Appendix 2-1 Minutes of Discussions of 5th and Final Joint Coordination Committee

MINUTES OF DISCUSSIONS OF 5th AND FINAL JOINT COORDINATION COMMITTEE MEETING UNDER PHASE-II OF THE PROJECT FOR STRENGTHENING OF FLOOD RISK MANAGEMENT IN LAI NULLAH BASIN BETWEEN JAPAN INTERNATIONAL COOPERATION AGENCY

AND AUTHORITIES CONCERNED OF THE GOVERNMENT OF ISLAMIC REPUBLIC OF PAKISTAN

As envisaged under item XI (3) of the signed Minutes of Meeting between Japan International Cooperation Agency (JICA) and Authorities Concerned of the Government of Islamic Republic of Pakistan dated 30 August 2007, the JCC in its meeting held on 05 November 2009 under the chairmanship of Mr. Asjad Imtiaz Ali, Member Technical of Federal Flood Commission discussed and approved with consensus the Draft Final Report (DF/R) of the Project for its better sustainability in future.

The following are the main points discussed in the above 5th & Final JCC meeting.

1. DF/R:

Expert Team explained contents of the DF/R in the 4th JCC meeting held on October 17 2009 and Pakistani side accepted the contents of the DF/R in principal subject to any comments by the stakeholders. The contents of DF/R include:

- Activities and Progress of each Output;
- Evaluation of each Output of Phase II; and
- Lessons Learnt and Recommendations for future.

2. Correction and Additional Recommendation of DF/R

Based on the comments on DF/R, the correction and recommendations will be reflected in the Final Report. The correction and recommendations include:

- Chapter 8.1.1. at the third sentence "UC" will be changed to "Nazim".
- Additional recommendations are as follows:
 - ① Regular maintenance and dredging of Lai Nullah is required (no later than end of April) before the monsoon season every year in coordination with concerned agencies, especially dredging works should be completed in advance to allow PMD to examine the Warning Code;
 - ② In order to monitor the sustainability of the Project activities, a Steering Committee is recommended to take care of issues and support Flood Risk Management in Lai Nullah on regular basis in future.

3 Institutional strengthening for Counterpart Agencies is required

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As a result of discussion all the related Pakistani authorities agreed to the matters refer to above.

重示英意

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Director, Disaster Management Division 1, Water Resources and Disaster Management Group, Global Environment Department Japan International Cooperation Agency

Mr. Shuji Kaku

Leader of Expert Team,

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Rawalpindi Cantonment Board

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Lt. Col. (Rtd) Islam-ul-Haq

Managing Director,

Water and Sanitation Agency, Rawalpindi

Islamic Republic of Pakistan

Islamabad, 5 November 2009

Mr. Asiad Imtaiz Al

Member Technical / Project Director

Federal Flood Commission

Ministry of Water and Power

Islamic Republic of Pakistan

Mr. Zafar Hasan Reza

Joint Secretary, (ADB/ Japan)

Economic Affairs Division

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Dr. Qamar uz Zaman Chaudhary

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Mr. Ahmed Kamal

Chief Engineer (Floods)

Federal Flood Commission

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Mr. Syed Nasir Ali Shah

Tehsil Municipal Officer,

Tehsil Municipal Administration Rawal

Town Rawalpindi

Islamic Republic of Pakistan

Dr. Aldur Rahman

District Emergency Officer

Punjab Emergency Service, Rescuel 122

Islamic Republic of Pakistan

Appendix 7-1 Evaluation Sheet for Output 1

Evaluation Sheet

Before	Training									S	elf-e	valua	tion																Exp	ert e	valu	atior							
	Name	Position	IV-1	IV-2	IV-3	IV-4	IV-5	9-VI	IV-7	IV-8	6-VI	IV-10	IV-11	IV-12	IV-13	IV-14	IV-15	IV-16	IV-17	IV-18	Position	IV-1	IV-2	IV-3	IV-4	IV-5	9-NI	IV-7	8-VI	6-VI	IV-10	IV-11	IV-12	IV-13	IV-14	IV-15	1V-16	IV-17	IV-18
5_2	Mr. Shahzad Sultan	6	3	4	4	4	4	4	4	5	4	4	4	3	4	4	3	4	3	3	6	3	3	1	3	3	4	2	3	4	3	4	3	4	4	2	4	3	3
9_5	Mr. Shahid Mahamood	4	3	3	3	3	3	3	3	3	3	3	4	3	4	4	3	4	3	4	4	3	3	2	3	3	3	2	3	3	3	4	3	4	4	2	4	3	4
10_1	Mr. Zaheer A. Babar	6	4	5	6	6	6	1	1	1	1	1	1	1	1	1	1	1	1	1	6	4	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10_2	Mr. Aleem ul Hassam	6	3	4	6	6	6	2	2	6	1	2	6	6	3	6	6	6	4	6	6	3	4	1	1	1	2	2	1	1	2	1	1	3	1	1	1	2	1
10_4	Mr. Aamir Shehzad Warsi	4	3	5	3	3	4	3	3	5											4	3	5	3	3	4	3	3	5										
11_1	Mr. Imran Aslam	4	6	3	6	3	3	3	6	6	6	3	3	3	3	3	6	5	3	3	4	1	- 3	1	2	3	3	1	1	1	3	3	3	3	3	1	5	2	2
11_5	Mr. Farhan Khaliq	4	6	6	6	6	6	6									,				4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
After 7	Fraining														-															-	SHEWALK STATE								
5_2	Mr. Shahzad Sultan	4	3	4	4	4	4	4	4	4	4	4	5	4	5	4	3	4	4	4		4	4	3	5	4	5	3	4	5	5	5	4	5	5	3	4	4	4
9_5	Mr. Shahid Mahamood	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4		4	4	3	5	4	5	3	4	5	5	5	4	5	5	4	3	3	4
10_1	Mr. Zaheer A. Babar	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4		4	4	3	4	4	5	3	4	5	5	5	4	5	5	3	3	3	4
10_2	Mr. Aleem ul Hassan	5	4	4	4	3	4	5	5	4	4	3	4	3	4	4	3	4	4	4		4	4	3	3	4	5	3	4	5	5	5	4	5	5	3	4	4	4
10_4	Mr. Aamir Shehzad Warsi	5	4	4	4	4	4	4	3	3	4	3	4	3	5	5	4	5	5	4		4	4	3	3	4	4	3	4	5.	5	5	4	5	5.	4	5	5	4
11_1	Mr. Imran Aslam	4	3	3	3	4	4	4	4	4	4	4	4	4	4	4	3	3	3	4		4	4	3	3	4	4	3	4	5	5	5	4	5	5	3	3	3	4
11_5	Mr. Farhan Khaliq	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		4	4	3	5	4	4	3	4	5	5	5	4	5	5	4	4	4	4

