

**DEVELOP TIME DISTRIBUTION PATTERN OF DESIGN
RAINFALL IN SELANGOR**

By

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Report is submitted as
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DECLARATION BY THE CANDIDATE

I Izwan bin Idris, 2004105502 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

Signature: _____

Date: 11 May 2007

DECLARATION BY THE SUPERVISOR

I confirm that I have read and checked this report and to my opinion the report is suitable in terms of scope and quality required for awarding the Bachelor of Civil Engineering (Hons).

Signature: _____

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ABSTRACT

The purpose of this study is to develop the time distribution pattern of design rainfall in Selangor which is more specific in Hulu Langat area. Time distribution or also known as temporal patterns of design rainfall are based on the storm duration which shows the fraction of rainfall to specified time interval. This pattern was used as a guide in design and construction of structure or system that related to hydrology and hydraulic area. In Malaysia, the existing temporal pattern was developed by Drainage and Irrigation Department of Malaysia. It covers nine years rainfall data from July 1970 to June 1979 involving nine rainfall stations located at different part of Peninsular Malaysia which are divided into part of Peninsular Malaysia, West Coast and East Coast. The existing temporal pattern had been used for almost 25 years since its last update on 1982. Therefore, it is necessary to produce the updated pattern which is more appropriate and specific on one area. Method of average variability has been used in the analysis process to develop the temporal pattern. The results of this study are considered more appropriate since it was derived using longer rainfall data which is 11 years compared to 9 years of the existing pattern and more specific compared to the whole Peninsular Malaysia.

TABLE OF CONTENTS

CHAPTER		PAGE
	Title page	i
	Declaration	ii
	Acknowledgement	iii
	Abstract	iv
	Table of content	v
	List of Figures	ix
	List of Tables	xi
	List of Appendices	xii
1	INTRODUCTION	1
	1.1 Background	1
	1.2 Problem Statement	5
	1.3 Objectives	6
	1.4 Scope of study	6
	1.5 Significance of study	7
2	LITERATURE REVIEW	8
	2.1 General	8
	2.1.1 Climate and weather of Malaysia	8

2.2	Precipitation process	8
2.3	Pattern of rainfall in Malaysia	10
2.3.1	Peninsular Malaysia	10
2.3.2	Sabah and Sarawak	11
2.4	Rainfall distribution	11
2.5	Design rainfall	12
2.5.1	Definition	12
2.5.2	Estimation of design rainstorm	13
2.5.3	Calculation of design flood	13
2.6	Temporal distribution	14
2.6.1	Definitions	14
2.6.2	Standard duration	15
2.7	Methods in developing temporal pattern	16
2.7.1	Sacramento method	16
2.7.1a	Short-duration storms	16
2.7.1b	Long-duration storms	17
2.7.2	Windows_TP program	17
3	RESEARCH METHODOLOGY	19
3.1	Introduction	19
3.2	Rainfall data collection	19
3.3	Design rainfall temporal pattern	20