HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES OF A T.V. STUDIO

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PROJECT REPORT

Project Submitted by ATHENA KOKKONI

"DESIGN OF THE ELECTRICAL SERVICES OF A T.V. STUDIO"

In part Satisfaction of the award of Diploma of Technician engineer in Electrical engineering of the HIGHER TECHNICAL INSTITUTE CYPRUS

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Type of Project: Individual

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SUMMARY

<u>TITLE:</u> Design of the electrical services of a T.V. studio.

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The design of the electrical services of a T.V. studio was the objective of this project.

The project included:

The design of the complete electrical installation of a
T.V. studio, which includes:

- (a) power
- (b) lighting
- (c) central heating/cooling
- (d) audio/video/data distribution.
- 2. The illumination design.
- 3. The design of a telephone system.
- 4. The diagrams schedule of materials and costing including labour.

All conduits and conductors that are going to be used were calculated doing all the calculations shown in this project.

After finishing the calculations, costing has been done to evaluate the value of the electrical installation of this building.

Also all the drawings, single line diagrams and conduit schematics are shown in this project.

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INTRODUCTION

This project deals with the design of the electrical and telecommunication services of a T.V. studio in Nicosia.

The building consists of the basement, the ground floor and the first floor.

The level of illumination in the various areas was taken by the CIBS code. The results of the illumination design are tabulated in table given the necessary information of each area.

The design of the lighting and power circuits were carried out in accordance with the IEE wiring Regulations as currently amended and the local EAC conditions of supply.

The results of the power circuits and the lighting are tabulated in tables, giving the necessary information for each circuit.

On each floor there is one distribution board, which is supplied from the main D.B. in the Basement.

All the distribution boards are protected by mcb,, except the main which is protected by MCCB.

For the main panel and each distribution board, there is a single line diagram showing the various circuits supplied from it.

The main consideration when designing the electrical installation was safety. Therefore, the appropriate measures were taken, so that the danger of electric shock is avoided.

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