NATUS • CULTUS • CIVIS
A Holistic Community Plan for the Beausoleil First Nation

by
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presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Architecture

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AUTHOR’S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
ABSTRACT

Sustainability is not a contemporary concept, rather it was a guiding principle all cultures lived by to maintain balance with the natural world and more importantly survive. Evidently architecture was a tangible expression of a way of life as indigenous people developed place specific vernacular that adapted to various climates, exploited local raw materials and created comfortable living conditions that were responsive as much to the inner environment of culture and social interaction as they were to the external environmental forces.

\textit{Natus • Cultus • Civis} explores the significance of place in developing a contemporary sustainable architecture and the potential for a new and authentic regional expression rooted in a relationship between the knowledge, technologies and traditions of Native and Euro-Canadian people. These two distinct models of vernacular reveal considerable differences in the worldviews of the people they represent but together they offer a rich source of sustainable strategies and dynamic responses to the diverse environmental conditions of Canada.

Situated within a context plagued by imposed and often problematic Eurocentric models and furthermore isolated on Christian Island in Georgian Bay, Ontario, the Beausoleil First Nation community has fallen victim to unemployment, substance abuse, distressing high school completion rates and a disappearing cultural identity. The residents recognize the need for a community plan and are committed to nurturing and protecting resources in a sustainable manner in addition to creating opportunities for economic growth and cultural nourishment.

As such the thesis culminates in a holistic community plan and the design of a learning centre, to be developed in collaboration with the Beausoleil First Nation, which aspires to empower the community economically and culturally. Rooted in the discussion of sustainability, region and tectonics, the learning centre will be designed by referencing local vernacular traditions, exploring new technologies and encompassing the contextual landscape, history, culture and climatic conditions of the site.
ACKNOWLEDGEMENTS

When you are about to begin, writing a thesis seems a long, difficult task. That is because it is a long, difficult task.
- University of Waterloo Thesis Guide

While I initially laughed after reading the above quote, I can now confirm that it was accurate. I honestly could not have completed this long, difficult task, without the many people who generously shared their insights, guidance and support throughout this enriching and enlightening but challenging journey.

John McMinn, supervisor, earth – Thank-you for keeping me grounded throughout this process, nurturing my initial thesis interests, introducing me to some key resources to help cultivate my ideas such as 41° to 66°: Regional Response to Sustainable Architecture in Canada and connecting me with three important people who influenced my thesis greatly: Dr. William Woodworth, Richard Kroeker and Kenneth Jake Chakasim.

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The Beausoleil First Nation, water – Thank-you for welcoming me into your community with warm smiles and friendly conversation, allowing me to explore Christian Island in all its natural beauty, attend the Island in the Sun Inter-Tribal Powwow and spend hours reading in your library. My first ferry ride across the water mediating between two worlds is one I will never forget. It was more than a physical journey that I had begun but also a spiritual journey that would forever change me.

Mom, Dad, Travis – Thank-you for your unconditional love, unwavering support of my aspirations and continuous belief in my ability to succeed – I would not be who I am or where I am today without you. Mom, thank-you for teaching me to stand-up for what I believe in, giving me a strong, passionate female voice to emulate and always being a phonecall away. Dad, thank-you for teaching me the importance of patience and a strong work ethic, always making me laugh and helping with my creative endeavours. Trav, thank-you for all our childhood adventures and nature explorations, making it your job to test my limits, challenging me to do better through friendly competition and always having my back.

Andrew – Thank-you for your patience, love and support. You have survived my thesis-induced craziness and although you may have never fully understood it or the architecture jargon, nocturnal tendencies and why it could possibly take so long to finish – we finally made it and I am unbelievably excited to start the next chapter in our life.

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To the people of Christian Island and the Beausoleil First Nation.
# CONTENTS

Author’s Declaration iii  
Abstract v  
Acknowledgements vii  
Dedication xi  
List of Illustrations xiii  

**PREFACE**

1  
**INTRODUCTION**

9  

**NATUS AND CIVIS**

27  

ARCHITECTURE: A Tangible Expression of a Way of Life 35  
Reflection of Worldview  
Responsive to Environment  
Impact of European Contact  
Looking Back, Moving Forward  

**STORIES OF THE ANISHINABEK**

61  
Creation  
Turtle Island  
Nanabozho  
The Seven Grandfathers  
The Water Drum of the Midewiwin  
The Seven Fires  

**THE SOUTHEASTERN OJIBWA–ANISHINABEK**

75  
Identity  
Post–Contact Division  
Seasonal Activities  
Material Culture  
Architecture  
Transportation  
Spiritual Way of Life  

**CHRISTIAN ISLAND: A Place of Refuge** 91  
Ste. Marie II and the Huron–Jesuit Occupation  
The Beasoleil First Nation: A Story of Displacement  
Life on the New Reserve  

**CHIMNISSING–N–DAA–YAAN: Christian Island – My Home** 109  
The Island Today  
Link to Mainland  
Economy  
Learning  
Culture  
Economic and Cultural Learning Initiatives  

**COMMUNITY PLAN PROPOSITION** 123  
A New Story  
Ecological Context  
Infrastructural Systems  
Cultural Re–Creation(al) Strategies  

**LEARNING CENTRE** 151  
Design Statement  
Translation  
Vision  

**CONCLUSION** 195  

**REFERENCES** 203  
Endnotes  
Bibliography and Discography  

**APPENDIX** 231  
Office of Research Ethics  
Beasoleil First Nation Resources (Draft)  
Design Process and Resources
LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure #</th>
<th>Description and Source</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fig. 1.1</td>
<td>Bush Road, 1842 by P.J. Bainbrigge</td>
<td>3</td>
</tr>
<tr>
<td>Fig. 1.2</td>
<td>Everett welcome sign</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Author. Everett, ON, September 2012.</td>
<td></td>
</tr>
<tr>
<td>Fig. 1.3</td>
<td>Exploring nature</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Dopheide, K. Everett, ON, January 1997.</td>
<td></td>
</tr>
<tr>
<td>Fig. 1.4</td>
<td>Map of Simcoe County</td>
<td>5</td>
</tr>
<tr>
<td>Fig. 1.5</td>
<td>Island in the Sun Intertribal Powow</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Author. Christian Island, ON, July 2012.</td>
<td></td>
</tr>
<tr>
<td>Fig. 1.6</td>
<td>Beausoleil First Nation ferry tickets</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Author. March 2013.</td>
<td></td>
</tr>
<tr>
<td>Fig. 1.7</td>
<td>Tobacco tie gift from W. Woodworth</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Author. December 2012.</td>
<td></td>
</tr>
</tbody>
</table>

INTRODUCTION

<table>
<thead>
<tr>
<th>Figure #</th>
<th>Description and Source</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fig. 2.1</td>
<td>Courtesy of Nature</td>
<td>11</td>
</tr>
<tr>
<td>Fig. 2.2</td>
<td>Beijing Dragon Villas</td>
<td>12</td>
</tr>
<tr>
<td>Fig. 2.3</td>
<td>Daniel Libeskind building clones</td>
<td>13</td>
</tr>
<tr>
<td>Fig. 2.4</td>
<td>Autumn on the York by A.J. Casson</td>
<td>14</td>
</tr>
<tr>
<td>Fig. 2.5</td>
<td>A furtrade canoe on the Mattawa River</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Ontario by Frances Hopkins</td>
<td></td>
</tr>
</tbody>
</table>
Fig. 2.6  Total Population World Map, 2002  15

Fig. 2.7  Ecological Footprint Map, 2002  15

Fig. 2.8  Geothermal heat pump  16

Fig. 2.9  Geothermal drill and fill  16

Fig. 2.10  Old Sun Native Residential School  20
Old Sun Native Residential School (Gleichen, AB) P75-103 S7-184, 1945. General Synod Archives, Anglican Church of Canada.

Fig. 2.11  Kashechewan First Nation housing  20

Fig. 2.12  Thomas Moore before and after images  21
Before and after images of young Thomas Moore, Regina Indian Industrial School, Saskatchewan, Department of Indian Affairs Annual Report, 1897 Library and Archives Canada, NL-022474.

NATUS AND CIVIS

Fig. 3.1  Dreamers Cove, 2006-2012  29

Fig. 3.2  Lifted, 2009  29

Fig. 3.3  Bug collection  30

Fig. 3.4  Worldview diagram - time  30
Author.

Fig. 3.5  Worldview diagram - power  31
Author.

Fig. 3.6  Word chart derived from reading  32

Fig. 3.7  Thesis diagram  32
Author.
ARCHITECTURE: A Tangible Expression of a Way of Life

Fig. 4.1  Cultural area map: North America  38

Fig. 4.2  Pit House, 1890 by James Teit  39

Fig. 4.3  Wigwam  39

Fig. 4.4  Earth Lodge  39

Fig. 4.5  Longhouse  39

Fig. 4.6  Tipi  39

Fig. 4.7  Iglu  39

Fig. 4.8  Structure of a Haida House, 1957 by John Smyly  39

Fig. 4.9  Log House  39

Fig. 4.10  Sod House  39

Fig. 4.11  Prairie House by John C. Lehr  39

Fig. 4.12  The cosmic house  40

Fig. 4.13  Pantheon section  41
Fig. 4.14 Pantheon coiffed dome and sun
Author. Rome, Italy, August 2010.

Fig. 4.15 Cathedral of Siena plan

Fig. 4.16 Cathedral of Siena interior view
Author. Siena, Italy, October 2010.

Fig. 4.17 Tipi dynamically responds to climate

Fig. 4.18 Bank barn program diagram
http://www.austin-mergold.com/images/RVG_clubhouse_03.gif

Fig. 4.19 Bank barn ramp

Fig. 4.20 Bank barn forebay

Fig. 4.21 Modern wigwam

Fig. 4.22 Nicola Valley Institute of Technology

Fig. 4.23 NVIT section + ventilation diagram

Fig. 4.24 Seabird Island Community School

Fig. 4.25 Seabird Island School framing model

Fig. 4.26 Supernatural Salmon by April White

Fig. 4.27 Seabird Island School south facade

Fig. 4.28 Seabird Island Community School plan
Fig. 4.29 Bent pole truss assembly by community 52

Fig. 4.30 Pictou Landing Health Centre vaulted construction 52

Fig. 4.31 Health Centre reception area 53

Fig. 4.32 Ouje-Bougoumou Cultural Village 53

Fig. 4.33 Ouje-Bougoumou Community Plan 54

Fig. 4.34 Douglas Cardinal meeting with Elders 54

Fig. 4.35 Ouje-Bougoumou developed vernacular 54

Fig. 4.36 David Wright House rendered elevation 55

Fig. 4.37 David Wright House plan 55

Fig. 4.38 David Wright House interior 56

STORIES OF THE ANISHINABEK

Fig. 5.1 Anishinabe winter village 63

Fig. 5.2 Grandpa Telling Stories by Morrisseau 63
<table>
<thead>
<tr>
<th>Fig. 5.3</th>
<th>Windigo</th>
<th>64</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.4</th>
<th>Androgyny by N. Morrisseau</th>
<th>65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author. Ottawa, ON, June 2010.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.5</th>
<th>Anishinabek Creation Story Murale</th>
<th>65</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.6</th>
<th>The Flood by Roy Thomas</th>
<th>66</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.7</th>
<th>Nanabush Giving the Raccoon its Colours 1969 by Daphne Odjig</th>
<th>67</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.8</th>
<th>Nanabush and Rabbit Transformation by Daphne Odjig</th>
<th>67</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.9</th>
<th>Seven Grandfathers by Leland Bell</th>
<th>68</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.10</th>
<th>Sharing a Vision 1989 by Leland Bell</th>
<th>68</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.11</th>
<th>Birch bark scroll migration map</th>
<th>69</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.12</th>
<th>Sacred Migis Shells of the Midewiwin</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author. August 2012.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.13</th>
<th>Migration by Norval Morrisseau</th>
<th>70</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 5.14</th>
<th>Migration Map</th>
<th>71</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

THE SOUTHEASTERN OJIBWA–ANISHINABEK

<table>
<thead>
<tr>
<th>Fig. 6.1</th>
<th>Cultural area map: North America</th>
<th>77</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 6.2</th>
<th>Cultural area map: Great Lakes area</th>
<th>78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fig. 6.3</td>
<td>Anishinabe territory after Europeans</td>
<td>78</td>
</tr>
<tr>
<td>Fig. 6.4</td>
<td>Sugar Camp, 1840 by Seth Eastman</td>
<td>79</td>
</tr>
<tr>
<td>Fig. 6.6</td>
<td>Some traditional Anishinabe foods</td>
<td>80</td>
</tr>
<tr>
<td>Fig. 6.7</td>
<td>Gathering wild rice by Seth Eastman</td>
<td>80</td>
</tr>
<tr>
<td>Fig. 6.8</td>
<td>Southeastern Ojibwa winter village</td>
<td>81</td>
</tr>
<tr>
<td>Fig. 6.11</td>
<td>Section through a wigwam</td>
<td>83</td>
</tr>
<tr>
<td>Fig. 6.12</td>
<td>Midewiwin lodge structure</td>
<td>83</td>
</tr>
<tr>
<td>Fig. 6.14</td>
<td>Shaking tent structure</td>
<td>84</td>
</tr>
<tr>
<td>Fig. 6.16</td>
<td>Smudging ceremony</td>
<td>86</td>
</tr>
<tr>
<td>Fig. 6.17</td>
<td>Shaking tent.</td>
<td>86</td>
</tr>
</tbody>
</table>
Fig. 6.18 Tobacco pipe  

Fig. 6.19 Ojibwa drums  

Fig. 6.20 Sweat Lodge, 1978 by N. Morrisseau  

Fig. 6.21 Medicine wheel and sacred plants  

Fig. 6.22 Midewiwin ceremony ritual procession  

Fig. 6.23 Sacred Midewiwin birchbark scroll  

CHRISTIAN ISLAND: A Place of Refuge

Fig. 7.1 Ste. Marie II, 1855 by Fr. Felix Martin  

Fig. 7.2 Plan of Ste. Marie II  

Fig. 7.3 Simcoe County land purchases map  
Author.

Fig. 7.4 Communities relocation map  
Author.

Fig. 7.5 Beausoleil Island by W. Monague  

Fig. 7.6 Little Christian Island by W. Monague  

Fig. 7.7 Indian Agent house on Christian Island  
Fig. 7.8  Indian Agent + Midewiwin lodge 1951  97

Fig. 7.9  Beausoleil children confessional 1951  98

Fig. 7.10  Settlement house remains  98

Fig. 7.11  Hope Island Light 1909 by J.W. Bald  99

Fig. 7.12  Charcoal production by B.A. King  99

Fig. 7.13  O’Gema Street cuts across island  100

Fig. 7.14  Abandoned farm fields  100

Fig. 7.15  Sturgeon fishing in Simcoe County  101

Fig. 7.16  Work travel map  102
Author.

Fig. 7.17  First telephone call on Christian Island  104

Fig. 7.18  M.V. Indian Maiden passenger ferry  105

Fig. 7.19  Timeline: Beausoleil + Simcoe County  106
Author.

CHIMNISSING–N–DAA–YAAN: Christian Island – My Home

Fig. 8.1  Aerial view of Christian Island  111

Fig. 8.2  View from Christian Island across bay  111

Fig. 8.3  Ice causeway across bay  112

Fig. 8.4  Navigating the icy waters  112

Fig. 8.5  Students arriving at Cedar Point  113
Author. Cedar Point, ON. June 2012.

Fig. 8.6  Stop sign in Anishinabemowin  113
Fig. 8.7  Island in the Sun Intertribal Powwow 114

Fig. 8.8  Aboriginal Youth Week 114
Ross, Brian and Sheryl Smith. “Aboriginal Youth Week Comes to Camp: Partners in History, Culture, and Environment at Georgian Bay Islands National Park of Canada.” In Ontario Archaeology, Vol. 73, No. 8.

Fig. 8.9  Aboriginal Resource Centre garden 115

Fig. 8.10  Idle No More demonstration 115

Fig. 8.11  Annual Georgian College Powwow 116

Fig. 8.12  Ogemawahj curriculum resources 117

Fig. 8.13  Cultural Wilderness Program 118

Fig. 8.14  Survival in the Bush, Inc. moccassins 118

Fig. 8.15  Four Councils Meeting 119

Fig. 8.16  Site 41 protest meeting 120

Fig. 8.17  Communities standing together 120

Fig. 8.18  Site 41 camp 121
COMMUNITY PLAN PROPOSITION

Fig. 9.1  Great Lakes region map  

Fig. 9.2  Seasons in the Great Lakes region  

Fig. 9.3  Ground mounted photovoltaic panels  

Fig. 9.4  Wind data map at 80magl  

Fig. 9.5  Horse logging  

Fig. 9.6  Wood residue biomass  

Fig. 9.7  Tapping trees in spring for sap  

Fig. 9.8  Harvest schedule  
Author.

Fig. 9.9  Cedar  

Fig. 9.10  Cedar bundle  

Fig. 9.11  Strawberries  

Fig. 9.12  Strawberry juice  

Fig. 9.13  Sage  
<table>
<thead>
<tr>
<th>Fig. 9.14</th>
<th>Sage bundle</th>
<th>132</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.15</th>
<th>Agriculture vignette</th>
<th>133</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.16</th>
<th>Tobacco</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.17</th>
<th>Tobacco pipe</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.18</th>
<th>Sweet grass</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.19</th>
<th>Sweet grass braid</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.20</th>
<th>Tree sap tap</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.21</th>
<th>Maple syrup</th>
<th>133</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.22</th>
<th>Big Sand Bay regatta</th>
<th>134</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.23</th>
<th>Ste. Marie II ruins</th>
<th>134</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.24</th>
<th>Christian Island lighthouse</th>
<th>135</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.25</th>
<th>Maple Dawn shipwreck</th>
<th>135</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.26</th>
<th>Eco-tourism map</th>
<th>136</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.27</th>
<th>Historic + Marine + Education map</th>
<th>137</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.28</th>
<th>Ancient sand dunes sign</th>
<th>138</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.29</th>
<th>Forked Three-Awned Grass sign</th>
<th>138</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Fig. 9.30</th>
<th>Community plan systems diagram</th>
<th>148</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fig. 10.1 Wigwam

Fig. 10.2 Log cabin

Fig. 10.3 Wood frame house

Fig. 10.4 Casino Rama

Fig. 10.5 Grand Traverse Civic Centre

Fig. 10.6 Location of Learning Centre
Google Earth. “Christian Island, ON.” 2013

Fig. 10.7 Carpet by Frank Lloyd Wright

Fig. 10.8 Pictou Landing Health Centre gallery

Fig. 10.9 Kids Den classroom

Fig. 10.10 Seabird Island School veranda/gardens

Fig. 10.11 A Path in the Forest

Fig. 10.12 Wood dome

Fig. 10.13 Tiered seating and central fire

Fig. 10.14 Stackwall construction
Fig. 10.15  Bent pole trusses + wood decking  161
  design.com

Fig. 10.16  Straw bale construction  162
  0/04/an-overview-of-alternative-housing-designs-part-2/

Fig. 10.17  Grid shell construction + connection  162
  www.englishwoodlandtimber.co.uk/structural
  timber-oak/

Fig. 10.18  Earth floor  163

Fig. 10.19  Cedar cladding + window detail  163
  design.com

Fig. 10.20  Weathered cedar cladding  164
  helpinaflash.com/House-Projects/Cedar-Roof-
  Maintenance.cfm

Fig. 10.21  Ceremonial staff  164
  hwy61.com/bm/bm~pix/nett-lake-stonebridge_-
  opt~s600x600.jpeg

Fig. 10.22  Community diagram  166
Author.

Fig. 10.23  Community photos  167
Author.

Fig. 10.24  Site diagram  168
Author.

Fig. 10.25  Design diagram  169
Author.

Fig. 10.26  Axis diagram  170
Author.

Fig. 10.27  Site plan  171
Author.

Fig. 10.28  Ground plan  172
Author.

Fig. 10.29  Upper plan  173
Author.

Fig. 10.30  Circulation diagrams  174
Author.

Fig. 10.31  Daylight diagram  174
Author.
<table>
<thead>
<tr>
<th>Fig. 10.32</th>
<th>North-south section</th>
<th>175</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.33</td>
<td>View from waterfront vignette</td>
<td>176</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.34</td>
<td>Learning spaces vignette</td>
<td>177</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.35</td>
<td>Medicinal garden vignette</td>
<td>178</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.36</td>
<td>Library and media centre vignette</td>
<td>179</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.37</td>
<td>Communal sacred space vignette</td>
<td>180</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.38</td>
<td>Corridor gallery + atrium vignette</td>
<td>181</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.39</td>
<td>Detail key for south wing</td>
<td>182</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.40</td>
<td>Detail A</td>
<td>183</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.41</td>
<td>Detail B</td>
<td>184</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.42</td>
<td>Detail C</td>
<td>185</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fig. 10.43</td>
<td>Detail D</td>
<td>186</td>
</tr>
<tr>
<td>Author.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### APPENDICES

| Fig. 13.1 | Materials | 250 |
| Author.   |           |     |
| Fig. 13.2 | Structural systems | 250 |
| Author.   |           |     |
| Fig. 13.3 | Straw bales | 251 |
| Author.   |           |     |
Fig. 13.4 Pole structure tests 252
Author.

Fig. 13.5 Site and program mapping 253
Author.

Fig. 13.6 First iteration plan 254
Author.

Fig. 13.7 Gathering space + corridor sketches 255
Author.

Fig. 13.8 Second iteration plan + section 256
Author.

Fig. 13.9 Third iteration plan 257
Author.

Fig. 13.10 Third iteration section 1 258
Author.

Fig. 13.11 Third iteration section 2 259
Author.

Fig. 13.12 Fourth iteration ground plan 260
Author.

Fig. 13.13 Fourth iteration upper plan 261
Author.

Fig. 13.14 Fourth iteration section 262
Author.

Fig. 13.15 Roof structure sketches 262
Author.

Fig. 13.16 Corridor, library, veranda sketches 263
Author.

Fig. 13.17 Fifth iteration ground plan 264
Author.

Fig. 13.18 Fifth iteration upper plan 265
Author.

Fig. 13.19 Sixth iteration ground plan 266
Author.

Fig. 13.20 Sixth iteration upper plan 267
Author.

Fig. 13.21 Sixth iteration section 268
Author.

Fig. 13.22 Circulation and roof structure sketches 268
Author.

Fig. 13.23 Transition iteration 269
Author.

Fig. 13.24 Seventh iteration ground plan 270
Author.

Fig. 13.25 Seventh iteration upper plan 271
Author.

Fig. 13.26 Seventh iteration sections 272
Author.

Fig. 13.27 Library and media millwork sketches 273
Author.
PREFACE
We must be the change we wish to see in the world
– Mohandas Gandhi (1913)
I have always had a place in my heart for Native people and their culture. It is hard to pinpoint a singular cause for this affection. I believe we are all native people in the sense that we are tied to the land, so perhaps it was my own relationship with nature that ignited the spark. As I learned about traditional Native life and the dark history of Canada during my elementary school education the space in my heart grew. The catalyst, however, must have been witnessing a beloved friend of the family struggle to finally learn her exact lineage and embrace her identity as a Native person. The truth was her parents had only been trying to protect her from a world that discriminated against Native people. After exploring her roots, she found the piece that was missing and has spent the last decade rediscovering herself and sharing the beauty of Native culture with the community.

The village of Everett where I grew up was once home to the Huron people. Later it became an Iroquois hunting preserve for over 100 years. The Ojibwa gradually moved south assuming the territory that I call home during the 18th century. These lands, part of which became known as Adjala-Tosotontio, first had to be acquired from the Ojibwa. The treaty was signed on Saturday, October 17th, 1818, surrendering 1,592,000 acres in return for £1200 annually. Adjala-Tosorontio is a township in south-central Ontario, in the County of Simcoe. A predominantly rural area of rolling countryside divided by the Nottawasaga River and its tributaries, just east of the Niagara Escarpment and a short drive south of Georgian Bay. Nottawasaga is a Huron word meaning Iroquois mouth of the river and was used as a warning when Iroquois raids were approaching on the river. Tosorontio is a Huron word meaning beautiful mountain and Adjala was the name of the wife of Chief Tecumseh, an important figure during the war of 1812 for whom the neighboring township was named.

Growing up we were only mildly aware of the history of the land we called home and the stories it held. When the first settlers moved into Simcoe County in the early part of the nineteenth century, they encountered an almost unbroken forest, there for countless centuries...
Before the beginning of recorded time. The huge trees stood shoulder to shoulder, their canopy blocking out the sky so that it was possible to ride for hours in cathedral–like silence on a thick carpet of pine needles. In the beginning the forest was regarded as an enemy – more so than the cold and isolation. To the pioneers, faced with the relentless threat of hunger, the clearing of the land was the key to survival. Each tree felled, stripped, burned and destroyed meant so many additional square yards in which to plant the crops that were the staples of their frontier existence. The exploitation of the lumber industry soon followed, birthing hamlets such as my home, Everett, in 1855. Tosorontio’s sandy soils provided vast stands of pine trees, supporting as many as seven large sawmills. For half a century it had seemed that the supply of trees was in exhaustible; with no thought of conservation, or the preservation of an industry, or of tomorrow. With the removal of the forest, the lands became silent once more and all that remained was a vast cemetery of stumps. In this way Nature was predominantly used for human benefit and so anything that could not be counted or measured in monetary terms had marginal value.

Growing up in this small rural community there was little to do and so rain, sun or snow my brother and I spent our days outdoors, exploring the fields, the forest and the creek. We didn’t need calendars or clocks, as we knew the time of year from observing changes in the flora and fauna and the time of day from the position of the sun in the sky.

Trips to the big city were reserved for special occasions, such as a visit to the Hockey Hall of Fame or the Royal Agricultural Fair. I didn’t like the city much. It was dense, crowded and the air was thick. I felt like I couldn’t breathe. I remember being on the subway for the first time and hearing a boy around my age, maybe nine or ten years old, ask his mom where milk came from. I couldn’t believe it! Had he really never seen a cow? It became clear in my mind that we came from very different worlds.
In grade two my teacher started a club called The Green Team and recognizing my affection for the natural world, asked me to be the class representative. I was part of the team until I graduated and during that time we promoted earth-conscious behaviour in our school and beyond, attending conferences, planting trees and picking up litter.

Concurrently, my community had grown from a hamlet to a village and was verging on becoming a small town as Toronto reached further north. Land containing pristine ecosystems was quickly rezoned for immediate development. Trees were clear-cut and marshland buried without any consideration beyond its division for the maximum profit. I witnessed cookie cutter housing built in place of the beautiful natural spaces I played in and learned from as a child. So I decided to take a stand. At the age of fourteen, I went before the mayor and council, pleading they reconsider future development until they had thoughtfully addressed the consequences. I was unsuccessful and to add insult to injury, the mayor reminded me that the places I enjoyed as a child were private property and I had actually been trespassing. The mayor, like the settlers almost two centuries before him, valued the Earth only for its resources, which were assumed to be infinite and inexhaustible.

The culmination of events and experiences in my life has led me to return home to Simcoe County for my thesis. I chose to pursue architecture as a result of personal struggles with my local government developing without consideration of the impact. I am very familiar with the Georgian Bay area, but had never been to Christian Island until a beautiful warm sunny day in November of 2011. I have continued to return to the island and attended the Island in the Sun Intertribal Powwow in the summer of 2012. Spending this time on Christian Island and speaking with several members of the community, I felt a deep connection and the desire to attempt to help in the community with its future plans for the island.
A culture is always broader than its researchers, no matter their origin and background. Reading the Beausoleil First Nation Resource Draft it is clear that the community is very committed and proactive in nurturing and protecting resources in a sustainable manner. At the same time it wants to create opportunities for economic growth. It was inspiring to find a community acting in a way that is responsible to the Earth and the people. Furthermore it is the reason my thesis interest lies in regionally responsive sustainable design and earth stewardship. I did not travel this path with a preset list of questions to be answered with Native data. That would have been more of an investigative enterprise rather than a learning experience. My intention is not to be invasive in the community, but rather to be present in this opportunity to listen and learn. I believe that design should be responsive to both the environment and the people. I have had to relearn how to learn, as I discovered new ways of understanding. This process required more than refined intellectual phrases; it demanded sensitivity to physical, emotional and ethical behaviour. I hope that my genuine interest, affection and respect for the Beausoleil First Nation are adequately conveyed in the text and the proposals outlined in this thesis.

Fig. 1.5 - Island in the Sun Intertribal Powwow July 2012

Fig. 1.6 - Some ferry tickets from my time spent on Christian Island.
Fig. 1.7 (Opposite) - A tobacco tie gift from Dr. William Woodworth.
INTRODUCTION
Man takes a positive hand in creation whenever he puts a building upon the earth beneath the sun. If he has birthright at all, it must consist in this: that he, too, is no less a feature in the landscape than the rocks, trees, bears or bees of all the nature to which he owes his being.¹

– Frank Lloyd Wright (1937)
**Relationship with the Natural World**

_This land is far more important than we are. To know it is to be young and ancient all at once._\(^2\) – Hugh Maclennan (1967)

In our modern minds nature and human society are separate things. This disconnect is a result of universalizing trends which show little regard for the regional geography and climate or the local cultural and contextual variations of distinct societies. As the importance of place and the relationship between humanity and nature fade, distinct characteristics derived from the indigenous architecture and traditional vernacular disappear, replaced by the uniformity of the dominant culture.

Historically humanity responded to local environmental conditions by developing techniques and technologies that maintained a balanced and respectful relationship with nature. Dwellings were built using the materials offered by the landscape and designed to harmonize with the natural forces of wind, rain and sun. While buildings originated from the need for shelter to survive, over time, these structures became more complex for economic, religious and cultural reasons in an effort to make sense of our place in the world. Furthermore, humanity designed the built environment to symbolize our relationship with the natural world. As architect and author, Christian Norberg-Schultz explains:

> In general, any understanding of the natural environment grows out of a primeval experience of nature as a multitude of living forces. Man was thus embedded in nature and dependent upon natural forces. The growth of man’s mental faculties proceeds from the grasping of such diffused qualities, into more articulate experiences, where the parts and interrelationships within the totality are understood.\(^3\)

Early architecture and building methods of a specific place or people,
defined as traditional vernacular, were the manifestations of a particular way of life, intuitive and learned based on traditions and knowledge of materials and techniques passed down through the generations. Traditional vernacular exemplified a harmonious relationship with nature, as buildings worked with the landscape to foster place and communal identity by connecting culture, history, and ecology within a geographical context. In this regard, indigenous architecture and traditional vernacular are imperative and influential factors in expressing a worldview, integrating with nature and providing a sense of continuity between our past and present. Architectural historian Sibyl Moholy-Nagy solidifies this point, stating:

The current attitude of humanity towards nature plays a significant role in the discourse on regionally responsive design as "places and cultures are being bulldozed into planetary geography of nowhere, eroding local and regional differences." Once a source of time-tested knowledge, traditional vernacular was slowly replaced by popular architectural trends and coveted imported designs, resulting in the disappearance of regional identities. Modern technological advances have provided the world with convenience, comfort and speed, resulting in accelerated rates of progress and changes in lifestyle that have supported a greater disconnection between nature and humanity. We have attempted to dominate and control the natural environment, and now we are experiencing the effects of an unbalanced ecosystem.
As such, architecture should be a built connection to the geographic and cultural characteristics of a region in order to maintain a strong link between people, place and nature.

**Sustainable Design through Regionally Responsive Architecture**

*There is no conflict between regionally appropriate and environmentally appropriate building practice.* – Niklaus Kohler (2003)

Architectural critic Kenneth Frampton outlined an approach to design that would counter the placelessness and lack of identity in modern architecture by referencing geographical context in his influential essay, *Towards a Critical Regionalism: Six Points for an Architecture of Resistance*. Frampton explained that to achieve, “Critical Regionalism necessarily involves a more directly dialectical relationship with nature than the more abstract, formal traditions of modern avant-garde architecture allow.”

In response to Frampton’s approach, professors John McMinn and Marco Polo contend that, “a contemporary architectural response, appropriate to its context on a variety of levels, would tend to be linked with local traditions of the material culture of the region.”

Furthermore, McMinn and Polo explain that the elements described by Frampton’s fifth point, *Culture Versus Nature: Topography, Context, Climate, Light and Tectonic Form*, lend themselves to “the pursuit of an architecture whose responsiveness to local conditions produces not only greater energy and material efficiencies, but also addresses local cultural and tectonic traditions, leading to greener but also more meaningful architecture that departs from the canon of universalizing practice.”

Frampton’s Critical Regionalism proposed architecture as the mediator between local place-identity and global culture as well as vernacular traditions and modern, technologically advanced
building practices. In this way architecture is developed that, “resists the numbing effect of both the universalizing impact of global technology and of nostalgic representations of self-referential historical revivalisms.” Additionally, McMinn and Polo propose that Critical Regionalism serves as a model for contemporary architecture, “that adopts strategies of sustainability related to local climatic and geographic conditions and cultural practices and that also participates in a broader critical discourse by engaging sustainability not only as technique or method, but as a cultural paradigm inspiring contemporary architects to establish their own distinctive cultural forms.”

It is especially important for a country like Canada that has a strong relationship between cultural identity and landscape to not fall victim to the current universalizing practice of design whereby a building is developed and replicated across the country or world at large despite varying ecological and cultural conditions for reasons of mass production, maximum profit or the desired iconography of a specific architect or place. The identity–as–landscape narrative defines, in part, what it means to be Canadian. Here the majestic mountains of the Rockies, the boundless prairie skies, the bedrock landscapes of the Canadian Shield, the rugged coast of the Maritimes and the arctic tundra illuminated by the Aurora Borealis, act as a unifying device for this vast country and shapes both its urban and rural inhabitants alike.

This romantic view of the wilderness has its origins in the northern voyages of discovery made by European explorers. Professor Russel Lawrence Barsh affirms this notion stating that, “like their immigrant forebears, Euro-Canadians are drawn to the wilderness – the frontier – because it lies beyond the borders of maps, outside the world of books, a place without labels, laws, or institutions; a place of unseen dangers, but also infinite possibilities.” A canoe journey into the wilderness has become a persistent trope in Canadian folklore that symbolizes the spiritual journey of a nation searching for an identity.
Historian Daniel Francis further explains that, “the canoe carries us out of our European past deep into the wilderness where we are reborn as citizens of the New World.”

Of course the current multiethnic and multiracial populations in Canada, whose stories become subsumed by an overarching tale of landscape as well as the fable told at the expense of the Aboriginal people both past and present, that Canada was an uninhabited terrain, complicate this narrative. As such Canadian architecture must represent a country that is home to many core cultures and composed of diverse landscapes and environmental conditions if it is to be regionally responsible and thus sustainable.

**Role of Culture in Defining Sustainability**

On March 20, 1987, the United Nations report *Our Common Future*, prepared by the World Commission on Environment and Development called for, “a form of sustainable development which meets the needs of the present without compromising the ability of future generations to meet their own needs.” The result has been a series of technological responses primarily focused on energy performance and production. Consequently, the broader discussion of architecture as a cultural project has remained relatively separate from the discourse on sustainable design. Professors, Guy Simon and Graham Farmer, reinterpreted sustainable architecture and the role of technology, expressing:

The emblematic issue is authenticity and the notion that truly sustainable buildings need to relate more fully to the concept of locality and place. Our ethical responsibilities are to resist the phenomenon of universalization prevalent in modern culture [as our] current technology based sustainable architectural approaches and design methodologies often fail to coincide with the cultural values of a particular place or people.
Current technologically based sustainable approaches and design methodologies for buildings make no reference as to how users interact with the features and systems and also often fail to take into account the cultural values of a particular place or people. According to Professors Faazi Ujam and Fionn Stevenson this means that, “without cultural awareness, any attempt to create a more sustainable environment is likely to falter as it encounters but fails to recognize very deeply structured personal responses to particular places that will tend to override shallow environmentalism.” To be truly sustainable, buildings must maintain functionality and relevance to the community. A building designed to be energy efficient could easily fail to address the cultural needs and values of the inhabitants due to lack of consideration. As such Guy and Farmer conclude that, “contemporary architecture should therefore seek a greater understanding of local culture if it is to be sustainable.” McMinn and Polo expand on this argument identifying that “Those needs may be defined not only in practical terms, but also on the basis of cultural, aesthetic and material traditions specific to a local or regional population for whom such elements are fundamental manifestations of self-definition and place-identity.”

