

JAPAN INTERNATIONAL
COOPERATION AGENCY

No. 2

DEPARTMENT OF IRRIGATION
MINISTRY OF WATER RESOURCES
HIS MAJESTY'S GOVERNMENT OF NEPAL

THE FEASIBILITY STUDY
ON
TRISHULI IRRIGATION PROJECT

FINAL REPORT
VOLUME III
DRAWINGS

AUGUST 1997

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CHUO KAIHATSU CORPORATION

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**JAPAN INTERNATIONAL
COOPERATION AGENCY**

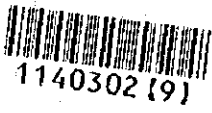
**DEPARTMENT OF IRRIGATION
MINISTRY OF WATER RESOURCES
HIS MAJESTY'S GOVERNMENT OF NEPAL**

***THE FEASIBILITY STUDY
ON
TRISHULI IRRIGATION PROJECT***

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VOLUME III
*DRAWINGS***

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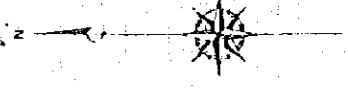
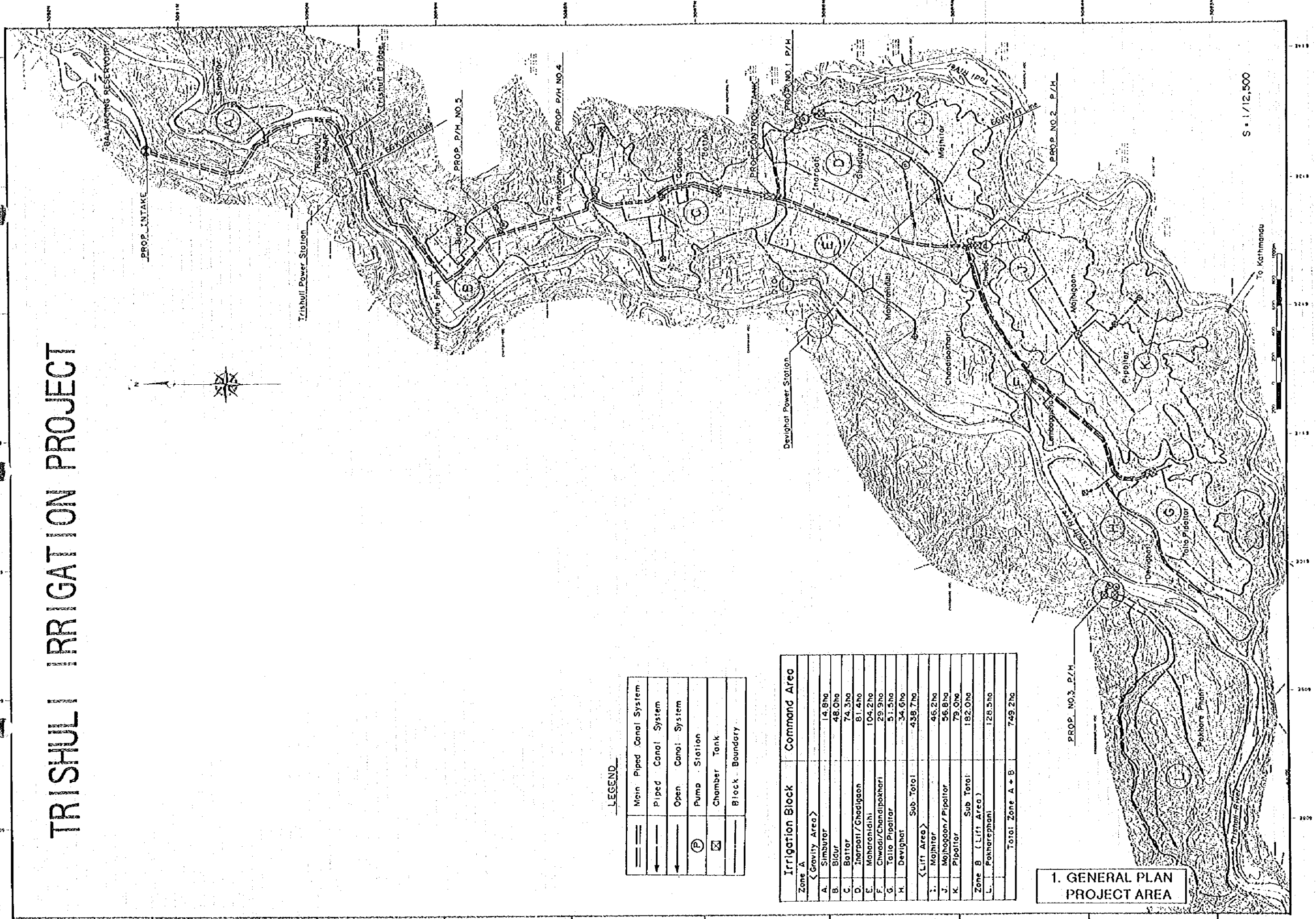
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THE FEASIBILITY STUDY
ON
TRISHULI IRRIGATION PROJECT

LIST OF DRAWINGS

DRG. NO.	DRAWING TITLE	DESCICRIPTION	
1.	GENERAL PLAN	PROJECT AREA	
2.	GENERAL PLAN	BLOCK-A	
3.	GENERAL PLAN	BLOCK-B, C	
4.	GENERAL PLAN	BLOCK-D, E, I	
5.	GENERAL PLAN	BLOCK-F, G, H, J, K	
6.	GENERAL PLAN	BLOCK-L	
7.	LONGITUDINAL SECTION	MAIN PIPED CANAL (1/5)	STA. 0+000 ~ 1+400
8.	LONGITUDINAL SECTION	MAIN PIPED CANAL (2/5)	STA. 1+400 ~ 2+800
9.	LONGITUDINAL SECTION	MAIN PIPED CANAL (3/5)	STA. 2+800 ~ 4+200
10.	LONGITUDINAL SECTION	MAIN PIPED CANAL (4/5)	STA. 4+200 ~ 5+600
11.	LONGITUDINAL SECTION	MAIN PIPED CANAL (5/5)	STA. 5+600 ~ 5+800
12.	LONGITUDINAL SECTION	COTROL TANK~ P/H NO.1~ MAJHITAR (1/1)	STA. 0+000 ~ 0+950
13.	LONGITUDINAL SECTION	COTROL TANK~ P/H NO.2~ PIPALTAR (1/2)	STA. 0+000 ~ 1+300
14.	LONGITUDINAL SECTION	COTROL TANK~ P/H NO.2~ PIPALTAR (2/2)	STA. 1+300 ~ 2+130
15.	LONGITUDINAL SECTION	P/H NO.2~ TALLO PIPALTAR (1/2)	STA. 0+000 ~ 1+250
16.	LONGITUDINAL SECTION	P/H NO.2~ TALLO PIPALTAR (2/2)	STA. 1+250 ~ 2+450
17.	TYPICAL COSS SECTIONS OF PIPE LAYING		
18.	GENERAL PLAN OF PROPOSED INTAKE		
19.	SECTIONS OF PROPOSED INTAKE		
20.	PROPOSED AQUEDUCT AT STA. 4+000		
21.	GENERAL PLAN & SECTION OF PROPOSED WATER BRIDGE		
22.	SECTIONS OF PROPOSED WATER BRIDGE		
23.	PROPOSED CONTROL TANK		
24.	STANDARD PUMP ROOM LAYOUT		
25.	PROPOSED PUMP STATION FOR BLOCK-L		

TRISHULI IRRIGATION PROJECT



S = 1/12,500

LEGEND

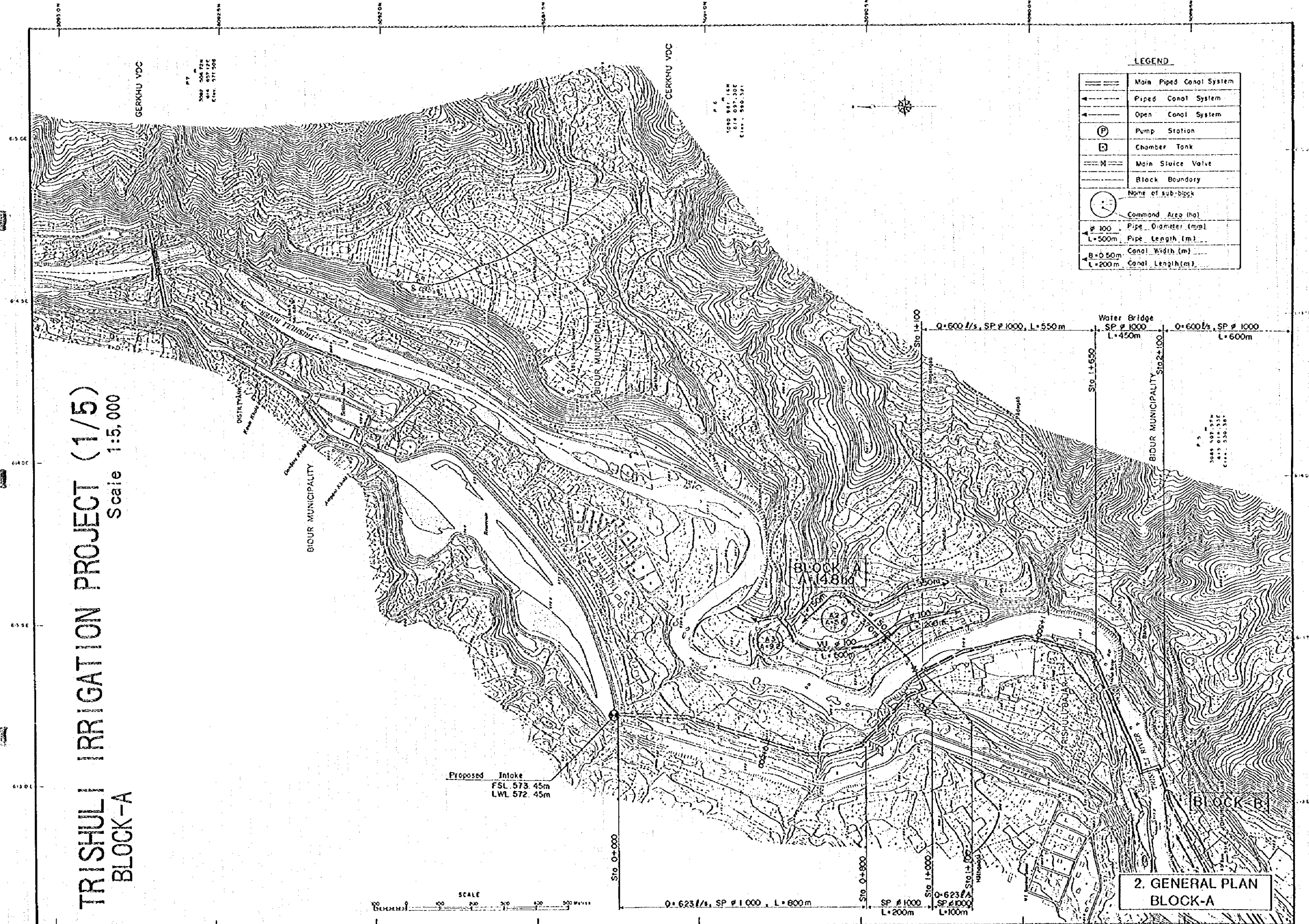
	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Block Boundary

Irrigation Block	Command Area
Zone A	
⟨ Gravity Area ⟩	
A. Simbutar	14.8ha
B. Bidur	48.0ha
C. Baitar	74.3ha
D. Inarpati / Ghadigaon	81.4ha
E. Maharaidahi	104.2ha
F. Chwadi / Chandipokhari	29.9ha
G. Tallo Pipaltar	51.5ha
H. Devighat	34.6ha
Sub Total	438.7ha
⟨ Lift Area ⟩	
I. Majhitar	46.2ha
J. Mojhogaon / Pipaltar	56.8ha
K. Pipaltar	79.0ha
Sub Total	182.0ha
Zone B (Lift Area)	
L. Pokharephani	126.5ha
Total Zone A + B	749.2ha

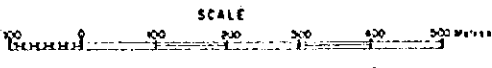
1. GENERAL PLAN PROJECT AREA

TRISHULI IRRIGATION PROJECT (1/5) BLOCK-A

Scale 1:5,000



LEGEND	
	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Main Sluice Valve
	Block Boundary
	Name of sub-block
	Command Area (ha)
	Pipe Diameter (mm)
	Pipe Length (m)
	Canal Width (m)
	Canal Length (m)

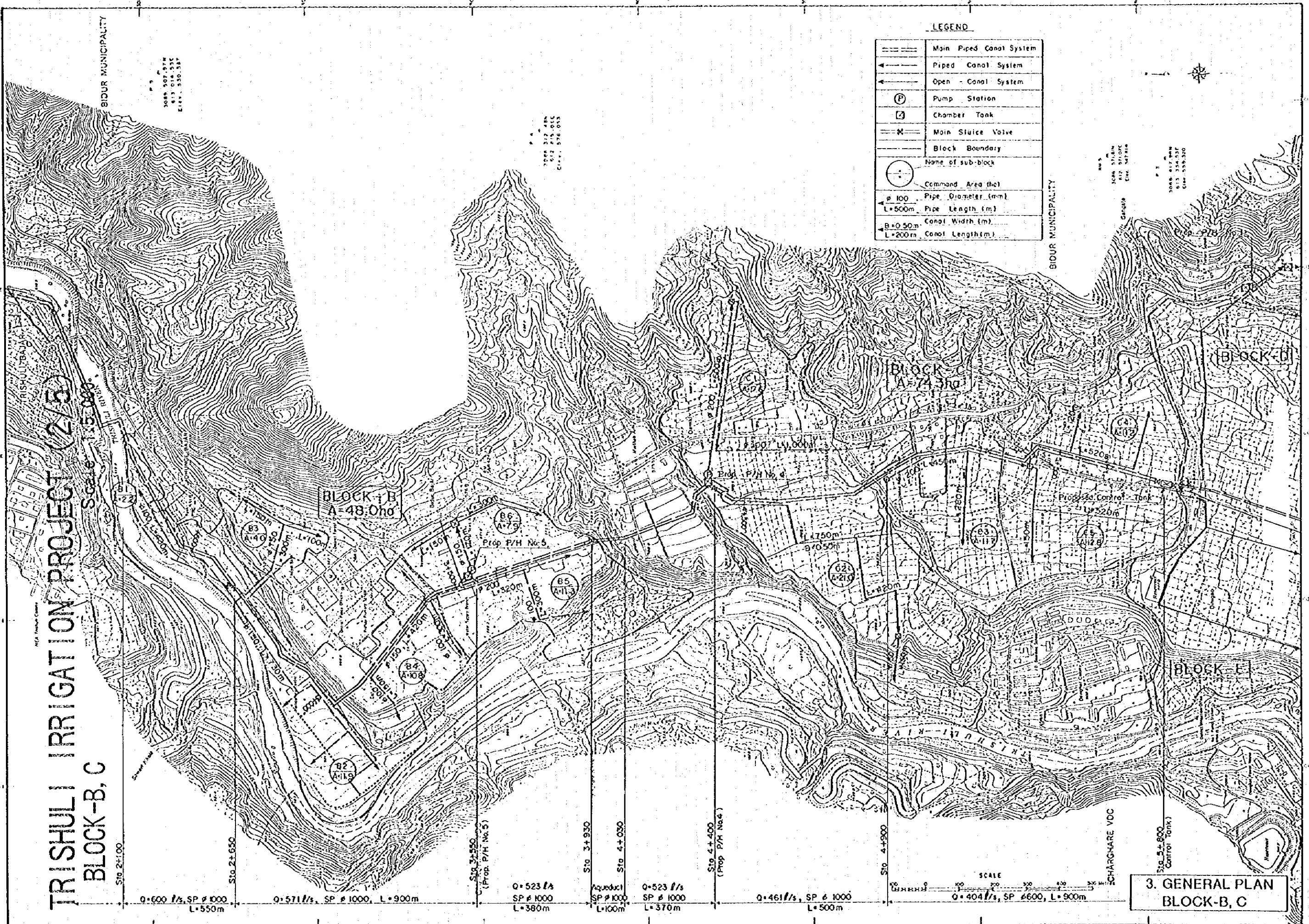


2. GENERAL PLAN
BLOCK-A

TRISHULI IRRIGATION PROJECT (2/5) BLOCK-B, C

Scale 1:5,000

LEGEND	
	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Main Sluice Valve
	Block Boundary
	Name of sub-block
	Command Area (ha)
ϕ 100	Pipe Diameter (mm)
L=500m	Pipe Length (m)
B=0.50m	Canal Width (m)
L=200m	Canal Length (m)



Sta. 2+100 $Q=600 \text{ l/s}$, SP ϕ 1000, L=550m
 Sta. 2+650 $Q=571 \text{ l/s}$, SP ϕ 1000, L=900m
 Sta. 3+550 (Prop. P/H No.5) $Q=523 \text{ l/s}$, SP ϕ 1000, L=380m
 Sta. 3+930 $Q=523 \text{ l/s}$, SP ϕ 1000, L=100m
 Sta. 4+030 $Q=523 \text{ l/s}$, SP ϕ 1000, L=370m
 Sta. 4+400 (Prop. P/H No.4) $Q=461 \text{ l/s}$, SP ϕ 1000, L=500m
 Sta. 4+900 $Q=404 \text{ l/s}$, SP ϕ 600, L=900m

