

バングラデシュ人民共和国

メグナ橋護岸改修計画

基本設計調査報告書

資料編

平成10年2月

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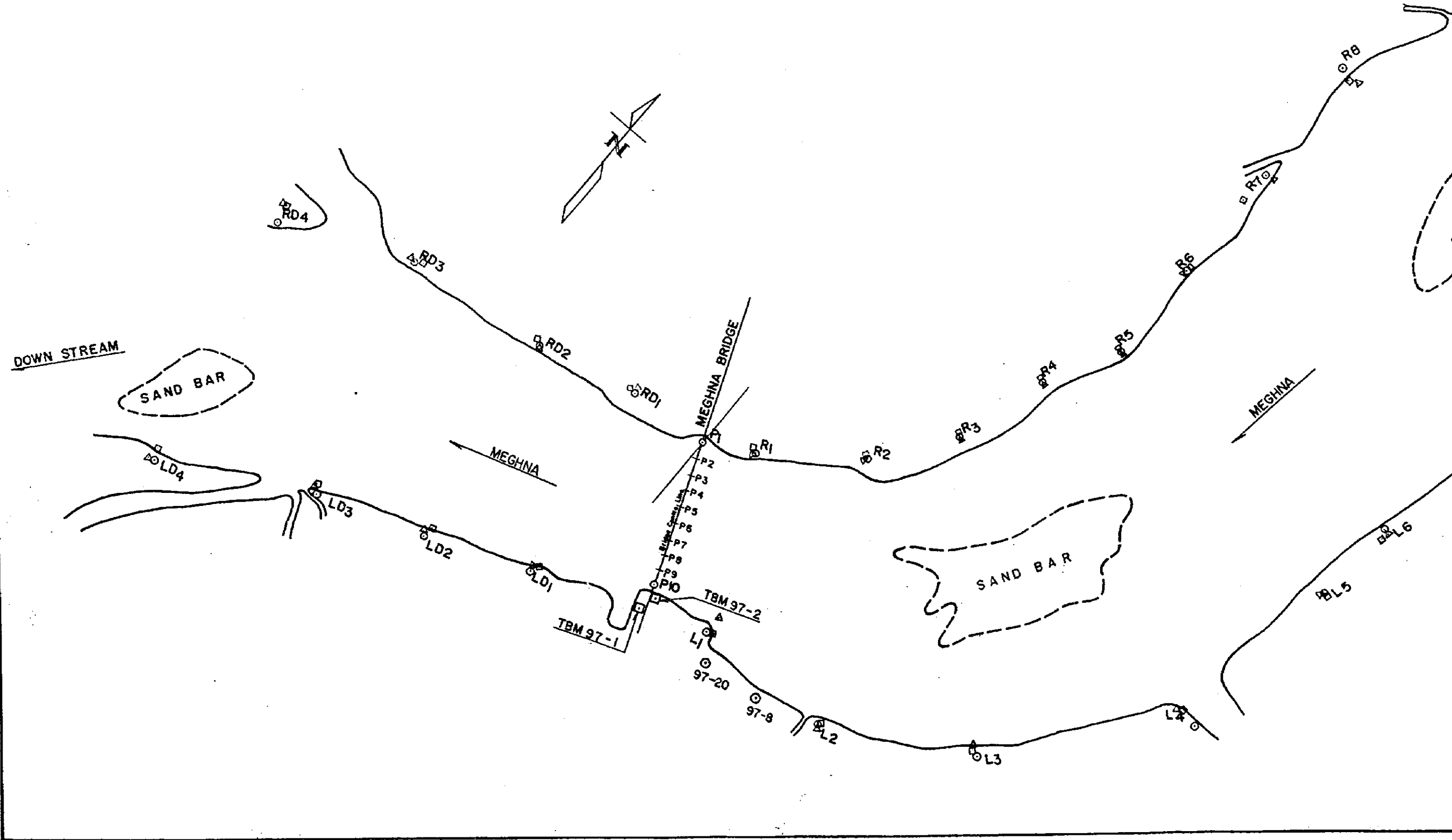
1144478 (3)

資料編

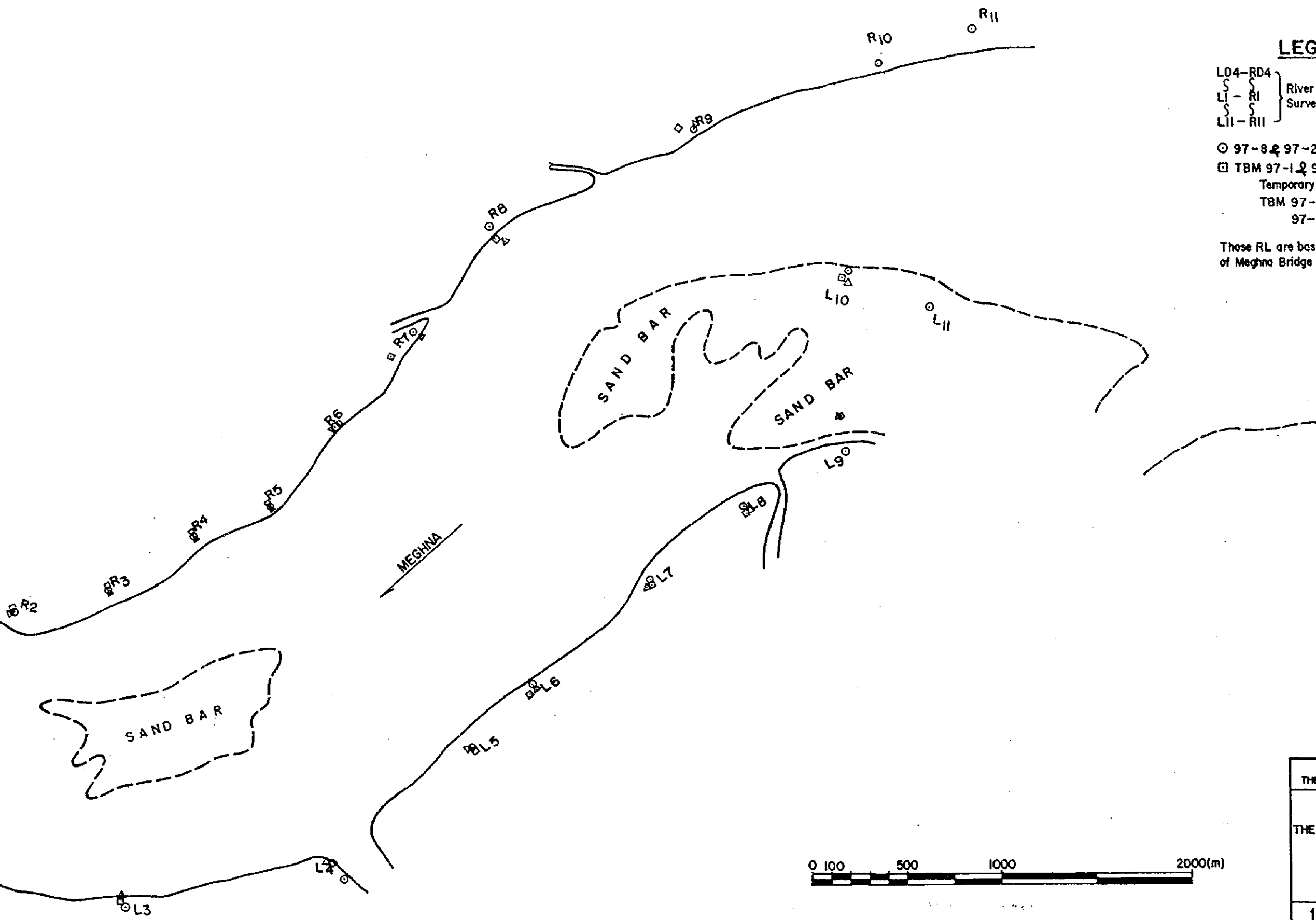
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平面図



(1) General plan



LEGEND

- | | | | | |
|---------|-----------------------|---------------|-----------|-----------|
| L04-RD4 | } River Cross Section | △-△ | 1989 APR. | |
| L1-R1 | | } Survey Line | □-□ | 1994 JAN. |
| L11-R11 | | | ○-○ | 1997 APR. |
- 97-8 & 97-20 Traverse Point (1997, APR.)
- TBM 97-1 & 97-2
Temporary Bench Mark
TBM 97-1 RL = 6.821
97-2 RL = 5.964

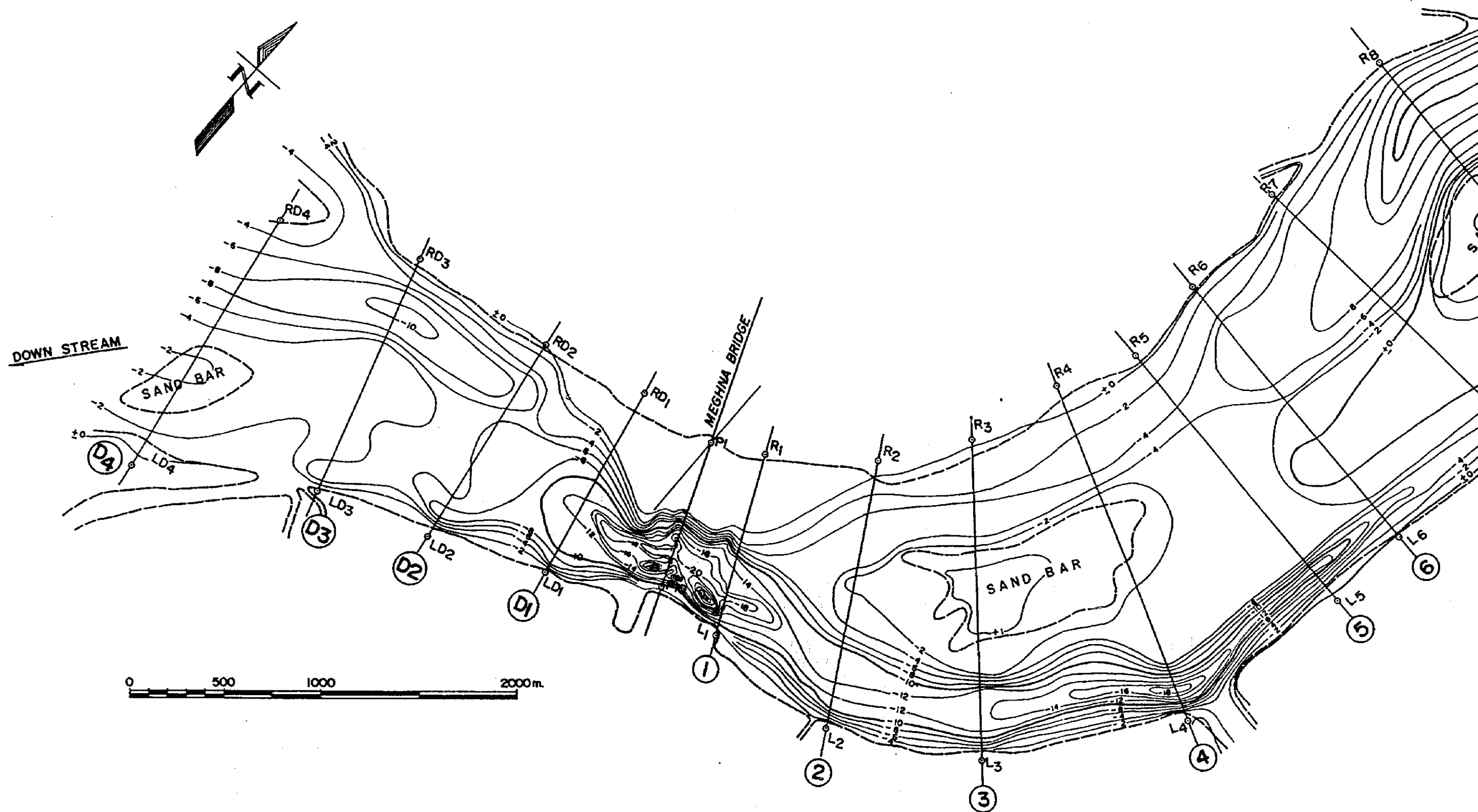
Those RL are based on the As Build Drawing of Meghna Bridge Construction.

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
1	GENERAL PLAN OF PROJECT SITE
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD.	

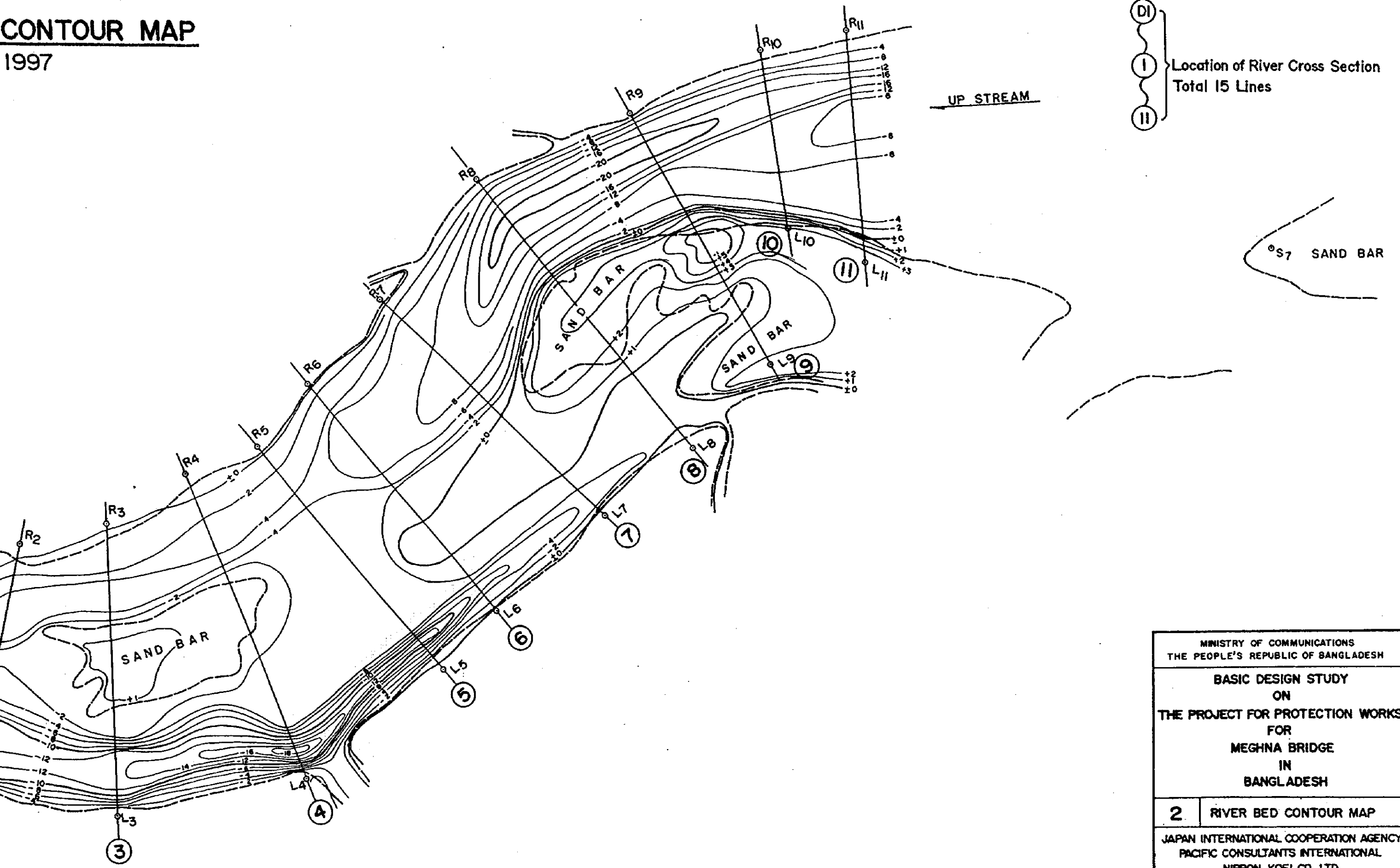
AUG. 1997

RIVER BED CONTOUR MAP

AUG. 1997



CONTOUR MAP
1997



(2) River Bed Contour Map

Note:-

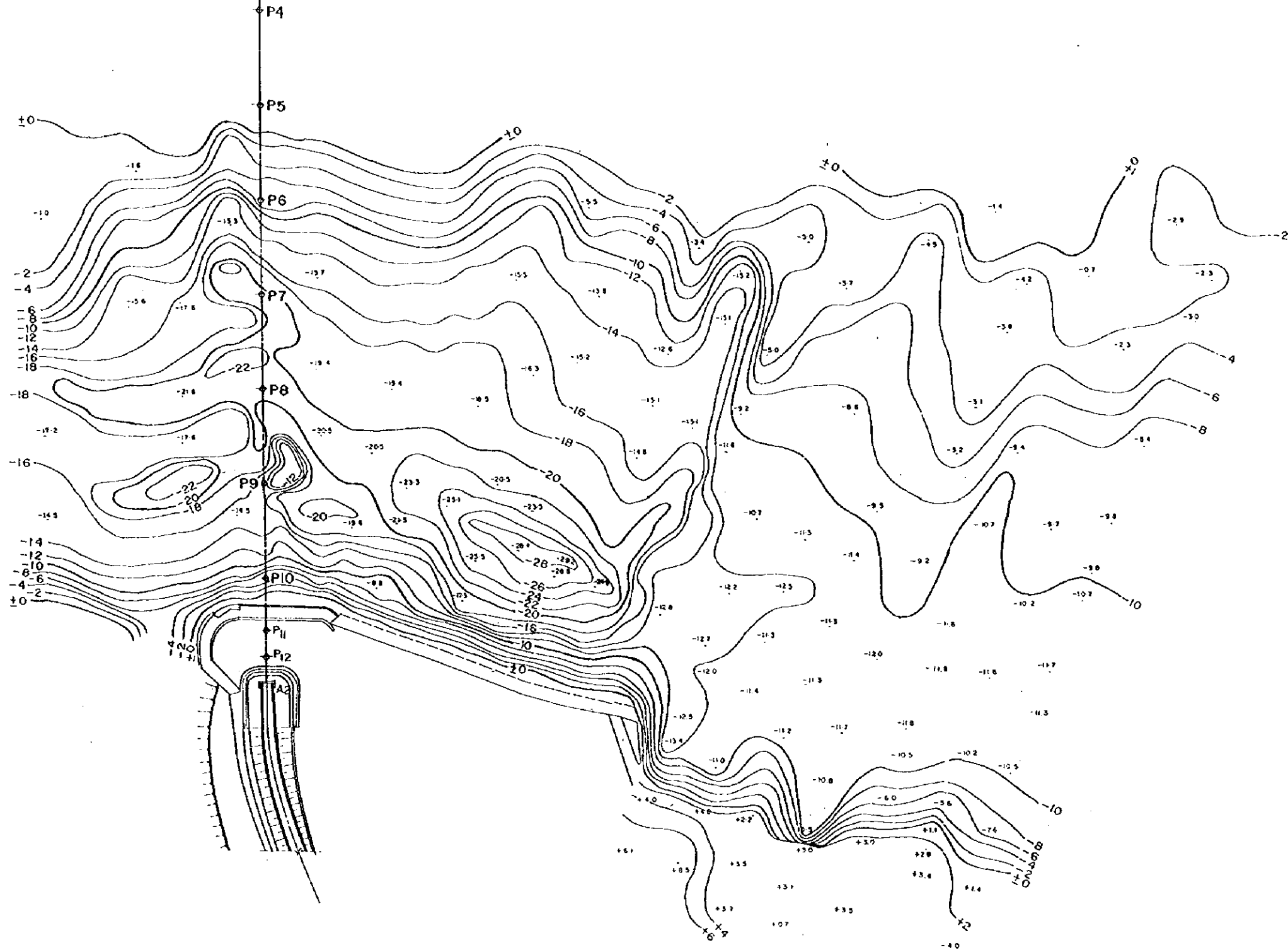
- (DI) } Location of River Cross Section
- (I) } Total 15 Lines
- (II) }

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
2	RIVER BED CONTOUR MAP
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD	

AUG. 1997

RIVER BED CONTOUR MAP AT LEFT BUND

(3) River Bed Contour Map at Left Bund



MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH
RIVER BED CONTOUR MAP AT LEFT BUND
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD

(4) Plan of Left Bund

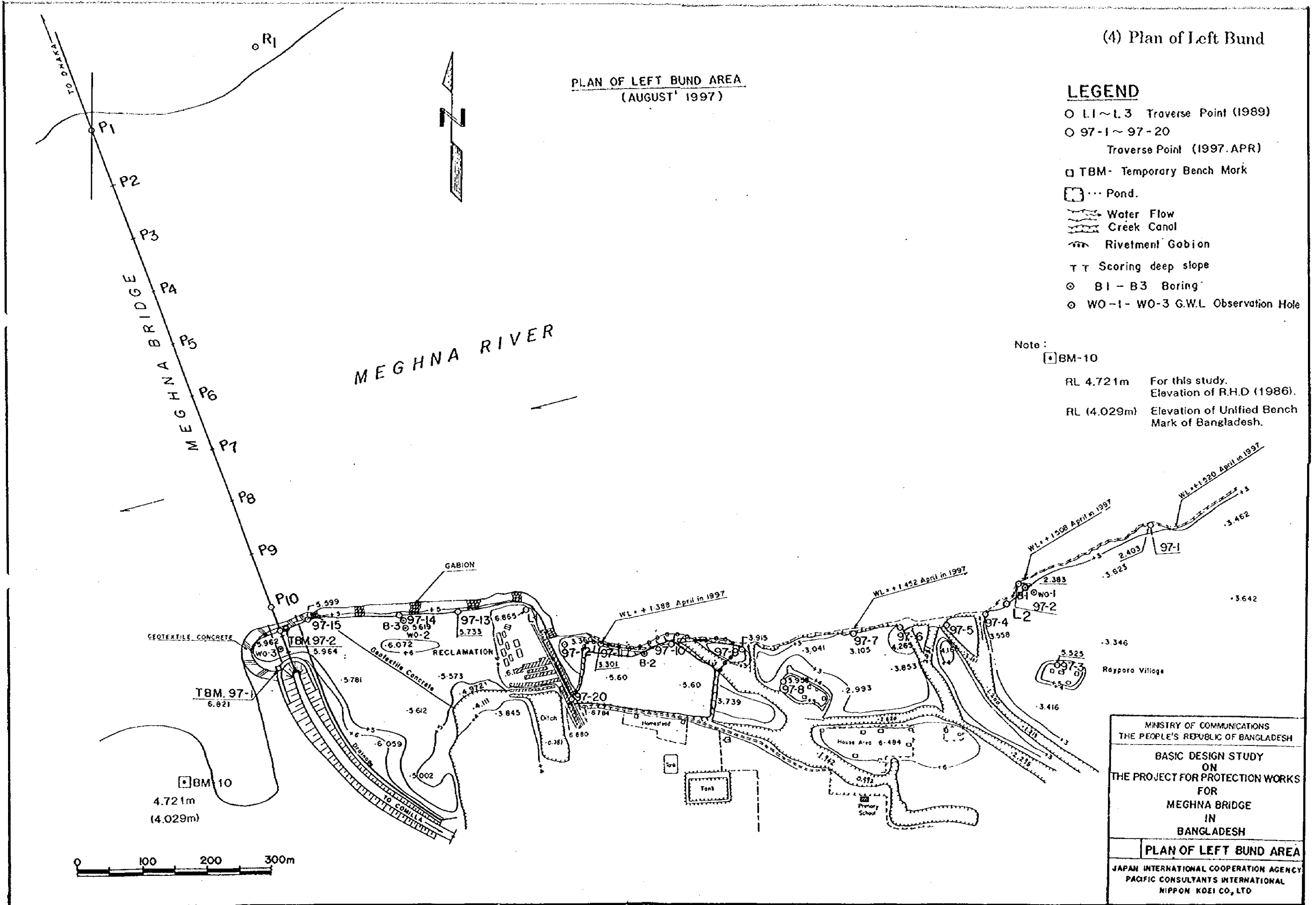
PLAN OF LEFT BUND AREA
(AUGUST 1997)

LEGEND

- L1~L3 Traverse Point (1989)
- 97-1~97-20 Traverse Point (1997.APR)
- TBM- Temporary Bench Mark
- ▭ Pond.
- Water Flow
- Creek Canal
- ⌒ Rivetment Gabion
- TT Scoring deep slope
- ⊙ B1 - B3 Boring
- ⊙ WO-1 - WO-3 G.W.L Observation Hole

Note:

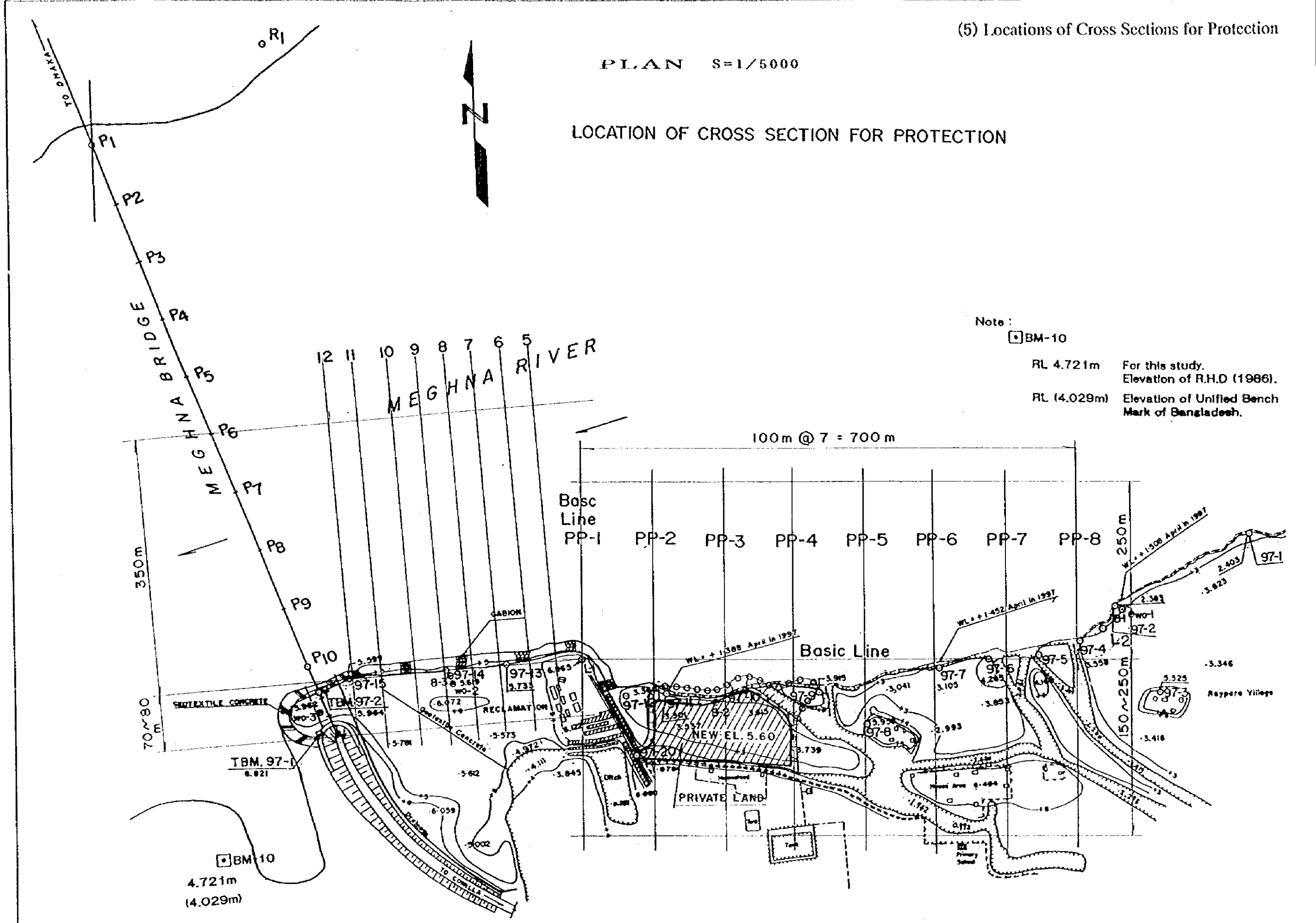
- BM-10
- RL 4.721m For this study.
- Elevation of R.H.D (1986).
- RL (4.029m) Elevation of Unified Bench Mark of Bangladesh.



(5) Locations of Cross Sections for Protection

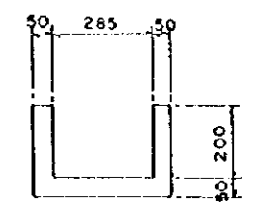
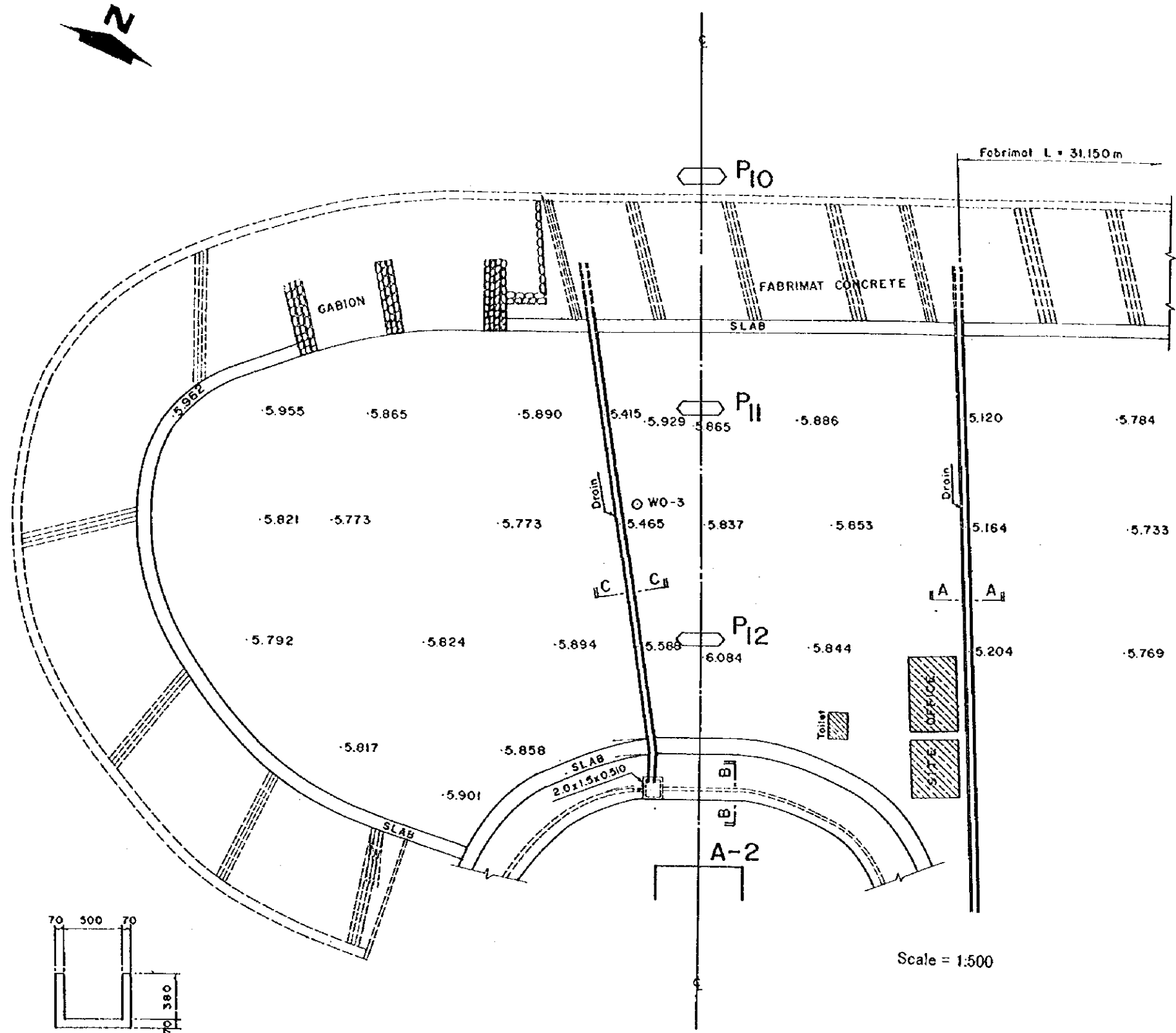
PLAN S=1/5000

LOCATION OF CROSS SECTION FOR PROTECTION

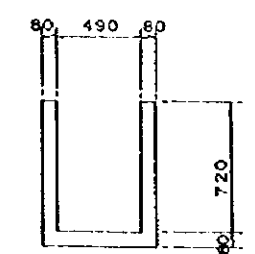


Note :
 □ BM-10
 RL 4.721m For this study.
 Elevation of R.H.D (1986).
 RL (4.029m) Elevation of Unified Bench
 Mark of Bangladesh.

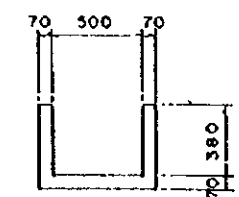
□ BM 10
 4.721m
 (4.029m)



SEC. B - B
Scale = 1:20



SEC. A - A
Scale = 1:40



SEC. C - C
Scale = 1:40

Scale = 1:500

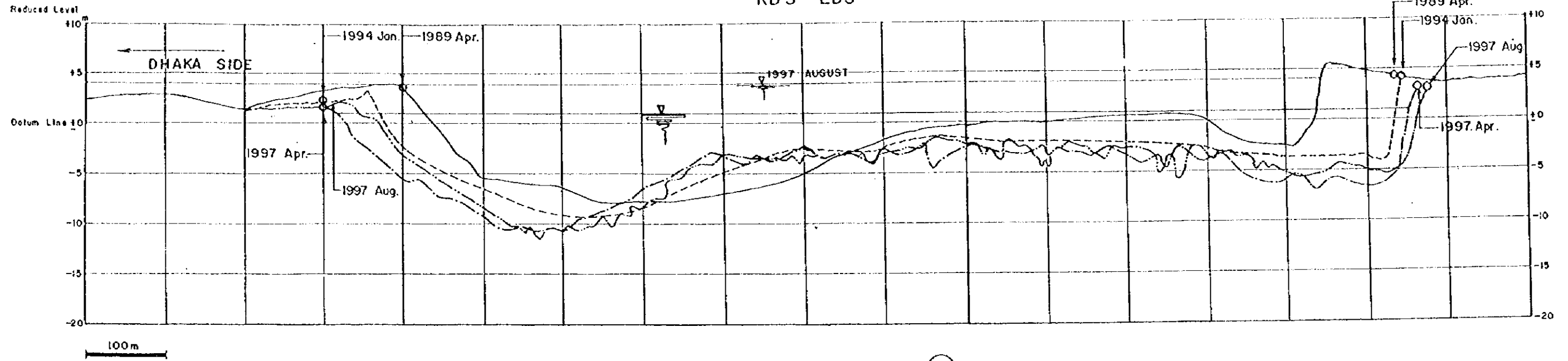
MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH
PLAN OF NEAR BRIDGE
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD

横断面

CROSS SECTION OF RIVER (1/8)

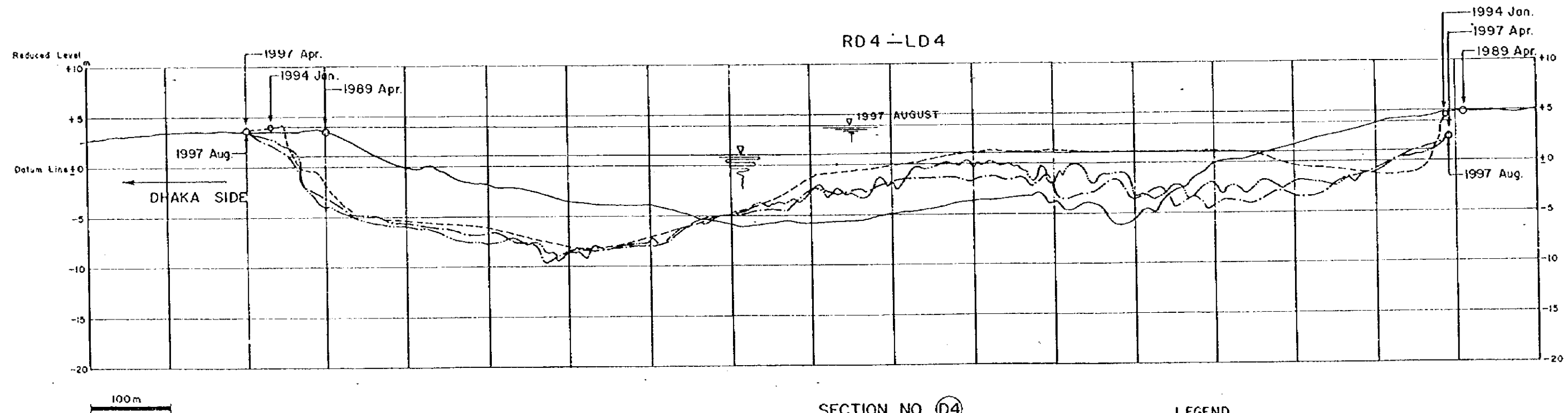
(1) Cross Sections of the River

RD 3-LD3



SECTION NO. (D3)

RD 4-LD 4



SECTION NO. (D4)

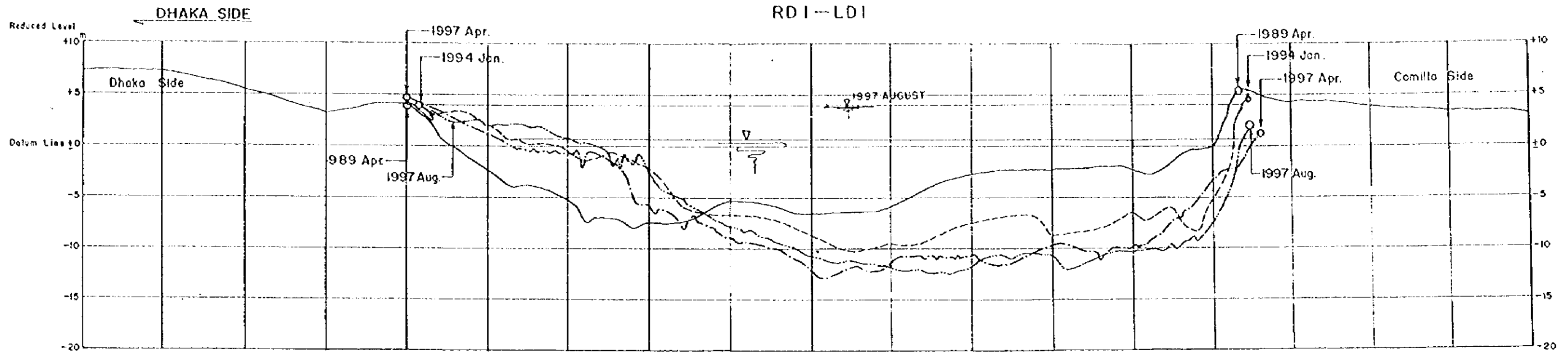
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HOR. 1:5000' m

LEGEND

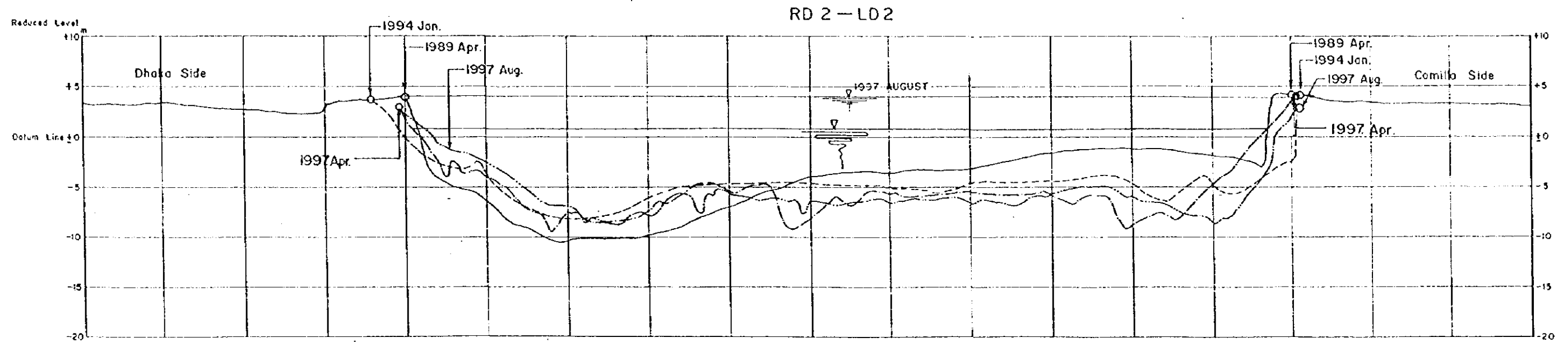
- April, 1989
- - - January, 1994
- · - · April, 1997
- · - · August, 1997

AUG. 1997.