As a natural progression, Guy and Farmer suggest that this approach draws “inspiration from indigenous and vernacular building strategies, which are seen as indicative of ways in which culture adapts to the limitations of a particular environment.” Traditional vernacular is an important frame of reference for it integrated and adapted the architecture in response to the challenges presented by the site to combine people, nature and the built form harmoniously. Furthermore, “the holistic nature of traditional building in which physical, spiritual and environmental needs were integrated within the greater context of social groups,” becomes a design precedent. For an architectural proposition to represent a truly sustainable design solution, it is implicit that it must reference a specific cultural milieu and its associated vernacular. In this way a cyclical relationship is formed whereby culture inspires the design and the built form...
reinforces the historical link between the past and the present.

Proposal

You must learn to look at the world twice if you wish to see all that there is to see. – Jamake Highwater (1981)

This thesis investigates the importance of place in developing sustainable architecture and the potential for a new and authentic regional expression rooted in a relationship between the knowledge, technologies and traditions of Aboriginal and Euro-Canadian people. These two distinct models of vernacular architecture offer different responses to environmental conditions that reveal considerable differences in the worldviews of the people they represent.

For Aboriginal peoples, there was no wilderness, for the territory we now call Canada was a familiar landscape, embedded with social relations and stories, endowed with sacred meaning and ultimately fundamental to the comprehension of their culture. In his book Of the Spirit architect Douglas Cardinal describes the Aboriginal sense of the natural world as dynamic and a vision of oneness and totality. As a result there was no escape from their interdependence with the environment, as they were woven into a symbiotic relationship with the Earth, water, air, seasons, animals and plants of the world. Consequently, architect Kenneth J. Chakasim explains in Sustainability: The AlterNATIVE Perspective that there was no concept of private ownership of resources and no notion of improvement of the natural environment by human intervention. Furthermore, Chakasim adds that time was considered cyclical rather than linear and so architecture was understood as an extension of the natural world. Thus for construction to respect the life giving Earth, architect William McDonough surmises in A Centennial Sermon: Design, Ecology, Ethics and the Making of Things that it, “must not only rise from the ground but return to it ... without causing harm to any
In contrast the Western ideology practiced in Canada by European settlers was one that viewed the New World as a place of opportunity and potential wealth, with the environment a mere commodity—a resource to be bought, exploited, developed and sold. Cardinal further argues that there was no sense of sacredness of the land, rather the unfamiliar wilderness was understood as threatening and dangerous, thus necessitating the dominion over and domestication of the natural world to serve humanity. Consequently, Chakasim concludes that settlement was devised to mitigate the potentially deleterious effects of the harsh environmental conditions on the immigrants. As such architecture was regarded as a shelter from and barrier against the natural world and construction was approached with durability and survival in mind rather than a harmonious relationship with the Earth.

Together these two distinct approaches to vernacular architecture offer a rich source of sustainable strategies for contemporary architecture. The Aboriginal perspective offers Traditional Ecological Knowledge (TEK) described by Chakasim as, “a concept wherein the material culture of a place is a repository of cultural values rooted in environmental stewardship, reduced ecological footprint and strategies for minimal interference with the natural world.” This idea of drawing on the wealth of indigenous knowledge based on thousands of years of experience has its roots in ethnoscience and human ecology and originates as far back as 1900. More recently TEK was recognized at an international level in the 1987 report Our Common Future as a source of lessons in resource management for modern societies. Early settler models provide a variety of creative technological responses using the limited resources available to them to endure the extreme climatic conditions present within Canada. It is important to note that many of the traditional Aboriginal and European precedents are no longer practical for modern living. McMinn and Polo express that, "the challenge is to distill those
elements of the vernacular that address the issue of sustainability, both attitudinally and symbolically, without sacrificing the standards of health, safety and comfort that form the basis of contemporary technologically advanced building.”

The thesis culminates with a proposition for a holistic community plan and the design of a learning centre for the Beausoleil First Nation, which aims to empower the community economically and culturally. Focusing on the symbiotic relationship between humanity and nature, the intent is to develop an architecture that does not yield to universalizing trends, but rather highlights regional characteristics. Rooted in the discussion of sustainability, region and tectonics, the learning centre will be designed by referencing local vernacular traditions, exploring new technologies and encompassing the contextual landscape, history, culture and climatic conditions of the site. It will be important to demonstrate the architectural relevance of vernacular as a channel for sustainable development as well as place and cultural identity and as the process by which man can build harmoniously with nature. To conclude, the proposal strives to be open-minded and move forward in a renewed atmosphere of better understanding and mutual respect between Euro-Canadians and First Nations. Finding sustainable development and regionally responsive architecture as a common goal and opportunity for our cultures to come together as friends and neighbours to learn from each other and gain a deeper understanding our distinct worldviews.

Considerations

…it is time, at long last, for modern, science-driven industrial societies to begin to grant traditional Native nature-wisdom and the long-suffering First Peoples of the world who are its guardians and rightful heirs the respect they have always deserved. – David Suzuki (1992)

As early as the seventeenth century European settlers and later
the Government of Canada systematically removed the identity of Aboriginal people in Canada, through Christian missions, reservations, residential schools and the Department of Indian Affairs. This is not part of a distant history as the Department of Indian Affairs still exists and the last residential school was not closed until 1996. Furthermore the Government of Canada did not offer an apology until June 11, 2008 when the Truth and Reconciliation Commission was established. Due to their very marginal role in the economic, political and judicial structures of Canada, Aboriginal peoples continue to experience destabilizing pressures on their respective senses of identity. Cultural theorist Stuart Hall explains that for a marginalized people, such historical memory is integral to the construction of identity:

Cultural identity...is a matter of becoming as well as of being. It belongs to the future as much as to the past. It is not something which already exists, transcending place, time, history and culture. Cultural identities come from somewhere, have histories. But, like everything which is historical, they undergo constant transformation. Far from being eternally fixed in some essentialized past, they are subject to continuous play of history, culture and power. Far from being grounded in a mere “recovery” of the past, which is waiting to be found, and which when found, will secure our sense of ourselves into eternity, identities are the names we give to the different ways we are positioned by, and position ourselves within, the narratives of the past.34

Today when Aboriginal people begin constructing their own sense of identity, it is difficult to transcend the legacy of externally imposed Euro-Canadian identities, in part because these were inherent in the legal and political structures under which all Aboriginal people functioned. The process is fraught with internal tensions and generally speaking, there is little consensus on the nature and significance of traditional lifestyles and institutions, and the extent

Fig. 2.10 - Old Sun Native Residential School in Gleichen, Alberta circa 1945.

Fig. 2.11 - Many reserve communities today display the results of generations of government housing programs. This image is of the Kashechewan First Nation community near James Bay in Northern Ontario.
Fig. 2.12 - Residential school administrators and Indian Agents across Canada submitted annual reports to the Department of Indian Affairs. In the 1889 report one of the Agent states that in 1869 all of the Indians of this agency were clothed in blankets and bedecked themselves with the feathers and paint, and had the long hair of the wild savage, but now they dress like white people and it is difficult for a stranger to distinguish them from white settlers. Above are images of Thomas Moore, a student at the Regina Indian Industrial School in Saskatchewan, included in the 1897 report to showcase this change. The left taken upon admittance and the right after tuition.
to which they should prevail in the contemporary world. As such Aboriginal communities continue to struggle to find a balance between upholding the way of life passed down from their ancestors and living in the world in which they were forcefully situated.

Canada’s First Nation communities have had little opportunity to construct their own indigenous architecture during the last three centuries. European contact in the 1600s brought about dramatic changes to Aboriginal culture in the form of European goods such as iron wares and firearms, Christian missions, treaties and colonization, which began the process of pacifying and assimilating the Aboriginal people. Peter Nabokov and Robert Easton examine this shift in indigenous architecture in their book *Native American Architecture*:

> Early attempts to convert Native American cultures to Christianity in the seventeenth–nineteenth century brought about specific changes to traditional dwellings, and building typologies shifted from culturally established ones to hidden and temporary ones. The need for secrecy led to the disappearance of traditional ceremonial buildings and spaces.

Furthermore, traditional building techniques were largely lost as Aboriginal groups were dispersed and removed from traditional lands. When Canada became a country in 1867, the Department of Indian Affairs was established to administer policy regarding Aboriginal peoples. The Indian Act followed in 1876, giving legal authority to the government to control the everyday lives of First Nations, treating them as wards of the state and denying them the right of Canadian citizens to vote or own property. Assuming the inherent superiority of British ways, the Canadian government pushed the Aboriginal people to become farmers and build permanent houses, resembling those of the European settlers, using stone, logs and later wood frame with siding or brick. Since the Europeans dismissed the culture that had produced traditional Aboriginal buildings, they could not see in them religious or social value. An excerpt from the 1889 *Dominion*
of Canada: Annual Report to the Department of Indian Affairs gives light to the assimilation process:

On many of the reserves visited the advancement in agriculture and the improvement in the construction of dwelling houses are most encouraging indications of the gradual development of a more enlightened civilization among those rude savages who cling with superstitious reverence to the barbarous customs and traditions of their untutored ancestors.38

After the Indian Act was revised in 1951 and the right to vote extended to include Aboriginals in 1960, First Nations across Canada began to take part in a widespread movement of cultural regeneration, which included the commission of new buildings challenged with the task of creating a contemporary Aboriginal architecture. As a result the question then arises if in the face of radically changing economic, social and cultural conditions initiated by the impact of universalizing modernist trends, can a specific building be designed for a distinct society that has lost their traditional vernacular? It becomes even more important then to create an appropriate site-specific architecture designed to capture the essence and character of the people’s culture, history and their connected relationship with the natural landscape. Furthermore, as succinctly put by architect Jim Taggart in his article on modern vernacular in Canadian Architect, it is imperative to reveal the, “cultural context not as an assemblage of symbols and metaphors, but through the embodiment of intrinsic cultural values.”39

Terminology

The historical relationship between Europeans, the Canadian government and Aboriginal peoples is complex, and has often been paternalistic and damaging. As a result, a term can be a loaded word, used as a powerful method to divide peoples, misrepresent them, and control their identity. However, it is important to recognize that
terms also have the potential to empower when people are given the opportunity to self-identity. Although many Aboriginal people may prefer to identify themselves by their specific cultural group, for the purposes of this thesis, several of the general terms used in a Canadian context are included below.

Aboriginal refers to the original inhabitants of Canada, and includes First Nations, Inuit, and Métis peoples. These are three distinct groups with unique heritages, languages, cultural practices, and spiritual beliefs. This term came into popular usage in Canadian contexts after 1982, when Section 35 of the Canadian Constitution defined the term as such. As an adjective it is defined as: having existed in a region from the beginning; native; indigenous.

First Nation describes Aboriginal peoples of Canada who are ethnically neither Métis nor Inuit. This term came into common usage in the 1970s and generally replaced the term Indian, although it does not hold the same legal definition. The singular First Nation can refer to a band, a reserve-based community, or a larger tribal grouping and the status Indians who live in them.

Inuit refers to the Aboriginal peoples of Arctic Canada who are not considered Indians under Canadian law.

Métis stems from the Latin verb miscere, which means to mix, and historically applied to the descendants of French fur traders and Cree women in the Prairies, English and Scottish traders and Dene women in the North, and British and Inuit in Newfoundland and Labrador. Today, the term is used broadly to describe people with mixed First Nation and European ancestry who identify themselves as Métis. The differences between these applications are often contentious.

Indian refers to the legal identity of a First Nations person who is registered under the Indian Act. It should only be used within its specific legal context, otherwise, it is considered outdated and may be
considered offensive due to its complex and erroneous colonial use in governing identity through this legislation and a myriad of other distinctions. *Indian Band* is also a legal term under the Indian Act to denote a grouping of status Indians.\(^4^4\)

*Indigenous* is rooted in the Latin *indigen*, meaning native or original inhabitant and in this sense, Aboriginal peoples are indeed indigenous to North America. However, this term usually refers to Aboriginal people internationally as it came into wide usage during the 1970s when Aboriginal groups organized transnationally and pushed for greater presence in the United Nations (UN). On September 13, 2007, the *Declaration on the Rights of Indigenous Peoples* was adopted by the UN emphasizing, “the rights of indigenous peoples to maintain and strengthen their own institutions, cultures and traditions, and to pursue their development in keeping with their own needs and aspirations.” Furthermore, it “prohibits discrimination against indigenous peoples,” and, “promotes their full and effective participation in all matters that concern them and their right to remain distinct and to pursue their own visions of economic and social development.” Canada officially endorsed the declaration on November 12, 2010.\(^4^5\)

*Native* refers to a person or thing that has originated from a particular place. It does not denote a specific Aboriginal ethnicity; rather it is a collective term to describe the descendants of the original peoples of North America. *Aboriginal* or *Indigenous* is generally preferred to *Native* as while generally not considered offensive, some may feel it has a negative connotation and is outdated. This term can also be problematic in certain contexts, as some non-Aboriginal peoples born in a settler state may argue that they, too, are ‘native.’\(^4^6\)
What sets worlds in motion is the interplay of differences, their attractions and repulsions. Life is plurality, death is uniformity. By suppressing differences and peculiarities, by eliminating different civilizations and cultures, progress weakens life and favors death. The ideal of a single civilization for everyone, implicit in the cult of progress and technique, impoverishes and mutilates us. Every view of the world that becomes extinct, every culture that disappears, diminishes a possibility of life.¹ – Octavio Paz (1967)
The world is made coherent by our description of it. Language permits us to express ourselves, but it also places limits on what we are able to say. What we call things largely determines how we evaluate them. What we see when we speak of ‘reality’ is simply that preconception – that cultural package we inherited at birth. The gap between Aboriginal society and the rest of Canadian society has resulted from a lack of understanding from as early as the European explorers and settlers who overlooked and misunderstood much of what they encountered in the ‘New World’. Investigating the etymology of words commonly associated with this relationship between Aboriginal and Eurocentric society begins to reveal two differing worldviews. Thomas Overholt and J. Baird Callicott describe worldview as, “a set of conceptual presuppositions, both conscious and unconscious, articulate and inarticulate, shared by members of a culture.”

Native, a term once used to describe Aboriginal people comes from the Latin word natus, which means birth. The word nature also comes from natus, inferring that Aboriginal people are the people of nature, of birth, of organic life. Aboriginal culture is then a reality alive with life, where the land stops being a thing, an object or a product of man. This relationship and unity with the land is the basis of that culture. As Douglas Cardinal emphasizes in his book Of the Spirit it “is not based on nationalism or concepts of property but on spirituality...The land is life. The land is the great being.” Furthermore, the natural world was not something alien and wild or an enemy or outside force that must be subdued and dominated. Rather the opposite was true as journalist Jamake Highwater describes Nature as, “the aesthetic perfection with which we aspire to become identical, harmonious, and bound by immediacy and wholeness.” As such the Aboriginal people are spiritually tied to the land.

Civilized, a term once used to describe the progress of European culture, comes from the Latin word civis, which means to live within a city. The city is the product of desire for dominance over nature. It is a form of conquest, separation and alienation of man from

Fig. 3.1 - Relationship and unity with the land, which is alive with life.

Fig. 3.2 - The city strives to control the natural world. Artist Josh Keyes imagines what would happen to the current urban sprawl in a post-apocalyptic world.
nature. With this notion came the idea of nature as an object to be studied, researched and classified, in order to be better understood and utilized for further advancement. According to philosopher Karl Marx, European culture believed itself to be above nature for it was a conscious being who built on its success and developed new ways of producing the things it needed, giving it a history. In contrast to the transformation and change of humans, the natural world was one of repetition and stagnation. As such the European people were scientifically tied to the land.

Primitive, a term once used to describe the progress of Aboriginal culture comes from the Latin word, primus, which means first. The civis mind is trained to see history as a straight-line progression, with the beginning viewed as inferior to the advanced present and future conquests. In comparison, this linear mentality is less holistic than the natus mind which thinks in terms of the circle, where the beginning is also the end. This approach views adaptation rather than conquest as progression. The Aboriginal sense of the land is not only dynamic – it is also a vision of oneness and totality. The oneness of Aboriginal culture is symbolically expressed in the circle, which represents harmony, equality and unity.

French scholar Charles de Brosses wrote during the eighteenth century that Western societies had transcended nature and outgrown the experiences of Aboriginal peoples, making their experience primitive and inferior to the advancements and priorities of civilized people. Dolefully, pre-Revolutionary French philosopher Jean-Jacques Rousseau noted that the many technological advances made by the civilized were not equaled by any noticeable improvements in the social condition of humanity. Additionally, in his Discourse on the Origin and Foundation of Inequality Among Mankind published in 1755, Rousseau envisioned the primary state of humankind as one of great harmony with nature. Early people were depicted as living happily in communities free from social constraints or laws, unaware of the values of gold and silver, which in his opinion were subsequently
There is much Eurocentric society can learn from the natus worldview. Douglas Cardinal describes the Aboriginal view of waste as, “the things that one acquires by a careless destruction of the land in order to surround oneself with the comforts of daily living.” This brings forth a value system, which is opposite to the consumerist ‘me’ society in which we live today. He continues stating, “the measure of a man is seen through the prospering life that surrounds him, not the inanimate [spiritless; lifeless] objects he has forcefully acquired.” For the modest needs of daily living humanity does not need to plunder nature. The relationship between Aboriginal people and nature was described by anthropologist Dorothy Lee as one of intimacy and mutual courtesy. For example, a hunter only killed a deer when necessary for survival, utilizing every part; hoofs, marrow, hide, sinew and flesh. She explains that, “waste is abhorrent to him, not because he believes in the intrinsic virtue of thrift, but because the deer has died for him.”

Furthermore, a person’s esteem was not measured by their material possessions, as that would indicate that they took more from nature than they gave. Instead, one’s wisdom and prowess as a hunter and warrior were celebrated, as these qualities would contribute to the long–term good of the community. In our modern society, living is often a continuous taking from nature without giving back. It is a continuous pattern of exploitation, with the Earth viewed primarily as a resource.

Additionally, Aboriginals held that all forms of life contribute to life itself and that every living being has its place within life’s framework, which led to a non-hierarchical society where decisions were made by consensus and freedom of the individual prevailed. Cardinal states that, “if he was not equal and set himself above the environment, he would be insensitive to what was happening around him and thus vulnerable...this was the key to survival.” In order to survive,
Aboriginal communities led a spiritual life, connected to the land. An act against the forces of nature charted a path to extinction. One could argue that the climate change the world is experiencing this century is a direct result of setting ourselves above nature and acting against its forces.

A balance does not exist at this time, as input by Aboriginal people is often limited or ignored in Canada. For Aboriginal people forced to assimilate with European society, this meant thinking in the way of the natus but living in the world of the civis. Highwater coined the term *Intellectual Savage* described as an Aboriginal person, “who was capable of surviving equally in two worlds by tenaciously retaining the ritual apparatus of primal people at the same time that [they] were attaining the intellectual and communications paraphernalia of the dominant societies.”

It is important to understand that both cultures have something to contribute. Highwater contends that, “the greatest distance between people is not space but culture.” It is destructive to believe that one culture is superior to another. It is important to remember that a relationship exists between all beings and all things and so each culture becomes victim of the other when we are adversarial. Instead Cardinal stresses that, “cultures must enhance each other and each has one hundred percent responsibility to bridge.”

Culture comes from the Latin word *cultus*, which means both to care for, worship, honour and revere (*cult*), as well as to till, tend, nurture and protect (*cultivate*). This is a modern concept based on the term, *cultura animi*, first used in classical antiquity by Roman orator Cicero, meaning *cultivation of the soul*. During the eighteenth and nineteenth century after the influence of Rousseau it came to refer to the unique identity, spirit, aspirations or ideals of a nation and more generally the universal human potential.

*Natus • Cultus • Civis* aims to discover a place somewhere between...
the two worldviews of *natus* and *civis*, bridging the gulf between Aboriginal and Eurocentric culture, knowledge, building traditions and technologies to create a new and authentic regional expression. During the process, it is important to be exceedingly careful not to destroy the diversity that gives life meaning, focus, vision and vitality. Highwater uses a tree metaphor to solidify this point proclaiming, “All branches of mankind unite in one trunk, yes! ... but what is a tree without its many separate branches?”26
ARCHITECTURE: A Tangible Expression of a Way of Life
The building as architecture is born out of the heart of man, permanent consort to the ground, comrade to the trees, true reflection of man in the realm of his own spirit.¹ – Frank Lloyd Wright (1930)
Reflection of Worldview

The term *architecture* refers to more than just the art and science of designing and erecting buildings in that it ‘embraces what happens whenever human thought or action makes order and meaning of ... space.’ Historically, this entailed place-naming, designating sacred sites, clearing village areas and garden plots, choosing hunting and food gathering territory, planning and constructing buildings, and arranging the spaces that would connect them. According to architect Robert Easton and anthropologist Peter Nabokov, ‘the way buildings were arranged and used, directly reflected the way society was organized as a whole,’ architecture thus became ‘a means by which members of the community learned rules of behaviour and the worldview.’

The rich building traditions of Aboriginal people were developed over the thousands of years before the arrival of the first Europeans. As such their dwellings were more than simply shelter. A prominent feature of all their architectural responses was a clear relationship between form, function and cultural region. Canada contains six broad cultural regions, defined by common climatic, geographical and ecological characteristics. Each region gave rise to distinctive building forms, which reflected these conditions, as well as the available building materials, means of livelihood, and social and spiritual values of the inhabitants. Generally speaking there was only one building type – the dwelling – however, in some regions the building structure was modified to serve spiritual purposes such as the shaking tent and sweat lodge. Learning occurred outdoors or communally in the dwelling around the hearth. In this way, each building served as home, community centre and school, reinforcing the belief that the ideal life cannot be divided into segregated components because mutual relationships and dependencies exist among all forces and forms in the natural world. These buildings ranged in size to hold anywhere from one to as many as twenty-four families as was the case for the Iroquois. To accommodate fluctuating family sizes, Aboriginal architecture was flexible using repeated structural elements or building
CULTURAL AREA
Climate Zone
Ecology
Raw Materials
Major Building Types

ARCTIC
Arctic
Tundra
Snow, Sod, Timber, Seal Skin, Stone
Winter House, Iglu, Tent, Barabara, Kasim

SUBARCTIC
Subarctic
Mountains, Tundra, Forests, Waterways
Timber, Saplings, Bark, Snow, Hide, Canvas
Wigwam, Tipi

NORTHWEST COAST
Temperate
Forest, Islands, Waterways
Cedar Timber, Split Planks and Bark
Plank House

PLATEAU
Continental Steppe, Highlands
Forest, Prairie
Timber, Saplings, Sod, Reed, Canvas
Pit House, Tipi, Elongated Tipi

PLAINS
Temperate, Continental Steppe
Prairie
Timber, Saplings, Sod, Grass, Hide, Canvas
Earthlodge, Grass House, Tipi

NORTHEAST/GREAT LAKES
Temperate
Woodlands
Sapling, Birch and Elm Bark, Sinew, Reed
Wigwam, Longhouse, Subarctic Tipi

Fig. 4.1 - Cultural area map highlighting the six regions in Canada.
TRADITIONAL ABORIGINAL RESPONSES:

Fig. 4.2 - Pit House
Fig. 4.3 - Wigwam
Fig. 4.4 - Earth Lodge
Fig. 4.5 - Longhouse

EARLY EUROPEAN RESPONSES:

Fig. 4.6 - Tipi
Fig. 4.7 - Igu
Fig. 4.8 - Plank House
Fig. 4.9 - Log House
Fig. 4.10 - Sod House
Fig. 4.11 - Prairie House
components to alter typical forms for easy expansion or contraction of a dwelling or space. Within dwellings the hearth was always central with the interior space allotted to specific functions such as cooking, storage, family sleeping areas and a place of honour for an Elder. Most communities were not arranged using a hierarchy, but for some groups such as the Haida dwellings were organized by social rank.\textsuperscript{5}

The Europeans brought with them their own building traditions, however, they had been developed on a different continent, under different circumstances and in many cases different climatic conditions. As such their dwellings were initially little more than shelter as they learned to adapt and survive. In contrast to Aboriginal communities, this Eurocentric society constructed separate buildings in their villages each dedicated to a specific service such as a school, a store or trading post, a post office, a hospital or a church. Their dwellings generally did not accommodate more than one family and unlike Aboriginal dwellings, an increase in size only signified an increase in wealth. Within each building, space was physically divided using walls to designate rooms for specific functions. In addition, Eurocentric society explicitly used their buildings to denote status by decorating, choosing a site location and using materials based on individual financial means. From the moment of contact Aboriginal people and Europeans could not avoid influencing the one another. With the construction of the railway, which connected Canada and its inhabitants from coast to coast, the impact increased exponentially. This is seen in the Haida using European joinery and tools to develop a second type of house construction, which more effectively married the post and beam structure to the exterior walls and roof.\textsuperscript{6} Another example is European settlers in Ontario using sheets of bark as roof sheathing an idea borrowed from the Wigwam.\textsuperscript{7}

In addition to meeting the primary need for shelter and the functional needs of daily living, all Aboriginal buildings and spatial domains were encoded with social and spiritual meanings.\textsuperscript{8} In Aboriginal culture, origin stories revealed the proper way to collect building...
Furthermore, the symbolic connection between the building and body often meant that people considered the structures and the materials that composed them to be alive. Their dwellings served as a reflection of the universe, and they, ‘held the ritual power to renew their cosmos through rebuilding, remodeling or reconsecrating their architecture.’

For the Eurocentric society spirituality was instead manifest in specific places of worship. In order to better understand the gradation of difference between Aboriginal and Eurocentric spirituality, it is important to look at two of the key sacred buildings found in European culture. Tracing back to antiquity, buildings such as the Roman Pantheon were both a reflection of the earth and cosmos as well as a place to worship their multitude of gods. Hadrian described the layers and spiritual meanings of this temple as follows:

This sanctuary of All Gods should reproduce the likeness of the terrestrial globe and stellar sphere, that globe wherein are enclosed the seeds of eternal fire, and hollow sphere containing all. Such was also the form of our ancestors’ huts where the smoke of man’s earliest hearths escaped through an orifice at the top. The cupola, constructed of a hard but lightweight volcanic stone, which seemed still to share in the upward movement of flames, revealed the sky through a great hole at the center, showing alternately dark and blue. This temple, both open and mysteriously enclosed, was conceived as a solar quadrant. The hours would make their round on that caissoned ceiling, so carefully polished by artisans; the disk of daylight would rest suspended there like a shield of gold; rain would form its clear pool on the pavement below, prayers would rise like smoke toward that void where we place the gods.

This description reveals parallels to Aboriginal traditions – a sacred fire; connection to the sky; tracking the sun; prayers rising carried by
tobacco smoke; building as a reflection of the universe. Continuing on to medieval Europe and the church, the spirituality European missionaries and settlers brought with them becomes more apparent. The floor plan for this sacred building was a cross, ‘the ultimate sculptural abstract of the body,’ and the crucifixion of Christ. Body symbolism is noted in the nave as the human body, the chancel as the soul and the altar as the spirit. Orientation was also important with the long nave leading from the west toward the chancel in the east where the altar resides representing the transition from darkness to light and the journey through humanity’s mortal timeline. The church was considered to be ‘a tangible expression of a host of images and ideas expressed in the Bible,’ acting as a mnemonic device for the Christian faith and a reflection of the way European people understood God, nature and the human race.

It becomes clear that throughout history architecture has been more than a means of providing shelter to both Aboriginal and European people, assisting humanity in defining its relationship to a larger physical and cultural context. McMinn and Polo agree stating that architecture functions as a ‘constructed model of a larger order embodying the temporal and cosmological understanding of the world in which we live.’ Lewis Mumford also felt the inextricable link between architectural forms and social forces asserting ‘a good building serves as the physical and symbolic setting for a scheme of life’ during the 1941 Dancy Lecture. He also proclaimed two essentials in architecture are ‘understanding the purposes, motives, habits, and desires of those who are to be housed,’ and remembering, ‘individual buildings should never be conceived as isolated units; they should always be conceived and executed as parts of the whole.’

**Responsive to Environment**

For Aboriginal people the daily life and architecture of each community were influenced by the abundance or scarcity of supplies.
and the climatic conditions of the region. In temperate zones with arable soil, communities responded to the need for more permanent building forms with diverse structures such as the longhouse, pit house and plank house. Seasonal residency helped maintain balance of the Earth’s resources and ensure survival in less amenable environments. This meant relocating throughout the year, typically in the fall after a summer of root gathering, berry picking and fishing, and again in the spring after a winter of hunting. As a result, the architecture developed for this way of life was quick and efficient to construct and at least partially transportable, leading to a range of structural responses including the wigwam, tipi and igloo. In all cases, the dwellings relied on the skills of the community and were built using the local raw materials available. It is important to note the materials and construction techniques that contributed to the appearance of Native buildings did not restrict the ideas of their builders. Rather the opposite was true, as they often pushed available materials to their limits making a variety of structures (bent frame, post and beam, compression) in all shapes (domical, conical, rectilinear) and sizes (housing one to twenty-four families). Easton and Nabokov stressed this point stating, ‘architecture is less what they could build than what they wanted to build.’

Availability of resources was not the only concern, as there were also Canada’s harsh winters and variable environmental conditions to endure. As a result, Aboriginal building traditions were firmly rooted in responses to local climate, developing dynamic architecture that skillfully used passive design strategies. In combination with utilizing locally available materials, McMinn and Polo explain that, ‘this resulted in a variety of distinct vernacular building traditions constituting appropriate and context-specific responses that would today be seen as sustainable in a broad, holistic manner.’ For instance, the tipi was designed to keep the cold, rain, wind, and heat at bay using simple modifications of the hide covering and in freezing temperatures adding an additional hide with grass insulation and wattle or snow wind breaks.

Fig. 4.17 - Tipi responding dynamically to varying climatic conditions.
The desire of the settlers for arable land led to the displacement of Aboriginal communities and the development of an agrarian vernacular foreign to that encountered in Aboriginal villages. McMinn and Polo describe this new vernacular as a ‘transformation of building types imported from the immigrants’ cultures of origin, adapted to local climatic conditions and available materials, consisting mostly of stone and timber.’

For European settlers timber was an easy choice since the Canadian landscape offered an abundant supply of old-growth forests and it was a familiar material. This led to the log house we now associate with the frontier experience. Typically a hearth was placed in the centre to radiate the heat through the small structure and various corner details existed depending on the origin of the settler; dovetail was British, keyed was Swedish and the ‘colombage’ method was French. Timber was later replaced by fieldstone gathered from the clearing of the fields. In the Prairie region where wood was limited, sod houses prevailed. Seasonal temperature extremes in the Northeast/Great Lakes region required adaptable enclosures that could expel heat during the hot, often humid summer months and retain it during the cold, harsh winter. For the settlers the bank barn was a low-tech, practical answer to their building performance needs. The permeable wood cladding on the upper level provided ventilation and the heat generated by livestock occupying the lower level was retained by hay stored above following harvest and the thermal mass of the stonewalls and earthwork ramp. The layout of the barn also minimized energy output, with hay easily stored high and dry on the upper level using an earthwork ramp for access and then distributed to the animals below by means of gravity.

**Impact of European Contact**

When European explorers and settlers first came to Canada, they did not suddenly transform their worldview, as they tended to perceive that there was no culture here; they were still Spaniards, Englishmen, Frenchmen, Dutchmen and Swedes and as such carried
with them their cultural practices and preoccupations. It was only out of necessity that they eventually adopted some of the Aboriginal ways in order to survive, for these settlers had no feeling of home or romantic love of the wilderness. At least a century passed before they felt secure enough to value the wilderness and a new frontier type emerged among trappers and hunters. Although far from the life that flourished in the courts and capital cities of contemporary Europe, the new buildings erected after the hardships of living in caves, dugouts, and huts were definitely of a European style.  

It was not until the middle of the nineteenth century that our typical light frame construction with an air space to serve as insulation became a characteristic North American form. This change was made possible by the development of sawmills and the mechanical production of cheap nails, removing the need for heavy wood pegs and cutting joints for heavy beams. During the next century there was a general shift from the traditions of the builder and the problems of organization and construction to the traditions of the painter and the problems of aesthetic and formal composition. This new style of building born out of technological advancements meant knowledge of local resources and traditions was no longer required for survival. Mumford explains that, 'with the aid of a builder’s handbook, one could carry these new forms into the heart of the wilderness and be at home anywhere in the world…with the aid of a cornice, a pediment, a column, a portico of classic origin, the colonist could feel at home.'

Modifications to Aboriginal architecture did not begin with the arrival of Europeans, but rather evolved over thousands of years due to its adaptive nature. European contact did, however, change the materials, forms, and meanings of traditional Native architecture. Local raw materials, such as bark, saplings and animal hide, were replaced with milled lumber, molded bricks, glass windows as well as wood doors and assembled with metal tools and nails. Furthermore, Easton and Nabokov assert that, 'Aboriginal] concepts of home and settlement were, altered by trade, disease, depopulation, warfare and
relocation of tribes to reservations.\textsuperscript{33}

**Looking Back, Moving Forward**

*For the past is not a soft cushion on which we may comfortably lie and take our ease; it is rather a springboard from which we gain the energy and confidence to leap into the troubled waters of our own day.* – Lewis Mumford\textsuperscript{34}

While it is much easier to copy ornament and earlier forms instead of investigating the geology, soil, climate, working conditions and social customs of a region, it is important to realize how empty architecture is without the life that once supported it.\textsuperscript{35} Mumford makes this clear, explaining, ‘the forms that people used in other civilizations or in other periods of our own country’s history were intimately a part of the whole structure of their life,’ and so ‘there is no method of mechanically reproducing these forms or bringing them back to life.’\textsuperscript{36} Instead architecture must engage cultural and material traditions as well as engage local climatic and environmental conditions to develop a contemporary regional architecture. McMinn and Polo explain that regional architecture uses ‘technologically appropriate responses to geography and environment,’ and generally embodies ‘the essence of local cultural identity intrinsically linked to local geography.’\textsuperscript{37} More specifically, cultural identity may be embodied in the ‘wisdom of rural vernacular building practices or the environmental attunement and animistic cosmology of indigenous cultural traditions.’\textsuperscript{38} Furthermore, regionalism is not a simple matter of using the most available local material, or copying the form of construction that our ancestors used. Regional forms are those which respond to the actual conditions of life and are most successful in making people feel at home in their environment. For Mumford this means, ‘they do not merely utilize the soil but they reflect the current conditions of culture in the region.’\textsuperscript{39}

It is important to note that regional does not mean self-sufficient or self-contained, for there has never been a human culture that was entirely
isolated in both time and space.\textsuperscript{40} Regional architecture must find a balance between the local place-identity and a global architectural culture in the same way it mediates between vernacular traditions and modern technologically advanced building practices.\textsuperscript{41} According to Mumford, ‘every culture must both be itself and transcend itself,’ and, ‘in no other art is that process more sharply focused than in architecture.’\textsuperscript{42} In addition he defines the local as the time-bound regional element which, ‘adapts itself to special human capacities and circumstances, that belong to a particular people and a particular soil and a particular set of economic and political institutions,’\textsuperscript{43} stressing it is far more than purely geographic characteristics. In contrast, he defines the global as the universal element which, ‘passes over boundaries and frontiers; it unites in a common bond people of the most diverse races and temperaments; it transcends the local, the limited, the partial.’\textsuperscript{44}

In addition to meeting social and cultural needs, buildings must be flexible and adaptable to the varying Canadian climate which boasts seven different zones ranging from dry frigid conditions in the Arctic to mild rainy weather in the Pacific to hot humid summers and cold winters in the Great Lakes and St. Lawrence Lowlands. For architecture to successfully adapt to these conditions it is not a mere matter of adding a mechanical system for heating or cooling the structure. First the building should be oriented for sunlight and summer winds and then the use and amount of window space on the north and south sides of the structure must be determined. Finally a means of altering the amount of light and insulation according to the season of the year and the time of day needs to be provided.\textsuperscript{45}

Mumford described the essence of regional architecture as being, ‘composed in such a fashion that it cannot be divorced from its landscape without losing something of its practical or its esthetic value – or both together.’\textsuperscript{46} Furthermore, he expressed that architecture, ‘reflects the deeper beliefs of an age,’ and, ‘bears witness to current feeling about nature, about society, about the very possibilities of
Traditional Native architecture embodied and reinforced the community’s central notions about their society and its place in the cosmos, in addition to meeting functional needs. In response to Canada’s harsh climate, the architecture developed utilized the skills of the community, the potential of local raw materials and passive design strategies. Anthropologist Walter Goldschmidt summarized this point perfectly by stating that the architecture was at once ‘responsive to the inner environment of cultural presupposition and social interaction as it was to the external environment of wind and weather.’ These traditional dwellings arose out of specific historical, demographic, ecological and cultural circumstances. According to Nabokov and Eastman, ‘their architectural imprint, often ephemeral, blends harmoniously with the land, and ebb and flow between residents and surroundings is smooth.’ They are places where people can live together in balance and are a source of inspiration for contemporary regionally responsive architectural development.

