



note:N.A. = Not Available

THE STUDY ON COMPREHENSIVE FLOOD MITIGATION  
AND ENVIRONMENTAL IMPROVEMENT PLAN  
OF LAI NULLAH BASIN  
IN THE ISLAMIC REPUBLIC OF PAKISTAN  
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. F.6  
Detailed Sewerage System of I-8/2, Islamabad

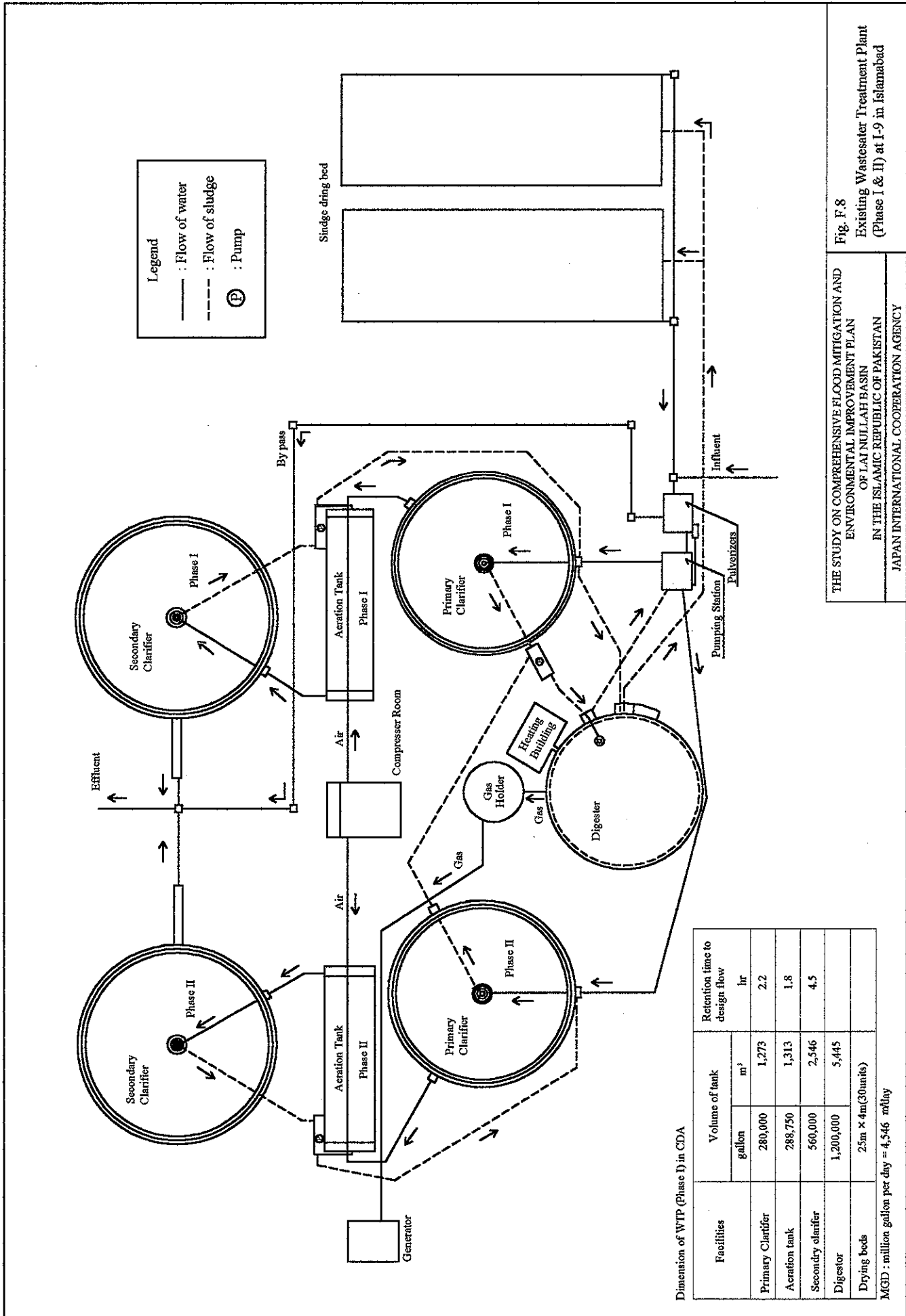


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Fig. F.7

Sewerage Master Plan for Islamabad



