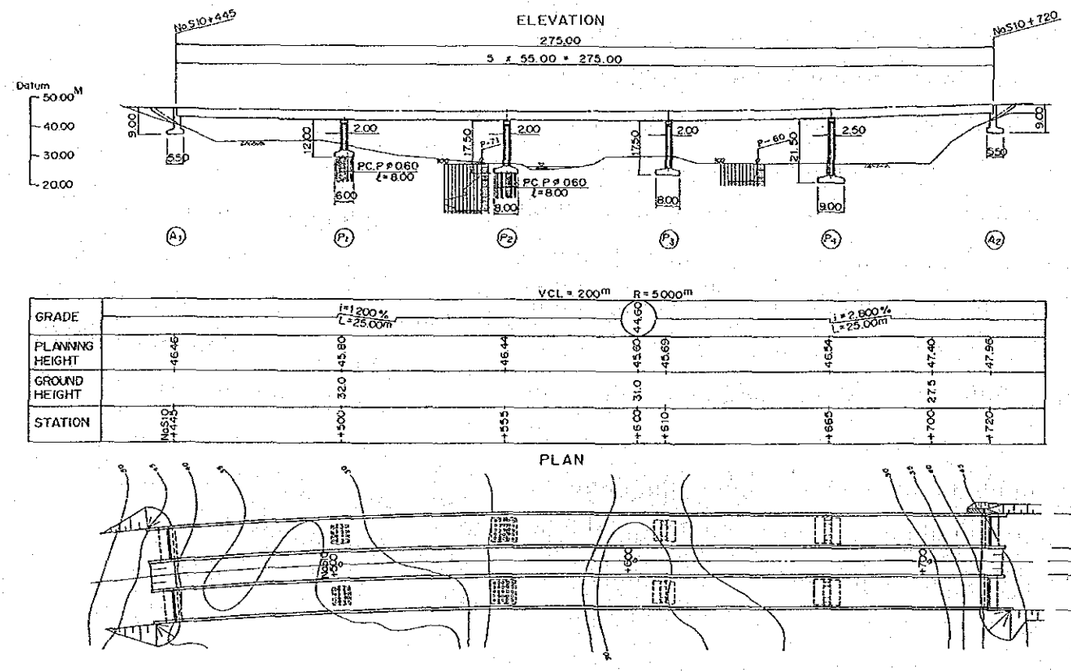
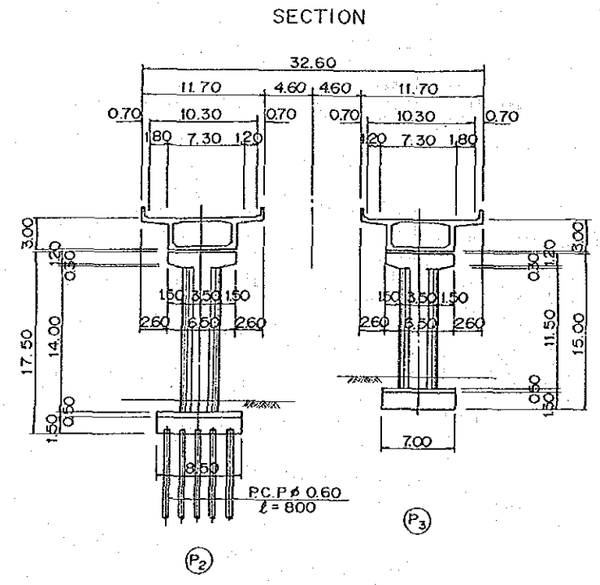
RIO GATUN BRIDGE





DESIGN CRITERIA

TYPE	P.C.5 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	275.00M
SPAN	5@35.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-RIO GATUN BRIDGE
VISTA GENERAL DE PUENTE-PUENTE RIO GATUN

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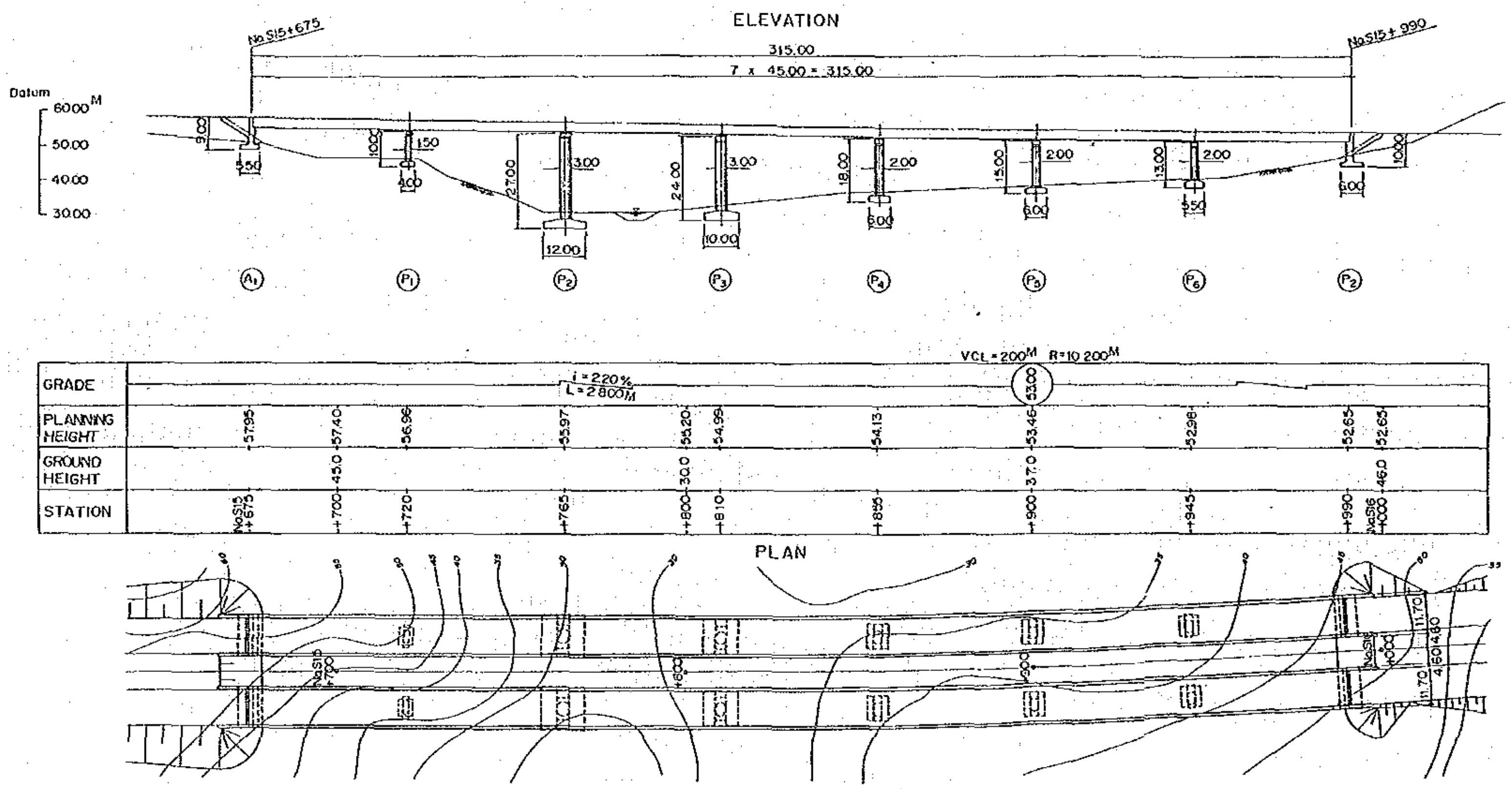
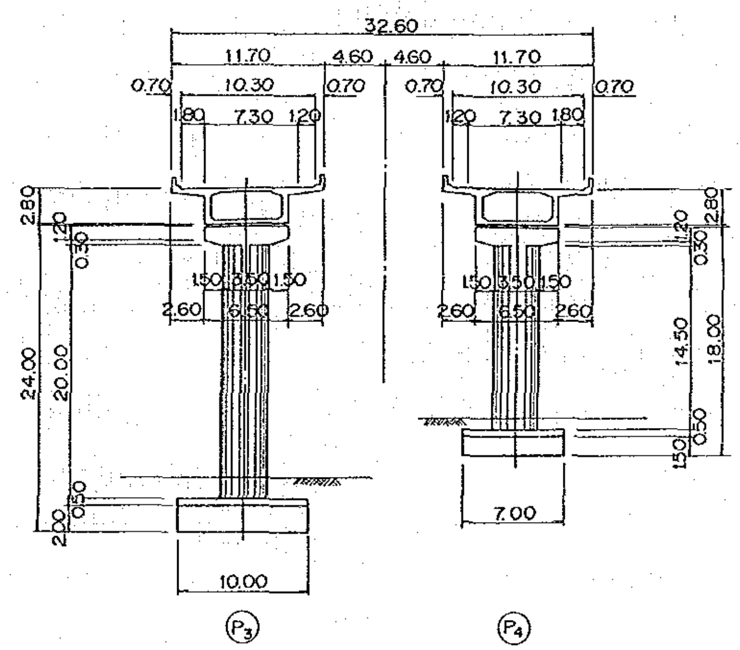
QUEBRADA EL PINO BRIDGE





