PROPOSAL FOR

TOWN OF YARMOUTH
ACTIVE TRANSPORTATION PLAN

August 13th, 2009

Submitted by:
Ekistics Planning & Design

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Chapter 1.0

Understanding of Client Requirements

This submission responds to the Town and Municipality of Yarmouth's terms of reference for an Active Transportation (AT) Master Plan. This project seeks to support the vision of Yarmouth as a healthy, vibrant, and sustainable community that provides a multitude of methods for its citizens and visitors to travel and connect. This AT Master Plan must be both visionary and pragmatic, it must attract investment and interest, and the process must coordinate the needs of many disparate and even discordant interests. As a key gateway into both Nova Scotia and Maine, the plan must address the best practices of both countries with respect to transportation, recreation, and tourism.

By its nature, vision-building is a very public process that seeks to cultivate widespread support for the future. As the Municipality is acutely aware, broad scale planning projects such as an AT Master Plan will require the buy-in of private land owners, developers and the public. This pursuit of collaboration and acceptance can inherently be an exercise in conflict resolution. The process can either further separate and enflame the various stakeholders or it can build bridges towards a desirable common future.

The successful implementation of an Active Transportation Plan for Yarmouth will require a thorough understanding of the applicable best practices for safe and sustainable multi-modal transportation in Nova Scotia, as well as extensive experience understanding stakeholder interests, the needs and requirements of the Town and Province, and the desires of the local community at large. In addition to addressing the wide range of transportation options for the Town and the County, the successful plan will need to identify the most suitable organizational and policy structure to carry the plan forward. It must also build support in the stakeholder community while identifying a variety of 'champions' who will carry aspects of the plan forward. In short, this project will require a well rounded study team with a strong understanding of the link between physical planning and design, organization policy, and maintenance / operational considerations. Only then will the Town realize the full potential of this project. The successful proponent will need to fully understand not only the physical and geographic context of

the proposed and existing AT network, but the social, and cultural aspects of those who seek to benefit from its expansion and development.

The end result must bring together the players to ensure that all competing and common interests are being met. It must also stir interest and excitement in the investment community and it must find ways to leverage funding programs and human resources to implement the Master Plan.

We have assembled a team who:

- Are one of the most recognized planning and design firms in Atlantic Canada. Our new office in Bangor, Maine also means we are able to look at the problem from both sides of Yarmouth. We can't underscore enough the significance that this perspective will bring for Yarmouth.
- Are widely respected as both visionary and pragmatic consultants by funding agencies and government departments in Nova Scotia.
- Prepared many of the recent trail, recreation, and active transportation studies for communities across Atlantic Canada.
- Have worked recently to understand much of the development economics of Yarmouth through various high profile projects in the community.
- Have a successful track record of broad-scale recreation and development plans;
- Understand the power of good design and branding to create high profile projects and achieve investor interest.
- Understand sustainable and ecological design principles as they apply to regional landscape and transportation planning.
- Are committed to meaningfully involving and engaging all the different 'publics' in the process and who are dedicated to excellence in creative problem solving.

1.1 Team Credentials

This proposal is presented by **Ekistics Planning and Design**, in conjunction with **SNC-Lavalin** and **Atlantic Road and Traffic Management**.

This is a full service team with the proven qualifications to best complete this project. Our team has worked on some of the most successful recreation, transportation, and planning related projects in Atlantic Canada. Ekistics always meets project deadlines and delivers above client expectations.

The successful completion of this project will require excellence in the respective fields of transportation planning, community engagement, landscape architecture, recreation planning, signage and wayfinding, municipal engineering and development economics. The following pages outline our approach, methodology, deliverables, timeline, and fee structure.

Rob LeBlanc, president of Ekistics and designated project manager, will monitor the schedules and will be responsible for coordination of product delivery. He will oversee all aspects of planning and design, report preparation, and final drawing produc-

tion. He will also be the direct contact with the client group for the duration of this project.

The following consultants will form the team for this project.

1. Ekistics Planning & Design

This proposal is submitted by **Ekistics Planning & Design** Ltd. Ekistics[1] is a multidisciplinary planning and design firm that offers a range of services in urban design, environmental planning, and landscape architecture. The firm is the largest of its kind in Atlantic Canada and Maine and works on a wide range of projects from large scale waterfronts, regional planning studies, recreation design and development, as well as national parks and smaller scale, parks, gardens, campuses and urban spaces.

Ekistics has a long history of involvement in broad-scale recreation and planning projects and urban design studies in Canada and the Eastern US. Most recently, Ekistics was the prime consultant on many large international urban design projects including the Dar Es Salaam Waterfront Plan (Tanzania) and the Abu Kammesh (Libya) Waterfront City design. Locally we have completed hundreds of parks, recreation, and open space plans.

The firm's corporate philosophy is to strike a balance between people and natural systems by applying sound ecological and sustainable planning principles which stress the alliance of science, technology, economics, and design.

Our team's strength is our commitment to understanding local issues and realities, and our approach which stresses creative environmental design.

Robert LeBlanc, Project Manager & Lead Designer.

Robert LeBlanc is a Landscape Architect & Urban Designer with a special interest in urban design, streetscape design, park planning, water resource planning, waterfront planning, heritage planning and ecological design. He is the president of Ekistics and holds a Bachelor of Science (Dalhousie), a Bachelor of Design in Environmental Planning (NSCAD University) and a Masters in Landscape Architecture (Guelph). Mr. LeBlanc spent a year as a senior design lecturer at the University of Canberra's School of Landscape Architecture in Canberra, Australia. He has prepared plans for dozens of broad-scale landscape, planning, and recreation projects all over Atlantic Canada including Pictou, Bedford Waterfront, downtown Halifax, Antigonish, Port Hawkesbury, Charlottetown, and many others. Mr. LeBlanc brings a wealth of experience in urban design and detailed design and engineering for streetscapes. Mr. LeBlanc is particularly well respected by clients in the industry for his project management approach which places an emphasis on timely completion, creative problem solving, team consensus building and realistic and achievable implementation strategies. He is Ekistics' lead designer and project manager.

1 i-'kis-tiks: a science dealing with human settlements and drawing on the research and experience of professionals in various fields as architecture, engineering, city planning, and sociabilityology

Peter Klynstra, FCSLA, Urban Designer

Peter Klynstra's professional experience spans more than thirty five years of varied project planning and design throughout North America. He has been the lead landscape architect, or "idea person", on all of the major waterfront, "mainstreet" and community planning and design projects undertaken by the firms where he worked from the 1970's to today. He has become especially sought after for his expertise in being able to listen to a community and through public interviews and workshops, distill the essence of what they know about their community, what they want it to be and how they see it, and then apply his design and planning skills to crate workable, identifiable, plans for their future.

For the past twenty years, Peter has been primarily involved in downtown planning, waterfront planning, and development research. Peter was a member of the National Capital Commission's Design Advisory Committee from 1994-1996, and is a Fellow of the Canadian Society of Landscape Architects who have honoured him with a lifetime achievement award.

Jeffrey Pinhey, M.A.Sc., P.Eng. Civil Engineering

Jeffrey Pinhey is a Civil/Environmental Engineer with a 25 year track record of project management and design experience in environmental engineering and planning, municipal engineering, geotechnical and materials engineering, landscape design, and project management. In addition to being a senior design associate of Ekistics, he is also sole proprietor of Land Design Engineering Services, an environmental consultancy providing engineering support services to other designers, private industry, and government. Jeff is one of those few engineers who really understand and can contribute to creative urban design solutions. He is regularly sought after as a creative engineer by many professionals in Atlantic Canada. Jeff is a former President of a multi-disciplinary Landscape Architecture, Engineering and Planning firm in Nova Scotia, and has a long and successful track record of project management of planning and design studies. This includes many of the streetscape and urban design projects Ekistics has undertaken.

Jill Robertson, Landscape Architect & Planner

Jill is both a landscape architect (CSLA) and a planner with a Bachelor of Environmental Science and a Masters in Landscape Architecture from the University of Guelph. Jill spent the last four years working as a landscape architect for a large multi-disciplinary engineering firm in Toronto, where she played a major role in Active Transportation, Cycling, and Trails Master Planning projects for municipalities such as Markham, Burlington, Mississauga, and Milton. She is a landscape architect and ISA certified arborist with a special interest in landscape ecology, park planning, cemetery / memorial planning, and ecological design. For every project that she is involved with, Jill brings a high level of technical competency, graphic clarity, and contextual sensitivity. As a avid Cyclist, Jill bikes to work every day.

Rachael McLean, Landscape Architect

Rachael holds a degree in Landscape Architecture from the University of Guelph and has been with Ekistics for almost 3 years. She brings a creative energy to a wide range of projects. Her commitment to quality ensures that she takes the extra step in achieving productive solutions. She is one of the project designers for the Town of Trenton Main Street Design Study now being prepared by Ekistics, as well as playing a significant role in the ongoing Yarmouth Downtown Revitalization Blueprint. She will bring a wealth of knowledge to this project and will be key in helping meet the timelines.

Derek Hart, Civil Engineering Technologist.

Derek earned his Civil Engineering Technologist degree at the University College of Cape Breton and has been with Ekistics for over 10 years. Mr. Hart possesses technical skills in CAD, GIS, 3D computer modeling, image capture technology and project management. Derek will produce the mapping documents for this project.

2. SNC-Lavalin

SNC-Lavalin Inc. (SLI) is one of the leading groups of engineering and construction companies in the world, and a key player in the construction, ownership and management of infrastructure. In business since 1911, SLI companies are active across Canada, in the United States, and in 30 other countries worldwide. SLI is currently working on projects in over 100 countries. Detailed information is available at www.snclavalin.com.

Bedford Phase 2 Waterfront Visualizations for WDCL. Ekistics 2003.

In Nova Scotia, SLI has been operating for over forty-five years and has the expertise to deliver small and large-scale projects from study and concept development through to construction and commissioning. SLI's local multi-discipline team approach enables us to offer our clients a full range of engineering services including project management, contracting, and consulting. SLI's engineering group has acted on the owner's behalf on a variety of projects ensuring that planning, budgeting, scheduling and financing are managed to achieve the owner's goals. Our experience extends to the planning, design and detailed engineering of developments, which require innovative responses to minimize construction costs.

