

## Figures

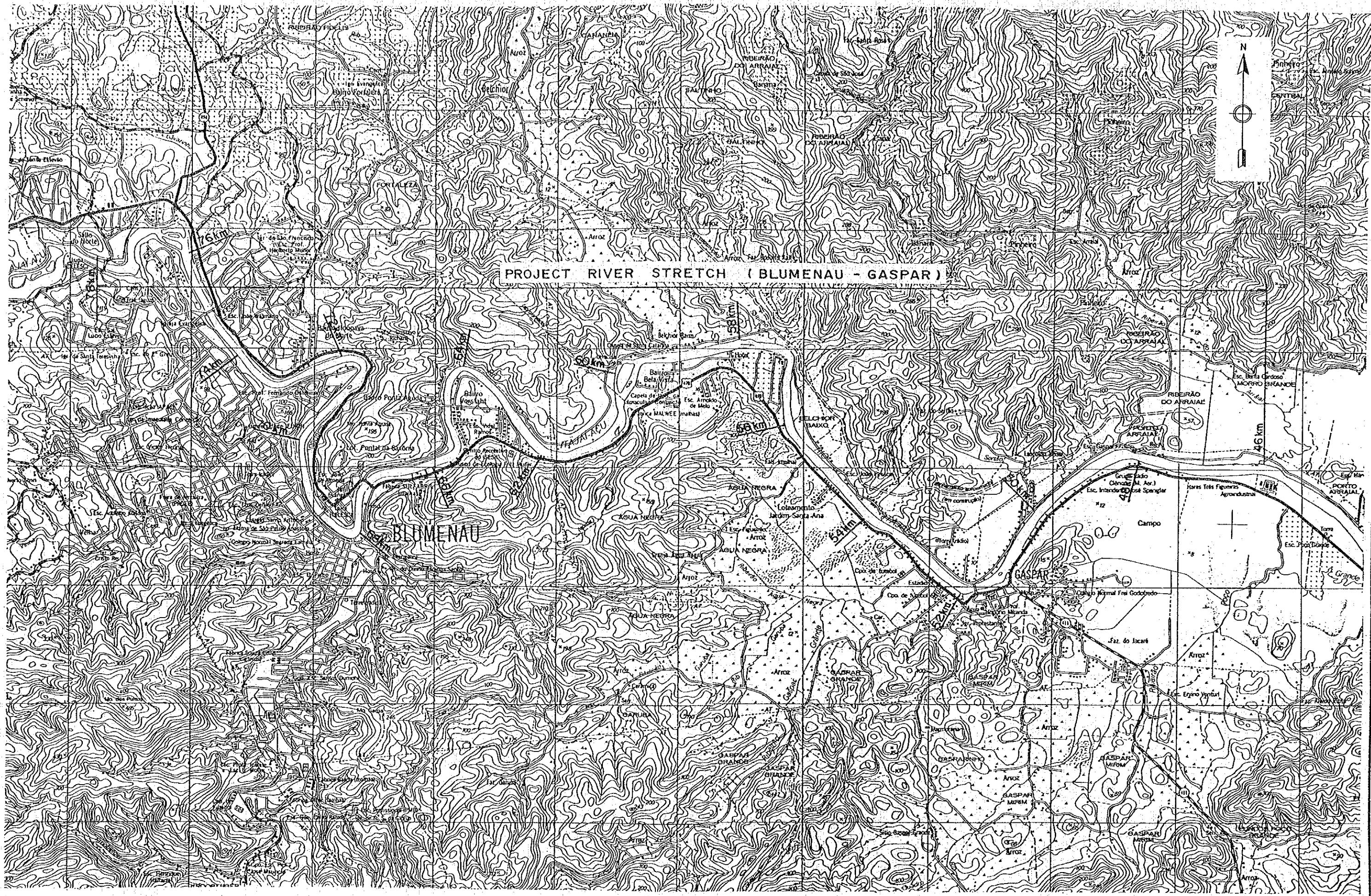


Fig. VII.1.1 GENERAL PLAN OF PROJECT RIVER STRETCH



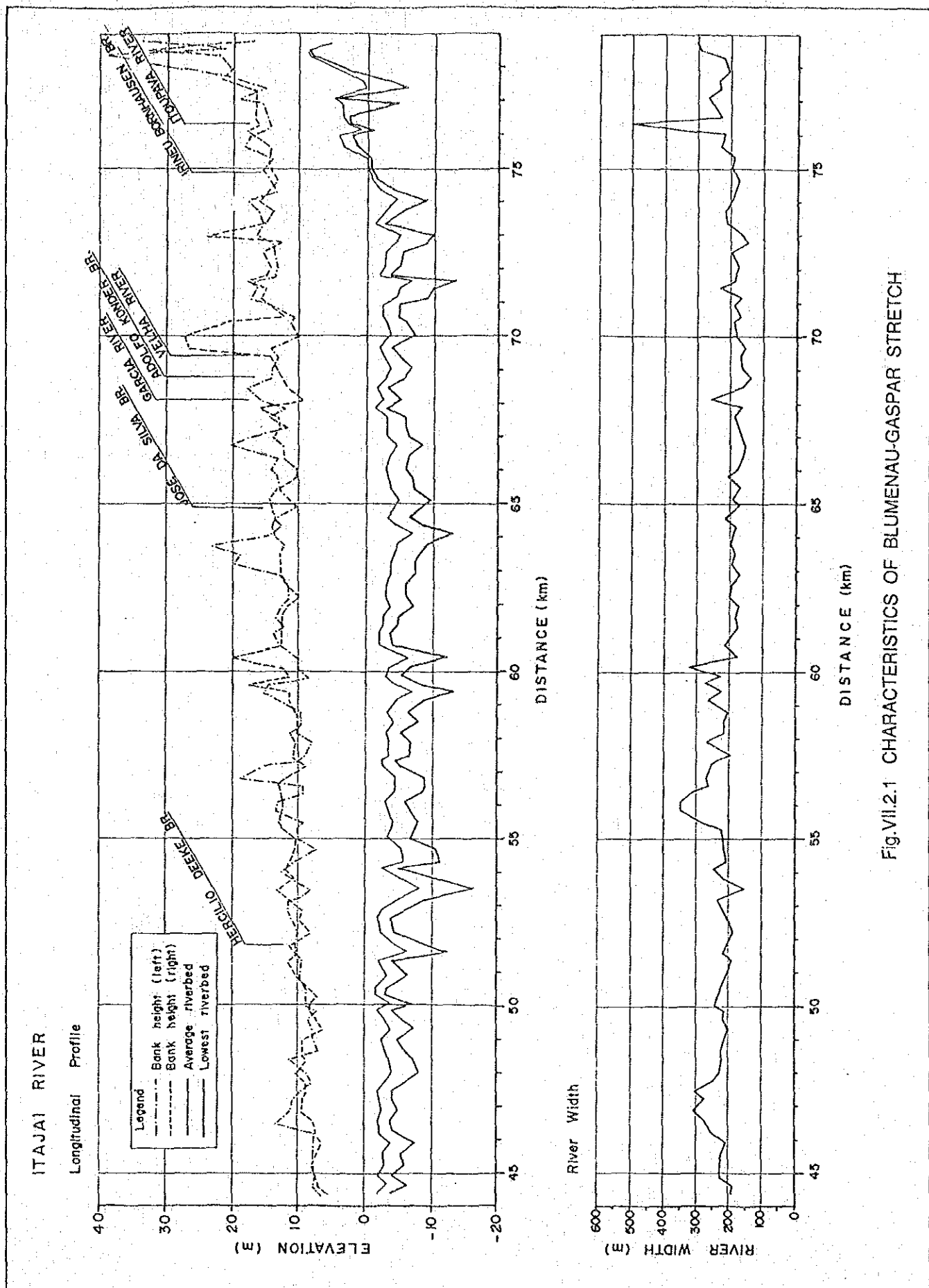


Fig.VII.2.1 CHARACTERISTICS OF BLUMENAU-GASPAR STRETCH



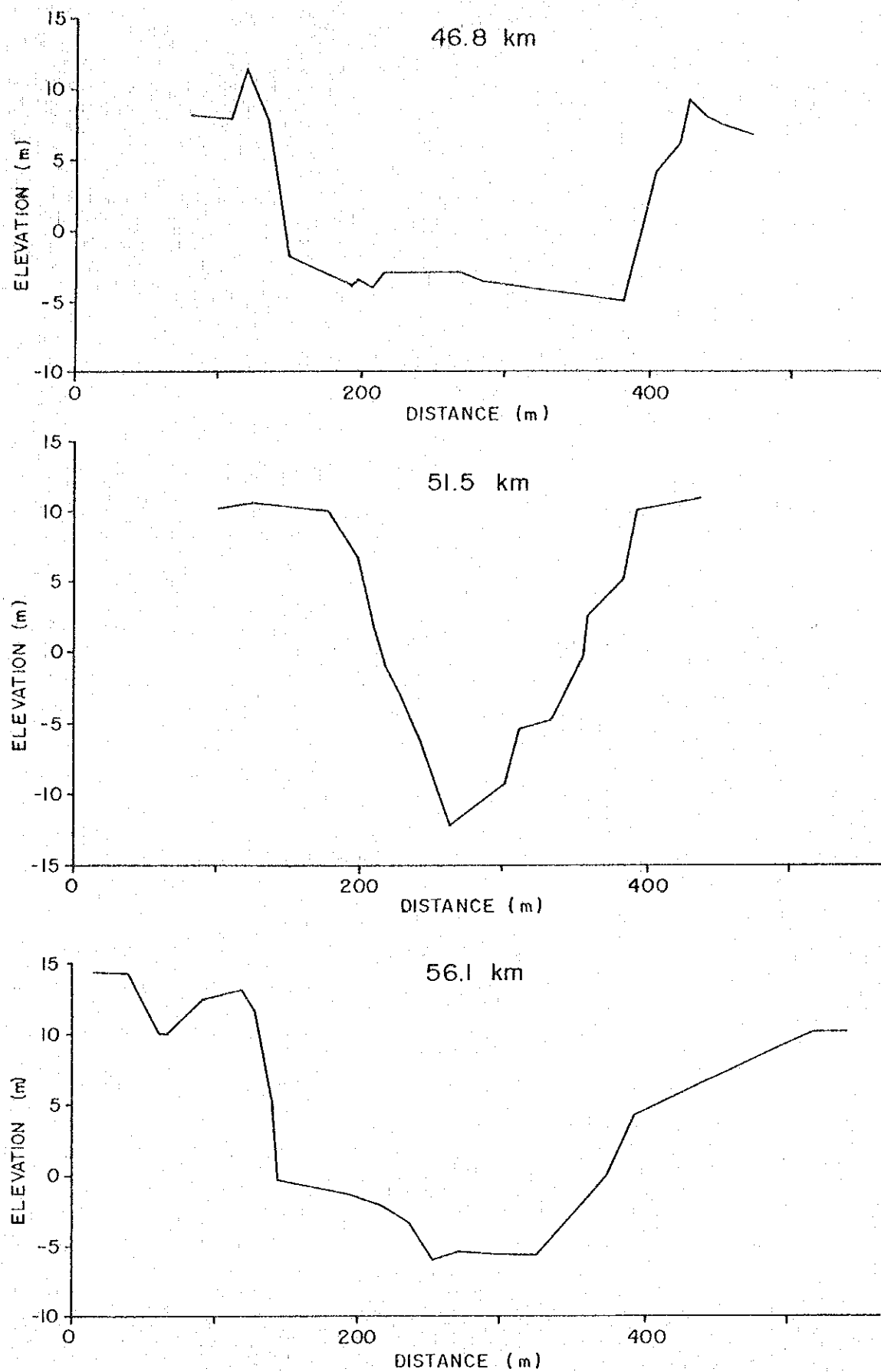


Fig. VII.2.2 TYPICAL CROSS SECTIONS OF EXISTING ITAJAI RIVER (1/3)



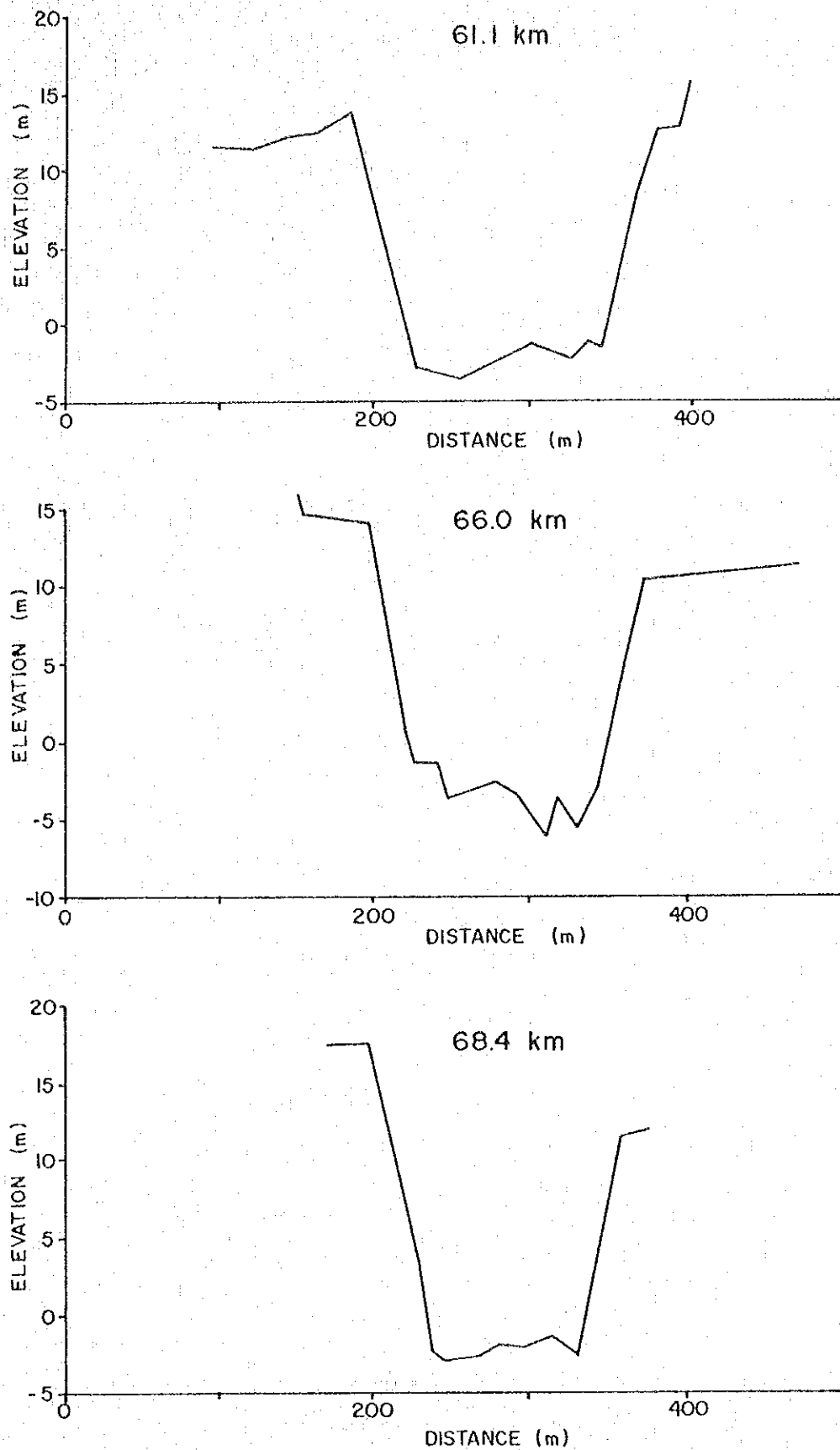


Fig. VII.2.2 TYPICAL CROSS SECTIONS OF EXISTING ITAJAI RIVER (2/3)





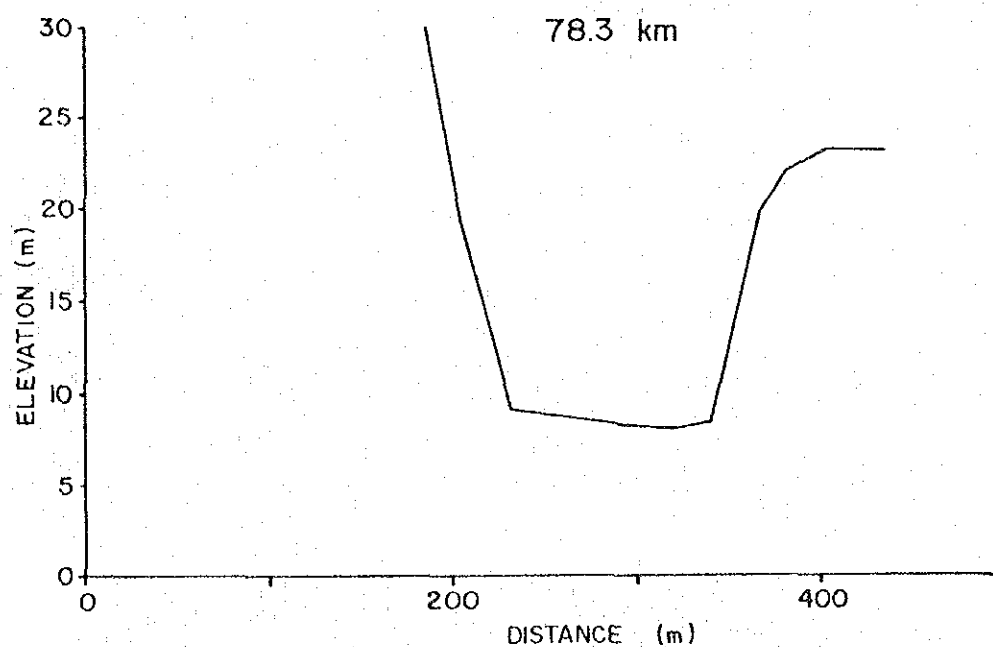
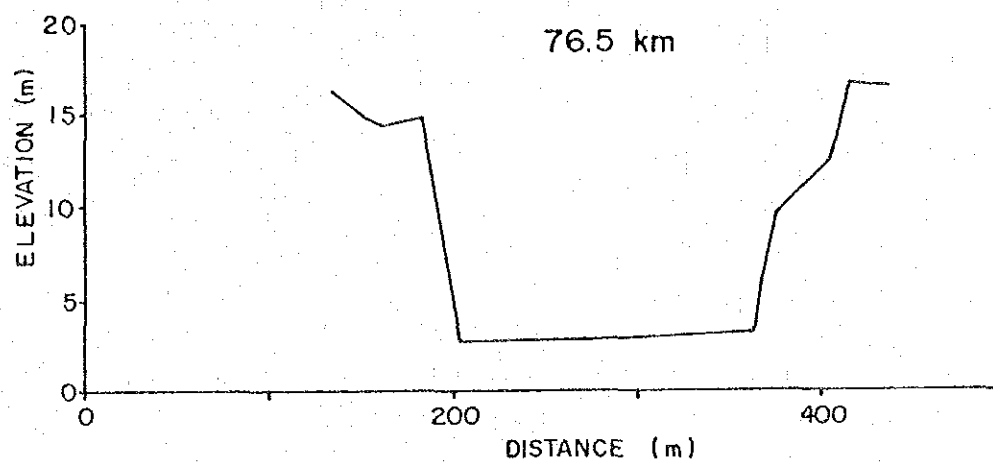
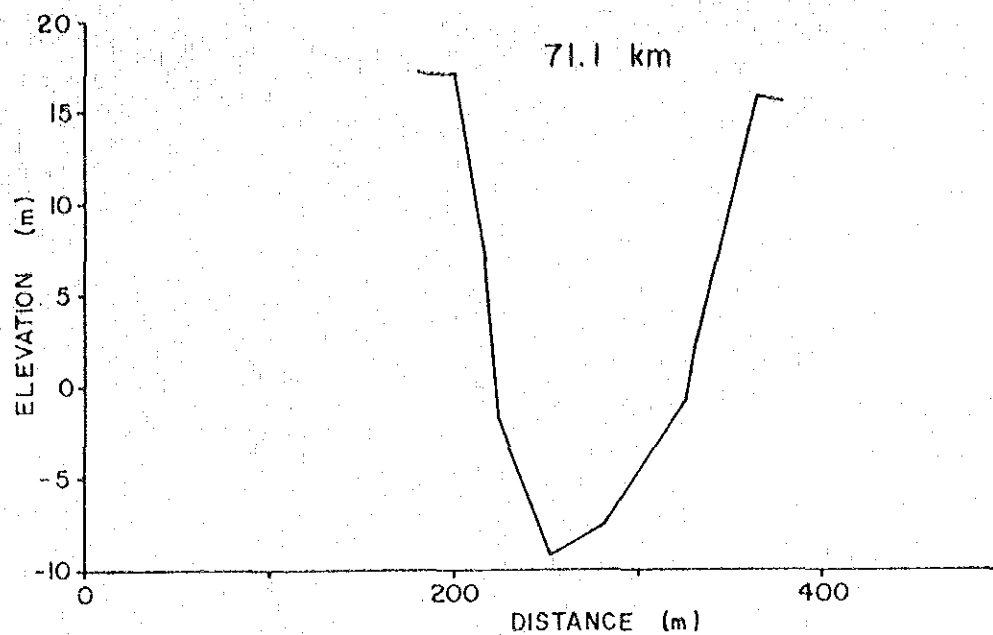


