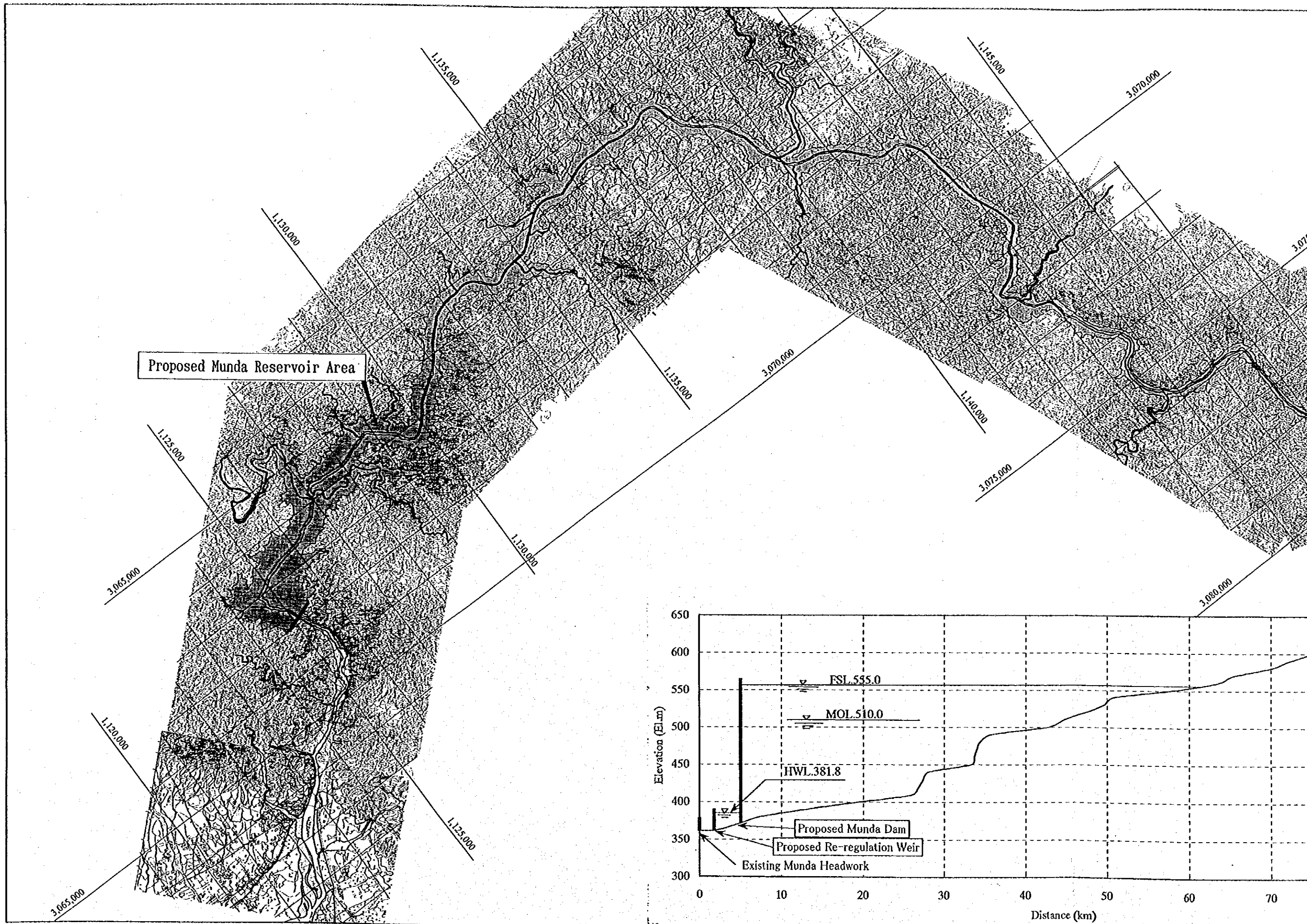
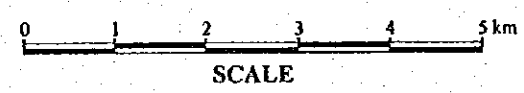
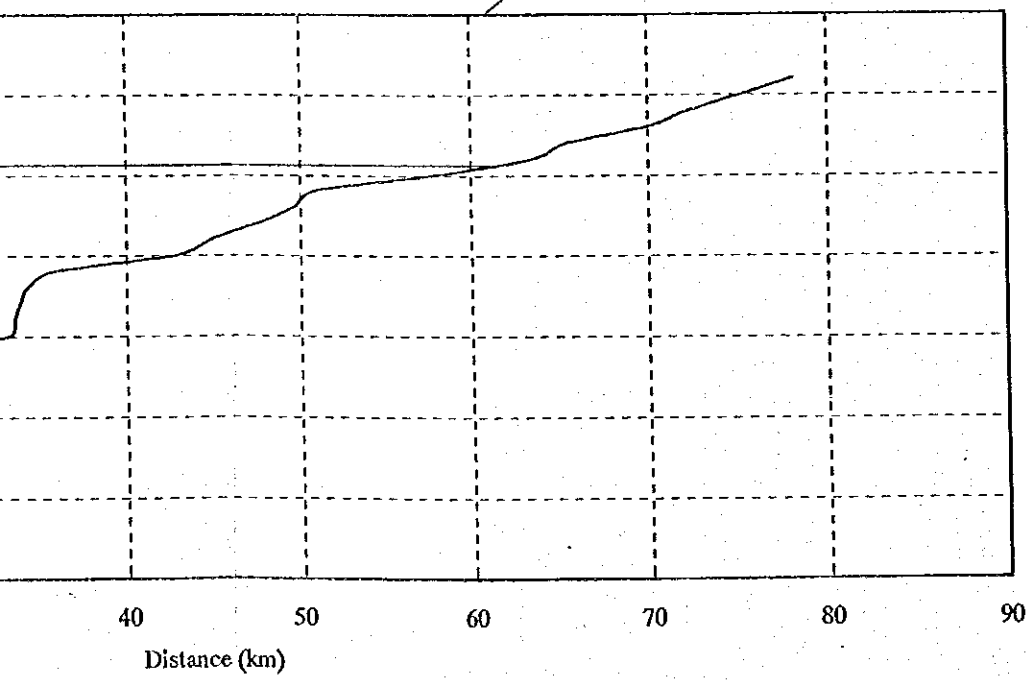
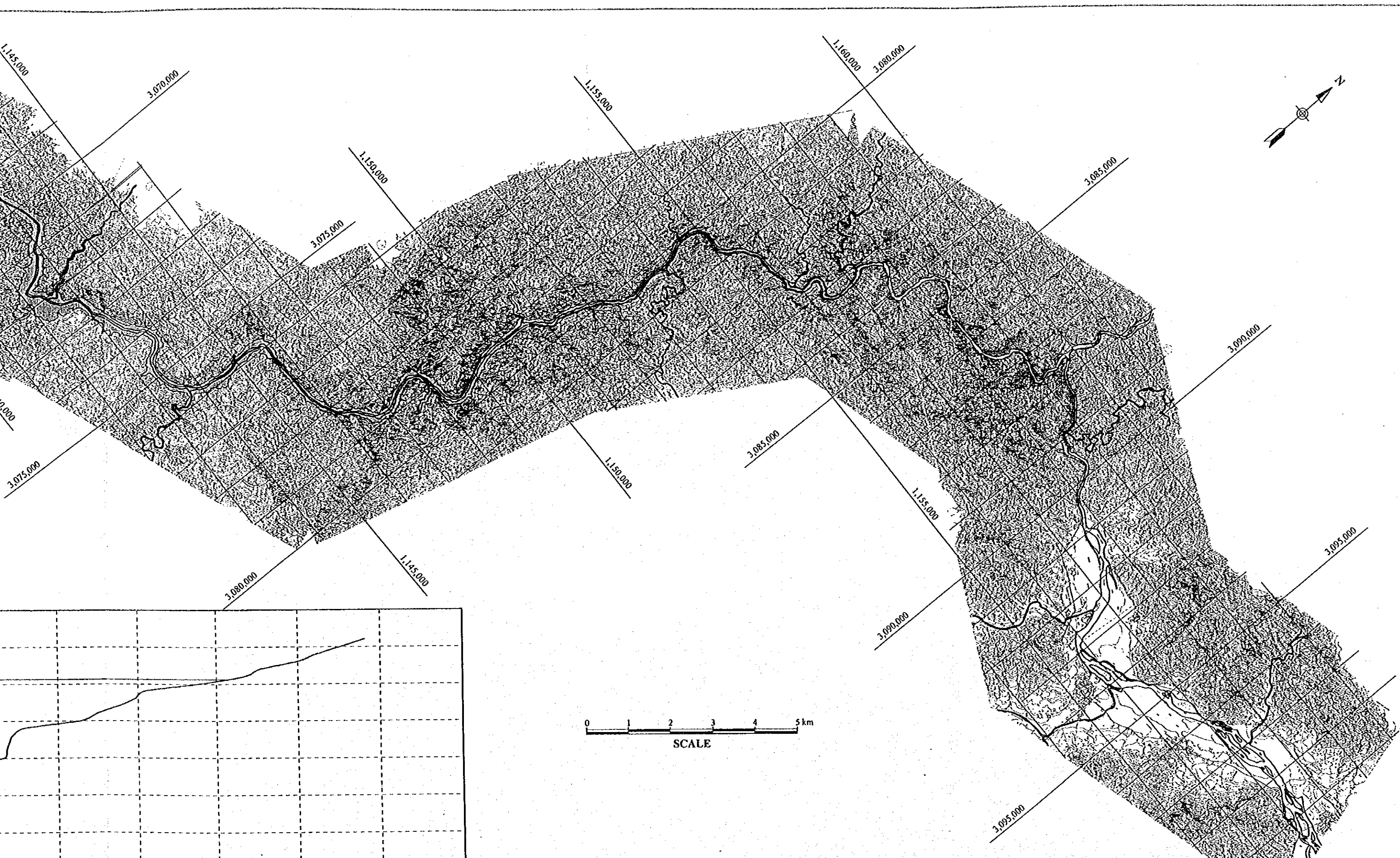


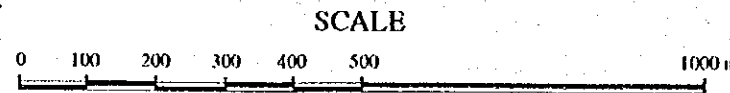
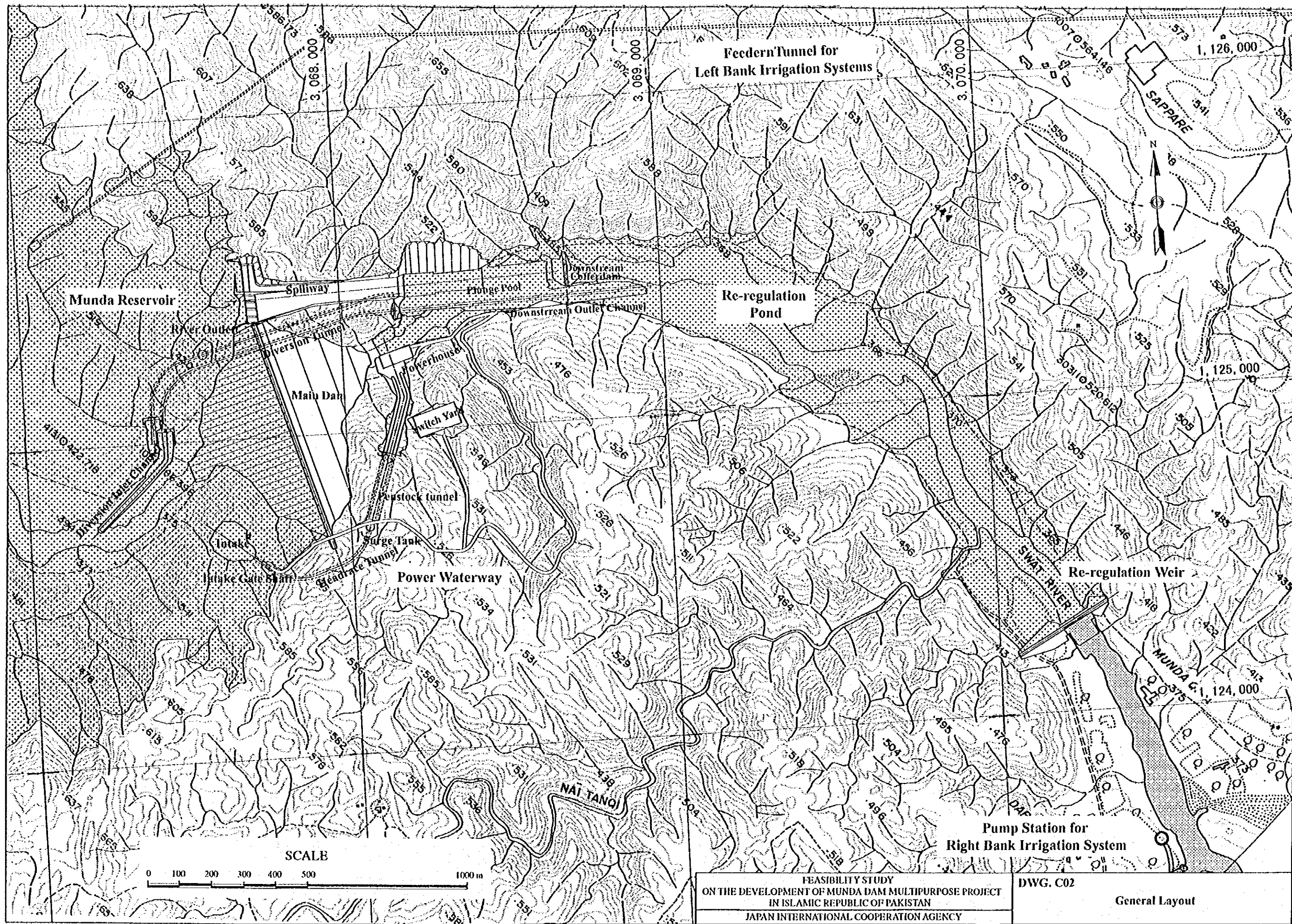
MAIN REPORT

