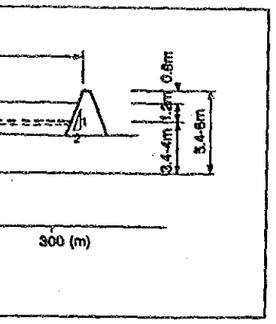
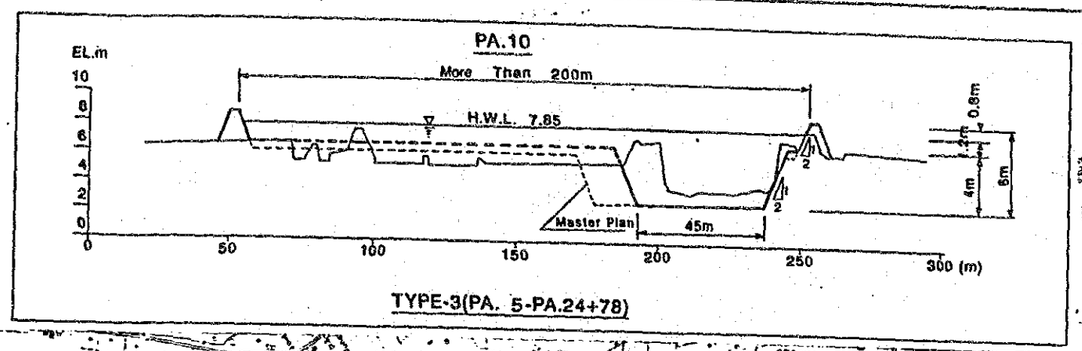




TYPE-3(PA. 5-PA.24+78)

THE STUDY ON BELAWAN-PADANG-ANGRAHTED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA JAPAN INTERNATIONAL COOPERATION AGENCY	パダン川緊急河川改修計画 (平面、横断図) 図4－6 (1/3)

SETTING BACK OF EXISTING DIKE

NEW IRRIGATION CANAL
L=700m

P A D A N G R I V E R

NEW LANGAU IRRIGATION CANAL

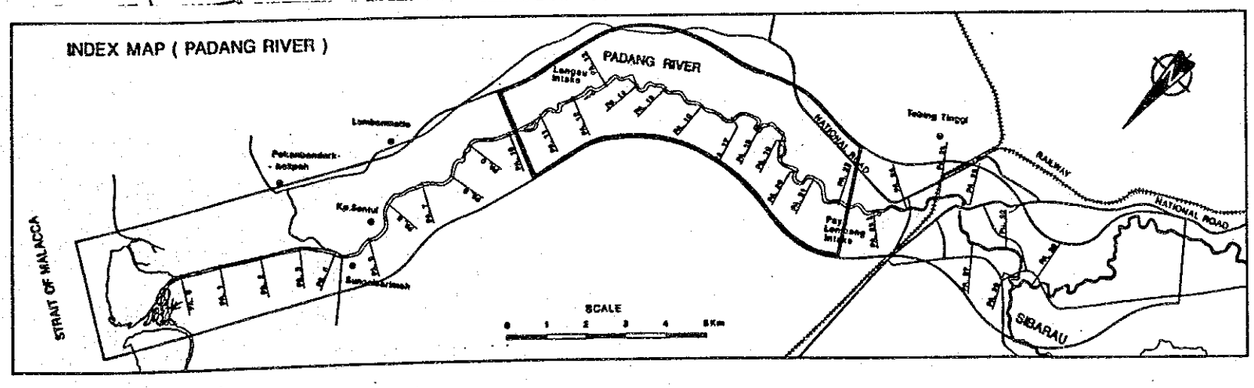
L=4,000m

REHABILITATION OF EXISTING DIKE

REHABILITATION OF EXISTING DIKE

ABANDONMENT OF EXISTING INTAKE

INDEX MAP (PADANG RIVER)



DIKE

NEW IRRIGATION CANAL
L=700m

PADANG RIVER

REHABILITATION OF EXISTING DIKE

NEW LANGAU IRRIGATION CANAL

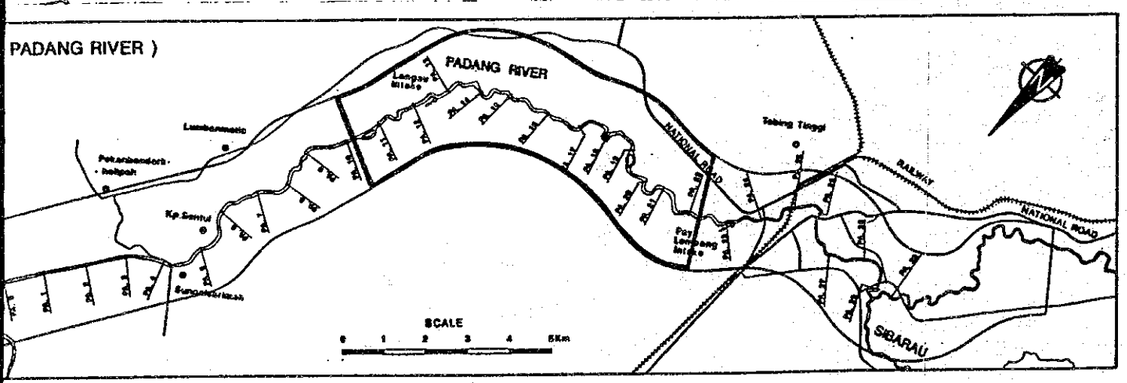
L=4,000m

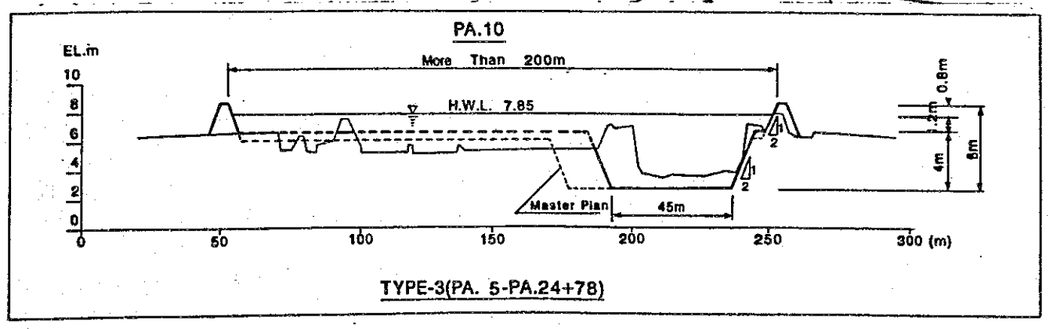
REHABILITATION OF EXISTING DIKE

NEW LANGAU INTAKE

ABANDONMENT OF EXISTING INTAKE

PADANG RIVER)





TYPE-3(PA. 5-PA.24+78)

THE STUDY ON RELAWAN-PADA
IN THE R
JAPAN INTERN

P A D A N G R I V E R

REHABILITATION OF EXISTING DIKE

IRRIGATION CANAL

L=4,000m.

