TABLES

Table 2-1 (1/2) Present Land Use (Sungai Petani)

River Basin	Sub-Basin No.	Total Area (ha)	Area for Each Land Use Category (ha)									
			Residential	Commercial	Industry	Institutional	Recreation	Natural	Paddy	Dry Crop	Road	Others
Lalang	LA- 1	229								229		
	LA- 2	253								253		
	LA- 3	347						1		320		26
	LA- 4	273								273		
	LA- 5	114						6		107		
	LA- 6	288	1		22			18		245		3
	LA- 7	118	65		51	0					2	
	LA- 8	239	117			1	80			41		
	LA- 9	317	9	57	14	14		5		133	45	39
	LA- 10	180	19		15	6				117	23	
	LA- 11	95	1					15		70	8	
	sub total	**2,453**	**213**	**57**	**102**	**22**	**80**	**45**		**1,789**	**77**	**68**
Tukang	TU- 1	135	105	12		5	6			2	6	
	TU- 2	145		0	20					115	9	
	TU- 3	49		2					47			
	TU- 4	18	2		0	1				14	1	
	TU- 5	209	29			179					1	
	TU- 6	89	1		6	59		16		5	1	
	TU- 7	148		16	18	1				109	4	
	sub total	**792**	**137**	**37**	**38**	**245**	**6**	**16**	**47**	**245**	**22**	
Layar Besar	LB- 1	66	52	0		6				9		
	LB- 2	132	17			98		13		2	2	
	LB- 3	94	54	0		14		1		21	4	
	LB- 4	85	2			3		23	29	27	1	
	sub total	**377**	**124**	**1**		**121**		**37**	**29**	**59**	**7**	
Che Bima	CB-1 1	125	19			4			95	1	5	
	CB-1 2	119	10					14	93	1	1	
	CB-1 3	83	29					35	11	8		
	sub total	**326**	**58**			**4**		**49**	**198**	**10**	**7**	
S. Petani	PE- 1	160	38		6					117		
	PE- 2	28		0	25					3		
	PE- 3	143			109			1		33		
	PE- 4	141	1		134					4	1	
	PE- 5	41			6				17	18	1	
	PE- 6	96	21	9		20			18	27		
	PE- 7	132			26					106		
	PE- 8	78	11	0	27	17			9	7	6	
	PE- 9	48	3						28	17		
	PE- 10	82	13		1	19			3	44	2	
	PE- 11	62	45	1		2			6	7	3	
	PE- 12	155	81		22	8				43	2	
	PE- 13	76	25	0		4			2	43	3	
	PE- 14	113	76	0		0			7	11	19	
	PE- 15	32	27	1							4	
	PE- 16	90	79			1	2	2			5	
	PE- 17	55	21			5	1	1	1	21	6	
	PE- 18	46	26	0		0	1		0	13	6	
	PE- 19	198	64	1		2		1		114	15	1
	PE- 20	121	69	1		3	4	2	19	10		13
	PE- 21	21	18							0	3	
	PE- 22	43	24			0			0	19		
	PE- 23	71	56	2		0				0	13	
	PE- 24	118	70	2		30	2			1	9	5
	PE- 25	114	54	0		2		7		37	11	3
	PE- 26	108	83	8		10				6		
	PE- 27	45	8	16		0		0			14	6
	PE- 28	146	13		122						10	
	PE- 29	130	116	5		6		2			1	1
	PE- 30	91	21	5		39	7				19	
	PE- 31	39	19	7		1	0	5			7	
	PE- 32	270	176	8	71	7				9		
	PE- 33	195	99			18	1	2	56	10	8	
	PE- 34	484	124	11		1		233	54		62	
	sub total	**3,772**	**1,483**	**75**	**548**	**195**	**18**	**255**	**220**	**720**	**230**	**28**
Pasir	PA- 1	76			39					36		
	PA- 2	361	18	62	54					227		
	PA- 3	136	73	3		7				50	4	
	PA- 4	240	75		46				12	46	61	
	PA- 5	105	92	6							7	
	PA- 6	144	119		15	10						
	PA- 7	391	157	1	12	4		24	46	147		
	PA- 8	227	55	2		10			18	142	0	
	PA- 9	176	139	1		16		2		19		
	PA- 10	488	15					173		299		
	sub total	**2,343**	**743**	**75**	**166**	**46**		**199**	**76**	**967**	**71**	
	grand total	**10,063**	**2,758**	**245**	**853**	**634**	**103**	**601**	**570**	**3,789**	**415**	**97**

