# ELECTRICAL ENGINEERING DEPARTMENT

# DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL ŞERVICES

OF A HOTEL,

E/1159

K. CHARALAMBOUS

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#### DESIGN OF THE ELECTRICAL SERVICES OF A HOTEL

#### BY

#### CHARALAMBOUS KYPRIANOS

### **Project Report**

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Dedicated to a very
valuable person in
my life,
Miss Monica Caballero

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#### **PREFACE**

The desing of the electrical installation of a hotel is a project fully in line with the 16th edition of the Regulations for electrical installations issued by the Institution of Electrical Engineers. It is itended to provide full analysis of results and desing procedures together with all the necessary information regarding the corresponding design.

The project also includes drawings of the installation together with typical calculations for each part of the desing as well as tables in which the results of all circuits distribution board ratings and illumination results are listed.

Kyprianos Charalambous

#### INTRODUCTION

This project deals with the electical installation of a hotel with is located in Cyprus.

The hotel consists of:

- a. Basement
- b. Ground floor
- c. First Floor

The main objective of this project is to design the electical installation providing the corresponding drawings which include the following:

- a. Power
- b. Lighting
- c. Telephone distribution

Also to estimate material and labour cost.

The Project is divided into 8 chapters the content of which is outlined below:

Chapter 1: It deals with illumination design

Chapter 2: It deals with the electrical circuits design

<u>Chapter 3</u>: It deals with distribution boards and supply cables and also with balancing and diversity

Chapter 4: It deals with fault level calculations

Chapter 5: It deals with earthing arrangements

<u>Chapter 6</u>: It deals with inspection and testing

**Chapter7:** It deals with telephone installation design

**Chapter8**: It deals with costing