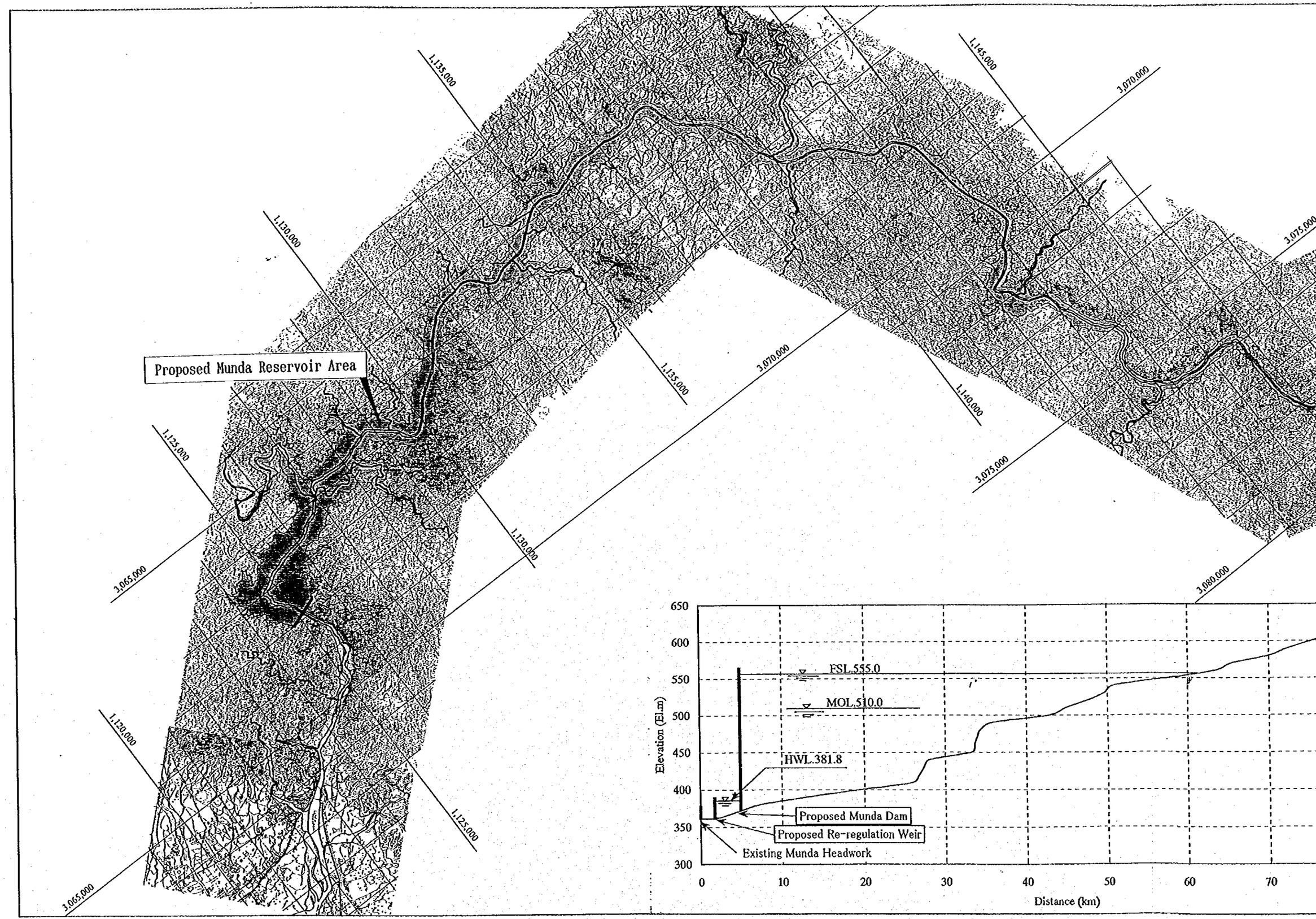
APPENDIX G

DRAWINGS


1,125,000
1,130,000
1,135,000
1,140,000
1,145,000
3,065,000
3,070,000
3,075,000
3,080,000
Proposed Munda Reservoir Area
650
600
550
500
450
400
350
300
Elevation (El.m)
FSL.555.0
MOL.510.0
HWL.381.8
Proposed Munda Dam
Proposed Re-regulation Weir
Existing Munda Headwork
0
10
20
30
40
50
60
70
Distance (km)

3,070,000
3,075,000
1,150,000
1,155,000
1,160,000
3,080,000
3,085,000
3,090,000
3,095,000
1,145,000
1,150,000
1,155,000
3,080,000
3,085,000
3,090,000
3,095,000