Fig. VII.2.2 TYPICAL CROSS SECTIONS OF EXISTING ITAJAI RIVER (3/3)



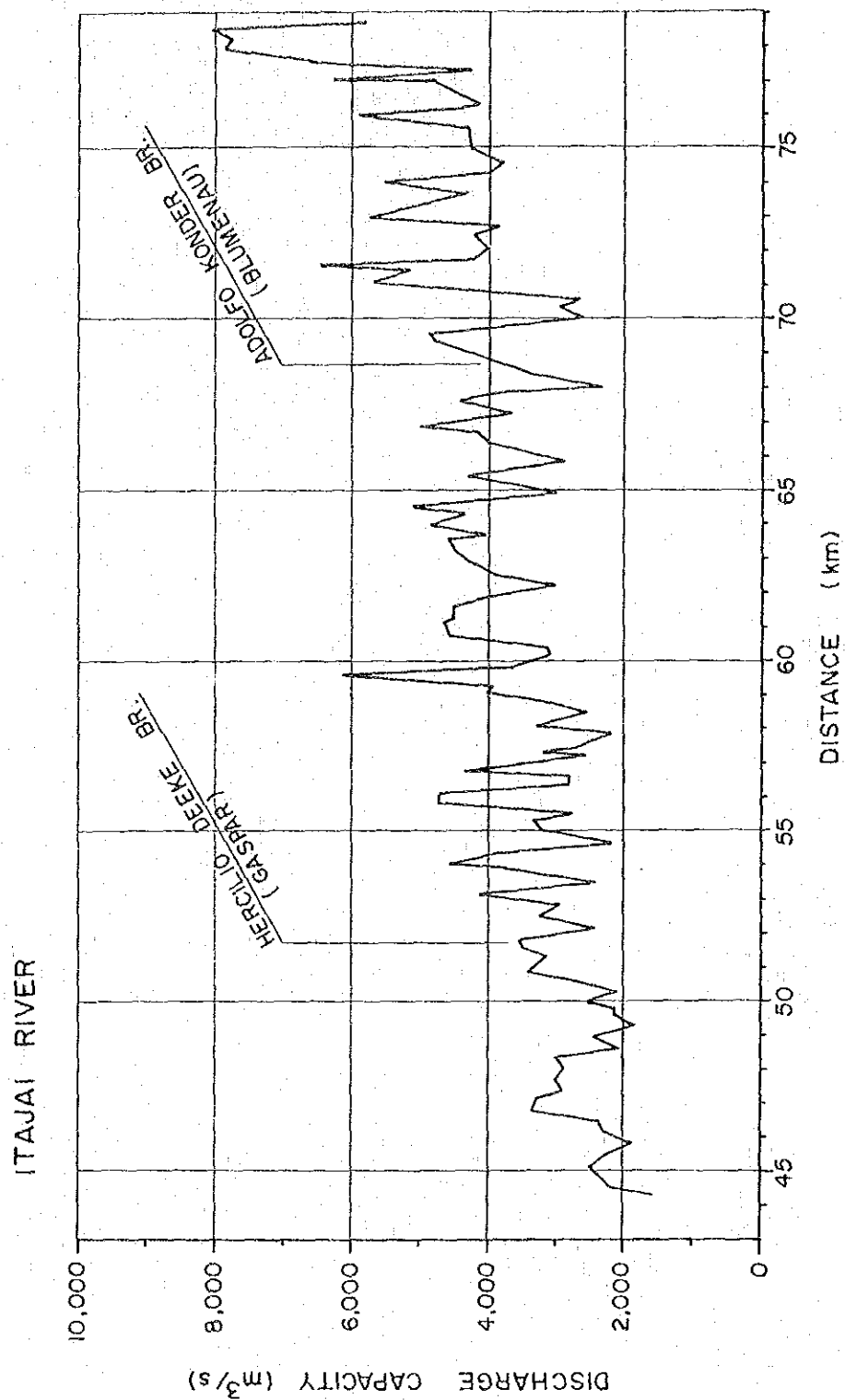


Fig.VII.2.3 BANKFUL DISCHARGE CAPACITY OF BLUMENAU-GASPAR STRETCH



# GARCIA RIVER

## Legend

- Bank height (left)
- Bank height (right)
- Lowest riverbed

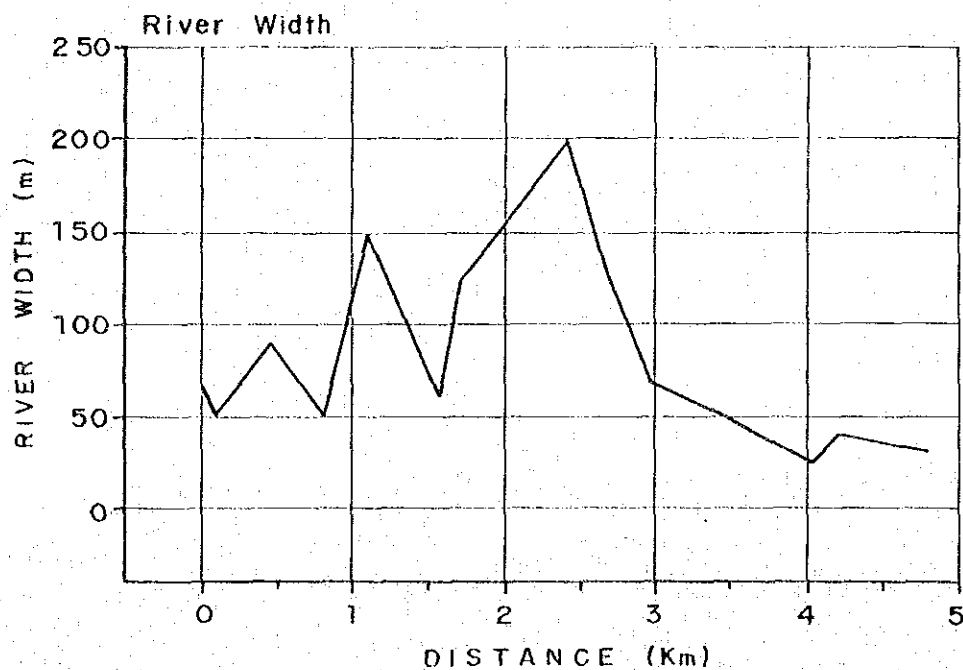
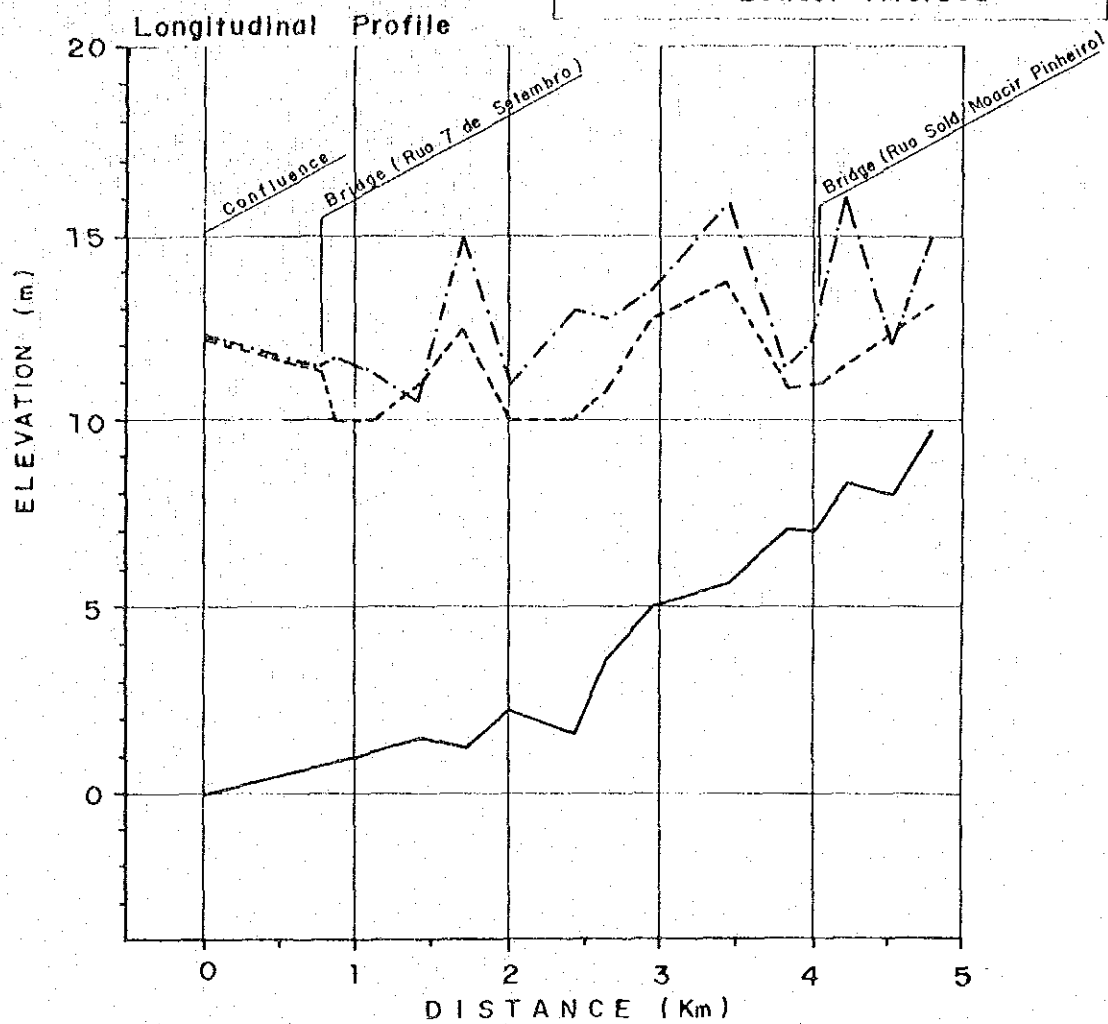


Fig. VII.2.4 CHARACTERISTICS OF MAIN TRIBUTARIES (1/3)



# VELHA RIVER

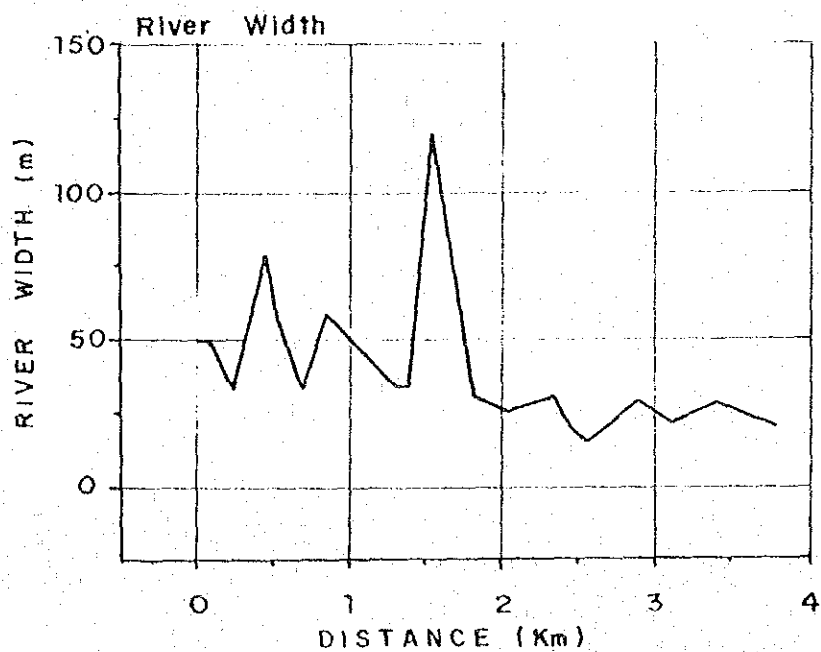
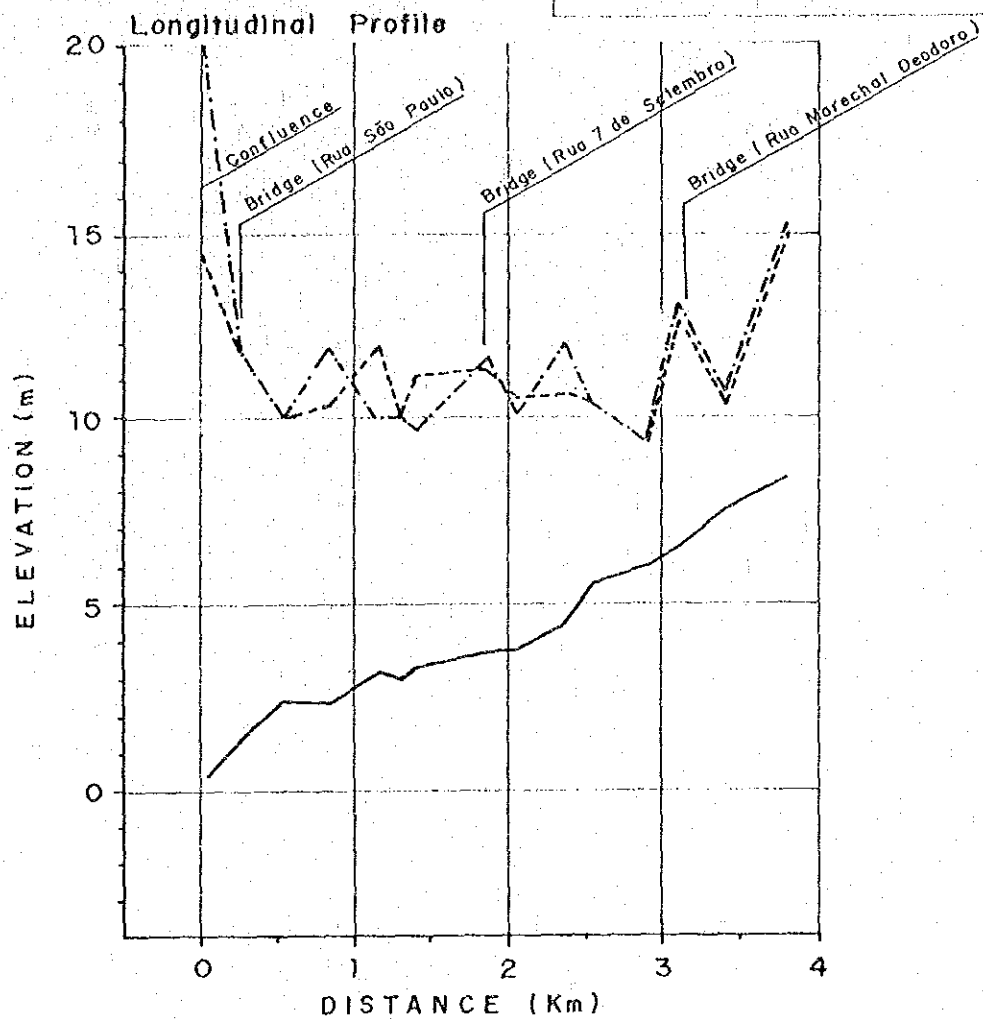


Fig. VII.2.4 CHARACTERISTICS OF MAIN TRIBUTARIES (2/3)





