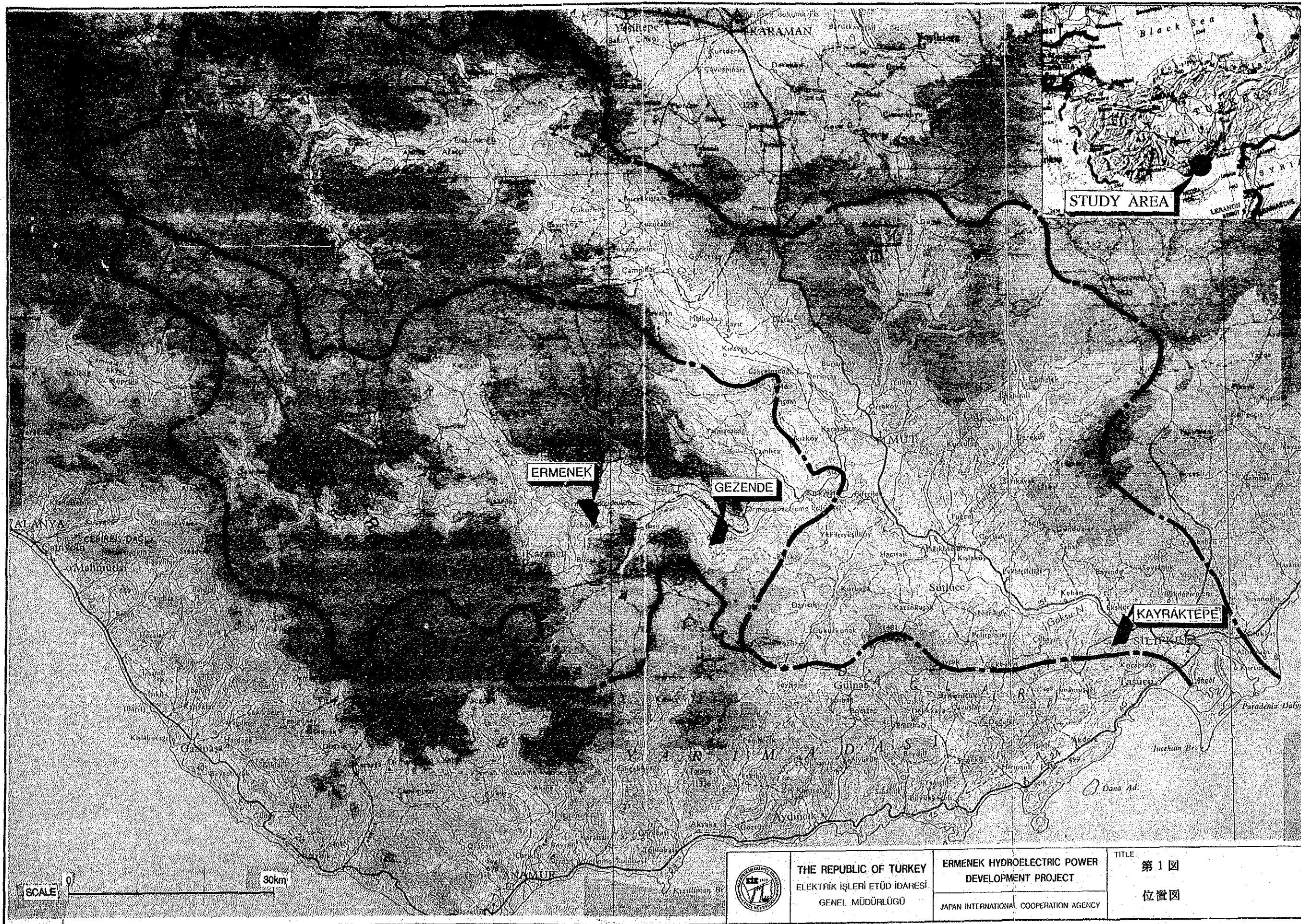


付図



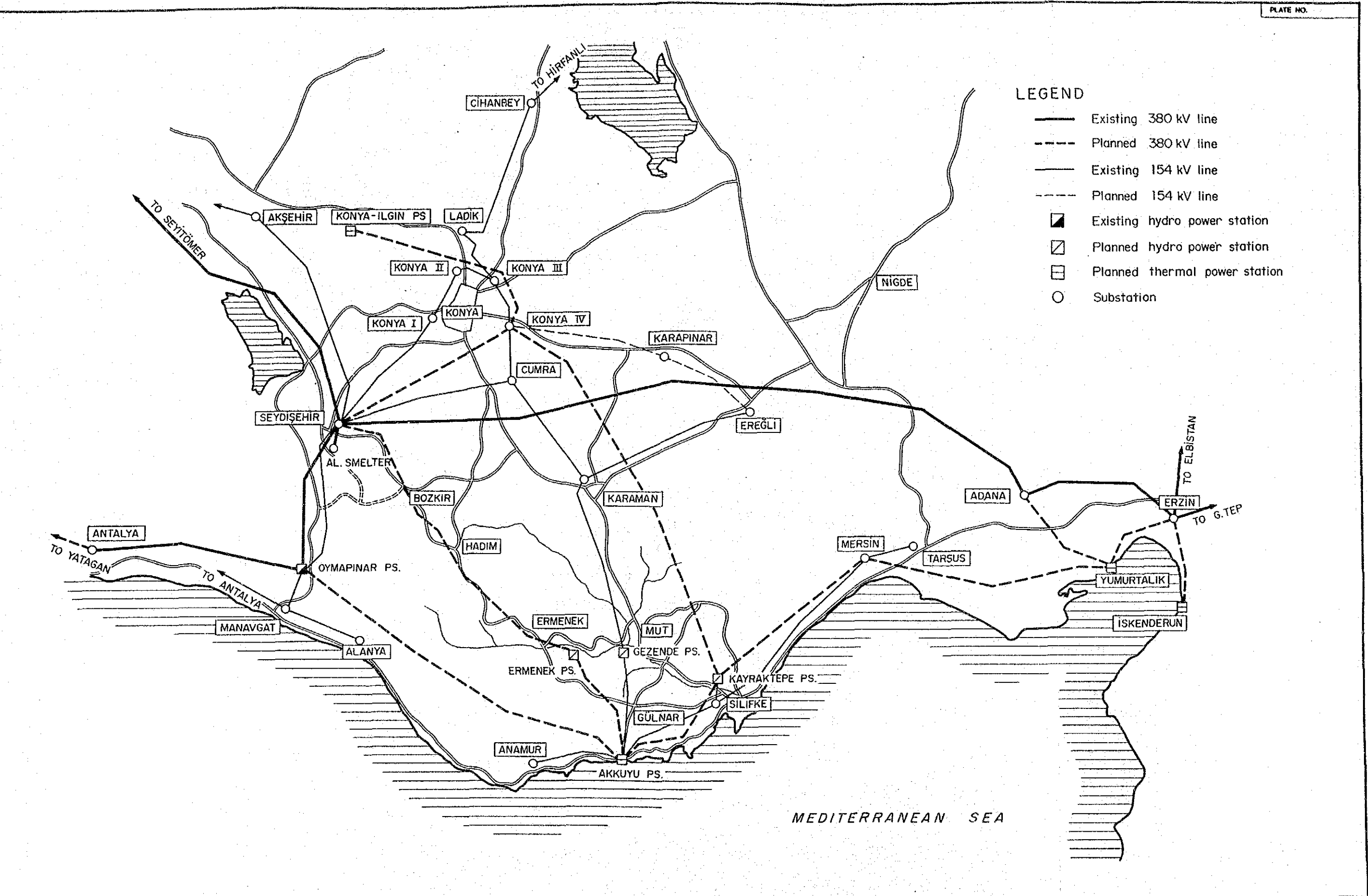
SCALE 0 30km



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GENEL MÜDÜRLÜĞÜ


ERMENEK HYDROELECTRIC POWER  
DEVELOPMENT PROJECT  
JAPAN INTERNATIONAL COOPERATION AGENCY

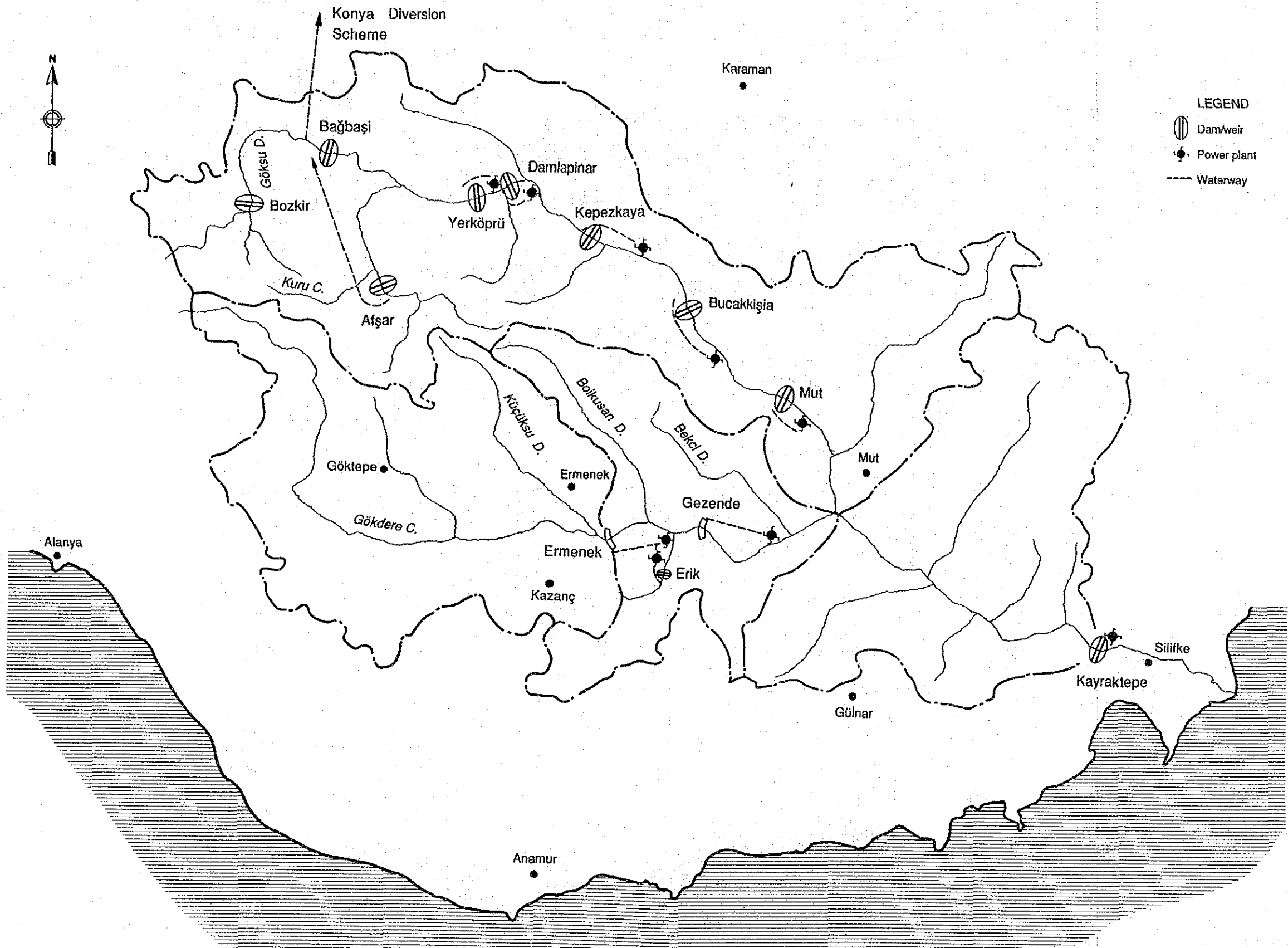
TITLE  
第 1 図  
位置図



LEGEND

- Existing 380 kV line
- - - Planned 380 kV line
- Existing 154 kV line
