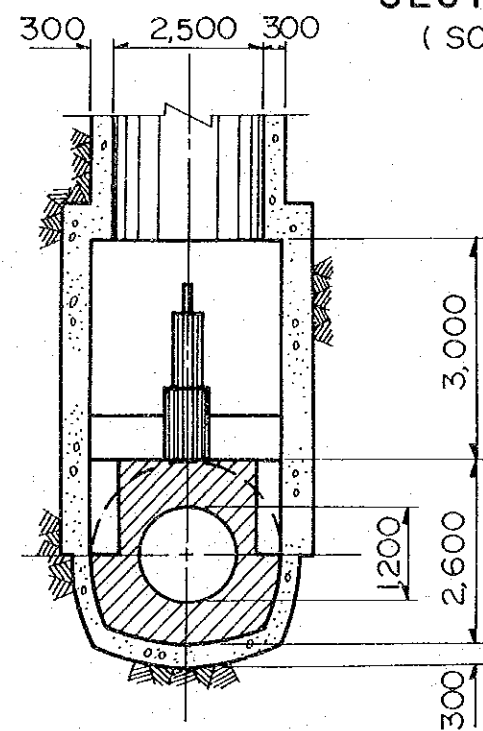
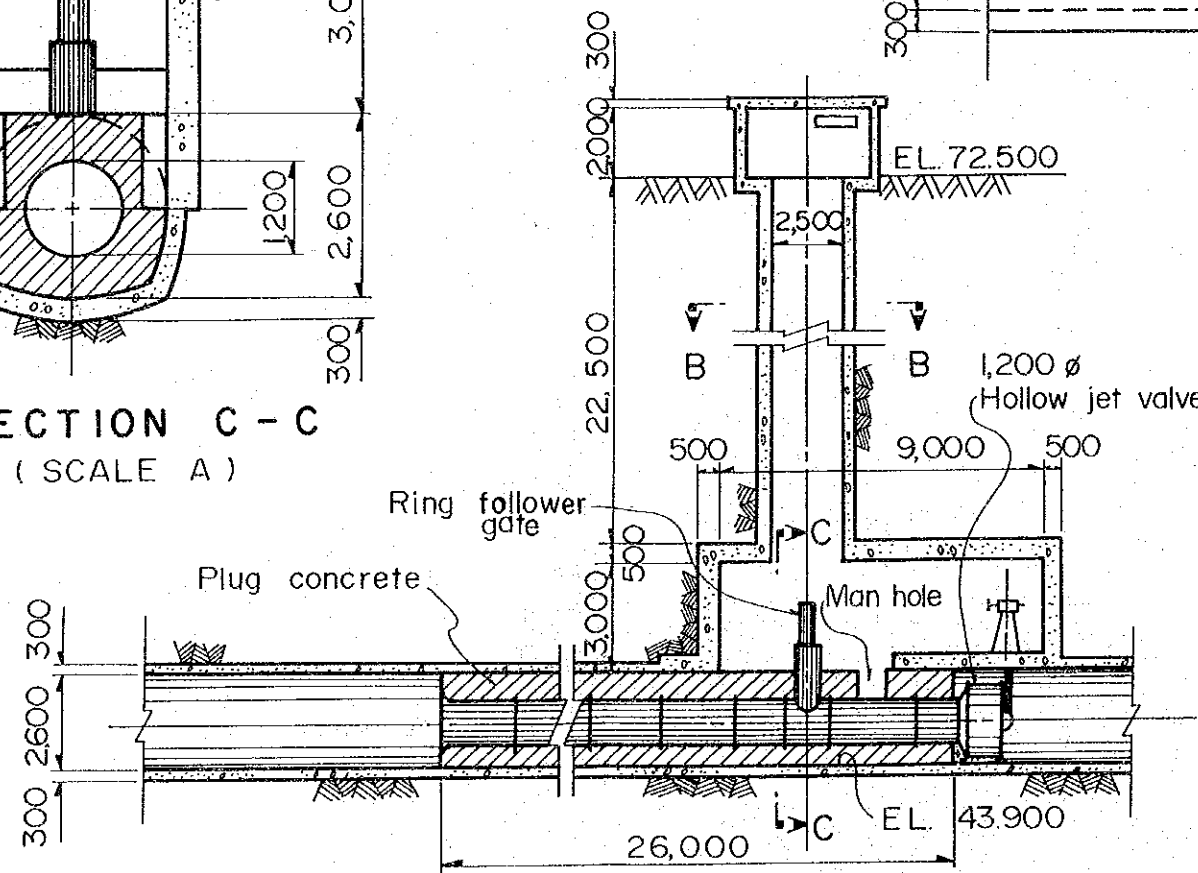


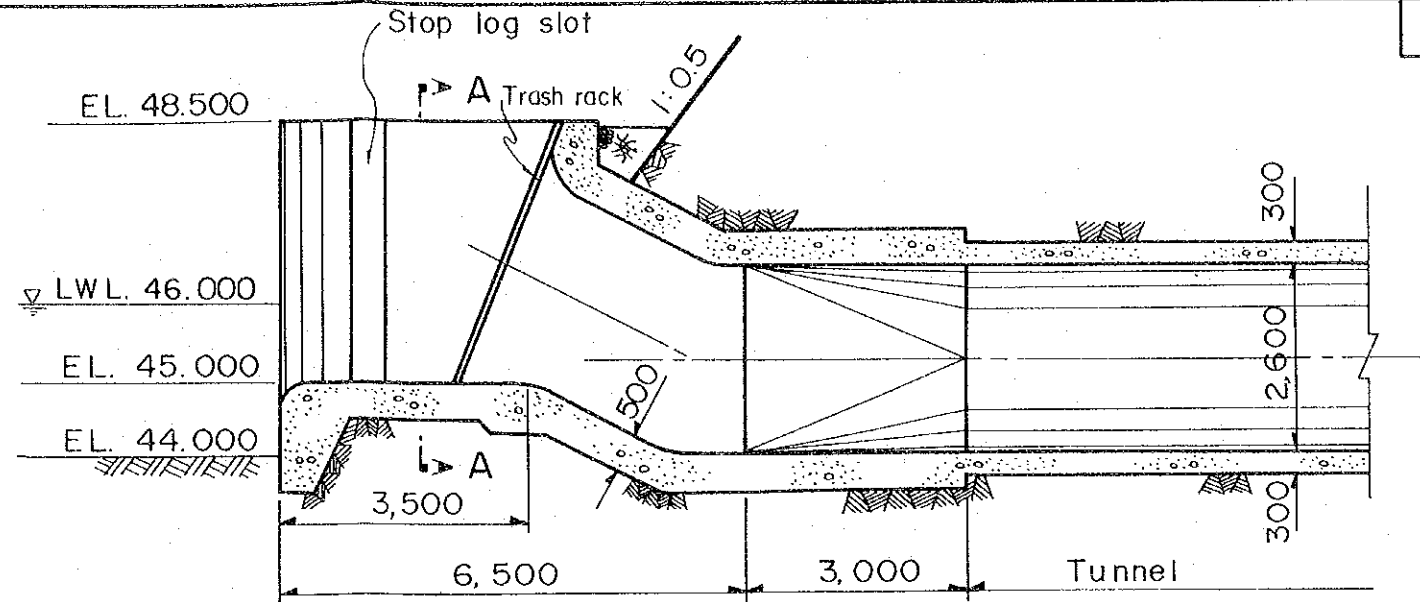
SECTION A - A  
( SCALE A )



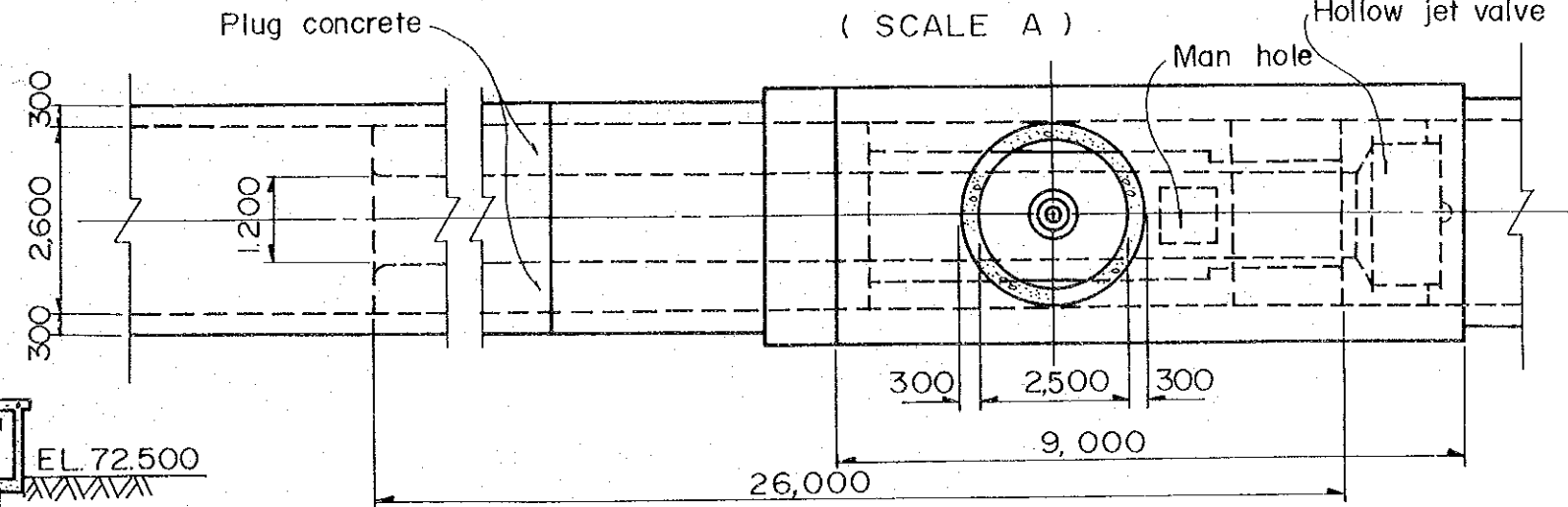
SECTION C - C  
( SCALE A )



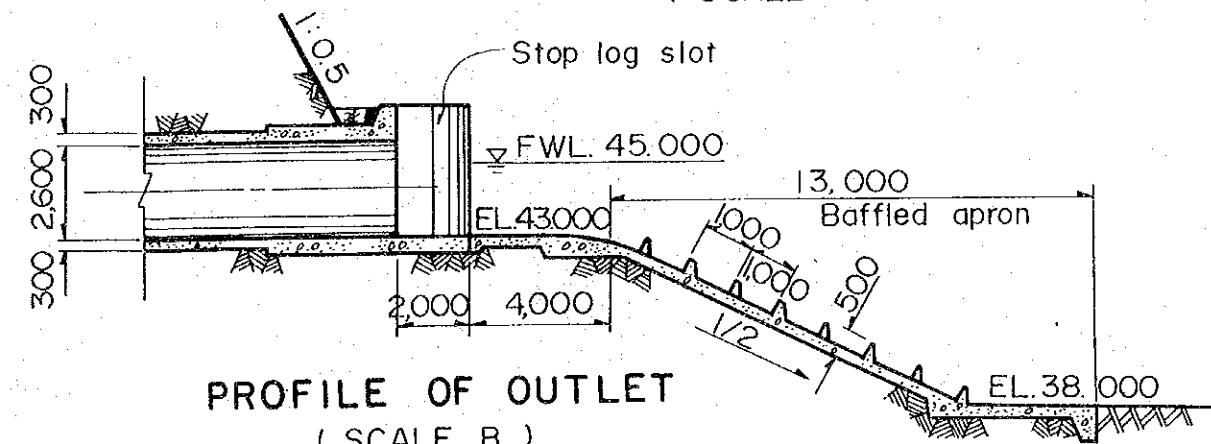
PROFILE OF SHAFT  
( SCALE B )