# ITUUPAVA RIVER

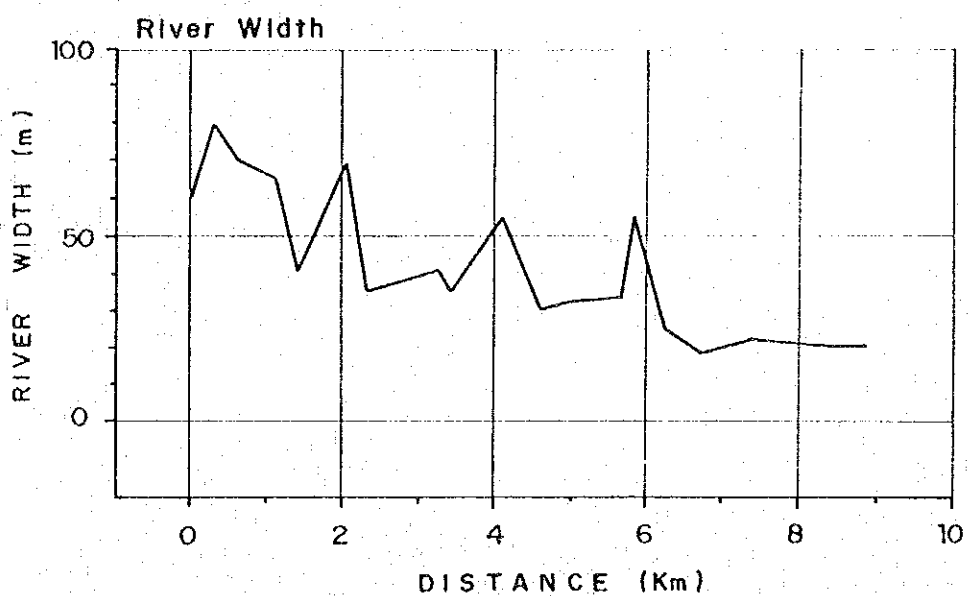
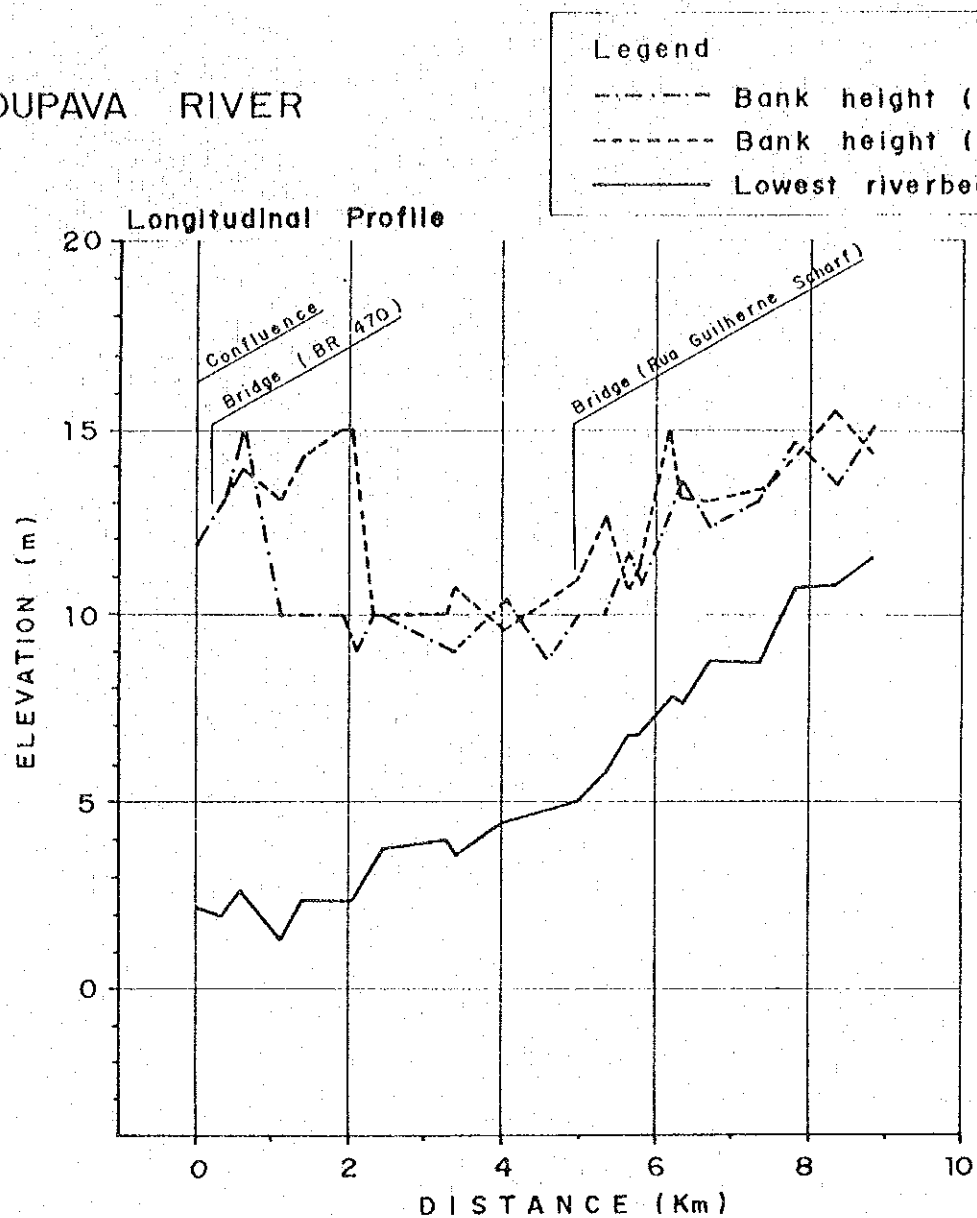


Fig. VII.2.4 CHARACTERISTICS OF MAIN TRIBUTARIES (3/3)



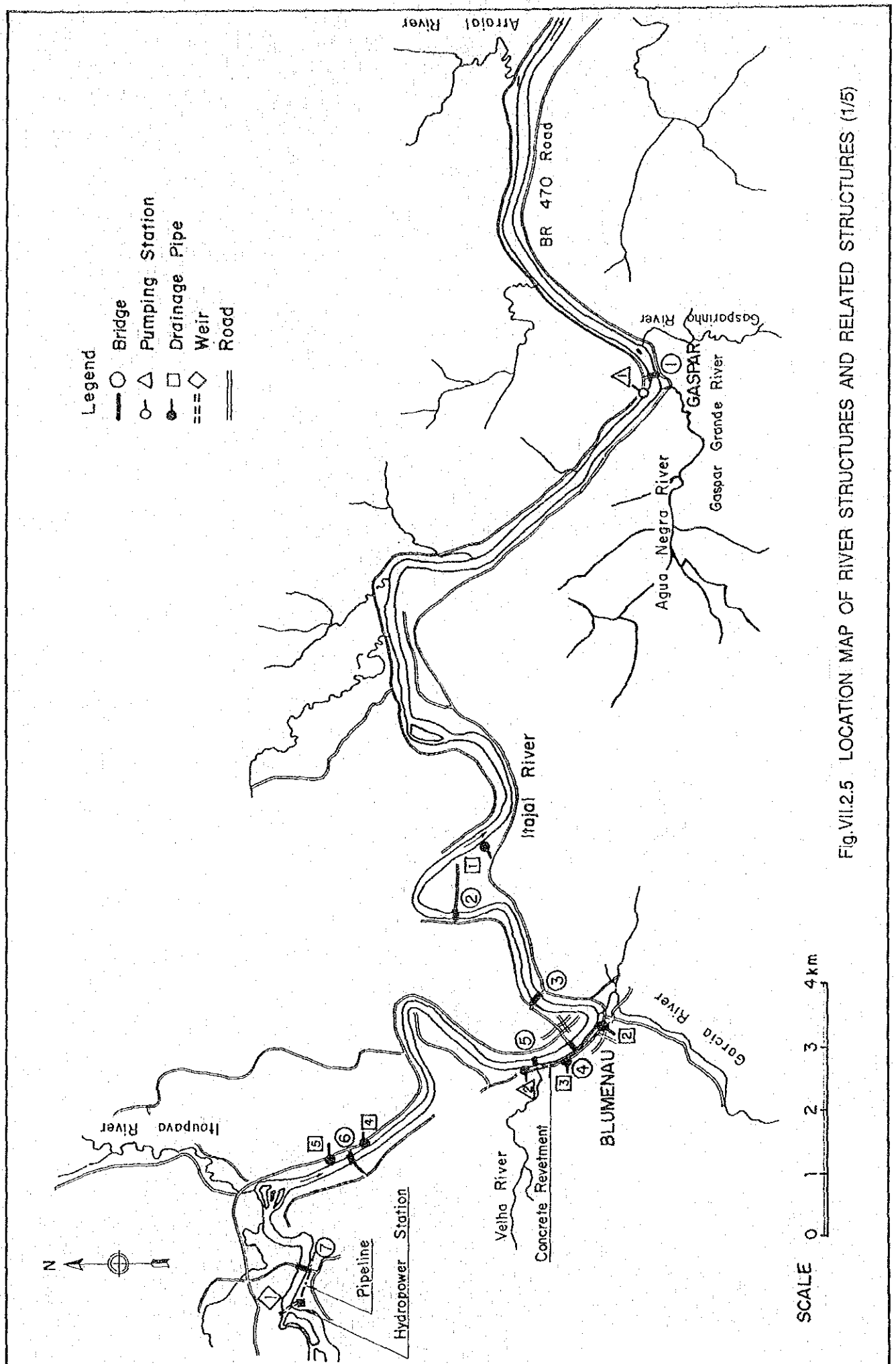


Fig.VII.2.5 LOCATION MAP OF RIVER STRUCTURES AND RELATED STRUCTURES (1/5)



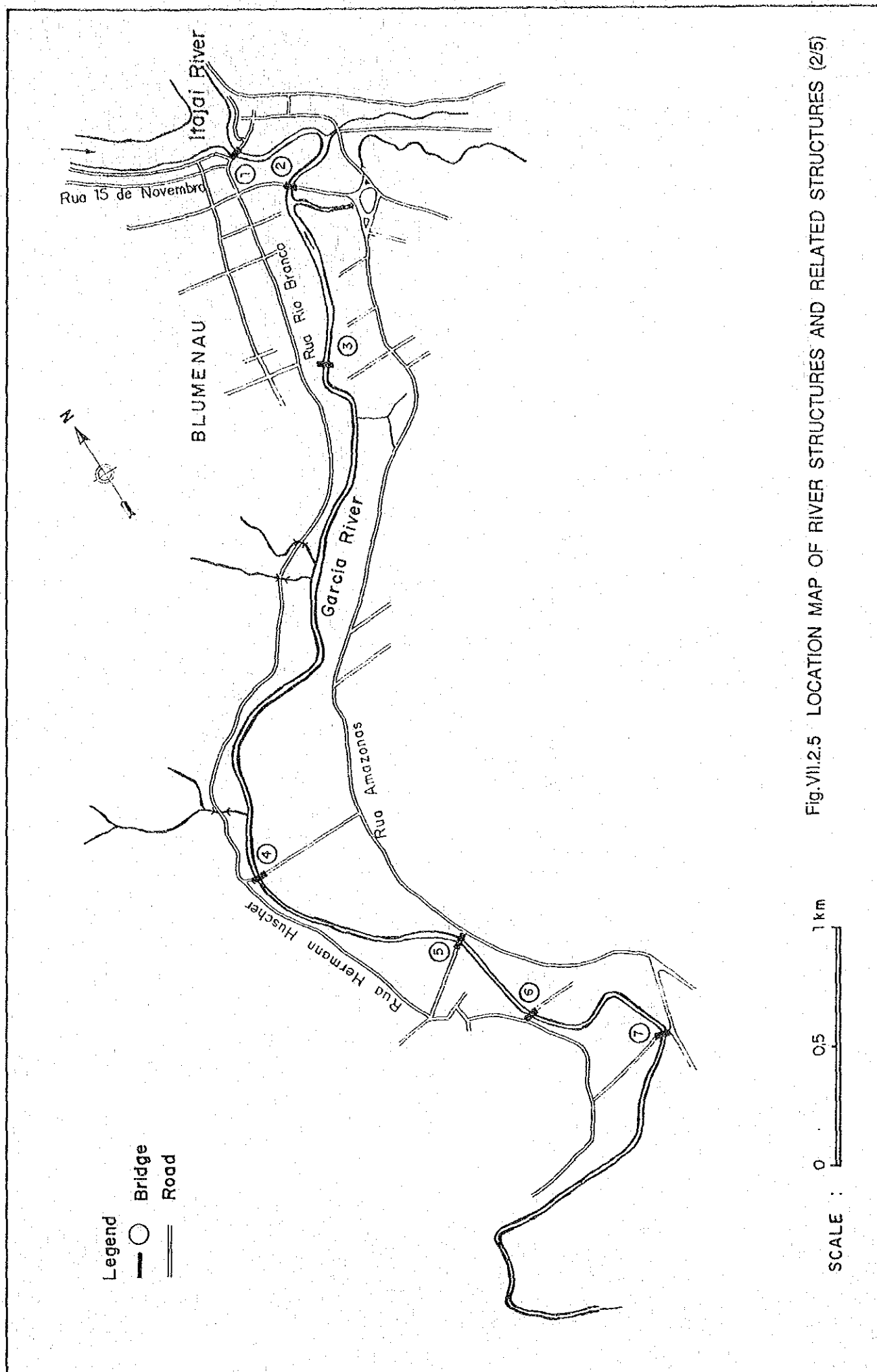


Fig.VII.2.5 LOCATION MAP OF RIVER STRUCTURES AND RELATED STRUCTURES (2/5)



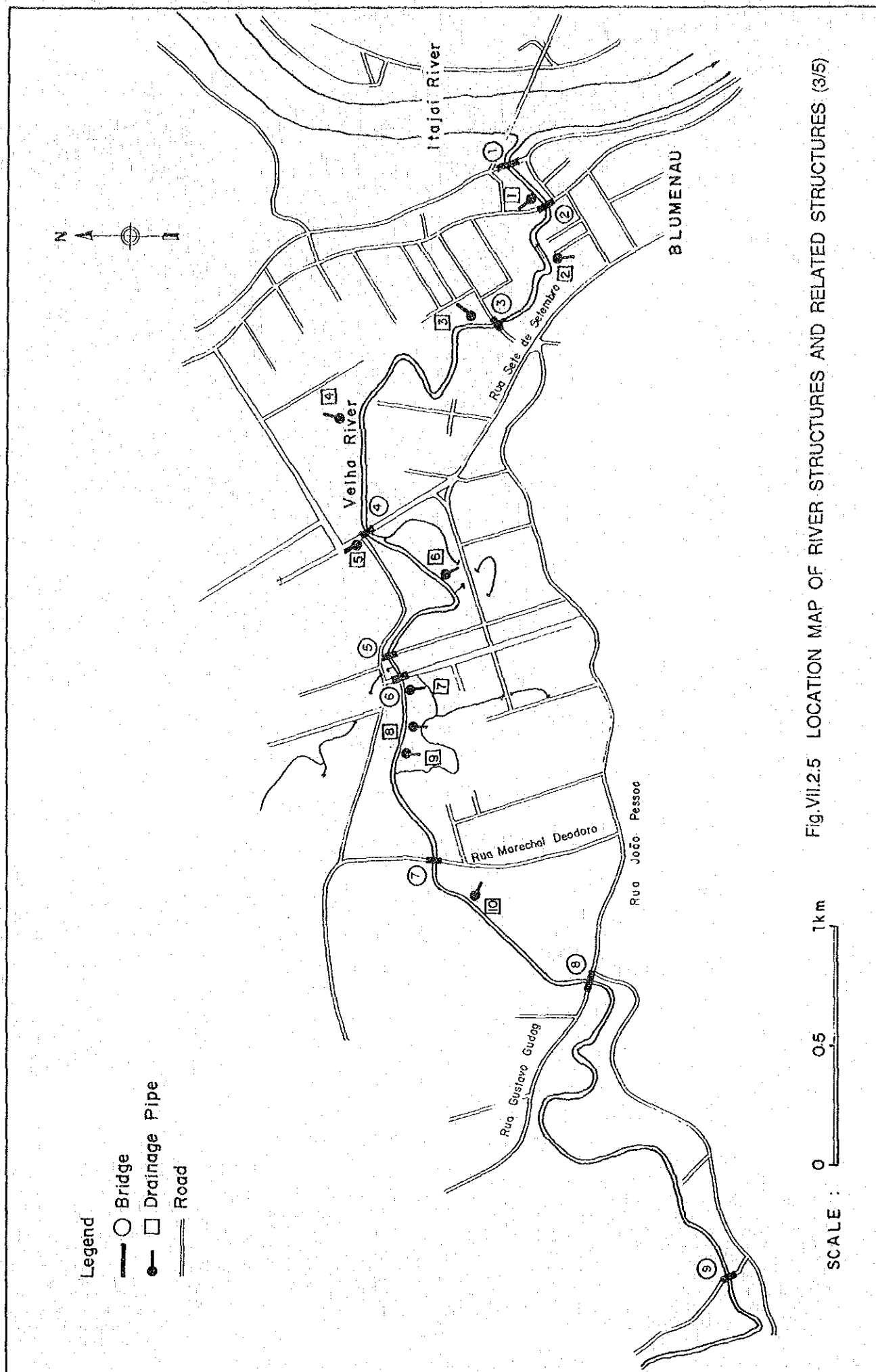


Fig.VII.2.5 LOCATION MAP OF RIVER STRUCTURES AND RELATED STRUCTURES (3/5)





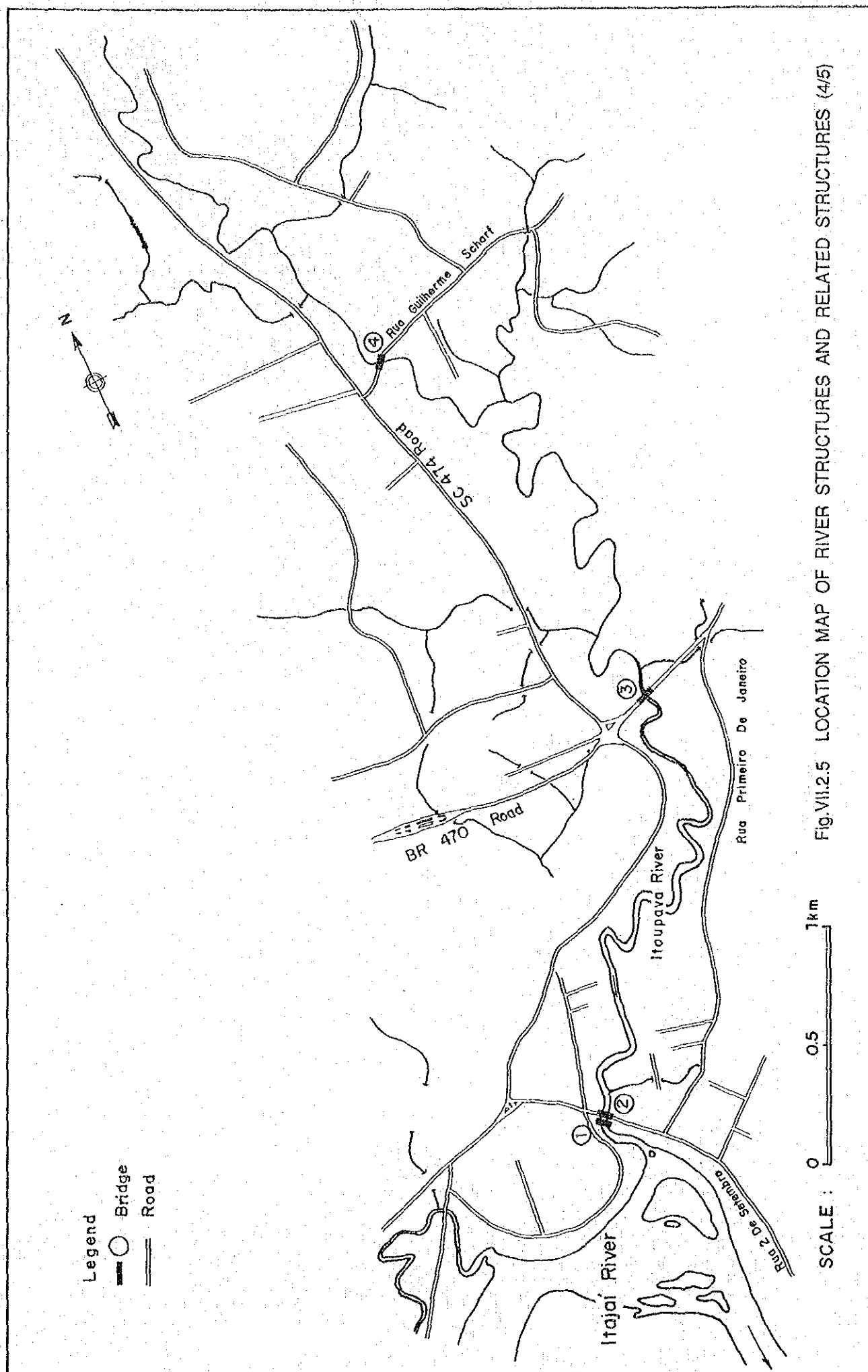


Fig.VII.2.5 LOCATION MAP OF RIVER STRUCTURES AND RELATED STRUCTURES (4/5)