- - - Planned 154 kV line
- ▣ Existing hydro power station
- ▤ Planned hydro power station
- Planned thermal power station
- Substation

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			JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

- Dam/weir
- Power plant
- Waterway

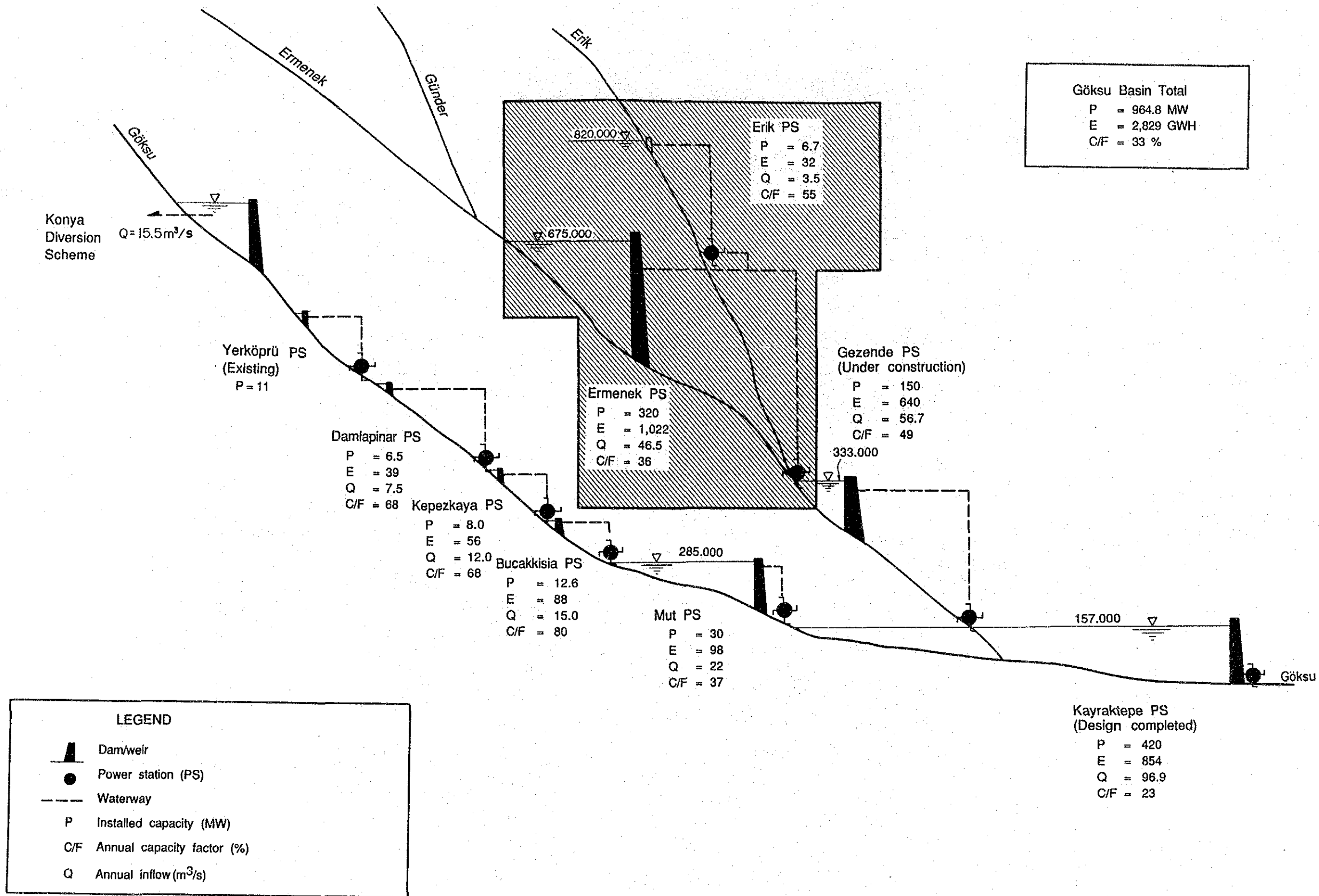
SCALE 0 40Km



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TITLE  
第3図  
ギョクス河全体開発計画、  
平面