Table 2-1(2/2) Existing Land Use (Melaka)

River Basin	Sub-basin	Sub-Basin No.	Total Area (ha)	Residential	Commercial	Industry	Institutional	Recreation	Natural	Paddy/Dry Crop	Road	Others
Lelch	Udang	UD-1	385	79		1		0		290	9	5
		UD-2	734	99		135	4		234	171	15	75
		UD-3	402	252		74	0			43	10	23
	S. Gajah	GA-1	583	18					39	494	9	24
		GA-2	134							124	4	5
		GA-3	102	28						49	5	19
		GA-4	67	5						54	8	1
	Lelch	LE-1	1,075	137	4	3	1			633	12	286
	Sub-total		3,481	618	5	212	5	-	563	1,567	74	438
Malim	Ayer Salak	AS-1	848	5		219	2			469	10	143
		AS-2	337	20	1	24	0			74	8	210
		AS-3	315	5	0	12	1			215	10	72
		AS-4	168	16	2	4				105	7	35
	Ayer Hitam	AH-1	953	14	3	33	1			762	9	131
		AH-2	262	25		28				125	7	78
		AH-3	150	11						74	5	60
		AH-4	104	14	6		3			33	10	38
		AH-5	224	49				6		71	5	93
		AH-6	210	4			3			167	5	30
	Malim	MA-1	464	34		132	0			153	9	136
		MA-2	226	42	3		3			137	4	37
		MA-3	276	23	1					198	6	47
		MA-4	416	100	4	48		1		155	10	97
		MA-5	240	49	0	1	1			151	9	29
	Sub-total		5,193	411	19	502	13	6	-	2,890	115	1,236
Melaka (1)	Melaka	UM-1	497	29		2	112			312	15	27
		UM-2	361	139	1	18	15			115	8	65
		UM-3	42		4	0	14				4	20
	Sub-total		900	167	5	20	141	-	-	427	28	113
Melaka (2)	Melaka	ME-1	80	8	2	10	2				6	51
		ME-2	389	84	3	10	37	5		87	20	142
		ME-3	225	67	9	31	6	2		19	8	85
		ME-4	86	40			8			1	4	32
		ME-5	236	49	4	63	37	1		48	8	26
		ME-6	240	109	7		27	1		71	10	15
		ME-7	45	25	5		4	2		5	3	1
		ME-8	183	70	18		1			64	8	22
		ME-9	225	64	6	1	1			135	11	8
		ME-10	143	81	3					40	7	13
		ME-11	52	18	4					15	6	8
		ME-12	33	15	2					5	3	8
		ME-13	51	23	3					13	5	8
		ME-14	43	19	8		6			6	3	0
		ME-15	86	44	18		5			3	7	9
		ME-16	100	33	3		18			2	9	34
		ME-17	110	23	43		1				5	38
	Sub-total		2,326	771	138	115	154	9	-	515	124	500
Cheng	S. Bangsal	SB-1	129	29		4				47	6	43
		SB-2	140	6		5				119	5	5
	Arang	AR-1	289	8						260	9	12
		AR-2	216	12	0	1	0	1		149	5	48
		AR-3	178	44						111	7	17
	Jenuang	JN-1	685							676	9	
		JN-2	280		2	0				270	6	2
		JN-3	1,281	18	3	49				1,208	2	
		JN-4	263	13		3	0			185	4	57
	Cheng	CH-1	229	19	2	1	8			100	10	90
	Sub-total		3,691	149	7	63	9	1	-	3,124	64	274
Putat	Putat	PU-1	231				5			54	9	163
		PU-2	68	2				28		4	7	27
		PU-3	91	5			58			14	6	9
		PU-4	203				16	26			12	149
		PU-5	100	1			38				3	59
		PU-6	336	111	3	109	50				5	58
		PU-7	366	77	29	66	4	47		50	7	86
		PU-8	560	233	1		43	22		45		215
		PU-9	356	116		10	16	85		1	7	121
	Sub-total		2,310	543	32	185	229	207	-	168	57	887
Minor Basin		CD-1	97	24	31		2	6			8	25
		CD-2	44	30	3		0				4	7
		CD-3	214	106	3	3		0		67	5	29
		CD-4	371	116	3	0	0	6		205	10	31
		CD-5	87	29						41	8	9
		CD-6	56	22						20	6	7
		CD-7	245	20						203	8	13
		CD-8	77	1		60				6	3	7
		CD-9	66			61					4	
	Sub-total		1,256	348	40	125	3	12	-	542	57	128
grand total			19,157	3,007	246	1,221	556	236	563	9,233	518	3,577