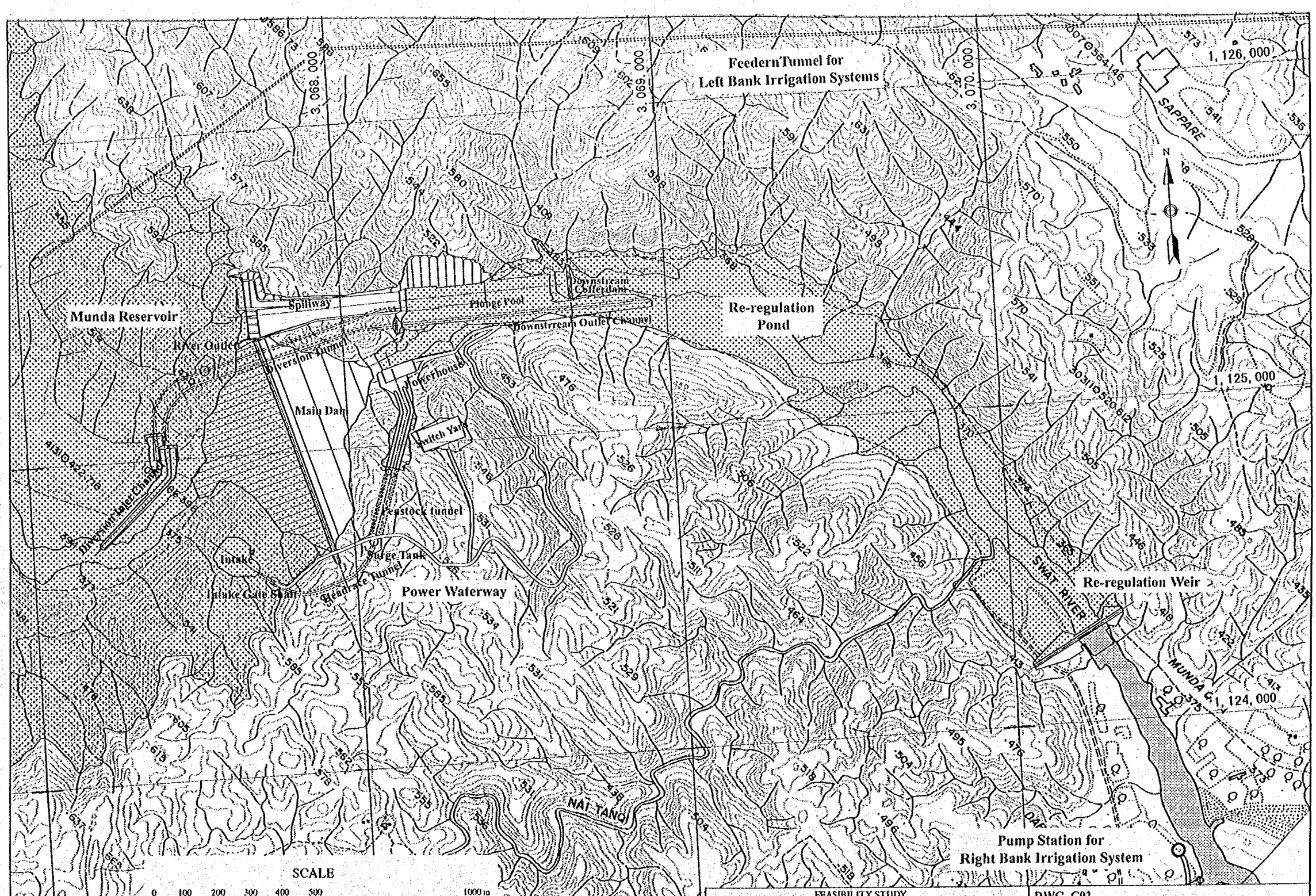
N

0 1 2 3 4 5 km
SCALE

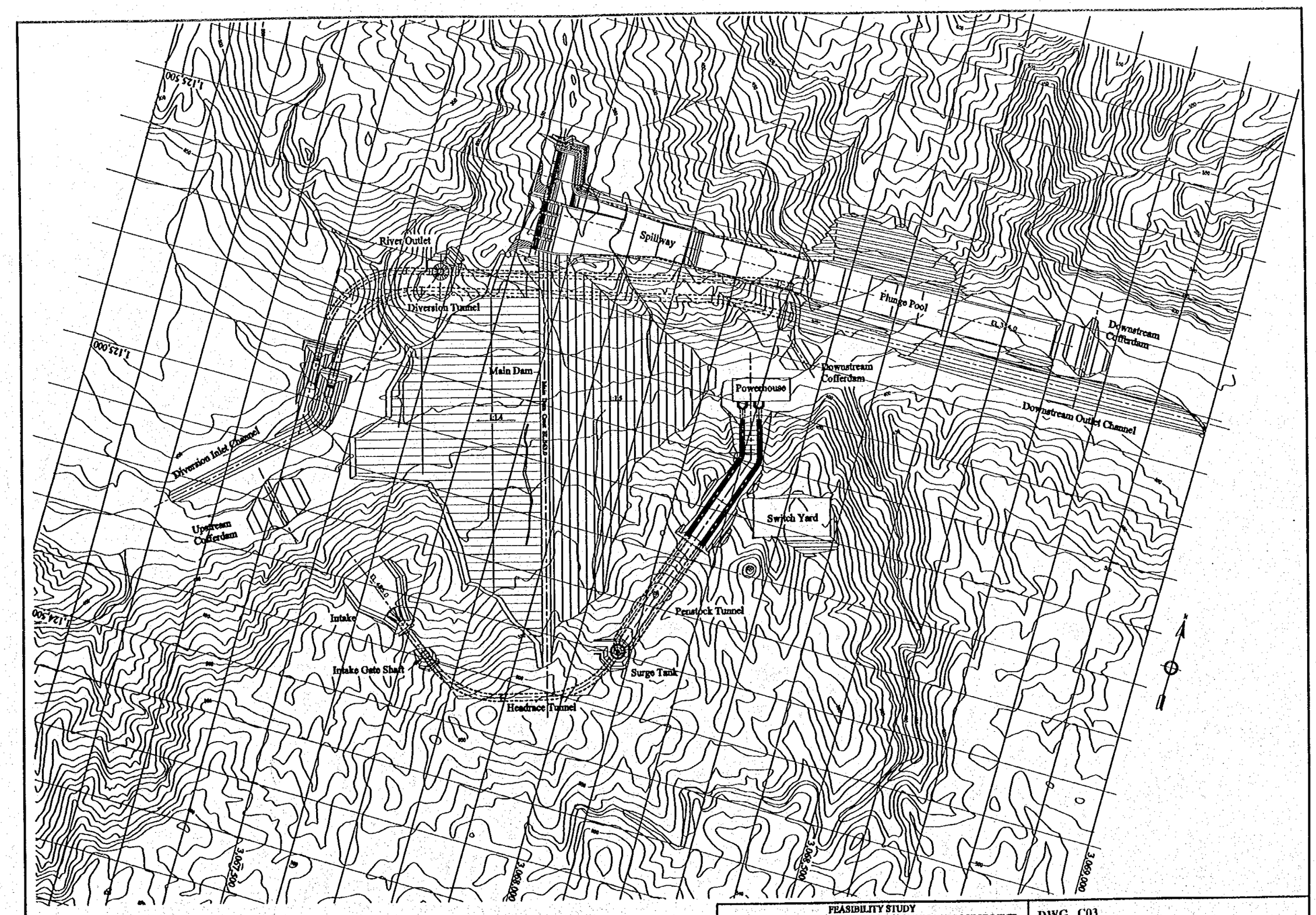
40 50 60 70 80 90
Distance (km)

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

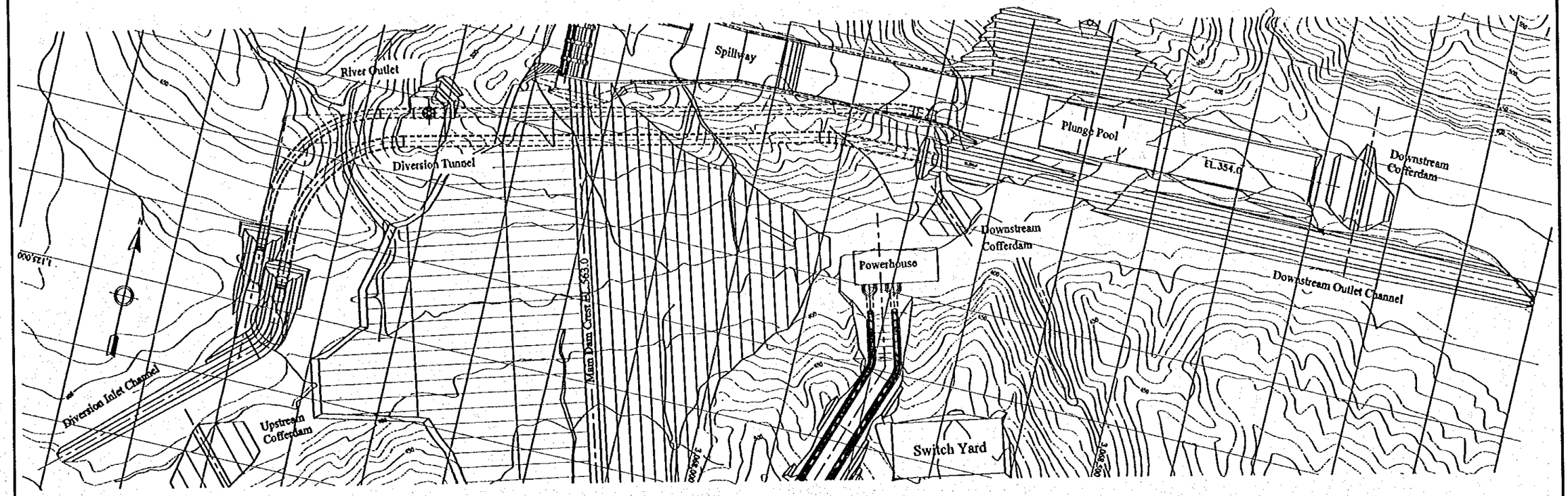
GD1


Feedern Tunnel for
Left Bank Irrigation Systems
Munda Reservoir
Spillway
Plunge Pool
Downstream Cofferdam
Downstream Outlet Channel
Re-regulation
Pond
River Outlet
Diversion Tunnel
Powerhouse
Main Dam
Switch Yard
Penstock tunnel
Surge Tank
Intake
Intake Gate Shaft
Headrace Tunnel
Power Waterway
NAI TANGI
SAPPARE
SWAT RIVER
Re-regulation Weir
MUNDA C.
Pump Station for
Right Bank Irrigation System
1, 126, 000
1, 125, 000
1, 124, 000
3, 068, 000
3, 069, 000
3, 070, 000
SCALE
0 100 200 300 400 500 1000 m
FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN
JAPAN INTERNATIONAL COOPERATION AGENCY
DWG. C02
General Layout