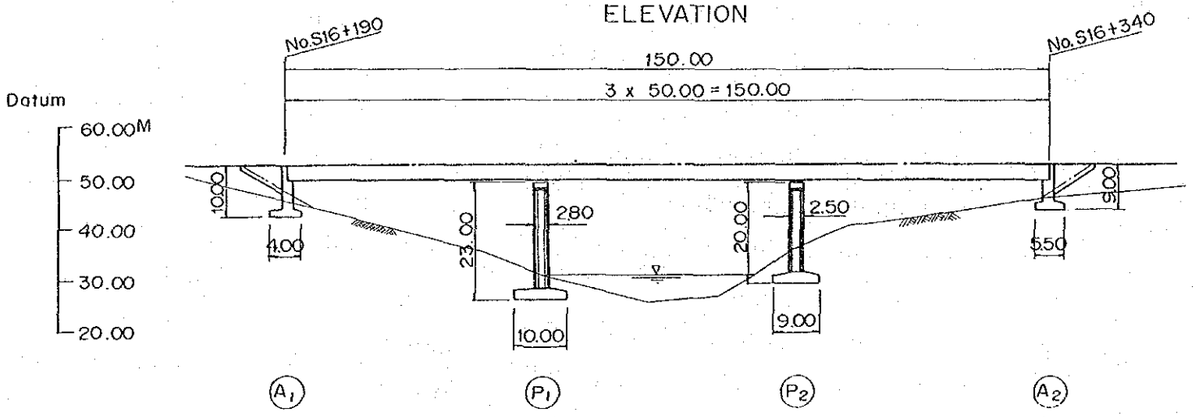
DESIGN CRITERIA

TYPE	P.C.7 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	315.00M
SPAN	7@45.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

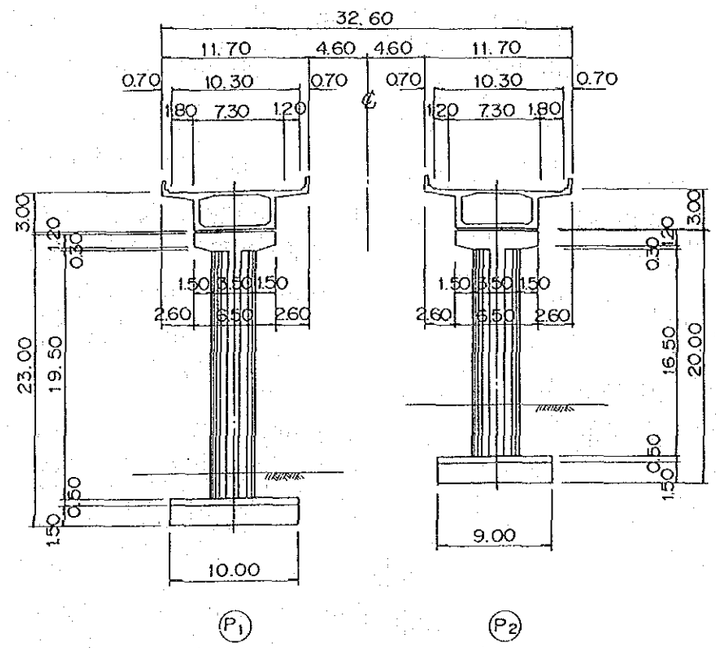
GENERAL VIEW OF BRIDGE-QUEBRADA EL PINO BRIDGE VISTA GENERAL DE PUENTE-PUENTE QUEBRADA EL PINO	MOP MINISTRY OF PUBLIC WORKS THE REPUBLIC OF PANAMA MINISTERIO DE OBRAS PUBLICAS	JICA JAPAN INTERNATIONAL COOPERATION AGENCY AGENCIA DE COPERACION INTERNATIONAL DEL JAPAN	THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON SCALE / ESCALA DWG. NO. / HOJA NO. DATE / FECHA PAGE NO. / PAGINA NO. 40/49