SLI's Halifax Office maintains a full multidisciplinary team, including the core transportation and municipal engineering capabilities that are essential to successfully complete this project. SLI has carried out extensive work on a wide variety of infrastructure assignments, across the Province of Nova Scotia and throughout Atlantic Canada and have established a strong local transportation presence to our internationally recognized roads and highways group. Our experience extends from knowledge

based studies and conceptual design to full construction certification and we have drawn upon these resources to assemble a group of in-house specialists that are highly capable of performing all aspects of the work under this contract.

Our project team will be lead my Mr. Roger Boychuk, P.Eng. He will also assume the role of Lead Transportation Engineer and will be the main contact for the engineering component of this project. He will be assisted by Mike Connors, a Master's level graduate of the University of New Brunswick Transportation program.

3. Atlantic Road & Traffic Management

Atlantic Road & Traffic Management (ARTM) is a sole proprietorship specializing in traffic engineering and transportation planning. Established in 1997, Atlantic Road & Traffic Management provides traffic engineering and transportation planning expertise to businesses, municipal and the provincial government departments.

ARTM's traffic engineering specialists have managed and participated in over 200 traffic engineering and transportation planning during the past seven years. Private sector projects have included many traffic impact studies, as well as intersection and traffic signal design studies. Municipal and Provincial government projects have included safety and operational review of street and road sections.

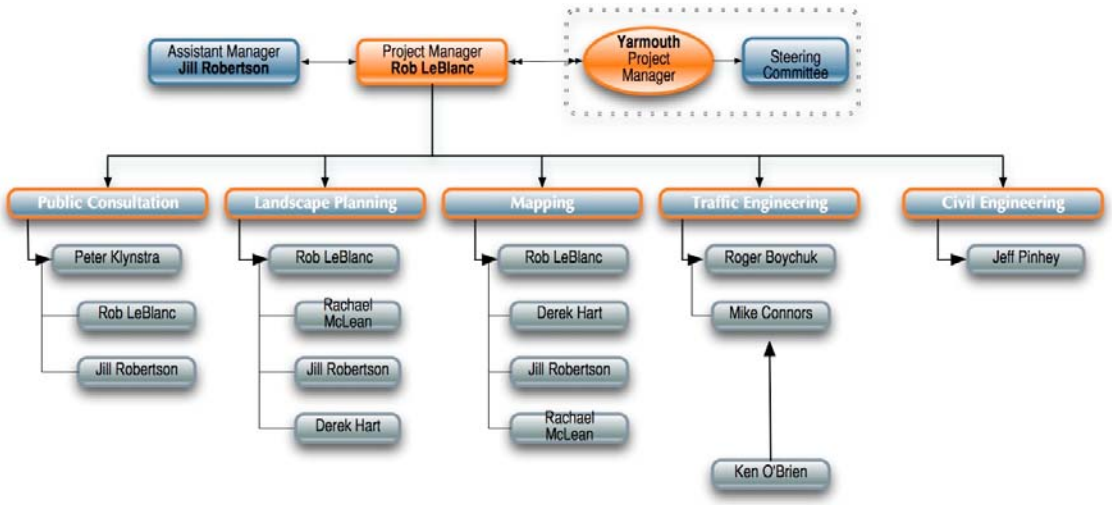
Ken O'Brien, P. Eng, Principal

Ken has over 36 years of experience in traffic engineering and transportation planning, including 29 years with the Nova Scotia Department of Transportation and Public Works (TPW). He has a broad knowledge of transportation issues, including traffic engineering, active transportation, system planning, design, safety, economics, environmental concerns, maintenance and capital needs, urban transportation planning, and multi-modal systems. During the past seven years, he has managed and completed many traffic and transportation planning studies for major Atlantic Canada firms and municipalities, and has provided the traffic engineering and transportation planning needs for many Halifax Regional Municipality (HRM) and TPW projects.

1.2

Team Structure

The following diagram demonstrates the team structure proposed for this project and the individual team players and their role on the team.



1.3

Curriculum Vitae

The CV's for each team member are shown at the end of this proposal.

1.4

Approach to Consultant

The approach to project management on a project with this timeline will be challenging. We have found the following steps useful in managing projects like this:

I. The consulting project manager (Rob LeBlanc) and the appointed manager for the Project Management team (Municipality of Yarmouth) consult regularly (at least weekly for the 4 months of the project) and the lines of communication between the team and client are directed only through the project managers. This ensures that ideas and directions are not lost.

II. The consulting team is briefed on the team and client chain of command at the beginning of the project. All team members are directed to keep the project manager abreast of the results of all meetings, discussions and findings throughout the project.

III. The client is apprised of relevant information by the consulting project manager throughout the project through regular meetings, phone calls and email.

IV. We will prepare a weekly progress sheet on Fridays which outlines the work completed during the previous week and the work to do in the coming week. We will meet with the committee to brief them at key times.

V. In addition, the project manager will be coordinating with various team sub-consultants on a very regular basis to ensure project milestones are being met in a timely fashion. At the start-up meeting, we will ask the client liaison if they would like to be cc'd on all correspondence between the team. This will provide another measure of security that the project is proceeding as scheduled.

Quality management is the direct responsibility of the consulting project manager in liaison with the Project Management Team project manager. Issues of quality management are spelled out before the schematic design and again before the final working drawings to ensure the highest standards are met.

1.5

Why Our Team?

There are several reasons why the Ekistics team is the right group for the Yarmouth Active Transportation Plan:

- We have offices and staff in both Nova Scotia and Maine so we can approach the problem from both sides of the Town.
- Active Transportation Planning requires a broad skill set addressing many different aspects of design and planning, including transportation engineering, streetscape planning, landscape architecture, signage and wayfinding, recreation planning, community consultation and engagement, open space and park planning, etc. In addition to experience with the design and implementation of many trails, recreation, and open space plans, Ekistics has unparalleled public consultation expertise which will be necessary to achieve meaningful public engagement.
- We are a well respected firm with creative designers and pragmatic planners. We understand the link between economic development and planning/design.
- We are currently working on the Yarmouth Downtown Revitalization Plan, and would expand on all opportunities for improved efficiency and cost savings to the Town.
- Ekistics has recently completed (in the last 2 years) many of the region's trail, transportation, and planning studies (Inglis Place, Main Street [Dartmouth], Barrington Street, Portland Street, Herring Cove, Sackville Drive, Bayne Street, Trenton, Port Coleborne (Ontario), Port Carling (Ontario), Antigonish Main Street, and many others).
- Ekistics, SNC-Lavalin, and ATRM offer full range design services in landscape architecture, urban planning, public consultation and engagement, municipal and transportation engineering, signage design, graphic design, community branding and visual impact assessment. All the skills necessary to complete this project.
- The firms assembled include some of the most creative designers in the world. Our highly graphic design approach will ensure an understanding of the detailed design proposal.
- We have never returned to a client asking for more money to complete any project than we originally agreed for the work.
- Ekistics has consistently produced project results over and above the client expectations.
- Our local experience in recreation planning has turned to international recognition over the last 5 years with waterfront and downtown plans in Morocco, Libya, Tanzania, Egypt and China. We are a local firm with significant international experience. Our New York Times Tower microclimate study just won an international design award (ASLA).
- Ekistics has won 3 international design competitions in the last 3 years (Point Pleasant Park, the Saint John Waterfront competition, the Dar Es Salaam Waterfront Competition) and 4 national design awards (Saint John Harbour

Abu Kammesh Waterfront Resort City, Libya. Ekistics 2007.

Passage Greenway, The New York Times Tower Microclimate Study and the Point Pleasant Park Plan).

- Ekistics led projects always meet the scheduled deadlines.
- Ekistics undertakes a significant amount of design for construction every year (usually more than $15-20 million annually). We understand the practicalities of getting things built in Nova Scotia.
- Ekistics and SNC-Lavalin understand how to leverage existing funding programs to make AT Master Plans implementable.
- Our process always calls for significant public input to ensure our plans reflect community values.

Previous Experience

- Dartmouth Waterfront Trail Plan
- Moncton Active Transportation Plan & Greenway System
- Harbour Passage Greenway, Saint John
- Liuzhou City Master Plan, China
- St. John's Waterfront Tourism Master Plan

Chapter 2.0

Understanding of the Project

The approach to this project will build upon Yarmouth's existing Active Transportation infrastructure, while highlighting areas for expansion and opportunity, in order to create a truly holistic community-based plan. Through a grassroots consultation approach, we will build the community support and stakeholder consensus to ensure the long term viability of the plan. It is our intent to create a "Made for Yarmouth, by Yarmouth" plan that is specific to the unique needs and opportunities of the entire Municipality. Building on our recent experience with the Yarmouth Downtown Revitalization Plan, we will ensure the final product is specific, implementable, cost-effective, and meets the long terms needs of the citizens and visitors of Yarmouth.

Often, the failing of a conventional Active Transportation master planning process is superficial public consultation. Without achieving a broad base of public support and buy-in, implementation of plan objectives may easily become hindered. Ekistics' advantage over other proponents is our proven track record and industry-leading expertise in conducting meaningful public engagement that works towards achieving consensus.

As clearly set out in Request for Proposal, the primary objectives of this study are:

- Outline a broad plan for extensive community engagement.
- Identify upgrades and development scenarios to create a walkable and wheelable network through the Town and across the Municipality of Yarmouth.
- Highlight opportunities for connectivity throughout and across Yarmouth.
- Determine technical plans and specifications for the proposed upgrades.
- Recommend planning and policy strategies to ensure implementation.

We recognize that outstanding and creative physical design is only part of the solution for successful Active Transportation Master Plan. Another vital component includes the development of strong partnerships with the YCATC, the Town, and other potential stakeholders. The plan needs to bring together the various interest groups so that each understands the requirements of the other and so that, through consensus, a plan can be developed that engages all the various interests.

2.1

Goals and Objectives

It is our intention to review, redefine, and augment the project goals and objectives with Staff at our start-up meeting. From what we know now about the downtown, we think the draft goals and objectives might include:

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1. Build Upon Existing Infrastructure

- Ensure the mapping of existing facilities is complete and current.
- Highlight key sections of the network, through expanded opportunities for signage, mapping, and wayfinding.

- Create a cohesive network by linking existing AT facilities with common streetscape elements such as benches, plant material, and lighting.
- Outline ideal maintenance and operational standards to ensure the long term viability of the existing and proposed facilities.