**Legend**  
 — : Flow of water  
 - - - : Flow of sludge  
 (P) : Pump

Dimension of WTP (Phase I) in CDA

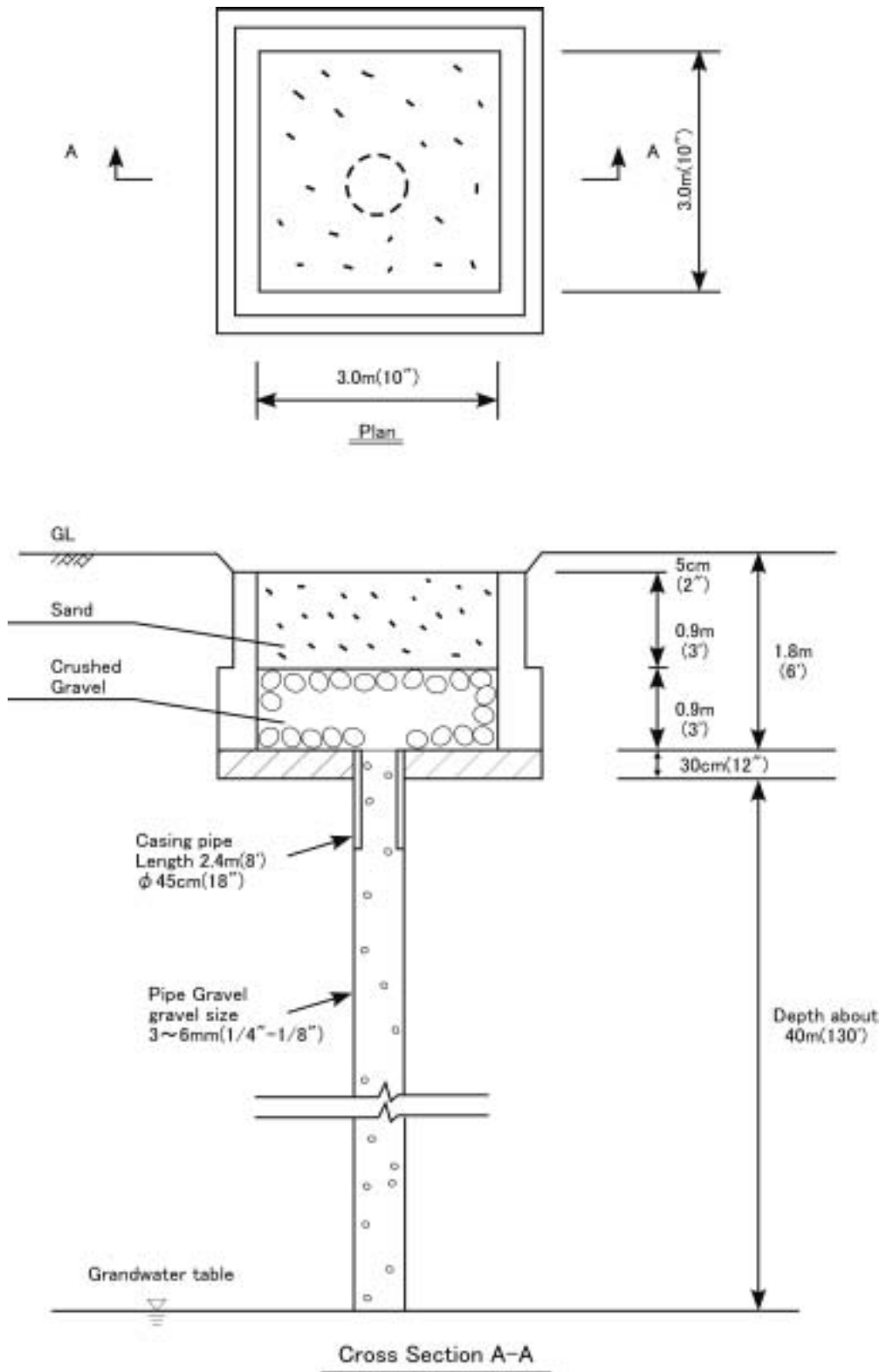
Facilities	Volume of tank		Retention time to design flow
	gallon	m <sup>3</sup>	
Primary Clarifier	280,000	1,273	2.2
Aeration tank	288,750	1,313	1.8
Secondary clarifier	560,000	2,546	4.5
Digester	1,200,000	5,445	
Drying beds	25m x 4m(30units)		