PROFILE OF INTAKE  
( SCALE A )



SECTION B - B  
( SCALE A )



PROFILE OF OUTLET  
( SCALE B )

SCALE A

SCALE B

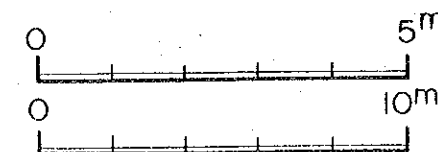
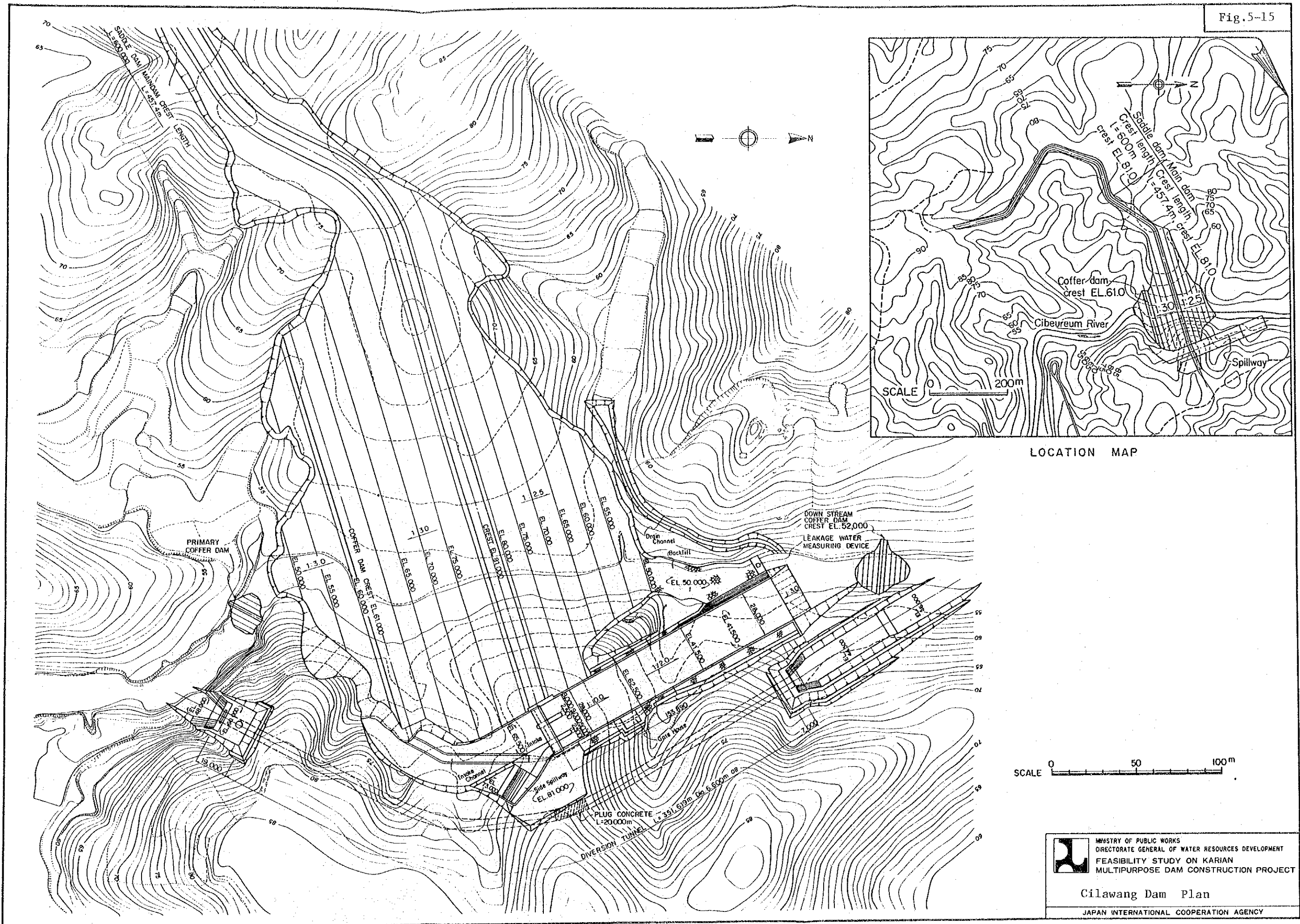
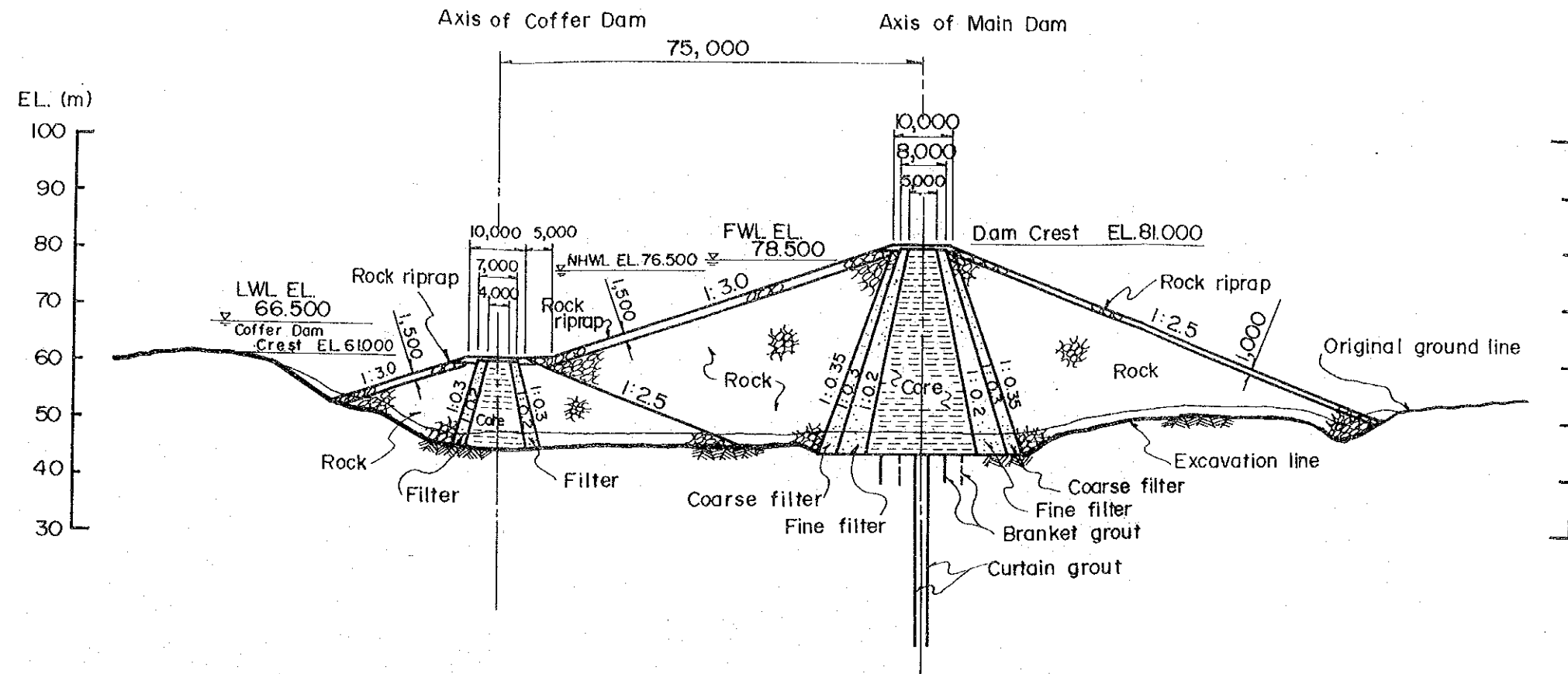
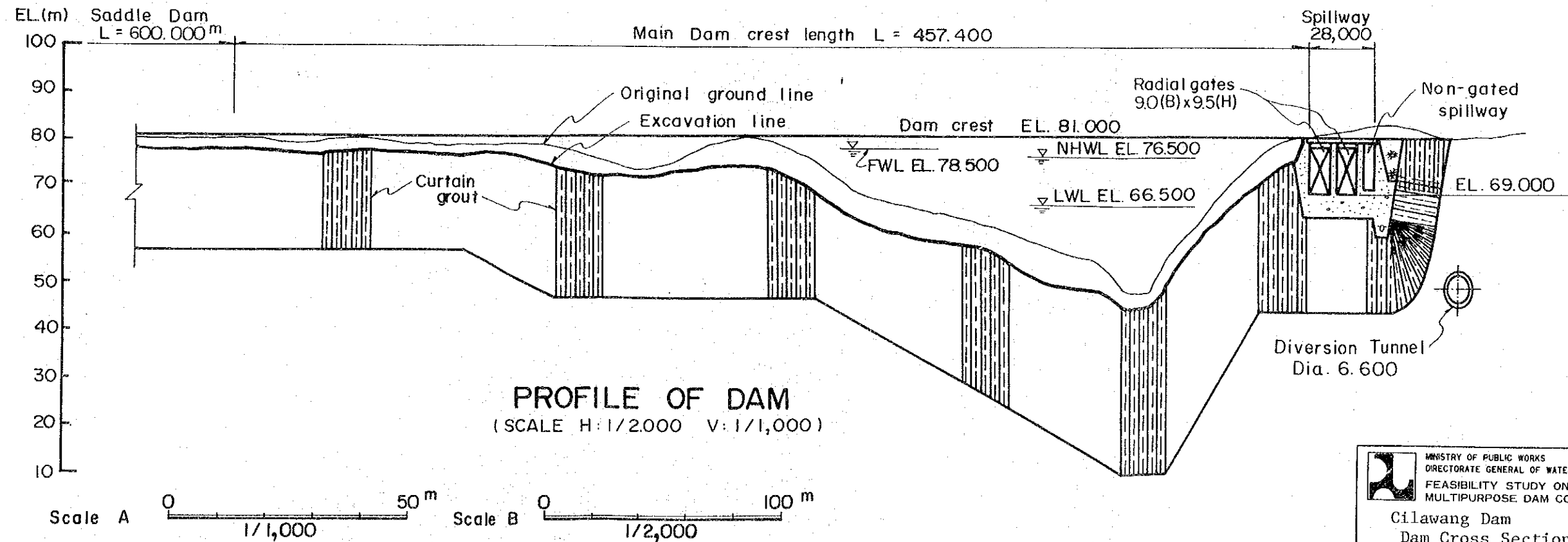