QUEBRADA LOPEZ BRIDGE

ELEVATION

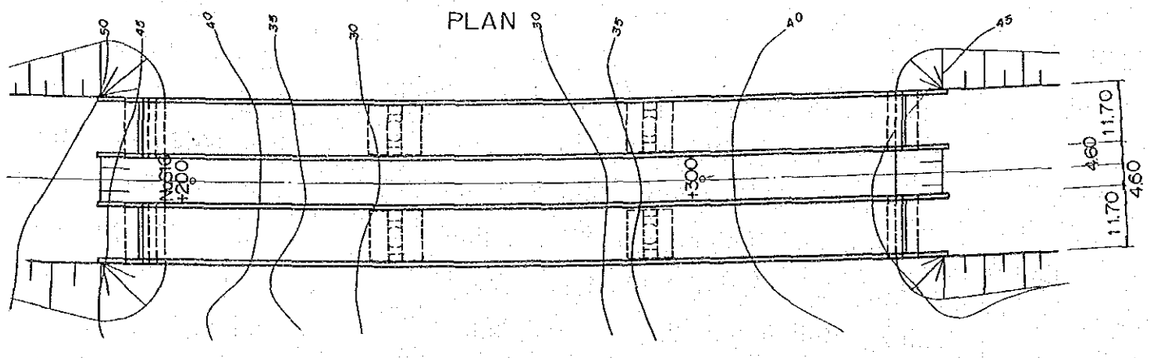


SECTION



GRADE	i=0.350% L=4 900M
PLANNING HEIGHT	51.99 / 51.95 / 51.81 / 51.64 / 51.60 / 51.64
GROUND HEIGHT	42.5 / 37.5
STATION	No.S16+190 / +200 / +240 / +290 / +300 / +340

PLAN



DESIGN CRITERIA

TYPE	P.C.3 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	150.00M
SPAN	3@50.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

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VISTA GENERAL DE PUENTE-PUENTE QUEBRADA LOPEZ

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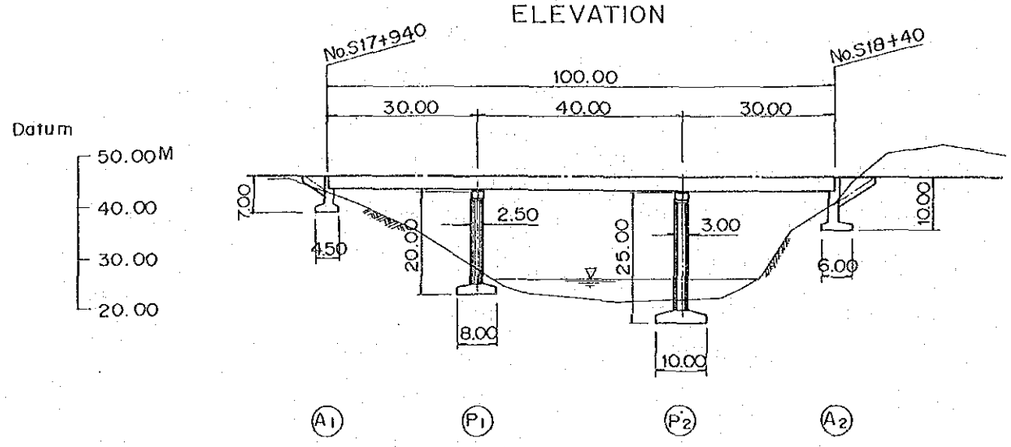
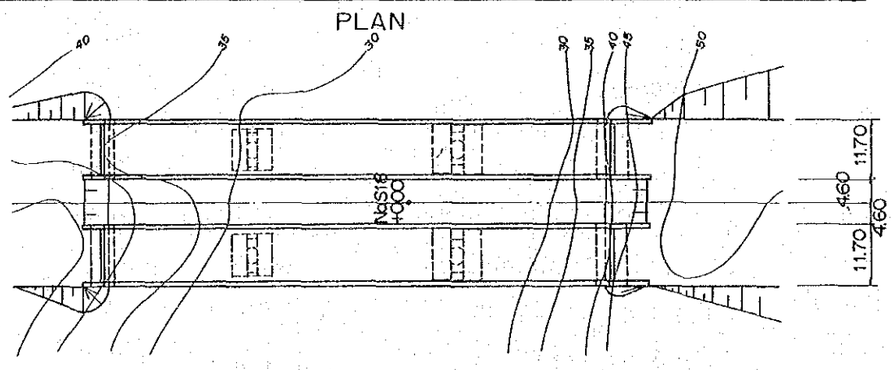
LAGO GATUN No. 1 BRIDGE

ELEVATION

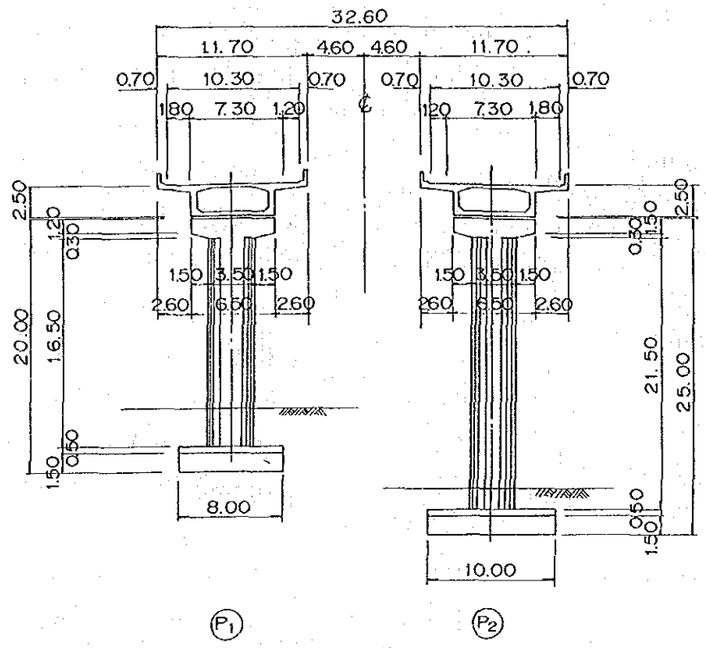


GRADE	i=0.350% L=4.900M				
PLANNING HEIGHT	45.86	45.76	45.65	45.62	45.51
GROUND HEIGHT			30.0		
STATION	No.S17 +940	+970	No.S18 +000	+10	+40

PLAN



SECTION



DESIGN CRITERIA

TYPE	P.C. 3 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	100.00M
SPAN	30.00M+40.00M+30.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-LAGO GATUN No.1 BRIDGE
VISTA GENERAL DE PUENTE-PUENTE LAGO GATUN No.1

