

PRODUCTION OF CIVIL ENGINEERING
DRAWINGS WITH THE AID

OF CAD PACKAGE

BY

PALAZI DESPO

PROJECT REPORT

SUBMITTED TO

THE DEPARTMENT OF CIVIL ENGINEERING

OF THE

HIGHER TECHNICAL INSTITUTE

NICOSIA - CYPRUS

in partial fulfilment of the requirements

the diploma of

TECHNICAL ENGINEER

in

CIVIL ENGINEERING

JUNE 1992



ACKNOWLEDGEMENTS

I want to apply my special thanks to my project supervisor Mr Anastasiades, lecture in Civil Engineering Dep. of H.T.I.

Also special thanks to Mr. Nicola Demetriou, director manager for the provision of the CAD package, reference book, the permission of using his computers and plotter. Special thanks also to my friend Basim, architect for his useful information about the operation of the computer, as well as Mr Antonis Antoniou, civil engineer, CAD system specialist of Palinex Information Technology L.T.D. for his information about CAD package.

PREFACE

The AutoCAD drafting package is a general purpose Computer Aided Drafting application for computers CAD applications are tremendously powerful tools.

There is virtually no limit to the kind of line drawings that can be prepared using AutoCAD. If it can be created by hand it can be easily generated by AutoCAD. Nowadays autocad is used in many fields of design.

Here are just a few of them :

- * Architectural drawings of all kinds.
- * Interior design and facility planning.
- * Work flow charts and organizational diagrams.
- * Graphs of all kinds.
- * Drawing for electronic, chemical, civil, mechanical engineer applications.
- * Topographic maps and nautical charts .
- * Line drawings for the fine art.
- * Creeting cards.

One of CAD's nicest feature is its ease of use compared to traditional methods. Its a clean and comfortable approach to drafting. Anyone who has spent hours over a drawing, erasing and redrafting can appreciate a method that allows you to sit up straight, make changes without leaving a trace of an erased line and make those changes more quickly. When you use CAD for a drawing containing the same object in several places, you can draw the object once, then insert it whenever it is needed and in any scale you want. If you later want to redraw the object you can do so once and it will be updated automatically wherever it occurs, or you can modify one occurrence of the object without affecting the others.

CAD allows greater accuracy than traditional hand drafting method. Rather than depending on a graphic scale and the clarity of your sight to determine dimensions, you can use CAD's build-in measuring capabilities to check the dimensions of the drawings you create. Also zooming and planning features enable you to magnify the smallest detail of a drawing and work as though you were looking through a microscope.

Generally the speed and ease with which a drawing can be prepared and modified using a computer, offers a phenomenal timesaving, an advantage over hand preparation. AutoCAD brings this sophisticated technology previously available only on large and costly systems, to the desktop computer user.

CONTENTS

	<u>Page</u>
Acknowledgements	2
Contents	3
Preface	4
1. Introduction	5
2. Display Controls	12
3. Layers - Glours - Linetypes	13
4. Blocks	16
5. Text - Dimensioning - Hatching	17
6. Save - End _ Quit	24
7. Conclusions - Comments	25
8. Appendix A	26
References	38