3. GENERAL PLAN
BLOCK-B, C

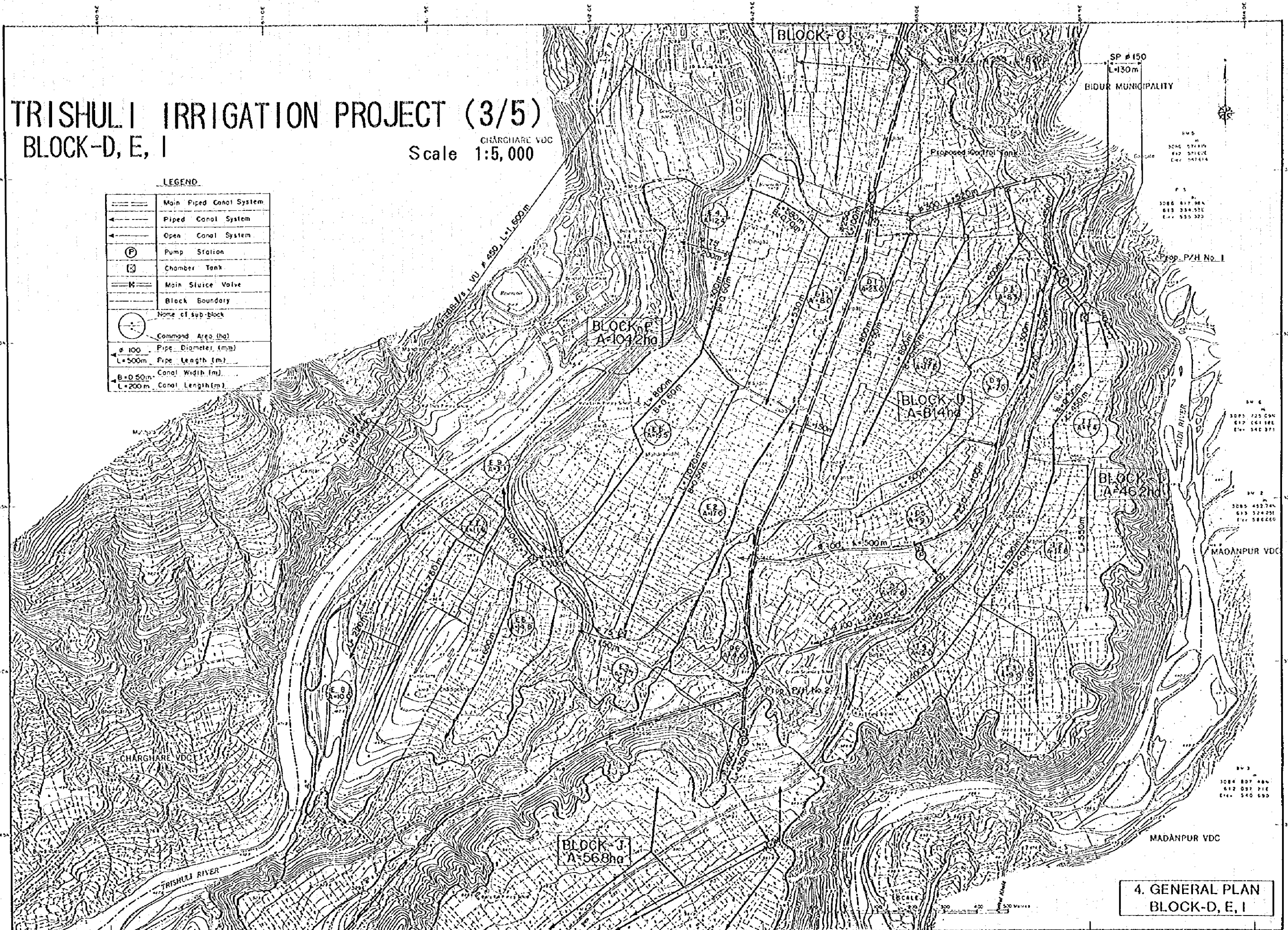
TRISHULI IRRIGATION PROJECT (3/5)

BLOCK-D, E, I

CHARGHARE VDC
Scale 1:5,000

LEGEND

	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Main Sluice Valve
	Block Boundary
	Name of sub-block
	Command Area (ha)
ϕ 100	Pipe Diameter (mm)
L=500m	Pipe Length (m)
B=0.50m	Canal Width (m)
L=200m	Canal Length (m)

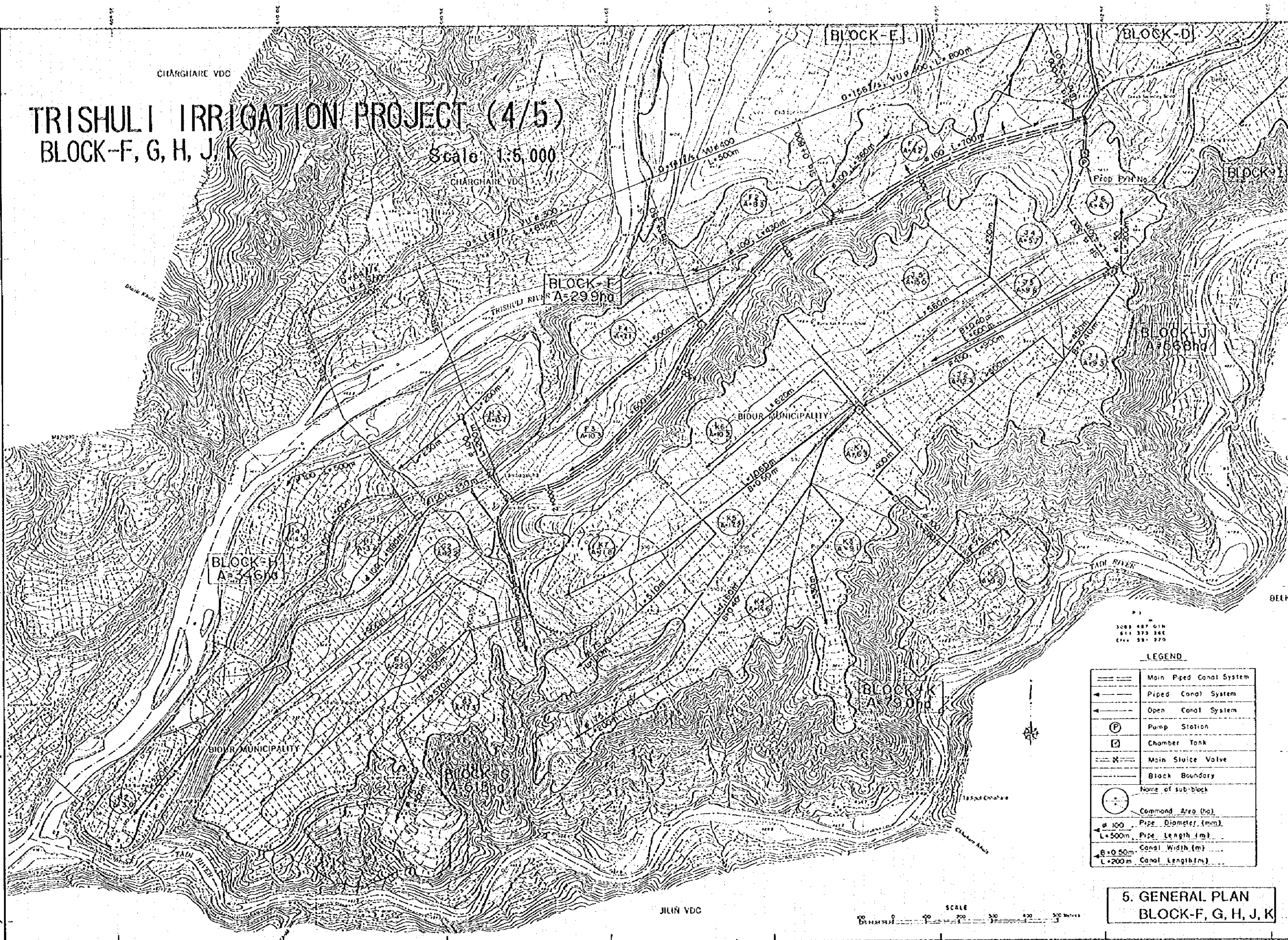


4. GENERAL PLAN
BLOCK-D, E, I

TRISHULI IRRIGATION PROJECT (4/5)

BLOCK-F, G, H, J, K

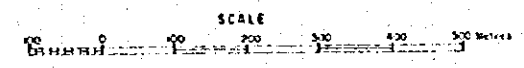
Scale 1:5,000



LEGEND

	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Main Sluice Valve
	Block Boundary
	Name of sub-block
	Command Area (ha)
ϕ 100	Pipe Diameter (mm)
L=500m	Pipe Length (m)
B=0.50m	Canal Width (m)
L=200m	Canal Length (m)

5. GENERAL PLAN
BLOCK-F, G, H, J, K



JILIN VDC

CHARGHARE VDC

CHARGHARE VDC

BLOCK-F
A=299ha

BLOCK-J
A=366ha

BLOCK-H
A=346ha

BLOCK-K
A=390ha

BIDUR MUNICIPALITY

BIDUR MUNICIPALITY

CHARGHARE VDC

CHARGHARE VDC

JILIN VDC

TRISHULI IRRIGATION PROJECT (5/5)

BLOCK-L

Scale 1:5,000

LEGEND

	Main Piped Canal System
	Piped Canal System
	Open Canal System
	Pump Station
	Chamber Tank
	Main Sluice Valve
	Block Boundary
	Name of sub-block
	Command Area (ha)
	φ 100 Pipe Diameter (mm)
	L=500m Pipe Length (m)
	B=0.50m Canal Width (m)
	L=200m Canal Length (m)

Proposed P/H No. 3

KHADGABHARJYAN VDC

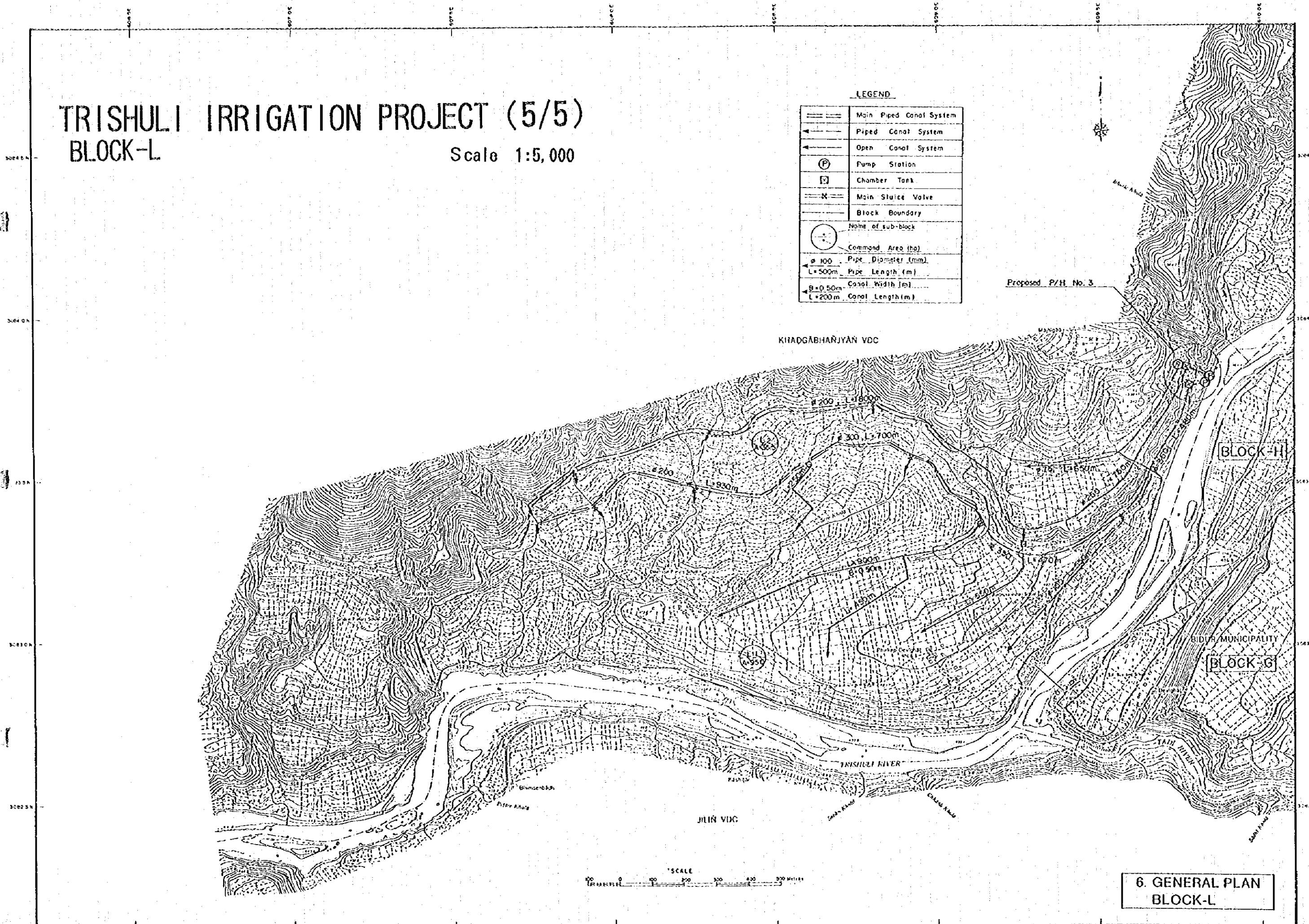
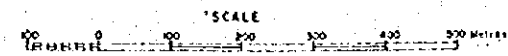
BLOCK-H

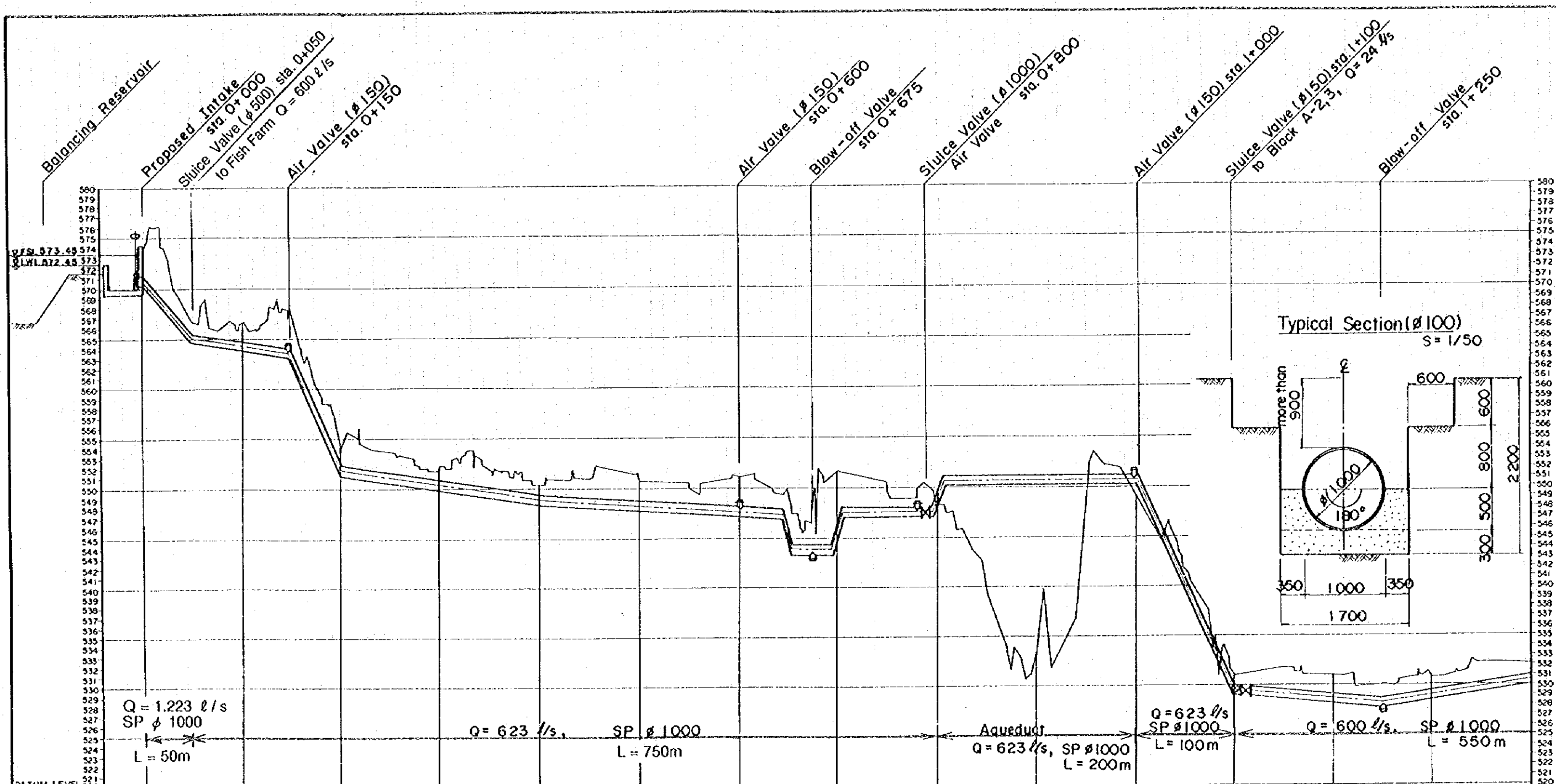
BLOCK-G

JILIN VDC

TRISHULI RIVER

6. GENERAL PLAN
BLOCK-L



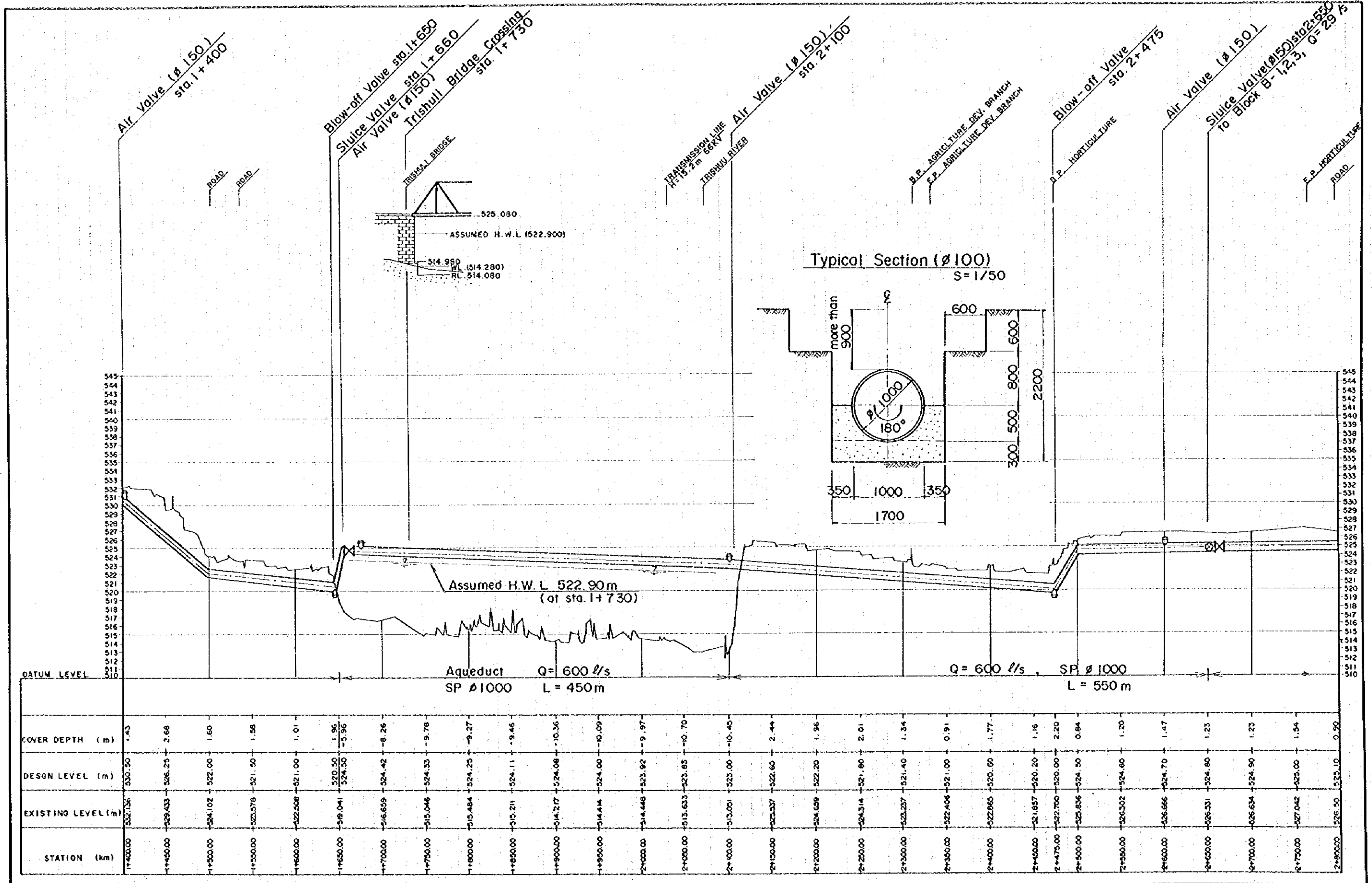


STATION (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
0+000.00	573.889	570.95	2.94
0+050.00	568.754	565.00	3.75
0+100.00	566.518	564.25	2.27
0+150.00	567.010	563.50	3.51
0+200.00	563.890	562.00	1.89
0+250.00	563.578	561.25	2.33
0+300.00	561.814	560.50	1.31
0+350.00	562.010	549.75	2.26
0+400.00	559.404	549.00	0.40
0+450.00	560.909	548.60	2.31
0+500.00	560.677	548.20	2.48
0+550.00	560.300	547.80	2.50
0+600.00	561.004	547.40	1.60
0+650.00	549.817	547.00	2.82
0+700.00	561.720	547.50	4.22
0+750.00	549.604	547.50	2.10
0+800.00	549.728	547.50	2.23
0+850.00	539.402	550.50	-11.10
0+900.00	533.421	550.50	-17.08
0+950.00	548.515	550.50	-2.99
1+000.00	549.321	550.50	-1.18
1+050.00	541.587	540.00	1.59
1+100.00	531.080	529.50	1.58
1+150.00	531.858	529.00	2.86
1+200.00	531.108	528.50	2.60
1+250.00	530.117	528.00	2.12
1+300.00	530.868	528.85	1.92
1+350.00	532.298	529.67	2.62
1+400.00	532.136	530.50	1.64