DRAWINGS





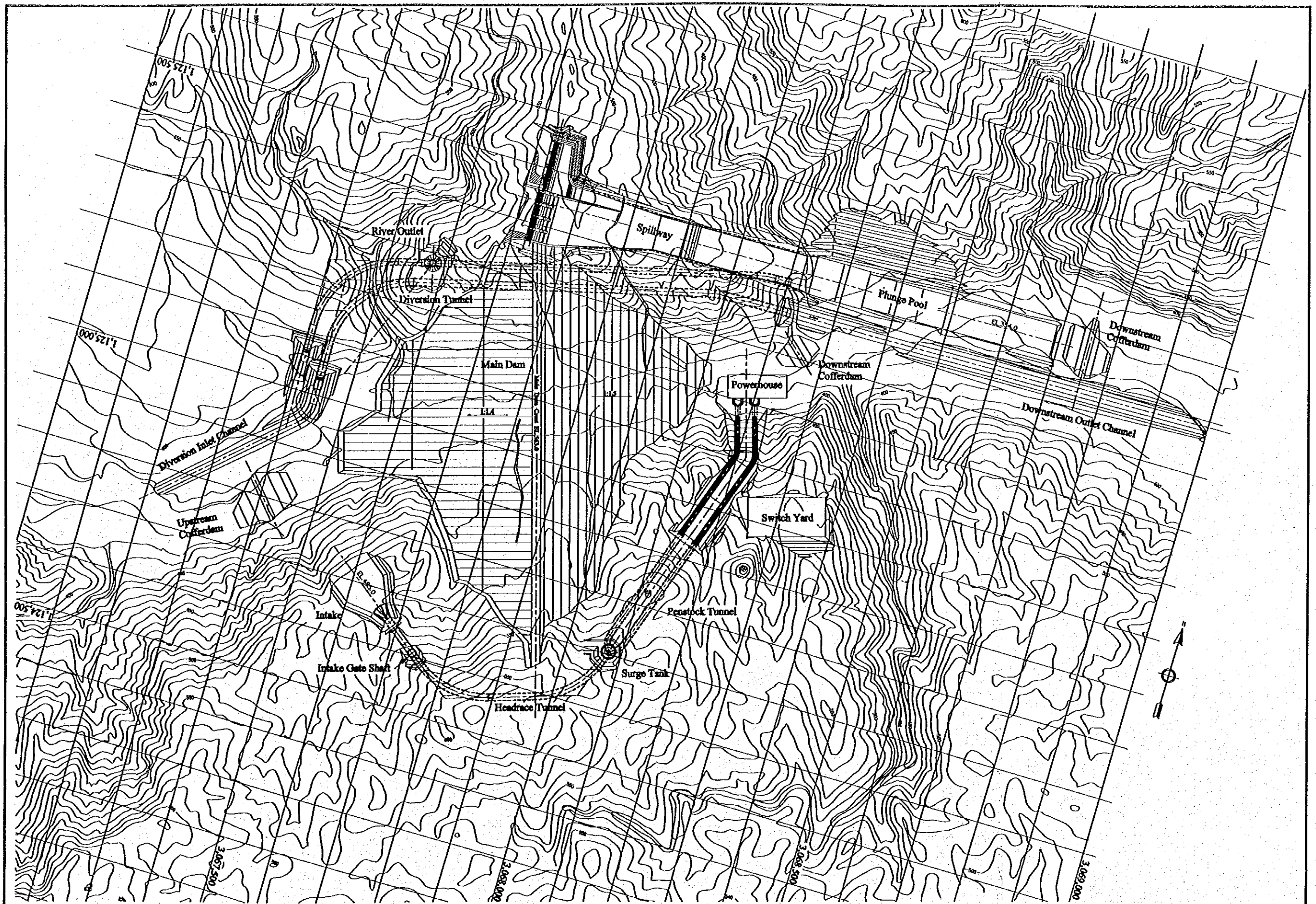
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C01 Reservoir Area
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FEASIBILITY STUDY
 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
 IN ISLAMIC REPUBLIC OF PAKISTAN
 JAPAN INTERNATIONAL COOPERATION AGENCY

DWG. C02

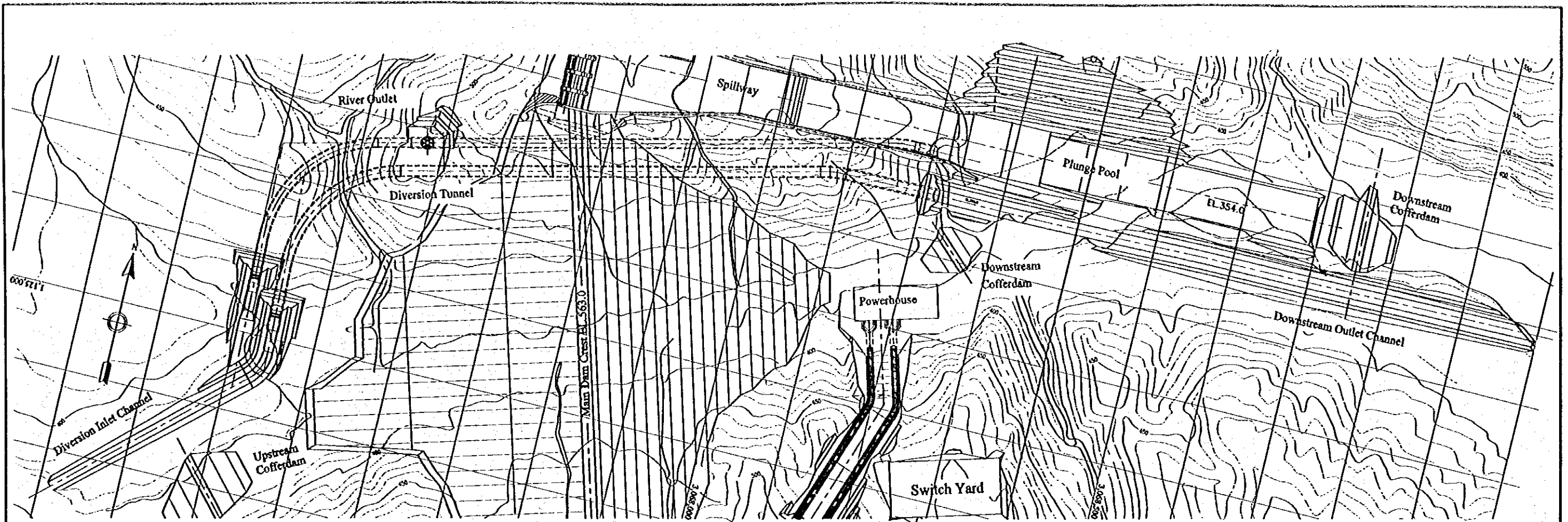
General Layout



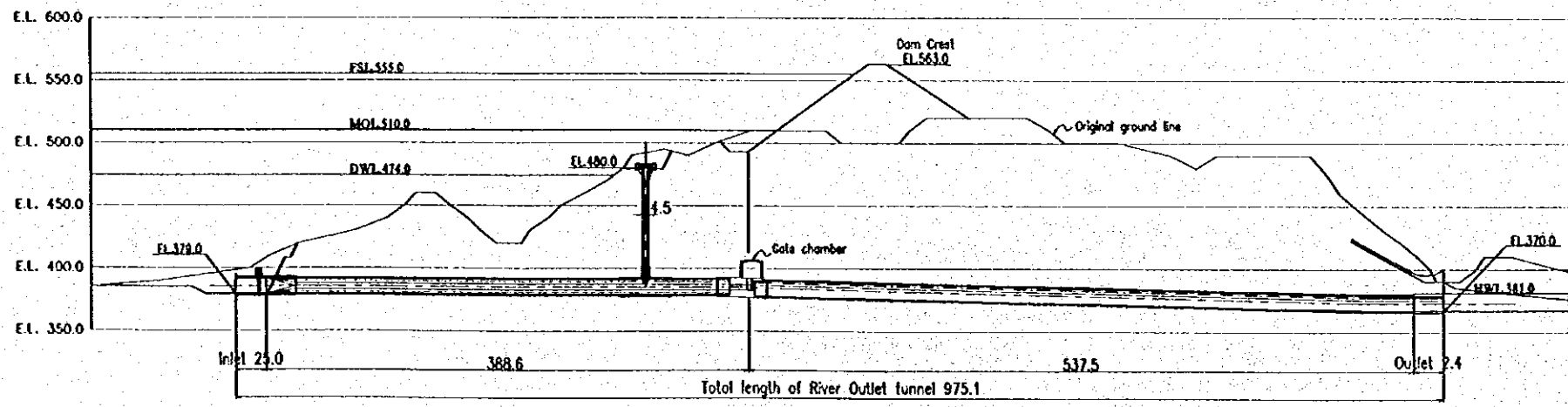
FEASIBILITY STUDY
 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
 IN ISLAMIC REPUBLIC OF PAKISTAN
 JAPAN INTERNATIONAL COOPERATION AGENCY

DWG. C03

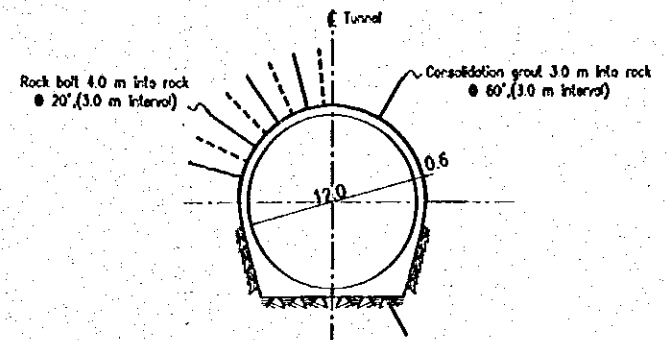
General Plan



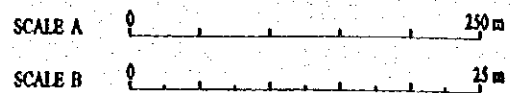
PLAN SCALE A



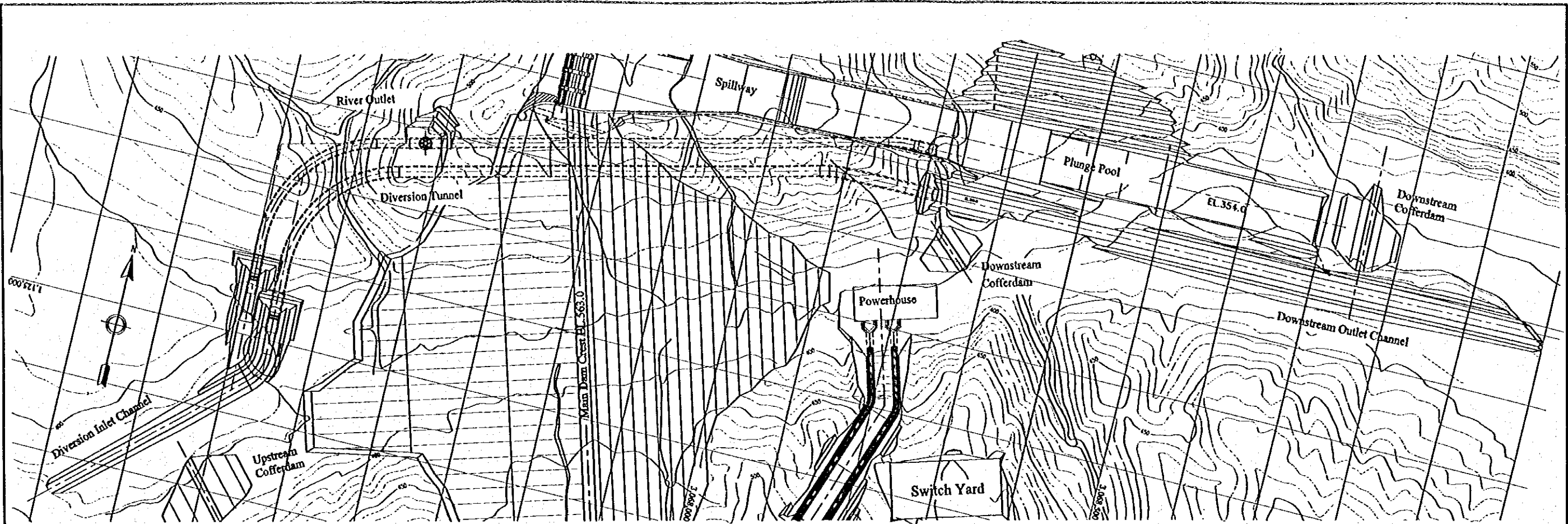
PROFILE SCALE A



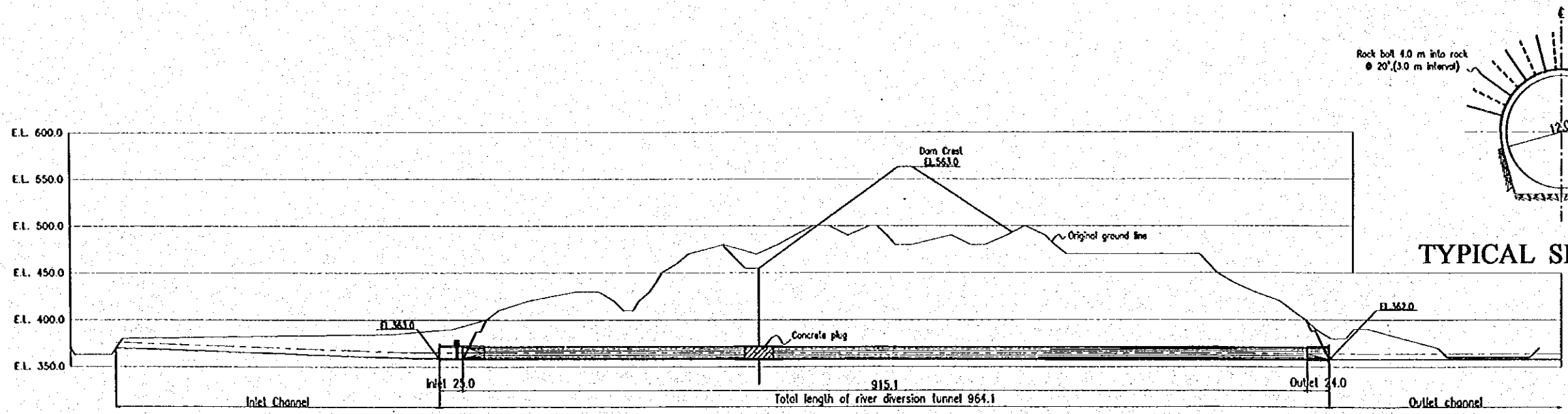
TYPICAL SECTION SCALE B



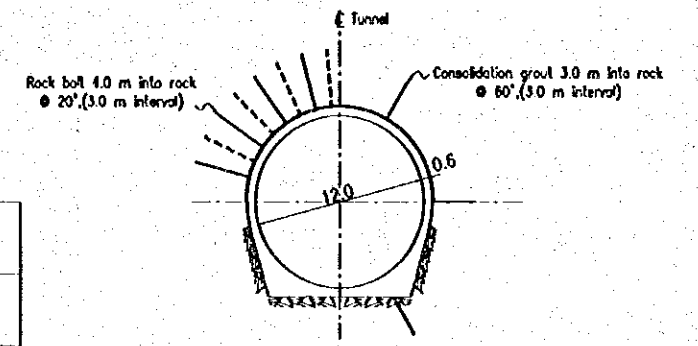
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C04 River Diversion and River Outlet (1)
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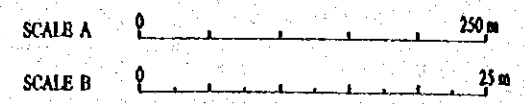
PLAN SCALE A