Göksu Basin Total  
 P = 964.8 MW  
 E = 2,829 GWH  
 C/F = 33 %

Erik PS  
 P = 6.7  
 E = 32  
 Q = 3.5  
 C/F = 55

Gezende PS  
 (Under construction)  
 P = 150  
 E = 640  
 Q = 56.7  
 C/F = 49

Ermenek PS  
 P = 320  
 E = 1,022  
 Q = 46.5  
 C/F = 36

Damlapinar PS  
 P = 6.5  
 E = 39  
 Q = 7.5  
 C/F = 68




Kepezkaya PS  
 P = 8.0  
 E = 56  
 Q = 12.0  
 C/F = 68

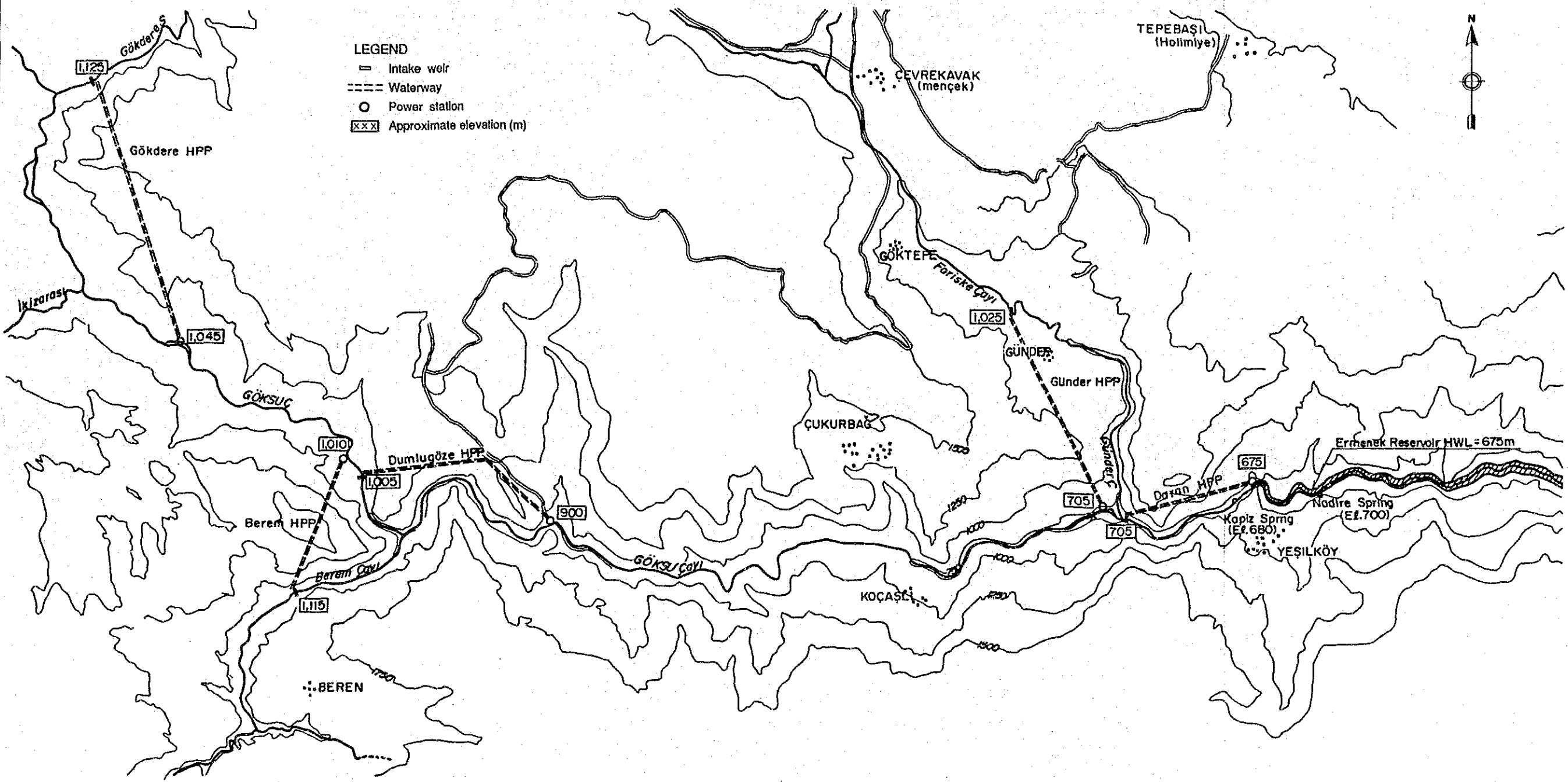
Bucakkisia PS  
 P = 12.6  
 E = 88  
 Q = 15.0  
 C/F = 80

Mut PS  
 P = 30  
 E = 98  
 Q = 22  
 C/F = 37

Kayraktepe PS  
 (Design completed)  
 P = 420  
 E = 854  
 Q = 96.9  
 C/F = 23


**LEGEND**

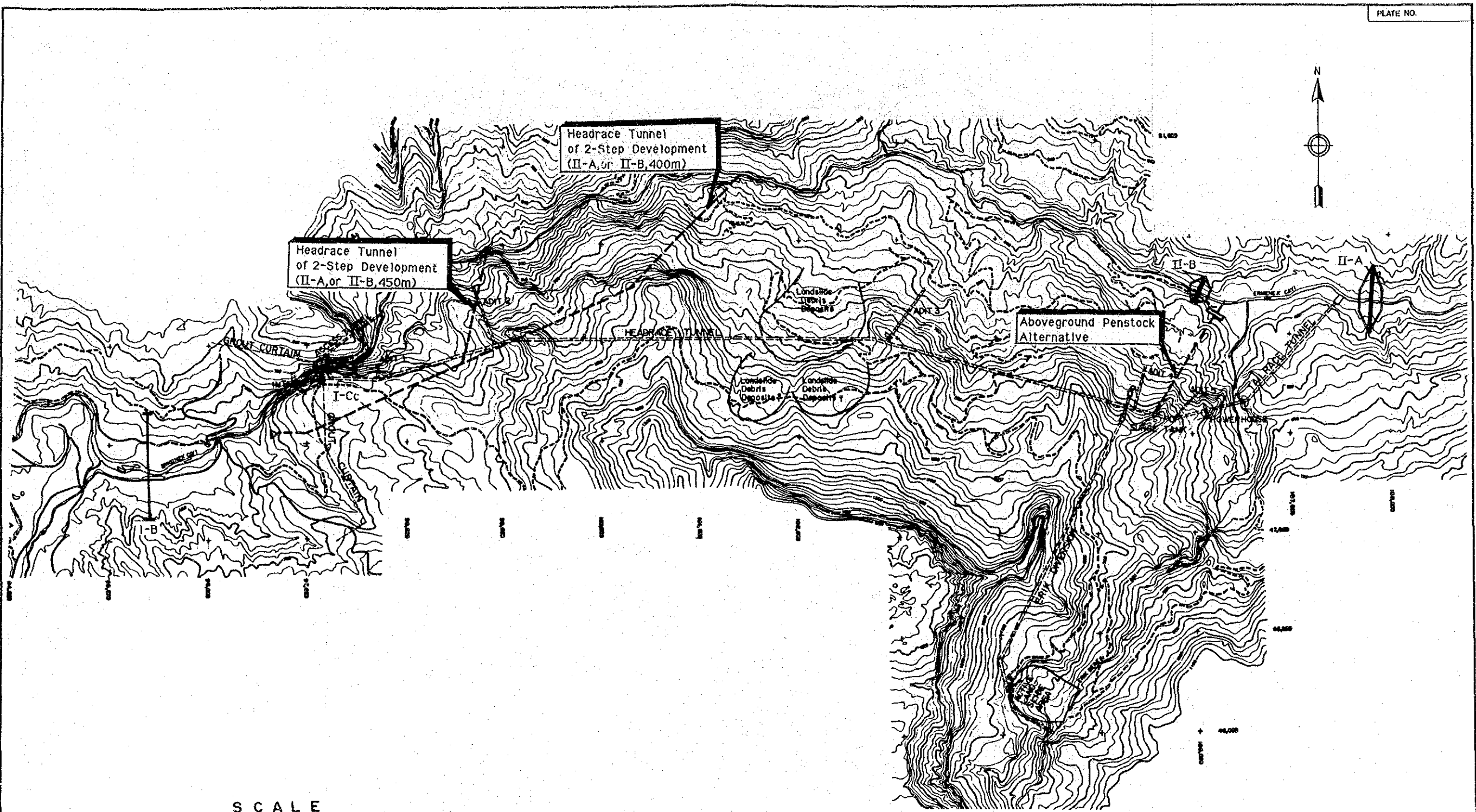
-  Dam/weir
-  Power station (PS)
-  Waterway
- P Installed capacity (MW)
- C/F Annual capacity factor (%)
- Q Annual inflow (m<sup>3</sup>/s)