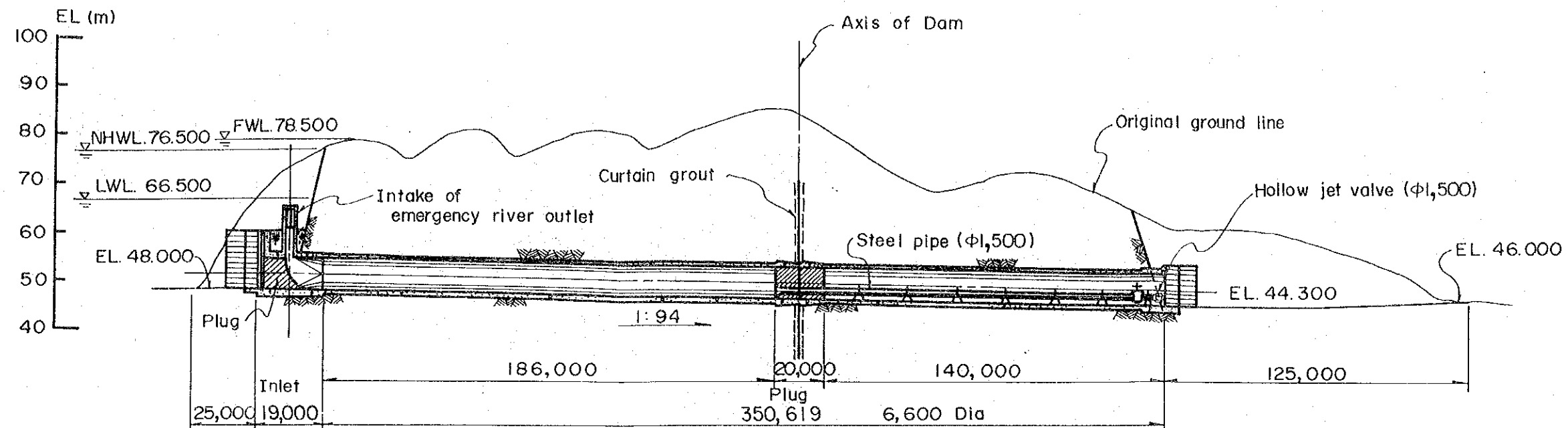
Fig.5-15



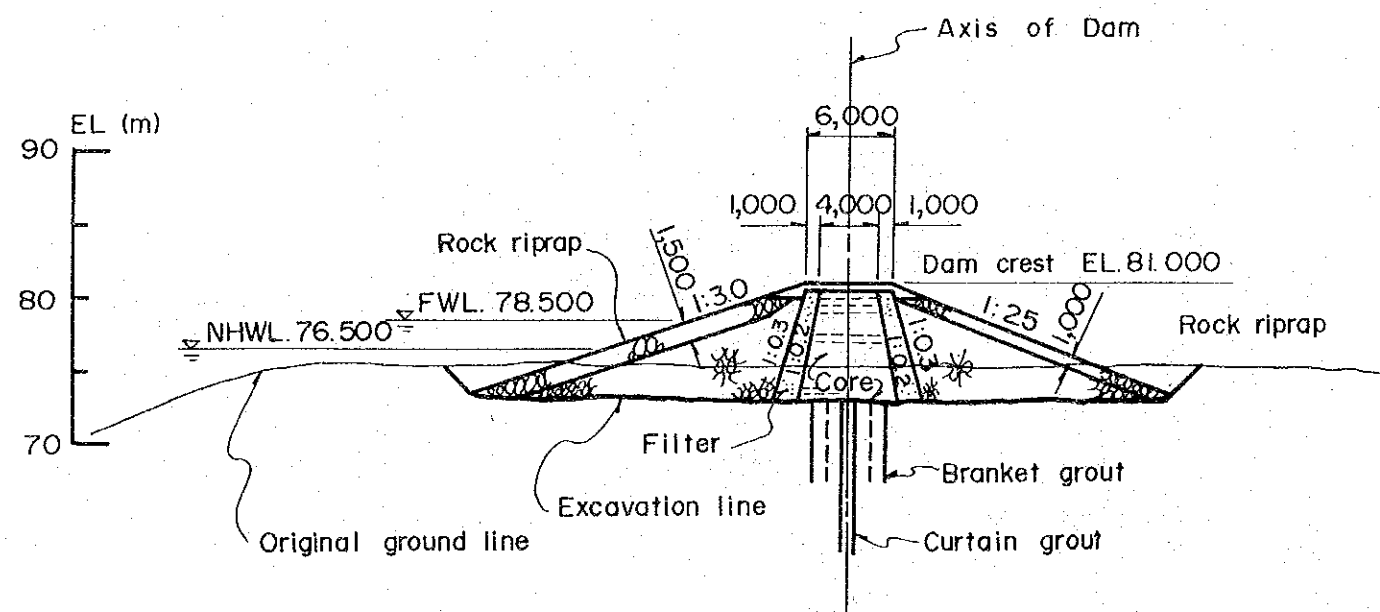


TYPICAL CROSS SECTION OF MAIN DAM  
(SCALE A)



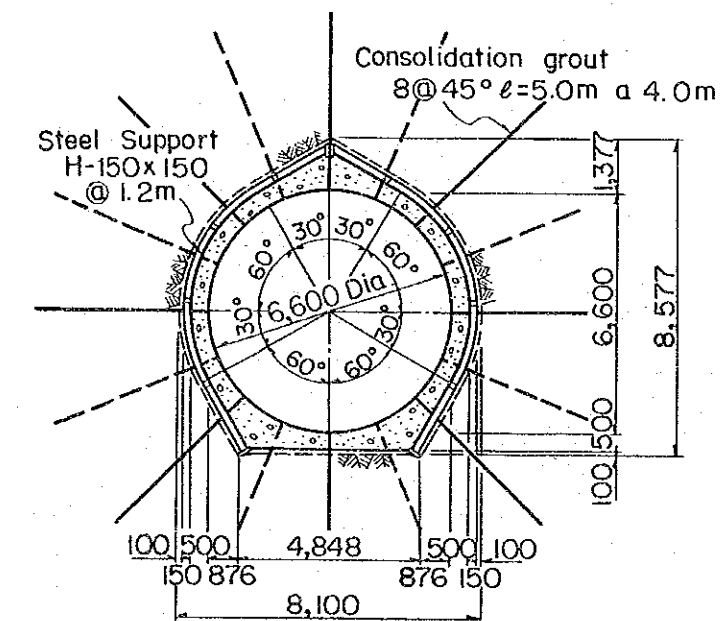
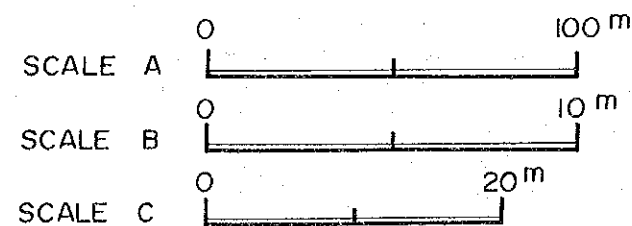


PROFILE OF DIVERSION TUNNEL (H-SCALE A)