PROFILE SCALE A

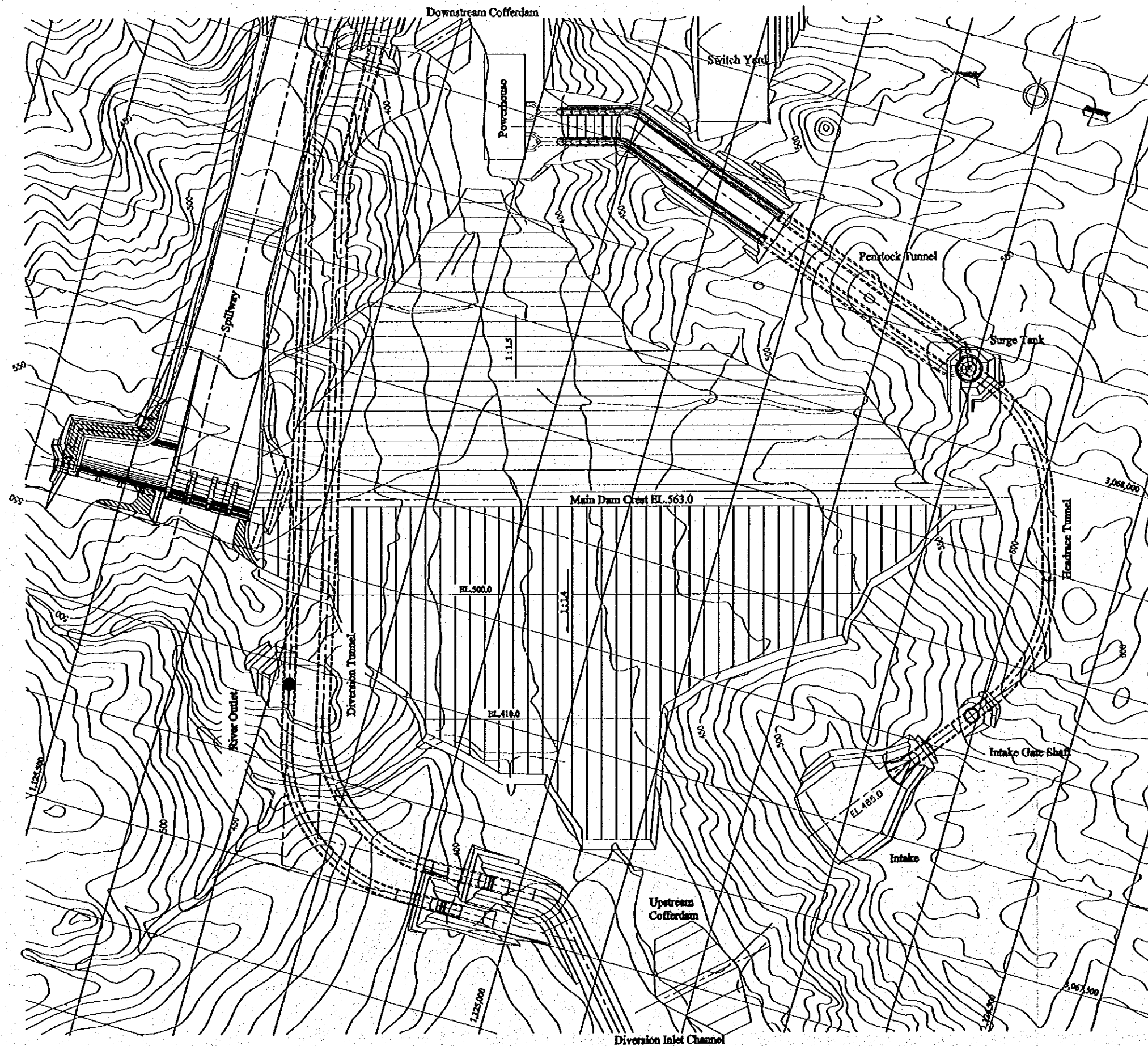


TYPICAL SECTION SCALE B



FEASIBILITY STUDY
 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
 IN ISLAMIC REPUBLIC OF PAKISTAN
 JAPAN INTERNATIONAL COOPERATION AGENCY

DWG. C05
 River Diversion and River Outlet (2)



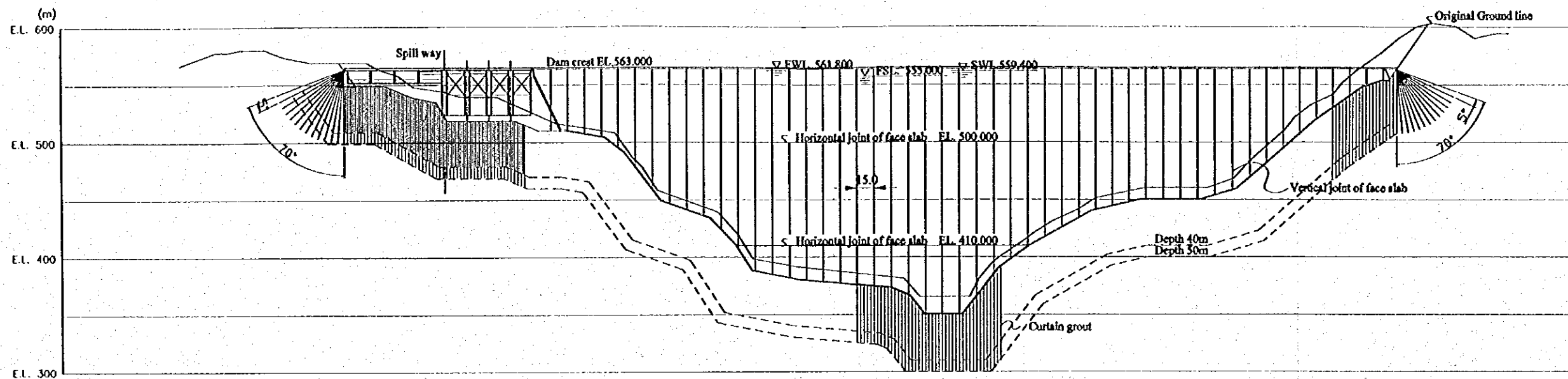
SCALE A 0 200 m

PLAN SCALE A

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

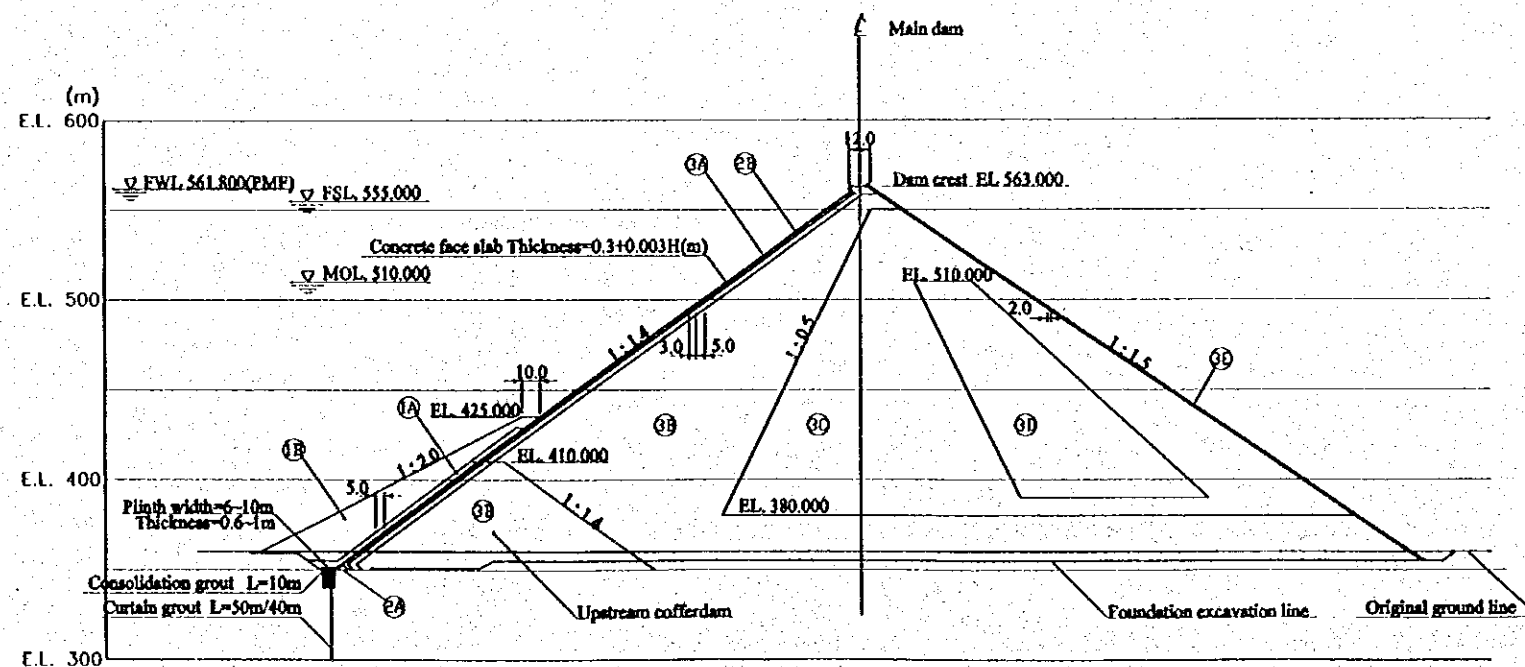
DWG. C06

Main Dam Plan



Note:
Zone 1A and 1B are not shown

MAIN DAM FRONT ELEVATION



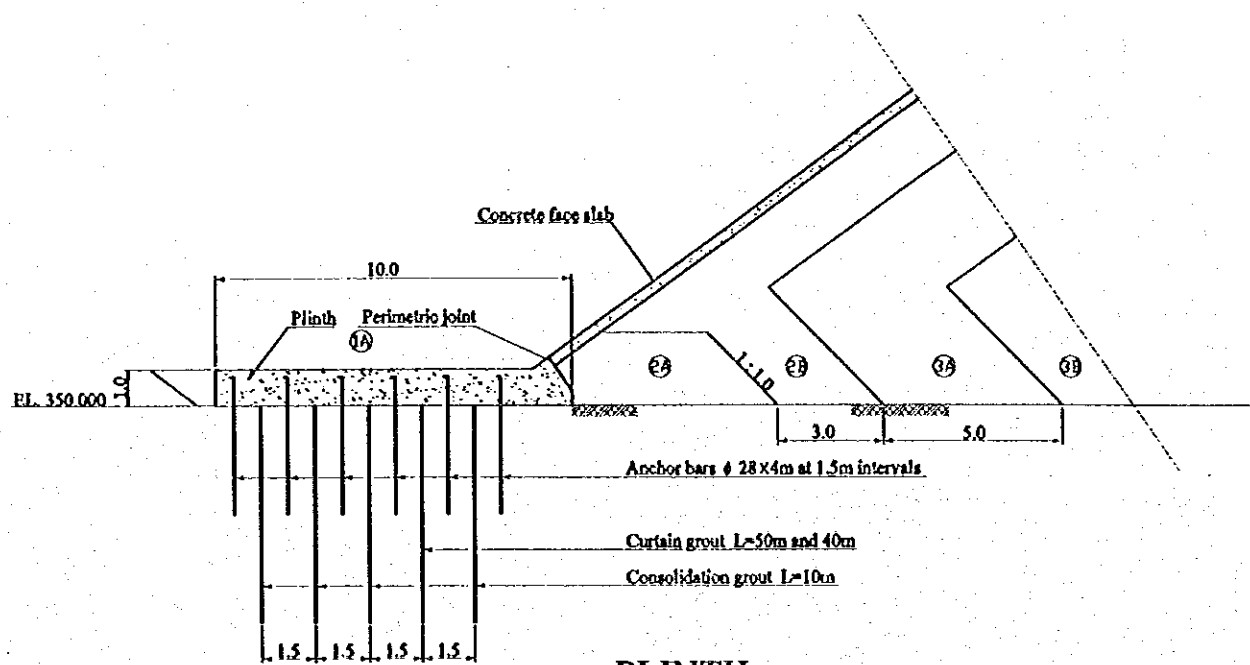
ZONE	CLASSIFICATION
1A	Impervious earth fill
1B	Radom fill
2A	Fine filter
2B	Crusher run
3A	Selected small rock
3B	Rock fill(Lime stone)
3C	Rock fill(schist)
3D	Rock fill(Excavated rock)
3E	Selected large rock

TYPICAL SECTION

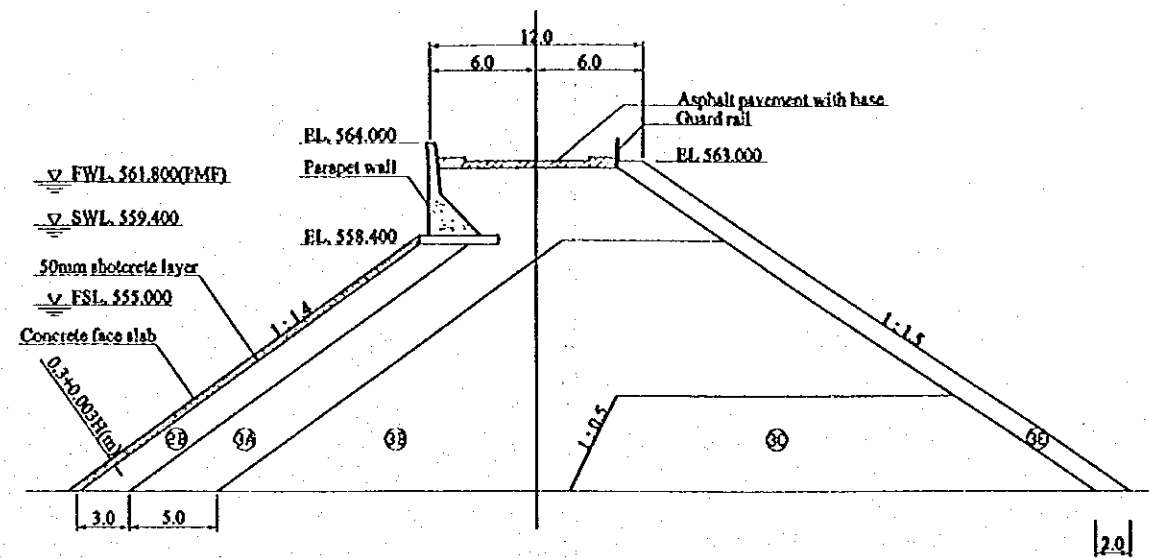
SCALE A 0 200m

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

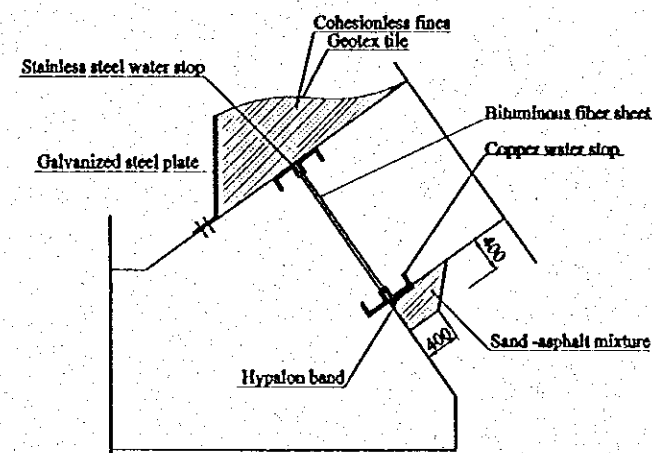
DWG. C07
Main Dam Front Elevation and Typical Section