**LEGEND**  
 — Intake weir  
 - - - Waterway  
 ○ Power station  
 [x x] Approximate elevation (m)


SCALE 0 5km

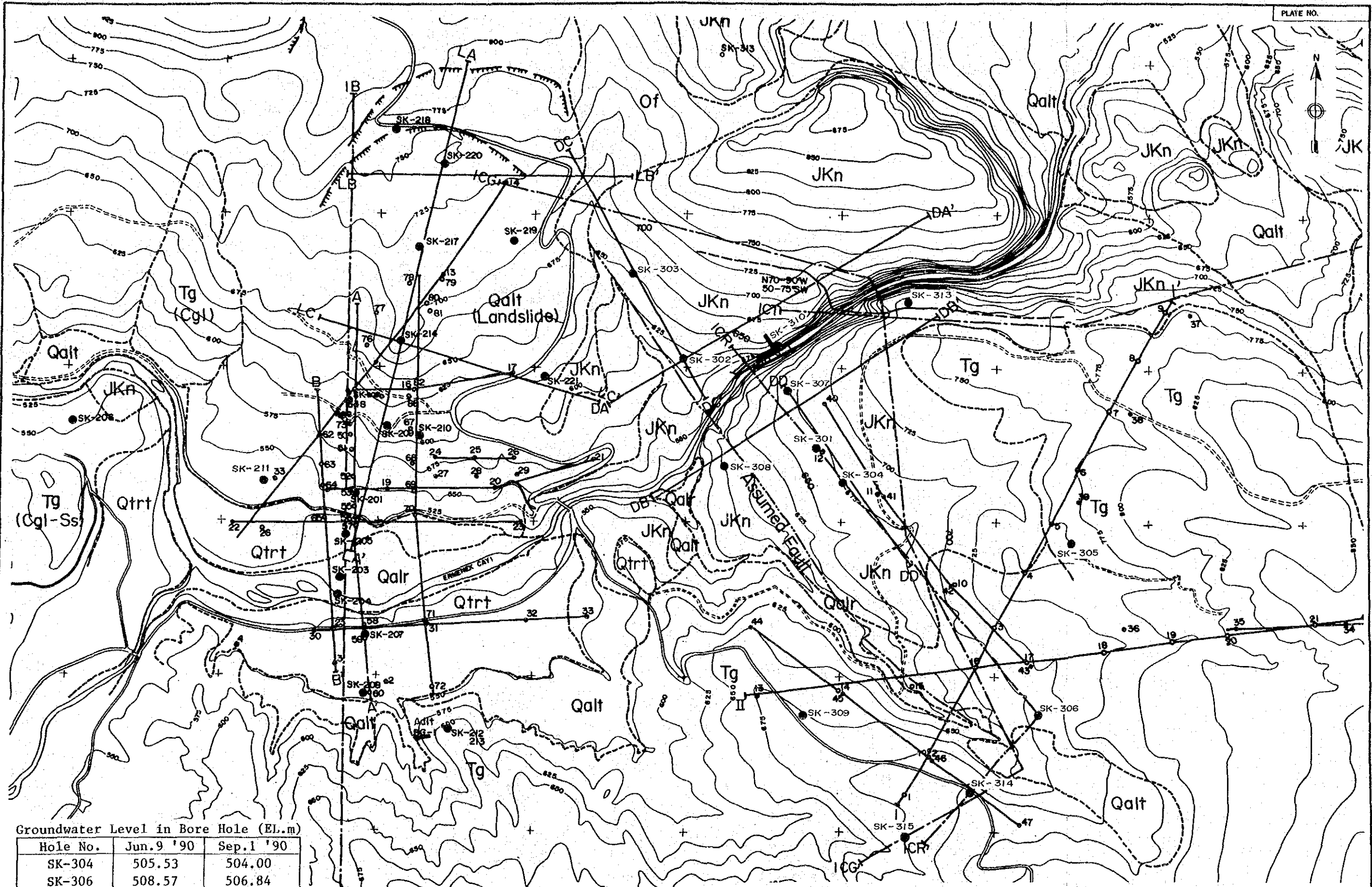
	<b>THE REPUBLIC OF TURKEY</b> ELEKTRİK İŞLERİ ETÜD İDARESİ GENEL MÜDÜRLÜĞÜ	<b>ERMENEK HYDROELECTRIC POWER          DEVELOPMENT PROJECT</b>	TITLF 第 5 図 エルマネック川上流域の 開発試案
		JAPAN INTERNATIONAL COOPERATION AGENCY	



SCALE



	THE REPUBLIC OF TURKEY ELEKTRİK İŞLERİ ETÜD İDARESİ GENEL MÜDÜRLÜĞÜ	ERMEK HYDROELECTRIC POWER DEVELOPMENT PROJECT JAPAN INTERNATIONAL COOPERATION AGENCY	TITLE 第 6 図 代替開発計画案一般配置図



Groundwater Level in Bore Hole (EL.m)

Hole No.	Jun.9 '90	Sep.1 '90
SK-304	505.53	504.00
SK-306	508.57	506.84
SK-308	506.12	505.80
SK-314	507.98 <sup>v</sup>	504.98
SK-315	—	504.54

<sup>v</sup>: 506.58m after 10 days.

SCALE 0 500m



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JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
第7図  
ダムサイト周辺の地質調査  
位置図