Table 2-2(1/3) Present Drainage Conditions in Sg. Petani

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity Discharge (m³/s)	Return Period (Year)	Functional Detention Pond	Area Affected by Flooding	Remarks
Sg. Lalang Basin (Total Drainage Area : 24.53 km²)								
LA-1	2.29	Sg. Lalang	0.0	4.0	less than 2			
LA-2	2.53	Sg. Lalang	0.0	-	-			
LA-3	3.47	Sg. Lalang	0.0	-	-			
LA-4	2.73	Alur C	0.0	2.0	less than 2			
LA-5	1.14	Alur A	0.0	1.7	less than 2			
LA-6	2.88	Alur A	7.9	-				
LA-7	1.18	Internal Drain	100.0	1.8	less than 2	19. Kaw. Industri LPK(148,140 m³)		Taman Ria Jaya & Kaw. Industri LPK
LA-8	2.39	Sg. Bakap	82.8	2.0	less than 2			
LA-9	3.17	Sg. Bakap	44.0	-	-			
LA-10	1.80	Sg. Lalang	34.9	-	-			
LA-11	0.95	Sg. Lalang	9.5	-	-			
Sg. Tukang Basin (Total Drainage Area : 7.93 km²)								
TU-1	1.35	Internal Drain	98.6	4.0	less than 2	2. Taman Ria (46,520 m³)		Taman Ria
TU-2	1.45	Sg. Tukang	20.6	0.8	less than 2		Kg. Huda	
TU-3	0.49	Cabang I-M	4.4	2.0	less than 2			
TU-4	0.18	Sg. Tukang	22.4	6.0	less than 2			
TU-5	2.09	Cabang H-L	100.0	10.0	less than 2			
TU-6	0.89	Sg. Tukang	75.7	-	-			
TU-7	1.48	Internal Drain	26.2	(unknown)	-			Taman Laguna Merbok (under construction)
Sg. Layar Besar Basin (Total Drainage Area : 3.77 km²)								
LB-1	0.66	Sg. Layar Besar	86.9	2.0	less than 2			
LB-2	1.32	Sg. Layar Besar	88.6	3.8	less than 2			
LB-3	0.94	Cabang D-E	76.9	7.0	less than 2			
LB-4	0.85	Sg. Layar Besar	6.9	0	less than 2			
Sg. Che Bima Basin (Total Drainage Area : 3.27 km²)								
CB-1	1.25	Sg. Che Bima	23.4	0.2	less than 2			
CB-2	1.19	Sg. Che Bima	9.9	1.3	less than 2			
CB-3	0.83	Sg. Che Bima	34.5	0	less than 2			

Table 2-2(2/3) Present Drainage Conditions in Sg. Petani

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity		Functional Detention Pond	Area Affected by Flooding	Remarks
				Discharge (m³/s)	Return Period (Year)			
Sg. Petani Basin (Total Drainage Area : 37.72 km²)								
PE-1	1.60	Sg. Pasir Kechil	27.2	4.0	less than 2			
PE-2	0.28	Sg. Pasir Kechil	90.2	2.2	less than 2			
PE-3	1.43	Line A1	76.5	35.0	more than 2			
PE-4	1.41	Line A1	96.8	2.4	less than 2			
PE-5	0.41	Line A1	15.8	-	-			
PE-6	0.96	Sg. Petani	53.1	5.0	less than 2			
PE-7	1.32	Line A	19.6	1.5	less than 2			
PE-8	0.78	Line A	78.9	2.0	less than 2			
PE-9	0.48	Sg. Petani	7.3	-	-			
PE-10	0.82	Line B	42.3	3.5	less than 2			
PE-11	0.62	Sg. Petani	80.6	-	-		Kg. Haji Wahab	
PE-12	1.55	Line C	72.4	4.0	less than 2	4. Taman Ria Jaya (366,320 m³)		
PE-13	0.76	Sg. Petani	41.2	-	-			
PE-14	1.13	Line D	84.2	2.0	less than 2	3. Taman Ria Jaya (70,600 m³)		
PE-15	0.32	Sg. Petani	100.0	-	-			
PE-16	0.90	Line E	97.5	1.5	less than 2		Kg. Raja	
PE-17	0.55	Line F	58.0	3.0	less than 2			
PE-18	0.46	Sg. Petani	71.7	-	-			
PE-19	1.98	Line G	41.5	3.0	less than 2	15. Taman Keladi (89,500 m³)		
PE-20	1.21	Line G	63.8	3.5	less than 2	14. Taman Sri Wang (6,190 m³)		
PE-21	0.21	Sg. Petani	98.8	-	-			
PE-22	0.43	Line H	56.0	1.5	less than 2			
PE-23	0.71	Sg. Petani	99.6	-	-			
PE-24	1.18	Line N	95.3	10.0	less than 2			
PE-25	1.14	Sg. Air Mendidih	59.0	1.0	less than 2		Kg. Benggali (Line P)	
PE-26	1.08	Sg. Air Mendidih	94.2	0	less than 2			
PE-27	0.45	Sg. Petani	85.5	-	-			
PE-28	1.46	Sg. Gelugor	100.0	2.5	less than 2	13. Taman Sri Wang (6,570 m³)		
PE-29	1.30	Sg. Gelugor	98.2	0	less than 2			
PE-30	0.91	Line Q	100.0	1.8	less than 2			
PE-31	0.39	Sg. Petani	86.8	-	-			
PE-32	2.70	Sg. Bakar Arang	96.6	0	less than 2			
PE-33	1.95	Line R	64.9	11.0	less than 2			
PE-34	4.84	Sg. Petani	40.8	-	-			