CROSS SECTION OF RIVER (2/8)



SECTION NO. (D1)



SECTION NO. (D2)

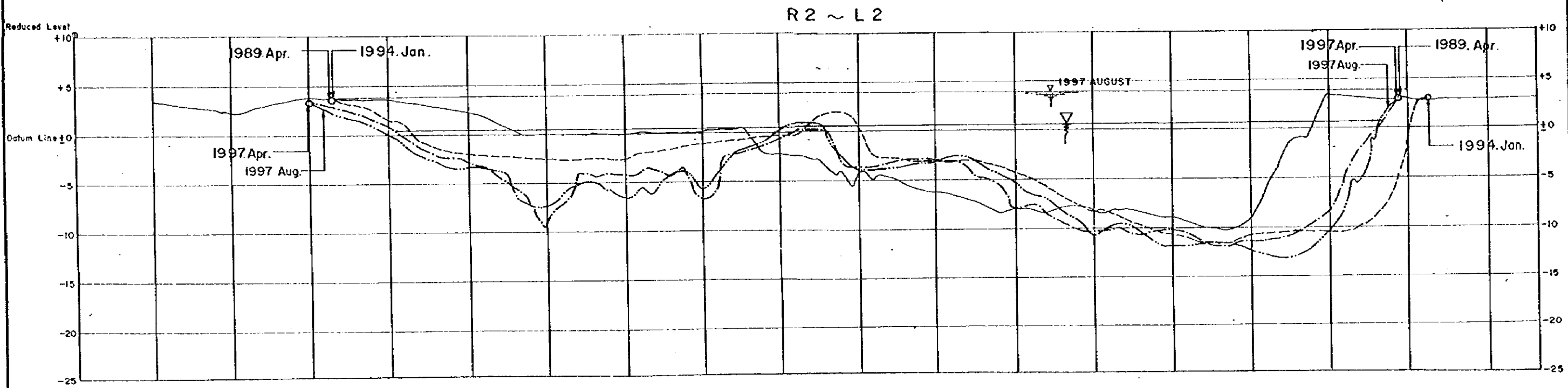
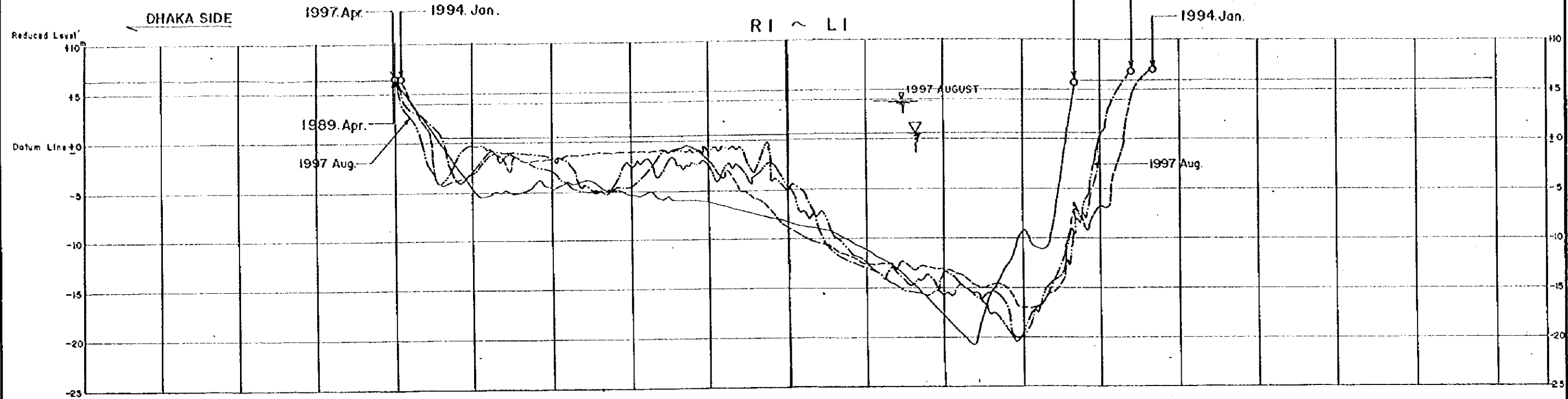
SCALE: $\frac{\text{VER. 1:400}}{\text{HOR. 1:5000}}$ m

LEGEND

- April, 1989
- - - January, 1994
- · · April, 1997
- · - August, 1997

AUG. 1997

CROSS SECTION OF RIVER (3/8)



SECTION NO. (2)

SCALE $\frac{\text{VER. 1:400}}{\text{HOR. 1:5000}}$ m

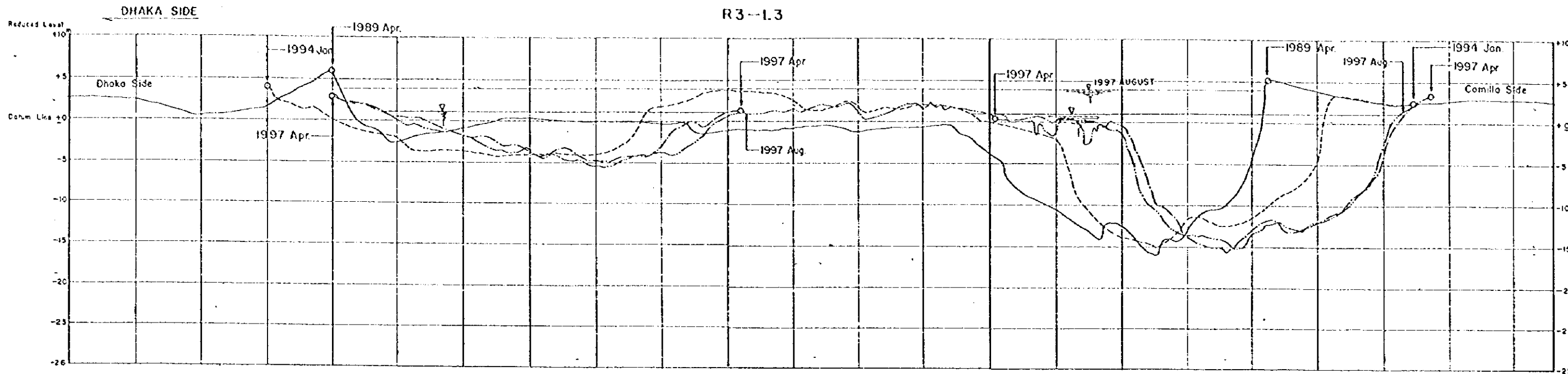
LEGEND

- APR, 1989
- - - JAN, 1994
- · · APR, 1997
- · - · - AUG, 1997

AUG. 1997

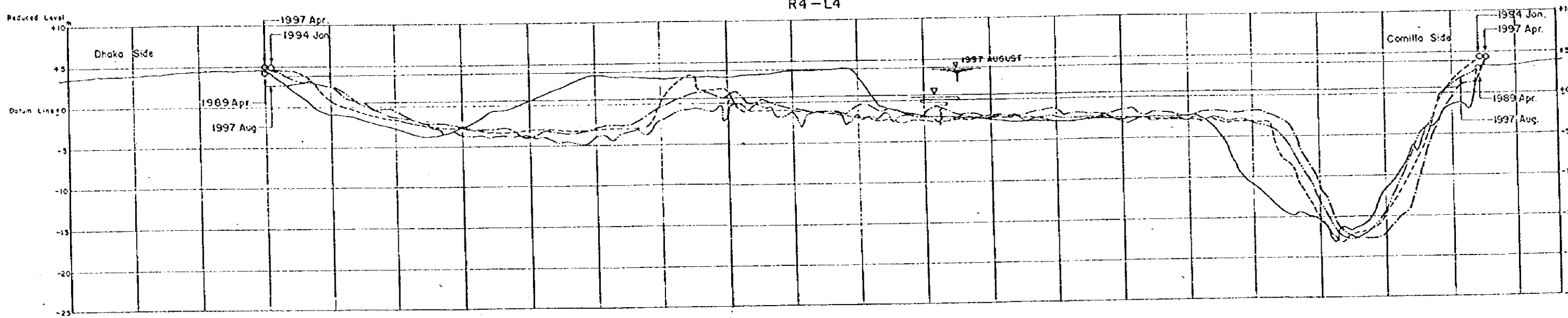
CROSS SECTION OF RIVER (4/8)

R3--L3



SECTION NO. (3)

R4-L4



SECTION NO. (4)

SCALE: VER 1:500
HOR 1:6000

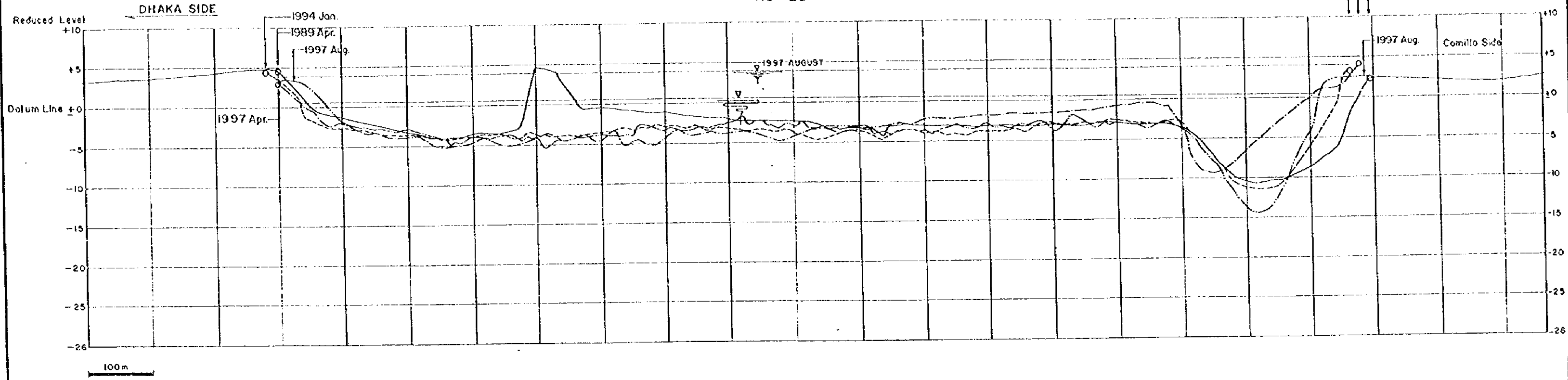
LEGEND

- April, 1989
- - - January, 1994
- · - April, 1997
- · - August, 1997

AUG. 1997

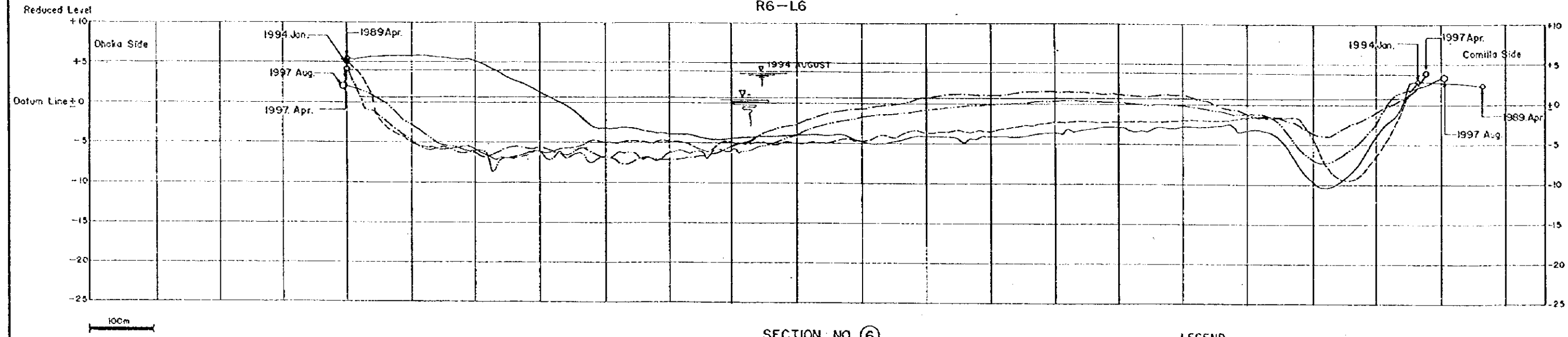
CROSS SECTION OF RIVER (5/8)

R5-L5



SECTION NO. ⑤

R6-L6



SECTION NO. ⑥

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HOR. 1:6000 m

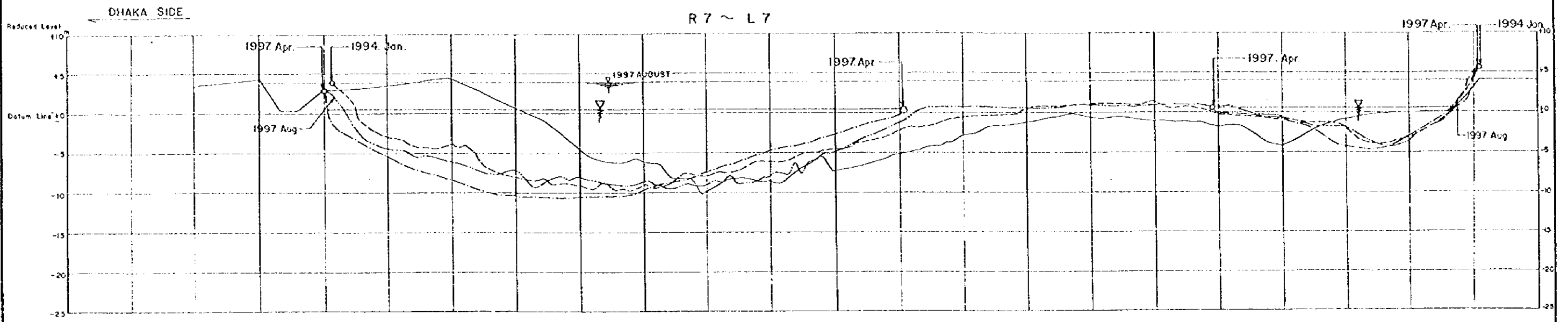
LEGEND

- April, 1989
- - - January, 1994
- April, 1997
- August, 1997

AUG. 1997.

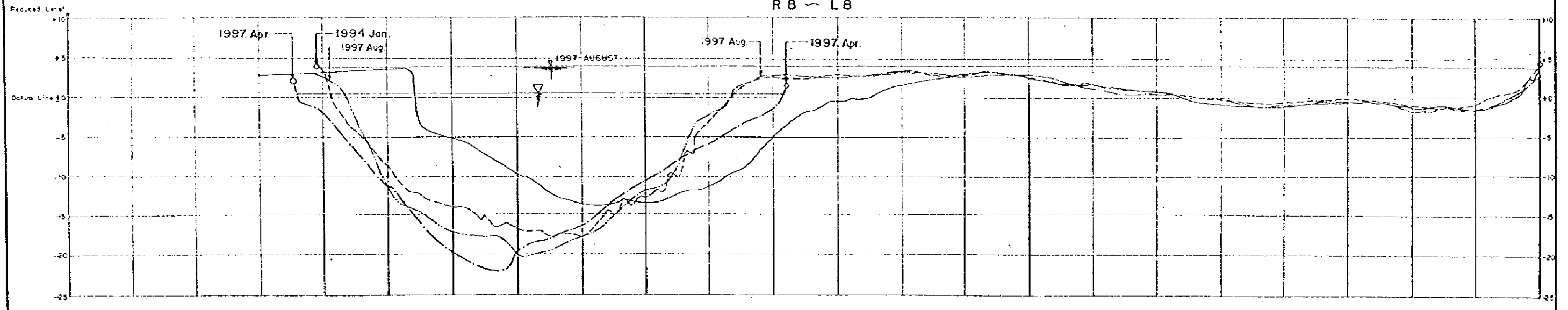
CROSS SECTION OF RIVER (6/8)

R 7 ~ L 7



SECTION NO. ⑦

R 8 ~ L 8



SECTION NO. ⑧

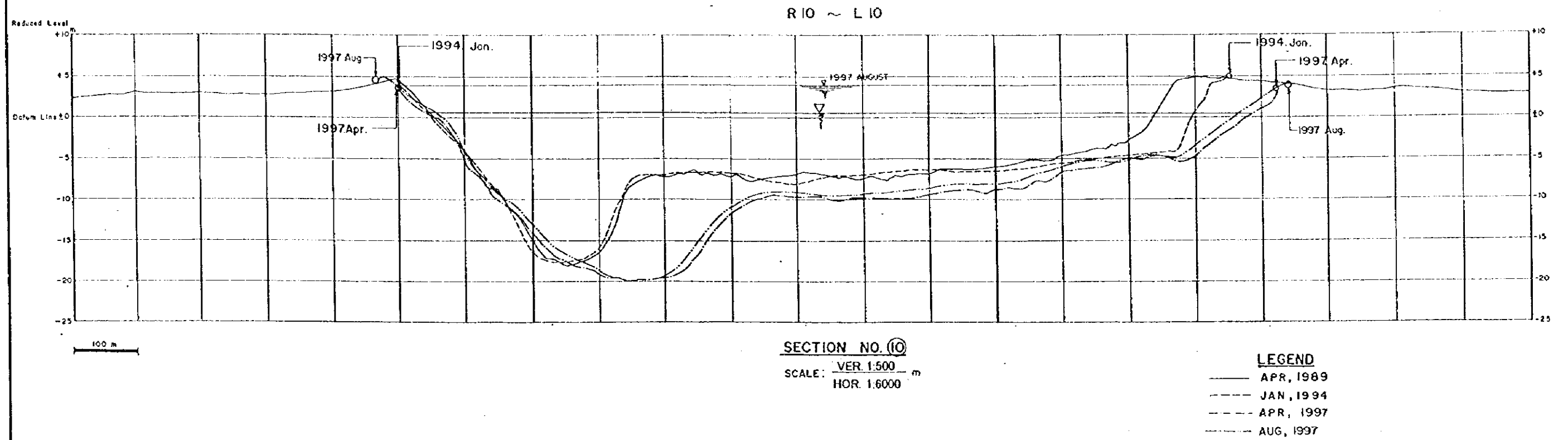
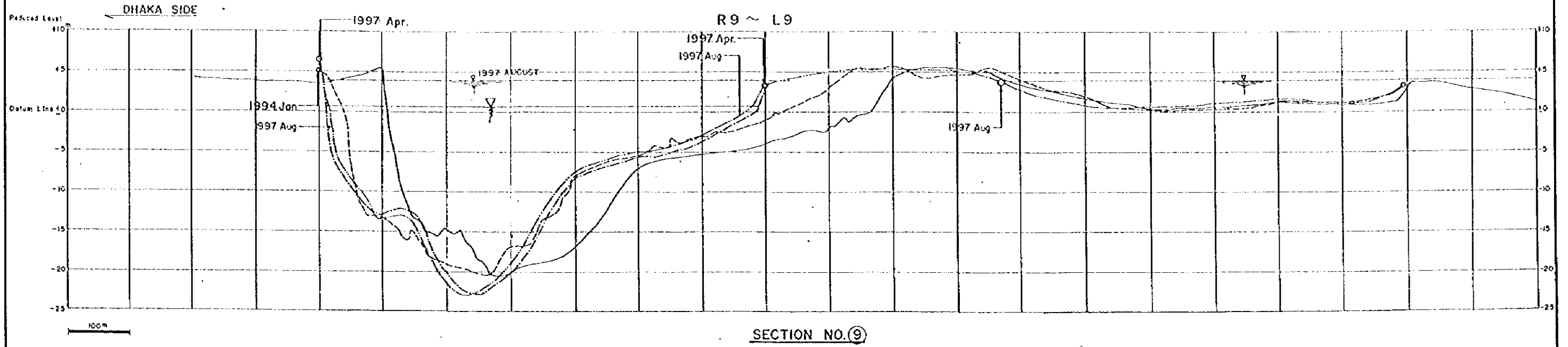
SCALE: VER. 1:500
HOR. 1:6000

LEGEND

- APR, 1989
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- · · APR, 1997
- · - AUG, 1997

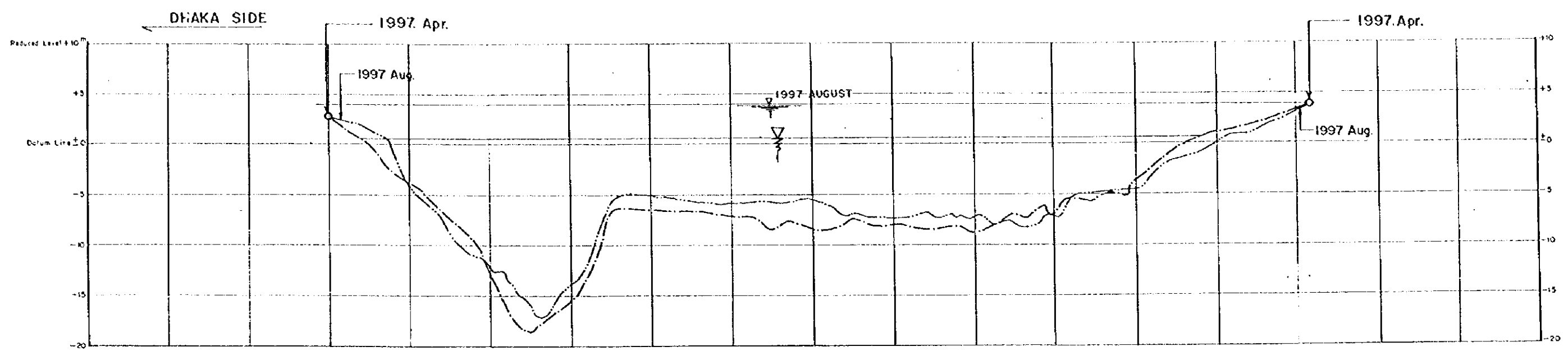
AUG, 1997.

CROSS SECTION OF RIVER (7/8)



AUG. 1997.

CROSS SECTION OF RIVER (8 / 8)



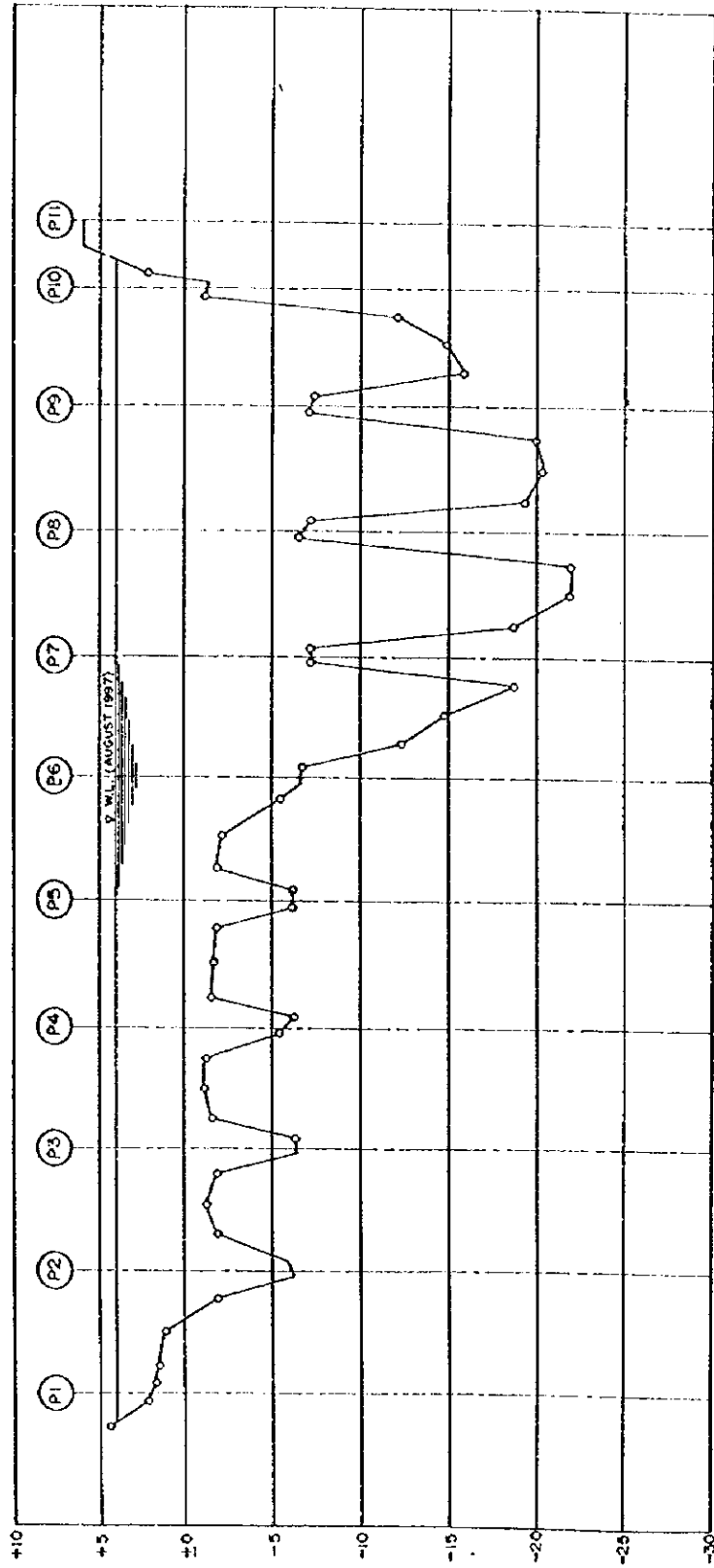
100m

SECTION NO. (II)
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HOR. 1:5000 m

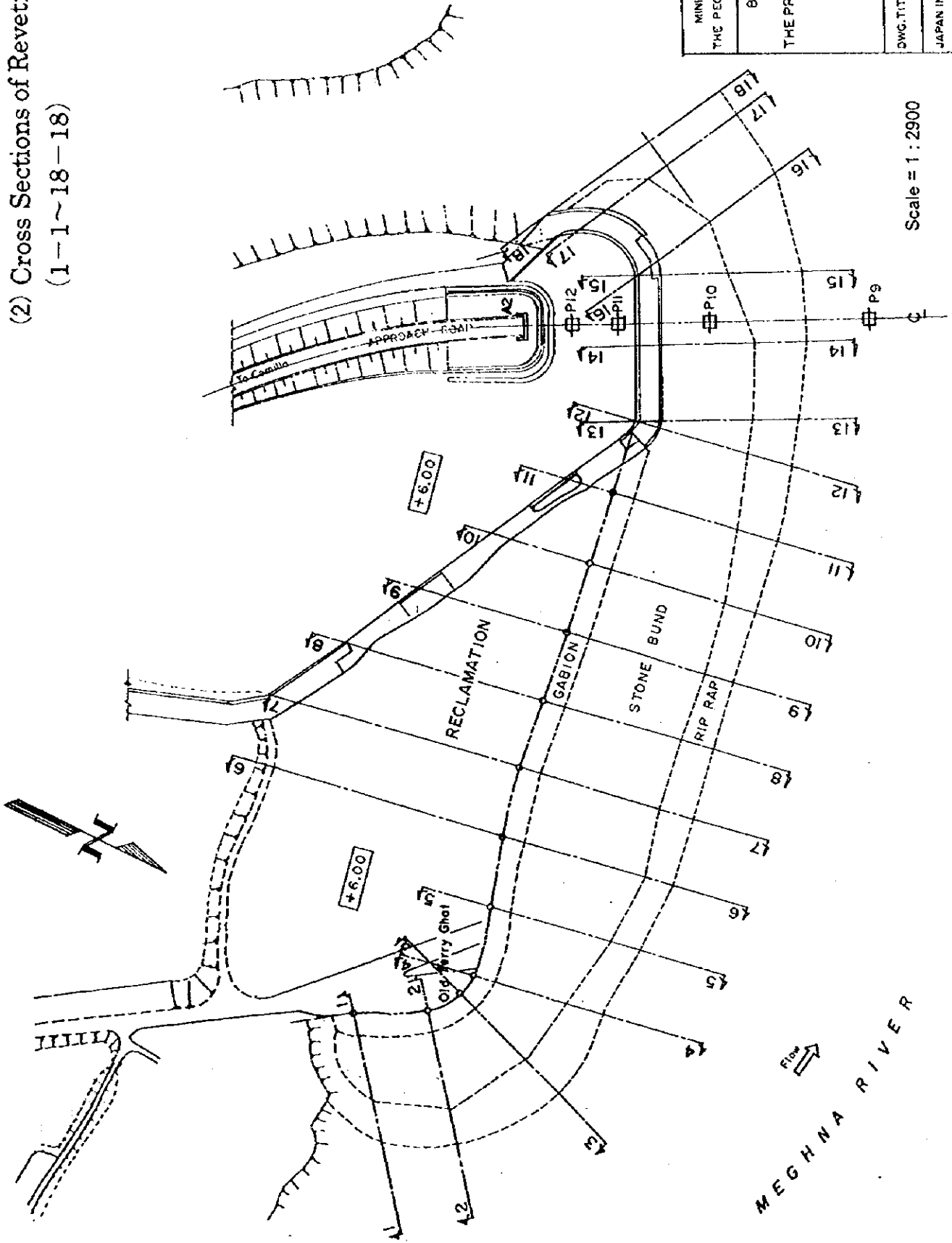
LEGEND
— April, 1997
- - - August, 1997

ADDITIONAL CROSS SECTION OF BRIDGE CENTER

VER. 1:400
SCALE: HOR. 1:5000

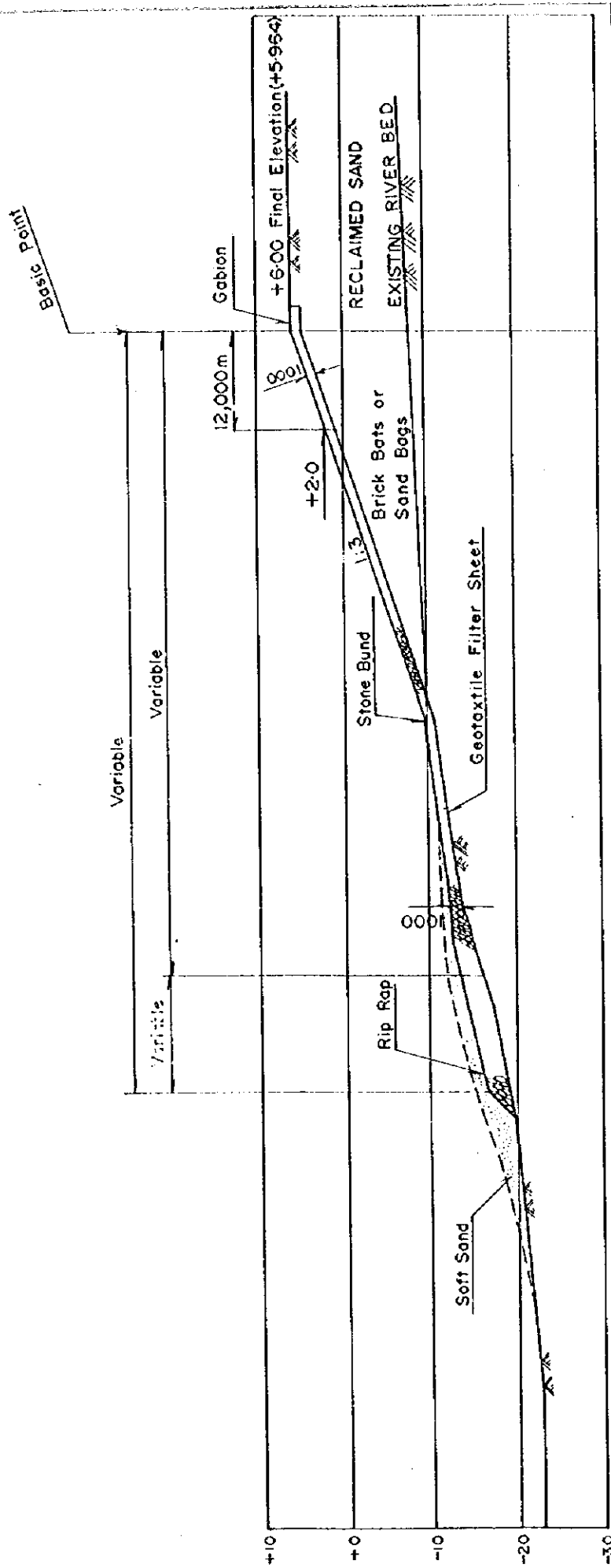


(2) Cross Sections of Revetment
(1-1~18-18)



MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. PLAN OF REVETMENT
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOGI CO. LTD.	

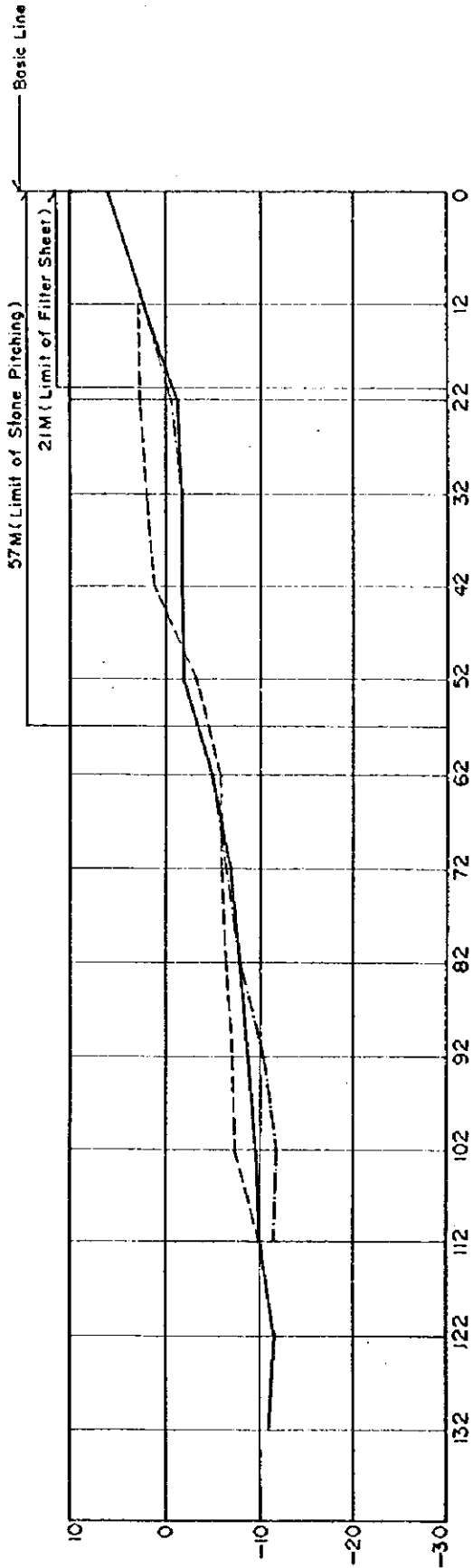
TYPICAL CROSS SECTION OF REVETMENT



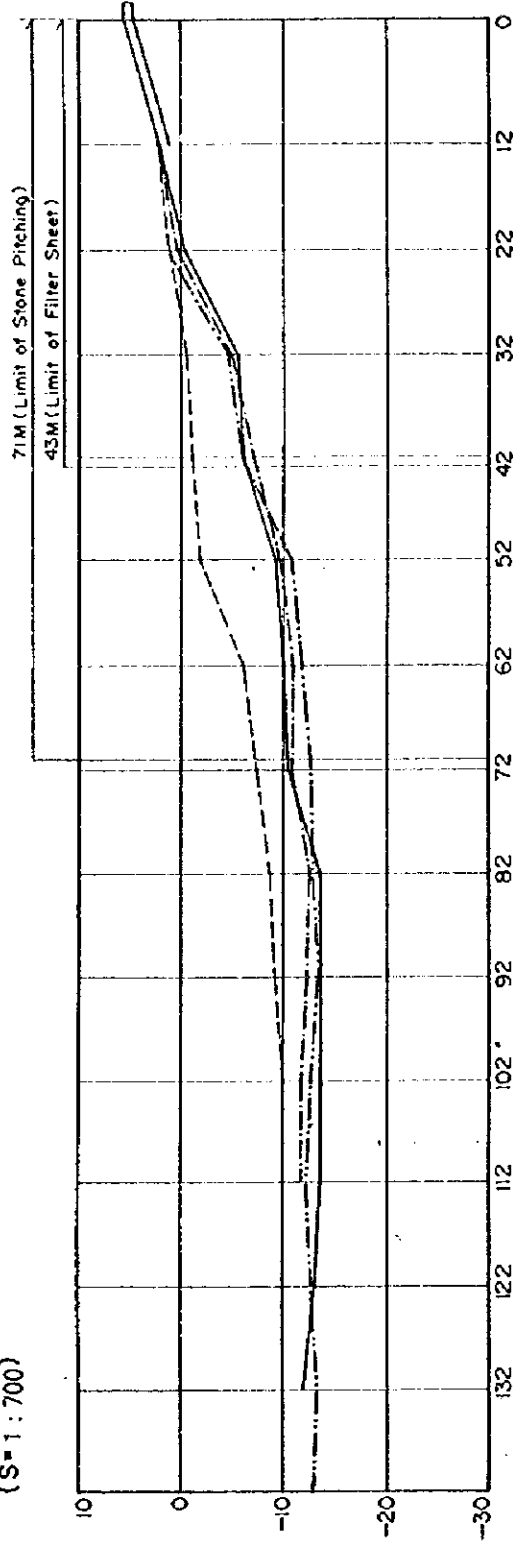
MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. SECTION OF REVETMENT
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEL CO. LTD.	

CROSS SECTION OF PROTECTION

SECTION 0-0
(S=1:700)



SECTION 1-1
(S=1:700)

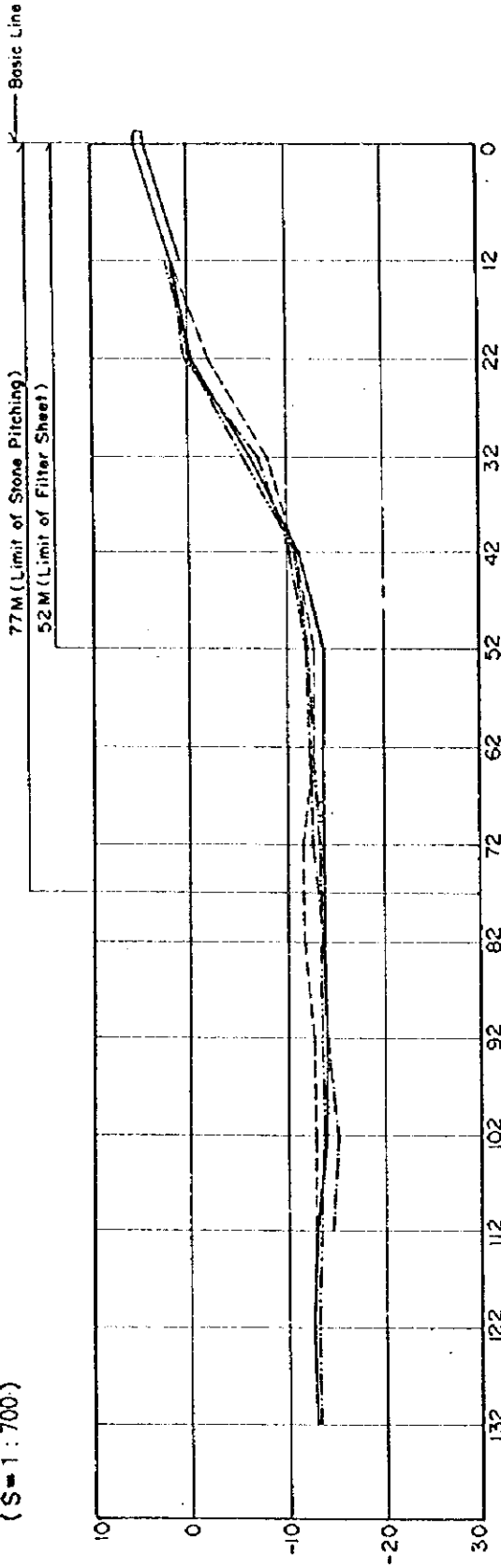


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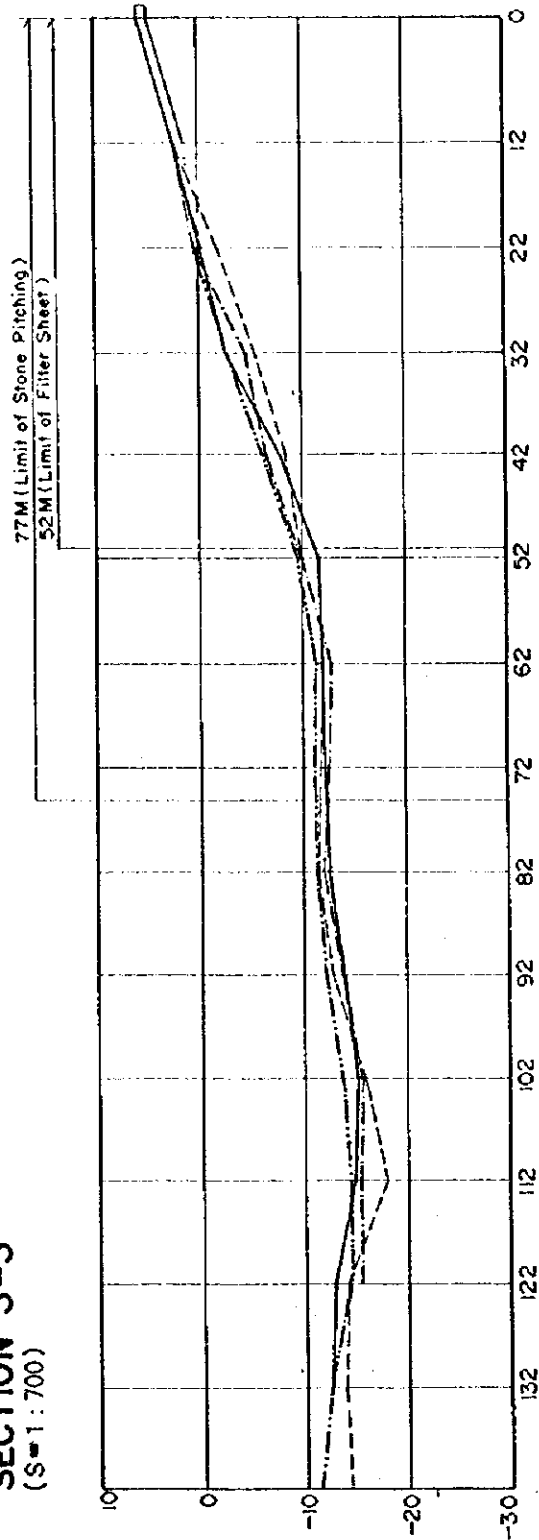
- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION /10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD.	