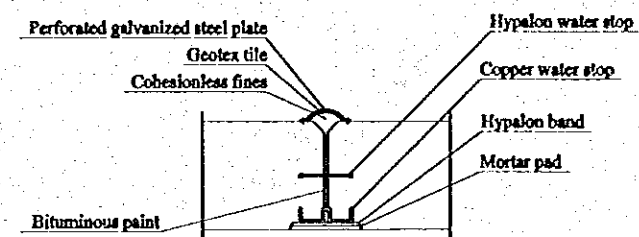
PLINTH SCALE B



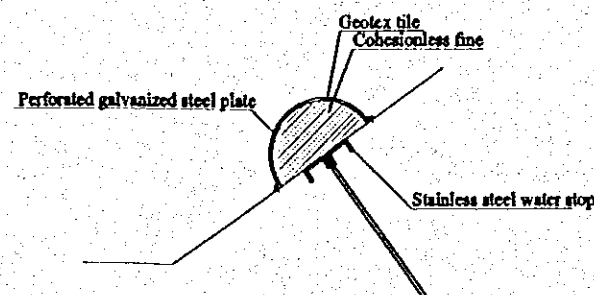
CREST DETAIL SCALE A



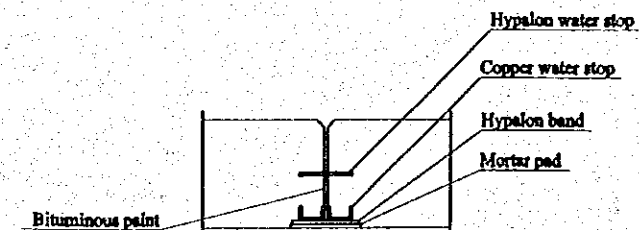
PERIMETRIC JOINT (Below 1A, 1B material)



VERTICAL JOINT (Tension side)



PERIMETRIC JOINT (Above 1A, 1B material)



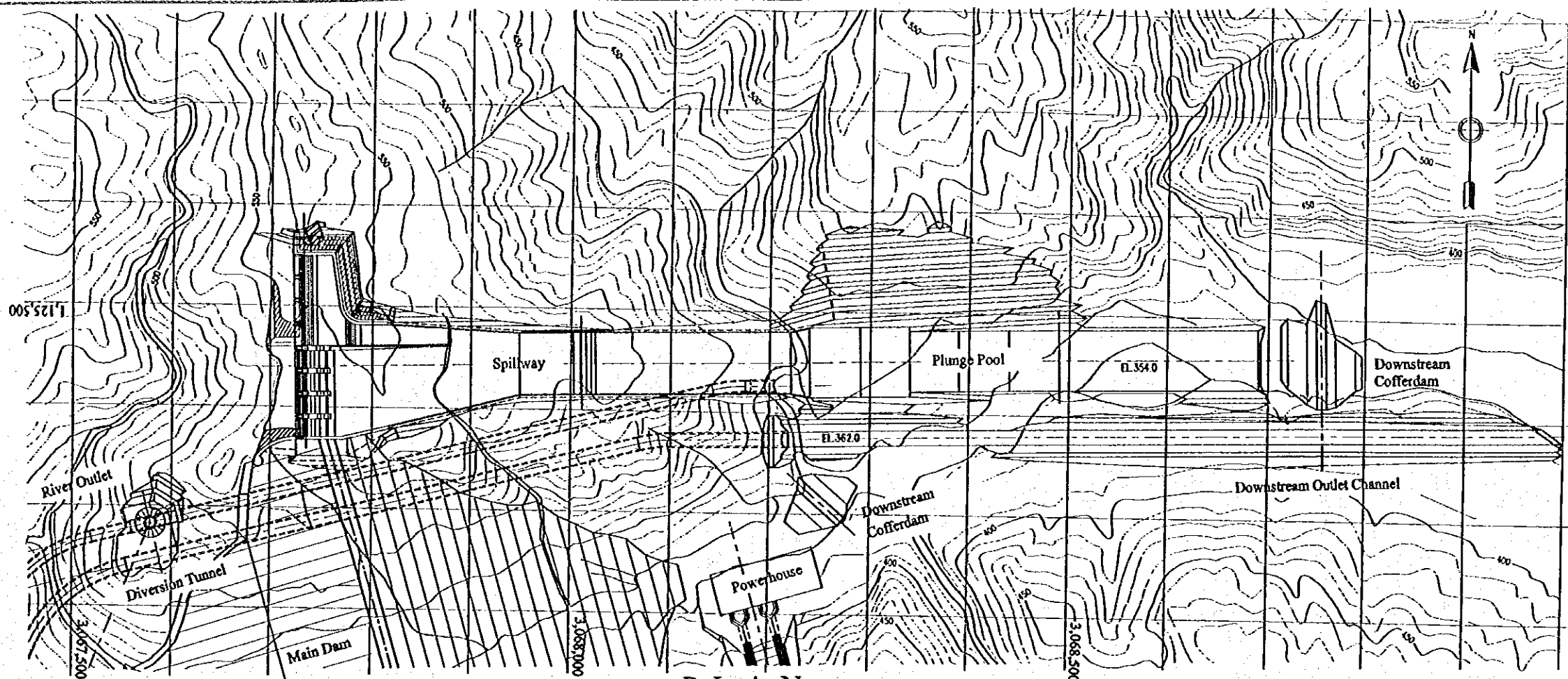
VERTICAL JOINT (Compression side)

SCALE A 0 20m

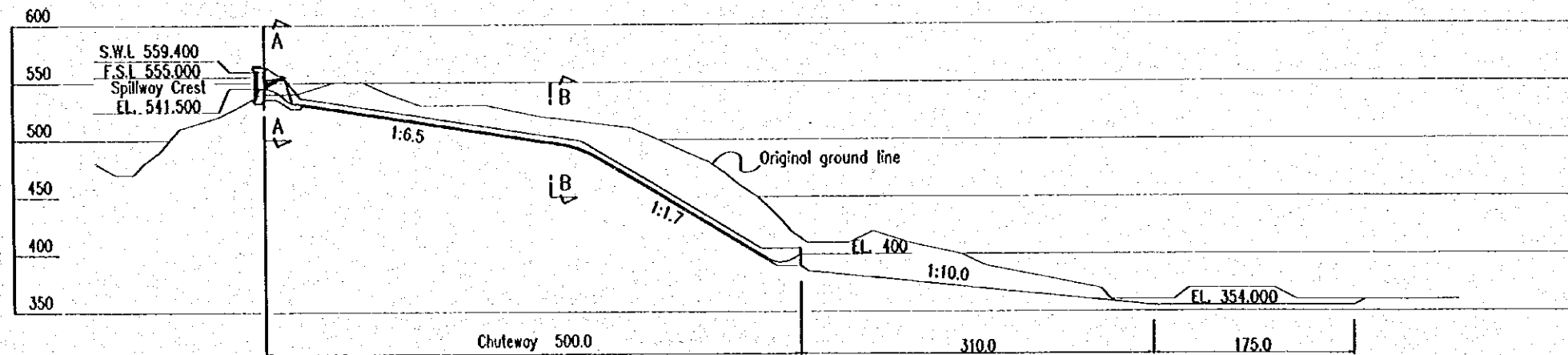
SCALE B 0 10m

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

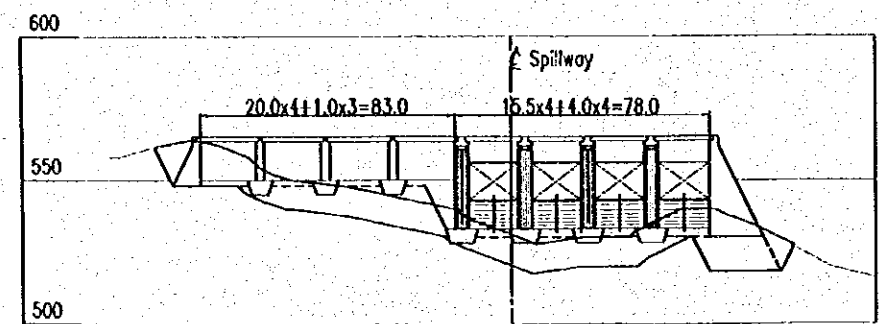
DWG. C08
Main Dam Details



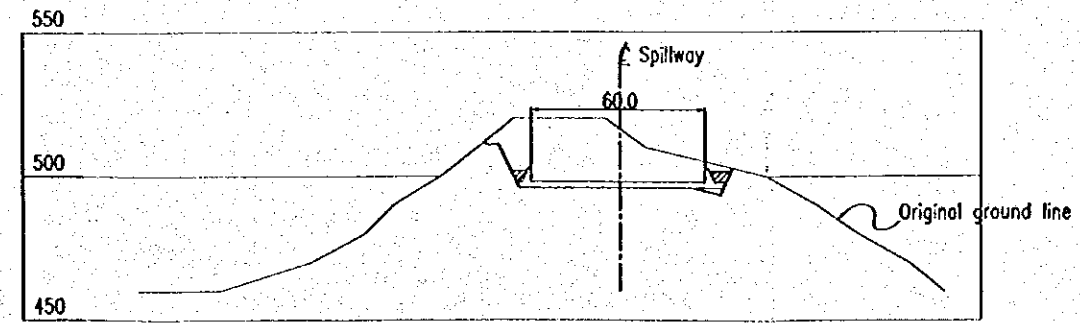
PLAN SCALE A



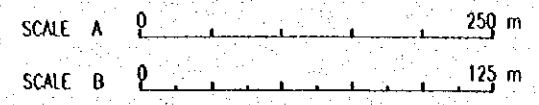
PROFILE SCALE A



SECTION A-A SCALE B

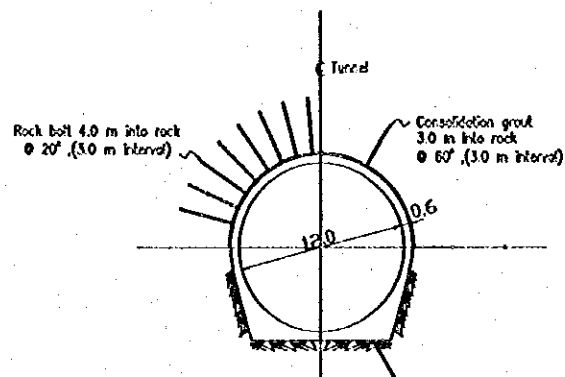


SECTION B-B SCALE B

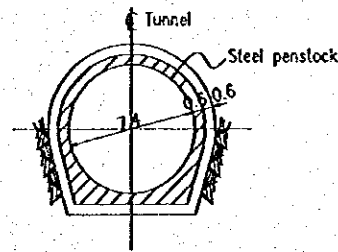


FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

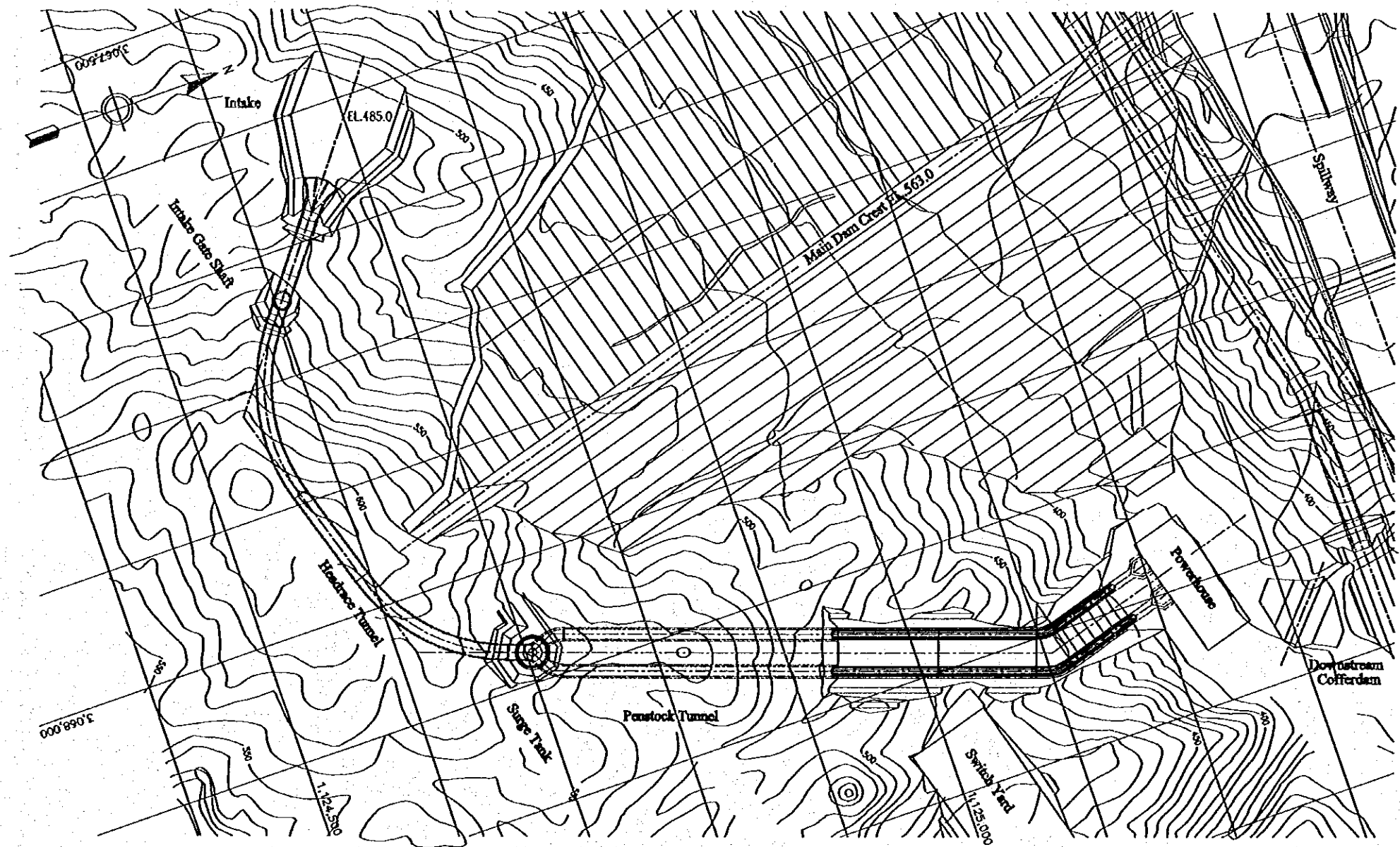
DWG. C09
Spillway, Plan, Profile and Sections