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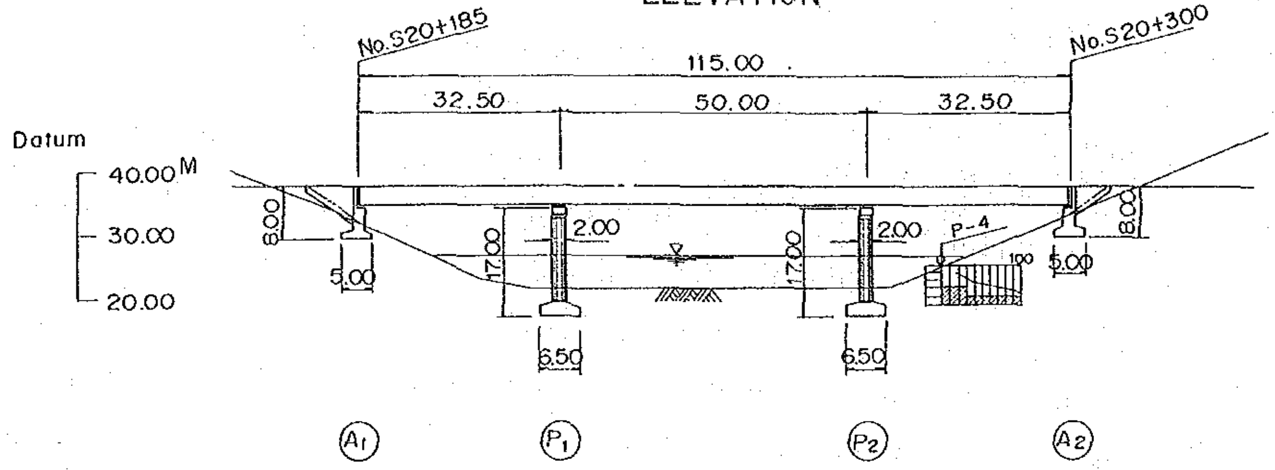
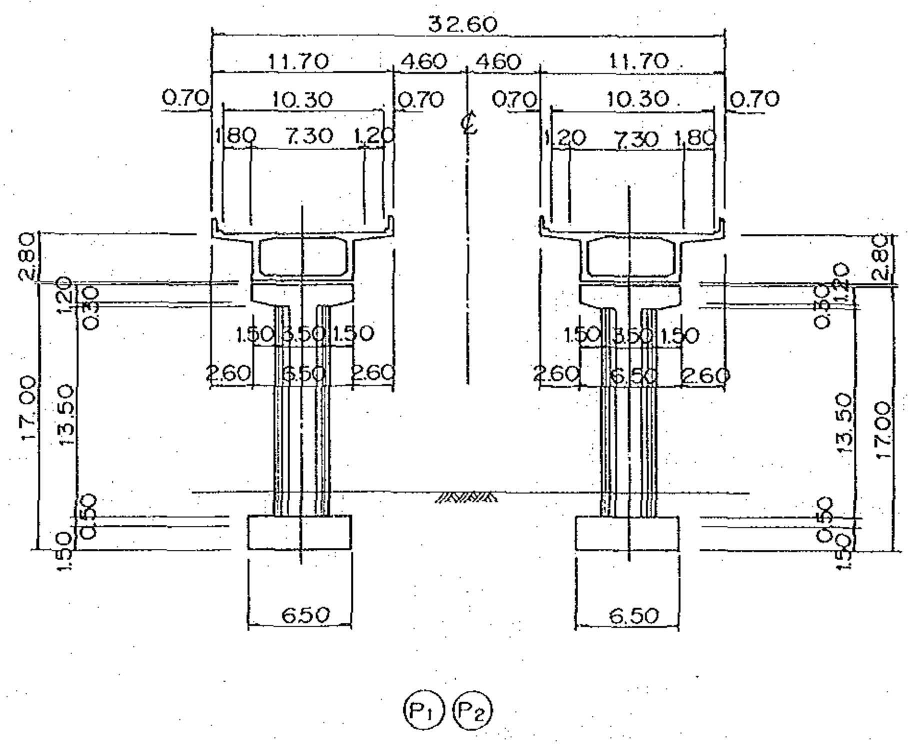
LAGO GATUN No. 2 BRIDGE

ELEVATION

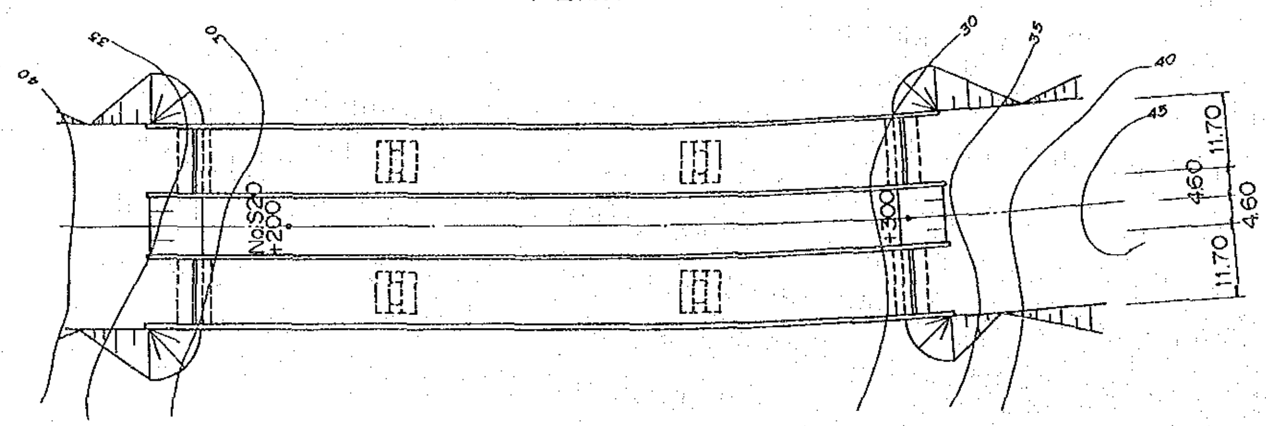


GRADE	i=0.350 % L=4900M				
PLANNING HEIGHT	38.00	37.95	37.89	37.71	37.60
GROUND HEIGHT		30.0			30.0
STATION	+185	+200	+217.5	+267.5	+300

SECTION



PLAN



DESIGN CRITERIA

T Y P E	P.C.3 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	115.00M
SPAN	32.50M+50.00M+32.50M
WIDTH	2 @10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-LAGO GATUN No.2 BRIDGE
VISTA GENERAL DE PUENTE-PUENTE LAGO GATUN No.2

