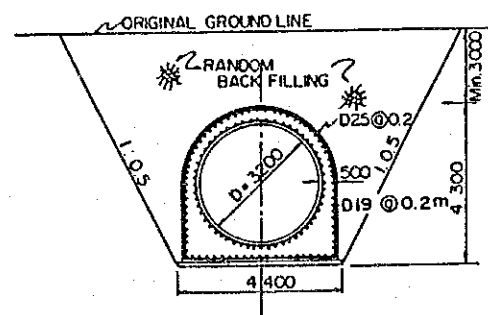
PROFILE OF SYPHON (No.1-No.6) SCALE A



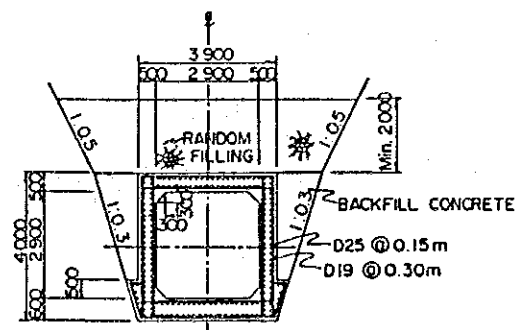
PLAN OF SYPHON No.3 SCALE A



PROFILE OF SYPHON No.3 SCALE A



TYPICAL SECTION OF SYPHON NO.2 AND NO.3 SCALE B



TYPICAL SECTION OF SYPHON NO.1, NO.4-NO.6 SCALE B

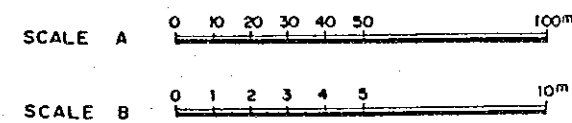
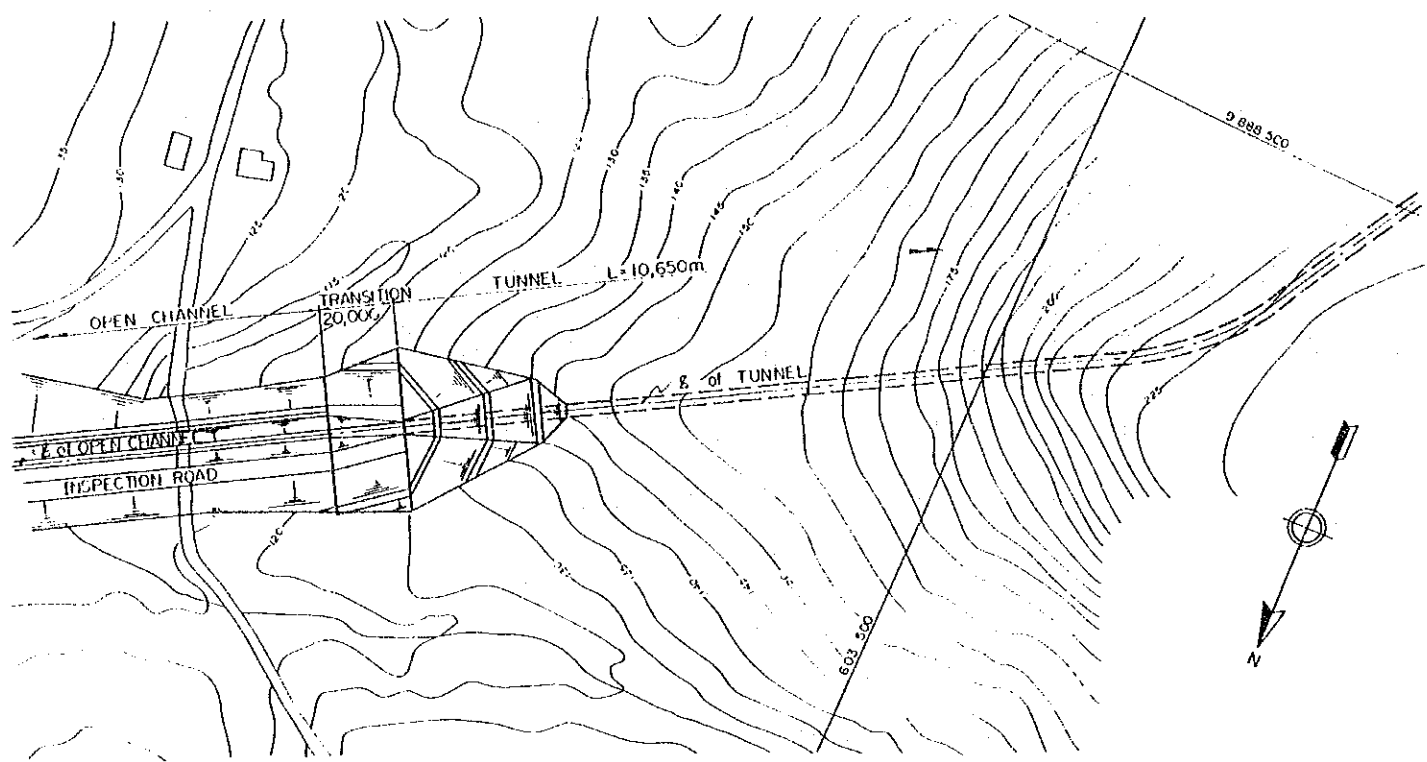
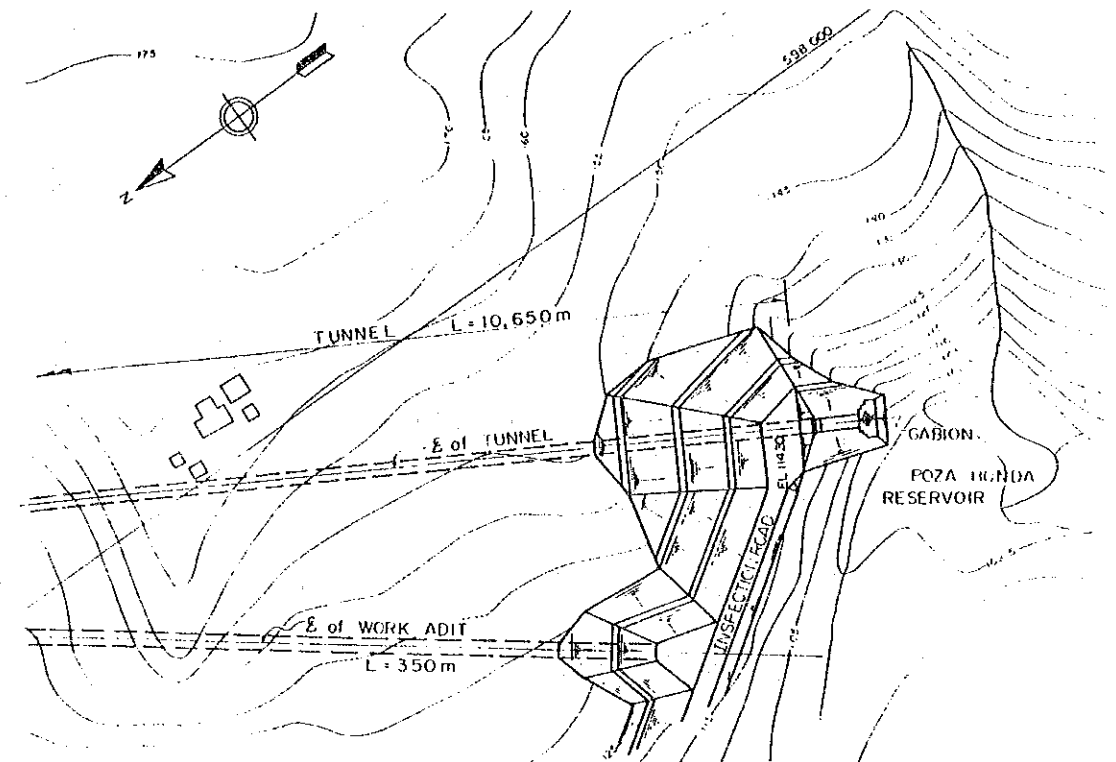


Fig.11.9 Diseño Básico de Sifones

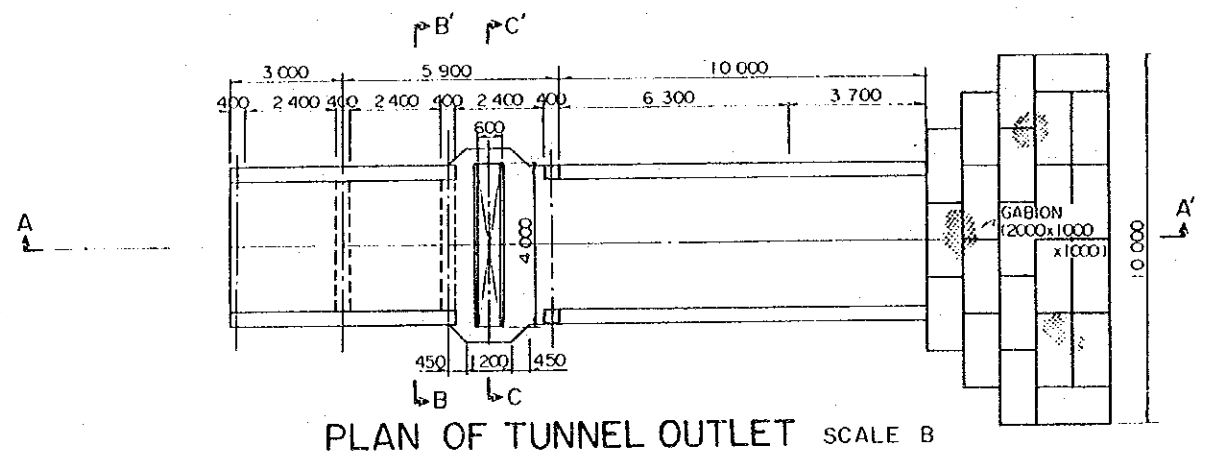
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY



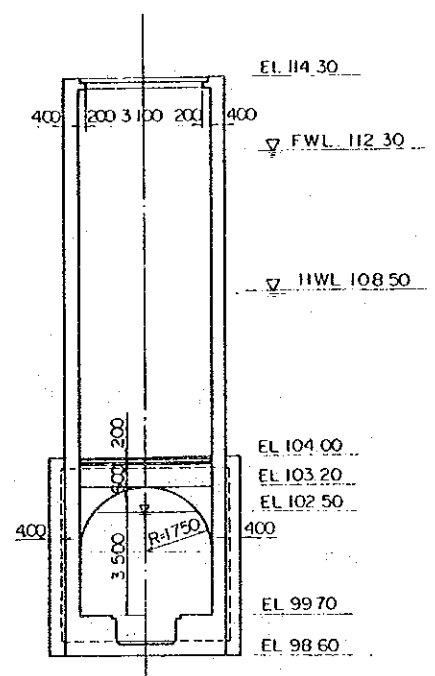
LAYOUT PLAN OF TUNNEL INLET SCALE A



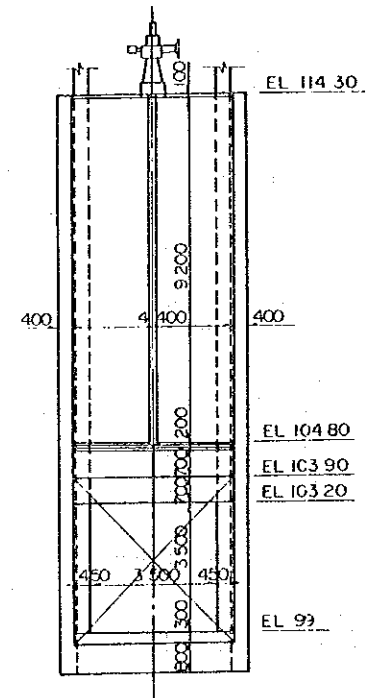
LAYOUT PLAN OF TUNNEL OUTLET SCALE A



PLAN OF TUNNEL OUTLET SCALE B



SECTION OF OUTLET B - B' SCALE B



SECTION OF OUTLET C - C' SCALE B

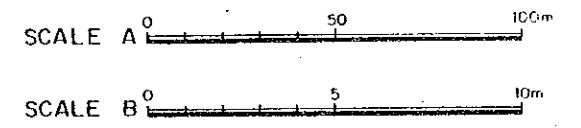
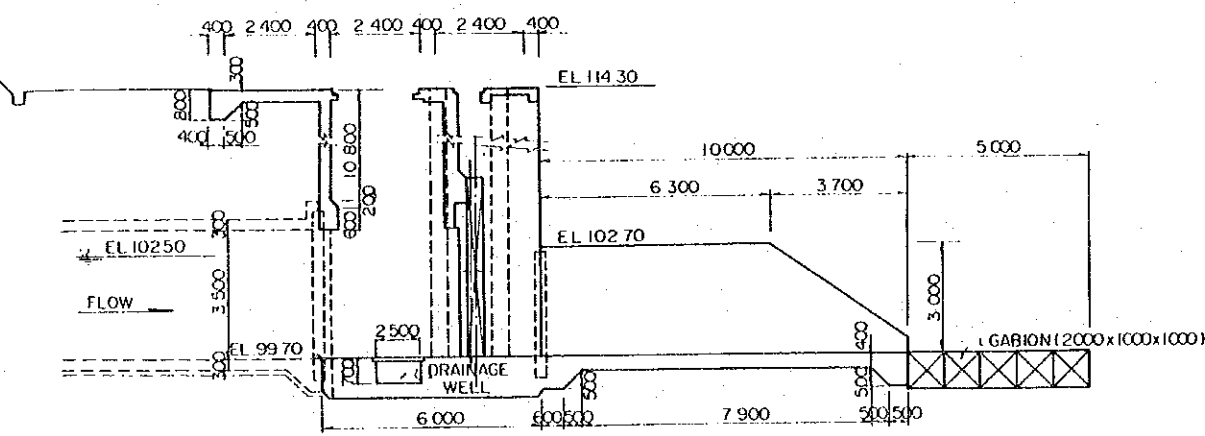
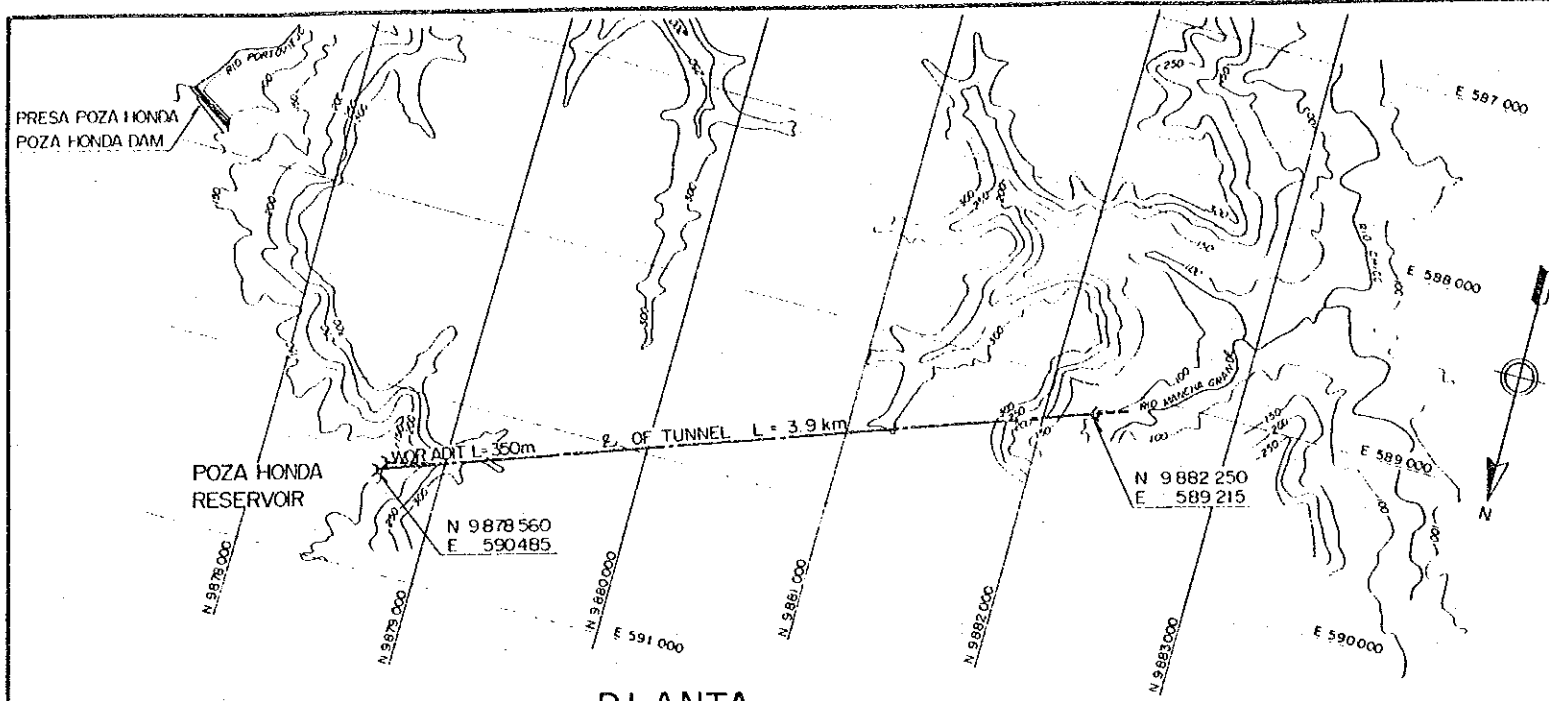


Fig.11.10

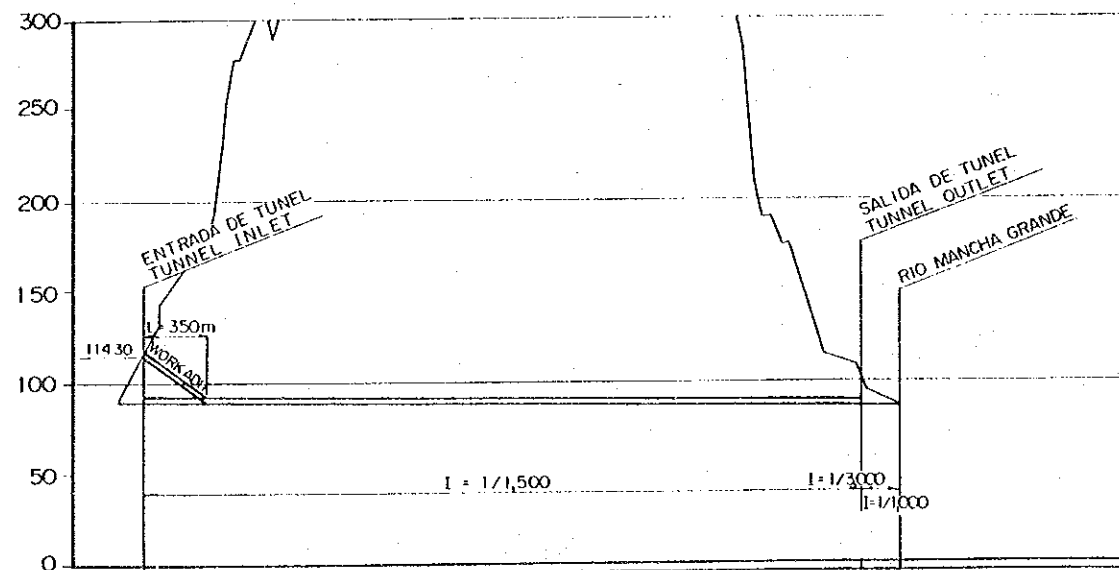
Diseño Básico de los Portales de Entrada y Salida para el Esquema de Trasvase "La Esperanza (Severino)-Presa Poza Honda"



SECTION A - A' SCALE B

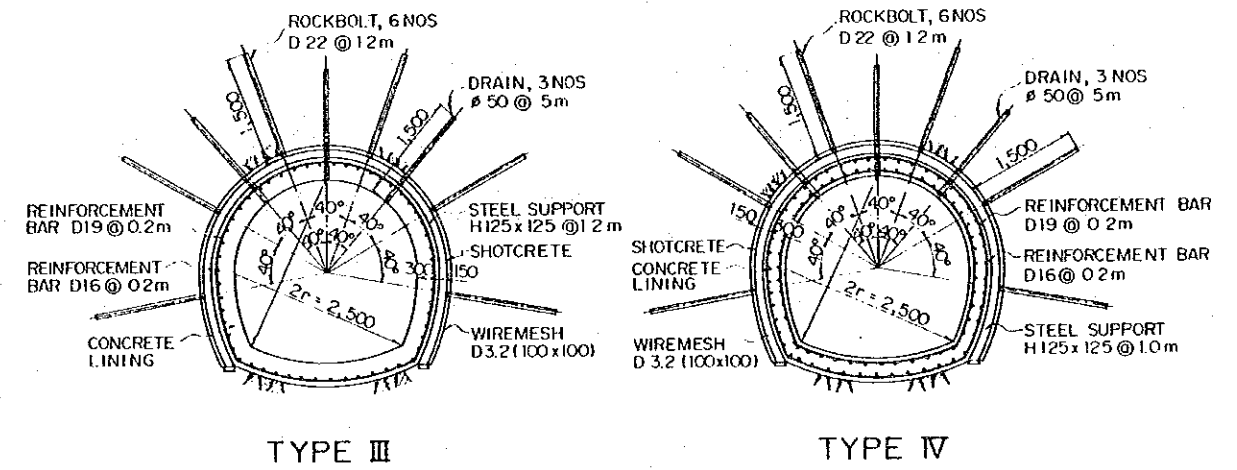
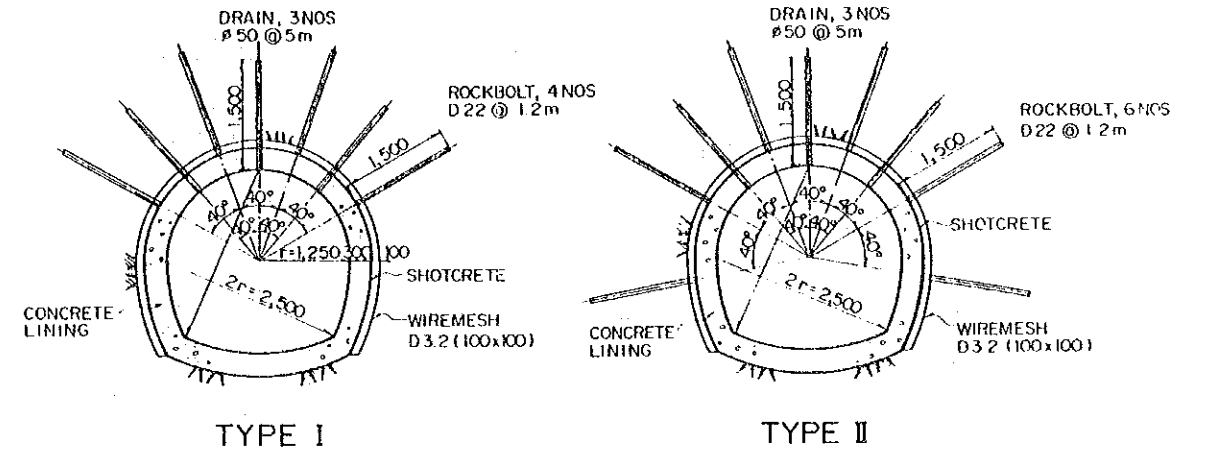