SECTION 2-2
(S=1:700)



SECTION 3-3
(S=1:700)

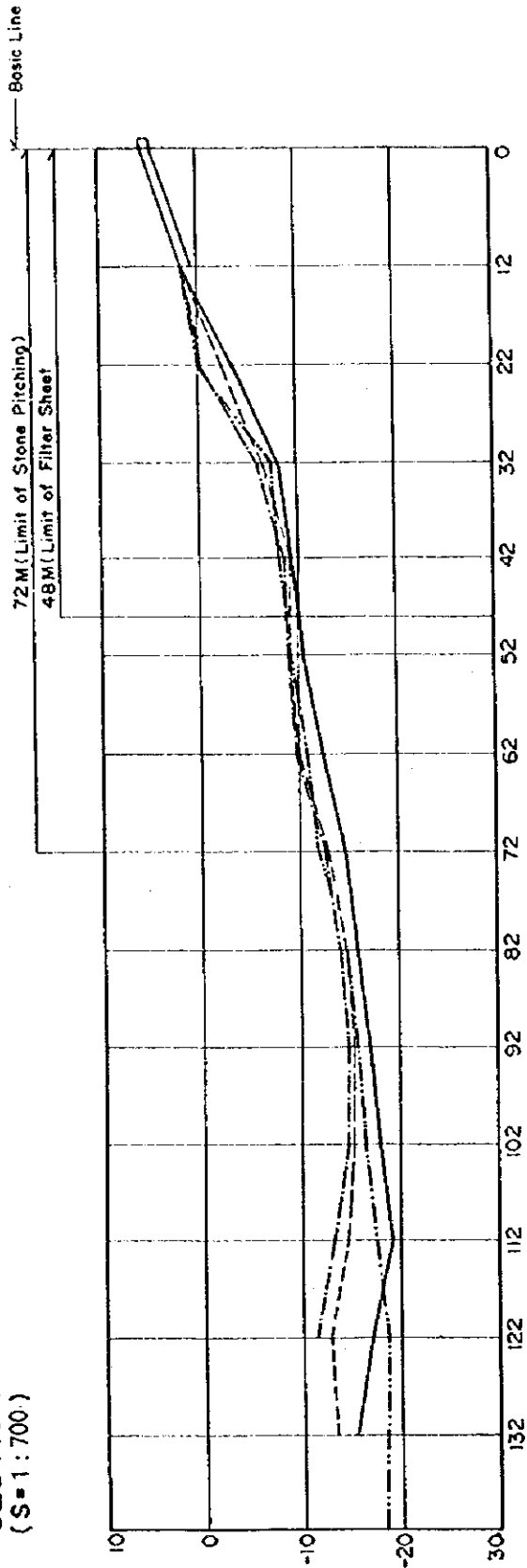


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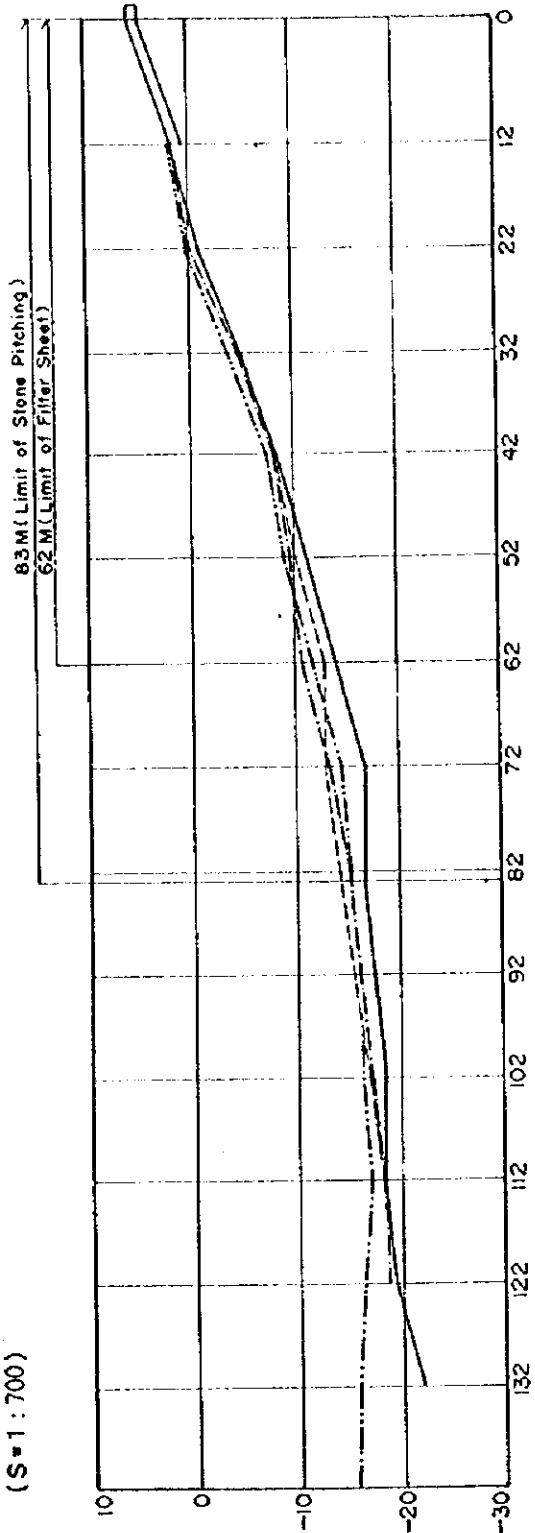
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- · - Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. / CROSS SECTION OF PROTECTION 2 / 10-
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD.	

SECTION 4-4
(S=1:700)



SECTION 5-5
(S=1:700)



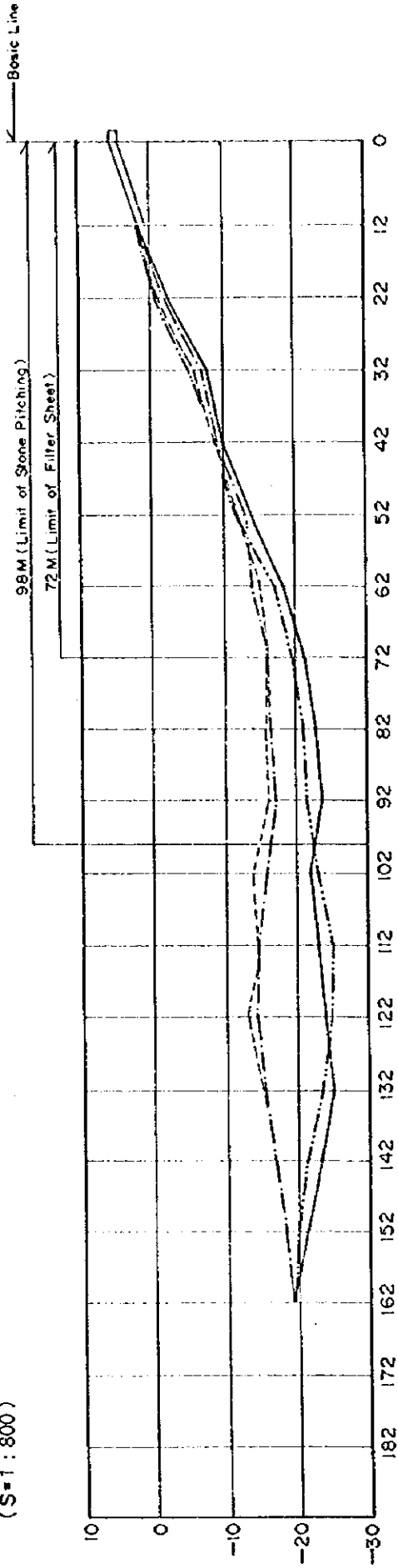
LEGEND

- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	TRIG. NO. CROSS SECTION OF PROTECTION 3/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

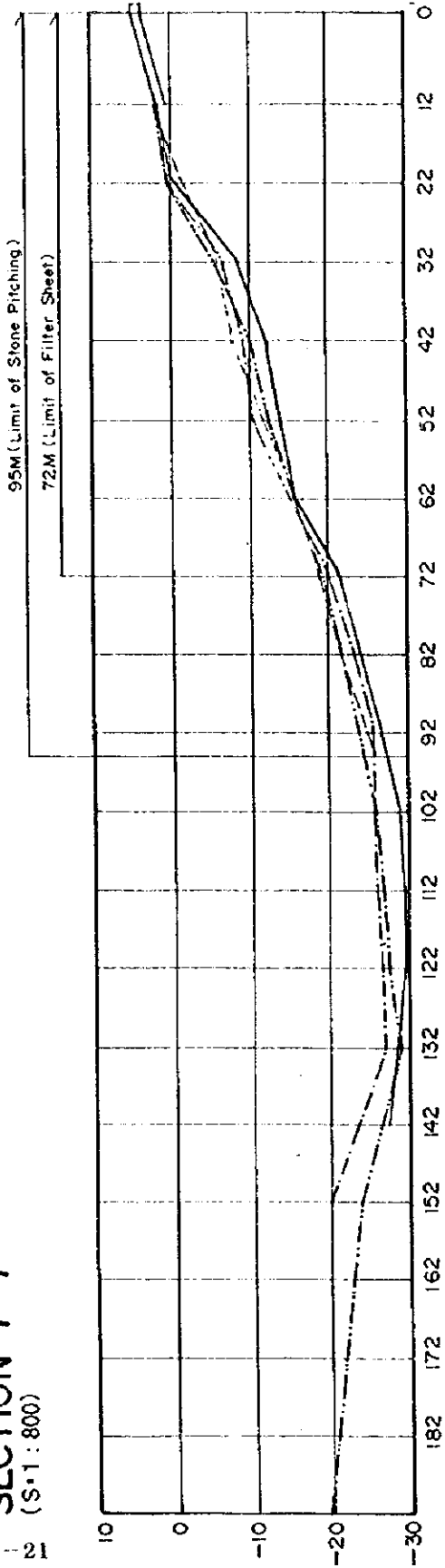
SECTION 6-6

(S=1:800)



SECTION 7-7

(S=1:800)

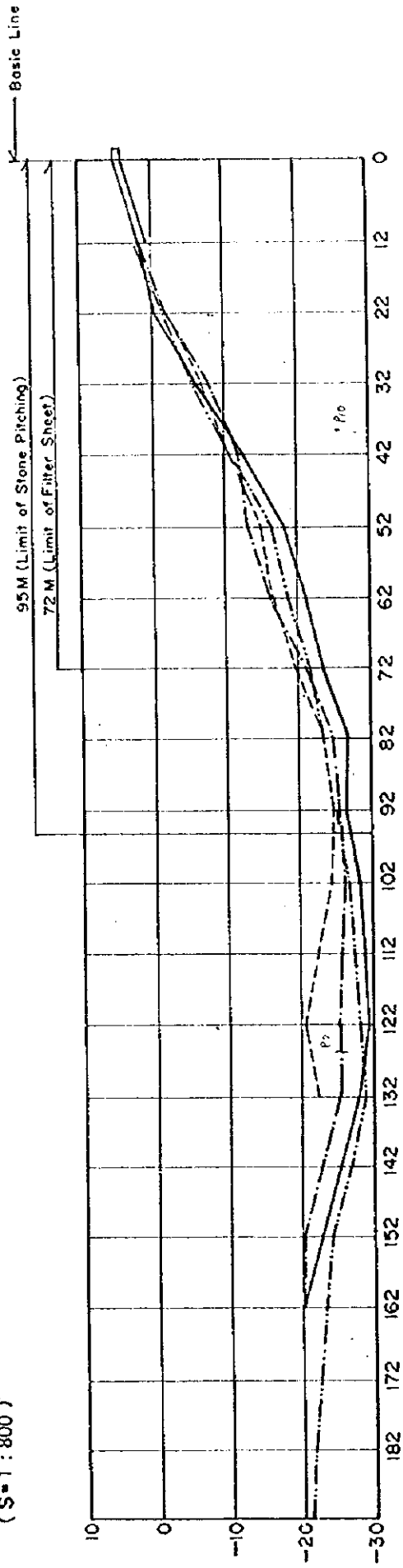


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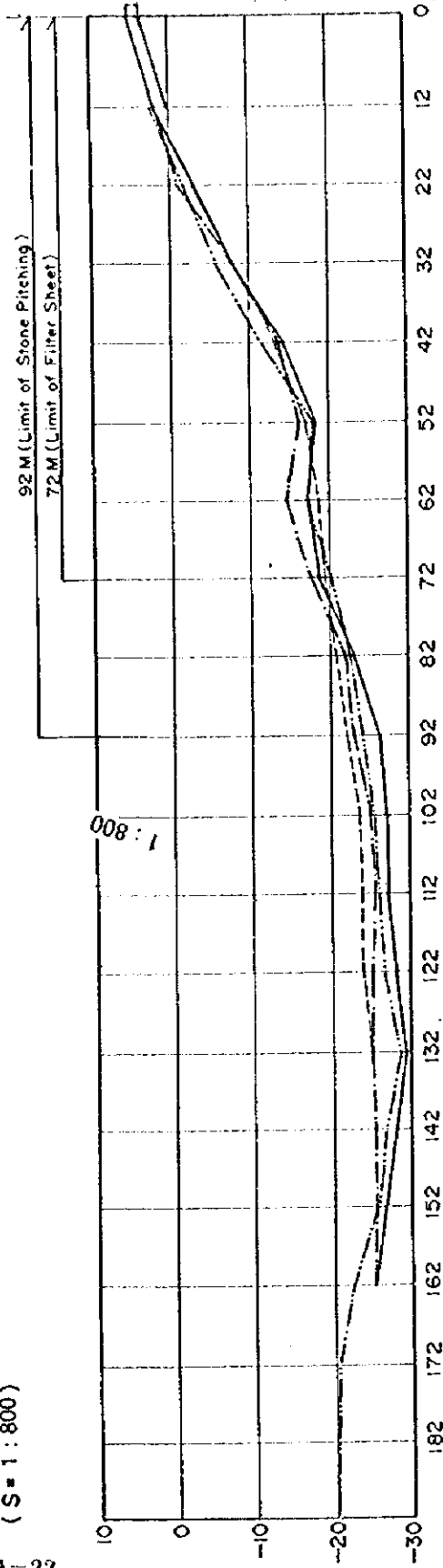
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- - - Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	CROSS SECTION OF PROTECTION 4/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOGI CO., LTD.	

SECTION 8-8
(S=1:800)



SECTION 9-9
(S=1:800)



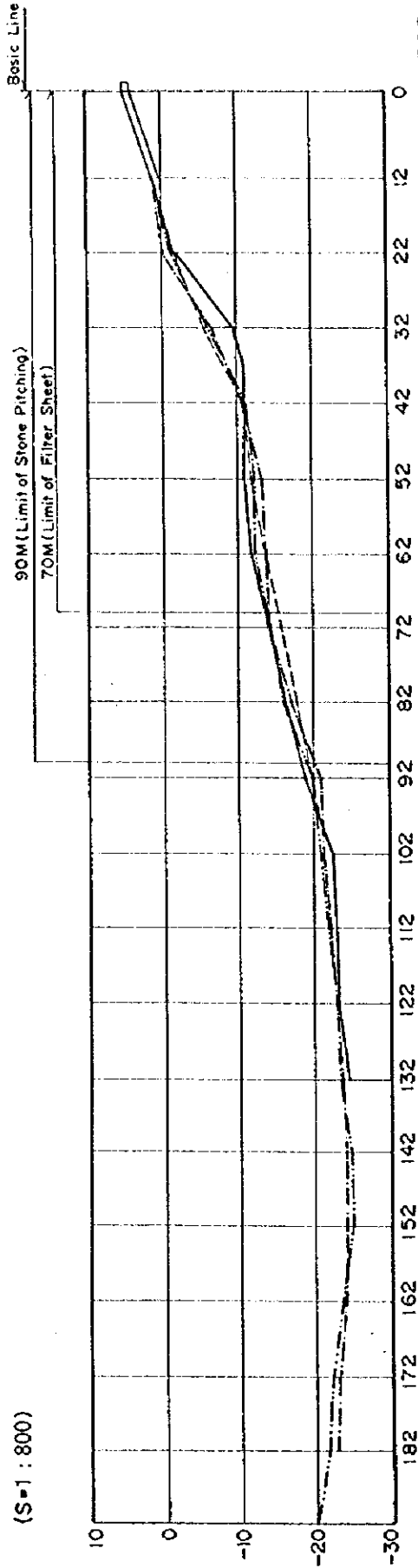
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- Level on Oct. 17, 1994
- Level on Nov. 22, 1995
- Level on Apr. 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
FIG. NO.	CROSS SECTION OF PROTECTION WALL
JAPAN INTERNATIONAL COOPERATION PACIFIC CONSULTANTS (JICA) NIPPON KOEI CO., LTD.	

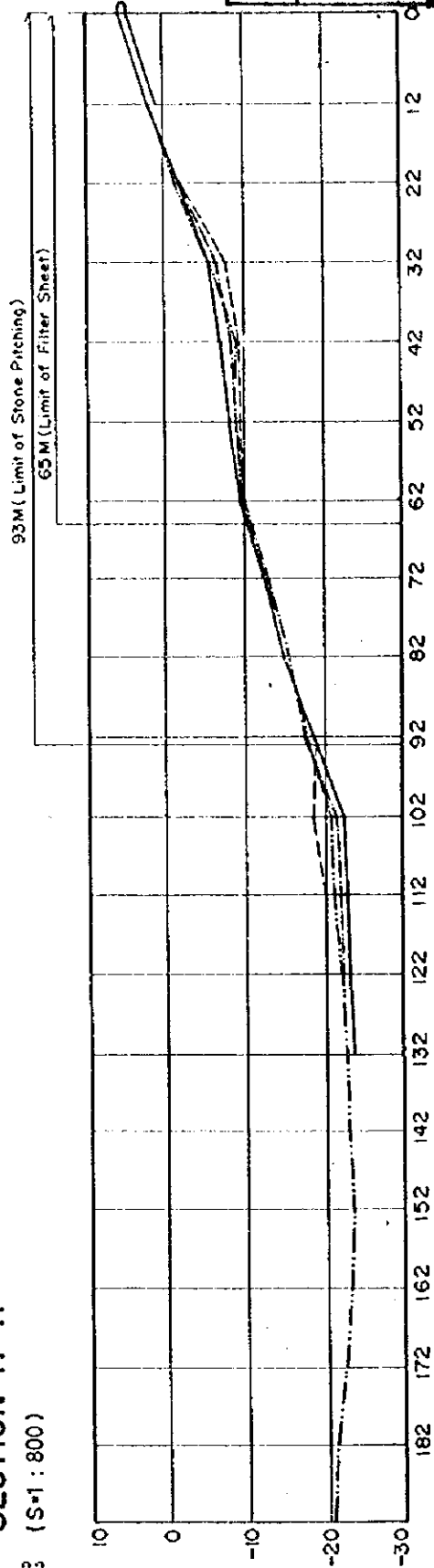
SECTION 10-10

(S=1 : 800)



SECTION 11-11

(S=1 : 800)

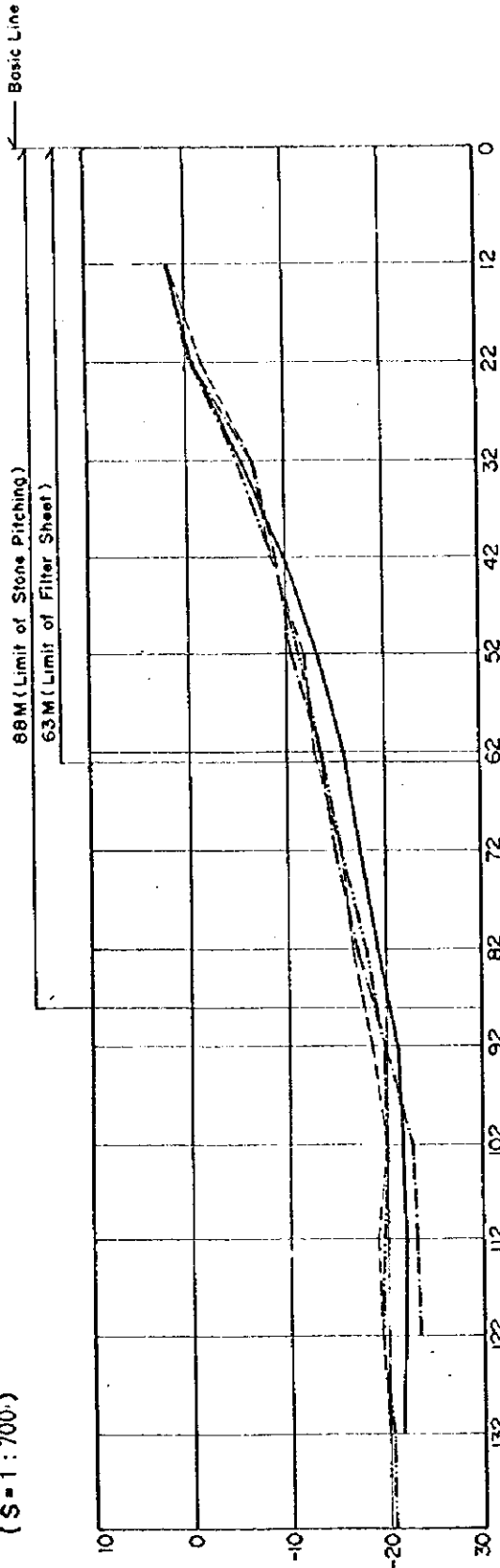


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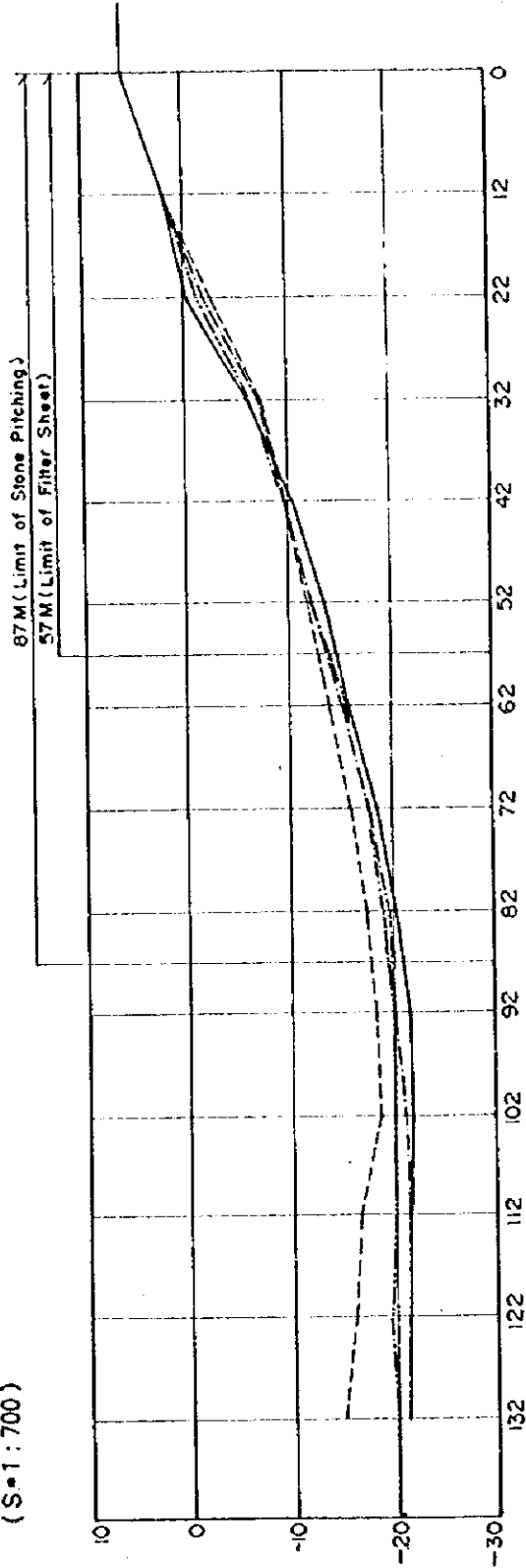
- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORK FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO.
	REVISED BY
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOGI CO., LTD.	

SECTION 12-12
(S=1:700)



SECTION 13-13
(S=1:700)

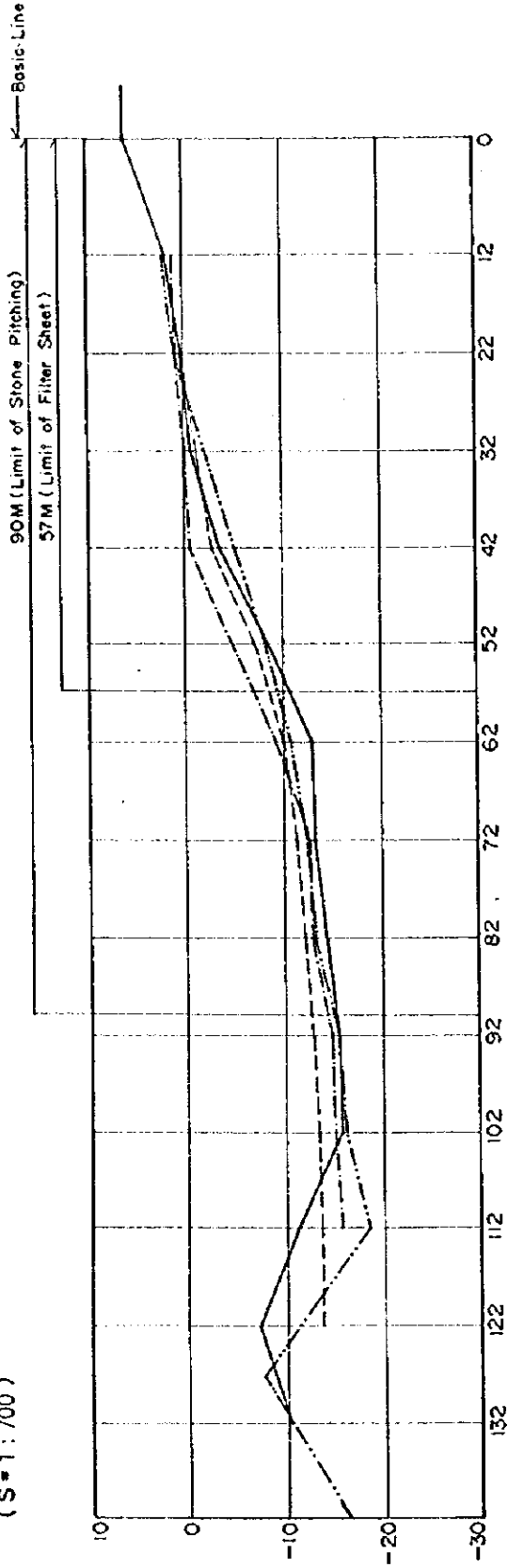


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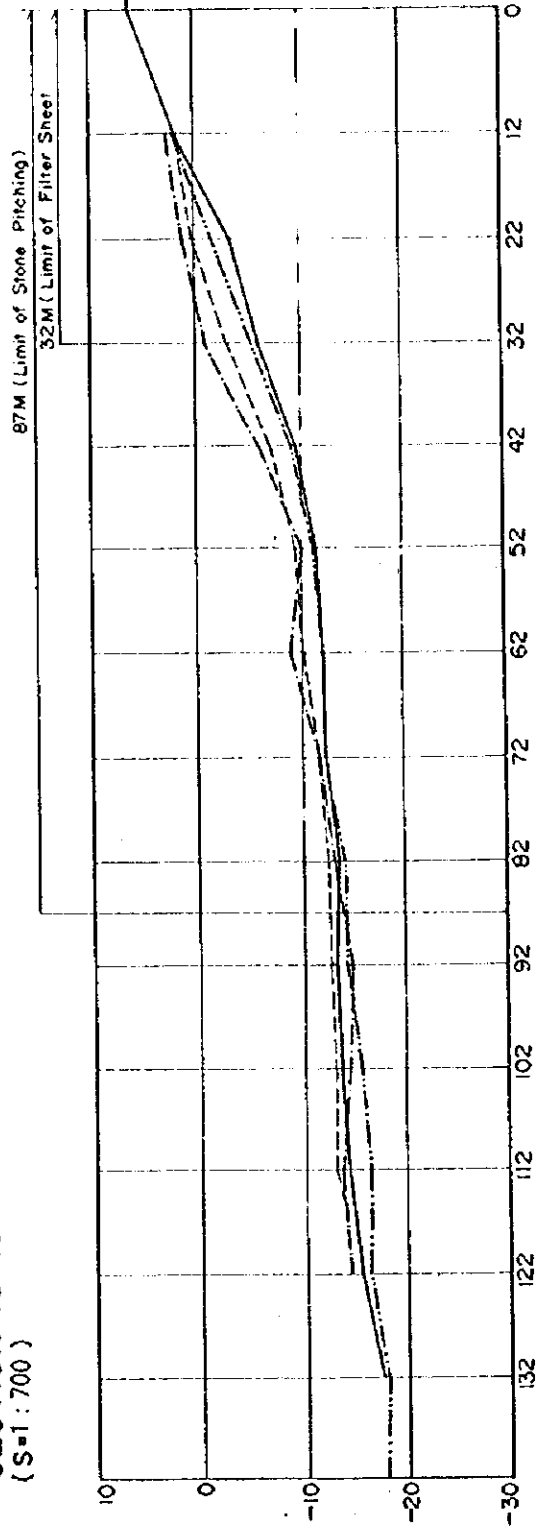
- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION 70
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL, NIPPON KOGI CO., LTD.	

SECTION 14-14
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SECTION 15-15
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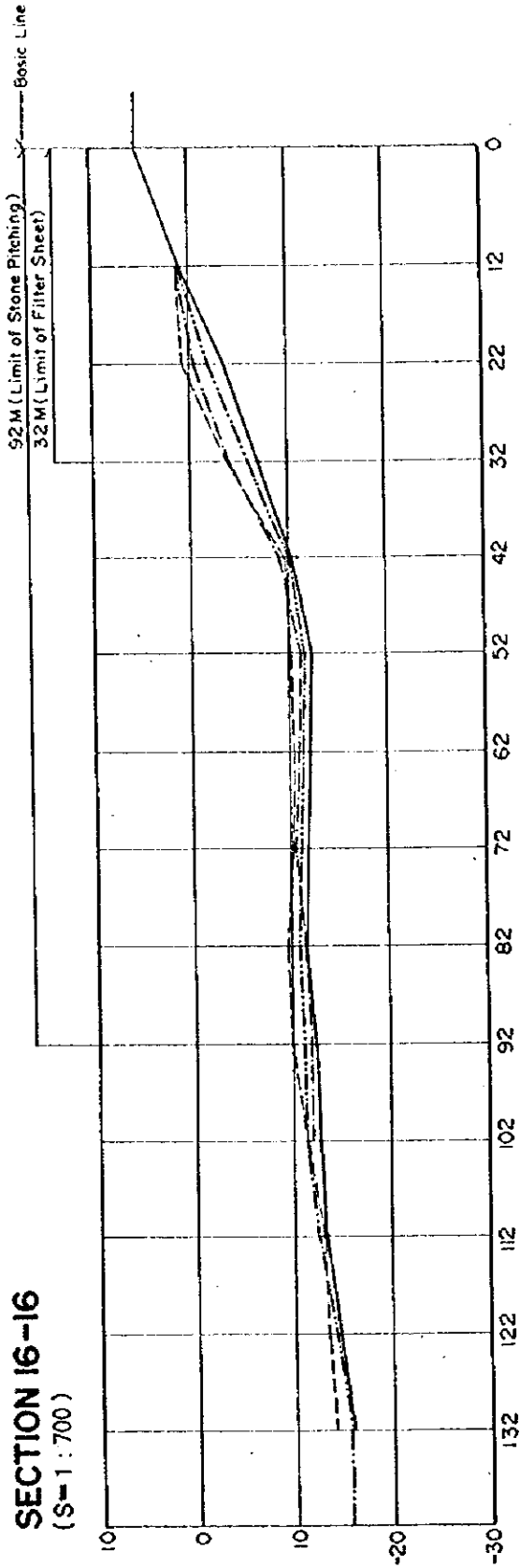


LEGEND

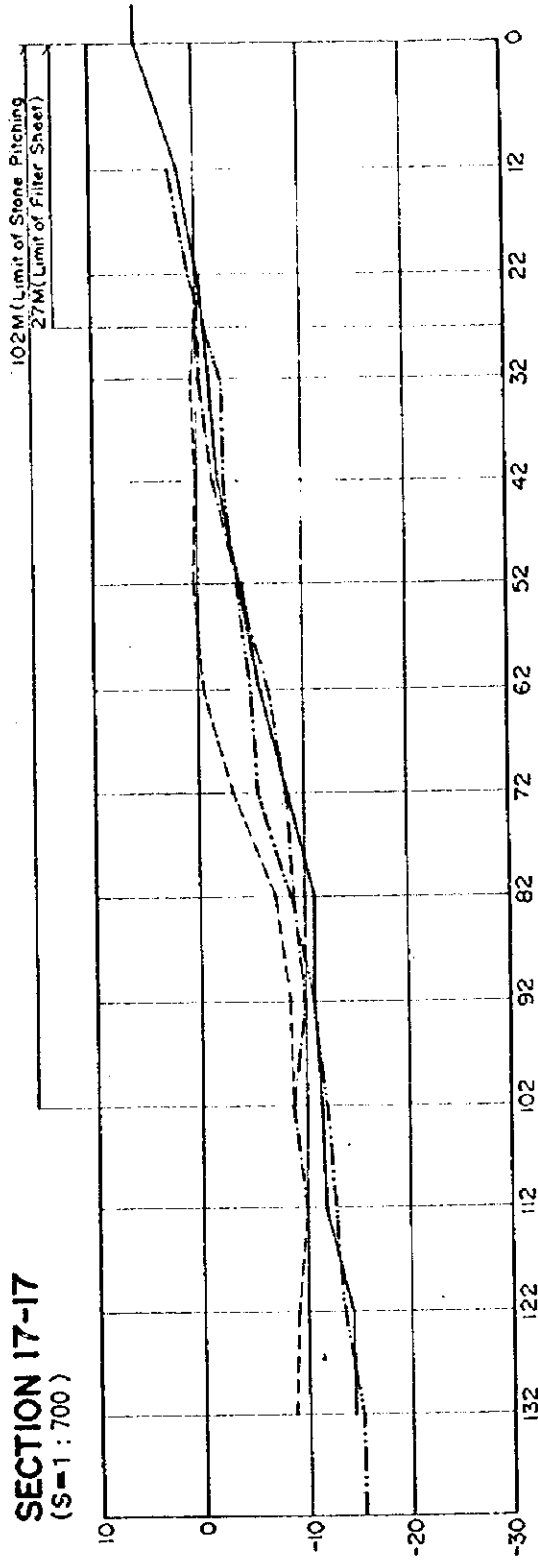
- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. (CROSS SECTION OF PROTECTION 8/10)
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOKAI CO., LTD.	

SECTION 16-16
(S=1:700)



SECTION 17-17
(S=1:700)

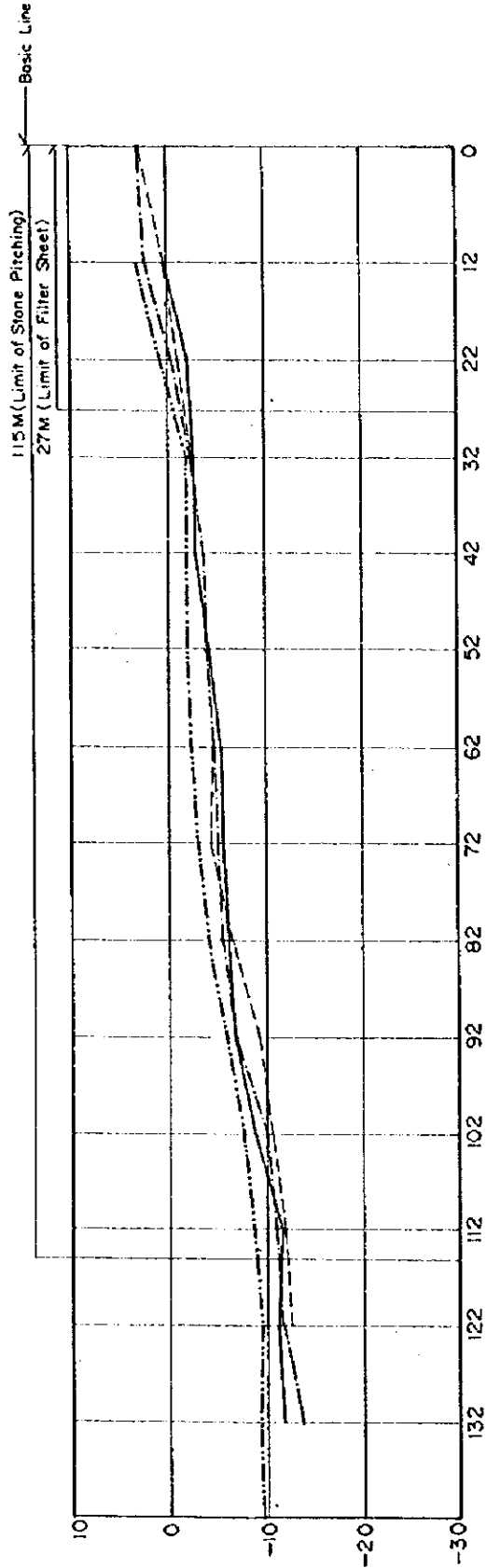


LEGEND

- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997
- Level on August 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
OWG TITLE	FIG. NO. CROSS SECTION OF PROTECTION 9/0
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 18-18
(S=1:700)



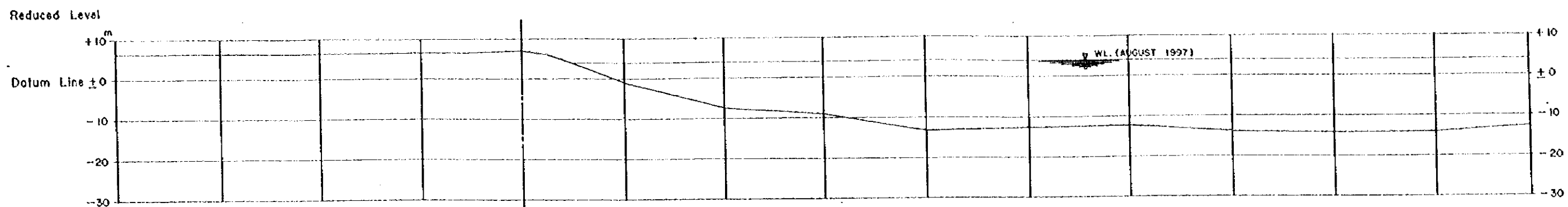
LEGEND

- - - - - Level on October 17, 1994
- · - · - Level on November 22, 1995
- Level on April 1997
- · · · · Level on August 1997

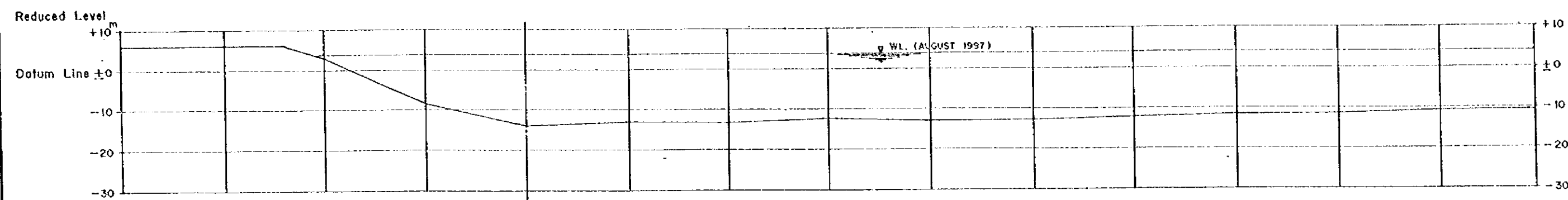
MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION 10/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO., LTD.	