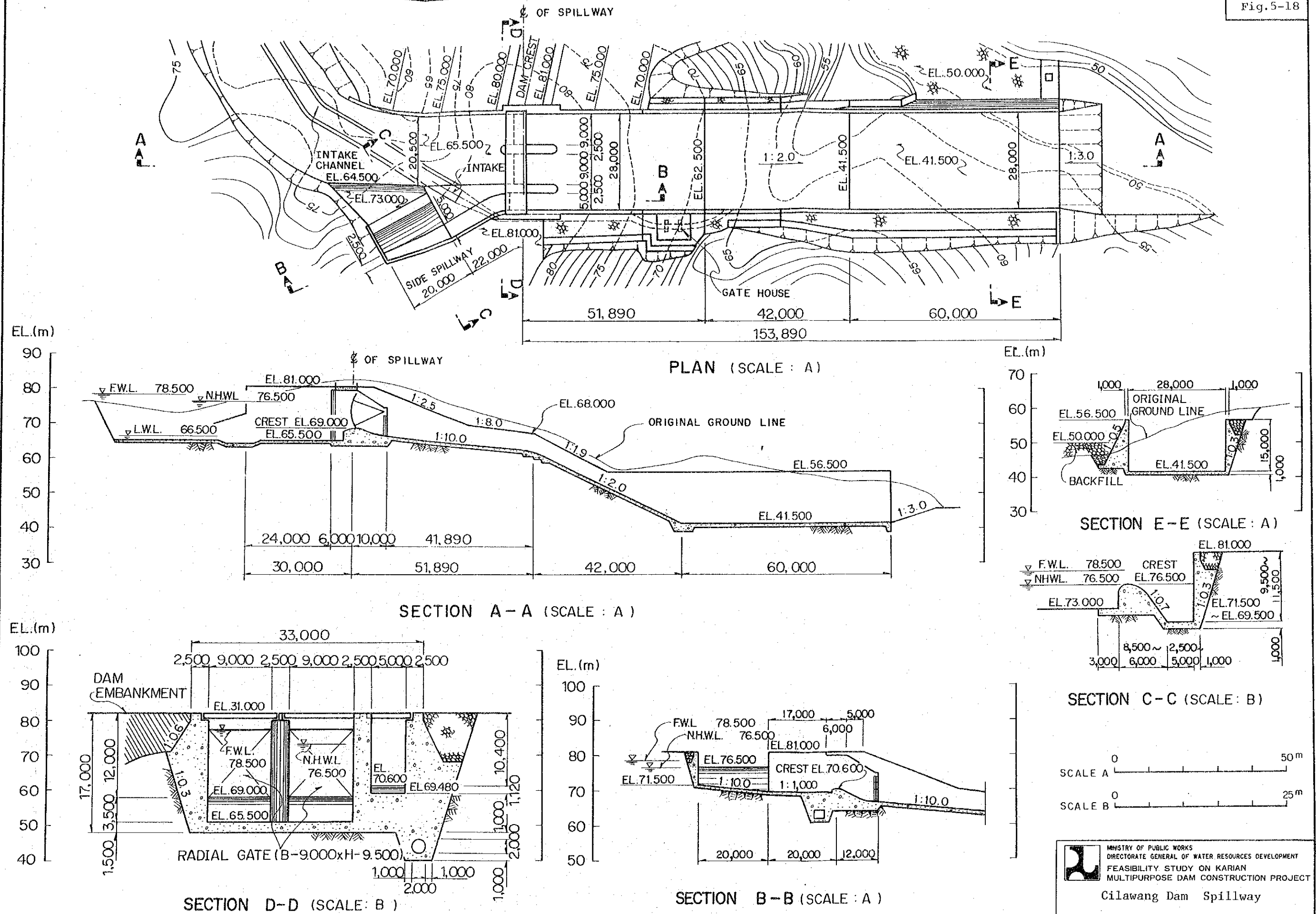
TYPICAL CROSS SECTION OF SADDLE DAM

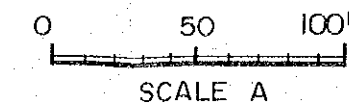
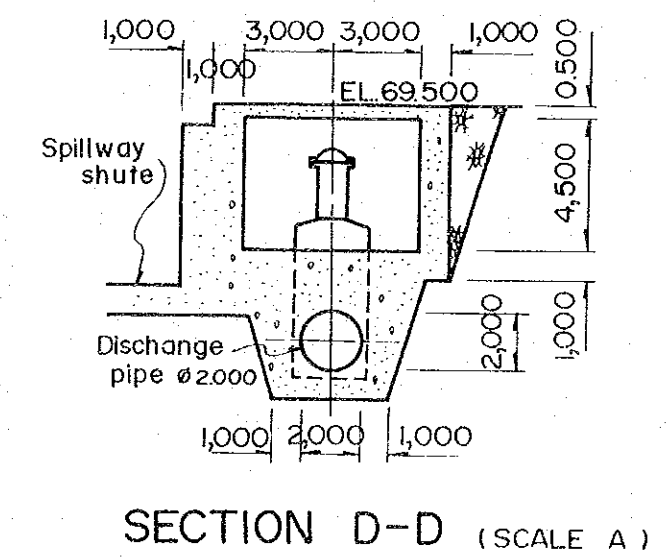
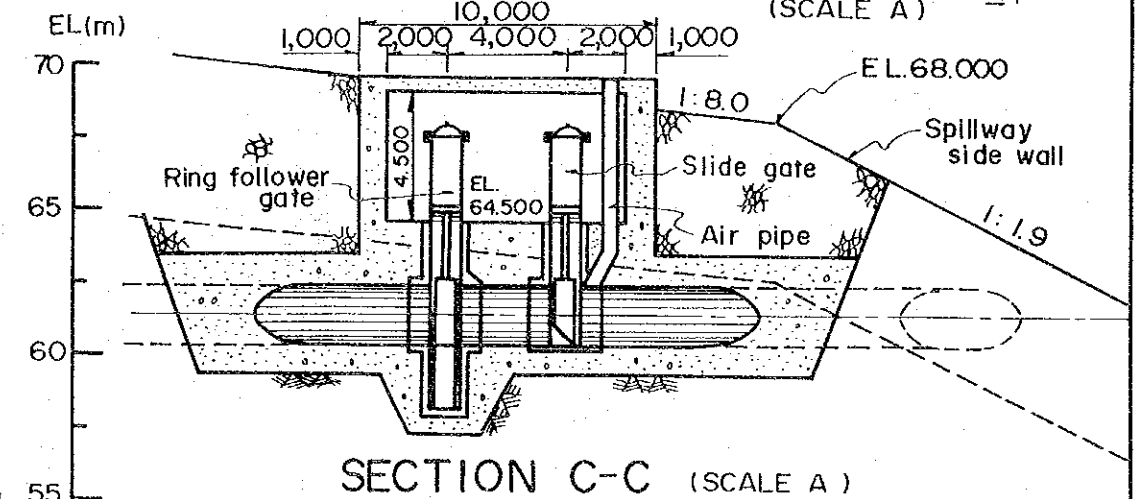
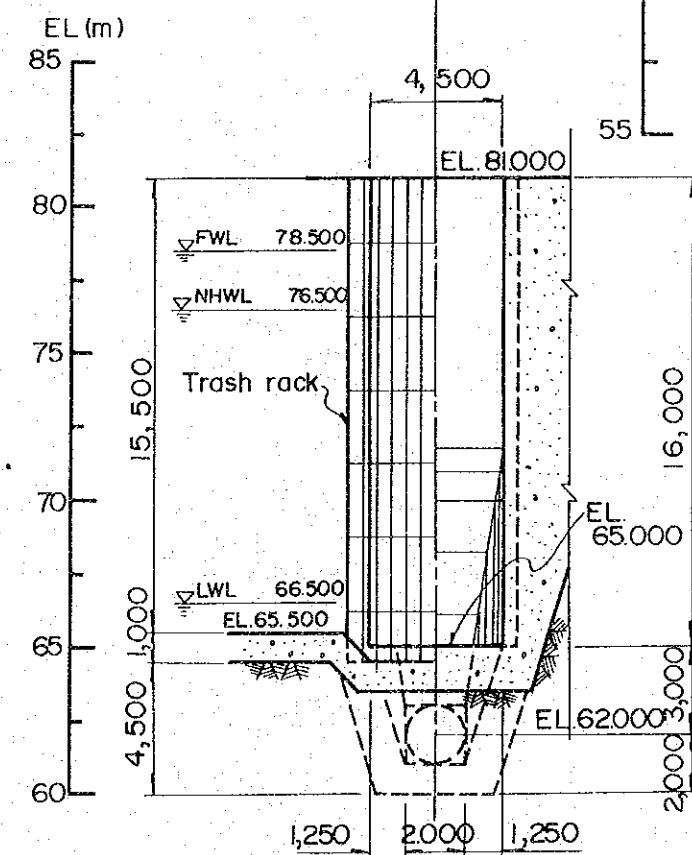
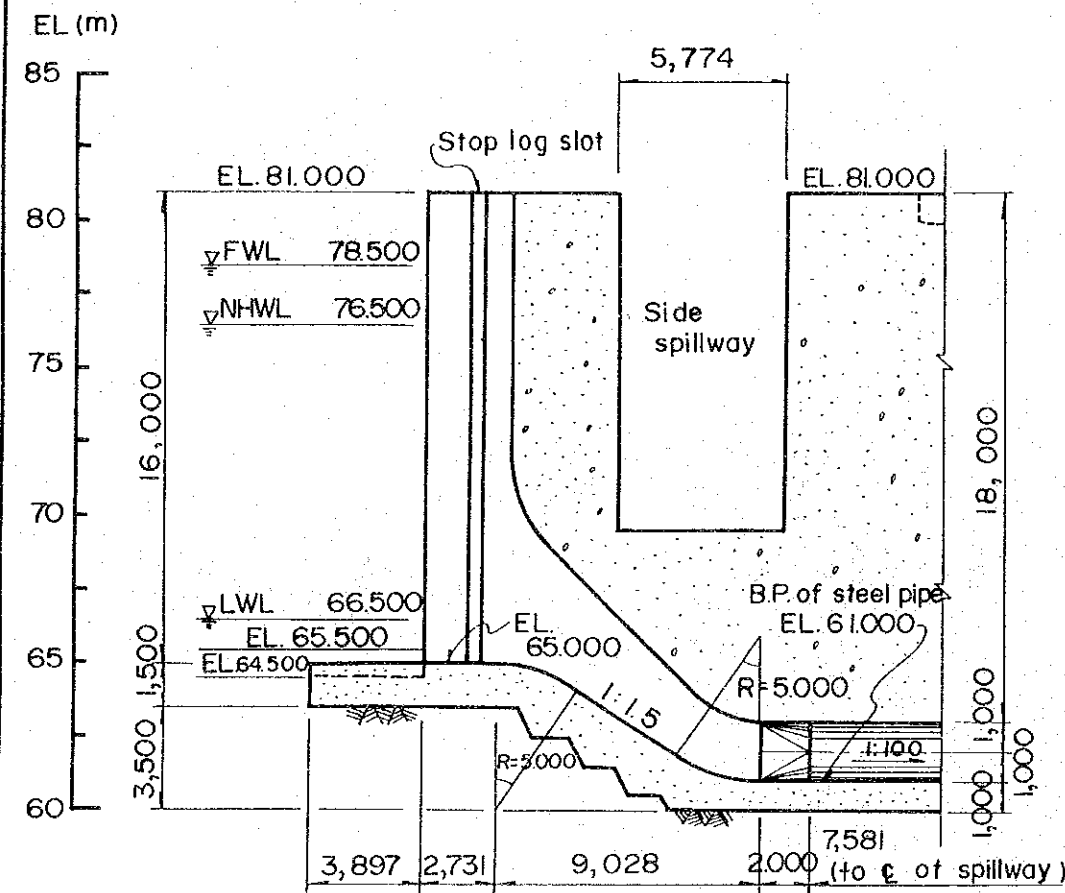
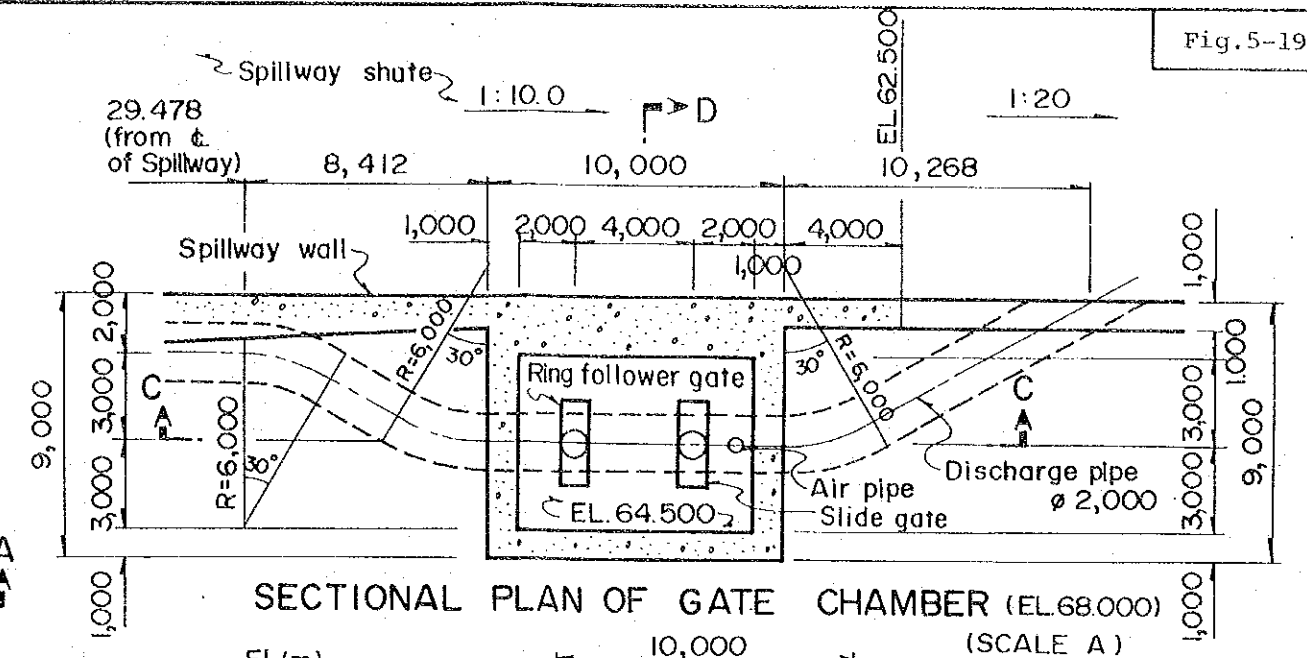
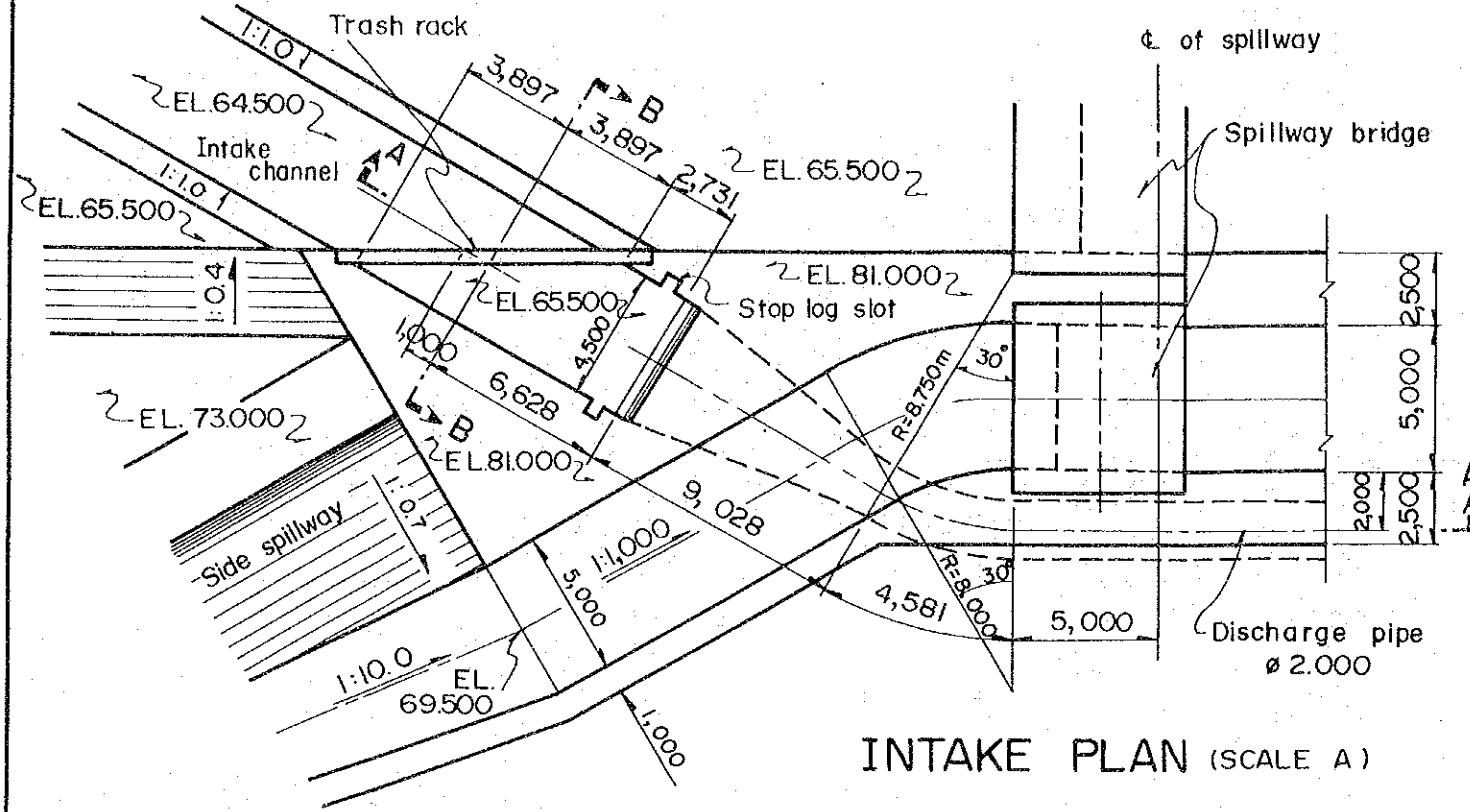
(SCALE C)



