HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL INSTALLATION OF A GROUP OF HOTEL APARTMENTS

EMMANQUEL MANOLIS

JUNE 1997

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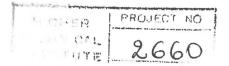
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 \mathbf{BY}

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In part satisfaction of the award of Diploma of Technician Engineer in Electrical Engineering of the Higher Technical Institute, Cyprus

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MANOLIS EMMANOUEL.

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ABSTRACT

This project deals with the design of the electrical and telecommunication services of hotel apartments.

The project work includes specifications and tender drawing as well as typical calculations of the design carried out.

The whole design is made according to the relevant for each system regulations.

SYMBOLS AND ABBREVIATIONS

B.S. British Standard

I.E.E. Institution of Electrical Engineers

E.F.L.I. Earth Fault Loop Impedance

M.F. Maintenance Factor

U.F. Utilization Factor

P.F. Power Factor

S/O Socket Outlet

SP & N Single Phase & Neutral

TP & N Three Phase & Neutral

V.D. Voltage Drop

MCB Miniature Circuit Breaker

C.B. Circuit Breaker

DC or DB Distribution Case or Distribution Board

HP Horse Power

CCT (s) Circuit (s)

% Percentage

m Meters

Hz Cycle per second

DB001 Distribution board situated at the ground floor of

apartment 1

MDB1 Main Distribution board of Block 1

W.H. Water Heater Switch

INTRODUCTION

This project deals with the design of the Electrical and Telecommunication Services for Hotel Appartments which will include the following:

- i) Electrical Services
 - a) Lighting
 - b) Power
 - c) Street and Parking Lighting
- ii) Telecommunications Services
 - b) Telephone system
- iii) Fire alarm system

The design was carried out according to:

- 1) The 16th edition of the I.E.E. Regulations and the local EAC conditions of supply.
- 2) The 4th edition of Interior Design Manual
- 3) The CYTA requirements for telephone Installation.

The hotel apartments consist of:

- a) BLOCK A Ground floor First floor
- b) BLOCK B Ground floor First floor
- c) BLOCK C Ground floor First floor
- d) Reception