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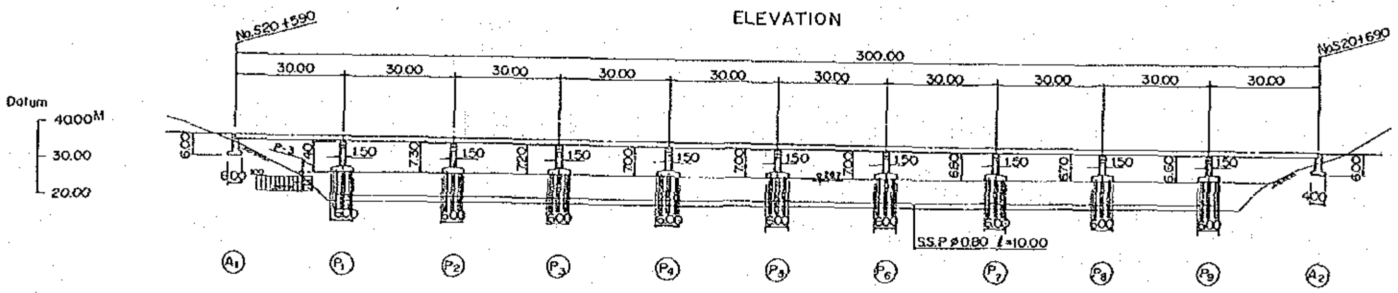
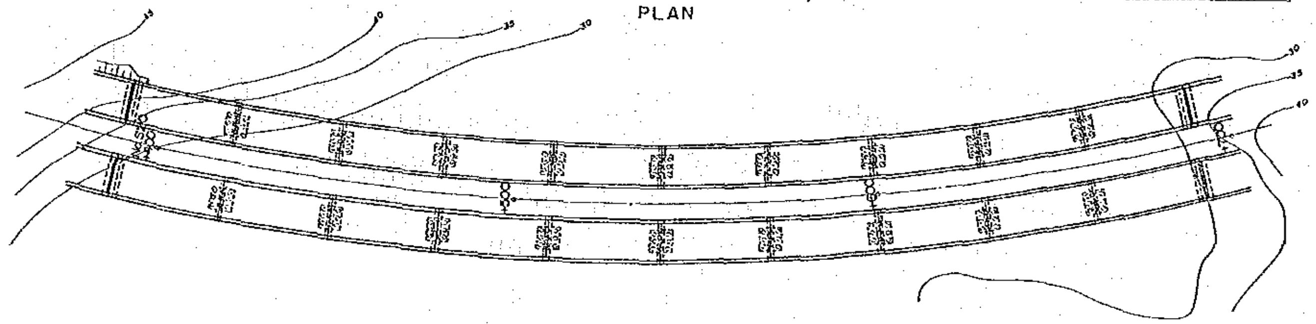
LAGO GATUN No. 3 BRIDGE

ELEVATION

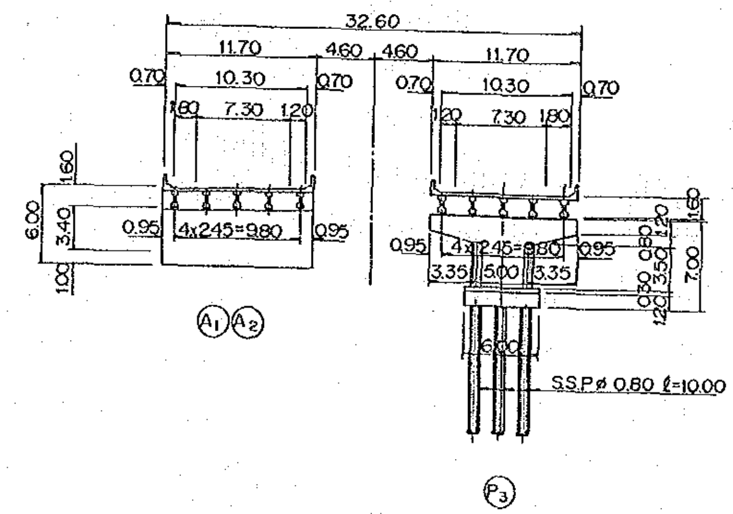


GRADE	i=0.350 % L=4.900M													
PLANNING HEIGHT	37.29	37.25	37.18	37.08	36.97	36.90	36.87	36.76	36.66	36.55	36.45	36.34	36.24	36.20
GROUND HEIGHT		30.0				30.0								35.0
STATION	+390	No.S20 +400	+420	+450	+480	+500	+510	+540	+570	+600	+630	+660	+690	+700

PLAN



SECTION



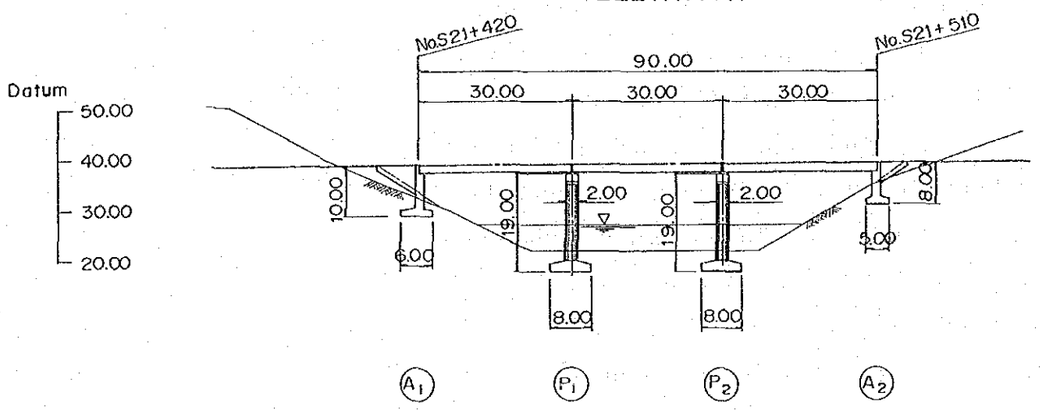
DESIGN CRITERIA

TYPE	P.C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	300.00M
SPAN	10@30.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-LAGO GATUN No.3 BRIDGE VISTA GENERAL DE PUENTE-PUENTE LAGO GATUN No.3	MOP MINISTRY OF PUBLIC WORKS THE REPUBLIC OF PANAMA MINISTERIO DE OBRAS PUBLICAS	JICA JAPAN INTERNATIONAL COOPERATION AGENCY AGENCIA DE COPERACION INTERNATIONAL DEL JAPAN	THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON SCALE / ESCALA — DWG. NO. / HOJA NO. DATE / FECHA — PAGE NO. / PAGINA NO. 44/49