As such, it is essential to examine contemporary examples of regionally responsive architecture that achieve a positive Aboriginal–Immigrant design relationship to gain a better understanding of how to proceed with the forthcoming design proposal. Additionally, an example of a positive Aboriginal–Aboriginal design relationship for comparison is appropriate. Lastly, a project by an Immigrant architect that embraces Aboriginal design principals of building harmoniously with Nature will give insight into applying these ideals in a broader context.

The Nicola Valley Institute of Technology located in Merritt, British Columbia was designed by Perkins + Will and Aboriginal architect Alfred Waugh, completed in 2001 with a $7,650,000 budget. This new post-secondary building was designed with extensive consultation between the design team, aboriginal elders and user groups, on and offsite, to address the needs of a modern academic institution while acknowledging the significant features of the site and reflecting the heritage and culture of the Aboriginal students.
The building emerges from a forested south-facing slope evolving into a three-storey structure that minimizes disruption to the surrounding landscape. Furthermore, the facility is symbolically oriented to the four cardinal directions with the main entry at the east axis facing the rising sun. The semi-circular shape is the first gesture in the forty-three acre campus master plan that will ultimately evolve into a circle—a shape chosen for its deep significance to Aboriginal culture—centering around a ceremonial arbour.

As the Nicola Valley experiences hot, dry summers and moderately cold winters, the institute was designed as a cold climate building using environmental principles drawn from two local traditional building types adapted and integrated with modern sustainable technologies and systems. The first building, the tipi, was an efficient ventilation structure that promoted cooling by convection during the hot summer months. It was translated into a two-storey glazed atrium that acts as a ventilation stack with operable windows that create airflow patterns which ventilate the building naturally. Additionally, a reference is made to the stretched skins used to clad the tipi in the tensioned fabric used for shading and the front entrance canopy. The second building, the pit house, was a south-facing earth-sheltered structure that minimized heat loss in cold the winter months using thermal mass. It was translated into the north façade being built into the naturally occurring slope of the site. Additionally, the wood column structure visually recalls the poles used in both building types, rising up through the interior space.

The building is clad primarily with horizontal strips of Alaskan yellow cedar which is durable, has a natural preservative and if left untreated will age to a silver grey, allowing the structure to further blend with the site. To slow rainwater runoff, a portion of the roof is covered with earth and planted with indigenous shrubs that lend themselves to the ethnobotany class offered at the institute, which studies the Aboriginal use of indigenous plants. Windows are shaded by adjustable wooden louvers in four different patterns that are angled
Internally, the spaces are organized to eliminate any sense of hierarchy – an important cultural paradigm – and a fireplace marks the centre of the building and acts as a focal point in the student lounge. Most challenging was adhering to the limited budget and value analysis requirements of the British Columbia Ministry of Education who subsidized the nearly 4510m² construction.

The Seabird Island Community School located near Agassiz, British Columbia was designed by Patkau Architects and completed in 1991. It was a result of the then prevailing state policy of subsidizing the construction of schools in Aboriginal communities. This new building known as Lalme’ Ixesawtekw to the community, was envisioned as a First Nations on-reserve school for kindergarten to grade six classes and designed to promote and foster the culture and language of the Stó:lo and Thompson people. As the most significant resource and largest building in the community, the school program evolved into a hybrid, communal-cum-educational space, primarily staffed by a diverse group of Aboriginal teachers.

A key component of the proposal was that the band manager would organize the construction process, removing the increased cost associated with a contractor intimidated by the unusual form. Additionally the community members would erect the school as part of a construction training program that would provide employment opportunities during and after construction. As such, the architects presented the final design as a 1:50 framing model to help the community visualize the scale and complex geometry of the structure in three-dimensions and supplement construction documents.

The aversion of the community toward the orthogonal architecture associated with colonial repression, led Patkau to develop a structure evocative of the traditional Salish heavy timber post-and-beam construction. Furthermore, the porch on the south side of the school,
with its sculptural armatures supporting garden vines and salmon-drying racks, recalls the boardwalks, elaborated building fronts, and rows of welcoming totemic figures fronting the water’s edge of traditional coastal villages.\textsuperscript{56}

The school is situated on an expansive plain in the Fraser Valley enveloped by the Rocky Mountains range. The roof is the dominant element in the overall form, adapting to the environmental conditions and site context, much like traditional Aboriginal architecture. As a result, the northern and southern facades differ in both mass and scale assuming a zoomorphic form, with the large closed sculptural volumes of the north resembling the mountains and diverting the cold winter winds, while the smaller south side opens under generous eaves welcoming the warm sun. The building is primarily clad in cedar shingles that will weather to shades ranging from silver grey to reddish brown depending on the orientation and exposure, thus enriching and exaggerating the northern and western volumes. In contrast, the walls on the south and east façades beneath the eaves are clad in plywood panels that increase the luminosity.\textsuperscript{57}

An important feature of the design is the continuity of the public realm with the school, which Patkau established by organizing the classrooms and main entrance along the southern face, each opening to a collective porch, teaching gardens and the community green space beyond, creating an active and permeable edge condition. The gymnasium, which also functions as a community hall is located on the north side to connect directly back to the street and one of the classrooms provides a kitchen for both indoor and outdoor community events and feast days. Most importantly, few distinctions have been made between staff and student areas, and the library and resource areas remain open to eliminate spatial hierarchy and keep with the educational philosophies of the community.

The \textit{Pictou Landing Health Centre} located in Pictou, Nova Scotia was designed by Richard Kroeker and Brian Lilley of \textit{Piskwepaq Design}

\textbf{Fig. 4.27} - The use of a variety of struts, beams and trellises echoes the totemic elements associated with early styles of West Coast architecture. Also shown are the south facing classrooms opening out to the teaching gardens.

\textbf{Fig. 4.28} - Plan of Seabird Island Community School illustrates the kitchen opening onto the atrium and community gardens; circular resource rooms and library open to the corridor; classrooms, collective porch and teachings gardens on the south; large gymnasium/community hall to the north.
Inc. in collaboration with Peter Henry Architects and completed in 2007 with a budget of $2,000,000 primarily sponsored by the Pictou Landing First Nations Band Council and Health Canada. The building was envisioned as an environmentally friendly health facility and community centre for the Mi’kmaw coastal fishing community of Pictou Landing.

Working with the architects, Chief and Council held consultation sessions with Elders and other community groups to develop a clear vision for the new building which combined spiritual, communal, and environmental considerations. The program includes clinics and consultation rooms for health professionals, a teaching room for community workshops on all aspects of Aboriginal health and wellness, gathering hall for social events and meetings, a reception area with display cases for local artifacts and an outdoor medicine garden and medicine wheel that form the physical centre of the community.

In collaboration with the community, the architects developed a small dimension timber truss technology, based upon previous studies conducted at the Dalhousie Faculty of Architecture and Planning by Richard Kroeker and the traditional materials and structure of the Mi’kmaw wigwam, that skillfully unites native and contemporary construction techniques.

The technology involves young spruce and pine tree saplings, which are removed from local plantation forests to improve the health of the remaining trees and formed into curved arch truss members by community members while still green and pliable. McMinn and Polo describe the application of this structural element, explaining that 'pairs of these trusses are joined to form a lightweight structural arch which, when deployed in series, form a sinuous, lyrical vaulted space.' This innovative structural system was developed through building prototypes, and the analysis was confirmed with full-scale load tests of the trusses.

The cross section of the building allows for passive collection of
return air and efficient heat recovery ventilation. Natural light is an important aspect in all rooms of the building and as a result each room was designed to maximize day lighting. One of the interior walls has a plaster finish made with local earth, in collaboration with children from the nearby community school, which not only records the imprints of community members, but helps to stabilize interior humidity levels. Heating and cooling is provided using geothermal energy from a local decommissioned municipal well water system. These strategies, together with high levels of insulation and the use of the earth as thermal mass to store heat have made the building operate at 43% higher energy efficiency than a conventional building of comparable size. The community also intend to implement wind and solar power in the future.

The Oujé-Bougoumou Community Plan located on the shore of Lake Opemisca in Northern Quebec was designed by Douglas Cardinal and completed in 1995. The opportunity to construct this new community was made possible by the signing of the James Bay and Northern Quebec Agreement in 1975, which recognized the land rights of the Inuit and Quebec Cree thus conceding benefits to these Aboriginal communities. After suffering through nine forced relocations over the course of eighty-five years the vision was based on a traditional holistic approach, with the new Cree village designed as a source of learning, spiritual renewal, healing as well as physical and economic sustenance.

Cardinal sought to re-create an Aboriginal way of life to the fullest extent in the context of modern facilities and contemporary institutions. As such the program included sustainable use of resources through a central biomass heating system fueled by wood residues from a local sawmill, a community subsidized housing program and a Cultural Village among the many other facilities.

Most importantly, the community chose the site, which is close to all the traditional trap lines and sited on a rise of sandy land, thus
retaining views of the lake for both housing and community buildings. The town plan was designed to resemble the sacred Thunderbird with the sapuwan, an open-sided roofed gathering place in the centre of the ‘eye’. Radiating out from this point is a series of concentric circles formed by buildings, the first two consisting of public structures such as a school, cultural institute, band office and Elder’s residences. Continuing outward are clusters of individual houses and recreational facilities that form the ‘beak’, ‘head’ and ‘body’. The Cultural Village sits on the periphery of the contemporary village, containing replications of traditional village dwellings and is used to teach both Cree people and visitors. While admittedly it is much like a European museum, it provides sensorially stimulating sites, with spruce-bow and wood smells, as well as light filtered through canvas, which are commonly used for rituals, ceremonies and to evoke images of the past.

Cardinal and the community truly felt the traditional dwelling, astchiiugamikw, which had served the Cree people for generations, was the embodiment of their traditional lifestyle and as such could provide the inspiration for the development of the entire community and the buildings therein. While sitting in an astchiiugamikw with the community Elders discussing, dreaming and visualizing, Cardinal had a feeling of wellbeing and connection to nature. This building had walls consisting of four feet of slightly sloped dirt, constructed only of natural materials, with natural light coming from a skylight directly above the fire area. From this Cardinal determined that the new public buildings should have ceilings that go from the sky to the earth with the roof structure as the dominant feature, where light defines the interior. As such there are open beams and skylights in these buildings and the doors face east to meet the rising sun just like in the houses of their ancestors as the Elders requested. Community youth suggested taller two-storey buildings, integrating traditional and contemporary structures, resulting in a successful community-driven design process.
The *David Wright House* located in Phoenix, Arizona was designed by Frank Lloyd Wright and completed in 1952. The 2500 square-foot house, which Wright called, “How to Live in the Southwest,” is situated among citrus groves on a two-acre lot in the Arcadia neighbourhood facing north to the picturesque Camelback Mountains, which can be seen from most of its rooms.

The house has a circular plan and spiral circulation beginning with a long curved exterior ramp leading to the entry and continuing internally curling through the elevated living spaces to the master suite. Additionally, an interior spiral stair leads up to a roof terrace providing expansive views of the bright blue Arizona sky that transition to beautiful colours at sunset as the moon rises filling the dark night sky with a plethora of stars.

As with many of Frank Lloyd Wright’s later commissions, the David Wright House emphasizes the circle, an important symbol representing harmony in Aboriginal culture and in European culture a symbol associated with the divine proportions exemplified in the *Vitruvian Man* drawing by Leonardo da Vinci. This is apparent in the circular massing of the house itself, the circular ramp and staircase, the circular fireplaces, the circular living space, the circular columns that raise the residence above the earth, and the circular and semi-circular windows.

The residence was lifted off the hot desert floor above the canopy of citrus trees to enhance the view to the mountains and allow the warm desert breeze through the courtyard to cool across the reflecting pool and carry the fragrance of the jasmine and bougainvillea that adorned the garden space. Furthermore, the courtyard was designed as a cool and shady environment to be enjoyed year round and help reduce the risk of indigenous spiders and scorpions, ultimately making the house a successful example of designing in the harshest of environments.

While Wright had initially envisioned the home being constructed
of wood, his son David who was a principal at Besser Block insisted it was constructed of concrete blocks instead. As such, the David Wright House is composed of a metal roof with a curvilinear concrete block form and custom concrete frieze. The only exposed wood on the exterior of the house is seen in the soffits, window frames and doors. In contrast, the interior is extensively wood with Philippine mahogany used for the ceilings, woodwork, cabinets and furniture. The floor is a reinforced concrete cantilever, for which Wright designed an abstract rug composed primarily of intersecting and overlapping circles.

Reflecting on the contemporary examples of regionally responsive architecture reveals that in all of the examples, the architects attempted to design for the local people, respect the regional character and engage with the landscape. Additionally, in all precedents with an Aboriginal client, the architects collaborated with the community to ensure an appropriate design proposition that met the needs and desires of the community and addressed various, social, economic, spiritual, cultural and environmental priorities and ideals.

The Nicola Valley Institute of Technology design was successful in its approach to minimizing disruption to the surrounding landscape, inclusion of a ceremonial axis linking the entry hall to the subtle circular form of the outdoor gathering space and the cardinal directions, paying homage to the cultural roots, philosophical principles and building traditions of First Nation community in the context of contemporary sustainable technology without resorting to iconographic ornament, distribution of a range of meeting places to reduce unwanted social and institutional hierarchy and use of local materials chosen for their relationship with the climatic conditions of the site.

The Seabird Island Community School design was successful in developing an architecture that reverberates with an Aboriginal
worldview through a handcrafted construction exercise that prompted a cultural response from the community and allowed for a greater cross-cultural understanding and relationship to take shape. Totemic elements associated with West Coast Aboriginal architecture was beautifully echoed through the use of a variety of struts, beams and trellises. Furthermore, the massing of the structure itself blends harmoniously with the mountainous landscape that embraces the site and with the choice in material responds cleverly to the resulting climatic conditions. Less successfully is the zoomorphic form the building assumes, that the architects deny has any correlation to an animal, however, it is hard to deny its resemblance to the salmon associated with West Coast First Nations. Most telling is the response from the community regarding the success of the building, which since its completion has gained self-determination and increased momentum, adding a Health Service Centre, initiating sheep farming, providing internet, partnering with the University of the Fraser Valley, planning a sustainable housing program and constructing the Lalme’ Iwesawtexw high school in 2006.76

The Pictou Landing Health Centre design was successful in utilizing local materials, knowledge and skills, reflecting the culture of the Mi’kmaq community and incorporating sustainable energy resources. For Kroeker, ‘architecture is not a rhetoric of shapes and forms that signify culture,’ rather, ‘it develops out of a way people work with the material around them.’77 In his view, ‘technology is not neutral, it is an economically and geographically contingent process.’78 Recognizing the inherent structural potential of a material typically deemed suitable only for paper pulp and firewood, Kroeker developed an appropriate technology rooted in the available resources and environmental conditions of the region as well as indigenous cultural practice.79 The idea of appropriate technology originates from economist Dr. Ernest F. Schumacher in his influential work, Small is Beautiful,80 where he defines it as technological choice and application that is small-scale, labor-intensive, energy-efficient, environmentally sustainable, locally controlled and socially appropriate. A key to the
success of the building was including the community, but rather than simply asking the community at large what it needed, targeted focus groups were set-up to make sure that Elders and the youth for example had their voices heard. It is important to note that while the completed building form was not symbolic of the Mi’kmaq culture, the First Nations community did recognize in it traditional building elements and characteristics that evoke their relationship to place.

The Oujé-Bougoumou Community Plan has been successful as a powerful force for cultural renewal and identity regeneration through the design, construction and management of a welcomed permanent settlement after experiencing many forced relocations over the course of nearly a century. Furthermore, the community now feels empowered as they played an intimate part in the inception, creation and construction of the new village, which is a living reflection of their culture and lifestyle. The layout of the village in the shape of the Thunderbird is, however, questionable as an effective source of cultural renewal as it has no origin in traditional building organization and can be argued as simplistic iconographic reference. Also, Cardinal’s original housing proposal, which was grounded in the Elder’s desire to have individual homes based on clusters of the traditional form, was unsuccessful in appealing to the community at large and was thus rejected in favour of more Eurocentric suburban models. Ironically, the community members have criticized the houses the most. With over 140 homes needing to be produced so quickly, available stylistic variations were reduced to just five models and when they wish to make alterations, owners must receive permission from the Band Council. In this sense, the pattern of state-funded housing projects has been repeated.

The David Wright House design was successful in its innovative and at the time unusual circular spiral plan that pre-dates the more familiar Guggenheim by six years. For Wright, Nature rather than history was his teacher. He believed that architecture, ‘must stand on its own feet, use the materials and methods of our own day, and ally
itself to the forces of nature, as expressed in the landscape and climate of the area to be served." This was successfully achieved by his use of concrete block, which was a relatively new building material in contemporary architecture made possible by the innovations in block machinery at the turn of the twentieth century. In addition, he lifted the building off the ground to maximize the benefits gained from the cool desert breeze.

For each region he designed in, Wright tried to develop a form that would identify with the local landscape and highlight the indigenous materials that were used. In this way, he made harmonious use of the site, by mingling the structure with the earth and surrounding vegetation. This is apparent in the care given by Wright to preserve the existing citrus grove in the courtyard, which was embraced by the building and as viewed from the elevated residence became a fragrant, vibrant lawn.

According to Mumford the universal element in Wright’s architecture is not his open plan but rather, "the recognition that the plan must be in conformity, not merely with the climate and the landscape and the soil and the native materials, but with the social institutions and the dominant types of personality in the region." To realize such a result, he created environments of carefully composed plans and elevations based on a consistent geometric grammar. In the case of the David Wright House, the circle was his language and he overlapped it in plan creating beautiful moments of transition and transformation, extended it in elevation to form cylinders akin to trees, rooted to the earth and reaching for the sky, and further imagining it in three-dimension developing a spiral circulation. In 1959, the magazine *House Beautiful* called the home “a modern castle in the air,” and “one of the most exquisite examples of the romance and beauty [Wright] has brought ... to life.” As a further testament to the success of the building, it should be noted that nothing has been renovated or changed since it was built over fifty years ago.
STORIES OF THE ANISHINABEK
It takes a thousand voices to tell a single story.¹

– Aboriginal proverb
As the days drew shorter and the blustery winter winds piled snow high upon the trails, members of the community, young and old, gathered in the wigwam around the warmth of the fire to listen and learn. Prior to European contact, the Anishinabek had no writing system. Instead customs were transmitted through pictures on birchbark scrolls, called wigwaasabak, and storytelling. The Elders played a primary role in this process, orally passing on and carrying forward ancient wisdom, rituals and values in the form of cultural myths, stories and traditions. This method of learning was an intergenerational and lifelong process in which Elders were the repositories of wisdom for the community. Their knowledge and guidance provided the vital links between past traditions and the prevailing future of the community.

A universal definition cannot be applied to all Elders, as their role is developed in accordance with their individual nature, personal experience, and context within the community. However, there are generally accepted commonalities outlined in *The Royal Commission of Aboriginal Peoples*. An Elder can be a man or a woman and is described as a person who, “has received special gifts of experience and knowledge that they can return to the community.” In addition, “age itself does not make one an Elder”, but rather Elders are individuals regarded by the community as, “exceptionally wise in the ways of their culture and the teachings of the Great Spirit.” Great honor and respect comes with the title of Elder, however, the report states that, “traditional Elders do not seek status; it flows from the people.” Even though they have walked far down life’s path, Elders feel young in relation to their culture’s ancient knowledge and so they keep their feet planted firmly and humbly on the ground. The report explains that, “it is the community’s responsibility to seek out the Elder’s gifts of knowledge and insight,” when looking for guidance and sound decision making. Rooted in the belief that people should learn individually and personally through observation and imitation, “Elders are neither prescriptive nor intrusive in their teachings but rather teach by example.”
There were two types of stories in their oral tradition. Tābātcamowin were anecdotes or stories referring to events in the lives of human beings and ranged from everyday occurrences to more exceptional experiences that verged on the legendary. These could be told in everyday conversation at anytime during the year. Ätiso 'kanak were sacred stories or myths that were not only traditional and formalized but their narration was restricted to the winter season and often ritualized. These stories were significant for they referred to characters regarded as living entities who had existed since time immemorial and were believed to be true accounts of events in the past lives of living beings. While the narratives may appear simple, they are actually multi-layered and complex, revealing, “the origin, order, and meaning of the universe as it is understood and experienced by people in the society which passes it on.” Furthermore, they are a source of sacred laws, which govern relationships within the community and the world at large and address moral and ethical issues.

It is important to recognize that these stories were open-ended to allow interpretation of truth and individual conclusions. Usually a number of truths or possibilities would be presented to indicate that one way was not the only way. The Anishinabek did not believe in one singular truth, for the world is dynamic, not static, and therefore constantly evolving and adapting to new conditions. Furthermore, truth in Aboriginal culture not being a definitive value is compared to a home as, “you have your main structure,” and, “you know what has to be in it, but the interior can be changed, renovated as time goes on.” For this reason, Aboriginal people never pretend to speak the truth instead they use the many words they have for maybe and I don’t know, only saying what they do know. Highwater confirms this sentiment stating that Aboriginal people, “do not believe in a universe, but in a multi-verse,” which means they, “don’t believe that there is one fixed and eternal truth; they think there are many different and equally valid truths.” The same principle is applied to the art of storytelling as well. The fact that each story was carried through generations by the process of retelling meant that while the
lesson remained the same, the storyteller shaped the story. For this reason I am able to tell the following stories as my own version. I have not changed any of the content or taken any liberties, but rather shared my understanding based on a multitude of other versions told by various Anishinabe people.

Creation of the World:

Gi’itchie Man-i-to’, the Great Spirit, had a vision, a dream. It began with the creation of Nee-bage’e’sis (the Moon) called Grandmother, Gee’sis (the Sun) called Grandfather and Ah’ki’ (the Earth) called Mother. The Earth is said to be a woman and in this way it was understood that woman preceded man on the Earth. She was called Mother Earth because from her come all living things. Water was her lifeblood. It flowed through her, nourished her, and purified her. Next, Gitchie Manito created the Four Sacred Directions: North, South, East, and West, giving each direction physical and spiritual powers to contribute a vital part to the wholeness of the Earth.13

Then the Great Spirit sent his singers in the form of birds to carry the seeds of life to all four corners of the Earth. Plants, fish, invertebrates, amphibians, reptiles and mammals followed them and they all lived in harmony. Lastly, Gitchie Manito took four parts of Mother Earth and blew into them using a Sacred Shell. From the union of the Four Sacred Elements and his breath, man was created in the image of the Great Spirit.14 It is said Gitchie Manito then lowered Original Man to the Earth where he lived in brotherhood with all that was around him. His descendents became known as the Anišna’be or Original People.15

Fig. 5.4 - Depicts the Anishinabe world view, showing a thriving and bountiful world in which all the diverse elements are in perfect balance and harmony.

Fig. 5.5 - Depicts the seven fires of creation starting with the black circle (the void) and the white circle (the first thought). The next two circles are the sun and moon that mixed together to become the spiral circle (first movement of the universe, balanced by the four directions). The final two circles are the first thoughts of the Creator (shaped into seeds containing the essence of life, spread by the birds creating the plants and animals of Earth) and the creation of man.
Creation of Turtle Island:

Long ago, after the Great Spirit first peopled the earth, the Anishinabek strayed from their harmonious ways and began to argue and fight with one another. Seeing that respect for all living beings no longer prevailed, Gitchie Manitou decided to purify the Earth in the form of a great flood, or mushko'-bewun', which destroyed the Anishinabe people and most of the animals. Only Nanabozho was able to survive the flood, along with a few animals that could swim or fly.

Nanabozho floated on a huge log searching for land, but none was to be found as the Earth was now covered by water for as far as the eye could see. Finally, Nanabozho decided he would try to swim to the bottom of the water to grab a handful of earth. He believed that with a small bit of Earth and help from the Four Winds and Gitchie Manitou, a new land could be created. So Nanabozho dove into the water and was gone for a long time. Finally he surfaced, and short of breath told the animals that the water was too deep for him to swim to the bottom. All were silent.

Finally, Mahng, the loon offered to try since he dives under the water to catch his food. But after a very long time, he floated to the surface, weak and nearly unconscious. He told the others there must not be a bottom. Then Zhinggi-biss, the helldiver came forward and offered to try since she could dive great distances. Again, a very long time passed before she too floated to the surface, without any Earth. Many more animals tried including Zhong-gwayzh', the mink, and even Mi-zheekay', the turtle, but all failed and it seemed hopeless.

Then little Wa-zhushk', the muskrat stepped forward and offered to try. Some of the other, bigger, more powerful animals laughed at Muskrat and Nanabozho told them that only Gitchie Manito could place judgment on others. So, Muskrat dove into the water. He was gone much longer than any of the others who tried to reach the

Fig. 5.6 - Depicts the flood with all the animals and Nanabozho on the back of turtle creating Turtle Island.
bottom and so Nanabozho and the other animals were certain that muskrat had given his life in search of the precious earth.

But then one of the animals spotted muskrat as he floated to the surface. Nanabozho lovingly pulled him from the water and a song of mourning and praise was heard across the water as muskrat’s spirit passed on to the spirit world. Then Nanabozho realized there was something in his paw and all the animals gathered close to see a small ball of Earth. The animals all shouted with joy because muskrat sacrificed his life so that life on Earth could begin anew. To thank muskrat Nanabozho bent over and breathed life back into him.

As Nanabozho took the Earth from Muskrat’s paw, turtle swam forward and offered his shell to bear the weight of the precious Earth. Suddenly, the wind blew from each of the Four Directions, and with the help of Gitchie Manito the tiny piece of Earth on turtle’s back began to grow. It grew and grew and grew until it formed a mini-si, or island in the water. Nanabozho and the animals all sang and danced in a circle on the growing island and still turtle bore the weight of the Earth on his back. After a while, the Four Winds ceased to blow and the waters became still. A huge island sat in the middle of the water, and today that island is known as Turtle Island, or North America.

Nanabozho:

Nanabozho began to travel Turtle Island, following the path of the sun. Along the way he received teachings of moral values and medicines from the animals. He learned that strawberries or oday-min, shaped in the form of a heart are powerful. He met his brother who explained that the earth is a four-fold space; there are four directions, four seasons, four elements, and so on. He also taught him that everything is both shadow and light. When he arrived in the West, he met his father and a battle began, but soon after Epinsighmook asked that they make peace. He told Nanabozho to return to the
East where the Anishinabek reside and teach them the powers of the Midewiwin, how to use fire, to hunt, to practice horticulture and to use medicinal plants so they are strong. In remembrance of their contest, his gave Nanabozho a pipe wrapped in sage as an emblem of peace and goodwill. Together they smoked the pipe as a symbol of reconciliation.16

The Seven Grandfathers:

Despite Nanabozho’s help, the post-diluvian people had a hard life and needed additional help to find a healthy, balanced way of life. So the Seven Grandfathers who reside in the realm of the stars summoned Otter to find someone who could help mediate for them. Otter presented a baby boy, who was first educated in the history of creation. Now a small boy, he entered the sacred lodge where the Grandfathers showed him a vessel covered with red, black, white, and yellow cloths, the four colours that represent the south, west, north and east, as well as the four human races. Each Grandfather then offered a gift to the small boy, which they placed in the vessel. The gifts of the Seven Grandfathers were moral values: Wisdom nibwaakaawin, Love zaagi’idiwin, respect minaadendamowin, courage aakode’ewin, honesty gwayakwaadiziwin, humility dabaadendiziwin, and truth debewin. The boy now an old man, returned to his people with the seven teachings.17

The Water Drum of the Midewiwin:

Even though the Midewiwin lodge was already built, the old man noticed that something essential was missing. Remembering the vessel from the Seven Grandfathers he built the first mitigwakik or water drum according to this image. The wooden body of the drum carved from a tree represented the vegetable world and the skin cover from a deer represented the world of the four-legged animals. This skin
was attached with a hoop that represented the oneness of all natural things, the seasons of the earth as well as the sacred link between man and woman. Lastly, he bound seven small round stones in the rawhide that represented the seven original teachings given to him.18

The Seven Fires:

According to sacred teachings, when the Anishinabe people lived along the northeastern coast of Turtle Island, seven neegawn-na-kawg' or prophets came to reveal their destiny through prophecies called the Neeshwa-wi' ishkoday-kawn', the Seven Fires.

The first prophet told them to follow the sacred miigis or cowrie shells of the Midewiwin or Grand Medicine Society. The Midewiwin would serve as a rallying point for the Anishinabe people and their traditional ways would be the source of much strength. Furthermore they were instructed to look for a turtle shaped island at the beginning and end of their journey as indication they were on the right path. Lastly, he warned that if they did not move they would be destroyed. So the people began a great chibi-moo-day-win or migration West to a place where food grows on water, the land chosen for them by Gitchi Manito.

During the migration the Anishinabek stopped seven times to receive the remaining prophecies. When they arrived at a turtle-shaped island Mooniyaa, the second prophet told the people that they would know the Second Fire when they reached a large body of water. This would be a time when the direction of the Sacred Shell was lost and the Midewiwin would diminish in strength, but a boy would be born to lead the way once more.19

When they reached Kicki-kaka-kong, a powerful place of water and thunder, they were given word from the third prophet that during the Third Fire they would discover the path to their chosen land.20

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Continuing their move west, the Anishinabek stopped along a river, where the fourth prophet foretold the coming of the Light-Skinned Race at the beginning of the Fourth Fire. If they came wearing the face of nii-kon’nis-i-win’ or brotherhood, then it would be a time of wonderful change as two nations join their knowledge to form one mighty nation. But they were warned that the face of brotherhood and the face of ni-boowin’ or death can appear very similar. If they come bearing weapons, be careful for their hearts may be filled with greed for the riches of the land.\(^2\)

Heading north, the Anishinabek crossed a channel separating a large lake and bay, stopping on an island. Here the fifth prophet described the Fifth Fire as a time of great struggle that would grip the lives of all Aboriginal people. As this Fire draws to an end, there will come a false promise of great joy and salvation, attained through a new way that abandons the old teachings. All those who accept this offer will cause the near destruction of the people.\(^2\)

Returning to the mainland they soon reached Baw-wa-ting an excellent fishing area. At this spot the sixth prophet revealed that during the Sixth Fire, those deceived by the false promise would take their children away from the teachings of the chi’ah-ya-og’ or Elders. A new kind of sickness will come among the people and their life will be filled with grief.\(^2\)

Following the shoreline of an adjoining great lake, the Anishinabek continued further west to another island, where they were granted the final prophecy. The Seventh Fire was said to be a time when an Oshkibi-ma-di-zeeg’ or New People will emerge. They will retrace their steps to find what their ancestors left behind, which will lead them to the Elders who will have fallen asleep. The task of the New People will not be easy and they will have to be careful in how they approach the Elders who will be silent out of fear. However, if they remain strong in their quest, the Water Drum will sound its voice again, the Sacred Fire will be relit and there will be a rebirth of the Anishinabe Nation.

Fig. 5.13 - Depicts the migration of the Anishinabe people.
At this time, if the *Light-Skinned Race* chooses the road of peace, love and brotherhood, then a Final and Eternal Fire will be lit. If they choose the other road, then the destruction that they brought with them to this land will cause much suffering and death to all of Earth’s people.  

The Anishinabek found the final turtle-shaped island a short distance away. Here they discovered the food that grows on water, *manoomin* or wild rice and the land, which had been given to them by Gitchi Manito.

**Interpretation**

According to Edward Benton-Benai, Grand Chief of the Three Fires Midewiwin Lodge, this migration began during 900AD and lasted for about five centuries. The Seven Fires represent both a group of teachings and a historical fact, with each Fire referring to an era of time. The seven places they stopped to receive the prophecies are present day Montreal, Niagara Falls, the Detroit River, Manitoulin Island, Sault Ste. Marie, Spirit Island in Duluth and Madeline Island.

It is believed that the Fifth Fire began when the *Light-Skinned Race* started taking away their land and independence as a free and sovereign people. The false promise was found in the materials and riches associated with the European way of life such as guns and money. The Sixth Fire began with the reservation system that later led to children being taken away from the teachings of the Elders and placed in boarding schools. Many people believe that we are now in the time of the Seventh Fire and the two roads have been interpreted as one of technology and one of spiritualism. In this case, technology is the fast-paced, reckless and thus destructive path that has left the Earth damaged and spiritualism is the slow, thoughtful, and thus healthy path that has left the Earth in balance and intact.
When the migration began, their Fathers the Abenaki, decided to remain along the Atlantic Coast to protect the eastern doorway with their allied brothers the Mi’kmaq. They thought their mushkeki-wini nun’ or medicines would keep away sickness, but as the people who had first contact with the Light-Skinned Race, they suffered the most. Along the way, the thousands of people involved, gradually organized into different groups. Benton-Benai further explains that, “each group took upon themselves certain tasks necessary for the survival of the people.”

The group called Ishko-day’wa’toni or fire people, were charged with the safekeeping of the Sacred Fire. These people were later called O-day’wa-toni, and, still later, the Potawatomi. The group called the Odaw-waht or trader people were responsible for providing food, goods and supplies to the entire nation. These people were later called the Odawa. The group called Ozhibii’we or those who keep records of a Vision, were the faith keepers of the nation. These people were later called Ojibway meaning the spiritual ones. They were entrusted with the keeping of the sacred scrolls and Waterdrum of the Midiwiwin. The Potawatomi, Odawa and Ojibwa formed the Three Fires Confederacy to recognize their alliance, which provided for all their needs.
THE SOUTHEASTERN OJIBWA-ANISHINABEK
Identity:

The Anishinabek are rooted in the Northeast and Great Lakes cultural area described by Nabokov and Eastman, which was originally home to three language groups: Algonquian, Iroquoian and Siouan. Each language group is comprised of Nations, which Europeans referred to as tribes. A Nation is a society whose members have ancestry, customs, beliefs and leadership in common. The Ojibway, Potawatomi and Odawa are each Nations, which belong to the Algonquian language group. Within each Nation are groups or communities, which Europeans referred to as bands for legal recognition associated with the Indian Act. Within each community are families, which Europeans referred to as clans. For example, Monague is a family within the Beausoleil First Nation, which is part of the Anishinabek.