Table 2-2(3/3) Present Drainage Conditions in Sg. Petani

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity		Functional Detention Pond	Area Affected by Flooding	Remarks
				Discharge (m³/s)	Return Period (Year)			
Sg. Pasir Basin (Total Drainage Area : 23.44 km²)								
PA-1	0.76	Sg. Pasir	52.2	0.3	less than 2			
PA-2	3.61	Sg. Pasir	37.2	-	-			
PA-3	1.36	Internal Drain	63.0	(unknown)	-			Taman Keladi (under construction)
PA-4	2.40	Sg. Pasir	75.6	-	-			
PA-5	1.05	Drain I & II	100.0	10.0	more than 2	12. Taman Sejati Indah (101,850 m³)		
PA-6	1.44	Sg. Pasir	100.0	-	-	18. Taman Kempas (6,810 m³)		
PA-7	3.91	Sg. Pasir	44.5	-	-		Kg. Pokok Limau	
PA-8	2.27	Sg. Pasir	29.7	-	-	9. Taman Semarak I (34,530 m³), 10. II (4,350 m³), 11. III (18,130 m³)	Kg. Pasir	
PA-9	1.76	Drain III & IV	88.1	25.3	less than 2			
PA-10	4.88	Sg. Pasir	3.2	-	-			

Table 2-3(1/3) Present Drainage Conditions in Melaka

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity Discharge (m³/s)	Average Drainage Capacity Return Period (Year)	Area Affected by Flooding (Functional Detention Pond)	Remarks
Sg. Lereh Basin (Total Drainage Area : 34.82 km²)							
UD-1	3.85	Sg. Udang	23.1	-	-		
UD-2	7.34	Sg. Udang	34.5	-	-		
UD-3	4.02	Sg. Udang	83.7	-	-		
GA-1	5.83	Sg. Seberang Gajah	4.6	-	-		
GA-2	1.34	Sg. Seberang Gajah	3.2	-	-		
GA-3	1.02	Sg. Seberang Gajah	33.1	-	-		
GA-4	0.67	Sg. Seberang Gajah	18.7	-	-		
LE-1	10.75	Sg. Lereh	14.6	-	-		
Sg. Malim Basin (Total Drainage Area : 51.93 km²)							
AH-1	9.53	Sg. Ayer Hitam	6.3	-	-		
AH-2	2.62	Sg. Ayer Hitam	22.6	-	-		
AH-3	1.50	Sg. Ayer Hitam	10.7	-	-		
AH-4	1.04	Sg. Ayer Hitam	31.8	-	-		
AH-5	2.24	Pt. Cheng Besar	26.7	5.0	less than 2		
AH-6	2.10	Pt. Cheng Kecil	5.9	1.5	less than 2		
AS-1	8.48	Sg. Ayer Salak	27.8	-	-	Taman Rambai Indah	
AS-2	3.37	Sg. Ayer Salak	15.7	-	-	(1.Kaw. Industri Bukit Rambai: 23,450 m³)	
AS-3	3.15	Pt. AB I	8.8	10.0	less than 2	Tanjung Minyak (Sg. Ayer Hitam)	
AS-4	1.68	Sg. Ayer Salak	17.0	-	-		
MA-1	4.64	Sg. Malim	37.7	-	-		
MA-2	2.26	Sg. Malim	23.2	-	-		
MA-3	2.76	Pt. Setulang Daing	10.9	1.5	less than 2		
MA-4	4.16	Sg. Malim	39.3	-	-		
MA-5	2.40	Sg. Malim	24.9	-	-		
Sg. Melaka Basin [Downstream of Merdeka Barrage] (Total Drainage Area : 23.27 km²)							
ME-1	0.80	Sg. Melaka and Small Individual Drains	35.5	-	-		
ME-2	3.89	Drain I	40.9	8.8	less than 2		
ME-3	2.25	Sg. Melaka and Small Individual Drains	54.0	-	-	Kg. Bachang	
ME-4	0.86	Drain II	61.1	(unknown)	-		
ME-5	2.36	Sg. Melaka and Small Individual Drains	68.8	-	-		
ME-6	2.40	Drain III	64.2	22.1	less than 2		
ME-7	0.45	Drain IV	86.2	(unknown)	-		
ME-8	1.83	Sg. Melaka and Small Individual Drains	53.0	-	-		
ME-9	2.25	Drain V (Pt. Line A Selatan)	36.5	4.5	less than 2		