PLANTA PLAN SCALE A



TIPOS DE ESTRUCTURAS TYPE OF STRUCTURE	TUNNEL L = 3,902m				OPEN CHANNEL L = 205m	
COTA DE ESTRUCTURA ELEVATION OF STRUCTURE (EL. m)	89 00	89 25	88 57	87 90	87 30	87 29
COTA DEL TERRENO ELEVATION OF GROUND (EL. m)	120				103	89
DISTANCIA ACUMULADA ACCUMULATE DISTANCE (m)	0	1 000	2 000	3 000	3 902	4 107
DISTANCIA DISTANCE (m)	0	1 000	1 000	1 000	3 902	205
ESTACION STATION	0+000	1+000	2+000	3+000	3+902	4+107

PERFIL PROFILE  
H; SCALE A  
V; SCALE B



TUNNEL SECTION SCALE C

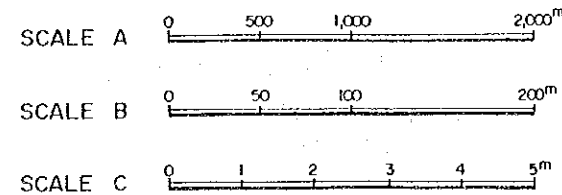
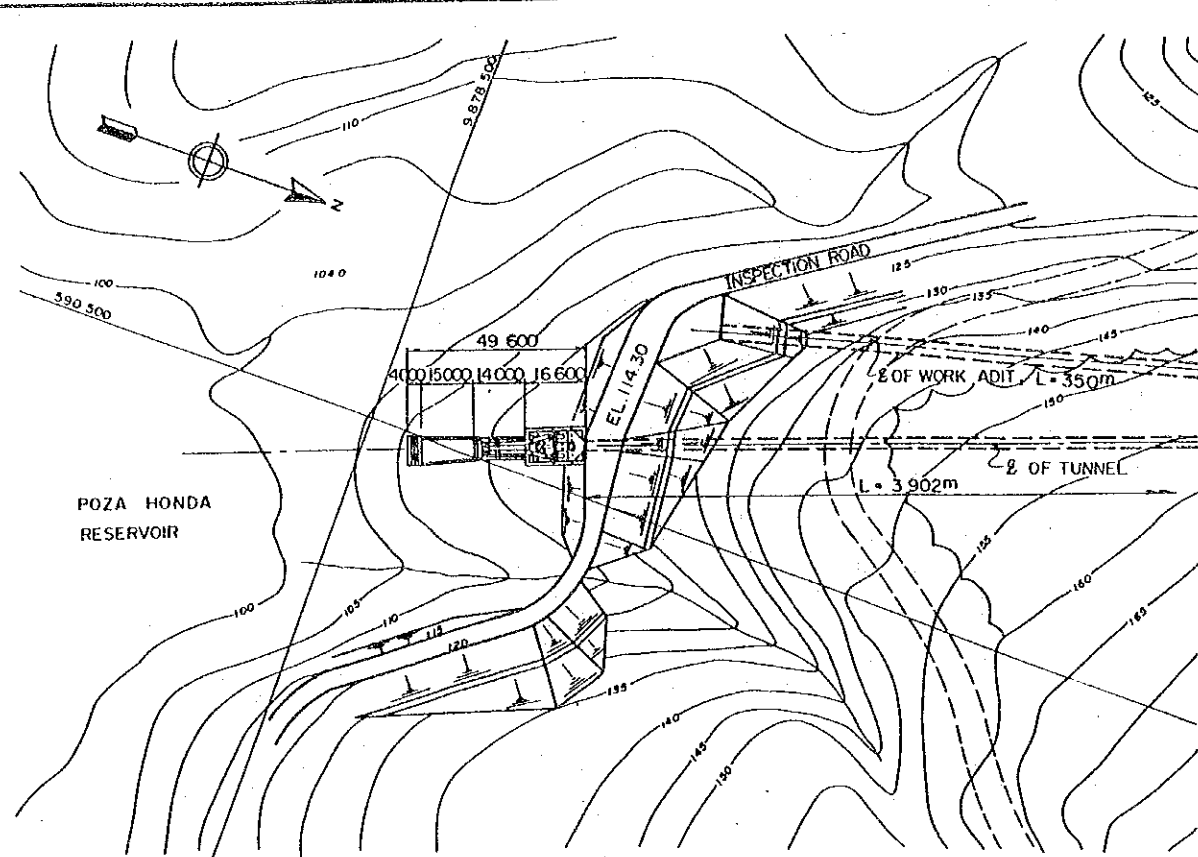


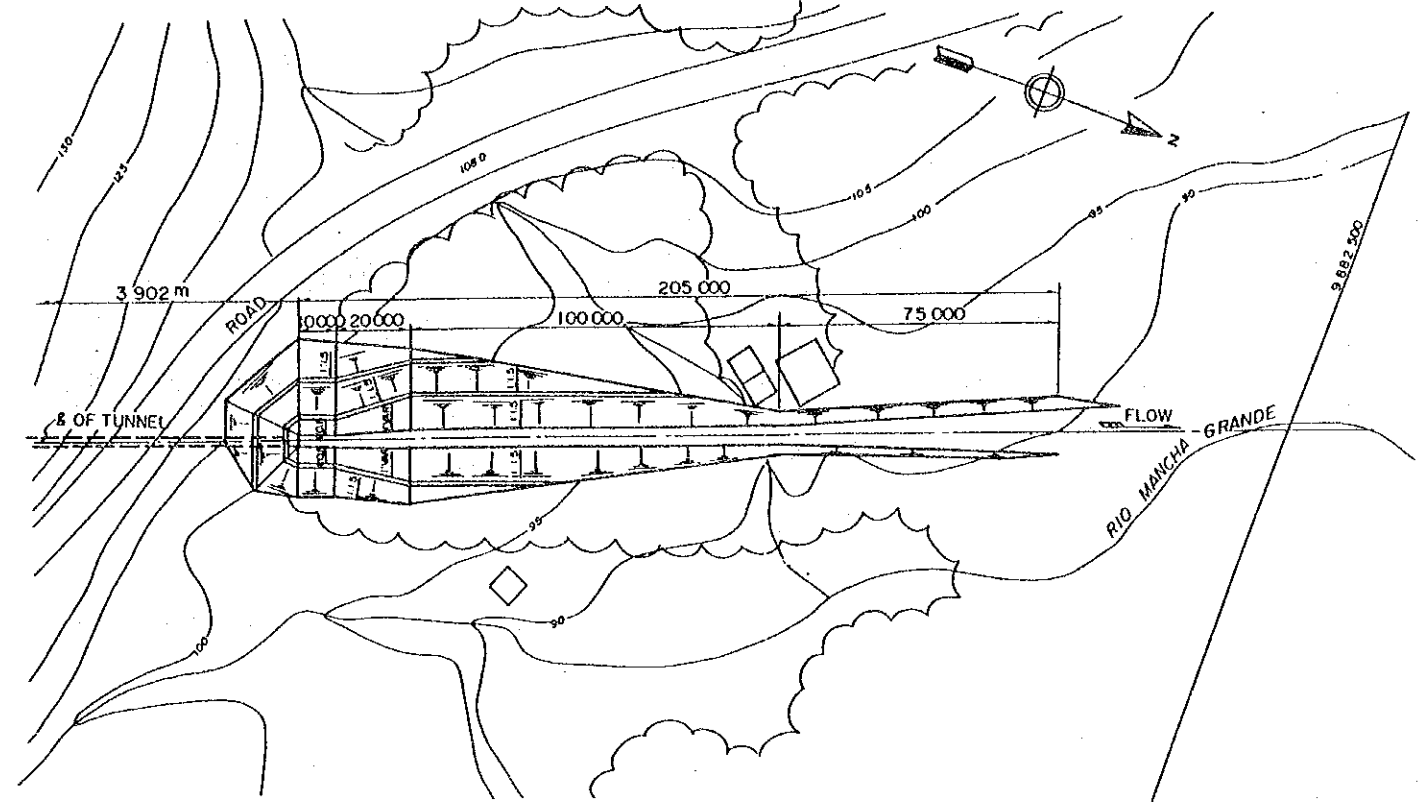
Fig.11.11 Diseño Básico del Esquema de Traspase "Presa Poza Honda-Río Mancha Grande"