Furthermore, there are four categories referring to geographical setting, language spoken, social function and human characteristic, which define an Anishinabe person. For example, a man from the Beausoleil First Nation may be described as follows: Southeastern Ojibwa; Anishinabemowin; Eagle clan; Anishinabe. Ojibwa appears in ordinary social conversation, but when transmitting teachings of a spiritual nature, Anishinabe is used. The name Anishinabe carries four levels of meaning each with its own level of memory: an individual whose personal memory is sought during a vision quest; a local people that carries the memory of ancestors; a race that holds the memory it people; a human being that conveys the memory of human kind.¹

Post–Contact Division:

When European explorers and missionaries first made contact with the Ojibway, in the early-seventeenth century, they were living along the north shore of Lake Huron and around the east end of Lake Superior. They lived in communities organized along totemic lines,
occupying land to the north and south of the great fishery at present
day Sault Sainte Marie. Their Anishinabe brothers, the Odawa and
Potawatomi, settled in present day Michigan and along the western
shore of Lake Michigan respectively.

When the fur trade expanded west of Sault Ste. Marie, Lake Superior
became the final link in a long chain of waterways leading back
to European markets. The Ojibwa found themselves in a crucial
geographic position as French explorers, missionaries, and traders
poured into the area in search of fortunes to be made and souls to
convert. It was not long before the Ojibwa became middlemen in the
fur trade. As European settlers began flooding into this part of the country
the government bought the land cheaply from the Ojibway. In forty
years, millions of acres were sold for pennies an acre and annual
presents. Sometimes the Ojibwa thought they were putting the land
in the King’s hands for safekeeping, until they needed it. They had
no idea what “owning” land meant. They didn’t fight each other for
possession of land, instead they fought to keep control over what was
growing or living on it. They were used to moving their villages to
better hunting grounds, or because they were defeated in a battle, but
they still felt the land belonged to all.

Involvement in the fur trade and land cessions stimulated migration
from their earlier homeland and by 1800 there were four identifiable
groups of the Ojibway people. The Saulteaux, or Northern Ojibwa
migrated westward through the territory north of Lake Superior. They
lived mainly in small, isolated hunting bands, and in contrast to their
kinsmen to the south did not harvest wild rice or make maple sugar.
The Southwest Ojibwa traveled through what is today the Upper
Peninsula of Michigan and westward into Wisconsin and Minnesota,
displacing the Sioux, who had previously inhabited large sections
of that territory. They were hunters and gatherers preoccupied with
the fur trade, and therefore did little farming. The Bungee, or Plains
Ojibwa, integrated themselves into the bison-hunting economy of the Northern Plains and comprised the western-most group of the Ojibwa people. The Southeastern Ojibwa inhabited portions of the Lower Peninsula of Michigan and adjoining areas of Ontario, where they hunted, fished, and engaged in some horticulture. Each group adjusted to the external pressures, changes in their environment and the resources available to ensure survival.

Seasonal Activities:

Early every spring or zeegwung, with the arrival of the first crow, the Southeastern Ojibwa moved into their sugar bush or sisibakwatokan camps to tap the maple trees. The sap collected was boiled into rich syrup or poured onto snow to harden into sugar for use as seasoning for fruits, vegetables, cereal and fish as well as a delicacy when eaten alone and a summer drink when dissolved in water. Bark was also harvested during the spring when large sheets could easily be peeled off the living trees without harming them. Birch bark or wigass has always been one of the most important raw materials in Ojibwa culture as it is wind and water proof, very tough, durable and resistant to decay. For this reason it was used in canoe building, crafts, sheathing and most importantly for the scrolls of the Midewiwin which recorded the history of the Ojibwa and were a distinct feature of their culture.

When the warm summer or neebing weather arrived families gathered in villages at lake narrows, river mouths, rapids and shoals to fish for lake trout and whitefish. During this time a variety of roots, nuts and wild berries such as raspberries, huckleberries, cranberries, blue berries, wintergreen berries, bearberries and strawberries were gathered for food and medicinal purposes. Horticulture was also practiced by the Southeastern Ojibwa, with the cultivation of corn, beans, squash and pumpkins in small gardens. After contact with Europeans, potatoes were added to their diet. Sweet grass, which gives off a fragrance similar to vanilla, was harvested before it ripened for use.
as perfume and incense in ceremonial observances and in the making of baskets.\textsuperscript{13} This was a season of accelerated social life in contrast to the isolation of winter, when marriages, adulteries, divorces, pow-wows, puberty rites, war parties, spiritual performances and exchange of gossip took place.\textsuperscript{14} Other activities included the moccasin game, double ball or \textit{papassi kawan}, hoop and pole or \textit{titipanatuwanagi}, racket or \textit{pagatowan}, ring and pin or \textit{paskahweowog}, lacrosse, races, swimming and tanning of animal hides.

As autumn or \textit{dagwaging} began the Southeastern Ojibwa people began to prepare for the long harsh winter ahead. The wild rice (\textit{manomin}) that grew in abundance in the shallows of the lakes was harvested just before maturity via canoe using a pole or forked stick. Next the rice was cured, by spreading it on racks and drying it in the sun or over a slow fire, before being winnowed by the wind.\textsuperscript{15} Fish, berries, roots and nuts were also extensively gathered and dried during the fall months to be stored for the winter. Men began hunting and trapping during this season as goods including snowshoes, snare wire and winter clothing were assembled by the women.

Each winter or \textit{beboong} the Southeastern Ojibwa disperse from their fisheries, fanning out over a wide area to hunt and trap in smaller family groups.\textsuperscript{16} Trap lines and snares for small game animals such as beaver, muskrat, rabbit, martin, fisher, partridge and lynx had to be maintained constantly in order to provide enough food and resources for daily living. Hunting of larger game such as moose, deer, and bear as well as waterfowl and wild birds often required tracking from temporary or seasonal camps located in more remote areas.\textsuperscript{17} Moose were considered the most important game animal using the meat as a source of food, the skin for clothing and rugs, the bones for tools, and the sinews for thread. The cold climate restricted outdoor activities to snowshoeing, ice fishing of big lake trout and sturgeon, shinny, snowsnake or \textit{shoshiman} and tobogganing. Indoor activities included the making and maintaining of clothing, arts and crafts, games and most importantly storytelling.
Material Culture:

The Southeastern Ojibwa made skilled use of all the natural products so richly provided by the woodland landscape in which they lived. All parts of the trees, shrubs, and grasses found a place in their material culture. They practiced wicker, plaiting, and coiling techniques using willow branches, basswood bark, black ash splints, cedar root, and sweet grass in their basket making. Saplings were used for poles for their architecture. The birch bark was made into baskets, boxes, and trays, and provided lodge and canoe coverings. Fibers secured from bark were twisted into cords and ropes. Roots were used for sewing birch bark strips together, binding canoes, weaving baskets, making dolls, and many other items necessary in daily life. Reeds, rushes, and bark fibers were woven into coarse mats for lodge coverings and finer ones to be used on benches and floors. Pine needles were valued for their pleasing perfume and served as filling for cushions or pillows for the bed. Dyes used to colour handicraft materials and ceremonial articles were secured from barks, roots, leaves, flowers and berries. Pine pitch and resin from black spruce trees served to caulk the seams and cracks in birch bark canoes and containers, rendering them watertight. Resin from balsam trees and from the bark of the prickly ash, cherry and slippery elm, and herbs of all sorts were used for medicinal purposes. Thorns from the thorn apple were used as awls for punching small holes in leather and wood. Rushes were tied in small bundles and used for scouring purposes. The leaves of the bearberry and the inner bark of the red oiser dogwood were smoked in pipes for pleasure. Wood was worked into splint baskets, bows and arrows, brooms, frames for snow shoes, water drums, war clubs, canoe frames and oars, paddles, flutes, heddles, pipes, fish lures, cradle boards, invitation sticks, grave boards or markers, sugar troughs, utensils, balls, lacrosse sticks and other equipment for games.

Architecture:

Responding to the local climate and utilizing the raw materials
Holistic Community Plan for the Beausoleil First Nation

available, the Southeastern Ojibwa developed a domical bent-frame structure with a round or oblong floor plan, which they called a wigwam. With a diameter ranging from seven to twenty feet, it could be easily elongated to become a multifamily structure. Construction called for special skills and tools, which were transmitted from the old to the young, as Nabokov and Easton explain that, ‘to bend a sapling into a smooth arch might call for debarking, trimming, aging, prebending, or steaming so that weak points would not splinter and crack.’

Depending on the location of their camp they used hickory, basswood, elm or ironwood sapling to create this architectural form. The framing poles were set in the ground using two to three foot spacing and slightly angled out to increase tensile strength when bent and form a slight eave to aid in drainage. As the poles were bent into five to eight foot high open arches running east to west and north to south, they were lashed together with pliable strips of fresh white oak, tough roots, or inner basswood bark that had been made into cordage. Next, lighter saplings were tied horizontally in tiers until they reached the central smoke hole to strengthen the structure. Once the wigwam frame had been erected, cattail mats with the grain of the reeds running vertical were tied in courses from the ground up to the smoke hole for efficient water runoff. They were an excellent form of sheathing for a nomadic people living in an extreme environment. They were pliable, lightweight and provided effective insulation by means of a dead air space between the overlapping stalks and leaves which as a result of being sewn together also kept out rain and wind. Bark sheets from birch, elm or chestnut trees were heavier and more awkward to transport than reed roofing mats, so whenever feasible they were reserved for winter wigwams. Furthermore, wigwam frames were often left standing at familiar campsites minimizing construction time and maximizing the use of sheathing which could be easily rolled-up and transported.

The wigwam was always oriented with its door to the east where the

Fig. 6.10 - Wigwam construction.
sun rises and carefully sited among protective trees so that, as colonist and historian William Strachey described in 1606, ‘snow or raine cannot assault them, not the sun in summer annoy them, and the roof being covered, as I say, the wynd is easily kept out.” In the centre was a hearth recessed in rocks buried beneath an earthen floor, which acted as a radiant floor heating system, then covered with fir, cedar or balsam boughs and mats, furs and rugs. The smoke hole above was typically covered with clay to prevent fire from rising sparks but a cedar pole was also placed outside the wigwam to swat out sparks that may land on the roof. A birch bark cylinder was also installed connecting the outside to the inside as a means of fresh air supply.

Within arm’s reach were earthenware pots, polished maple bowls, a hardwood mortar and pestle and bark buckets made water tight with spruce gum caulking.

Certain spiritual ceremonies were accorded their own structures. For the Ojibwa this included the sacred Midewiwin Lodge or *midewigaan*, in which the rites of the Grand Medicine Society were celebrated. This was a longer version of a wigwam built in an open grove or clearing over a sturdy framework of saplings rigidly held together with other saplings placed horizontally, secured by a basswood cord at every crossing of poles. It varied in length from one hundred to two hundred feet, in width from thirteen to thirty feet and in height from seven to ten feet. The Midewiwin lodges were the largest structures built by the Ojibwa in historic times. Unlike the wigwam, Midewiwin Lodge was only partly covered by brush, hides and cloth, which lined the perimeter of the earthen floor. Sacred poles of cedar representing the trees of life rose from the lodge floor. Nearby a Sweat Lodge or *abwesowigamig* about ten feet in diameter and four to six feet high in the middle is built using bent willow poles and covered by animal skins. Stones that have been heated in a sacred fire are placed in the centre and water is poured over them to create steam. The tiniest sacred building was the Shaking Tent, the setting for a divinatory rite performed by a specially trained shaman, made from special woods that had been harvested according to ritualistic instructions into a
bent sapling frame no larger than a telephone booth. The Ojibwa customarily used three birch and three spruce uprights in conjunction with two birch and two spruce horizontal hoops to bind it together. The floor was usually covered with freshly cut spruce boughs. Once the shaman entered the structure was completely covered with bark or cloth.\(^{35}\)

**Transportation:**

The principal means of transportation for the Southeastern Ojibwa was via the birch bark canoes or *wiguass-tchiman*\(^{36}\) along the waterways and portage routes from spring to autumn and by toboggans and snowshoes across the deep snow covered trails during the winter. Canoes were an essential part of Southeastern Ojibwa life as they also depended on them for fishing, hunting, trading and war. A good birch bark canoe would last one year, afterwards it was resigned to home use and light trips.\(^{37}\) Canoes varied in size from small river canoes handled by two men to voyageur canoes handled by eight to ten men and thirty-five to forty feet in length.\(^{38}\) The making of a birch bark canoe required much skill. Interestingly, all measurements for a canoe were calculated based on distances between various parts of the human body. According to author Carrie A. Lyford, who spent time observing Ojibwa people during the early twentieth century, ‘the correct depth of a canoe amidships was the distance between the elbow and the thumb,’ and, ‘the right distance between the ribs was the span from the little finger to the thumb.’\(^{39}\) Six people could make a birch bark canoe in ten to fourteen days once the bark, cedar for the framework and pitch had been prepared. During this time there were necessary periods of waiting while parts of the canoe dried to form.\(^{40}\)

**Spiritual Way of Life:**

Survival required harmony between all individuals and the natural
and spiritual world, from which they were bestowed wisdom, sought
guidance and received material resources. As a result the Ojibwa led
a spiritual life tied to the land, always remembering that they were
just one of many elements of nature, no greater and no less than
everything else on the earth. Before hunting or fishing, berry picking,
harvesting wild rice or celebrating the making of a new drum, prayers
were said and offerings made. An important part of Ojibwa spirituality
was the participation in ceremonies and sacred rituals that honoured
and gave thanks to the spirits.

There are four main parts of a ceremony. The first is the opening
prayer usually led by an elder, which is intended to acknowledge the
gratitude for life and ask for assistance with the work or intention of
a gathering. Next is the work, which focuses on the specific intention
of the ceremony, such as a name giving. This is followed by a give
away, which is the enactment of a core value of Native culture, the
practice of generosity and sharing. It was held to express gratitude
to the people for witnessing and supporting individuals and families
though specific events. An example is a member’s formal entry into
the dance circle, or the commemoration of a loved one’s death. The
ceremony ends with a feast, which is usually opened with a prayer and
often a spirit plate is made to feed the guests from the spiritual world.
Sacred food for the Ojibwa consisted of wild rice, corn, strawberries
and deer meat. It is customary to have helpers feed the elders prior to
people feeding themselves or their children.

One of the most common ceremonies was the smudge, which invited
health into a person’s life by purifying and helping them to think
clearly. Smudging was done by burning specific plants, typically sweet
grass or sage, and brushing the smoke over oneself. This ceremony
was often used when people were sick or feeling depressed. A naming
ceremony was when an individual was given a Native name. It may
have been a family name, which required they carry on the name and
to conduct themself in the way the name indicated. For example, if the
name symbolizes or refers to courage then they must act courageously.

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Fig. 6.15 - Construction of an Anishinabe birchbark canoe.
It may also be to acknowledge a new relationship to the community and/or spiritual world. A burning ceremony was done to acknowledge or feed relations in the spiritual world.

There were three healing rituals that reactualized a link with the Great Spirit and enabled a physical, psychological, spiritual and social revitalization.

The sweat lodge was symbolic of the maternal womb, providing healing for the body and mind, through a rebirthing process. During the sweat, ailments and mundane problems that created an imbalance were released, leaving the participants selfless, egoless and equal once more. Steam created by pouring cold water over hot stones in the centre of the low structure aided in purifying and strengthening the occupants. In addition to healing, sweat lodges played a significant role in generating dreams and visions, which allowed each individual to find their own path and source of knowledge. Fasting was sometimes involved in this process and almost always required an elder to guide the ceremony.

The shaking tent is a healing of the spirit directly linked to the symbolism of the turtle. Constructed of six poles, which form a hexagon in plan, the shaking tent resembles the extremities of the turtle: head, four feet and a tail. When the spiritual leader entered, he was at the centre of the world, the place where he could make contact between two worlds: the horizontal world of humans, and the vertical world of spiritual beings. During his transcendent state, he could dispatch a spiritual helper, usually a turtle, to distant regions to answer questions from the community about the most auspicious places to hunt, the well being of distant relatives, and what would happen in the future. If visions were the means for individual Ojibwa to validate their beliefs and gain new knowledge and aid from the manitos, then the shaking tent ceremony was the means for the Ojibwa community to gain access to the objects of their spirituality.

Fig. 6.16 - Smudging ceremony.

Fig. 6.17 - The shaking tent - traverse of sun marks time.
Derived from the Algonkian word meaning to dream, the pow-wow was a social healing and a time for celebration, socializing, dances, songs, feasts and ceremonies. It was an occasion for learning the seven natural ways of healing: crying, laughing, talking, trembling, yawning and sweating. Proximity to water and forest was very important for the pow-wow grounds for ‘in this way, all is together, all the animals, the fish, plants, sky, sun, all nature is there.’

All ceremonial practices were forms of prayer. Prayers in Native culture were an expression of the human relationship between the Great Spirit and manitos and were offered at individual or group ceremonies. The pipe ceremony was a sacred ritual for connecting the physical and spiritual worlds, with the pipe acting as a link between the earth and the sky. Nothing was more sacred for the pipe was the prayers of the Ojibwa people in physical form, with the smoke exhaled symbolic of their words, touching everything, and becoming a part of all there was. Tobacco or asema was thus sacred as well and so it was offered to the spirits when asking for guidance or help. It was also an important custom to give an Elder tobacco when asking for a service or information, as a way of indicating they respect and appreciation for the wisdom and knowledge they hoped to receive. Like prayers, Ojibwa songs communicated human wishes to the manitos, often asking for help obtaining food during a hunt, while others recalled stories thereby invoking the powers gained through the oral traditions. Songs also accompanied the administration of medicine and other ceremonial acts to give the rituals potency. Furthermore, songs and prayers were often associated with offerings, which served as invocation, petition, and other forms of prayer in their own right.

The Eagle or Migizi was a sacred bird representing strength and was seen as the prayer carrier and messenger for the Ojibwa people. As such, eagle feathers were spiritual and honoured ceremonial objects that were treated with the utmost respect. They were often used during pow-wows for prayers and regalia. To be given an Eagle feather...
was one of the greatest honours to receive, because it recognized achievement and great acts or deeds.\textsuperscript{49}

Although spirituality was often a communal activity, the health of the Ojibwa people was dependent on maintaining a balance between the mental, emotional, spiritual and physical aspects of every individual. For this reason much of the focus was on individual spiritual growth and the evocation of dreams and visions to seek insight from spirits. Anishinabe author Basil Johnston states, ‘through dream and vision a man would find guidance in attaining \textit{fulfillment of self}.’\textsuperscript{50} Oneiric activity was prized for a link existed between dreams and the gaining of knowledge. For this reason the ability to dream was cultivated from early childhood. Anthropologist Frances Densmore explains the connection between education and dreams further stating, ‘they could not learn from books nor from teachers,’ because, ‘all their wisdom and knowledge came to them in dreams,’ and so, ‘they tested their dreams, and in that way learned their own strength.’\textsuperscript{51} In most cases the dreamer would seek the guidance of an Elder to help interpret the dream in order to fulfill the vision.

Acknowledgement of the four directions plays an integral part in many cultural practices. Pow-wow arbors and dance grounds, sweat lodges and smudge ceremonies are just some examples. One of the more common embodiments of the teaching of the four directions is the medicine wheel, a symbol that represents the circle of life. It is a very deep and complex symbol, which would take a lifetime to fully understand all of its teachings. The core concept of the Medicine Wheel is balance, harmony, and interconnectedness. It can represent the four stages of life: infant, youth, adult and elder; the four races of humans: yellow, red, black and white; the four seasons: spring, summer, autumn and winter; the four cardinal directions: east, south, west and north; four sacred plants: cedar, sage, sweet grass and tobacco; etc. In Ojibwa architecture, ceremonies and rituals East was the direction for beginning everything as well as the principle entry or door and movement was always clockwise.\textsuperscript{52}
The Ojibwa believed in many manitos both good and evil that resided in the heavens and earth and all the layers in between. Since the natural and the supernatural were inseparable they existed everywhere in nature – in the animals, birds, trees, rocks, waterfalls, thunder and lightning, winds and cardinal directions.\textsuperscript{53} The Thunderbirds or \textit{animikig} were associated with the four cardinal directions and said to control the four winds and created thunder and lighting.\textsuperscript{54} Nanabozho was the cultural hero of the Ojibwa, instructed by Gitchie Manito to help them. He was an elusive spirit who wandered about, often appearing as a rabbit, shifting his shape or using trickery to teach a lesson or impart wisdom. The Ojibwa were indebted to him for showing them how to use the resources of nature including strawberries, maple sugar, wild rice and birchbark. But the greatest gift of Nanabozho was the gift of the Midewiwin, which he bestowed upon the Ojibwa during a time of need; a time of sickness and death.\textsuperscript{55}

By means of the Midewiwin, the sick were to be cured and life was to be prolonged. As a result the knowledge of roots, herbs, and barks that could be used for teas, poultices, ointments, or charms in curing disease or correcting disfigurement were perpetuated. The \textit{mide} leaders were community historians as well who kept sacred birch bark scrolls that recorded the procedures for their ceremonies and depicted the historical movements of the Anishinabe people. Thus the teachings of Nanabozho were re-enacted in ritual, ceremonies, curing rites, song and dance.\textsuperscript{56} Members of the society were initiated by progressing through four degrees of ritual mystery.\textsuperscript{57}

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This insight into the ancestry of the Beausoleil First Nation highlights key ideas that should be reflected in the design proposal for the community such as the cultivation of the four sacred plants, alignment of the building with the four directions, the wigwam with its bent pole domical structure as a reference point for form and material choice and the importance of a communal gathering space for learning and spiritual activities.
CHRISTIAN ISLAND: A Place of Refuge
Ste. Marie II and the Huron–Jesuit Occupation

The first recorded evidence of the occupation of Christian Island comes from the Jesuit Relations and Allied Documents. These were the records of the French Jesuit Missionaries who had established themselves in Huronia in 1634, following the explorations of Samuel de Champlain and his alliance with the Huron people against the Iroquois. In 1639 they built a centralized mission at the site of St. Marie I, which flourished until the mid 1640’s when Iroquois warriors invaded Huronia.¹ The effects were devastating on both the economy and morale, forcing the Huron community to seek refuge on nearby Christian Island (known as Île Saint Joseph to the missionaries and Gahoendoe to the Huron people) beginning in 1648.² A settlement, today known as the Charity Site, was established on the shores of Douglas Lake. In the spring of 1649, Father Chaumonot and a number of Huron refugees from nearby Ossozone arrived at Christian Island. By the middle of June 1649, St. Marie I was abandoned and the entire mission moved to Christian Island accompanied by the remaining 8000 Huron refugees.³

Upon arrival, a stone fort was built to house the Jesuits and a large Huron village comprising nearly 100 structures on the leeward shore of the Island. Sadly, the refugees had not been able to bring adequate supplies, nor did they have time to plant sufficient crops in the summer of 1649. Consequently, during the winter hundreds, perhaps thousands, of people died from starvation or disease.⁴ In June of 1650, the missionaries and approximately 300 Huron people abandoned St. Marie II and journeyed to Quebec, while another 300 Huron people remained on Christian Island and occupied the fort.⁵ By that fall the Iroquoian Onondaga had traced the Huron refugees to the island and built a fortified camp on the main land. In the spring of 1651 most of the remaining Huron fled to Manitoulin Island (home to their Algonkian allies) in fear of another attack from the Onondaga. Those that stayed were defeated in the late summer of 1651 and the few that survived fled or were taken captive.⁶ This
ended the occupation of Christian Island until 1832, when forty-nine Potawatomi sought refuge after the U.S. Congress passed the Indian Removal Act in 1830.

The Beausoleil First Nation: A Story of Displacement

The initial ancestors of the Beausoleil First Nation were the Southeastern Ojibwa who migrated south from the north shores of Lake Huron around the time of the final defeat and displacement of the Huron people by the Iroquois in 1651. By 1720 as many as 15,000 had occupied the Nottawasaga and Matchedash Bay region - former Huron territory. The area, no longer occupied by a French outpost, offered them what it had provided the Hurons - rich resources and direct water and portage access between Toronto, Quebec, Kingston and Lake Huron via Lake Simcoe. The Ojibwa were becoming so reliant on the Europeans as a result of their involvement in the fur trade that their own culture began to disintegrate. Anthropologist George Quimby summarized the breakdown of their culture during this time stating:

By 1760 every Indian in the [Upper Great Lakes] region was in some way dependent upon the fur trade and thus in a sense was working for the white men. Animal skins, particularly those of beaver, had become money. And the Indians had to obtain this animalskin money in order to buy the tools, weapons, utensils, clothing, ornaments, and even food that they formerly had produced themselves.⁸

Following treaties in 1785, 1798 and 1815, which ceded land to the Crown, European settlers quickly began to occupy Huronia and a naval base was established at present day Penetanguishene. Around the same time the Ojibwa began ceding their lands, the fur trade from which they had derived their principal income was reaching its end.⁹

Fig. 7.3 - Land purchases.
the balance shifted from European exploration to control of valuable resources and vital water systems in the soon to be Simcoe County.

The Lieutenant Governor of Upper Canada, Sir John Colborne, established the Coldwater Narrows Reserve in 1830 in an attempt to assimilate three Southeastern Ojibwa groups into European society. The reserve was approximately 10,000 acres in size and ran in a narrow strip of land, approximately 14 miles long by 1.5 miles wide, along an old portage route between Lake Simcoe and Matchedash Bay on Lake Huron. Over the next six years the groups constructed a road, which ultimately became Ontario Highway No.12 and cleared the land on either side for farming. They built schools, houses, barns, three saw mills and a grist mill at the two villages where they had settled - under Chiefs Yellowhead and Snake at the Narrows of Lake Simcoe (present day Orillia) and under Chief Aisance at Coldwater near Georgian Bay. Although they remained in touch with their Georgian Bay home, the transition from a more traditional life was wrenching. The groups lobbied during those six years to secure title deeds and self-management of their lands, but were unsuccessful. On November 26, 1836, the Crown ceded the reserve in the interest of selling the arable land to European settlers.

In preference to a new government experiment on Manitoulin Island, the three bands established separate reserves, but still retain a sense of common identity today as the Tri-Council. Chief Yellowhead’s band purchased 1600 acres of land at Rama on Lake Couchiching in 1838. Chief Snake and his people moved to Snake Island in Lake Simcoe and later Georgina Island in 1860. The people under the leadership of Chief John Aisance remained unsettled until 1842, when they moved to present day Beausoleil Island in Matchedash Bay. This location offered the potential for traditional activities of hunting, trapping, maple tree tapping, berry picking and fishing to be re-established. By 1846 the settlement at Cedar Springs on the west shore contained 20 log houses, a barn, and a schoolhouse, with a second settlement 3.5 kilometres north, containing 10 log houses. Up to 100 acres were
under cultivation, with the primary crops being corn and potatoes. In addition, the surrounding islands, including Potato and Christian were used seasonally to plant and harvest garden plots with pumpkins and beans as well. They also produced 5,000 pounds of maple sugar annually. Fishing was another important economic activity for the Beausoleil.

Agriculture proved near impossible in the poor soils of the island causing hunger and outright famine and so on June 5, 1856 the Beausoleil surrendered their existing islands in exchange for three new ones, Christian, Hope and Beckwith, reserved as their permanent settlement. Just before the move, forty-five Odawa joined and upon arrival on Christian Island, it was discovered that forty-nine Potawatomi had been residents since 1832. This was a result of the Indian Removal Act passed by the U.S. Congress in 1830, which authorized the relocation of Aboriginal people from their homelands to lands west of the Mississippi River to accommodate European-American expansion. This Act caused many Three Fires bands to seek refuge in Canada, leaving their homeland in present-day Michigan. Twenty years later in 1876, nineteen families of Potawatomi and Odawa left Christian Island to found their own reserve at Moose Deer Point in Muskoka. The creation of the reserve in 1856 centering on Christian Island, ended the Band’s nomadic existence. During the last twenty-six years they had been forced to relocate three times as a result of an ideological, socio-economic framework that had rationalized their displacement for exploration and the exploitation of natural resources.

Life on the New Reserve

Once again, in 1856, Christian Island was a refuge - this time from European settlement - and a new home for the Beausoleil First Nation. Chief Assance’s devotion to the increasingly restricted area on the fringes of Matchedash Bay echoed the Huron decision almost
two centuries before. Although it was an island cut off by ice for a third of the year, its agricultural potential and proximity to traditional lands was integral.

**Role of the Indian Agent and the Department of Indian Affairs:**

Although initially the reserve did not drastically affect their traditional way of life, ultimately the new restrictions changed every aspect of it and by the end of the century reduced the Beausoleil First Nation to wards of the government. The most immediate effect was a forced change in subsistence patterns, for the reserve brought an end to their former semi-nomadic lifestyle and seasonal rhythm as they were settled in a permanent village under government supervision. Traditional sources of food began to shrink even as the reserve population began to increase due to government control of fishing, hunting and rice harvesting beyond the borders of the reserve. The shift in diet to provisions from trading stores resulted in poor health becoming endemic on the reserve by the end of the nineteenth century.

Between 1870 and 1926 the Beausoleil First Nation’s money was held by the Federal Government in a trust fund and was their major source of capital. Loans for community projects came from this fund and were subject to approval from the Indian Agent and Department of Indian Affairs. The first Indian Agent was placed on the island in 1884, which place him at the centre of the political structure and allowed the government to continue to maintain economic and social control of the Beausoleil First Nation people. To the Federal Government, a permanent Indian Affairs presence on the island signified progress. This is an eloquent testimony to the crushingly paternalistic system that Department regulations imposed upon Aboriginal people, wherein even the smallest financial decision had to have the Agent’s approval. In an interview with Leonard Monague, on Christian Island in July of 1988, he described the relationship between the Indian Agent and the Beausoleil community as ‘not
good’ and ‘aggravating’ explaining that, ‘they were more like wardens and everything had to have their approval,’ and that, ‘it really didn’t matter how nice they were.’ Leonard Monague was descended from a line of chiefs who first took the position in the 1860s and 1870s. They found discrepancies in the Indian Agent’s work and in 1968 Leonard Monague replaced him as Native Band Administrator after serving as Chief for two terms.

Co-existent with funding controlled by the Indian Agent were strains which were destructive to this First Nation community including two confessional schools and two churches, which at times divided the people by their new religious affiliation. In addition, after Grade Eight, schooling abruptly ended, forcing many children to journey to residential schools in Chapleau or Brantford. This wrenching separation was often caused by the death of a parent and the disruption or impoverishment of the family.

Settlement

The Beausoleil First Nation Reserve consists of three islands, Christian or Chimnissing, Hope and Beckwith as well as several tiny islands close to the shores of these larger islands and an area consisting of sixteen acres located on the mainland at Cedar Point. The people of the Beausoleil First Nation settled on Christian Island, the largest with an area of approximately 9820 acres and a distance of three kilometers from the mainland. Beckwith Island covers 2130 acres and Hope Island covers 1350 acres, both undeveloped and never seeing any permanent settlements.

In 1899, Christian Island was surveyed and an area along the south gently curving leeward shore was retained as a village site. Band members were able to build a house on a two-acre site within this area and receive a ‘location ticket’, which could be exchanged for a surveyed piece of land in the interior. These lots that were typically
fifty acres in size were frequently left as bush. Houses were privately owned but the land itself was communal. According to Leonard Monague, the early houses were mainly one room squared timber log homes heated by big box stoves and fires places, with roofs that you could see through to the stars. Any of the houses built later were wood frame clad with insulbrick, a fibreboard sheathing coated with tar and added granular material, similar to asphalt shingles with the surface stamped with a brick or rectangular stone pattern. Many of these were built with trust fund money, which was counter to treaty obligations.

Seafaring

In 1856 a stone lighthouse and keeper’s house were constructed on 10 acres on the southeast tip of Christian Island. Ten years later the area was increased to 36.75 acres and in 1887 a second lighthouse was built on the northwest point of Hope Island. These lighthouses signaled the coming of western civilization and culture to the natural biosphere of Georgian Bay, lighting the way for marine navigation, which brought more settlers and lumber barons.

Forest Management

The mixed bush of beech, oak and maple was important as a provider of fuel, timber for the squared log buildings constructed on the island and for maple tree tapping as maple sugar was extensively used. In 1917, timber rights were ceded on Hope and Beckwith Islands, but not on Christian Island. A lumbering industry did exist on Christian Island, but it was not very large. The sawmill provided twelve jobs and consisted mainly of cutting logs to sell to lumber companies. Tree harvesting was significant both as a source of cash and as a component of the subsistence economy. By the 1940’s marketable timber was becoming scarce. Although the sawmill at
the waterfront near the dock did survive until the early 1960’s, little money could be extracted from their funds managed by the Indian Agent for new equipment. The charcoal industry ran into trouble with high transportation costs. The charcoal was high quality 100% hardwood, but like the lumber industry they ran into the problem of being undersold.29

Farming

The Department of Indian Affairs, through its policies, its control of funds and its directions to the Indian Agents tried to promote subsistence farming. As a result, along the road that cuts through the centre of Christian Island to Big Sand Bay, several farms were developed. According to the Canada Cessional Papers, by 1899, 237 band members lived on Christian Island and of the 843 acres, which had been cleared, 543 were being farmed or used as pasture. There were already four frame buildings, forty log buildings and ten barns. In addition to three hundred and fifty steel traps and eighteen fishnets, there were twenty-five ploughs and one threshing machine. Large equipment for grain grinding was also purchased. The Beausoleil First Nation owned sixty-six horses, eighty-five steers and cows, over one hundred pigs and four hundred fowl. There was also a communal bull, boar and stallion for breeding. Crops included oats, wheat, corn and eighteen hundred bushels of potatoes.30 Often families farmed together, keeping their chickens, cattle, pigs and gardens on village lots. Berry picking and maple syrup production were also family activities typically led by women.31 The seasonal activities associated with farming, sugaring, berry picking and logging were remembered by those who grew up during this period as a time when there was a strong sense of community.32 By World War I, the Beausoleil First Nation was an agricultural community rather than a hunting or fishing community, with most of their economic structure based on farming and the timber industry and a model representative of the supposed efficacy of Indian Affairs.
According to Leonard Monague, the Beausoleil First Nation used to depend almost entirely on their own produce and livestock for food. They made cornmeal by putting corn in a hollowed out log and pounding it with a hammer. Apples were dried and hung up in the ceiling. They sun dried and salted meat and fish to eat during the long winter months along with pemmican and bannock or scones. They drank mostly coffee and tea from their home brew, beano, which was made from the white beans and natural wines made from wild grapes and chokeberries. Potato soup with slatters, a type of dumpling, and Indian corn soup were staples. To make Indian corn soup, the corn was soaked or lyed in ashes and then strained and boiled to remove the coat from the kernel, which were then boiled with salted pork or pork rinds. Some band members made sourdough bread as well.33

Farm production began to decline in the mid 1920’s. Orchards planted in 19th century no longer produced fruit by 1930.34 Farms disappeared after World War II and by 1950 the agricultural phase on Christian Island, except for ventures such as beef production and a pheasantry, were past.35 Leonard Monague believed that the pheasantry established on the island to release birds for hunters and to raise birds for sale, ‘made good economic sense but the upkeep of the enterprise was poor and the band was undersold when it tried to put its birds on the market.’36 Farming on Christian Island never did enter the age of the tractor and as an economic depression hit many left the reserve to find work.