2. Create a Route Designer's Toolbox

- Produce a comprehensive set of on and off-road facilities design, construction, operation, and maintenance policies and guidelines.
- Ensure a balance between technical detailing and aesthetic considerations for system facilities.
- Develop a phasing strategy and long-term operational plan, to ensure implementation and maintenance of existing and new facilities.
- Avoid design choices that constitute a long term maintenance problem.
- Reduce vandalism opportunities by carefully selecting furnishings, minimizing areas that are not in plain view, and following CPTED design principles (Crime Prevention Through Environmental Design).
- Ensure that the finished Plan is fully aligned with existing Municipal practices and policies, where necessary and appropriate.
- Identify and reduce pedestrian and vehicular conflict points.

3. Ensure Viability through Community Engagement

- Identify stakeholders early in the process and provide an opportunity for meaningful involvement in the design process.
- Create momentum during the inception of the project, to develop excitement and support for the Plan.
- Identify community champions who will support the Plan through all phases of development.
- Ensure the design represents the vision and philosophy of the various stakeholders.
- Work with the Town to maximize context sensitive solutions that are both proven and unique.
- Bring funding agencies together to create a showcase project for all involved.
- Talk to developers about the potential missing opportunities and find ways to help them achieve their goals while ensuring the goals of safe and efficient Active Transportation are met.
- For 'hard sell' areas or other places where opposition to connections exists, undertake additional consultation to build consensus and achieve meaningful and realistic design solutions.

4. Understand the Context of Yarmouth

- Understand the unique natural and built environment of Yarmouth, to ensure contextual sensitivity.
- Recognize existing destinations and expand on opportunities to create desirable nodes and terminus points throughout the system.
- Introduce unique and appropriate facilities, such as furnishings, benches, lighting, fixtures, information and interpretive signage, etc.
- Create a hierarchy of route options, meeting a range of users' needs and abilities.
- Integrate AT facilities into the streetscape, without compromising existing character, functions, facilities, or safety.
- Look at special district marketing programs to showcase special destinations.
- Seek out and fill-in gaps in existing network facilities, including areas beyond walking and cycling, such as skating and paddling.
- Identify barriers and constraints early in the process, in order to develop feasible solutions to overcome these obstacles.

5. Support people in their active transportation pursuits

- Look at zoning practices to encourage workplaces and commercial spaces to develop bicycle parking and shower facilities for AT commuters.
- Implement bicycle parking as a standard for any new developments.
- Review old zoning standards to ensure that AT practices become standard as the Town grows and evolves.
- Work with developers to help them understand the benefits of integrating Active Transportation practices into their projects.
- Maximize the potential of a fully linked system, using high quality design and the promotion of node and terminus attractions.
- Link the key areas of Yarmouth with easy pedestrian connections.

6. Capitalize on the strategic PR value of this important project.

- Identify opportunities to raise the profile of Yarmouth by creating a buzz about this project and its benefits.
- Actively solicit opportunities for media attention at key stages of this project.
- Assist the Active Transportation Committee in creating stories and identify events with high media interest throughout the project.
- Support the Town in using this plan as a case study for other Municipalities.

Cyclist in Yarmouth Ekistics 2009

7.Tie Into Existing Ferry Traffic

- During our North Sydney revitalization plan, we discovered creative ways to encourage people to leave the terminal and visit the Town. This included a countdown clock for the ferry and signs that indicated how many minutes walk it was back to the ferry terminal. These lessons will prove invaluable for Yarmouth.
- Provide AT network route maps on the ferry and at the ferry terminal.
- Examine the feasibility of a bike-share program in co-operation with the CAT ferries, to encourage visitors to explore Yarmouth on two wheels.
- Capitalize on the captive audience.

North Sydney Revitalization Plan, Ekistics

Standards and Initiatives

On top of the studies outlined in the terms of reference, we will ensure that our work conforms to the recommendations or regulations outlined in:

- TAC Manual 2008
- Barrier Free Design (CAN/CSA-B651-95)
- Standard Specifications for Municipal Services
- CPTED Standards
- Yarmouth Municipal Standards

Chapter 3.0
Approach and Methodology

The following sections describe our method for completing the tasks set forth in the terms of reference in four phases: understanding and information gathering, consultation, schematic Design, and reporting.

Phase 1 - Understanding & Information Gathering

The initial phase of this project will include a start-up meeting and hike / bike tour, geared towards understanding the background issues more fully for this project. These are described in more detail below.

1. Background preparation

Building on our work with the Downtown Revitalization Plan, we will use our previously obtained background information as a starting point for the development of a comprehensive base plan. By expanding on our existing base information, we are increasing the efficiency of this phase of the study. We would also ask that the Municipality provide any additional and relevant background studies, GIS information, record drawings, and engineering standards for the study area.

2. Project Conference Call

We would also like to have a conference call with the committee to plan the public workshop for our first site visit. We need to be able to understand the issues surrounding the project prior to our first visit so that the workshop can be coordinated for our first visit. We think that an hour long call with the committee, plus some follow up interviews with key staff will help us prepare for the first workshop very early in the project.

3. Prepare workshop posters

We will assemble a workshop poster for the client to post in public places. We will also prepare the text for an ad for the workshop which we will give to the client for advertising in the local papers. We will discuss ways to maximize participation at project startup. We would assume that any direct invitations would be completed by the client if they are needed.

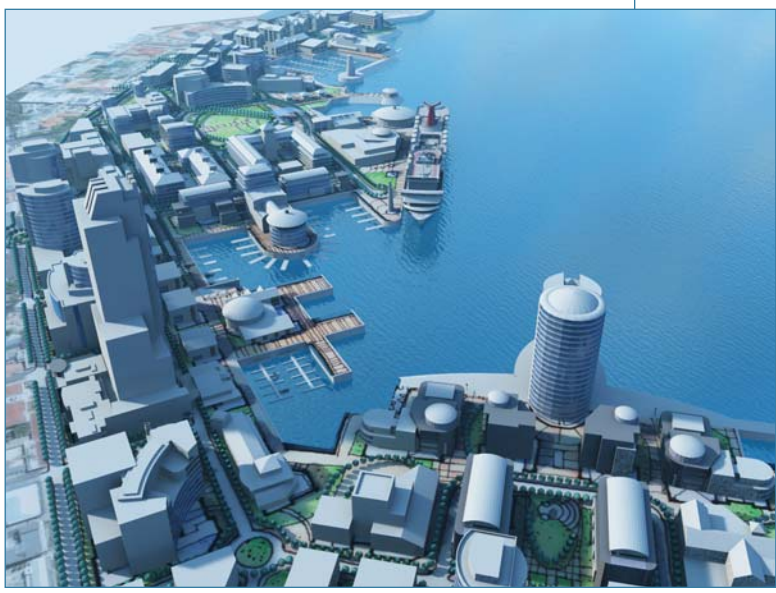
4. Prepare Study Webpage and Online Survey

We regularly employ webpages and online surveys as a component of our public engagement strategy. In advance of our visit, we will develop a draft version of a comprehensive, on-going web page (linked to the Town's existing website) for interaction between Town staff and the public, as well as an on-line Active Transportation survey. We would like to confirm the content at this time, so that the web page and survey can go live prior to our first workshop.

5. Start-up Meeting (Trip #1)

About 2 weeks after our initial conference call, we would come to Yarmouth for the startup meeting, stakeholder interviews, the first public workshop and the inventory and analysis. We anticipate a lunch startup meeting.

At the start-up meeting, we will discuss the project objectives, the potential stakeholders, the proposed work schedule and timelines and the details of the workshop(s) with Staff and the Committee. Rob LeBlanc, the project manager, will prepare an agenda at least three days before the meeting. We would also like to discuss, in detail, the issues related to the area beyond those outlined in RFP including the project boundary, the municipal plan, development projects on the books, etc. We would hope to come out of this meeting with a consensus on the detailed objectives for the project, and an understannding of the strategic Town goals and possible administrative structure.



Dar Es Salaam Waterfront Plan, Tanzania. Ekistics 2008.

To maximize our time on the first visit, we would like to do our interviews and inventory on our first trip. To that end, we would ask that the client provide a list of interviews at least 1 week before our startup so that we can phone and set up interviews for our visit.

Rob LeBlanc and Jill Robertson will attend for the team.

6. Hike and Bike Tour & Inventory

Following our start-up meeting we would like to take a walking and /or cycling tour of the area with Staff and the Committee. During this session we would discuss detailed opportunities/strengths, constraints and weaknesses. Of specific interest will be the state of existing facilities, network connectivity, and current maintenance and operational practices.

3.2

Phase 2 - Consultation

1. Interviews

Our team will spend the remainder of the first day and the next day interviewing key stakeholders for the project including municipal planners and engineers, politicians, interest groups, business leaders, stakeholders, Cat Ferries, the Port Authority, developers or other relevant organizations/individuals.

The team members would spend about 2 days in Yarmouth during this phase.

2. Design workshop

Following the first day start-up, the consultants will host a stakeholder workshop that night with members of the Steering Committee, the Yarmouth County Active Transportation Committee (YCATC), the invited public, and other invited guests as identified by the Steering Committee.

For the workshop event, we would need to discuss the format with the committee. Our initial approach would be to combine a visioning and design workshop into a 2-2.5 hour session. We anticipate having the participants work at tables of between 6-8 people on individual base plans of the study area. The first portion of the workshop would focus on the existing active transportation system, seeking out those sections or connections that are well used, unmapped, or requiring maintenance, and highlighting trip destinations and critical nodes. The next phase of the workshop would focus participants on describing connections that they would like to see made, and nodes and destinations that could be created, enhanced, or integrated into the system. Rob LeBlanc will moderate the workshop. At the end of the evening, we will ask participants to present their plans to the group. Rob LeBlanc will summarize the findings and will hint at a consensus plan. He will also tell people about the online survey.

The workshop should ideally excite people about the potential of fully realized Active Transportation network, while starting to identify champions for various projects.

This stage would end Trip #1.

3. Follow-up Information Gathering

Following the first visit, we will have additional material to gather including background documents and base studies, other phone interviews, other document reviews, etc. We will also undertake a historic review of resources in the study area and we'll talk to local tourism and business contacts.