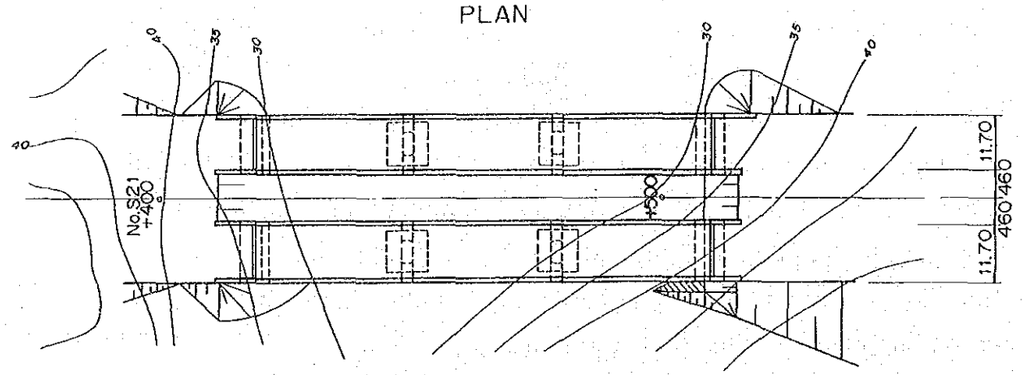
LAGO GATUN No. 4 BRIDGE

ELEVATION

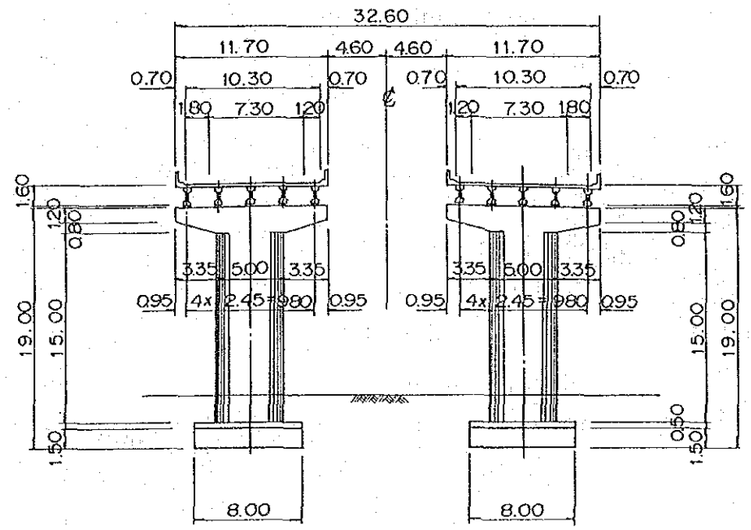


GRADE	i=0.520% L=1000 M					
PLANNING HEIGHT	38.92	39.02	39.18	39.33	39.44	39.49
GROUND HEIGHT	42.5				30.0	
STATION	+400	+420	+450	+480	+500	+510

PLAN



SECTION



DESIGN CRITERIA

TYPE	P.C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	90.00M
SPAN	3@30.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-LAGO GATUN No.4 BRIDGE
VISTA GENERAL DE PUENTE-PUENTE LAGO GATUN No.4

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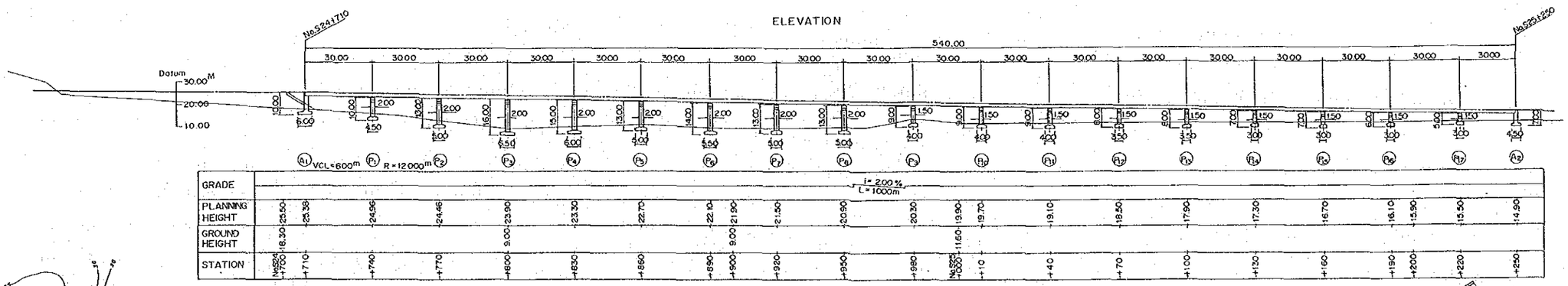
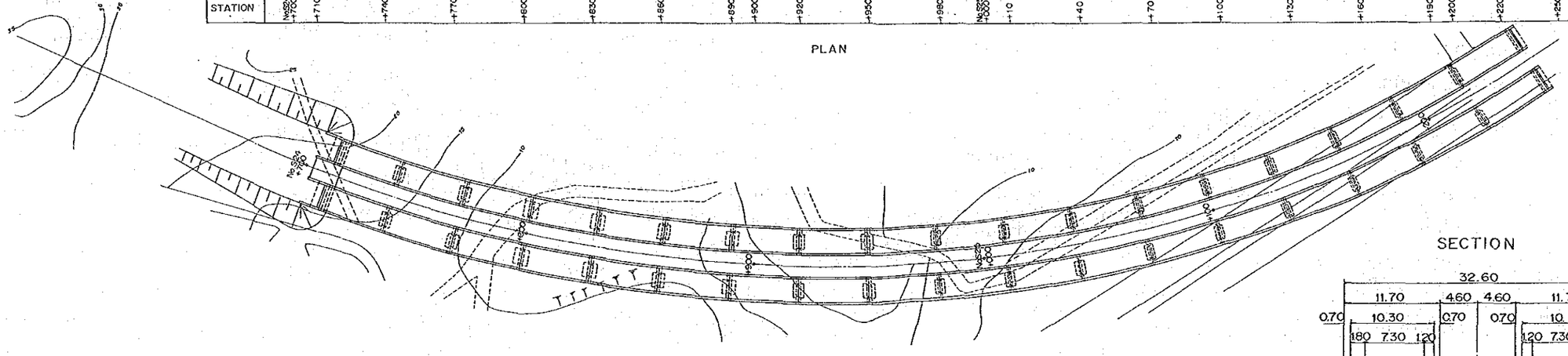
COCO SOLO VIADUCT

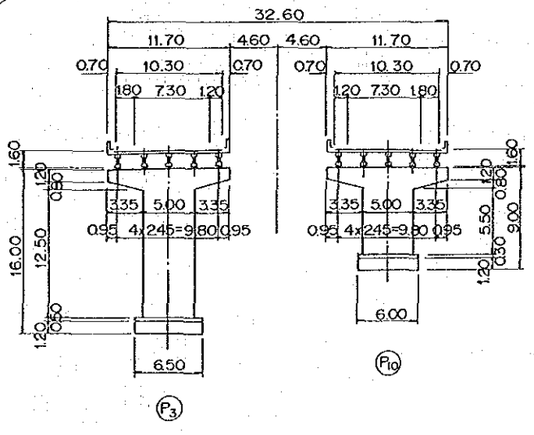
ELEVATION



PLAN



SECTION



DESIGN CRITERIA

TYPE	P.C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	540.00M
SPAN	18@30.00M
WIDTH	2@10.30M
LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-COCO SOLO VIADUCT
VISTA GENERAL DE PUENTE-PUENTE COCO SOLO