Off the Island Employment

Beginning in the 1920’s and 30’s many people from the Beausoleil First Nation sought work off the island during the summer months, becoming an important source of labour in the cash economy of the region. This left entire families broken as fathers and sometimes mothers were absent for long periods. Poverty only compounded the effects of children being cared for by extended family or other members.
of the community. Already considered second-class citizens, however, they struggled to secure work over their white competitors and were not always fairly compensated for their labour. The majority worked as log drivers in the Muskoka Mills north of Honey Harbour and at Iron City further up the coast toward Parry Sound. They also picked fruit in Peel and Halton county as well as the Niagara peninsula, acted as guides for cottagers and worked in resorts. Everyone from Christian Island who worked at the resort lived in big eighteen by twenty foot tents supplied by the club, which Leonard Monague explained were on their own site called the Indian Camp. Earning income off the island became a hard necessity after World War II. Servicemen found that they had skills needed in the construction boom of the 1950’s and 60’s and so the population of the island remained stable as families moved away to find employment, returning when they reached retirement. Leonard Monague considered himself, ‘lucky to have a job,’ often having to collect pogey or social welfare in the winter when work was unavailable. A new symbiotic relationship had been formed, albeit one, which gave the Beausoleil First Nation little hope of breaking out of the subsistence nexus.

**Culture + Recreation**

During his interview, Leonard Monague lamented that not much had been tried on Christian Island to revive their culture. He remembered that there was an old camp behind Alex Copegog’s property that led to an area where camp meetings were held. Here community members, ‘sang old Indian hymns, prayed and gave out testimonials.’ Leonard Monague also explained that dancing was no longer done on the island and the only way to learn how was to bring someone from the mainland to teach. Furthermore, the traditions of making quill and sweet grass boxes as well as fancy beadwork and leatherwork were still fairly strong although few members of the younger generation were interested in carrying on these traditional art forms. On Christian Island, the artisans are mainly women, although Leonard Monague...
sited that Amos King did some woodcarving including totem poles. Reviving their language was also difficult as many of the teachers spoke a different dialect than the one on Christian Island. There was no traditional medicine left on the island either and Leonard Monague recalled how in the old days people looked after themselves using Aboriginal remedies such as pine resin to treat infection and agrimony for urinary problems. Maintaining their cultural traditions was proving difficult and so the community discussed having an Ojibwa World or recreation of a traditional village on Christian Island. Leonard Monague thought it was a good idea and believed the recreation committee should investigate additional solutions.

Another significant event, which Leonard Monague remembered well, was Achievement Day, which started circa 1910 and continued to the post World War II era and was usually held on Thanksgiving weekend. There were horse races on the main road, traditional dances, a small pow-wow, a rodeo-type event with domesticated steers and music, which was an important part of any celebration. Early Fall Fairs were prominent events as well, including everything from handicrafts, sewing, baking, produce and livestock, which were sold, shown and judged. The Beausoleil were athletic too, enjoying softball, swimming and running in the summer, with members of the community even performing on the cinder track on Christian Island and elsewhere. A winter sports fest was also held at Douglas Lake with a big slide, skating, hockey and ice fishing on the bay.

Time of Change

Leonard Monague was first elected as chief in 1954 and during his first term he brought hydroelectric power to the island. Robert H. Saunders, the chairman of Ontario Hydro, came to switch on the electricity in December of 1954, starting with the illumination of a big Christmas tree in front of the Community Hall. After the initial wiring was done it took them some time to wire all the houses on
the island, but once complete, it allowed for modern conveniences, such as fridges that removed the need for root cellars and icehouses. According to Leonard Monague, his family was the first to have a washing machine and television. Leonard Monague said they, ‘watched Western Theatre and could never figure out why they were always the bad guys.’ During the rest of his two-year term he developed cottage sites on the island to attract people with lots of money who would hire the Beausoleil First Nation to work for them. Jobs off the island were drying up and he believed that establishing a summer community similar to Iron City would be the answer. He received approval for cottage leasing in 1956 for 184 lots on the north side along Big Sand Bay and 105 on the south side along Lighthouse Point, but further development was abandoned. He was also interested in starting a pilgrimage to Ste. Marie II to tie it more closely to Ste. Marie I and the Martyr’s Shrine. But his dreams of an archives and museum housing artifacts from an archaeological dig at the fort ended quickly as, ‘there was no way to transport people to the island and no accommodation or picnic grounds for them.’

During his second term from 1964-66, telephone service were brought to Christian Island. The Indian Agent had a contract with the Tiny Township Telephone Company to supply him with his own phone, which was located in his office. An elder became very ill and Leonard Monague asked to use the Agent’s phone to call for medical service but the Agent refused, telling Leonard Monague to use the phone across the channel at Cedar Point instead. However, this was impossible, as he was not allowed to use the agency boat to get there. Leonard Monague contacted his Member of Parliament and the matter was brought up in the House of Commons. Soon afterward the island received telephone service.

After Leonard Monague retired as chief the second time he became the Band Administrator, where his main tasks were to keep programs running and to look for new areas of development. He commissioned a study of a twenty-year development program for the three islands,
which involved a Toronto corporation. Leonard Monague explained that, ‘they were willing to train the island’s young people for twenty years and then the company would withdraw from the scheme,’ and, ‘the profits would be split 60-40 in favour of the band.’ However, the plan depended on a causeway or bridge link with the mainland, but Indian Affairs wanted the company to pay the whole shot and the company wanted some contribution from the government. The stalemate ended any hopes of the project getting off the ground and the Beausoleil First Nation was left of the equation.\textsuperscript{55}

This issue came up again when the M.V Indian Maiden passenger ferry was commissioned in 1985 to provide transportation service for the Beausoleil First Nation community. There was discussion back and forth about a causeway and again the decision went against a land link. Leonard Monague stated that, ‘the boat and docks cost close to $1\,000\,000,’ and he believed that, ‘the band would in the end have saved that amount if the causeway had been built.’\textsuperscript{56} The M.V Indian Maiden is capable of transporting seventy people and breaking ice up to four inches, which is essential in winter months when the channel begins to freeze. The M.V Sandy Graham was purchased in 1998 to provide transportation for twenty-eight vehicles and an additional ninety-eight passengers.

Understanding the history of the Beausoleil First Nation is imperative as it reveals the impact of European settlement and the Department of Indian Affairs on both the way of life and architecture of the community, and as such brings to light the sensitivity required moving forward with a design proposition as an Immigrant designer. Additionally it will be important to acknowledge the Ste. Marie II site that connects the Beausoleil First Nation to the Huron people and the Jesuit missionaries who inhabited Christian Island before them as well as the marine heritage of Georgian Bay that connects them with the European settlers who arrived in Huronia afterwards.
Fig. 7.19 - Timeline summarizing the information presented and illustrating the shift from traditional activities associated with seasonal living to activities encouraged by the Dominion of Canada through the Indian Agent and necessary to survive in a new sedentary reserve lifestyle. Other information layers depicted are the shift in occupancy of Huronia (present day Simcoe County) and the overarching powershift that occurred with French explorers and missionaries and British settlement.
CHIMNISSING - N-DAA-YAAN: Christian Island My Home
It's all a question of story. We are in trouble just now because we don't have a good story. We are in between stories. The old story, the account of how we fit into it, is no longer effective. Yet we have not learned the new story. – Thomas Berry (1988)
The Island Today

Since the middle of the twentieth century the island’s visage has dramatically changed. Single apple trees standing in the middle of abandoned meadows now mark the possible location of farm homes, barns and orchards. Log houses that signified the transition from a nomadic way of life to settlement on a reserve have all disappeared save one and the light keeper’s house on the southern point of the island is nothing but a romantic stone ruin. Family land holdings remain much the same along the southern shore, but expansion has occurred east and west along the main road now totaling more than 150 structures primarily three bedroom compact single floor houses reminiscent of 1950’s Ontario suburbs that are now the ubiquitous vernacular. The village core has been redeveloped amid the dense poplar, maple, spruce and white pine that cover the rolling landscape with a new band council office, senior centre, elementary school and general store that overlook the waterfront as well as a daycare centre and modern health care facility.²

Link to Mainland

Christian Island is a two-hour drive north of Toronto to the southern shores of Georgian Bay, followed by a twenty-minute four-kilometer ferry ride across the choppy waters from Cedar Point. The ferry is the only access to or from the island, which is problematic when the winds are too high in the summer or the ferry can no longer break through the frozen passage during the winter, thus leaving the 700 or so residents stranded. In the wintertime when the bay is completely frozen over, another causeway appears, and for those brave enough to drive across this ice highway freedom is possible.

In her film Chimnissing N-daa-yann, Beausoleil First Nation member Ellen Monague described the dangers of traveling across the frozen bay explaining, "we have lost some people on this ice, but it’s just a
chance we take,” as it is a part of life and, “when you want to go home, you want to go home, it doesn’t matter what’s in front of you.” More often it was a matter of not missing work and buying food or gas in town. Ellen remembered as a kid growing up on the island that every winter, “we had to stock up on food because the bay would freeze over and there was always that in between period where it was too hard for the boat to make it through and too dangerous to drive.” If they were really desperate they would walk across or use dogsleds and snowmobiles.

The idea of a causeway has been speculated since Leonard Monague was appointed Band Administrator in 1968 and whether or not the Beausoleil First Nation will get one is still a big question, which according to Ellen, “the community seems to be split 50/50.” For some residents there is safety in limited access to the island but others think it would help with employment, secondary schooling and emergency health situations.

Economy

Economic life on Christian Island has been difficult and as is the case on many reserves, economic opportunities are few. Transporting fish, timber or agricultural produce to the mainland market has always been a challenge with Penetanguishene a fair distance from the reserve and the waters of Georgian Bay providing a barrier especially in the winter. Many enterprises have been attempted in the past such as charcoal production, a pheasantry, and commercial fishery, but they were repeatedly undersold by larger mainland businesses that could sell at bulk prices and did not have to charge more to account for additional transportation across the bay. In 1988 a full range of positions for band members in social services, policing, capital and public works, healthcare, education and band administration were implemented. While this employed some through the community’s Band Office and small service industry, most others were still limited
to construction work on the mainland or seasonal work at Casino Rama in Orillia, a ferry ride and hour and a half drive away.

**Learning**

The ferry schedule also dictates the lives of students, who after Grade 8 attend high school in Midland or Penetanguishene, where they board throughout the winter, away from their homes for the first time. For most it’s their first interaction with non-Aboriginals and dropout rates are high. The isolation felt by many of Christian Island’s youth, fearful of what lies on one side of the water and trapped on the other, has also resulted in alcoholism and substance abuse.8

This only adds to the familiar and concerning statistics that indicate a significant gap in high school completion rates between Aboriginal and non-Aboriginal people in Canada. In 2006 the proportion of Aboriginal people aged 20 to 24 that did not have a high school diploma (40%), was three times higher than that of non-Aboriginal Canadians (13%). The rate was even higher for First Nations living on reserve (61%). These numbers are distressing given the importance of a high school diploma in the pursuit of further education, training and employment.9

**Culture**

A traditional understanding of Ojibwa life is seldom experienced on the island any more. Rodney Monague Sr., who was chief of the Beausoleil First Nation between 1968 and 1990 recalled, “The Ojibwa way of life was snuffed out on the island between 1920 and 1958.”10 Furthermore, he explained that, “Anything that was considered pagan, basically un-Christian, was forbidden,”11 by the Indian Agents who represented the Government of Canada’s Ministry of Indian Affairs, the last of which left the island in 1968.
Historically educational policy evoked through the *Indian Act* was consistently and unashamedly used by the Canadian Government to assimilate Aboriginal people into mainstream culture and eradicate their culture. Indigenous knowledge is community-based, contextual, holistic and interpretative. Dr. Margaret Kovach, an associate professor at the University of Saskatchewan contends that, “The knowledge sits in story, history, place, and with people. Indigenous knowledge is imbued with a fluidity that is bound to place but can never be fully captured within an institutional net.”

Today, generations of Beausoleil First Nation youth are growing up without a true sense of identity. Current chief, Rodney Monague Jr., is a prime example, expressing, “I’m the chief and I can’t even speak or really understand Ojibwa.” He adds, “For me I was able to pursue a life and career without that identity and do okay. But for these young guys who are kind of troubled, maybe learning who they are will help them.”

Some community activities that have since been initiated are the annual *Island in the Sun Intertribal Powwow* each summer, dinners held for elders and special events such as *Native Awareness Day* and *The Seven Grandfather Awards*.

### Economic and Cultural Learning Initiatives

In 2000 *Aboriginal Youth Week* a four-day camp for First Nations students in Grades 7 and 8 from seven different Anishinabek communities was started at *Camp Kitchikewana* on Beausoleil Island in Georgian Bay Islands National Park. The whole concept of the event is about, “being proud of your own traditions and culture and being open to sharing it with others and understanding other cultures.” The participants are given the chance to explore not only the history of the island and its natural and cultural themes, but also to learn more about Anishinabe history and culture, taught in a place significant to them by their own educators and Elders. The Beausoleil First Nation traces their ancestry to this place and evidence of the nineteenth century cabins and outbuildings associated with
Chief John Assance’s community, which lived here from 1836 to 1856 is found throughout the camp. Through the holistic learning and activities the youth participate in, they are shown the relevance of First Nations traditions in a modern context. Scott Carpenter, a community development officer with the Métis Nation of Ontario, explained the importance of traditional learning, stating, “Tradition is important, but it’s not stagnant at the same time. We have to adapt or else we'll be left behind.” The students spend their time playing Kookoosh ball, doing crafts, learning about the medicine wheel and importance of tobacco, taking part in daily smudges and a variety of recreational activities from canoeing to ping-pong. Involvement in an archaeological dig on the site alongside archaeologists from Parks Canada also reveals the long and rich history of the island, with artifacts unearthed showing as many as 12 distinct Aboriginal cultures have called the island home during the past 4500 years. The camp ends with a celebration dinner and a drum social with students dancing along to the beat of the drum in their regalia.

In 2000 the Anishinabe Education and Training Circle in partnership with Georgian College began offering a number of Aboriginal programs and services at the college including Niwiiagan a Peer Mentor Service, a Visiting Elder program to provide support, spiritual guidance and cultural awareness to all students and the Anishinabe Resource Centre which acts as a cultural gathering place and drop-in centre. Consequently a liaison formed between Georgian College and Aboriginal communities, organizations and individuals to enable the sharing of information and resources on Aboriginal culture and language, in addition to identifying and initiating the development of new Aboriginal programs and services and to assist with local community-based training initiatives.

Three Aboriginal focused college programs are currently offered and they each include courses that teach students about Aboriginal history, traditions and culture in addition to providing a Aboriginal framework in which other information in the program can be
presented. Cultural teachings and smudging are integrated daily throughout each academic semester in social activities, individual program courses, and Traditional Teacher and Elder visits. Shki-Miikan or New Roads is a one-year certificate program intended to enhance the Aboriginal student’s sense of cultural identity, develop self-management skills, build a strong educational foundation and consider education and career options. Aboriginal Community and Social Development is a two-year co-op diploma program designed to give students the skills needed to work in the health and social services sector with a focus on administration. The program was developed in response to a need identified for qualified people within the Aboriginal community to handle the business side of their health and social service programs. Anishnaabemowin Language Programming is a two-year diploma program focusing on creating functionality in the Anishnaabemowin language and preparing students to design, develop and implement community language programs in First Nations communities and organizations.18

Two other college programs used to be offered. The Foundations of Gaming and Resort Operations was a one-year program designed to provide students with the training required to work in the gaming and hospitality industries due primarily to the proximity of Casino Rama in the Mnjikaning First Nation community. Aboriginal Tourism Management was a three-year program that helped Aboriginal people interested in being involved in the tourism industry, whether it was running a marina or a gas station or developing heritage, cultural or eco-tourism learn how to link it to economic development without selling out their culture or history.19

In 2003 a part-time Practical Nursing Program on Christian Island was initiated to meet the future staffing needs for the Island Health Unit and planned senior’s residence. Thirteen students enrolled in the four-year program offered by the Loyalist College, Bancroft Campus with assistance from the First Nations Technical Institute. After studying, training and personal sacrifice the six remaining
Beausoleil First Nation women graduated in the fall of 2007 ready to pursue a career in the world of healthcare. The decision of these young women to improve their quality of life and take control of their future did not come easy. They first had to pass a Grade 23 equivalency test before being able to qualify for funding from the Beausoleil First Nation Post-Secondary Student Assistance Program, which focuses on training opportunities for Aboriginal people and had to be approved by the Ontario College of Nurses.

In 2003 the six southern Ontario First Nations communities that comprise the Ogemawahj Tribal Council (OTC) collaborated to produce an updated social studies curriculum for Grade 6 students that teaches how contemporary Aboriginal people live, both on and off reserves because, “other social studies materials that include Aboriginal people, where they exist at all, are either American, outdated, or solely focus on the way Aboriginal people lived in the past,” said OTC Education Advisor Elizabeth Bigwin. The contemporary life section covers population, language, culture and tradition, religions, food, clothing, homes, buildings and services, transportation, employment and economic development, education and recreation. There is a little bit of history and some information on treaties, self-government and land claims. The resource section enables further study by listing friendship centres, First Nations and Aboriginal organizations, as well as Internet resources. The six classroom activity booklets and teacher resource package developed by two teachers and reviewed by community members were put together to help overcome old stereotypes still prevalent about Aboriginal people. The educational package has been endorsed with the Curriculum Services Canada seal of recommendation. However, according to Bigwin, “The important piece to this is the voice. We thought if people are learning about Beausoleil First Nation, for example, then they should be hearing it from us, not someone else.”

In 2007 Gino Ferri, an expert on Aboriginal culture and his team of outdoor survivalists at Survival in the Bush Inc. offered a course
on Christian Island called the Cultural Wilderness Program to help
the Beausoleil First Nation youth recover their lost culture. Nine
chronically unemployed young men all between their late teens and
mid-twenties signed up for the program that Ferri explained aimed to
give them “roots and wings.” 23 While there was no way of knowing
if it would help them, the intention was, “to give them the tools to
make the right decisions, to think about things and ultimately feel
proud of who they are, who they have come from.” 24

The program was intense spending time in and out of the bush over
a 14-week period, “learning survival skills and traditional Ojibwa
practices such as how to kill an animal, spirit it, skin it and prepare
its meat,” as well as “traditional leatherwork, Ojibwa history and the
forgotten prayer rituals of their ancestors.” 25 While there was some
initial apprehension from community Elders, skeptical about non-
Aboriginals teaching their youth, it was no longer an issue once they
realized that it was “not a European-style program where an authority
figure talks at students and then the course is over.” 26 It is important
to recognize that what they learned was not from a textbook.

Ferri believed that the way to counter the isolation the Christian
Island youth feel is to empower them by teaching them how to cope,
how to mentally prepare for challenges, how to devise a plan and work
as a team through skills and knowledge that helped their ancestors
survive. “The Ojibwa loved the land,” Ferri affirmed and if, “you
take the land away from the Ojibwa...you eliminate their cultural
and spiritual connection, their lifestyle.” 27 The program sought to
give them back their ethos, their sense of being and their connection
to the land so they could become fully alive. For at least two of the
young men positive change resulted. One, a recovering alcoholic who
dropped out of high school after Grade 10 had resented his heritage
growing up and did not speak or understand Ojibwa. Before meeting
Ferri, he had never contemplated much at all about the Ojibwa way of
life, but now a glow surrounds him that Elders had never seen before.
According to Chief Monague, he is now, “beating down the door
of the local employment office, looking for work.” Another began working in construction on and off after dropping out of high school in Grade 10 also. The program kept him busy and helped to focus on something other than his anger. His grandmother noted positive changes once he started the program.

**Remuneration**

On March 24, 2011 after 20 years of research and another 20 years after submission the federal government offered a $307-million land claim settlement agreement to the four south-central Ontario First Nations for land taken in the former Coldwater-Narrows reserve. This money will be put into trust agreements for their communities, with the Beausoleil First Nation receiving 30% of the settlement. Chief Roland Monague Jr. reflected on the outcome of the land claim stating, “When we think about everything we’ve lost over the years, the economic opportunities, the social challenges we’ve endured so many years, the healing that needs to occur, I believe if we think in that direction, if we think that our future generations don’t have to suffer in the same way we did, this claim can go a long way.” Another element of the settlement agreement allows the First Nations 30 years to purchase up to 10,673 acres of land (the equivalent area of the Coldwater-Narrows reserve) to be designated as reserve land upon approval from the federal government. Monague didn’t anticipate receiving the first federal cheque until the spring of 2012, but was still positive about it helping the community when it did arrive explaining that, “Today it’s something that’s been long standing; it’s an offer that’s on the table. It will never acknowledge our losses [but] it’ll certainly assist us in moving forward for the benefit of future generations.”
In 2009 a 137-day peaceful protest occurred against the chosen location for a new dump atop an aquifer that had tested as pure as the cleanest Arctic ice and fertile farmland only a few kilometers from the freshwater beaches of Georgian Bay. It was believed to be a lost cause after the rejection of an environmental review board was overturned by the Ontario cabinet and furthermore Simcoe County disregarded petitions, rallies, lawn sign campaigns and legal challenges. However, everything changed and a significant environmental victory was won when five determined women from Beausoleil First Nation received permission from farmer Art Parnell to set-up camp in his clover field across from Site 41. In a letter to Ontario Premier Dalton McGuinty, they served notice that as Indigenous women, they would play an intimate role in protecting this precious resource, the water, for future generations.

Over the course of the protest thousands of people were inspired to join in the fight, helping to build shelter for the campers and the sacred fire that had been lit, setting up recycling systems that turned the camp into a model for zero-waste and donating food, firewood, batteries, tarps and so on. Collaboration had blossomed and it was a unique alliance in which First Nations members joined with non-First Nation people to stand “Shoulder to Shoulder” for a common goal. All were equal, all respected and all were valued. While not a religious camp, spirituality was evident in daily prayers that were offered for the land and the water, in a multitude of ways including prayer circles led by local ministers that combined traditional Anishinabe prayers. The camp was open to the community at large and people were encouraged to share some of the pure water, join in on weekly potlucks and participate in the open dialogue and sharing of information.

A true sense of community emerged as First Nations and non-First Nation people chose to celebrate and share their traditions rather
than ignore cultural differences. Community members who had lived a relatively short distance away from the Beausoleil First Nation learned for the first time the significance of First Nation practices and beliefs as they were invited to participate in ceremonies celebrating the water as well as daily prayers, drumming and teachings. For First Nations members it was an opportunity to learn how local farmers had been careful stewards of the land for generations. Differences of opinions sometimes surfaced but were resolved through talking circles where each person was given all the time they needed to thoughtfully express their views until a consensus was reached. Every contribution mattered and everyone contributed. As people learned to depend upon and trust one another a sense of belonging, friendship and family flourished.32

Fig. 8.18 - The Site: 41 camp on Art Parnell’s clover field.
COMMUNITY PLAN PROPOSITION
Your vision will become clear only when you look into your heart. Who looks outside, dreams. Who looks inside, awakens. - Carl Jung
A New Story

A community can be a victim of circumstances, pushed by the constant current of local pressures and global forces or it can take control over its own destiny and shape its own future. The preliminary focus is to speculate opportunities for cultivating the \textit{minobimaadiziwin} or good life on Christian Island for the Beausoleil First Nation. The intention is to develop a proposal that builds on the past, seizes the moment and establishes a collective vision for the future that encompasses the spirit of the community and provokes the imagination of its residents.\textsuperscript{2}

Far too often First Nation communities in Canada are the recipients of a myriad of architectural and settlement schemes, funding programs, and service delivery models that do not reflect, respect or remain sensitive to their culture or worldview and are furthermore dictated and managed by the Federal Government. However, it is quite clear from decades of this design and development approach that these imposed schemes are inadequate in many situations and often fail to meet the needs of the communities. The problem is rooted in the fact that designers are often ignorant to the needs and priorities of the community and so the schemes are developed in spite of, rather than in harmony with, local conditions and the desires of the people and thus become an embodiment of governmental authority. Community insights and perspectives have much to contribute to the design process as they are rooted in traditions of the past and visions for the future. As such it was essential for the Beausoleil First Nation to be involved in the process so that the issues, strengths, hopes and opportunities within the community informed the proposal and ensured it is sensitive to their values and aspirations.\textsuperscript{3}

First Nation people generally regard the natural environment as a precious and sensitive resource and so the community plan proposition strives to harmonize with nature, following the traditional teaching of the medicine wheel, an important guiding principle. Through this teaching First Nation people learn that they must be protectors of
the earth as every action is related to creation and maintaining a balanced life. Furthermore, the way buildings are placed, how they are constructed, their aesthetic and program can all reflect a respect for and attachment to the land. A key design guideline will be cultivating ideas that work with natural resources and show consideration for their fundamental values rooted in the land.4

Culture, geography and governance define communities. First Nation communities are distinguished by their history, traditions and values, in addition to the territorial boundaries of each reserve and a distinct Chief and Council structure for community decision making. Each day decisions are made in the community about economic initiatives, educational strategies, resource allocation, environmental management, land use, housing, transportation, social policy, health delivery, public works and so on. It is important to recognize that they are all interrelated and so each is vital to sustaining and enriching the quality of life for the Beausoleil First Nation. These many threads needed to come together to weave a sustainable community plan that sets in motion the path to self-determination.5

While non-First Nation communities primarily report to the provincial government, First Nations communities deal directly with the federal government, which means they have a large range of responsibilities and there are many layers of bureaucracy, a lot of redundancy and a pressing need for efficiency and accountability. The community plan proposition, which reflects the aspirations of the Beausoleil First Nation and charts a course for future action is also an important basis for meaningful discussions and agreements with Federal Agencies. For the community this means they have a specific course of action for negotiating funding agreements that lead to tangible results and for funding agencies this means that the community can be held accountable to its long-term commitments. Ultimately the plan becomes a common reference point that expresses the goals, responsibilities and commitment of the community and assures Federal agencies that the funding received will be suitably
spent in the service of a long-term community-based plan of action.\textsuperscript{6}

The two key issues of cultural and economic sustainability highlighted in the previous chapter will be addressed in the community plan proposition by outlining on-reserve community-based employment and economic opportunities and cultural learning endeavours involving the Beausoleil First Nation youth and community at large. Economics refers to how a community sustains itself and more specifically what the people do, how resources are used and what keeps the community thriving. Professor of Entrepreneurship and Management Accounting, Robert B. Anderson describes the Aboriginal approach to economic development as, “a predominantly collective one, centred on the community or \textit{nation} for the purposes of ending dependency through attaining economic self-sufficiency, controlling activities on traditional lands, improving socioeconomic circumstances, and strengthening traditional culture, values and languages.”\textsuperscript{7} For this reason both traditional and new economies are important contributors in developing a proposition for self-reliance. Furthermore, understanding the land, its history, resources and uses was essential for determining the basic opportunities and constraints in developing a community plan. A community is a collection of interests held together by a common history, culture, values, or vision. The community plan proposition is informed by these elements and strives to find a balance between what the community can be and what it wants to be.\textsuperscript{8}

\section*{Ecological Context}

Christian Island is located within the Great Lakes region, an area that supports a diverse range of ecosystems, from tall-grass prairie to deciduous and boreal forest, that benefit from the moderating effects of these large bodies of water. This microclimate offers temperate conditions and fertile soils well suited to agriculture and as such supported a significant pre-contact agrarian culture which consisted
primarily of three staple crops known to the Iroquois or Haudenosaunee people as the *three sisters*: corn, squash and beans. With the arrival of Europeans, potatoes and other root vegetables were added to their repertoire. It is not surprising that within Canada, settlement tended to concentrate in the favourable area near the Great Lakes.\(^9\)

Climatically the area experiences four clearly distinct seasons and more notably extreme variations between long cold winters and hot humid summers with a seasonal swing of 50°C as typical daytime temperatures range from -20°C during the winter to +30°C during the summer. During the transitional spring and fall seasons, daily temperature ranges can also be drastic with daytime highs in the mid-teens and overnight lows near or below freezing. Consequently it is important to take these rapid freeze-thaw cycles into consideration when designing to avoid potential building performance issues. In contrast precipitation is more evenly distributed between seasons with considerable snowfall in winter, heavy thunderstorms in summer and scattered showers in spring and fall.\(^10\)

The annual cycles are beautiful to behold. As the damp cold of late winter wanes the temperatures begin to rise almost suddenly to summer-like conditions and the blanket of snow covering the landscape melts away, the sap begins to run, buds appear on the deciduous trees and the air is filled with bird songs as spring arrives. Summer follows erasing any memory of the long winter with the thick cover of deciduous forests that provide shade from the hot sun, the taste of fresh picked berries and the smell of flowers in bloom. As the weight of heavy humid air builds to a climax providing an ideal climate for plant growth and successful agrarian activity, comfortable living becomes a challenge and people flock to the surrounding lakes en masse to cool down. The shift from summer to fall is signaled by declining temperatures that cause the heat island effect around the major cities and urban sprawls in the region to dissipate and the air to clear. The deciduous forests turn vibrant hues of red, orange and yellow after meeting the crisp fresh air of autumn and soon after their
leaves flutter down to join the earth once more. It is not long before the shortened days, penetrating cold and heavy snowfall of winter creep back and the landscape shifts to a white light-reflecting vista set against a backdrop of stark blue skies and the dark silhouettes of trees veiled by snow.11

Infrastructural Strategies

One strategy for providing a renewable income and employment opportunities is a solar farm located in an existing field accessible from the road leading to Big Sand Bay. Approximately 5240 ground mounted photovoltaic panels, covering around 7 acres of existing deforested land, with a 1.2-megawatt nameplate capacity will produce an estimated 1.9 million kWh each year, which is enough to power 175-200 homes. There are currently 185 permanent residences that exist on Christian Island that could benefit, however, there is also the option to simply sell all energy harvested back to the grid. The system would incorporate a Ray Tracker solar tracking system that rotates the assembly for maximum sun exposure. This would increase the energy captured by up to 25% compared to fixed systems and also reduce the acreage requirements. In addition, employment opportunities present themselves in the form of a maintenance team responsible for cleaning the cells and keeping the grass low around the panels to ensure optimum exposure and collection.12

Another strategy for providing a renewable income and employment opportunities is a wind farm located on the northwest point of Christian Island where at 80 meters above ground level (magl), wind speeds are 7.5-8 m/s, which is considered very good to excellent conditions for generating energy from wind turbines. Standard turbines which are 80 meters to the hub and have three blades each 30 meters long, have an average capacity of 2.5 megawatts will produce an estimated 12.4 million kWh each year, which is enough to power 1000-1300 homes. The area on the island best suited for
wind turbines is capable of hosting a minimum of 30 wind turbines, which would produce enough energy for 30,000–39,000 homes. The best way to proceed with this form of energy generation would be to enter into a 50/50 partnership with a company, such as, Northland Power, who has already worked with First Nation communities on Manitoulin Island. Possible employment opportunities include turbine commissioner, construction labourer and wind technician.

A third strategy for providing a renewable income and employment opportunities is horse logging, a traditional method of extracting timber using horses as the *base machine*. It allows easy access to trees and means less manual dragging and stacking in addition to causing less damage to the woodland floor and residual crop. A wide range of options are available from simple skidding with a single tree and chain to a horse drawn forwarder with grapple loader. Due to the environmental benefits horse logging fits in well with woodland management, natural regeneration and wildlife habitat renewal by avoiding damage to standing trees and helping with the regeneration process by lightly scarifying the woodland floor to promote regrowth. Furthermore, the benefits are extensive and the process is environmentally friendly causing minimal ground damage, generating minor noise, creating no pollution and operable in normally inaccessible areas. Applications include first and second thinnings, yarding to a track or ride for secondary extraction, removing windblown trees, harvesting on sensitive sites, steep, impractical areas and sites close to rivers and streams.

The trees removed from the forest would then be milled into lumber for community building and sale in a new lumber warehouse. Additionally, logging and mill residues, such as damaged trees, limbs and tops of trees, sawdust, trimmings, bark, and so on, could be sold as biomass for use in a new community district heating system or for household biomass boilers. Based on a 20-year maturity length, which is common for the dominant tree species on the island, a 20-year rotation of the land has been explored for the purposes of this
strategy. By dividing Christian Island into five areas of approximately 2000 acres that could each provide energy to 320-365 homes for a four-year period, when the 20-year rotation was complete the first area selectively harvested will have reached maturity once more. This forest management strategy could not only ensure the healthy maintenance of the land but also provide building materials, an energy source and employment opportunities in horse logging, the sawmill, the lumber shop and the renewable energy biomass industry.16

Cultural Re-Creation(al) Strategies

The first strategy is to develop an agricultural component, which although a larger endeavor than the horticultural practices of the Anishinabe, it would help create a sustainable, organic food source for the entire community as well as employment opportunities. Raising sheep, chickens and pigs would provide the community with local, organic, meat and eggs, as well as wool for yarn and blankets or for sale to wool mills and spinners. Growing fruit and vegetables would provide local, organic produce and preserves that could be sold at a new community market. If two existing cleared areas on the island totaling 30 acres are used, approximately 320 people could be fed and members of the community employed. Perhaps more importantly, culturally significant plants such as sweet grass, cedar, sage and tobacco would be grown to aid in the renewal of traditions and ceremonies in addition to reviving the Anishinabe practice of making maple syrup and strawberry juice.

Another strategy is eco-tourism, which has been adopted by many First Nations communities and proven successful when developed and managed by the community itself. It would be essential that the community determine which activities would enhance village life, contribute to cultural growth and be largely if not entirely sustained by the community members themselves. Potential activities on Hope and Beckwith Island include angling and down-rigging for bass,

Fig. 9.6 - After trees are milled into lumber all residue can be used as biomass.

Fig. 9.7 - Tapping the trees in spring to collect sap for maple syrup.
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Fig. 9.8 - Harvest schedule for vegetables, sacred plants, fruit and livestock.

Fig. 9.9 & 9.10 - Cedar.

Fig. 9.11 + 9.12 - Strawberries.

Fig. 9.13 + 9.14 - Sage.
Fig. 9.15 - Agriculture developed on existing cleared areas creating a sustainable, organic food source for the entire Beausoleil First Nation community.

Fig. 9.16 + 9.17 - Tobacco.

Fig. 9.18 + 9.19 - Sweetgrass.

Fig. 9.20 + 9.21 - Maple syrup.
salmon, pickerel, trout and whitefish as well as camping. In addition to the existing 184 cottages on the northern shore and 105 cottages on the southern shore for which the Beausoleil First Nation leases the land, Christian Island could host water sports in the summer such as sailing, parasailing, canoeing, kayaking and swimming and alternatively cross-country skiing, snowshoeing and ice fishing in the winter. All islands could offer hiking trails, bird watching and access to specific beaches. There is great potential for the Beausoleil First Nation to become a recreational hub, feeding off the existing natural landscape and neighbouring provincial and federal parks if they so desired. A rental shop would ideally be constructed to provide visitors with the information, equipment and guides necessary to engage in all the recreational activities that Christian Island would offer. Trail systems would be further developed and maps as well as signage added to control site disturbance and protect any sensitive ecosystems. Finally a new dock catering to visiting boaters would be built adjacent to the existing ferry dock to feed into the existing Georgian Bay network.

A third strategy is historical-tourism as there are three distinct historical sites in addition to five others and seven standing heritage structures that exist on the Beausoleil First Nations islands. The earliest is the Sainte Marie II fort, a National Historic Site of Canada, located on the southern shore of Christian Island. It was constructed in June 1649 following the destruction of the former Jesuit mission of Sainte-Marie Among the Hurons and abandoned the following summer. All that remains today are low-lying cobble walls, evidence of an adjacent Huron village and an unused Huron burial site. Together this is one of the most significant archaeological and early historical sites in Ontario due to its importance in Canada’s early history, the destruction of the Huron confederacy and its connection and proximity to Sainte-Marie Among the Hurons, one of the most successful heritage attractions in the province. The two other distinct historical sites are a limestone lighthouse, capped with a cast iron lantern, on the southern tip of Christian Island constructed in 1857 and a wood lighthouse on the
northeastern point of Hope Island constructed in 1884 - both by
John Brown, a Scottish-born stonemason.18

An additional strategy is marine-tourism as Georgian Bay marine
history goes back to the 17th century explorations of Samuel de
Champlain and the 19th century merchants sailing ships and
continues right up to this day. Many lives have been lost, tempted by
the crystal clear water only to find rugged islands, gale force winds
and hidden shoals. It is part of the folklore of the area and an eerie
spectacle for those above and below the water to gaze upon the history
frozen in time in the cold water of Georgian Bay. There are twelve
shipwrecks in the vicinity and four specifically on the shores of the
Beausoleil First Nations islands, which already draw scuba divers,
marine enthusiasts and boaters to the area. The Mapledawn was
stranded in 1924 in a blinding snowstorm on Christian Island. The
three other shipwrecks are scattered along the northern points of
Hope Island. The Marquette met its demise in an 1867 storm. It was
known as the Hope Island Mystery Wreck until divers located it in
1975. The Lottie Wolf was run aground after hitting a rock in 1891.
The Michigan was blown into the shallows by high winds in 1943.19
Furthermore, the Anishinabe traditionally used canoes for water
transportation and as such developed extensive water and portage
routes, many of which are still used today by recreational canoeists in
the Georgian Bay area.