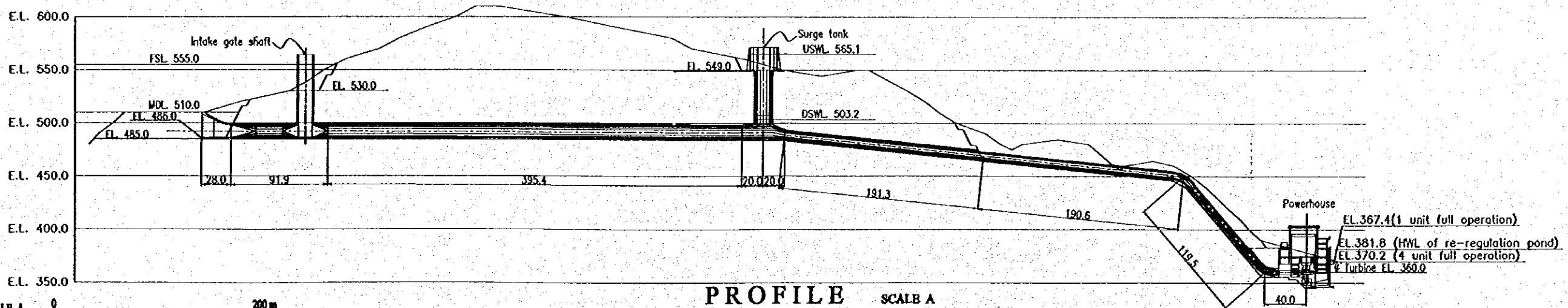
HEADRACE TUNNEL
SCALE B



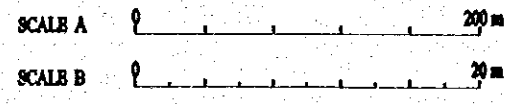
PENSTOCK TUNNEL
SCALE B



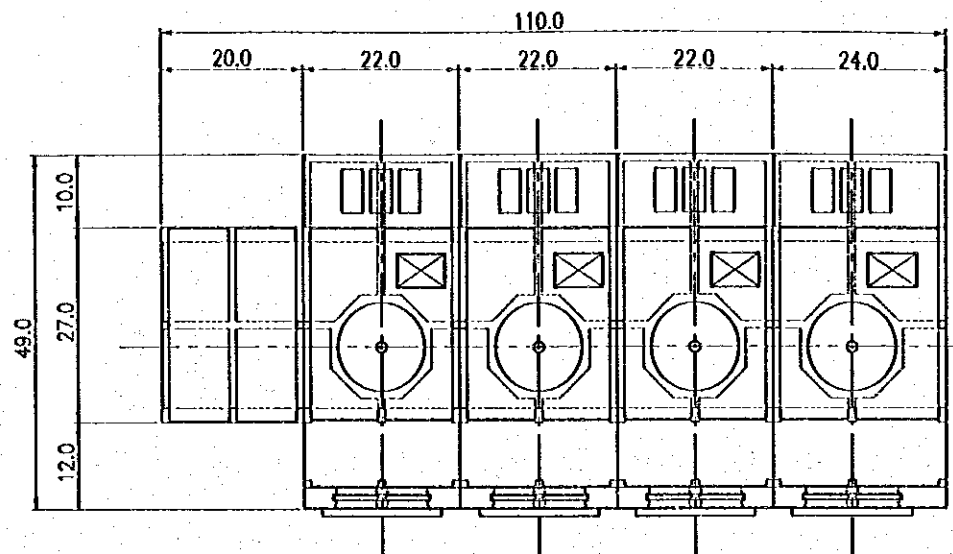
PLAN SCALE A



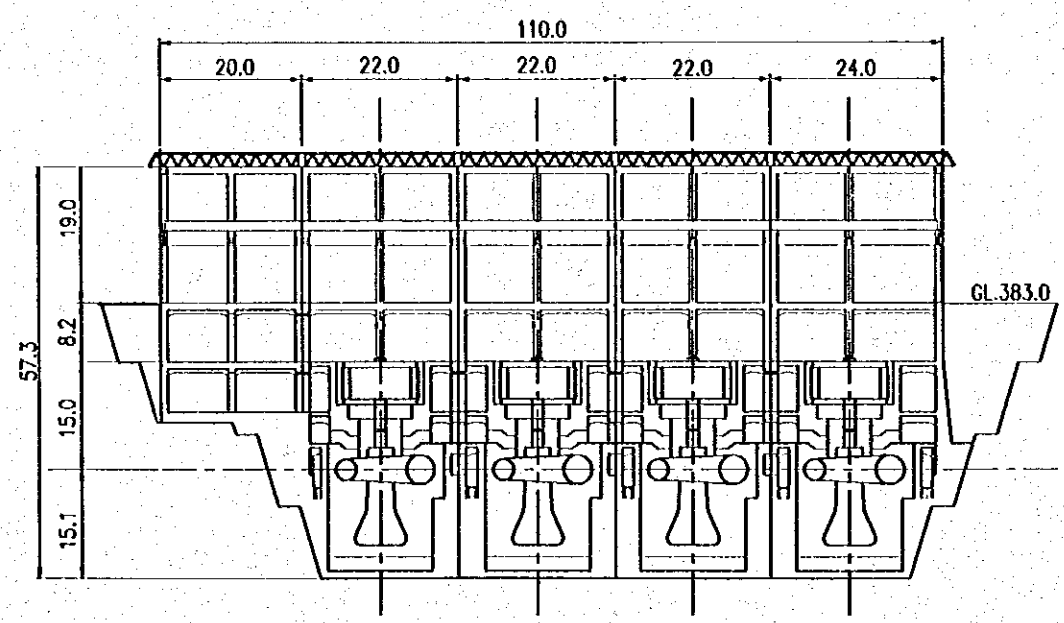
PROFILE SCALE A



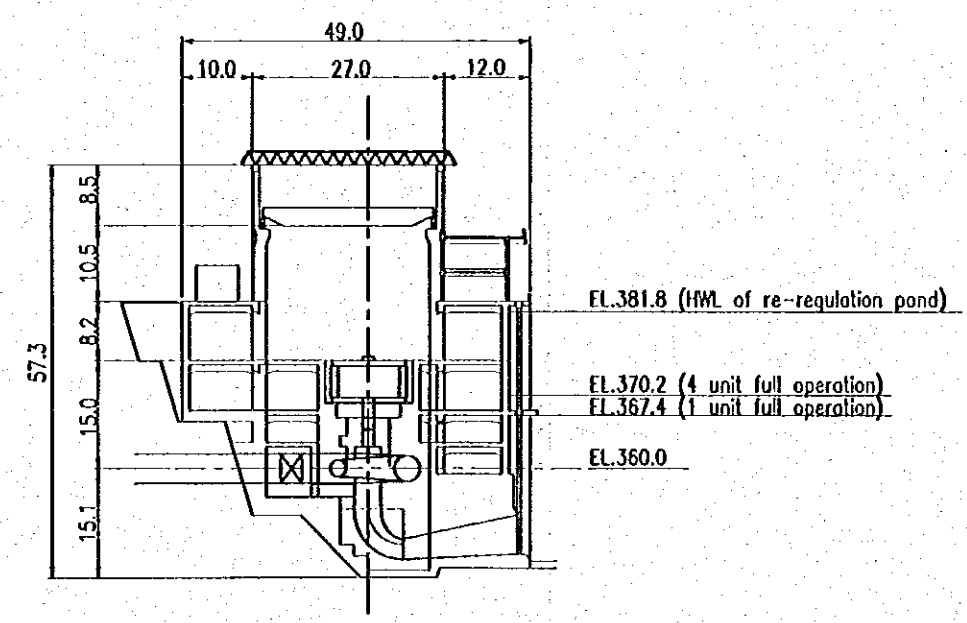
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C10 Waterway, Plan and Profile
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PLAN SCALE A



LONGITUDINAL SECTION SCALE A



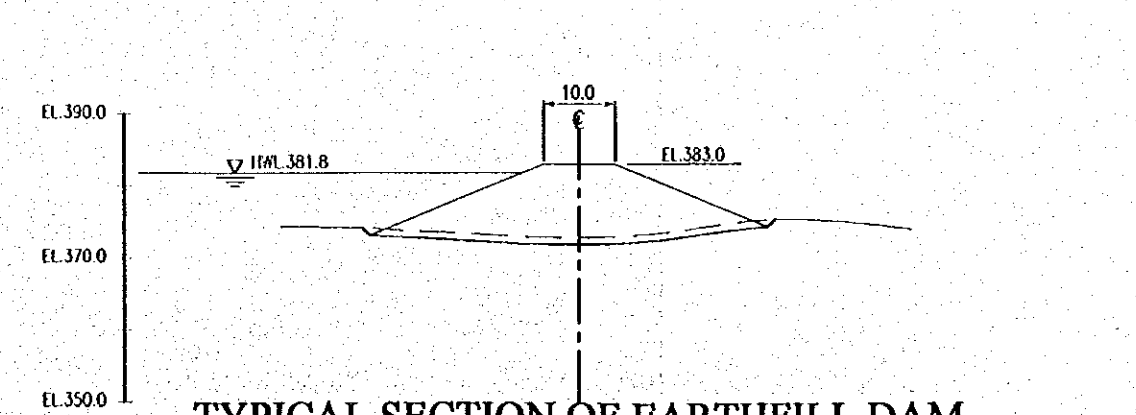
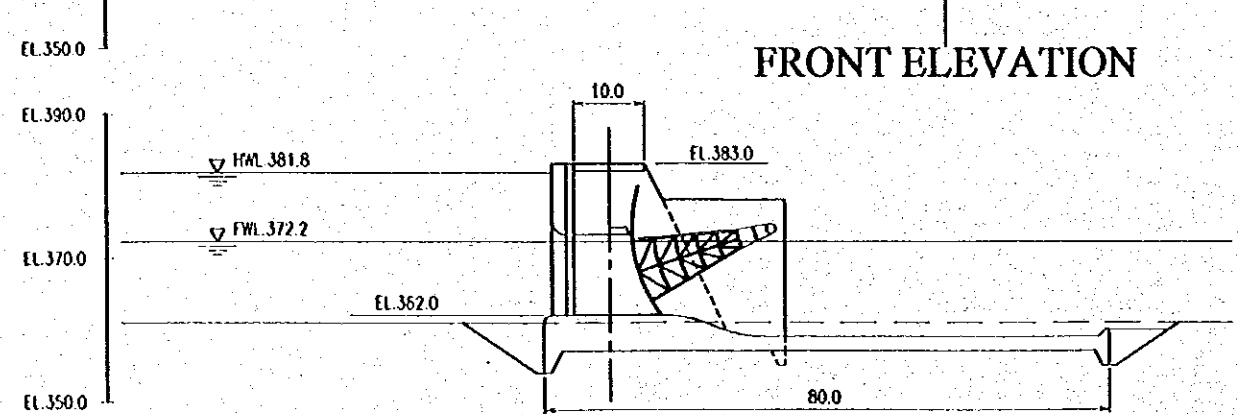
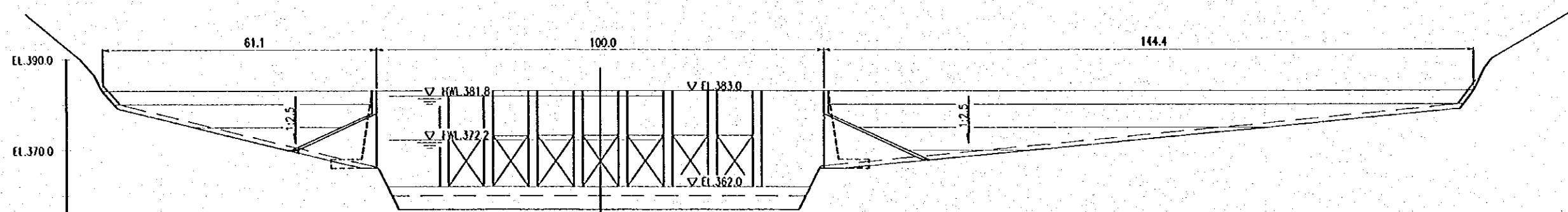
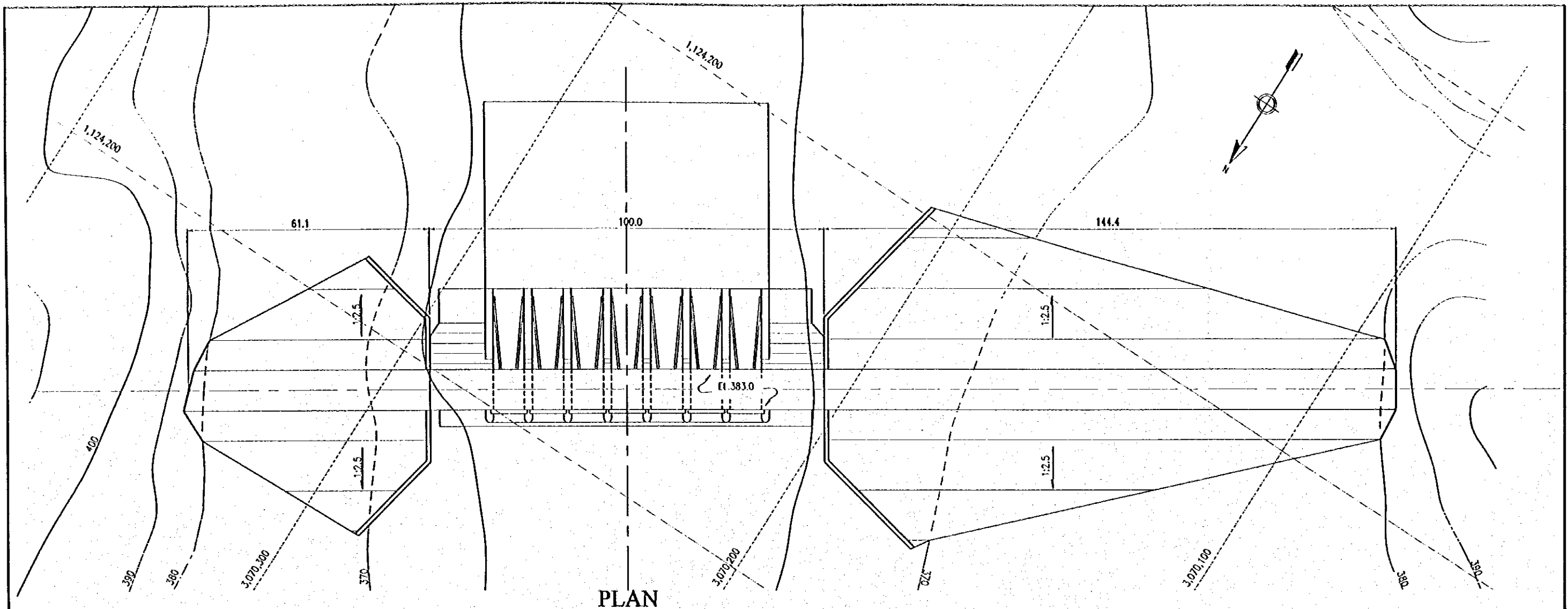
TRANSVERSE SECTION SCALE A