CROSS SECTION OF PLANNING PROTECTION (1/2)

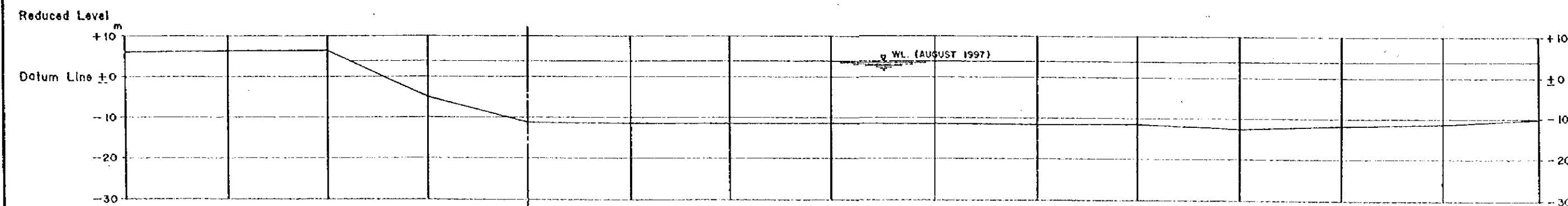
(3) Cross Sections of Protection Planning (PP-1~PP-8)



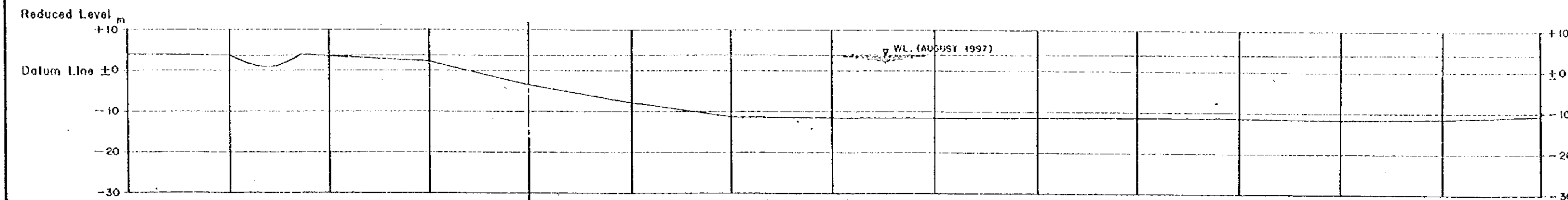
SECTION NO. PP-1



SECTION NO. PP-2



SECTION NO. PP-3



SECTION NO. PP-4

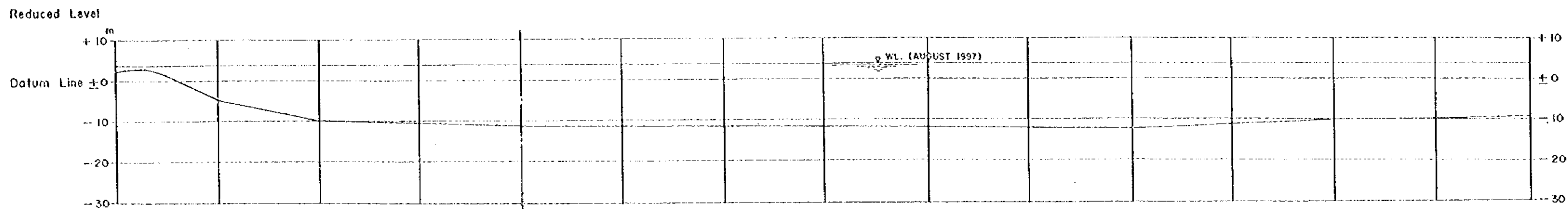
25m

Basic line

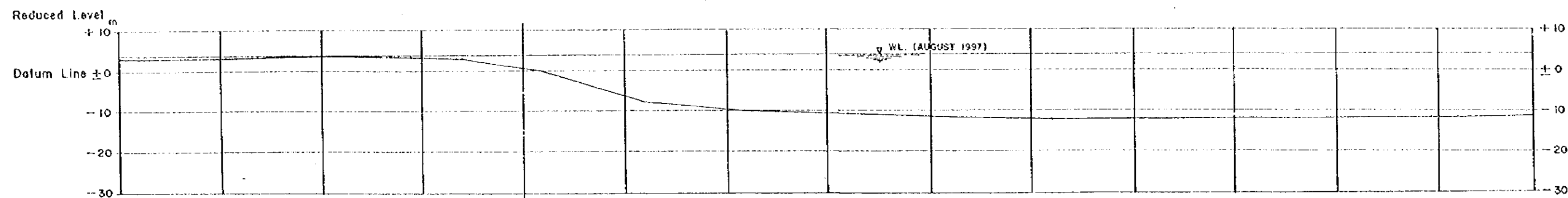
SCALE: VER. 1:1000 m
HOR. 1:1000

AUGUST 1997

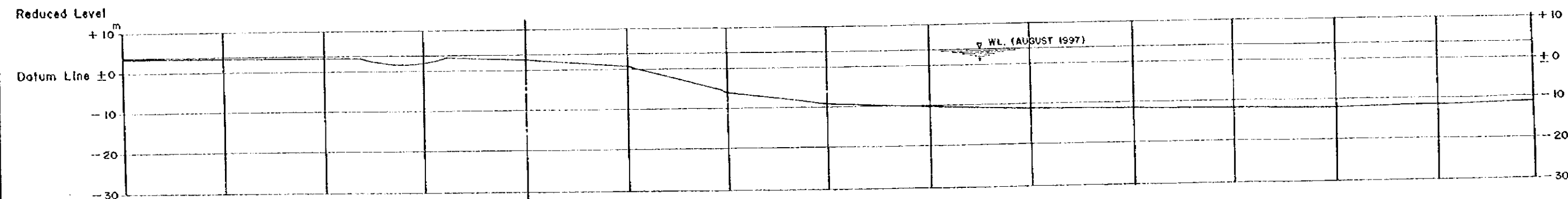
CROSS SECTION OF PLANNING PROTECTION (2/2)



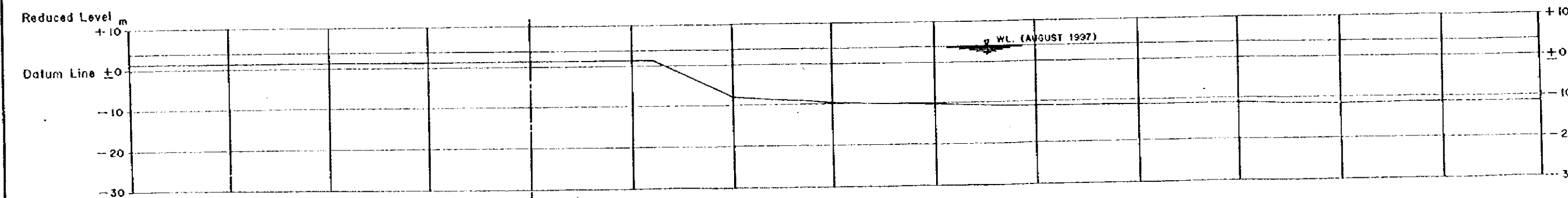
SECTION NO. PP-5



SECTION NO. PP-6



SECTION NO. PP-7



SECTION NO. PP-8

25m

Basic line

SCALE: VER. 1:1000' m
HOR. 1:1000

AUGUST 1997

2. 地質・土質調査結果

(1) メグナ橋 F/S 調査および詳細設計時の資料

(2) ボーリング柱状図

(3) 河床材料の粒度分布試験結果

(2) 土質調査

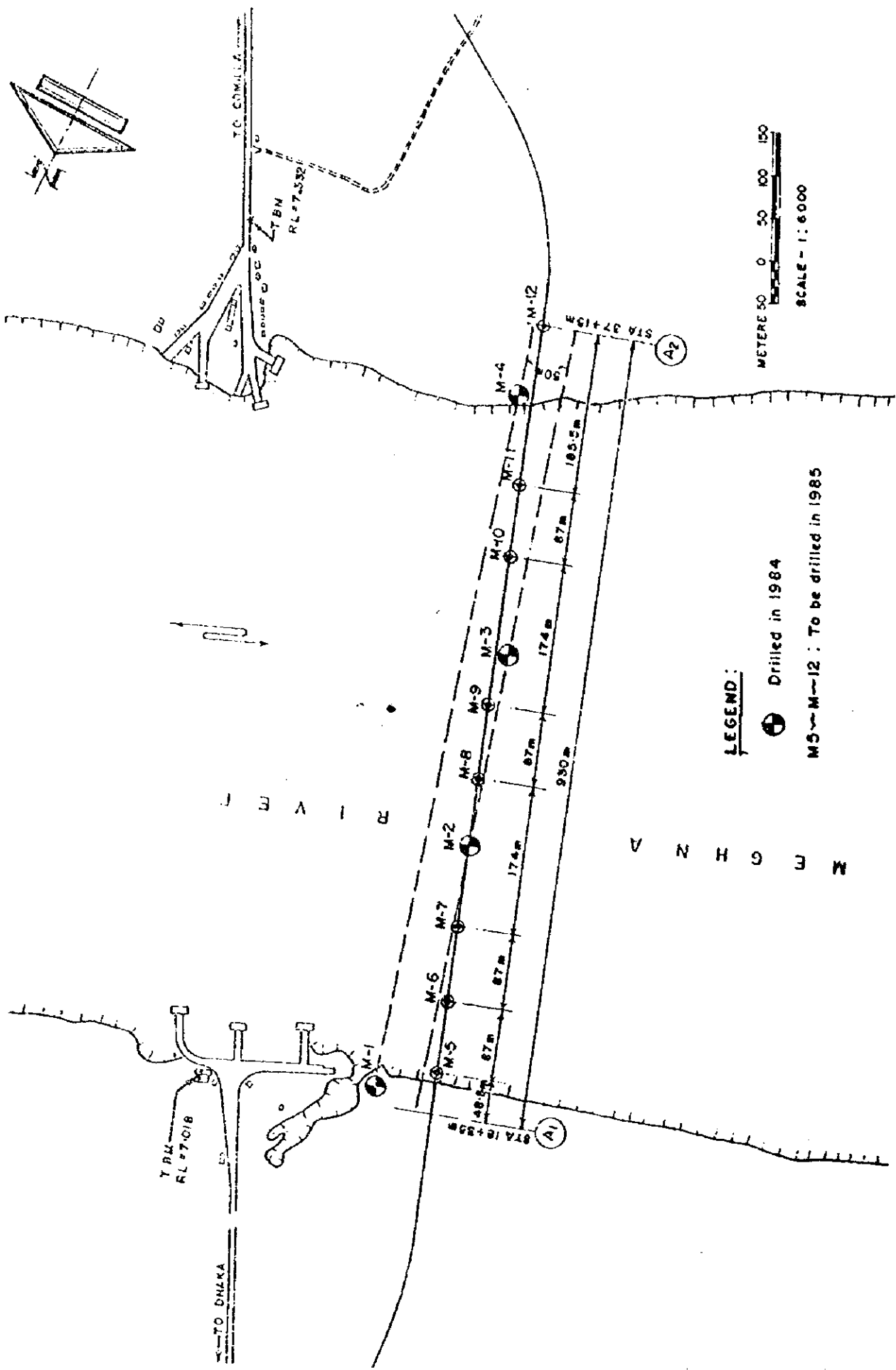


FIG. 3.2.1.1 BORING LOCATION (1/4)
AS OF 1986.MAR.

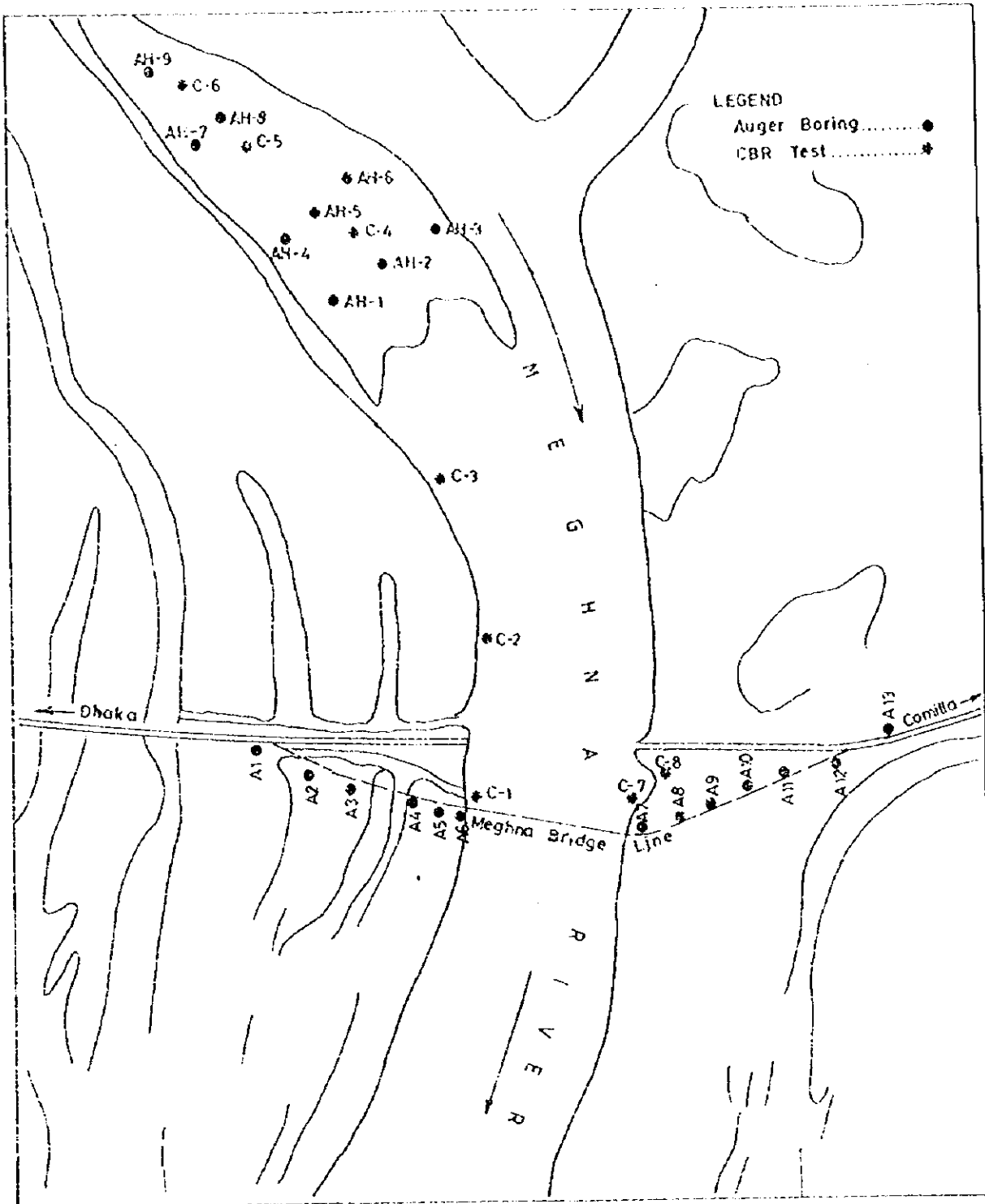


FIG. 3.2.1.1
BORING LOCATION (2/4)
AS OF 1986. MAR.

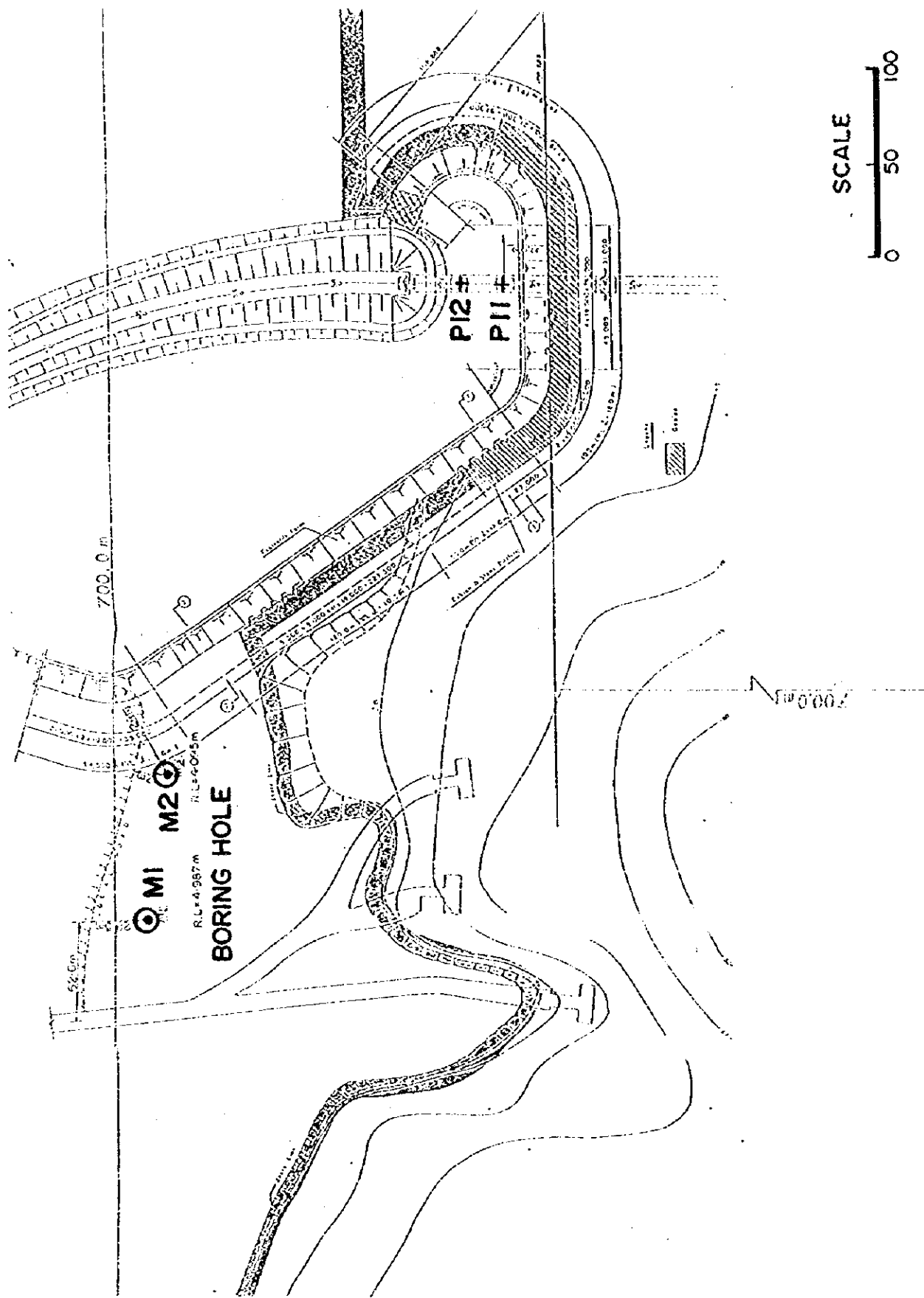
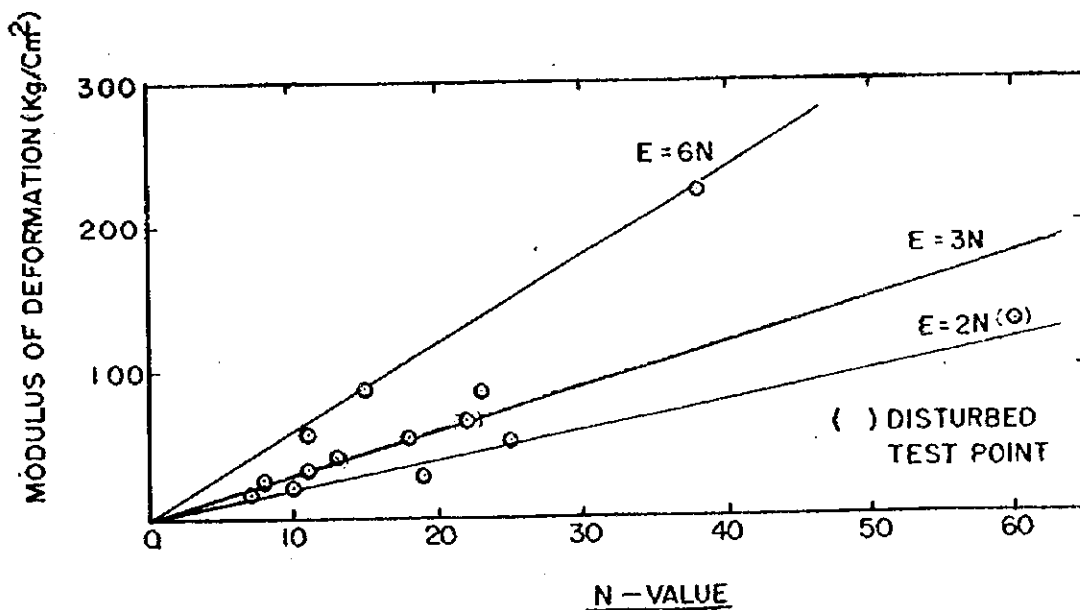


FIG. 3.2.1.1 BORING LOCATION (3/4)
 AS OF 1992. JUL.

Boring Location	Depth		Zone	Soil Type	N-value	E (kg/cm ²)
	RL-m	GL-m				
A - 6	1.3	5.2	US - 1	Sand with Silt Sand	8	24
	5.7	9.6			10	21
M - 5	5.2	6.1	US - 1	Sand with Silt	8	27
	14.2	15.1	US - 2		18	55
	24.2	25.1	US - 3		60	(131)
M - 8	11.3	5.1	US - 1	Sand with Silt	7	17
M - 9	11.1	5.8	US - 2	Sand with Silt	11	33
	18.4	13.1	US - 2		13	(42)
	25.1	19.8	US - 3		22	(67)
M - 10	13.6	5.1	US - 2	Sand	11	56
	19.6	11.1	US - 2		15	88
	25.6	17.1	US - 3		38	225
M - 11	13.5	5.9	US - 2	Sand with Silt	19	29
	18.7	11.1			25	53
	24.7	17.1			23	86



MODULUS OF DEFERATION (E) V.S. N-VALUE (N)

Fig.3.2.1.5 MODULUS OF DEFORMATION
SOURCE : D/D REPORT (1986.2)

F : Contents of Silt/Clay

Uc: Uniformity Coefficient

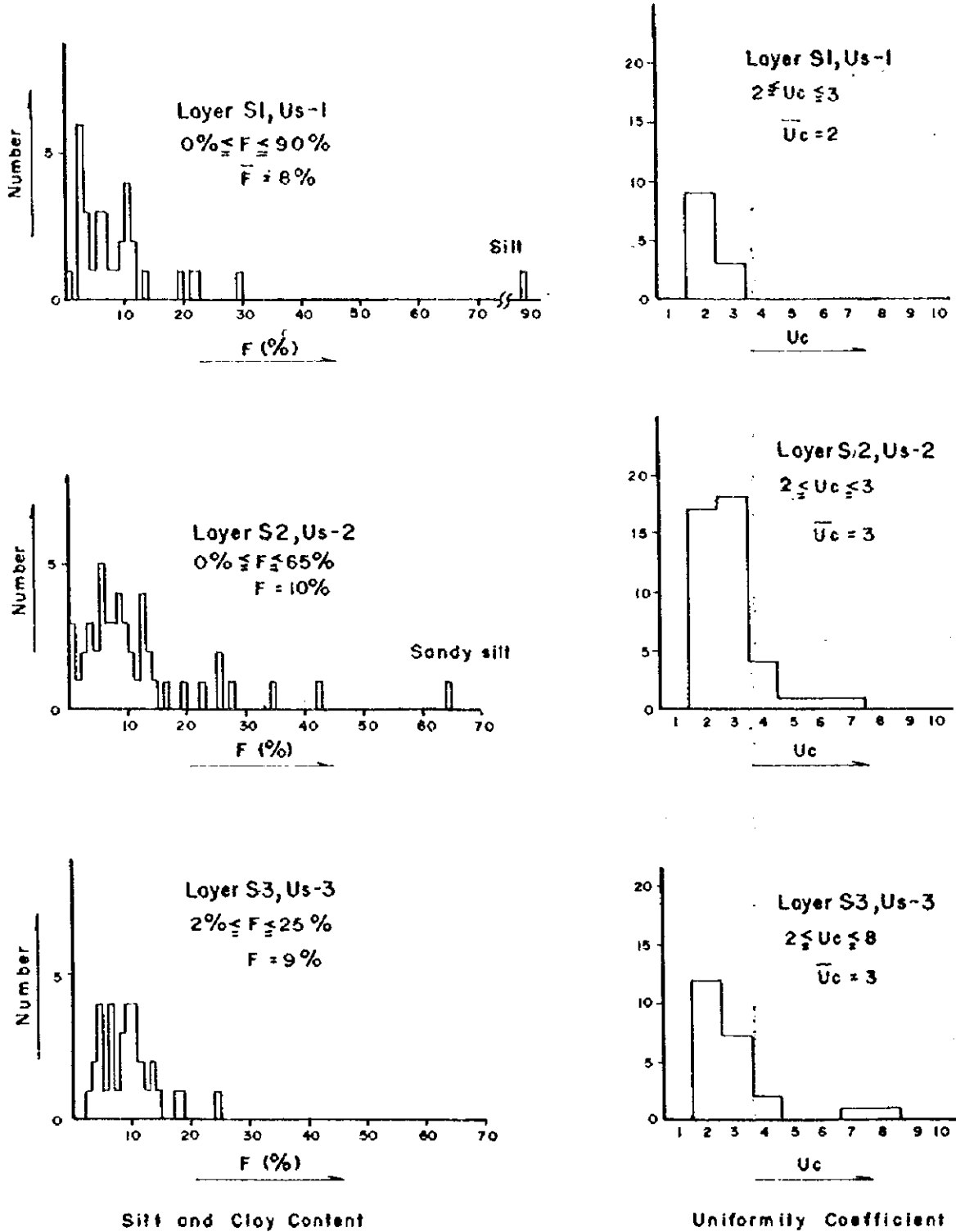
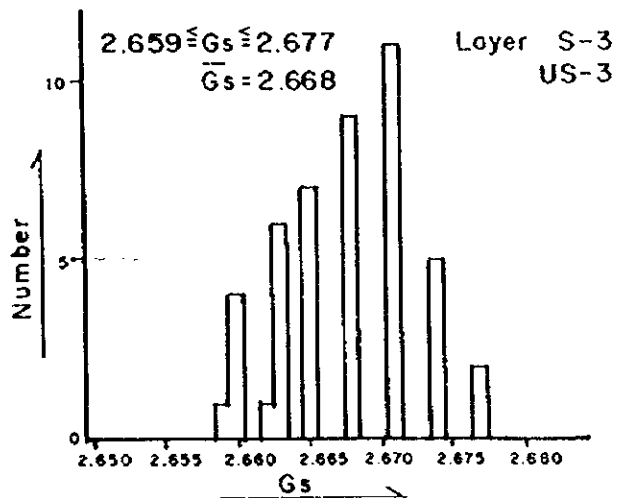
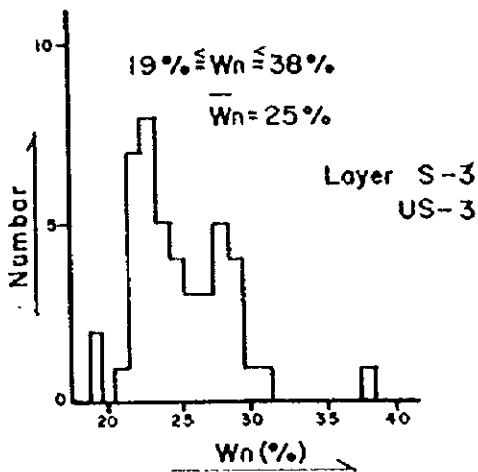
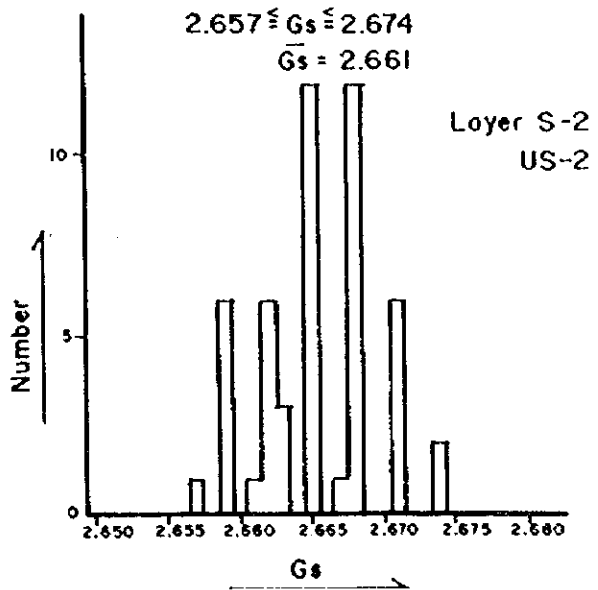
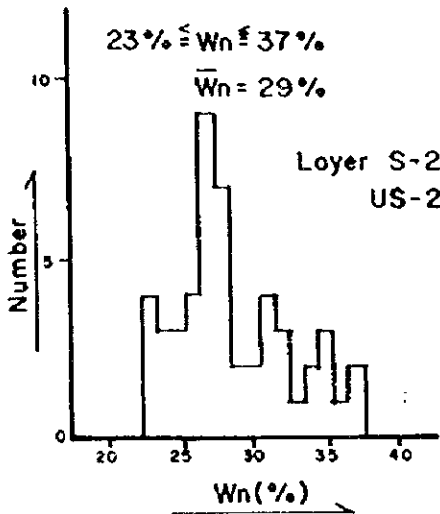
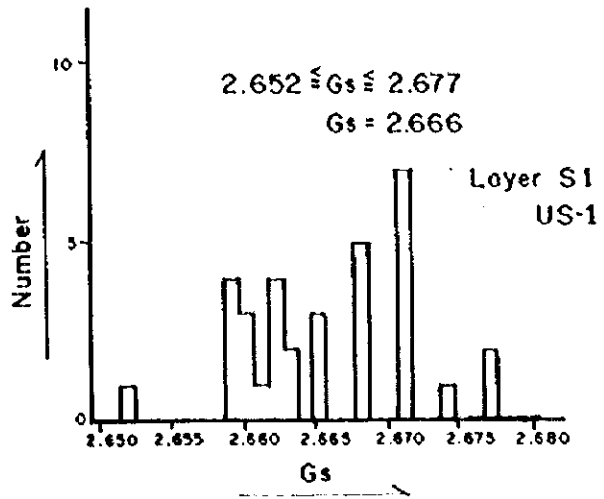
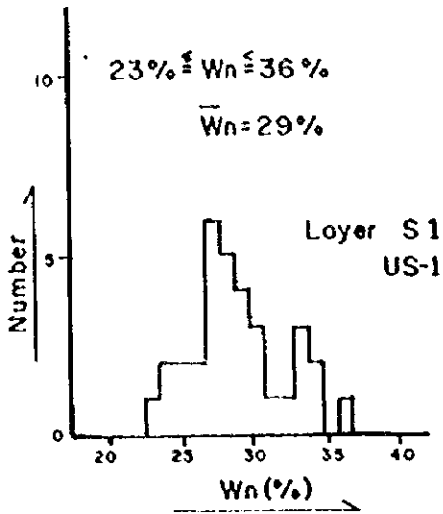


Fig. 3.2.1.3 Result of Soil Test (1 / 2)
 Source: D/D Report (1986.2)

Wn: Water Content

Gs: Specific Gravity



Natural Water Content

Specific Gravity

Fig: 3.2.1.3 Result of Soil Test (2 / 2)

Source: D/D Report (1986.2)

N: N Value of Standard Penetration Test

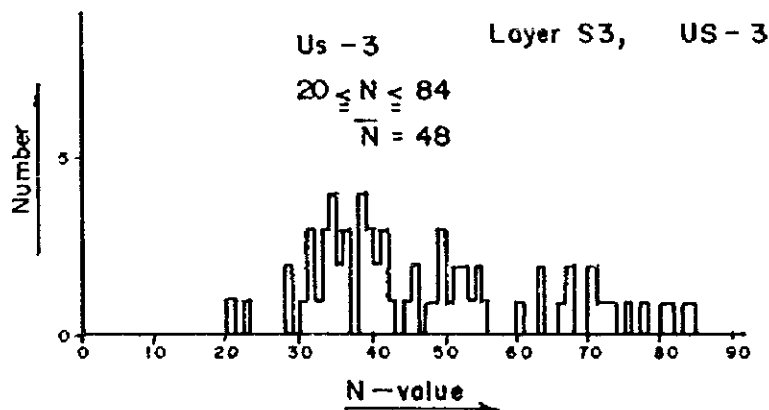
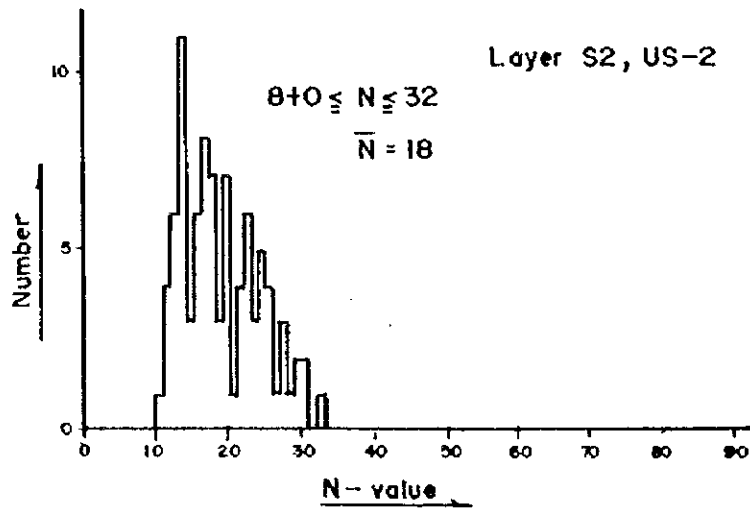
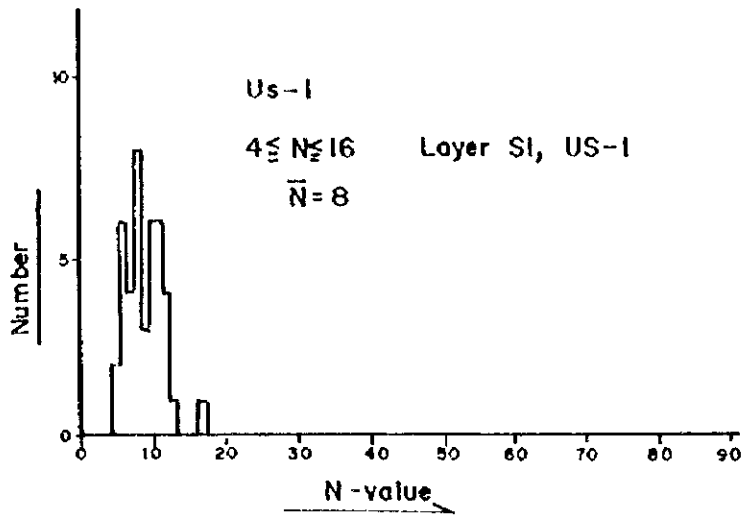
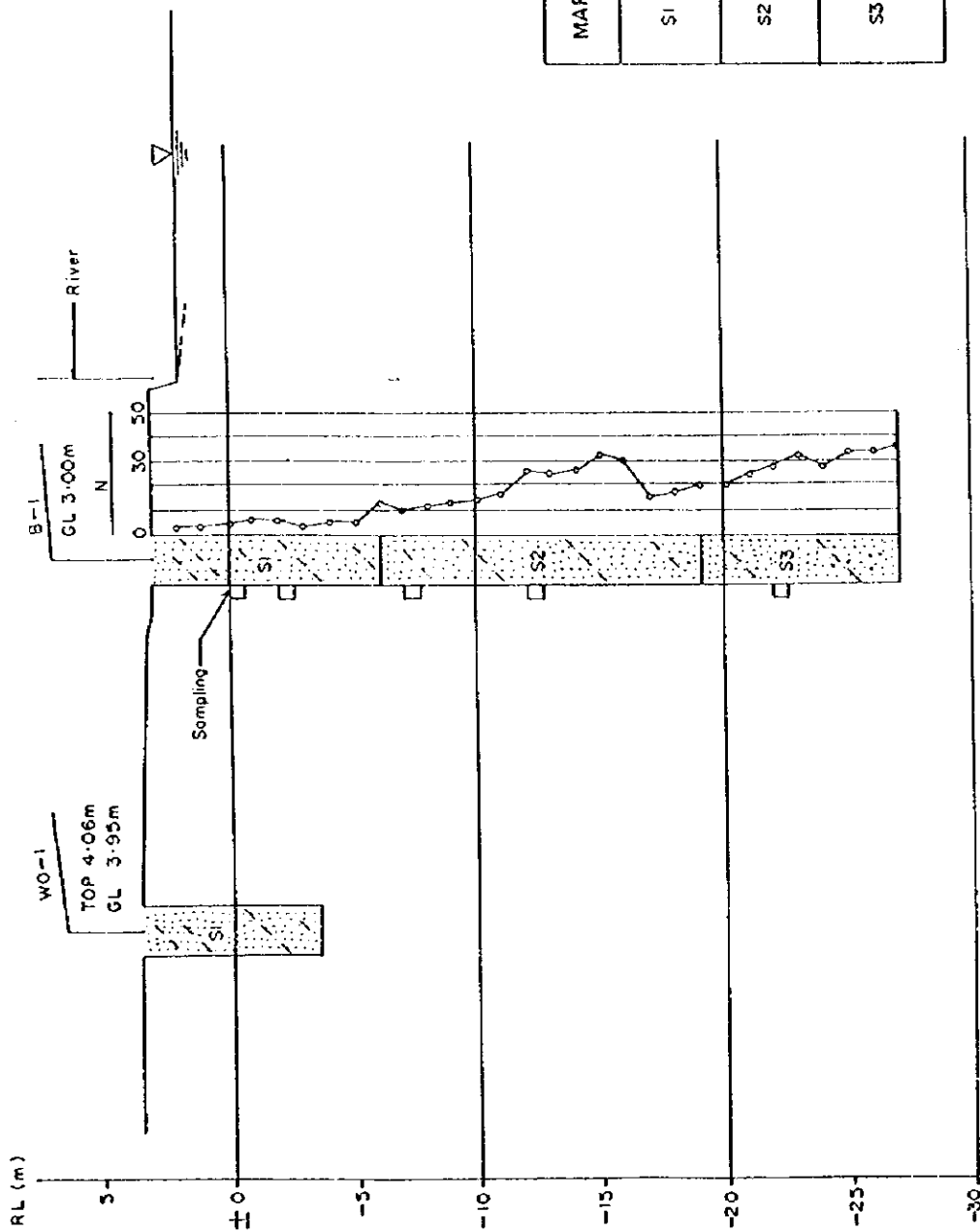


Fig.3.2.1.4 Result of Standard Penetration Test
 Source: D/D Report (1986.2)

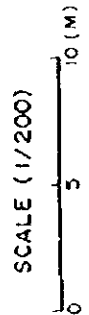


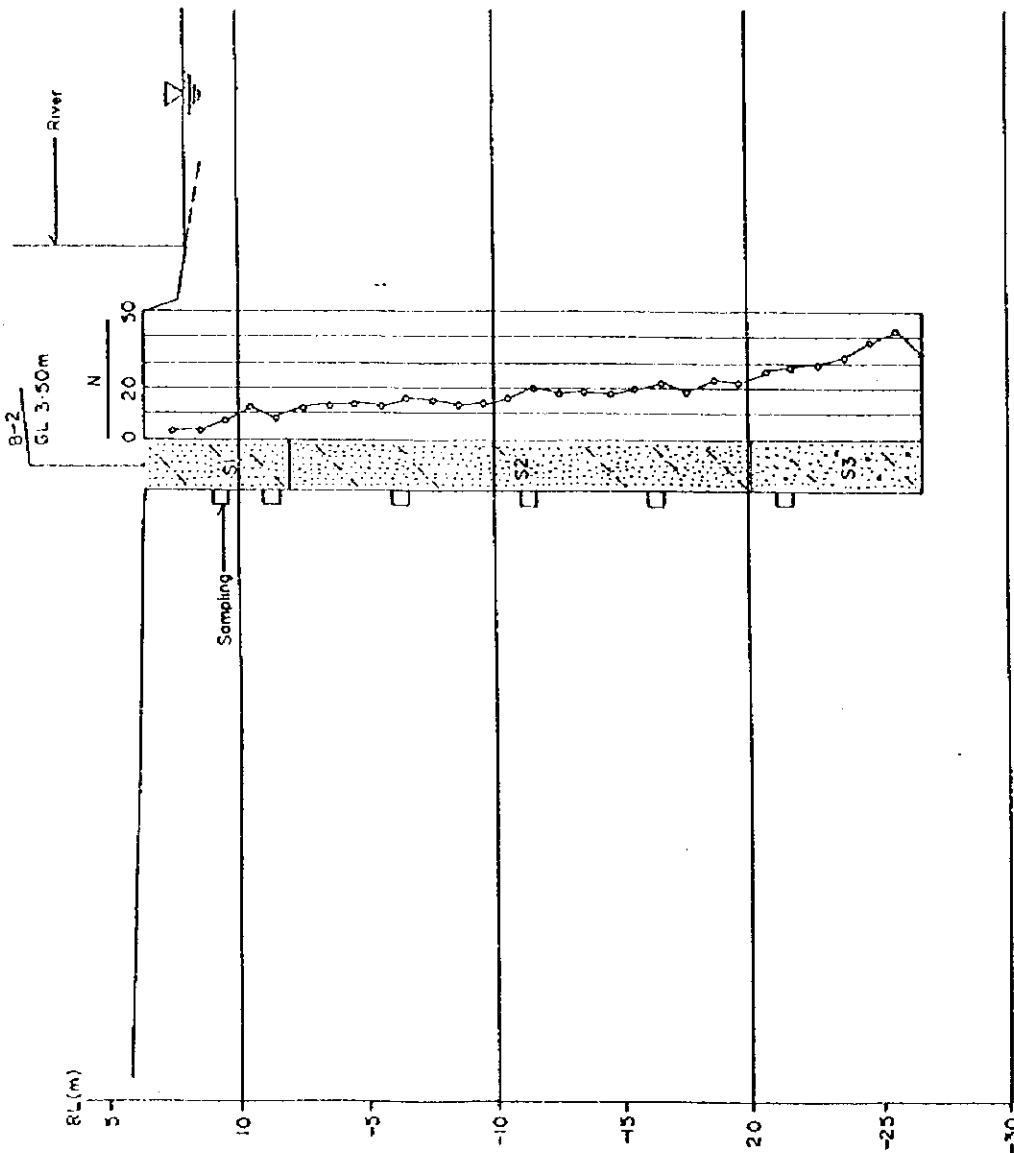
LEGEND

MARK	SOIL - TYPE	N (S.P.T.)	CHARACTER
S1	Fine SAND	2~8 Ave: 5	Very Fine Loose Silt a little
S2	Fine SAND	10~30 Ave: 20	Contains Silt medium grains Stiffer
S3	Fine to Medium SAND	20~35 Ave: 27	Medium grains increase Fairly Firm

図 5.6.3 ボーリング柱状図 (1/5)

Note: WO - Boring Hole for G.W.L. Observation
 B - Boring for Sub-soil Study
 N - Blow Number of Standard Penetration Test





LEGEND

MARK	SOIL - TYPE	N (S.P.T.)	CHARACTER
S1	Fine SAND	2 ~ 12 Ave: 5	Very Fine Silty Loose.
S2	Fine SAND	12 ~ 24 Ave: 17	Silt a little Medium grains Containing Homogeneous.
S3	Fine to Medium SAND	20 ~ 41 Ave: 30	Medium grain increase Fairly Firm in density.