Table 2-3(2/3) Present Drainage Conditions in Melaka

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity Discharge (m³/s)	Average Drainage Capacity Return Period (Year)	Area Affected by Flooding (Functional Detention Pond)	Remarks
ME-10	1.43	Drain VI	63.4	12.5	less than 2		
ME-11	0.52	Drain VII	55.2	2.9	less than 2	Kg. Lapan	
ME-12	0.33	Drain VIII	61.5	2.9	less than 2	Kesidang	
ME-13	0.51	Sg. Melaka and Small Individual Drains	59.7	-	-		
ME-14	0.43	Drain IX	85.9	17.5	more than 2		
ME-15	0.86	Sg. Melaka and Small Individual Drains	85.6	-	-		
ME-16	1.00	Drain X	63.4	4.8	less than 2	Durian Daun	
ME-17	1.10	Sg. Melaka and Small Individual Drains	65.3	-	-		
Sg. Melaka Basin (Upstream of Merdeka Barrage)							
JN-1	6.85	Sg. Jenuang	1.3	-	-		
JN-2	2.80	Sg. Jenuang	2.9	-	-		
JN-3	12.81	Sg. Jeram	5.7	-	-		
JN-4	2.63	Sg. Jeram	8.0	-	-		
AR-1	2.89	Sg. Paya Rumpat	5.9	5.0	less than 2		
AR-2	2.16	Sg. Paya Rumpat	9.0	-	-		
AR-3	1.78	Sg. Paya Rumpat	28.5	-	-		
SB-1	1.29	Sg. Solo Bangsal	30.5	1.5	less than 2		
SB-2	1.40	Sg.Solo Bangsal	11.0	0.4	less than 2		
CH-1	2.29	Sg. Cheng	17.4	-	-		
UM-1	4.97	Internal Drain of Melaka Air Port	31.7	-	-		
UM-2	3.61	Internal Drain of Taman Merdeka	50.2	66.2	more than 2		
UM-3	0.42	Sg. Melaka and Small Individual Drains	52.5	-	-		
Sg. Putat Basin (Total Drainage Area : 23.11 km²)							
PU-1	2.31	Sg. Ayer Keroh	6.0	-	-		Reservoir Area
PU-2	0.68	Sg. Ayer Keroh	54.8	-	-		
PU-3	0.91	Sg. Ayer Keroh	75.3	-	-		
PU-4	2.03	Sg. Ayer Saga	26.3	10.0	less than 2		
PU-5	1.00	Sg. Ayer Keroh	41.3	-	-		
PU-6	3.36	Sg. Bt. Bruang	82.6	40.0	less than 2	Jalan Ayer Keroh Height	
PU-7	3.66	Sg. Ayer Manggis	62.7	100.0	more than 2		
PU-8	5.60	Sg. Putat	53.5	-	-	Kg. Sg. Putat	
PU-9	3.56	Sg. Putat	65.7	-	-	Kg. Pulau Nibong	