DIKE

NEW LANGAU INTAKE

PA.19

PA.18

PA.20

PA.21

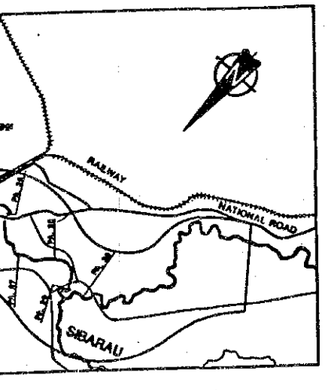
PA.22

LEGEND

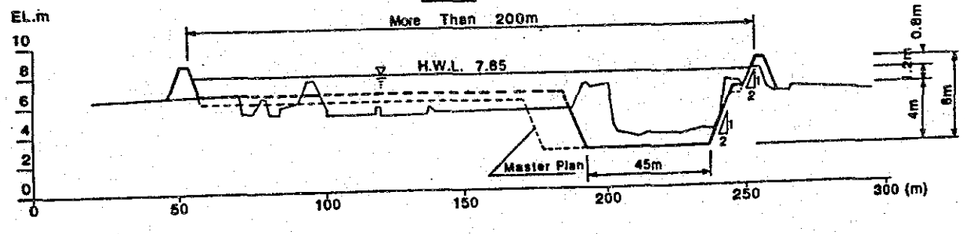
- CHANNEL ALIGNMENT
- EXISTING DIKE
- NEW EARTH DIKE
- NEW PARAPET WALL
- LOW WATER CHANNEL ALIGNMENT
- REVETMENT
- NEW IRRIGATION CANAL
- SLUICE WAY
- WATER GATE
- BRIDGE (TO BE CONSTRUCTED)
- WEIR
- INUNDATION AREA

SCALE

0 200 400 600 800 1000m



PA.10



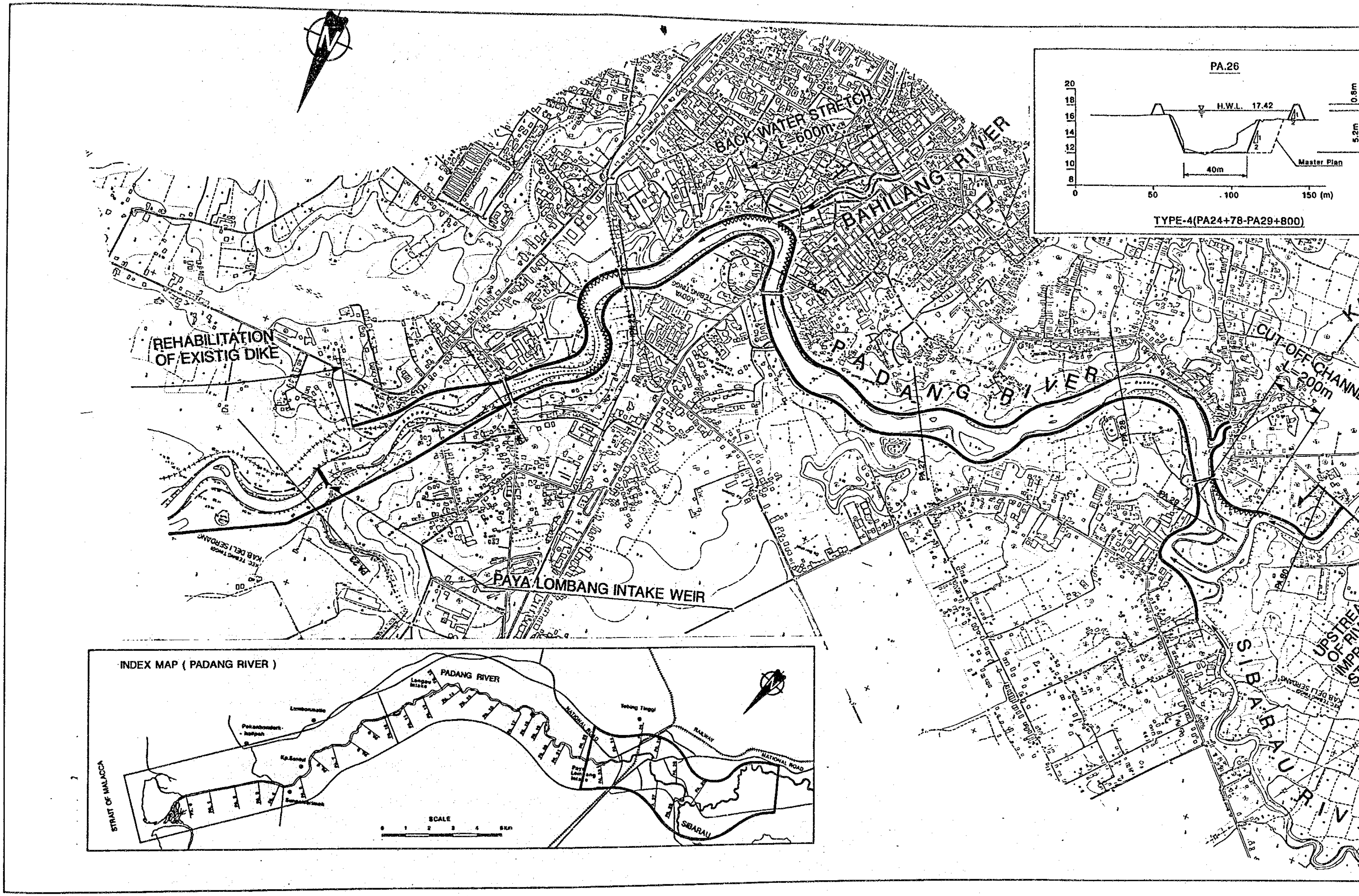
TYPE-3(PA. 5-PA.24+78)

