

**CENTRE OF STUDIES FOR BUILDING SURVEYING  
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING  
UNIVERSITI TEKNOLOGI MARA**

**THE RELATIONSHIP BETWEEN  
THE DESIGN AND MAINTENANCE OF  
SULTAN ABDUL AZIZ ROYAL GALLERY**

**HANIS ATHIRAH BINTI ABDUL GHAFAR  
(2012921951)**

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**“I hereby declare that this academic project is the result of my own  
research  
except for the quotation and summary which have been  
acknowledged”**

**Student's Name : HANIS ATHIRAH BINTI ABDUL  
GHAFFAR**

**Signature : **

**UITM No. : 2012921951**

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## **ABSTRACT**

Building maintenance is a process where a building is cared to function at the standards that have been specified for the occupants use and benefit. The main purpose of this dissertation is to identifying the connection between building design and its maintenance; by knowing the design of the building and have a deeper study on the maintenance. The relationship between design and maintenance should not be viewed from the perspective of increasing repair work or cost involved, but need to consider also the design impact on structure and material installed as well as the each building component life cycle. In order to achieve the aim of this dissertation, several objectives are set up; which are to determine the link between design and maintenance from the point of repair work, to consider the impact of design on structure and material installed as well as the life cycle of each building component and to investigate the factors of building design that influence maintenance system. Several methodologies are used in order to carry out the research. Questionnaires have been distributed to certain parties only. Observation too has been conducted to survey the current building condition. Based on the analysis, most of the respondents are aware about the link between design and maintenance. The results indicate there are a lot of factors affecting the building maintenance and the workmanship had proven to play a major role. In a nutshell, the results of the analyzed data give detailed information about general building maintenance and the current state of Sultan Abdul Aziz Royal Gallery is considered excellent and well maintained from both research methodologies. After the defects found, and the proper maintenance arrangement should be conducted are identified.

## **ACKNOWLEDGMENT**

### **In the Name of Allah, the Beneficent, the Merciful**

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Sincerely,



(HANIS ATHIRAH BINTI ABDUL GHAFAR)

## **1.0 INTRODUCTION**

### **1.1 STUDY BACKGROUND**

The condition of a completed building, mainly in the manner of defects and maintenance are determined by building design. The building performance and physical characteristic and its endurances to confront against environmental condition, social interfaces such as graffiti and vandalism are indirectly influenced by design (Ramly,A., 2006).

Design and maintenance link should not be viewed from the perspective of increasing the repair work or cost involved, but it need to consider also the design impact on structure and material installed as well as each building component life cycle. (Ramly,A., 2006)

The chosen building is the Sultan Abdul Aziz Royal Gallery which located at Klang, Selangor. The study focus on the relationship between design and maintenance of the chosen study site.