STATION: 0+000 - 1+400

SCALE H=1:4000, V=1:400

7. LONGITUDINAL SECTION
MAIN PIPED CANAL (1/5)
STA. 0+000 ~ 1+400

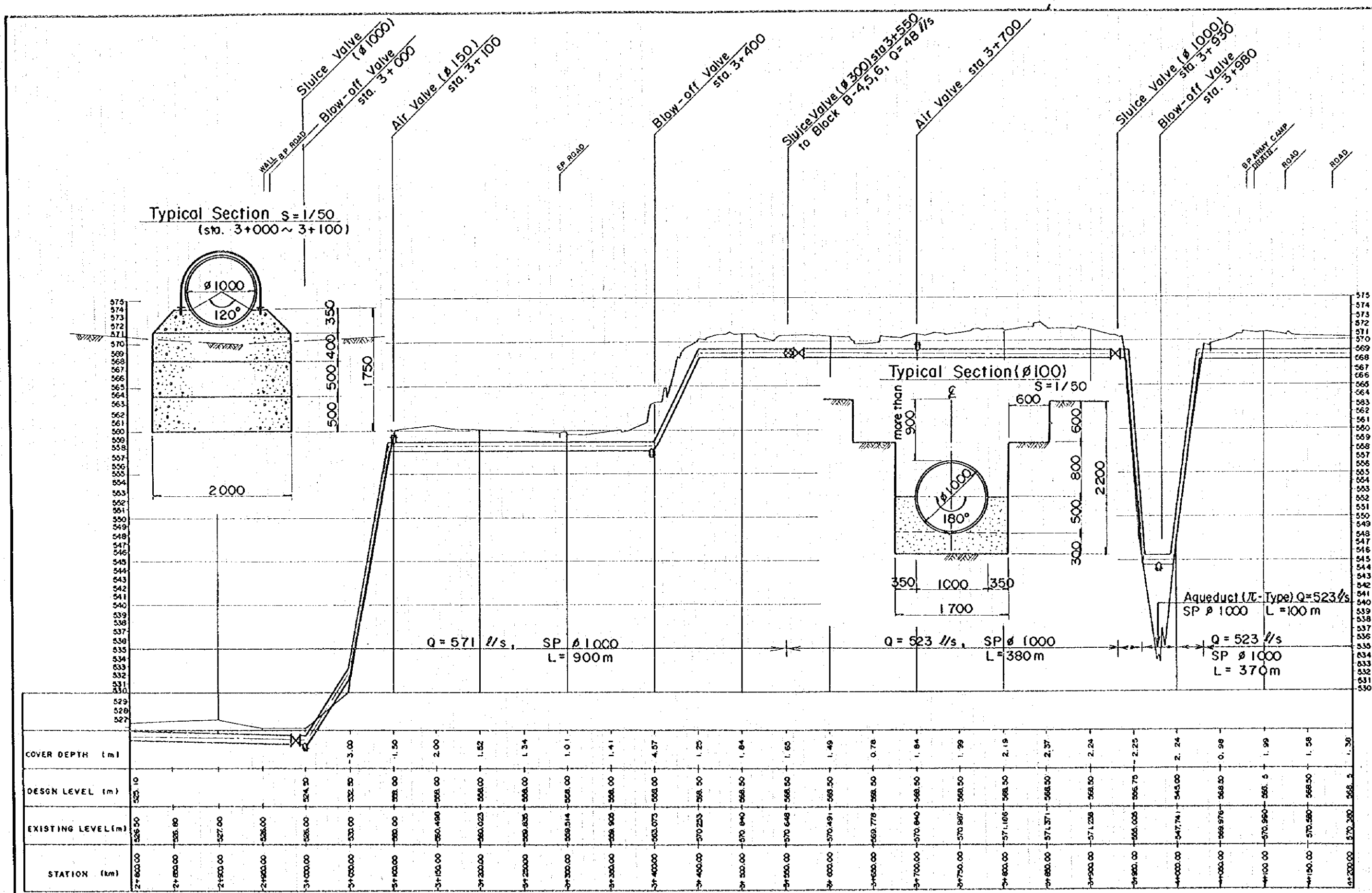


STATION (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
1+400.00	522.75	530.50	1.43
1+450.00	529.433	526.25	2.68
1+500.00	524.102	522.00	1.60
1+550.00	523.578	521.50	1.58
1+600.00	522.508	521.00	1.01
1+650.00	519.041	520.50	1.96
1+700.00	516.859	524.42	-8.26
1+750.00	515.046	524.33	-9.78
1+800.00	515.884	524.25	-9.27
1+850.00	515.211	524.11	-9.46
1+900.00	514.217	524.08	-10.36
1+950.00	514.414	524.00	-10.09
2+000.00	514.448	523.92	-9.97
2+050.00	513.633	523.85	-10.70
2+100.00	513.051	523.00	-10.45
2+150.00	523.537	522.60	2.44
2+200.00	524.639	522.20	1.96
2+250.00	524.314	521.80	2.01
2+300.00	523.237	521.40	1.34
2+350.00	522.406	521.00	0.91
2+400.00	522.865	520.60	1.77
2+450.00	521.857	520.20	1.16
2+475.00	522.700	520.00	2.20
2+500.00	523.836	524.50	0.84
2+550.00	526.302	524.60	1.20
2+600.00	526.666	524.70	1.47
2+650.00	526.531	524.80	1.23
2+700.00	526.634	524.90	1.23
2+750.00	527.042	525.00	1.54
2+800.00	526.50	525.10	0.90

STATION: 1+400 - 2+800

SCALE H=1:4000, V=1:400

8. LONGITUDINAL SECTION
MAIN PIPED CANAL (2/5)
STA. 1+400 ~ 2+800



Typical Section $s=1/50$
(sta. 3+000 ~ 3+100)

Typical Section ($\phi 100$)
 $S=1/50$

$Q = 571 \text{ l/s}$, SP $\phi 1000$
 $L = 900 \text{ m}$

$Q = 523 \text{ l/s}$, SP $\phi 1000$
 $L = 380 \text{ m}$

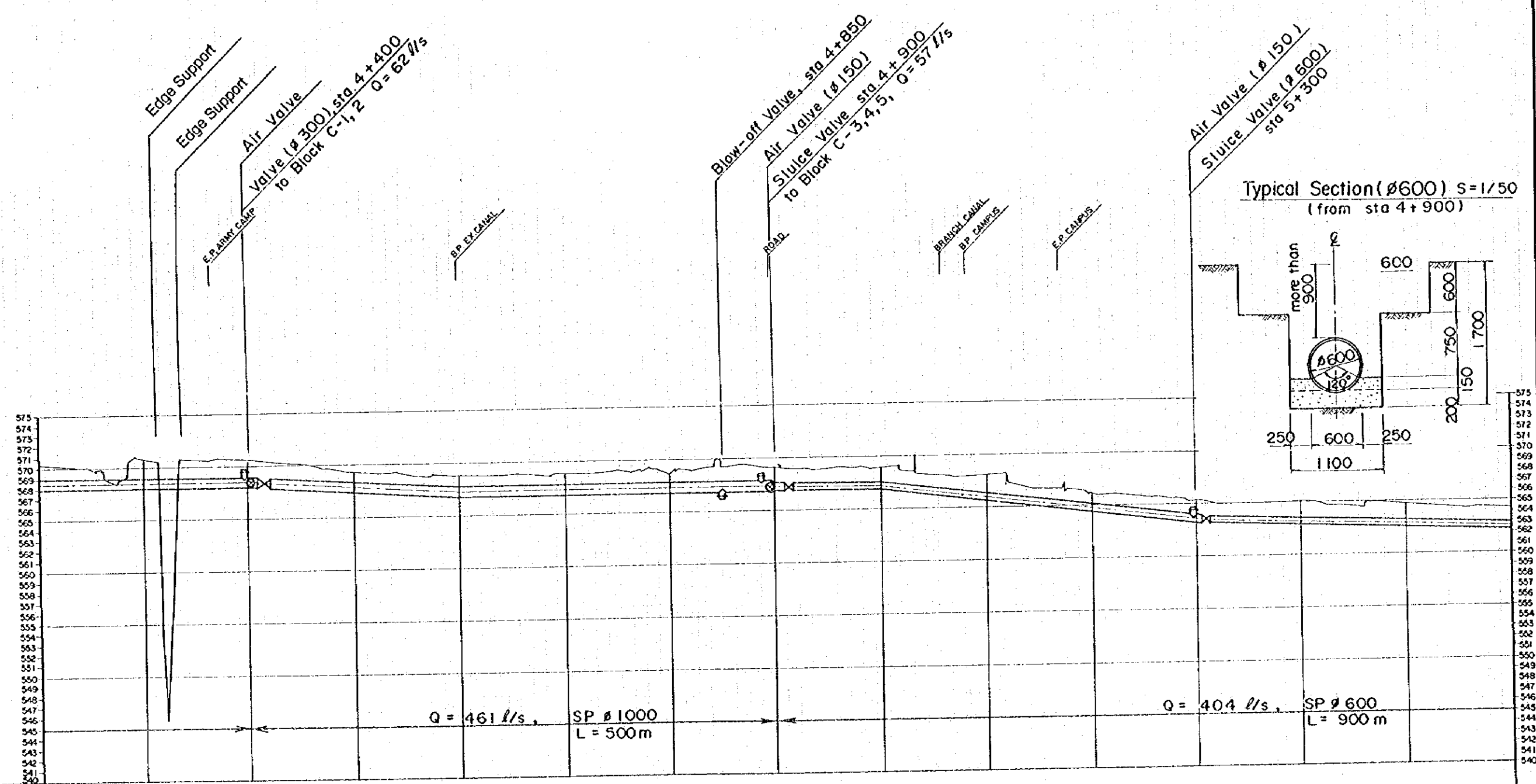
Aqueduct (π -Type) $Q=523 \text{ l/s}$
SP $\phi 1000$ $L=100 \text{ m}$

$Q = 523 \text{ l/s}$
SP $\phi 1000$
 $L = 370 \text{ m}$

STATION (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
2+800.00	526.50	525.10	
2+850.00	525.00		
2+900.00	527.00		
2+950.00	526.00		
3+000.00	526.00	524.50	
3+050.00	530.00	532.00	3.00
3+100.00	528.00	528.00	1.50
3+150.00	550.480	558.00	2.00
3+200.00	560.023	558.00	1.52
3+250.00	559.835	558.00	1.34
3+300.00	559.514	558.00	1.01
3+350.00	558.900	558.00	1.41
3+400.00	563.073	558.00	4.37
3+450.00	570.253	558.00	1.25
3+500.00	570.840	558.00	1.84
3+550.00	570.648	558.00	1.65
3+600.00	570.491	558.00	1.49
3+650.00	569.778	558.00	0.78
3+700.00	570.840	558.00	1.84
3+750.00	570.887	558.00	1.29
3+800.00	571.165	558.00	2.15
3+850.00	571.371	558.00	2.37
3+900.00	571.238	558.00	2.24
3+950.00	565.025	556.75	2.25
4+000.00	547.741	545.00	2.24
4+050.00	568.976	568.50	0.98
4+100.00	570.960	565.5	1.99
4+150.00	570.580	568.50	1.58
4+200.00	570.380	568.5	1.36

STATION: 2+800 - 4+200
SCALE H: 1:4000, V: 1:400

9. LONGITUDINAL SECTION
MAIN PIPED CANAL (3/5)
STA. 2+800 ~ 4+200



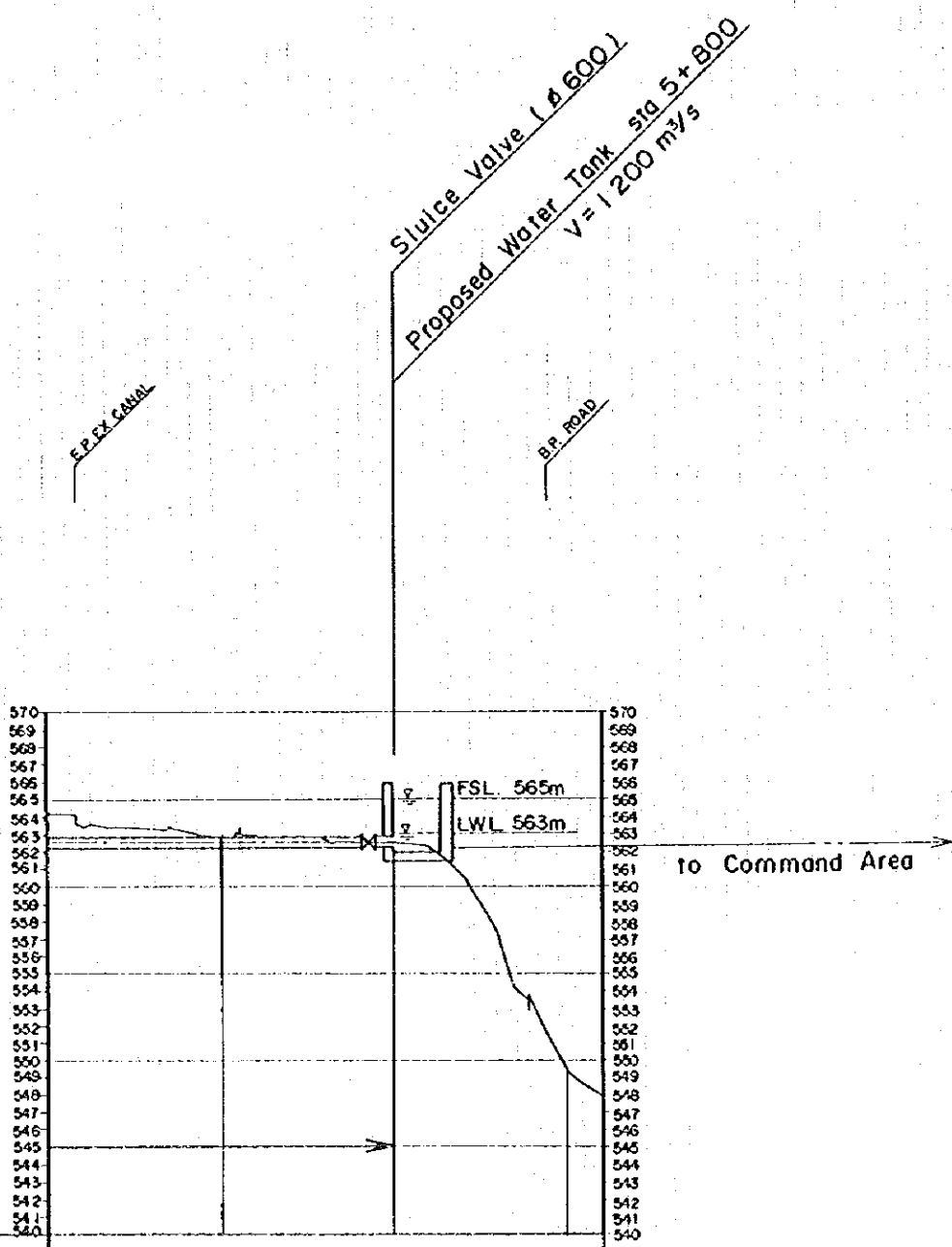
Q = 461 l/s, SP ø 1000
L = 500m

Q = 404 l/s, SP ø 600
L = 900 m

STATION (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
4+200.00	570.290	566.50	1.38
4+250.00	569.831	568.50	0.83
4+300.00	570.889	568.50	1.89
4+350.00	570.654	568.50	1.65
4+400.00	570.583	568.50	1.58
4+450.00	570.002	568.25	1.30
4+500.00	569.325	568.00	0.83
4+550.00	568.947	567.75	1.20
4+600.00	568.791	567.50	0.79
4+650.00	568.826	567.50	0.83
4+700.00	568.798	567.50	0.79
4+750.00	569.037	567.50	1.04
4+800.00	568.595	567.50	0.60
4+850.00	569.224	567.50	1.22
4+900.00	569.038	567.50	1.04
4+950.00	568.906	567.50	0.91
5+000.00	568.922	567.50	0.99
5+050.00	568.158	566.83	0.83
5+100.00	568.042	566.17	1.37
5+150.00	566.685	565.50	0.68
5+200.00	566.157	564.83	0.83
5+250.00	565.833	564.17	1.16
5+300.00	565.332	563.50	1.35
5+350.00	564.997	563.33	1.17
5+400.00	563.147	563.17	1.48
5+450.00	564.663	563.00	1.16
5+500.00	564.763	562.83	1.44
5+550.00	564.339	562.67	1.17
5+600.00	564.269	562.50	1.27