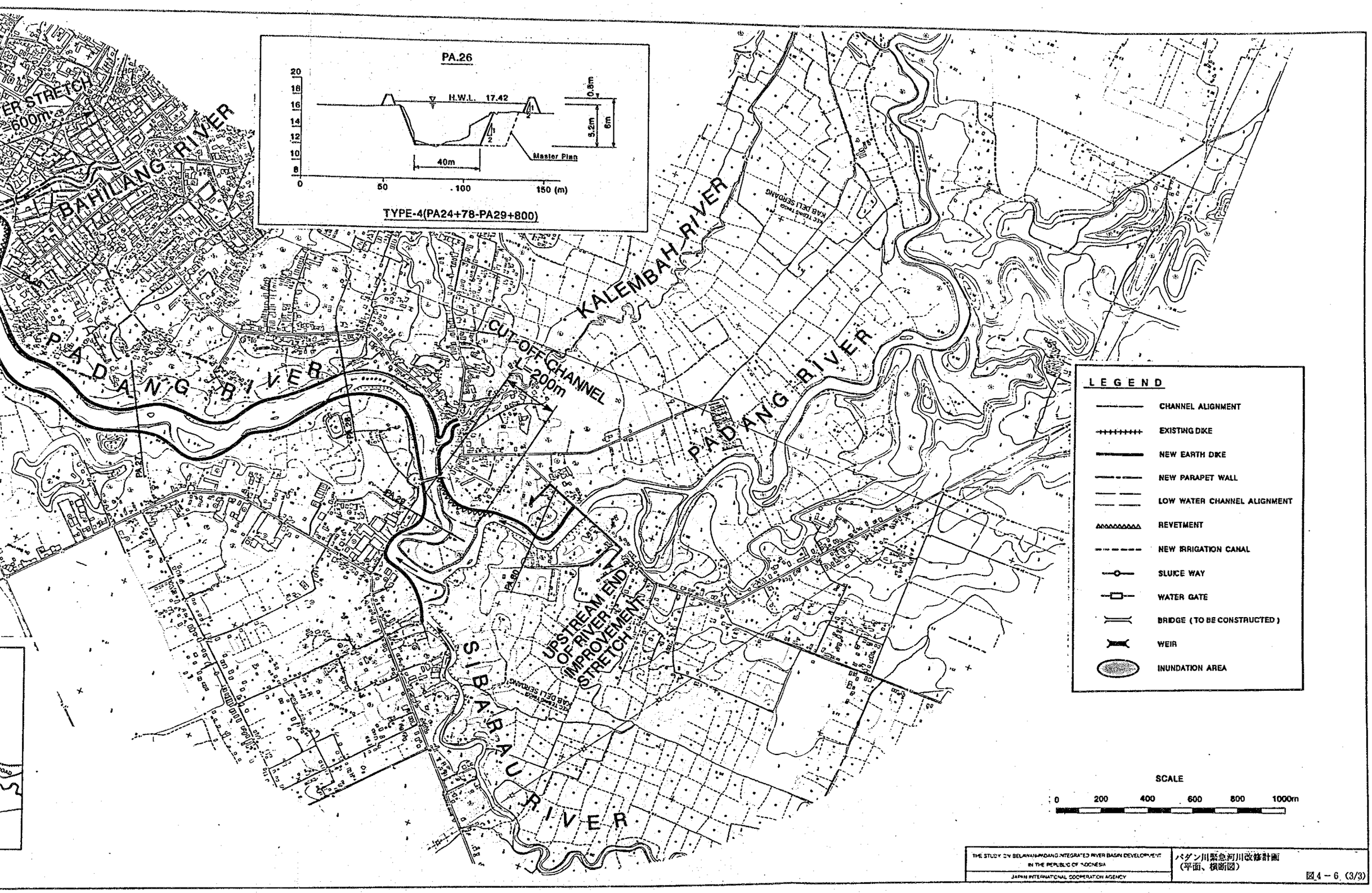
THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

パダン川緊急河川改修計画
(平面、横断図)

図4－6 (2/3)


PA.26
H.W.L. 17.42
40m
Master Plan
0
50
100
150 (m)
20
18
16
14
12
10
8
TYPE-4(PA24+78-PA29+800)
BACK WATER STRETCH
L=600m
BAHILANG RIVER
REHABILITATION
OF EXISTIG DIKE
PADANG RIVER
L=200m
PAYA LOMBANG INTAKE WEIR
PA.27
PA.28
PA.29
INDEX MAP (PADANG RIVER)
PADANG RIVER
STRAIT OF MALACCA
NATIONAL ROAD
RAILWAY
SIBARAU
SCALE

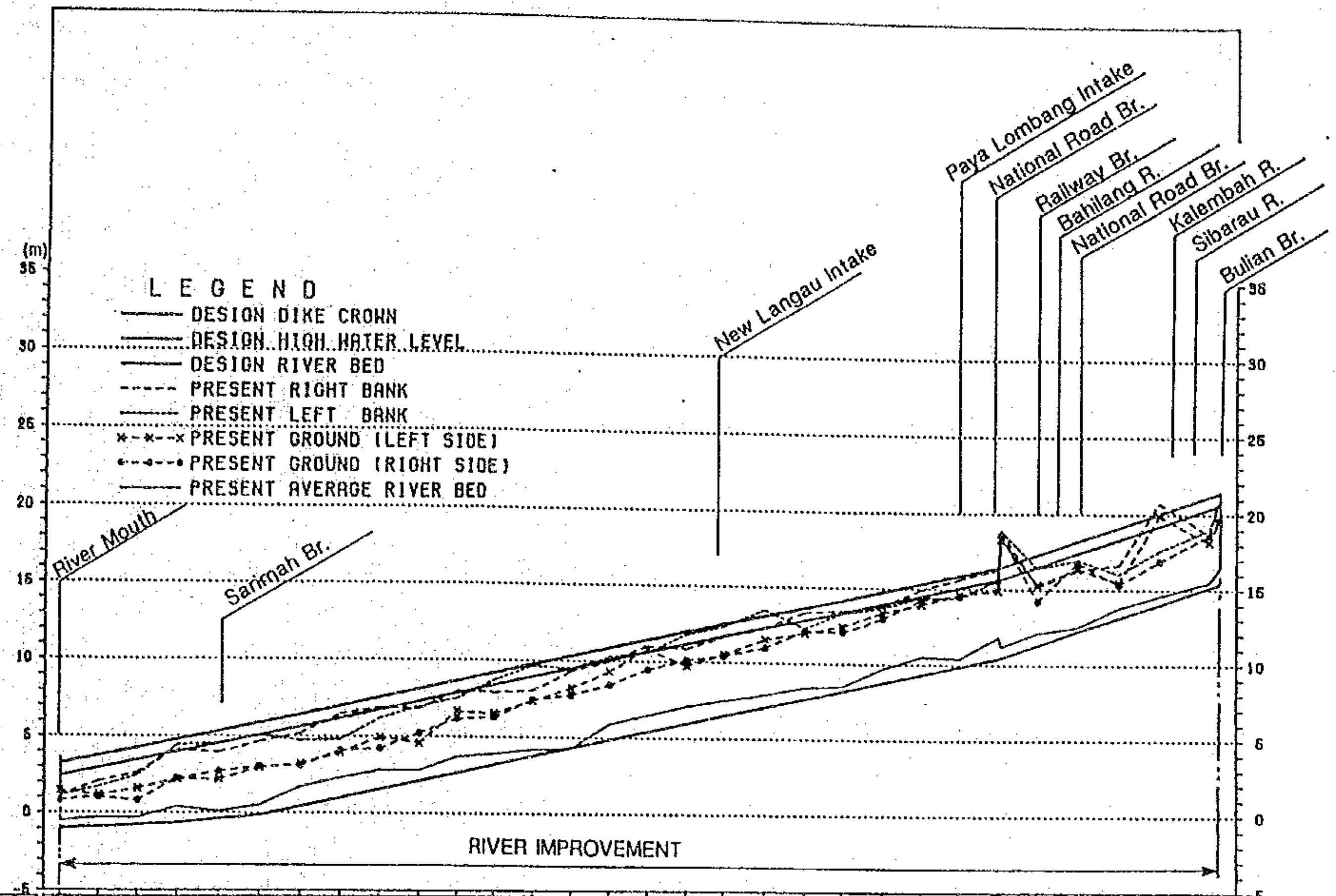


THE STUDY ON BELAWAN-PADANG-INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