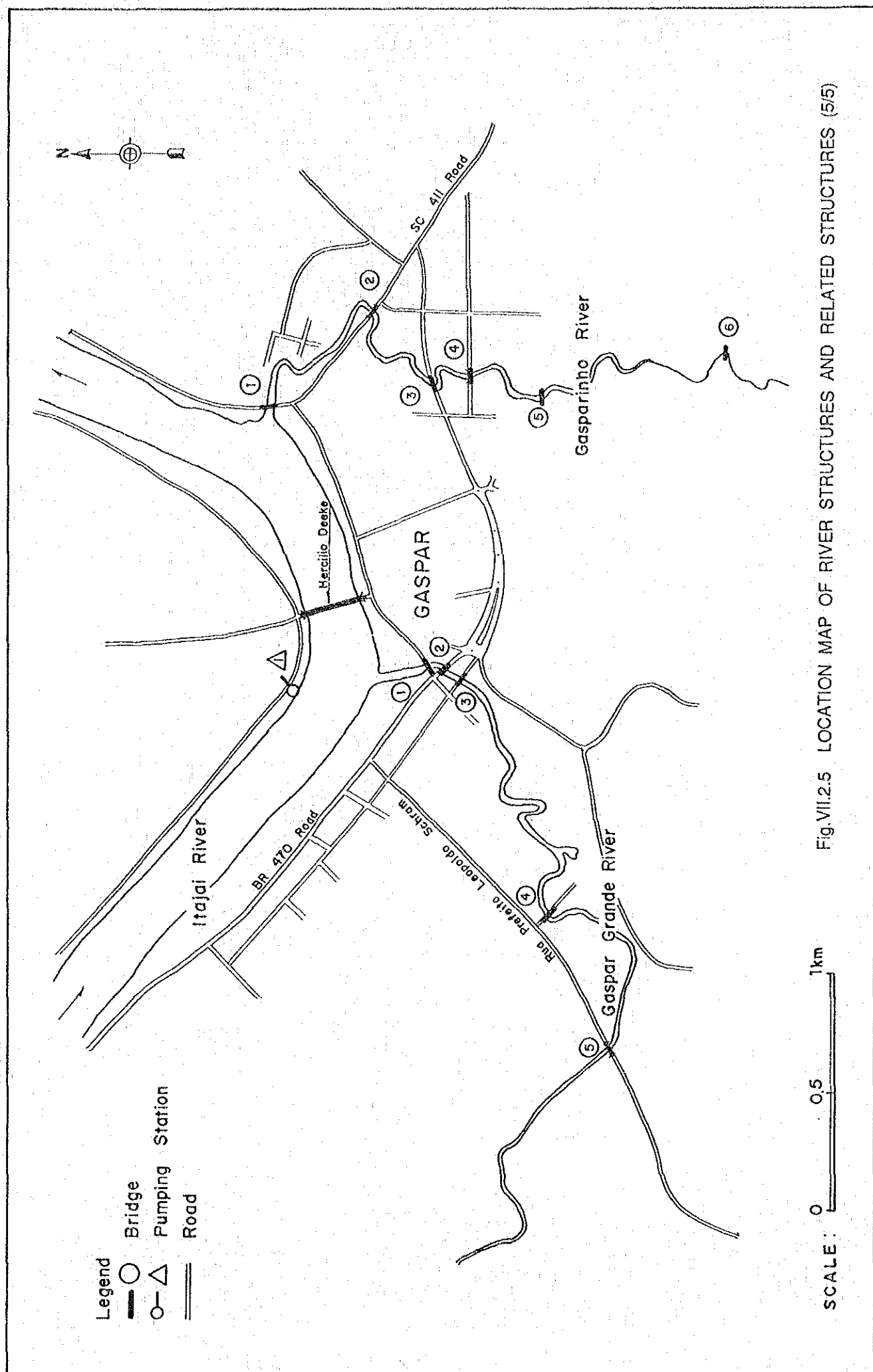


Fig.VII.2.5 LOCATION MAP OF RIVER STRUCTURES AND RELATED STRUCTURES (5/5)



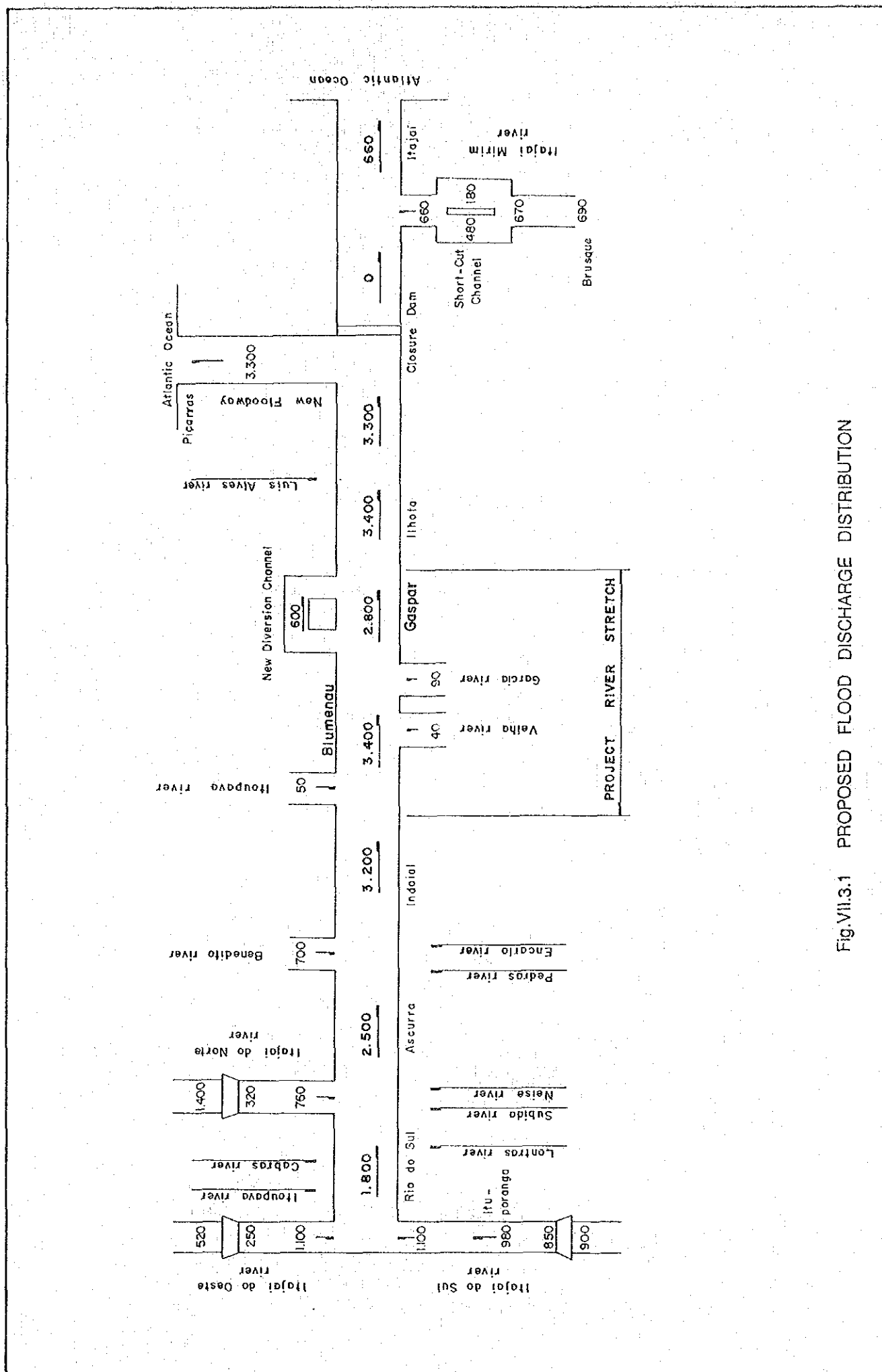


Fig.VII.3.1 PROPOSED FLOOD DISCHARGE DISTRIBUTION

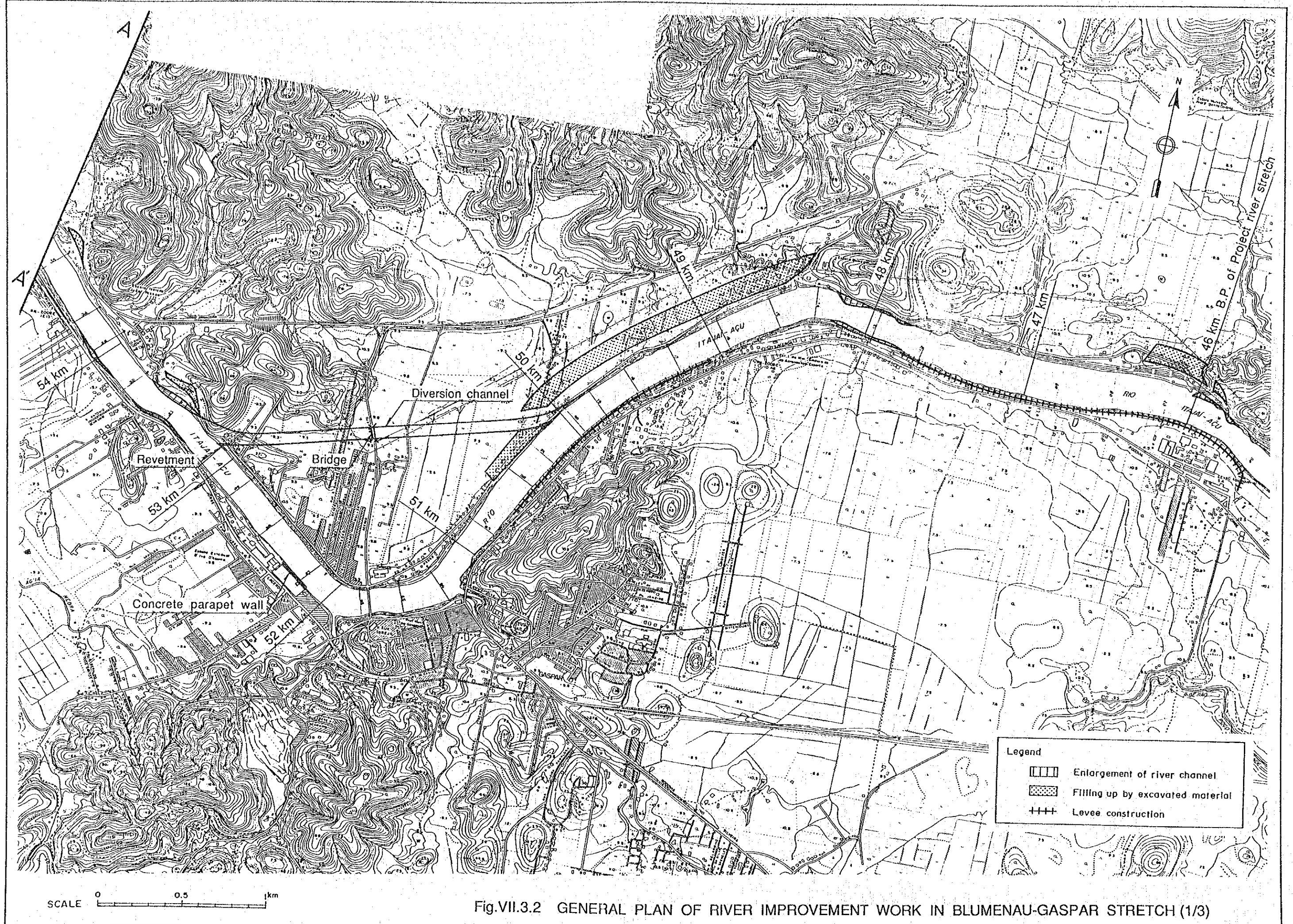


Fig.VII.3.2 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN BLUMENAU-GASPAR STRETCH (1/3)



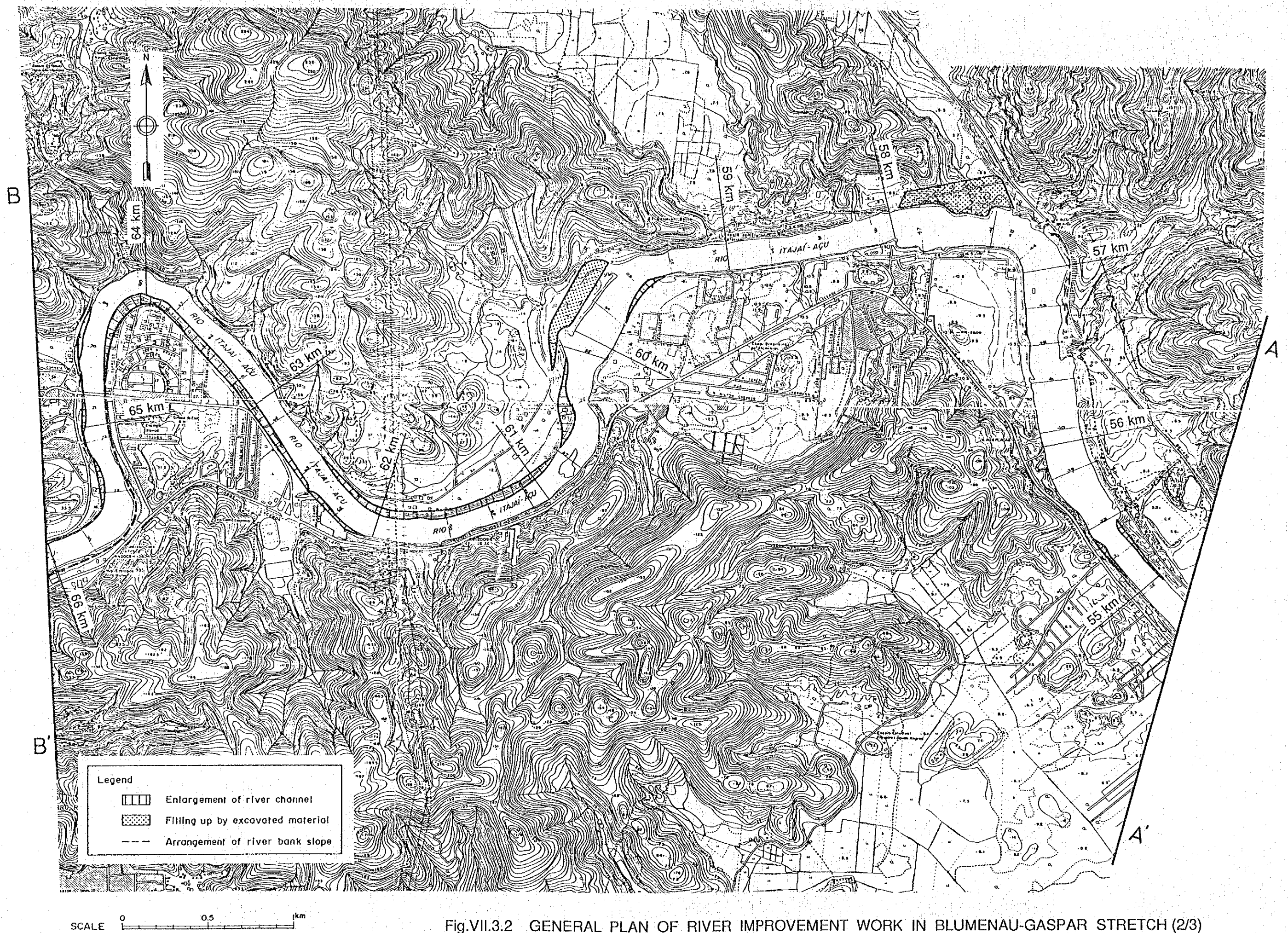


Fig.VII.3.2 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN BLUMENAU-GASPAR STRETCH (2/3)