EL.381.8 (HWL of re-regulation pond)
 EL.370.2 (4 unit full operation)
 EL.367.4 (1 unit full operation)
 EL.360.0

SCALE A 0 50 m

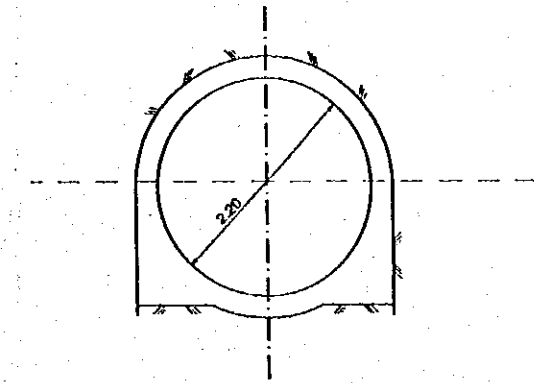
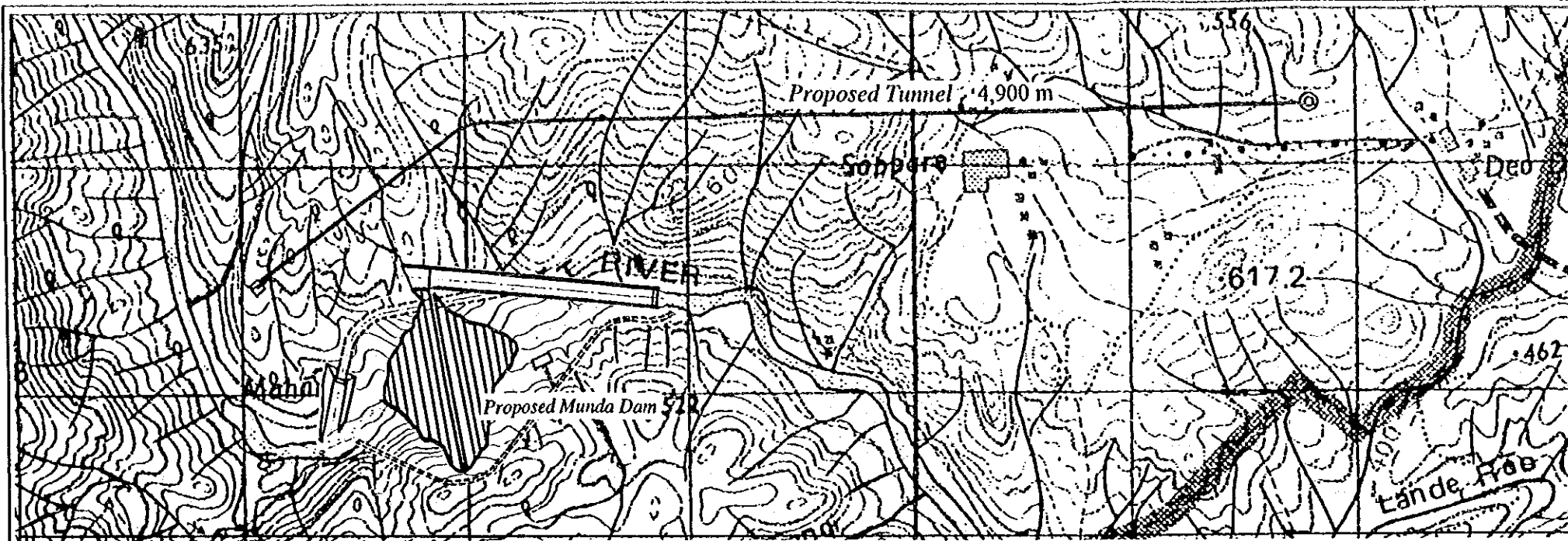
FEASIBILITY STUDY
 ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
 IN ISLAMIC REPUBLIC OF PAKISTAN
 JAPAN INTERNATIONAL COOPERATION AGENCY

DWG. C11
 Powerhouse, Plan and Sections

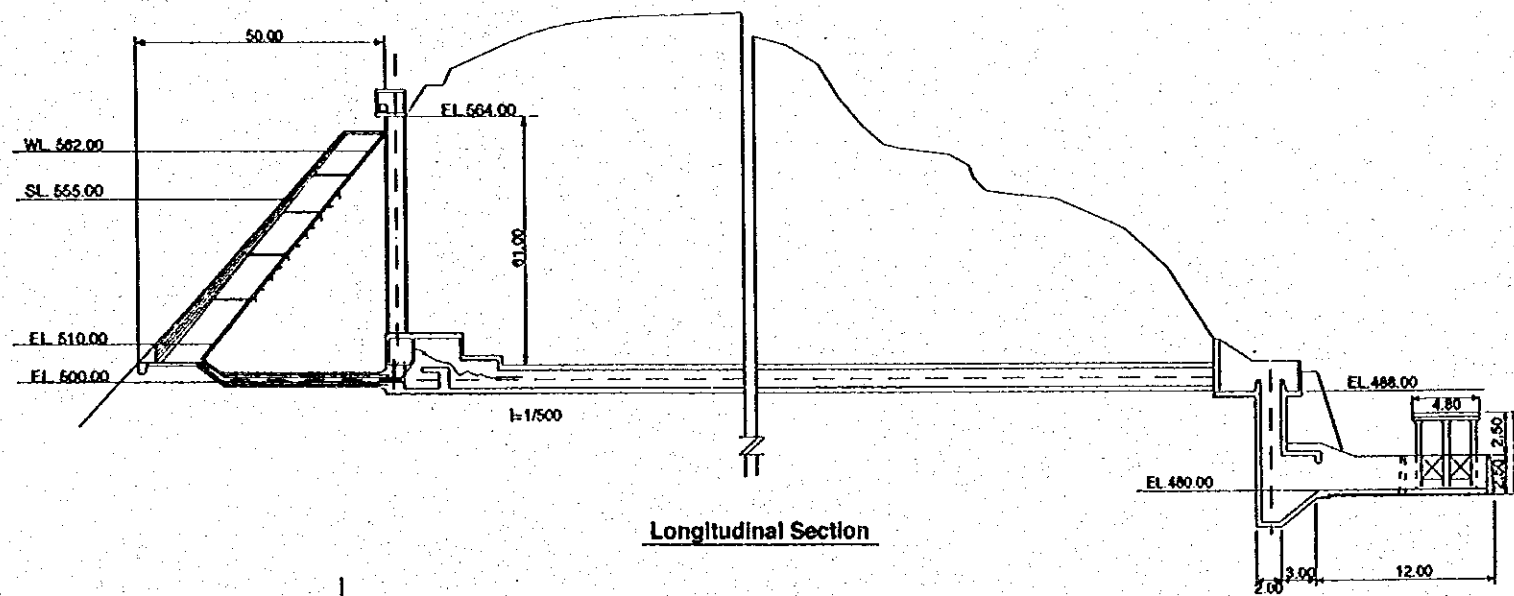


SCALE 1:50

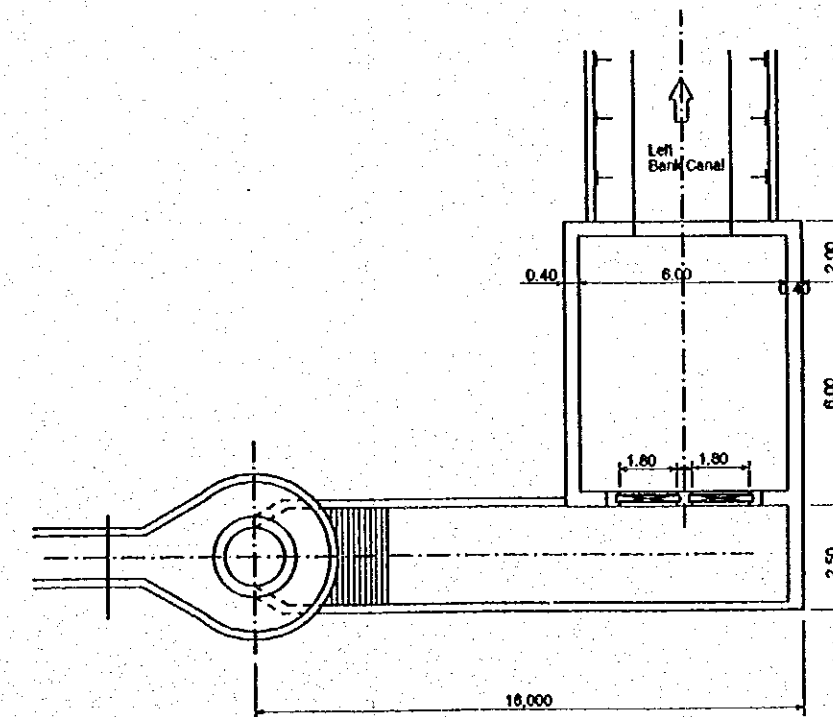
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C12 Re-regulation Weir
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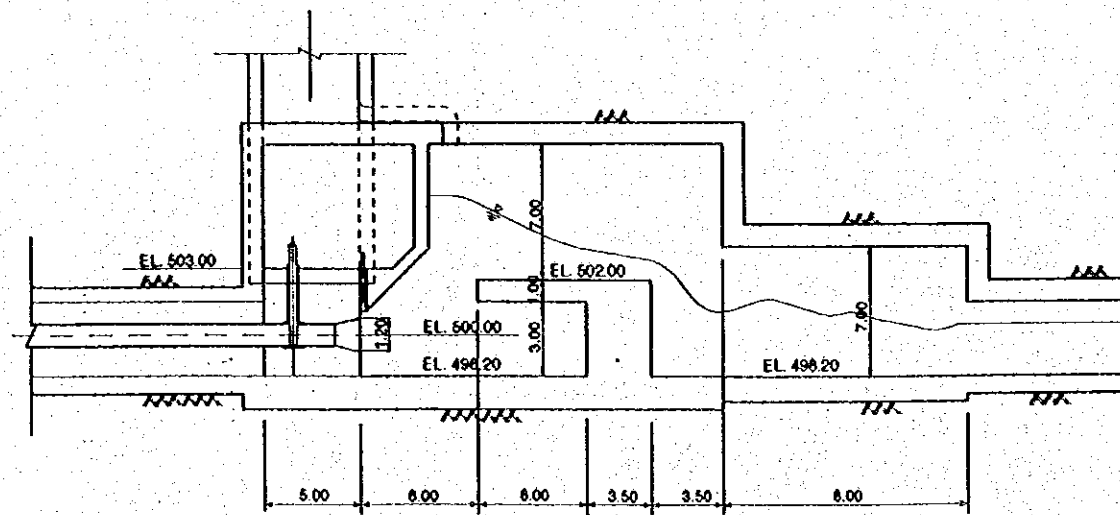
Typical Tunnel Section



Longitudinal Section



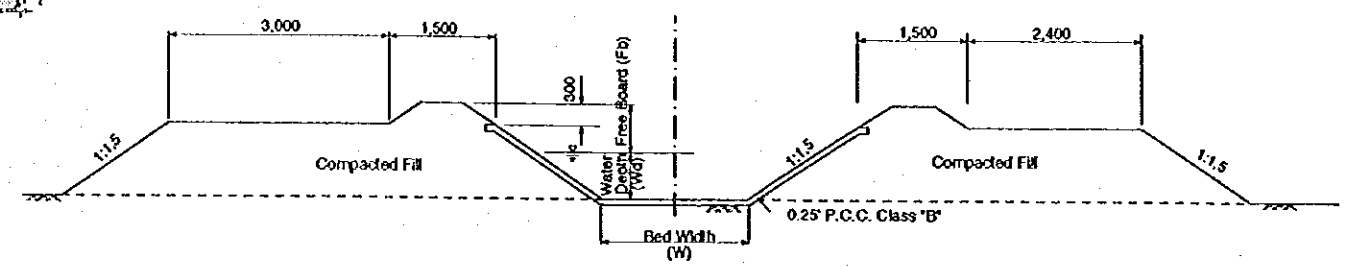
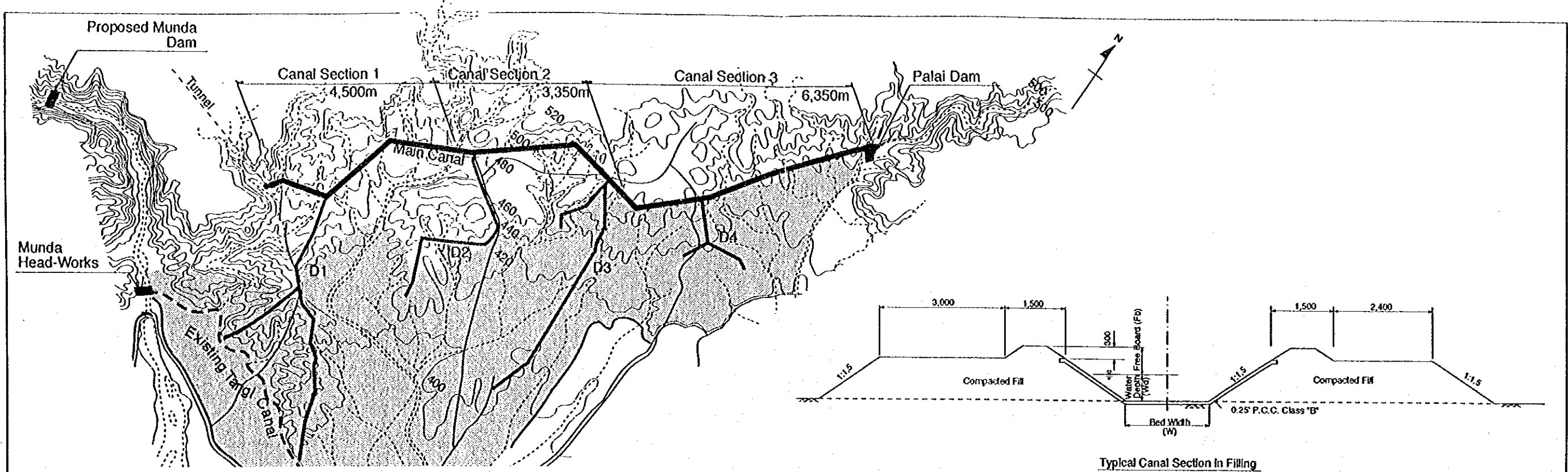
Ground Plane of Link Section