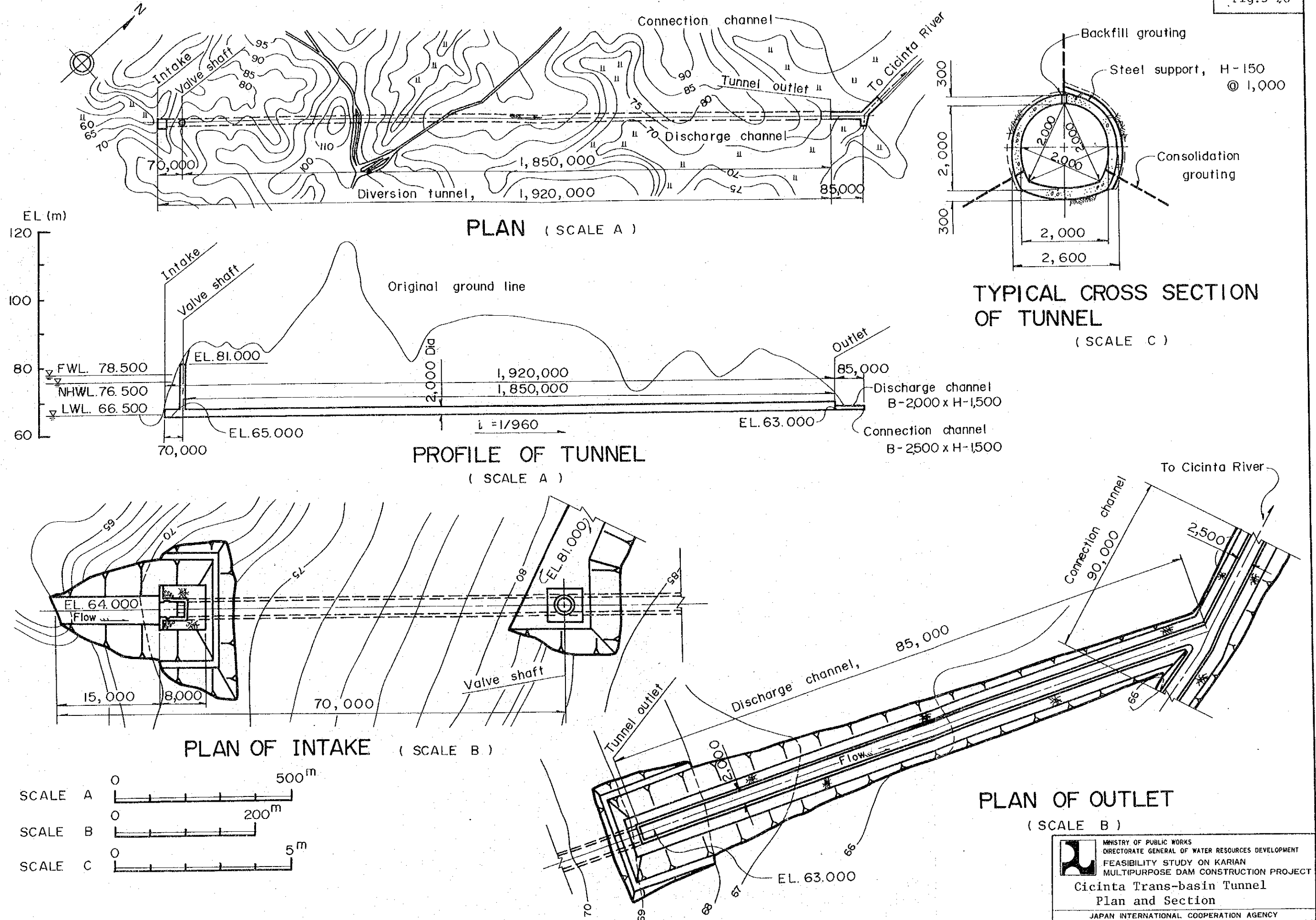
TYPICAL SECTION OF TUNNELS

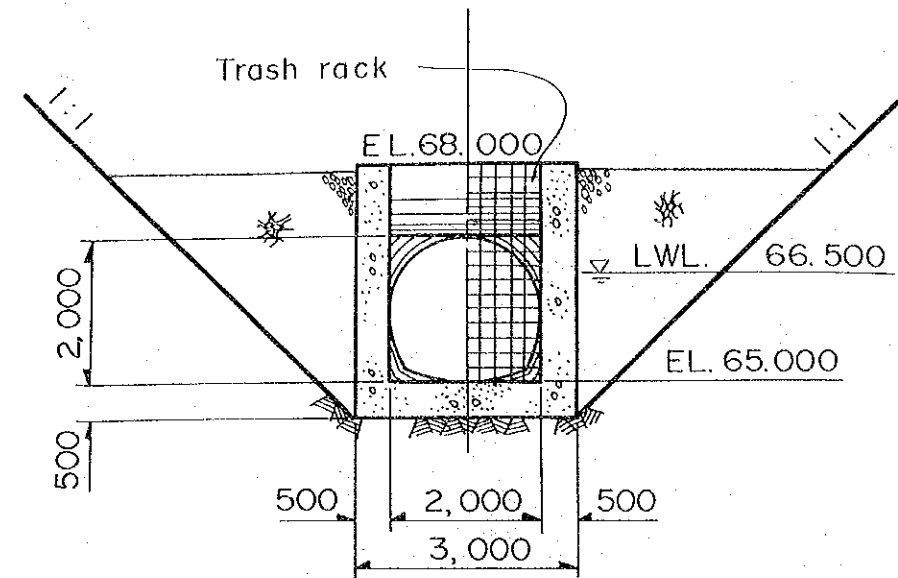
(SCALE B)



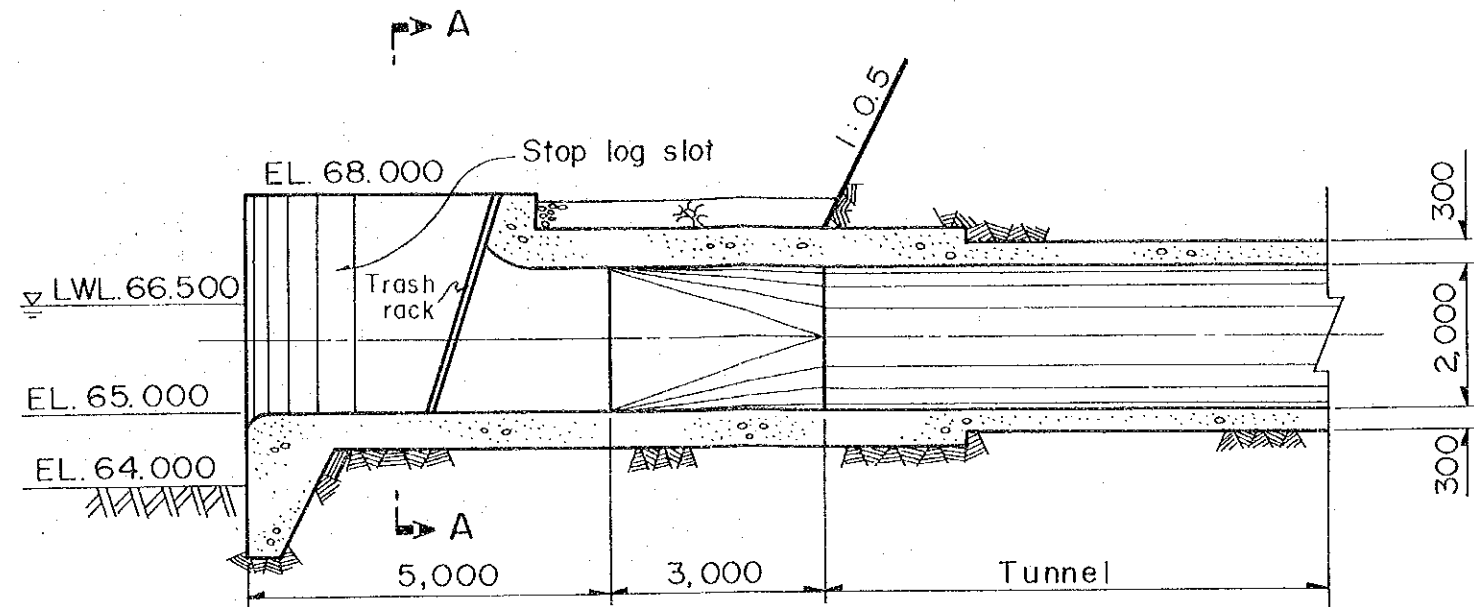




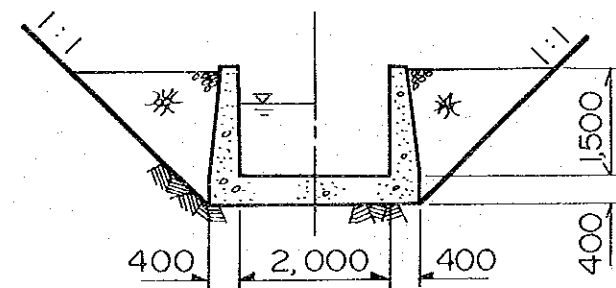




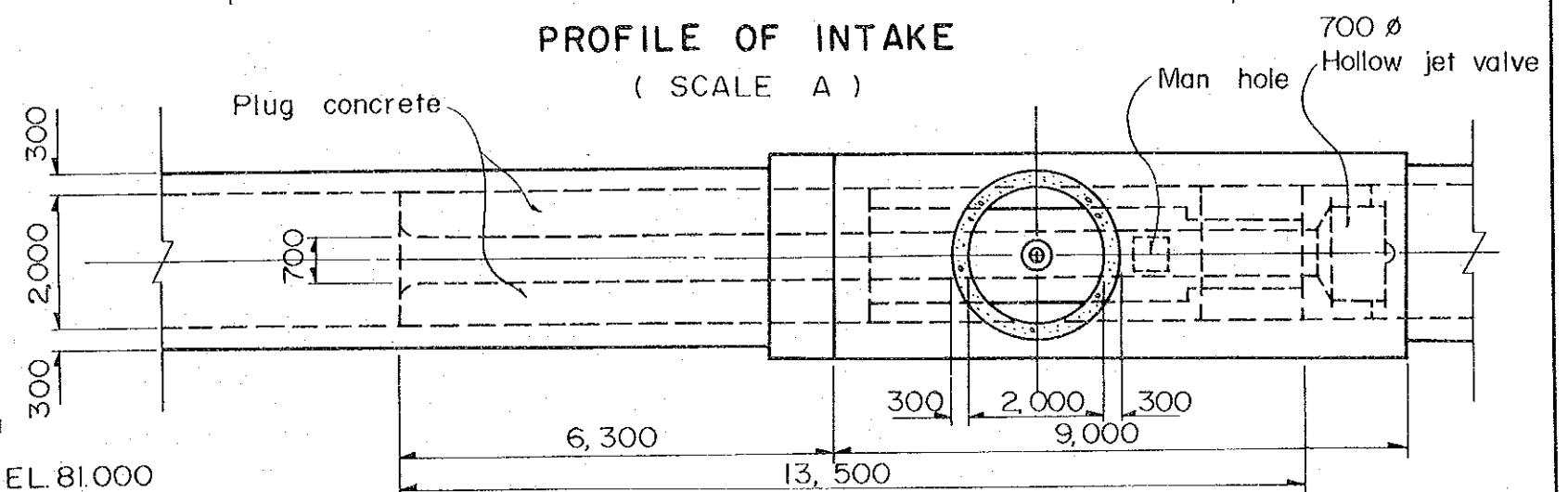
SECTION A - A  
( SCALE A )