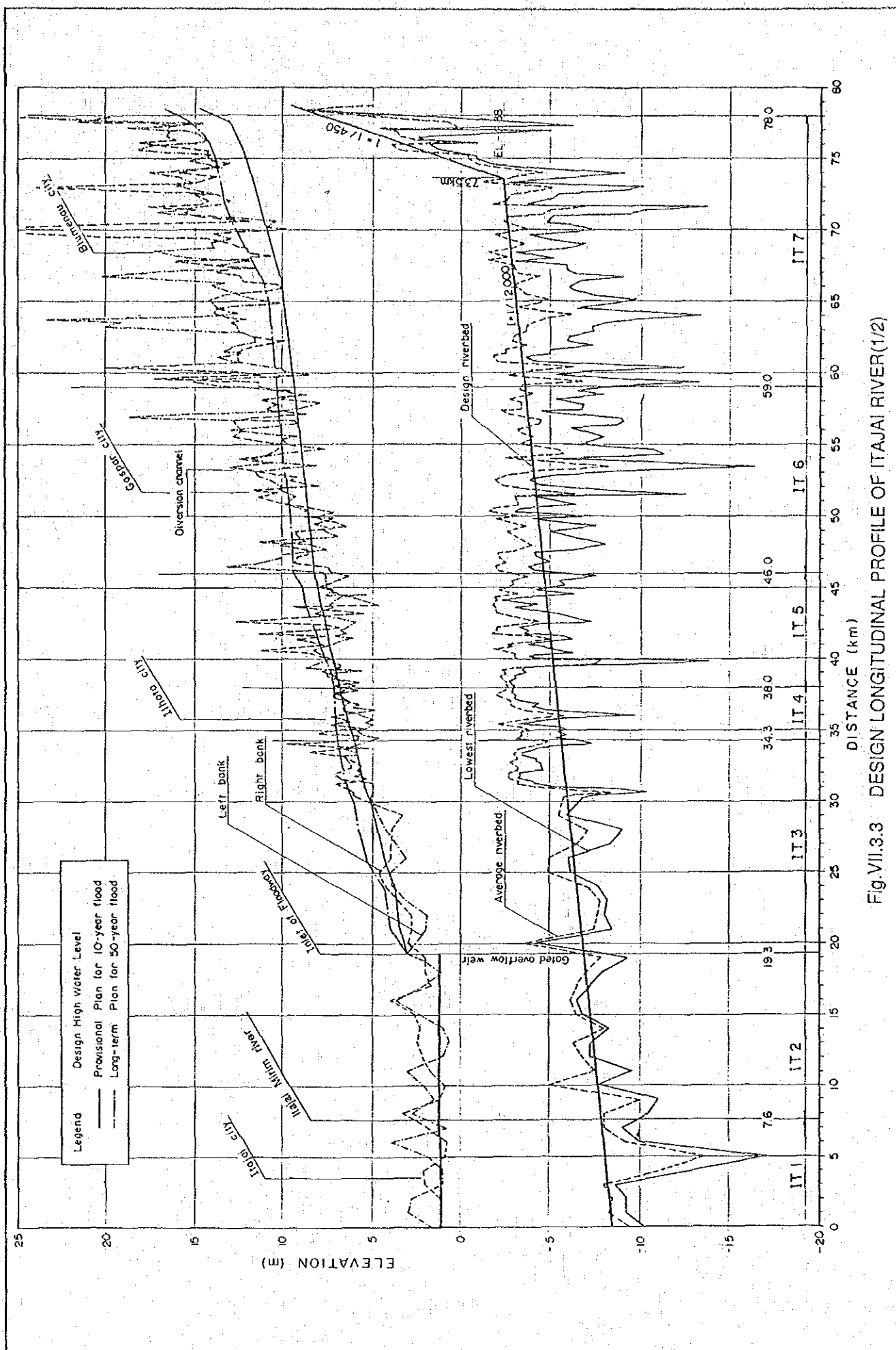


Fig.VII.3.3 DESIGN LONGITUDINAL PROFILE OF ITAJAI RIVER(1/2)



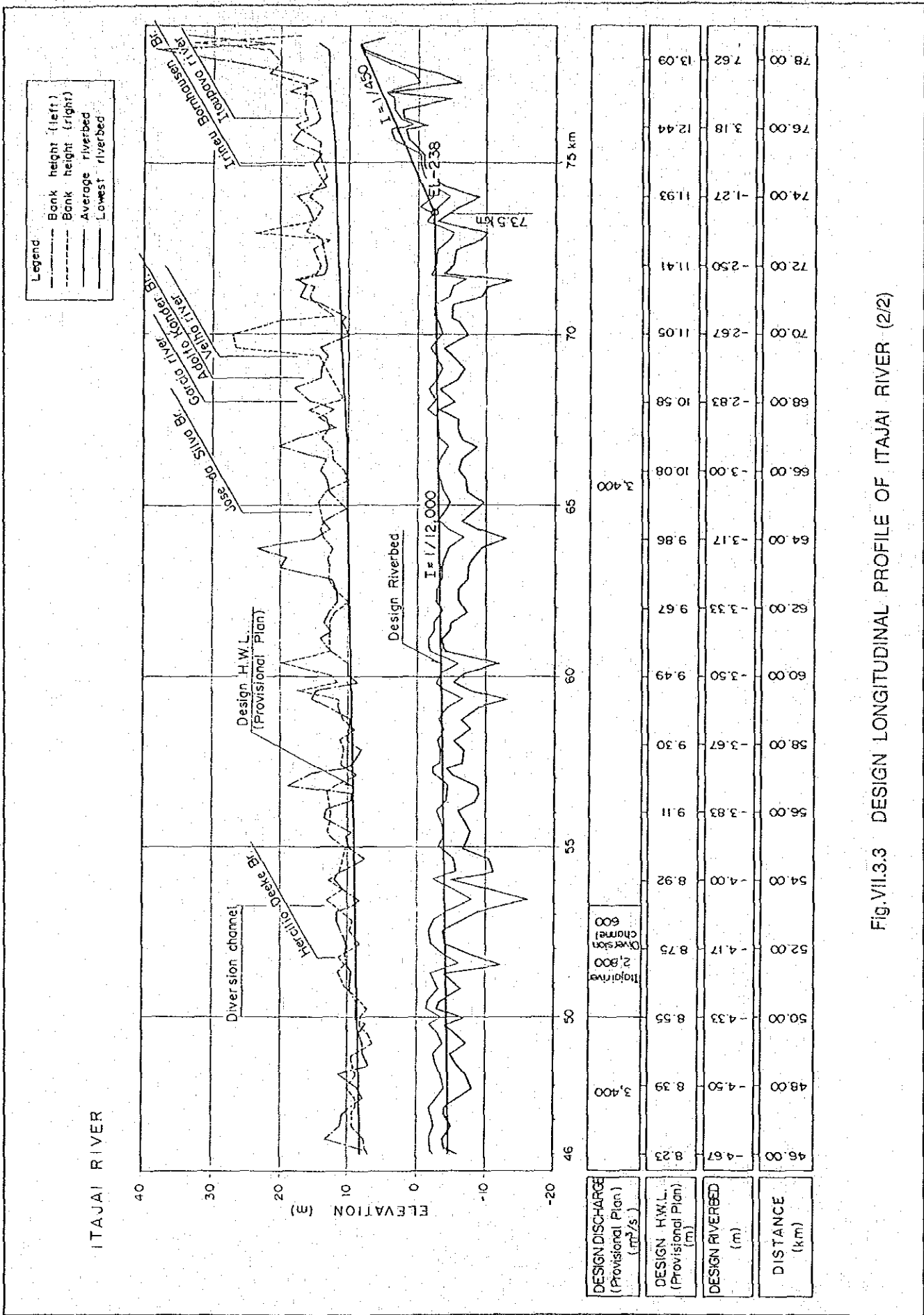


Fig.VII.3.3 DESIGN LONGITUDINAL PROFILE OF ITAJAI RIVER (2/2)



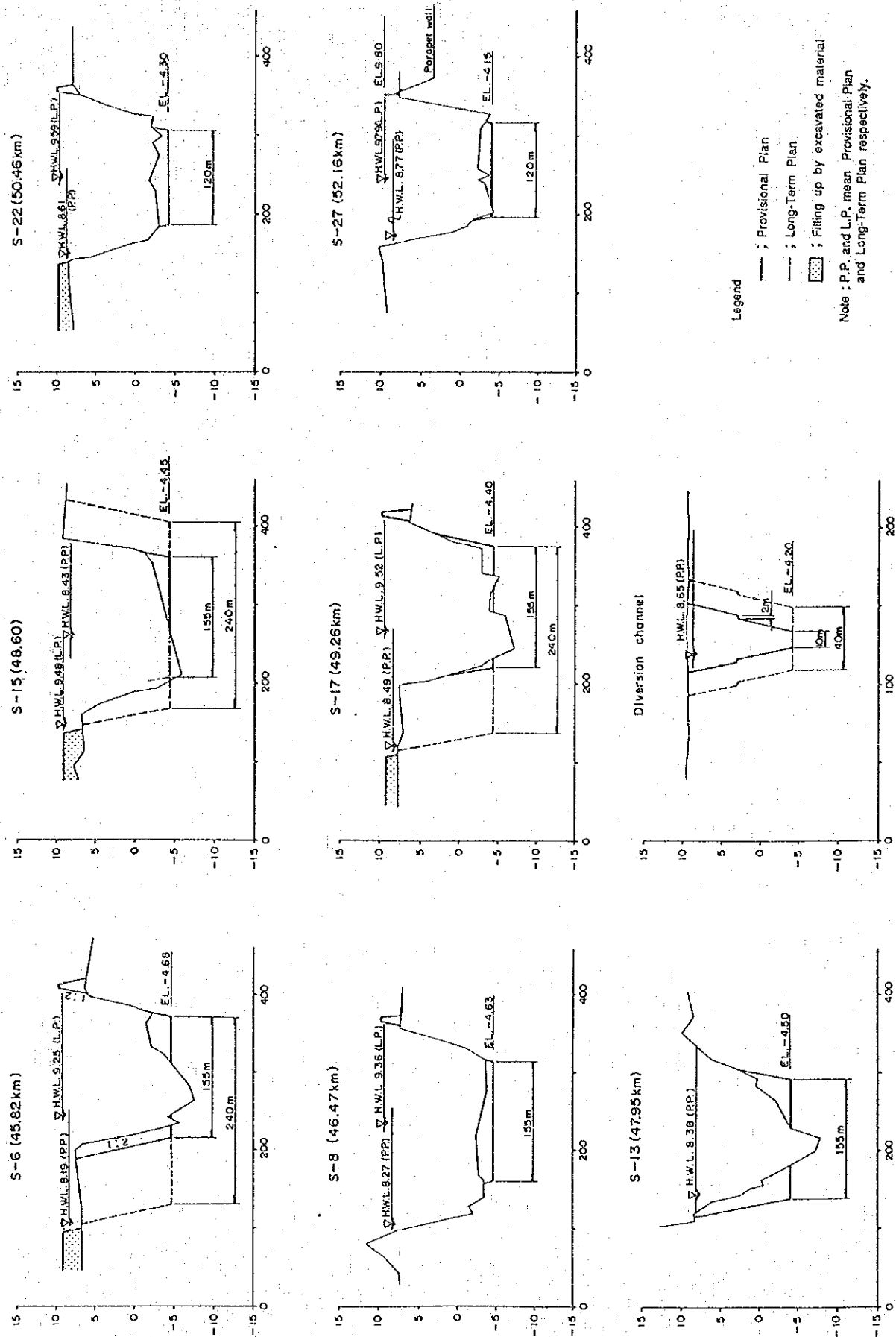


Fig.VII.3.4 DESIGN RIVER CROSS SECTIONS OF ITAJAI RIVER(1/3)





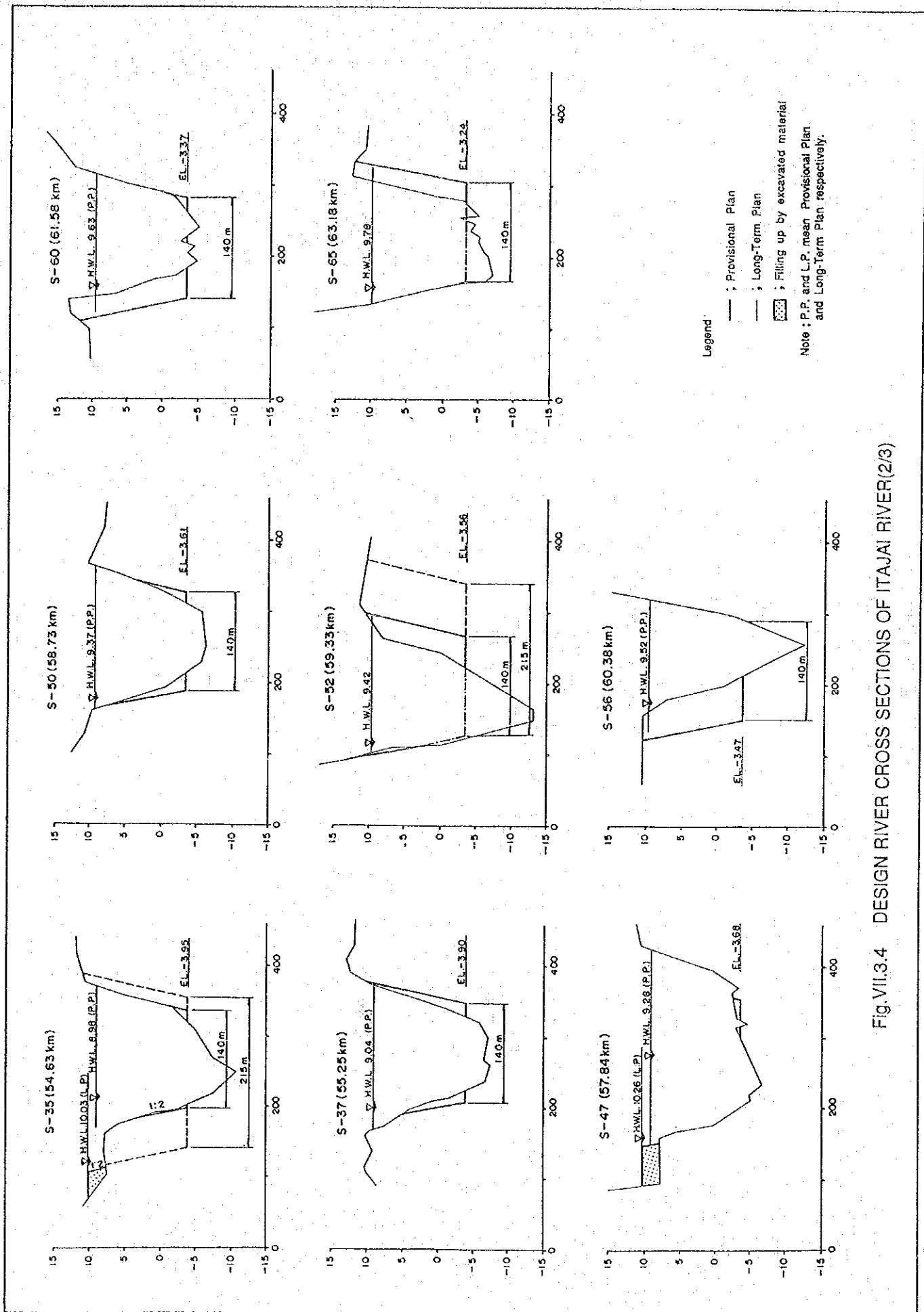


Fig.VII.3.4 DESIGN RIVER CROSS SECTIONS OF ITAJAI RIVER(2/3)



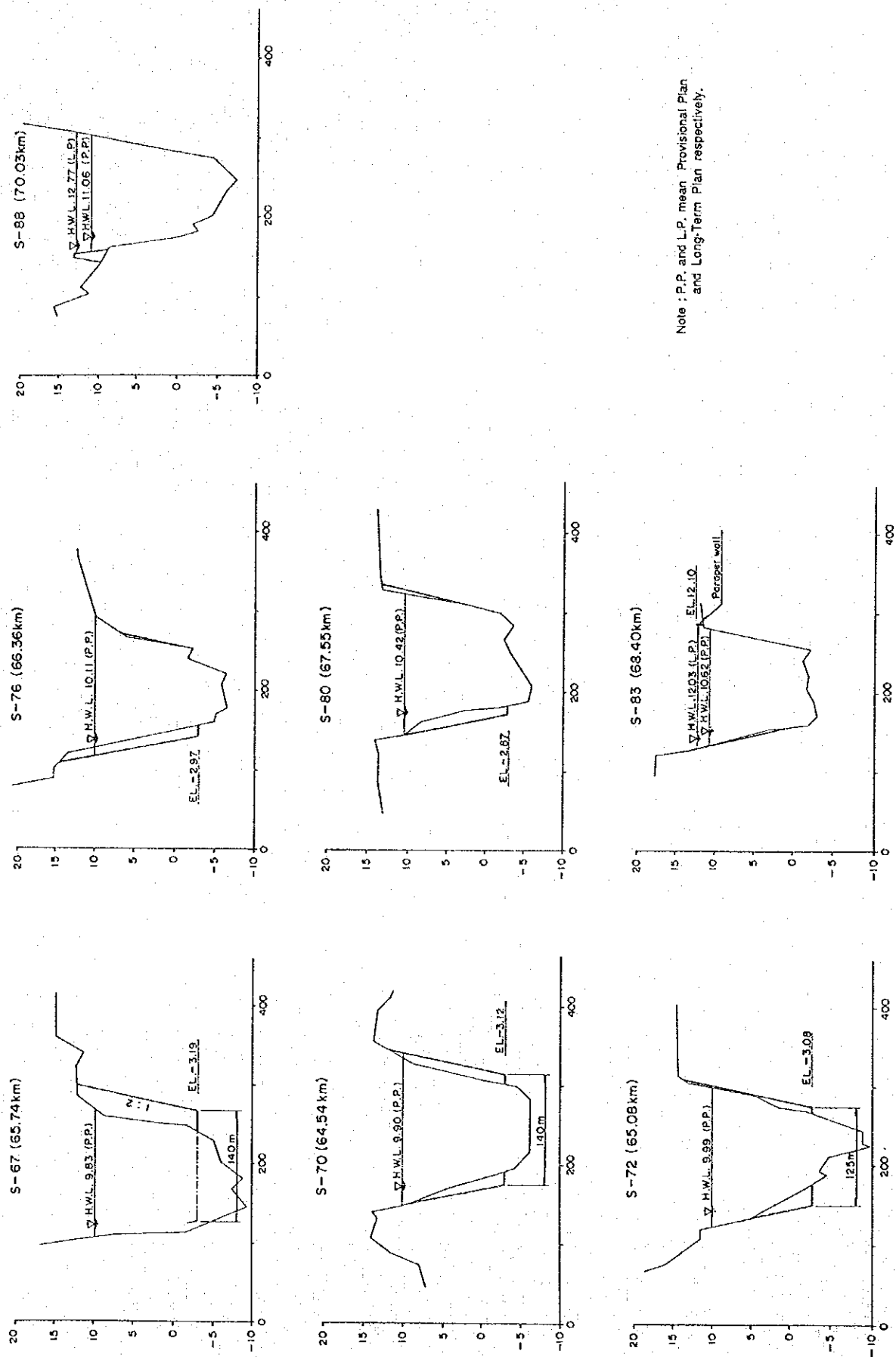
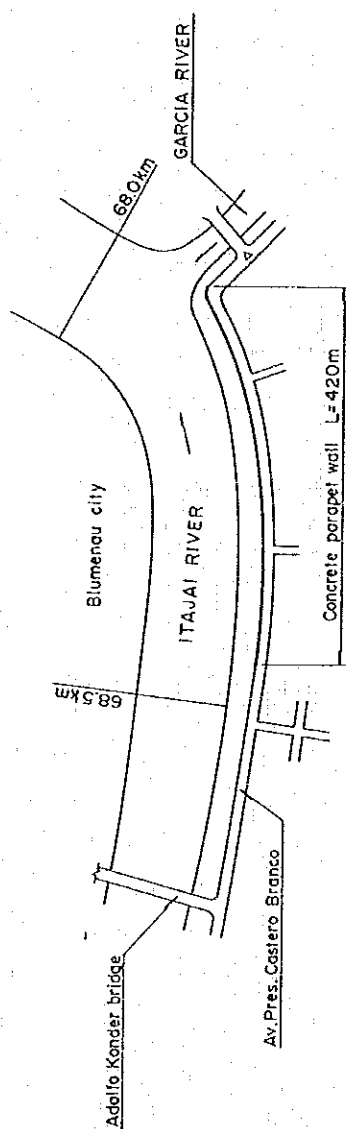
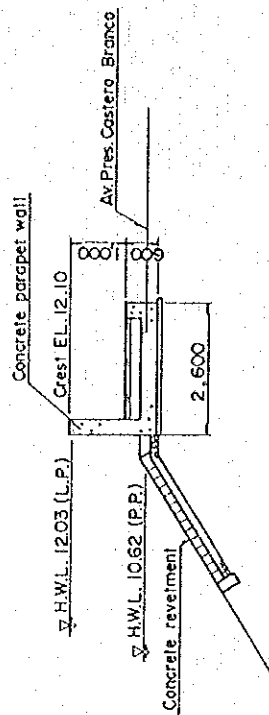