STATION: 4+200 - 5+600
SCALE H: 1:4000, V: 1:400

10. LONGITUDINAL SECTION
MAIN PIPED CANAL (4/5)
STA. 4+200 ~ 5+600

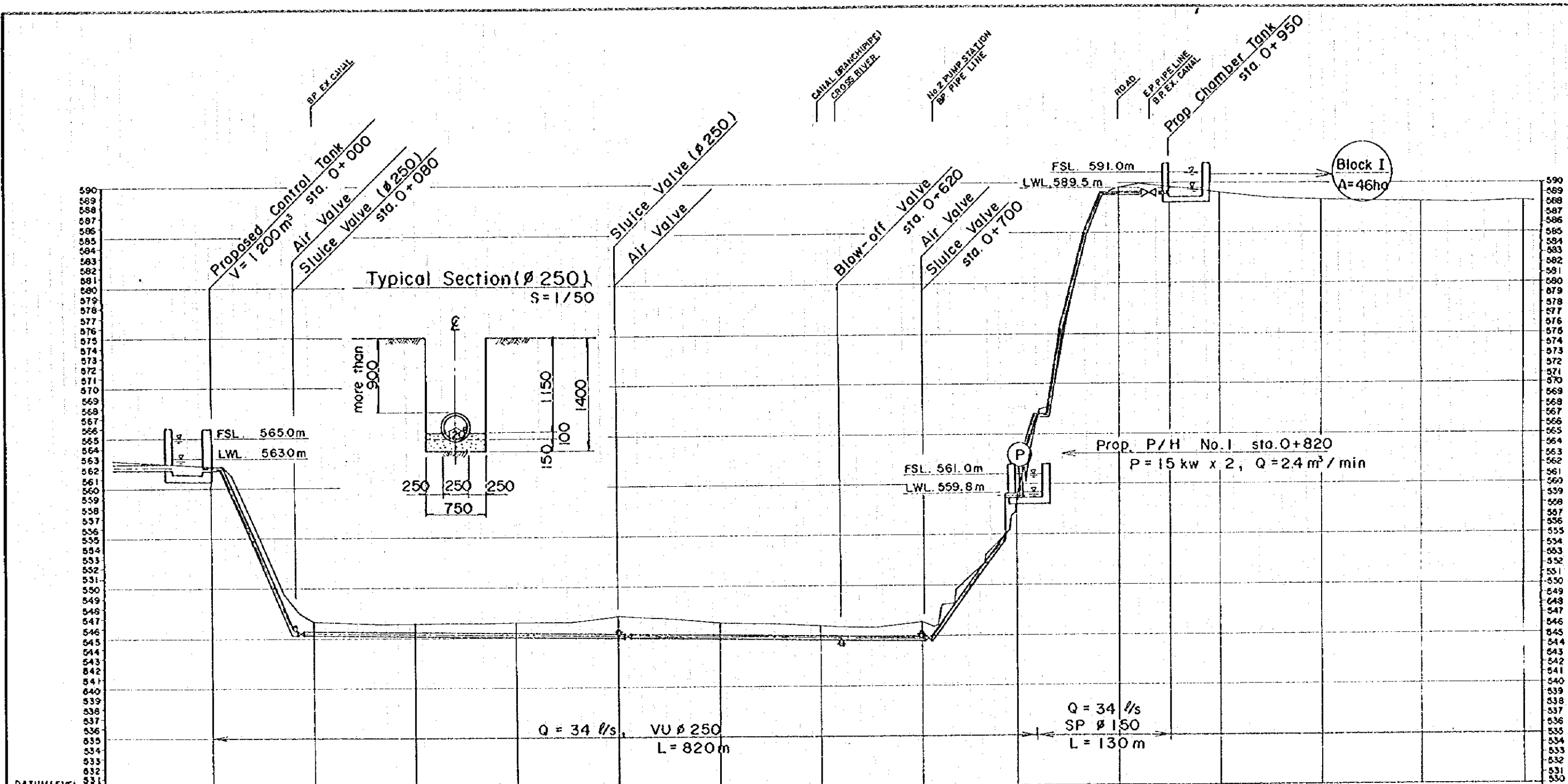


DATUM LEVEL	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570
COVER DEPTH (m)																															
DESIGN LEVEL (m)																															
EXISTING LEVEL (m)	564.269	563.388	562.940	562.824	562.437	561.067	549.200	547.910																							
STATION (km)	5+600.00	5+650.00	5+700.00	5+750.00	5+800.00																										

STATION : 5+600.00 - 5+800

SCALE H: 1:4000, V: 1:400

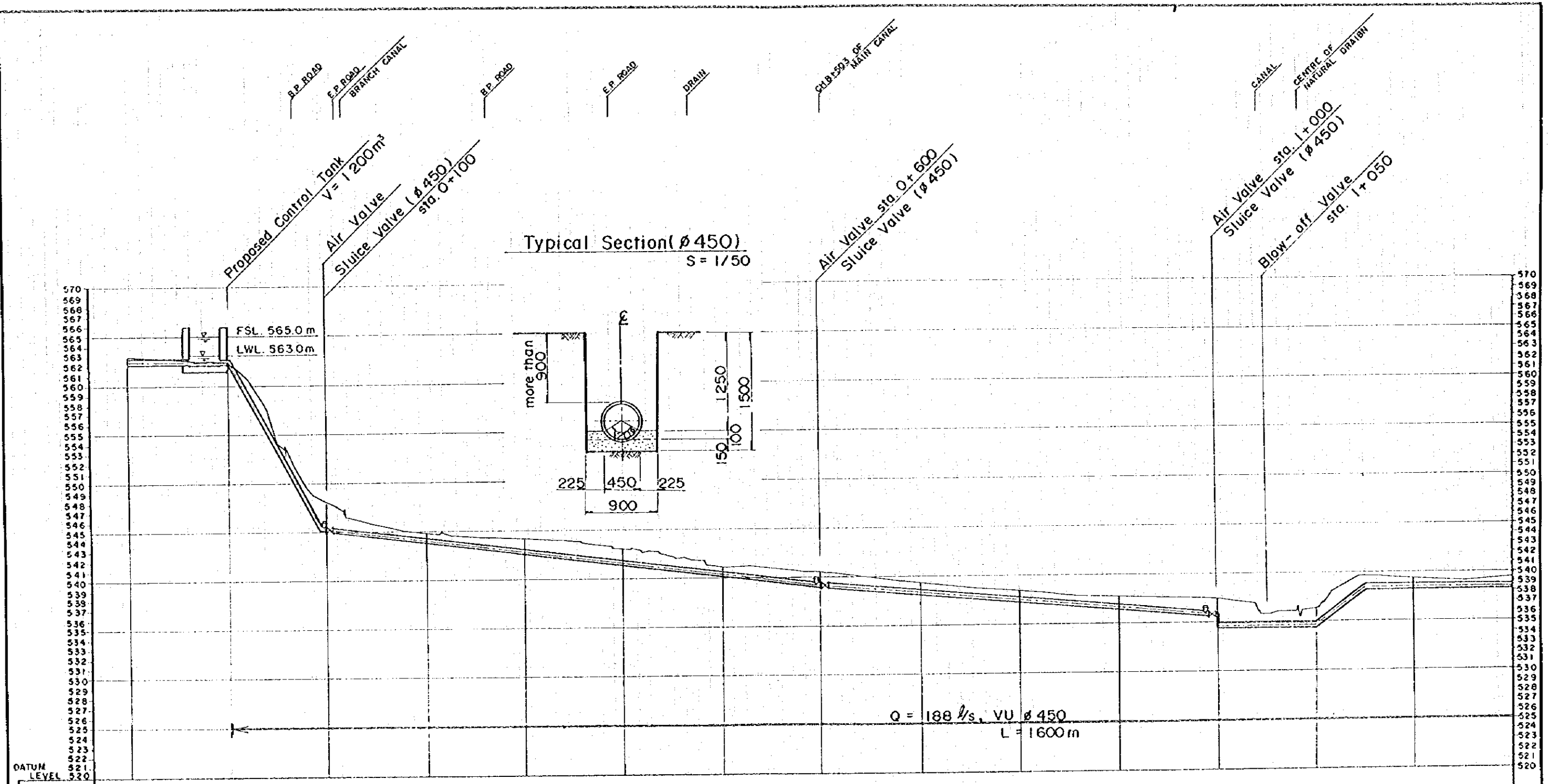
11. LONGITUDINAL SECTION
 MAIN PIPED CANAL (5/5)
 STA. 5+600 ~ 5+800



STATION (km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
0+000	562.905	562.0	0.78
0+050	554.00	551.69	2.19
0+080	546.50	545.50	2.88
0+100	546.712	545.50	1.09
0+150	546.360	545.42	0.85
0+200	546.447	545.33	0.99
0+250	546.396	545.25	1.02
0+300	546.497	545.17	1.20
0+350	546.477	545.08	1.272
0+400	547.050	545.00	1.96
0+450	546.880	544.92	1.85
0+500	546.397	544.83	1.43
0+550	546.326	544.75	1.45
0+600	546.070	544.67	1.40
0+650	545.850	544.59	1.19
0+700	546.401	544.50	1.78
0+750	550.548	501.25	-0.83
0+800	559.143	558.00	1.02
0+850	576.969	577.50	-0.61
0+900	589.486	590.00	-0.59
0+950	593.669	589.00	0.52
	588.022		
	586.303		
	588.193		
	588.076		
	586.056		
	587.826		
	588.127		

STATION: 0+000 - 0+950
 SCALE H: 1:4000, V: 1:400

12. LONGITUDINAL SECTION
 CONTROL TANK P/H NO.1 MAJHITAR (1/1)
 STA. 0+000 ~ 0+950



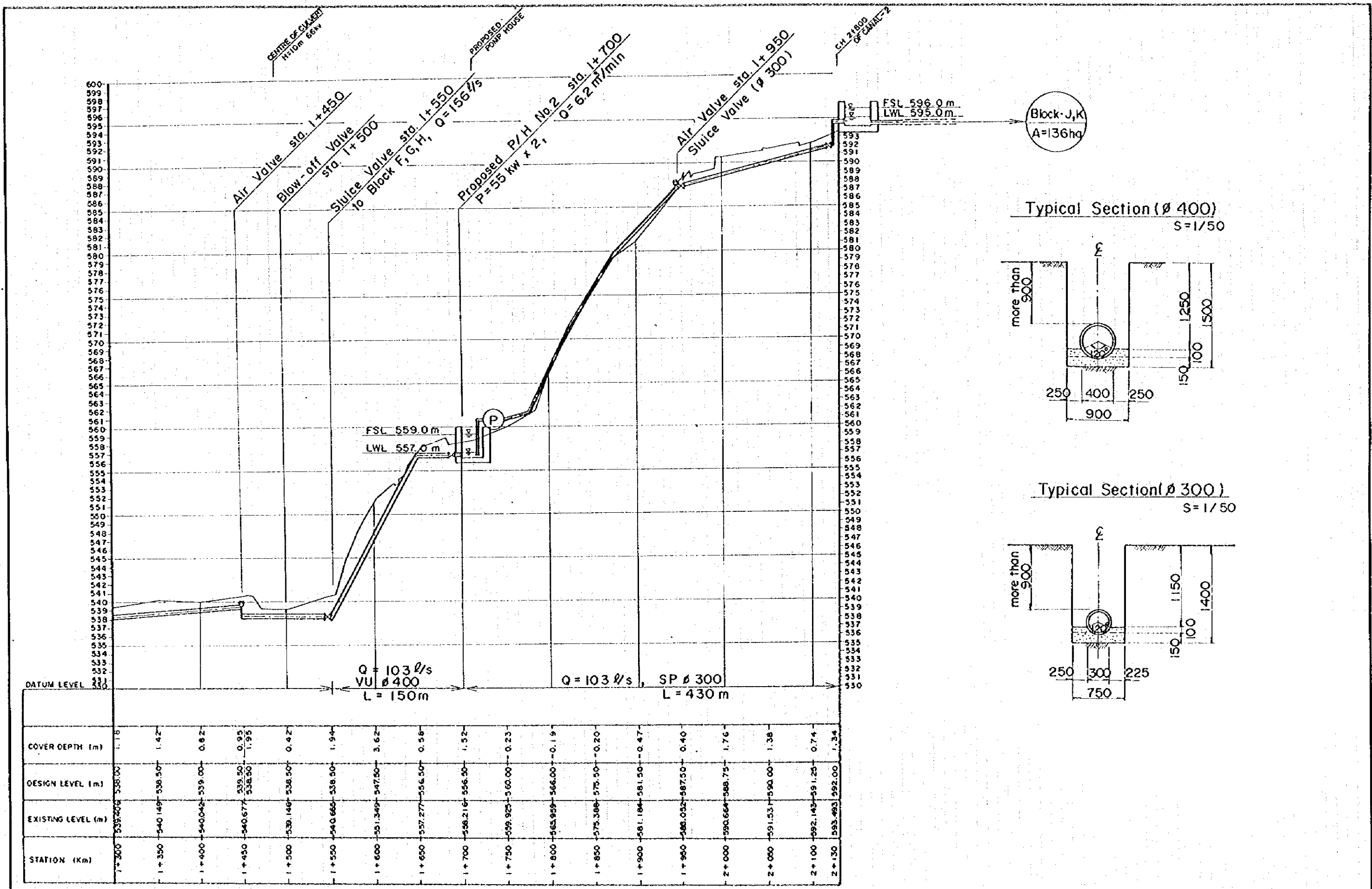
STATION (Km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
0+000	562.90	562.00	0.06
0+050	554.05	553.75	0.08
0+100	547.90	545.50	2.19
0+150	545.69	544.85	0.62
0+200	544.79	544.20	0.33
0+250	544.32	543.55	0.55
0+300	544.17	542.90	1.05
0+350	543.86	542.25	1.41
0+400	543.07	541.60	1.25
0+450	542.28	540.95	1.11
0+500	541.12	540.30	0.60
0+550	540.97	539.65	1.10
0+600	540.67	539.00	1.40
0+650	539.67	538.56	1.08
0+700	539.31	538.13	0.96
0+750	538.81	537.69	0.90
0+800	538.50	537.25	1.03
0+850	538.06	536.81	0.97
0+900	537.78	536.38	1.18
0+950	537.67	535.94	1.51
1+000	537.45	535.50	1.73
1+050	535.82	534.50	2.73
1+100	536.24	534.50	1.60
1+150	535.63	538.00	1.47
1+200	539.46	538.00	1.24
1+250	539.12	538.00	0.90
1+300	539.06	538.00	1.18

Q = 188 l/s, VU Ø 450
L = 1600 m

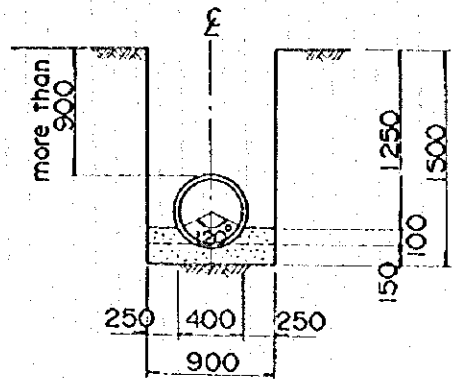
STATION : 0+000 - 1+300

SCALE H = 1 : 4000, V = 1 : 400

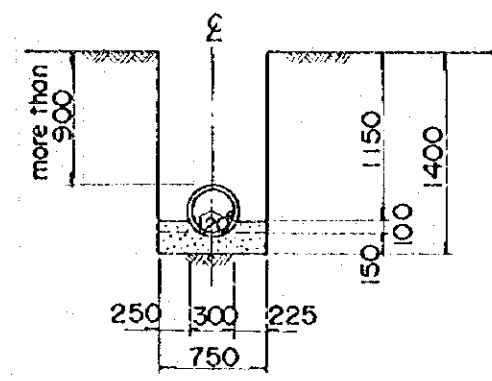
13. LONGITUDINAL SECTION
COTROL TANK P/H NO.2 PIPALTAR (1/2)
STA. 0+000 ~ 1+300



Typical Section (ø 400)
S=1/50



Typical Section (ø 300)
S=1/50

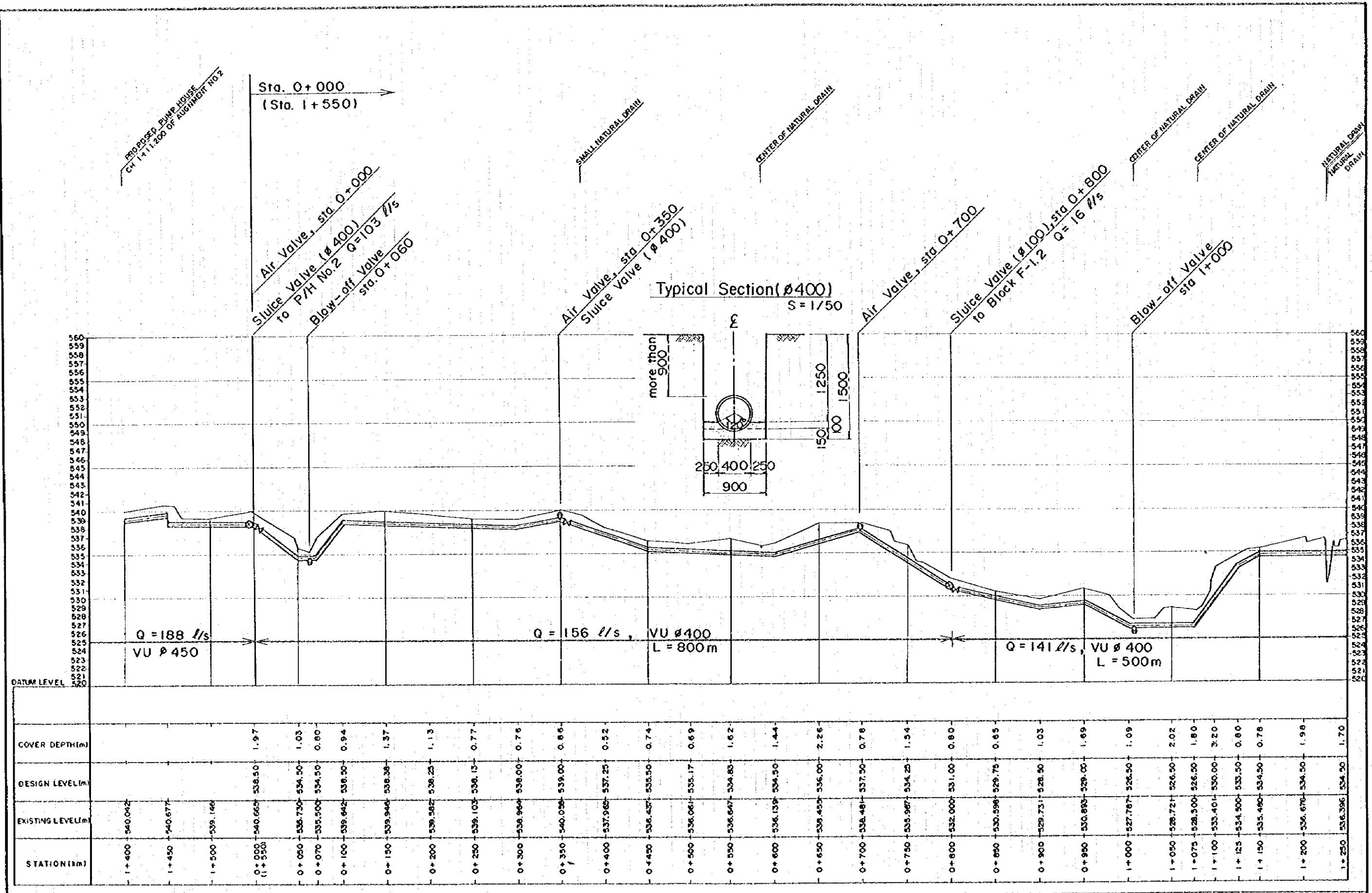


STATION (Km)	EXISTING LEVEL (m)	DESIGN LEVEL (m)	COVER DEPTH (m)
1+300	535.20	538.00	1.18
1+350	540.14	538.50	1.42
1+400	540.04	539.00	0.82
1+450	540.67	539.50	0.95
1+500	538.14	538.50	0.42
1+550	540.66	538.50	1.94
1+600	551.34	547.50	3.62
1+650	557.27	556.50	0.58
1+700	558.21	556.50	1.52
1+750	559.92	560.00	0.23
1+800	565.99	566.00	0.19
1+850	575.38	575.50	0.20
1+900	581.18	581.50	0.47
1+950	588.02	587.50	0.40
2+000	590.64	588.75	1.76
2+050	591.53	590.00	1.38
2+100	592.14	591.25	0.74
2+130	593.49	592.00	1.34