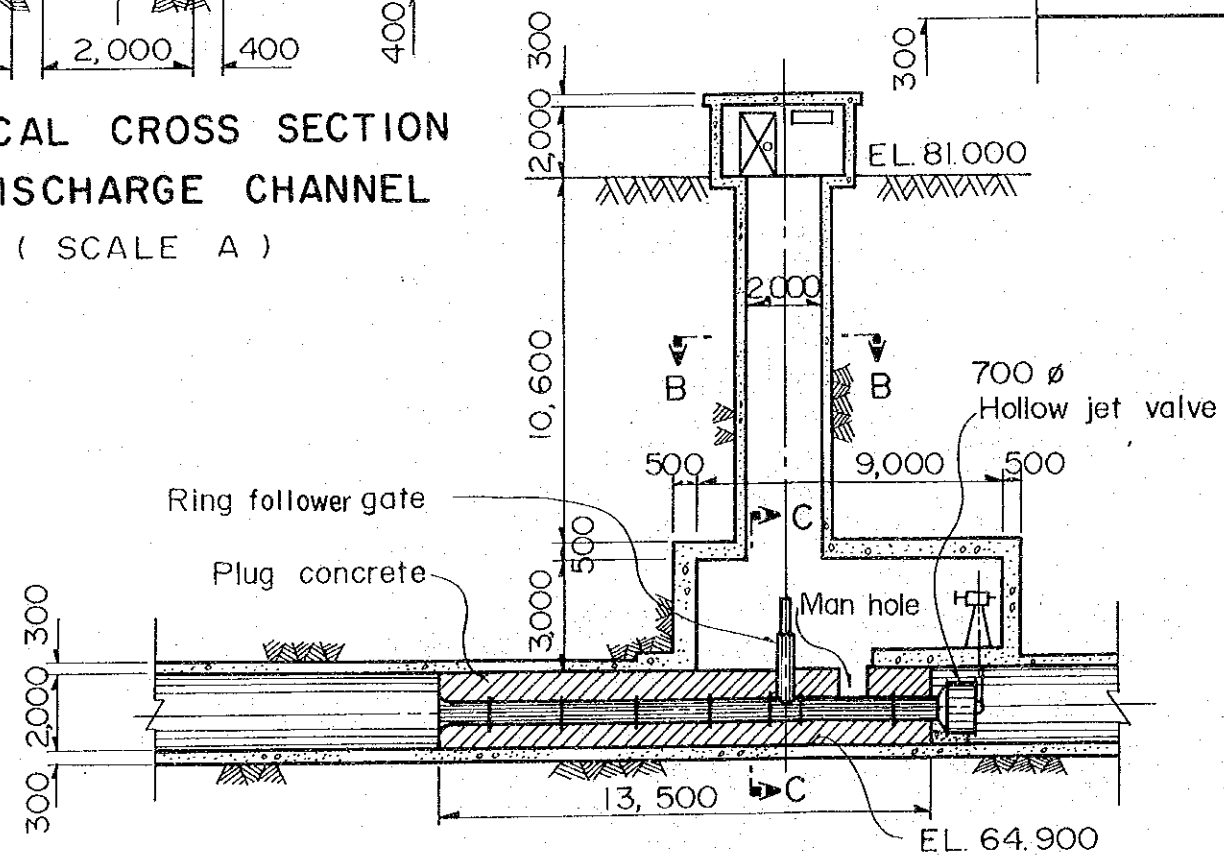
PROFILE OF INTAKE  
( SCALE A )



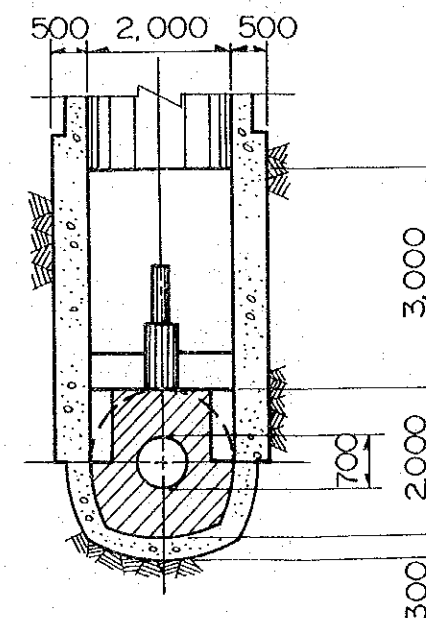
TYPICAL CROSS SECTION  
OF DISCHARGE CHANNEL  
( SCALE A )



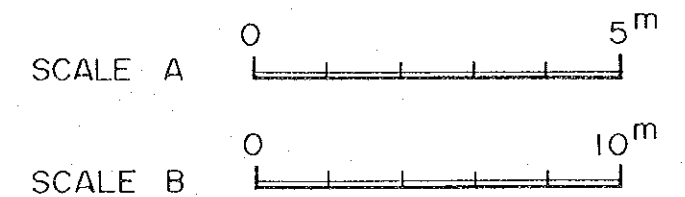
SECTION B - B  
( SCALE A )



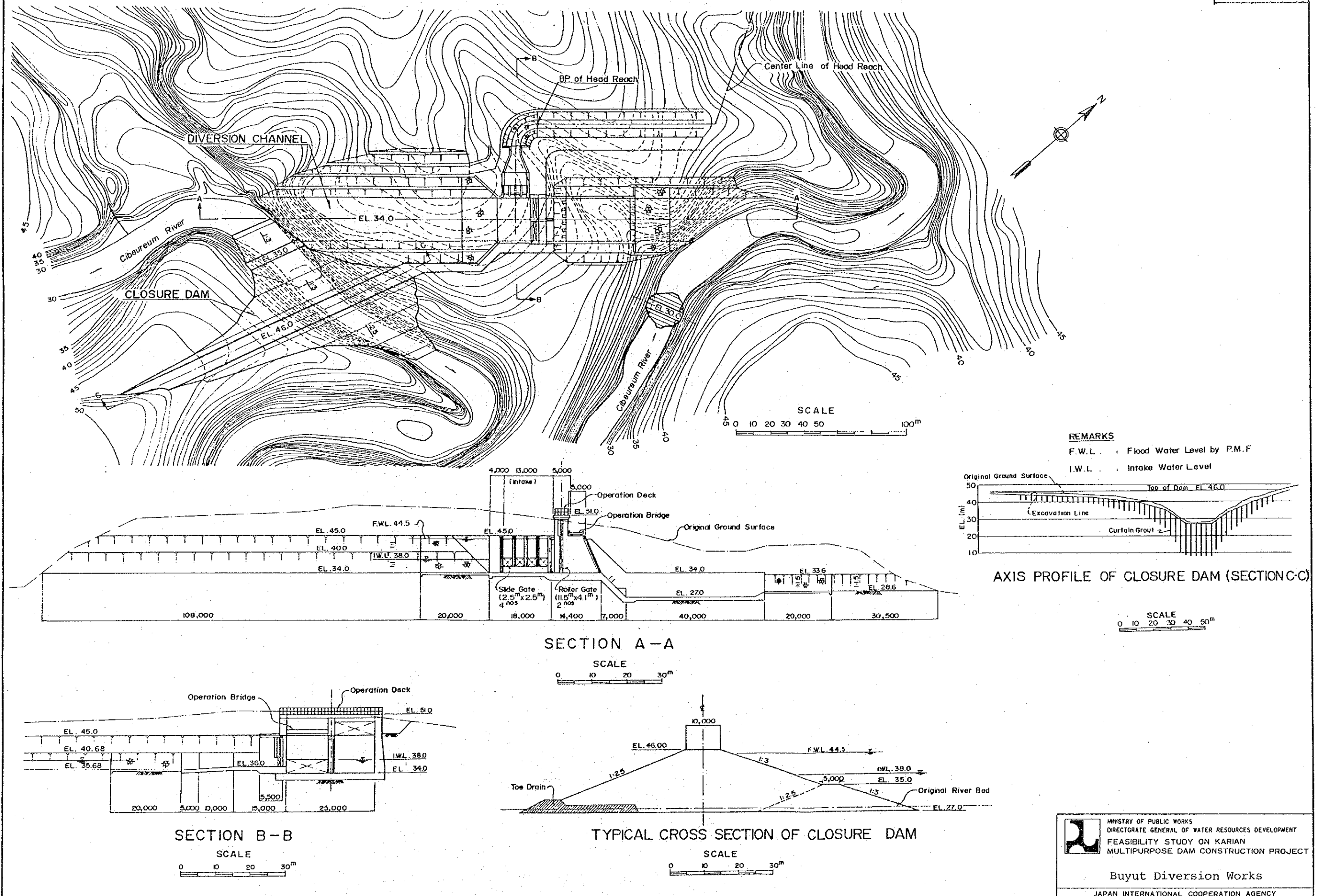
PROFILE OF SHAFT  
( SCALE B )



