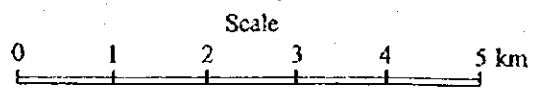
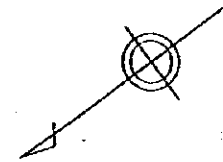


Legend

(X) Existing Road Br.

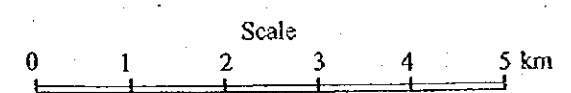
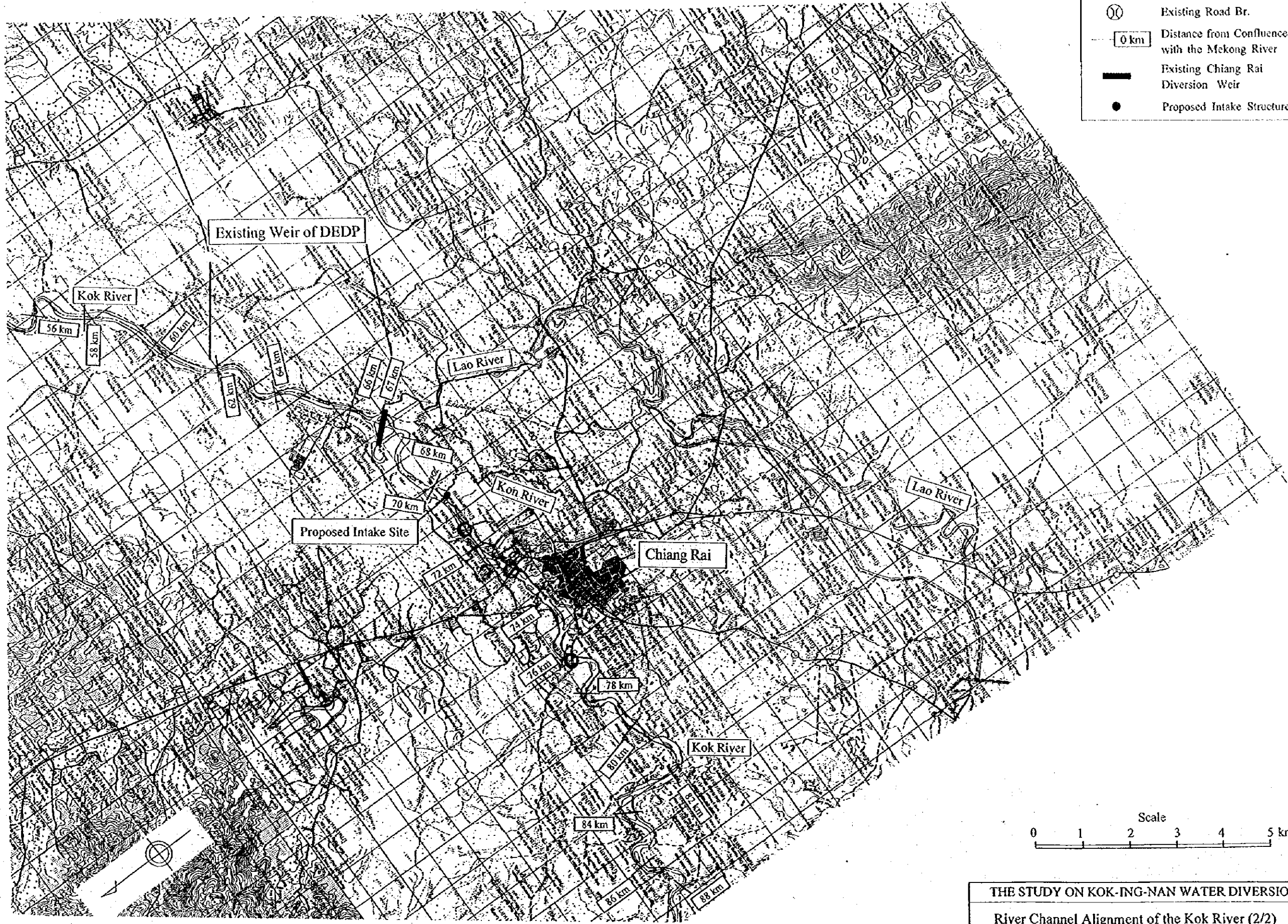
— 0 km Distance from Confluence with the Mekong River



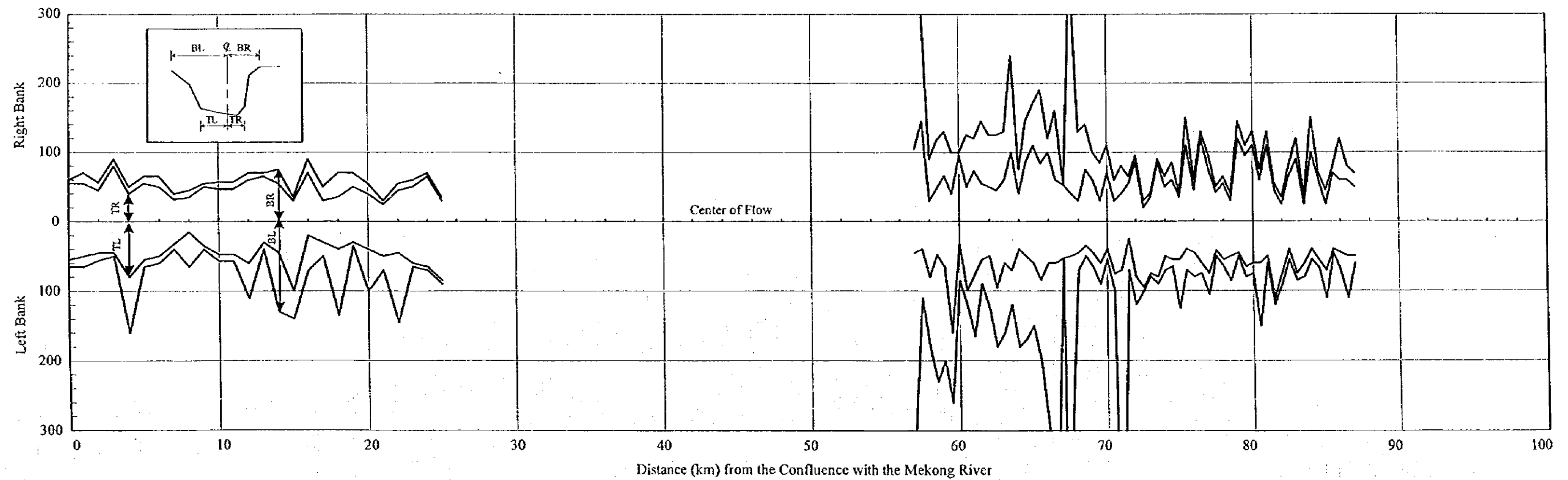
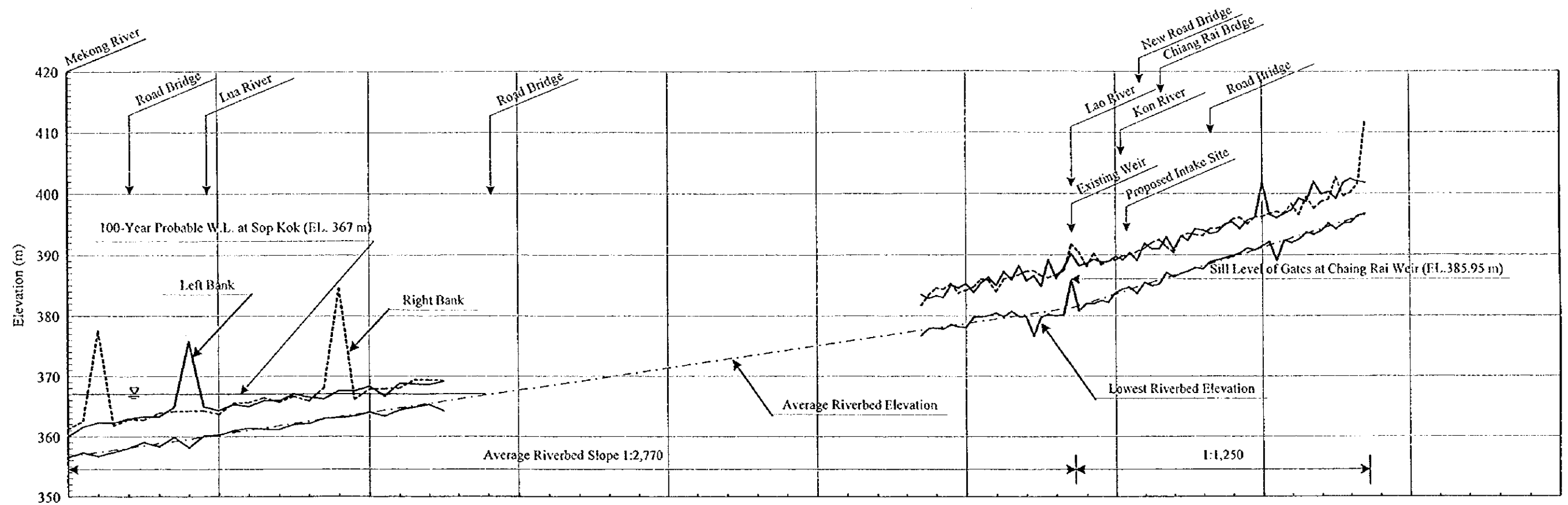
THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Kok River (1/2)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-1