Note: Wo - Boring Hole for G.W.L. Observation
 B - Boring for Sub-soil Study
 N - Blow Number of Standard Penetration Test

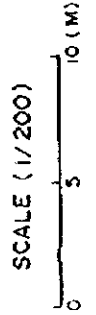
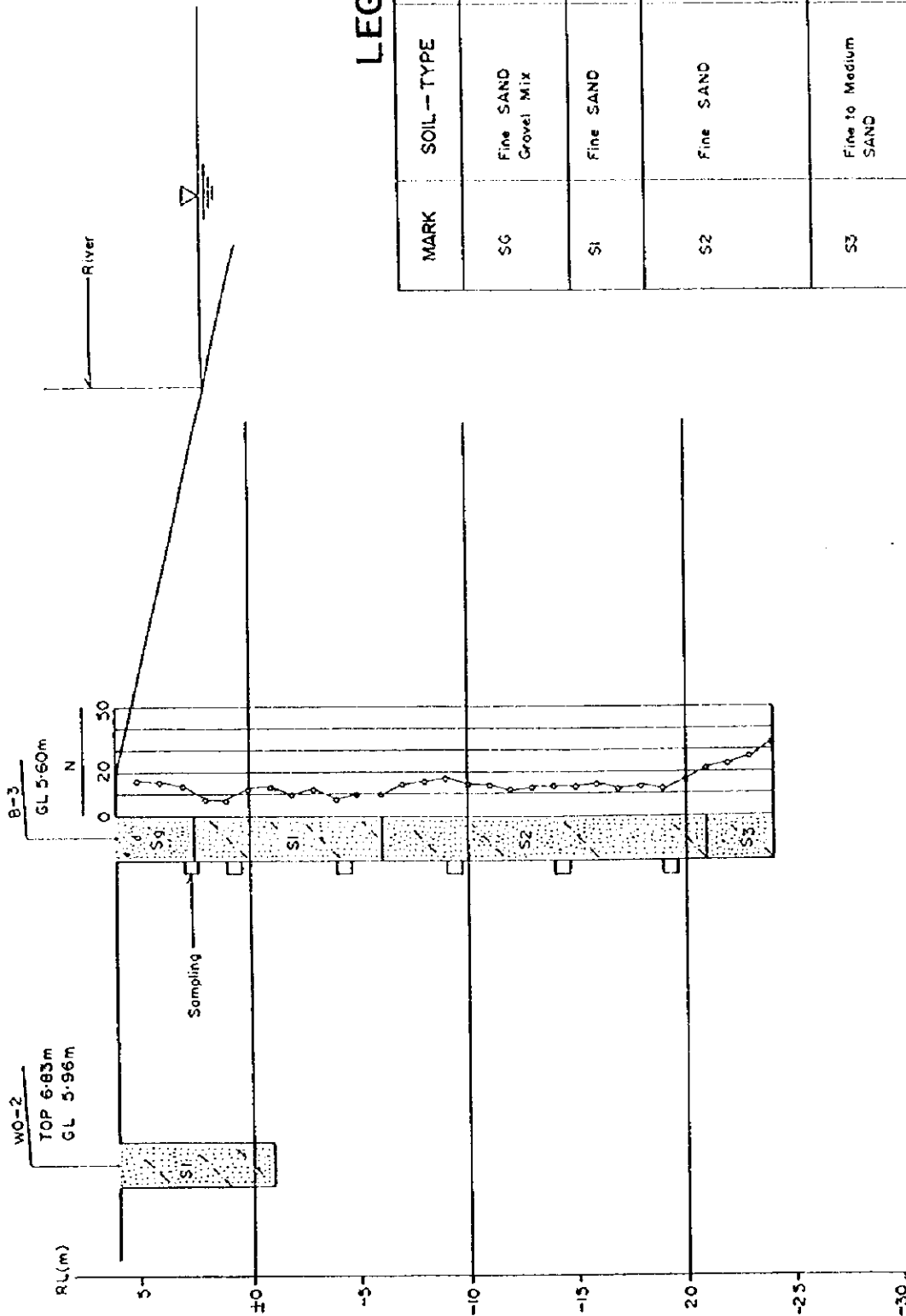


図 5.6.3 ボーリング柱状図 (2/5)



LEGEND

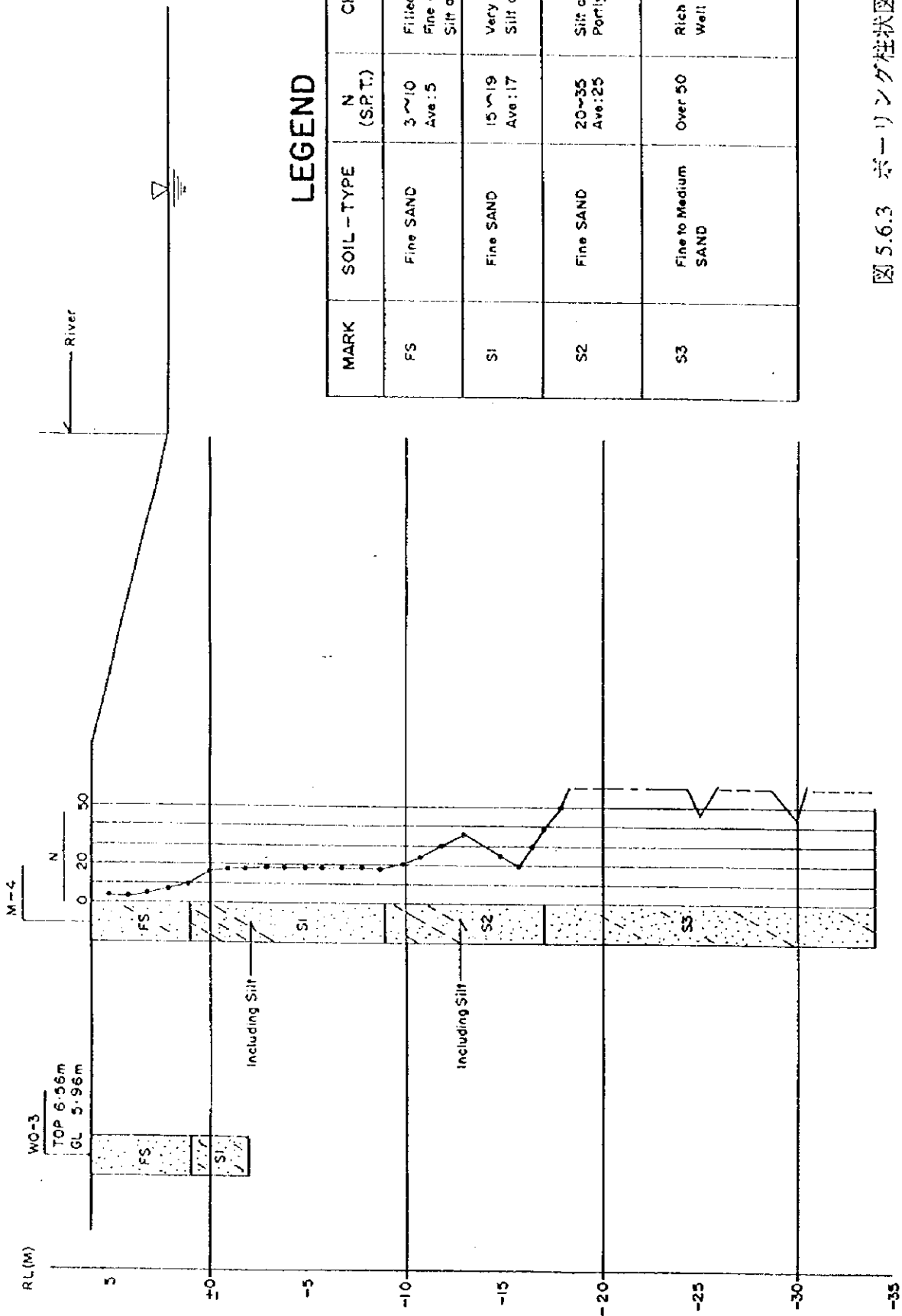
MARK	SOIL-TYPE	N (S.P.T.)	CHARACTER
SG	Fine SAND Gravel Mix	13~17 Ave:15	Containing Stone fragments of Dybe Emblk.
SI	Fine SAND	8~12 Ave:10	Homogeneous Loose.
S2	Fine SAND	11~17 Ave:15	Silt a little A little quantity of medium Sand Homogeneous Slightly Loose.
S3	Fine to Medium SAND	20~32 Ave:25	Medium grains increase Fairly Firm.

Note: WO - Boring Hole for G.W.L. Observation
 B - Boring for Sub-soil Study
 N - Blow Number of Standard Penetration Test.

SCALE (1/200)



図 5.6.3 ボーリング柱状図 (3/5)



Note : 1) W/O-3 Hole for G.W.L. Observation
 2) M-4 Boring in D/D

SCALE (1/200)
 0 5 10 (M)

図 5.6.3 ボーリング柱状図 (4/5)

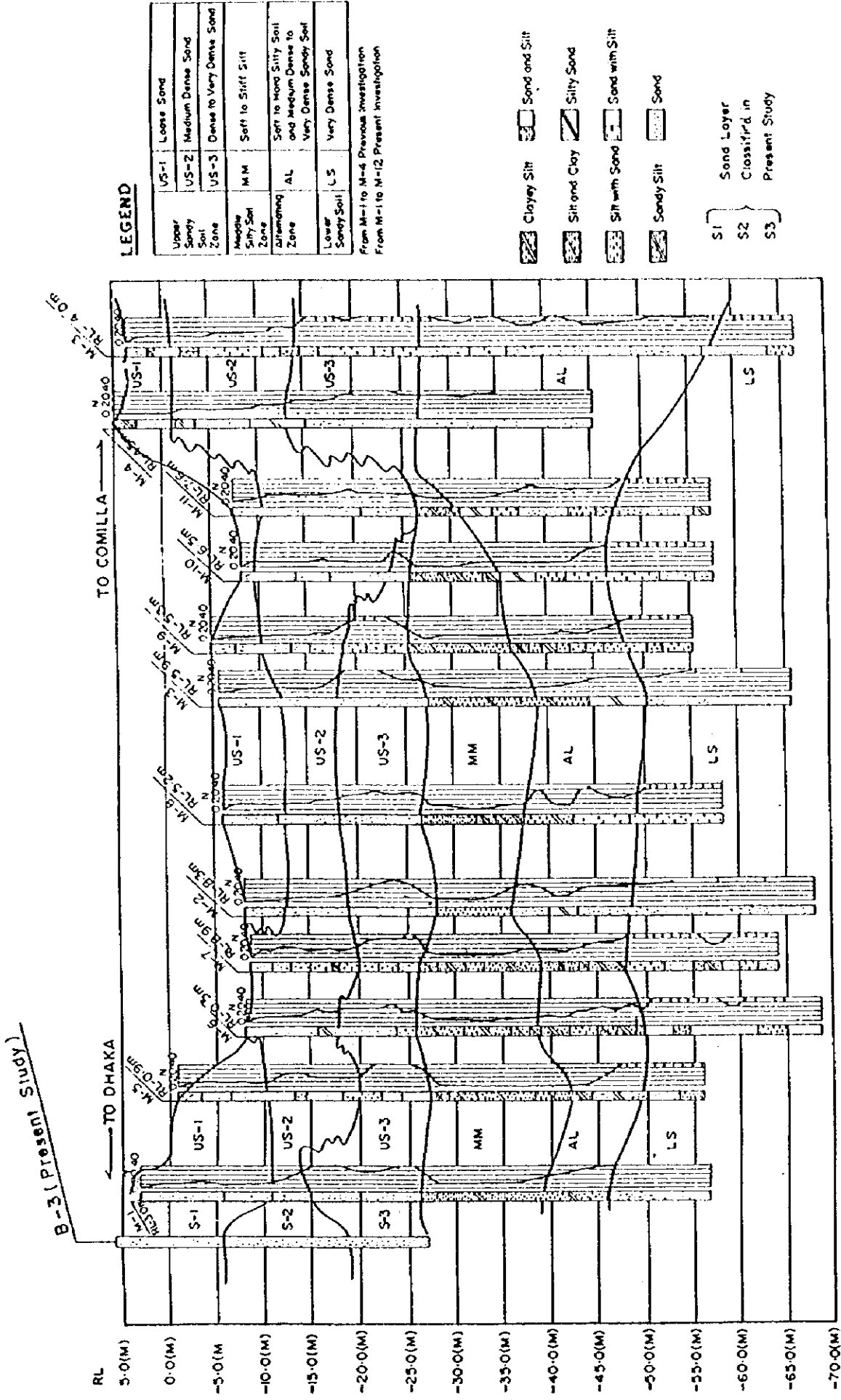


図 5.6.3 ボーリング柱状図 (5/5)

表 5.6.2 粒度分布室內試驗結果 (1997 年 8 月調查)

Date of Sampling : August 10 - 20 / 1997

Date of Testing : August 10 - 20 / 1997

Meghna River Protection Project

Sample No	Depth of Sample (%)	Grain Size Analysis					Clay (<0.002 mm) (%)	150 (mm)	100 (mm)	D ₆₀ / D ₁₀	Unified soil classification symbol (USCS)	Remarks	
		Gravel 76 1-4.76 mm (%)	Coarse sand 4.76-2.0 mm (%)	Medium sand 2.0-0.425 mm (%)	Fine sand 0.425-0.075 mm (%)	Silt 0.075-0.002 mm (%)							
D-1	River bed	Nil	Nil	0.6	94.4	5.0	Nil	0.19	0.21	0.09	2.33	SP	Fine sand, trace silt, grey, NP
D-2	River bed	Nil	Nil	3.9	92.2	3.9	Nil	0.22	0.25	0.15	1.67	SP	Fine sand, trace silt, grey, NP
D-3	River bed	Nil	Nil	1.3	95.4	3.3	Nil	0.12	0.15	0.08	1.88	SP	Fine sand, trace silt, grey, NP
D-4	River bed	Nil	Nil	1.0	85.3	13.7	Nil	0.11	0.13	0.045	2.89	SM	Fine sand, little silt, grey, NP
D-5	River bed	Nil	Nil	0.4	68.6	31.0	Nil	0.11	0.13	0.009	14.44	SM	Fine sand, some silt, grey, NP
D-6	River bed	Nil	Nil	2.7	95.5	1.8	Nil	0.21	0.24	0.15	1.60	SP	Fine sand, trace silt, grey, NP
D-10	River bed	Nil	Nil	Nil	54.8	45.2	Nil	0.08	0.10	0.026	3.85	SM	Fine sand and silt, grey, NP

Note : NP = Non-plastic

DDC Laboratory

TABLE - 1

TABLE 3.2.5.1 SUMMARY OF SOIL TEST RESULTS
Part - II (river bed material) (1/2)

Meghna River Protection Project.

Sample No.	Depth (m)	Grain Size Analysis						D50 (mm)	Cu = D60/D10	Unified soil classification symbol (USCS)	Remarks
		Gravel 76.1-4.76 mm (%)	Coarse sand 4.76-2.0 mm (%)	Medium sand 2.0-0.425 mm (%)	Fine sand 0.425-0.075 mm (%)	Silt 0.075-0.002 mm (%)	Clay < 0.002 mm (%)				
A-1	21	Nil	Nil	Nil	98.00	02.00	Nil	0.205	1.450	SP	Fine sand, trace silt, grey, NP
A-2	18	Nil	Nil	Nil	98.00	02.00	Nil	0.202	1.820	SP	Fine sand, trace silt, grey, NP
B-3	25	Nil	Nil	Nil	99.00	01.00	Nil	0.205	1.440	SP	Fine sand, trace silt, grey, NP
C-3	-	Nil	Nil	Nil	97.00	03.00	Nil	0.190	2.290	SP	Fine sand, trace silt, grey, NP
C-4	14	Nil	Nil	Nil	96.00	04.00	Nil	0.150	2.010	SP	Fine sand, trace silt, grey, NP
C-5	2	Nil	Nil	Nil	98.00	02.00	Nil	0.165	2.180	SP	Fine sand, trace silt, grey, NP
D-1	9	Nil	Nil	1.00	73.00	26.00	Nil	0.140	4.910	SM	Fine sand, some silt, grey, NP
D-2	12	Nil	Nil	3.00	49.00	48.00	Nil	0.776	5.050	SM	Fine sand and silt, grey, NP
D-3	12	Nil	Nil	1.00	75.00	24.00	Nil	0.133	4.380	SM	Fine sand, some silt, grey, NP
D-4	8	Nil	Nil	Nil	64.00	36.00	Nil	0.090	5.000	SM	Fine sand, some silt, grey, NP
D-5	2.5	Nil	Nil	Nil	45.00	55.00	Nil	0.060	6.230	ML	Silt and fine sand, grey, NP

Note : NP = Non-plastic

TABLE - 1

TABLE 3.2.5.1 SUMMARY OF SOIL TEST RESULTS
Part - II (river bed material) (2/2)

Meghna River Protection Project.

Sample No.	Depth (m)	Grain Size Analysis						D50 (mm)	Cu = D60/D10	Unified soil classification symbol (USCS)	Remarks
		Gravel 76.1-4.76 mm (%)	Coarse sand 4.76-2.0 mm (%)	Medium sand 2.0-0.425 mm (%)	Fine sand 0.425-0.075 mm (%)	Silt 0.075-0.002 mm (%)	Clay < 0.002 mm (%)				
D-6-1	2	Nil	Nil	Nil	09.00	85.00	6	0.031	6.500	ML	Silt, trace fine sand, grey, NP
D-6-2	2	Nil	Nil	Nil	74.00	26.00	Nil	0.100	3.640	SM	Fine sand, some silt, grey, NP
D-7	4	Nil	Nil	Nil	93.00	07.00	Nil	0.115	1.560	SP-SM	Fine sand, trace silt, grey, NP
D-8	4.5	Nil	Nil	Nil	88.00	12.00	Nil	0.147	2.750	SP-SM	Fine sand, little silt, grey, NP
D-9	3	Nil	Nil	Nil	84.00	16.00	Nil	0.140	3.200	SM	Fine sand, little silt, grey, NP
D-10	3	Nil	Nil	Nil	87.00	13.00	Nil	0.100	1.920	SM	Fine sand, little silt, grey, NP
E-1	3.5	Nil	Nil	Nil	73.00	27.00	Nil	0.095	3.550	SM	Fine sand, some silt, grey, NP
E-2	1	Nil	Nil	Nil	90.00	10.00	Nil	0.125	1.870	SP-SM	Fine sand, little silt, grey, NP
E-3	0.5	Nil	Nil	Nil	98.00	02.00	Nil	0.165	2.160	SP	Fine sand, trace silt, grey, NP

Note : NP = Non-plastic

表 採取土砂の粒度特性と比重

Sampling Point No	Location		d ₅₀ (μ m)	$\sqrt{\frac{d_{84}}{d_{16}}}$	Specific Weight
C1	No. 2(L)	Bank	60	3.73	2.73
C2		Brink	34	4.61	2.72
C3		Slope	114	1.68	2.78
C4		Bed	48	3.49	2.71
C5	No. 4(L)	Bank	32	3.94	2.65
C6		Brink	113	2.56	2.78
C7		Slope	104	2.73	2.73
C8		Bed	152	1.76	2.75
C9	No. 6(L)	Bank	47	4.15	2.72
C10		Brink	45	2.93	2.74
C11		Slope	21	6.07	2.67
C12		Bed	90	2.28	2.77
D1	No. 1(R) ~ No. 2(R)	Bank	93	1.58	
D2		Brink	102	1.34	
D3		Slope	107	1.33	
D4		Bed	118	1.49	
D5	No. 8(R)	Bank	102	1.40	
D6		Brink	102	2.40	
D7		Slope	44	5.60	
D8		Bed	41	3.54	
S1	No. 3 ~ No. 5	Old Bar	120	1.53	
S2		"	114	1.89	
S3		"	99	1.59	
S4		New Bar	192	1.49	
S5		"	177	1.60	
S6		"	143	1.64	
W1	No. 2(R)	Bed	158	1.79	
W2	No. 6(R)	Bed	115	1.49	
mean			96	2.56	2.73

3. 洗掘調査結果（1997年4月調査）

(1) 橋脚部

(2) 護岸工部

(3) 洗掘調査結果図

Scouring Survey for Piers (P-6)

Diver's Information

1. Depth to river bed
from water level

*

H= 12m (UPSTREAM)

11m (DOWNSTREAM)

2. Conditions of river bed
around piles

-Bed line (undulation)

*COVER WITH SAND ON STONE

*SOFT SAND FLAT AT SLOPE TOE

-Protected stone

(scattered in bed, on footing)

*SCATTERED ON FOOTING

*COVER WITH SAND ON STONE

3. Conditions of foundation
(footing, piles)

-Damages

*NO VISUAL DAMAGE

-Others

*UNABLE TO SEE LEVELING CONC.
BASE

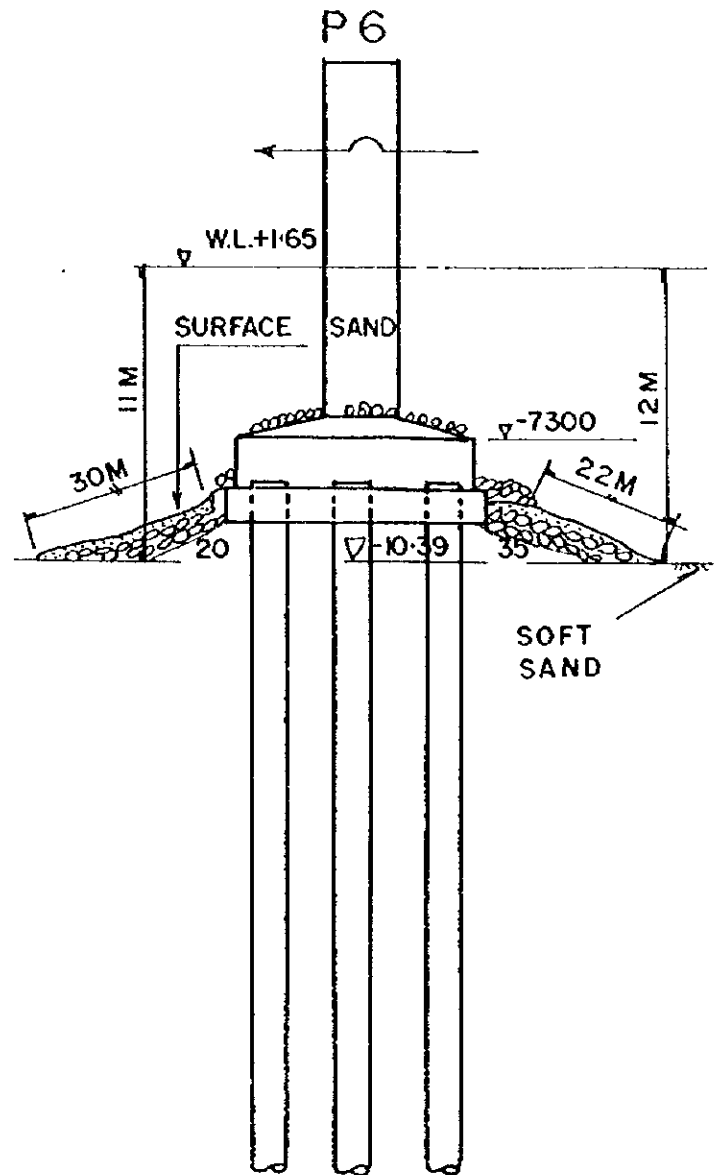
*TOTALLY COVERED

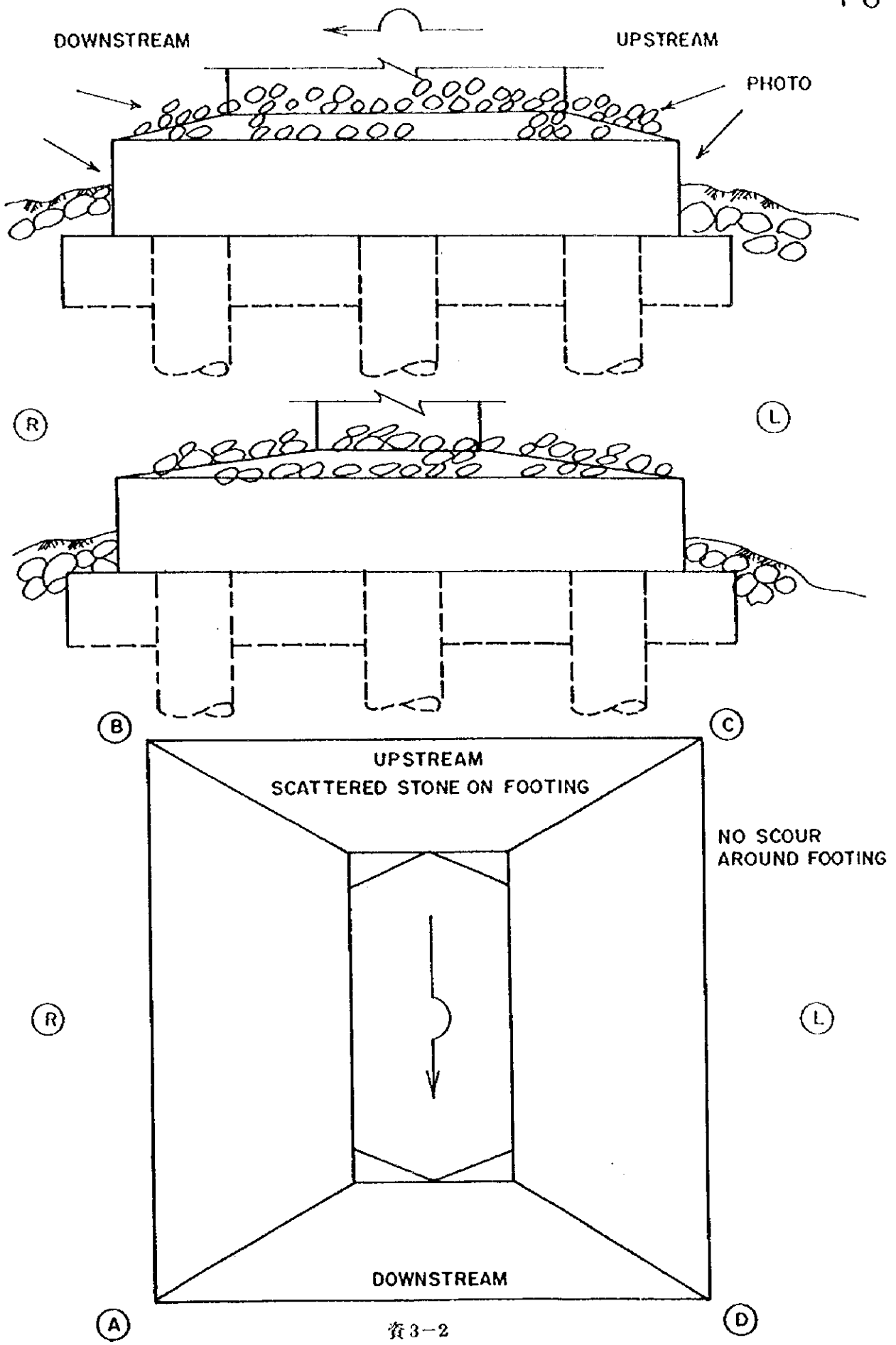
4. Photographs

(bed, piles, footing)

5. Note

* measure (50m), camera, light, level)





資3-2

Scouring Survey for Piers (P-7)

Diver's Information

1. Depth to river bed
from water level

*

H= 14m

2. Conditions of river bed
around piles

-Bed line (undulation)

*FINE SAND

-Protected stone

(scattered in bed, on footing)

*SCATTERED ON FOOTING

*NO COVER WITH SAND ON STONE

3. Conditions of foundation
(footing, piles)

-Damages

*NO VISUAL DAMAGE

*NO SCOUR AT FOOTING

-Others

*UNABLE TO SEE LEVELING CONC.

BASE

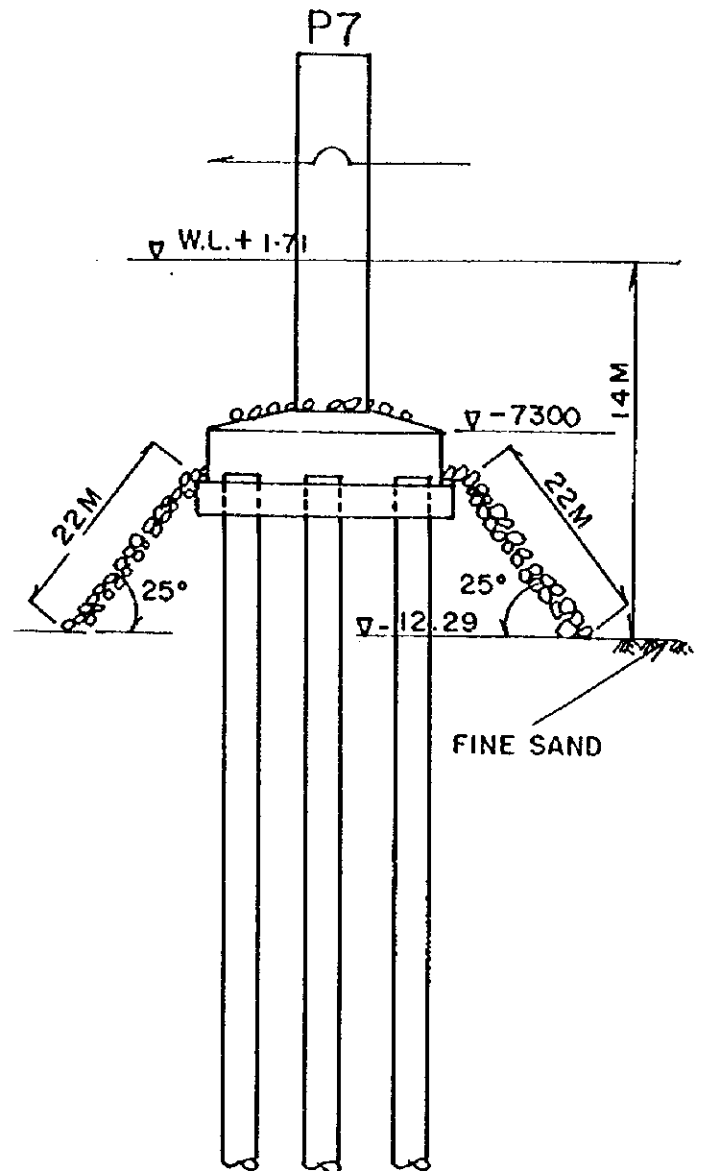
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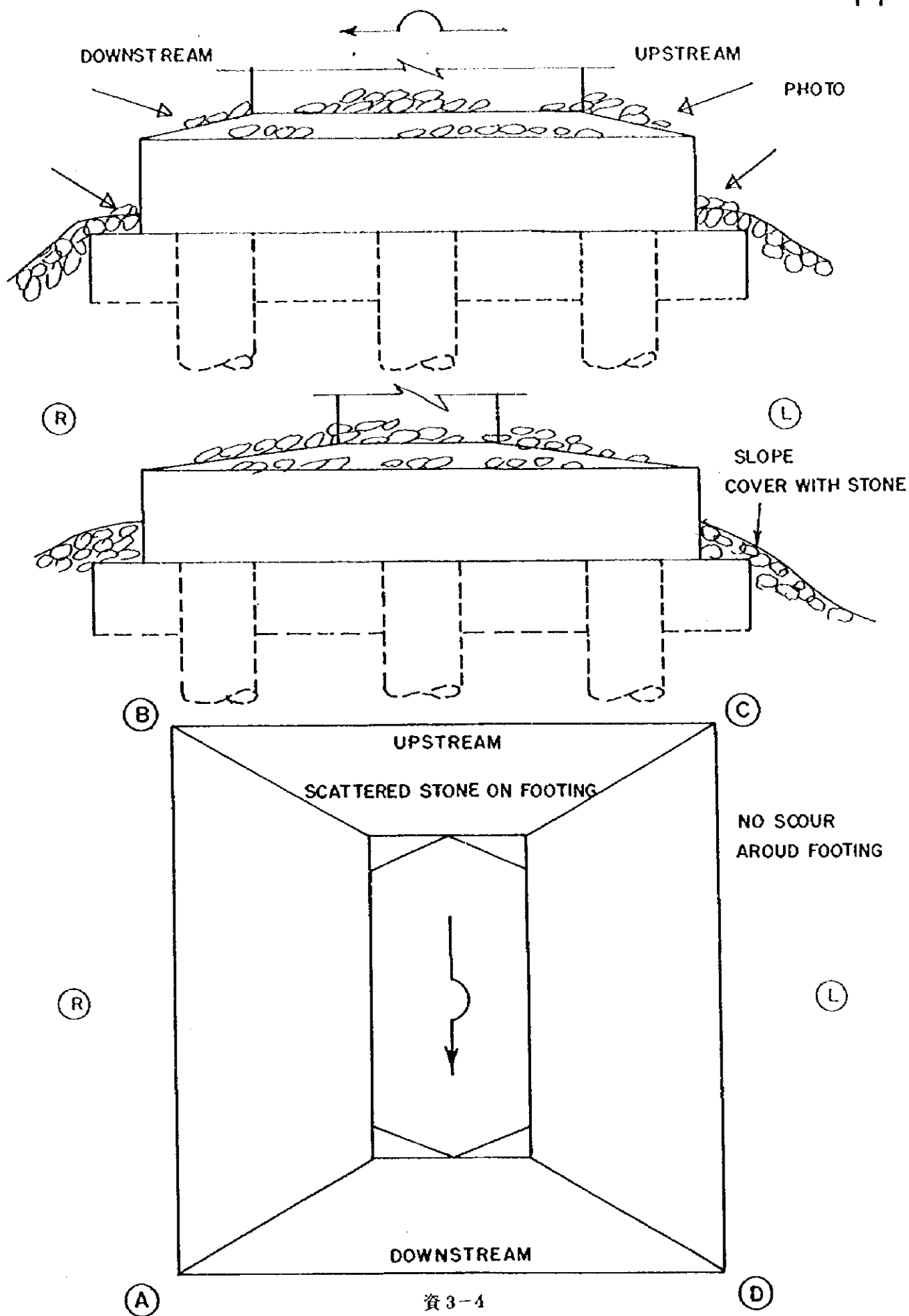
4. Photographs

(bed, piles, footing)

5. Note

* measure(50m), camera, light, level)





資 3-4

Scouring Survey for Piers (P-8)

Diver's Information

1. Depth to river bed
from water level

*

H= 22 m

2. Conditions of river bed
around piles

-Bed line (undulation)

*FLAT/COMPACTED SAND

-Protected stone

(scattered in bed, on footing)