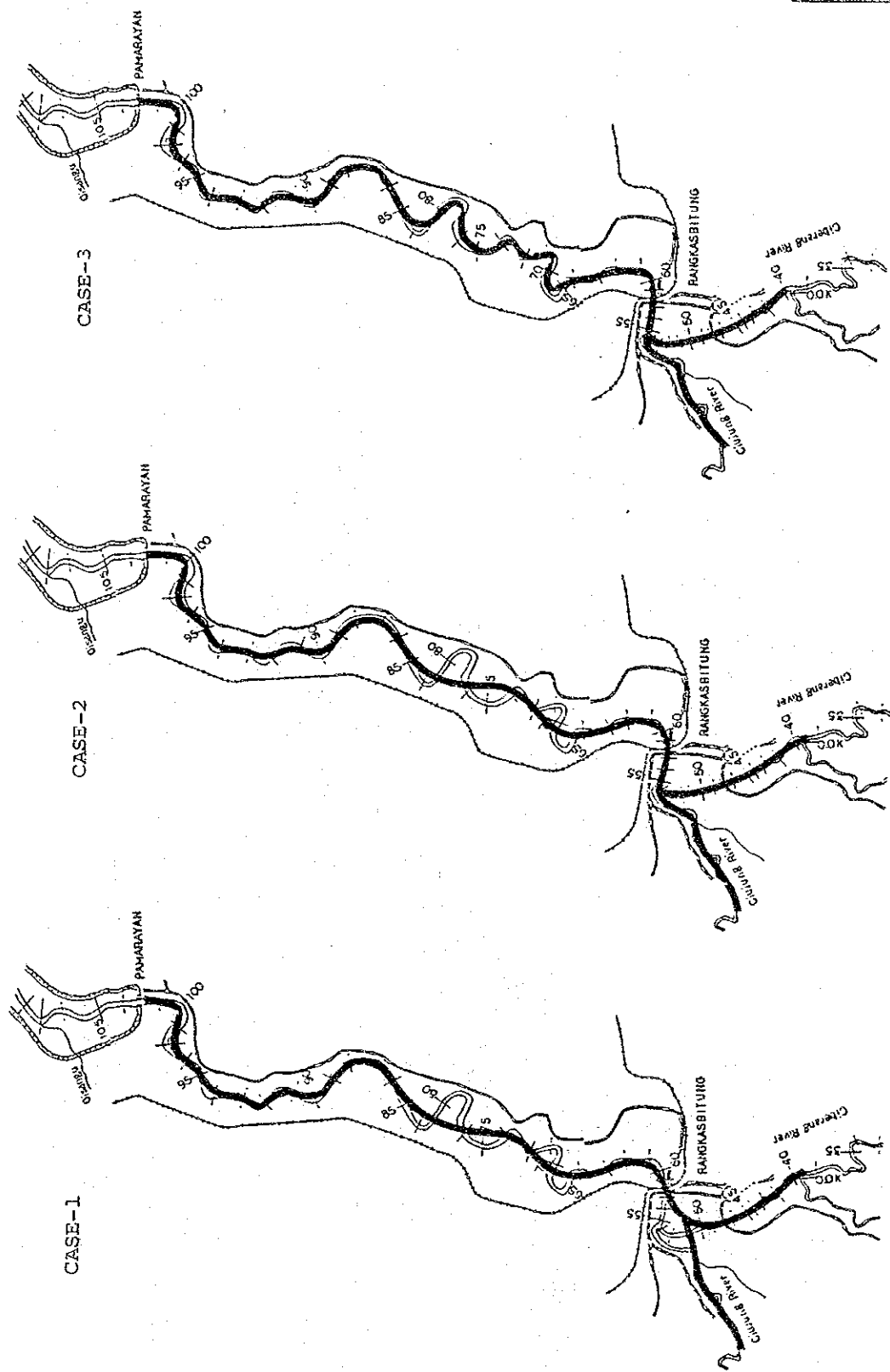
SECTION C - C  
( SCALE A )







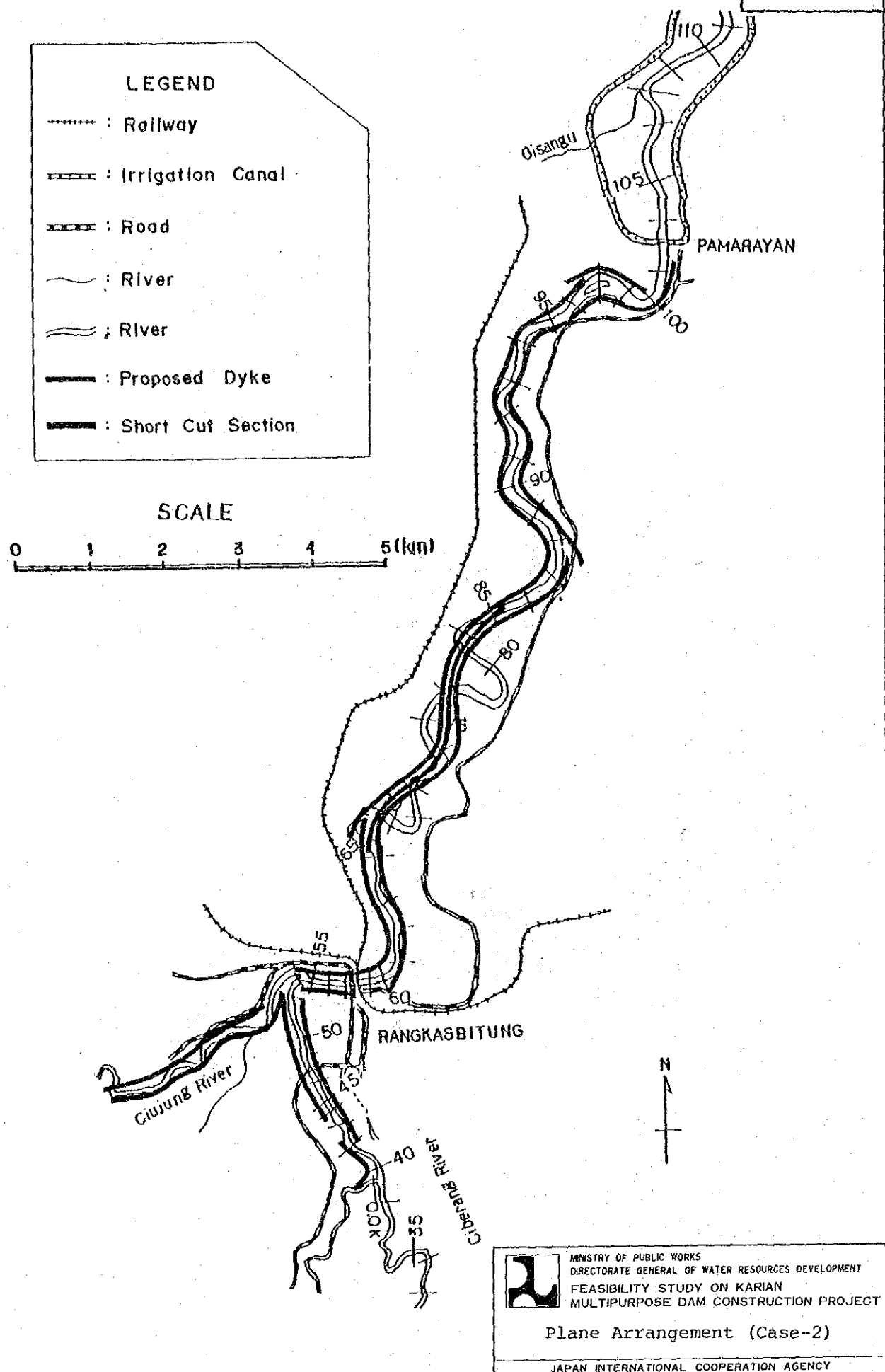




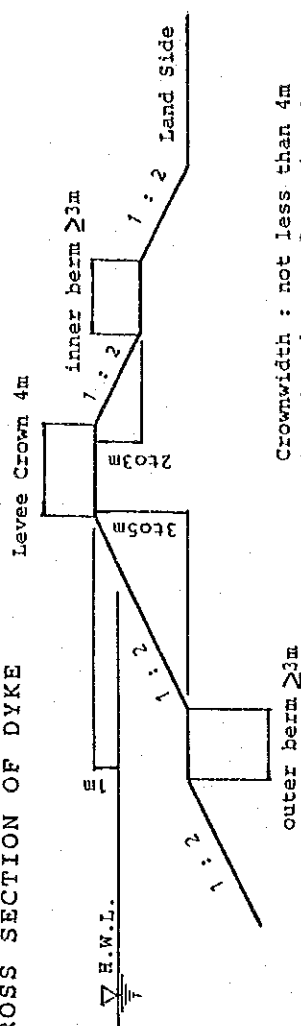
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### Alternative Plans of River Improvement

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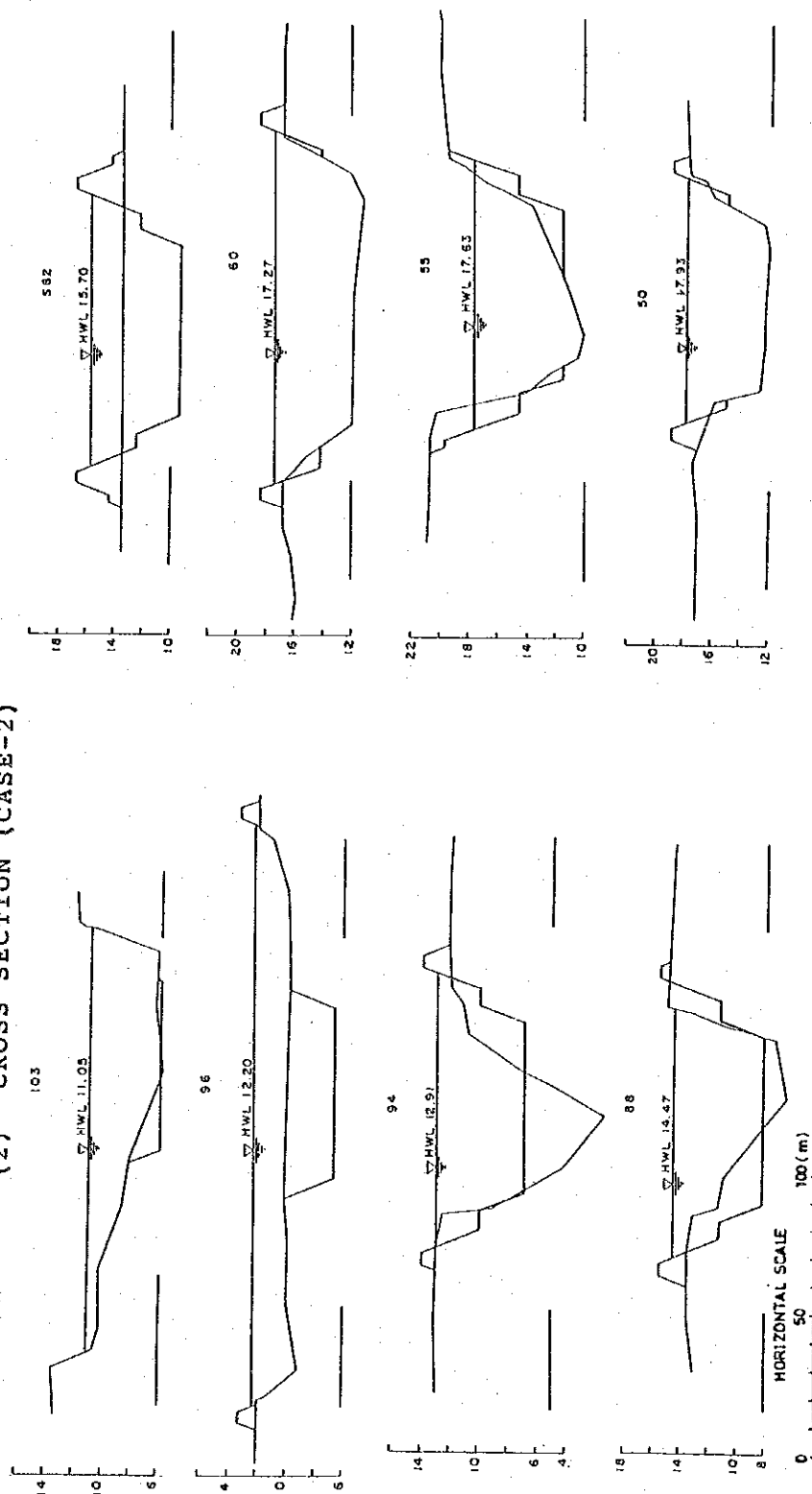