Table 2-3(3/3) Present Drainage Conditions in Melaka

Sub-basin Code	Catchment Area (km²)	Key Drainage System	Urban Area in Catchment (%)	Average Drainage Capacity Discharge (m³/s)	Average Drainage Capacity Return Period (Year)	Area Affected by Flooding (Functional Detention Pond)	Remarks
Coastal Drainage System							
CD-1	0.97	Drain XI	74.3	64.7	more than 2		
CD-2	0.44	Drain XII	83.4	8.0	less than 2		
CD-3	2.14	Drain XIII	55.3	11.1	less than 2	Kg. Sembilam & Taman Usrah Jaya	
CD-4	3.71	Drain XIV (Pt. Pokok Mangga)	36.3	1.3	less than 2	Kg. Pokok Mangga	
CD-5	0.87	Drain XV	42.6	4.8	less than 2		
CD-6	0.56	Drain XVI	50.2	4.4	less than 2		
CD-7	2.45	Drain XVII	11.8	9.5	less than 2		
CD-8	0.77	Drain XVIII	83.6	25.3	more than 2		
CD-9	0.66	Internal Drain of PETRONAS Refinery	100.0	-	-		

Table 2-4 Existing Detention Pond in the Study Area

No.	Name of Development	Area of Development	Catchment Area of Pond	Area of Pond	Depth of Pond	Storage Capacity	Drainage System [Sub-basin No.]	Equivalent Storage Capacity
Sungai Petani								
1	Taman Wira Jaya	17.1 ha	17.1 ha	2,000 m²	3.0 m	4,800 m³	Sg. Air Mendidih, Sg. Petani [PE-25]	280 m³/ha
2	Taman Ria	111.7 ha	111.7 ha	23,260 m²	3.0 m	55,820 m³	Sg. Tukang [TU-1]	500 m³/ha
3	Taman Ria Jaya (Makyong)	240.8 ha	76.6 ha	14,120 m²	6.0 m	76,200 m³	Line D, Sg. Petani [PE-14]	990 m³/ha
4	Taman Ria Jaya (Kaw. Industri Ringan)		94.7 ha	45,790 m²	9.0 m	384,640 m³	Line C, Sg. Petani [PE-12]	4,060 m³/ha
5	Taman Mutiara Indah	18.9 ha	18.9 ha	2,040 m²	3.5 m	5,920 m³	Line E, Sg. Petani [PE-16]	310 m³/ha
6	Taman Cengal Indah	6.3 ha	6.3 ha	270 m²	3.0 m	650 m³	Line F, Sg. Petani [PE-17]	100 m³/ha
7	Taman Sutera	9.9 ha	9.9 ha	840 m²	2.5 m	1,600 m³	Sg. Petani [PE-11]	160 m³/ha
8	Taman Arked	45.0 ha	29.9 ha	3,450 m²	2.5 m	6,560 m³	Sg. Bakar Arang, Sg. Petani [PE-32]	220 m³/ha
9	Taman Semarak (I)	57.3 ha	26.2 ha	13,280 m²	3.6 m	39,840 m³	Sg. Pasir [PA-8]	1,520 m³/ha
10	Taman Semarak (II)		9.6 ha	2,560 m²	2.7 m	5,380 m³	Sg. Pasir [PA-8]	560 m³/ha
11	Taman Semarak (III)		15.7 ha	4,770 m²	4.8 m	20,030 m³	Sg. Pasir [PA-8]	1,280 m³/ha
12	Taman Sejati Indah	136.6 ha	92.4 ha	20,370 m²	6.0 m	110,000 m³	Sg. Pasir [PA-5]	1,190 m³/ha
13	Taman Sri Wang (K/Api)	54.1 ha	16.4 ha	4,380 m²	2.5 m	8,320 m³	Sg. Gelugor, Sg. Petani [PE-28]	510 m³/ha
14	Taman Sri Wang (J/Raya)		37.7 ha	6,190 m²	1.5 m	5,570 m³	Line G, Sg. Petani [PE-20]	150 m³/ha
15	Taman Keladi	116.9 ha	149.6 ha	17,900 m²	6.0 m	96,660 m³	Line G, Sg. Petani [PE-19]	650 m³/ha
16	Taman Permai	18.7 ha	18.7 ha	540 m²	1.6 m	540 m³	Sg. Pasir [PA-7]	30 m³/ha
17	Taman Desa Meranti	17.9 ha	17.9 ha	1,340 m²	1.5 m	1,210 m³	Sg. Pasir [PA-7]	70 m³/ha
18	Taman Kempas (Atas)	185.3 ha	50.4 ha	4,540 m²	2.5 m	8,630 m³	Sg. Pasir [PA-6]	170 m³/ha
19	Kawasan Industri LPK	322.9 ha	121.7 ha	24,690 m²	7.0 m	158,020 m³	Sg. Lalang [LA-7]	1,300 m³/ha
20	Taman Nilam	24.1 ha	90.9 ha	9,250 m²	1.5 m	8,330 m³	Sg. Pasir [PA-9]	90 m³/ha
Melaka								
1	Kaw. Industri Bukit Rambai	64.2 ha	61.1 ha	26,060 m²	1.5 m	23,450 m³	Sg. Ayer Salak [AS-2]	380 m³/ha