*NO COVER WITH SAND ON STONE

*SCATTERED ON FOOTING

3. Conditions of foundation
(footing, piles)

-Damages

*NO VISUAL DAMAGE OR CRACK AT

FOOTING, PILE

*CAP BETWEEN FOOTING & LEVELING

CONC. BASA

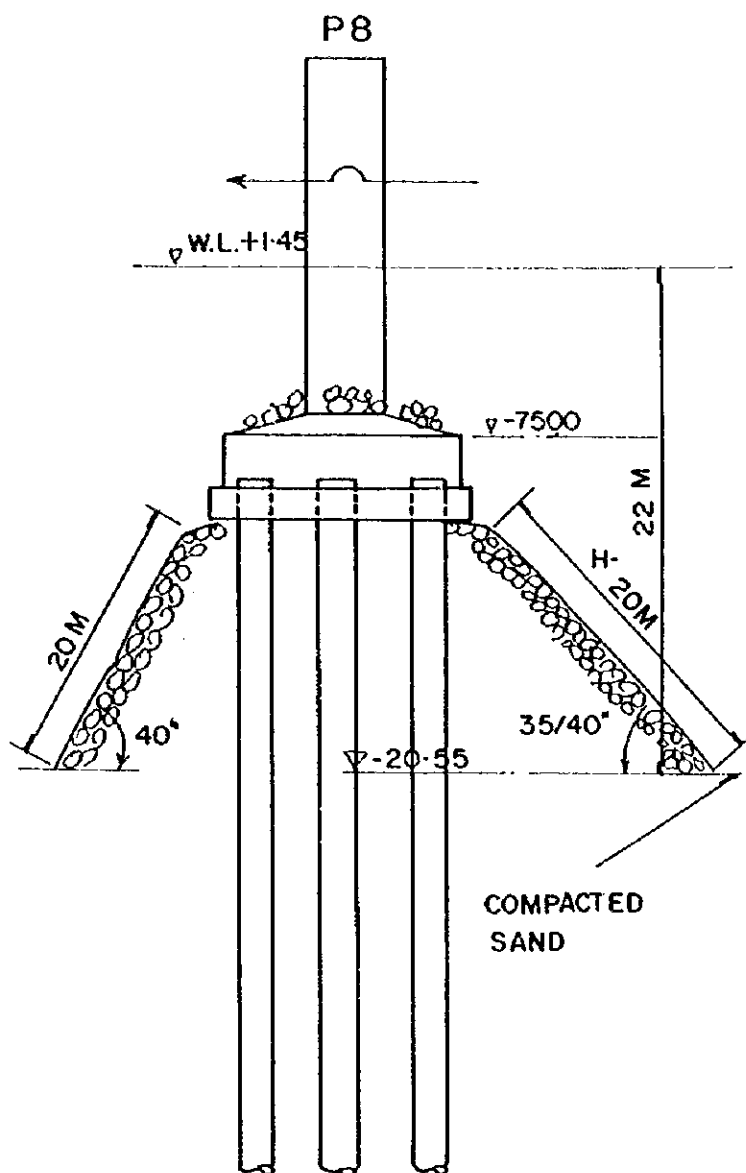
-Others

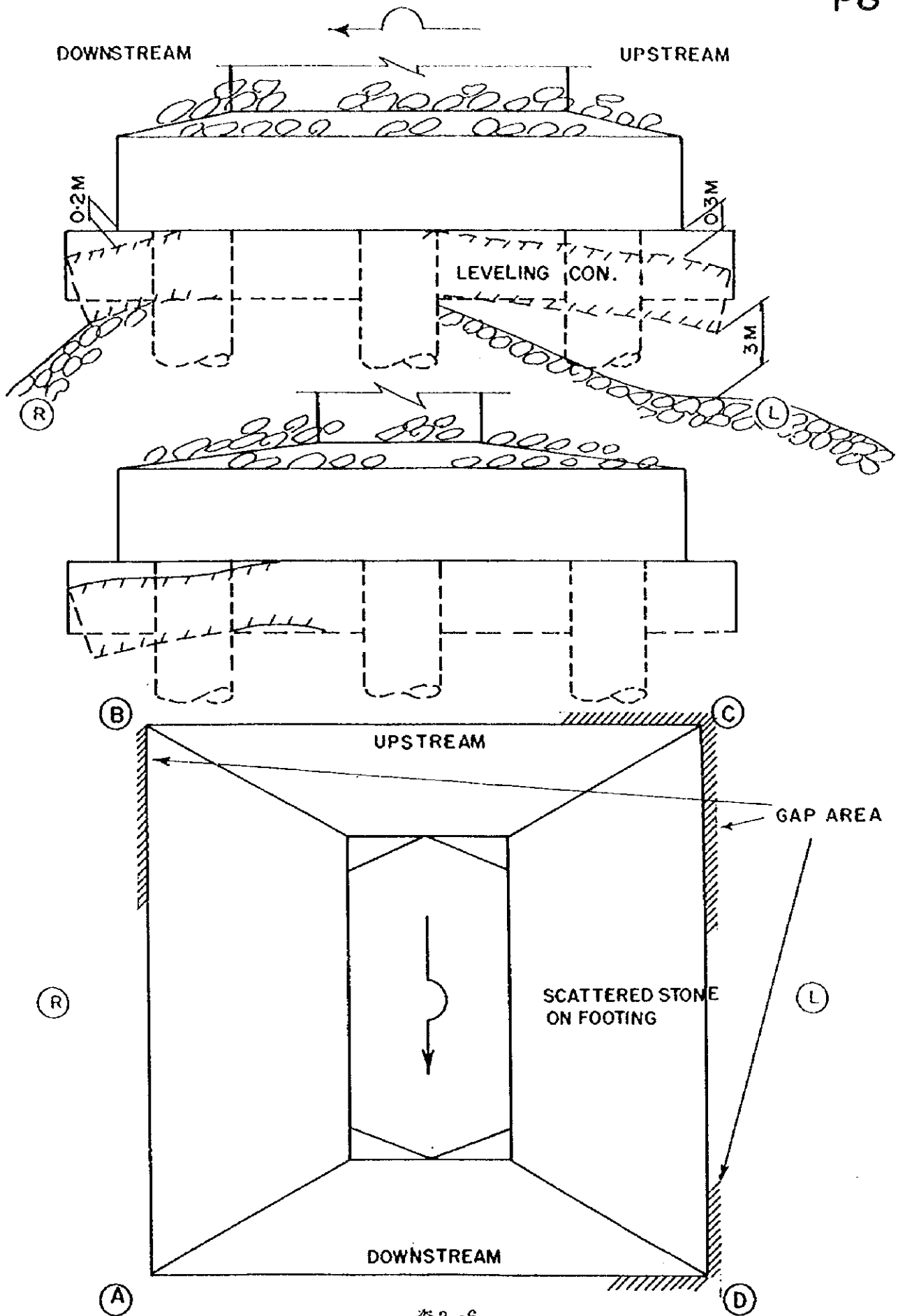
4. Photographs

(bed, piles, footing)

5. Note

* measure(50m), camera, light, level)





Scouring Survey for Piers (P-9)

Diver's Information

1. Depth to river bed
from water level

*

H= 16m(UPSTREAM)

13m(DOWNSTREAM)

2. Conditions of river bed
around piles

-Bed line (undulation)

*FLAT WITH FINE SAND(UP)

*FLAT WITH COMPACTED SAND(DOWN)

-Protected stone

(scattered in bed, on footing)

*SCATTERED STONE ON FOOTING

*SLOPE COVER WITH STONE

(NO SAND)

3. Conditions of foundation
(footing, piles)

-Damages

*NO VISUAL DAMAGE

*NO SCOUR AT FOOTING

-Others

*REMAINING TEST PILE

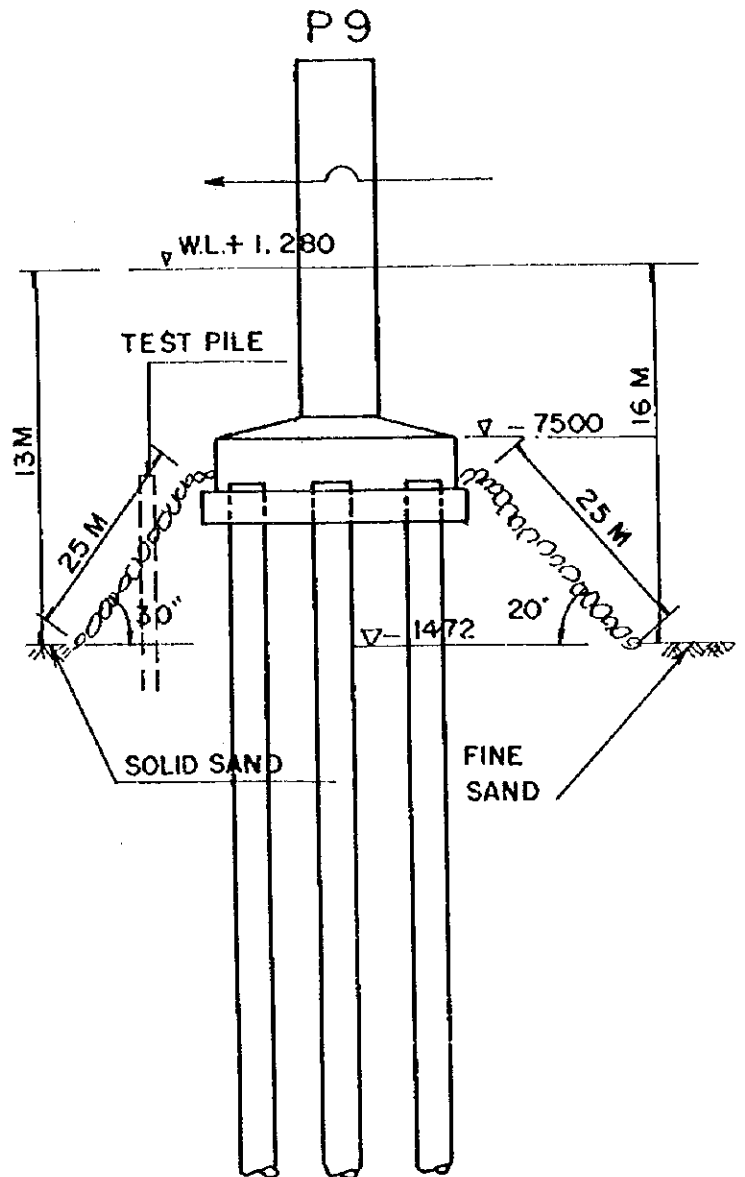
AT DOWN STREAM

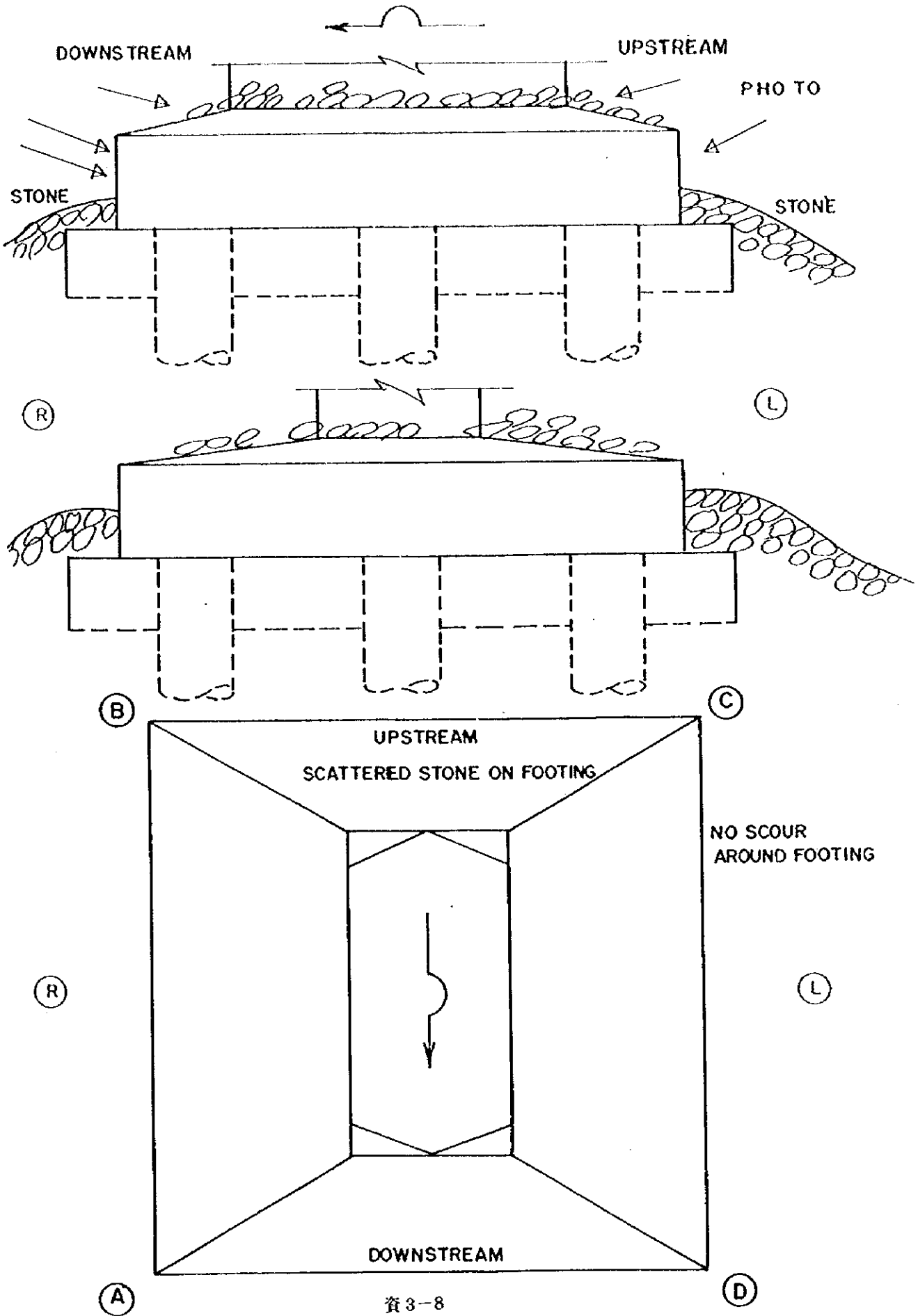
4. Photographs

(bed, piles, footing)

5. Note

* measure(50m), camera, light, level)





Scouring Survey for Piers (P-10)

Diver's Information

1. Depth to river bed
from water level

*

H = 6 m H = 12 m (DHAKA SIDE)

2. Conditions of river bed
around piles

-Bed line (undulation)

*ALL STONE (UPSTREAM)

*FLAT WITH SOFT SAND (DOWNSTREAM)

-Protected stone

(scattered in bed, on footing)

*ALL STONE AROUND FOOTING

3. Conditions of foundation
(footing, piles)

-Damages

*NO VISUAL ALL FOOTING

NO SCOUR AROUND FOOTING

-Others

*DHAKA SIDE:

SLOPE WITH STONE

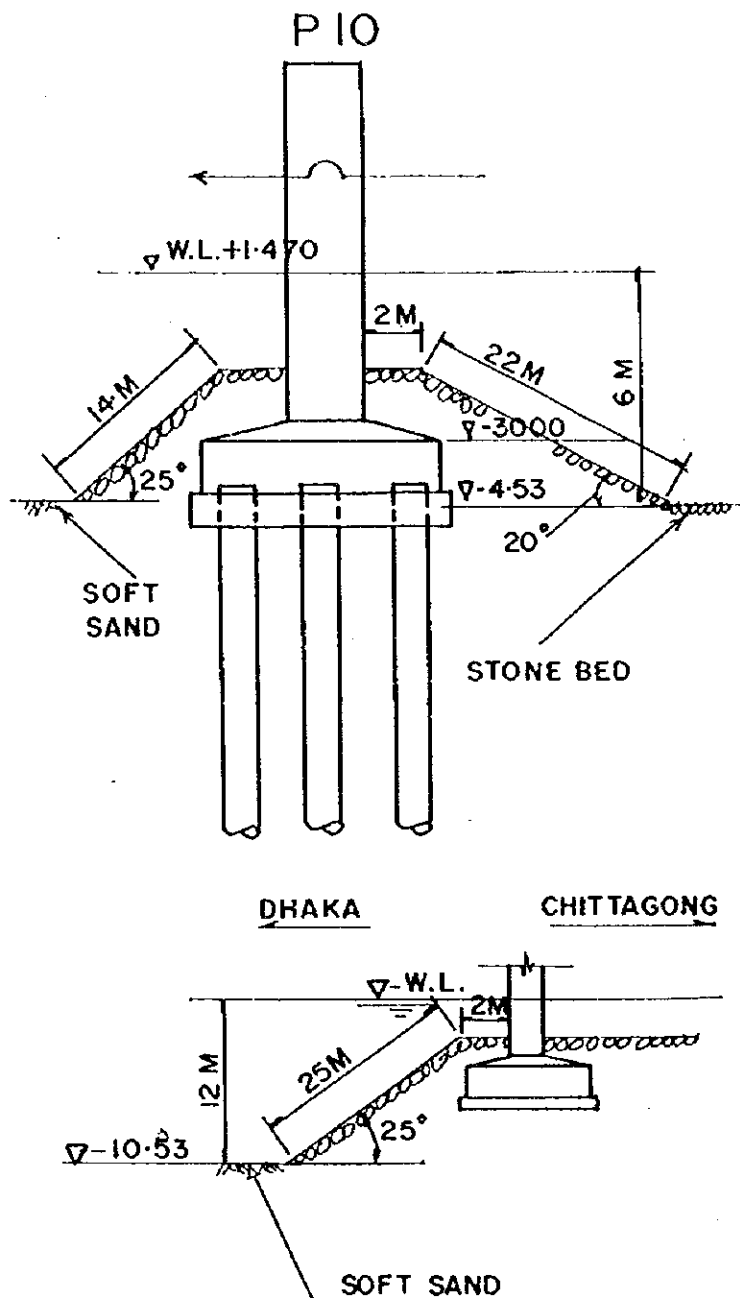
SOFT SAND (BED)

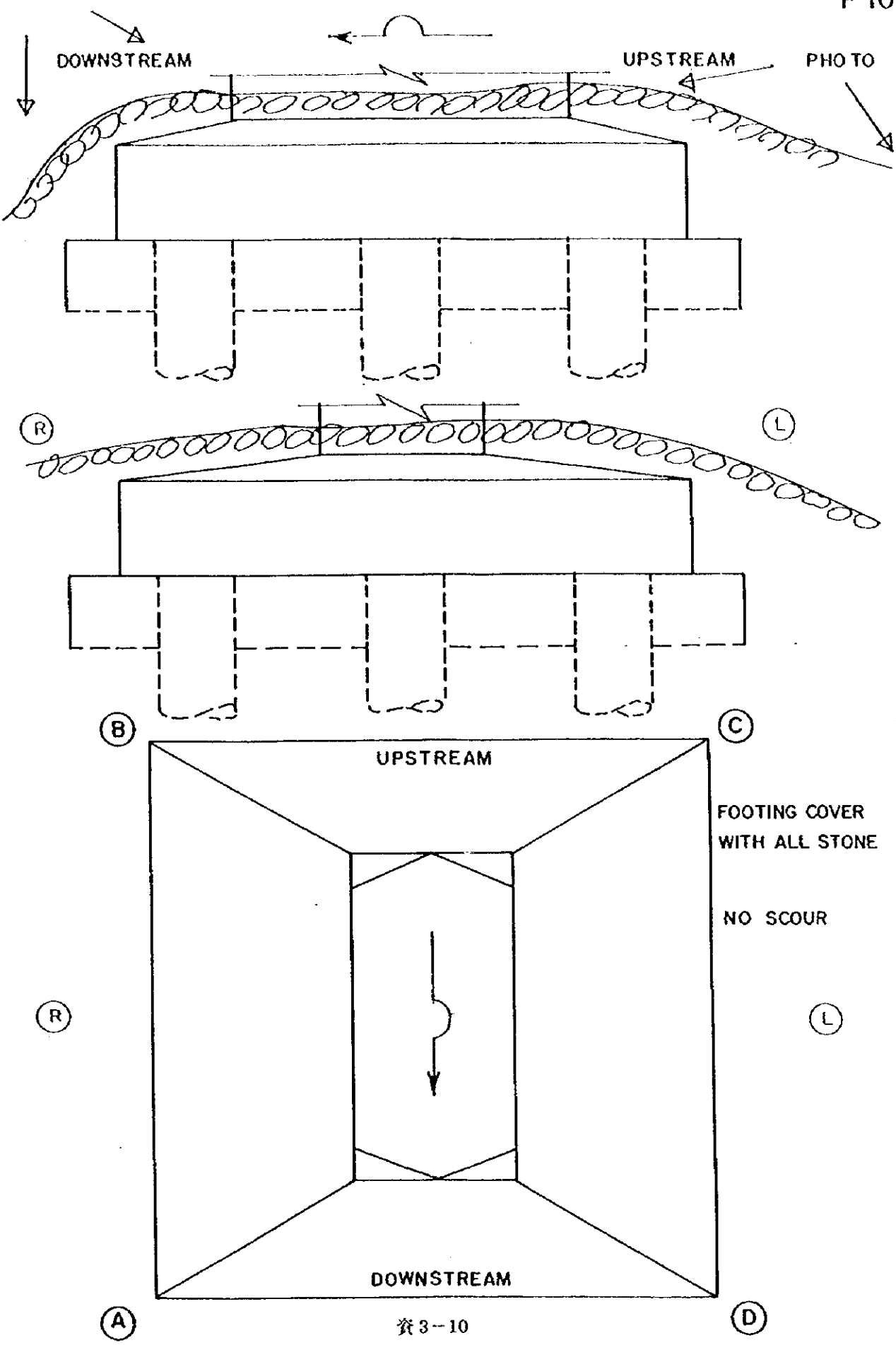
4. Photographs

(bed, piles, footing)

5. Note

* measure (50m), camera, light, level)





資 3-10

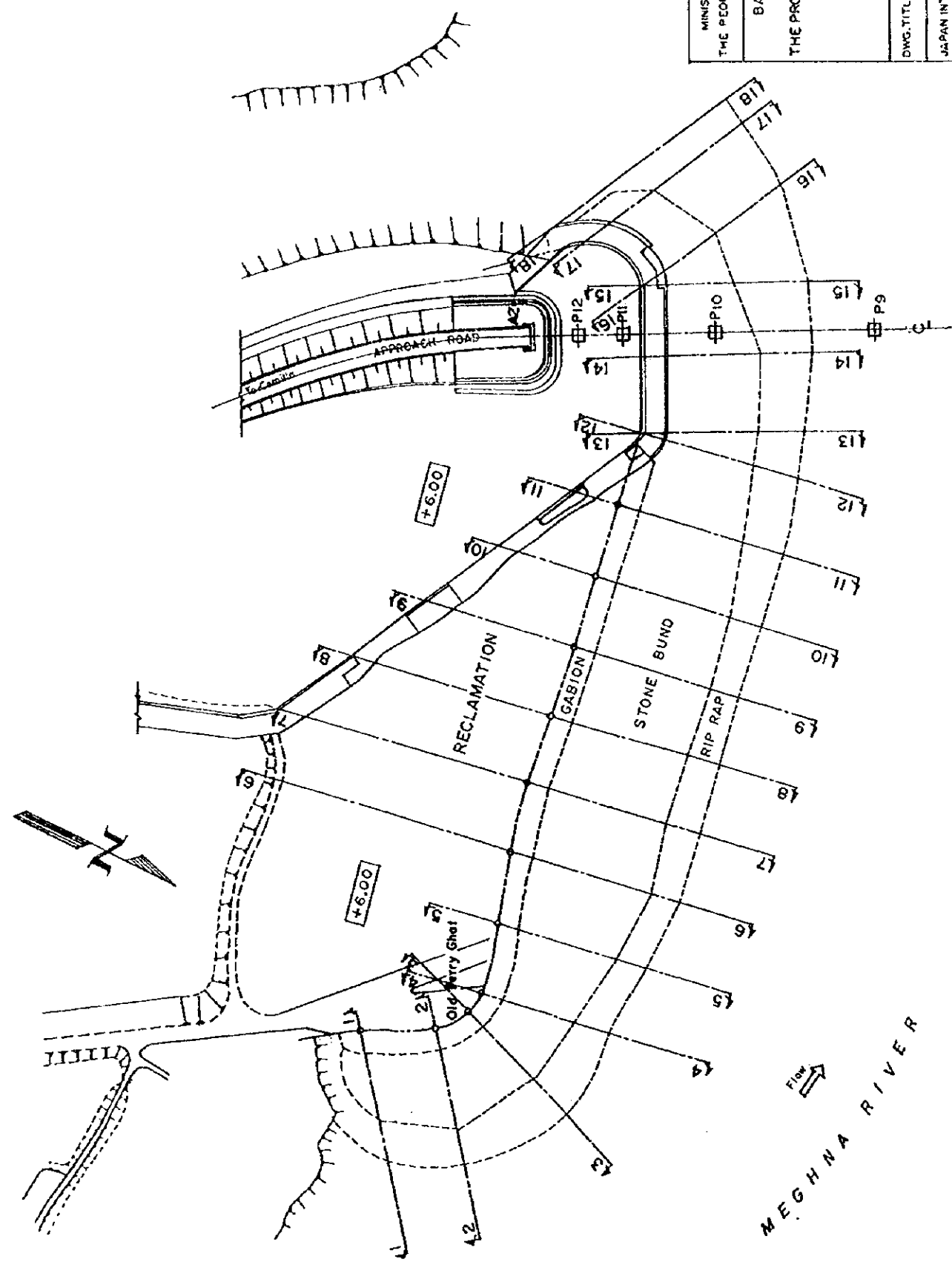
圖一 左岸各護岸断面経年変化図

MINISTRY OF COMMUNICATIONS
THE PEOPLE'S REPUBLIC OF BANGLADESH

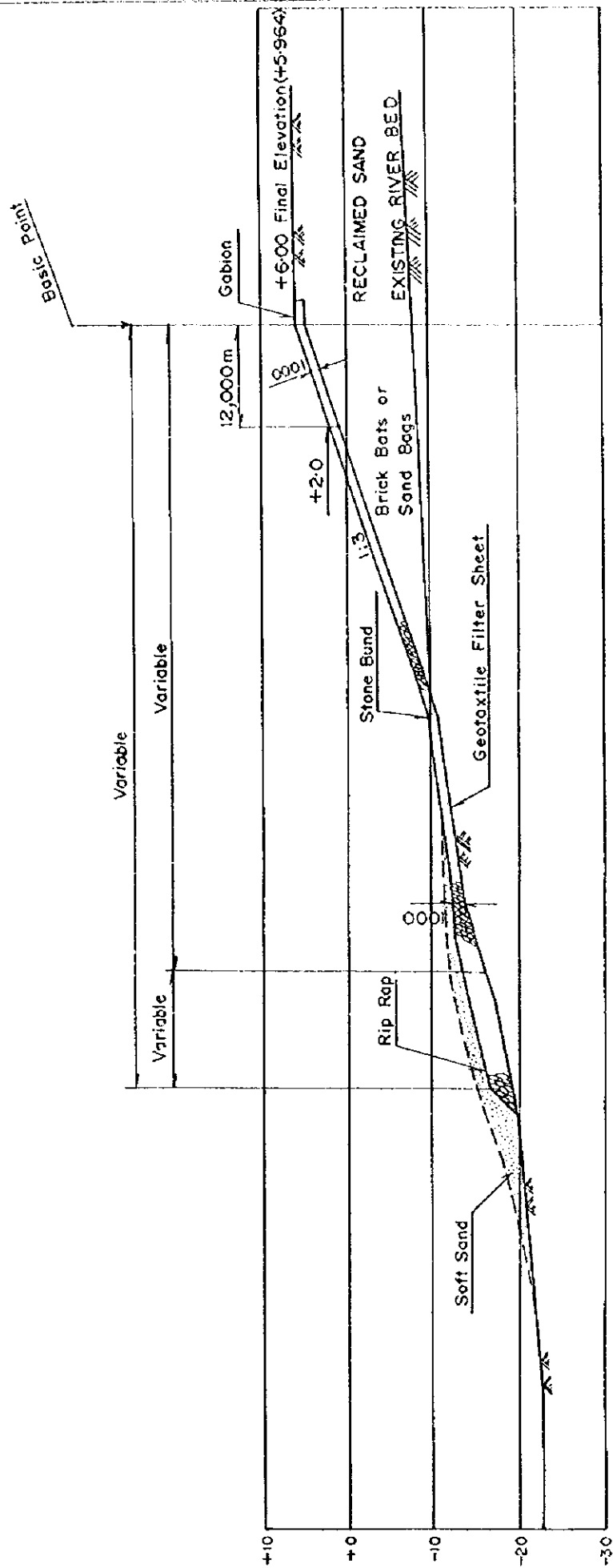
BASIC DESIGN STUDY
ON
THE PROJECT FOR PROTECTION WORKS
FOR
MEGHNA BRIDGE
IN
BANGLADESH

DWG. TITLE FIG. NO. PLAN OF REVETMENT

JAPAN INTERNATIONAL COOPERATION AGENCY
PACIFIC CONSULTANTS INTERNATIONAL
NIPPON KOEI CO. LTD.



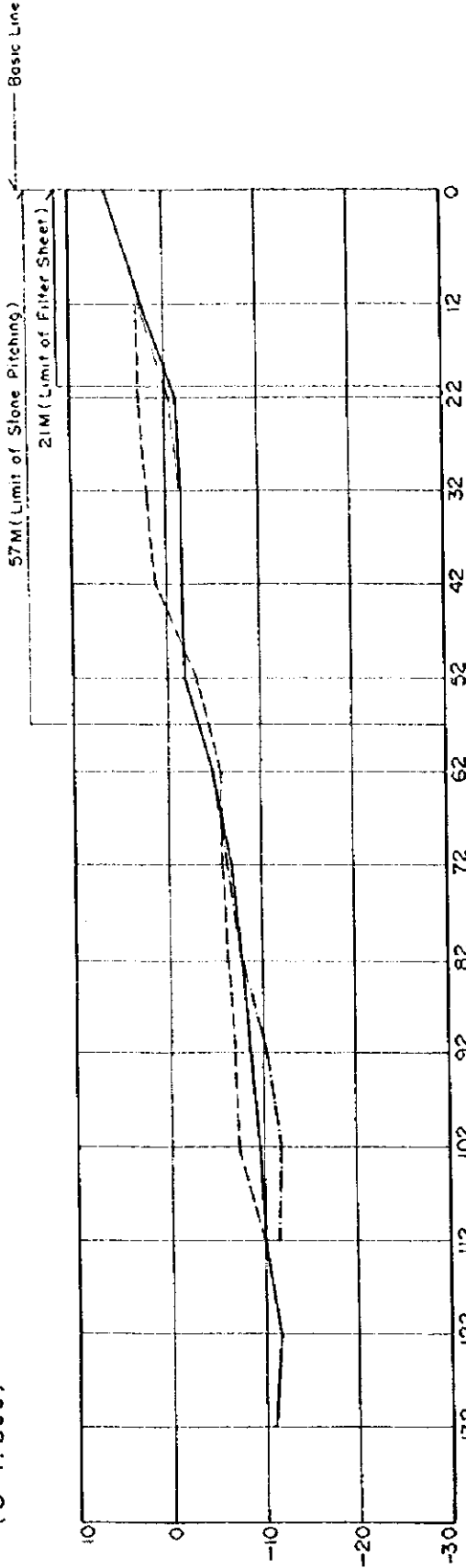
TYPICAL CROSS SECTION OF REVETMENT



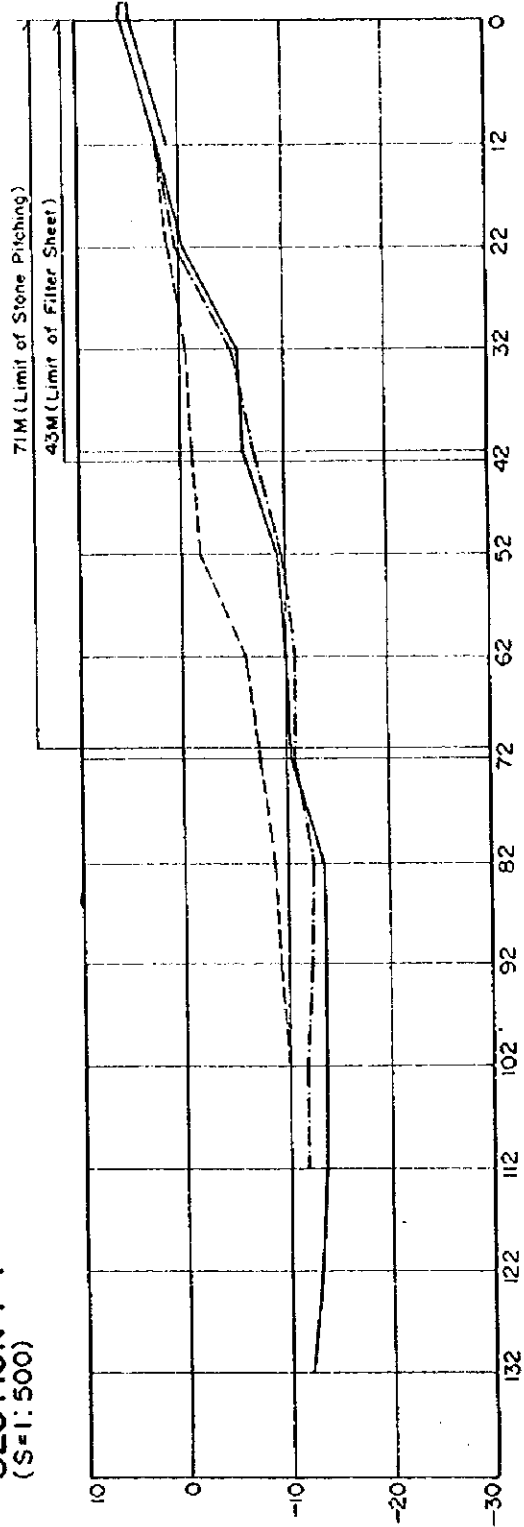
MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. SECTION OF REVETMENT
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

CROSS SECTION OF PROTECTION

SECTION 0-0
(S=1:500)



SECTION 1-1
(S=1:500)

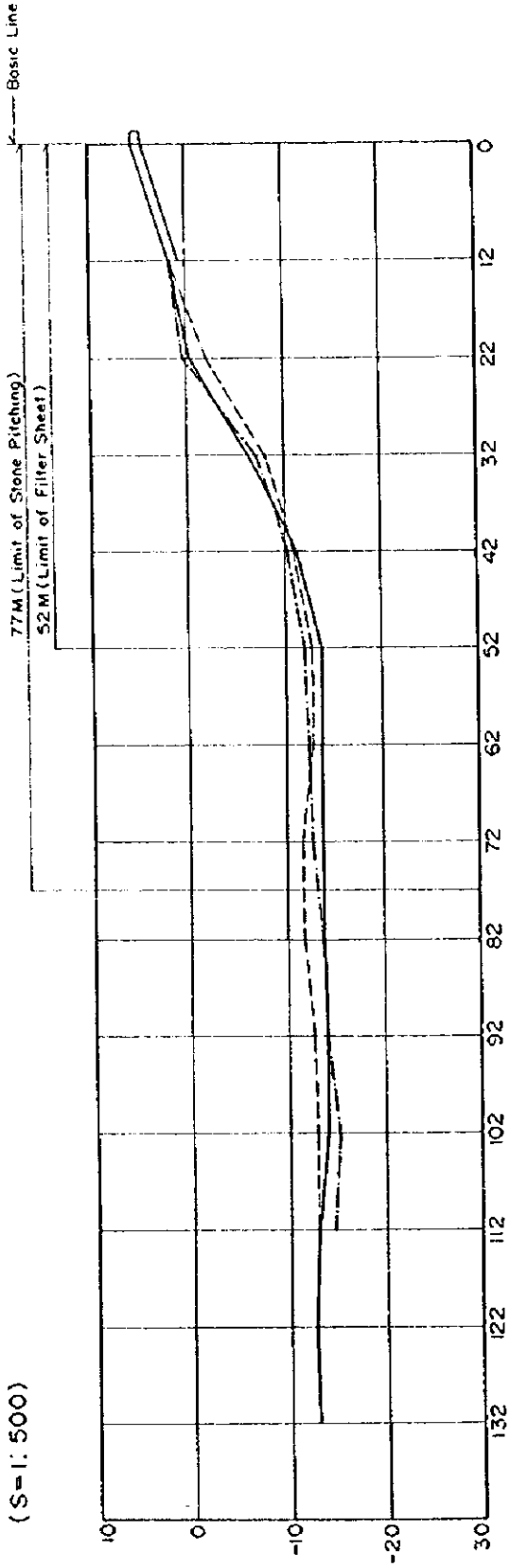


LEGEND

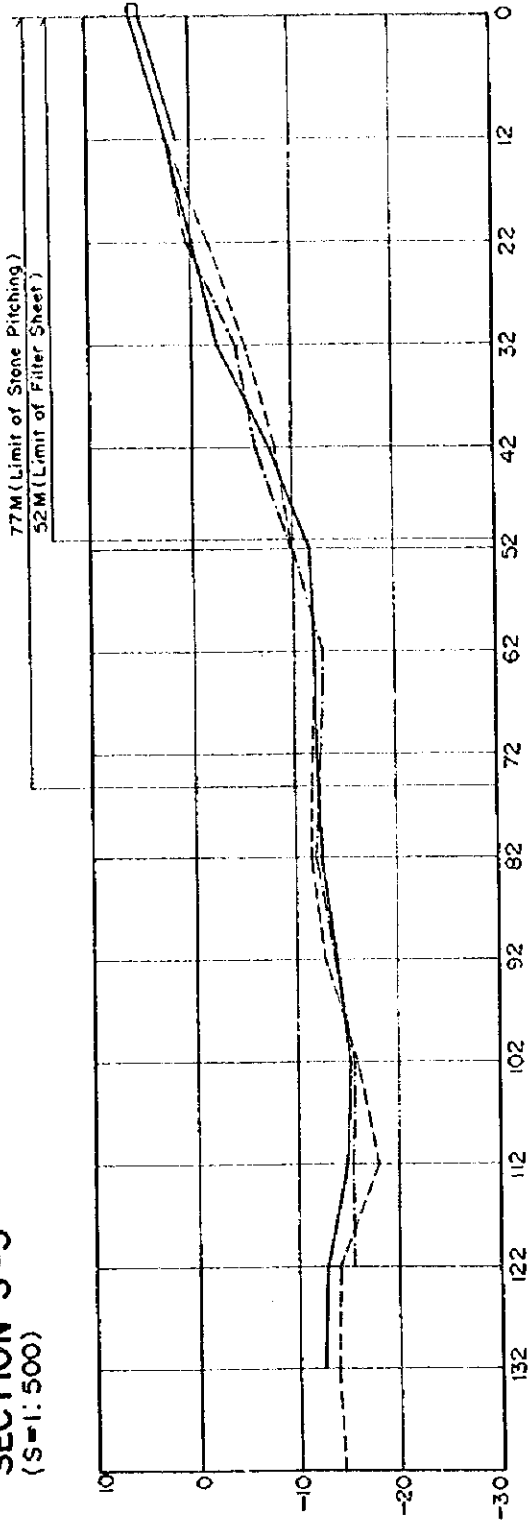
- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION /10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 2-2
(S=1: 500)



SECTION 3-3
(S=1: 500)

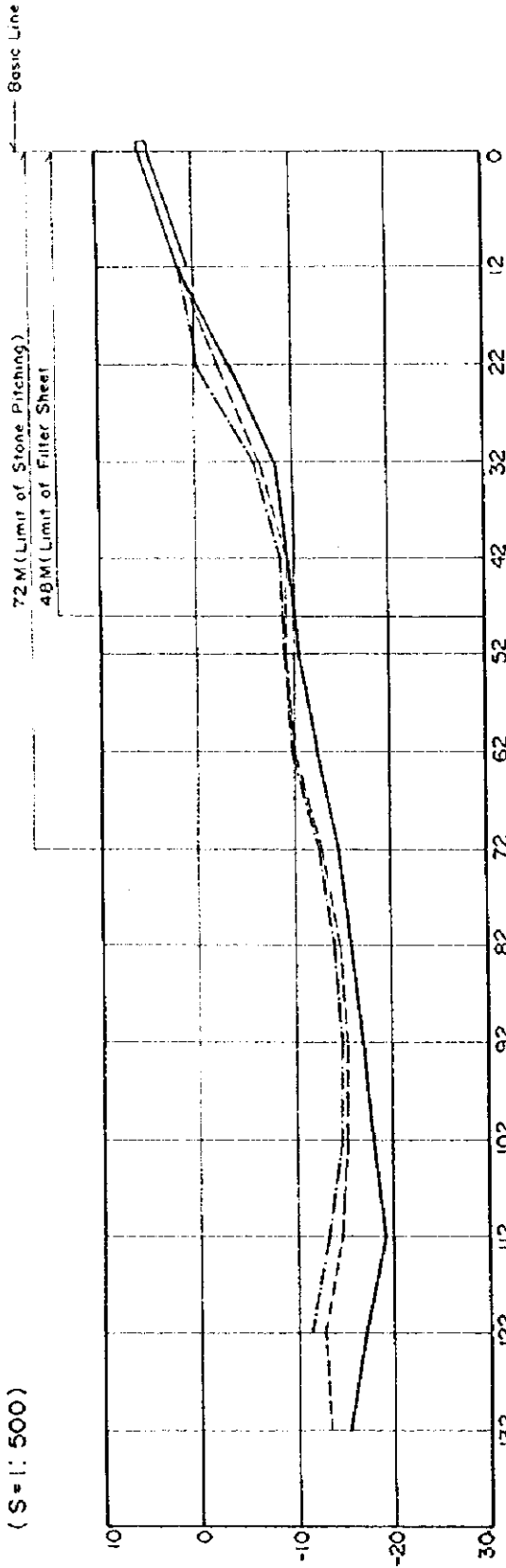


LEGEND

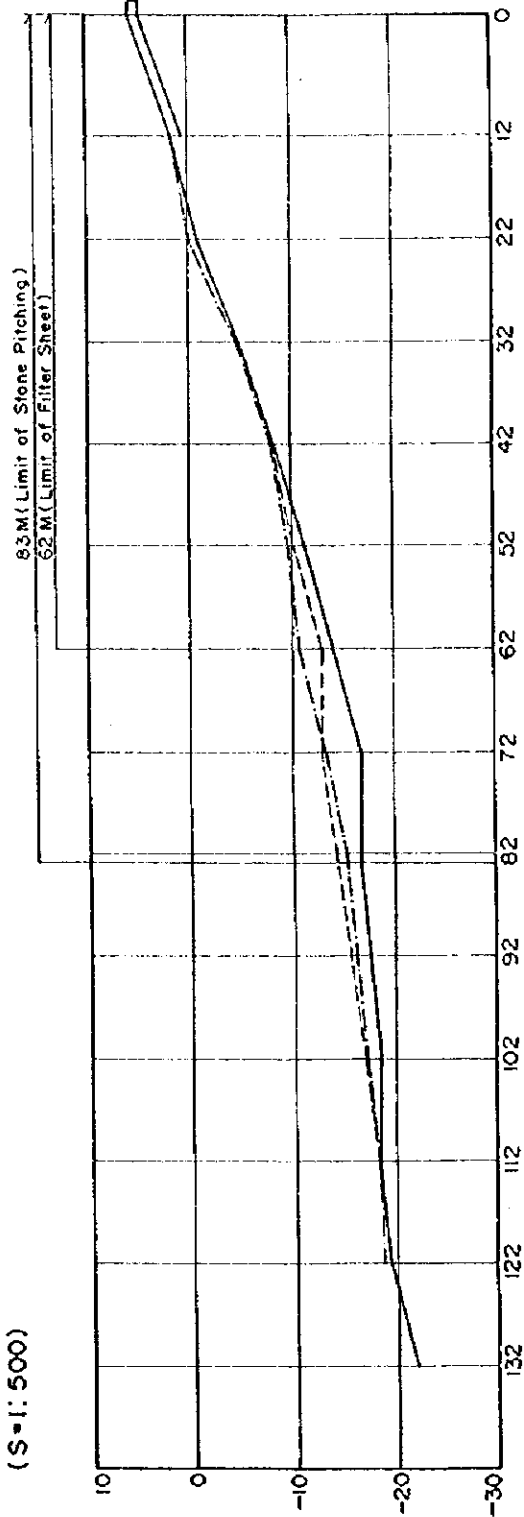
- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO.: CROSS SECTION OF PROTECTION 2/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD	