**GEOLOGY OF THE PROJECT AREA**

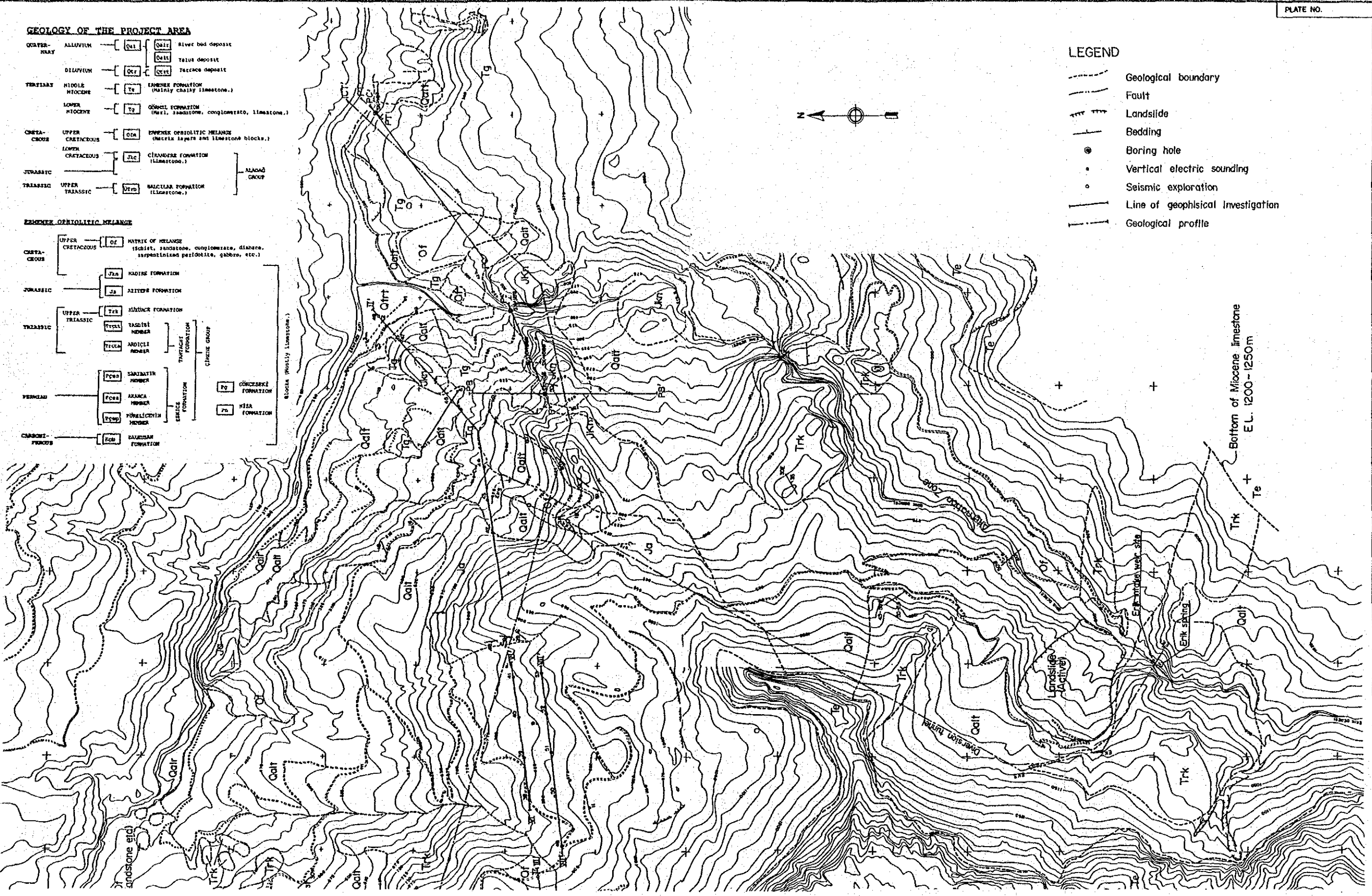
- QUATERNARY
  - ALLUVIUM [Qal] River bed deposit
  - [Qa1] Talus deposit
  - [Qa2] Terrace deposit
- TERTIARY
  - MIDDLE MIOCENE [Tm] ERMENEK FORMATION (Mainly cherty limestone.)
  - LOWER MIOCENE [Tl] ÇÖĞEÇLİ FORMATION (Merl. sandstone, conglomerate, limestone.)
- CRETACEOUS
  - UPPER CRETACEOUS [Cka] ERMENEK ORPHTOLITIC MELANGE (Matrix layers and limestone blocks.)
  - LOWER CRETACEOUS [Ckc] ÇİĞİRCİ FORMATION (Limestone.)
- JURASSIC [Jk] ALAĞAÇ GRUBU
- TRIASSIC
  - UPPER TRIASSIC [Tka] MİLLİCİ FORMATION (Limestone.)

**ERMENEK ORPHTOLITIC MELANGE**

- UPPER CRETACEOUS [Cka] MATRIX OF MELANGE (Siltst. sandstone, conglomerate, diabase, saponitic acid peridotite, gabbro, etc.)
- JURASSIC [Jk] KADIRI FORMATION
- [Ja] AZİTİNE FORMATION
- UPPER TRIASSIC [Tka] KİLİÇER FORMATION
- [Tka1] TAZIŞI FORMATION
- [Tka2] ARDICI FORMATION
- [Tka3] SAKINTIYI FORMATION
- [Tka4] ARANCA FORMATION
- [Tka5] HÖRÜLÇİ FORMATION
- [Tka6] SALDIRAN FORMATION
- TRIASIC [Tka] ÇÖĞEÇLİ FORMATION (Mainly limestone.)
- [Tka7] KISA FORMATION

**LEGEND**

- Geological boundary
- Fault
- Landslide
- Bedding
- Boring hole
- Vertical electric sounding
- Seismic exploration
- Line of geophysical investigation
- Geological profile



Bottom of Miocene limestone  
EL. 1200-1250m

SCALE 0 10km



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DEVELOPMENT PROJECT  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
第 8 図  
発電所周辺の地質調査  
位置図