## (1) TYPICAL CROSS SECTION OF DYKE



Crownwidth : not less than 4m  
Free-board : not less than 1m

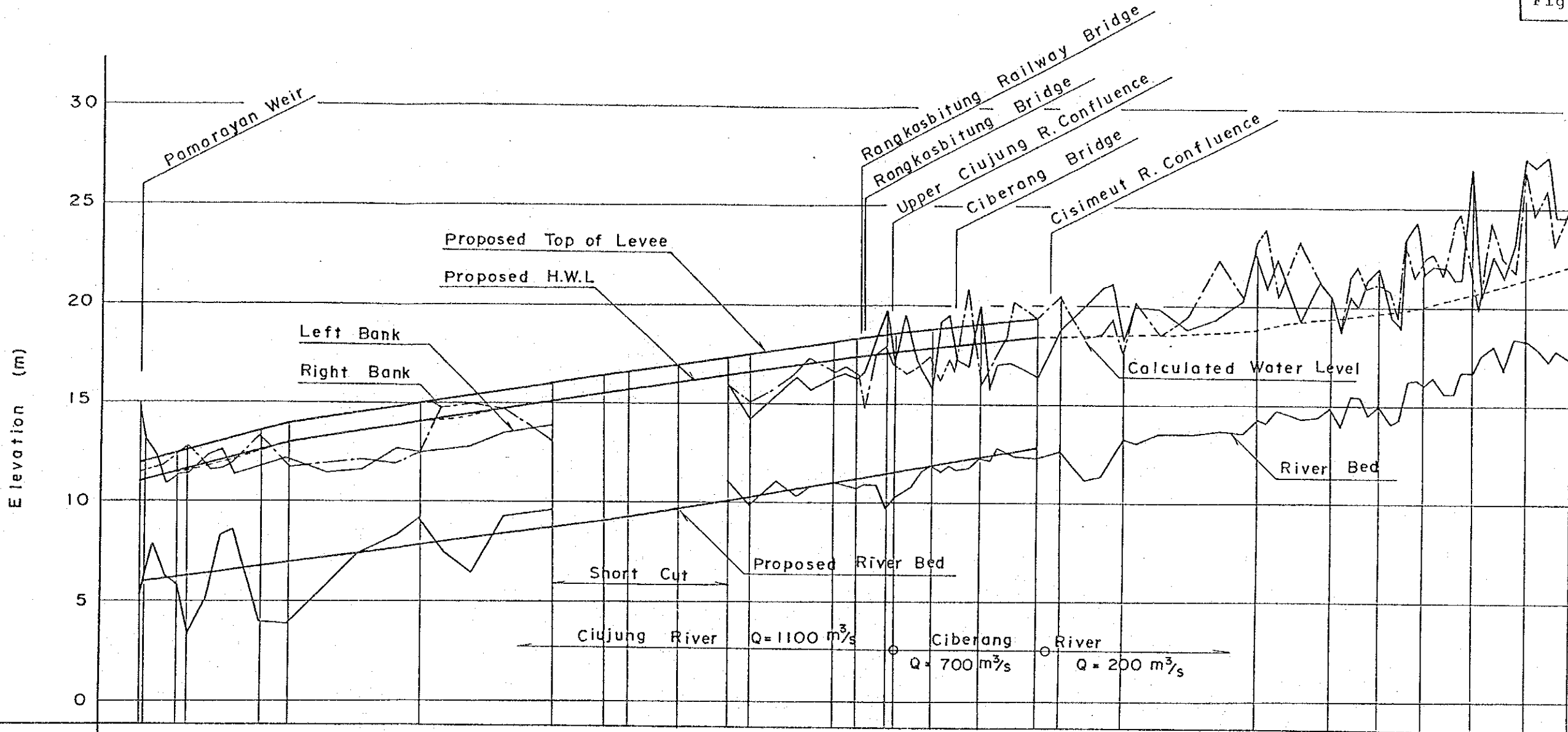
## (2) CROSS SECTION (CASE-2)




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MULTIPURPOSE DAM CONSTRUCTION PROJECT

(1) Typical Cross Section of Dyke  
(2) Cross Section (Case-2)

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Section NO.	Distance (m)	Proposed Plan				
		River Bed (EL m)	High Water (EL m)	Top of Levee (EL m)	River Bed Gradient	HWL Gradient
P.W. 103	0	6.00	11.00	12.00	1/1550	1/2430
100	85	6.21	11.05	12.05		
99	735	6.29	11.37	12.37	1/3040	1/2650
95	955	6.76	11.62	12.62		
94	2403	6.94	12.55	13.55	L = 9266	L = 9123
90	2953	7.85	12.91	13.91		
85	5703	8.72	14.04	15.04	1/2310	1/3280
S83	8351	9.05	15.13	16.13		
S82	9351	9.26	15.51	16.51	1/2310	1/3280
S80	9851	9.70	15.70	16.70		
65	10851	10.14	16.07	17.07	1/2310	1/3280
64	11881	10.33	16.46	17.46		
60	12311	11.07	16.62	17.62	1/2310	1/3280
58	14011	11.27	17.27	18.27		
55	14470	11.53	17.44	18.44	1/2310	1/3280
54	15089	11.60	17.63	18.63		
50	15239	11.96	17.67	18.67	1/2310	1/3280
45	16076	12.39	17.93	18.93		
40	17082	18.24	18.24	19.24	1/2310	1/3280
39	18214	18.58	18.58	19.58		
35	18714				1/2310	1/3280
30	20014					
	22744				1/2310	1/3280



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MULTIPURPOSE DAM CONSTRUCTION PROJECT  
Longitudinal Profile of  
Ciujung River (Case-2)  
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PROJECT IMPLEMENTATION SCHEDULE FOR KARIAN DAM AND CIUYAH TUNNEL

Work Item	1986	1987	1988	1989	1990	1991
1. Detailed Design	_____					
2. Preparation Works		_____				
3. Dam Construction Works						
3.1 Preparation works			_____			
3.2 Diversion works			_____	_____		
3.3 Cofferdam				_____		
3.4 Main and Saddle dam				_____	_____	
3.5 Spillway				_____	_____	
3.6 Intake					_____	_____
3.7 Metal works					_____	_____
4. Tunnel Construction Works						
4.1 Tunnel works				_____	_____	_____
4.2 Metal works						_____
5. Administration and Engineering						_____

Fig.7-1



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MULTIPURPOSE DAM CONSTRUCTION PROJECT

Project Implementation Schedule  
for Karian Dam and Ciuyah Tunnel

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PROJECT IMPLEMENTATION SCHEDULE FOR CILAWANG DAM AND CICINTA TUNNEL

Work Item	1986	1987	1988	1989	1990	1991
1. Detailed Design						
2. Preparation Works						
3. Dam Construction Works						
3.1 Preparation works						
3.2 Diversion works						
3.3 Cofferdam						
3.4 Main and Saddle dam						
3.5 Spillway and Intake						
3.6 Metal works						
4. Tunnel Construction Works						
4.1 Tunnel works						
4.2 Metal works						
5. Administration and Engineering						

Fig.7-2



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FEASIBILITY STUDY ON KARIAN  
MULTIPURPOSE DAM CONSTRUCTION PROJECT

Project Implementation Schedule  
for Cilawang Dam and Cicinta Tunnel

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Fig. 7-3

## PROJECT IMPLEMENTATIONS SCHEDULE FOR RIVER IMPROVEMENT WORKS

Work Item	1986	1987	1988	1989	1990	1991
1. Detailed Design						
2. Procurement of Equipment Materials and Spare Parts						
3. Land Acquisition						
4. Civil Works						
4.1 Pamarayan weir to No.85 (8.35 km)						
4.2 Short cut (3.53 km)						
4.3 No.65 to No.53 (3.28 km)						
4.4 Ciberang river (3.3 km)						
4.5 Upper Ciujung River (4.41 km)						
5. Administration and Engineering						



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Project Implementation Schedule  
for River Improvement Works

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PROJECT IMPLEMENTATION SCHEDULE FOR K-C-C IRRIGATION SCHEME

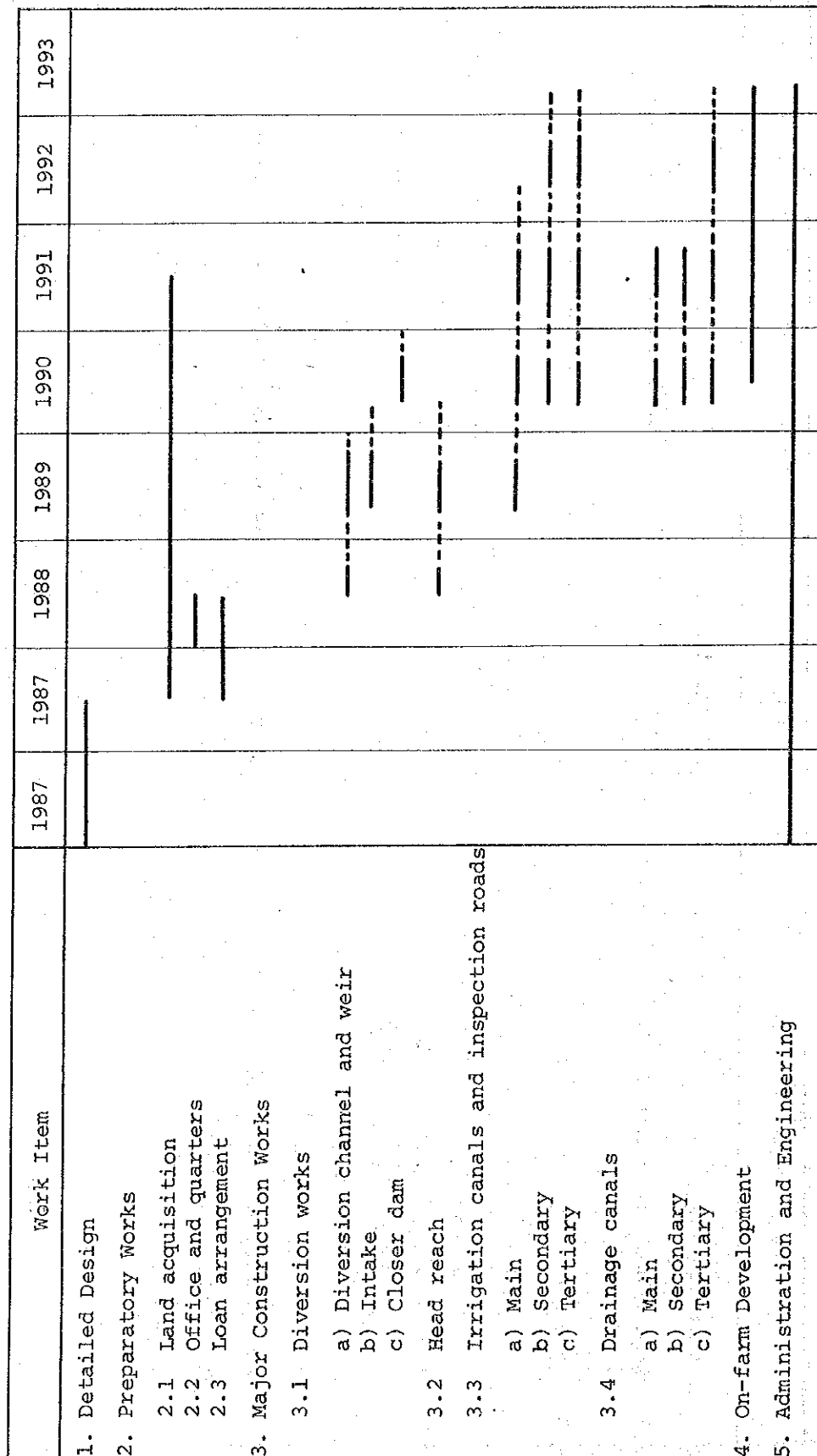


Fig.7-4



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FEASIBILITY STUDY ON KARIAN  
MULTIPURPOSE DAM CONSTRUCTION PROJECT

Project Implementation Schedule  
for K-C-C Irrigation Scheme

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