Position: 5; Management. 4; Technical 3; Hydro/Hydraulic Engr. 2; Telecom/Computer Engr. 6; Others

Remark: Yes; mark to 5, No; mark to 1, x; mark to 6

Appendix 7-2 Examination on Hydrology

Examination on Hydrology

			Name	
Lai N	Nullah Flood Forecasti	ing and Warning S	System (FFWS)	
Q1:	FFWS has some rainfa	all station. Answer	all the station's nar	ne.
A1:				
Q2:	Answer all the name of	f water level gaugin	ng station along La	i Nullah.
A2:				
Rain	fall Analysis			
Q3:	Explain differentiate b	etween 60-minutes	rainfall and 1-hour	rainfall
A3:		•		
Q4:	How do you compute	the probable rainfal	l of 100-year return	n period?
	Explain the procedure			
A4:	1.			
	2.			
	3.			
	4.			
	5.			
Q5:	Calculate 5, 10, 50, 10	0-vear rainfall from	ı Rainfall Data She	et
A5:	Caroniato 5, 10, 50, 10	o year rainium mom	Ramian Data Bile	Ot .
110.		Probable De	ninfall (mm)	
	5 2222			100
	5-year	10-year	50-year	100-year
			•	

Discharge Measurement

Q6: A6:	Answer the objective of discharge measurement.
Q7:	How do you convert the water level into river discharge?
A7:	
Q8:	How do you make a H-Q rating curve? Explain the procedure.
A8:	1.
	2.
	3.
	4.
	5.
	6.
Q9:	Fill in the Field Notebook and Compute measured discharge, flow area and average velocity in accordance with following condition:
<cor< td=""><td>adition></td></cor<>	adition>
. 🗸	Discharge measurement at Gawal mandi water level gauging station on January 29, 2009
✓	It was fine and calm day
✓	Water level was 491.50 EL.m at 11:51 when discharge measurement starts
✓	(3) measurement lines were taken (L1, L2 and L3)
✓	Surface floats were used for discharge measurement
✓	First float was dropped at L1 at 11:55 and floating time is 32.6 second
✓	Second one was dropped at L2 at 12:03 and floating time is 20.4 second
✓	The last one was dropped at L3 at 12:10 and floating time is 40.2 second
✓	And the water level at the end of discharge measurement was 491.90m at 12:13
✓	Use the following sheets for calculation:
	"DISCHARGE MEASUREMENT NOTES FOR FLOATING METHOD"
	"CROSS-SECTIONAL AREA CALCULATION"
	Gawal mandi Cross-section

A9:

Discharge	Total Area	Mean Velocity

Runoff Model

Q10:	How does the "Runoff" change when "Curve Number" increases?
A10:	:Start of flood
	:Peak
ı	:Duration
	:Runoff Volume
	How does the "Runoff" change when "Initial AMC" shifts 2 to 3? Start of flood
	:Peak
	:Duration
	:Runoff Volume
Q12:	How does the "Runoff" change when "Hydraulic Length" becomes long? (the catchment area is same)
A12:	Start of flood
	:Peak
	:Duration
	:Runoff Volume

Rainfall Data Sheet

1. Extract Maximum Daily Rainfall each year

		Maximum
No.	Year	Daily
		Rainfall
1	1986	122
2	1987	93
3	1988	105
4	1989	127
5	1990	23
6	1991	97
7	1992	34
8	1993	140
9	1994	64
10	1995	110
11	1996	123
12	1997	47
13	1998	101
-14	1999	118
15	2000	48
16	2001	110
17	2002	41
18	2003	163
19	2004	54
20	2005	66
21	2006	75
22	2007	99
23	2008	70