Fig.VII.3.4 DESIGN RIVER CROSS SECTIONS OF ITAJAI RIVER (3/3)

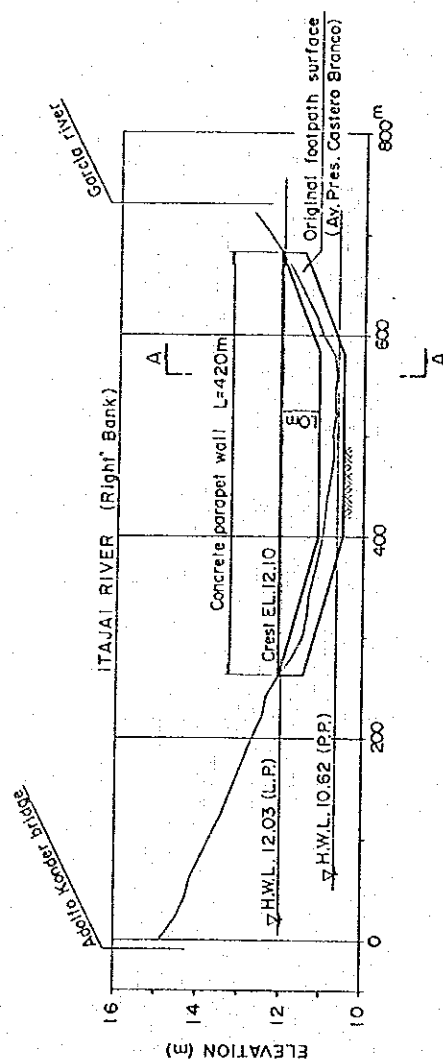




PLAN SCALE A



SECTION A - A SCALE D



LONGITUDINAL PROFILE SCALE B: H SCALE C: V

Note : P.P. and L.P. mean Provisional Plan and Long-Term Plan respectively.

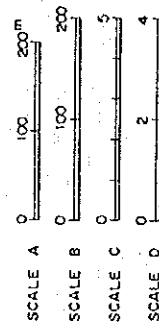
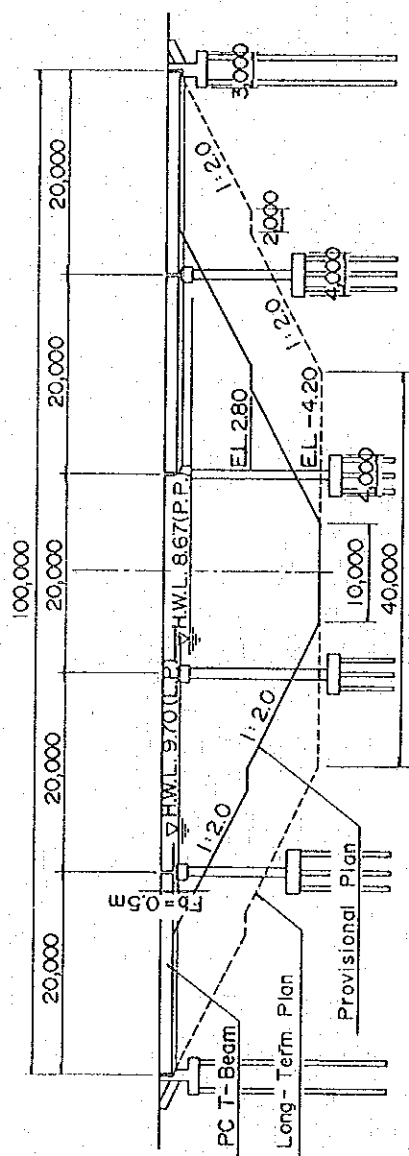
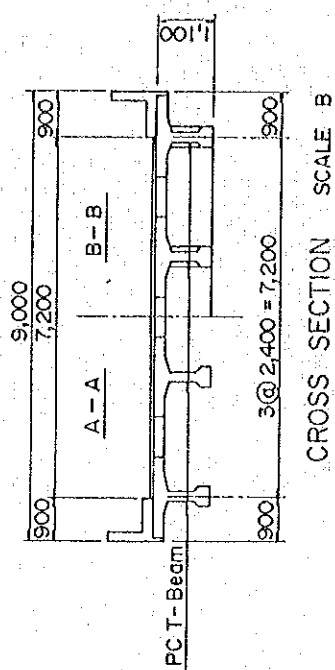


Fig.VII.3.5 PROPOSED CONCRETE PARAPET WALL ALONG BLUMENAU STRETCH

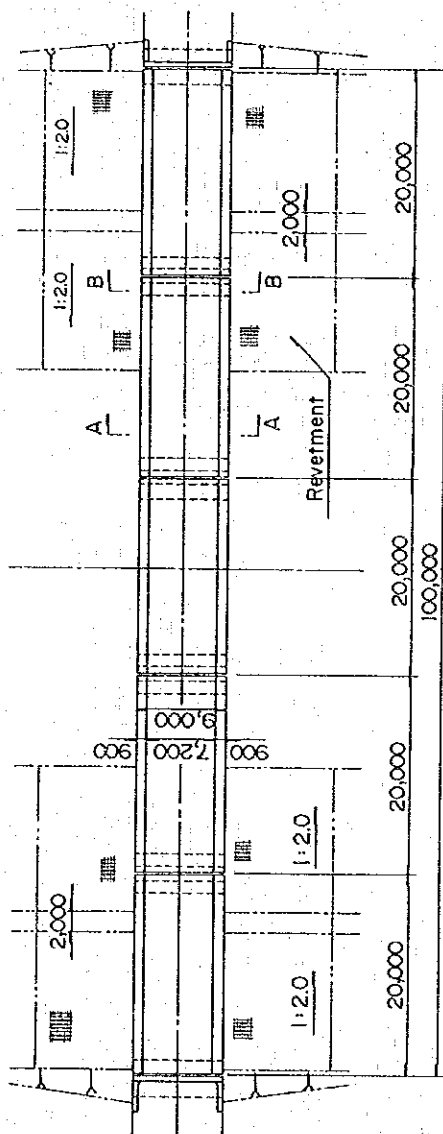




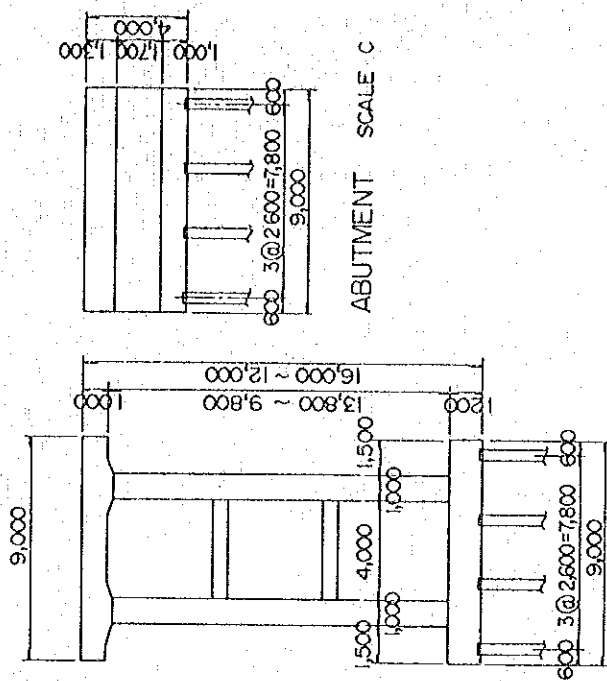
PROFILE SCALE A



CROSS SECTION SCALE B



PLAN SCALE A



PIER SCALE C

ABUTMENT SCALE C

Note: P.P. and L.P. mean Provisional Plan and Long-Term Plan respectively.

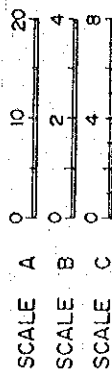


Fig.VII.3.6 PROPOSED BRIDGE AT DIVERSION CHANNEL

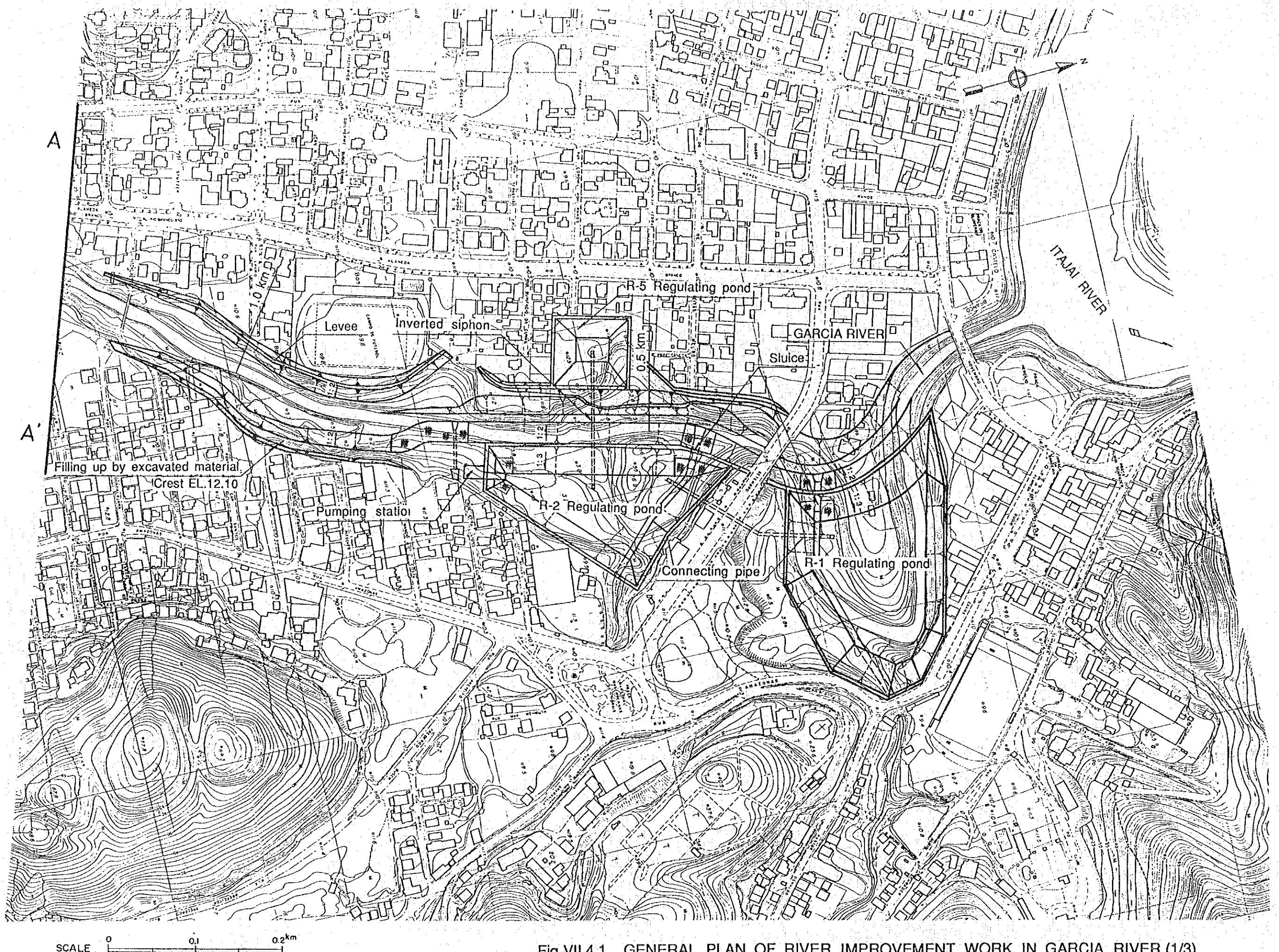


Fig.VII.4.1 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN GARCIA RIVER (1/3)



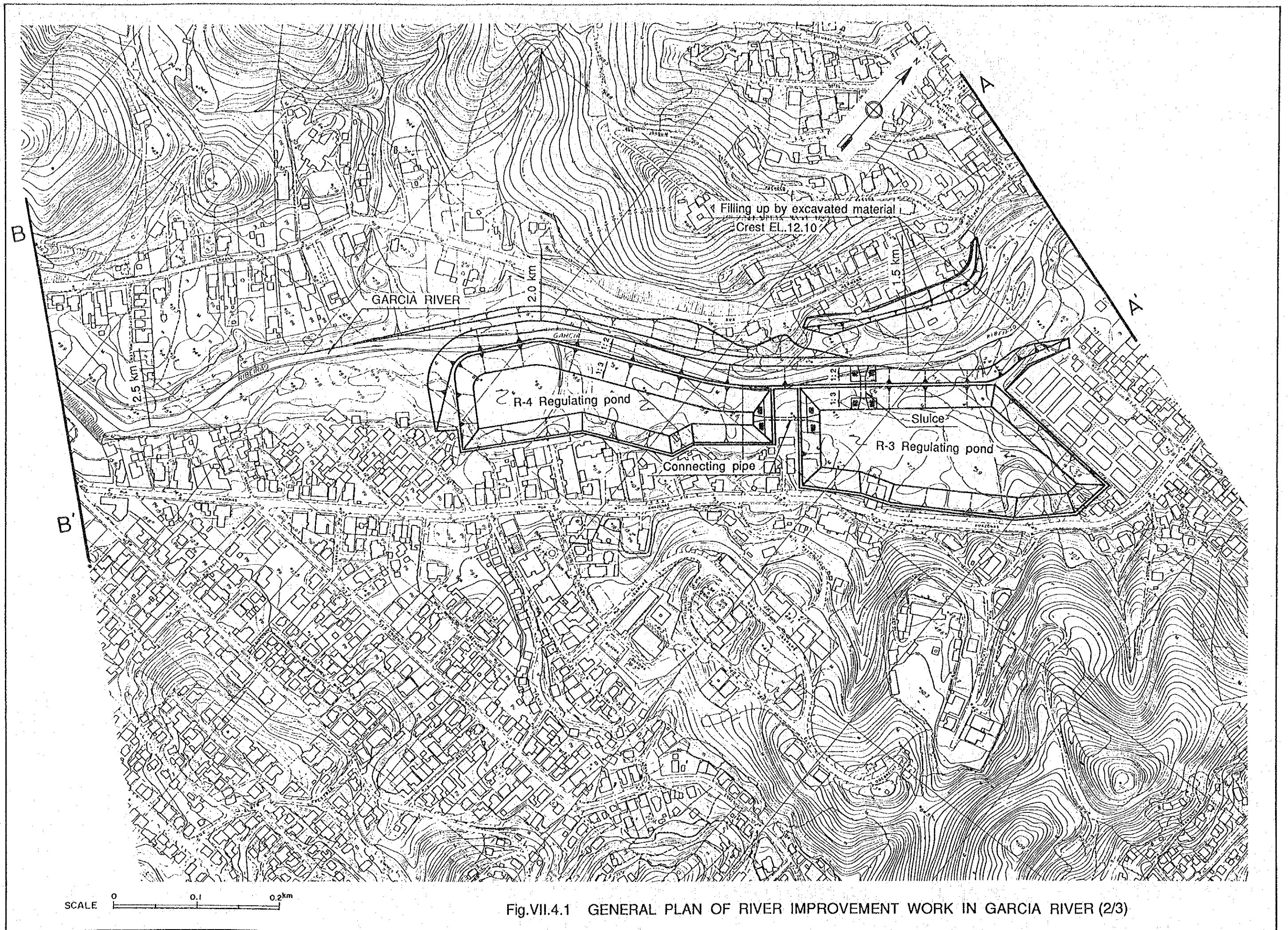


Fig.VII.4.1 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN GARCIA RIVER (2/3)

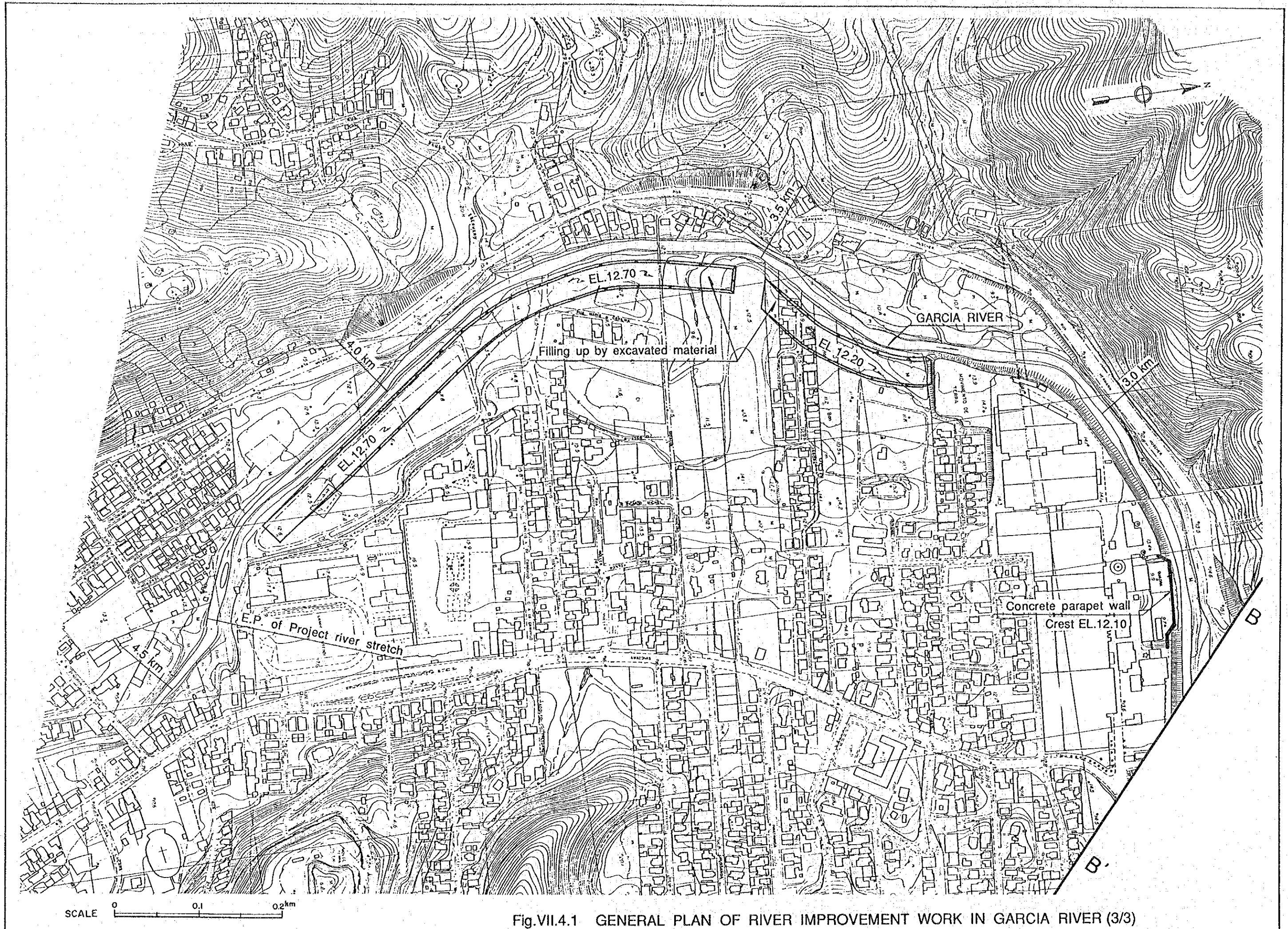


Fig.VII.4.1 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN GARCIA RIVER (3/3)