Phase 3 - Technical Review and Analysis (trip #2)

1. Mapping

With the assistance of municipal staff, our team will update the inventory of existing and proposed on and off-road AT facilities in the Municipality. The updated inventory will be consolidated onto three separate maps that will form the basis for presentations of existing conditions, constraints and opportunities for the Core Team and the Steering Committee, stakeholders and the public. The inventory maps will illustrate existing and proposed features and infrastructure. We will incorporate all available background information, combined with the local knowledge of our Core Team and input from Town staff. We will also undertake selected site visits to complete the inventory. The three categories that will be mapped including:

- **Existing and Planned Facilities**. We will obtain, review, and assemble on and off-road network data for existing routes provided by the Municipality.
- **Major Attractions and Destinations**. These can include both recreational and commuter destinations, plus tourist attractions, schools, major employment centres, libraries, major retail centres or shopping districts, recreational facilities and transit terminals.
- **Barriers to Development**. Barriers will be prioritized to include primary and secondary barriers. A well-designed system should be continuous and overcome secondary level barriers in order to encourage use by many different types of users.

2. Route selection Criteria

In order to determine the necessary linkages and prioritize system development, our team will build will build upon our review of background data and draw upon the numerous studies, policies, guidelines, and plans from an array of municipalities across North America and internationally. We will review guidelines accepted by recognized associations such as ITE, TRB, TAC, AASHTO, and FHWA. We will also integrate information learned from our consultation with key stakeholders and the members of the public, as well as look at existing practices undertaken by the Town of Yarmouth. This information will be compiled into a route selection criteria matrix, which our team will use to evaluate candidate routes, and prioritize development and expansion of the AT system.

3. Candidate route Selection & Draft Report

We will identify and investigate candidate routes, based on the information gathered to date from the study goals and objectives, our inventory and analysis, and the public consultation.

Approximately one week will be spent in the field to "ground-proof" the short list of route options as part of this investigation. During the field work, we will collect a digital photo inventory and record GIS way points at photo locations as well as where road right-of-way measurements have been taken.

We will evaluate the route options and recommend preferred routes based on the route selection criteria matrix. A careful balance of numerical weighting factors and qualitative information on each corridor must be derived to ensure that priority is correctly assigned. This will be completed through consultation and meetings with the Core Team, the Steering Committee, and the public, plus involved stakeholders. Priority trail and on-road alignments will be explored based on potential overall benefits and impacts.

4. Draft Report

Based on the work completed in preceding tasks, a draft network will emerge that will be a mix of on and off-road facilities. This network will be a long-term Active Transportation Master Plan that builds upon the existing on and off-road networks that have been developed by the Municipality. This map will be based on the digital mapping provided to us by the Municipality. We will digitally map the draft network, including key entry points and destinations.

We will assemble the mapping, cross sections, standard details, phasing and maintenance schedules, and cost estimates into a draft report. This report will be prepared within 8-10 weeks of the design workshop. We will provide 3 DRAFT and 1 digital **PDF** of the report. We suggest that the Draft report be uploaded onto the study webpage, for public comment and review.

Phase 4 - Reporting (trip #3)

The draft Active Transportation Report will be reviewed by the steering committee (and invited stakeholders, if requested) for feedback prior to commencing the final report. Comments and feedback will be assembled and included in the final report.

Bedford Phase 2 Waterfront Visualizations for WDCL. Ekistics 2003.

1. Final Design Report

We will assemble the final comments and we will prepare a final report. We will provide 3 copies of the final report plus an archival **PDF**.

2. Community Open House

At the conclusion of the study, we will host a Community Open House, to share the completed AT Master Plan with the public. This will be an important opportunity for the

public to see their involvement in the development of this master plan come to fruition.

Rob LeBlanc, Roger Boychuk, and Jill Robertson will attend for the team.

Deliverables

The final Active Transportation Master Plan will include the following components:

- Conceptual details and cross sections for proposed street upgrades, intersections, sidewalks, trails, signage, lighting, street furniture, and traffic calming.
- Recommendations for the drafting of municipal planning strategy policies and recommendations for subdivision bylaw standards, relating to any proposed infrastructure.
- 10 year phased approach for implementation.
- Preliminary cost estimates and budgeting.

Dar Es Salaam Waterfront Plan, Tanzania.
Ekistics 2008.

Chapter 4.0:

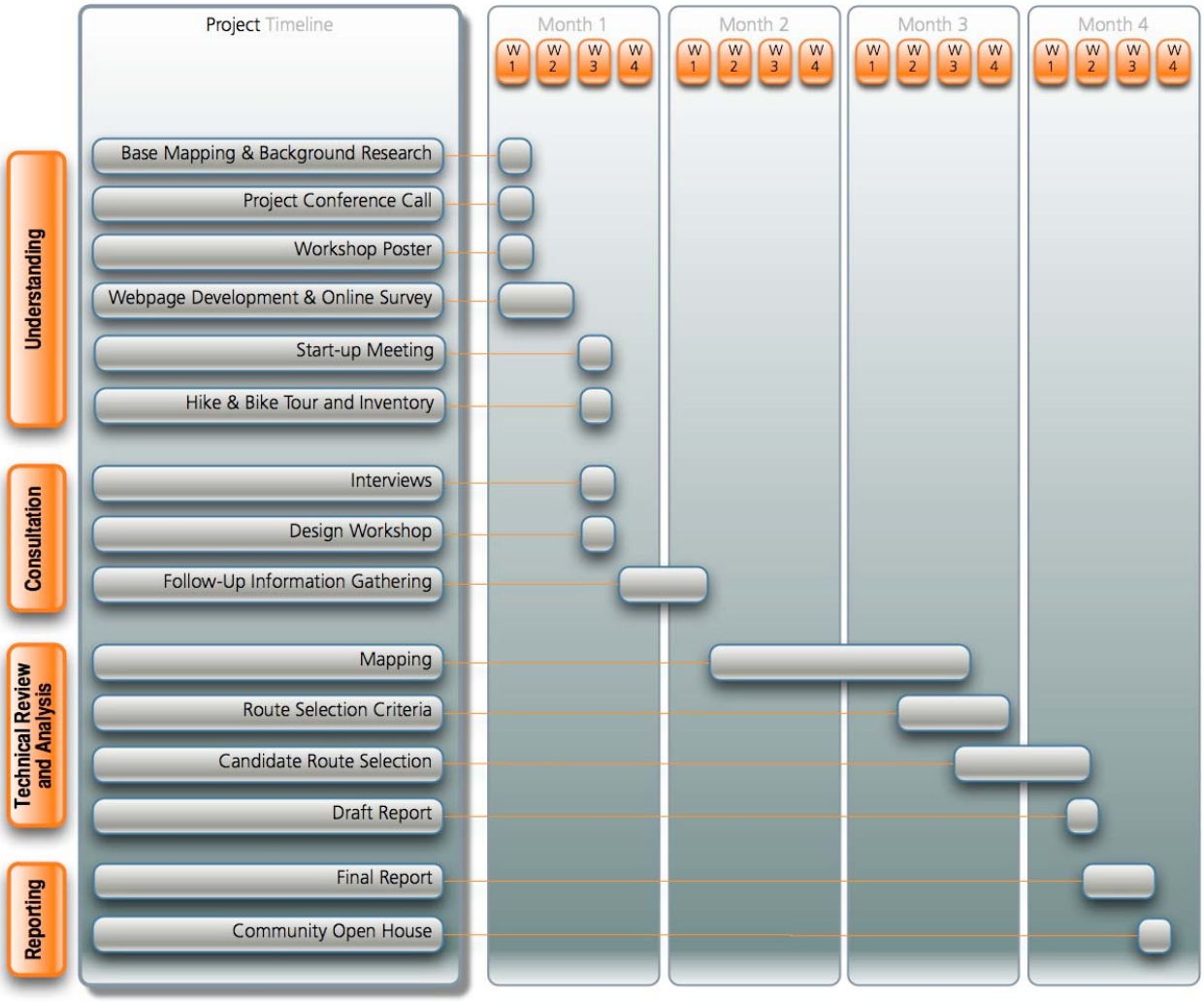
Fees and Timeline

This will be a challenging but rewarding project for the Town of Yarmouth if creativity and practicality can be harnessed. We want to assure the steering committee that this job will receive our highest attention.

4.1

Timeline

The timeline on the next page shows the critical path for completing this project. Since the start-up date is not confirmed, we have used a relative timeline for the project. We believe we can easily complete this project within 4 months. The following chart 4.1 outlines our proposed timeline for this project.


Project Timeline
Month 1
Month 2
Month 3
Month 4
W 1
W 2
W 3
W 4
Understanding
Base Mapping & Background Research
Project Conference Call
Workshop Poster
Webpage Development & Online Survey
Start-up Meeting
Hike & Bike Tour and Inventory
Consultation
Interviews
Design Workshop
Follow-Up Information Gathering
Technical Review and Analysis
Mapping
Route Selection Criteria
Candidate Route Selection
Draft Report
Reporting
Final Report
Community Open House

Yarmouth Active Transportation Master Plan

	Ekistics						SNC-Lavalin			ARTM
Task	R. LeBlanc	P. Klynstra	J. Pinhey	J. Robertson	R. McLean	D. Hart	R. Boychuk	Intermediate	Technical	K. O'Brien
3.1 - Understanding										
Base Mapping & Background Research	0.5				0.5	1			1	
Project Conference call	0.1			0.1			0.1			
Workshop Poster					0.5					
Online Survey	1									
Startup	0.5	0.5		0.5						
Hike and Bike Inventory / Analysis	0.5			0.5						
3.2 - **Consultation**										
Interviews	0.5			0.5			0.5			
Design and Visioning Workshop	0.5			0.5			0.5			
Follow-up Information gathering				0.5	0.5				0.5	
3.3 - Technical Review										
Mapping	3			3	1	2	1	2	2	
Route Selection Criteria	1	0.5	2	2	2	0.5	2	1		1
Candidate Route Selection	1	0.5	2	3	3		2	1		1
Draft Report	2		0.5	0.5	2	0.5	0.5	1		
3.4 - Reporting										
Draft Presentation	1			0.5				0.5		
Final Report	1	0.5		1			0.5	0.5		
Community Open House	0.5	0.5		0.5			0.5			
Total Days	13.1	2.5	4.5	13.1	9.5	4	7.6	6	3.5	2
Percentage involvement	25%	5%	7%	19%	10%	4%	14%	9%	3%	4%
Per Diem Rate	*Can$ 950.00*	*Can$ 950.00*	*Can$800.00*	*Can$ 720.00*	*Can$ 550.00*	*Can$ 550.00*	*Can$ 950.00*	*Can$ 720.00*	*Can$ 500.00*	*Can$ 950.00*
Total $ per person	Can$ 12,445.00	Can$2,375.0	Can$3,600.0	Can$9,432.0	Can$5,225.0	Can$2,200.0	Can$7,220.0	Can$4,320.0	Can$1,750.0	Can$1,900.0
Subtotal Fees	Can$ 50,467.00									
Allowable Disbursements **	Can$ 5,500.00									
Total including disbursements	**Can$ 55,967.00**									

4.2

Fees

All fees are shown in CAN dollars. Our design team member's hourly and daily rates are indicated in chart 2 (rate structure) as well as the lump sum fee for each sub-project. This table clearly shows the proposed tasks, the individual assigned to each task and the days associated with each activity.