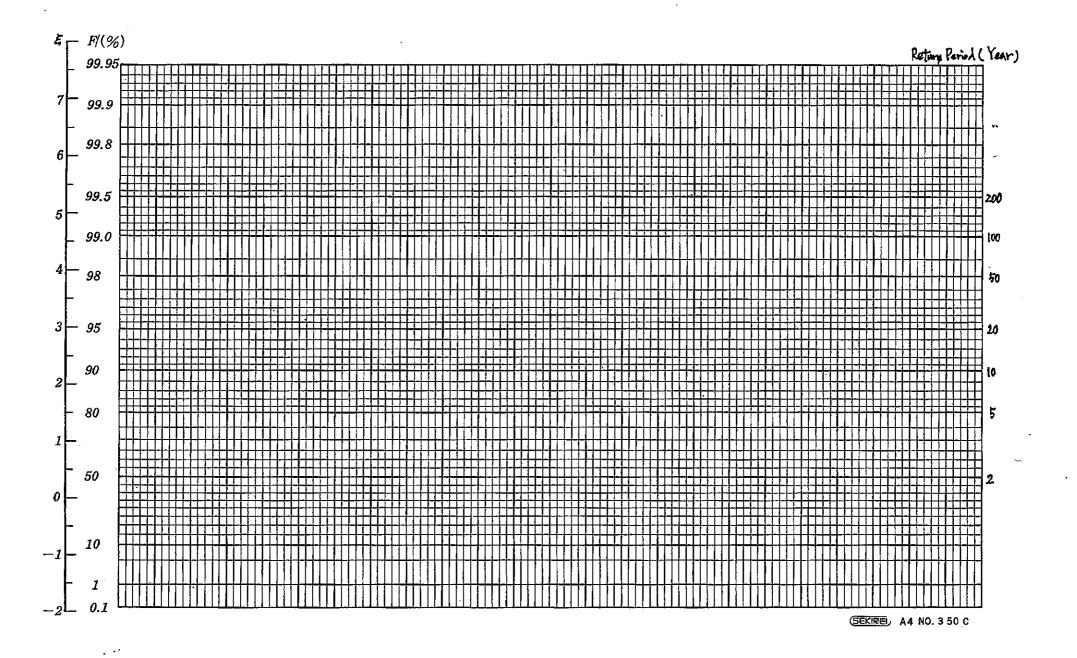
2. Arrange the series of data

	Maximum
No.	Daily
	Rainfall
1	23
2	34
3	41
4	47
5	48
6	54
7	64
8	66
9	70
10	75
11	93
12	97
13	99
14	101
15	105
16	110
17	110
18	118
19	122
20	123
21	127
22	140
23	163

3. Compute plotting position by Cunnan Formula

Plotting	Maximum Daily
Position	Rainfall
2.6	23
6.9	34
11.2	41
15.5	47
19.8	48
24.1	54
28.4	64
32.8	66
37.1	70
41.4	75
45.7	93
50.0	97
54.3	99
58.6	101
62.9	105
67.2	110
71.6	110
75.9	118
80.2	122
84.5	123
88.8	127
93.1	140
97.4	163

^{4.} Plot Rainfall data and Plotting Position on the Graph paper



DISCHARGE MEASUREMENT NOTES FOR FLOATING METHOD

River N	lame	<u> </u>					Station Name				
Measu	rement No.						Recorder		·		
	year			Start		• :		Weather	Wind Direction	Wind Force	
Date	month	 Time		End		:					
	day			Ave.		:					
	ter Level andard)	charge n³/s)	No. c	of Line				Surface Slope	Mean Velocity (m/s)	Flow Distance (m)	
								1/			
W.L.	Reference Gauge	1st Staff (m)	_	2nd Staff (m	_			Difference (m)	Distance (m)	Surface Slope	
Start		 ` '		•				• •		· · · ·	
End											
Ave.											

Line	Floa	ating	Dropping	Flow Time	Velocity of		Corrected	Parti	al Cross-sectiona	l Area	Sectional
No.	Туре	Free Board	Dropping Time	(sec)	Float (m/s)	Coef.	Velocity (m/s)	1st (m ²)	2nd (m ²)	Average (m ²)	Discharge (m ³ /s)
			:								
			:								
			:								
:			•								
			:			-					
			:								
			:								
									Total		<u> </u>

Note:

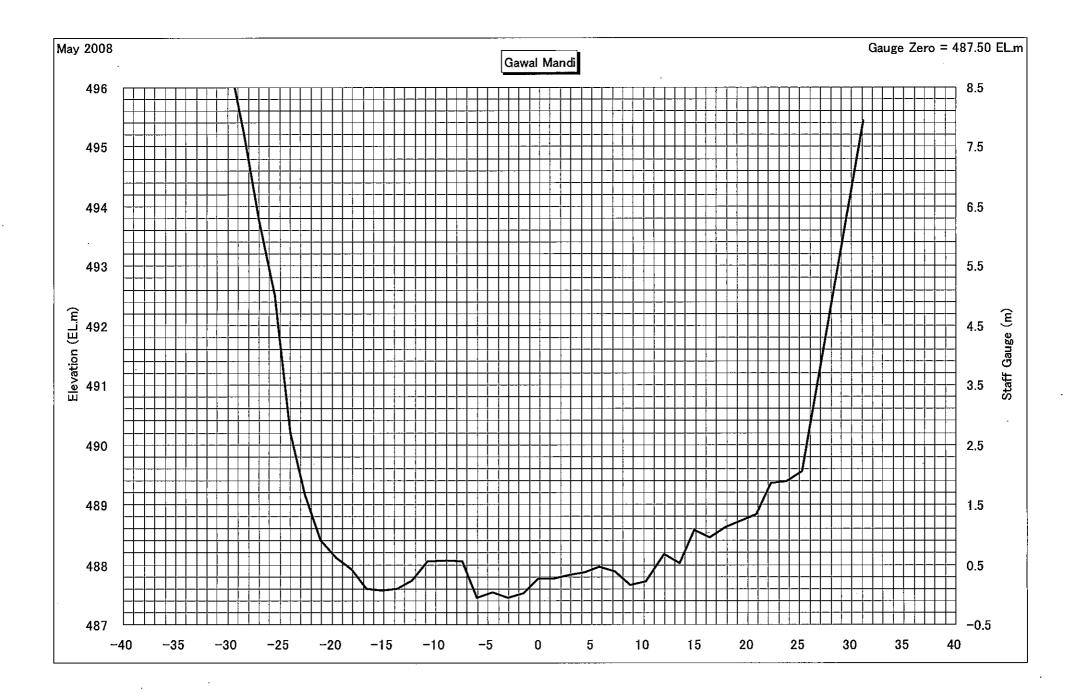
Elevation of Staff gauge zero

Kattarian Bridge : 493.50 EL.m Gawal mandi Bridge : 487.50 EL.m

CROSS-SECTIONAL AREA CALCULATION

River Name	Station Name	
Measurement No.	Date	

				Date of	Cross-section	nal Survey	<u> </u>		
		1st Cross-section	<u> </u>				2nd Cross-sectio	חת	
Wat	ter Level	start			/\/a	ter Level	start		
	(m)	end			vva	(m)	end		
		Average	·			···/	Average		
No.	Water Depth (m)	Partial Width (m)	Partial Area (m ²)	Total Area (m²)	No.	Water Depth (m)	Partial Width (m)	Partial Area (m²)	Total Area (m²)
							-		
	-					 			
									
·									
			-						



Examination Score of Each Trainee

Question	Point A	llocation		1	2	2	31	3		4		5	1	6	1	7
Question	Process	Answer	Process	Answer	Process	Answer	Process	Answer	Process	Answer	Process	Answer	Process	Answer	Process	Answer
Q1		4		3		4		4		4		4		4		4
Q2		4		4		4		4		4		4		4		4
Q3		4		4		4		4		4		4		4		4
Q4		9		9		9		9		2		9		9		9
Q5	10	8	10	8	10	8	10	4	10	2	10	8	10	6	10	8
Q6		5		3		5		5		0		5		5		2
Q7	450	3		3		3		3		3		3	No. III	3		3
Q8		10		10		10		10		0				10	0.6266	10
Q9 -	10	9	4	6	10	3	8	0	10	9	10	9	4	9	10	9
Q10		. 8		6		2		6		8		6		8		8
Q11		8	266	6		2		8	F 755	8		8		8		8
Q12	2016.2	8		4		2		6		8		6		8		8
		100	В	80	C	76	В	81	С	72	В	96	В	92	В	97

Appendix 7-3 Evaluation of Flood Forecast Works with MIKE 11 Simulations

Name of Trainee: 1

Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Forecasting		
- Understanding of required data for Flood Forecasting	A	And the state of t
- Understanding of the meaning of the works	C→A	
(2) Flood Forecasting Works by MIKE I.1		
- Setting of Rainfall data (Simulation start time)	C→B	
- Setting of Rainfall data (Simulation end time)	Α	
- Setting of Simulation Time	A	
- Running the Simulation	Α	
- Comparison of Simulated water level and Observed water level	E→B	
- Adjustment of Parameter for Flood Forecasting	D→B	
- Obtaining correct forecasted result	Α	
- Explanation of the Result	Α	
- Restoration of Parameter setting	A	
(3) Understanding of Flood Warning Code:		21
- Pre-Alert	A	The second secon
- Alert	A	
- Evacuation	С	· · · · · · · · · · · · · · · · · · ·
- Issuance of "Evacuation" at the right time	В	
Total Time	D→C	

A: Excellent, B: Good, C: Fair, D: Poor, E: Absence

Evaluation of Flood Forecasting Works with MIKE11 Simulation

Name of Trainee: 2

Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Forecasting	13valuation	Nemai Ks
- Understanding of required data for Flood Forecasting	A	MARKET CONTRACTOR OF THE PROPERTY OF THE PROPE
- Understanding of the meaning of the works	A	
(2) Flood Rorecasting Works by MIKE 11		
- Setting of Rainfall data (Simulation start time)	C→B	West of the Control o
- Setting of Rainfall data (Simulation end time)	C→B	
- Setting of Simulation Time	A	
- Running the Simulation	A	
- Comparison of Simulated water level and Observed water level	В	
- Adjustment of Parameter for Flood Forecasting	В	
- Obtaining correct forecasted result	A	
- Explanation of the Result	A	, , , , , , , , , , , , , , , , , , , ,
- Restoration of Parameter setting	A	
(3) Understanding of Flood Warning Code		
- Pre-Alert	A	
- Alert	В	
- Evacuation	В	
- Issuance of "Evacuation" at the right time	A	
Total Time	C→B	

