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**LANDSLIDE IN HILLSIDE RESIDENTIAL BUILDING:  
CASE STUDY AT PAYA TERUBONG, PENANG**

Final Project submitted in partial fulfilment  
of the requirement for the award of  
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## **ABSTRACT**

Penang is one of the states in Malaysia which has grooved and hilly topography. Construction activities in Penang are increasing day by day, primarily for residential and commercial purposes. Then, developers have decided to develop the remaining hill land rather than on the mainland. The awareness on landslide among the residents at hillside building is still low level because there are not concerned with the risk of landslide hitting them at future. This is because although residents already know of the danger of landslides they still ignoring the issues and choose to live in hillside building. Several of landslide event have found at Malaysia especially in Penang. Therefore, The aim of this research to identify the level of awareness among residents in hillside residential building on landslide at Penang. There are 3 objectives formulated for this research are to investigate the level of awareness on landslide among residents in hillside residential building, to identify the main factor contribute to landslide in hillside residential building and to recommend the solution to solve issues on a landslide in hillside residential building. The methodology for conducting this study is using a quantitative method by distributing the questionnaires among residents in five different selected area at Paya Terubong. SPSS was used for analyzing data with version 25.0. By this end of this research, the level of awareness among residents in hillside residential building will be determined.

**Keywords:** Awareness, Residents, Hillside development, Landslide, Penang

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# CHAPTER 1

## INTRODUCTION

### 1.0 Background of the research

Penang is one of the state in Malaysia which has grooved and hilly topography. Construction activities in these areas are increasing day by day, primarily for residential and commercial purposes. Moreover, More than 50% of Penang Island is made up of steep topography above 60m ( Lateh & Ahmad, 2011). And indeed, hill land is richly available on the island. So it is not shocking that many developers have targeted the hill land for all sorts of development ranging from housing to transportation, industries, and recreation ( Lateh & Govindasamy, 2012). Development of a management system at an early stage can reduce the after effect of any environmental hazard due to the heavy construction. Rapid development put the environment at risk by natural disasters like flood, changes of climate, landslides and become a safety threat to the life and property of local inhabitants. ( Ahmad, Yahaya, Ali & Hussain,2010).

According to Kazmi, Qasim, Harahap, Baharom, Imran & Moin ( 2016) A natural disaster, by its nature is usually multifaceted and unpredictable. Problems of landslides often occur due to the instability of slopes, distressed slopes, and cut slopes. No country is immune to environmental disaster. Environmental disasters are a disaster to the natural environment mostly due to human activity such as unsustainable development and over-exploitation of natural resources that causes in disease and death of living beings(Abdul Rahman, 2014)