Legend

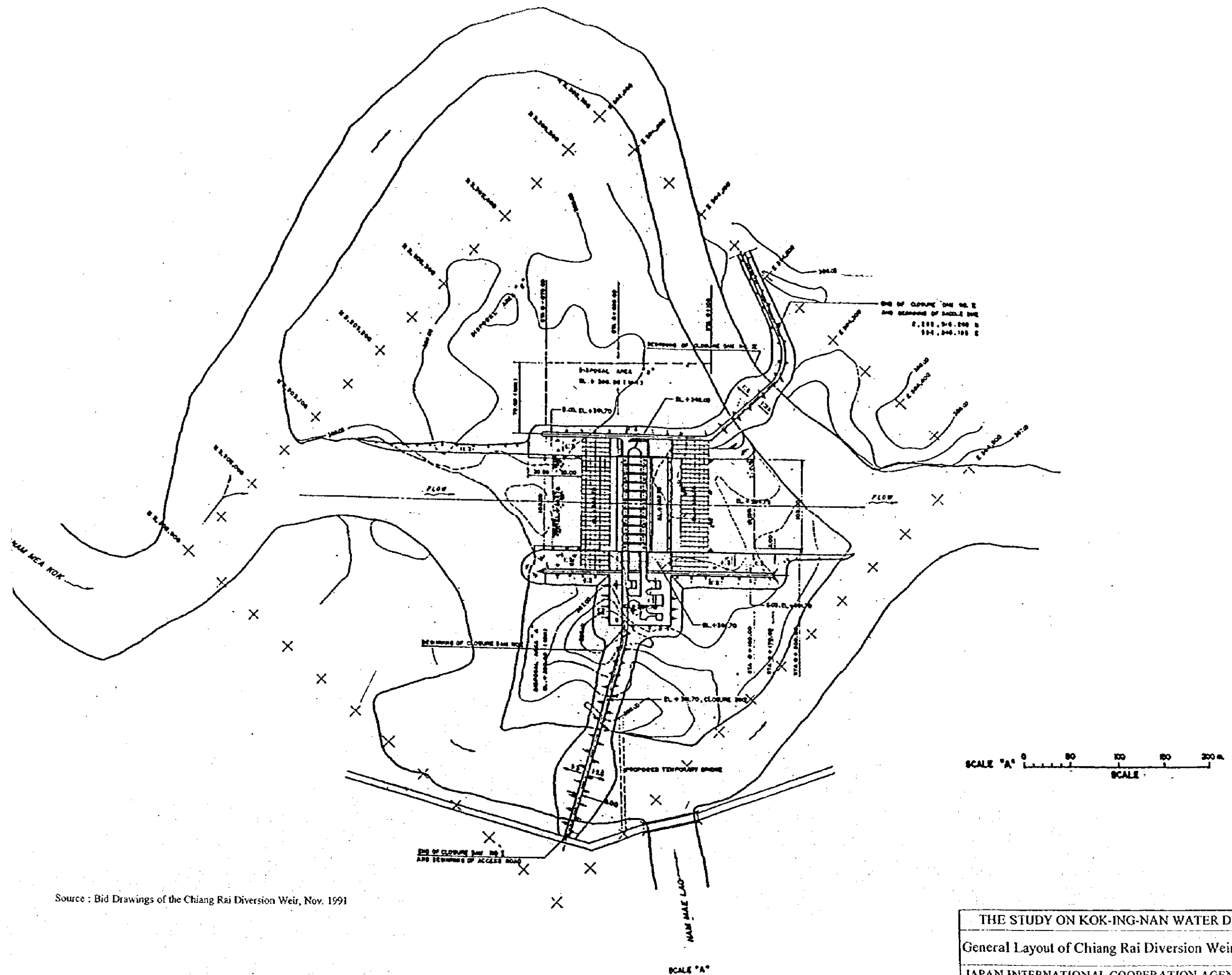
- ⊙ Existing Road Br.
- 0 km Distance from Confluence with the Mekong River
- Existing Chiang Rai Diversion Weir
- Proposed Intake Structure Site



THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Kok River (2/2)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-2

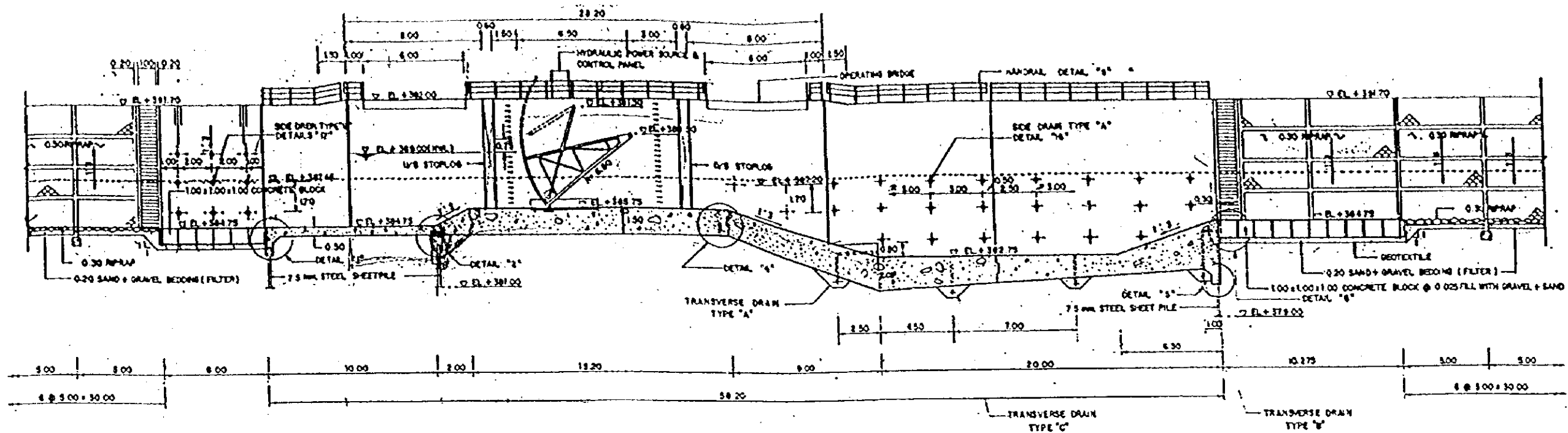


THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Characteristics of the Kok River	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-3