MGD : million gallon per day = 4,546 m<sup>3</sup>/day

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Fig. F.8  
 Existing Wastewater Treatment Plant (Phase I & II) at I-9 in Islamabad



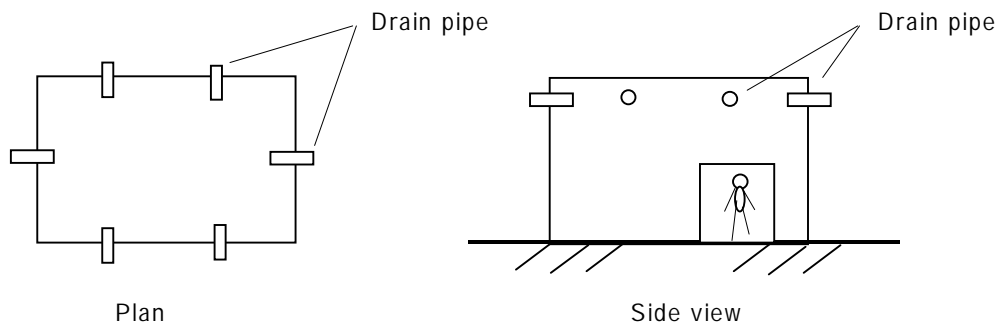


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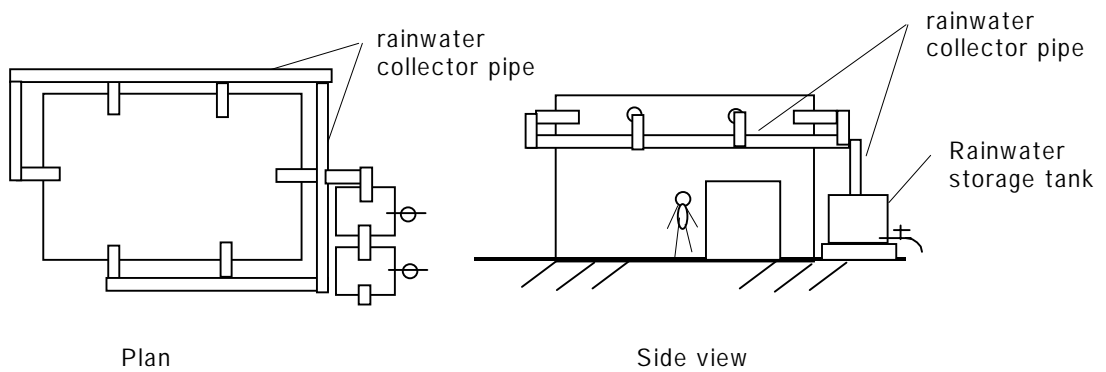
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Fig. F.9

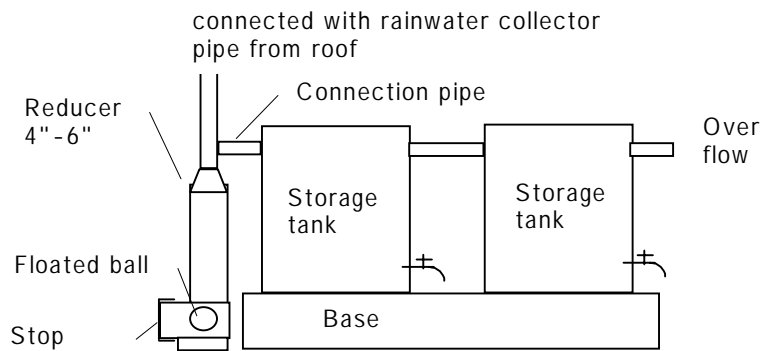
Structure of Rainwater Infiltration Wells  
Constructed by CDA as Pilot Project in 2002