STATION : 1+300 - 2+130

SCALE H= 1:4000 V= 1:400

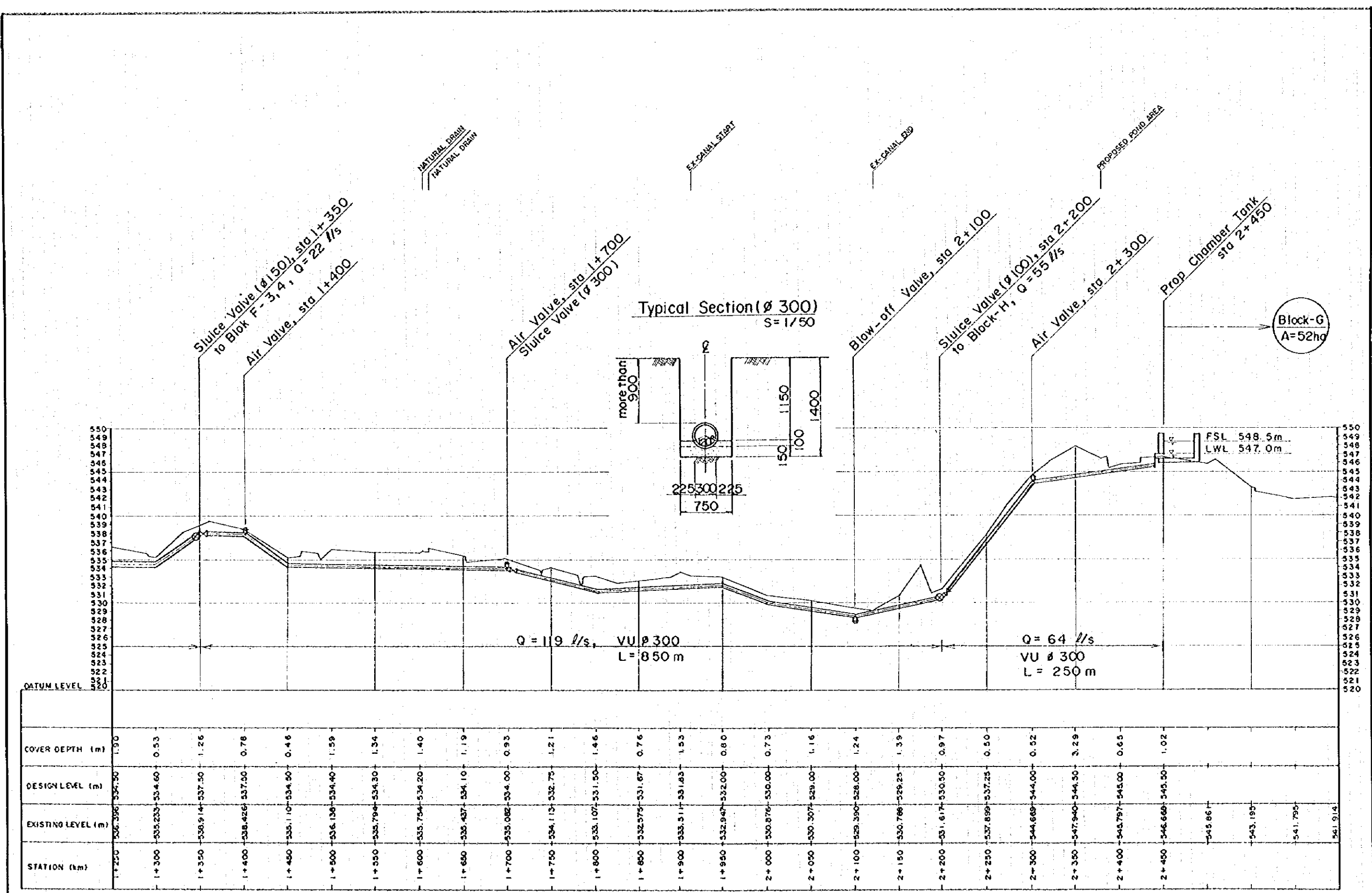
14. LONGITUDINAL SECTION
CONTROL TANK P/H NO.2 PIPALTAR (2/2)
STA. 1+300 ~ 2+130



STATION : 0+000 - 1+400

SCALE H = 1:2000 V = 1:200

15. LONGITUDINAL SECTION
P/H NO.2 TALLO PIPALTAR (1/2)
STA. 0+000 ~ 1+250



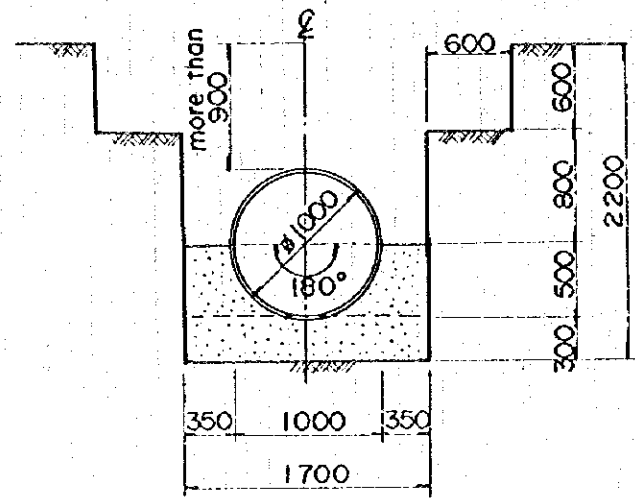
DATUM LEVEL	550	549	548	547	546	545	544	543	542	541	540	539	538	537	536	535	534	533	532	531	530	529	528	527	526	525	524	523	522	521	520
COVER DEPTH (m)	1.90	0.53	1.26	0.78	0.46	1.59	1.34	1.40	1.19	0.93	1.21	1.46	0.76	1.53	0.80	0.73	1.16	1.24	1.39	0.97	0.50	0.52	3.29	0.65	1.02						
DESIGN LEVEL (m)	536.390	535.60	537.50	537.50	534.50	534.40	534.30	534.20	534.10	534.00	532.75	531.50	531.67	531.83	532.00	530.00	529.00	528.00	528.25	530.50	537.25	544.00	544.50	545.00	545.50						
EXISTING LEVEL (m)	536.390	535.233	536.914	538.426	535.110	536.136	535.794	535.754	535.437	535.082	534.123	533.107	532.575	533.511	532.947	530.876	530.307	529.390	529.766	531.617	537.899	544.669	547.940	545.797	546.669	545.86	543.195	541.795	541.914		
STATION (km)	1+250	1+300	1+350	1+400	1+450	1+500	1+550	1+600	1+650	1+700	1+750	1+800	1+850	1+900	1+950	2+000	2+050	2+100	2+150	2+200	2+250	2+300	2+350	2+400	2+450						

STATION : 1+250 - 2+600
 SCALE H : 1:4000 V : 1:400

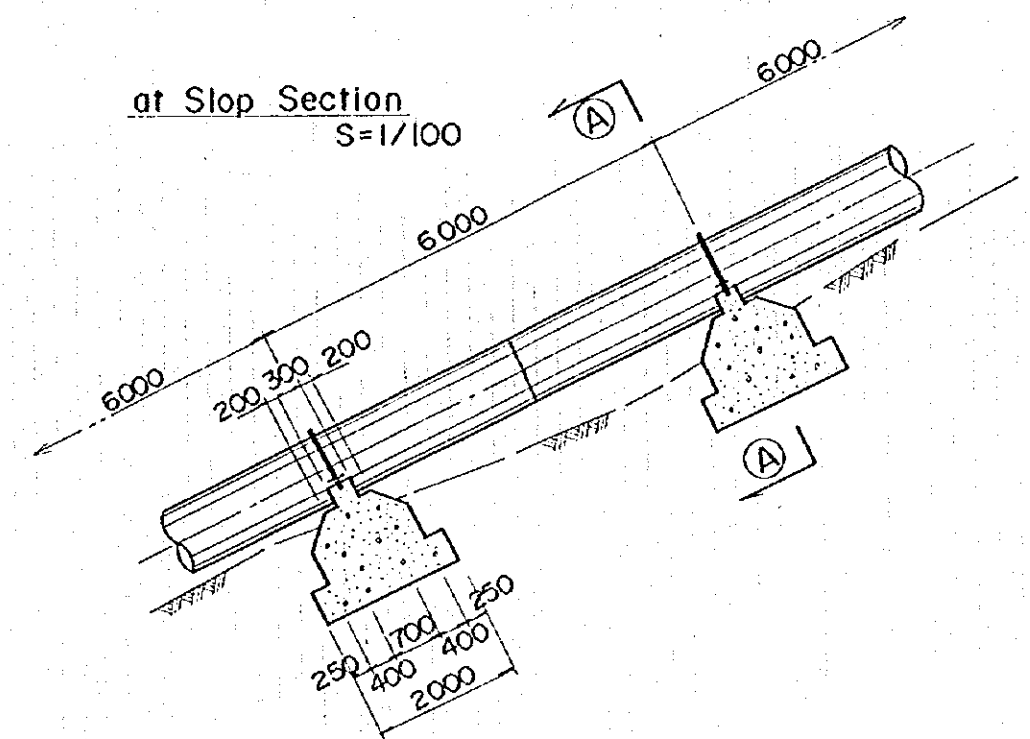
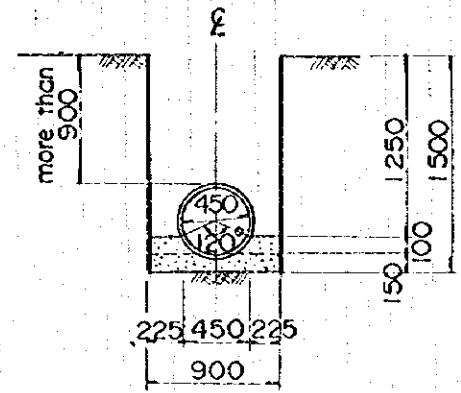
16. LONGITUDINAL SECTION
 P/H NO.2 TALLO PIPALTAR (2/2)
 STA. 1+250 ~ 2+450

TYPICAL CROSS SECTIONS

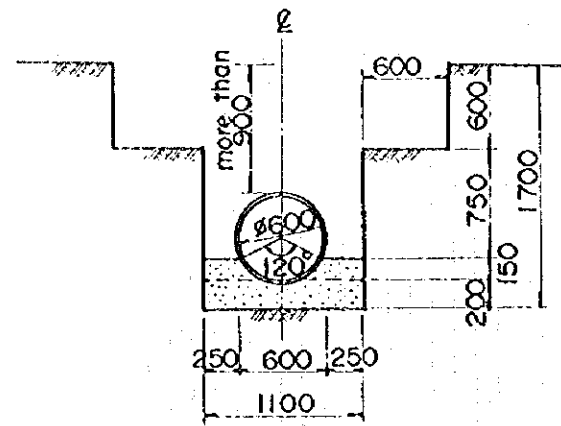
SP ϕ 1000 m/m
S=1/50



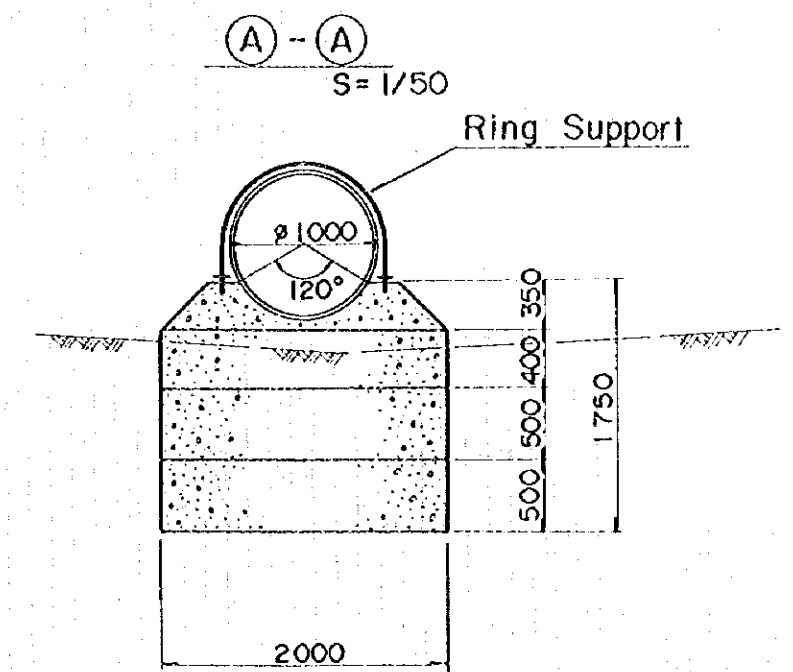
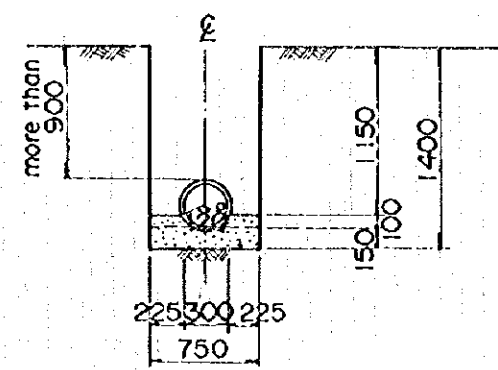
VU ϕ 350 ~ ϕ 450 m/m
S=1/50