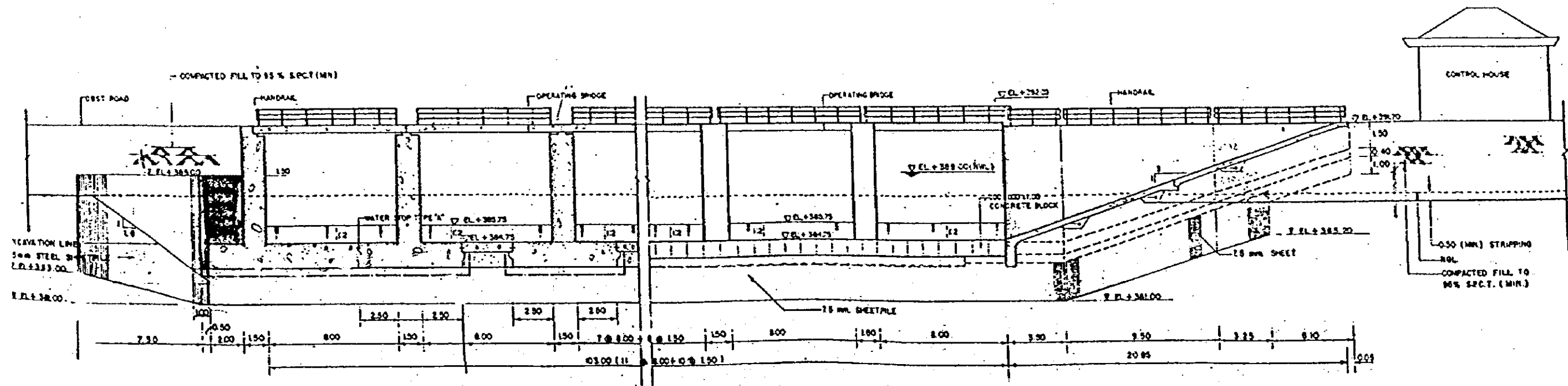


Source : Bid Drawings of the Chiang Rai Diversion Weir, Nov. 1991

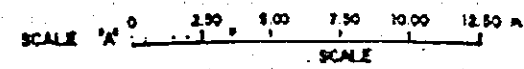
THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
General Layout of Chiang Rai Diversion Weir of DEDP	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-4



SECTION A-A
SCALE "A"



SECTION B-B
SCALE "A"



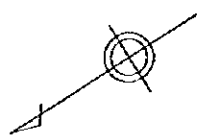
Source : Bid Drawings of the Chiang Rai Diversion Weir, Nov. 1991

THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
Profile of Chiang Rai Diversion Weir of DEDP	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-5

Legend

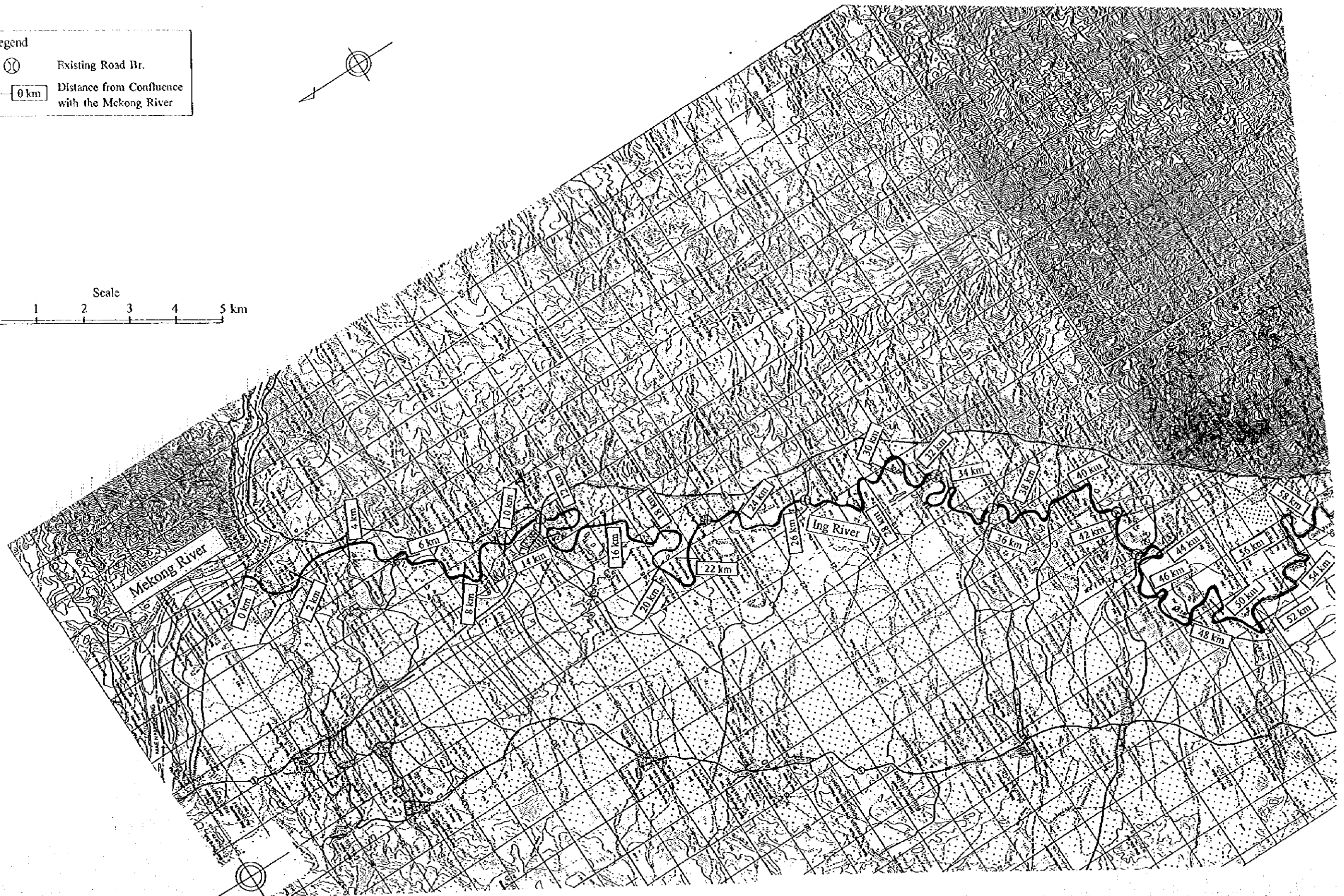
⊗ Existing Road Br.