The total lump sum fee for this project will be **$55,967** including expenses ($5,500) plus HST. Expenses have been estimated using the cost of assembling base materials, cost of travel (6 person trips), the cost of printing and reproduction of the 3 draft and 3 final reports, and providing snacks and beverages as may be required for the public meeting. Any required expenses beyond those outlined above (i.e. Advertising for the workshop, rental of the hall, etc.) are not included in our expenses. We don't assume there will be any additional expenses unless the client changes the scope.

If awarded the project, we would work with the Town's project manager to look for areas of potential overlap with our on-going Downtown Revitalization Plan. For example, trips could be held concurrently, and the reduction in expenses would be passed along to the Town.

We propose a payment schedule as follows: 10% on startup, 20% after the community workshop, 60% after draft report presentation to committee, 10% after final report. All invoices will be due within 30 days of the issued date on the invoice. Overdue accounts will accrue a 2% interest charge for each month late. All payments will be made to Ekistics Planning & Design.

Robert LeBlanc

President, Ekistics Planning & Design

Robert T. LeBlanc

B.Sc., BDEP, MLA

Robert LeBlanc's professional experience spans twenty years of varied project planning and design in all parts of the globe. He has been the senior project manager for nearly all Ekistics projects in the last 13 years, leading large multidisciplinary teams from concept to completion.

He is a landscape architect and environmental planner with a special interest in urban design, landscape ecology, park planning, waterfront/resort planning and the application of evolving technologies to research and design. Rob is committed to the highest standards of sustainable design and brings first-rate graphic communication to every project.

Education

Master of Landscape Architecture, MLA, University of Guelph, Ontario, 1994

Bachelor of Design in Environmental Planning, NS College of Art and Design, l992

Bachelor of Science, B.Sc., Dalhousie University, Nova Scotia, 1989

Golf Course Design, Harvard University, Boston, Massachusetts, 2000

Memberships

Canadian Society of Landscape Architects, Atlantic Provinces, past president

American Society of Landscape Architects, ASLA

Canadian Institute of Planners, MCIP

American Planning Association, APA

International Association of Landscape Ecologists

Soil and Water Conservation Society

Canadian Landscape Reclamation Association

Stanley Thompson Society

Society for Environmental Graphic Design

Planning & Urban Design

- *Downtown Truro Facade Incentive Program, NS*
- *Chengdu City Expansion, China*
- *New Glasgow Urban Design Study, NS*
- *St. Peter's Village Master Plan, NS*
- *Dong Da Mixed Use Community, China*
- *Bedford South Master Plan, Halifax, NS*
- *Pleasantville Community Master Plan, St. John's, NFLD*
- *Mount Saint Vincent University Master Plan, Halifax, NS*
- *Portland Street Facade Study, Dartmouth, NS*
- *Zowara-Abu Kammesh City Master Plan, Libya*
- *500 Lot Heritage Study, Charlottetown, PEI*
- *Inglis Place Streetscape Plan, Truro, NS*
- *Bible Hill Core Area Downtown Plan, Bible Hill*
- *Inner Mongolia Neighbourhood Plan, China*
- *Dong Da City Master Plan, China*
- *Port Carling Streetscape Study, Ontario*
- *Debert Air Industrial Park Master Plan*
- *Bible Hill Core Area Plan*
- *Main Street Streetscape Study, NS*
- *Greenwich Planning Study, NS*
- *Startford Core Area Plan*
- *Saint John Civic Core Master Plan*
- *Charlottetown Downtown 500 Lot Strategy*
- *Truro Urban Design Strategy*
- *Town of Stellarton Strategic Plan*
- *Bridgewater exit 12 Commercial Development Plan (with Cantwell Co.)*
- *Liuzhou City Design, new City for 150,000 people. China*
- *FuzhouMaster Plan Community, China*
- *Town of Wolfville's Commercial Development Plan*
- *Herring Cove Road Streetscape Study, NS*
- *Reeves & Granville Streetscape Design Study, Port Hawkesbury*
- *Sydney Downtown Facade & Signage Study*
- *Exit 12 Commercial Development Study*
- *Truro Heritage District Study, NS*
- *Kingstec College Campus Master Plan*
- *Acadia University Campus Landscape Master Plan, NS*
- *North Sydney Streetscape Design Study, NS*
- *Summerside Streetscape Design Study, PEI (with DKG Ltd.)*

Robert T. LeBlanc (continued)

B.Sc., BDEP, MLA

- *Bayne Street Land Use Study, NS*
- *Barrington Street Heritage District Study*
- *Shubenacadie Canal Greenway Master Plan, NS*
- *Times Square Tower Microclimate Study, New York, USA.*
- *Halifax Waterfront Urban Design Concepts, Halifax*
- *Fundy Outdoor Network Provincial Park Master Plans (with DKG Ltd.)*
- *Downtown Charlottetown Streetscape Study, PEI.*
- *Bedford basin Western Shore Plan, NS*

Tourism Planning

- *Oukaimeden Resort Plan, Morocco*
- *White Point Resort Master Plan, NS*
- *Dundee Resort Master Plan, NS*
- *Ben Eoin Ski/Golf Resort Master Plan, NS*
- *Peggy's Cove Management Plan, NS (with EPG Ltd.)*
- *St. John's Waterfront Tourism Study, NFLD*
- *Oak Island Tourism Plan (with EPG Ltd.)*
- *Norris Point Waterfront Tourism Plan, NFLD*
- *Fundy Interpretive Master Plan, Kings County, NS*

Waterfront Planning

- *Bedford Waterfront Phase 2 Master Plan, NS*
- *Birch Cove Waterfront Plan, NS*
- *Dar Es Salaam Waterfront Plan, Tanzania*
- *Sheet Harbour Waterfront Plan, NS*
- *Souris Harbour Plan, PEI*
- *Dar Es Sallaam Waterfront Plan, Tanzania, Africa*
- *Lunenburg Waterfront Development, NS (with Cantwell & Company)*
- *Historic Properties Redevelopment, NS*
- *Queens Landing Waterfront Development, NS*
- *Saint John Coast Guard Site Redevelopment*
- *Charlottetown Harbour Plan, PEI*
- *Wrights Cove Master Plan, Halifax*
- *Pugwash Waterfront Plan, NS*
- *Grand Etang Waterfront Plan, NS*
- *Port Morien Town Square, NS*
- *Arisag Waterfront Plan, NS*
- *Bayfield Waterfront Plan, NS*
- *Port Hood Waterfront Plan, NS*
- *Canso Waterfront Plan, NS*
- *Port Hawkesbury Waterfront Plan, NS*
- *Saint John Waterfront Greenway, NB*
- *St. John's Waterfront Tourism Study, NFLD*
- *West Point Waterfront Development, PEI*
- *Alberton Waterfront Plan, PEI.*
- *St. Peters Waterfront Redevelopment, PEI*
- *Wood Islands Waterfront Planning & Design, PEI.*
- *Campbellton Waterfront, Campbellton, N.B.*
- *Chaleur Regional Waterfront Design Study (with DKG Ltd.).*
- *Montague Waterfront, Montague PEI (with Morello Assc).*
- *Bedford Waterfront Development (phase I working drawings and phase II concepts).*
- *Pictou Waterfront Development.*
- *Dartmouth Waterfront Development Plan.*

Landscape Architecture & Site Planning

- *Reversing Falls Master Plan, NB*
- *Debert Gateway Study, NS*
- *Point Pleasant Park Master Plan, Halifax*
- *Lake Banook Master Plan, NS*
- *Dozens of Seniors Homes and care facilities in NS.*
- *Point Pleasant Park International Design Competition, co-winner.*
- *Kings College Courtyard, Dalhouse University, NS*
- *Sackville Landing Urban Plaza Redevelopment, Halifax*
- *Porters Lake Provincial Campground Improvement Plan.*
- *Richmond Villa Seniors Complex, NS*
- *Purdy's Wharf Redevelopment Plan, NS*
- *Tall Ships Quay 2000 Plaza. Halifax NS.*
- *Dieppe Kite Park Master Plan, NB*
- *Fox Creek Golf Community Plan*
- *Columbus Field Park Master Plan, Antigonish, NS*
- *Wentworth Park Master Plan, Sydney, NS*
- *Western Commons All Weather Turf Facility, NS*
- *New Waterford All Weather Turf Facility, NS*
- *Dartmouth Waterfront Greenway Plan*
- *NS Hospital Greenway, Dartmouth, NS*
- *Mainland Common School*
- *Le Village Historic Village, Mont Carmel, PEI.*
- *Halifax International Airport Addition, Halifax, NS.*
- *Halifax Waterfront Kiosks Conceptual Design, NS*
- *Sackville Streetscape Design Study, Sackville, NS.*
- *Portland Streetscape Design Study, Dartmouth, NS.*
- *Porters Lake Greenway, Porters Lake, NS.*
- *Dollar Lake Greenway Trail Suitability Study, Musquodoboit,*
- *Nova Scotia P3 Schools Site Planning and Detailed Design - 18 of the new P3 schools in Nova Scotia*
- *N.S. Correctional and Forensic Facilities, Burnside NS*
- *Highlandview Hospital, Amherst NS.*
- *Kensington Station Master Plan.*
- *Fortune Head Ecological Reserve, Fortune, NFLD.*
- *Danish Embassy Master Plan, Canberra, Australia.*
- *Halifax Historic Grand Parade*

- *Portland Estates Recreation Park Complex.*
- *Wesley Daycare Playground, Canberra Australia.*

Environmental Planning

- *DEVCO Divestiture Strategy*
- *Princess Colliery Reclamation Master Plan, NS*
- *HRM Small Scale Waste Water Treatment Study*
- *Belle River Assessment, PEI*
- *HRM Sustainability Centre Conceptual Design*
- *Kingsburg Beach Management Study*
- *Saint John Waterfront Stormwater Wetland*
- *Jonathan Creek Stormwater Wetland, Moncton, NB*
- *Cobequid Health Centre Microclimate Assessment*
- *Fox Creek Golf Environmental Assessment*
- *Silver Sands Golf Environmental Assessment*
- *Genpower Visual Impact Assessment*
- *Five Islands Stream Restoration,*
- *Tryon Riverside Park, North Tryon, PEI*
- *A Critical Event Stream Temperature Model for Unregulated, Urban Streams*
- *Morningside Tributary Sub-Watershed Plan.*
- *Smelt Brook Erosion Study.*