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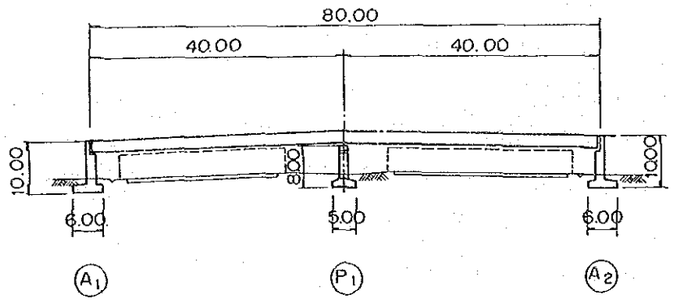
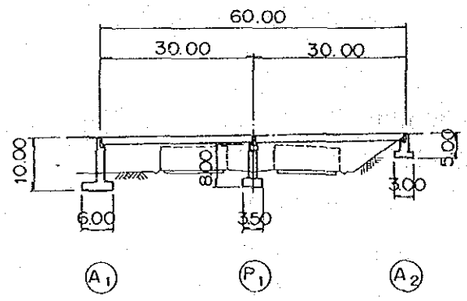
OVER BRIDGE
(SABANITAS AREA)

ELEVATION

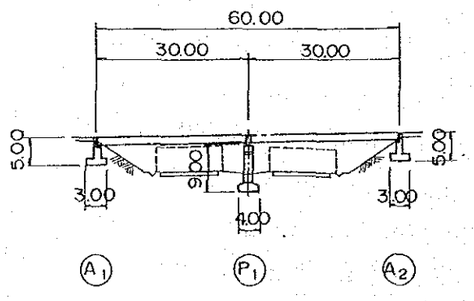
TYPE I



TYPE II

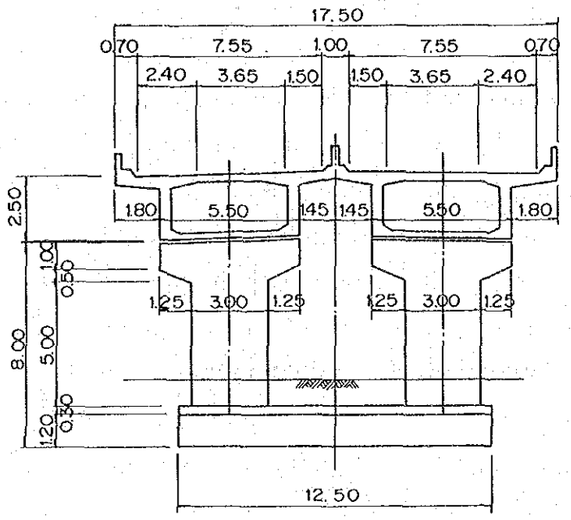


TYPE III

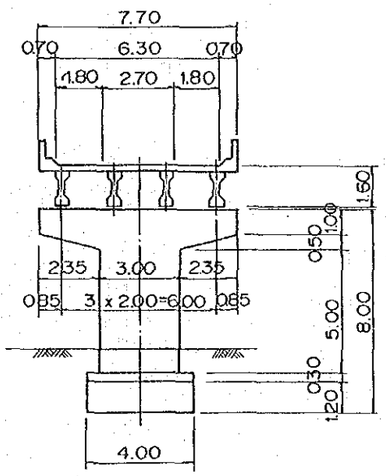


SECTION

TYPE A



TYPE B



BRIDGE NAME	STATION	TOTAL BRIDGE LENGTH(M)	WIDTH	TYPE	
CHAMPION OVER BRIDGE	S12+330	60.00	6.30	II	B
〃	S14+050	60.00	6.30	II	B
〃	S15+015	60.00	6.30	II	B
SABANITA INTERCHANGE BRIDGE	S16+530	80.00	16.10	I	A
SAN JORGE OVERBRIDGE	S17+400	60.00	6.30	III	B
SAN ANDRES OVERBRIDGE	S17+850	60.00	6.30	II	B
SAN ANDRES OVER BRIDGE	S19+350	60.00	6.30	II	B

DESIGN CRITERIA

LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	I=15.24/(L+38.1)
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-OVERBRIDGE (2)
VISTA GENERAL DE PUENTE-SOBRE EL PUENTE (2)

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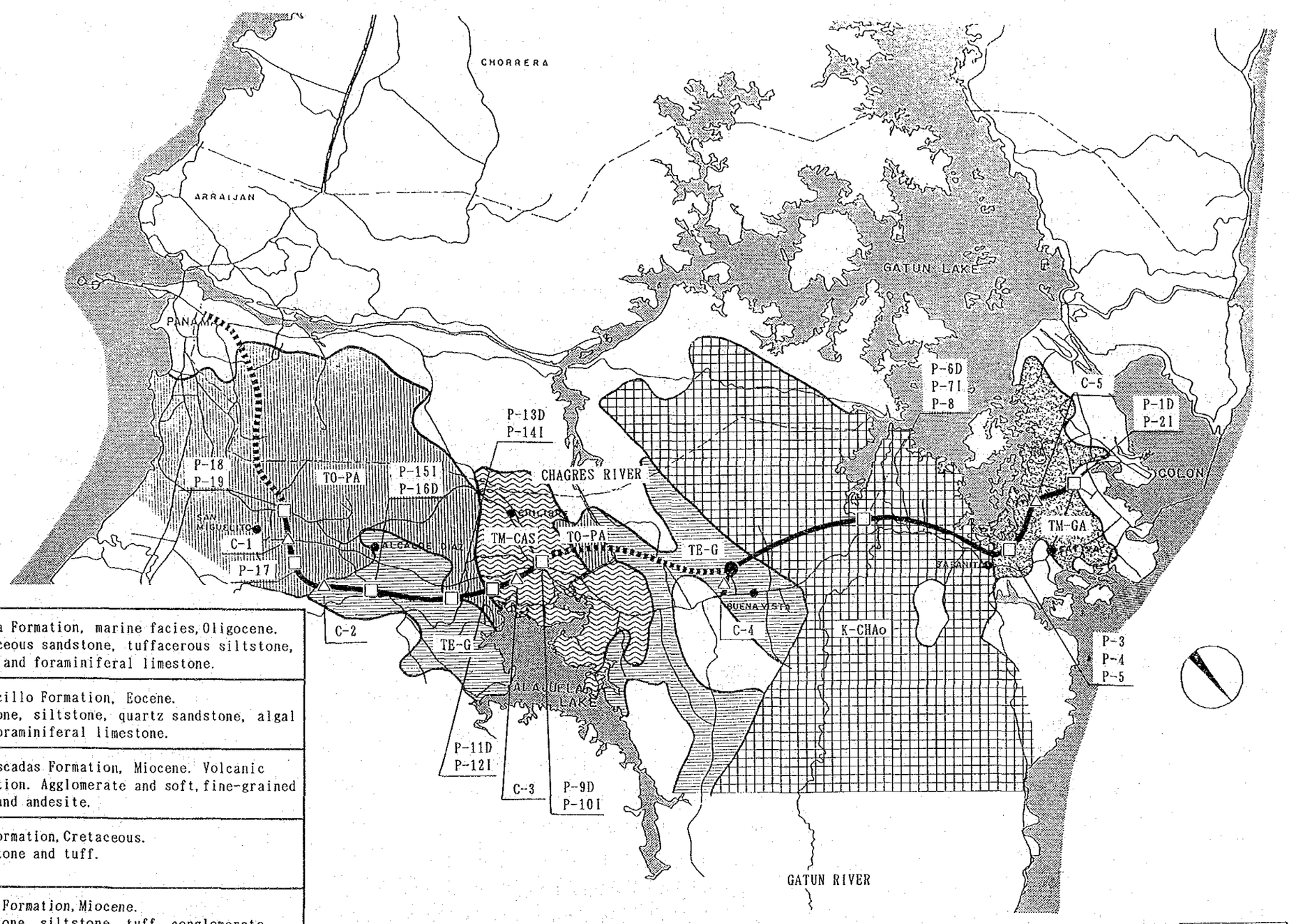