— 0 km Distance from Confluence with the Mekong River

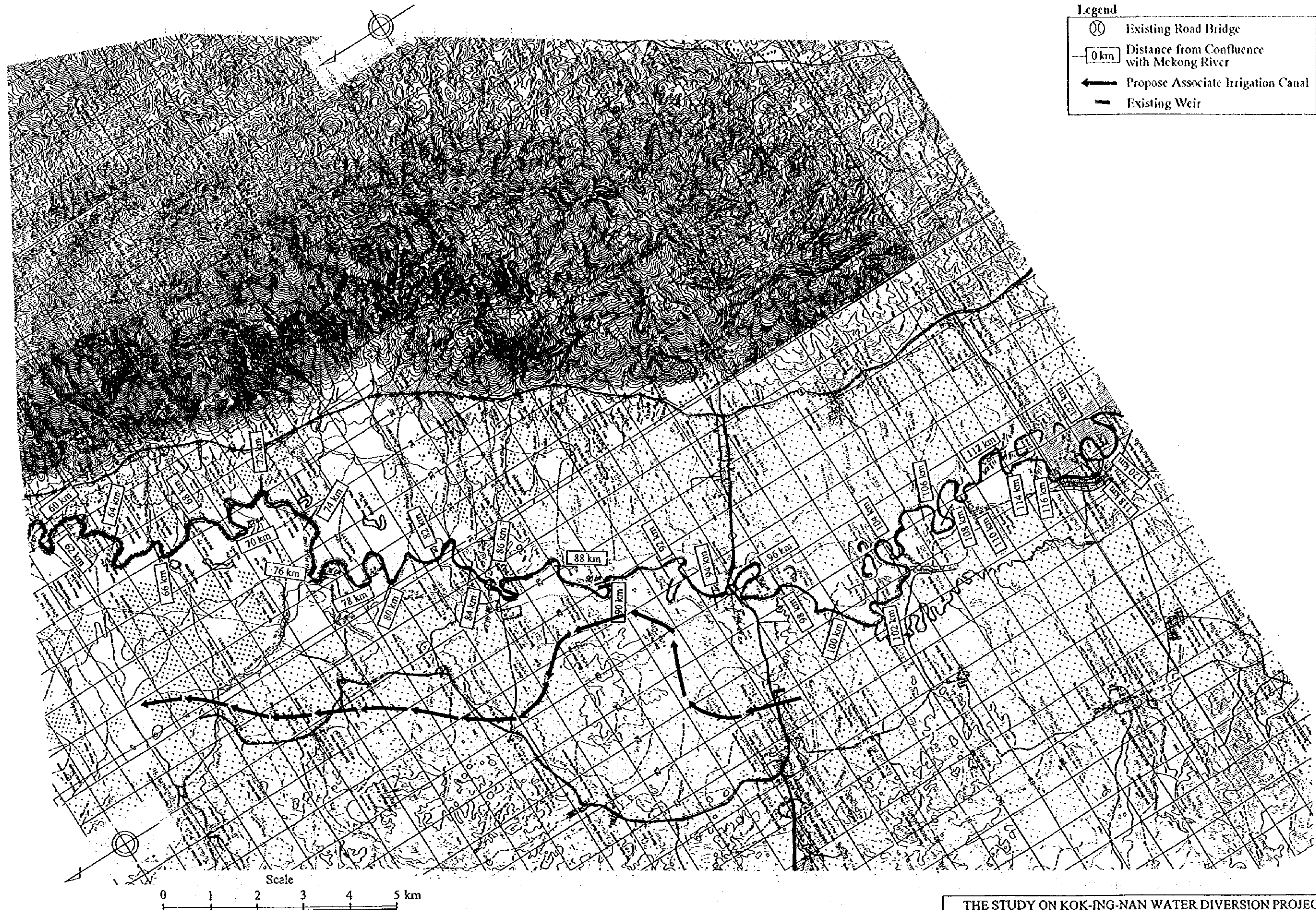


Scale

0 1 2 3 4 5 km

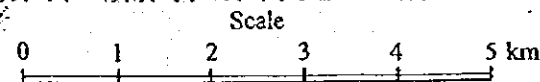


THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Ing River (1/3)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-6




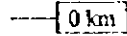

Legend

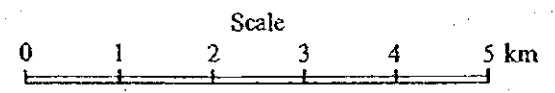
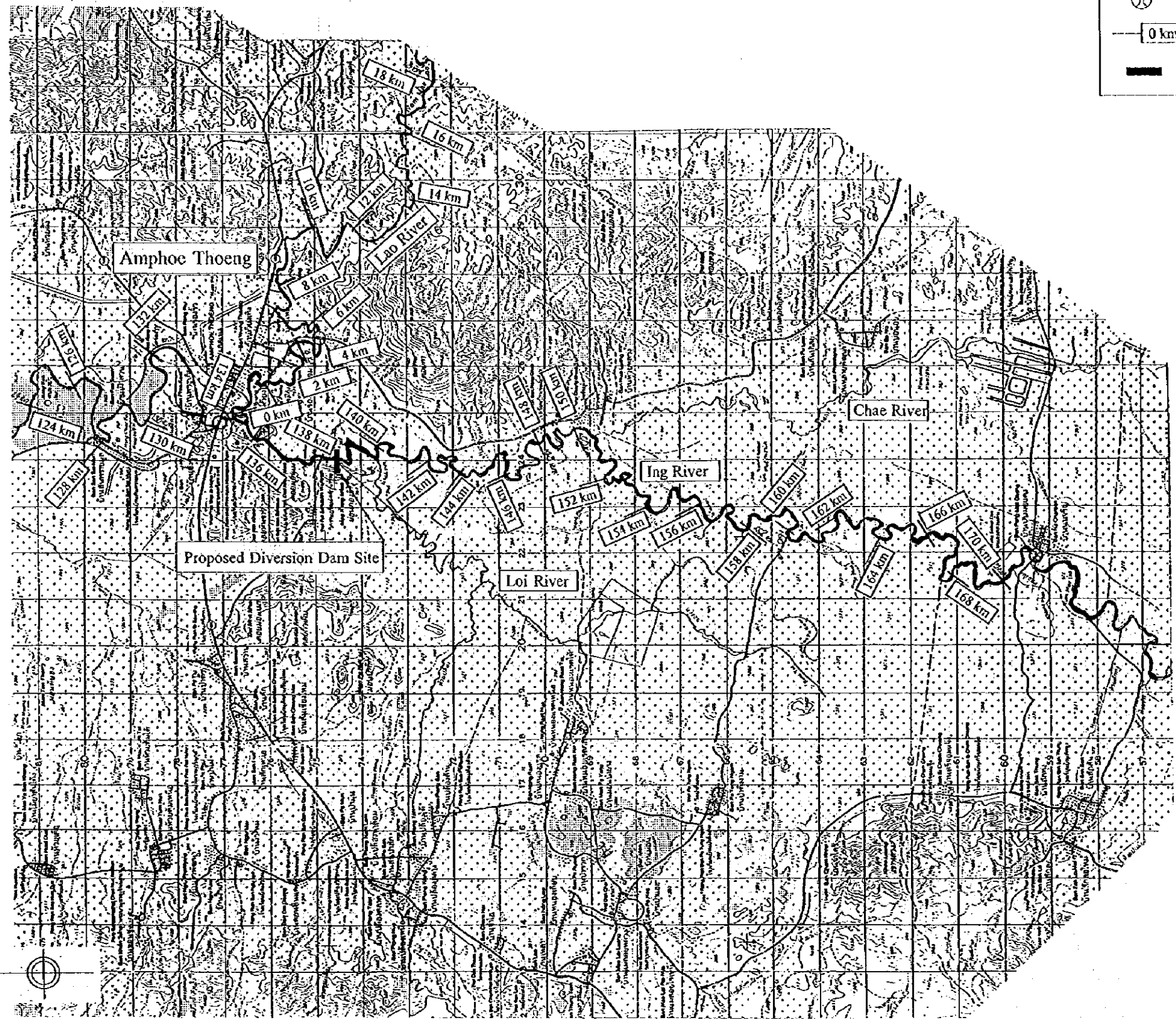
- ⊙ Existing Road Bridge
- 0 km Distance from Confluence with Mekong River
- ← Propose Associate Irrigation Canal
- Existing Weir