Sport Architecture

- *Aspotogan Golf Community, Halifax, NS*
- *Chengdu Golf Community, China*
- *Clarenville Golf & Ski Resort, NFLD*
- *Mainland Common Recreation master Plan, Halifax, NS*
- *Lake Banook World Canoe Championships 2009 Master Plan, Dartmouth, NS*
- *William Spry Centre Community Rec Park, NS*
- *HRM All Weather Fields, Burnside, NS*
- *East Dartmouth Rec Fields, Dartmouth, NS*
- *Moncton Open Space Master Plan, Moncton, NB*
- *Keppock Ski Resort Master Plan, Antigonish, NS*
- *Oukaimeden Golf/Ski Resort, Morocco*
- *Charlo Golf Community, Charlo, NB*
- *Aspotogan Ridge Golf Community, NS*
- *Ocean Links Golf Course, NS*
- *Mountain Golf Course Master Plan, NS*
- *Ben Eoin Golf Course, NS*
- *Magnetic Hill Golf Course Community Master Plan,*
- *White Point Beach Resort Masterplan, NS*
- *Cabot Park Golf Resort, PEI's*
- *Silver Fox Golf Club, Moncton, NB*
- *Moncton Golf & Country Club, Riverview, NB*
- *Silver Sands Beach Golf Course, Eastern Passage, NS*
- *Antigonish Golf & Country Club, Antigonish*

Robert T. LeBlanc (continued)

B.Sc., BDEP, MLA

- *Développement Grand Ruisseau Golf, Mont Carmel, PEI*
- *Horseshoe Ridge Golf & Country Club, Shubenacadie, NS*
- *Ocean Sands Golf Village, Clam Harbour, NS*
- *Glasgow Hills Golf Course, PEI*
- *Amaruk Golf Course, Happy Valley-Goosebay, Labrador,*
- *Covehead Golf Course, Covehead, PEI*
- *Belmont Golf Course, Guysborough N.S. – 9-hole expansion*
- *McCabe Lake Golf Course, HRM, NS*
- *Golf Suitability Assessment, HRM, NS.*
- *Port Hood Golf Course, Port Hood, NS*
- *Diamond Hills Golf Course, PEI.*
- *Royal Hemlocks Golf Course, N.S*
- *Fairview Golf Centre, Halifax,*
- *Mabou Golf Course, Cape Breton -*
- *Beach Grove Golf Course, Prince Edward Island.*
- *Coyote Creek, NS*

Publishing, Research and Lectures

2008 ed. "Landscape Architectural Graphic Standards", Microclimate Chapter. with Dr. Robert Brown.

"Microclimatic Design of Rooftop Gardens and Urban Courtyards", New York Times Tower. For the International Federation of Landscape Architects, 2003

Visiting Lecturer in Landscape Architecture, University of Canberra, Canberra, Australia. 1995-1996. Taught 'Landscape Design' 4.1, 3.1, 2.1.

The Landscape Ecology Conference, 1995, University of Minnesota, Minnesota. Presentation: "The Critical Urban Stream Temperature Model"

LeBlanc. R and R. Brown, August 2001. "Microclimate Modification: Site Adjustments to Reduce Maintenance Costs and Improve Player Comfort on Your Golf Course". GreenMaster Magazine.

LeBlanc. R and R. Brown, Aug, 2000. "The Use of Riparian Vegetation in Stream Temperature Modification", J.CIWEM, issue 14.

Awards

2008 CSLA National Award. Point Pleasant Park Comprehensive Plan

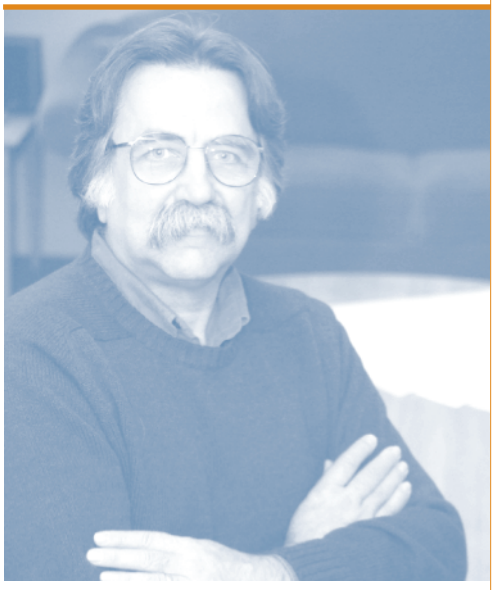
2006 ASLA Award. New York Times Tower microclimate study

2006 Point Pleasant Park International Design Competition. Co-winner.

2006 CSLA National Merit. Point Pleasant Park Competition

2005 CSLA Regional Merit. Harbour Passage Greenway (with DKG Ltd.)

2005 Saint John Waterfront Coast Guard Site Design Competition. Winner.



Peter Klynstra

FCSLA

Peter Klynstra's professional experience spans thirty-five years of varied project planning and design throughout North America. Peter was a member of the National Capital Commission's Design Advisory Committee from 1994-1996, and is a Fellow of the Canadian Society of Landscape Architects who have honored him with a lifetime achievement award.

He has been the lead landscape architect, or "idea person", on all of the major waterfront and community planning and design projects undertaken by the firms where he worked from the 1970's to today. He has become especially sought after for his expertise in being able to listen to a community and through public interviews and workshops, divine the essence of what they know about their community, what they want it to be and how they see it, and then apply his design and planning skills to create workable, identifiable, plans for the future.

Selected Campus and Military Base Planning Experience

- *Mount St. Vincent University Master Plan*
- *Acadia University Master Plan*
- *University of Prince Edward Island Master Plan*
- *University of Illinois, Urbana, Krannert Art Museum Expansion*
- *University of Illinois, Urbana, Krannert Center for the Performing Arts, preliminary planning*
- *CFB Halifax Base Development Plan, Senior Planner*
- *CFB Shearwater Base Development Plan, Senior Planner*
- *CFB St. Jean Language School Development, Planning team member*
- *Canadian Coast Guard Base, Dartmouth, Development Plan team*
- *Academic Building, Wisconsin State University, LaCrosse*
- *University of Wisconsin Catholic Student Centre, Madison, Design Team*
- *University of Wisconsin Office Tower, Madison, Design Team*

Waterfront Design and Planning Experience

Mr. Klynstra's waterfront work has been recognized several times by the Waterfront Centre for its design excellence. He has been the planner, landscape architect or prime consultant on the following waterfront plans:

- *Queens Landing, Halifax Waterfront 2005*
- *Market Square St. John, Residential Area*
- *Saint John Harbour Passage Greenway, NB (CSLA Regional Merit Award 2005, with DKG Ltd.)*
- *Pugwash Waterfront Plan, NS*
- *Grand Etang Waterfront Plan, NS*
- *Port Morien Town Square, NS*
- *Arisag Waterfront Plan, NS*
- *Bayfield Waterfront Plan, NS*
- *Port Hood Waterfront Plan, NS*
- *Canso Waterfront Plan, NS*
- *Port Hawkesbury Waterfront Plan, NS*
- *St. John's Waterfront Tourism Study, NFLD*
- *Calais Waterfront Development Plan; Calais, Maine, USA*
- *Fredericton Riverfront Plan; Fredericton, NB*
- *St. Stephen Waterfront Plan; St. Stephen, NB*

Education

University of Wisconsin; Madison, Wisconsin, All graduate course work in Landscape Architecture, 1969-71

University of Illinois; Urbana, Illinois, Bachelor of Architecture, 1967

Memberships

Fellow of the Canadian Society of Landscape Architects

Atlantic Provinces Association of Landscape Architects, Past President

Registered Architect, State of Wisconsin; USA

Past Member of the National Capital Commission Design Advisory Committee; Ottawa, ON.

Past Chairman of the Spring Garden Area Business Improvement District Commission; Halifax, NS

Peter Klynstra

- *Rothesay Waterfront Plan; Rothesay, NB*
- *Halifax Waterfront Plan, 1976; Halifax, NS*
- *Halifax Waterfront Plan, 1999; Halifax, NS*
- *Pictou Waterfront Plan; Pictou, NS —Waterfront Centre Award*
- *Bear River Waterfront; Bear River, NS —Waterfront Centre Award*
- *Halifax & Dartmouth Waterfront Strategic Development Plan; Halifax, NS*
- *Dartmouth Waterfront Plan; Dartmouth, NS*
- *Bedford Waterfront Plan; Bedford, NS*
- *Charlottetown Waterfront Plan; Charlottetown, PEI*
- *Summerside Waterfront Plan; Summerside, PEI*
- *Yarmouth Waterfront Plan; Yarmouth, NS*
- *North Sydney Waterfront Plan; North Sydney, NS*
- *Port Hawkesbury Waterfront Plan; Port Hawkesbury, NS*
- *Chester Waterfront Plan; Chester, NS*
- *Liverpool Waterfront Plan; Liverpool, NS*
- *Canso Waterfront Plan; Canso, NS*
- *Sheet Harbour Waterfront Plan; Sheet Harbour, NS*
- *Little Dover Waterfront Plan; Little Dover, NS*
- *New Glasgow Rotary Waterfront Park (Samson Trail); New Glasgow, NS*
- *Guysborough Waterfront Plan; Guysborough, NS*
- *The Ballantynes Cove Waterfront Plan; Ballantyne Cove, NS*
- *Norris Point Waterfront Plan, Norris Point, Nfld.*
- *Bayfield Waterfront Plan, Bayfield, NS*
- *St. John's Harbour Tourism Plan, St. John's, Nfld.*
- *Tourism and Concept Plan for Acadian Village; Lower West Pubnico, NS*
- *Beach Evaluation Beach Opportunities Program, 200 beaches in Nova Scotia*