**Typical Present Drainage of Households**

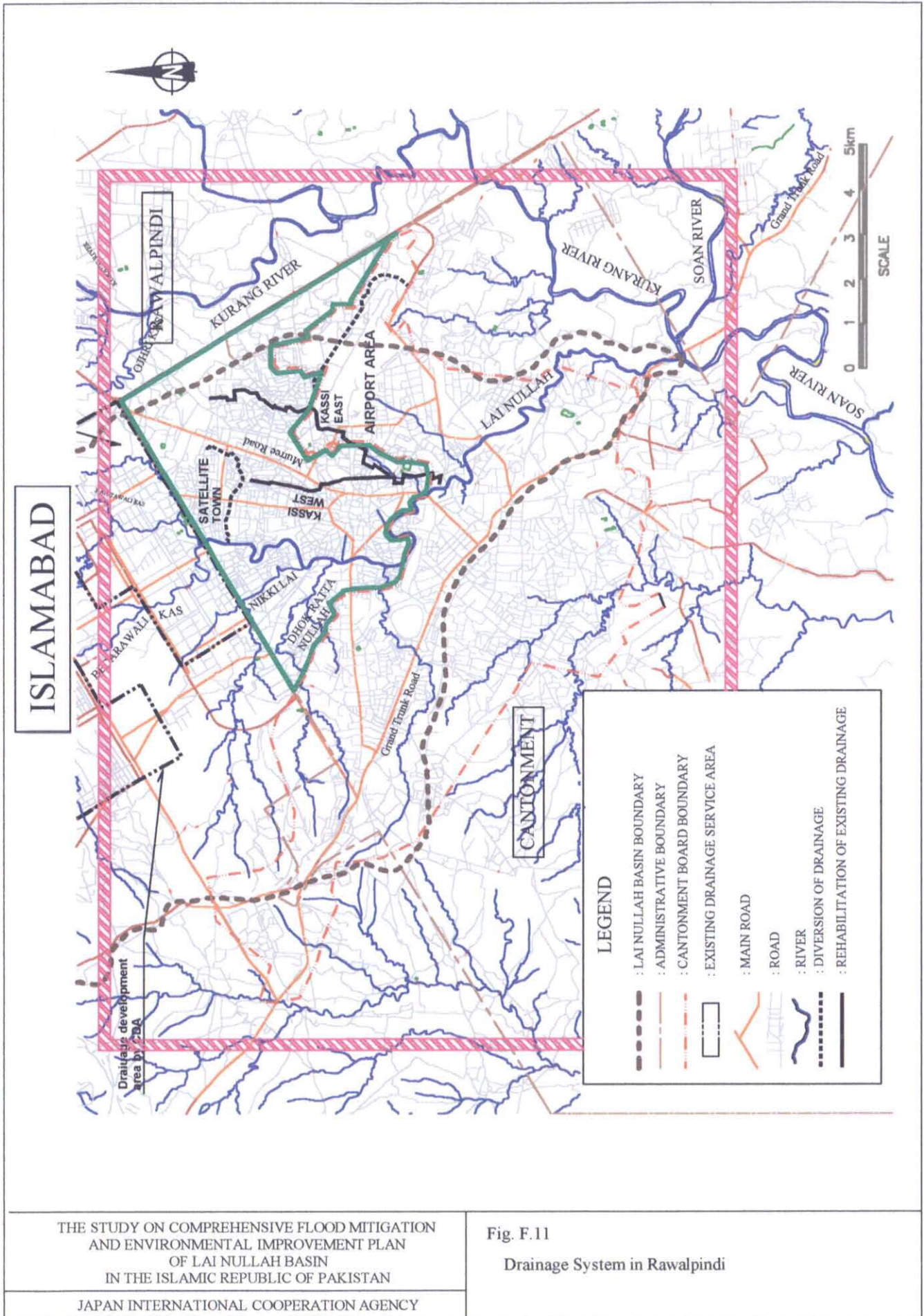


**Typical Application for Rainwater Storage System**

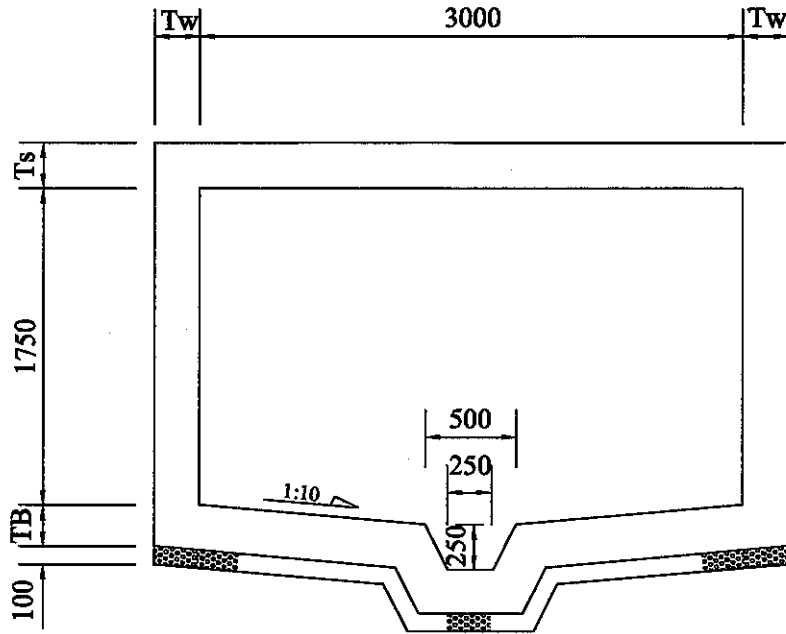


**Detail of Water Storage System**

**Typical Structure of Rainwater Storage System