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY

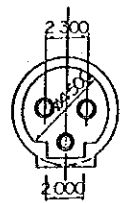




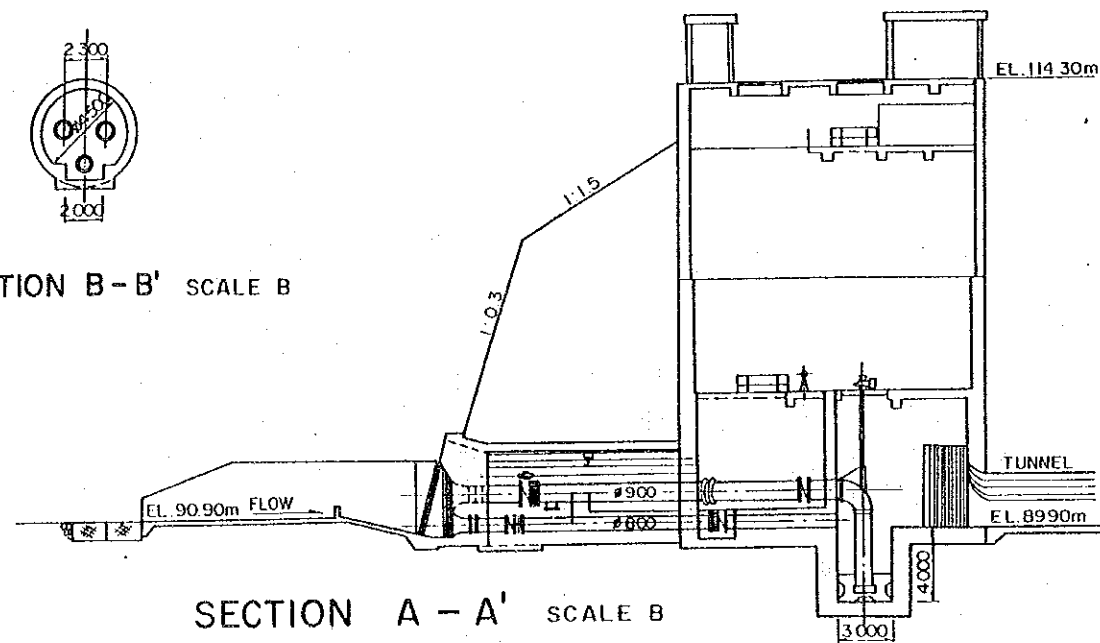
LAYOUT PLAN OF TUNNEL INLET SCALE A



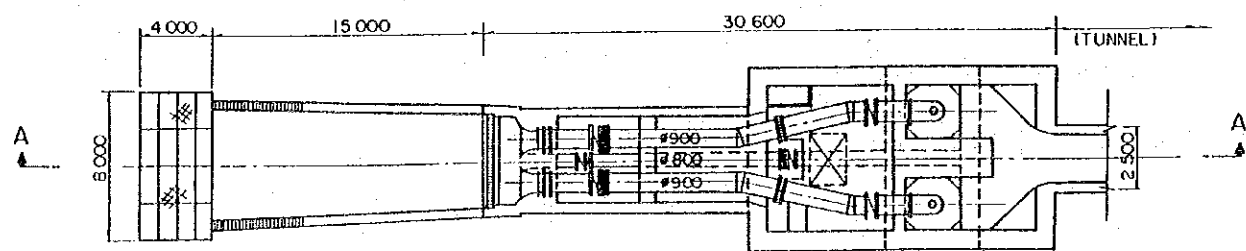
LAYOUT PLAN OF TUNNEL OUTLET SCALE A



SECTION B-B' SCALE B



SECTION A-A' SCALE B



PLAN OF TUNNEL INLET SCALE B

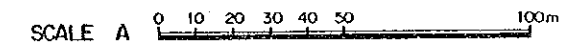
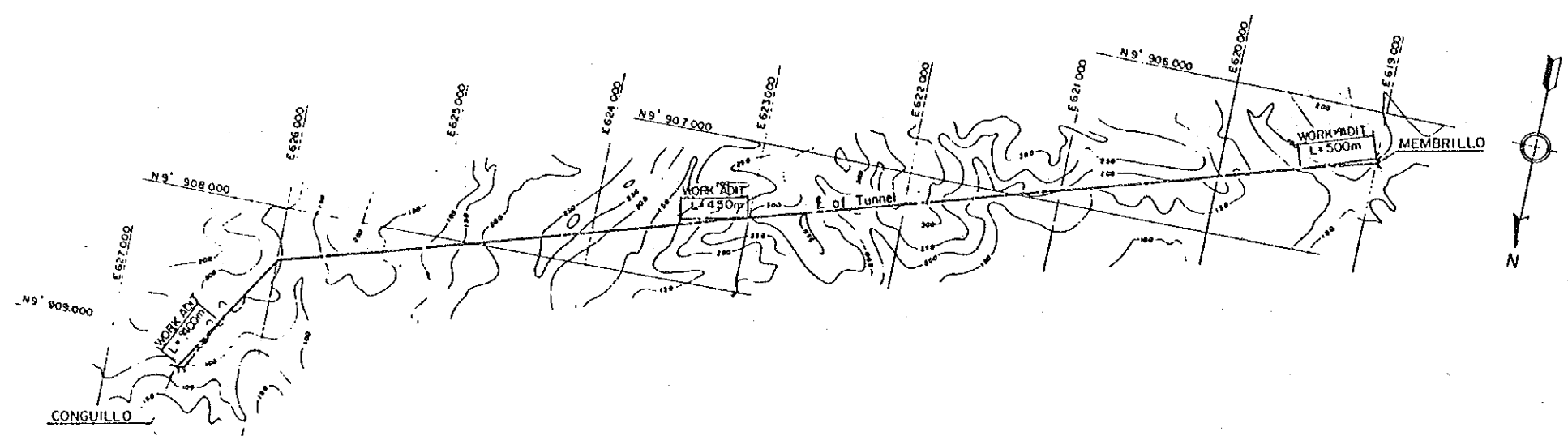
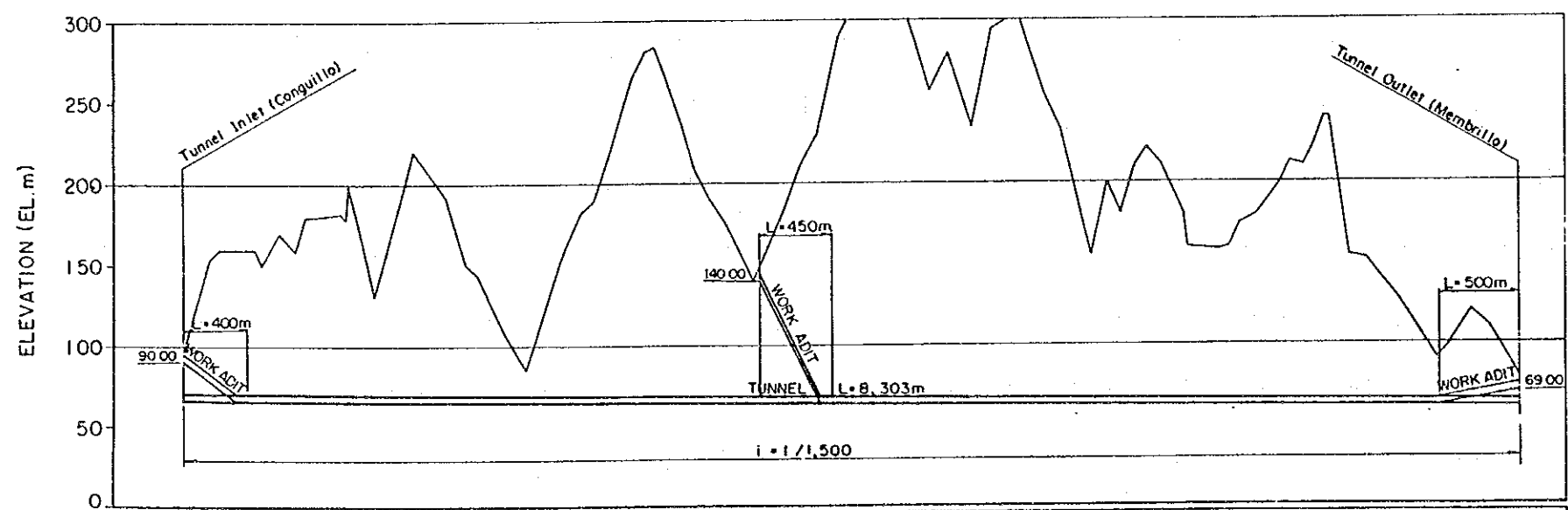


Fig.11.12 Diseño Básico de los Portales de Entrada y Salida para el Esquema de Trasvase "Presa Poza Honda-Río Mancha Grande"

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS  
 JAPAN INTERNATIONAL COOPERATION AGENCY

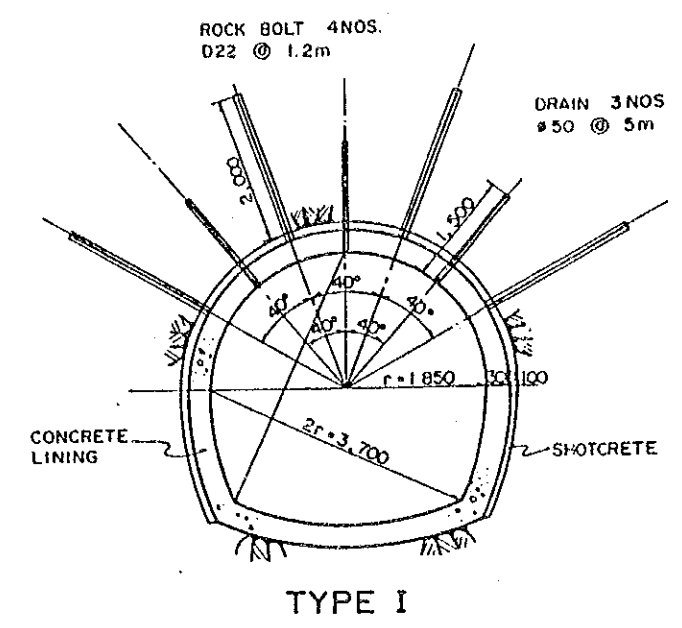


PLAN SCALE A

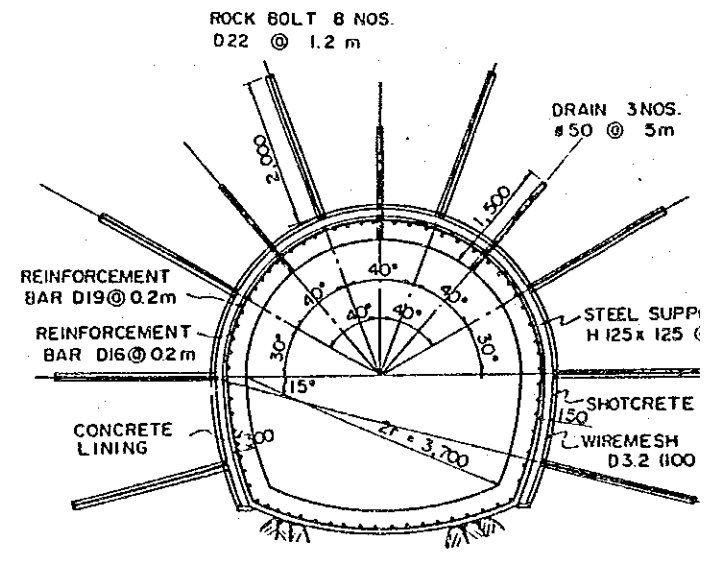


TYPE OF STRUCTURE	TUNNEL									
ELEVATION OF FORMATION (EL. m)	66.00	65.35	64.70	64.05	40.00	63.40	62.75	62.10	61.45	58.50
ELEVATION OF GROUND (EL. m)	95.00	180.00	105.00	264.00	150.00	258.00	290.00	220.00	212.00	80.00
ACCUMULATED DISTANCE (m)	0	1,000	2,000	3,000	3,580	4,000	5,000	6,000	7,000	8,303
DISTANCE (m)	0	1,000	1,000	1,000	580	420	1,000	1,000	1,000	1,303
STATION	0+000	1+000	2+000	3+000	3+580	4+000	5+000	6+000	7+000	8+303