SECTION 4-4
(S=1:500)



SECTION 5-5
(S=1:500)

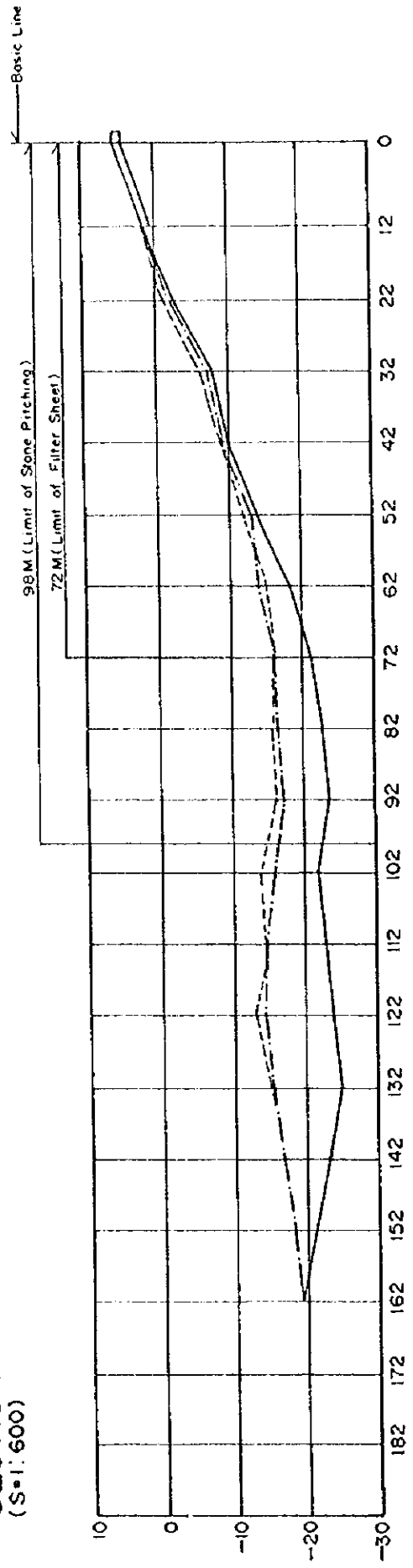


LEGEND

- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997

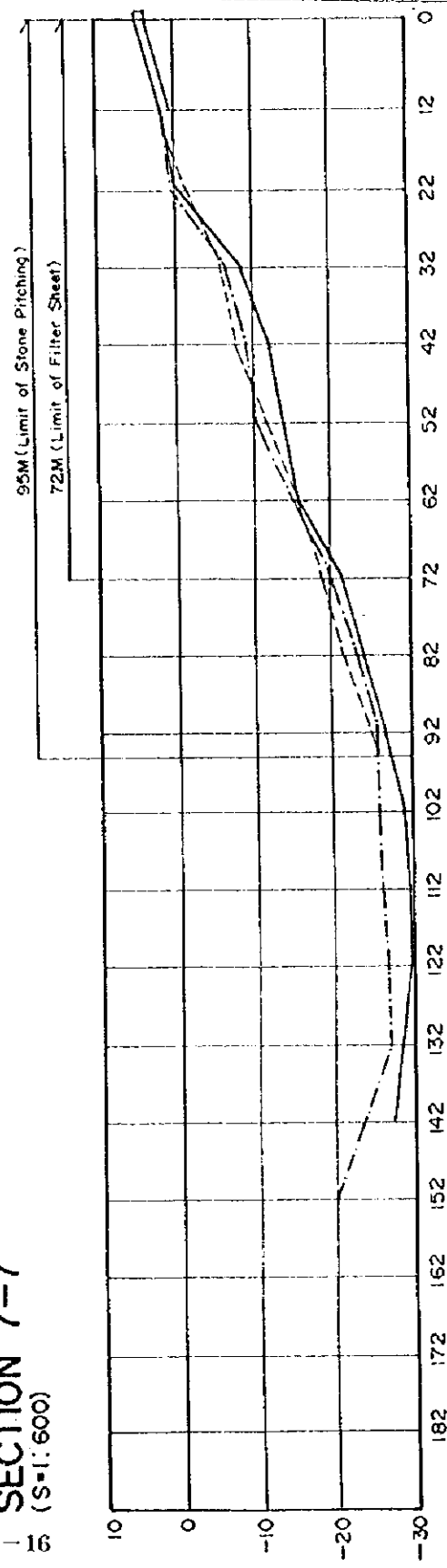
MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION 3/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 6-6
(S=1:600)



資 3-16

SECTION 7-7
(S=1:600)

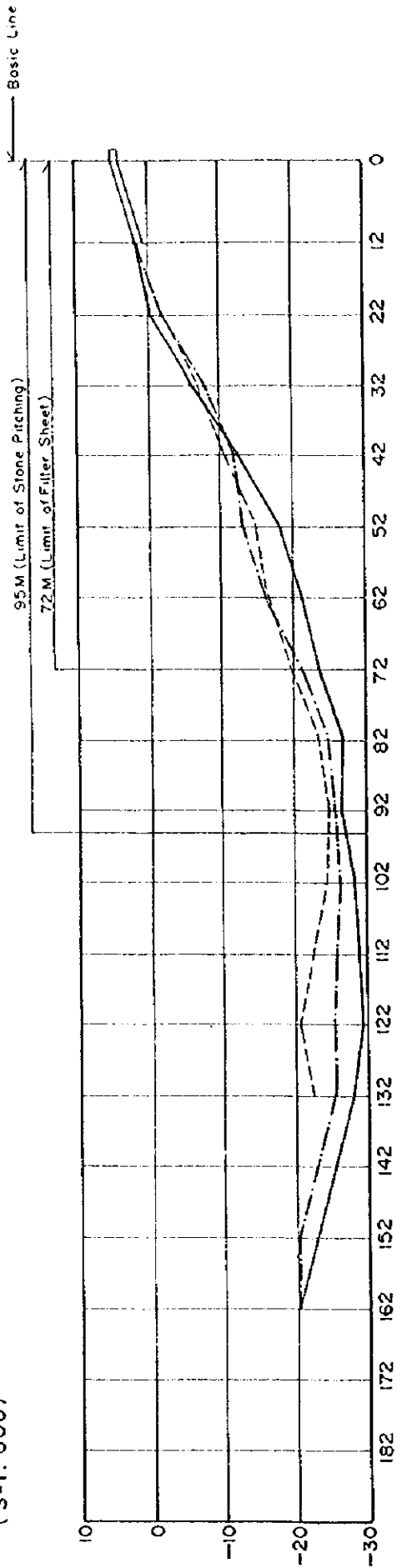


LEGEND

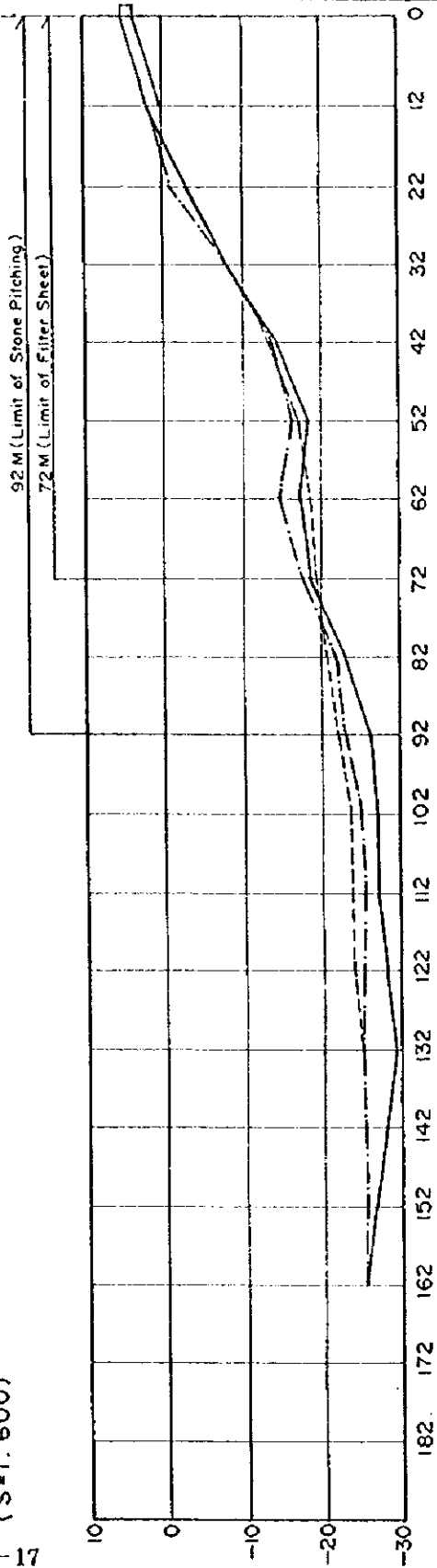
- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION 4/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOGI CO. LTD.	

SECTION 8-8
(S=1: 600)



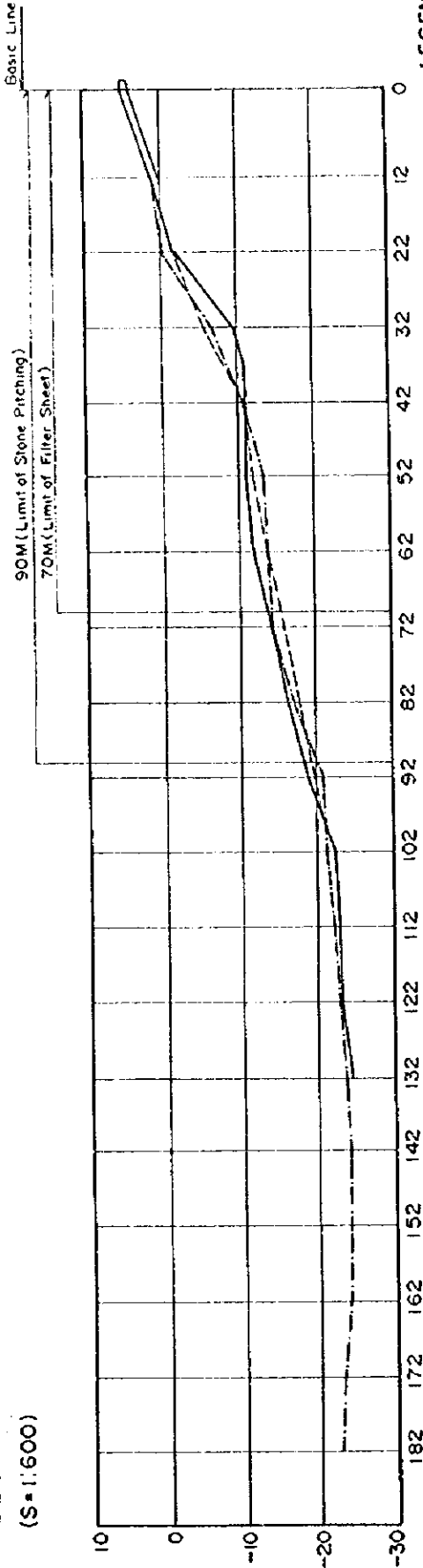
SECTION 9-9
(S=1: 600)



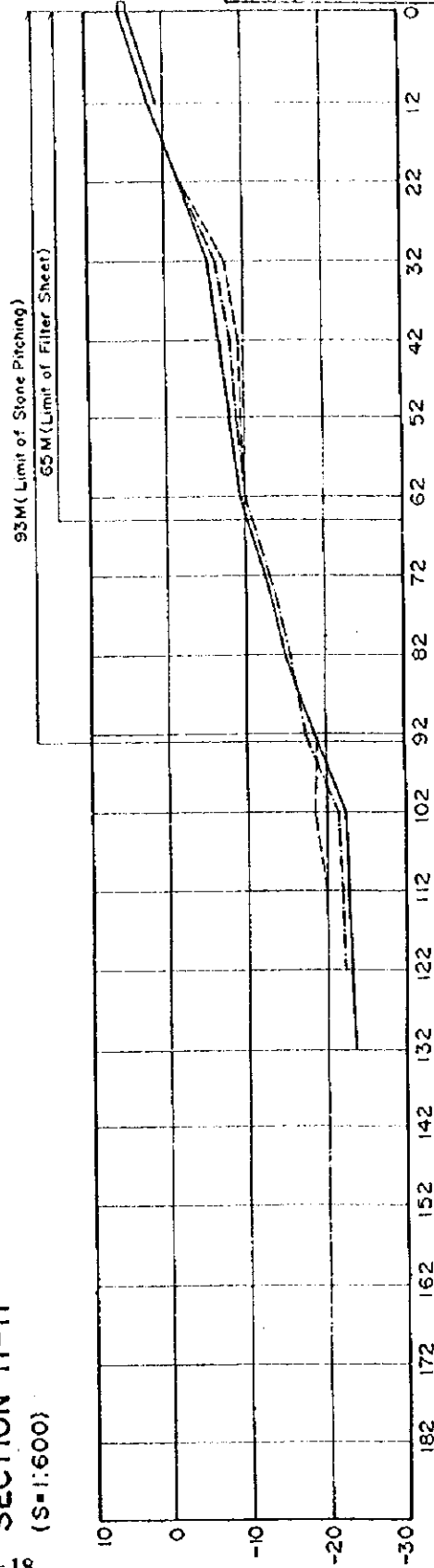
LEGEND
 - - - - - Level on Oct. 17, 1994
 - · - · - Level on Nov. 22, 1995
 ———— Level on Apr. 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MECHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION 5/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD	

SECTION 10-10
(S=1:600)



SECTION 11-11
(S=1:600)

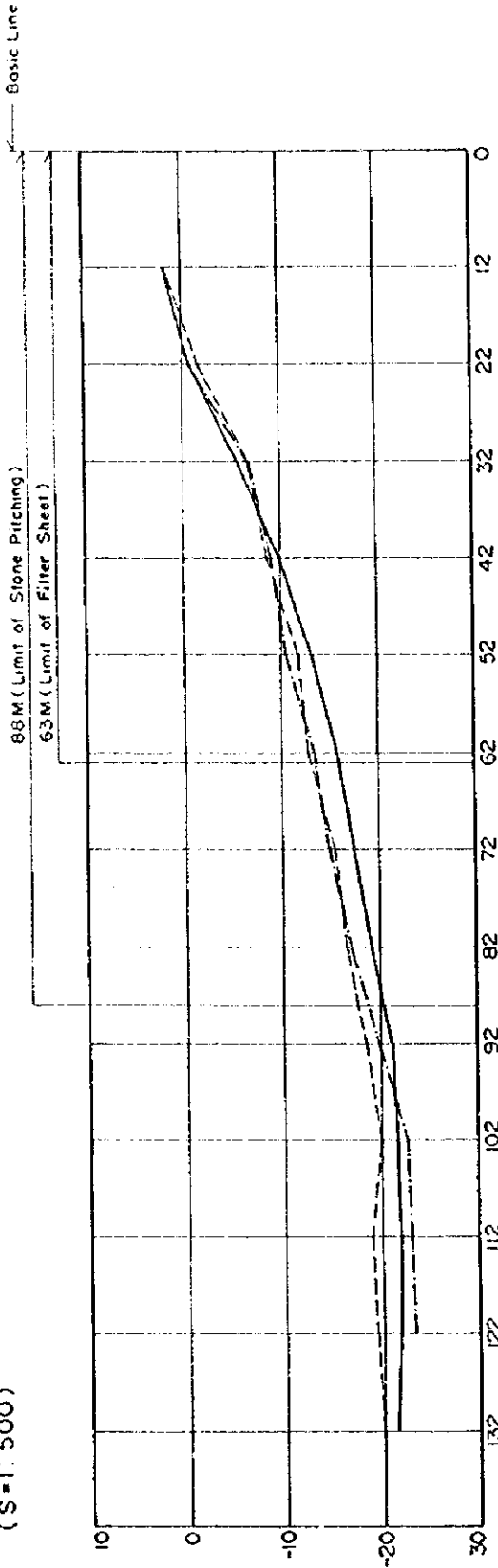


LEGEND

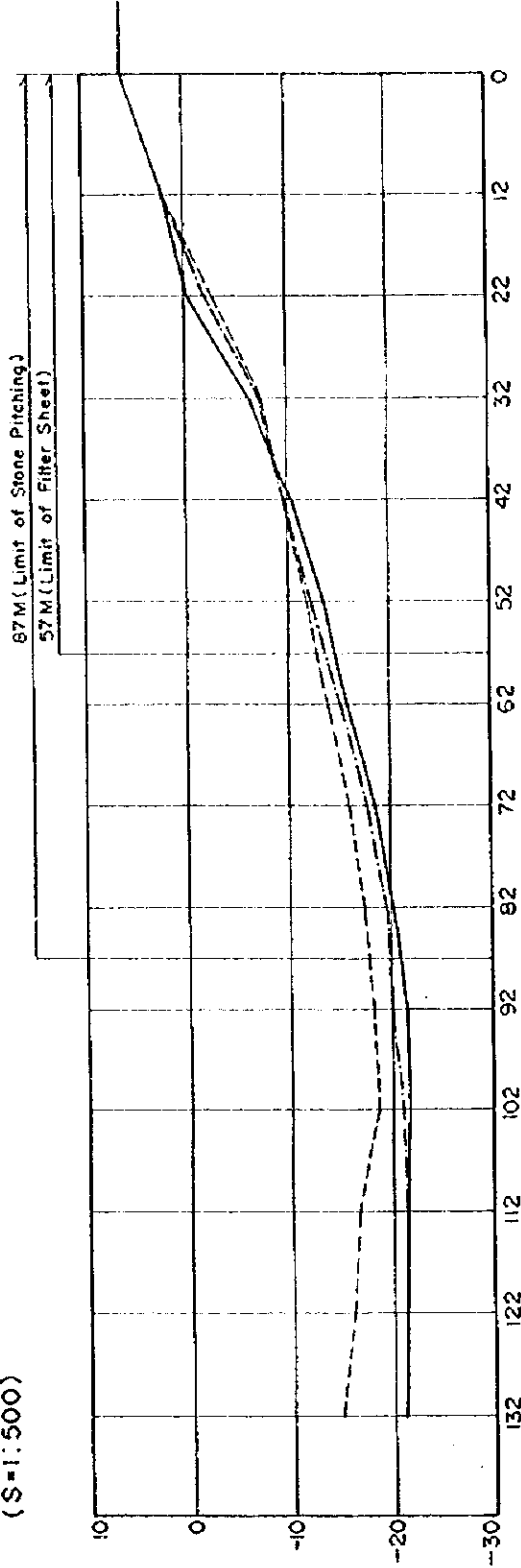
- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO.
CROSS SECTION OF PROTECTION 5/10	
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 12-12
(S=1:500)



SECTION 13-13
(S=1:500)

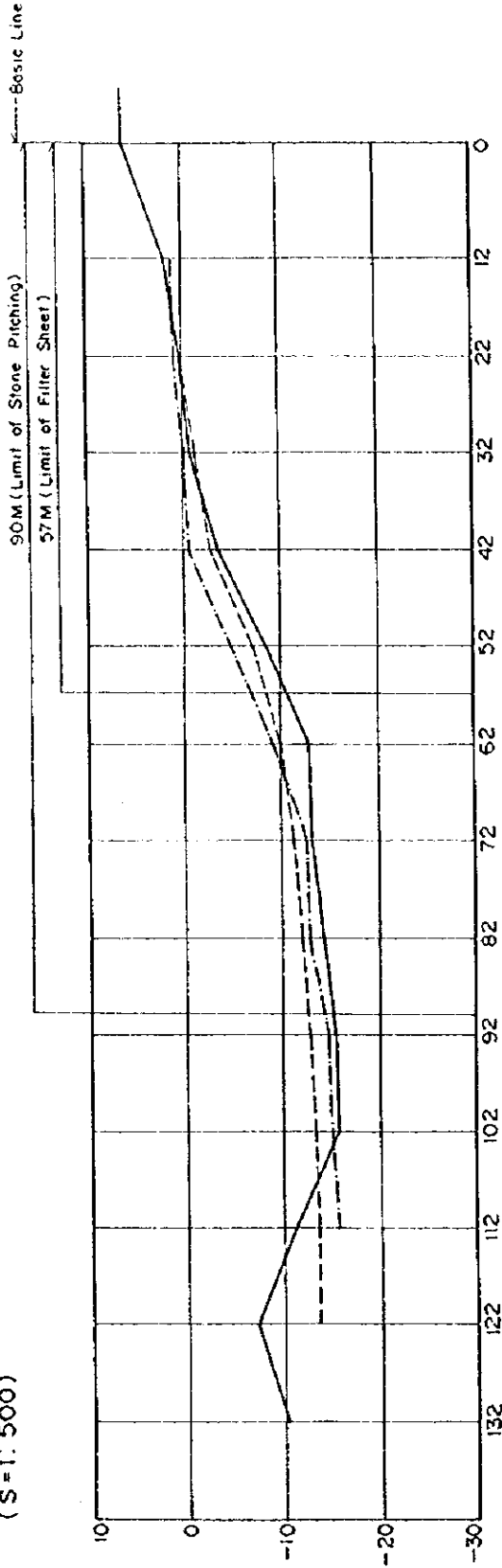


LEGEND

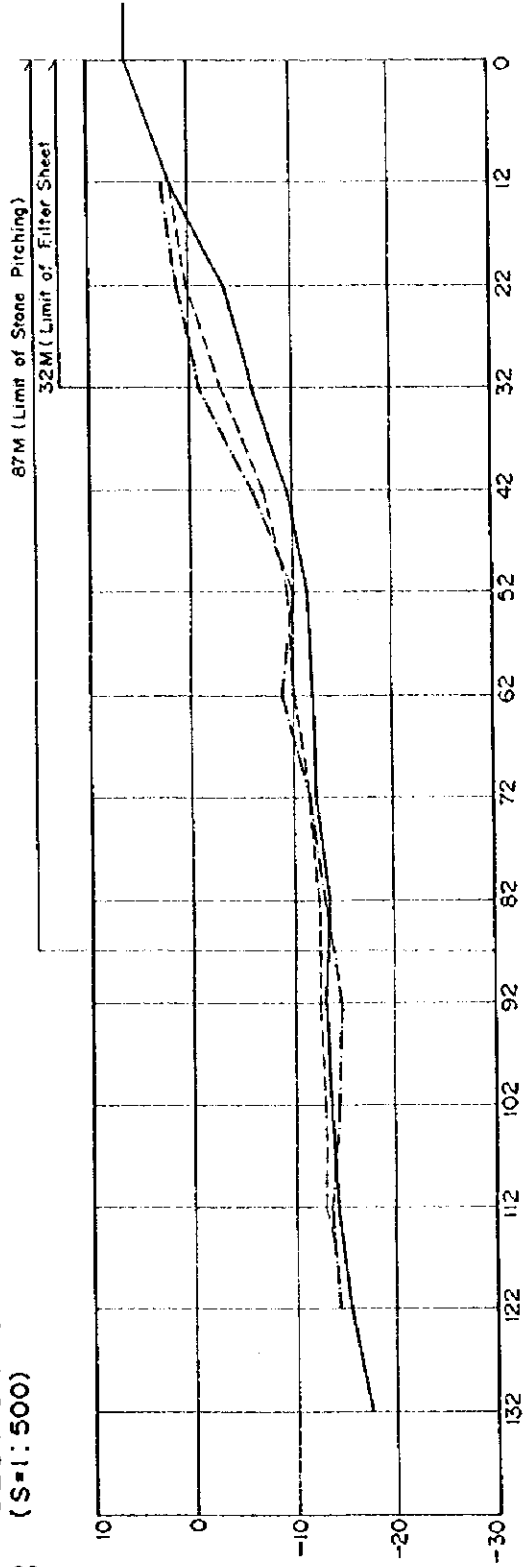
- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO.
CROSS SECTION OF PROTECTION 7/0	
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 14-14
(S=1:500)



SECTION 15-15
(S=1:500)

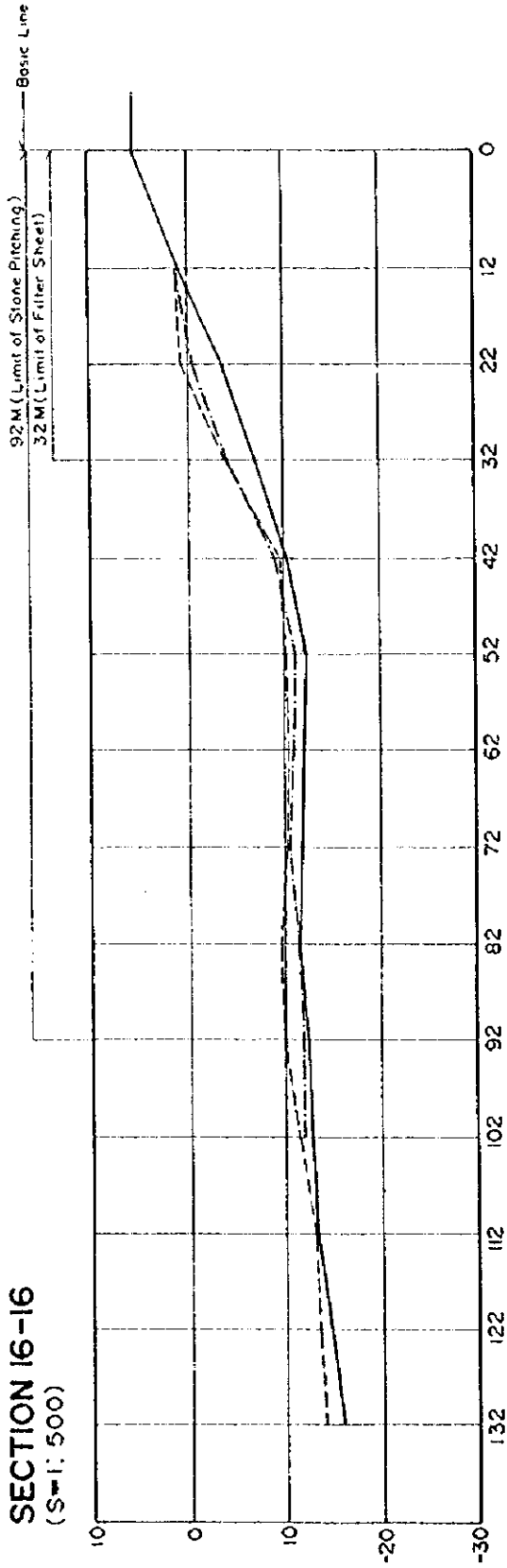


LEGEND

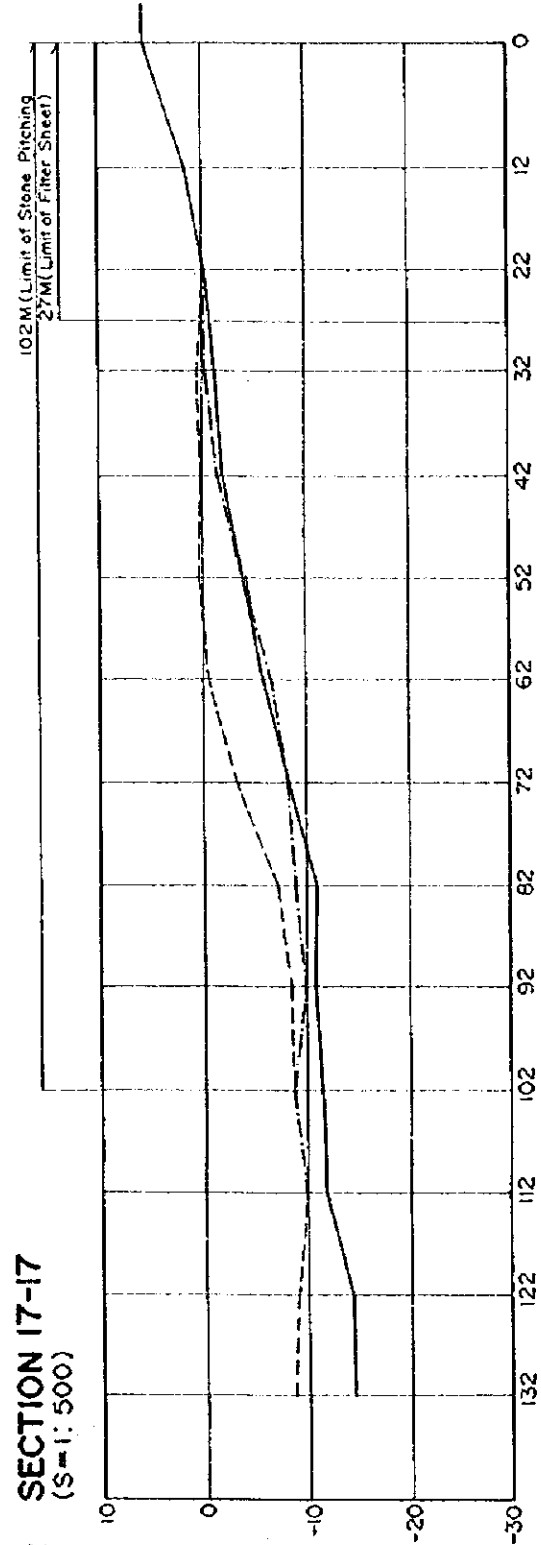
- Level on October 17, 1994
- Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON THE PROJECT FOR PROTECTION WORKS FOR MEGHNA BRIDGE IN BANGLADESH	
DWG TITLE	FIG. NO. CROSS SECTION OF PROTECTION 8/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD	

SECTION 16-16
(S=1: 500)



SECTION 17-17
(S=1: 500)

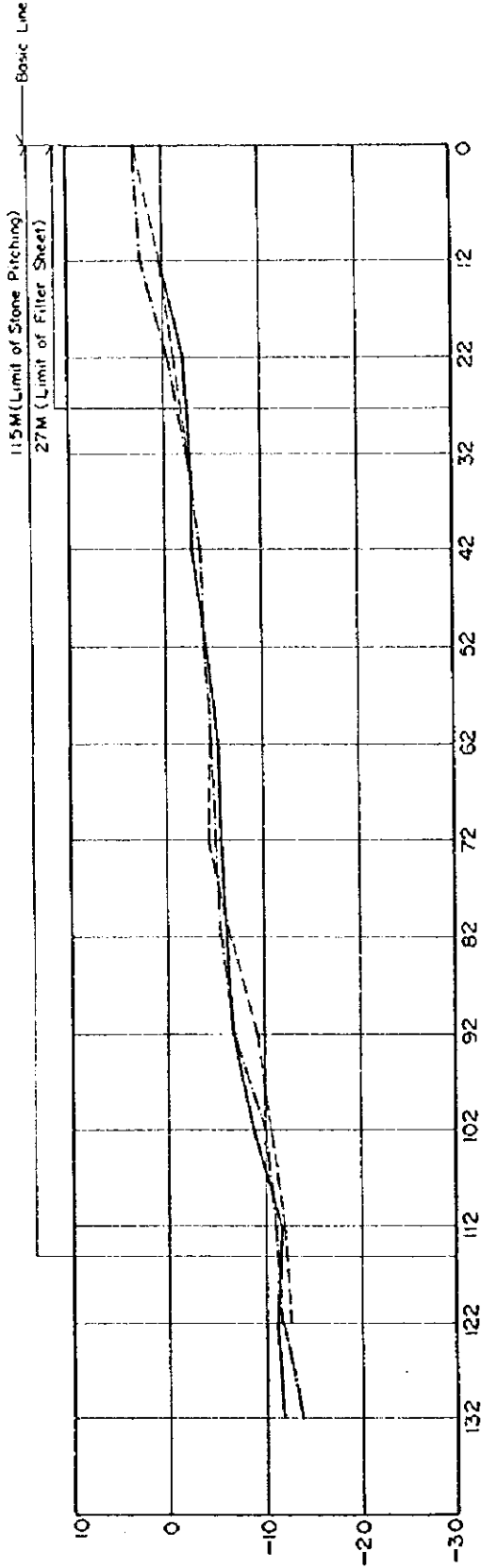


LEGEND

- Level on October 17, 1994
- - - Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MECHINA BRIDGE IN BANGLADESH	
DWG TITLE	FIG. NO. CROSS SECTION OF PROTECTION 9/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD.	

SECTION 18-18
(S=1: 500)



LEGEND

- Level on October 17, 1994
- · - Level on November 22, 1995
- Level on April 1997

MINISTRY OF COMMUNICATIONS THE PEOPLE'S REPUBLIC OF BANGLADESH	
BASIC DESIGN STUDY ON FOR MEGHNA BRIDGE IN BANGLADESH	
DWG. TITLE	FIG. NO. CROSS SECTION OF PROTECTION NO/10
JAPAN INTERNATIONAL COOPERATION AGENCY PACIFIC CONSULTANTS INTERNATIONAL NIPPON KOEI CO. LTD	

以下は、潜水夫による水際から河床までの各箇所の調査結果の記録を記す。

Scouring Survey for Left Bund (3-3)

Diver's Information

1. Locations for scouring survey by divers

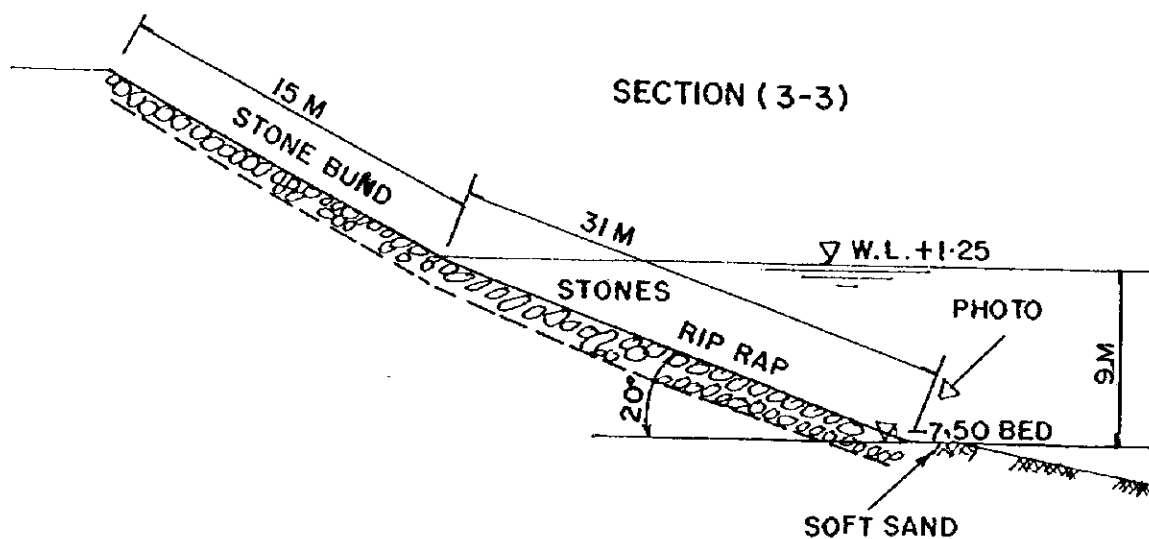
*3/3 REVETMENT

2. Conditions of revetment to river bed

- Bed line (undulation)
 - to draw in cross sections
 - *WAVE PATTERN , SOFT SAND
- protected stone, rip rap
 - *SEMI COVER WITH SOFT SAND ON RIP RAP
- Others

3. Photographs

rip rap, protected stone, river bed



Scouring Survey for Left Bund (7-7)

Diver's Information

1. Locations for scouring survey by divers

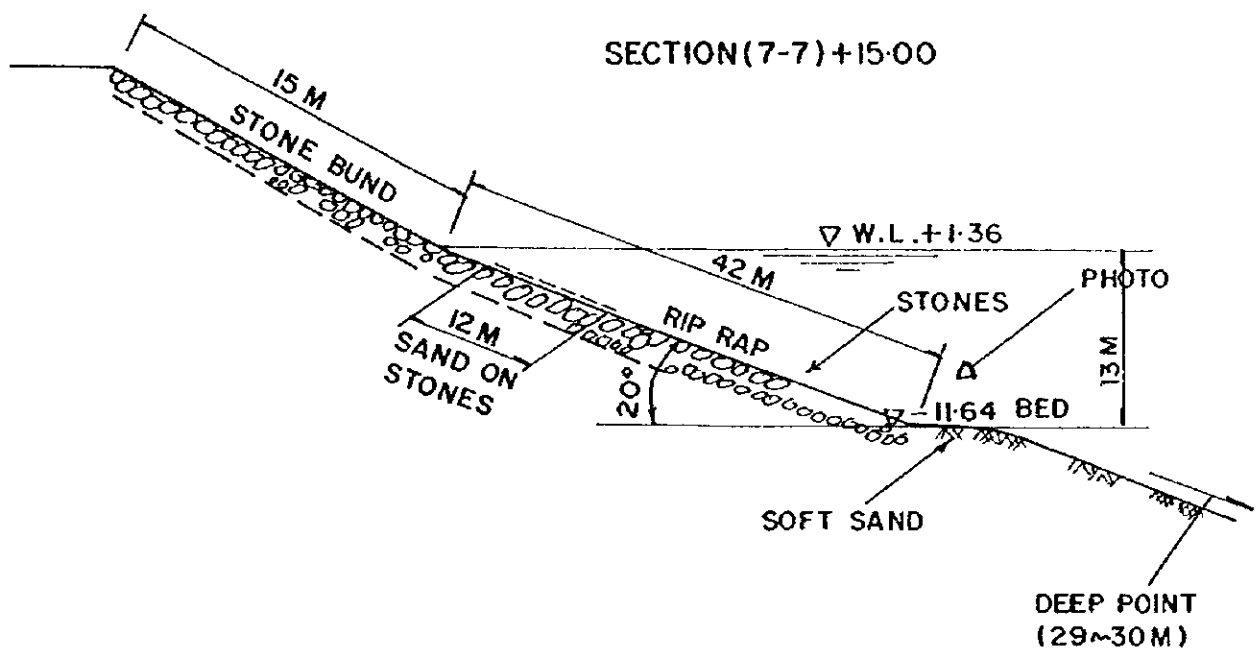
*7/7 REVETMENT

2. Conditions of revetment to river bed

- Bed line (undulation)
 - to draw in cross sections
 - *WAVE PATTERN, SOFT SAND
- protected stone, rip rap
 - *SEMI COVER WITH SOFT SAND ON RIP RAP
- Others

3. Photographs

rip rap, protected stone, river bed



Scouring Survey for Left Bund (10-10)

Diver's Information

1. Locations for scouring survey by divers

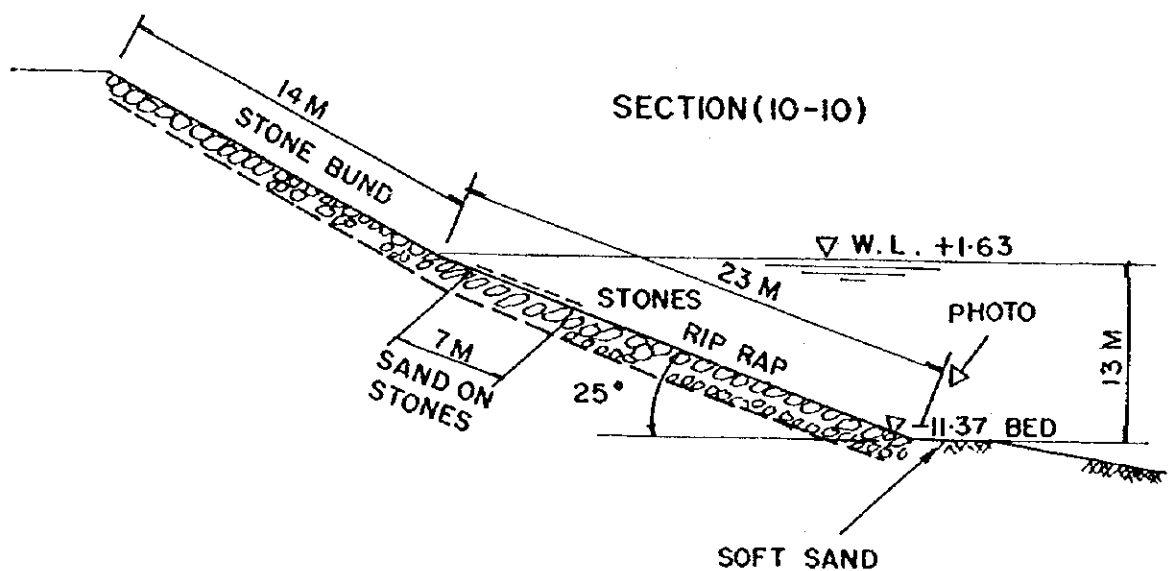
*10/10 REVETMENT

2. Conditions of revetment to river bed

- Bed line (undulation)
 - to draw in cross sections
 - *WAVE PATTERN, SOFT SAND
- protected stone, rip rap
 - *SEMI COVER WITH SOFT SAND ON RIP RAP
- Others

