

A Survey on the Performance of Sustainable Urban

Drainage System

DEPARTMENT OF BUILDING SURVEYING

FACULTY OF ARCHITECTURAL PLANNING AND SURVEYING

BSB 608

ACADEMIC PROJECT I

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DATE SUBMIT : 19 DECEMBER 2011

ABSTRACT

Sustainable urban drainage system is a new approach in the drainage system in Malaysia. This system is different than the conventional drainage system that had been implemented in present day. We had many issues about the flashflood in Malaysia, and a solution is needed to avoid the flashflood that are always happened mostly when the raining season. This study is to find out the issues of Sustainable Urban Drainage System operation in Malaysia. There are many types of sustainable urban drainage system and each type of the sustainable urban drainage system had a different function. Beside that this study is also to find out the issues that are reduces the effective of Sustainable Urban Drainage System. There are many developers in Malaysia but this system it seem still new and only in Universiti Sains Malaysia Engineering Campus had fully used this system for their drainage system and Putrajaya Wetland. The research stages content of five stages in accomplishing the research. Identification issues, data collection, literature review, analysis of data, conclusion and recommendation. The method to collect the finding is by questionnaire survey was distribute to professional occupation such as lecture, engineer technical and science officer and also student that are learned in civil engineer. The data will be analyzed by using Microsoft Excel. After the whole study on this research the recommendation will make by list or to recommend ways to improve the operation of the Sustainable Urban Drainage System

ACKNOWLEDGMENT

First of all, thanks and appreciated to the Supervising, Sr. Rohimah Khoiryah Harahap for giving support and guides along to complete this study as part of the compulsory to complete a Bachelor program in Building Surveying, University technology Mara (UiTM).

Much appreciated are the useful contributions of staff in company as participate in give and information and cooperation. Besides, thanks to very helpful to developer as provided some data for this study.

Special thanks to all lecture in Building Surveying Department, family, and friends for their encouragements and support in order to complete this study. That I really appreciated to all that involved in this study. Thank you.

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CHAPTER 1 INTRODUCTION

1.0 OVERVIEW

The drainage system or sewer system is responsible to transport the wastewater from the households to the wastewater treatment plant. It is a part of the integrated urban waste water system, where it comprised of the wastewater treatment plant and the receiving water (Sara De toffol, 2006). Wastewater is defined as water that after being use for life support, industrial processes, or life enhancement must be collected and disposed of appropriately in order to prevent nuisances and polluted conditions from developing in urban areas. Storm water is defined as water that runoff produced by precipitation (Butler and Davies, 2000).

Practically the artificial drainage system had been developed since ancient time and it can be found in many civilizations such as the Mesopotamian, the Indus and the Romans. The purpose of ancient civilization had used this system is to collect rainwater, prevent nuisance flooding and convey waste. The modern sewer concept was born in the 19th century due to hygiene reasons. The cholera epidemic, directly connected to the inadequate sanitation in European cities was the trigger for the construction and development of urban sewer system (Ashley et, al 8, 1999; Harremoes 1997).