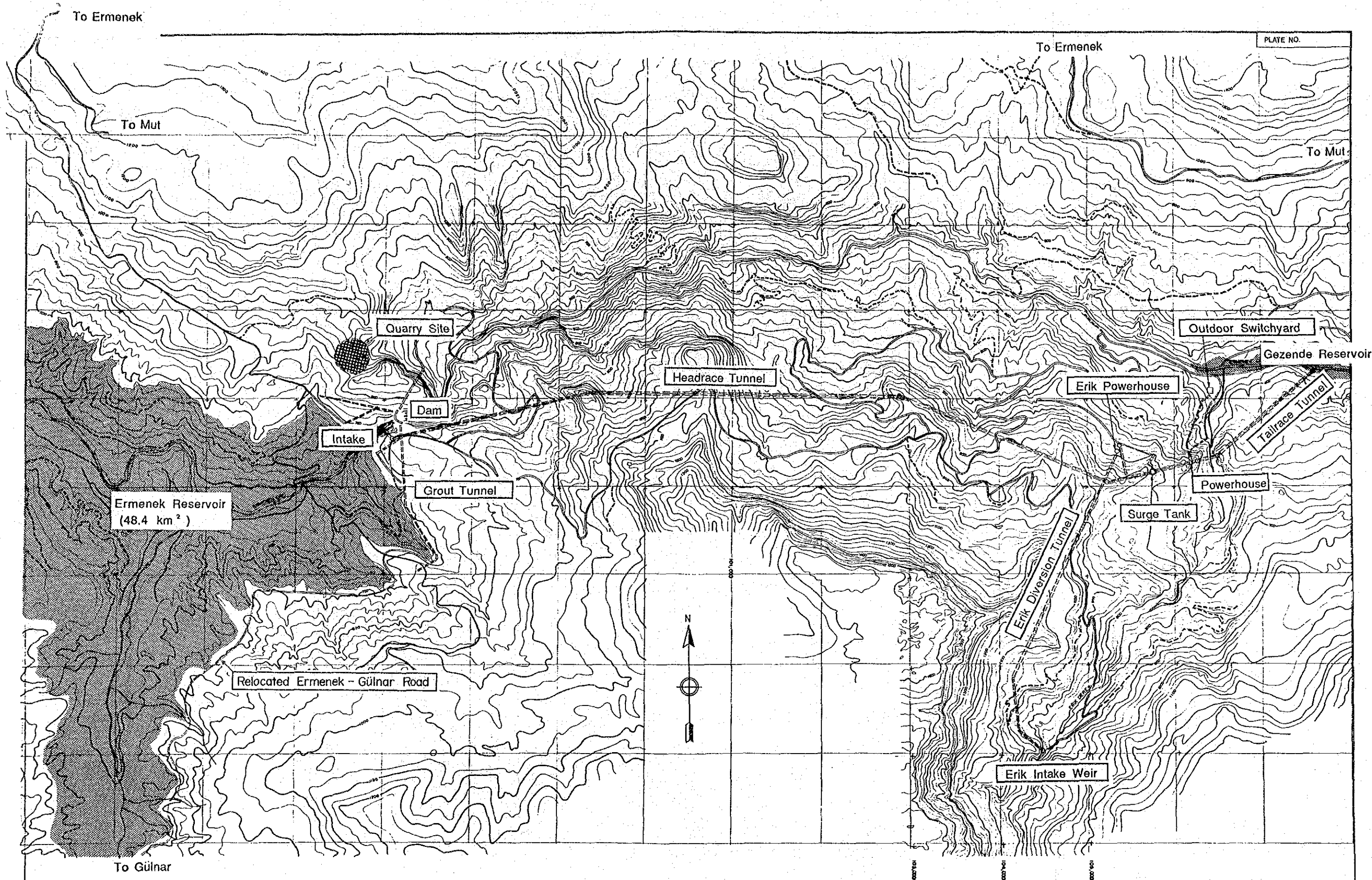

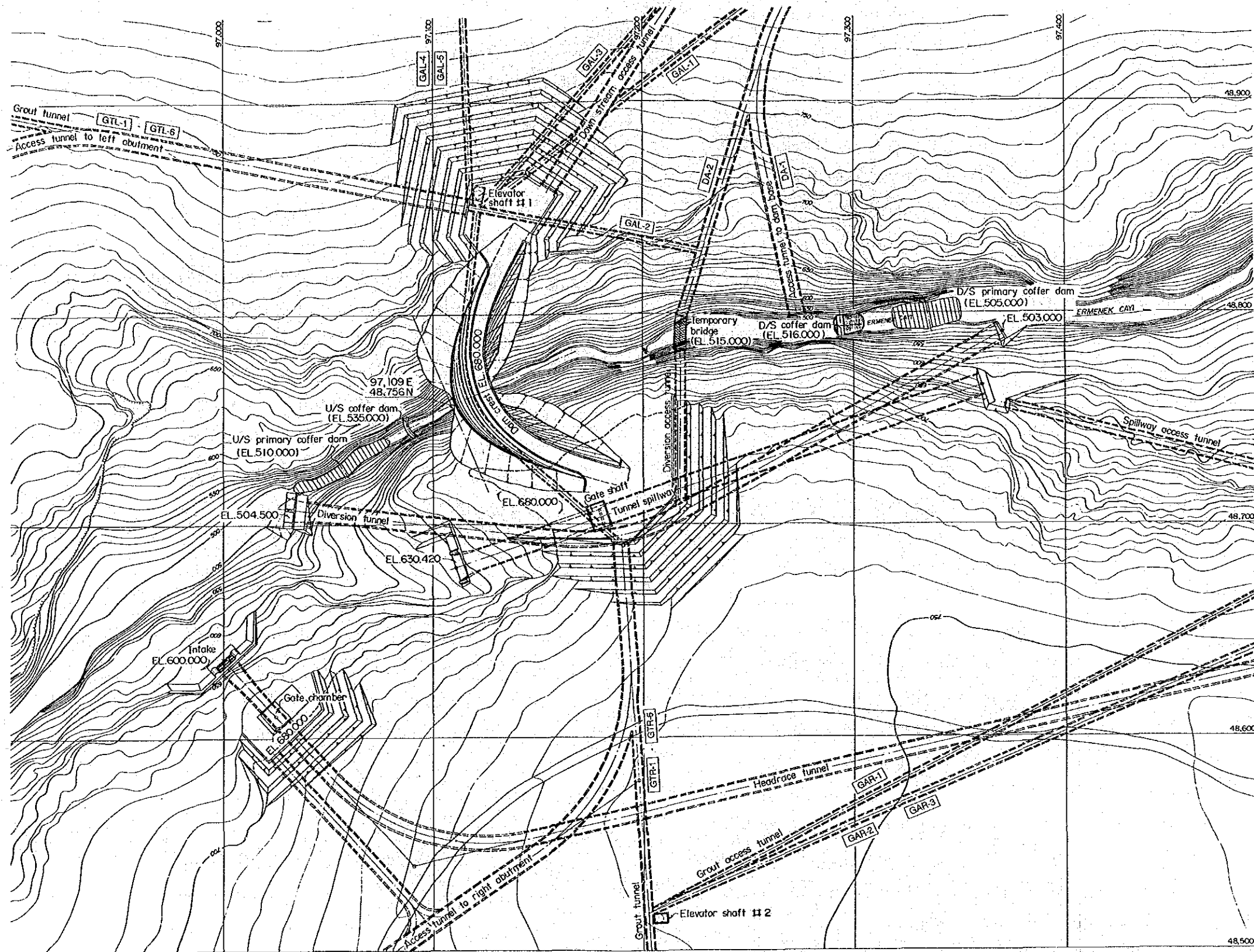


PLATE NO.


Ermenek Reservoir  
(48.4 km<sup>2</sup>)

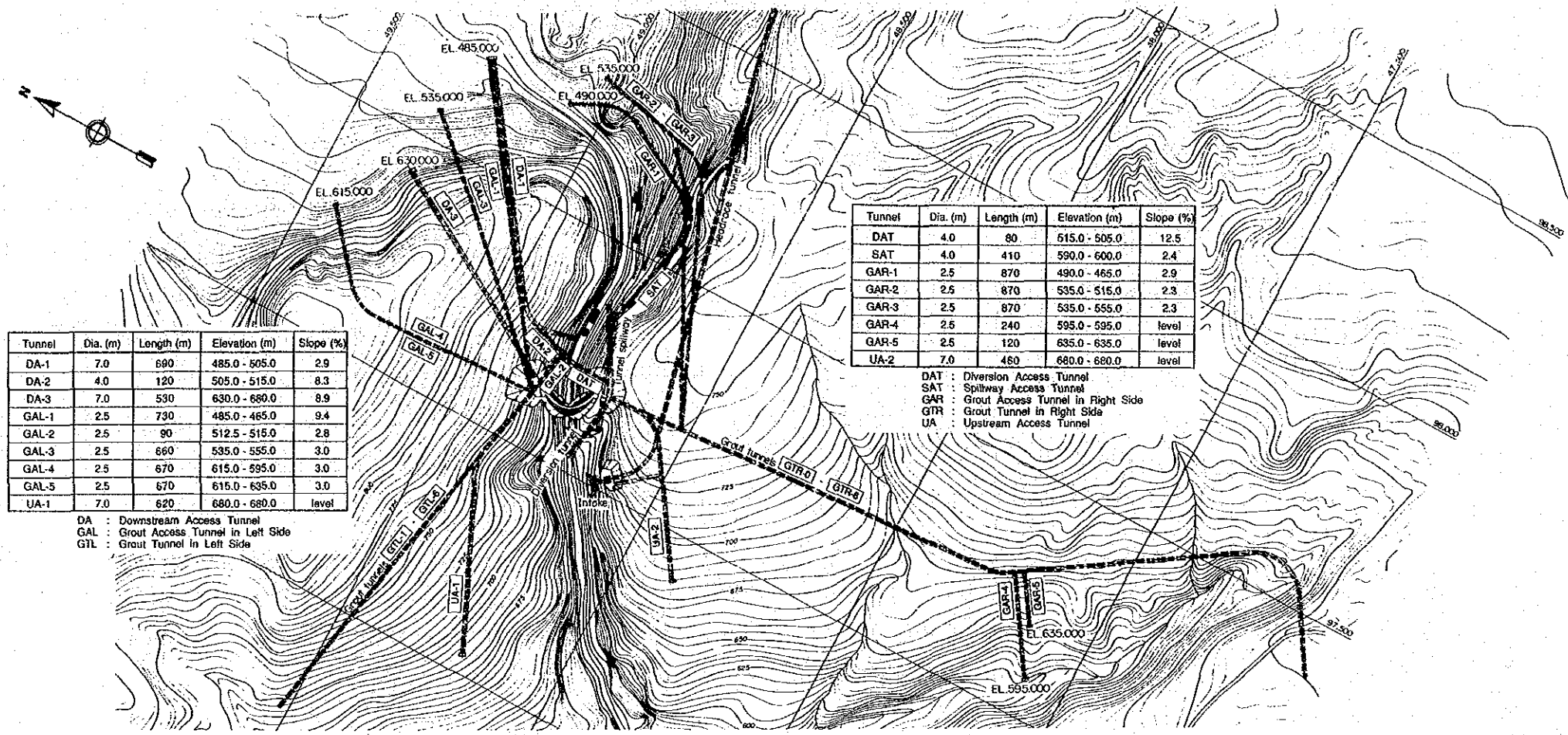
SCALE 0 1 2 km

	THE REPUBLIC OF TURKEY ELEKTRİK İŞLERİ ETÜD İDARESİ GENEL MÜDÜRLÜĞÜ	ERMENEK HYDROELECTRIC POWER DEVELOPMENT PROJECT	TITLE 第 9 図 エルマネック計画 一般配置図
		JAPAN INTERNATIONAL COOPERATION AGENCY	



SCALE 0 100m

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		JAPAN INTERNATIONAL COOPERATION AGENCY	