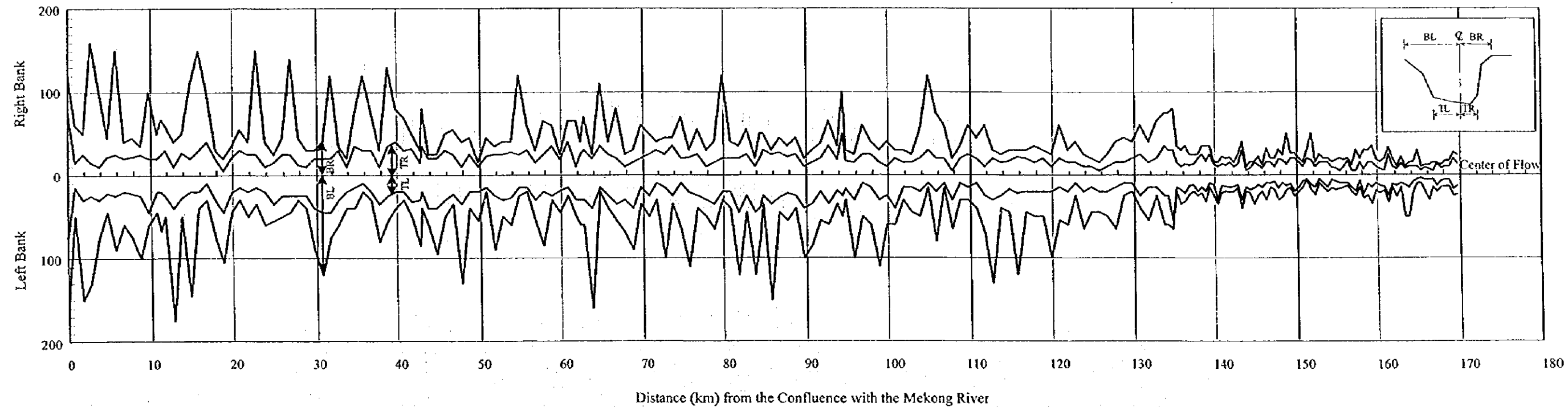
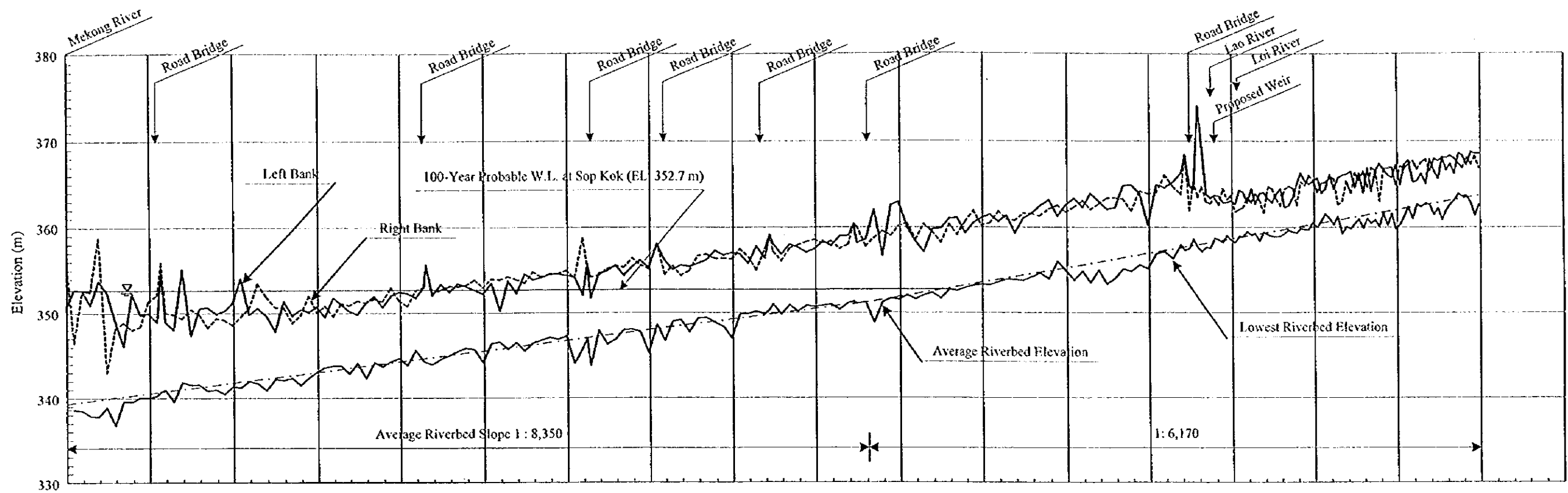
THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Ing River (2/3)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-7

Legend

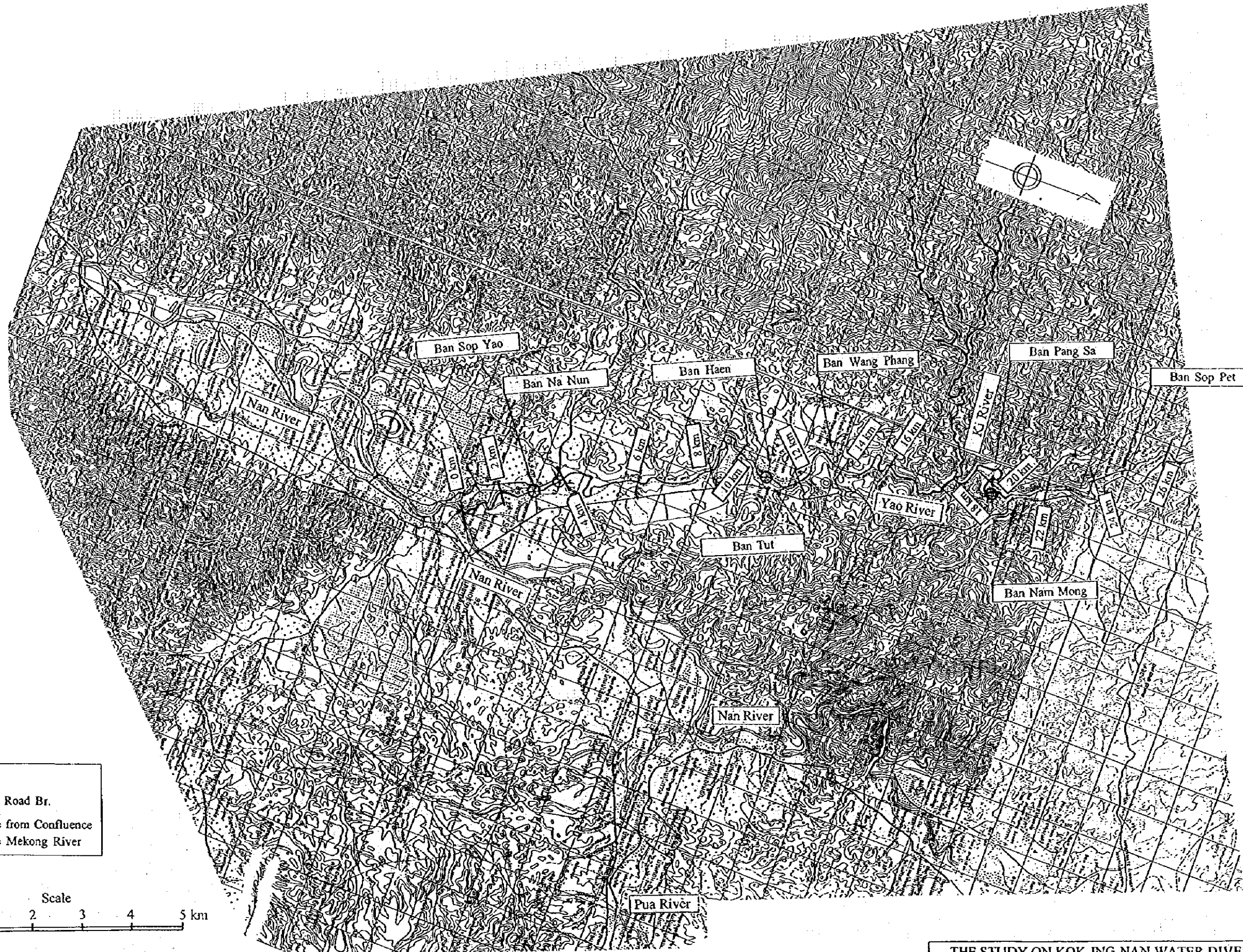
-  Existing Road Br.
-  Distance from Confluence with the Mekong River
-  Proposed Ing Diversion Dam



THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Ing River (3/3)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-8



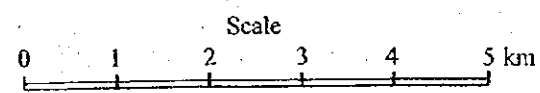
THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Characteristics of the Ing River	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-9