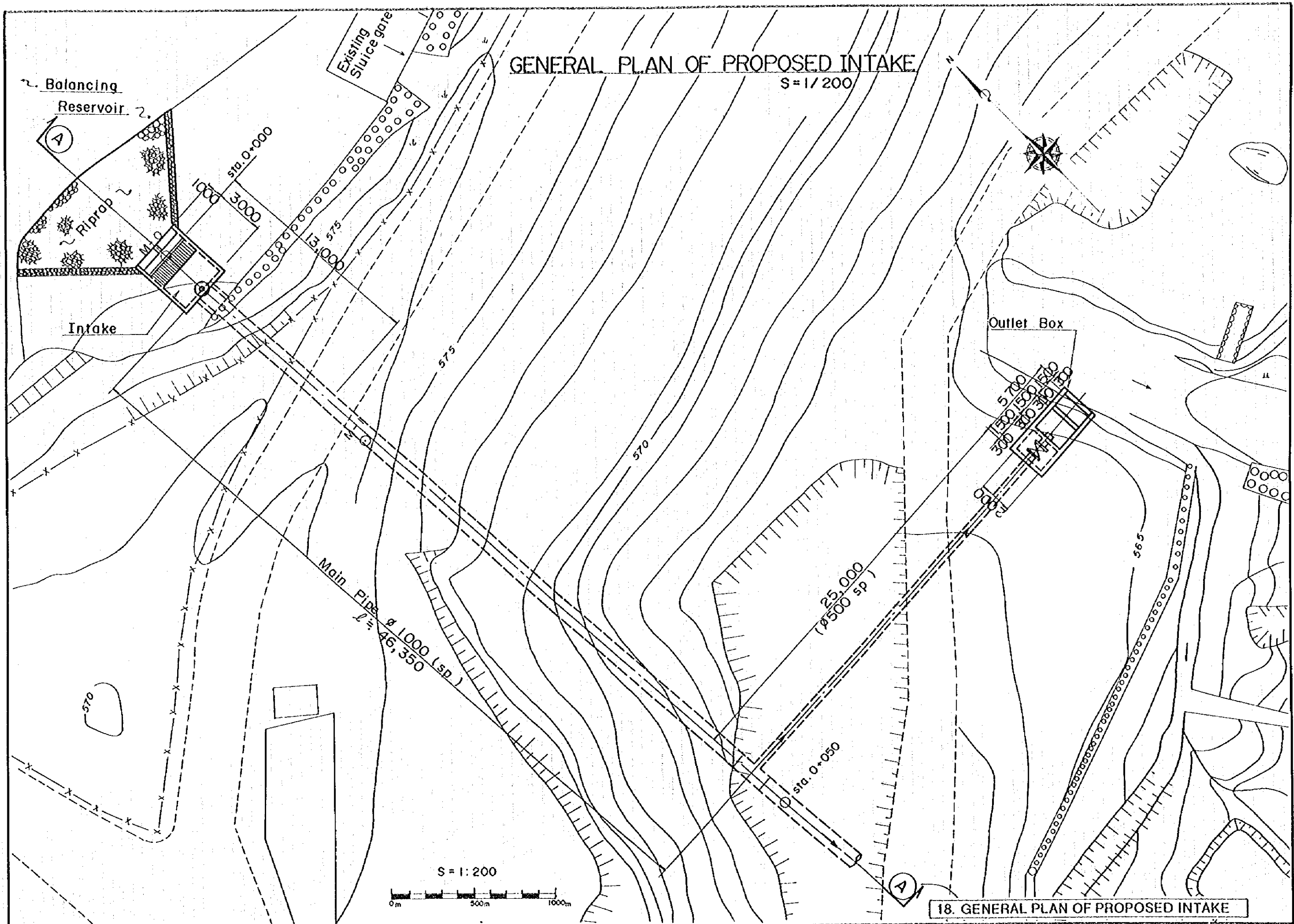


SP ϕ 600 m/m
S=1/50



VU ϕ 150 ~ 300 m/m
S=1/50

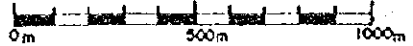




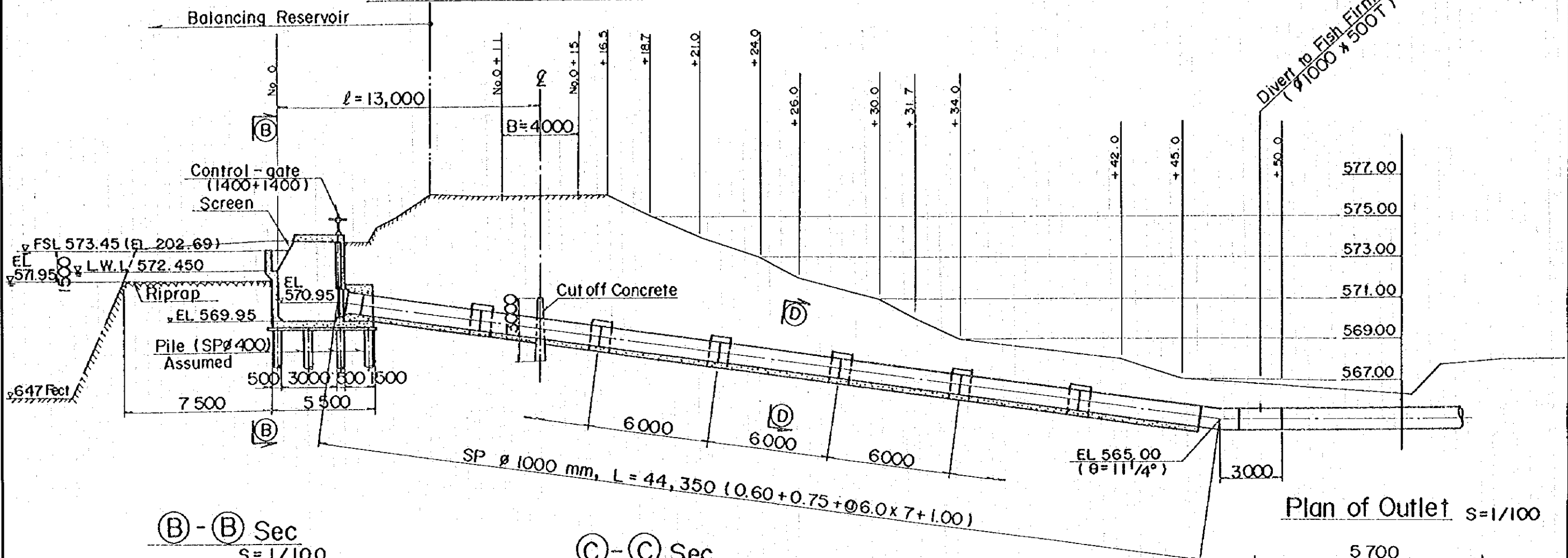
GENERAL PLAN OF PROPOSED INTAKE

S=1/200

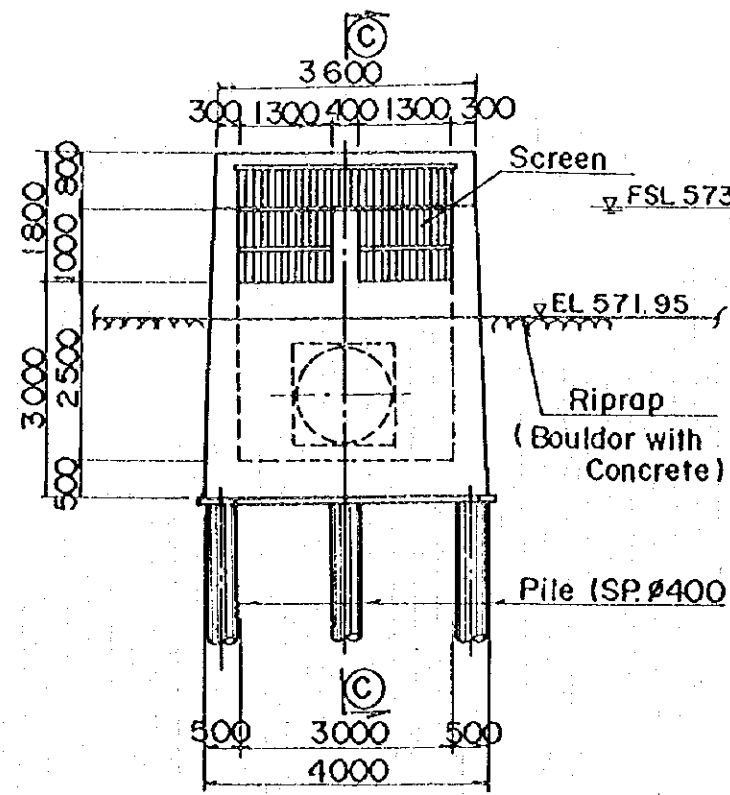
S=1:200



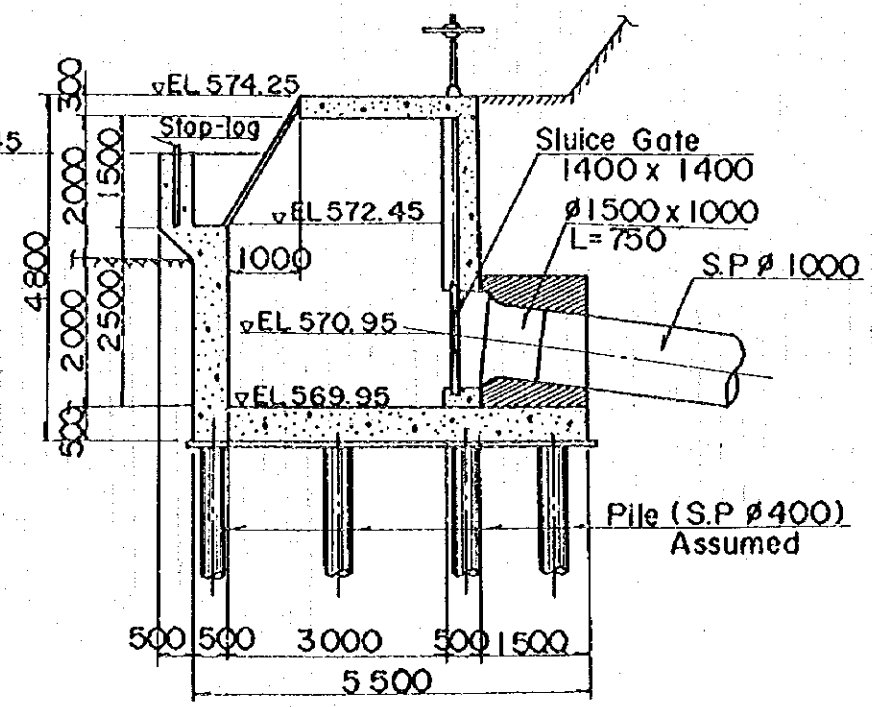
SECTIONS OF PROPOSED INTAKE (A) - (A) Sec s=1/200



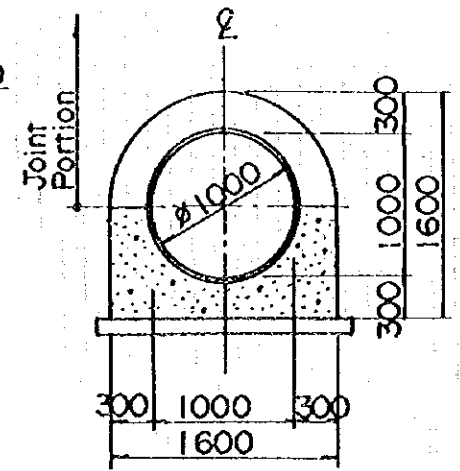
(B) - (B) Sec
S=1/100



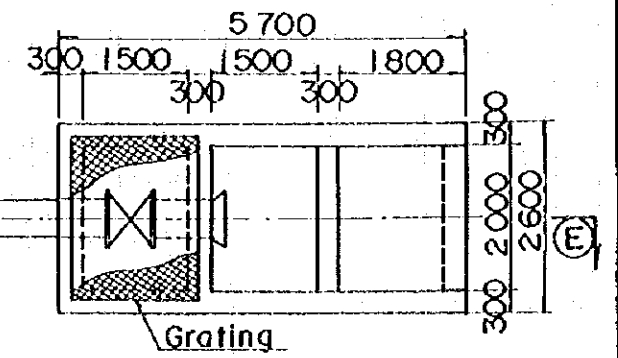
(C) - (C) Sec
S=1/100



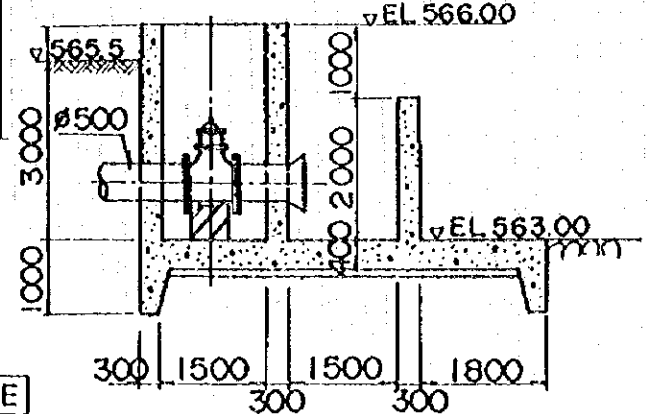
(D) - (D) Sec
S=1/50



Plan of Outlet s=1/100



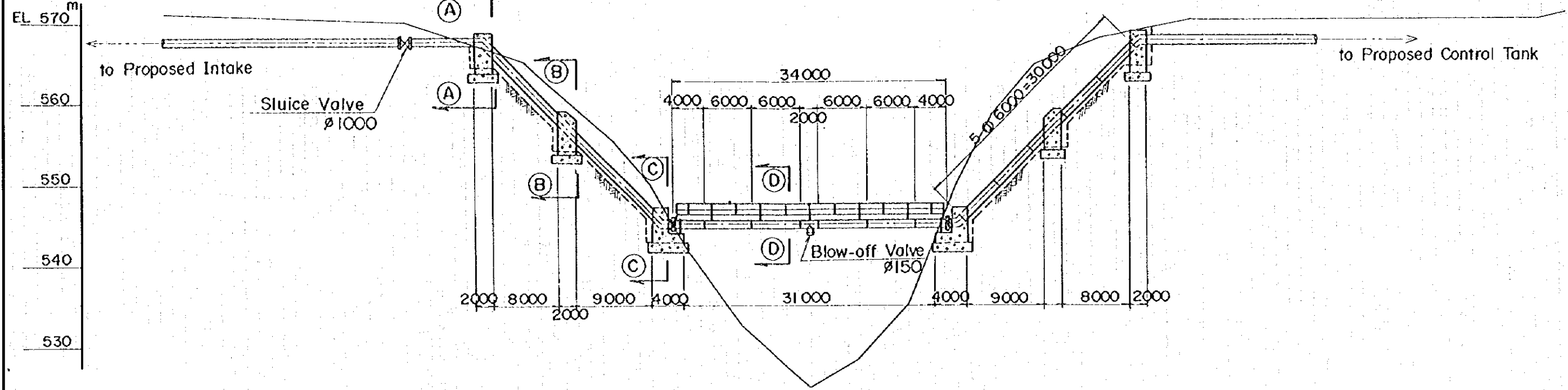
(E) - (E) Sec
S=1/100



Sta. 3+900 3+910 3+920 3+930 3+940 3+950 3+960 3+970 3+980 3+990 4+000 4+100 4+200 4+300 4+400 4+500

PROPOSED AQUEDUCT AT STA. 4+000 (ARMY CAMP)

S=1/500

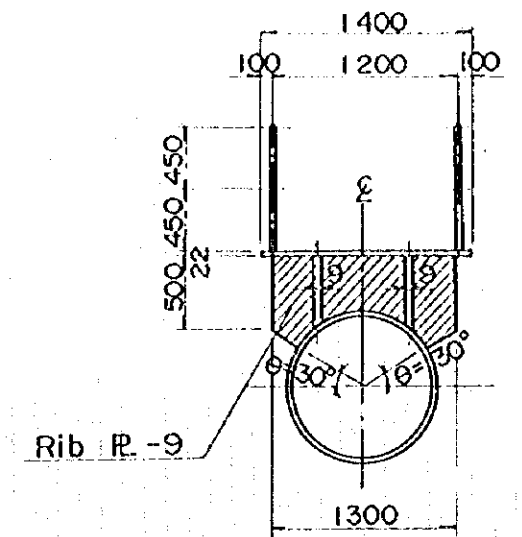
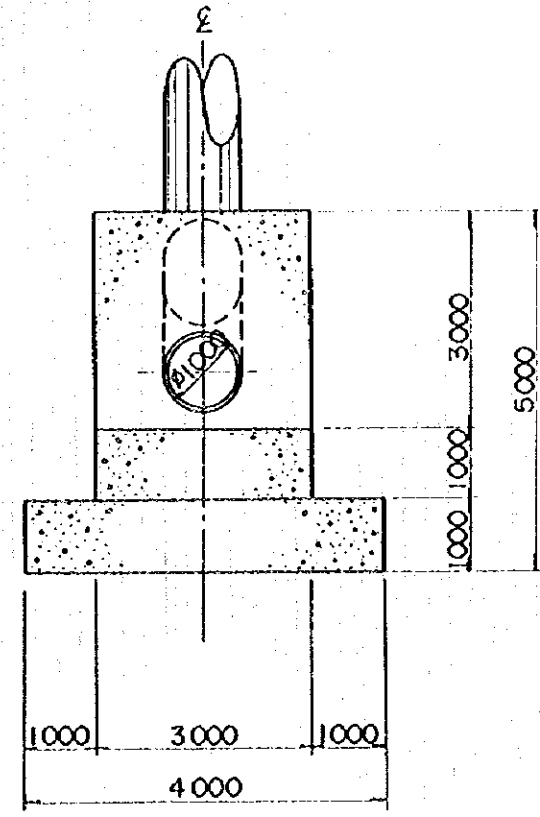
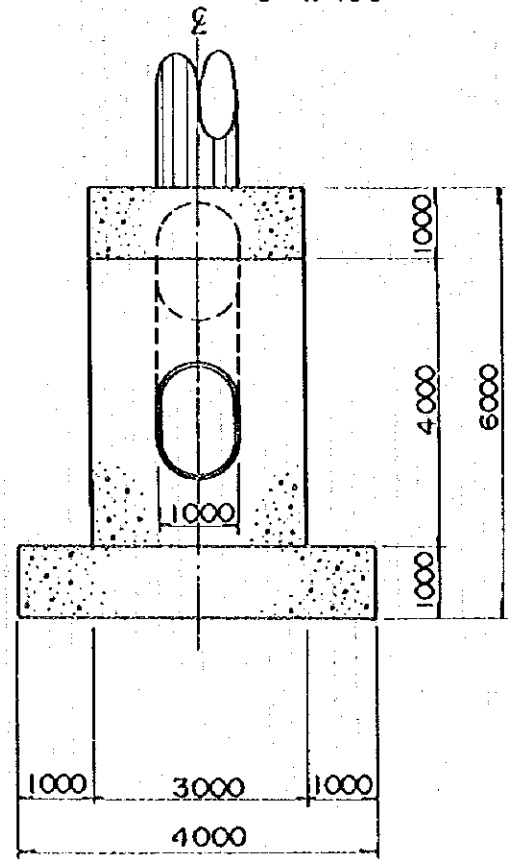
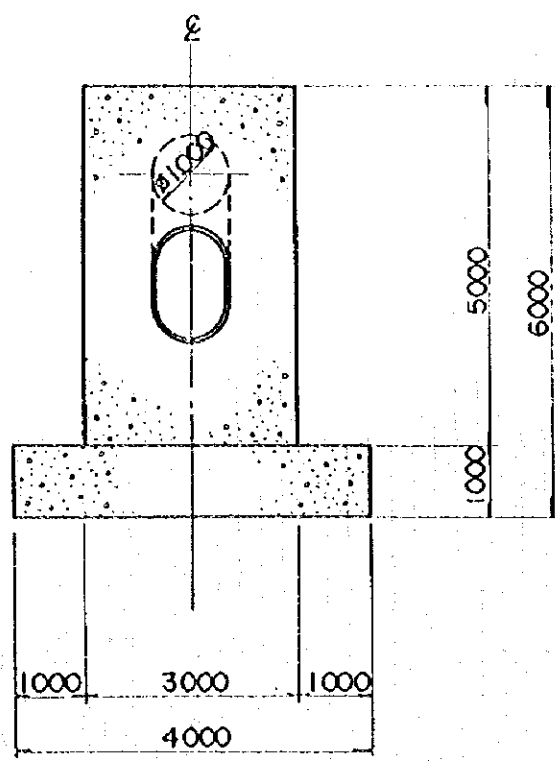