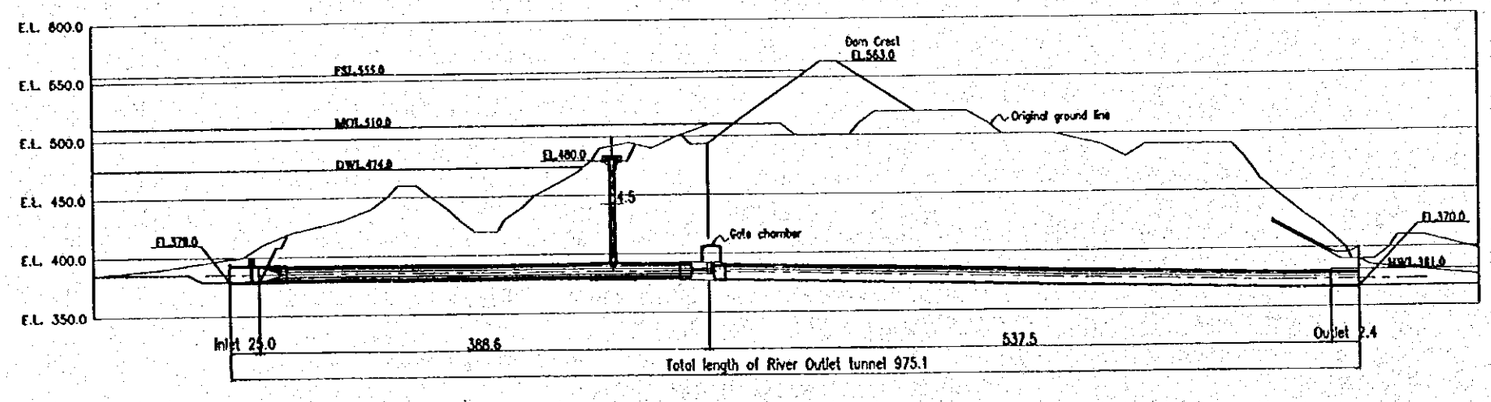
GD2



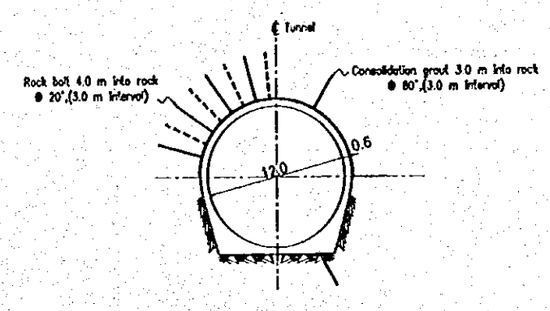
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN	DWG. C03
JAPAN INTERNATIONAL COOPERATION AGENCY	General Plan