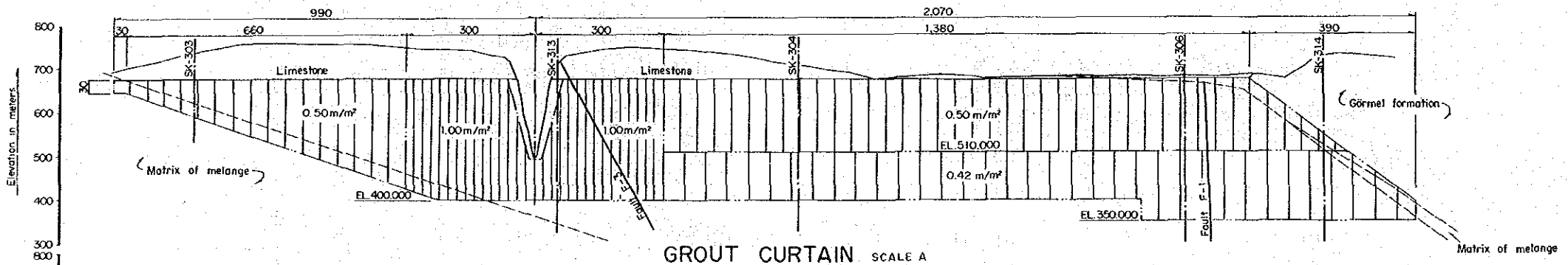
Tunnel	Dia. (m)	Length (m)	Elevation (m)	Slope (%)
DA-1	7.0	690	485.0 - 505.0	2.9
DA-2	4.0	120	505.0 - 515.0	8.3
DA-3	7.0	530	630.0 - 680.0	8.9
GAL-1	2.5	730	485.0 - 465.0	9.4
GAL-2	2.5	90	512.5 - 515.0	2.8
GAL-3	2.5	660	535.0 - 555.0	3.0
GAL-4	2.5	670	615.0 - 595.0	3.0
GAL-5	2.5	670	615.0 - 635.0	3.0
UA-1	7.0	620	680.0 - 680.0	level

DA : Downstream Access Tunnel  
 GAL : Grout Access Tunnel in Left Side  
 GTL : Grout Tunnel in Left Side

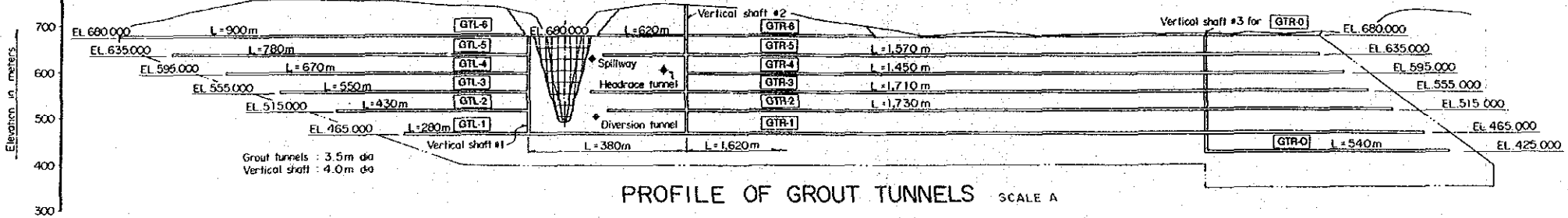
Tunnel	Dia. (m)	Length (m)	Elevation (m)	Slope (%)
DAT	4.0	80	515.0 - 505.0	12.5
SAT	4.0	410	590.0 - 600.0	2.4
GAR-1	2.5	870	490.0 - 465.0	2.9
GAR-2	2.5	870	535.0 - 515.0	2.3
GAR-3	2.5	870	535.0 - 555.0	2.3
GAR-4	2.5	240	595.0 - 595.0	level
GAR-5	2.5	120	635.0 - 635.0	level
UA-2	7.0	480	680.0 - 680.0	level

DAT : Diversion Access Tunnel  
 SAT : Spillway Access Tunnel  
 GAR : Grout Access Tunnel in Right Side  
 GTR : Grout Tunnel in Right Side  
 UA : Upstream Access Tunnel

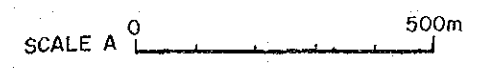
PLAN SCALE A




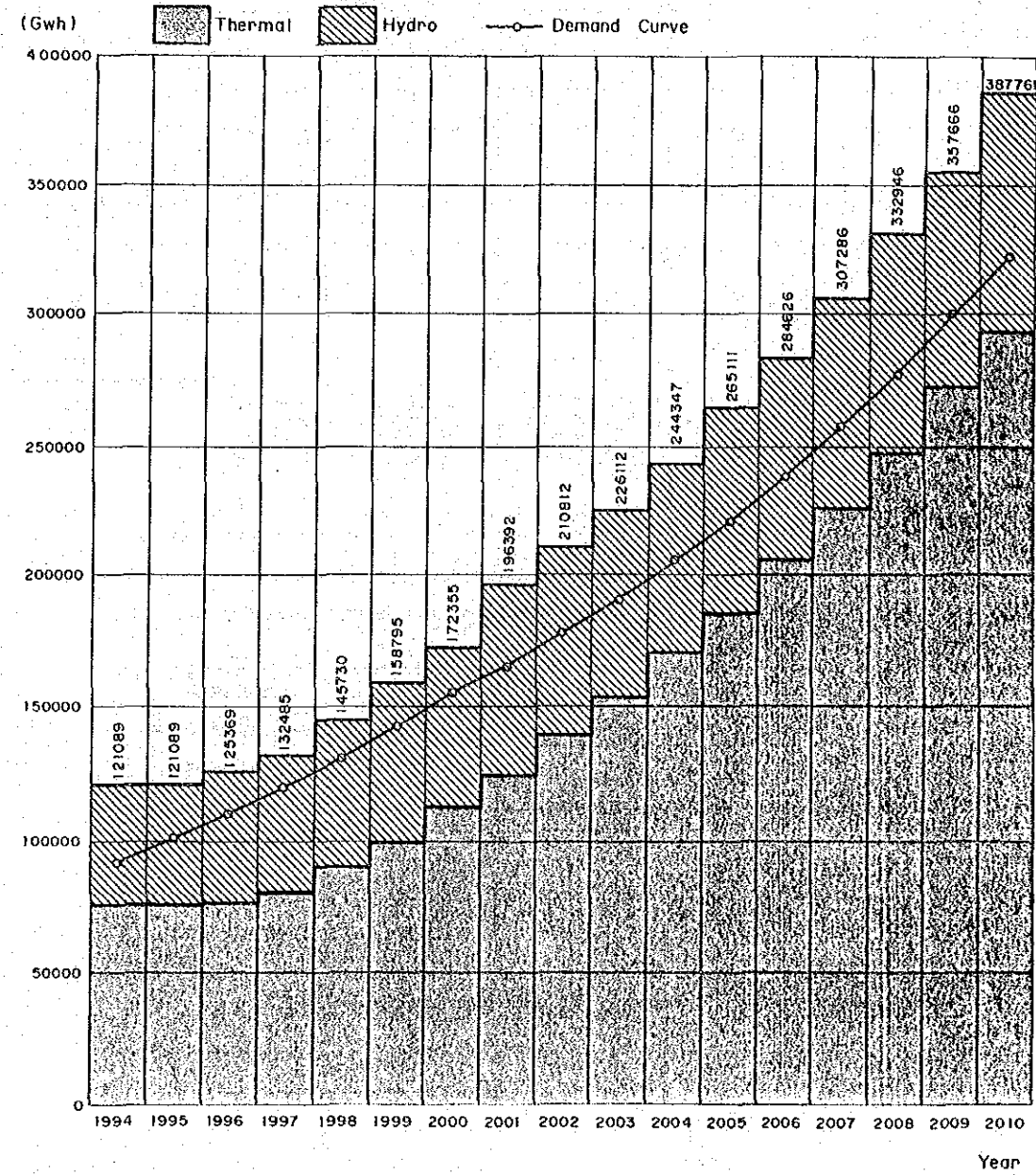
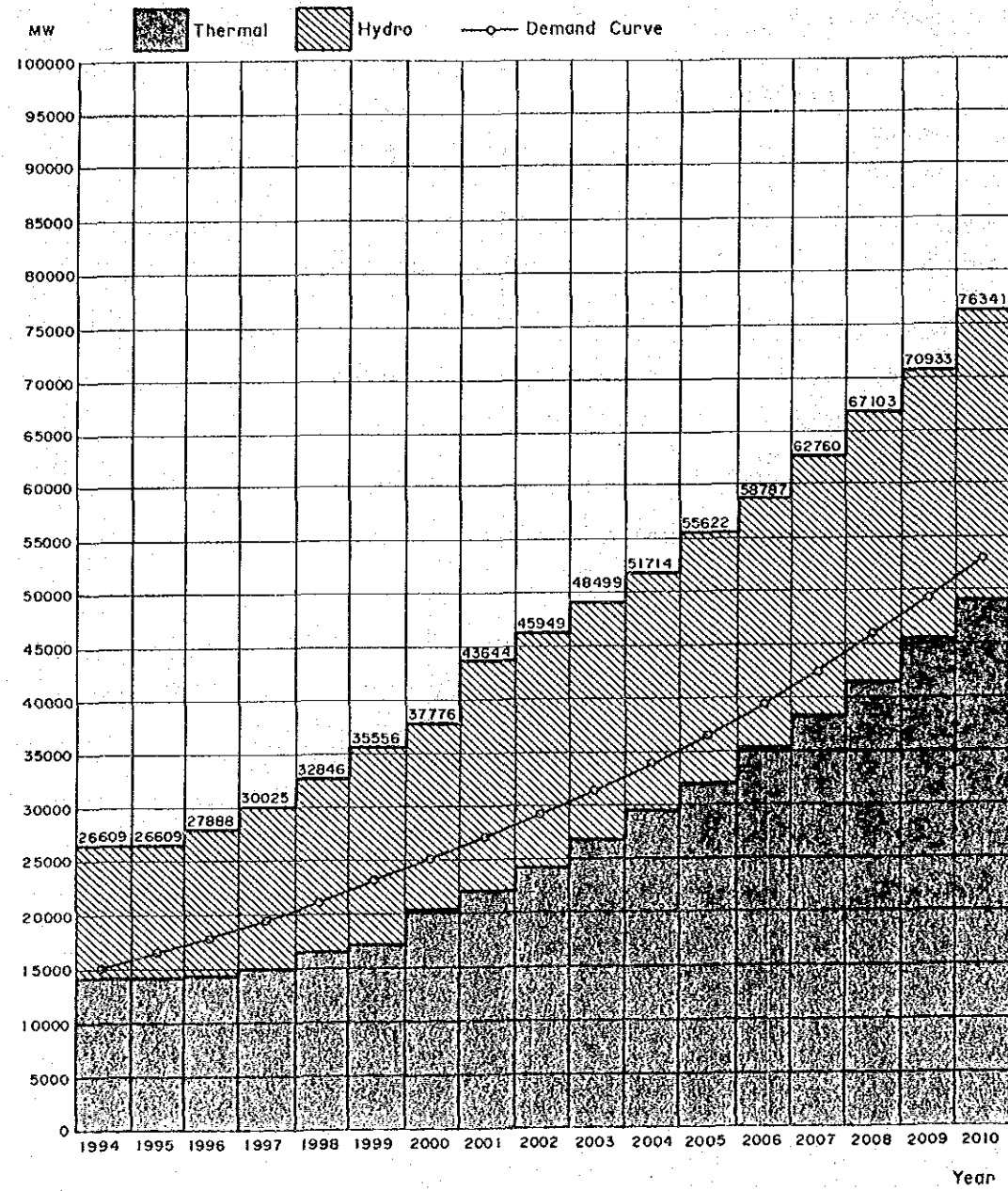
GROUT CURTAIN SCALE A