パダン川緊急河川改修計画
(平面、横断図)

図4－6 (3/3)



Gradient of Design Riverbed: 1/8,000 | 1/4,000 | 1/1,800 | 1/1,100

Station No.	PR.0	PR.1	PR.2	PR.3	PR.4	PR.5	PR.6	PR.7	PR.8	PR.9	PR.10	PR.11	PR.12	PR.13	PR.14	PR.15	PR.16
Design Elevation (m) – Dike Crown	3.20	3.72	4.24	4.76	5.32	5.87	6.43	6.99	7.54	8.10	8.66	9.21	9.76	10.32	10.87	11.43	11.99
Design Elevation (m) – High Water	2.40	2.92	3.44	3.96	4.52	5.07	5.63	6.19	6.74	7.30	7.85	8.41	8.96	9.52	10.07	10.63	11.19
Design Elevation (m) – Riverbed	-1.00	-0.87	-0.75	-0.62	-0.37	-0.12	0.43	0.99	1.54	2.10	2.65	3.21	3.76	4.32	4.87	5.43	5.98
Present Elevation (m) – Right Ground	1.42	1.14	1.57	2.20	2.17	2.94	3.21	3.93	4.95	4.60	6.87	6.55	7.38	6.22	9.32	10.79	9.75
Present Elevation (m) – Left Ground	0.79	1.01	0.76	2.23	2.69	3.02	3.10	4.06	4.20	5.24	6.18	6.30	7.46	7.77	8.46	9.49	10.12
Present Elevation (m) – Average Riverbed	-0.50	-0.30	-0.30	0.40	0.10	0.50	1.70	2.30	2.60	2.80	3.70	3.90	4.20	4.30	5.90	6.50	7.10
Distance – accum. (km)	0.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	10.000	11.000	12.000	13.000	14.000	15.000	16.000
Distance – partial (m)	0	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

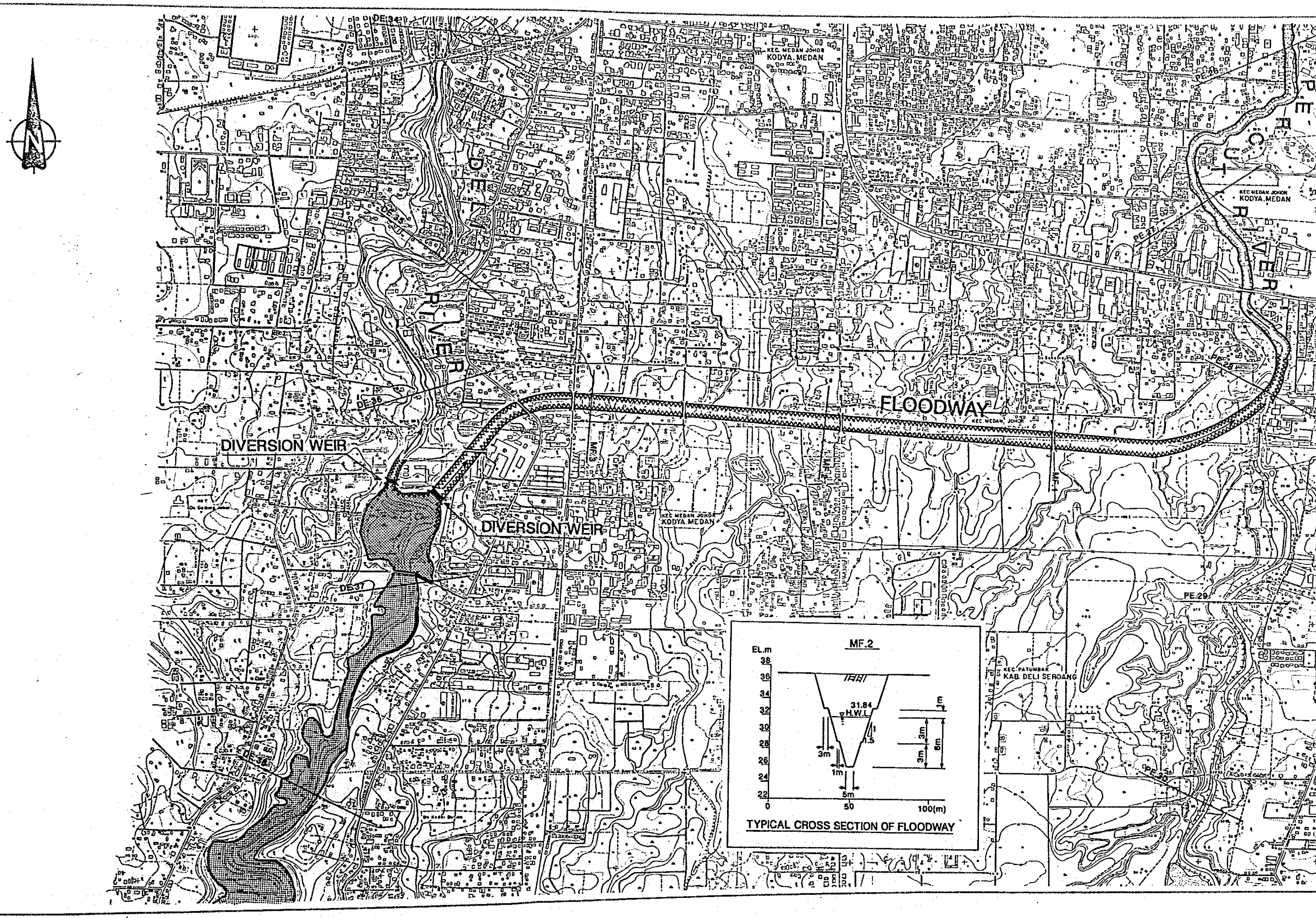
Station No.	PR.16 +950	PR.18	PR.19	PR.19 +950	PR.21	PR.22	PR.23	RAYRE RD B	PR.25	PR.26	PR.27	PR.28	PR.30 BULIAN BR.
Design Elevation (m) – Dike Crown	12.51	13.10	13.66	14.18	14.76	15.32	15.87	16.49	17.31	18.22	19.13	20.04	21.18 / 21.41
Design Elevation (m) – High Water	11.71	12.30	12.85	13.30	13.96	14.52	15.07	15.69	16.61	17.42	18.33	19.24	20.38 / 20.61
Design Elevation (m) – Riverbed	6.51	7.10	7.65	8.18	8.70	9.32	9.87	10.49	11.31	12.22	13.13	14.04	15.18 / 15.41
Present Elevation (m) – Right Ground	10.51	11.63	11.90	12.45	13.40	13.97	14.83	16.89	15.33	15.37	15.40	19.93	18.18 / 18.68
Present Elevation (m) – Left Ground	10.41	10.99	12.11	12.06	12.90	14.20	14.55	15.55	14.24	16.70	15.35	18.91	18.83 / 19.84
Present Elevation (m) – Average Riverbed	7.60	7.90	8.40	8.50	9.70	10.50	10.40	11.89	12.10	12.50	13.60	14.80	15.50 / 15.40
Distance – accum. (km)	16.950	18.000	19.000	19.950	21.000	22.000	23.000	24.098	25.020	26.000	27.000	28.000	29.250 / 29.510
Distance – partial (m)	950	1050	1000	950	1050	1000	1000	1098	922	1000	1000	1000	1250 / 260