3. Photographs

rip rap, protected stone, river bed



Scouring Survey for Left Bund (15-15)

Diver's Information

1. Locations for scouring survey by divers

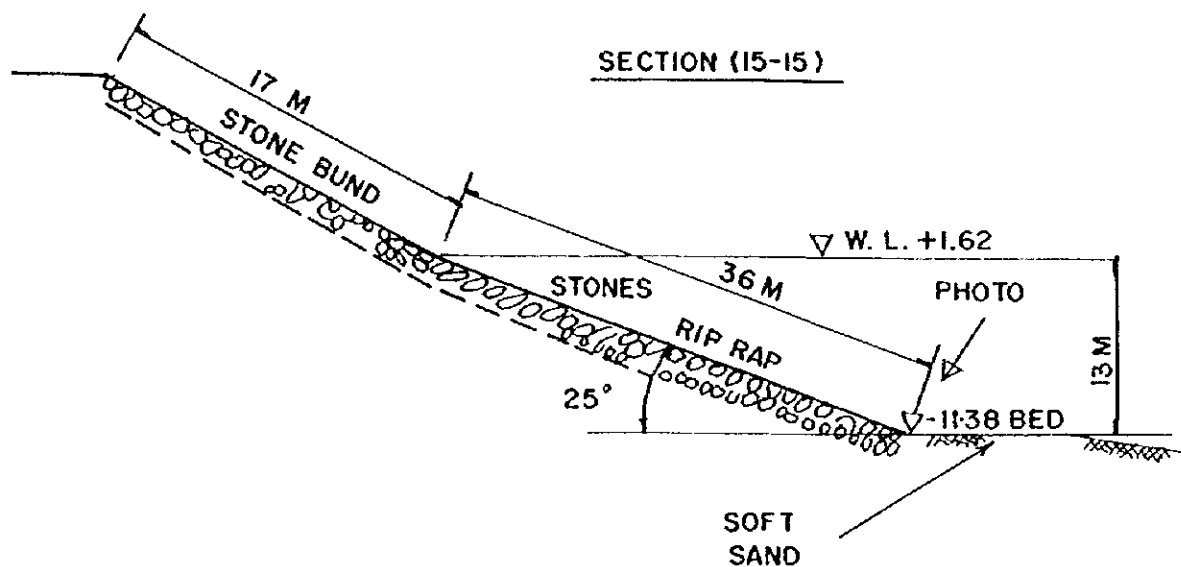
*15/15 REVETMENT

2. Conditions of revetment to river bed

- Bed line (undulation)
 - to draw in cross sections
 - *FLAT RIVER BED, SOFT SAND
- protected stone, rip rap
 - *SEMI COVER WITH SAND ON RIP RAP
- Others

3. Photographs

rip rap, protected stone, river bed



Scouring Survey for Left Bund (17-17)

Diver's Information

1. Locations for scouring survey by divers

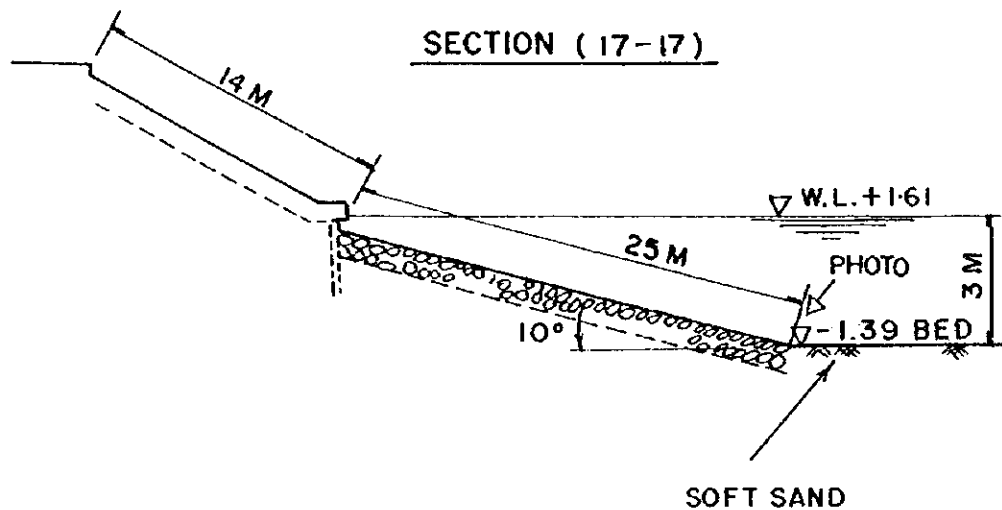
*17/17 REVETMENT

2. Conditions of revetment to river bed

- Bed line (undulation)
 - to draw in cross sections
 - *FLAT RIVER BED, SOFT SAND
- protected stone, rip rap
 - *SEMI COVER WITH SAND ON RIP RAP
- Others

3. Photographs

rip rap, protected stone, river bed



4. 水文資料

(1) 流向・流速調査結果

(2) メグサ橋地点水位記録

4-(1) 流向・流速調査結果

Section : 1.10 ~ R10 Date : August 7, 1997
 Water Level : RL. +4.30 m

Location	Depth (m)	Current (cm/s)			Direct (Deg.)
		X	Y	Composite	
Left to Right 50 m	2	-22.6	-15.0	37.0	234
	3	-18.0	-9.7	14.0	256
	(bottom)			Ave. 25.5	Ave. 240.0
150 m	2	-41.0	-44.0	59.0	229
	4	-48.0	-52.9	48.6	227
	6	-48.3	-58.1	76.7	229
	8	-36.1	-45.2	58.6	236
	9	-33.0	-41.1	55.1	201
(bottom)			Ave. 59.6	Ave. 224.9	
250 m	2	-38.6	-45.9	54.4	236
	4	-31.0	-38.0	29.8	250
	6	-26.2	-29.5	28.9	242
	8	-29.6	-27.2	31.4	235
	10	-18.6	-14.5	18.5	255
	12	-24.4	-26.1	36.0	223
	13	-4.6	-21.3	21.9	203
(bottom)			Ave. 31.6	Ave. 234.7	
350 m	2	-42.2	-41.3	21.1	234
	4	-29.1	-32.2	35.5	247
	6	-27.2	-29.2	35.8	229
	8	-41.4	-42.4	51.2	229
	10	-23.3	-21.1	27.7	212
	12	-26.4	-24.2	26.1	212
13	-8.4	-15.5	18.2	297	
(bottom)			Ave. 30.8	Ave. 234.0	
450 m	2	-36.8	-42.2	53.3	318
	4	-36.8	-42.2	50.0	230
	6	-35.4	-37.8	52.6	227
	8	-32.6	-37.6	40.7	234
	10	-34.4	-33.6	42.8	227
	12	-29.1	-28.6	31.3	216
	13	-7.9	-21.6	13.1	259
(bottom)			Ave. 40.5	Ave. 245.9	
550 m	2	-10.5	-12.8	9.1	326
	4	-16.3	-26.8	29.4	234
	6	-15.7	-19.4	28.1	221
	8	-15.7	-16.4	12.6	217
	10	-17.3	-16.6	15.7	216
	12	-14.6	-10.1	15.5	222
	14	-14.0	-15.5	15.5	236
	16	-18.8	-23.0	21.4	199
	18	-19.2	-27.2	19.0	199
	20	-23.9	-21.0	23.0	217
	22	-22.6	-19.6	32.0	198
	24	-22.3	-8.7	21.4	215
25	-18.6	-5.5	12.5	181	
(bottom)			Ave. 19.6	Ave. 217.5	
650 m	2	-25.9	-24.3	24.2	253
	4	-28.1	-34.2	38.7	207
	6	-27.2	-29.9	32.1	221
	8	-24.2	-28.2	24.1	211
	10	-30.2	-28.7	36.6	212
	12	-23.9	-27.7	26.8	210
	14	-20.7	-20.2	21.2	202
15	-7.6	-7.9	7.8	234	
(bottom)			Ave. 26.4	Ave. 216.6	
750 m (20 m from R10) (Say)	2	-7.0	+5.5	7.8	224
	2.6	-7.8	-0.9	8.2	254
	(bottom)			Ave. 8.0	Ave. 239.4

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (1/6)

Section : 1.3 - R3
 Water Level : RL. +4.20 m

Date : August 9, 1997

Location	Depth (m)	Current (cm/s)			Direct (Deg)	Location	Depth (m)	Current (cm/s)			Direct (Deg)
		X	Y	Composite				X	Y	Composite	
Left to Right 50 m	2	+27.8	+42.7	29.4	230	1050 m	2	+32.9	+59.0	51.2	207
	4	+25.1	+51.4	57.9	235		4	+36.5	+53.7	49.1	221
	6	+20.0	+50.6	41.8	224		6	+23.6	+46.6	34.4	224
	8	+15.6	+40.5	33.3	234		7	+14.7	+29.7	22.4	228
	10	+11.3	+21.1	25.3	251		(bottom)	Ave. 39.3	Ave. 218.1		
	(bottom)	Ave. 37.5	Ave. 233.7								
150 m	2	+14.3	+44.9	49.1	222	1150 m	2	+28.6	+44.6	38.2	204
	4	+15.4	+46.4	38.8	228		4	+15.5	+28.0	26.4	228
	6	+8.6	+40.3	35.3	224		4.5	+4.5	+16.6	19.1	227
	8	+16.9	+43.9	35.5	238	(bottom)	Ave. 27.9	Ave. 216.8			
	10	+9.6	+32.4	25.6	240	1240 m (on R3)	1.5	5.5	25.2	25.1	206
	12	+7.1	+35.0	23.3	237		(bottom)	9.8	33.2	32.2	212
	14	+8.8	+35.8	28.6	232		Ave. 28.7	Ave. 209.4			
	16	+9.0	+31.8	30.1	234						
(bottom)	Ave. 33.3	Ave. 230.7									
250 m	2	+13.9	+32.9	31.1	198						
	4	+10.4	+25.4	26.3	215						
	6	+9.0	+25.0	21.0	212						
	8	+5.1	+18.9	15.3	230						
	10	+8.8	+27.0	18.8	250						
	12	+9.7	+19.7	19.7	249						
	14	+10.6	+22.0	19.4	262						
	16	+11.0	+18.3	19.9	261						
	18	-11.5	+5.9	11.4	246						
	(bottom)	Ave. 20.3	Ave. 232.2								
350 m	2	+10.9	+16.6	15.9	290						
	4	+6.4	+16.1	17.2	265						
	6	+17.4	+34.4	32.0	222						
	8	+22.9	+35.1	35.4	231						
	10	+17.8	+31.7	29.7	235						
	12	+12.9	+29.9	27.8	237						
	14	+10.0	+17.6	18.4	232						
	(bottom)	Ave. 25.2	Ave. 239.7								
450 m	2	+30.6	+39.5	40.0	276						
	4	+19.8	+20.8	29.5	208						
	(bottom)	Ave. 34.8	Ave. 218.4								
550 m	2	+22.1	+38.7	37.9	203						
	3	+15.4	+27.1	23.5	232						
	(bottom)	Ave. 30.7	Ave. 214.1								
650 m	2	+8.5	+21.7	25.7	252						
	2.5	+6.5	+13.9	17.2	261						
	(bottom)	Ave. 21.5	Ave. 255.6								
750 m	2	-2.3	+19.8	20.2	220						
	3	-2.9	+1.5	3.2	186						
	(bottom)	Ave. 11.7	Ave. 215.4								
850 m	2	+15.6	+40.0	38.6	206						
	4	+14.7	+26.3	25.4	220						
	(bottom)	Ave. 32.0	Ave. 211.6								
950 m	2	+20.7	+34.7	31.3	214						
	4	+11.3	+36.3	29.6	239						
	6	+13.5	+23.9	23.8	255						
	8	+6.7	+9.9	10.7	252						
	9	+5.2	+4.9	9.5	292						
	(bottom)	Ave. 21.0	Ave. 241.3								

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (2/6)

Section : I.I - R1
Water Level : RL. +4.20 m

Date : August 9, 1997

Section : LDI - RD1
Water Level : RL. +4.20 m

Date : August 9, 1997

Location	Depth (m)	Current (cm/s)			Direct (Deg)	Location	Depth (m)	Current (cm/s)			Direct (Deg)		
		X	Y	Composite				X	Y	Composite			
Left to Right 50 m	2	+51.6	+69.2	66.1	298	Left to Right 50 m	2	+15.3	+37.3	33.6	234		
	4	+37.7	+68.2	53.9	288		4	+5.4	+27.6	25.9	236		
	6	+46.4	+46.6	69.2	286		6	-0.7	+13.9	10.8	125		
	8	+41.6	+72.0	63.8	286		(bottom)			Ave. 23.4	Ave. 218.0		
	10	+12.1	+68.7	63.0	254		150 m	2	+32.6	+52.6	47.7	243	
	12	+31.2	+29.0	28.7	252			4	+28.7	+37.6	37.6	248	
	14	-0.6	+2.9	3.8	41			6	+15.1	+24.9	21.1	255	
	16	+42.7	+34.0	49.1	316			8	+11.0	+22.2	24.7	236	
	16.5	+7.9	-11.8	13.9	219			10	+7.6	+21.6	22.8	202	
	(bottom)			Ave. 45.7	Ave. 280.0			12	+12.9	+26.8	28.1	212	
	170 m	2	+26.1	+65.2	52.2			255	14	+16.4	+23.1	24.8	263
		4	+37.4	+76.2	84.6			264	15.5	+0.5	+2.3	3.0	226
		6	+17.0	+70.6	84.6		268	(bottom)			Ave. 26.2	Ave. 237.8	
		8	+27.0	+63.0	74.5		264	250 m	2	+52.2	+55.5	59.7	252
		10	+28.4	+62.2	52.2		270		4	+47.9	+53.0	56.5	245
		12	+33.0	+59.3	59.0		266		6	+56.0	+48.0	54.2	247
14		+27.5	+62.0	68.9	271	8	+39.4		+49.3	50.5	246		
16		+19.2	+53.0	50.3	264	10	+41.8		+44.2	44.2	252		
18		+16.3	+47.3	41.5	264	12	+27.8		+30.0	35.3	261		
20		+15.4	+41.3	35.5	267	12.5	+31.7		+25.3	38.3	259		
21		-8.9	+37.3	38.7	249	(bottom)				Ave. 48.4	Ave. 250.9		
(bottom)			Ave. 58.4	Ave. 264.5	350 m	2	+15.4	+38.9	32.4	252			
290 m	2	-9.8	+19.2	17.1		329	4	+37.9	+55.3	45.7	243		
	4	-12.9	+47.8	35.4		292	6	+34.6	+53.8	51.2	252		
	6	-13.5	+41.6	32.7		269	8	+23.1	+49.2	42.3	255		
	8	-8.0	+31.9	25.5		274	10	+34.6	+55.6	49.6	242		
	10	-10.6	+38.7	30.9		289	12	+25.5	+44.2	41.6	247		
	12	-11.7	+55.4	37.0		292	14	+8.5	+13.5	12.5	211		
	14	-10.6	+57.6	43.2		291	(bottom)			Ave. 39.3	Ave. 237.0		
	16	-21.4	+44.9	36.6	275	450 m	2	+53.1	+62.4	67.1	269		
	18	-5.1	+27.7	22.3	268		4	+59.1	+51.7	57.0	262		
	19	-3.8	+14.6	14.9	251		6	+32.4	+57.6	48.4	262		
	(bottom)			Ave. 29.6	Ave. 283.6		8	+34.5	+44.9	45.4	268		
410 m	2	-15.3	+73.1	59.9	236		10	+29.1	+46.5	37.5	253		
	4	-9.5	+53.1	42.7	245		11	+6.4	+30.3	30.5	291		
	5.5	-6.1	+13.7	10.6	186		(bottom)			Ave. 47.7	Ave. 266.5		
	(bottom)			Ave. 37.7	Ave. 234.7		550 m	2	+31.5	+39.9	36.3	256	
	530 m	2	+24.9	+68.7	52.3	239		4	+17.1	+46.7	33.5	228	
4		+18.1	+53.8	40.8	244	5		+17.2	+7.0	11.1	265		
5.5		+11.2	+27.0	23.9	259	(bottom)				Ave. 27.0	Ave. 245.6		
(bottom)				Ave. 39.0	Ave. 244.8	650 m		2	+30.2	+45.7	49.1	266	
2		+18.2	+48.4	42.5	236		4	+36.7	+14.2	22.2	247		
4	+18.5	+43.5	41.5	244	(bottom)				Ave. 35.7	Ave. 260.1			
650 m (100 m from R1) (Say)	4.5	+8.7	+15.5	15.6	259	750 m (70 m from RD1) (Say)	1.5	-6.1	+15.3	17.3	266		
(bottom)			Ave. 33.2	Ave. 242.9	(bottom)				Ave. 17.3	Ave. 266.0			

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (3/6)

Section : Bridge Axis
Water Level : RL. +4.25 m

Date : August 10, 1997

Location	Depth (m)	Current (cm/s)			Direct (Deg.)
		X	Y	Composite	
Middle of Pier 1 & 2	2	+9.2	+22.0	23.9	260
	2.5	-1.7	+12.9	13.5	254
	(bottom)			Ave. 18.7	Ave. 257.8
Middle of P2 & P3	2	+9.2	+49.2	38.4	253
	4	+11.2	+40.6	30.5	267
	4.5	-2.6	+9.3	11.8	253
	(bottom)			Ave. 26.9	Ave. 258.3
Middle of P3 & P4	2	-17.2	+56.9	42.2	247
	4	-24.1	+47.5	41.8	237
	4.8	-8.1	+26.7	21.9	274
	(bottom)			Ave. 35.3	Ave. 248.6
Middle of P4 & P5	2	-38.5	+58.9	54.8	246
	4	-24.7	+36.4	34.4	250
	5.5	-34.8	+40.7	34.7	239
	(bottom)			Ave. 41.3	Ave. 245.2
Middle of P5 & P6	2	+5.1	+57.6	45.9	249
	4	+1.1	+52.3	35.4	244
	6	-15.8	+38.4	27.4	231
	(bottom)			Ave. 36.2	Ave. 242.8
Middle of P6 & P7	2	-8.7	+63.7	49.6	249
	4	-1.9	+60.7	44.8	264
	6	-11.8	+63.5	48.5	263
	8	-6.3	+58.6	48.5	250
	10	+1.1	+41.7	31.0	253
	12	+4.2	+31.4	25.5	260
	14	+1.8	+35.7	31.1	267
	16	+0.5	+24.5	19.0	239
	18	+0.1	+27.2	19.2	266
	(bottom)			Ave. 35.2	Ave. 256.9
Middle of P7 & P8	2	+0.3	+56.6	40.8	260
	4	-2.7	+60.0	43.4	256
	6	-0.2	+60.0	44.8	257
	8	+1.9	+59.9	48.5	258
	10	+0.4	+63.4	47.4	263
	12	-0.8	+66.6	43.9	262
	14	-0.6	+58.6	45.0	261
	16	+1.4	+56.1	41.5	262
	18	-2.7	+54.4	36.9	257
	20	+3.0	+60.1	45.3	268
	22	+1.4	+59.7	38.3	258
	24	-0.1	+50.6	35.2	268
	26	-0.3	+45.8	40.1	258
	28	-3.5	+41.6	25.3	253
(not reached to bottom)			Ave. 41.2	Ave. 260.3	
Middle of P8 & P9	2	-33.1	+62.4	56.1	258
	4	-32.8	+65.6	53.3	258
	6	-38.8	+76.0	67.9	258
	8	-13.7	+67.1	56.6	259
	10	-42.7	+67.7	58.2	252
	12	-31.4	+38.9	48.3	247
	14	-35.7	+57.7	48.2	252
	16	-35.2	+54.0	47.9	248
	18	-23.1	+57.0	41.2	246
	20	-30.3	+55.1	46.8	240
	22	-25.1	+50.0	43.5	246
	24	-23.6	+48.7	42.2	257
	26	-25.4	+48.6	42.0	251
	28	-29.3	+51.0	45.6	257
(not reached to bottom)			Ave. 49.8	Ave. 252.5	

Location	Depth (m)	Current (cm/s)			Direct (Deg.)
		X	Y	Composite	
Middle of P9 & P10	2	-41.7	+60.7	56.8	241
	4	-48.9	+67.4	60.0	234
	6	-41.4	+56.6	55.3	255
	8	-34.9	+64.0	51.4	254
	10	-44.8	+59.1	57.7	243
	12	-40.6	+59.3	53.8	237
	14	-36.9	+50.9	48.5	236
	16	-33.1	+59.5	47.4	247
	18	-28.3	+22.2	44.8	248
	20	-20.3	+30.0	27.3	285
	21	-0.1	+5.1	9.2	344
(bottom)			Ave. 46.6	Ave. 247.7	
Middle of P10 & P11	2	-23.3	+37.5	37.5	246
	3	-13.3	+22.7	18.4	243
	(bottom)			Ave. 28.0	Ave. 245.0

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (4/6)

Section : 9
Water Level : RL. +4.25 m

Date : August 10, 1997 Section : 7
Water Level : RL. +4.25 m

Date : August 10, 1997

Location	Depth (m)	Current (cm/s)			Direct (Deg.)	Location	Depth (m)	Current (cm/s)			Direct (Deg.)
		X	Y	Composite				X	Y	Composite	
Left to Right 60 m (C1)	2	+8.8	+15.9	25.1	265	Left to Right 60 m (C4)	2	+18.5	+23.3	35.1	71
	4	+10.6	+35.3	23.3	262		4	-2.0	-1.4	8.9	209
	6	+7.6	+31.0	28.1	95		6	+7.8	-2.2	6.0	331
	8	+6.2	+13.0	13.2	123		8	+6.9	-10.4	9.0	255
	10	-6.0	+8.0	8.3	43		10	+2.1	-4.6	2.9	8
	12	+3.0	+4.6	3.9	305		12	+18.9	+2.2	15.0	46
	14	-2.5	+4.4	5.2	346		14	-0.7	+13.7	6.9	344
	16	-6.6	+6.1	7.7	206		16	+6.7	+1.9	7.5	61
	18	-7.3	+19.1	10.1	166		18	-10.1	+9.8	8.0	212
	20	+4.6	-0.6	5.2	358		20	+14.7	+12.2	18.0	316
	22	-9.3	+5.1	5.5	46		21.5	+4.4	+4.2	8.6	308
	(bottom)			Ave. 12.3	Ave. 190.1		(bottom)			Ave. 11.4	Ave. 176.4
	110 m (C2)	2	+29.0	+62.2	51.7		264	110 m (C5)	2	+18.6	+63.1
4		+42.0	+52.5	58.4	262	4	+33.8		+79.2	63.8	270
6		+34.1	+54.0	52.0	259	6	+24.7		+73.2	57.6	270
8		+39.0	+60.0	57.7	261	8	+23.7		+70.3	58.0	264
10		+36.9	+56.1	48.6	260	10	+23.3		+61.2	52.2	281
12		+39.5	+63.9	59.0	267	12	+22.6		+57.1	48.6	276
14		+40.2	+62.0	59.7	260	14	+17.8		+57.3	45.2	276
16		+36.1	+57.4	52.9	266	16	+21.1		+57.0	43.0	277
18		+33.2	+55.4	50.8	272	18	+15.0		+44.0	34.3	280
20		+31.3	+55.2	45.4	273	20	+27.1		+64.2	69.1	268
22		+31.2	+42.5	40.4	274	22	+17.4		+63.4	50.3	278
24		+33.2	+59.1	52.7	263	24	+20.6		+53.3	41.9	284
26		+27.6	+36.0	36.4	277	26	+18.2		+52.2	42.3	273
28	+27.9	+50.0	43.9	284	28	+22.2	+49.2	47.3	284		
(not reached to bottom)			Ave. 50.7	Ave. 266.6	(not reached to bottom)			Ave. 50.5	Ave. 273.8		
160 m (C3)	2	+23.1	+29.0	40.8	259	160 m (C6)	2	+1.7	+49.9	37.5	256
	4	+26.3	+46.0	39.8	263		4	+9.5	+43.8	33.6	276
	6	+32.7	+47.6	50.1	255		6	+6.8	+61.7	44.2	275
	8	+33.8	+50.2	52.2	261		8	+8.9	+42.0	25.8	289
	10	+21.8	+32.2	30.2	262		10	+2.9	+25.9	15.2	162
	12	+23.1	+41.3	41.0	275		12	+3.4	+34.6	25.5	259
	14	+27.7	+42.2	41.3	279		14	+2.6	+52.7	35.7	276
	16	+23.1	+20.5	28.4	284		16	+5.1	+36.7	30.3	287
	18	+22.3	+45.3	34.4	260		18	+9.8	+55.9	35.6	276
	20	+18.5	+28.8	22.3	274		20	+14.9	+79.0	62.8	277
	22	+9.1	+23.4	16.4	256		22	+6.3	+55.0	43.9	269
	24	+10.3	+23.4	15.7	260		24	+6.4	+34.7	26.5	276
	26	+10.8	+11.6	10.3	290		26	-12.9	+36.1	19.1	284
26.5	-6.2	-15.3	17.6	223	28	-13.4	+24.2	25.3	272		
(bottom)			Ave. 31.5	Ave. 264.4	(not reached to bottom)			Ave. 32.9	Ave. 274.6		

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (5/6)

Section : 4
Water level : RL. +4.25 m

Date : August 10, 1997

Section : PP3
Water Level : RL. +4.25 m

Date : August 10, 1997

Location	Depth (m)	Current (cm/s)			Direct (Deg.)	Location	Depth (m)	Current (cm/s)			Direct (Deg.)
		X	Y	Composite				X	Y	Composite	
Left to Right 60 m (C7)	2	+30.3	+62.2	59.9	281	Left to Right 60 m (C10)	2	-11.2	+29.8	29.9	264
	4	+35.5	+70.9	64.0	284		4	-8.7	+26.4	16.4	285
	6	+34.5	+75.2	65.5	284		6	-26.4	+49.9	44.5	275
	8	+29.7	+62.3	51.6	281		8	-23.3	+48.2	40.5	280
	10	+28.4	+48.0	41.0	306		10	-31.2	+44.9	42.2	263
	12	+18.0	+48.0	39.1	293		12	-13.5	+30.2	25.0	289
	14	+31.9	+44.6	34.9	304		14	-1.9	+19.9	15.4	289
	15.5 (bottom)	+5.6	+23.4	21.7	294		(bottom)			Ave. 30.6	Ave. 275.5
110 m (C8)	2	-16.3	+77.1	58.2	271	120 m (C11)	2	-9.1	+24.1	25.0	244
	4	+16.5	+69.4	49.2	271		4	-18.9	+59.4	41.9	285
	6	-16.3	+70.9	63.1	270		6	-27.0	+52.7	46.5	272
	8	-20.1	+65.5	37.6	266		8	-22.2	+47.7	41.1	278
	10	-16.8	+72.1	60.0	278		10	-18.4	+48.8	41.4	288
	12	-18.1	+68.1	54.4	266		12	-26.6	+40.0	38.4	278
	14	-17.6	+56.6	37.4	269		14	-20.4	+34.6	38.6	280
	16 (bottom)	-16.3	+18.1	22.4	254		15 (bottom)	-11.3	+19.5	17.3	267
160 m (C9)	2	-36.9	+63.1	57.8	266	170 m (C12)	2	-22.0	+44.1	44.6	242
	4	-28.9	+56.4	50.5	278		4	-20.5	+31.8	29.1	241
	6	-22.3	+50.0	38.0	270		6	-20.2	+34.4	26.2	253
	8	-29.8	+60.6	49.3	273		8	-17.8	+35.0	29.0	264
	10	-32.6	+63.3	49.6	260		10	-19.6	+35.4	30.7	266
	12	-32.3	+61.7	50.8	263		12	-17.1	+36.6	31.3	286
	14	-36.3	+52.2	53.8	259		14	-21.6	+39.9	34.4	283
	14.5 (bottom)	-25.9	+40.6	32.1	271		15 (bottom)	-19.6	+17.2	24.4	281
			Ave. 47.7	Ave. 267.1				Ave. 31.2	Ave. 263.5		

PROTECTION WORKS FOR
MEGHNA BRIDGE

表 6.5.1 流速・流向調査結果 (6/6)

Monitoring sheet for the Month of May, June, July and August

	Boring Hole WO-1 4.065			Boring Hole WO-2 6.830			Boring Hole WO-3 6.564			Water Level P10		REMARKS
	High Tide	Low Tide		High Tide	Low Tide		High Tide	Low Tide		WL/HT	WL/LT	
	3-May-97	1.850	1.200		1.350	1.390		1.340	1.380		1.530	
4-May-97	1.400	1.180		1.430	1.390		1.430	1.420		1.630	1.120	
5-May-97	1.530	1.340		1.530	1.480		1.520	1.470		1.800	1.260	
6-May-97	1.620	1.420		1.590	1.530		1.570	1.530		1.855	1.280	
7-May-97	1.670	1.490		1.640	1.620		1.600	1.570		1.950	1.380	
8-May-97	1.670	1.510		1.700	1.680		1.620	1.610		1.940	1.350	
9-May-97	1.670	1.520		1.700	1.680		1.640	1.630		1.870	1.350	
10-May-97	1.640	1.490		1.680	1.670		1.620	1.610		1.850	1.370	
11-May-97	1.660	1.500		1.680	1.660		1.550	1.540		1.840	1.350	
12-May-97	1.590	1.510		1.660	1.670		1.630	1.590		1.800	1.360	
13-May-97	1.600	1.470		1.670	1.640		1.660	1.610		1.780	1.400	
14-May-97	1.540	1.440		1.660	1.640		1.620	1.570		1.670	1.350	
15-May-97	1.460	1.490		1.530	1.670		1.560	1.540		1.590	1.350	
16-May-97	1.330	1.360		1.470	1.480		1.500	1.470		1.560	1.210	
17-May-97	1.380	1.350		1.470	1.490		1.540	1.500		1.680	1.260	
18-May-97	1.440	1.360		1.490	1.490		1.560	1.490		1.780	1.270	
19-May-97	1.640	1.460		1.560	1.580		1.590	1.560		1.880	1.390	
20-May-97	1.650	1.510		1.600	1.630		1.650	1.640		1.970	1.500	
21-May-97	2.250	2.030		1.890	1.920		1.890	1.860		2.500	1.900	
22-May-97	2.350	2.120		2.070	2.030		1.990	1.910		2.520	1.940	
23-May-97	2.420	2.220		2.170	2.130		2.070	2.010		2.570	1.980	
24-May-97	2.360	2.160		2.210	2.160		2.060	2.010		2.490	1.960	
25-May-97	2.260	2.080		2.250	2.160		2.110	2.040		2.480	1.940	
26-May-97	2.360	2.200		2.270	2.160		2.170	2.060		2.500	1.960	
27-May-97	2.470	2.310		2.300	2.270		2.210	2.160		2.570	2.010	
28-May-97	2.430	2.310		2.290	2.260		2.220	2.170		2.590	2.130	
29-May-97	2.360	2.240		2.330	2.300		2.270	2.220		2.500	2.180	
30-May-97	2.360	2.260		2.320	2.310		2.260	2.220		2.500	2.150	
31-May-97	2.430	2.240		2.340	2.290		2.270	2.290		2.520	2.140	
1-Jun-97	2.310	2.260		2.330	2.310		2.260	2.240		2.560	2.160	
2-Jun-97	2.510	2.290		2.350	2.310		2.300	2.260		2.570	2.160	
3-Jun-97	2.530	2.300		2.400	2.330		2.340	2.280		2.710	2.210	
4-Jun-97	2.520	2.370		2.420	2.380		2.360	2.310		2.600	2.200	
5-Jun-97	2.520	2.410		2.390	2.420		2.320	2.320		2.620	2.200	

表3.2.1-1 メグナ橋地点水位観測記録 (1/4)

PROTECTION WORKS FOR MEGHNA BRIDGE

Monitoring sheet for the Month of May, June, July and August

	Boring Hole WO-1 4.065			Boring Hole WO-2 6.830			Boring Hole WO-3 6.564			Water Level P10		REMARKS
	High Tide	Low Tide		High Tide	Low Tide		High Tide	Low Tide		WL/HT	WL/LT	
	6-Jun-97	2.5900	2.4150		2.4750	2.4300		2.4140	2.3340		2.6400	
7-Jun-97	2.6150	2.4350		2.4950	2.4400		2.4390	2.3440		2.7400	2.2500	
8-Jun-97	2.6500	2.5350		2.5500	2.4450		2.4540	2.3540		2.7200	2.3000	
9-Jun-97	2.6100	2.4100		2.5750	2.5000		2.5190	2.4440		2.6800	2.3800	
10-Jun-97	2.6150	2.4350		2.5850	2.5150		2.5140	2.4540		2.7000	2.4000	
11-Jun-97	2.6200	2.3650		2.5650	2.5300		2.5090	2.4140		2.6600	2.4500	
12-Jun-97	2.6150	2.3500		2.6000	2.5600		2.5190	2.4090		2.6600	2.4500	
13-Jun-97	2.6250	2.4650		2.5900	2.5600		2.4840	2.4940		2.6700	2.4750	
14-Jun-97	2.6900	2.3550		2.6450	2.5800		2.5940	2.5540		2.7400	2.5500	
15-Jun-97	2.7150	2.3650		2.6600	2.6450		2.5940	2.5790		2.7500	2.6000	
16-Jun-97	2.7150	2.6850		2.7100	2.7000		2.6640	2.6340		2.9000	2.6700	
17-Jun-97	2.7350	2.7150		2.7500	2.7450		2.6640	2.7090		2.9700	2.7750	
18-Jun-97	2.9950	3.0150		2.8300	2.8200		2.7490	2.7290		3.0000	2.8800	
19-Jun-97				3.0300	2.8940		2.8440	2.6940		3.1800	2.9500	
20-Jun-97				3.0300	3.0100		2.9040	2.8640		3.2700	3.0100	
21-Jun-97				3.1200	3.0950		2.9940	2.6740		3.3800	3.1800	
22-Jun-97				3.2100	3.1900		3.0940	3.0740		3.4200	3.2150	
23-Jun-97				3.2950	3.2850		3.1390	3.1190		3.5000	3.2800	
24-Jun-97				3.3800	3.3650		3.2290	3.2090		3.5600	3.3500	
25-Jun-97				3.6500	3.3500		3.2640	3.2340		3.5600	3.4500	
26-Jun-97				3.4400	3.4100		3.3040	3.2640		3.6200	3.4700	
27-Jun-97				3.5150	3.5000		3.3540	3.1940		3.6700	3.4700	
28-Jun-97				3.6710	3.5500		3.2640	3.1840		3.6500	3.4400	
29-Jun-97				3.6300	3.5800		3.2540	3.1740		3.6300	3.4850	
30-Jun-97				3.6250	3.5900		3.2440	3.1590		3.6400	3.4800	
1-Jul-97				3.6100	3.5900		3.2340	3.1340		3.6700	3.4800	
2-Jul-97				3.5900	3.6100		3.2340	3.1390		3.6750	3.4850	
3-Jul-97				3.5800	3.5600		3.2740	3.2490		3.7300	3.5300	
4-Jul-97				3.7700	3.7600		3.3240	3.3390		3.7500	3.5700	
5-Jul-97				3.6600	3.6500		3.5540	3.5440		3.7800	3.6300	
6-Jul-97				3.7750	3.7650		3.4490	3.4390		3.8500	3.7300	
7-Jul-97				3.9400	3.8250		3.5040	3.4890		3.8800	3.7500	
8-Jul-97				4.0200	4.0000		3.5640	3.5440		3.9400	3.8800	

表3.2.1-1 メグナ橋地点水位観測記録 (2/4)

PROTECTION WORKS FOR MEGHNA BRIDGE

Monitoring sheet for the Month of May, June, July and August

	Bonng Hole WO-1		Bonng Hole WO-2		Bonng Hole WO-3		Water Level P10		REMARKS
	4.065		6.830		6.564		WL/HT	WL/LT	
	High Tide	Low Tide	High Tide	Low Tide	High Tide	Low Tide	4.0250	3.8800	
9-Jul-97			4.040	4.0050	3.58+0	3.5540	4.0250	3.8800	
10-Jul-97			3.9700	3.8950	3.92+0	3.8290	4.0700	3.9000	
11-Jul-97			4.2600	4.1200	4.0790	3.94+0	4.1500	4.0750	
12-Jul-97			4.3800	4.2900	4.2890	4.1540	4.3700	4.1750	
13-Jul-97			4.5100	4.4000	4.5190	4.4040	4.5200	4.3400	
14-Jul-97			4.5000	4.4700	4.6390	4.6190	4.6800	4.5500	
15-Jul-97			4.6850	4.6500	4.6990	4.6740	4.7500	4.6200	
16-Jul-97			4.7600	4.7400	4.7490	4.7240	4.8500	4.7800	
17-Jul-97			4.7600	4.7700	4.83+0	4.8540	4.9100	4.8650	
18-Jul-97			4.8100	4.7900	4.8590	4.84+0	4.9600	4.9000	
19-Jul-97			4.8900	4.8750	4.92+0	4.9040	5.0100	4.9600	
20-Jul-97			4.9600	4.9750	4.8990	4.9140	5.0500	5.0000	
21-Jul-97			5.0000	4.9850	4.92+0	4.9040	5.0900	5.0500	
22-Jul-97			5.1100	5.0900	5.0990	5.0790	5.1000	5.0500	
23-Jul-97			5.0650	5.0400	5.0590	5.0290	5.0600	4.9700	
24-Jul-97			4.9500	4.9100	5.01+0	4.9790	5.0100	4.9200	
25-Jul-97			4.8750	4.8600	4.95+0	4.9340	4.8850	4.8300	
26-Jul-97			4.8500	4.7300	4.8990	4.8740	4.9000	4.8200	
27-Jul-97			4.7450	4.7200	4.8740	4.8490	4.7300	4.6500	
28-Jul-97			4.6750	4.6450	4.8190	4.7990	4.6000	4.5300	
29-Jul-97			4.6000	4.5900	4.83+0	4.7990	4.5400	4.4200	
30-Jul-97			4.6100	4.5650	4.81+0	4.7740	4.5200	4.4000	
31-Jul-97			4.5850	4.5700	4.7290	4.7040	4.5700	4.4400	
1-Aug-97			4.5640	4.5950	4.7440	4.7400	4.5600	4.4450	
2-Aug-97			4.4900	4.5100	4.6940	4.7240	4.4500	4.3600	
3-Aug-97			4.4000	4.3750	4.5940	4.5690	4.3700	4.2400	
4-Aug-97			4.3600	4.3400	4.5690	4.5440	4.2800	4.2000	
5-Aug-97			4.4400	4.4300	4.7040	4.6890	4.4300	4.3600	

表3.2.1-1 メグナ橋地点水位観測記録 (3/4)

PROTECTION WORKS FOR MEGHNA BRIDGE

Monitoring sheet for the Month of May, June, July and August

	Boring Hole WO-1		Boring Hole WO-2		Boring Hole WO-3		Water Level P10		REMARKS
	4.065		6.830		6.564				
	High Tide	Low Tide	High Tide	Low Tide	High Tide	Low Tide	WL/HT	WL/LT	
6-Aug-97			4.4700	4.4850	4.8090	4.8140	4.4800	4.3700	
7-Aug-97			4.4000	4.3850	4.7290	4.7190	4.4000	4.3000	
8-Aug-97			4.3300	4.3100	4.5940	4.5640	4.3200	4.2000	
9-Aug-97			4.2900	4.2600	4.6190	4.6340	4.3000	4.1800	
10-Aug-97			4.2850	4.2650	4.5740	4.5590	4.3000	4.1750	
11-Aug-97			4.2750	4.2600	4.5340	4.5540	4.3100	4.1850	
12-Aug-97			4.2350	4.2600	4.484	4.514	4.3300	4.2000	
13-Aug-97			4.2750	4.3000	4.534	4.564	4.4100	4.3200	
14-Aug-97			4.3650	4.3900	4.789	4.864	4.5000	4.4100	
15-Aug-97			4.4600	4.4900	4.744	4.934	4.5900	4.4800	
16-Aug-97			4.5400	4.5600	5.079	5.114	4.6400	4.5700	
17-Aug-97			4.6200	4.6000	4.914	5.024	4.6700	4.5800	
18-Aug-97			4.6600	4.6400	4.904	4.939	4.7600	4.6800	
19-Aug-97									
20-Aug-97									
21-Aug-97									
22-Aug-97									
23-Aug-97									
24-Aug-97									
25-Aug-97									
26-Aug-97									
27-Aug-97									
28-Aug-97									
29-Aug-97									
30-Aug-97									
31-Aug-97									

PROTECTION WORKS FOR MEGHNA BRIDGE

表3.2.1-1 メグナ橋地点水位観測記録 (4/4)