"Mainstreet" Planning, Landscape Architect and Urban Designing Experience

- *Mainstreet Fredericton; NB*
- *Downtown Plan; Dalhousie; NB*
- *Mainstreet Summerside; PEI*
- *Mainstreet Amherst; NS*
- *Mainstreet Halifax; NS*
- *Mainstreet Dartmouth; NS*
- *Mainstreet Truro; NS*
- *Mainstreet Antigonish; NS*
- *Mainstreet Trenton; NS*
- *Mainstreet Parrsboro; NS*
- *Mainstreet Bridgewater; NS*
- *Mainstreet Lunenburg; NS*
- *Gottingen Street Improvement Projects; Halifax, NS*
- *Grand Parade G7 Upgrade; Halifax, NS*
- *Borden-Carleton Landscape Management Plan; Borden, PEI*

Selected Regional Municipal and Neighborhood Planning Experience

- *The Greater Moncton Metropolitan Plan; Moncton, NB*
- *Moncton Linear Park and Greenway Plan; Moncton, NB*
- *City of Moncton Municipal Planning Strategy, 1972; Moncton, NB*
- *Watershed Development Feasibility Study for the Halifax Public Service Commission; Halifax, NS*
- *Gros Morne Tourism Plan; Gros Morne National Park, NFLD*
- *Barrington Street, Halifax Nova Scotia*
- *Four neighbourhood plans in St. John's; St. John's, NFLD*
- *The "Old South End Neighbourhood Plan"; Halifax, NS*
- *Pinecrest/Highfield Neighbourhood Plan; Dartmouth, NS*
- *Community Plans for the seven enclave communities in Gros Morne National Park; Gros Morne, NFLD*
- *Town of Botwood Plan; Botwood, NFLD*
- *Gottingen Street Streetscape Enhancement Plan; Halifax, NS*
- *Grand Parade Redevelopment in Downtown Halifax; Halifax, NS*

Research

Creation of visual and environmental controls for the Visual Resource Analysis and Visual Environment section of the Venture Gas Environmental Impact Statement for Mobil Oil.

Development of draft site design controls for business and industrial areas.

National Capital Commission Design Advisory Committee; Ottawa

Member of research team for the Business park ecosystem project, Nova Scotia College of Art and Design; Halifax, NS

Publications

Annapolis Royal Historic Gardens "Contemporary Landscapes in the World" Published in 1991, by Process Architecture Co. Ltd.; Tokyo, Japan.

Landscape Management Plan - Borden - Carlton, PEI, Plan Canada, March 1997, pg. 31-36.

Teaching Experience

Adjunct Professor, of Environmental Planning, Nova Scotia College of Art and Design (NSCAD) 1974-2002; Halifax, NS
Dalhousie University; Halifax, NS. Lecturer in Planning and Architecture

Jill Robertson

B.Sc.(Env.), MLA, OALA

Jill Robertson brings her experience with naturalized landscape design and open space development together with her background in environmental science and arboriculture. She has lead and been involved with site specific and conceptual design and planning projects across Canada.

She is a landscape architect and ISA certified arborist with a special interest in landscape ecology, park planning, cemetery / memorial planning and ecological design. For every project that she is involved with, Jill brings a high level of technical competency, graphic clarity, and contextual sensitivity.

Education

Master of Landscape Architecture, MLA, University of Guelph, Ontario, 2005

Bachelor of Science Honours, Environmental Science, B.Sc. (Env). University of Guelph, Ontario, 2001

Memberships

Ontario Association of Landscape Architects, Full Member

Canadian Society of Landscape Architects,

International Society of Arboriculture, Professional Member

International Association of Landscape Ecologists

Planning & Urban Design

- *Ecole Elementaire Pavillon de la Jeunesse, Hamilton, ON*
- *Queenston School, Mississauga, ON*
- *Meadowvale School, Mississauga, ON*
- *North Peel Secondary School, Brampton, ON*
- *L'Ecole L'Harmonie, Waterloo, ON*
- *King William Streetscape, Huntsville, ON*
- *Ecole Elementaire Horizon Jeunesse, Mississauga, ON*
- *Ecole Maison Montessori, Toronto, ON*
- *Vista Heights School, Mississauga, ON*
- *Ecole Secondaire de Barrie, Barrie, ON*
- *Turner Fenton School, Mississauga, ON*

Recreation Planning

- *Recreation, Arts, and Leisure Master Plan, Regional Municipality of Wood Buffalo, AB*
- *Markham Trails Master Plan, Markham, ON*
- *Milton Trails Master Plan Update, Milton, ON*
- *Caledon Trailway Link Feasibility Study, Caledon, ON*
- *M.A. Sills Park Master Plan, Belleville, ON*
- *Cedar Valley and Harmony Creek Park Master Plans, Oshawa, ON*
- *Town of Heart Parks and Recreation Master Plan, Hearst, ON*

Landscape Architecture & Site Planning

- *Greensborough Neighbourhood Park, Markham, ON*
- *North Central Park and Splash Pad, Hamilton, ON*
- *Calvert Dale Park, Georgetown, ON*
- *Alton Parks Conceptual Design, Burlington, ON*
- *High Glen Neighbourhood Park, Markham, ON*
- *Lakeside Industrial and Chester Spur Line Trails Functional Design, Halifax, NS*
- *Gray's Road Parkette, Hamilton, ON*
- *Culham Trail, Mississauga, ON*
- *Waterfront Trail Connection, Mississauga, ON*

Jill Robertson (continued)

B.Sc. (Env.), MLA, OALA

Environmental Planning, Assessment, and Design

- *Milton Trails Master Plan Update, Milton, ON*
- *407 Business Campus Stormwater Ponds, Brampton, ON*
- *Highway 11 Expansion, Katrine, ON*
- *Parc Downsview Park, Toronto, ON*
- *Communities of Castlemore Crossing, Brampton, ON*
- *Mountainview Retirement Residence, Georgetown, ON*
- *El Ad Group Condominium Development, Mississauga,ON*
- *Earth Rangers Ecological Education Centre, Woodbridge, ON*
- *Castle Frank Subway Station, Toronto, ON*
- *CN Leaside Trail Study, Toronto, ON*
- *Dorothy Ley Hospice, Toronto, ON*
- *Thornhill Retirement Residence, Thornhill, ON*
- *Kennedy Circle Heritage Oak Trees, Milton, Ontario*

Cemetery and Memorial Design

- *Greenwood Cemetery, Georgetown, ON*
- *Caledonia Cemetery, Haldimand County, ON*
- *Municipal Cemeteries Master Plan, Regional Municipality of Wood Buffalo, AB*

Publishing, Research and Lectures

Robertson, P. J., R. C. Corry, and R. Lafortezza. 2005. The implications of a landscape ecological approach to the designed rehabilitation of aggregate extraction sites in Southern Ontario. US International Association for Landscape Ecology Annual Meeting, Syracuse, New York. Oral paper.

Corry, R. C., R. Lafortezza, R. D. Brown, N. Kenny, and P.J. Robertson. 2008. Guiding selective ecological restoration with contextual landscape information: An approach for pits and quarries in Ontario. Ecological Restoration 26(2), 120-127.

Corry, R. C., R. Lafortezza, R. D. Brown, N. Kenny, N. Pulver, and P. J. Robertson. 2007. Using landscape context to guide the rehabilitation of pits and quarries in Ontario. US-International Association for Landscape Ecology Annual Meeting, Tucson, Arizona. Oral paper.

Awards

2005 Victor Chanasyk Medal for Professionalism

2005 NASU-MSU Award for the International Association of Landscape Ecology

Jeffrey Pinhey

M.A.Sc., P.Eng

Jeff is a Civil/Environmental Engineer and Project Manager with 23 years of experience in project management and design. He provides experience in environmental engineering and planning, municipal engineering, research and development, geotechnical and materials engineering, urban and landscape design, urban design, and project management. He has held senior roles in small and medium size engineering and landscape architecture firms, and maintains specialist practices in small scale wastewater solutions, and civil engineering design in support of landscape architectural and planning projects.

He is a civil engineer who has not restricted his career to the basic application of engineering principles, but has, instead, worked as part of project teams involving architects, landscape architects, urban planners, archaeologists, environmental scientists, geoscientists and hydrogeologists and more. He teaches, lectures, makes public presentations, and often writes the reports on the various multi-disciplinary projects on which he works.

Education

Bachelor of Engineering (Civil), TUNS, 1981

Master of Applied Science (Water Resources/ Environmental), 1984

Memberships

Association of Professional Engineers of Nova Scotia (APENS)

Association of Professional Engineers of New Brunswick (APENB)

Atlantic Provinces Association of Landscape Architects (Honourary)

Wastewater Nova Scotia

The Stanley Thompson Society

Planning & Urban Design

- *Point Pleasant Park International Design Competition, Co-Winning Team Member*
- *Halifax Grand Parade Renovation, Granville Mall*
- *Halifax Downtown Outdoor Café Design Guidelines*
- *Streetscape Improvement Plan, Portland St., Dartmouth, NS*
- *Streetscape Improvement Plan, Sackville Drive, Sackville, NS*
- *Streetscape Improvement Plan, Herring Cove Road*
- *Streetscape Improvement Plan, Main Street, Dartmouth, NS*
- *Shubenacadie Canal Greenway, Downtown Dartmouth*
- *Wright's Cove Planning Strategy*
- *Sackville Landing Park Redevelopment*
- *Nova Scotia Community College, New Halifax Campus Siting Study*
- *Ports Canada, Halifax Cruise Ship Terminal Planning Study*
- *Bayne Street Area Masterplan, HRM*
- *Settlement and Servicing Strategy, Herring Cove, HRM*
- *Waterfront Development Plan, Port Hawkesbury, NS*
- *Waterfront Development Plan, Pictou, NS*
- *Waterfront Development Plan Bear River Annapolis County, NS*
- *Greenwich Planning Study, King's Co., NS*
- *Waterfront Development Plan and Servicing Strategy, Little Dover, Guysborough County*
- *Long Term Development Masterplan, East Hants Corridor NS*
- *North Dartmouth Planning Strategy Long Term Development Plan*
- *Cornwallis Park Redevelopment Plan, Digby Co., NS*

Environmental Engineering

- *HRM Regional Planning Small Scale Sewage Management Strategy*
- *Highway 104 Alma to Salt Spring Environmental Assessment, Description of Undertaking*
- *Shubenacadie Lakes Pollution Control Study*
- *Truro Floodplain '96 Masterplan*
- *Over 100 designs for single family home on-site sewage disposal systems,*

Jeffrey Pinhey

M.A.Sc., P.Eng

of high complexity, normally solving malfunctions in difficult conditions.