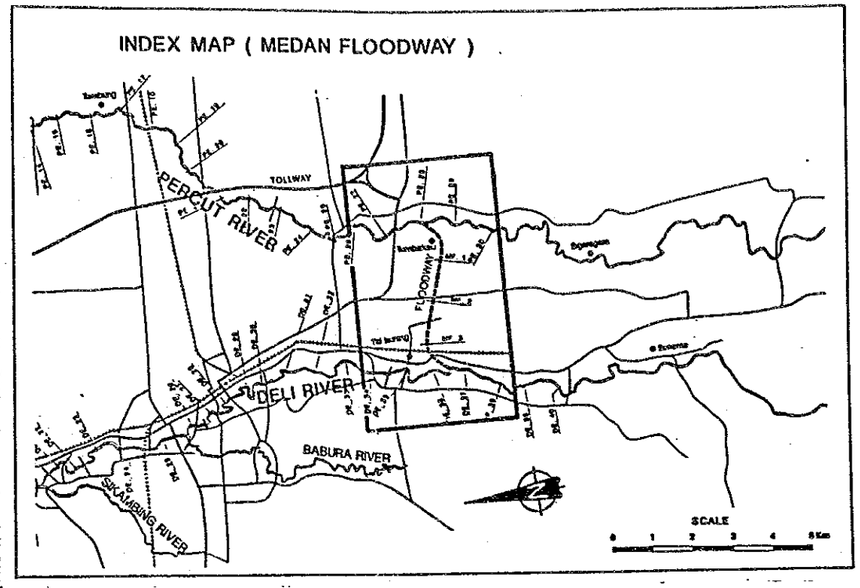
THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

パダン川緊急河川改修計画
（縦断図）

図4－7


DE.34
KEC. MEDAN JOHOR
KODYA. MEDAN
DELI RIVER
DE.35
DE.36
DIVERSION WEIR
DIVERSION WEIR
MF.3
KEC. MEDAN JOHOR
KODYA. MEDAN
DE.37
FLOODWAY
KEC. MEDAN JOHOR
PE.26
PE.27
PE.28
PE.29
PE.30
PERCUT RIVER
KEC. MEDAN JOHOR
KODYA. MEDAN
KEC. PATUMBAK
KAB. DELI SERDANG
MF.2
El.m
38
36
34
32
30
28
26
24
22
0
50
100(m)
31.84
H.W.L.
1m
3m
3m
6m
1
1.5
3m
1m
5m
TYPICAL CROSS SECTION OF FLOODWAY



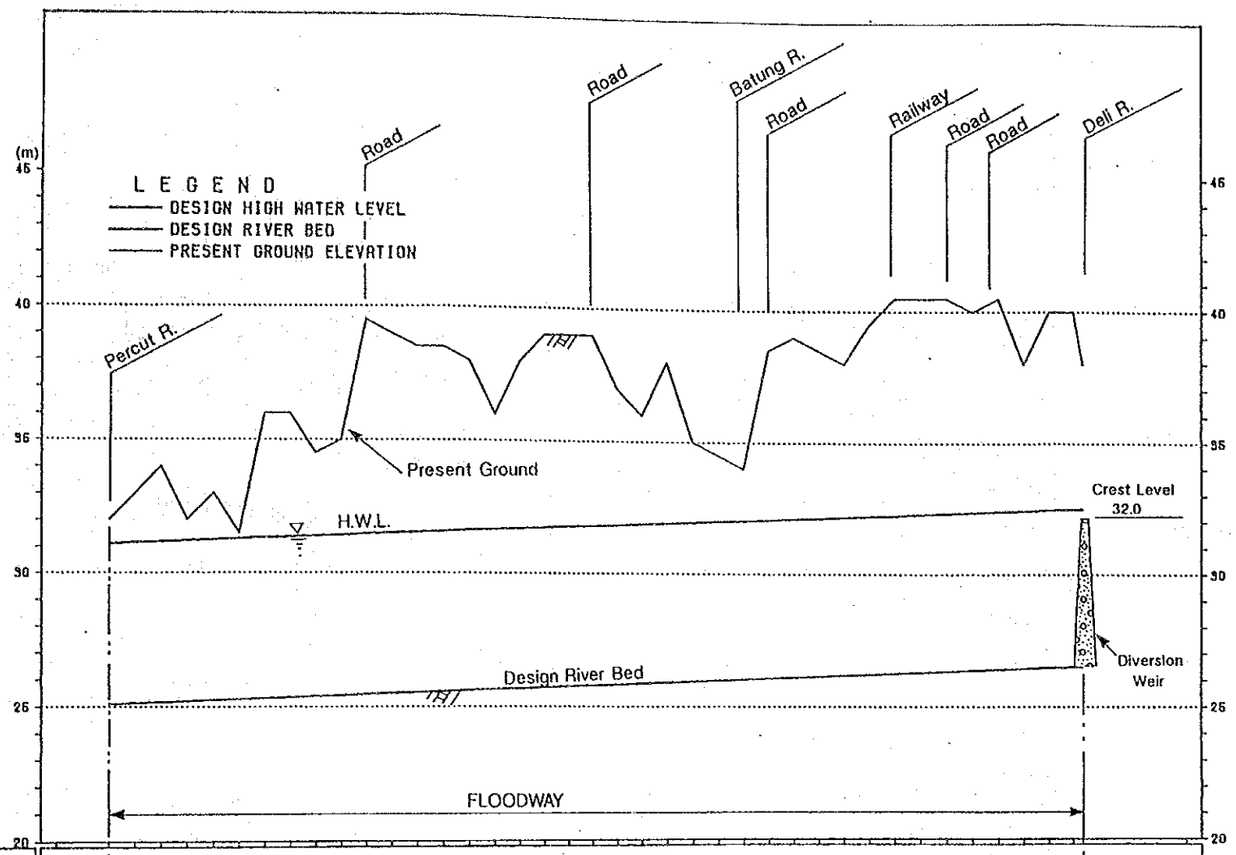
LEGEND

- CHANNEL ALIGNMENT
- EXISTING DIKE
- NEW EARTH DIKE
- NEW PARAPET WALL
- LOW WATER CHANNEL ALIGNMENT
- REVETMENT
- NEW IRRIGATION CANAL
- SLUICE WAY
- WATER GATE
- BRIDGE (TO BE CONSTRUCTED)
- WEIR
- INUNDATION AREA

SCALE

0 200 400 600 800 1000m

THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA	最適放水路ルート
JAPAN INTERNATIONAL COOPERATION AGENCY	図4－8