PLAN SCALE A



PROFILE SCALE A

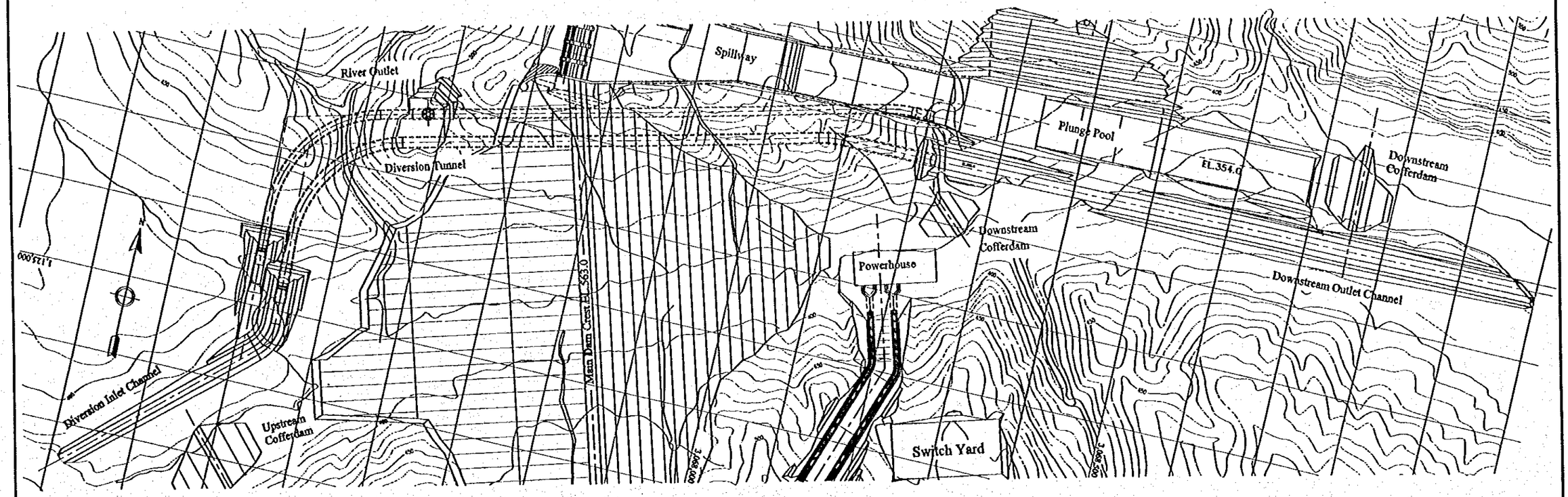


TYPICAL SECTION SCALE B

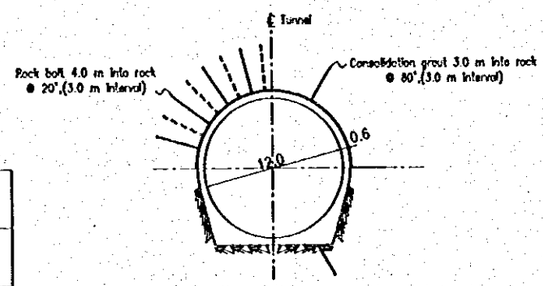
SCALE A 0 250 m

SCALE B 0 25 m

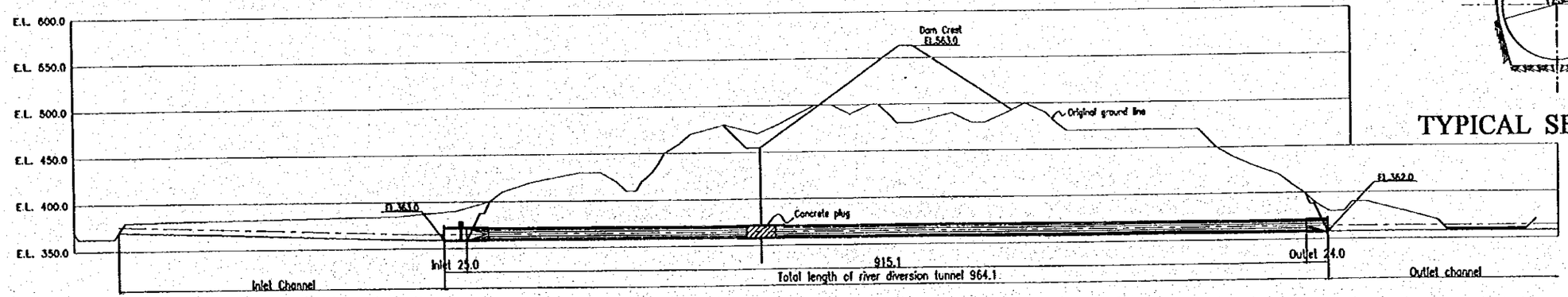
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C04 **River Diversion and River Outlet (1)**



PLAN SCALE A



TYPICAL SECTION SCALE B



PROFILE SCALE A

SCALE A 250 m

SCALE B 25 m

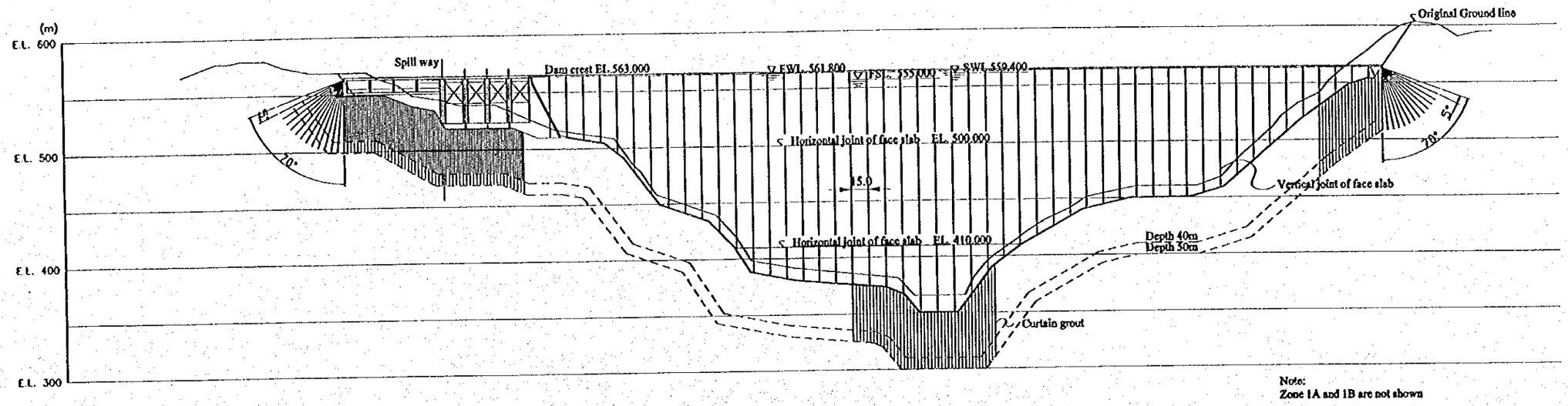
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C05 River Diversion and River Outlet (2)

GD5

SCALE A 0 200 m

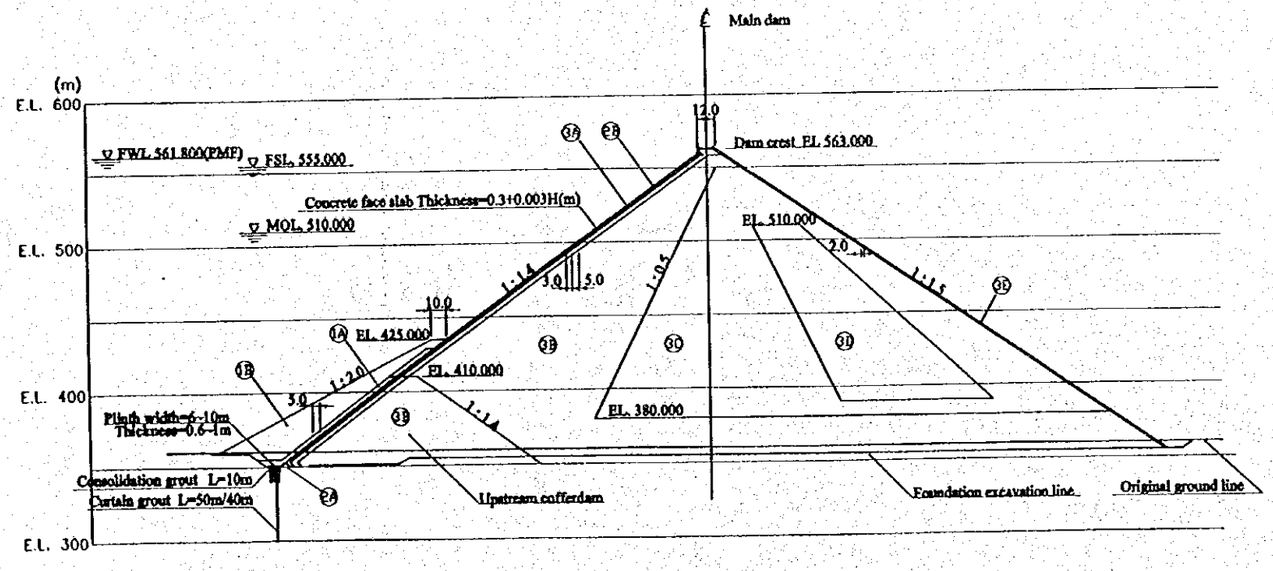
PLAN SCALE A

FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN	DWG. C06
JAPAN INTERNATIONAL COOPERATION AGENCY	Main Dam Plan