(A)-(A) S=1/100

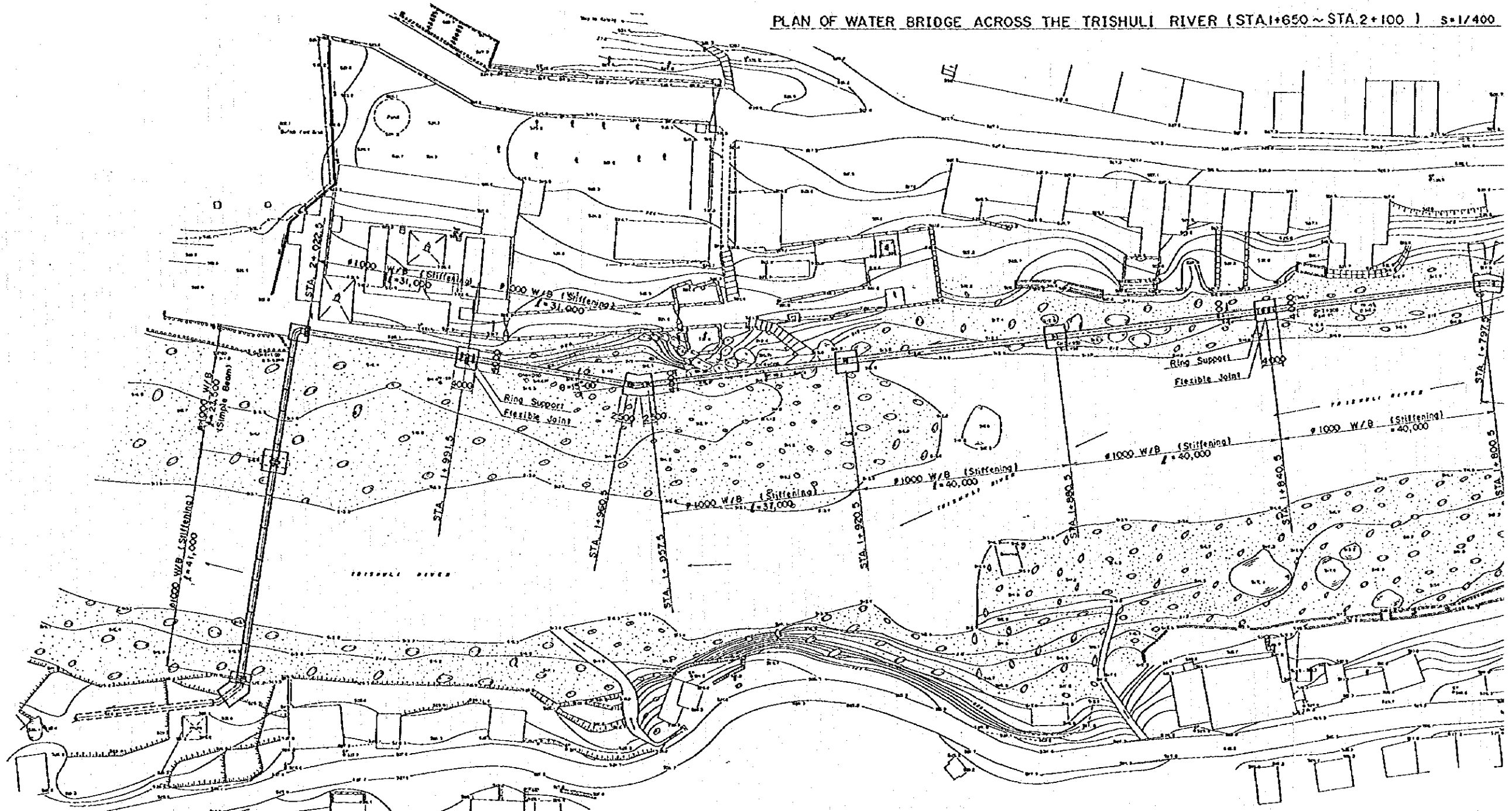
(B)-(B) S=1/100

(C)-(C) S=1/100

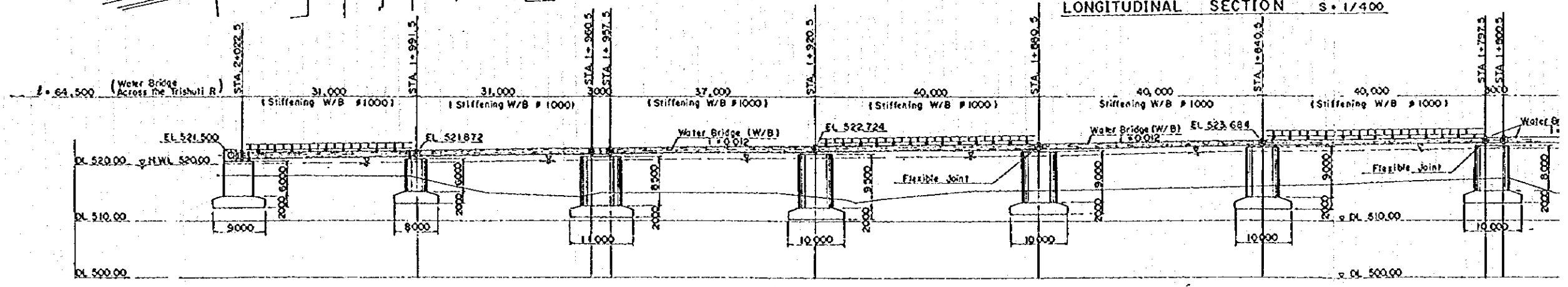
(D)-(D) S=1/50



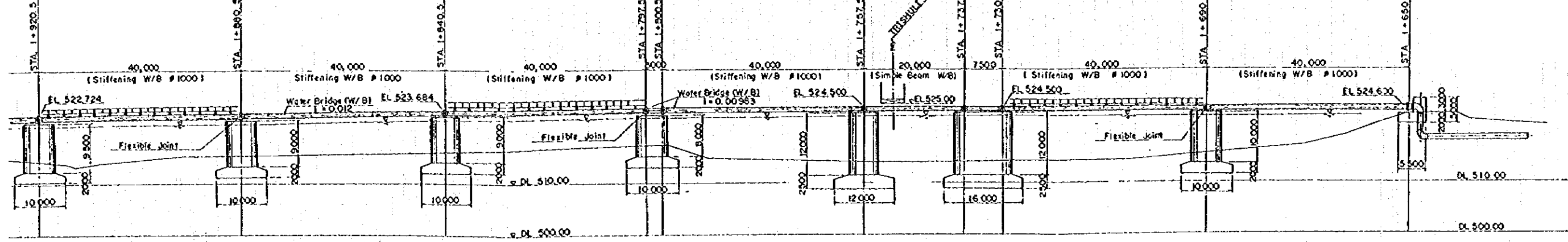
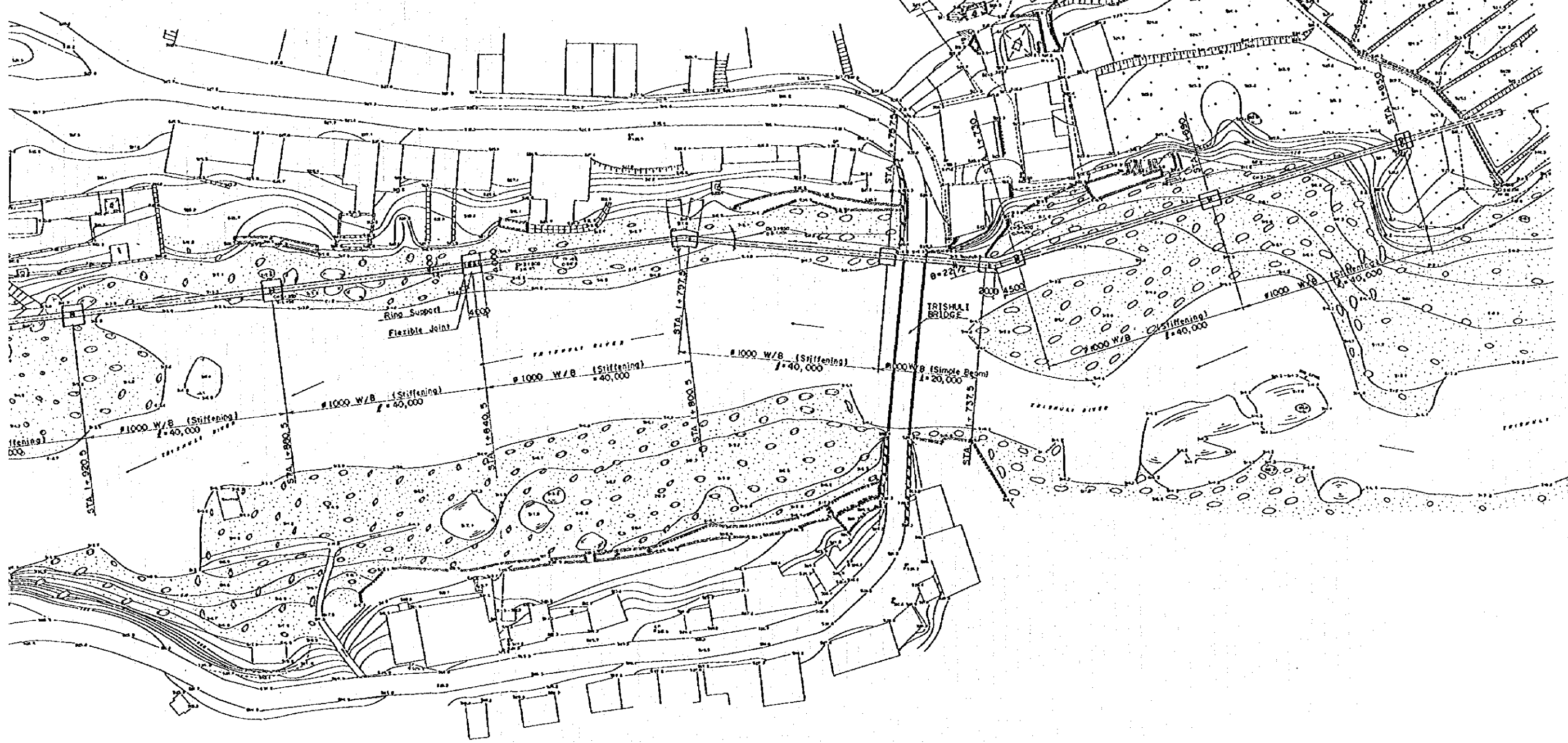
PLAN OF WATER BRIDGE ACROSS THE TRISHULI RIVER (STA.1+650 ~ STA.2+100) S=1/400



LONGITUDINAL SECTION S=1/400

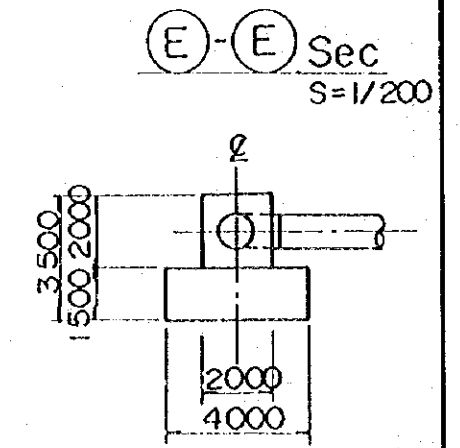
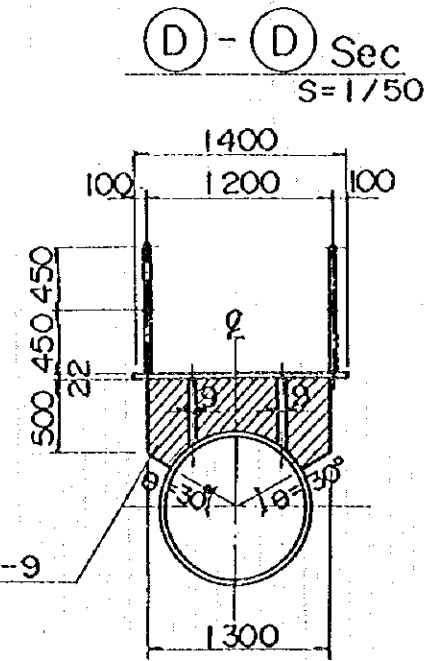
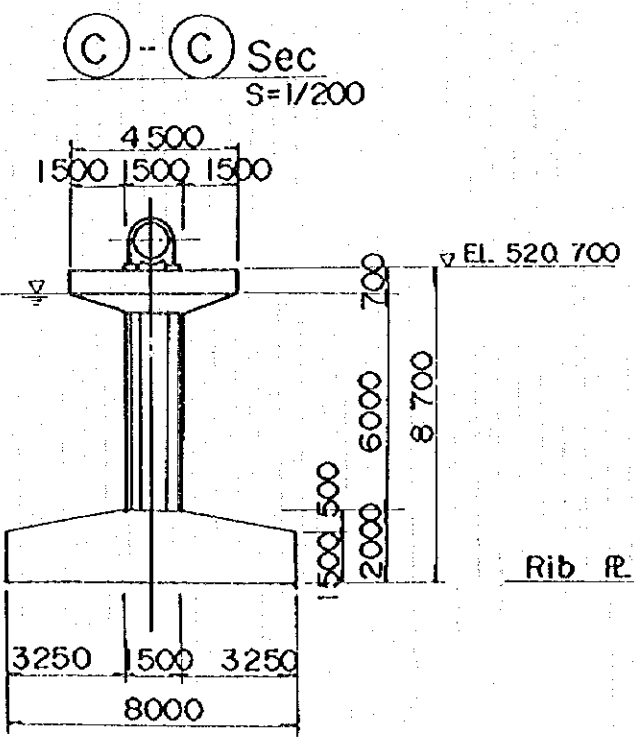
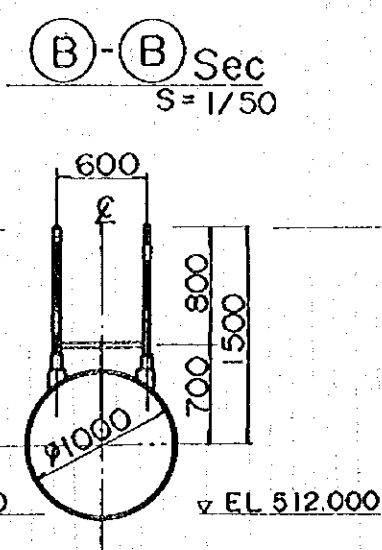
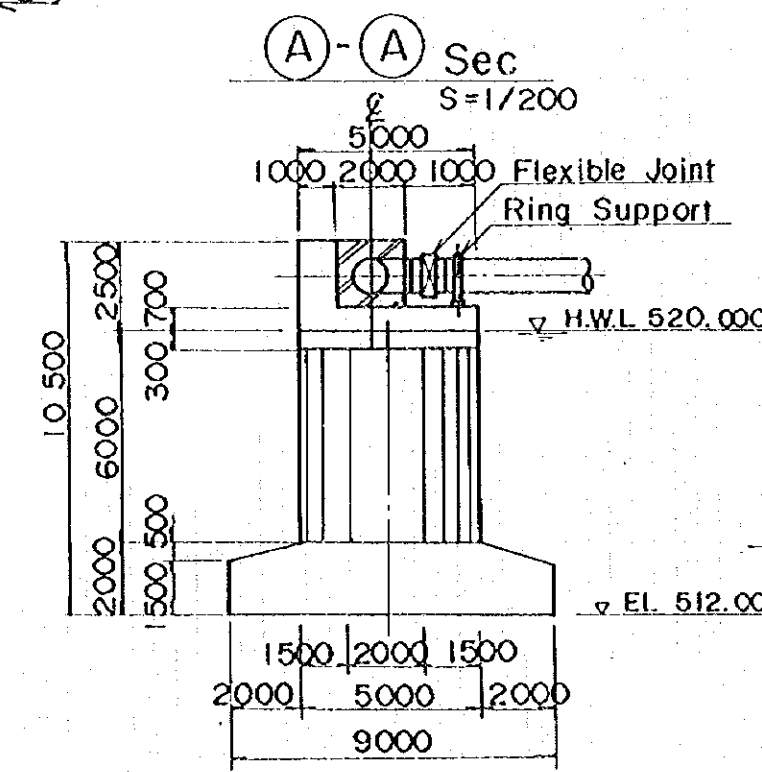
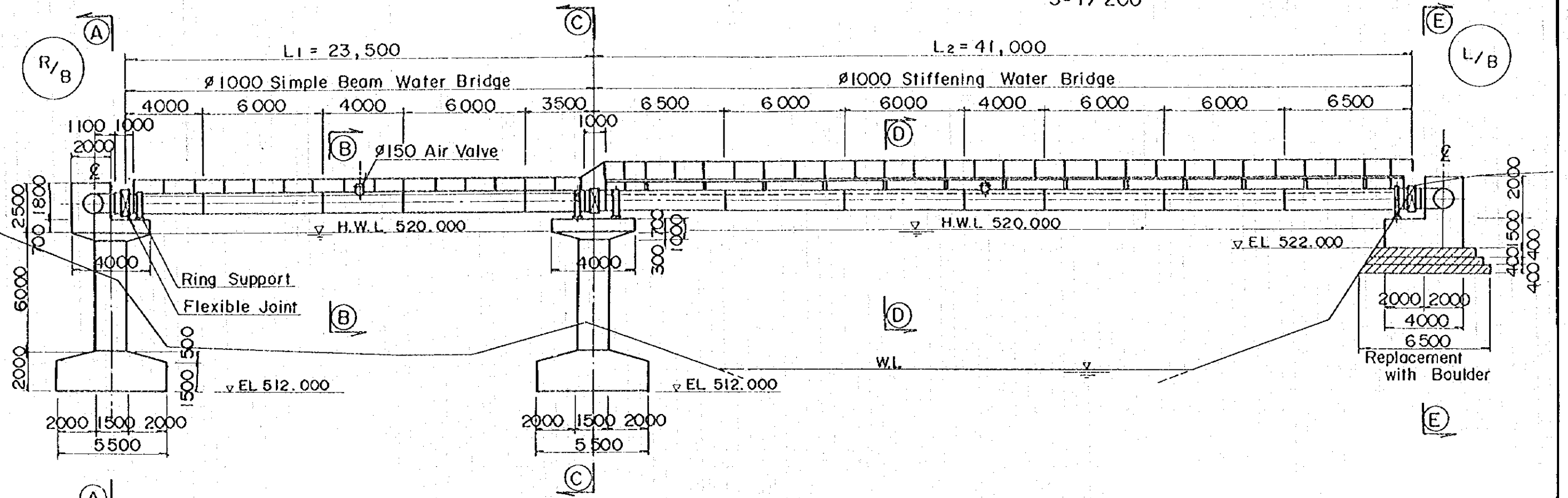


PLAN OF WATER BRIDGE ACROSS THE TRISHULI RIVER (STA.1+650 ~ STA.2+100) S=1/400



PROPOSED WATER BRIDGE (ACROSS THE TRISHULI RIVER)

S = 1/200

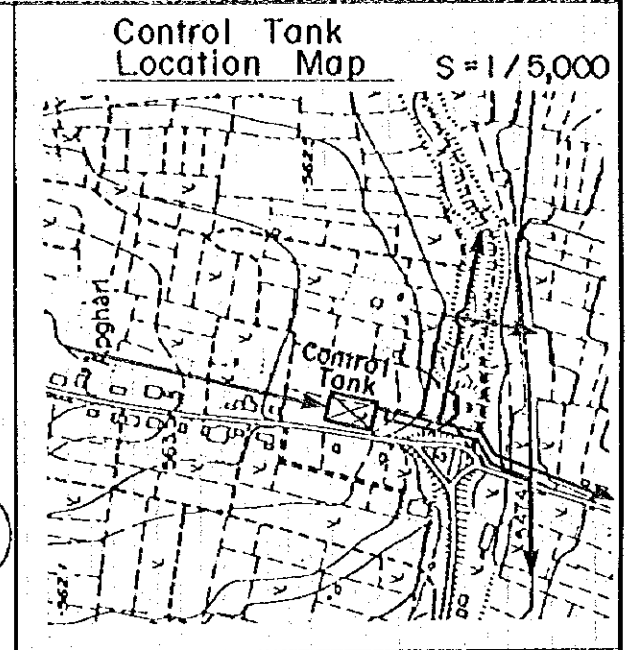
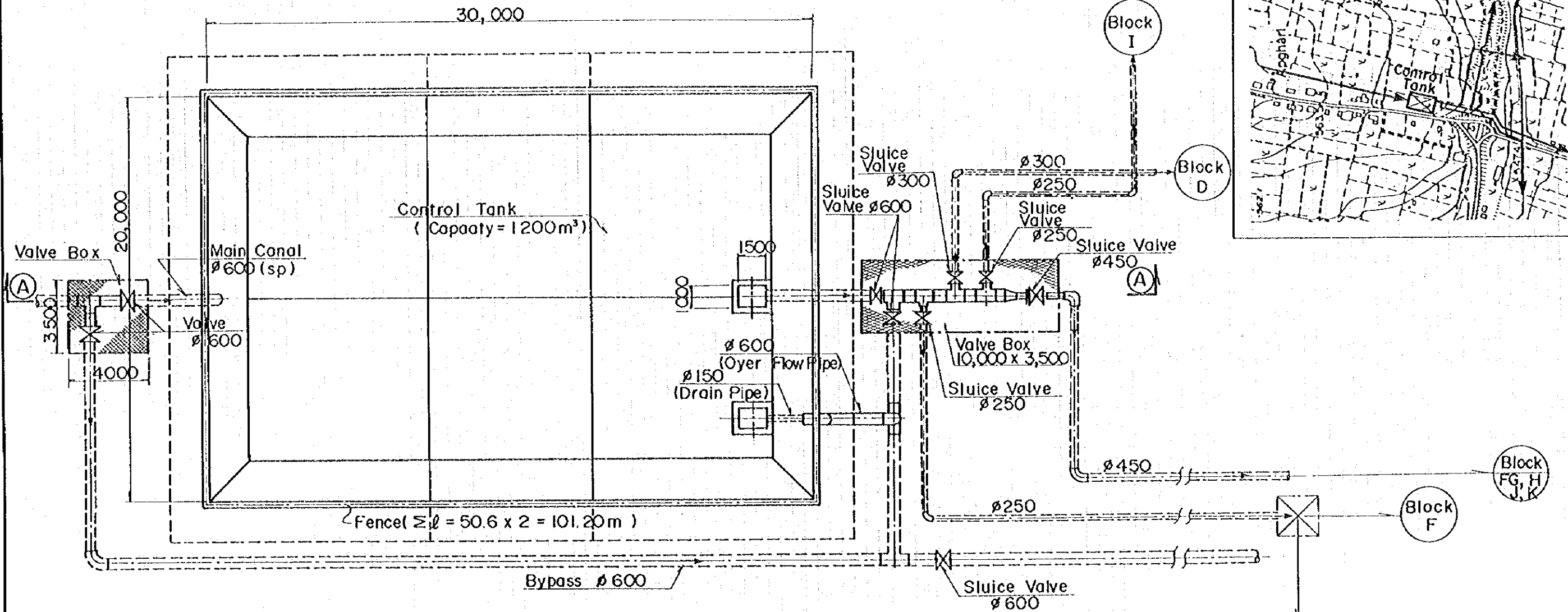