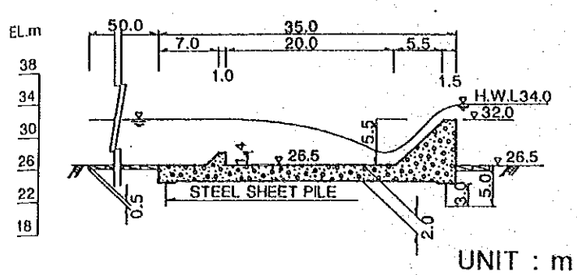
Gradient of Design Riverbed		1/2,700
Design Elevation (m)	High Water	31.10 31.14 31.17 31.21 31.25 31.29 31.32 31.36 31.40 31.43 31.47 31.51 31.54 31.58 31.62 31.66 31.69 31.73 31.77 31.80 31.84 31.88 31.91 31.95 31.99 32.03 32.06 32.10 32.14 32.17 32.21 32.25 32.29 32.32 32.36 32.40 32.43 32.47 32.50 32.50
	Riverbed	25.10 25.14 25.17 25.21 25.25 25.29 25.32 25.36 25.40 25.43 25.47 25.51 25.54 25.58 25.62 25.66 25.69 25.73 25.77 25.80 25.84 25.88 25.91 25.95 25.99 26.03 26.06 26.10 26.14 26.17 26.21 26.25 26.29 26.32 26.36 26.40 26.43 26.47 26.50 26.50
Present Ground Elevation (m)		32.00 33.00 34.00 32.00 33.00 31.50 35.00 35.00 34.50 35.00 33.50 36.00 38.00 36.50 38.00 38.00 38.00 38.00 39.00 38.00 37.00 35.00 35.00 35.00 34.50 34.00 36.50 39.00 38.50 38.00 38.00 39.50 40.50 40.50 40.00 40.50 39.00 40.00 40.00 39.00
Distance	accum. (km)	0.000 0.100 0.200 0.300 0.400 0.500 0.600 0.700 0.800 0.900 1.000 1.100 1.200 1.300 1.400 1.500 1.600 1.700 1.800 1.900 2.000 2.100 2.200 2.300 2.400 2.500 2.600 2.700 2.800 2.900 3.000 3.100 3.200 3.300 3.400 3.500 3.600 3.700 3.800 3.840
	partial (m)	0 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 40
Station No.		MF-0 MF-0+100 MF-0+200 MF-0+300 MF-0+400 MF-0+500 MF-0+600 MF-0+700 MF-0+800 MF-0+900 MF-1 MF-1+100 MF-1+200 MF-1+300 MF-1+400 MF-1+500 MF-1+600 MF-1+700 MF-1+800 MF-1+900 MF-2 MF-2+100 MF-2+200 MF-2+300 MF-2+400 MF-2+500 MF-2+600 MF-2+700 MF-2+800 MF-2+900 MF-3 MF-3+100 MF-3+200 MF-3+300 MF-3+400 MF-3+500 MF-3+600 MF-3+700 MF-3+800 MF-3+840

THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

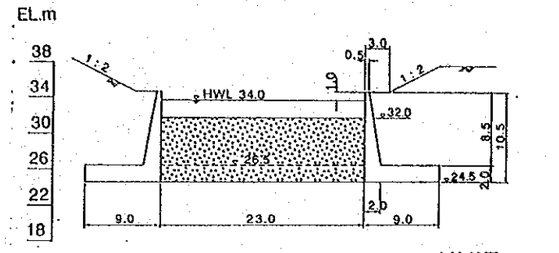
最適放水路縦断図

図4－9



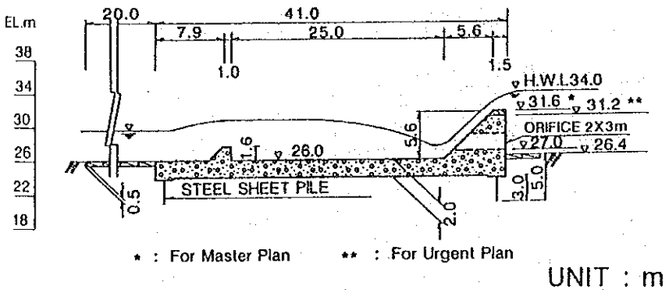
UNIT : m

SECTION A-A



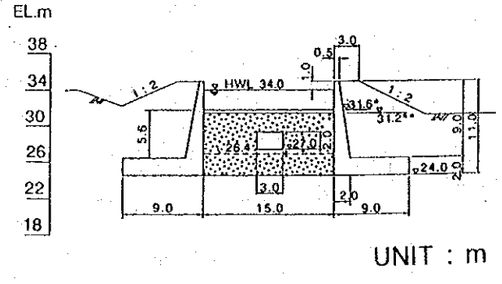
UNIT : m

SECTION B-B



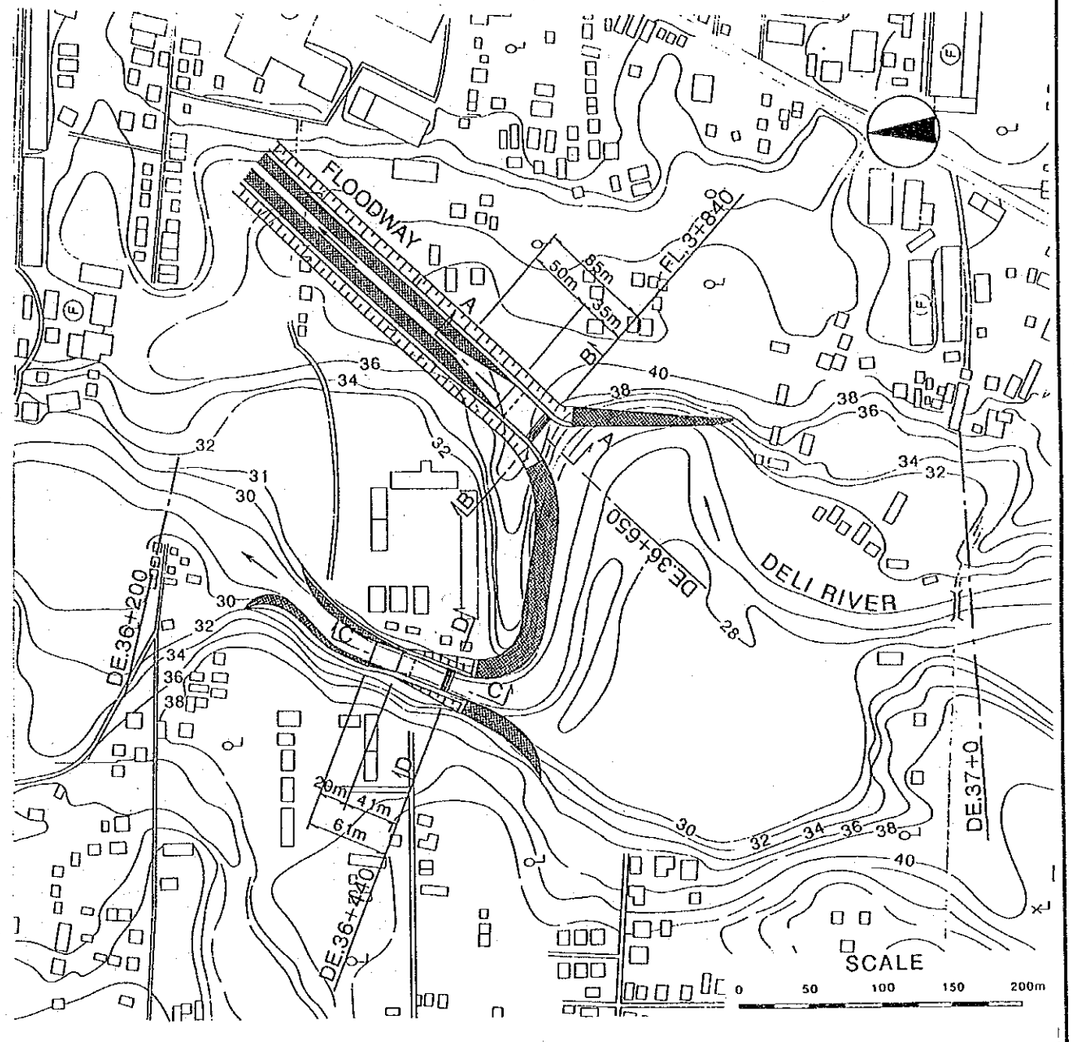
UNIT : m

SECTION C-C



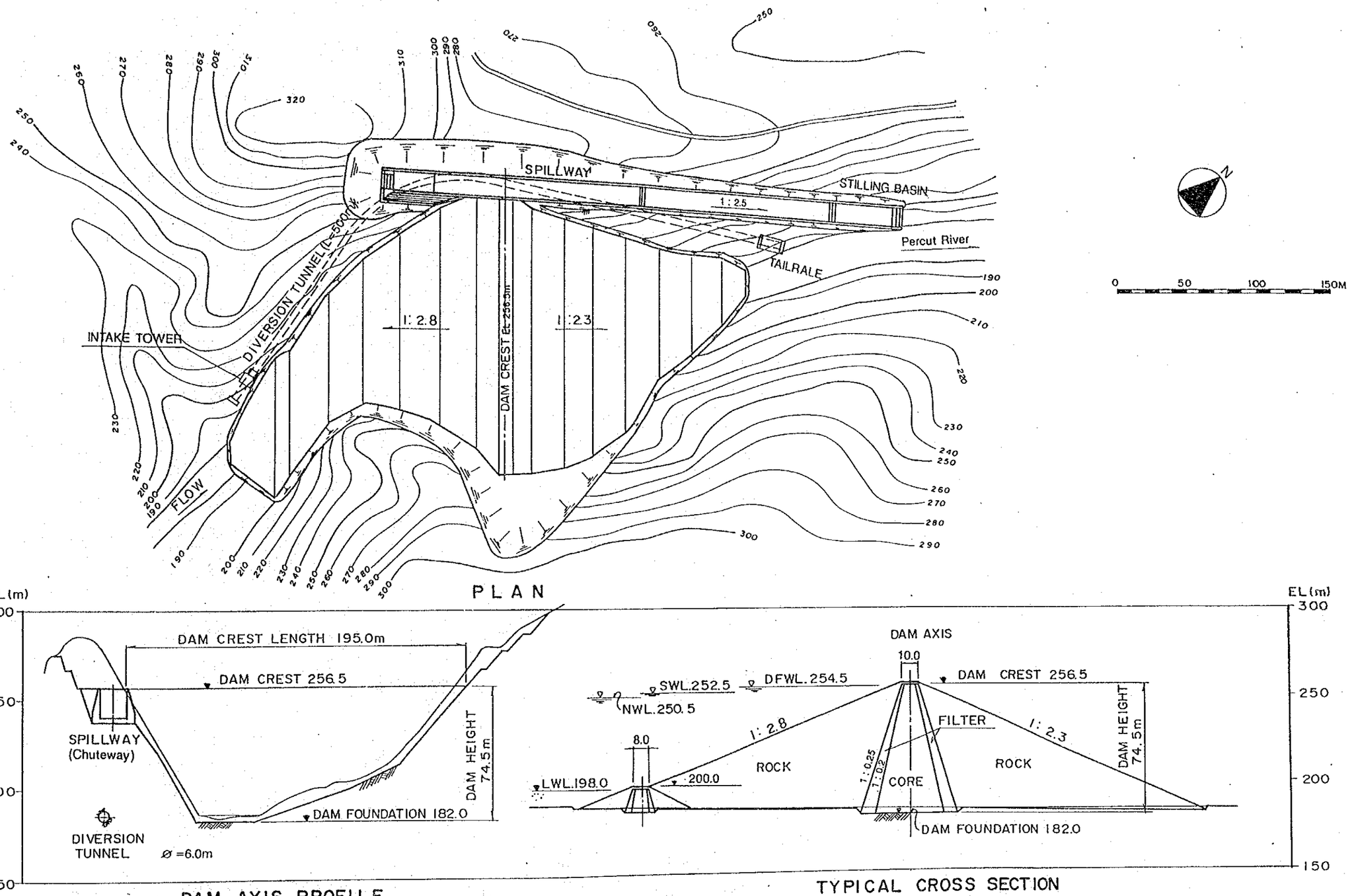
UNIT : m

SECTION D-D



PLAN OF DIVERSION FACILITY

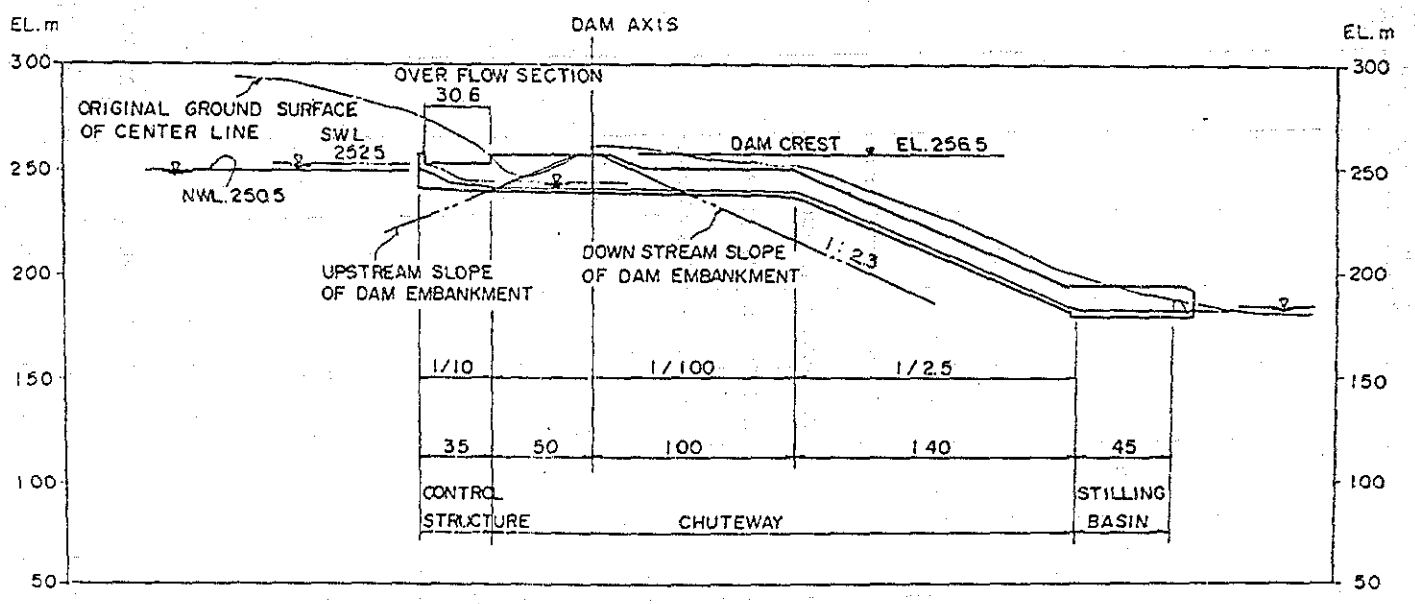
THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA	最適分水路概要図
JAPAN INTERNATIONAL COOPERATION AGENCY	図 4 －10