Both these histories would connect to the existing network of
marine-tourism, recreation and education. Possible economic and
employment opportunities exist in operating a diver training facility
on one of the shallow water shores which could include an air fill
station and recompression chamber, access to a full service charter
boats to the dive sites and a dive store. Additionally, a glass bottom
boat similar to the one operating in the Fathom Five National Marine
Park would provide a popular means for non-divers to view shallow
wrecks, geological formations and marine life. Land-based aquariums
are another option to provide an opportunity to examine marine

Fig. 9.24 - Christian Island lighthouse and light keeper house ruins in 2011.
Fig. 9.25 - The Mapledawn shipwreck explored by a scuba diver in 2009.
Fig. 9.26 - Proximity of Christian Island to major parks and connection to the major highway route loop that connects them, makes eco-tourism a viable option for the community drawing on existing access and tourist market.
Fig. 9.27 - Proximity of Christian Island to shipwrecks and historical sites as well as local high schools reveals the potential for marine and historic tourism as well as educational programs. Most notable is the distance between the island and the high schools the Beausoleil First Nation youth currently attend. While reasonable for day trips, field trips or vacations, it is unrealistic in combination with the ferry ride for a day-to-day school schedule, thus forcing the students to board for at the winter months.
life up close and act as a teaching lab for the study of fresh water marine life for high school and university students. Lighthouses are also an important element in marine history and the two located on Christian Island and Hope Island could be utilized to house displays on the marine history of the area including the construction and use of the Anishinabe canoe.20

A fifth strategy is environmental education, research and conservation. The islands of the Great Lakes region have always been important to Aboriginal people for they are embedded with spiritual significance and historically provided the resources for their survival. Today this area is part of a tourism and recreational network that highlights the beautiful landscape of the world’s largest collection of freshwater islands and the significant biological diversity they contain. They are important breeding and staging areas for colonial nesting waterbirds, harbour noteworthy assemblages of plants and animals and provide important stopover sites for migrating birds.21 The Beausoleil First Nation already started a naturalist club in 2011 and so the next step could be a conservation centre where community members could record and document the sightings of birds, fish, wildlife, forest insects, disease and natural disturbances which would enable the community to track ecosystem changes and take the appropriate measures to achieve and maintain a balance. Furthermore wildlife research and displays could also be incorporated to educate the community and visitors. Activities such as bird watching, birdhouse building, environmental seminars and advocacy meetings could be part of the program.

The final strategy and primary focus of the community plan proposition is the development and design of a learning centre that would provide an alternate indigenous high school curriculum based on traditional ecological knowledge and the teachings of the seven grandfathers as well as a community resource to help restore the cultural identity of the Beausoleil First Nation. It becomes quite clear from discussions with community members, attendance at the

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Fig. 9.28 - The ancient dunes are from the postglacial shores of Algonquin and Nipissing era approximately 12,000 and 5000 years ago, respectively.

Fig. 9.29 - Forked Three-Awned “Ice Age” Grass is a species at risk and out of the only 14 locations in Canada it can be found, Christian Island has one of the largest populations. These signs are located on Christian Island.
Island in the Sun Intertribal Powwow and the success of the Cultural Wilderness Program that knowledge and participation in cultural traditions is part of the solution in cultivating the minobimaadiziwin or good life on Christian Island for the Beausoleil First Nation. Ellen Monague remembers, “feeling like there was something missing in my life,” before becoming involved in an Aboriginal organization and, “it was my culture.” The traditional worldview was a holistic vision that encompassed all areas of life including language, belief systems, thinking and behaviors, ecological teachings and a sense of kinship with all creatures and their surrounding environment. Dr. Erica-Irene Daes, Special Rapporteur to the United Nations offers further description of traditional knowledge bases and outlines several key aspects of these foundations of learning. She notes:

The heritage of an indigenous people is not merely a collection of objects, stories and ceremonies, but a complete knowledge system with its own concepts of epistemology, philosophy, and scientific and logical validity. The diverse elements of an indigenous people’s heritage can only be fully learned or understood by means of a pedagogy traditionally employed by these peoples themselves, including apprenticeship, ceremonies and practice. Simply recording words or images fails to capture the whole context and meaning of songs, rituals, arts or scientific and medical wisdom. This also underscores the central role of indigenous people’s own languages, through which each people’s heritage has traditionally been recorded and transmitted from generation to generation.

Learning was also seasonal, with physical learning in the summer and oral learning in the winter. This begins to inform the programming of the learning centre, with wilderness survival and ethnobotany (the native use of indigenous plants) operating during the summer months and story-telling occurring in the winter months. It is important that learning is not confined to the classroom for Cardinal explains that, “The difference between a prefabricated classroom with four walls and nature from which man evolved is immense.” Classrooms
will act as spaces for students, the Beausoleil First Nation and the community at large to learn about Anishinabe culture. A gallery with permanent and temporary displays will provide space to showcase Anishinabe art and artifacts from the past through to the present. Community members are still noted for their artistic craftwork and so the opportunity for people to buy exquisite quill and sweet grass boxes, leather and beadwork, baskets and twig furniture would encourage future generations to learn these skills and keep this tradition from disappearing. “The relationship between the youth and the Elders is critical to the nation-building process. It means the survival of our people, that’s how important and critical it is that we build that really strong foundation,” stated Merle Assance-Beedie, Getzijik advisory council southeast region representative from the Beausoleil First Nation. As such the library and resident Elder meeting space is essential in teaching and guiding the youth and community. Finally a communal gathering space is imperative for the collective sharing, dreaming, learning, singing, dancing, feasting and so on.

This important building will be constructed at the center of the village to play an active role in community life and acting as an orientation centre for visitors. Aboriginal peoples integrate into their self-definition, a different sense of time than is often found in urban centers to the south and a rich amalgamation of natural and man-made history. Furthermore the Anishinabe of Lake Huron and Simcoe have a 315 year old recorded history which is highly distinctive and significant for such a small group and all visitors would be enriched and intrigued by exposure to this community. Oral presentations and gallery exhibits about natural fauna, bird life, herbal medicines, local craft traditions and the history of the Beausoleil First Nation are as important and interesting as the lighthouses and the two-year history of Sainte-Marie II.

Moving forward with the design, I aim to keep in mind Richard Kroeker’s philosophy that, understanding context requires the ability to grasp the imperatives associated with a specific site and its history,
culture, and physical environment. Moreover, by making use of locally available materials, and utilizing and redeveloping indigenous building techniques, the best design response will emerge while producing a functional and appropriate technology that is regionally responsive and sustainable.

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The community plan speculates the many opportunities for cultivating the minobimaadiziwin but it is important to consider how each may be implemented and what challenges may arise.

The solar farm, wind farm and biomass district heating system are large-scale infrastructural projects that require a large amount of capital to initiate, which without further research appears financially out of reach for a small community. However, the province of Ontario has successfully created a domestic renewable energy sector of sufficient size to drive economies of scale and lower prices. In addition to domestic developments, the evolution of the global market has contributed to substantial capital and operating cost reductions.

Furthermore, the Ontario Power Authority manages an Aboriginal Energy Partnerships Program that consists of three key initiatives to support Aboriginal communities considering renewable energy generation projects. The Aboriginal Renewable Energy fund (AREf) assists with some of the initial project development costs associated with First Nation and Métis community renewable energy projects. The Aboriginal Renewable Energy network (AREn) is a web-based source of information relating to conservation and renewable energy development that will continue to evolve based on the needs of and input from Ontario’s Aboriginal communities. The Aboriginal Community Energy Plans (ACEP) program helps Aboriginal communities identify and act upon their local conservation and renewable energy development opportunities.26
The Ontario Power Authority also manages the Ontario Feed-in Tariff (FIT) program that offers cost-based compensation to renewable energy producers, providing price certainty and long-term contracts that help finance these investments. Applications that have Aboriginal community support or ownership are given priority, the regulatory process is streamlined to expedite approval, and the communities currently receive an additional $0.75-1.5/kWh generated.27

These renewable energy projects would create economic opportunities that include positive financial returns for the community and local jobs for the community ranging from new manufacturing facilities and direct and indirect jobs that support projects. Understanding that these job may require specialized knowledge or skilled labour, many of the colleges and universities in Ontario have introduced a number of new programs related to the clean energy economy, including: wind turbine technician training, green business management, renewable energies technician training, sustainable energy and building technology, clean and renewable energy engineering technology.28 For eligible Status Indian and Inuit students requiring financial assistance, Aboriginal Affairs and Northern Development of Canada (AANDC) has two funding programs (Post-Secondary Student Support Program and University and College Entrance Preparation Program) that help offset tuition, travel and living expenses.29 Upon commission, the Beausoleil First Nation could enter into a contract with a qualified company to undertake operation and maintenance until community members were educated or trained to assume responsibility.

Looking more specifically at solar farms, they remain well-established, reliable solid-state systems requiring minimal maintenance compared to the rotating machinery of wind farms. They also produce no noise, vibration or pollution, which is favourable from an environmental and cultural standpoint as well as the comfort of the residents. Based on the proposed 1.9 million kWh generated annually and the $0.3575/kWh value for Aboriginal projects with 15-50% equity from the Ontario FIT program, the Beausoleil First Nation would receive
$679,250 in annual revenue. The cost of the arrays, conversion equipment, transformers and all installation for the proposed seven acre solar farm would be approximately $4 million and as such it would take nearly six years to see a return on the investment.

In comparison, wind farms have a more substantial visual impact given their size and the nature of the operating turbines has caused concern for noise pollution and the effects of their movement on bird and bat migratory patterns. Generally, sound assessments are undertaken, often requiring that all turbines meet the 40dBA environmental noise measurement limit for receptors and migratory patterns are mapped and respected when choosing a site. Based on the proposed 327 million kWh generated annually and the $0.1425/kWh value for Aboriginal projects with 15-50% equity from the Ontario FIT program, the Beausoleil First Nation would receive $46,597,500 in annual revenue. The cost of the turbines, transformers, substations, transmission lines, connection station, operations building and all installation for the proposed thirty acre wind farm would be approximately $180 million and as such would take nearly 4 years to see a return on the investment. One key component to the viability of a wind farm for the Beausoleil First Nation is the requirement of three-phase electric power and so the feasibility of connected this system to the islands would need to be further investigated.

In the case of a biomass district heating system, an entire facility and network of pipes is required, however, this approach provides both heat and hot water to the community it serves. A concern for the community may be the air emissions from the facility that will need to install a filtration system to control particulate matter, volatile organic compounds and hazardous air pollutants, which are primarily generated in the drying process of green woodchips. Based on the proposed 3.5 million kWh generated annually and the $0.1455/kWh value for Aboriginal projects with 15-50% equity from the Ontario FIT program, the Beausoleil First Nation would receive $509,000 in annual revenue. The cost of constructing the proposed 0.5mW
biomass boiler plant and installing a network of distribution piping would be approximately $750,000 and as such would take less than 2 years to see a return on the investment.35

Horse logging in contrast is a much simpler system that requires far less capital investment and the specialized skills needed, can be learned quite quickly with a weeklong training course. The working horses are the ultimate low impact ‘base machine’ as they can be used to work with a range of equipment in environmentally sensitive sites or steep and difficult terrain, replacing tractors and heavy machinery for a low capital cost. The fixed overhead and operational costs for horse logging are substantially less when compared to those of mechanical logging, which relies primarily on the economy of scale. The economics of horse logging allow forested properties to be managed cost effectively while meeting, or even exceeding, the landowner’s objectives and expectations. A team can skid up to 3000 board-feet per day.

A team typically consists of two trained logging horses, which can cost $2000-5000 but can work for 15-20 years and three people responsible for saw, animal and equipment operation.36 The daily cost of working an average sized draft horse (including feed, salt, water, vet care and shoeing) is approximately $8/day. Shoeing is the most expensive single cost of horse logging as they require professional shoes with heel caulks and toe plates for added traction.37 Altogether the start-up costs for horse logging that include the trained horses and equipment are less than $10,000.38 While this is a traditional method of logging it is by no means obsolete, in fact there is a growing demand for horse loggers by owners of private forested land, which creates further job opportunities for the Beausoleil First Nation. Hauling modern logging machines to a site is more expensive than pulling a horse trailer and the higher overhead of conventional logging tends to make horse logging very cost-competitive even though it is more labour intensive. Additionally the increasing cost of fuel only adds to the economic appeal of horse logging for forest landowners.39 On average horse loggers in the United States and United Kingdom charge
between $175 and $300 per day for their services. If the community required a new sawmill the initial cost could range from $16 000 to $30 000 depending on the model, however, being portable it would offer flexibility in use. Successful small-scale sawmill businesses can make upwards of $200 per day, in combination with the horse logging could provide a return on the total investment within a year.

Agriculture is the most familiar strategy as it has roots in Anishinabe horticultural practices and proved quite prosperous on Christian Island for the nearly 30 years that the Indian Agent promoted subsistence farming. A concern with this proposal is it may still hold a negative connotation related to the Beausoleil First Nation’s experience with the Department of Indian Affairs management of the community. Extrapolating from a five acre farm plan, the thirty acre proposal would include: eighteen acres of market garden, six acres cover cropping area, six acre pasture area for raising chickens and pigs, a 4000 square-foot greenhouse for starting transplants and growing early crops, assorted fruit trees, and 20 beehives to help with garden pollination and produce honey. The minimum basic equipment needed to efficiently manage the proposal would include: a diesel tractor and loader in the 40-45hp range, spader with power harrow, bed shaper and drip tape, transplanter, rotary mower, rear-time tiller in the 8-11hp range, walk-in cooler or refrigerated room, pick-up truck, light room for starting plants, honey processing equipment and fencing, feeders, waterers and portable housing for livestock. Ideally the garden area would rotate with the animal grazing plot, which would be planted with forage crops to help with feed costs and the cover crop areas, which should be deep-rooted nitrogen fixing crops like alfalfa, soybeans and clover, to help fertilize the soil.

The cost associate with machinery, labour, fertilizers, seeds and livestock, would be approximately $750/acre per year for a total of $22 500 annually. Potential revenue is based on the Community Supported Agricultural (CSA) model, which has become a popular way for consumers to buy local, seasonal food directly from a farm
through purchased ‘shares’ or a container of seasonal produce and other farm products that they receive each week. This model has proven advantageous for the producer who can market and secure weekly customers during the off-season and better plan in advance for the growing season. With this model in mind, the revenue possible could be as high as $200,000 based on the sale of 180 CSA shares, 1000 chickens, 50 pigs, 1000lbs of honey and all sales from the orchard. Ultimately the focus is providing a sustainable organic food source for the community as the current options are very limited by the very nature of island life, so any revenue would be a bonus.

The conservation centre and eco, historical and marine tourism strategies each require various amounts of capital investment ranging from the relative low cost of self-guided trails, interpretive areas and displays to the higher cost of recreation or dive equipment, tour boats and new buildings. Community funding for tourism in Canada is generally difficult to obtain but not impossible. For example, the Canadian Strategic Infrastructure Fund allocated $4.3 billion to investment categories, that included tourism development, to cover up to 50% of total eligible costs. Aboriginal Affairs and Northern Development of Canada is promoting economic development by strengthening Aboriginal entrepreneurial projects through improved access to capital. In this way, a marine-business that offered diving courses and boat tours could qualify for funding. The National Recreational Trails Coalition received $25 million in funding to build and renew multi-purpose trails for walking, running, cross-country skiing, biking, all-terrain vehicle and snowmobiling. It would be possible for the proposed eco tourism initiative to qualify for funding.

More important than the capital required is whether the Beausoleil First Nation would be interested in or comfortable with inviting the general public into the community on a more frequent or permanent basis, as a tourism strategy would imply. Looking to some of the neighbouring First Nation communities that have embraced and developed similar forms of reveals a successful approach that
combines economic endeavours, recreational activities and cultural, environmental and historical learning opportunities. The Great Spirit Circle Trail (a joint collaboration of the seven First Nations on Manitoulin Island in Georgian Bay) operates on a much larger scale offering summer camps, adventure packages, wilderness tours, art galleries, museums, shops and ‘Authentic Aboriginal Experiences’ that exhibit the culture and traditions of the Anishinabe people.47 The Nanabush Trails (envisioned by the Georgina Island First Nation in Lake Simcoe) in contrast offers an interpretive centre for learning about the history of the community, the local flora and fauna on the island, the traditions and stories of the Ojibway people in addition to four unique trails that are part of the community’s forest management strategy and showcase an authentic wigwam village that assists in teaching the traditional way of life to community youth.48

While the construction of the learning centre will most definitely require a significant amount of capital it is completely feasible. Each year the Government of Canada invests approximately $1.5 billion in First Nation elementary and secondary school education programming, as well as approximately $200 million annually in First Nation school infrastructure. Since 2006, the government has provided funding through Canada’s Economic Action Plan and the Gas Tax Fund for 263 school projects, including: 33 new schools, 26 major school renovations and/or additions, and 204 other minor school-related projects.49 Since 2011, in Ontario alone, there have been four new schools granted funding ranging from $8 to $25 million with perspective student enrollment from 66-268.50

Following the Crown-First Nations Gathering on January 24, 2012, the Government committed to develop new legislation by September 2014 for First Nation elementary and secondary education that would establish structures and standards to support strong and accountable education systems on reserve and most importantly foster each First Nation community’s right to self-determination. An additional commitment of $175 million was also made to new school projects.51
Fig. 9.30 - Summary of strategies presented, illustrating proposed location of each and associated jobs created and annual revenue (after initial implementation costs).
<table>
<thead>
<tr>
<th>PROPOSED LOCATIONS:</th>
<th>CALCULATION:</th>
<th>ESTIMATED JOBS + REVENUE:</th>
<th>EXISTING LOCATIONS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>20 + 10 acres @ 8 people/acre = 320 people fed</td>
<td>$200 000</td>
<td>Historical Sites</td>
</tr>
<tr>
<td>Farmers’ Market</td>
<td>180 CSA shares 1000 chickens, 50 pigs 1000 lbs honey</td>
<td>N/A</td>
<td>Shipwrecks</td>
</tr>
<tr>
<td>Maple Syrup Production</td>
<td></td>
<td></td>
<td>Parks</td>
</tr>
<tr>
<td>Horse Logging (land rotations)</td>
<td>500 acres/year</td>
<td>$44 000</td>
<td>Cottages</td>
</tr>
<tr>
<td>Sawmill + Lumber Store</td>
<td></td>
<td>$38 000</td>
<td>Beaches</td>
</tr>
<tr>
<td>Biomass</td>
<td>500 acres/year = 0.5 mW capacity = 3.5 million kWh = 320-365 homes</td>
<td>$509 000</td>
<td></td>
</tr>
<tr>
<td>Wind Power</td>
<td>30 mills (on 30 acres) = 60 mW capacity = 374 million kWh = 30000-39000 homes</td>
<td>$46 600 000</td>
<td></td>
</tr>
<tr>
<td>Solar Power</td>
<td>x 5240 panels (7 acres) = 1.2 mW capacity = 1.9 million kWh = 200-300 homes</td>
<td>$680 000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong>:</td>
<td><strong>28 +</strong></td>
<td><strong>$48 071 000</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Not accounting for initial implementation costs or Beausoleil First Nation worker wages.
We are all indigenous peoples of this Earth, and we need to come together in our original identities to nurture our relationships together in respectful and meaningful ways. Out of that encounter arises authentic and beautiful architectural expression.

- Dr. William Woodworth, B.Arch., Ph.D. Raweno:kwas “he dips the words”, Mohawk, Six Nations of the Grand River
Design Statement

Once European settlers and missionaries arrived on Turtle Island and began to impose their worldview, Aboriginal communities had increasingly limited opportunities to design and construct their own indigenous architecture as traditional dwellings gave way to the one-room log cabin and later the small wood frame house. Since the establishment of the reserve system they have generally been forced to make do with low-cost government housing and community projects proposed by government-selected designers that encouraged assimilation rather than reflecting an Aboriginal worldview. Coercive government policy used to determine identity, but today it is the right of Aboriginal people to determine how much acculturation is acceptable, when and how to assimilate, if ever, and what message their buildings convey. Anishinabek Elder, Art Solomon, spoke about the process of moving forward:

Native people feel they have lost something and they want it back. It doesn’t necessarily mean that when I talk about going back over there, that we stay over there. You have to get those teachings and pick up those things that we left along the way. The drums, the language, the songs are all scattered around. We need to bring them into this time. You need these things to teach your children today in order to give them that direction and good feelings about who they are. They need to know where they are going. It doesn’t mean we have to go back to living in teepees. You can be a traditionalist and be comfortable wherever you are.2

There is a certain tendency to confuse the ancient with the authentic, as though only traditional culture could represent Aboriginal people. According to architectural historian Carol Krinsky the result has been a “resurgence of half-remembered...preconquest mythology, beliefs, and rituals” modified for modern life by “political considerations, contaminated by exploitive factions, and diluted by invented or
During the last forty years a widespread movement of cultural regeneration has occurred, with Aboriginal groups across the country commissioning culturally appropriate buildings and many strategies for developing contemporary Aboriginal architecture have been implemented. Some architects have responded by applying ornament based on tribal art to suggest Aboriginal possession of a building and pride in it. In many instances this is a result of budgetary constraints but in some cases members of certain First Nation communities would prefer to live outwardly as the Euro-Canadian majority does, “feeling that the Native way should be manifested comprehensively in private.” Other architects assume that Aboriginal clients want to replicate older forms or abstract traditional architecture for a more inventive building. Most solutions, however, are either the diagram or zoomorphic approach. Diagram buildings tend to be a circle, representing the circle of life, medicine wheel, wind rose or cosmos. Zoomorphic shapes tend to take on the form of birds, serpents, or turtles, which are important in Aboriginal narratives.

The building must support personal and group values important to the Beausoleil First Nation community, such as reverence for nature and the Great Spirit, orientation and relationship with landscape features of the site, passive heating and cooling and cosmology. Most importantly the design process should be communal with the architect learning from the community, translating traditional structures, customs and values into an architectural form that retains these sacred meanings, strengthening the people today and promising to do so in the future.

Winston Churchill stated in 1943 that, “We shape our buildings, and then they shape us.” The design proposal for the Beausoleil First Nation community must embrace the idea that architecture is a tangible expression of a way of life, in order to provide strategies and buildings that will enable the community to flourish and allow an Aboriginal sensibility to triumph in mainstream culture without borrowed material.”

Fig. 10.4 - Casino Rama is an example of ornament used. In this case murales were painted across the entire facade and flowers planted in symbolic colours.

Fig. 10.5 - Grand Traverse Civic Centre is an example of zoomorphic shapes used. In this case the structure symbolizes a turtle with its thirteen plates to honour the lunar phases and power of women.
compromising inner principles. This modern architecture will turn to ancient forms, adapting them in response to changes to the natural and social environment, and creating a contemporary structure that hearkens to the past. Employing old and new materials and techniques and with an emphasis on harmony and balance the design will aim to successfully meld community needs with tradition.

The learning centre will be to the people, much more than a name or a building, but a positive force in maintaining and developing a strong Anishinabek cultural identity on Christian Island for the Beausoleil First Nation. Many traditions are near extinction or live only in the memories of the oldest members of the community. As such the ultimate goal is the development of an alternate high school and community resource building, which is spiritually centred, culturally driven and based on holistic learning for the continuation of an Anishinabek way of life. The learning centre will aid in the revival of Traditional Ecological Knowledge and the renaissance of Aboriginal philosophy and worldview. This is best expressed in the vision described by The Native Canadian Centre of Toronto:

Our Native way has always given us life. On the foundation of this belief we can and will build a strong and healthy Native community. For the people who come from the four directions of our Nation we will make a good centre. And from this place, we will create the means to reach out to the people, to mend the hurt, lift the broken, to free the imprisoned – body, mind, and spirit, to challenge the young, to strengthen the families, to respect the Elders, past, present and future. We will do this by honouring the Native way of life through commitment to self-determination, through striving for a life of quality, and by moving toward the empowerment of community.

It is important that the new structure is in tune with the environment and local geography. As such the building aims to be part of nature and flow out of the land, with the landscape weaving in and out so
that even in the harshness of winter the occupants are not deprived of their closeness with the natural world. Furthermore, choosing local materials and native plant species and working with nature to develop the most efficient heating and cooling systems is an essential imperative.

The learning centre will be the most significant resource and largest community building. As such, the school program will be a hybrid of communal and educational spaces. In addition the learning centre will employ a diverse group of qualified community members. It is proposed that a community manager organizes the construction process and the building itself is primarily built by community members and used as a training program in construction.

Translation

The learning centre is situated on the southern shore of Christian Island amongst a forest of towering pines in the centre of the village, open to the water on the south, visually connected to the ferry dock and embraced by key public buildings in the community. Envisioning the learning centre as the nucleus and spirit, this area becomes the vital and dynamic centre of the community with educational, cultural and recreational facilities all within walking distance and within view, culminating in the interaction of people, the exchange of ideas and the development of the mind and body. Acknowledging that learning is a life-long process the building is a community resource providing learning opportunities and space use to the entire community when not conflicting with the alternative high school program. Given the incorporation of Aboriginal studies in the primary and secondary school curriculum there is tremendous potential for cross-cultural learning by offering educational opportunities for visitors as well in the form of classes or an interpretive centre.

Design of the learning centre began with diagramming current site...
features and further layering the cultural teachings and environmental design conditions associated with each of the four cardinal directions and the axis mundi. This process revealed a series of parameters for both the construction of the building and the organization of program.

Environmentally: the north-west is protected from the cold prevailing winter winds; the north is ideal for clerestory windows as it provides indirect light; the east and west have minimal glazing as the sun angles are difficult to mediate; the south avoids direct sunlight during hot summer months but maximizes and stores solar gain during the cold winter months. As a result of being located in the Great Lakes region, which experiences extreme temperature swings of 50°C between long cold winters and hot humid summers, insulation is extremely important for all directions to maintain occupant comfort and minimize energy use.

Culturally: the East represents fire and new beginnings expressed by the rising sun and as such is the place for the fire keeper lounge and main entry; the South represents youth, growth and water and as such is the place for learning spaces, teaching gardens and a connection to Georgian Bay; the West represents adults and physical wellbeing and as such is the place for the staff area, medicine wheel, medicinal gardens and wilderness teachings; the North represents wisdom and as such is the place for the resident Elder, library and media centre; the axis mundi represents the centre of the world or the connection between the earth and sky and as such is the place for a communal sacred space and astrological terrace.

As the circle is an important symbol representing harmony in Aboriginal culture and divine proportion in European culture, this perfect geometry is used as an additional guiding layer that underlies the plan revealing the vesica piscis, a place of transition, transformation and balance, at its intersections. Circulation in the building strives to reflect the transformational movement in Anishinabek culture that

![Fig. 10.7- A custom carpet designed by Wright based on his cover for Liberty magazine illustrating the vesica piscis revealed by overlapping circles.](image-url)
traditionally began in the East following the path of the sun in a clockwise direction and is still practiced today at powwows and other important ceremonies. Rooms are designed to be open-concept where appropriate and organized around a circular corridor to avoid any social or spatial hierarchy and respect the educational philosophies of the Anishinabek culture. The corridor also acts as a gallery, displaying artwork and artifacts from the Beausoleil First Nation community both past and present.

The difference between a typical rectilinear classroom with four walls and the natural setting from which Anishinabe people learned is immense. For this reason the learning spaces are domical in form, referencing traditional learning environments and are envisioned with flexible ground seating that connects the occupants to the earth and encourages dialogue between students and teachers by removing any sense of hierarchy. Classes could focus on Traditional Ecological Knowledge and its application to subsistence living and natural resource management, Aboriginal art, music, architecture and languages as expressions of a worldview and culture, Aboriginal beliefs, values, aspirations, voices and visionaries in contemporary society, or perhaps more specific courses related to cosmology, astrology or ethnobotany – the study of indigenous plant use. Furthermore, each learning space opens onto a collective veranda, shaded in the summer by the vine covered wooden arms of a trellis that embraces the south façade reaching out toward the teaching gardens and bay beyond. This creates an active and permeable edge condition that modifies or captures the sun depending on the season, sheds the rain, provides a sense of shelter and transitions between the built form and the natural world.

Following the veranda or gallery corridor to the west reveals through the towering pines, a medicinal garden, medicine wheel and wilderness teaching area that connects the learning spaces to the Elder residence and communal sacred space. From here an exterior curved ramp peels away from the earth floating through the trees to
an astrological terrace connecting the community to the sky, the sun, the moon and the stars.

Accessible from the terrace, are the library and media centre, high up in the trees veiled by the greenery providing beautiful views of the forest and ideal indirect light via clerestory windows. Since the funding for these resources can be limited, the library and media centre will be part of a collective system, thus offering numerous services, materials, programs and books, that would be otherwise unattainable by sharing resources.

A curved stair leads back down to the main entry and atrium that acts as both interior crush space and a visitor centre, displaying larger artifacts and artwork as well as a community bulletin board for posting items of interest, issues and activities. Also connected to the atrium is the reception and kitchen area used for storage and preparation of indoor and outdoor community events and feasts to the south as well as services, the fire keeper lounge and Elder residence to the north.

The fire keeper has a very important role in the learning centre as they are responsible for tending the sacred fire. During this time they must remain focused and pray for the people involved in the ceremony. Depending on the ceremony for which it was lit, the fire keeper may need to keep the fire burning for a long period of time and in this case would rotate with another fire keeper. When not tending to a sacred fire they teach the community about its uses, significance and traditional practices such as offerings and smudging.

Adjacent to the fire keeper lounge is the Elder residence. From the Elder the community seeks guidance, learns the unrecorded history of their ancestors, recovers the Anishinabek language, gleans indigenous knowledge, practices traditional ceremonies and becomes familiar with the spiritual and material cultural of the Anishinabe people. In exchange the community provides and cares for the resident Elder. The sacred books of the Beausoleil First Nation are written in the

Fig. 10.10 - South veranda and classroom gardens inspired by Seabird Island School (Parkau Architects)

Fig. 10.11- Exterior ramp through the trees leading to astrological terrace inspired by A Path in the Forest (Tetsuo Kondo)
At the heart of the building is the communal sacred space rooted in the earth, centred around a sacred fire and open to the elements with an oculus that connects the occupants to the sky, evocative of the traditional wigwam, sweat lodge and shaking tent structures that were places of communal learning, spiritual renewal and dreaming. Community gatherings, prayers, feasts, drumming, dancing, storytelling and ceremonies also occur in this space. Dreaming is essential as it is the realm of myth and inspiration, described by Highwater as, “the time in which creation takes place, in which the ineffable continuum of nature flickers brightly. It is the reverberation of first things in which the cosmos makes its most ancient drummings.”

Storytelling is equally important, as it is intrinsic to the intergenerational transmission of Indigenous knowledge. Furthermore, Annis May Timpson argues in First Nations, First Thoughts: The Impact of Indigenous Thought in Canada, that these oral traditions can be used to, “mitigate the impact and damage of colonialism by enabling Aboriginal peoples to question research methodologies, reframe historical knowledge, challenge dominant ideas, and above all, develop agency.”

Understanding the significance of some of these traditional activities reveals the inherent importance of this sacred space.

Technology extends far back into the history of architecture, with the word rooted in the Greek *techne* meaning art, skill, craft and *logos* meaning knowledge, which evokes an intellectual, analytical and even exploratory approach to construction. In this way it is important for the architecture of the building to be tectonic making an art of the assembly, the materials and the spaces formed rather than relying on applied ornament for beauty or cultural identity. Traditional Anishinabek structures developed from bent saplings being lashed together to create a distinctive material and architectural culture that endured for many centuries before colonialism. With the intention of community involvement in the construction as an educational
and training opportunity as well as the importance of referencing traditional vernacular and using local, sustainable materials, a variety of structural technologies and natural resources were investigated and chosen based on environmental merit, cultural significance and skill required.

Stack-wall construction involves using short cut logs, stacked like cordwood, filled with sawdust and sealed with mortar. It permits the use of small-dimension logs not otherwise useful, which could be sourced locally and provides excellent insulation values but walls thick are thick and unwieldy. A major benefit is it does not require a general contractor, crane or specialized skills, allowing a community to take control of their own construction. Stackwall construction has been selected for the exterior corridor wall, which looks onto a treed courtyard that embraces the communal sacred space. Differentiating the circulation space accentuates the architectural form and material quality of the adjacent program. From a practical standpoint, this area needed to be durable as it will experience the most traffic and as a gallery space required a resilient wall condition to allow flexibility in changing displays, which this wood base provides.

Bent pole construction involves the use of round wood thinnings taken from softwood plantation forests and can take many forms. Architect Richard Kroeker has developed a curved truss system as used in the Pictou Landing Health Centre and architect John McMinn has explored this construction method through design studios that resulted in a gothic inspired structural roof system for the East Highlands Community Hall and a tree inspired canopy system at the University of Toronto. In contrast to milled timber, where the grain is cut thus greatly reducing its structural capacity, these poles contain fibres all running in the same direction, with those wrapping the perimeter supplying the strength to bend. Generally these thinnings are used for low grade, low value purposes such as pulp, paper or firewood, however, the vast quantity produced across the country, coupled with the economic and structural potential offered, provides
a largely untapped resource to be explored. Bent pole construction lends itself to achieving a vaulted roof system for the main structure, which in combination with the primary wall system recalls an indigenous vernacular.

Straw bale construction involves using bales of straw (an agricultural by-product of cereal grains such as wheat, oats, barley, rye and rice) as structural elements, building insulation or both and is typically sealed with a thick plaster finish. When plastered they provide moisture, fire and pest control. Issues can arise when not properly sealed making them susceptible to rot, insurance can be difficult to obtain and walls are unavoidably thick due to the standard dimensions of the bales. Advantages are numerous including its renewable nature, relatively low-cost, high insulation values, ability to be sourced locally or even grown on Christian Island, can easily form curved walls and do not require specialized skills as they are flexible and quite forgiving. The plaster applied by hand to the interior walls, will record the memories of the community members and help to stabilize humidity levels in the building. As such, after much consideration, straw bale construction has been chosen for the primary wall system based on its high insulation values, organic forms, straightforward construction, low-cost and material availability.

Small-dimension gridshell construction involves layers of timber lath woven into a grid or mesh that is connected and secured at the nodes and made rigid with wood decking once in place. Laths are typically scarf-jointed on site to remove any defects and produce longer sections. There are generally no structural limitations with regards to scale as proven by architect Frei Otto and engineering firm Buro Happold who together spanned distances of up to 80m with members no larger than 50mm². This method of construction requires specialized skills, but with guidance and training from an on-site experienced carpenter a grid-shell can be successfully erected by the community as is evidenced by the Goethean Science Centre, the Weald and Downland Open Air Museum and the Hooke Park.
Workshop. Small-dimension gridshell construction is used for the communal sacred space as its architectural language and structural technology mirrors the traditional vernacular of the Anishinabe. The design of the circular wood dome is a perfect geometry based on the sacred numbers, four and seven, which are intrinsic to Anishinabe culture. There are seven fires, prophecies and teachings as well as four seasons, directions, sacred plants, stages of life, elements and so on. The circular floor plan is 16m x 8m (both multiples of four) with a circumference of 49m (a multiple of 7). The grid shell is composed of 16 lath rings intersected by 32 lath arches resulting in 64 connections to the earth spaced at 0.8m o.c. (all multiples of four).