PROFILE H : SCALE A  
V : SCALE B

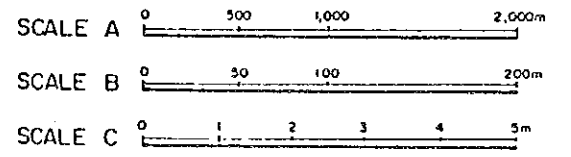


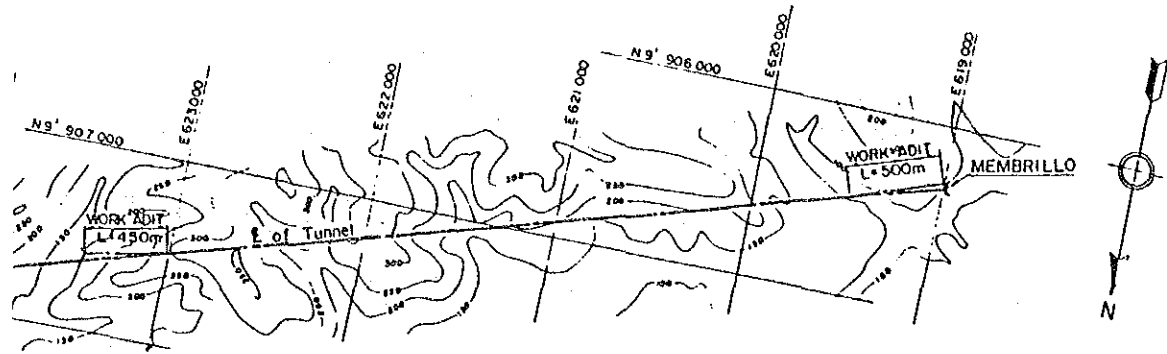
TYPE I



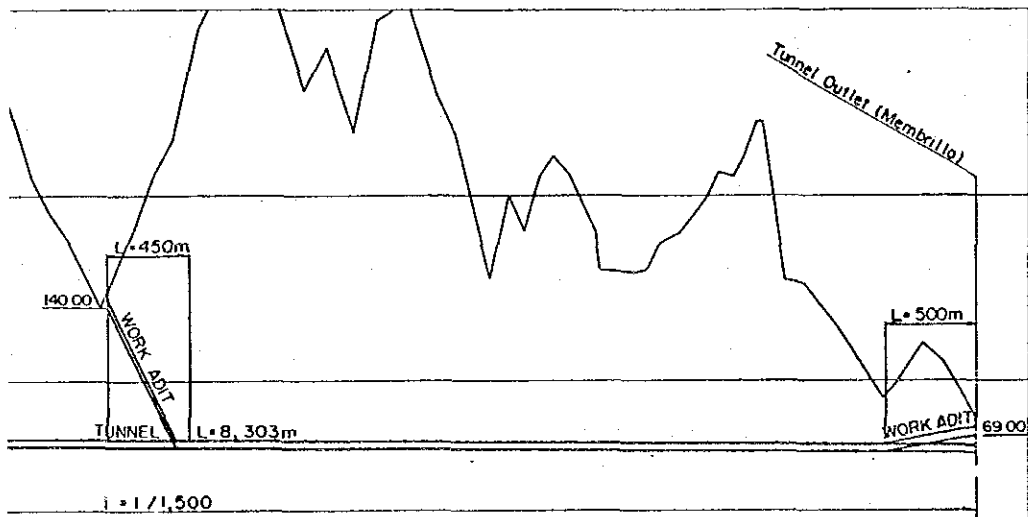
TYPE III

TUNNEL



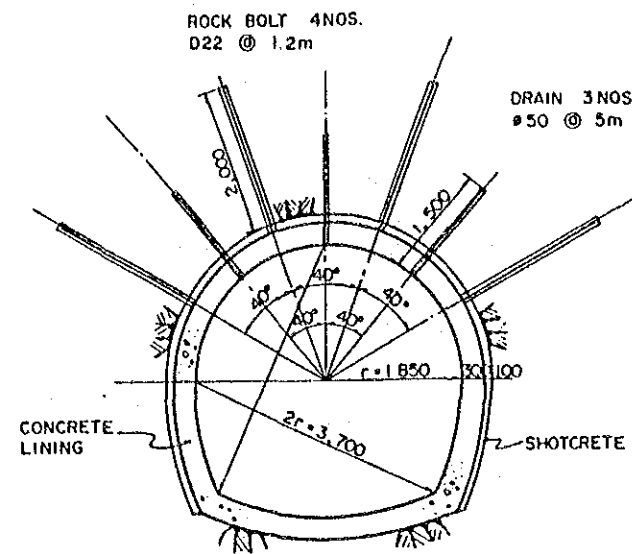


PLAN SCALE A

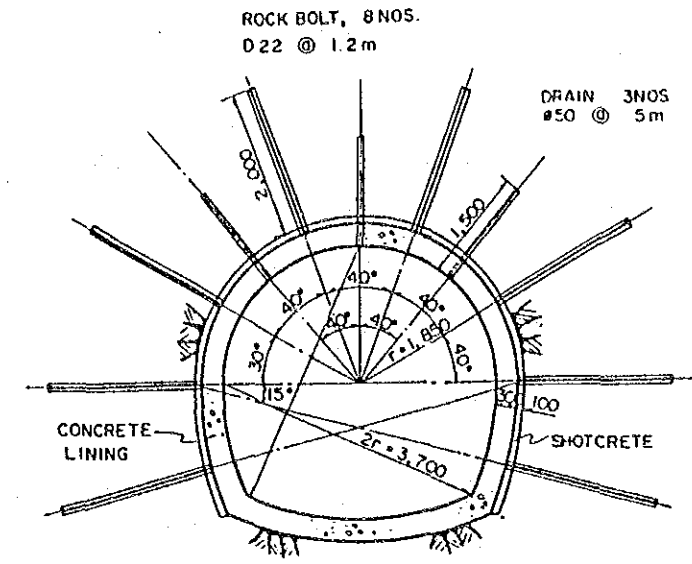


TUNNEL	
140.00	63.40
150.00	258.00
3.580	4.000
5.80	420
3+580	4+000
	5+000
	6+000
	7+000
	8+303

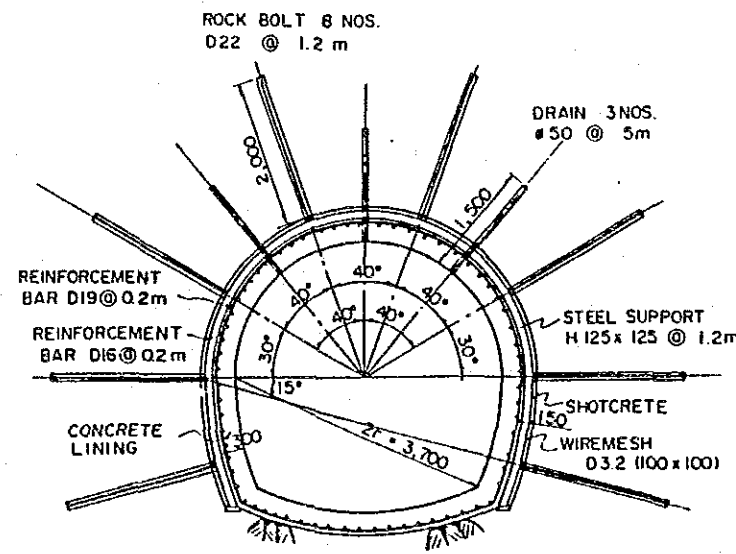
PROFILE H : SCALE A  
V : SCALE B



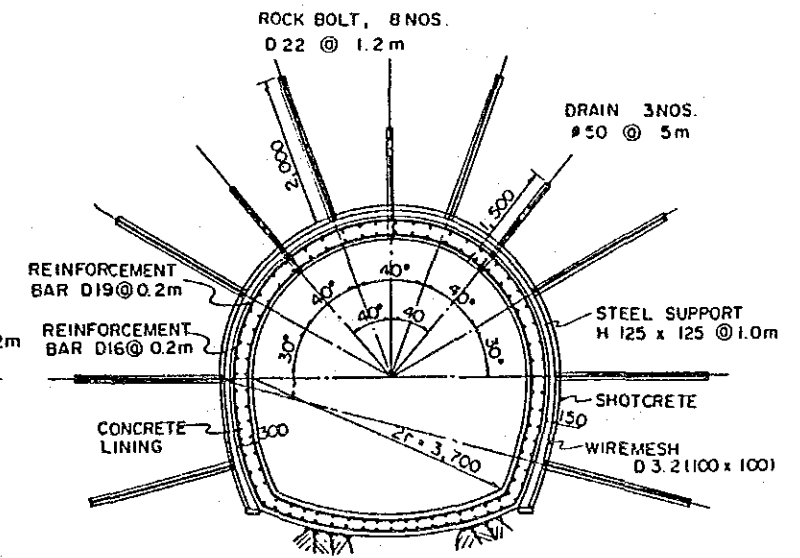
TYPE I



TYPE II



TYPE III



TYPE IV

TUNNEL SECTION SCALE C

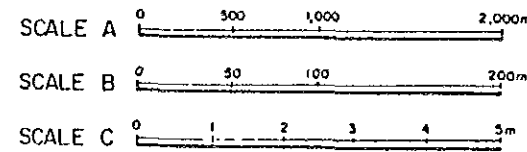
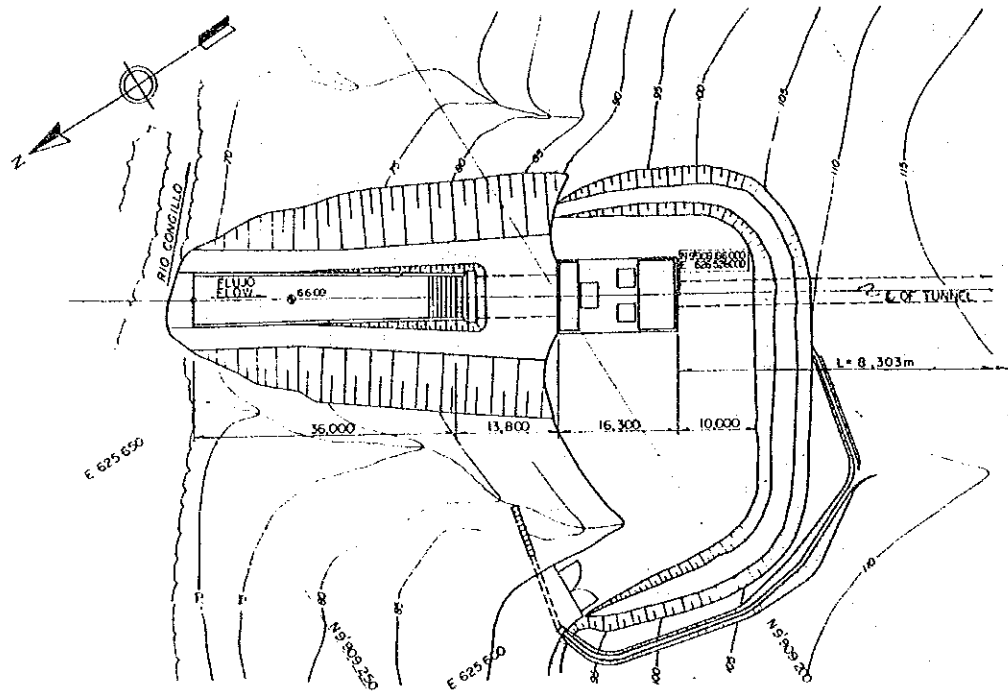
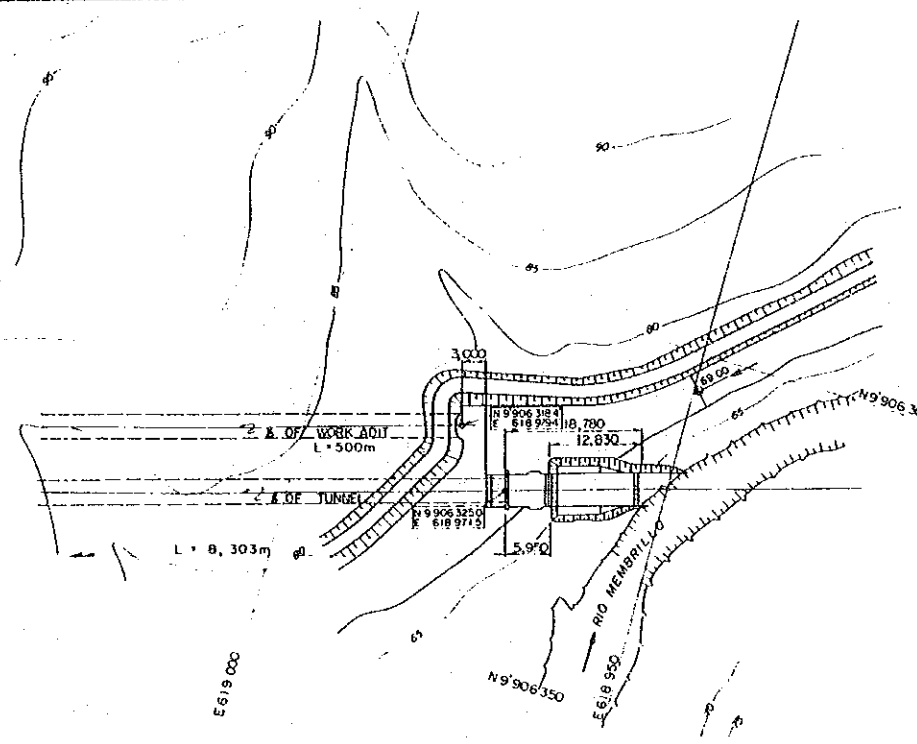


Fig.11.13 Diseño Básico para el Esquema de Traslase "Daule Peripa-Presa La Esperanza"

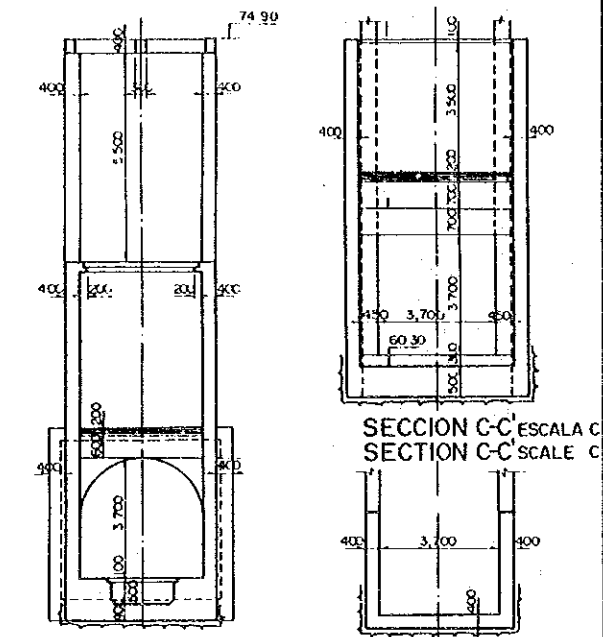