Name of Trainee: 3

Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Forecasting		
- Understanding of required data for Flood Forecasting	A	
- Understanding of the meaning of the works	A	
(2))Elood Forecasting Works by MIKE 1	10.00	The Control of the Co
- Setting of Rainfall data (Simulation start time)	A	
- Setting of Rainfall data (Simulation end time)	A	
- Setting of Simulation Time	Α	
- Running the Simulation	Α	
- Comparison of Simulated water level and Observed water level	A	
- Adjustment of Parameter for Flood Forecasting	C→A	
- Obtaining correct forecasted result	A	
- Explanation of the Result	Α	
- Restoration of Parameter setting	В	
(6) Understanding of Flood Warning Code		
- Pre-Alert	Α	
- Alert	Α	
- Evacuation	Α	
- Issuance of "Evacuation" at the right time	Α	·
Total Time	B→A	

A: Excellent, B: Good, C: Fair, D: Poor, E: Absence

Evaluation of Flood Forecasting Works with MIKE11 Simulation

Name of Trainee: 4

Items	Evaluation	Dawasala
(1) Understanding of Outline of Flood Forecasting	<u> Evaluation</u>	Remarks
- Understanding of required data for Flood Forecasting	A	And the second s
- Understanding of the meaning of the works	A A	
	L A	
- Setting of Rainfall data (Simulation start time)	B	
- Setting of Rainfall data (Simulation end time)	A A	
- Setting of Simulation Time		
- Running the Simulation	A	
- Comparison of Simulated water level and Observed water level	A	
- Adjustment of Parameter for Flood Forecasting	C→B	
	C→B	
- Obtaining correct forecasted result	<u>A</u>	
- Explanation of the Result	A	
- Restoration of Parameter setting	C	
(3) Understanding of Flood Warning Code	Sec. 10 10 10 10	Arrenda de la companya della companya de la companya de la companya della company
- Pre-Alert	A	
- Alert	Α	
- Evacuation	A	
- Issuance of "Evacuation" at the right time	A	
Total Time	C→B	

Name of Trainee: 5

Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Forecasting		
- Understanding of required data for Flood Forecasting	Α	
- Understanding of the meaning of the works	A	
(2) Flood Forecasting Works by MIKE II		
- Setting of Rainfall data (Simulation start time)	C→A	
- Setting of Rainfall data (Simulation end time)	C→A	
- Setting of Simulation Time	A	
- Running the Simulation	A	•
- Comparison of Simulated water level and Observed water level	C→A	
- Adjustment of Parameter for Flood Forecasting	A	
- Obtaining correct forecasted result	A	
- Explanation of the Result	A	
- Restoration of Parameter setting	A	
(3) Understanding of Flood Warning Code	wilden in de	
- Pre-Alert	A	
- Alert	A	
- Evacuation	A	,
- Issuance of "Evacuation" at the right time	В	
Total Time	B→A	

A: Excellent, B: Good, C: Fair, D: Poor, E: Absence

Evaluation of Flood Forecasting Works with MIKE11 Simulation

Name of Trainee: 6

Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Rorecasting		
- Understanding of required data for Flood Forecasting	A	
- Understanding of the meaning of the works	Α	
(2) Flood Forecasting Works by MIKE 11		
- Setting of Rainfall data (Simulation start time)	C→B	_
- Setting of Rainfall data (Simulation end time)	A	
- Setting of Simulation Time	A	
- Running the Simulation	A	
- Comparison of Simulated water level and Observed water level	C→B	
- Adjustment of Parameter for Flood Forecasting	C→B	
- Obtaining correct forecasted result	A	
- Explanation of the Result	Α	
- Restoration of Parameter setting	A	
(3) Understanding of Flood Warning Code		
- Pre-Alert	, A	
- Alert	A	
- Evacuation	В	
- Issuance of "Evacuation" at the right time	A	
Total Time	C	

Name of Trainee: 7

` Items	Evaluation	Remarks
(1) Understanding of Outline of Flood Forecasting		
- Understanding of required data for Flood Forecasting	· A	erg est and could be come to a court be referred by a financial court of the court
- Understanding of the meaning of the works	A	
(2) Flood Forecasting Works by MIKELIA		
- Setting of Rainfall data (Simulation start time)	C→B	and the second second second second
- Setting of Rainfall data (Simulation end time)	A	
- Setting of Simulation Time	A	
- Running the Simulation	A	
- Comparison of Simulated water level and Observed water level	C→B	
- Adjustment of Parameter for Flood Forecasting	C→B	
- Obtaining correct forecasted result	C→A	
- Explanation of the Result	A	
- Restoration of Parameter setting	A	
(3) Understanding of Flood Warning Code		A STATE OF THE STA
- Pre-Alert	A	and the second s
- Alert	A	
- Evacuation	В	THE THE PERSON OF THE PERSON O
- Issuance of "Evacuation" at the right time	A	
Total Time	D→C	<u></u>