Table 2-5(1/2) Average Flow Capacity and Probable Discharge (Sg. Petani)

River		Channel No.	Distance (m)[*1]		Average Flow Capacity (m3/s)		Probable Discharge (m3/s)		
			Downstream	Upstream	Average	Minimum	2 year	5 year	100 year
Lalang	Bakap	CLA-7	0.0	2840.5	4.4	0.1	76	92	137
		CLA-6	2840.5	4045.0	77.1	1.7	41	50	72
	Line A	CLA-5	0.0	3556.5	6.9	0.6	45	55	85
	Main Stream	CLA-4	0.0	1549.0	Nil	Nil	162	193	296
		CLA-3	1549.0	3016.0	8.7	Nil	160	199	304
		CLA-2	3016.0	5239.0	4.1	0.7	53	66	101
		CLA-1	5239.0	6989.0	4.8	1.9	36	44	70
Tukang	Main Stream	CTU-3	0.0	1825.0	6.3	Nil	53	67	105
		CTU-2	1825.0	2542.0	5.9	0.8	32	39	58
		CTU-1	2542.0	3900.0	2.3	0.3	27	32	47
Petani	Line A1	CPE-13	0.0	870.0	0.6	Nil	50	67	101
		CPE-12	870.0	2200.0	140.1	2.2	55	61	91
	Main Stream	CPE-10	0.0	4193.0	Nil	Nil	150	196	325
		CPE-9	4193.0	4723.0	Nil	Nil	174	220	348
		CPE-8	4723.0	5711.0	Nil	Nil	158	199	311
		CPE-7	5711.0	6691.0	Nil	Nil	149	183	279
		CPE-6	6691.0	7193.0	Nil	Nil	152	185	282
		CPE-5	7193.0	8193.0	28.3	Nil	140	170	256
		CPE-4	8193.0	8900.0	7.2	5.1	139	168	255
		CPE-3	8900.0	9482.0	7.1	3.0	138	167	251
		CPE-2	9482.0	10400.0	14.8	4.8	125	154	233
		CPE-1	10400.0	11200.0	5.5	2.5	112	135	201
Pasir	Main Stream	CPA-6	0.0	1400.0	Nil	Nil	131	165	262
		CPA-5	1400.0	4254.0	8.3	Nil	119	149	233
		CPA-4	4254.0	4954.0	3.3	1.0	112	138	211
		CPA-3	4954.0	6554.0	2.7	0.5	96	120	185
		CPA-2	6554.0	7654.0	8.4	0.3	83	103	159
		CPA-1	7654.0	10054.0	8.6	0.2	63	77	115

Note :　　　*1 : Distance from river mouth or confluence with mainstream.

Table 2-5(2/2) Average Flow Capacity and Probable Discharge (Melaka)