Note:
Zone 1A and 1B are not shown

MAIN DAM FRONT ELEVATION



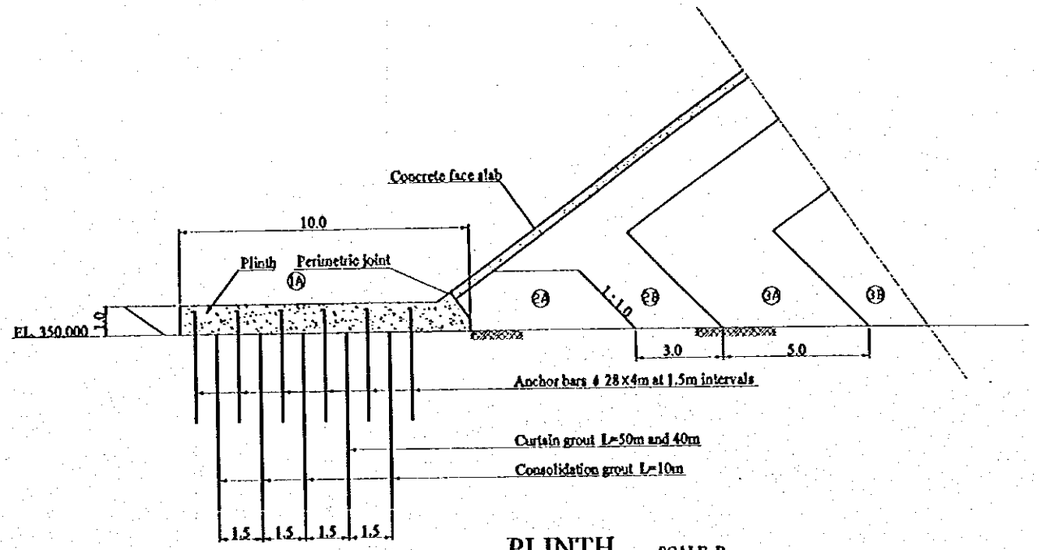
TYPICAL SECTION

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

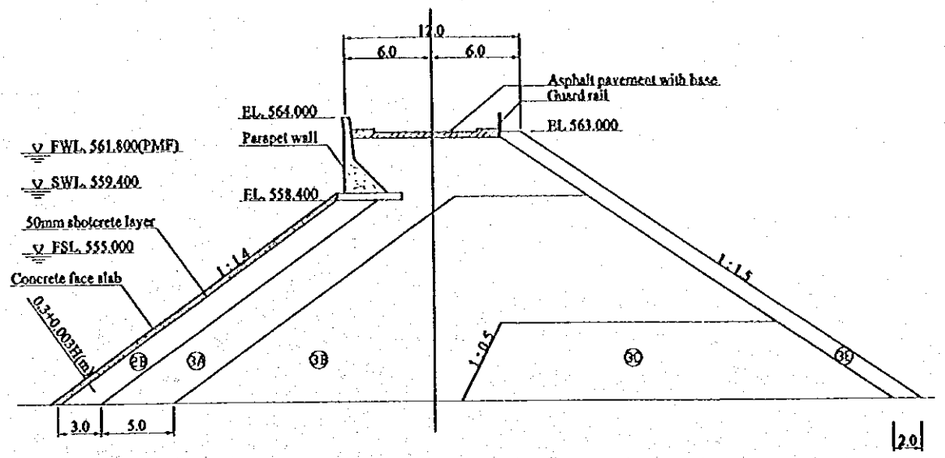
SCALE A 0 200 m

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

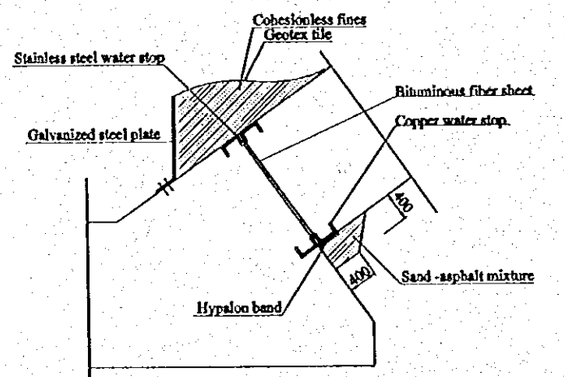
DWG. C07
Main Dam Front Elevation and Typical Section



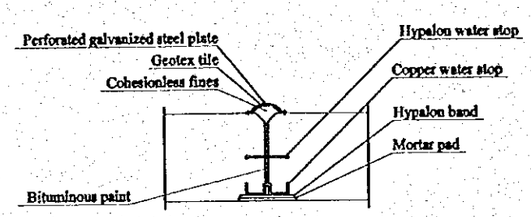
PLINTH SCALE B



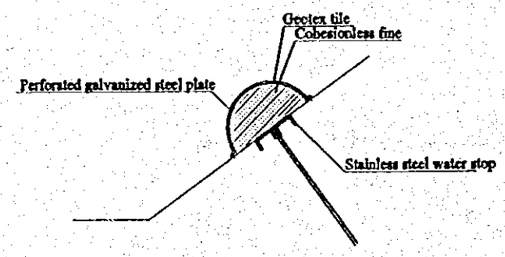
CREST DETAIL SCALE A



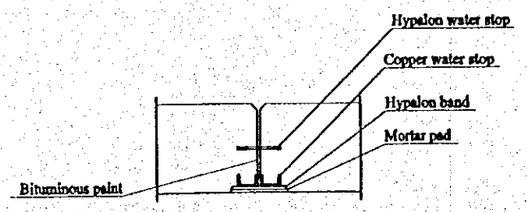
PERIMETRIC JOINT(Below 1A,1B material)



VERTICAL JOINT(Tension side)



PERIMETRIC JOINT(Above 1A,1B material)

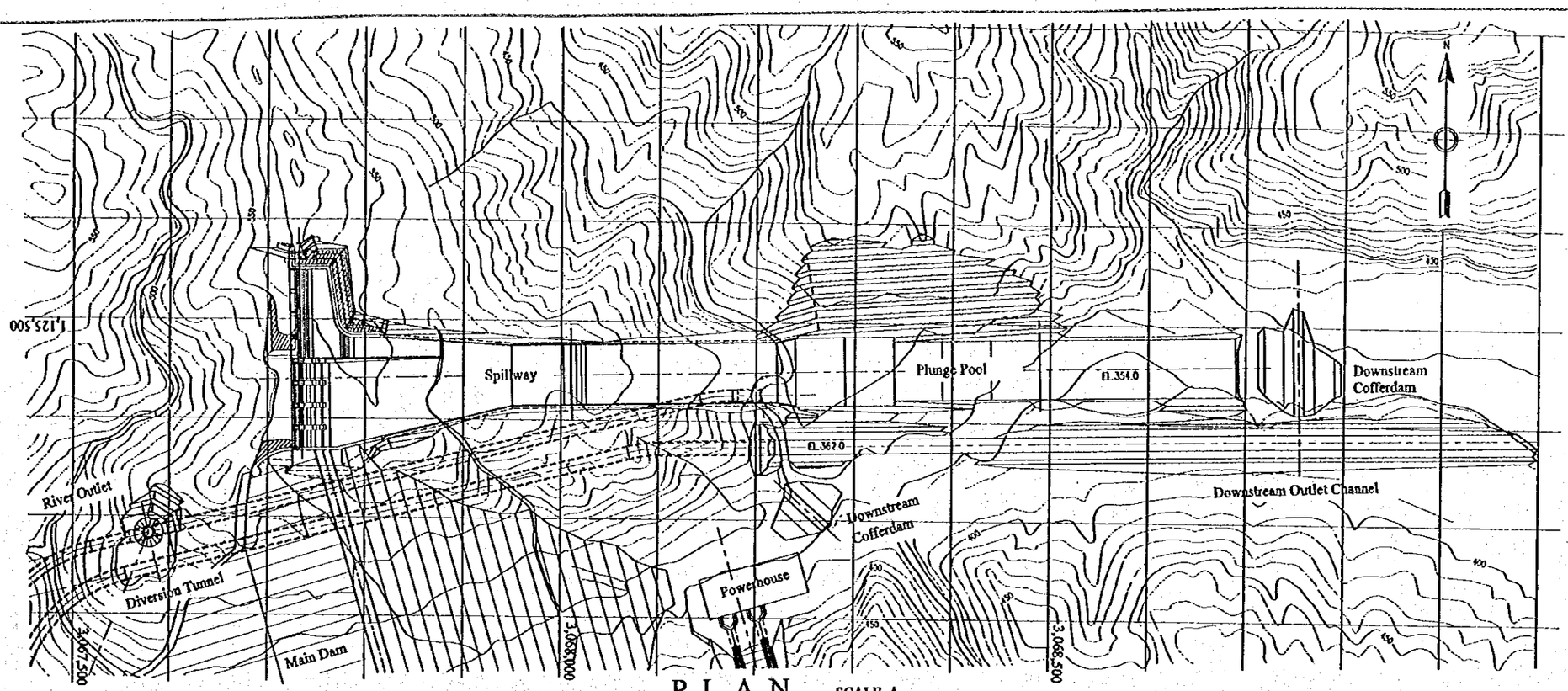


VERTICAL JOINT(Compression side)