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY



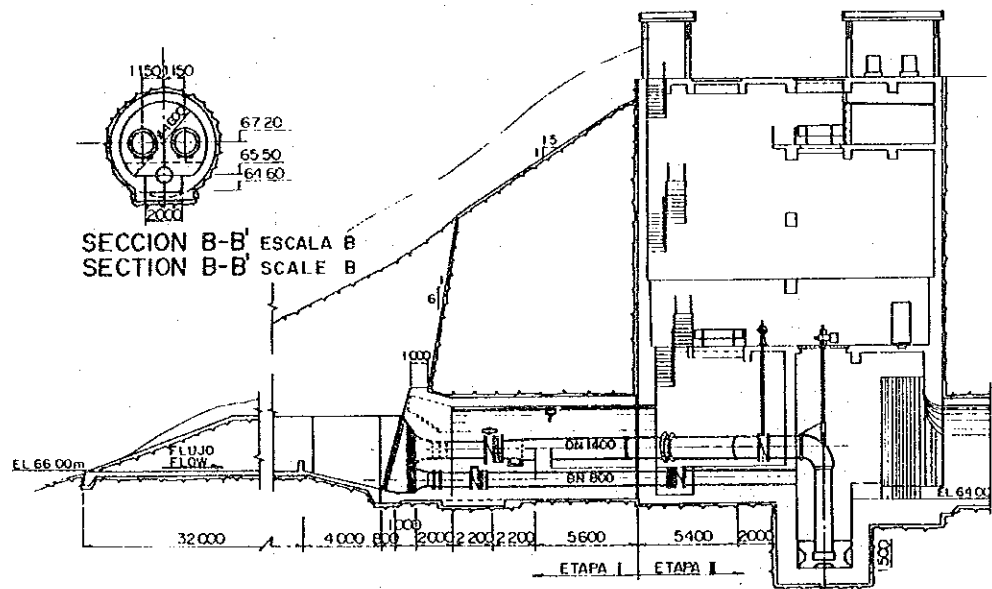
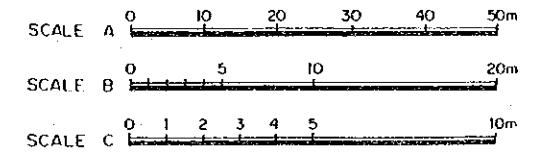
LAYOUT PLAN OF TUNNEL INLET SCALE A



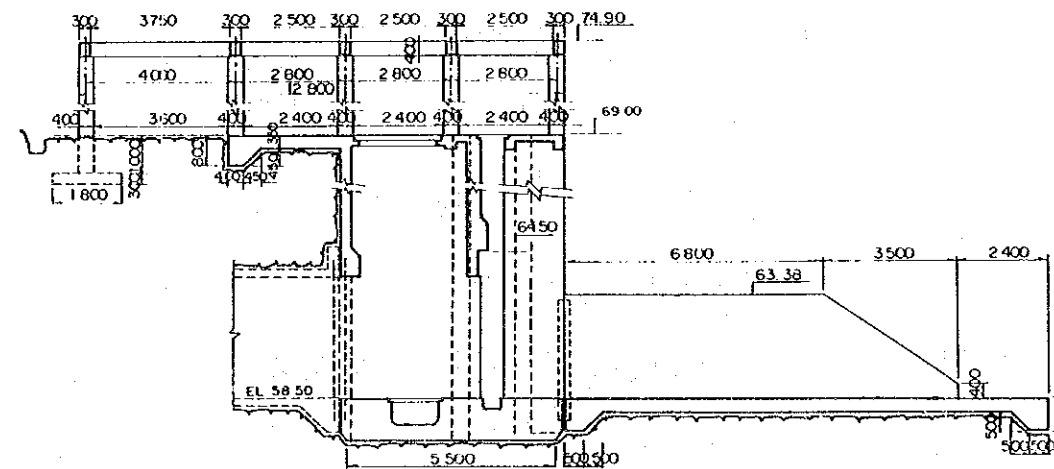
LAYOUT PLAN OF TUNNEL OUTLET SCALE A



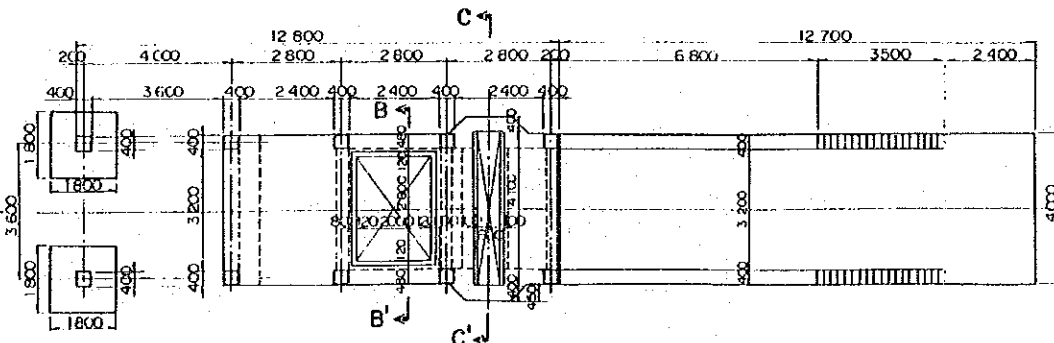
SECCION B-B' ESCALA C SECTION B-B' SCALE C  
SECCION D-D' ESCALA C SECTION D-D' SCALE C



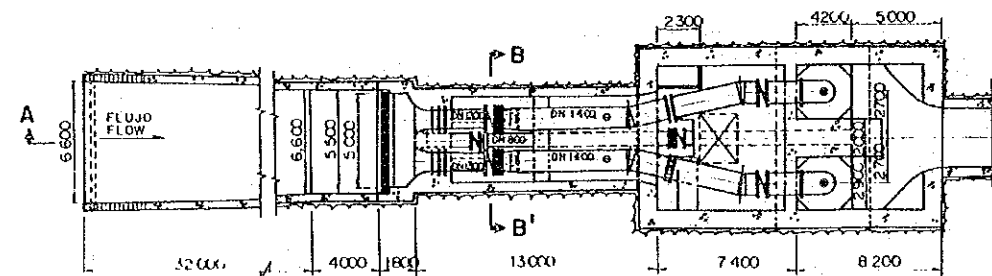
SECCION A-A' ESCALA B SECTION A-A' SCALE B



SECCION A-A' ESCALA C SECTION A-A' SCALE C



PLANTA DE SALIDA DE TUNEL A LA COTA 69.00 ESCALA C  
PLAN OF TUNNEL OUTLET AT EL. 69.00 SCALE C



PLANTA DE ENTRADA DE TUNEL ESCALA B  
PLAN OF TUNNEL INLET SCALE B

Fig.11.14  
Diseño Básico de los Portales de Entrada y Salida para el Esquema de Traslase "Daule Peripa-Presa La Esperanza"