River		Channel No.	Distance (m)[*1]		Average Flow Capacity (m3/s)		Probable Discharge (m3/s)		
			Downstream	Upstream	Average	Minimum	2 year	5 year	100 year
Lereh	Main Stream	CLE-1	0.0	2800.0	14.9	7.2	117	172	334
	Udang	CLE-2	4383.0	7231.0	10.0	2.7	85	112	191
		CLE-3	0.0	4383.0	7.1	Nil	101	134	227
	S.Gajah	CLE-4	0.0	1800.0	9.0	2.4	32	47	93
Malim	Main Stream	CMA-1	365.7	2682.1	288.2	239.0	180	261	507
	Ayer Salak	CMA-2	0.0	1200.0	470.3	346.4	69	91	155
		CMA-3	1200.0	3000.0	167.6	84.9	70	97	174
		CMA-4	3000.0	4800.0	135.6	81.7	82	116	210
	Bertam ULU	CMA-5	0.0	600.0	31.8	15.5	41	58	111
	Ayer Hitam	CMA-6	4000.0	4650.0	51.9	39.6	54	76	143
		CMA-7	3100.0	4000.0	42.9	28.4	58	81	153
		CMA-8	1500.0	3100.0	30.0	23.2	58	158	158
		CMA-9	0.0	1500.0	41.8	20.4	64	92	174
Melaka	Main Stream (1)[*2]	CME-1	13536.0	14451.2	440.1	383.5	155	221	425
	Main Stream (2)*	CME-2	11400.0	13600.0	13.5	10.7	11	14	21
		CME-3	9600.0	11400.0	20.1	10.5	60	82	141
		CME-4	8400.0	9600.0	14.7	5.8	148	210	380
		CME-5	7400.0	8400.0	9.9	5.9	147	208	382
		CME-6	5200.0	7400.0	12.0	6.0	146	208	387
		CME-7	4400.0	5200.0	12.6	5.3	148	211	393
		CME-8	2800.0	4400.0	22.9	5.3	148	211	393
		CME-9	2000.0	2800.0	56.6	46.0	144	206	384
		CME-10	1000.0	2000.0	61.1	6.0	138	200	377
Cheng	Main Stream	CCH-1	0.0	2000.0	14.7	Nil	123	184	368
	Paya Rumput	CCH-3	0.0	1400.0	2.8	1.1	26	37	69
	Jenuang	CCH-5	0.0	2400.0	1.9	Nil	33	50	102
	Jeram	CCH-6	0.0	1800.0	21.5	17.0	82	121	245
Putat	Ayer Keroh	CPU-1	0.0	1400.0	9.5	1.2	17	22	39
	Main Stream	CPU-2	5625.0	6500.0	9.6	1.8	54	71	117
		CPU-3	4200.0	5625.0	10.2	2.8	128	171	294
		CPU-4	1800.0	4200.0	10.2	1.5	128	171	294
		CPU-5	0.0	1800.0	Nil	Nil	122	163	283

Note : *1 Distance from river mouth or confluence with mainstream.
*2 Upstream from Diversion point
*3 Downstream from Diversion point

Table 2-6 Flooding Conditions in Habitual Inundation Area

Area	Key Drainage System	Flooding Situation	Major Causes of Flooding	Remarks
Sungai Petani				
Kg. Benggali	Line P	• 0.3 to 0.5 m in depth twice to three times a year • Flooding for 1 to 2 hours	• Overflow along Line P due to poor drainage capacity • Development activities in upper reaches	
Kg. Haji Wahab	Sg. Petani	• 0.3 to 0.5 m in depth • Flooding by coincidence with heavy downpour and high tide	• Poor channel capacity due to sharp bend	
Kg. Pokok Limau	Sg. Pasir	• 0.5 to 1 m in depth after every heavy downpour • Flooding for 1 to 3 hours	• Poor capacity of channel and culvert	
Kg. Hj Rashid	Sg. Pasir	• 0.3 m in depth • Flooding by coincidence with heavy downpour and high tide	• Poor channel capacity	
Kg. Huda	Sg. Tukang	• 0.5 to 1 m in depth after every heavy downpour	• Poor drainage capacity • Development activities in upper reaches	
Melaka				
Kg. Sg. Putat & Kg. Pulau Nibong	Sg. Putat	• 0.5 to 1 m in depth after every heavy downpour • Flooding for 1 week	• Overflow along Sg. Putat due to poor drainage capacity • Development activities in upper reaches	Affected families: 32 in May 1998, 38 in Nov. 1998
Jl. Ayer Keroh Height	Sg. Bt. Bruang	• Flooding along national road after every heavy downpour	• Poor drainage pipe capacity • Industrial development in upper reaches	
Tanjung Minyak	Sg. Ayer Hitam	• Flooding along right bank after every heavy downpour	• Poor drainage capacity • Development activities in upper reaches	Affected families: 8 in Oct. 1996
Taman Rambai Indah	Sg. Ayer Salak	• Flooding on lower portion of estate after every heavy downpour	• Lack of enough platform level • Development activities in upper reaches	Affected families: 44 in Jan. 1997, 81 in Aug. 1998, 52 in Nov. 1998
Kg. Durian Daun Dalam	Trunk drain	• 0.4 m in depth after 1-hour heavy downpour	• Poor capacity of roadside drain • Depressed hinterland in entire drainage basin	
Kg. Lapan, Bachang	Roadside drain	• Flooding on lower portion after every heavy downpour	• Poor capacity of roadside drain • Depressed hinterland in entire drainage basin	
Kesidang	Trunk drain	• Flooding on lower portion after 1-hour heavy downpour	• Poor capacity of roadside and trunk drain • Depressed hinterland in entire drainage basin	
Kg. Sembilan	Trunk drain	• 0.5 m in depth after every heavy downpour • Flooding situation lasting for 30 years	• Poor capacity of trunk drain	