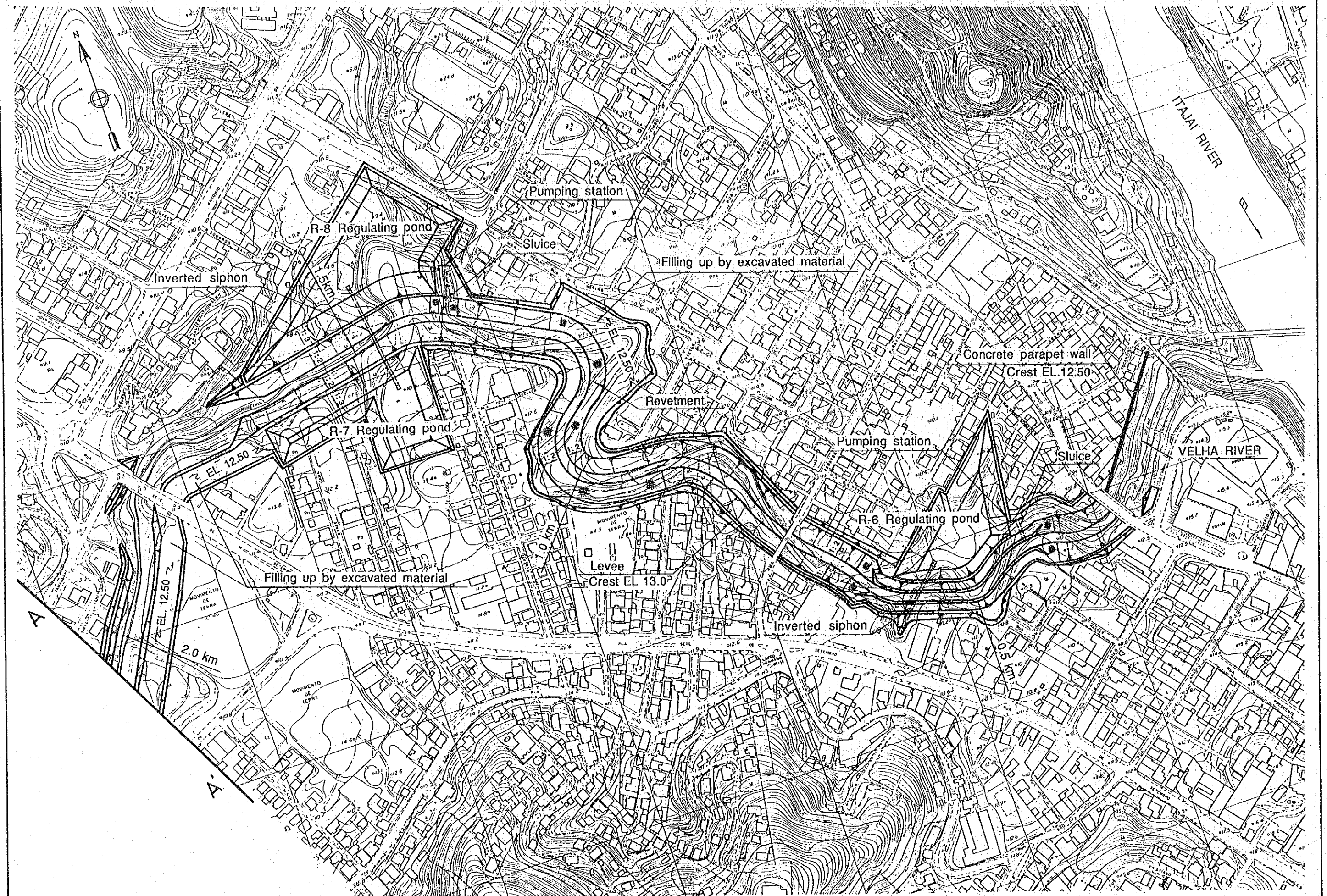


Fig.VII.4.2 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN VELHA RIVER (1/2)

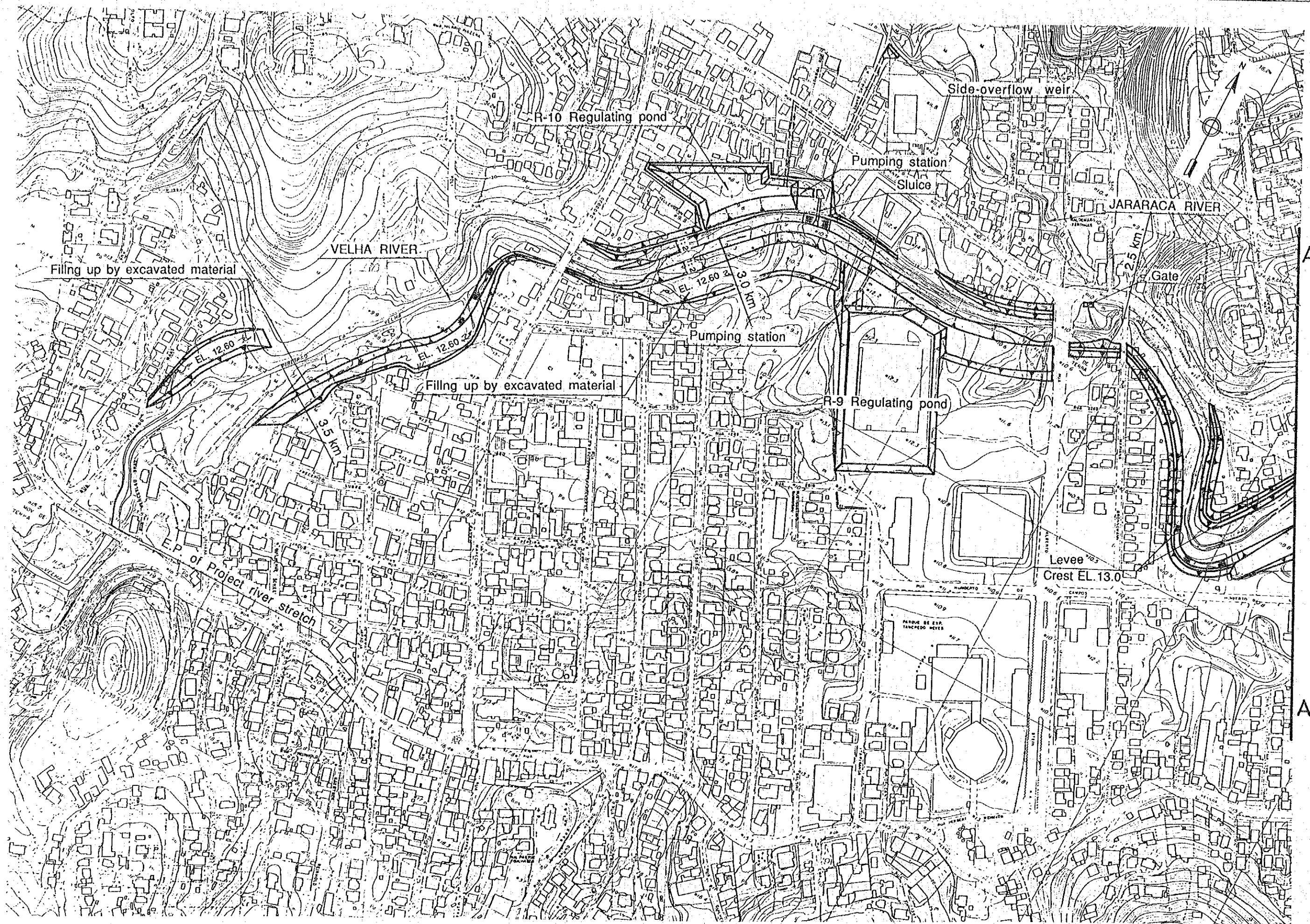


Fig.VII.4.2 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN VELHA RIVER (2/2)



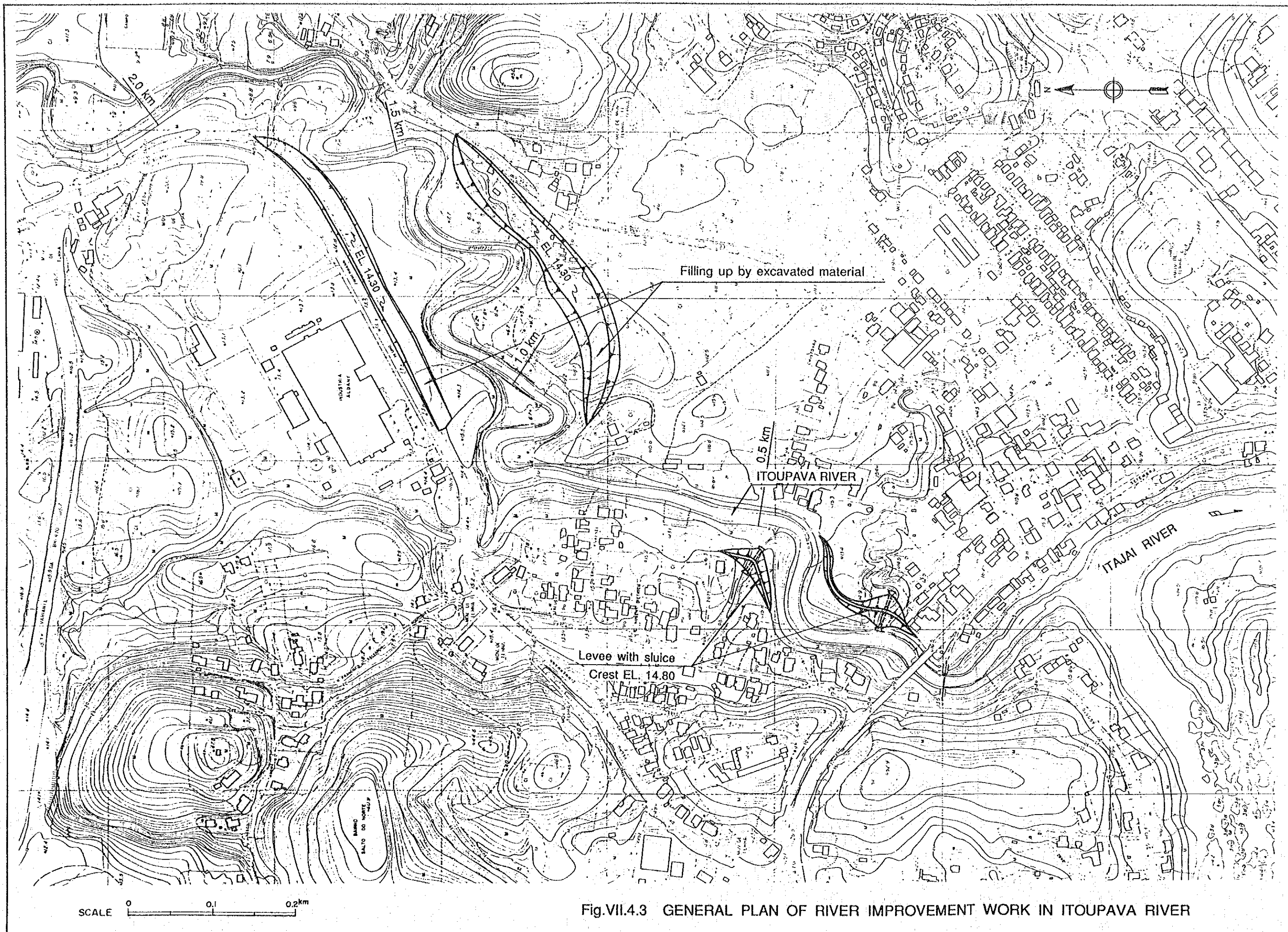
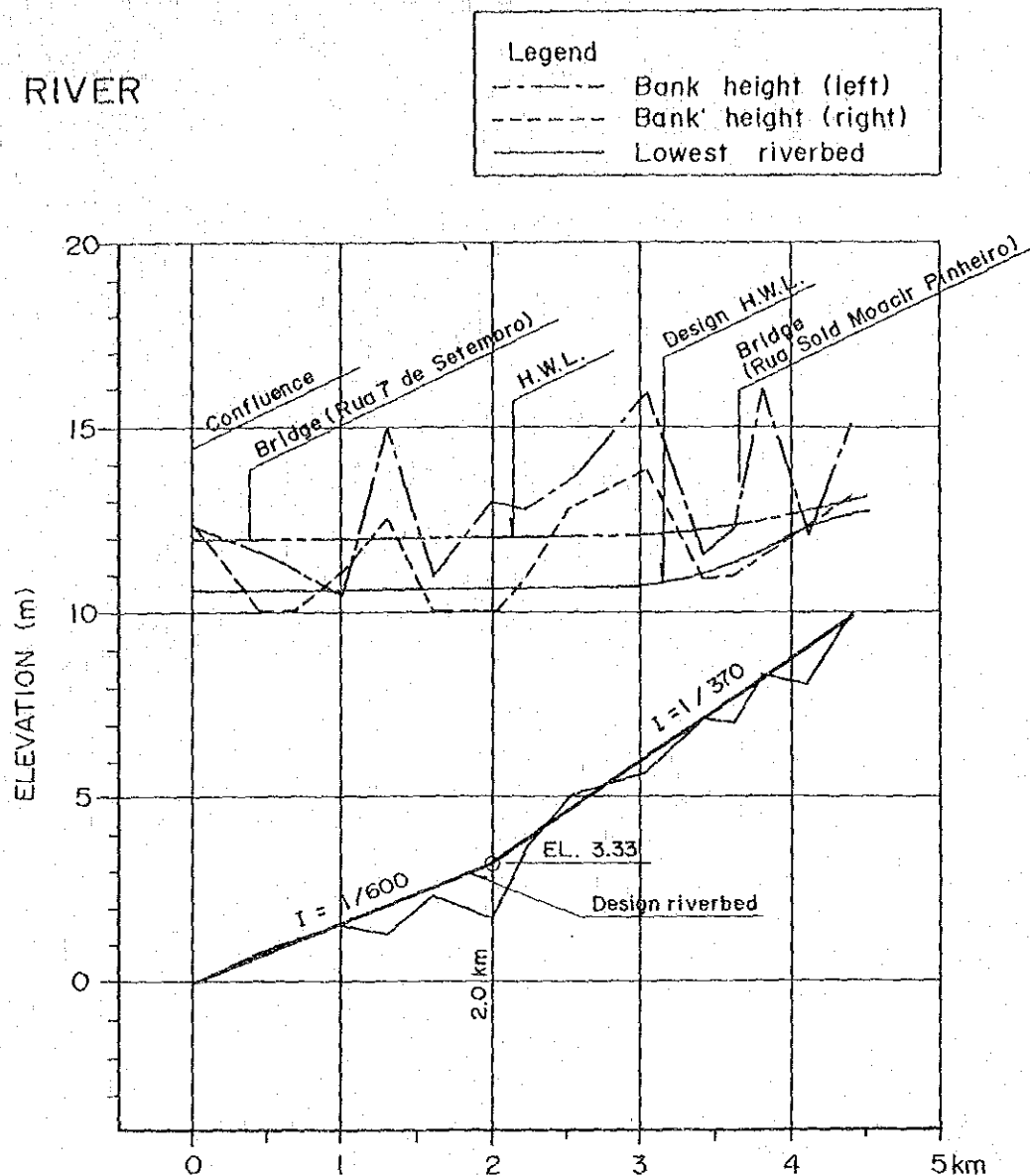