22. SECTIONS OF PROPOSED WATER BRIDGE

PROPOSED CONTROL TANK

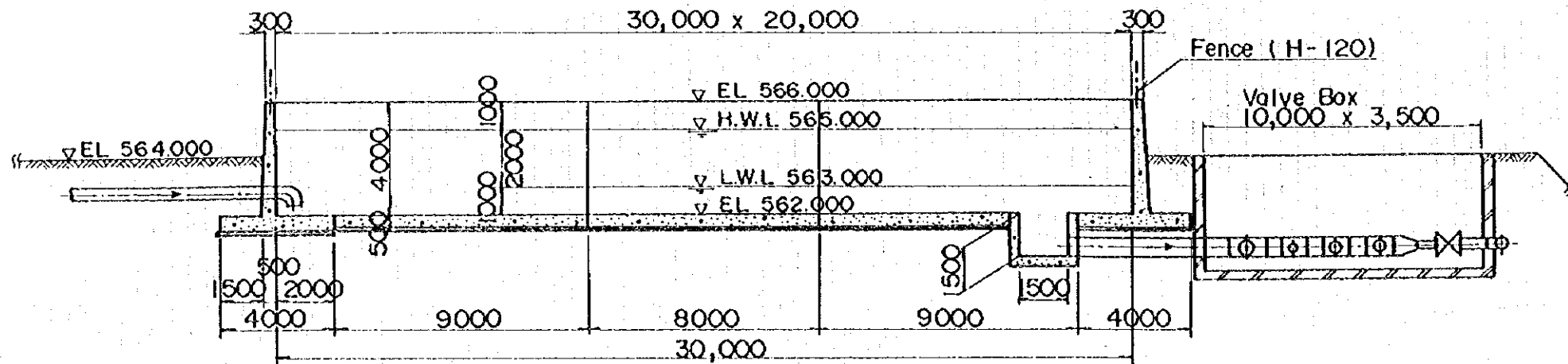
PLAN

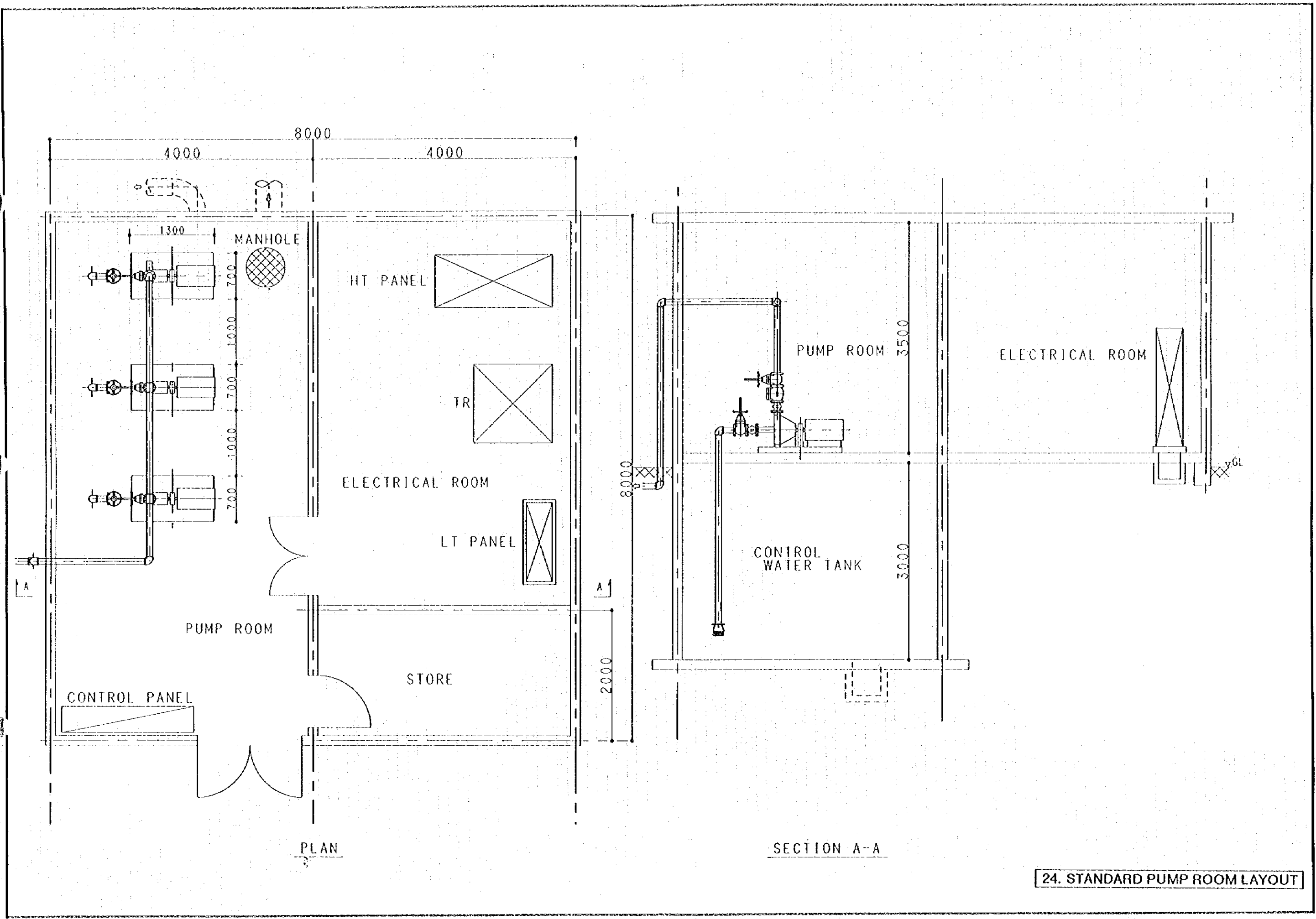
S=1/200



(A) - (A) Sec

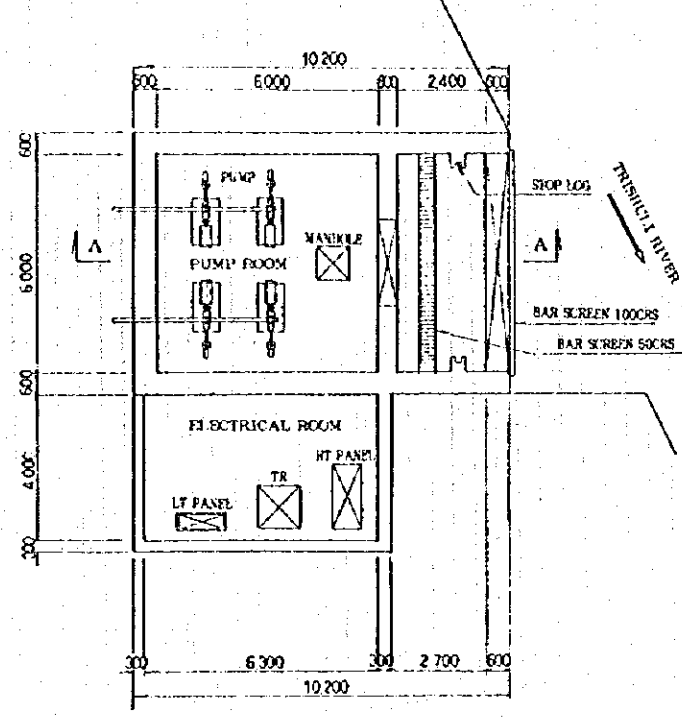
S=1/200



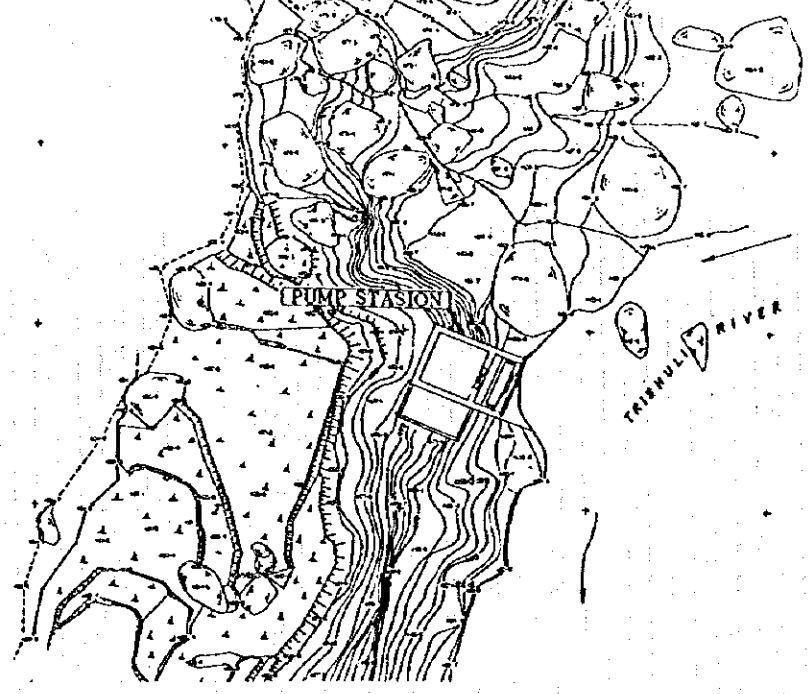


24. STANDARD PUMP ROOM LAYOUT

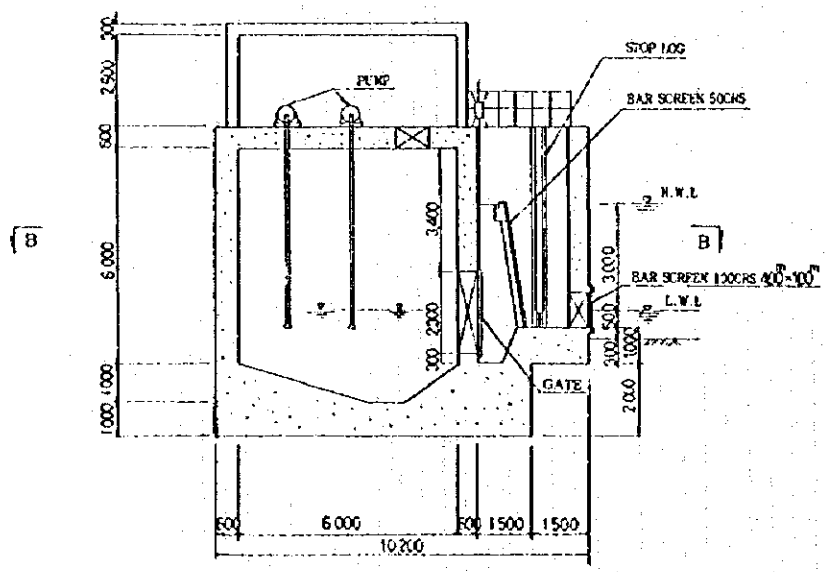
PLAN S=1:200



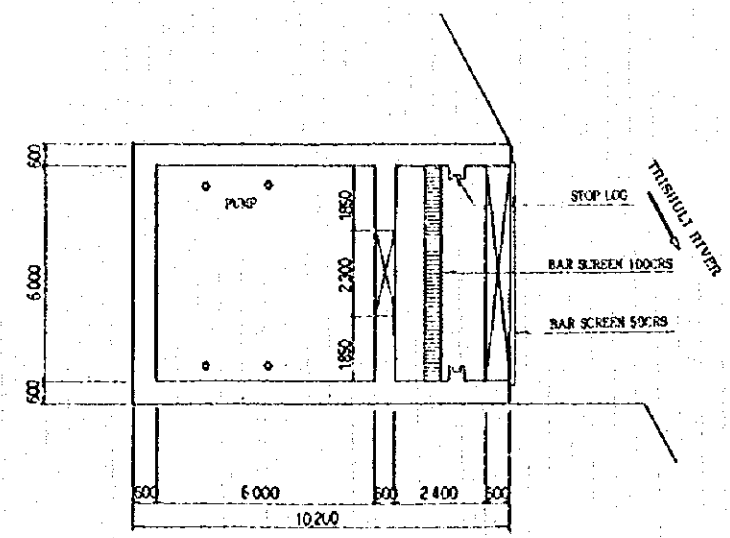
PUMP STATION LOCATION MAP
S=1:800

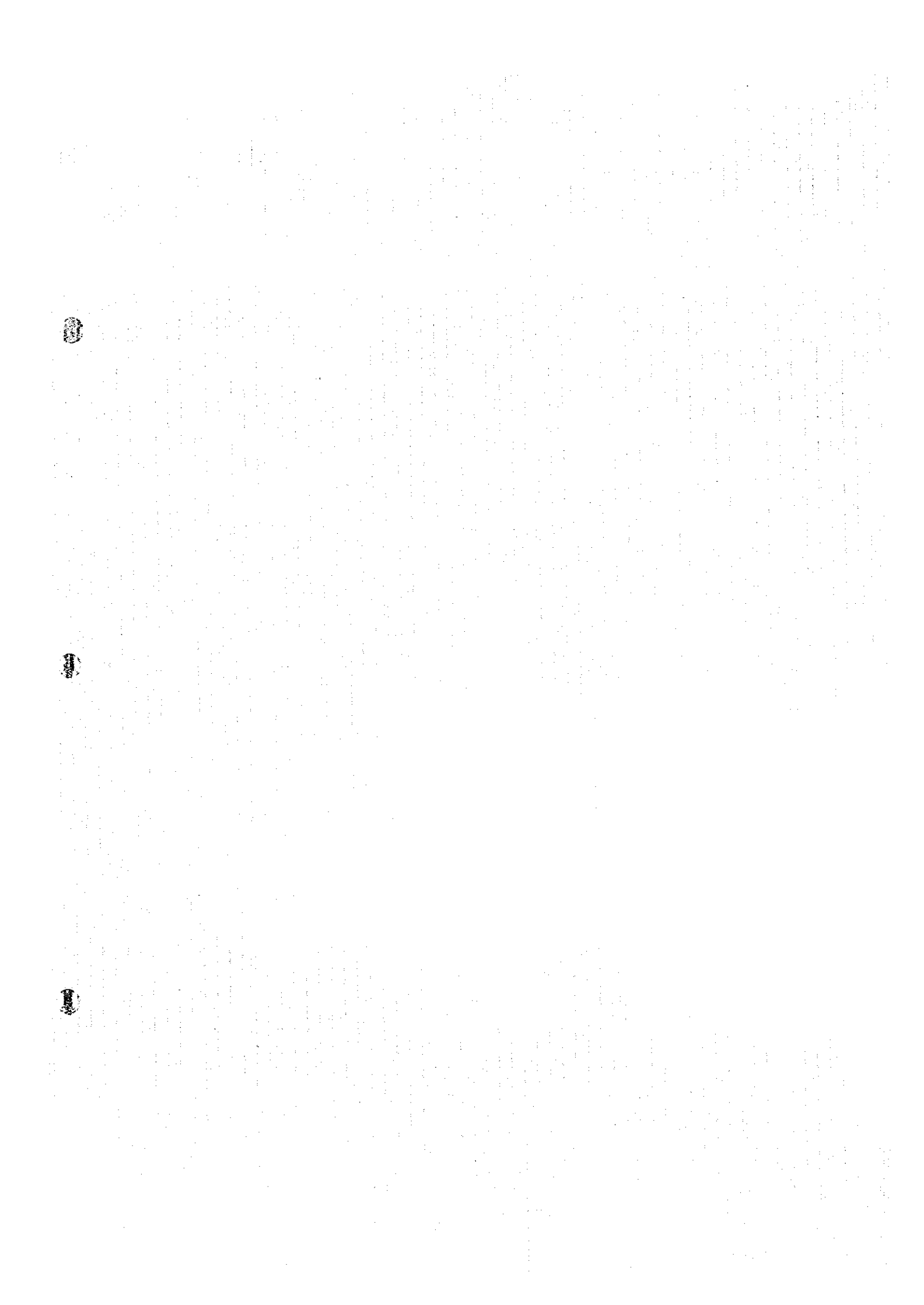


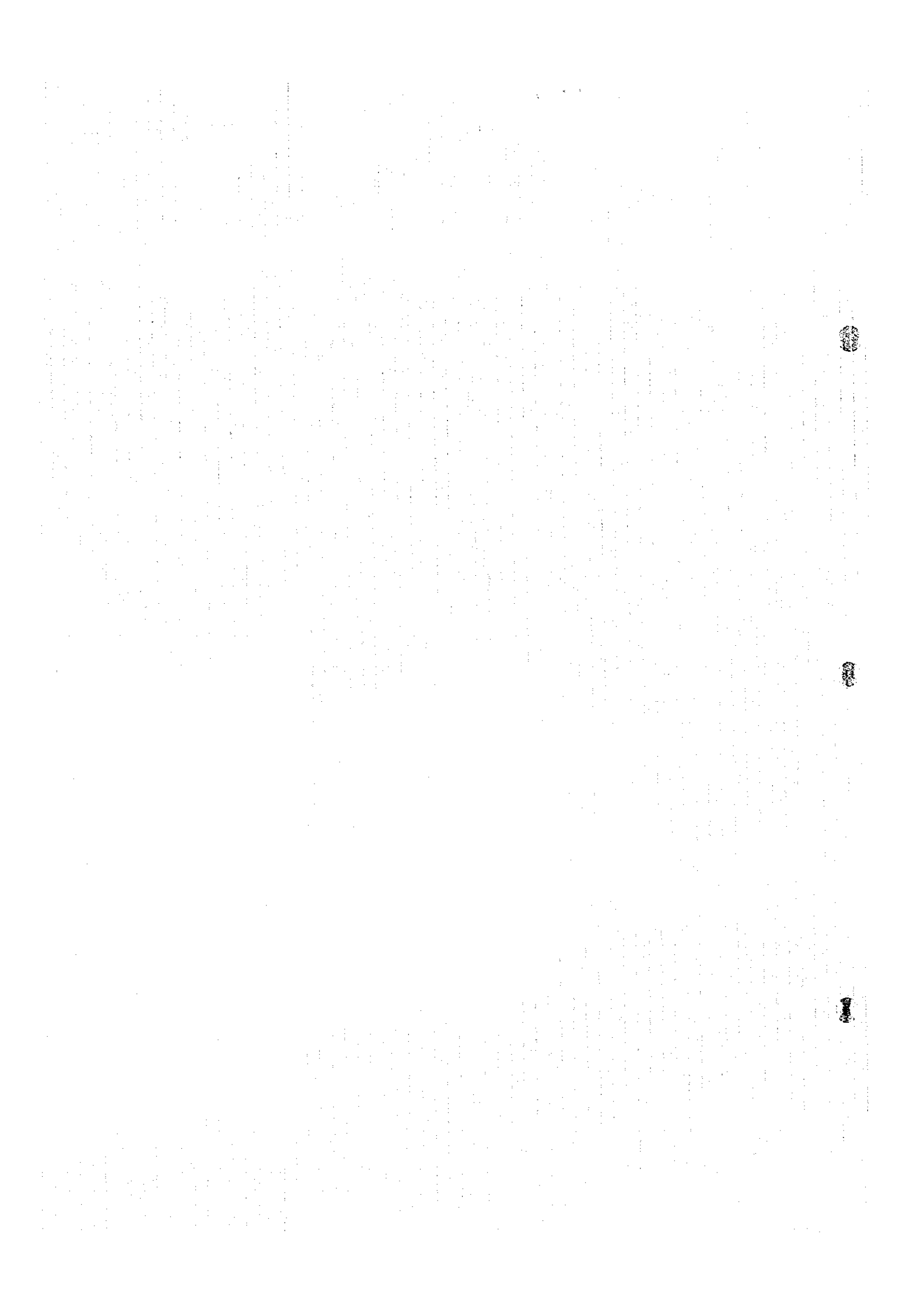
SECTION A-A S=1:200



SECTION B-B S=1:200







JICA