Landscape Architecture and Sustainable Development

by

Jason B. Walker

Virginia Polytechnic Institute and State University

Master

Of

Landscape Architecture

Department of Landscape Architecture

Approved:

___________________________
Dr. Patrick Miller, Chair

___________________________  ______________________
Dr. Bob Jones                     Dr. John Randolph

April 5, 2001

Blacksburg, Virginia

Keywords:  Landscape Architecture, Sustainable Development, Design, Sustainable
ABSTRACT

The purpose of this thesis is to examine the role of sustainable development in Landscape Architecture. From reviewing the literature, a position is developed. The position is that Sustainable Development is an important issue for landscape architects and that there are reasons landscape architects have had limited success in sustainable development. The method of the thesis is derived from assessing a problem of sustainable development and landscape architecture and developing a solution to this problem. The solution is a procedure, not a tool, that landscape architects can use to learn about Sustainable Development and how it applies to landscape architecture. This thesis culminates in the development and application of a Sustainable Development Framework for Landscape Architects. The Framework is a procedure for landscape architects to become informed about sustainable development and how it applies to landscape architecture. For this thesis, the application was applied to the build out of an existing community, Top of the World. The implications of applying this framework are then discussed.
ACKNOWLEDGEMENTS

I would like to acknowledge a small number of supportive people without whom this project would not have reached fruition:

Dr. Patrick Miller’s support and guidance throughout this project, from inception to now and beyond, has greatly benefited this project and my own scholarly development. Patrick is a great professor from which to learn from, and he is an equally great person that I am honored to know.

During my tenure at Virginia Tech, Dr. John Randolph has been an invaluable resource and has greatly contributed to my understanding sustainable development.

Throughout this project, the support, encouragement, and insight that Dr. Bob Jones provided was extremely beneficial and sincerely appreciated.

Also, I would like to thank my MLA classmates and the LAR faculty for enriching my time here in Blacksburg. Thanks to Teresa and Jennifer for always answering my many questions.

Finally, I want to send a special thanks to Naomi Walker for your support and encouragement and for being there.
# TABLE OF CONTENTS

Title Page.................................................................................................................i  
Abstract..................................................................................................................ii  
Acknowledgements...................................................................................................iii  
Table of Contents......................................................................................................iv  
List of Multimedia Objects.......................................................................................v  
Introduction...............................................................................................................1  
Review of Literature.................................................................................................3  
  Importance of Sustainable Development.............................................................3  
  Sustainable Development Theory........................................................................4  
Position.....................................................................................................................7  
Methodology............................................................................................................10  
  Sustainable Development Framework..................................................................10  
    Research..............................................................................................................11  
    Analysis...............................................................................................................11  
    Design................................................................................................................12  
    Evaluation...........................................................................................................12  
Applying the Framework..........................................................................................13  
  Top-of-the-World Community............................................................................13  
No-Framework Comparison.....................................................................................16  
Insights and Conclusions.........................................................................................17  
Bibliography............................................................................................................20  
Appendix I – Diagrams............................................................................................23  
Appendix II – Vita...................................................................................................35
LIST OF MULTIMEDIA OBJECTS

Sustainable Development Framework

Figure 1 Overall Method and Process Diagram .................................................................2
Figure 2 Components of Sustainability ...........................................................................10
Figure 3 Scales of Sustainability ..................................................................................10
Figure 4 Analysis Checklist ..........................................................................................14
Figure 5 Framework Master Plan ..................................................................................15
Figure 6 Framework Enlargement Plan .........................................................................15
Figure 7 No-Framework Master Plan ..........................................................................16
Figure 8 No-Framework Enlargement Plan ..................................................................16