Earthen floor construction typically involves pouring a mixture of clay, sand and fibres onto a subfloor of tamped gravel, cob, adobe or concrete and then sealed with a drying oil. It benefits from being a durable low-cost finish composed primarily of natural materials that can be installed over nearly any subfloor in a variety of colours and textures. Additionally the flooring integrates well with in-floor radiant heating and can act as a thermal mass. Earthen floors are, however, labour intensive, but only require little training. An earthen floor with radiant heating was a clear choice when considering the traditional connection to Mother Earth beautifully described by author Luther Standing Bear in Land of the Spotted Eagle:

The people came literally to love the soil and they sat or reclined on the ground with a feeling of being close to a mothering power. It was good for the skin to touch the earth and the people liked to remove their moccasins and walk with bare feet on the sacred Earth. Their [dwellings] were built upon the earth and their altars were made of earth. The birds that flew into the air came to rest upon the earth and it was the final abiding place of all things that lived and grew. The soil was soothing, strengthening, cleansing and healing.11

Cedar cladding can provide a variety of façade treatments using
shingles, overlapping horizontal or vertical boards, panels, sheets and jointed horizontal or vertical boards. Cedar is a renewable resource, naturally resistant to moisture and decay, lightweight, easy to work with and can be locally sourced. Important to note is due to its natural preservatives, it will have a corrosive effect on some metals and so stainless steel, aluminum or brass is advised. The primary reason for selecting cedar cladding is that it can be left untreated and depending on the orientation and exposure to the elements it will weather to shades ranging from silver grey to reddish brown, enriching and exaggerating the façade and blending with a natural site. Additionally, the application can be evocative of the bark and grass mats traditional used to clad Anishinabek structures.

Respecting the antipathy of the Beausoleil First Nation community toward the orthogonal architecture commonly associated with repression, the culturally sensitive physical contours, aesthetic sensibilities, organization, circulation and program of the proposed building are achieved through a process that blends traditional and contemporary vernacular, man-made and natural materials, modern technology and traditional ecological knowledge, and spiritual and community visions that tells a story of what the learning centre can be.

Further connecting the Learning Centre to the community is a spiritual path that aligns the centre of the powwow grounds, Elder residence, communal sacred space, shoreline offering fire and still point of the water along its axis. In this way the existing ferry dock and connected main artery become the path of the visitor with the threshold marked by two posts symbolic of the ceremonial staff which will represent the stature and honor of the Beausoleil First Nation. Another more subtle axis, guiding the location of the Learning Centre’s main entry and its connection to the community, aligns the building with the other key sources for learning: Ste. Marie II, elementary school, Elder centre as well as chief and council building.
Vision

Here the Beausoleil First Nation community will share their dreams, re-establish their roots and identity, learn from their rich culture, participate in ceremonies, heal together, gather strength, and celebrate accomplishments.
Fig. 10.22 (Opposite) - Community diagram 1:2500 illustrating location of Learning Centre at the heart of the village, open to the water on the south, visually connected to the ferry dock and embraced by key community buildings.

Fig. 10.23 (Above) - Community buildings illustrating the architectural influence of European settlers and coercive government policy.

- Residential Buildings
- Public Buildings
- Ferry Path
- Winter Road
Fig. 10.24 - Site diagram of natural conditions
Fig. 10.25 - Design diagram illustrating cultural teachings and environmental considerations associated with each of the four directions that reveal parameters for both the construction of the building and organization of the program.
Fig. 10.26 - Axis diagram 1:5500
1 Spiritual path
2 Still point - water
3 Offering - fire
4 Still point - earth
5 Connection - sky
6 Threshold - staff
7 Visitor portal

Fig. 10.27 - Site plan 1:2500
Fig. 10.28 - Ground plan 1:400
Ground Plan:
1. Main Entry
2. Atrium
3. Reception + Coordinator Office
4. Learning Rooms
5. Gallery Corridor
6. Teaching Gardens
7. Spiritual Path
8. Veranda
9. Staff Room
10. Medicinal Garden
11. Astrological Ramp
12. Elder Residence
13. Fire Keeper Office
14. Service Rooms
15. Janitor Closet
16. Washrooms
17. Coat Room
18. Elevator Room
19. Communal Space

Upper Plan:
20. Reading Room
21. Meeting Room
22. Storage
23. BF Washroom
24. Printer Station
25. Media Centre
26. Work Area
27. Circulation Desk
28. Librarian Office
29. Astrological Terrace
30. Roof Garden

Fig. 10.29 - Upper plan 1:400
Fig. 10.30 - Circulation diagrams

Fig. 10.31 - Daylight diagram
Fig. 10.32 - North-south section.
Fig. 10.33 - View from waterfront of Learning Centre and sacred path

Holistic Community Plan for the Beausoleil First Nation
Fig. 10.34 - Learning spaces looking out to the teaching gardens, sacred path and waterfront
Fig. 10.35 - Elder teaching in medicinal garden with view to astrological terrace ramp and exterior of sacred communal space
Fig. 10.36 - Library fire place reading room and media centre
Fig. 10.17 - Communal sacred space with view towards opening to sky
Fig. 10.38 - Elder teaching in medicinal garden with view to astrological terrace ramp and exterior of sacred communal space
Fig. 10.39 - Detail key for south wing
Fig. 10.40 - Detail A - Footing

- Poured concrete footing and foundation wall
- Liquid applied dampproofing
- 100 mm XPS rigid insulation
- 10 mm drainage mat
- Back fill
- Granular fill for drainage
  200 mm dia. weeping tile
Fig. 10.41 - Detail B - Window still to straw bale to slab + footing

copper sheet lapped and sealed
19 mm osb
fill cavity with polyurethane
closed cell spray foam
wood blocking
notched straw bale
25 mm plaster finish

25 mm plaster finish on wire
mesh w/integrated flashing
2-string straw bale compressed
by 9-gauge galvanized wire
straps tensioned between the
sill plate and foundation wall
at 1200 mm o.c.
38 x 89 mm base filled w/
vermiculite pumice stone

flagstone walkway
copper protection sheet
10 mm drainage mat
100 mm XPS rigid insulation
liquid applied dampproofing
poured concrete foundation wall
infloor supply air duct
expansion joint

double glazed, argon filled,
thermally broken unit
banana truss

25 mm adobe finish and seal
100 mm adobe floor w/radiant
heating and cooling system
liquid applied dampproofing
100 mm XPS rigid insulation
200 mm sand
400 mm granular
19 x 800 mm vertical cedar siding
#15 felt
19 x 64 mm horizontal pressure
treated firring strips @ 725 mm O.C.
19 x 64 mm vertical firring strips @ 600 O.C.
attached to wood decking with gutter spikes
through 13 x 100 mm pex pipe
6 mm air space
100 mm polyurethane closed cell spray foam
cont. lapped peel-and-stick membrane
38 x 140 mm wood decking
banana truss

pergola connected
to structure by
steel angle
copper sheet
lapped and sealed
19 mm osb
wood blocking
fill cavity with
polyurethane
closed cell
spray foam
38 x 140 mm
wood decking
banana truss
double glazed, argon
filled, thermally
broken unit

Fig. 10.42 - Detail C · Window header to roof
19 x 800 mm vertical cedar siding
#15 felt
19 x 64 mm horizontal pressure treated firring strips @ 725 mm O.C.
19 x 64 mm vertical firring strips @ 600 O.C.
attached to wood decking with gutter spikes through 13 x 100 mm pex pipe
6 mm air space
100 mm polyurethane closed cell spray foam cont. lapped peel-and-stick membrane
38 x 140 mm wood decking
banana truss
Fig. 10.44 - Detail E - Window sill to cordwood wall to slab + footing

25 mm adobe finish and seal
100 mm adobe floor w/radiant
heating and cooling system
liquid applied dampproofing
100 mm XPS rigid insulation
200 mm sand
400 mm granular

double glazed, argon filled,
thermally broken unit
banana truss

copper sheet lapped and sealed
19 mm osb
fill cavity with polyurethane
closed cell spray foam
wood blocking
notched cordwood

stacked 500 mm long cordwood,
w/100 mm wide mortar bands
on the interior and exterior
filled with a saw dust, paper
sludge, newsprint insulation
mixture in between

integrated flashing
copper protection sheet
10 mm drainage mat
100 mm XPS rigid insulation
liquid applied dampproofing
poured concrete foundation wall
expansion joint

LEARNING CENTRE
copper sheet lapped and sealed wood blocking
19 x 800 mm vertical cedar siding
#15 felt
19 x 64 mm horizontal pressure treated firring strips @ 725 mm O.C.
19 x 64 mm vertical firring strips @ 600 O.C. attached to wood decking w/gutter spikes through 13 x 100 mm pex pipe
6 mm air space
100 mm polyurethane closed cell spray foam
cont. lapped peel-and-stick membrane
38 x 140 mm wood decking
25 x 38 mm gridshell lathes
Fig. 10.47 - Detail G - Grid shell wall to slab + footing

25 mm adobe finish and seal
100 mm adobe floor w/radiant heating and cooling system
liquid applied dampproofing
100 mm XPS rigid insulation
200 mm sand
400 mm granular

250 mm dia. infloor air supply duct

19 x 800 mm vertical cedar siding
#15 felt
19 x 64 mm horizontal pressure treated firring strips @ 725 mm O.C.
19 x 64 mm vertical firring strips @ 600 O.C. attached to wood decking w/ gutter spikes through 13 x 100 mm pex pipe
6 mm air space
100 mm polyurethane closed cell spray foam cont. lapped peel-and-stick membrane
38 x 140 mm wood decking
25 x 38 mm gridshell lathes

integrated flashing
copper protection sheet
10 mm drainage mat
100 mm XPS rigid insulation
liquid applied dampproofing
poured concrete foundation wall
expansion joint
Fig. 10.48 - Detail key for north wing
25 mm plaster finish on wire mesh w/integrated flashing at window header. 2-string straw bale compressed by 9-gauge galvanized wire straps tensioned between the roof plate and floor at 1200 mm o.c. on a 38 x 89 mm base filled w/vermiculite pumice stone.

25 mm plaster finish 38 x 235 wood blocking w/batt insulation cavity infill joist hanger.

Copper sheet lapped and sealed 19 mm osb fill cavity with polyurethane closed cell spray foam wood blocking notched straw bale 25 mm plaster finish.

double glazed, argon filled, thermally broken unit.

50 mm concrete slab w/radiant heating and cooling system 19 mm osb 38 x 235 mm wood joist w/batt insulation filled cavity 38 x 140 mm wood decking.

Supply airduct built into book case.

Fig. 10.49 - Detail H - Window header to straw bale wall to floor.
19 x 800 mm vertical cedar siding
#15 felt
19 x 64 mm horizontal pressure treated furring strips @ 725 mm O.C.
19 x 64 mm vertical furring strips @ 600 O.C. attached to wood decking with gutter spikes through 13 x 100 mm pex pipe
6 mm air space
100 mm polyurethane closed cell spray foam cont. lapped peel-and-stick membrane
38 x 140 mm wood decking
banana truss
copper chimney stack
storm collar
roof flashing
roof radiation shield
fire-safe enclosure

Fig. 10.50 - Detail I - Roof to chimney
Fig. 10.51 - Detail J - Roof to straw bale wall

- 19 x 800 mm vertical cedar siding
- #15 felt
- 19 x 64 mm horizontal pressure treated furring strips @ 725 mm O.C.
- 19 x 64 mm vertical furring strips @ 600 O.C. attached to wood decking with gutter spikes through 13 x 100 mm pex pipe
- 6 mm air space
- 100 mm polyurethane closed cell spray foam continuous, lapped peel-and-stick membrane and flashing
- 38 x 140 mm wood decking
- Banana truss

- Roof plate composed of 19 mm osb, 38 x 89 mm blocking, polyurethane closed cell spray foam filled cavity, plywood sheathing
- 2-string straw bale compressed by 9-gauge galvanized wire straps tensioned between the roof plate and foundation wall at 4 foot o.c., wire mesh and 25 mm plaster finish w/ integrated flashing
CONCLUSION
The Beausoleil First Nation faces many challenges associated with island life and the impact of colonialism, however, the inherently beautiful community and the sublime islands they call home are rich with possibility. *Natus • Cultus • Civis*, sought to explore a variety of strategies for cultivating the *minobimaadiziiwin* or good life on Christian Island through a holistic community plan for the Beausoleil First Nation. It was imperative for the proposition to be sustainable, not only in the maintaining of ecological balance but also in the creating of opportunities for economic growth and cultural nourishment that together would empower and sustain the community.

A truly sustainable design needs to resist the phenomenon of universalization prevalent in contemporary society that often fails to coincide with the cultural values of a particular people or place and instead be regionally responsive. In this way, architecture becomes a built connection to the geographic and cultural characteristics of a region and maintains a strong link between people, place and nature. Therefore it was essential to seek a greater understanding of the local vernacular traditions and culture, contextual history and geographic conditions of the region in order to develop an appropriate proposal that aspired to reflect the spirit of the community and ignite the imagination of the Beausoleil First Nation by building on the past, seizing the moment and establishing a collective vision for the future.

Ideally the holistic community plan and learning centre would have been developed in collaboration with the Beausoleil First Nation, however, despite extensive communication with Chief Roland Monague and an agreement to meet on Christian Island to discuss the future of the community, I arrived to find he was absent. I have attempted to contact him since but have yet to receive any further response or explanation. As such I relied on conventional research, the Beausoleil First Nation website and many visits to Christian Island, which led to informal discussions with community members while attending the Island in the Sun Inter-Tribal Powwow, reading and watching videos in the public library, taking the ferry and generally
exploring. While not formally answered, the questions approved by the University of Waterloo Office of Research Ethics helped to focus and frame the proposition.

Since the completion of the proposal, numerous capital projects have been announced by the Economic Development Office on the Beausoleil First Nation website, many of which were part of the strategies outlined in the holistic community plan. Some projects listed are Island Trails, Camping, Golf Course, Interpretive Centre, Pure North Resort, Marina, Hope Island Light Station and Events Centre. In combination with the Beausoleil First Nation Resources Draft, it is evident that the residents recognize the need for a community plan and are committed to fostering their economy, cultivating the Anishinabek culture and protecting their natural resources.

At the heart of Natus • Cultus • Civis is a vision for a sustainable future centered in the potential for a new and authentic regional expression rooted in the knowledge, technologies and traditions of both Aboriginal and Euro-Canadian people. Together these two distinct worldviews and approaches to vernacular offer a rich source of sustainable strategies and dynamic responses to the diverse geographic conditions of Canada that can inform contemporary architecture. Rather than steadfastly resisting or conforming to one or the other, the idea is to find a fresh middle way that would preserve and develop each culture and identity while utilizing the desirable aspects of each in an exchange of knowledge and ideas.

Learning about different worldviews also deepens the understanding of one's own cultural heritage and enriches the global community. It is time things changed and the gulf between these two societies was acknowledged, explored, bridged where possible and accommodated where not. It is essential that Aboriginal and Euro-Canadian people have an open mind and heart, moving forward in a renewed relationship based on reciprocal respect, mutual cultural understanding and accurate perceptions of these two realities. We
must recognize that the future is our common challenge. Perhaps then we can begin to create a new story - one that includes us all.

Reflection

I could not have anticipated just how influential and transformative my first trip to Christian Island was going to be. It started as a search for a site that would be the focus of my thesis studies and after just one day exploring the island and casually speaking with some community members I was both captivated and enamoured.

Reflecting on my experiences visiting Christian Island and what I have learned about the Beausoleil First Nation during the last couple years, I believe the most successful and appropriate approach for creating a self-sustaining holistic community would be to start with small and minimally invasive strategies that respect the community’s traditions and reverence for the environment as well as maintain a positive connection with the natural world.

In this way I advocate horse logging as a source of employment, income and renewable energy that would also fit with their current woodland management plan. Furthermore, it is a low cost start-up making it an economically feasible option for the community; it would allow easy access to the entire tree covered rolling landscape of the island; this process of selectively harvesting also promotes new growth by gently scratching the soil; it is a skill that can be easily and quickly learned; it provides lumber and biomass which could be used within the community for building and fireplaces or pellet stoves in individual buildings respectively.

I would also encourage agriculture as a sustainable source of local, organic food and employment. Additionally, it would minimize the reliance on convenience food or extensive travel to the mainland (which can be difficult during the winter months); it is a low cost
Lastly I support low-impact tourism that focuses on recreational activities as well as cultural, environmental and historical learning opportunities. It would be envisioned as a series of trails highlighting the lighthouse, ice age grass, ancient sand dunes, Ste. Marie II, shipwrecks and most importantly showcase the history, traditions and story of the community; it would tap into the existing eco-tourism and historical landmarks in the area connecting the island to other communities; it would build-on the existing economy provided by the current cottage rentals that bring visitors to the island.

Stepping back after designing the Learning Centre, I reviewed two locally built First Nation buildings to determine if my vision would be well received by the Beausoleil First Nation.

The Beausoleil First Nation Community Centre designed by Teeple Architects in 2006 provides insight into the desires of the community when designing a new building. A democratic design and decision-making process involving the entire community was key. Since the building is the only significant recreation facility on the island, central location was imperative and so it was situated just north of the village adjacent to the existing baseball diamond and sports field. Indigenous knowledge played an important role in the design with the plan based on the medicine wheel and the circle of life. As such, the building is circular in form with each of its four entries located on the cardinal axis. In addition to exercise facilities, basketball and volleyball courts, the centre also houses a senior centre oriented in the west and a youth centre oriented in the east.

The nearby Mnjikaning First Nation Childhood Education Centre also designed by Teeple Architects in 2005 provides additional insights as this community shares both geographic and cultural history with the
Beausoleil First Nation. The design was also informed by traditional knowledge focusing on the easterly axis of the cardinal wheel, as it is an early childhood education facility, with all playrooms facing eastward. The focal point of the building is a ring-shaped playground coloured red, yellow, black and white to represent the circle of life. Another important element in the design was the interior consisted of natural materials, primarily wood and slate.

Given my decision to also locate the Learning Centre at the heart of the community, use the cardinal axis to align the building and medicine wheel to determine the location of the program as well as extensive use of natural locally sourced materials for construction, I feel confident that my design proposal would respect the values of the community.

Since I was unable to formally involve the Beausoleil First Nation in the process of developing a community plan and the design of the Learning Centre, I finish this thesis with the hope that I have conveyed my genuine affection and respect for the people of Christian Island and that if only even in some small way, I have been able to inspire the community.
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APPENDICES
Approved Information Letter:

Dear Chief Roland Monague;

I am a Master of Architecture student engaged in a thesis titled, *A Holistic Community Plan for the Beausoleil First Nation* under the supervision of Associate Professor John McMinn.

The basis of the thesis is regionally responsive design, which means that architecture is responsive to its physical context (climate, geography, material resources) and social context (culture, occupant/community needs, economic and institutional resources). By learning from members of the community about their specific needs, desires, culture and resources, I will be able to propose a community master plan and architectural building component which is both regionally responsive and authentic. The design is a requirement for the completion of my architecture thesis and is thus hypothetical so there are no plans for its implementation. As a member of the Beausoleil First Nation your perspective and insights on the needs of the community and plans for future development would greatly enhance my research and subsequent design proposal. To be clear, I am not requesting a design from the participants, rather their responses to a series of questions, which will aid in the development of the design. There are no benefits to individual participants or to the community concerning the research other than a copy of the thesis, which will be provided to the library after completion.

I would be grateful if you could find time to see meet with me at your convenience to discuss topics of energy, services, economy, government and relationship with neighbouring communities. Additional comments or personal narratives relative to the design that might occur to you would be most welcome.

Participation in this research is voluntary. It will involve an interview of approximately an hour in length to take place in a mutually agreed upon location. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this interview at any time without any negative consequences by advising the researcher. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any theses or reports resulting from this interview, however, with your permission anonymous quotations may be used. Data collected during this interview including audiotapes, notes and electronic data will be encrypted and retained for 0.5 years in a secure location, accessed only by myself. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 226-877-2077 or by email at sdopheid@uwaterloo.ca.

Furthermore, I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. In the event that you have any comments or concerns resulting from your participation in this study, please contact Dr. Maureen Nummelin, the Director, Office of Research Ethics, at 1-519-888-4567, Ext. 36005 or maureen.nummelin@uwaterloo.ca.

I trust you will agree with me that the Beausoleil First Nation community will benefit from a collaborative hypothetical design proposition. Your participation in my thesis will enrich my research base and your insights will enlighten my architectural design overall. It will be my intention to email you once more about a week after you receive this email, to determine your reaction and, I hope, to establish a time and place for our meeting. I very much look forward to speaking with you and thank you in advance for your assistance in this thesis.

Sincerely,

Samantha Dophoide

Approved Interview Questions:

Questions That May Be Answered:

1.0: Energy
1.1 - Has the community investigated alternate methods of energy production?
1.2 - Would the community be interested in wind, solar or biomass energy systems?

2.0: Services
2.1 - Is Native culture par of the island elementary school curriculum?
2.2 - If so how? If not why?
2.3 - What are the benefits and problems with students attending high school off the island?
2.4 - Would the community be interested in an alternate high school or learning centre on the island?
2.5 - If so, what program would the community require? (ie: classes offered, specific rooms)
2.6 - Would the community be interested in an exchange program where students from other Simcoe County schools spent time on the island? (ie: day trips, weekend camping, school term)
2.7 - What other services would the community like to see on the island? (ie: conservation/educational centre)

3.0: Economy
3.1 - What are the current employment opportunities on the island?
3.2 - What are the current employment opportunities off the island?
3.3 - Are there any plans for future employment opportunities on the island?
3.4 - Would the community be interested in Eco, Cultural or Historical Tourism, Horticulture or Agriculture, or a Forest Management system (would provide biomass fuel source, building materials and maintain a healthy forest)?

4.0: Leadership
4.1 - What is the role of the Band Council?
4.2 - What is the role of the Elders?
4.3 - What is the role of the community in decision making?
4.4 - What is the role of the Federal Government in decision making or funding?

5.0: Off-Reserve
5.1 - What is the community’s relationship to neighbouring communities? (ie: Midland or Penetanguishene)
5.2 - What level of isolation from or engagement with neighbouring communities is desired?
5.3 – Is the ferry a long term solution or is a bridge a possibility?

6.0: Architecture
6.1 – Does the community identify with the architecture currently on the island?
6.2 – Would the community be interested in an architecture that reflected the values and traditions of their culture? (ie: material choice, form, room organization, orientation)
6.3 – Are passive heating and cooling strategies for buildings important or of interest to the community?
6.4 – Is it important or of interest for buildings to be constructed using local materials and labour (potentially from the island)?

7.0: Additional
7.1 – Do you have any additional comments, opinions or information you’d like to share?
7.2 – Do you have any stories you’d like to share?
DRAFT

TABLE OF CONTENTS

SECTION 1
BEAUSOLEIL FIRST NATION RESOURCE POLICY
Introduction ........................................................................ Page 5
Vision ............................................................................. Page 5
Mission ............................................................................. Page 5
Guiding Principals .......................................................... Page 5
1) Commitment ............................................................... Page 5
2) Band Membership Consultation ................................. Page 6
3) Traditional and Culture Values .................................. Page 6
4) Forest Diversity ......................................................... Page 6
5) Planning ........................................................................ Page 7
6) Recreation ................................................................. Page 7
7) Health and Safety ....................................................... Page 7
8) Accountability ............................................................ Page 7
9) Forest Research and Education ................................. Page 8

SECTION 2
TIMBER HARVESTING
Part A: Objectives .......................................................... Page 8
Part B: Application Guidelines ........................................ Page 9
Part C: Application Procedure ........................................ Page 9
Part D: Transportation .................................................. Page 10
Part E: Access Roads and Water Crossing ...................... Page 10
Part F: Forest Fire Protection for Logging and Silvicultural Operations ........................................ Page 11
Part G: Boat and Ferry Travel .......................................... Page 11
Part H: Health and Safety .............................................. Page 12
Part I: Environmental Accidents .................................... Page 12
Part J: Monitoring .......................................................... Page 12
Part K: Reporting .......................................................... Page 12
Part L: Private Land Owners .......................................... Page 13
Part M: Compliance for Harvesting ................................. Page 13
Part N: Enforcement Penalties ....................................... Page 14

SECTION 3:
HARVESTING FUELWOOD
Part A: Application Guidelines and Procedures ............... Page 15
Part B: Trail Clearing for Fuelwood ............................... Page 16
Part C: Transportation .................................................. Page 16
Part D: Dues ................................................................... Page 16
Part E: Monitoring and Compliance ............................... Page 16

SECTION 4:
NON-TIMBER FOREST PRODUCTS
Part A: Products Collected for the Use of Sale .................. Page 17
Part B: Applications Guidelines and Procedures ............. Page 17
DRAFT

SECTION 5:
NON-RENEWABLE RESOURCES

Part A: Application Guidelines ........................................ Page 20
Part B: Application Procedures ..................................... Page 20
Part C: Dues ......................................................................... Page 20
Part D: Compliance ............................................................. Page 20
Part E: Enforcement Penalties ........................................... Page 20

SECTION 6:
AGGREGATES

See Schedule A: Form “A” ................................................. Page 21

SECTION 7:
PARKS AND RECREATION

See Schedule A: Form “A” ................................................. Page 21

SECTION 8:
COTTAGE INDUSTRY

See Schedule A: Form “A” ................................................. Page 21

SECTION 9:
FISHERIES INDUSTRY

Information required ......................................................... Page 21

SECTION 10:
PROTECTED AND SCIENTIFIC SITES

PART “A” Research .......................................................... Page 21
PART “B” Area’s of Concern .............................................. Page 22
PART “C” Traditional and Spiritual Values ....................... Page 22

SECTION 11:
WINDMILL INDUSTRY

Information required ......................................................... Page 22

DRAFT

SECTION 12:
FERRY INDUSTRY

Information required ......................................................... Page 22

SECTION 13:
REMEDIES AND ENFORCEMENT

PART “A” Damage by Forest Operations ......................... Page 22
PART “B” Repairs – Band Council Powers ......................... Page 22
PART “C” Costs for Damages and Repair ......................... Page 23
PART “D” Court Powers .................................................... Page 23
PART “E” Compliance with Resource Plans and Agreements .. Page 23
PART “F” Costs for Infrctions ........................................... Page 23

SECTION 14
BEAUSOLEIL FIRST NATION RESOURCE BYLAWS

PART “A” Bylaws ............................................................. Page 23
PART “B” Apply Bylaws ..................................................... Page 23
PART “C” Enforce Bylaws .................................................. Page 23
PART “D” Control of Resources ......................................... Page 23

SCHEDULE “A”

Form “A” Application for Development and Interference ..... Page 24
Form “B” Site Plan ............................................................ Page 25
Form “C” Requirements .................................................. Page 26

SCHEDULE “B”

Form “A” Land Owner Authorization ............................... Page 27
Form “B” Harvesting Contractor Agreement ..................... Page 28
Form “C” Timber Harvesting Terms and Conditions .......... Page 30
Form “D” Special Conditions ........................................... Page 31

SCHEDULE “C”

Form “A” Private Land Authorization (Contract Only) .......... Page 32
Form “B” Fuelwood Plan Authorization ............................. Page 33

SCHEDULE “D”

Form “A” Non-Timber Forest Product Application to Harvest Resources for Use of Sale ................................. Page 34

SCHEDULE “E”

Form “A” Non-Renewable Resources Application to Extract Resources for the Use of Sale ................................. Page 35
SECTION I:

BEAUSOLEIL FIRST NATION RESOURCE POLICIES

INTRODUCTION:
The Beausoleil First Nation Lands and Forestry Departments are responsible for the Sustainable Forest Management on Beausoleil First Nation Territory. The Lands and Forestry Departments responsibilities may also include the harvesting and distribution of wood products to mills. The Lands and Forest Units are accountable to Beausoleil First Nation Chief and Council.

VISION

Our vision is to improve the state of Beausoleil First Nation Resources and to enhance participation and create opportunities for Beausoleil First Nations economic growth.

MISSION

Beausoleil First Nation mission is to nurture and protect while establishing sustainable practices and to increase species diversity on our Lands.

GUIDING PRINCIPLES

1. COMMITMENT

The Beausoleil First Nation will comply with applicable laws, regulations, policies and standards.

Standard:
- Committed to the prevention of pollution
- Continuous improvement of Forest Management Operations and resource related activities
- Ensure Beausoleil First Nation Employees, Contractors and Operators are aware of their responsibilities under the Beausoleil First Nation Resource Document
- Regularly review the Resource Policy and update as required

2. BAND MEMBERSHIP CONSULTATION

Provide opportunities for Community consultation on Forest Management Practices in Beausoleil First Nation Territory.

Standard:
- Facilitate public review and input on the Forest Management Plan and work schedules and respond to comments in a timely fashion
- Effectively communicate Forest Management Practices to the membership

The Beausoleil First Nation will work co-operatively with the Chief and Council and Community Members to identify and implement ways to achieve more participation in the Forest Management Planning for Beausoleil First Nation Lands.

3. TRADITIONAL AND CULTURAL VALUES

Traditional and Cultural values are unique components of the forest environment.

Standard:
- Identify and protect values
- Consult with elders and research history

4. FOREST DIVERSITY

Forest Management Practices shall respect wildlife habitat, genetics, species and ecosystem diversity on Beausoleil First Nation Landscape.

Standard:
- Create and define forest habitat conditions and increase our species diversity
- Maintain site-specific diversity through applications of Forest Management Prescriptions
- Long-term commitment to ensure sufficient funds are budgeted to train personnel
- Involve expertise from related scientific and traditional disciplines in planning and implementation of activities
- Maintain the productive capacity of the soil
- Regenerate the forest to the appropriate species for site-specific initiatives
- Use current scientific Forest Management techniques, and practice Traditional harvesting
5. PLANNING

Sustaining healthy forest ecosystems is the main priority in the planning and implementation of all activities.

Standard:
- Maintain a database of current forest information
- Identify and protect forest and traditional values through applications of ‘Area of Concern’ prescriptions as detailed in the Beausoleil First Nation Resource Management Plan

6. RECREATION

Forest Operations will be planned and implemented in harmony with member recreation on Beausoleil First Nation Lands.

Standard:
- All Forest Operations will be located away from recreational features during peak periods of usage (campgrounds, parks, hiking trails, spiritual places)
- Maintain aesthetic qualities of the Beausoleil First Nation forest landscape

7. HEALTH AND SAFETY

Protection of human health is an integral part of all Forest Operations and Activities.

Standard:
- Establish and communicate safe working habits to Beausoleil First Nation members working in the Resources also to Contractors and Clients
- Organise training programs for Beausoleil First Nation employees and assist Contractors and Clients in their training programs
- Maintain and communicate Emergency Response Plans and Procedures

8. ACCOUNTABILITY

Periodic audits shall ensure that operations are consistent with established policies and objectives. Compliance with current by-laws and regulations, and the prevention of pollution will be continuously evaluated.

Standard:
- Ongoing compliance monitoring

9. FOREST RESEARCH & EDUCATION

The Beausoleil First Nation shall encourage Scientific Forest Research and Operational Practices shall be updated to keep pace with new procedures and practices.

Standard:
- Participate in research projects that contribute to the health of the forest ecosystems and productivity of the forest
- Establish partnerships with Private Sectors and other Scientific Institutions
- Effectively communicate new procedures to employees and membership in a timely fashion
- Participation by the Beausoleil First Nation Membership in the development of new standards and guidelines
- Establish partnerships to promote Forestry Education and Forest Health Awareness

SECTION 2

TIMBER HARVESTING

PART A: OBJECTIVES

1. Purpose of Operation:
- Timber
- Sawlog
- Salvage
- Rehabilitation
- Land/Tot clearing
- Silviculture
- Agriculture
- Trails
- Road building/maintenance
- Fuelwood - (commercial)
- Agro-forestry
- Park Development
- Aggregates
PART B: APPLICATION GUIDELINES

1. The individual or organization commissioning the Harvester must be a member of Beausoleil First Nation.
2. The Harvester and/or the Harvester’s employee(s) must possess valid certificates and licenses for harvesting and use of any of Beausoleil First Nation Resources.
3. All lands on Beausoleil First Nation are subject to Environmental Assessment Screening prior to planning any operations that may affect the natural state of the area.
4. The Harvester must file an Operational Plan with Beausoleil First Nation Lands Management Officer.
5. Operation objectives must be stated in the Operational Plan and Planning must comply with the Beausoleil First Nation Resource Management Plan.

PART C: APPLICATION PROCEDURES

1. It is the Landowners’ responsibility to have a qualified professional:
   a) Layout Operations
      • Mark skid trails
      • Identify road corridor with 30m road allowance
      • Identify and clearly mark landings
   b) Survey Lot Boundaries
      • Clearly mark boundaries with Red Marking Paint
   c) Trees Marking
      • Follow Beausoleil First Nation Resource Management Plan for Annual Cut Allowances.
      • Mark allocations for Annual Work Schedule
      • Removals (yellow-orange)
      • Stay (blue)
   d) All timber-timber is to be scaled and graded prior to removal from Harvesting Operating site by Qualified Scales approved by Beausoleil First Nation.

PART D: TRANSPORTATION

1. RULES AND REGULATIONS
   • The Harvester must ensure the safe operation of all equipment used in the removal of timber products.
   • All traffic laws must be strictly adhered to.
   • Timber products will not be transported during the following times in order to ensure the safety of our children.
     Monday - Friday
     8:30 a.m. – 9:00 a.m.
     11:30 a.m. – 1:00 p.m.
     3:00 p.m. – 4:00 p.m.
   • For the peace of the community, timber products will not be transported through the village area after 10:00 p.m.
   • Any damage to roads and/or property resulting directly to harvesting or transportation of timber products is the sole responsibility of the harvester to repair and/or restore.
   • Timber products will NOT be stock piled at or near the dock area unless otherwise approved by Chief and Council.
   • No entering Private Property during the transportation of timber products without prior written approval from the Landowner and Registered with Lands Management Officer.

PART E: ACCESS ROADS and WATER CROSSING

1. Roads, trails and any water crossings will follow prescriptions for “Area’s of Concern” as well as planning with Road Building Strategies.
   • Private Land – no trespassing – alternate routing
   • Annual Work Schedule concessions/islands
   • Islands – shipping/loading docks/landing sites
   • Private Roads - access – decommission

See: Schedule “A” Form “A” and processes for an Environmental Screening Assessment and any other documents required by Council.
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PART F: FOREST FIRE PROTECTION FOR LOGGING AND SILVICULTURE OPERATION

1. Check daily for Fire Rating and have a daily “Emergency Field Plan” in place.

2. Every person operating a power saw must have available, in the immediate cutting area, a minimum of a 1 lb. ABC chemical fire extinguisher that is in working condition.

3. One (1) filled rigid back pack complete with trombone (in operating condition) and One (1) shovel must be available in the immediate working or cutting area of each crew.

4. Every piece of mechanical equipment must have an adequate exhaust system and muffler in good condition with a heavy duty spark arrestor, permanently affixed to the outlet of such system.

5. Every skidder is to be equipped with 1 – 10 lb. ABC type extinguisher.

6. Every piece of mechanical equipment, i.e. skidders, slashers, etc. shall be cleared of flammable debris on a regular basis.

7. All electric and oxy-acetylene welding equipment must be on a site cleared to mineral soil for a minimum distance of 3 meters.

8. All electric and oxy-acetylene welding equipment must have present a minimum of 1 – 20 lb. ABC Dry Chemical fire extinguisher in working condition for each set of welding apparatus.