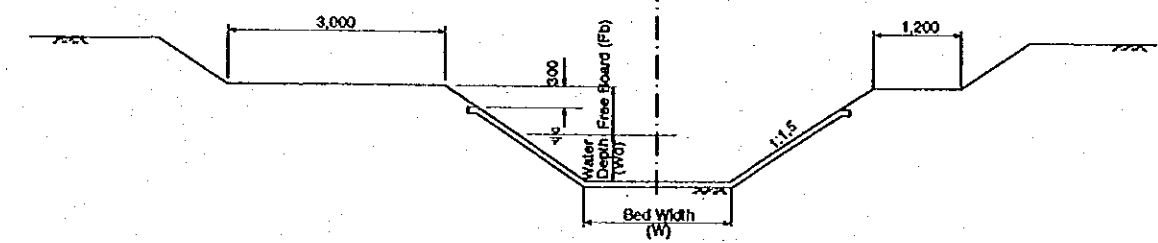
Detail of Energy Dissipator

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

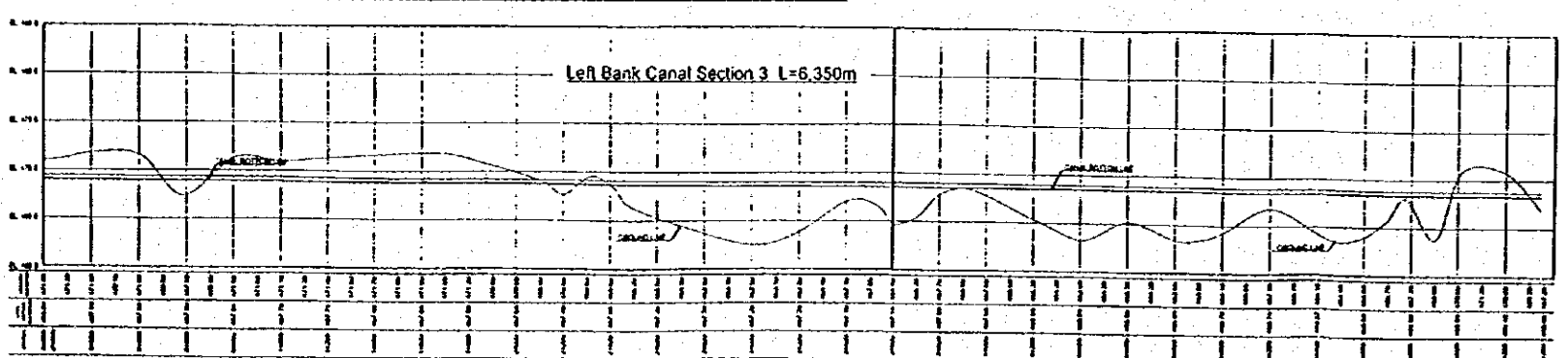
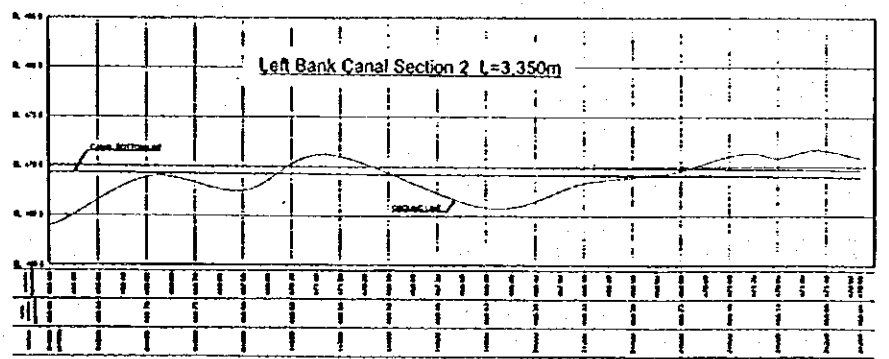
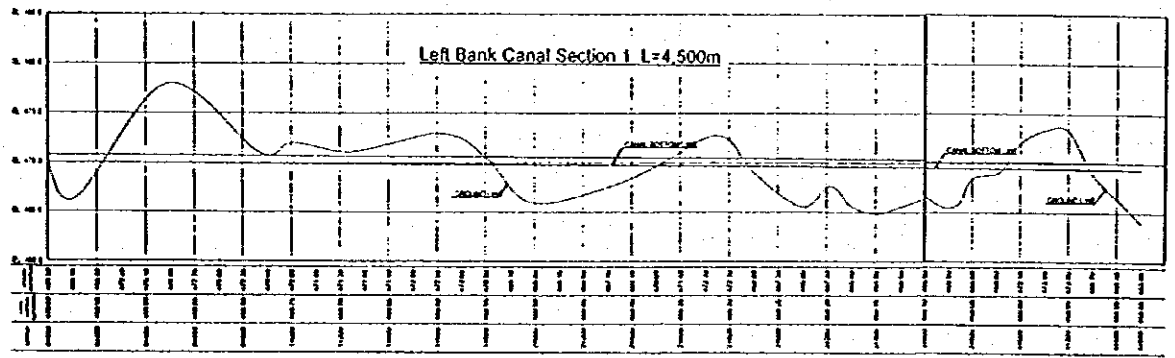
DWG. 101
Feeder Tunnel of Left Bank Area



Typical Canal Section In Filling



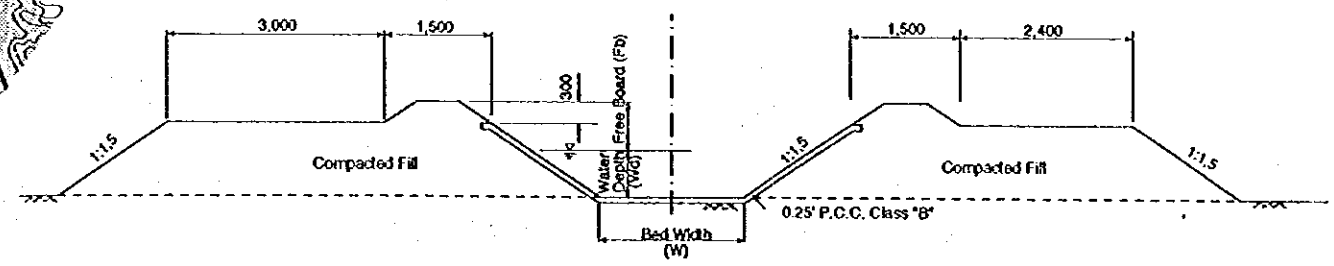
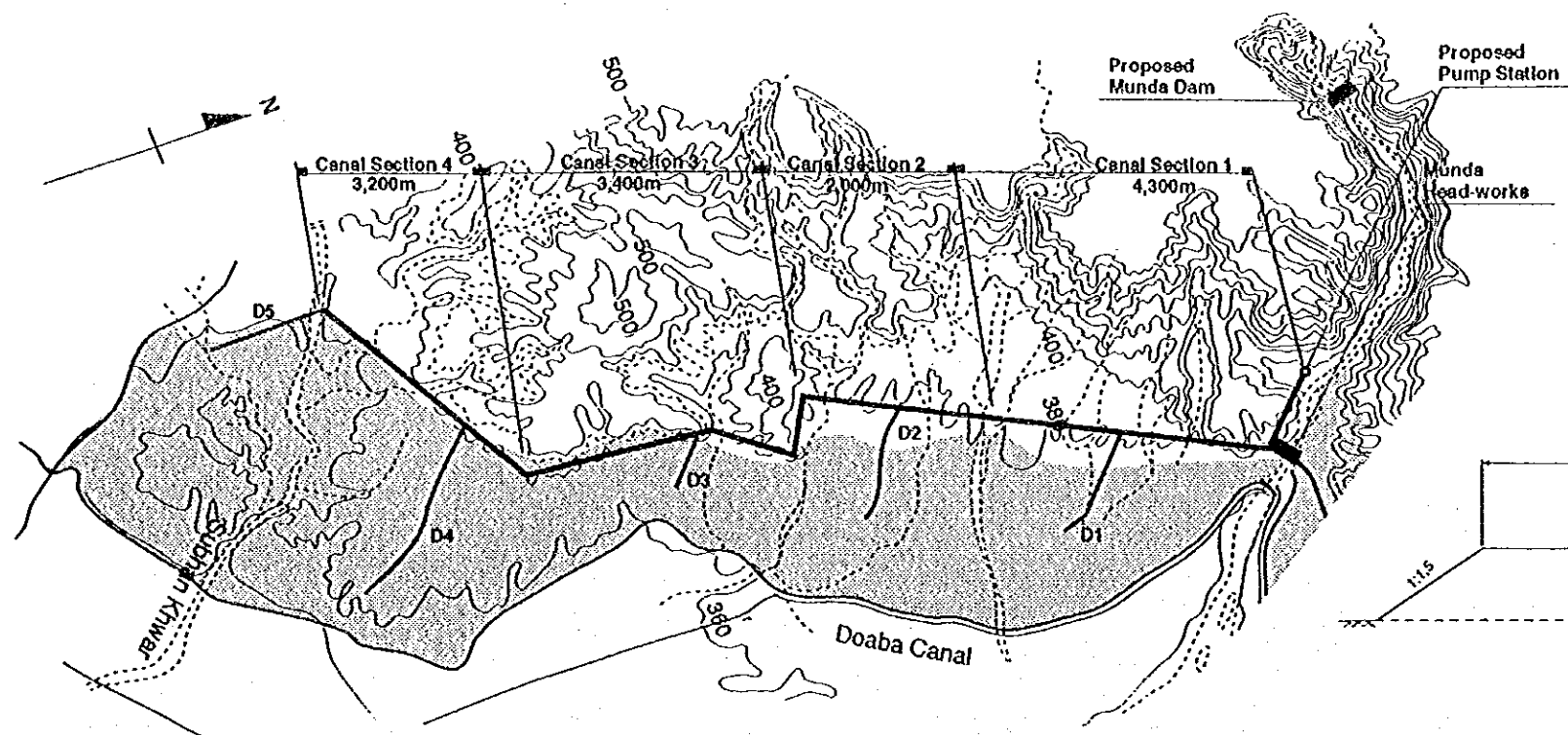
Typical Canal Section In Cutting



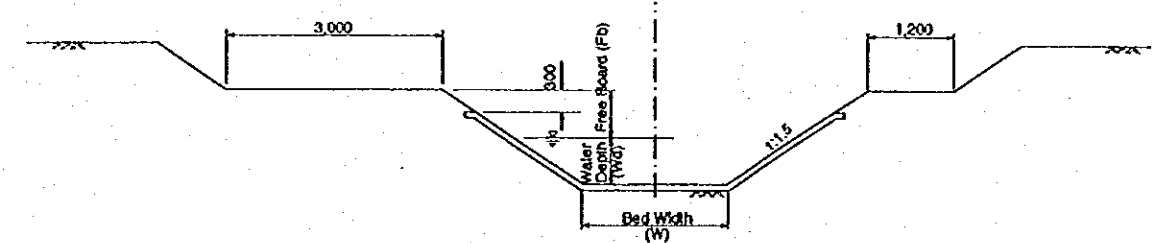
Canal-section	Q(m ³ /s)	N	Bed Slope	W(m)	Wd(m)	Fb(m)
Main Canal						
Section 1	4.391	0.016	1/4,000	2.00	1.083	0.55
Section 2	2.501	0.016	1/4,000	1.50	0.872	0.54
Section 3	1.016	0.016	1/4,000	1.00	0.656	0.54
Distributary						
D1	1.890	0.016	1/4,000	1.20	0.842	0.54
D2	0.345	0.016	1/4,000	1.00	0.378	0.54
D3	1.140	0.016	1/4,000	1.00	0.695	0.54
D4	0.486	0.016	1/4,000	1.00	0.452	0.54