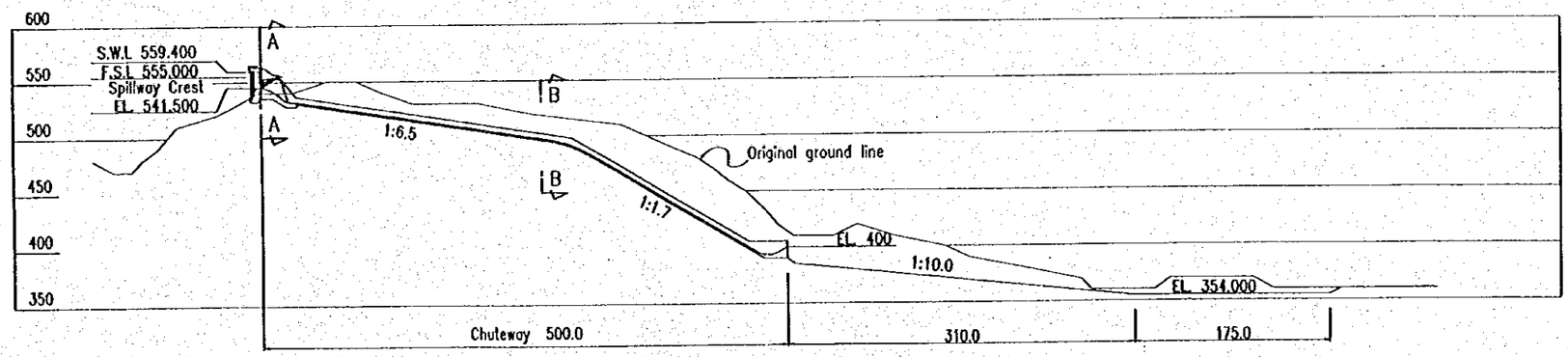
SCALE A 0 20m

SCALE B 0 10m

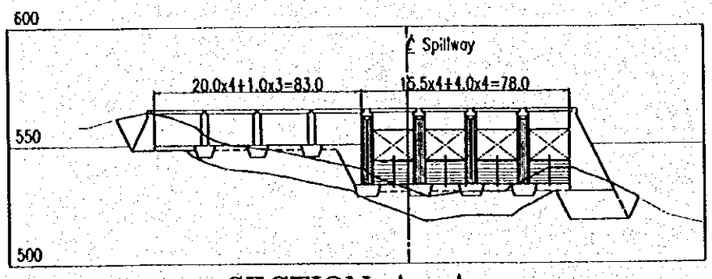
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN	DWG. C08
JAPAN INTERNATIONAL COOPERATION AGENCY	Main Dam Details