9. A minimum of 50% of the personnel in a work permit area must be competently trained in the use of the fire suppression equipment.

10. Modification of bush operations in the form of early shifts, closure or additional fire prevention measures must be approved by the Beausoleil First Nation.

PART G: BOAT AND FERRY TRAVEL

- Large truck rate:
- Small truck rate:
- ½ loads:
- Ice Road Policy?
- Beckwith – Hope “Docking System”?
- Industry / Tourism “Exporting / Importing Schedules”

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PART H: HEALTH AND SAFETY

1. All people working in the Resource Industry must have Health and Safety Training or Certificates.

2. Operators in Forestry or Aggregates must have certification or training certificates for chainsaw, skidders, loaders, trucks, bulldozers.

3. First aid kits are to be on site.


5. Communications Plan for emergencies (radio, satellite phone, cell phone)

6. Field reporting for Workman Safety Insurance Board.

PART I: ENVIRONMENTAL ACCIDENTS

1. A spill kit is to be on site for any hazardous substances spill.

2. Any action that inhibits or renders any quality to the water, soil or air will be reported to the Beausoleil First Nation Chief and Council immediately.

PART J: MONITORING

1. Beausoleil First Nation reserves the right to have representatives inspect the Harvesters Operation at any time without prior notice.

2. The Harvester may have an independent Registered Professional Forester inspect his/her operation at his/her expense.

3. Beausoleil First Nation will inspect the land entered in the Operation Plan to ensure the Resource Management Plan, Area’s of Concern and Silvicultural Prescriptions have been followed and sustainable harvesting has occurred with all merchantable timber utilized, tops removed, slash cut to no higher than 2ft in height and access roads and water crossing restored or protected.

4. Beausoleil First Nation reserves the right to check sale any timber at anytime during the harvesting operations and/or transporting of timber on Beausoleil First Nation lands by an approved Timber Slicer.

5. All timber/lumber must have a Bill of Lading indicating, species, pieces, volume and scale accompanying each load leaving Beausoleil First Nation.

PART K: REPORTING

1. The Harvester must follow a Forest Operations / Resource Management Plan and report all activities to the Beausoleil First Nation Lands Management Officer in a timely fashion, or respectfully every other week.

2. The Harvester will ensure all timber/lumber is sealed, guided and recorded by species, pieces, and volumes and accurate records are kept and reported on every 2 wks to Beausoleil First Nation Lands Office.

3. Failure to report all activities to the Beausoleil First Nation Lands Office will result in the immediate halt of Harvesting Operations.
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PART I: PRIVATE LAND OWNERS

4. The Private Land Owner and the Harvester must jointly file a Logging Plan with Beausoleil First Nation Lands Office.
5. The Private Land Owner must provide Proof of Title to the land identified in the Harvesting Plan.
6. Timber Dues will be collected from the Private Land Owner/Harvester.
7. All policies, procedures, guidelines and compliance must be followed by the Private Landowner before, during and after the harvest.
8. An Administration Fee of $10.00 will be paid to the Beausoleil First Nation Lands Office.

PART M: COMPLIANCE FOR HARVESTING

1) The Resources being utilized on Beausoleil First Nation will be subject to Compliance Monitoring and Auditing Procedures to regulate extractions and promote Sustainable Harvesting Practices.
2) Compliance for “Area’s of Concern” and “Operational Prescriptions” will be monitored by a qualified professional to ensure prescribed practices are being met.
3) Compliance Monitoring for Wasteful Practices will be monitored by a qualified professional.
   - Leaving high stumps
   - Leaving merchantable timber
   - Leaving merchantable trees
   - Leaving lodged trees
   - Failure to utilize wood chip fiber

4) All merchantable products will be measured, scaled or weighed and proper tracking forms “Bill of Ladings” will accompany each load of product leaving Beausoleil First Nation. Each load will possess a “Bill of Ladings” indicating:
   - Date
   - Licensee
   - Vehicle identification
   - Species
   - Measuring location
   - Approval number
   - Destination (name or code)
   - Signature of issuer/trucker
   - Any other information requested by Beausoleil First Nation

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PART N: ENFORCEMENT PENALTIES

1. Identification of Authority – Stewardship, Officer, Forester or Technician will represent Beausoleil First Nation in Compliance Monitoring for Beausoleil First Nation Resources.
2. The first documented non-compliance occurrence may result in one or more of the following remedies or enforcement actions:
   - verbal warning
   - written warning
   - remedial action (voluntary compliance)
   - stop work order
   - repair order
   - compliance order
   - administrative monetary penalty
   - omissions
   - loss of resource harvesting privileges (1-5 year)
3. The second occurrence will result in mandatory monetary penalty and may include one or more of the above. Monetary penalties for leaving high stumps, merchantable timber, merchantable trees, or lodged trees:
   - First monetary penalty: $50.00 for each infraction to a maximum of $5,000
   - Second monetary penalty: $100.00 for each infraction to a maximum of $10,000
   - Third monetary penalty: $150.00 for each infraction to a maximum of $15,000
4. Monetary penalties for unauthorized harvests, unauthorized hauling or leaving wood chip fiber:
   - First monetary penalty may be the greater of:
     1-2 times the applicable stumpage values or $5,000
   - Second monetary penalty may be the greater of:
     3-4 times the applicable stumpage values or $10,000
   - Third monetary penalty may be the greater of:
     5 times the applicable stumpage values or $15,000
     Maximum Monetary Penalty for above infractions: $15,000
5. Criteria used to determine violation to be first, second, third violation:
APPENDICES

DRAFT

- Compliance history-time period (all violations committed in the last 3 years from the date of the current violation are counted)
- Violations for wasteful practices, unauthorized harvests, unauthorized hauling, or any other infraction under Beausoleil First Nation resource compliance are considered when assessing the previous 3 years
- Violations of any members working for a company within the harvesting unit are considered when assessing the previous three year period.

9. Unauthorized harvest committed on a harvesting area by a person or persons beyond the control of the Contractor or Company will not be considered when determining a violation to be a 1, 2, 3, or 4.

10. Violations recorded against the Contractor or Company on a particular harvesting area will be considered.

11. When an Unauthorized Harvest, Unauthorized haul, or an Wasteful Practice is discovered, current policy and procedures will be followed to document the occurrence and determine a remedy if warranted.

12. An Administrative Penalty for Wasteful Practices may be assessed even if the timber has been:

- measured, stumped collected
- reasonable market opportunity exists
- has been measured and stumped has not been collected
- has not been measured

13. A person who is liable for an Administrative Penalty may within thirty days after receipt of notice, make representations to the Chief and Council on whether a penalty should be imposed and on the amount of any penalty.

SECTION 3:

HARVESTING FUELWOOD

PART A: APPLICATION GUIDELINES AND PROCEDURES

1. The Harvester must be a Member of Beausoleil First Nation.
   (Band Members who owns their own property are required to harvest on their own Private Land)

2. The Harvester and or the Harvester’s employees must possess a valid Certificate for operating a chainsaw.

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    APPENDICES

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- Private Landowners cutting on their own property are advised to have a Chainsaw Operation Certificate.

3. The Beausoleil First Nation’s Resource Management Plan must be strictly adhered to

   - Trees to be marked by qualified professionals

   - The Harvester must file a Fuelwood Plan with Beausoleil First Nations Lands.

PART B: TRAIL CLEARING FOR FUELWOOD

1. Fallen trees along roads and trails can be Harvested for Fuelwood by qualified Band Members with Chainsaw Operators Certificate.

2. No removal of dead or fallen trees from Private Property without Prior written approval from the Land Owner and Registered with the DFNI Lands Office.

3. Tree stumps must be within 15 meter of trail or road or otherwise obstructing traffic

4. The Whole tree must be cleared and removed with tops utilized to 4 cm in diameter and slash cut and piled to no higher than 21 ft. from ground.

PART C: TRANSPORTATION

1. The Harvester will ensure the safe operation of all equipment used in the transportation of fuelwood.

2. If it is necessary to enter Private Property during the transportation of fuelwood, the Harvester must have the Landowner’s written permission prior to movement and registered with the Lands Management Office.

PART D: DUES

1. Dues are not applicable to Private Land Owners.

2. Dues are set at $5.00 for each cord of fuelwood cut by homé member on Band

   - Does not include trail clearing or hazard cuts

3. Dues will be paid by cash or cheque directly to Beausoleil First Nation

4. Failure to pay dues will result in halting any future fuelwood activities.

PART E: MONITORING AND COMPLIANCE

1. Beausoleil First Nation reserves the right to have a qualified representative inspect the harvesters operation at any time without notice.

2. The Harvester will report all activities to Beausoleil First Nation Lands Department immediately upon the completion of the Harvesting Plan.

3. Failure to report all activities to Beausoleil First Nation Lands Department will result in the halt of future harvesting activities.
SECTION 4:
NON-TIMBER FOREST PRODUCTS.

PART A: PRODUCTS COLLECTED FOR THE USE OF SALE OFF RESERVE

- Canada Yew
- Blood Root
- Chaga
- Morsels
- Fiddleheads
- Mushrooms and Fungi
- Seed and Cone
- Berries
- Fruits
- Maple Syrup
- Leks

PART B: APPLICATION GUIDELINES AND PROCEDURES

1. Harvesting, Gathering and Collecting of Non-Timber Forest Products will be reserved for Beausoleil First Nation Band Members unless otherwise stated by Beausoleil Band Council.
2. Non-Band members living with Band Members have the right to Harvest Non-Timber Forest Products for benefit of the Band Members household.
3. Harvesting, Gathering and Collecting Non-Timber Forest Products for personal or community uses will be subject to the integrity of the Band Members Harvesting.
4. Harvesting of wildlife should be reported to the Forestry Unit. (Record keeping purposes only.)
5. Harvesting, Gathering and Collecting of Non-Timber Forest Products for the purpose of employment or sale to off reserve sources will be under strict Regulations and Compliance for Sustainable Practices.
   - Applications to Renewable Resources only.
   - Sustainability Plans for Band Lands must be approved by Beausoleil First Nation prior to Harvest.

PART C: TRANSPORTATION

1. The Harvesters, Collectors and Gatherers will ensure the transporting of Non-Timber Forest Products does not disrupt the ecology of Beausoleil First Nation Lands.

PART D: DUES

1. Beausoleil First Nation Members will not be subject to dues on Band Lands.

PART E: REPORTING

1. Reporting and Sustainability Plans apply to Non-Timber Forest Products being harvested for the Sale off Reserve.
2. Weekly reporting of volumes extracted and locations of extraction are to be reported to the Beausoleil First Nation Lands Office.
3. Harvesting locations will be identified with signs indicating “Harvesting in process”
4. Failure to report all activities to the Beausoleil First Nation Lands Office will result in the halt of any future Harvesting Activity.

PART F: MONITORING

1. Beausoleil First Nation reserves the right to enter Private or Band Lands to inspect for Sustainable Practices at any time without prior notice.
2. Harvesting Practices will be strictly monitored to comply with Sustainability Plans.

PART G: COMPLIANCE

1. There will be no extraction of Non-Timber Forest Products for the purpose of sale without a Sustainability Plan and Lands Office approval.
2. Harvesting Non-Timber Forest Products for the purpose of sale without an approved Sustainability Plan will result in halt of harvesting.
3. Non-Timber Forest Products used in Commercial Harvests will be under Compliance Monitoring by a qualified professional.
4. All Rules and Regulations for Sustainable Harvests must be followed.
5. A Sustainability Plan Registered with the Lands Office is needed for harvesting Non-Timber Forest Products for commercial use.
6. Landowner Permission must be granted and registered with the Lands Office.
7. Annual reports to Lands Office on total volume harvested and locations of harvest.
PART II: SPECIAL CONSIDERATIONS

1. Non-Timber Forest Products, Harvested, Collected, and Gathered on Beausoleil First Nation by Beausoleil First Nations Members for Personal or Ceremonial use will not be subject to Sustainable Planning.

2. Non-Band Members, Lessees, Campers, Cottagers, Day Trippers, Boaters will be subject to a Resource Search if suspected to be transporting Beausoleil First Nation Resources off Reserve.
   - Firewood, wildlife, fish, aggregates, timber, plants, trees, Non-Timber Forest Products (driftwood, berries, fungi, mushrooms, sweet grass, medicines, etc.)

3. Band Members and Non-Band Members, Lessees, Campers, Cottagers, Day Trippers will be subject to a Resource Search if suspected to be transporting Resources on Reserve.
   - Wildlife, firewood, uncertified lumber, plants or trees that could be a threat to the ecology of Beausoleil First Nation.

PART I: ENFORCEMENT PENALTIES

A documented Non-Compliance occurrence in violation of Non-Timber Forest Products Sustainable Harvesting Plans, Practices and Trespass may result in one or more of the following Remedies or Enforcement actions:

- verbal warning
- written warning
- remedial action (voluntary compliance)
- stop work order
- compliance order
- administrative monetary penalty
- loss of resource harvesting privileges (1-5 year)

1. A person who is liable for an Administrative Penalty may within thirty days after receipt of notice, make representations to the Chief and Council or whether a penalty should be imposed and on the amount of any penalty.

SECTION 5:
NON-RENEWABLE RESOURCES (SAND, GRAVEL, STONE)

PART A: APPLICATION GUIDELINES

1. An Application must be filed with the Lands Office and brought before Beausoleil First Nation Band Council and Membership before any action is taken to proceed with any Plans to extract Non-Renewable Resources.

PART B: APPLICATION PROCEDURES

1. Upon approval from Chief and Council the Band Member wishing to extract the Resource must seek Environmental Screening Assessment.
2. Upon approval of the Environmental Screening Assessment an Operational Plan, Mitigation Plan, Restoration Plan must be presented to Chief and Council and Membership.

PART C: DUES

1. Non-Renewable Resources extracted for sale on or off reserve will pay dues in the amount of set price established by Beausoleil First Nation Chief and Council.

PART D: COMPLIANCE

1. Non-Renewable Resource used in Commercial Harvests will be under Compliance Monitoring by a qualified professional.
2. All Rules and Regulations for Sustainable Extractions must be followed.
3. A Sustainability Plan Registered with the Lands Office is needed for Extracting Non-Renewable Resources for Commercial Use.
4. Landowner Permission must be Granted and Registered with the Lands Office.
5. Weekly reports to Lands Office on total volume extracted and locations of extractions.

PART E: ENFORCEMENT PENALTIES

1. The first documented Non-Compliance occurrence in violation of Non-Renewable Harvesting Plans, Practices and Trespass may result in one or more of the following Remedies or Enforcement actions:

   - verbal warning
   - written warning
   - remedial action (voluntary compliance)
   - stop work order
   - compliance order
   - administrative monetary penalty
   - loss of resource harvesting privileges (1-5 year)
1. The second occurrence will result in mandatory monetary penalty and may include one or more of the above.

2. The third offence will result in loss of Extracting Privileges.
   • In the case of Private Property the penalty will be paid to Landowner.

4. A person who is liable for an Administrative Penalty may within thirty days after receipt of notice, make representations to the Beausoleil First Nation Chief and Council on whether a penalty should be imposed and on the amount of any penalty.

SECTION 6:
AGGREGATES
(See Schedule A: Form “A” plus Environmental Screening Process)

SECTION 7:
PARKS AND RECREATION
(See Schedule A: Form “A” plus Environmental Screening Process)

SECTION 8:
COTTAGE INDUSTRY
(See Schedule A: Form “A” plus Environmental Screening Process)

SECTION 9:
FISHERIES INDUSTRIES
(Information needed)

SECTION 10:
PROTECTED AND SCIENTIFIC SITES

PART A: RESEARCH

1. Sites identified and used for Research will be protected by identifying the locations on Values Map and clearly marked boundary of Research Plots in the field.

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- Take actions that the Beausoleil First Nation Band Council considers necessary to repair the damage or to prevent further damage.

PART C: COSTS FOR DAMAGES AND REPAIRS

1. The person or contractor who caused or permitted the damage to the Resource is liable to the Beausoleil First Nation Band Council for all costs associated with the actions to amend, repair and/or restore.

PART D: COURT POWERS

1. If the person causes or permits damage to water, soil, plant life or wildlife habitat on Beausoleil First Nation Territory, the Beausoleil First Nation Band Council may order the person to take actions as the court directs to repair the damage or to prevent further damage.

PART E: COMPLIANCE WITH RESOURCE PLANS AND AGREEMENTS

1. If in the opinion of the Beausoleil First Nation Band Council, a person or contractor has failed to comply with the Resources Plans and/or Resource Agreements the following may occur:
   - Order the person to take such actions as the Beausoleil First Nation Band Council directs to rectify and carry out obligations imposed in the Resource Agreement.
   - Take such action as the Band Council considers necessary to carry out obligations imposed in the Resource Agreement or Plan.

PART F: COSTS FOR INFRACTIONS

1. The person who failed to comply with the Resource Agreements or Plans is liable to the Beausoleil First Nation Band Council for all costs associated with any action taken by the Beausoleil First Nation Band Council to rectify, restore and/or repair the infraction.

SECTION 14:

BEAUSOLEIL FIRST NATION RESOURCE BYLAWS

PART A: DEVELOP BYLAWS
PART B: APPLY BYLAWS
PART C: ENFORCE BYLAWS
PART D: CONTROL OF RESOURCES

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SCHEDULE “A”

FORM “A” APPLICATION FOR A DEVELOPMENT, INTERFERENCE WITH WETLANDS, ALTERATIONS TO SHORELINES AND WATERCOURSES PERMIT

APPLICANT: __________________________

PHONE: __________________________

MAILING ADDRESS: __________________________

POSTAL CODE: __________________________

PHONE: __________________________ FAX: __________________________

PROJECT LOCATION:

Lot: ______ Con: ______ File #: ______

Application is hereby made to: (Check appropriate box)

- Place or Remove Fill
- Alter a Wetland
- Install a Septic System
- Alter a Watercourse
- Excavate or remove aggregates
- Work at Shoreline

Permit # ______

Brief description of proposed works:

________________________________________

Proposed start date of work: ______
Proposed completion of work: ______
Existing Land Use: (Band, Private, Residential, Commercial) ______
SCHEDULE “A”
FORM “B”
THE SITE PLAN MUST INCLUDE THE FOLLOWING BASIC INFORMATION (MORE INFORMATION MAY BE REQUIRED):

- General location of property in relation to roads, trails, etc.
- Location and dimensions of all existing structures on the property and a survey plan with lot dimensions.
- Location of any watercourse, open water or wetland on or near the property.
- Intended location and dimensions of fill, construction or waterway alteration proposed.
- The elevations of existing buildings and grades and the proposed elevations of buildings and grades after the development.
- All drainage, grading and septic system details before and after development.
- A complete description of the type of fill proposed to be placed or dumped and locations of dumping.

NOTE: INSUFFICIENT OR INACCURATE INFORMATION MAY DELAY THE PROCESSING OF YOUR APPLICATION.

Please allow 14 days for processing. This application does not relieve the applicant of the obligation to secure any other necessary approvals from the Band Council. This approval will be valid for 24 months unless otherwise stated on the “conditions of approval.”

I, (first name) _______________________________ declare that the above information is correct to the best of my knowledge and I agree to abide by Beausoleil First Nation Resource Document.

I acknowledge that this application and supporting documents will be considered as Beausoleil First Nation documents and available to the membership on written request.

“1 acknowledge and agree that any permit issued pursuant to this application may be revoked if it is issued on the basis of false, inaccurate, or misleading information.”

Signature: _______________________________ Date: ___________
Witness: _______________________________ Date: ___________

NON-REFUNDABLE PERMIT PROCESSING FEES
Retroactive Application $00.00 Permit Revision $00.00 Permit Application $00.00 Site Plan Clearance $00.00 Permit Application (minor) $00.00

PAID BY: Cash _____ Cheque _____
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SCHEDULE “B”  TIMBER HARVESTING
FORM “A”  LANDOWNER AUTHORIZATION

If the Application is to be submitted by a Contractor or Agent on behalf of the Owner(s), this Landowner Authorization must be completed and signed by the Owner(s).

For subject property: ____________________________

Beausoleil First Nation Private Land

Lot# _____ Con# _____

Harvesting Plan# ____________________________

Note to the owner(s):
If the application is to be prepared by a solicitor or agent, authorization should not be given until the application and its attachments have been examined and approved by you.

I/we _______________________________________

Hereby authorize ______________________________________

(Print full name of Contractor or Agent)

To submit the enclosed application to Beausoleil First Nation, and to appear on my behalf at any hearing(s) of the application and to provide any information or material required by the Beausoleil First Nation Band Council relevant to the Application for purposes of obtaining a Harvesting Permit and comply in accordance with the Beausoleil First Nations Resource Management Document.

Dated at the ______ of ___________

This ______ day of _______ 20_____

Signature of Land Owner(s): ____________________________

_____________________________________

Signature of Lands Officer: ____________________________

Signature of Contractor or Agent: ____________________________

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SCHEDULE “B”  HARVESTING TEMPORARY AGREEMENT
FORM “B”

THIS AGREEMENT made as of the ____________ Day of ____________, 20______

BETWEEN: BEAUSOLEIL FIRST NATION
("Hereafter called the “First Nation”)

-And-

("Hereafter called the “Contractor”)

With the consent of the Council of Beausoleil First Nation, Permission is granted to

do ___________________ to cut

and remove timber from Lot # ____________ Con # ____________ on

the

Beausoleil First Nation Lands.

TERMS OF AGREEMENT:

Contractor agrees to pay Beausoleil First Nation for standing timber in the Harvesting Allocation for the agreed upon price of ____________ for

Lot(s) ______ Con(s) ______

Preparation activities for the harvest allocations will be performed by Beausoleil First Nation Forestry Department and are based on prescriptions with compliance to the BFN Five-Year Operating Plan. Failure to comply with Beausoleil First Nation Resource Document, and all of the terms and conditions stated in attached Form “B” of this agreement may result in the cancellation of this agreement.

DISCLAIMER:

1) The Contractor of timber shall indemnify and save harmless The Beausoleil First Nation from and against all claims, demands, loss, costs, damages, actions, suits or other legal proceedings by whomever, made, sustained, brought to prosecution in any manner based, occasioned by or attributed to anything done or omitted to be done by the Purchaser of Timber, their
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Officers, Servants, Employees or their Contractors arising out of or connected with the Granting of this Permit.

2) The Contractor shall indemnify and save harmless The Beausoleil First Nation from and against all claims demands, loss, costs, damages, actions, suits or other legal proceedings by whomsoever made, sustained, brought or prosecuted in any manner based, occasioned by or attributed to anything done or omitted to be done by the Contractor, their officers, servants, employees or their contractors arising out of or connected with the granting of this permit.

This agreement to harvest timber on Beausoleil First Nation Lands constitutes an agreement made in triplicate. This agreement constitutes a period of one year

Dated at ______________ this ______ day of ______, 20___

Between:

______________________________
On Behalf of Beausoleil First Nation

Authorizing Signature for Beausoleil First Nation Lands.

And:

______________________________
On behalf of the _______________________

Authorizing Signature for _______________________

Witnessed by: ______________________ Date: ______________________

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SCHEDULE “B”
FORM “C” TIMBER HARVESTING - TERMS AND CONDITIONS

CUTTING SPECIFICATIONS:
- Trees marked with blue or red paint must not be cut or damaged by logging activities.
- All trees marked in yellow by representatives of the Beausoleil First Nation Forestry Unit must be cut.
- All merchantable Pecan, White Birch and Soft Maple must be cut unless otherwise marked with blue or red paint.
- Where the area is not specifically marked, only species and sizes of trees meeting or exceeding the size limit 30 cm D.B.H. may be cut.
- All stumps to be cut to a maximum height of 30 cm (12 inches) or less.
- All parts of the tree longer than 5.5 cm (three-quarters inches) in diameter to be utilized (includes branches) unless otherwise stated below.

LOGGING SPECIFICATIONS:
- No roads or landings to be constructed without prior approval.
- Only designated trees (i.e.: species) will be cut.
- No debris to be left on roads.
- All felling is to be done to the open to avoid hanging up.
- All snags to be filled concurrently with operation.

ENVIRONMENTAL PROTECTION:
- No activities are allowed that will cause damage to roads.
- No activities are allowed in the spring when frost is coming out of the roads.
- No garbage to be left on site.
- All hazardous waste materials such as oil, gas, and other lubricants must be removed from the work site in proper containers and discarded in a proper manner.
- All tops and branches to be cut up and scattered to a maximum height of two feet.
- Not skidding through waterways (i.e: creeks, ponds, lakes, etc.)
- No felling of trees into waterways.
- Fire fighting, first aid equipment, and hazard spill kit must be carried on site.
- Species at risk shall be protected with “Area of Concern” prescriptions.
  (No hauling timber through Private (CP Property without written permission from the landowner and filed with the BFN Lands Office)

Dated at ______________ this ______ day of ______, 20___

Between:

______________________________
On Behalf of Beausoleil First Nation

Authorizing Signature for Beausoleil First Nation Lands.

And:

______________________________
On behalf of the _______________________

Authorizing Signature for _______________________

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SCHEDULE "B"
FORM "D"
SPECIAL CONDITIONS

Land Ownership: ________________________________

1. Location of Cut: Lot # ______ Cont# ____________

2. Designated Species and Size of timber to be cut:

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SIZE LIMIT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard maple</td>
<td>≥ 9.5 cm top</td>
<td></td>
</tr>
<tr>
<td>White ash</td>
<td>≥ 9.5 cm top</td>
<td></td>
</tr>
<tr>
<td>Oak</td>
<td>≥ 9.5 cm top</td>
<td></td>
</tr>
<tr>
<td>Poplar</td>
<td>≥ 9.5 cm top</td>
<td></td>
</tr>
<tr>
<td>White Birch</td>
<td>≥ 9.5 cm top</td>
<td></td>
</tr>
<tr>
<td>All Others</td>
<td></td>
<td>All merchantable materials</td>
</tr>
</tbody>
</table>

3. RESERVES AND ACCESS RESTRICTIONS:

- No cutting within 200 m of any lake or shoreline within 30 m of any navigable waterway unless prior agreement to modified harvesting method (i.e. Selection Cutting of Designated Species and Size Limits) is utilized and agreed to by Beausoleil First Nation.
- No cutting or skidding on or near intermittent streams of watersheds.
- No cutting within areas marked in red on attached map. Where “no cut” reserves are marked in the field with red paint, there shall be no cutting or skidding beyond those boundaries so marked; and trees marked with red paint shall not be cut or damaged.

4. SITE PREPARATION AND REHABILITATION:

- To promote regeneration a hardwood prescription with a selective cut to promote sustainable inventory of the working species.
- Diseased and/or infested species will have Prescriptions Modified to suit the needs of each individual stand and/or disease or infestation.

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SCHEDULE C:
FORM "A" HARVESTING FUELWOOD
PRIVATE LAND AUTHORIZATION (Contracted Only)

If the Application is to be submitted by a Contractor or Agent on behalf of the Owner(s), this Landowner Authorization must be completed and signed by the Owner(s).

For subject property:

Beausoleil First Nation Private Land
Lot# ______ Con# ______
Fuelwood Harvesting Plan # __________

Note to the owner(s):
If the application is to be prepared by a solicitor or agent, authorization should not be given until the application and the Fuelwood Plan and its attachments have been examined and approved by you.

I/we ____________________________

Hereby authorize

(Print full name of Contractor or Agent)

To submit the enclosed Fuelwood Application to Beausoleil First Nation, and to appear on my behalf at any hearing(s) of the application and to provide any information or material required by the Beausoleil First Nation Band Council relevant to the Application for purposes of obtaining a Harvesting Permit and comply in accordance with the Beausoleil First Nations Resource Management Document.

Dated at the ____________________________

This ______ day of ___________ 20__

Signature of Landowner(s): ____________________________

Signature of Land Owner: ____________________________

Signature of Contractor or Agent: ____________________________
SCHEDULE C:
FORM “B” FUELWOOD HARVESTING
FUELWOOD PLAN AUTHORIZATION (BAND LAND)

If the Application is to be submitted by a Contractor or Agent on behalf of the Band, this authorization must be completed and signed by the Lands Officer.

For subject property: ____________________________________________

Beausoleil First Nation Band Lot
Lot# _____ Con# _____

Harvesting Plan:
________________________________________________________________________

The Authorization for this Application and its Attachments have been examined and approved by Beausoleil First Nation Lands Officer.

I/we _________________________________________________________________

Hereby authorize ________________________________________________

(Print full name of Contractor or Agent)

To Harvest Fuelwood from the Beausoleil First Nation Land stated in the above and to appear on my behalf at any hearing(s) of the Application and to provide any information or material required by the Beausoleil First Nation Council relevant to the Application for purposes of obtaining a Harvesting Permit and comply in accordance with the Beausoleil First Nations Resource Document.

Dated at the _______________ of _____________________________

This __________ day of ___________________ 20__

Signature of Lands Officer: ____________________________________________

Signature of Contractor or Agent: ________________________________________

SCHEDULE D:
FORM “A”: NON-TIMBER FOREST PRODUCT APPLICATION TO HARVEST RESOURCES FOR THE USE OF SALE

BEAUSOLEIL FIRST NATION PRIVATE or BAND LAND

Lot# _____ Con# _____

Crop Rotation Plan # ______________ Year of Harvest ______________

UTM Coordinates: ___________________ _________________________

Note to the owner(s):
Authorization will not be given until a Sustainability Plan for Beausoleil First Nation Resources and its Attachments have been examined and approved by Beausoleil First Nation Chief and Council.

I/We ______________________________________________________________

Hereby authorize _________________________________________________

(Print full name of Contractor or Agent)

To submit the enclosed Application to Beausoleil First Nation, and to provide any information or material required by the Beausoleil First Nation Council relevant to the application for purposes of obtaining a Harvesting Permit and comply in accordance with the Beausoleil First Nations Resource Management Document.

Dated at the _______________ of _____________________________

This __________ day of ___________________ 20__

Signature of Landowner(s): ____________________________________________

Signature of Lands Officer: ____________________________________________

Signature of Contractor or Agent: ________________________________________
SCHEDULE E:
FORM "A" NON-RENEWABLE RESOURCES (SAND, GRAVEL, ROCKS)
APPLICATION TO EXTRACT RESOURCES FOR THE USE OF SALE

BEAUSOLEIL FIRST NATION PRIVATE or BAND LAND

Ownership of Property

Lot# ___ Con# ___

Plan # __________________ Resource Extracting _______________________

Note to the owner(s):
Authorization will not be given until an Environmental Screening Assessment has been processed and an Operation Plan and its attachments have been examined by Beausoleil First Nation and approved by Chief and Council.

I/We ____________________________

Hereby authorize ____________________________
(Print full name of Contractor or Agent)

To submit the enclosed Application to Beausoleil First Nation, and to provide any information or material required by the Beausoleil First Nation Band Council relevant to the Application for purposes of obtaining a permit and comply in accordance with the Beausoleil First Nations Resource Management Document.

Dated at the __________________________
of __________________________

This __________ day of __________ 20__

Signature of Landowner(s): __________________________

Signature of Lands Officer: __________________________

Signature of Contractor or Agent: __________________________
DESIGN PROCESS + RESOURCES

Fig. 13.1 - Locally available natural and sustainable materials: Strawbale, Cordwood, Bent Pole/Sapling, Stone, Thatch, Cedar Siding/Shake

Fig. 13.2 - Structural systems using locally sourced bent pole/saplings and/or small-dimension lumber: Banana Truss (Kroeker), Pole Tree (McMinn), Gridshell (various)
CORDWOOD:

Cordwood walls typically range from 12 to 24” but can be found as thick as 36” in northern climates

R-value of cordwood is R-1.47/inch making a 12” wall R-17.5 to R-35

Cordwood usually accounts for about 40 to 60% of the wall system, the remaining portion consisting of a mortar mix and insulating fill

STRAW BALE:

Straw is a by-product of our food production (cereal grains)

Rice bales > wheat, oat, rye or barely because they are lighter, have increased silica content to resist decay and have slightly barbed surfaces which make them coherent even when cut or untied

Bales are stacked in a running bond

Plaster finish (25-75mm thick) provides: moisture control, thermal resistance + storage, fire control, pest control and acts as structure

R-value for straw bales ranges from R-1.45 to R-2.77/inch making the 2-String Bale R-26 to R-50 and the 3-String Bale R-33 to R-63

R-value for the plaster finish ranges from R-0.3 to R-0.6/inch adding an additional R-0.3 to R-1.8 depending on final thickness of plaster

Refer to OBC Section 2.5

WHITE PINE BENT POLE/SAPLING:

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<th>Age (yr)</th>
<th>Dbh (in)</th>
<th>Ht (ft)</th>
<th>Dbh (mm)</th>
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<td>21.0</td>
<td>140</td>
<td>6.4</td>
</tr>
<tr>
<td>17</td>
<td>6.0</td>
<td>22.2</td>
<td>152</td>
<td>6.8</td>
</tr>
</tbody>
</table>

* Sizes of white pine used in traditional wigwam structures (also used elm, hickory, basswood and ironwood). Typical wigwams were 5 to 8’ (1.5 to 2.4m) tall with a 7 to 20’ (2.1 to 6.1m) span using poles spaced at 2 to 3’ (60 to 90mm) o.c.

* Size used in wood dowel testing

Fig. 13.3 - 2-String Bale (50-65lbs) and 3-String Bale (75-95lbs).
Fig. 13.4 - Exploring bent pole structures at a 1:50 scale based on 7m x 150mm white pine poles by testing wood dowels (soaked in water to simulate fresh cut trees)
Fig. 13.5 - Initial mapping of program, site conditions and calculation of sun angles.
Fig. 13.6 - First iteration based on mapping: one-storey, gallery corridor around central gathering space, classrooms to the south, library to the north, east to west axis.
Fig. 13.7 - Sketches imagining gathering space with storage and permeable thatch walls & gallery corridor with pole-tree structure and clerestory windows.
Fig. 13.8 - Second iteration: now north portion of building is two-storeys, exploring banana truss roof structure and ramped corridor around gathering space.
Fig. 13.9 - Third iteration: softened classroom edges, ramp now inside gathering space and exploration of courtyard sliver for additional daylight/connection to nature
Fig. 13.10 - Section based on third plan showing courtyard sliver.
Fig. 13.11 - Section based on third plan showing ramp through gathering space
Fig. 13.12 - Fourth iteration: Ground plan showing much more detail and scale
Fig. 13.13 - Fourth iteration: Upper plan showing much more detail and scale
Fig. 13.15 - Sketches exploring roof structures connecting classrooms, gallery corridor and gathering space
Fig. 13.16 - Sketches imagining gallery corridor, library with views into treetops and south veranda off classrooms and gardens overlooking the bay
Fig. 13.17 - Fifth iteration: Ground plan tweaking of rooms to reflect more circular forms and addition of fire keeper lounge
Fig. 13.18 - Fifth iteration: Upper plan tweaking of rooms to reflect more circular forms
Fig. 13.19 - Sixth iteration: Ground plan with gathering space separated from main building allowing more light, connection to nature and clear structural system.
Fig. 13.20 - Sixth iteration: Upper plan with gathering space separated from main building allowing more light, connection to nature and clear structural system
Fig. 13.21 - Section based on sixth iteration with new roof structure on second-storey and gathering space oculus opening to outdoors

Fig. 13.22 - Sketches imagining circulation and roof structure for south portion of building
Fig. 13.23 - Transition between sixth and seventh iteration: playing with the arc/courtyard space between main building and gathering space
Fig. 13.24 - Seventh iteration: Ground plan pushing forward circular forms and pure elliptical geometries
Fig. 13.25 - Seventh iteration: Upper plan pushing forward circular forms and creating a free-flow circulation path
Fig. 13.26 - Sections based on seventh iteration: Comparing two different roof strategies, the latter based on pure circular and elliptical forms
Fig. 13.27 - Sketches illustrating new millwork strategy for library/media centre program