Descripción	1982		1983		1984		1985		1986		1987		1988		1989		1990	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Estudio de Factibilidad																		
Aterraje Financiero																		
servicios de Ingeniería para el Diseño detallado y fiscalización de la construcción																		
Licitación y adjudicación de la obra																		
Adquisición de la tierra																		
Lote I Construcción del Túnel La Esperanza-Poza Honda y Poza Honda-Río Mameña Grande																		
A. Túnel La Esperanza-Poza Honda																		
1. Obras Generales (Obras Preparatorias)																		
2. Estación de bombeo																		
3. Tubería de acero																		
4. Canal abierto y sifón																		
5. Obras de entrada y salida																		
6. Túnel																		
7. Ventanas de acceso																		
8. Vía de acceso																		
9. Línea de Transmisión y Subestación																		
B. Túnel Poza Honda-Río Mameña Grande																		
1. Obras Generales (Obras Preparatorias)																		
2. Obras de entrada y salida																		
3. Túnel																		
4. Ventanas de acceso																		
5. Vía de acceso																		
Lote II Construcción del Túnel Daule Peripa-La Esperanza																		
1. Obras Generales (Obras Preparatorias)																		
2. Obras de entrada y salida																		
3. Túnel																		
4. Ventanas de acceso																		
5. Vía de acceso																		
Proyecto de Presa La Esperanza (en construcción)																		

Fig. 12.1 Cronograma de Construcción

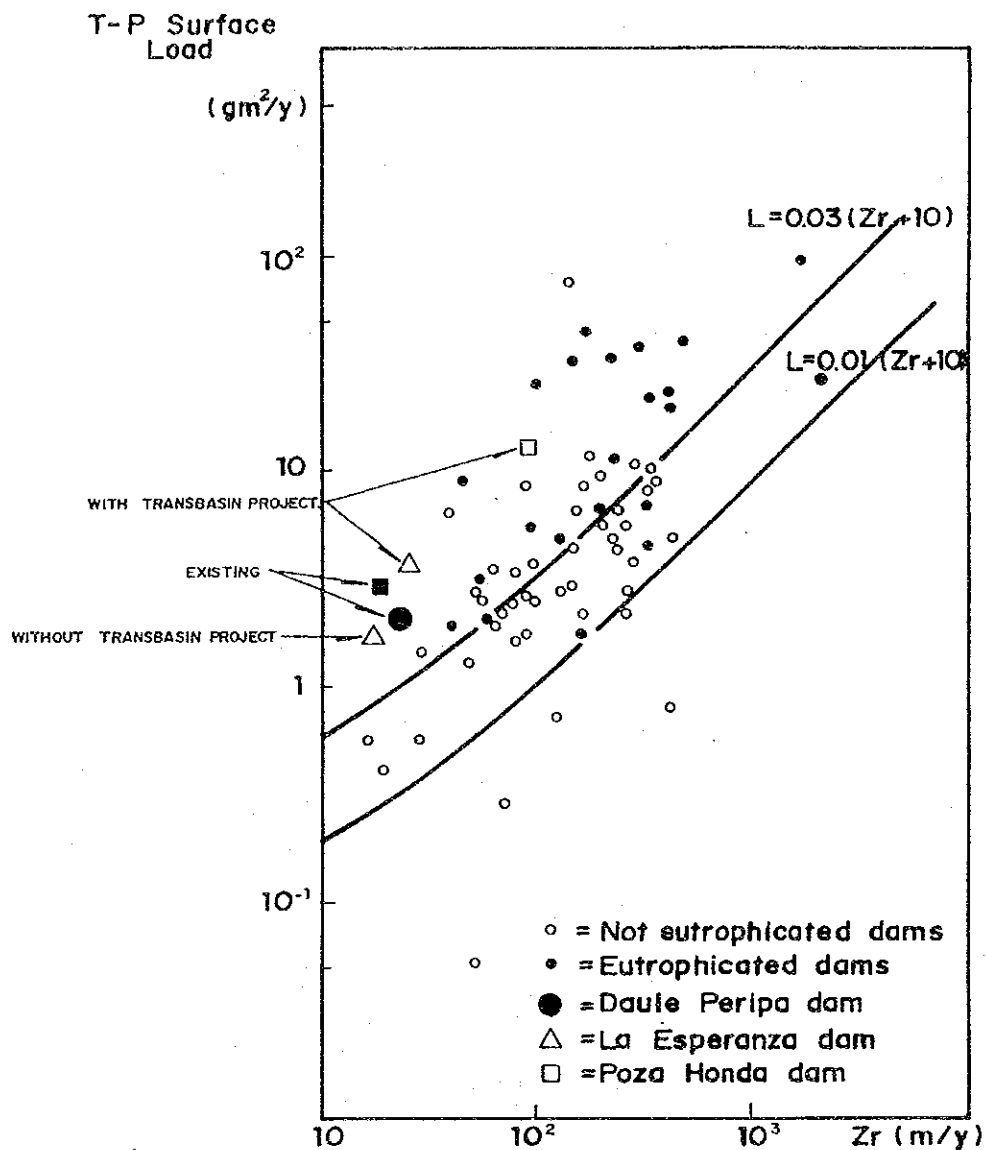


Fig.13.1 Posibilidades de Eutroficación (Modelo Vollenweider)

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY

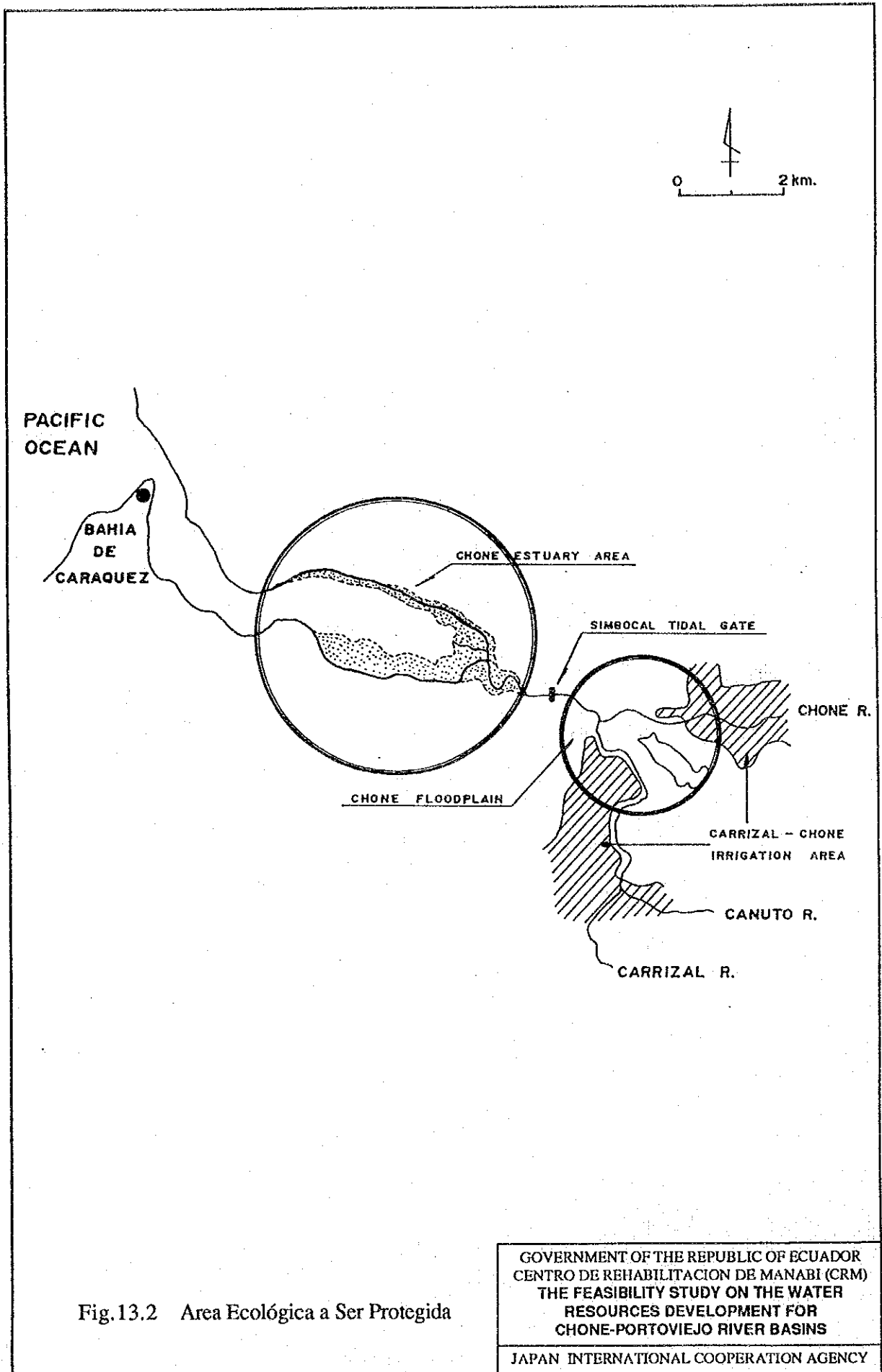
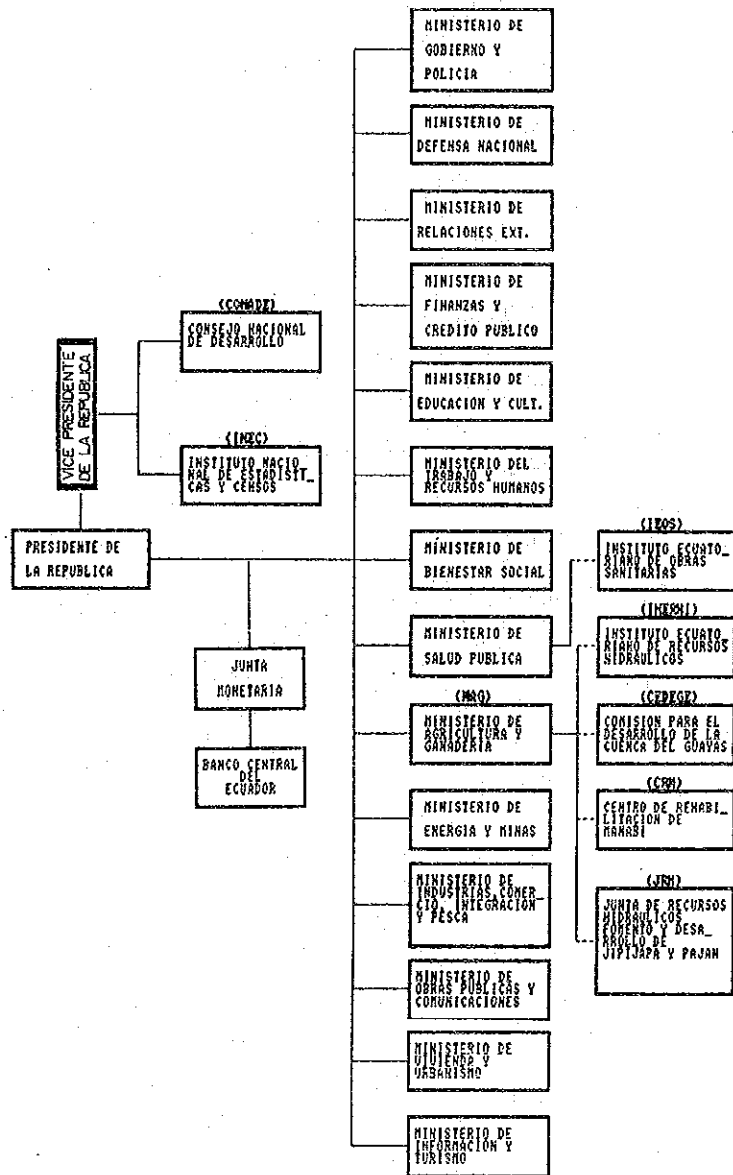