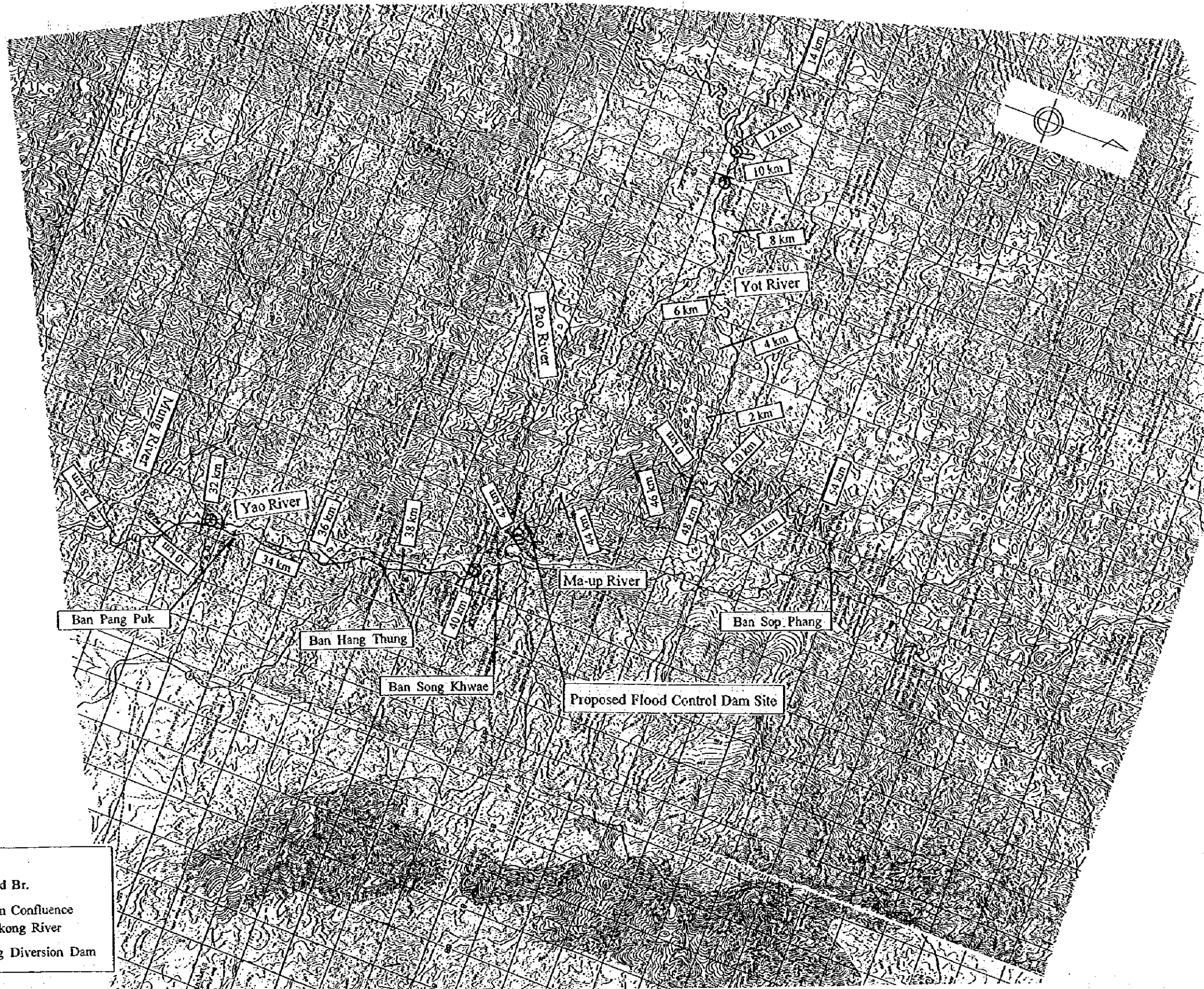
Legend

⊕ Existing Road Br.

— 0 km Distance from Confluence with the Mekong River



THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Alignment of the Yao River (1/2)	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-10



Legend

Existing Road Br.

Distance from Confluence with the Mekong River

Proposed In-g Diversion Dam

Scale

0 1 2 3 4 5 km

THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT

River Channel Alignment of the Yao River (2/2)

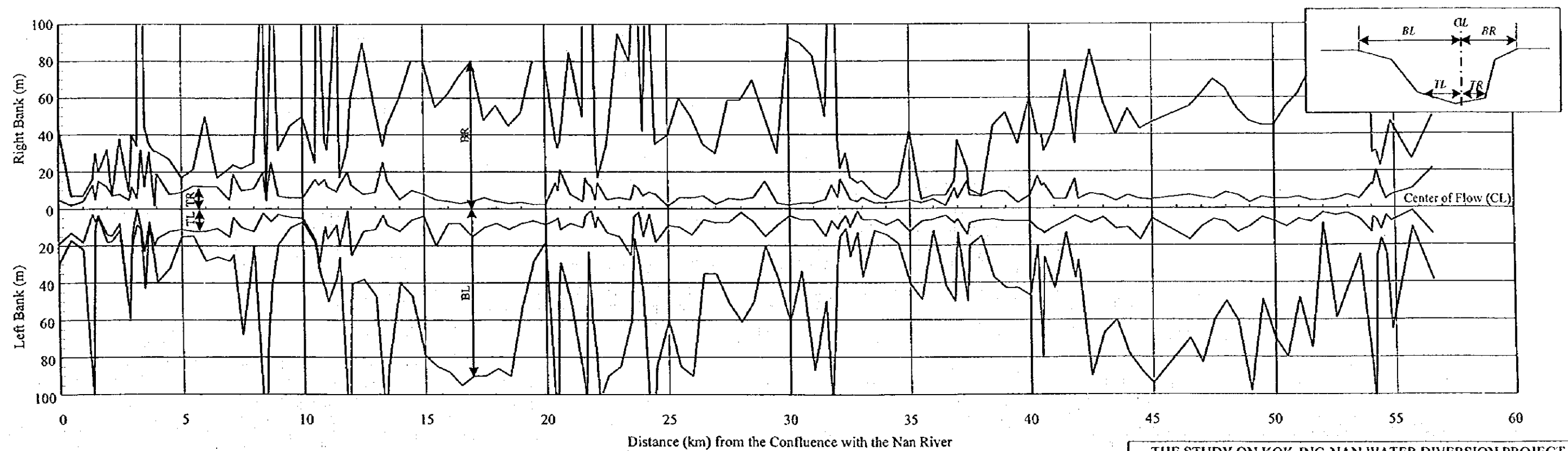
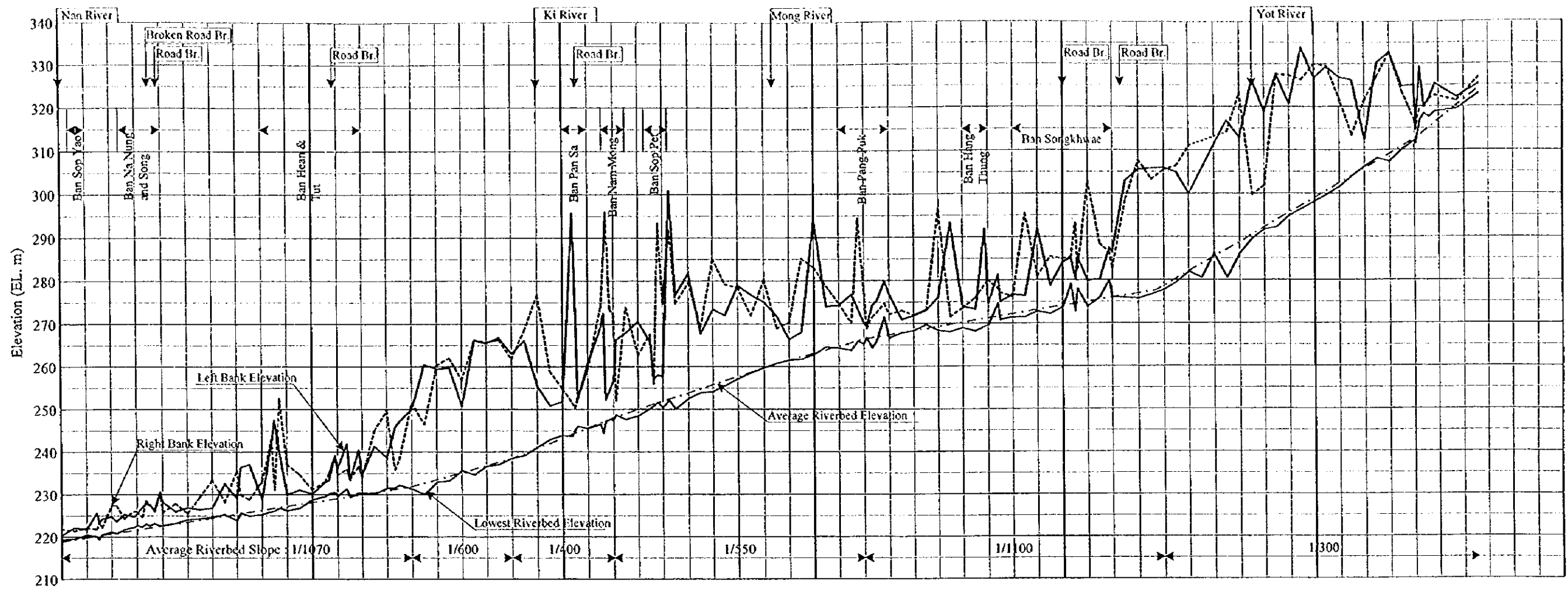
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.