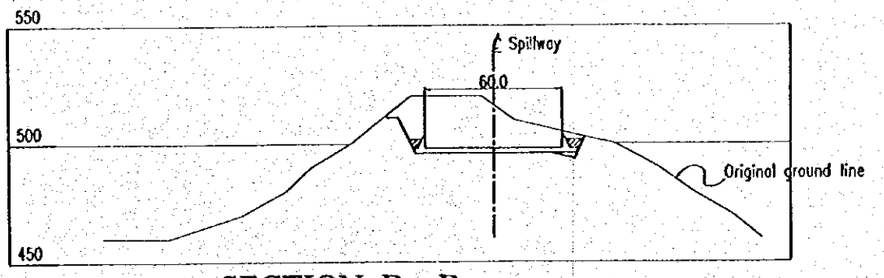
PLAN SCALE A



PROFILE SCALE A



SECTION A–A SCALE B



SECTION B–B SCALE B

SCALE A 0 250 m

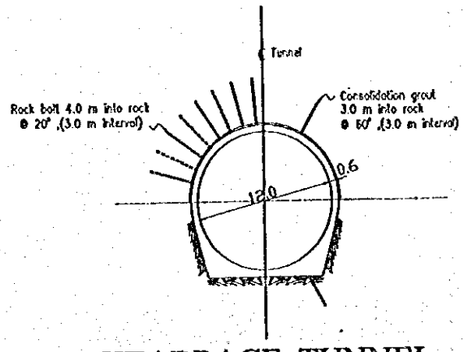
SCALE B 0 125 m

FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN

JAPAN INTERNATIONAL COOPERATION AGENCY

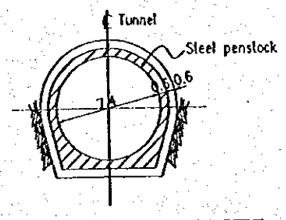
DWG. C09

Spillway, Plan, Profile and Sections



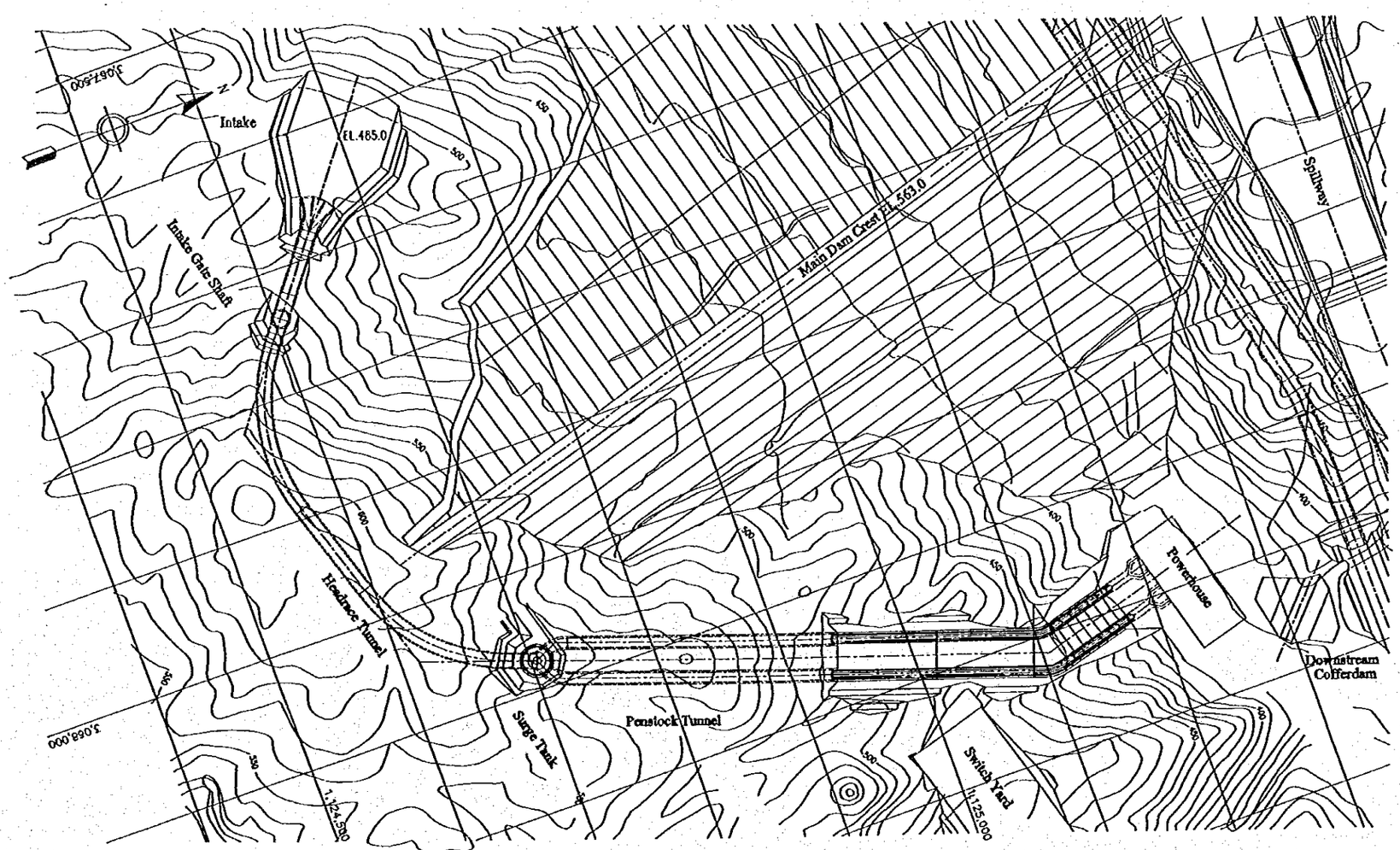
HEADRACE TUNNEL

SCALE B

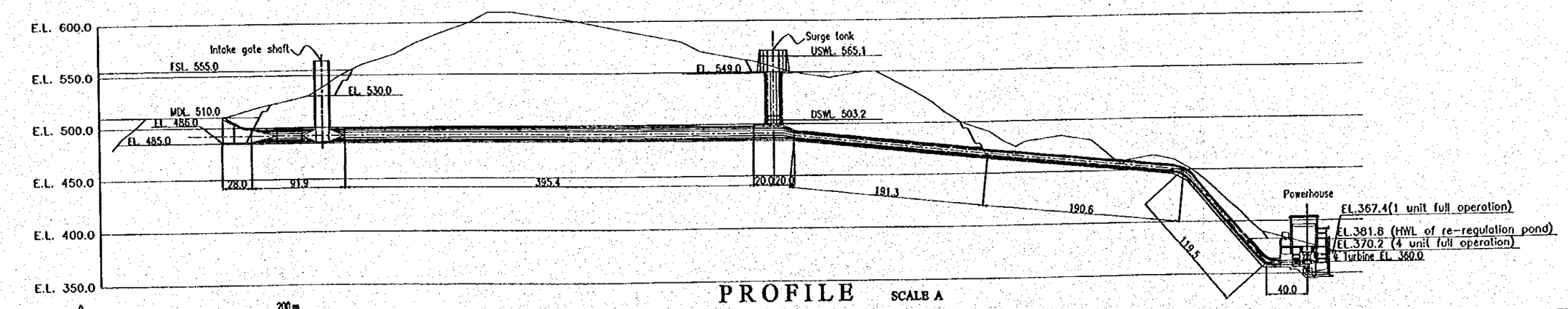


PENSTOCK TUNNEL

SCALE B



PLAN SCALE A



PROFILE SCALE A

SCALE A 0 200 m

SCALE B 0 20 m

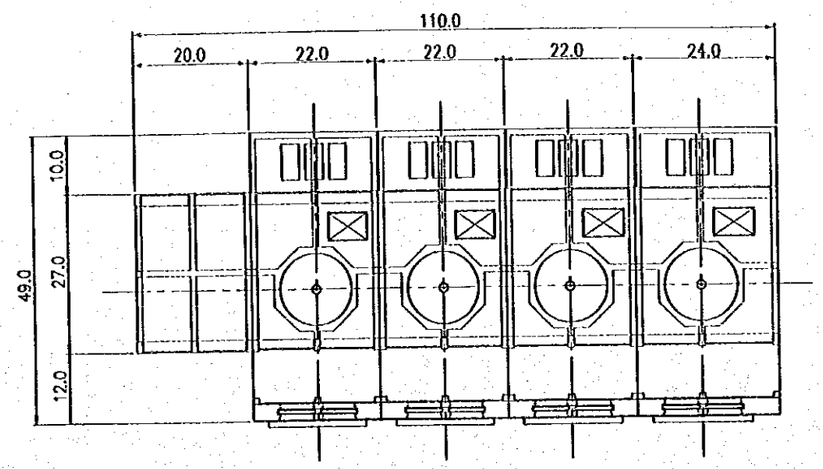
FEASIBILITY STUDY
ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT
IN ISLAMIC REPUBLIC OF PAKISTAN