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

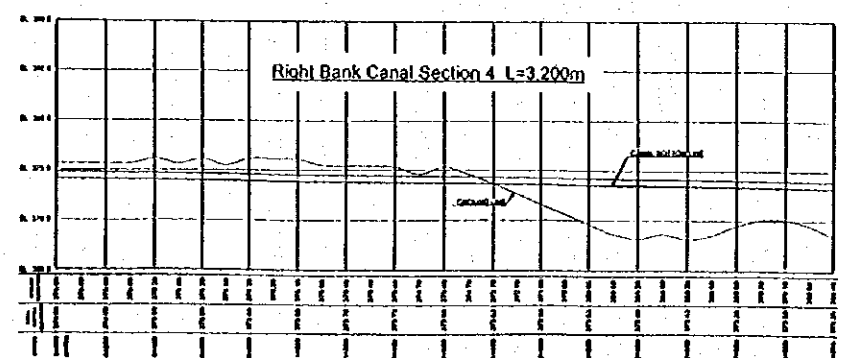
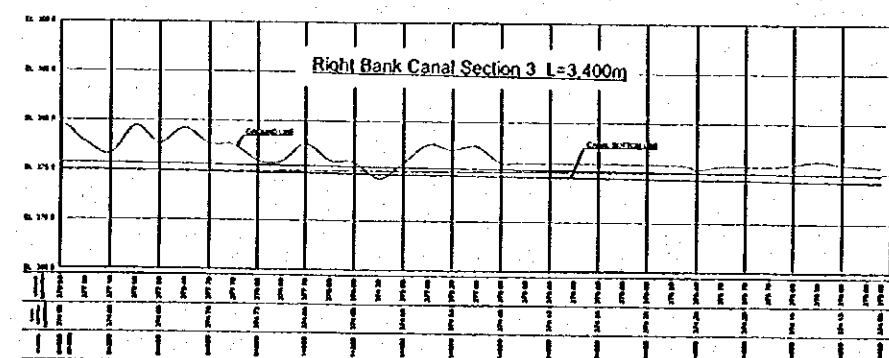
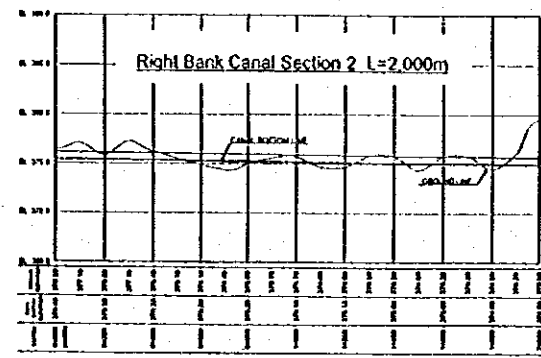
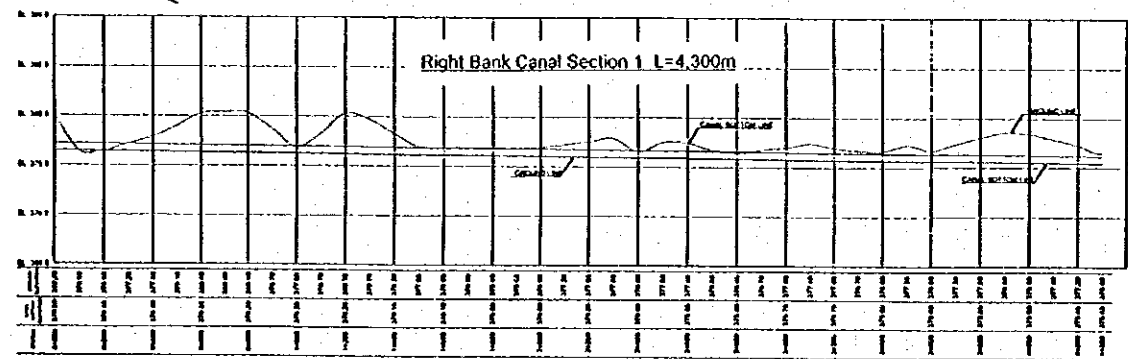
DWG. 102
Left Bank Canal



Typical Canal Section In Filling



Typical Canal Section In Cutting

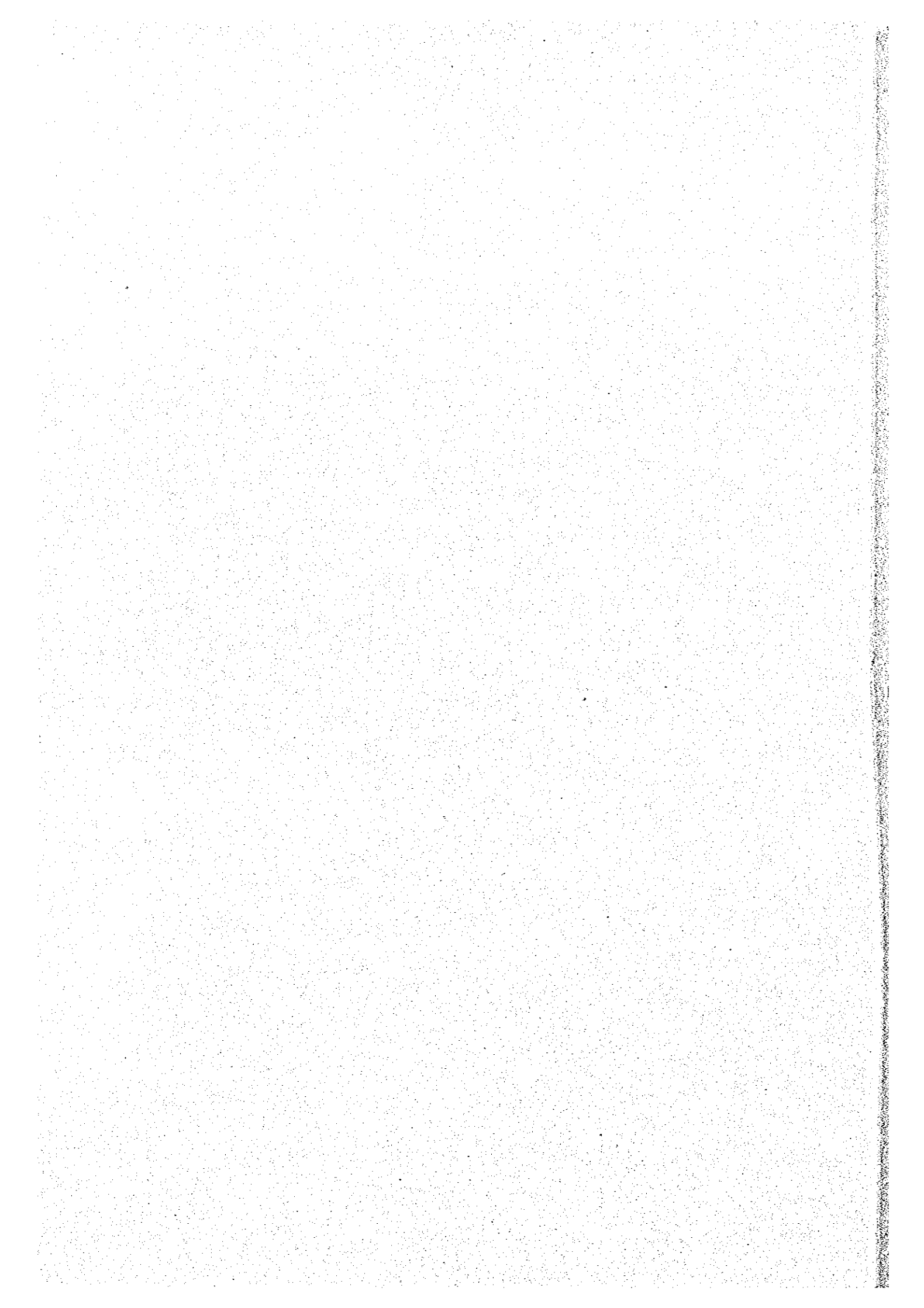


Canal-section	Q(m ³ /s)	N	Bed Slope	W(m)	Wd(m)	Fb(m)
Main Canal						
Section 1	2.204	0.016	1/4,000	1.50	0.845	0.55
Section 2	1.821	0.016	1/4,000	1.20	0.826	0.54
Section 3	1.548	0.016	1/4,000	1.20	0.763	0.54
Section 4	1.316	0.016	1/4,000	1.20	0.703	0.54
Distributary						
D1	0.382	0.016	1/4,000	1.00	0.399	0.54
D2	0.273	0.016	1/4,000	1.00	0.333	0.54
D3	0.232	0.016	1/4,000	1.00	0.305	0.54
D4	0.879	0.016	1/4,000	1.00	0.611	0.54
D5	0.437	0.016	1/4,000	1.00	0.428	0.54

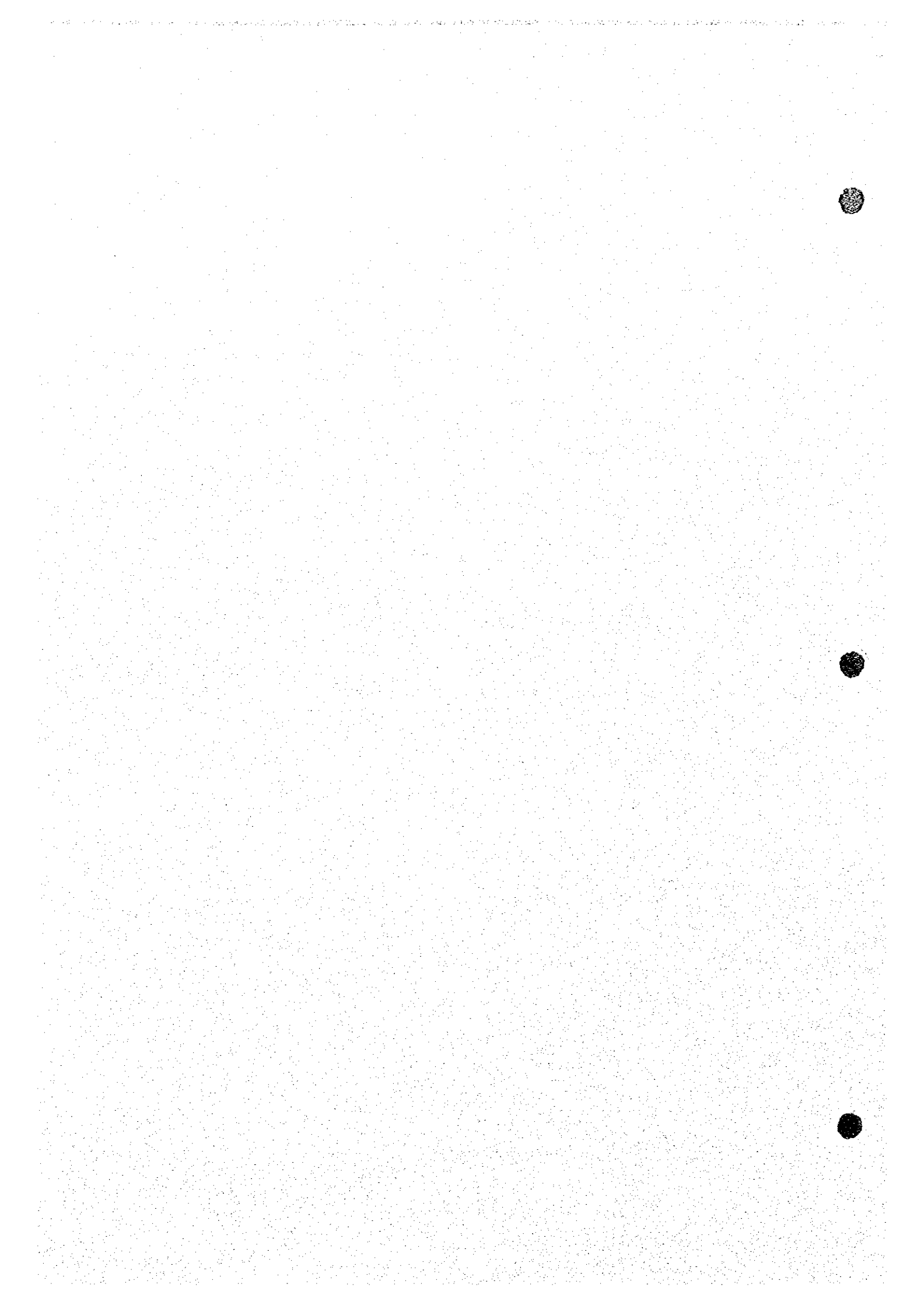
FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY

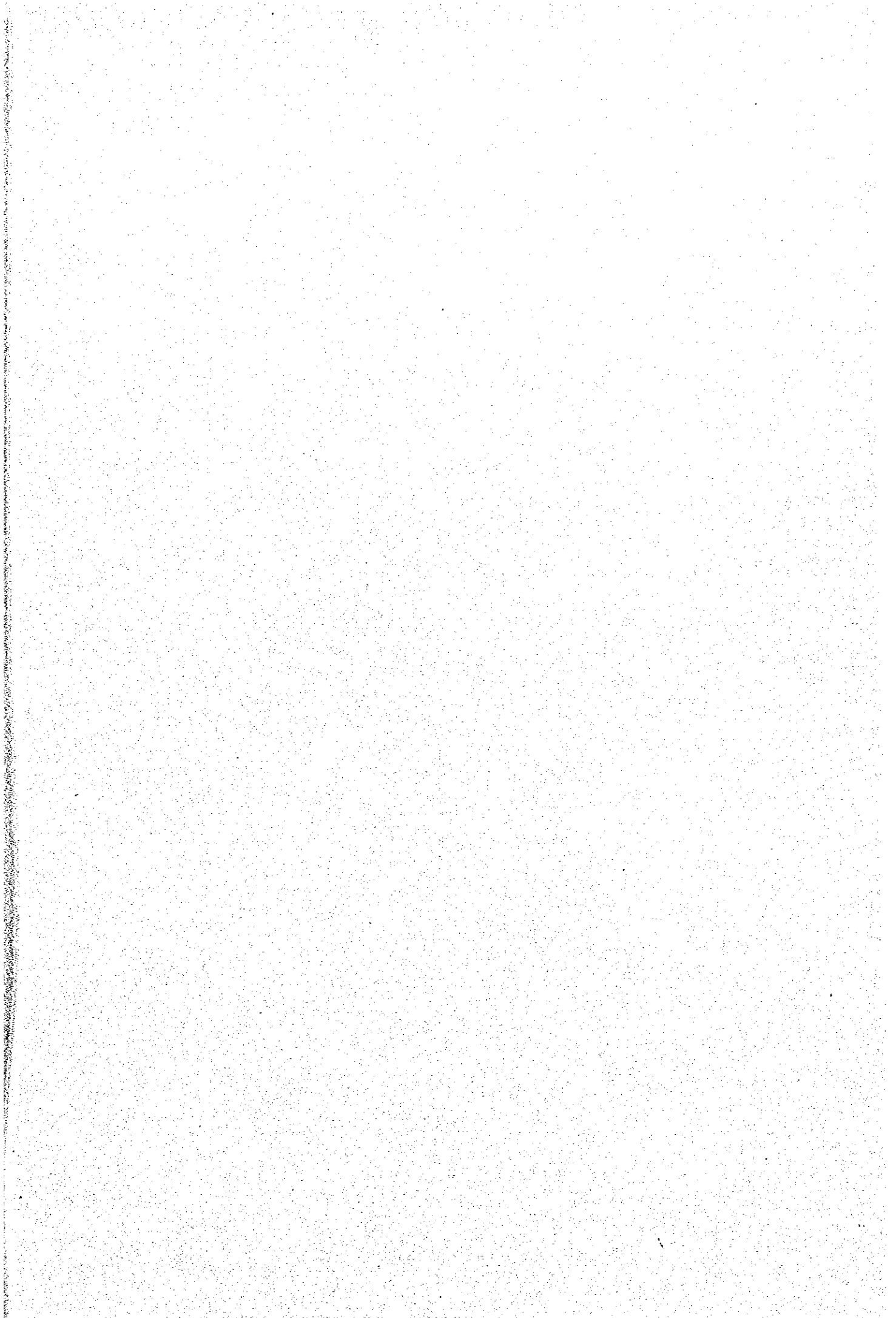
DWG. 103

Right Bank Canal









JICA