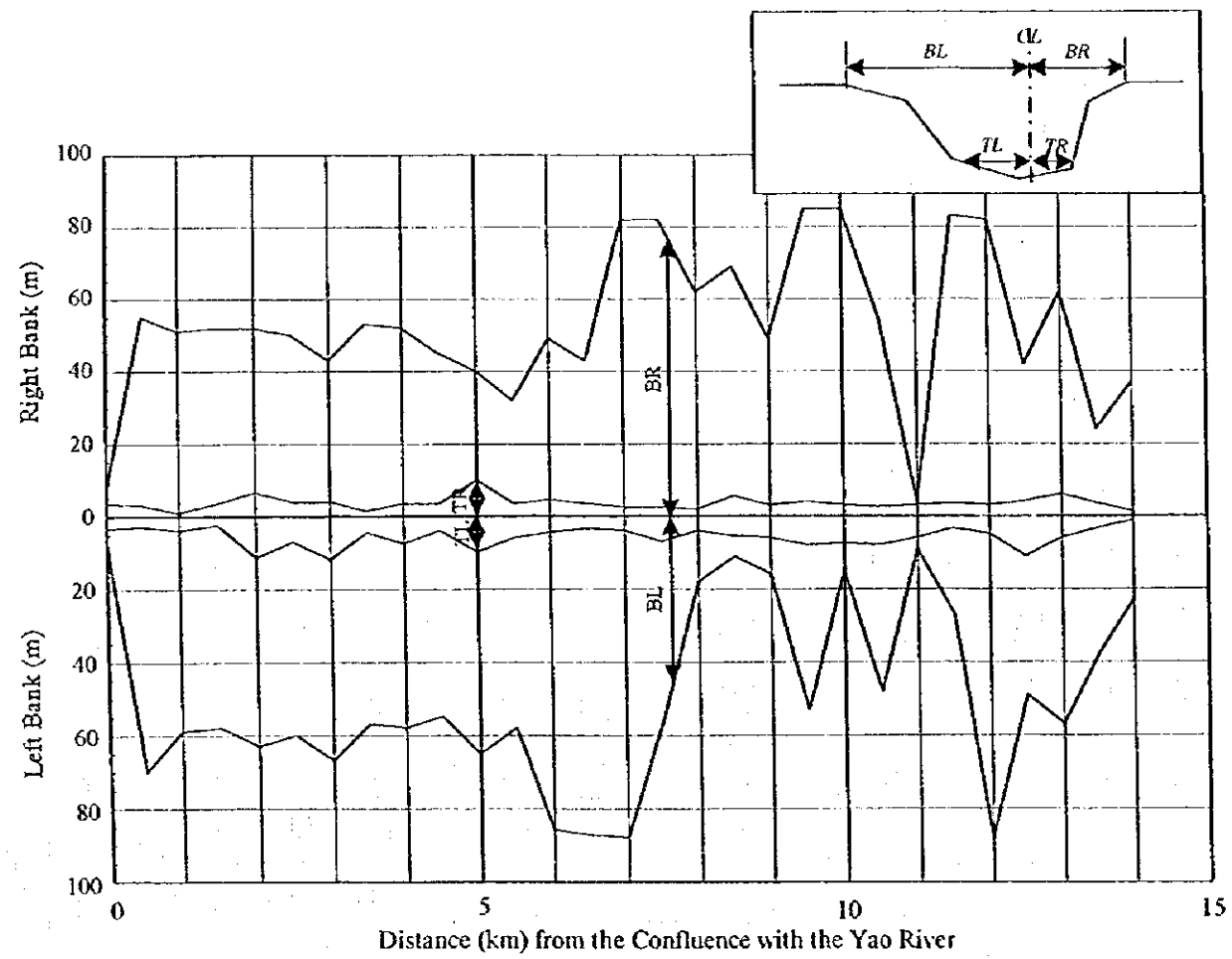
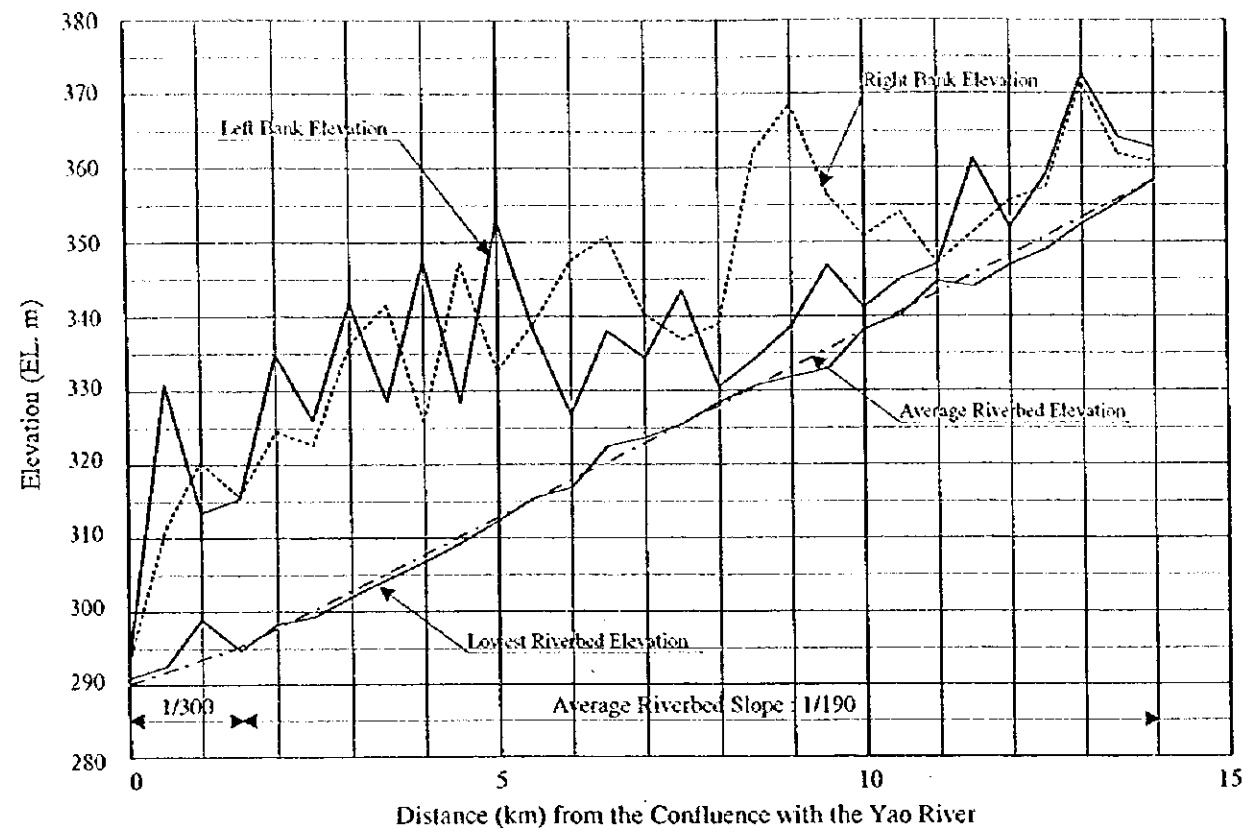
MAP & Drawings No.

