

HIGHER TECHNICAL INSTITUTE
ELECTRICAL ENGINEERING DEPARTMENT

DESIGN OF THE ELECTRICAL SERVICES

DESIGN OF THE ELECTRICAL SERVICES
AN OFFICE BLOCK

by

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HIGHER TECHNICAL INSTITUTE

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**DESIGN OF THE ELECTRICAL
SERVICES OF AN OFFICE BLOCK**

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DESIGN OF THE ELECTRICAL
SERVICES OF AN OFFICE BLOCK

Project Report Submitted by
IACOVOS A. ROUSOU

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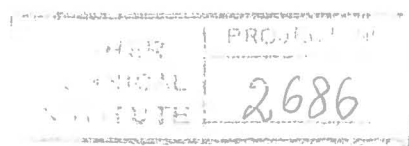
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Project Supervisor: Mr A. Georgiou

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I DEDICATE THIS PROJECT
TO MY PARENTS
ANDREAS AND MARIA

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INTRODUCTION

This project, as its title states, is the design of the Electrical Services of an Office Block.

More specifically the main objectives to study were the following:

1. The Illumination Design work involved.
2. The Electrical Installation Design, which included lighting, sockets and power.
3. The design of the Fire Alarm System.
4. The design of the Lighting Protection System.
5. The design of the Telephone Installation.
6. To provide all necessary diagrams and single line diagrams.
7. To provide schedule of materials and costing including labour.

Terms and Conditions:

1. Three-phase supply 415V, 50Hz, T.T. earthing system.
2. In carrying out the design of the electrical installation, the I.E.E. Wiring Regulations 16th Edition as currently amended as well as the local regulations established by the Electricity Authority of Cyprus were taken into consideration.
3. The illumination design work must be in accordance with the C.I.B.S. code.
4. CYTA requirements were taken into consideration.
5. The Fire Alarm System design must be in accordance to BS5839.
6. The Lighting Protection System must be in accordance to BS6651.
7. The external resistance, is taken to be equal to $Z_e=0.8\Omega$.