JAPAN INTERNATIONAL COOPERATION AGENCY

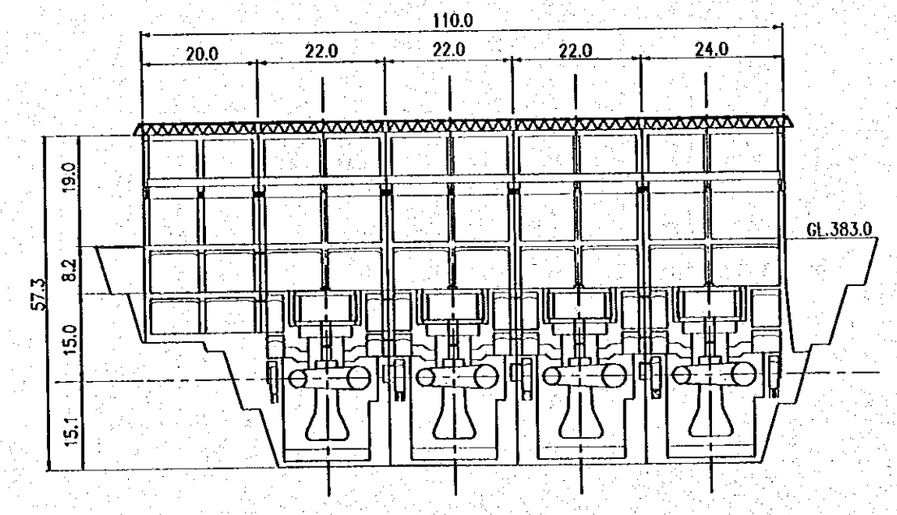
DWG. C10

Waterway, Plan and Profile

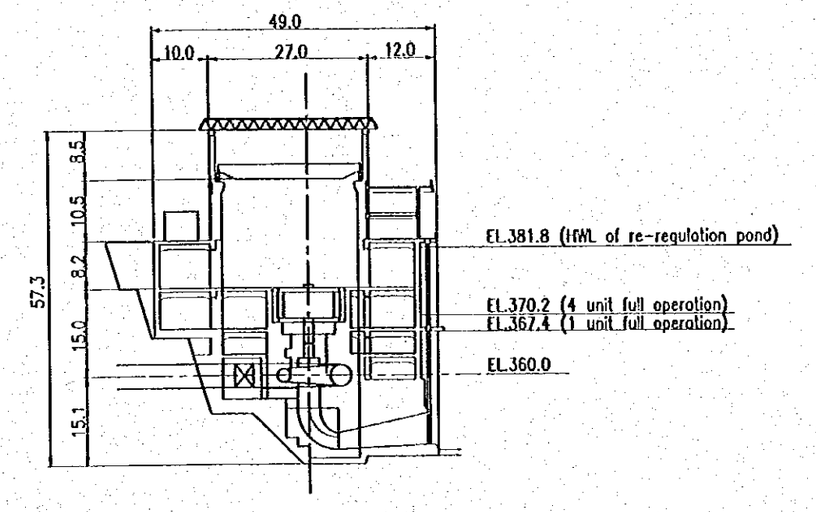
GD10



P L A N SCALE A



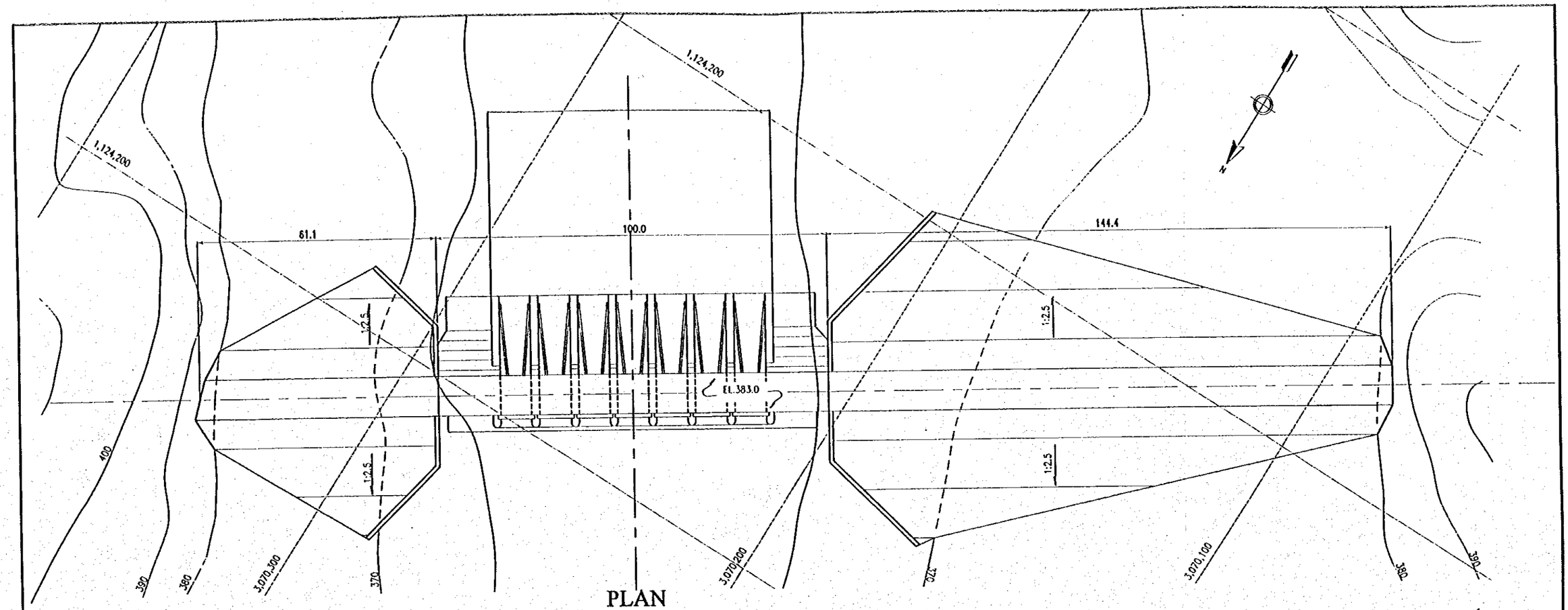
LONGITUDINAL SECTION SCALE A



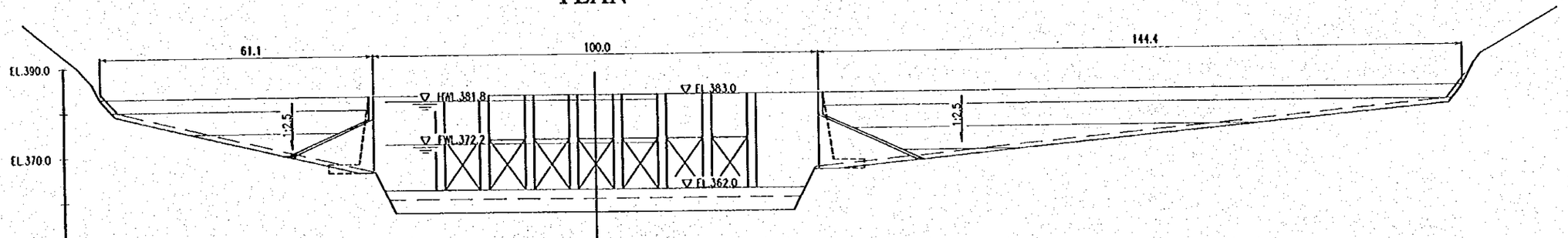
TRANSVERSE SECTION SCALE A

SCALE A 0 50 m

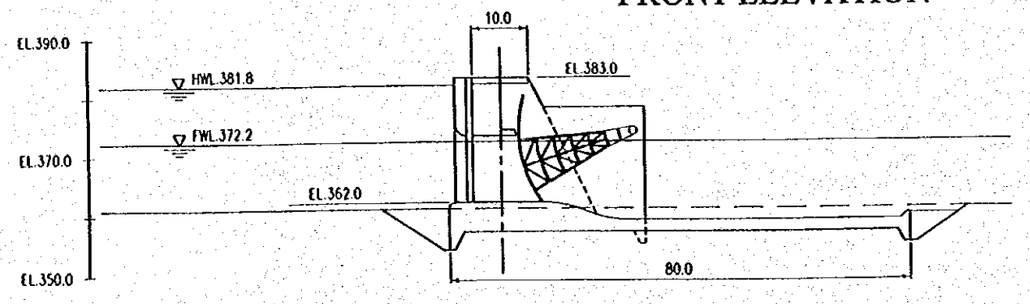
FEASIBILITY STUDY ON THE DEVELOPMENT OF MUNDA DAM MULTIPURPOSE PROJECT IN ISLAMIC REPUBLIC OF PAKISTAN JAPAN INTERNATIONAL COOPERATION AGENCY	DWG. C11 Powerhouse, Plan and Sections



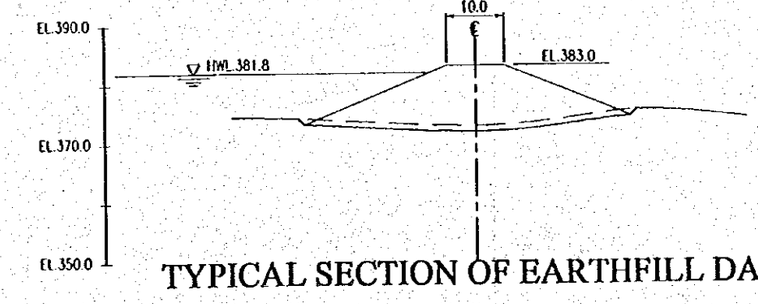
PLAN



FRONT ELEVATION



TYPICAL SECTION OF GATE WEIR



TYPICAL SECTION OF EARTHFILL DAM

SCALE A 0 50 m

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

GD12