for Run off Reduction and Rainwater Reuse**

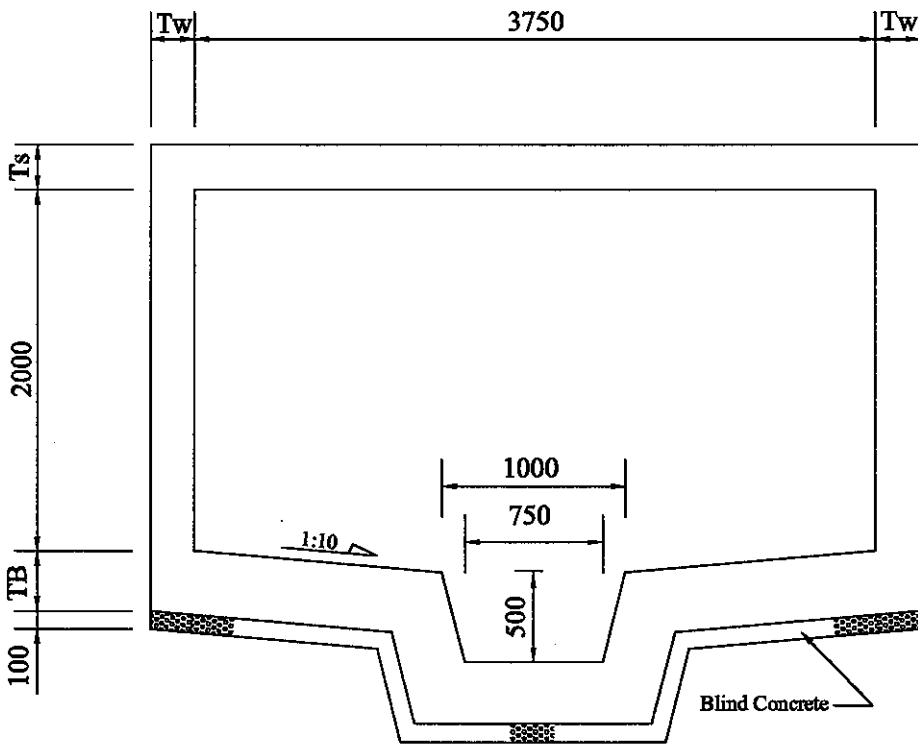


DW-02



TYPICAL SECTION TYPE "A"

SCALE-"A"



TYPICAL SECTION TYPE "B"

SCALE-"A"

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Fig. F.12

Cross-Section of Drainage Channel