Figure

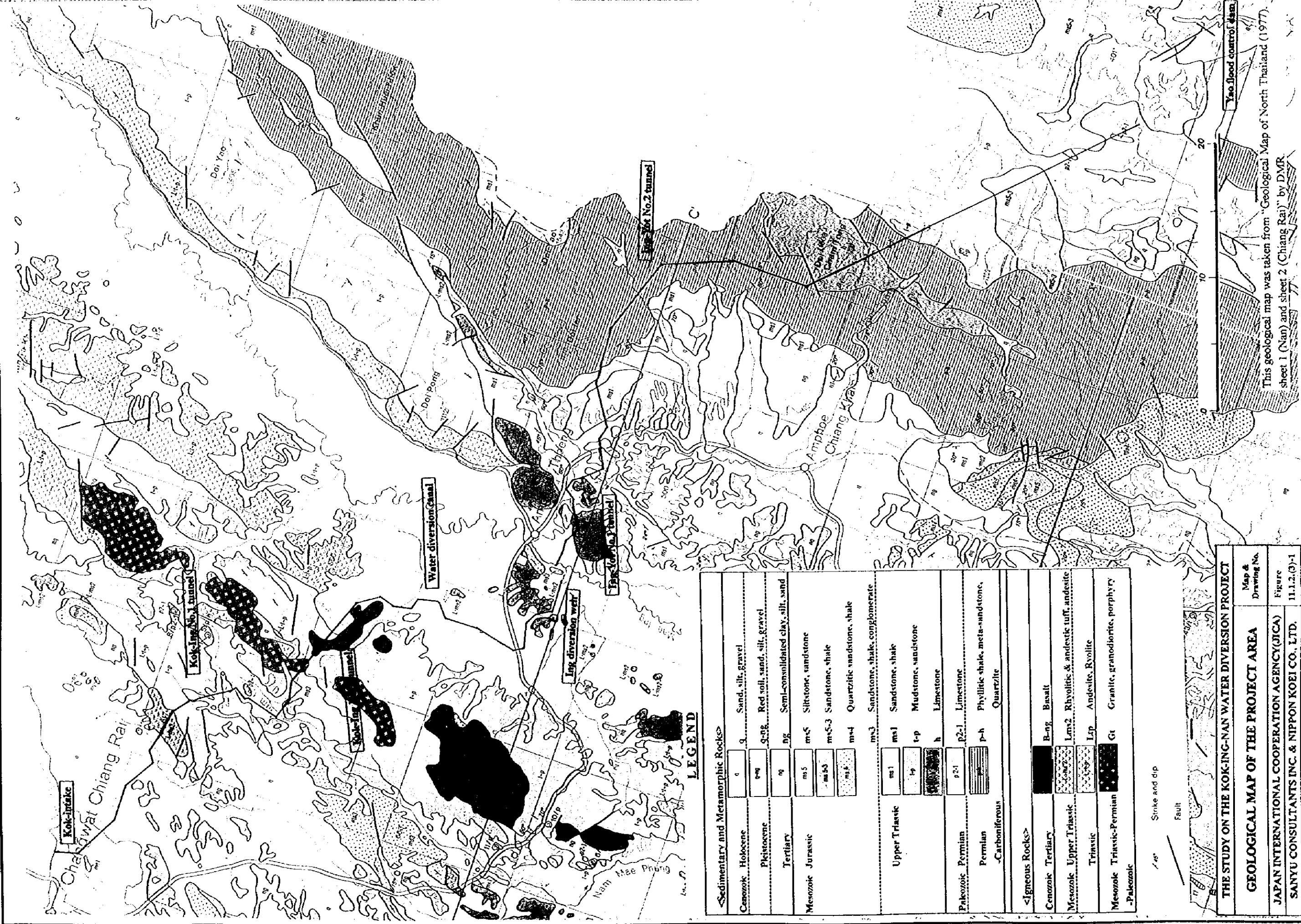
11.1.2 (2)-11



THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Characteristics of the Yao River	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-12



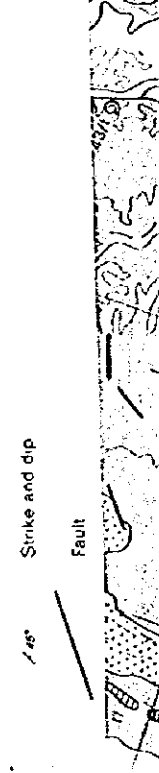
THE STUDY ON KOK-ING-NAN WATER DIVERSION PROJECT	
River Channel Characteristics of the Yot River	MAP & Drawings No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	11.1.2 (2)-13



This geological map was taken from "Geological Map of North Thailand (1977), sheet 1 (Nan) and sheet 2 (Chiang Rai)" by DMR

LEGEND

Sedimentary and Metamorphic Rocks	
Cenozoic	Holocene
q	Sand, silt, gravel
qng	Red soil, sand, silt, gravel
Pleistocene	
ng	Semi-consolidated clay, silt, sand
Tertiary	
m5	Siltstone, sandstone
m5.3	Sandstone, shale
m5.4	Quartzitic sandstone, shale
Mesozoic	
m3	Sandstone, shale, conglomerate
Upper Triassic	
m1	Sandstone, shale
t-p	Mudstone, sandstone
h	Limestone
Paleozoic	
p2-1	Limestone
p-h	Phyllitic shale, meta-sandstone, Quartzite
Carboniferous	
Igneous Rocks	
Cenozoic	
Tertiary	
B-ng	Basalt
Mesozoic	
Upper Triassic	
Lms2	Rhyolitic & andesitic tuff, andesite
Triassic	
Lp	Andesite, Rhyolite
Mesozoic	
Triassic-Permian	
Gt	Granitic, granodiorite, porphyry
Paleozoic	



THE STUDY ON THE KOK-ING-NAN WATER DIVERSION PROJECT

GEOLOGICAL MAP OF THE PROJECT AREA	Map & Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	Figure
SANYU CONSULTANTS INC. & NIPPON KOEI CO., LTD.	II.1.2.(3)-1

Kokintake

Kok-Ing No.1 tunnel

Kok-Ing No.2 tunnel

Water diversion canal

Ing diversion weir













Ing-Yot No.1 tunnel

Ing-Yot No.2 tunnel






Yao Sued control dam

LEGEND

Sedimentary and Metamorphic Rocks

- Quaternary Holocene  Quaternary Holocene
- Pliocene  Pliocene
- Tertiary  Tertiary
- Miocene  Miocene
- Oligocene  Oligocene
- Eocene  Eocene
- Palaeocene  Palaeocene
- Palaeogene  Palaeogene
- Palaeozoic  Palaeozoic
- Triassic  Triassic
- Permian  Permian
- Carboniferous  Carboniferous

Igneous Rocks

- Granite  Granite
- Mylonite  Mylonite
- Diabase  Diabase
- Andesite  Andesite
- Basalt  Basalt

THE STUDY ON THE KOKING AN WATER DIVERSION PROJECT

GEOLOGICAL MAP OF THE PROJECT AREA

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

SANYI CONSULTANTS INC. A MEMBER OF SANGI