Fig.13.2 Area Ecológica a Ser Protegida

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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 THE FEASIBILITY STUDY ON THE WATER  
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Fuente: Direccion de Normas y Consolidacion Financiera de la Contraloria General del Estado

Fig. 14.1 Organigrama del Gobierno del Ecuador

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
 CHONE-PORTOVIEJO RIVER BASINS

JAPAN INTERNATIONAL COOPERATION AGENCY



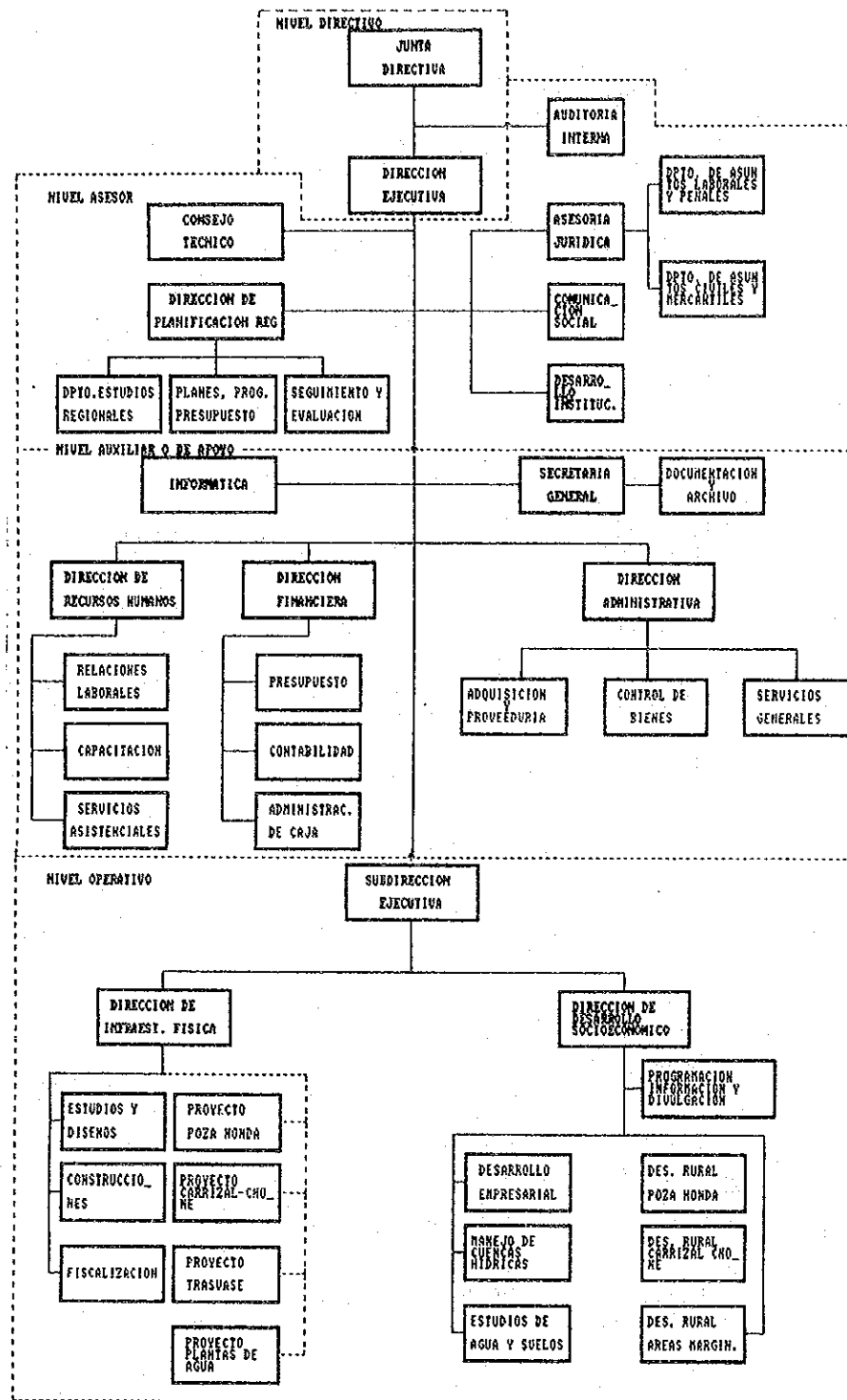


Fig.14.2 Organización Actual del CRM

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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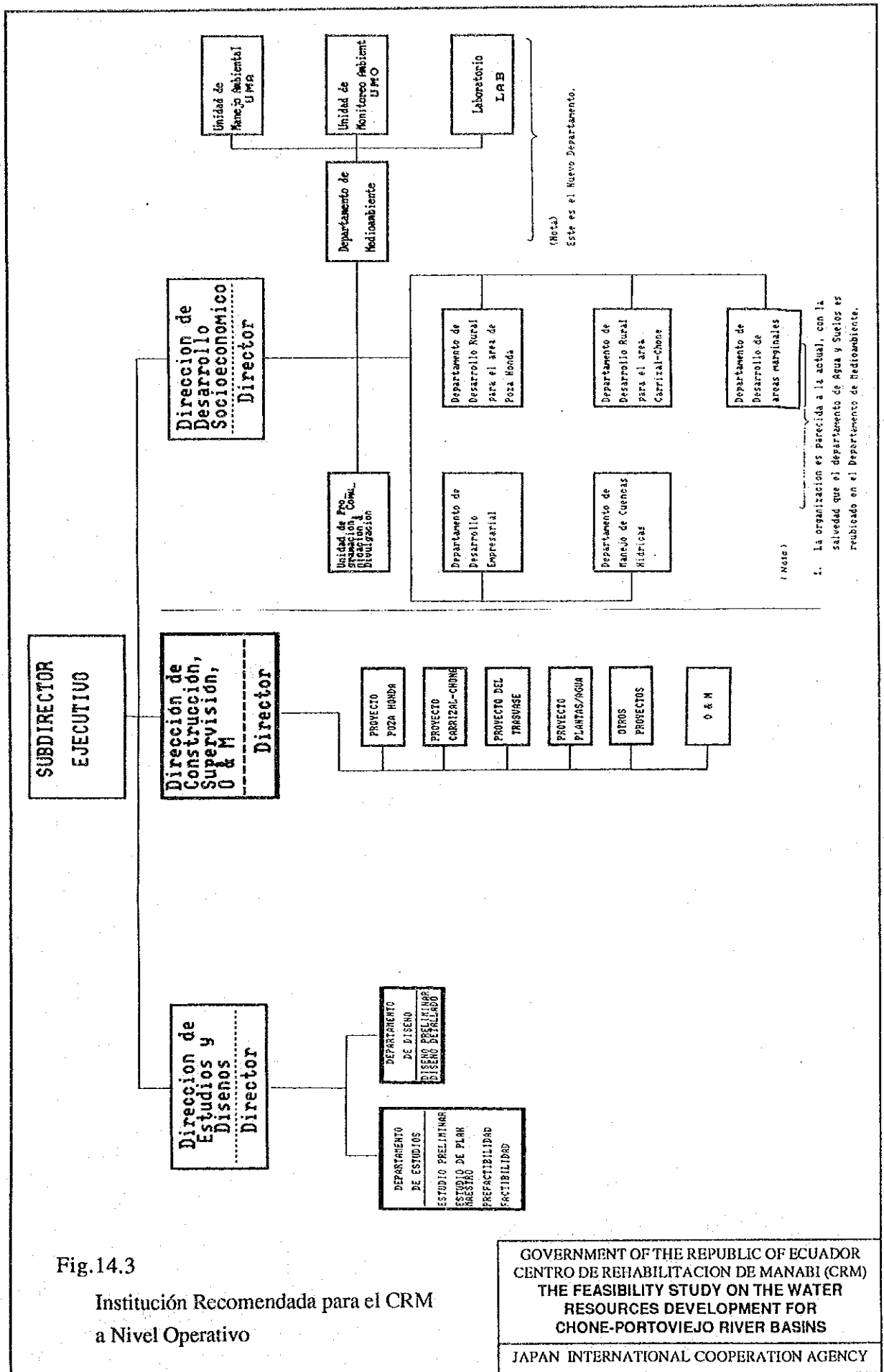


Fig.14.3

Institución Recomendada para el CRM  
a Nivel Operativo

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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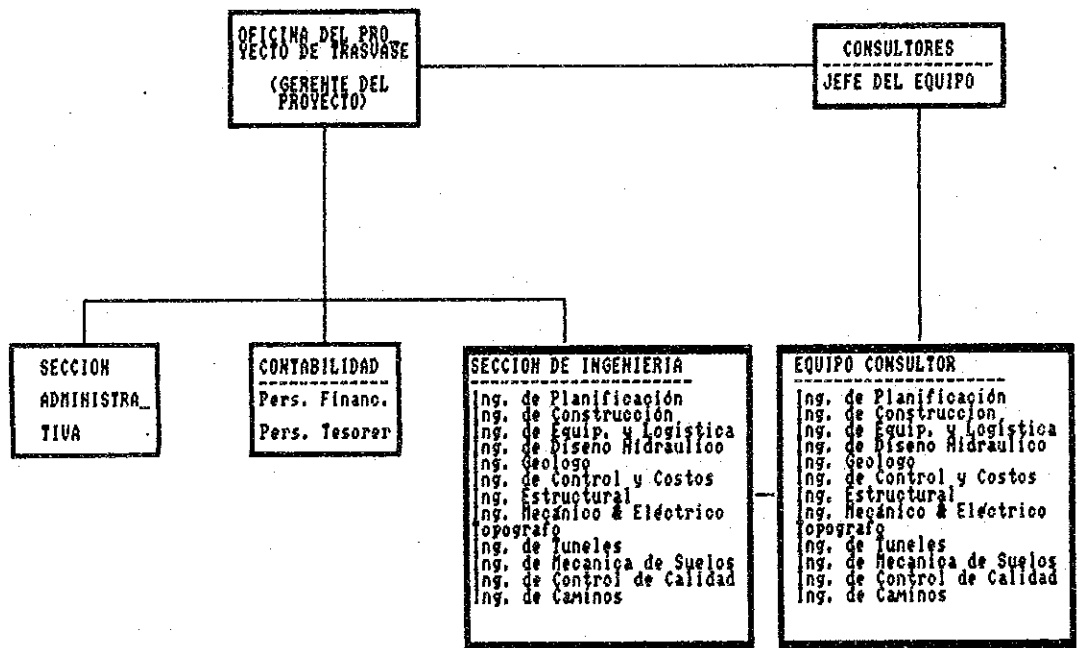


Fig.14.4 Organigrama para la Fase de Construcción y Supervisión del Proyecto de Traslase

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
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