AN ECOLOGICAL APPROACH TO LANDSCAPE PLANNING.

A Thesis Submitted to the Department of Architecture Engineering & Environmental Design, College of Engineering, in Partial Fulfillment of the Requirements for the Degree of Master of Science in Architecture

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Submitted: September 2006
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In the Name of ALLAH the most Gracious the most Merciful
Abstract

The following thesis mainly explores the use of ecological landscape planning model for culture landscape. Ecological landscape planning is a set of analysis that are applied in a step by step method to generate languages of planning. It has been widely used over the past several years to develop landscape planning. Understanding of the complex problems of land use competition requires appreciation of natural processes, cultural values, economic imperatives and political negotiations. This integrated understanding is an important component of the planning process.

This research is dedicated to explore one of the most valuable culture landscape of the Egyptian desert oasis (Desert depression), within an ecological approach for landscape planning. This research starts with examining the factors that shaped the culture landscape, exploring the different landscape planning models, and establishing a proposed model suitable for the culture landscape of Egypt. In the second part of this research, proposed model is tested in the oasis of Siwa and evaluated for future use in other cultural landscape.

Keywords: Landscape planning, Ecological Landscape planning, culture landscape, Suitable landscape planning.
Acknowledgement

First of all, I thank Allah, the glorious and compassionate for helping me accomplishing this work. My gratitude goes then to my Supervisors for their support and guidance, Prof. Dr. Mostafa Gabr for his insights, guidance, constant effort, support and continuous encouragement throughout the course of this study. Dr. Hany Ayad for his helpful suggestions, valuable advice, sincere supervision and guidance throughout the whole thesis. I would like to express my gratitude to Dept. Of Architecture Engineering & Environmental Design, College of Engineering & Technology and the great support of the head of the department, Prof. Dr. Abass Yehia. My thanks also go to Dr. Alaa El-Din Sarhan for his insightful comments and observations which helped me from the beginning to choose my way.

I would like to thank my colleagues in the architecture department for their encouragement and helpful discussions especially Jasmin Sobhy for her sincere help, Sherine Shafike for her encouragement and helpful discussion, Heba Shamkh for her help in reading my thesis and Finally , Thanks to Mohamed sobhy, Safwat Adel, Mohamed Adel, Bassem Eid, Ahmed Mamdouh, M. Alaa fathalla and Fatma Hassanain for being my friends and wishing me good.

Finally, I express my special debt of gratitude to my parents, sisters and my small family for their continuous support, patience, tolerance and encouragement. My little angel, Mariam for wiping all my pains and worry with her lovely smile.
List of acronyms and abbreviations used

**Acronyms**

**TMY**: Typical Meteorological Year.

**ITCZ**: The Intertropical Convergence Zone.

**GHCN1**: The Global Historical Climatology Network, version 1

**UNESCO**: The United Nations Educational, Scientific and Cultural Organization.

**UN-CSD**: United Nations - Commission of Sustainable Development.

**UNDP**: United Nations Development Program.

**UNEP**: United Nations Environment Program.

**USAID**: United States Agency for International Development.

**WWF**: World Wildlife Fund.

**Abbreviations**

**DEM**: Digital Elevation Model

**GIS**: Geographic Information Systems

**GPS**: Global Positioning

**NGOs**: Non-Government Organizations
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The scenarios describe a current situation, some alternative future and the necessary steps or actions needed to link the present with the future. These scenarios are not intended to be complete plans, but are appropriate for encouraging informed discussion of alternatives. The scenarios are evaluated, in presence of public, expert and stakeholder input. The discussion leads to a landscape plan that is adaptive in terms of implementation, monitoring and education.

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