Appendix 7-4 Evaluation of MIKE 11 Skills

Name of Trainee: 1

Items	Evaluatio	Remarks
(1) Understanding of Outline of Elood Simulation Software		
- Understanding of Structure of MIKE11	A	and the second control of the second control
- Understanding of required file type of MIKE11	A	
(2): Usage of Simulation Editor		
- "Models", Choise of proper models	A	THE CONTRACT OF THE PROPERTY O
- "Input", Connection of each required files	A	
- "Simulation", Set of proper time step	A	*
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	A	
- "Results", Set of proper unit of results	A	
- "Start", He/She can find defective file when he can't start simulation	A	
(3)) Usage of Network Editor		
- Open and set of Network Editor	A	
- Plot of each point	A	
- Connection each point as a river branch	B	
- Connection between each branch	A	***************************************
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	A	
- Operation of Plane Figure	A	
(4) Usagerof Cross-section Editor.		
- Input Cross-section data	A	
- Put Mark	A	
- Understanding of Resitance Numbers	C	
- Understanding of Processed Data	B	
- Operation of Plane Figure	A	
- Connection with Network Editor	B	THE RESIDENCE OF THE PARTY OF T
- Understanding of the relationship between Network and Cross-section	A	
(5)) Usage of Boundary data Editor	A	The same of the sa
- Understanding of required boundary data		
- Setting of boundary data	B C	
- Understanding of data format (Time Seriese and Constant)	C	
- Connection with Network Editor	В В	
- Making Time-series Data	ļ. —	
(6) Usage of Runoff Model (RR Parameters)	D	
- "Catchments", Insert Catchment and Choice of proper model type		
- "UHM", set of proper model parameters	C	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	A	
- "Timeseries", Setting of Rainfall data	C B	
- "Timeseries", Understanding of Weighted timeseries setting		
- Connection with Network Editor	A	
(M) Usage of 1810 Parameter Editor	В	
Independent of Clobal Values and Independent		
- Understanding of Global Values and Local Values	<u>C</u>	
- Setting of Initial condition	<u>A</u>	
- Setting of Bed Resistance	<u>B</u>	
(8) Usagelof MIKE VIEW		
- Showing of Longitudal profile of each river	A	
- Showing of Cross-section and water level simulation result	D	
- Showing of Hydrograph	В	
- Taking required data from MIKE VIEW	A	

Name of Trainee: 2

Items	Evaluatio	Remarks
(1) Understanding of Outline of Elood Simulation Software		
- Understanding of Structure of MIKE11	A	性(1975年) 1987年 - 1985年 - 1985年
- Understanding of required file type of MIKE11	B	
	_	L .
- "Models", Choise of proper models	A	
- "Input", Connection of each required files	1 A	
- "Simulation", Set of proper time step	$\frac{1}{C}$	
- "Simulation", Set of proper period	$\frac{D}{A}$	
- "Simulation", Set of proper condition	$\frac{1}{C}$	
- "Results", Set of proper unit of results	C	
- "Start", He/She can find defective file when he can't start simulation	В	
(3) Usage of Network Editor	В	
- Open and set of Network Editor	Α	
- Plot of each point	A	
- Connection each point as a river branch	A B	
- Connection between each branch		
- Connection between each branch - Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	B	
- Operation of Plane Figure	A	
- Operation of Frane Figure (4):Usage of Gross-section Editor 7	B	Carrenger page Transport (1875) and the Carrenger page 1875 and the Carrenger page 187
- Input Cross-section data - Put Mark	A	
	B	
- Understanding of Resitance Numbers	C	
- Understanding of Processed Data	В	
- Operation of Plane Figure	A	
- Connection with Network Editor	В	
- Understanding of the relationship between Network and Cross-section	A	EVERTANA SEE TO A A SECURITION OF THE PARTY
(5) Usage of Boundary, data Editor		
- Understanding of required boundary data	B	
- Setting of boundary data	.A	
- Understanding of data format (Time Seriese and Constant)	В	
- Connection with Network Editor	В	
- Making Time-series Data	A	
(6) Usage of Runoff i Model ((RRParameters))		44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
- "Catchments", Insert Catchment and Choice of proper model type	<u> </u>	
- "UHM", set of proper model parameters	В	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	A	
- "Timeseries", Setting of Rainfall data	A	
- "Timeseries", Understanding of Weighted timeseries setting	A	
- Connection with Network Editor	В	
(7)) Usage of HID Parameter Editor		
- Understanding of Global Values and Local Values	В	
- Setting of Initial condition	A	
- Setting of Bed Resistance	Α	
(8) Usage of MIKE VIEW	C. Selection of	
- Showing of Longitudal profile of each river	В	
- Showing of Cross-section and water level simulation result	В	
- Showing of Hydrograph	С	
- Showing of Trydrograph		

