

**DEVELOPMENT OF SAFETY
PRACTICES FRAMEWORK FOR
COLLAPSE ACCIDENT AT THE
CONSTRUCTION SITE: A CASE
STUDY FOR SCHOOL BUILDING AND
INFRASTRUCTURE WORKS IN
PULAU PINANG**

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**Bachelor of Engineering (Hons) Civil
(Infrastructure)
UNIVERSITY TEKNOLOGI MARA
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By

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This report is submitted as a
partial requirement for the degree of
Bachelor of Engineering (Hons) Civil (Infrastructure)

**UNIVERSITY TEKNOLOGI MARA
JANUARY 2019**

DECLARATION OF THE CANDIDATE

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Under Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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for Collapse Accident at the Construction Site :
A Case Study for School Building and
Insfrasturcture Work at Pulau Pinang.

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Date : January 2019

ACKNOWLEDGEMENT

In The name of Allah, The Most Merciful. First and foremost, I would like to express my thankfulness to Allah S.W.T for giving me the privileges and strength to complete and fulfill my responsibility in accomplishing this Final Year Project.

Not forgetting, I want to give a special thanks to my supervisor, Mrs. Nurulzatushima Abdul Karim for her advices, guidance and motivation that encourage me to finish this Final Year Project.

Apart from that, thanks to all my friends for their effort to help me and support towards completing this Final Year Project. Without them, everything would not keep to the deadlines.

As a conclusion, to all people who have helped me throughout my research, directly or indirectly, I really appreciate of all sorts of information, guidance, and critics that are given to me. All contributions and personal sacrifices will be well remembered. Thank you.

ABSTRACT

Safety issues are considered as the major concerns in the construction industry. Despite the rapid advancement of technology, it is revealed that the rate of the fatality in the construction industry is extremely high. One of the factor that contribute to the fatality is the collapse accident at the site. The aim of this paper is to determine the main factors of collapse accident at the construction site and investigate the main attributes of safety practices as a prevention tool for collapse accident at construction site and finally develops the safety framework for collapse accident at the site in improving the construction site management. A questionnaires survey was carried out practically with 30 respondents in the construction sector. All the data is analyzed using SPSS Software version 23.0 using ranking analysis based on mean and standard deviation value. The results found that majority of the total respondents agreed that the most critical main causes of collapse accidents are unique nature of the industry, human element, management and unsafe equipment. Besides, the safety practices attributes were matched with suitable main causes by followed the result from synthesised of literature review. The main cause of collapse accident and the safety practices attributes as a prevention tools for collapse accident can be determine and from all of the findings, a safety practices conceptual framework for collapse accidents at construction sites were develop as a guideline to construction practitioners especially for the contractors to monitor and take action in the future construction activities to reduce collapse accidents in generally as one of the imposed safety at the construction sites especially in the building and infrastructure works.