REMARKS

	TO-PA	Panama Formation, marine facies, Oligocene. Tuffaceous sandstone, tuffacerous siltstone, algal and foraminiferal limestone.
	TE-G	Gatuncillo Formation, Eocene. Mudstone, siltstone, quartz sandstone, algal and foraminiferal limestone.
	TM-CAS	La Cascadas Formation, Miocene. Volcanic formation. Agglomerate and soft, fine-grained tuff, and andesite.
	K-CHAo	Ocu Formation, Cretaceous. Limestone and tuff.
	TM-GA	Gatun Formation, Miocene. Sandstone, siltstone, tuff, conglomerate and sandy mudstone.

GEOLOGICAL CONDITION MAP
MAPA DE CONDICION GEOLOGICA

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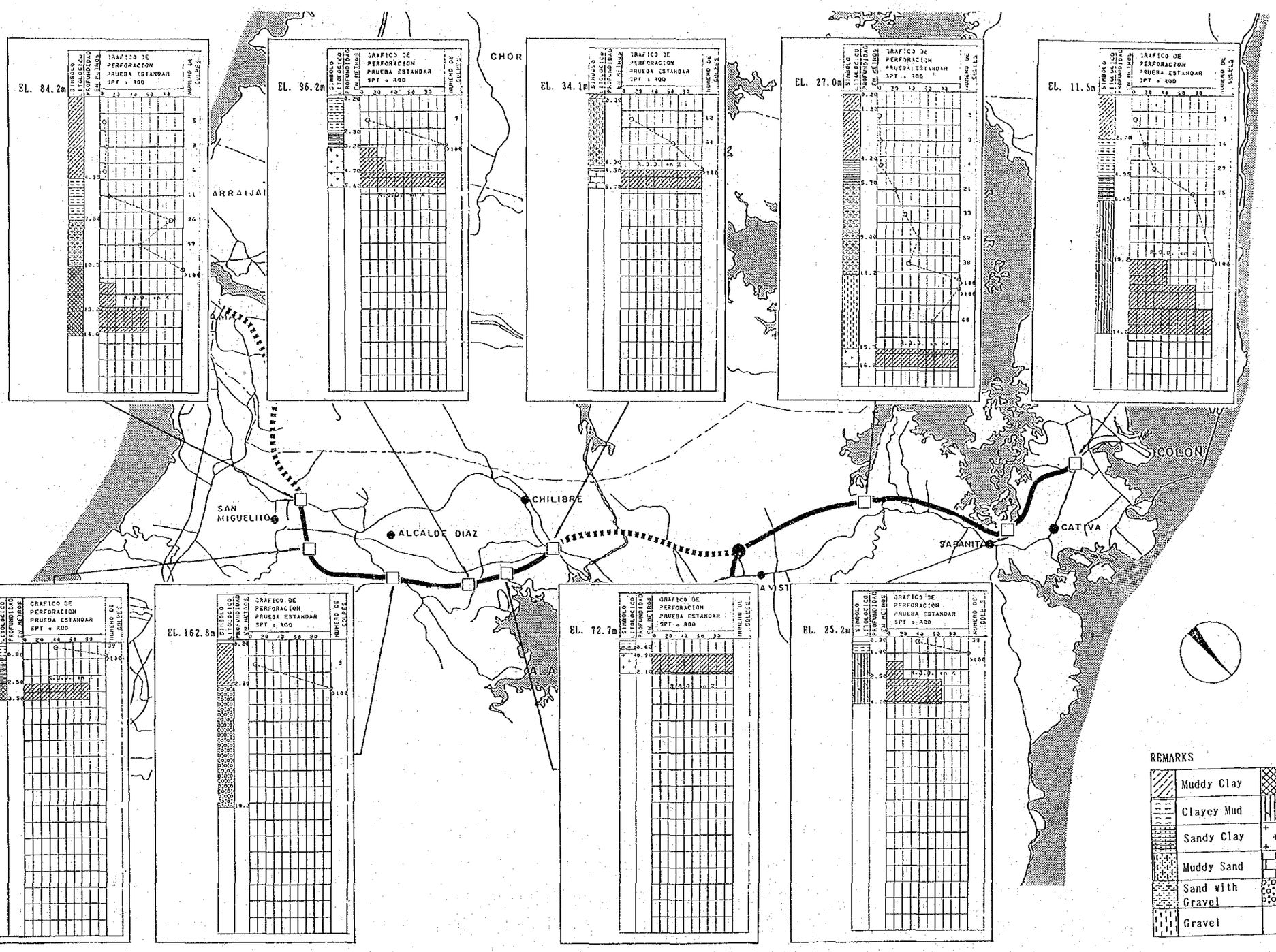

SOIL PROFILE ALONG THE PROPOSED ROAD
PERFIL DE SUELO A LO LARGO DE LA CARRETERA PROPUESTA

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