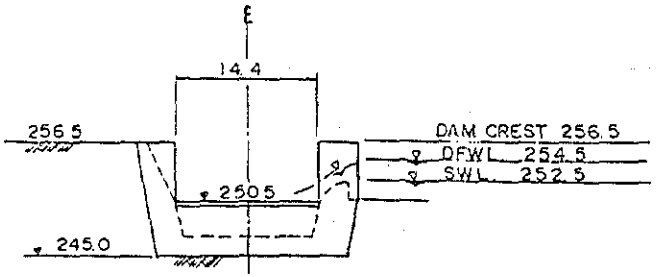
THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA JAPAN INTERNATIONAL COOPERATION AGENCY	ラウシメメ多目的ダム一般図 図 4 −11

洪水吐き縦断図

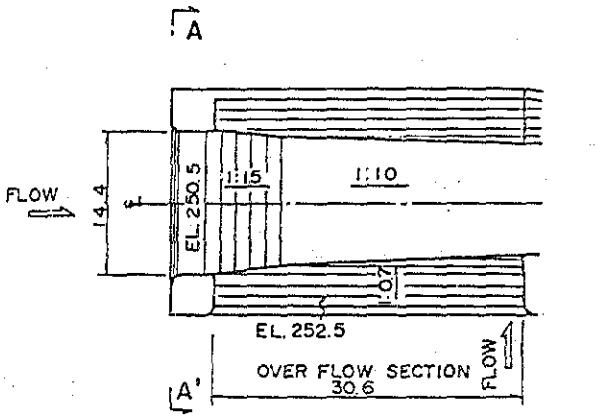
図4－12



LONGITUDINAL PROFILE OF SPILLWAY

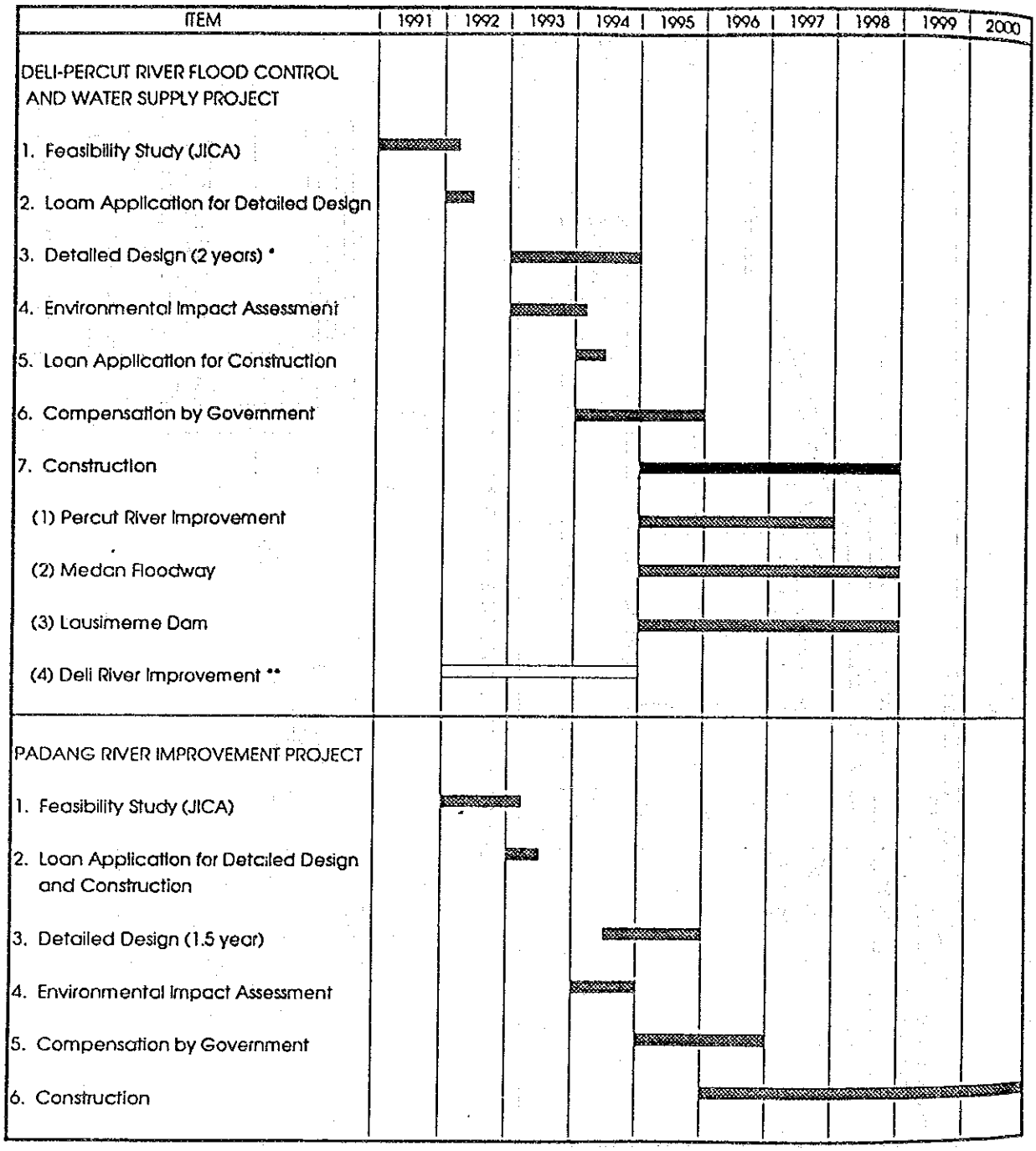


A－A' SECTION



PLAN OF CONTROL STRUCTURE

IMPLEMENTATION SCHEDULE



* Detailed design work for the Deli-Percut Flood Control and Water Supply Project excluding the Deli River Improvement

** Construction works of Deli River Improvement under MUDP II

THE STUDY ON BELAWAN-PADANG INTEGRATED RIVER BASIN DEVELOPMENT IN THE REPUBLIC OF INDONESIA	緊急事業実施計画
JAPAN INTERNATIONAL COOPERATION AGENCY	図 4 −13