

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES  
OF A RECREATION CENTRE

E/1184

ANDREAS ANDREOU

JUNE 1999

**HIGHER TECHNICAL INSTITUTE**

**ELECTRICAL ENGINEERING DEPARTMENT**

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**DESIGN OF THE ELECTRICAL SERVICES  
OF "ZOO" RECREATION CENTRE**

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**BY  
ANDREAS ANDREOU  
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Mr. EFSTATHIOS MICHAEL**

**JUNE 1999**

1

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# HIGHER TECHNICAL INSTITUTE

## DESIGN OF THE ELECTRICAL SERVICES OF "ZOO" RECREATION CENTRE

**SUBMITTED BY :**

**ANDREAS ANDREOU**

**In partial fulfilment of the requirements  
For the diploma award of the  
Technician Engineer in Electrical  
Engineering Department of the  
Higher Technical Institute  
Nicosia - Cyprus**

**PROJECT SUPERVISOR :  
Mr. E. MICHAEL**

**JUNE 1999**

2

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	2980

**DEDICATED TO  
MYSELF**

# CONTENTS

<b>ACKNOWLEDGEMENTS .....</b>	<b>5</b>
<b>INTRODUCTION .....</b>	<b>6</b>
<b>CHAPTER 1 : ILLUMINATION DESIGN .....</b>	<b>7</b>
<b>CHAPTER 2 : LIGHTING CIRCUITS .....</b>	<b>37</b>
<b>CHAPTER 3 : POWER CIRCUITS.....</b>	<b>65</b>
<b>CHAPTER 4 : FIXED APPLIANCES .....</b>	<b>75</b>
<b>CHAPTER 5 : MECHANICAL LOADS.....</b>	<b>86</b>
<b>CHAPTER 6 : FIRE ALARM SYSTEM.....</b>	<b>101</b>
<b>CHAPTER 7 : BURGLAR ALARM SYSTEM.....</b>	<b>106</b>
<b>CHAPTER 8 : BALANCING OF PHASES &amp; DIVERSITY FACTOR.....</b>	<b>111</b>
<b>CHAPTER 9 : DISTRIBUTION BOARDS.....</b>	<b>138</b>
<b>CHAPTER 10 : FAULT LEVEL CALCULATIONS.....</b>	<b>150</b>
<b>CHAPTER 11 : ELECTRICITY CONSUMPTION COST &amp; POWER FACTOR IMPROVEMENT.....</b>	<b>156</b>
<b>CHAPTER 12 : TELEPHONY SYSTEM.....</b>	<b>162</b>
<b>CHAPTER 13 : LIGHTNING PROTECTION SYSTEM .....</b>	<b>171</b>
<b>CHAPTER 14 : COSTING OF THE INSTALLATION .....</b>	<b>182</b>
<b>CHAPTER 15 : CONCLUSIONS.....</b>	<b>192</b>
<b>CHAPTER 16 : APPENDICES.....</b>	<b>194</b>

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## INTRODUCTION

This project as its title states, is the design of the electrical services of “Zoo” recreation centre. More specifically the basic aims that have been studied are the following :

- Illumination design
- Lighting circuits
- Power circuits including fixed appliances and Mechanical loads
- Fire Alarm system
- Burglar Alarm system
- Balancing of phases & diversity factor
- Distribution boards
- Fault level calculations
- E.A.C Tariff Codes
- PFCU calculations
- Telephony system design
- Lightning protection system
- Costing of the installation

The whole design of “Zoo” recreation center was done according to the IEE regulations 16<sup>th</sup> edition ,the CIBS code for illumination and the E.A.C conditions .

The telephony installation was designed considering CYTA regulations and requirements.