Name of Trainee: 3

Items	Evaluatio	Remarks
(1) Understanding of Outline of Flood Simulation Software		Kemai Ks
- Understanding of Structure of MIKE11	A	
- Understanding of required file type of MIKE11	A	
(2) Usage of Simulation Editor		
- "Models", Choise of proper models	A	
- "Input", Connection of each required files	A	
- "Simulation", Set of proper time step	A	
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	A	
- "Results", Set of proper unit of results	C	
- "Start", He/She can find defective file when he can't start simulation	B	
(3)) Usage of Network Editors		
- Open and set of Network Editor	A	
- Plot of each point	$\frac{A}{A}$	77
- Connection each point as a river branch	$\frac{\Lambda}{C}$	
- Connection between each branch	В	THE RESIDENCE OF THE PROPERTY
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	A	
- Operation of Plane Figure	$\frac{\Lambda}{\Lambda}$	
(4) Usage of Cross-section Editor		
- Input Cross-section data	A	LANE
- Put Mark	$\frac{A}{A}$	THE RESIDENCE TO THE RE
- Understanding of Resitance Numbers	B	
- Understanding of Processed Data	В	
- Operation of Plane Figure	A	, and the second
- Connection with Network Editor	$\frac{A}{A}$	ATTENDED TO THE PROPERTY OF TH
- Understanding of the relationship between Network and Cross-section	$\frac{\Lambda}{C}$	
(S) Usage of Boundary data Editors		
- Understanding of required boundary data	A	
- Setting of boundary data	A	
- Understanding of data format (Time Seriese and Constant)	A	
- Connection with Network Editor	A	
- Making Time-series Data	A	
(6) Usage of Runoff Model ((RR Parameters))		
- "Catchments", Insert Catchment and Choice of proper model type	A	
- "UHM", set of proper model parameters	A	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial		
- "Timeseries", Setting of Rainfall data	A	
- "Timeseries", Understanding of Weighted timeseries setting	B	
- Connection with Network Editor	A	
(7) Usage of (HD) Rarameter Editor		
- Understanding of Global Values and Local Values	l A l	
- Setting of Initial condition	A B	
- Setting of Bed Resistance	·	
(8): Usage of MIKE VIEW	A	
- Showing of Longitudal profile of each river	A I	
- Showing of Cross-section and water level simulation result	$\frac{A}{D}$	
- Showing of Cross-section and water level simulation result - Showing of Hydrograph	B	
	В	
- Taking required data from MIKE VIEW	<u> </u>	

Name of Trainee: 4

Items	Evaluatio	Remarks
(1)) Understanding of Outline of Flood Simulation Software		
- Understanding of Structure of MIKE11	В	
- Understanding of required file type of MIKE11	A	
(2): Usage of Simulation Editor		
- "Models", Choise of proper models	C	CONTRACTOR
- "Input", Connection of each required files	A	
- "Simulation", Set of proper time step	В	**************************************
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	A	
- "Results", Set of proper unit of results	С	
- "Start", He/She can find defective file when he can't start simulation	В	
(3)) Usage of Network Editor		
- Open and set of Network Editor	A	
- Plot of each point	A	
- Connection each point as a river branch	В	
- Connection between each branch	Ĉ	
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	В	T TOTAL PROPERTY OF THE PARTY O
- Operation of Plane Figure	A	
(4) Usage of Cross-section Editor		
- Input Cross-section data	В	EM ANTERIOR PARTIES DE CONTRA PER DE CONTRA DE
- Put Mark	A	M. I
- Understanding of Resitance Numbers	В	
- Understanding of Processed Data	B	
- Operation of Plane Figure	В	
- Connection with Network Editor	B	
- Understanding of the relationship between Network and Cross-section	C	
(5) Usage of Boundary data Editor	Total Control	
- Understanding of required boundary data	C	resident and a property of the second of the
- Setting of boundary data	В	
- Understanding of data format (Time Seriese and Constant)	С	
- Connection with Network Editor	В	7/7 78/18/18/18/18/18/18
- Making Time-series Data	A	
(6) Usage of Runoff Model (RR Parameters)		
- "Catchments", Insert Catchment and Choice of proper model type	A	STEEL ST
- "UHM", set of proper model parameters	A	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	C	
- "Timeseries", Setting of Rainfall data	A	'
- "Timeseries", Understanding of Weighted timeseries setting	A	
- Connection with Network Editor	C	
(7)) Usage of HD) Parameter Editor		
- Understanding of Global Values and Local Values	A	
- Setting of Initial condition	$\frac{1}{C}$	
- Setting of Bed Resistance	В	
(8) Usage of MIKE VIEW		
- Showing of Longitudal profile of each river	В	THE RESERVE THE PROPERTY OF TH
- Showing of Cross-section and water level simulation result	- ĉ	
- Showing of Hydrograph	$\frac{c}{c}$	
- Taking required data from MIKE VIEW	В	· · · · · · · · · · · · · · · · · · ·
Towning reduction than 11111177 1 11211	ם	. <u></u>

Name of Trainee: 5

Items	Evaluatio	Remarks
(1) Understanding of Outline of Flood Simulation Software		
- Understanding of Structure of MIKE11	A	
- Understanding of required file type of MIKE11	Α	
(2): Usage of Simulation Editor	第三字号和10字:	
- "Models", Choise of proper models	A	
- "Input", Connection of each required files	A	
- "Simulation", Set of proper time step	В	
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	A	
- "Results", Set of proper unit of results	С	
- "Start", He/She can find defective file when he can't start simulation	A	
(3) Usage of Network Editor		
- Open and set of Network Editor	A	and the second s
- Plot of each point `	A	
- Connection each point as a river branch	A	
- Connection between each branch	A	
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	A	
- Operation of Plane Figure	A	
(4) Usage of Cross-section Editor.	Annual Company of Company of Company of Company	
- Input Cross-section data	A	
- Put Mark	A	
- Understanding of Resitance Numbers	B	
- Understanding of Processed Data	В	
- Operation of Plane Figure	A	
- Connection with Network Editor	A	
- Understanding of the relationship between Network and Cross-section	A	
(5) Usage of Boundary data Editor	**************************************	
- Understanding of required boundary data	A	
- Setting of boundary data	. A	
- Understanding of data format (Time Seriese and Constant)	A	
- Connection with Network Editor	A	
- Making Time-series Data	A	
(6) Usage of Runoff Model (RRP Parameters)		
- "Catchments", Insert Catchment and Choice of proper model type	A	
- "UHM", set of proper model parameters	A	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	В	
- "Timeseries", Setting of Rainfall data	A	
- "Timeseries", Understanding of Weighted timeseries setting	~	
- Connection with Network Editor	A	
Wusage of HD) Parameter Editor	A	
- Understanding of Global Values and Local Values - Setting of Initial condition	A	
	<u>A</u> ~	
- Setting of Bed Resistance	A	
(8) Usage of MIKE VIEW		
- Showing of Longitudal profile of each river	<u>A</u>	
- Showing of Cross-section and water level simulation result	A	
- Showing of Hydrograph	В	
- Taking required data from MIKE VIEW	A	