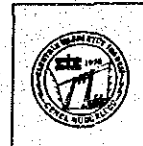
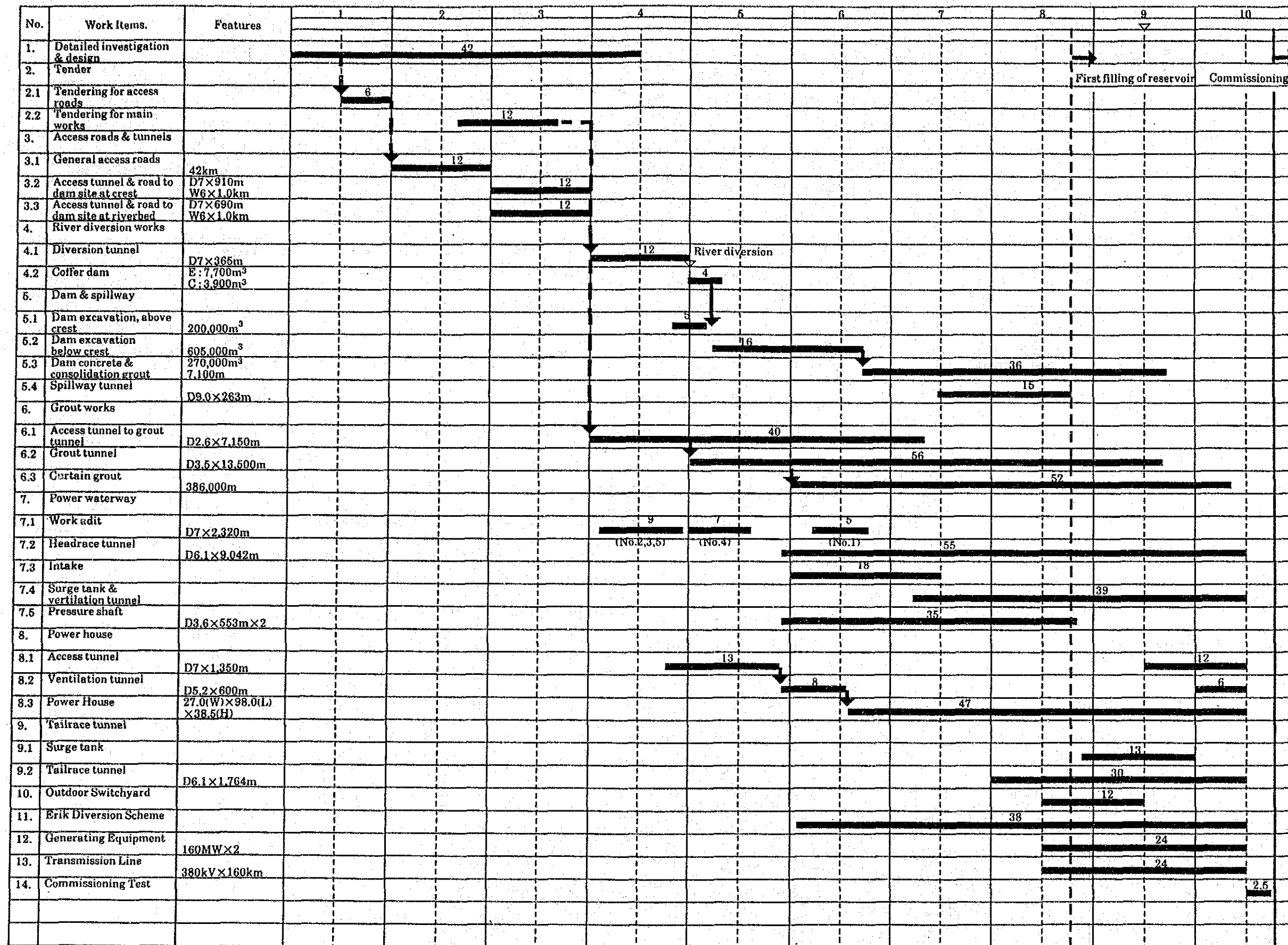
PROFILE OF GROUT TUNNELS SCALE A



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		JAPAN INTERNATIONAL COOPERATION AGENCY	第11図 グラウトカーテン計画図



(1994-2010, TEK's Low Scenario with BOT)



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ERMENEK HYDROELECTRIC POWER  
DEVELOPMENT PROJECT  
JAPAN INTERNATIONAL COOPERATION AGENCY

TITLE  
第13図  
建設工程







明水