Fig.VII.4.3 GENERAL PLAN OF RIVER IMPROVEMENT WORK IN ITOUPAVA RIVER



# GARCIA RIVER



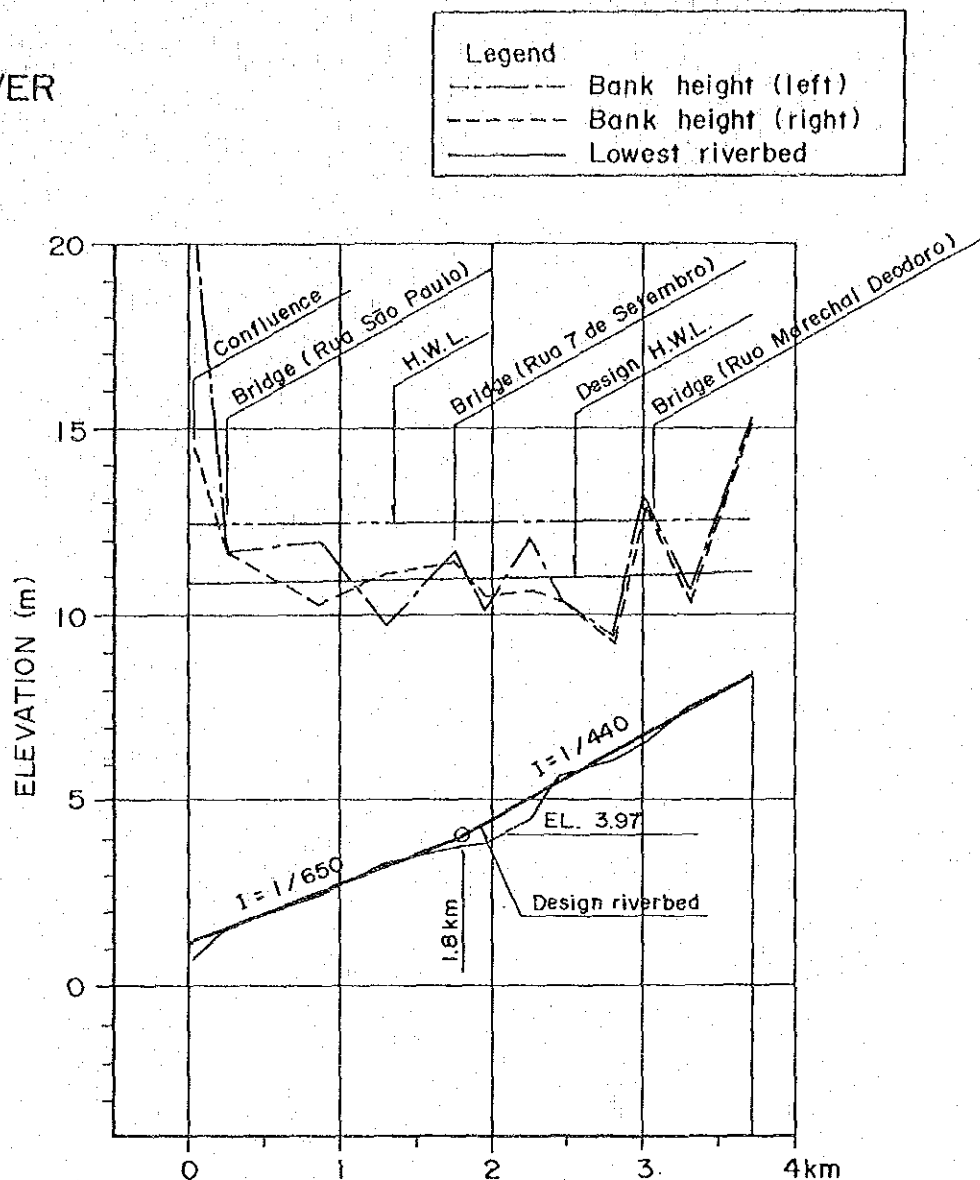
DESIGN H.W.L. (10-year probable flood) (m)	10.62	10.63	10.64	10.69	11.07	12.06	12.64
H.W.L. (50-year probable flood) (m)	12.03	12.04	12.05	12.07	12.21	12.68	13.11
DESIGN RIVERBED (m)	0.00	1.67	3.33	6.03	7.38	8.74	9.82
DISTANCE (km)	0.00	1.00	2.00	3.00	3.50	4.00	4.40

Fig.VII.4.4 DESIGN LONGITUDINAL PROFILE OF MAIN TRIBUTARIES (1/3)





# VELHA RIVER

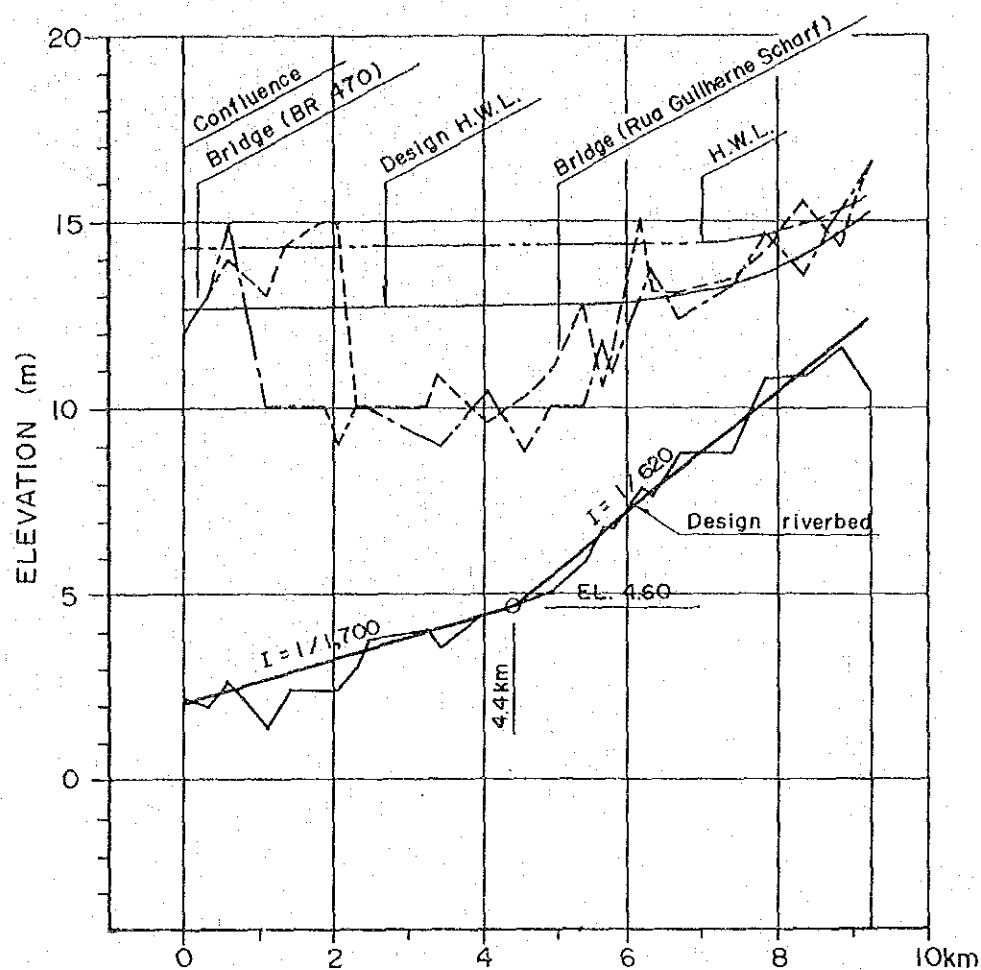


DESIGN H.W.L. (10-year probable flood) (m)	10.89	10.90	10.90	10.95	11.06
H.W.L. (50-year probable flood) (m)	12.50	12.50	12.50	12.52	12.54
DESIGN RIVERBED (m)	1.20	2.74	4.42	6.70	8.29
DISTANCE (km)	0.00	1.00	2.00	3.00	3.70

Fig.VII.4.4 DESIGN LONGITUDINAL PROFILE OF MAIN TRIBUTARIES (2/3)



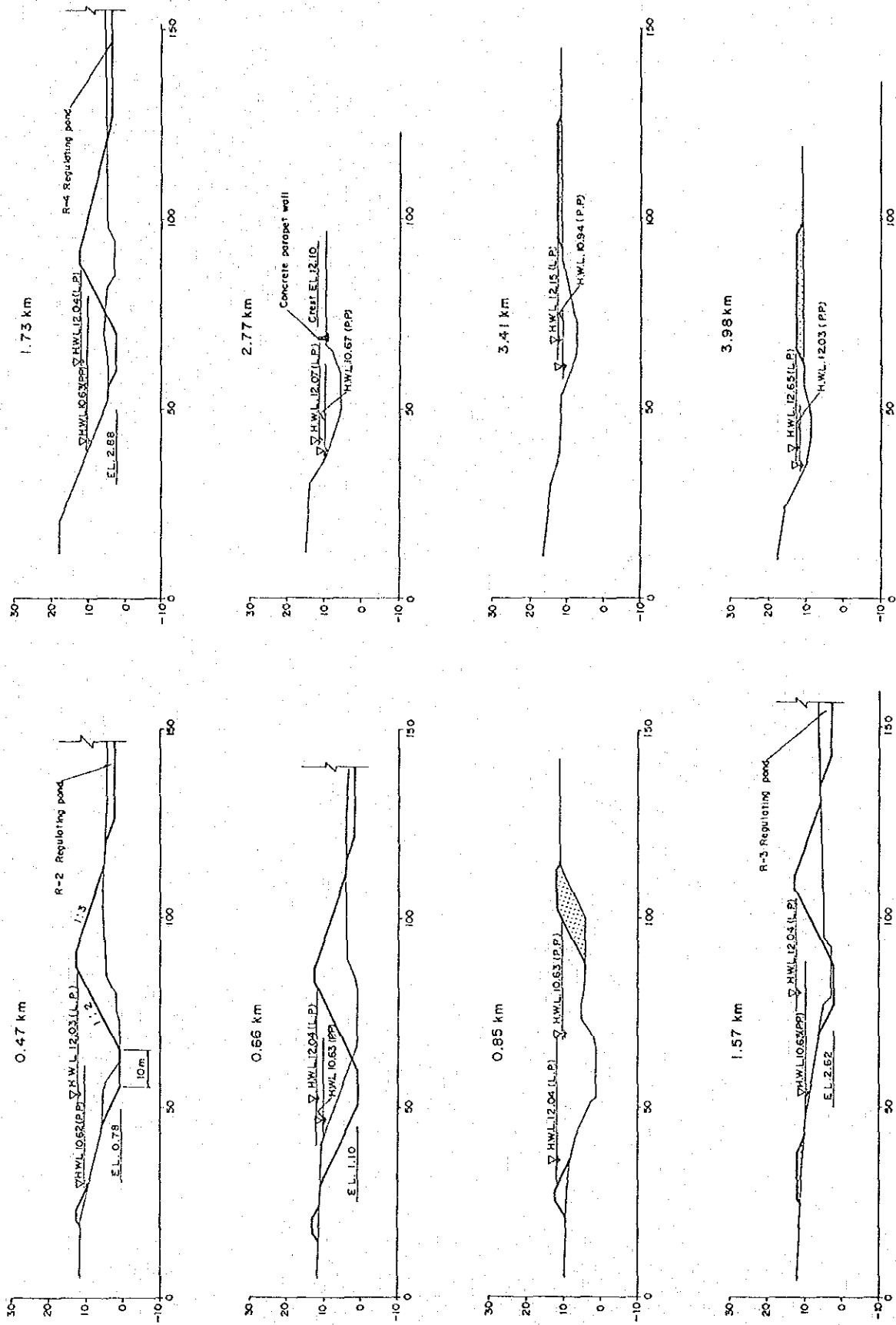
# ITUUPAVA RIVER



DESIGN H.W.L. (10-year probable flood) (m)	12.69	12.72	12.73	12.75	13.49	15.20
H.W.L. (50-year probable flood) (m)	14.30	14.31	14.31	14.32	14.57	15.56
DESIGN RIVERBED (m)	2.00	3.17	4.35	7.18	10.41	12.42
DISTANCE (km)	0.00	2.00	4.00	6.00	8.00	9.25

Fig.VII.4.4 DESIGN LONGITUDINAL PROFILE OF MAIN TRIBUTARIES (3/3)

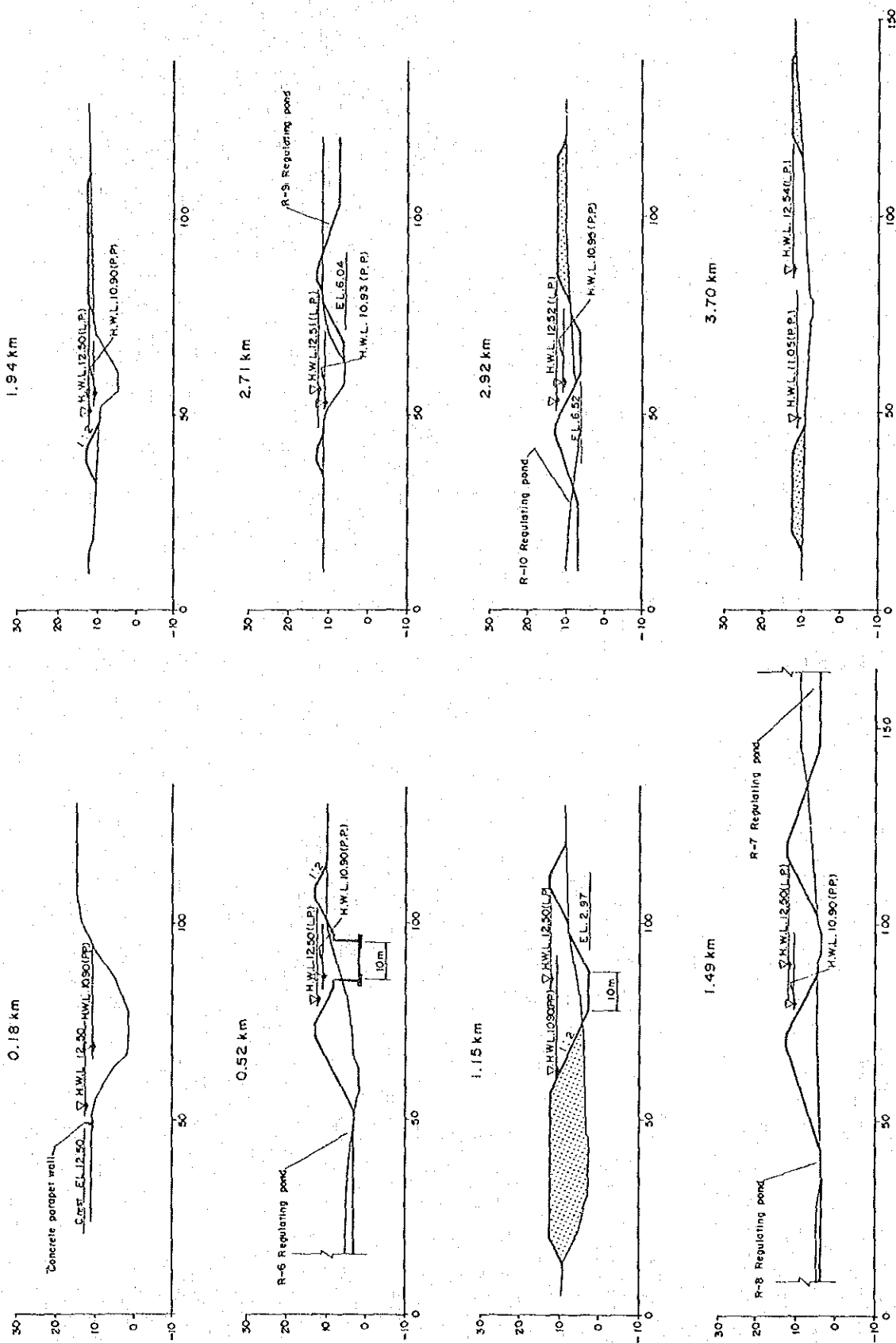




Note : P.P. and L.P. mean Provisional Plan and Long-Term Plan respectively. ; Filling up by excavated material.

Fig.VII.4.5 DESIGN RIVER CROSS SECTIONS OF GARCIA RIVER





Note : P.P. and L.P. mean Provisional Plan and Long-Term Plan respectively.

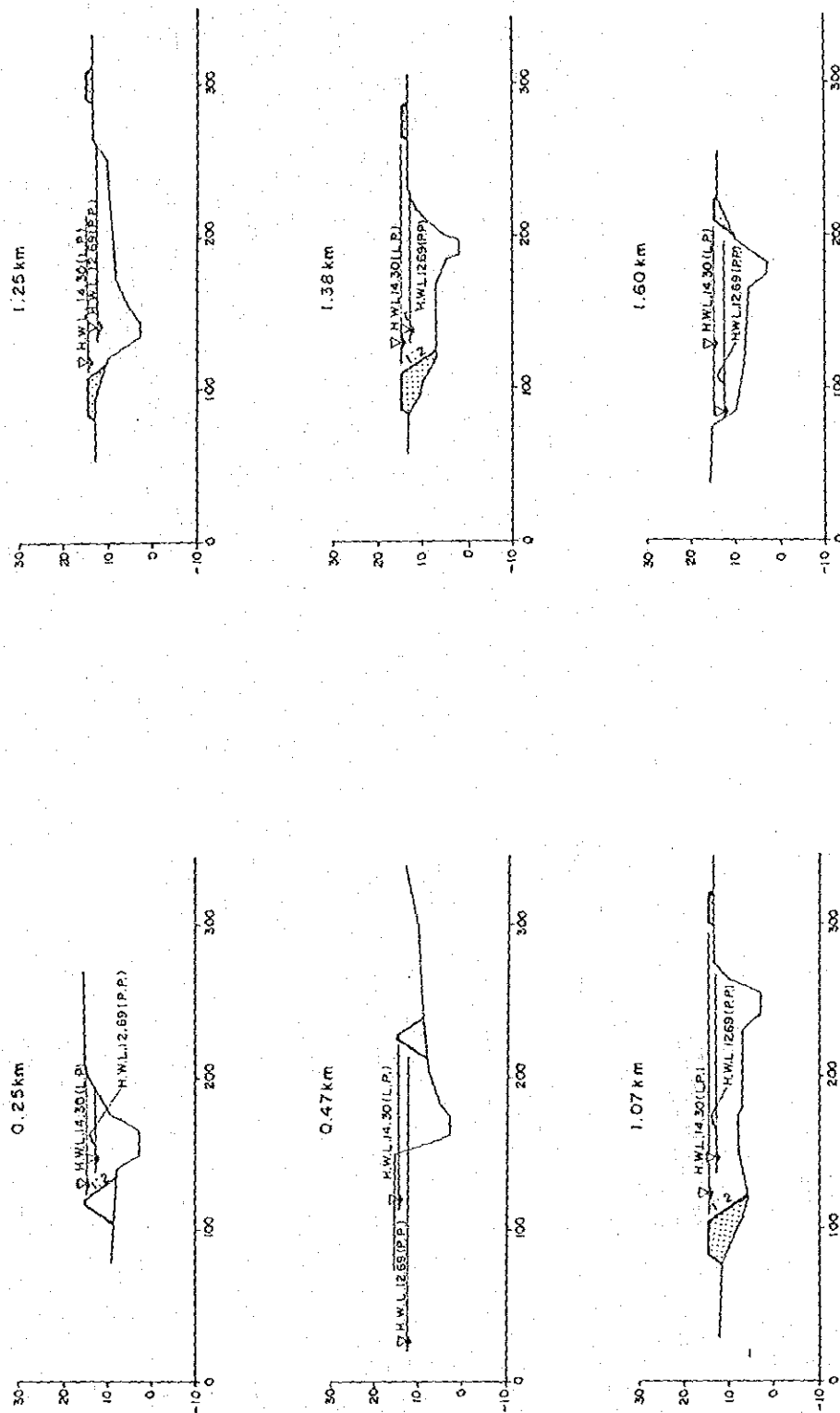


: Filling up by excavated material.

Fig.VII.4.6 DESIGN RIVER CROSS SECTIONS OF VELHA RIVER







Note : P.P. and L.P. mean Provisional Plan  
and Long-Term Plan respectively.  
[ ] : Filling up by excavated material.

Fig.VII.4.7 DESIGN RIVER CROSS SECTIONS OF ITOUPAVA RIVER