Name of Trainee: 6

Items	Evaluatio	Remarks
(1). Understanding of Outline of Flood Simulation Software		i Kemai Ks
- Understanding of Structure of MIKE11	A	Unide Ministration of Conference and Administration of the Adminis
- Understanding of required file type of MIKE11	A	
(2) Usage of Simulation Editor		
- "Models", Choise of proper models .	A	<u>an and an </u>
- "Input", Connection of each required files	A	
- "Simulation", Set of proper time step	В	
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	В	
- "Results", Set of proper unit of results	C	
- "Start", He/She can find defective file when he can't start simulation	A	
(3) Usage of Network Editor 38		
- Open and set of Network Editor	A	
- Plot of each point	A	
- Connection each point as a river branch	B	
- Connection between each branch	A	
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	A	
- Operation of Plane Figure	A	
(4)¿Usage of Cross section Editor	A [
- Input Cross-section data		
- Put Mark	A	
- Understanding of Resitance Numbers	<u>A</u>	
- Understanding of Processed Data	В	
- Operation of Plane Figure	В	
- Connection with Network Editor	A	
- Understanding of the relationship between Network and Cross-section	A	
(5) Usage of Boundary data Editor	A	
- Understanding of required boundary data		and the second s
- Setting of boundary data	A	
- Understanding of data format (Time Seriese and Constant)	A	
- Connection with Network Editor	В	
	<u>A</u>	
- Making Time-series Data	A	Total and the second of the se
(6) Usage: of: Runoff Model (RRParameters)		
- "Catchments", Insert Catchment and Choice of proper model type	A	, , , , , , , , , , , , , , , , , , , ,
- "UHM", set of proper model parameters	<u>A</u>	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	В	
- "Timeseries", Setting of Rainfall data	A	
- "Timeseries", Understanding of Weighted timeseries setting	A	
- Connection with Network Editor	A	
(//) Usage of HD Parameter Editors		
- Understanding of Global Values and Local Values	В	
- Setting of Initial condition	Α	
- Setting of Bed Resistance	В	
(8) Usage of MIKE VIEW		
- Showing of Longitudal profile of each river	A	
- Showing of Cross-section and water level simulation result	В	, , , , , , , , , , , , , , , , , , , ,
- Showing of Hydrograph	A	
- Taking required data from MIKE VIEW	A	

Name of Trainee: 7

Items	Evaluatio	Remarks
(1) Understanding of Outline of Flood Simulation Software		FFF TAR FF
- Understanding of Structure of MIKE11	A	The second secon
- Understanding of required file type of MIKE11	A	
(2) Usage of Simulation Editor		
- "Models", Choise of proper models	A	e man note i man mantena di Principal de Manda de California (C.). 1886
- "Input", Connection of each required files	В	
- "Simulation", Set of proper time step	С	
- "Simulation", Set of proper period	A	
- "Simulation", Set of proper condition	A	
- "Results", Set of proper unit of results	C	
- "Start", He/She can find defective file when he can't start simulation	Č	
(3) Usage of Network Editor		
- Open and set of Network Editor	A	
- Plot of each point	A	
- Connection each point as a river branch	A	
- Connection between each branch	A	
- Showing of Tabular View	A	
- "Tabular View", usage of points' data (XY-cor, Chainage, Data Type)	A	
- "Tabular View", usage of branches' data (Topo ID, Connection)	A	
- Operation of Plane Figure	A	
(4) Usage of Cross-section Editor		
- Input Cross-section data	A	
- Put Mark	В	
- Understanding of Resitance Numbers	<u>B</u>	
- Understanding of Processed Data	A	
- Operation of Plane Figure	A	
- Connection with Network Editor	A	
- Understanding of the relationship between Network and Cross-section	A	
(5) Usage of Boundary data Editor		
- Understanding of required boundary data	A	
- Setting of boundary data	A	
- Understanding of data format (Time Seriese and Constant)	A	
- Connection with Network Editor	A	
- Making Time-series Data	В	
(6) Usageloft Runoft Model (RRP Rarameters)		
- "Catchments", Insert Catchment and Choice of proper model type	A	
- "UHM", set of proper model parameters	A	
- "UHM", Finding and Modification of MIKE11 bug (Lag Time and Initial	В	
- "Timeseries", Setting of Rainfall data		
- "Timeseries", Understanding of Weighted timeseries setting	A A	
- Connection with Network Editor	B	
	D	
(7) Usage of HD Rarameter Editors		
- Understanding of Global Values and Local Values	<u>A</u>	
- Setting of Initial condition	<u>B</u>	
- Setting of Bed Resistance	A	
(8) Usagerof VIKE VIEW		
- Showing of Longitudal profile of each river	A	
- Showing of Cross-section and water level simulation result	A	
- Showing of Hydrograph	<u>A</u>	
- Taking required data from MIKE VIEW	A	