- *Sewage treatment, open space design, The Narrows Residential Development, Lunenburg Co.*
- *Sewage Treatment, water re-use, Osprey Ridge Golf Clubhouse*
- *Over 30 designs for mid size sewage treatment for projects in Nova Scotia*
- *Sewage Treatment, water re-use, Berwick Heights Golf Clubhouse*
- *CFB Shearwater Environmental Baseline Study, Dartmouth, NS*
- *Sewage Treatment, Hartlen Point Golf Clubhouse*
- *Sewage Treatment, Dundee Lodge Hotel and Golf Clubhouse*
- *Gander Lake Watershed Management Plan, NF*
- *Solar Aquatics Sewage Treatment Facility (Co-Designer), Bear River Annapolis County, NS*
- *Environmental Risk Management Plan, Surface Water, CN Shops Property, Moncton, NB*
- *Halifax, Trenton, Amherst, natural gas pipeline laterals routing, NS*

Civil/Municipal Engineering Design

- *Sanitary Sewer Main Design, Hebron and Dayton Yarmouth County, NS*
- *McGowan Lake Fish Hatchery, Queens County, NS*
- *Fairview Hills Golf Centre, Driving Range and 9 Hole Course*
- *CFAD Bedford Missile Storage Facility*
- *Atlantic Cat Service Centre, Burnside (2002, 2005)*
- *Miller Composting Facility, Burnside*
- *Alderney Drive Realignment*
- *Meadowbrook Subdivision Central Servicing, Herring Cove Road*
- *Adesa Car Auction Lot, Phase 1*
- *Bishops Landing Surface Drainage (2002)*
- *Halifax Independent School*
- *Shannex Clayton Park Expansion (2003/04)*

- *Simmons Mattress Warehouse, BLIP (2003)*
- *Saint Mary's Stadium Field Turf Drainage and Grading*
- *The Grand Parade Renovation*
- *CFB Stadacona, New CPO and Officers Mess (Juno Building)*
- *Burnside Soccer and Football Synthetic Fields*
- *Real Atlantic Superstore, Sackville*
- *Maplewood Apartments Site Renovation (2003)*

Project Site Selection and Analysis

- *Site Assessment Engineer, Nova Scotia Department of Transportation and Public Works - 90 school site assessments and design review for all new Provincial building construction in Nova Scotia*
- *Drafted policy for school site selection in Nova Scotia in 1992, updated process in 2003*
- *Review of Consultant's Report for Site Selection, Colchester Regional Hospital, Saint Peters Seniors Care Facility, Yarmouth Correctional Facility*
- *Site Selection, Nova Scotia Community College, New Campus, Woodside*
- *Site Selection, Proposed New Corrections Facilities, North Nova*
- *Site Section, New Canadian Diabetes Association Regional Summer Camp*
- *Site Selection, Northwood Continuing Care Facility, Bedford*

Other

Instructor, Nova Scotia On-Site Sewage Disposal, Qualified Person Level 1 Course, teaching on-site sewage disposal and alternative on-site practices to other Professional Engineers.

Guest Speaker, Shad Valley Science Program, Acadia University, "Alternative Sewage Treatment".

Guest lecturer, Dalhousie University Civil Engineering, Environmental Planning Schools

Member of Nova Scotia Advisory Panel on Sedimentation and Erosion Control (since 1992)

Board of Advisors, Canadian Association of Professional Sommeliers, Atlantic Chapter

Lecturer: Nova Scotia Short Courses for erosion and sedimentation control for roads and building sites.

Invited participant, Nova Scotia Sewage Management Policy Long Term Plan, NSDOE, 1998.

Rachael McLean

BLA

Rachael is a Landscape Architect who brings a creative energy to a range of projects both past and present. Her commitment to quality ensures that she takes the extra step in achieving productive solutions.

Education

Bachelor of Landscape Architecture
University of Guelph
Guelph, Ontario, 2006

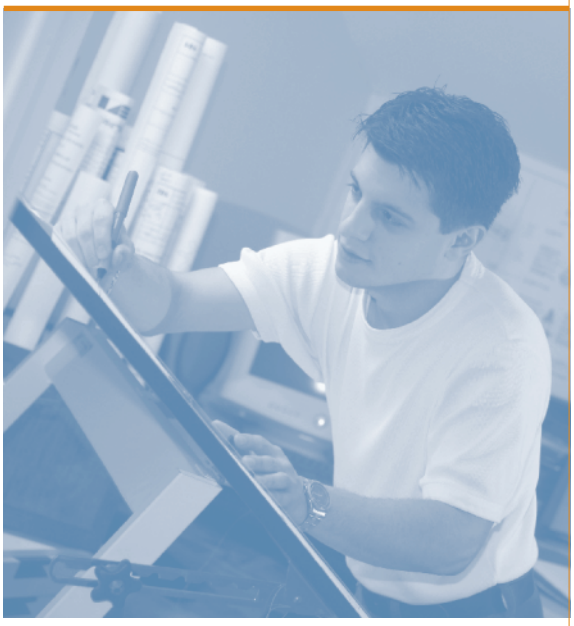
Interactive Technology Diploma
Nova Scotia Community College
Truro, Nova Scotia, 2002

Landscape Architecture & Site Planning

- *Mispec Landuse Study - NB*
- *Mainland Common Community, HRM, NS*
- *Margaree Lodge Resort, Cape Breton, NS*
- *Sackville Dr. Facade Study, Sackville NS*
- *Lake Banook - International Canoe Championships'09, Dartmouth, NS*
- *Truro Facade Study, Truro NS*
- *Parkland, Planting Design, NB*
- *New Glasgow Downtown Development, New Glasgow, NS*
- *Bide Awhile Animal Shelter, Dartmouth, NS*
- *Allan Park Garden, Stellerton, NS*
- *Main Street Revitalization, Trenton, Nova Scotia*
  Project inception, workshop leader, publicity, project relations, conceptual masterplan & 3D model
- *Westside Community Centre, New Glasgow, NS*
- *Broidy Park, Pictou, Nova Scotia*
- *Feeding Others of Dartmouth, Dartmouth, Nova Scotia*
  edible planting plan for courtyard

Residential Landscapes

- *Smith Residence, Mt. Uniack, NS*
- *Jensen Property, NS*
- *Vladi Residence, Halifax, NS*
- *Mott Residence, Sackville, NB*
- *Silver Property, PEI*
- *Flinn Property, North Shore, NS*
- *Morton Property, New Glasgow, NS*
- *Ford Estate, Caribou River, NS*
- *Sobey Property, New Glasgow, NS*
- *Murray Property, Pictou, NS*
- *Hiltz Property, Little Harbour, NS*
- *Daley Property, New Glasgow, NS*
- *Fraser Property, Antigonish, NS*
- *Hickey Property, New Glasgow, NS*
- *Johnson Property, Port Williams, NS*



Derek Hart

CET

Derek Hart is a Civil Engineering Technologist with special interests in computer generated 3D modeling, visual impact assessment, conceptual presentation, site/structural planning and design, development of engineering/landscaping details, preparation of tender documents, quantity surveying and cost estimating, and recreational trail development.

Education

Diploma in Civil Engineering Technology
from University College of Cape Breton,
Sydney, Nova Scotia, 1999

Interpretive Planning, Graphic Design & 3D Modeling

- *Cole Harbour Park and Trails, NS*
- *Halifax Festival Maps, NS*
- *Signal Hill Interpretation Center, NF*
- *John Risley Property Wayfinding Map, NS*
- *WDCL Water Lot Plan, NS*
- *Cape Sable Island Interpretive Center, NS*
- *Shubenacadie Canal Mapping, NS*
- *Waterfront Berthing Plan, NS*
- *Dartmouth Harbourwalk Panel, NS*
- *Bedford West Developement Plan Model, NS*
- *Millbrook Mall Rendering Model, NS*
- *ANE Petrolium Import Terminal Model, NS*
- *Petro Canada Model, NS*
- *Starr Manufacturing Rendering Model, NS*
- *Midtown Tower Model, NS*
- *Hospital Hill Animation Model, NS*
- *Mount Allison University Animation Model, NB*
- *LNG Petrolium Import Terminal Model, NB*
- *South Street Model, NS*
- *Bronar Residence Home Models*
- *Margaree Interpretive Master Plan, NS*
- *Purdy's Wharf (property) Model, NS*
- *Halifax Waterfront Model, NS*
- *Times Square Tower Model, New York, USA*

Planning & Urban Design

- *Portland Street Facade Improvements, NS*
- *Stellarton Strategic Plan, NS*
- *Wolfville Commercial Strategy, NS*
- *Charlottetown Waterfront Plan, PEI*
- *Cornwallis Park Development, NS*
- *Wright's Cove Development, NS*
- *Truro Downtown Master Plan, NS*
- *Richmond County Center, NS*
- *Sackville Landing Development, NS*
- *Archibald & Bedard Development, NS*
- *Bridgewater Exit 12 Development, NS*
- *Queen's Landing, NS*
- *Point Pleasent Park International Design Competition, NS*
- *HRM Electrical Line Trimming Street Section, NS*
- *Antigonish Yaught Club, NS*
- *Zinck Property, NS*

Derek Hart

- *Shepards Island Development, NS*
- *Crombie New Glasgow Development, NS*
- *Lake Banook Bridge, NS*
- *Petro Canada Site Plan, NS*
- *North Sydney Waterfront, NS*
- *Mount Saint Vincent University, NS*
- *Herring Cove Streetscape Study, NS*
- *Canoe to the Sea Race Mapping, NS*
- *Acadia University Campus Landscape Master Plan, NS*
- *Cowie Hill Visualization, NS*
- *Fuzhou Master Plan Community, China*
- *HRM Regional Planning Documentation, NS*
- *Charlotte Street Streetscape Study, NS*
- *Historic Shubenacadie Canal & Waterway Plan, NS*
- *Canso Waterfront Plan, NS*
- *Norris Point Waterfront Plan, NFLD*
- *Peggy's Cove Management Plan, NS*
- *North Sydney Streetscape Design Study, NS*
- *Kingstec College Campus Master Plan, NS*
- *Shunenacadie Canal Greenway Master Plan, NS*

Landscape Architecture & Site Planning

- *Dartmouth Harbourwalk Trails Plan, NS*
- *UPEI School of Business Admin. Working Drawings, PEI*
- *King George All-Weather Turf Facility Working Drawings, NF*
- *Ocean Nutrition Working Drawings, NS*
- *Avonhurst Gate Working Drawings, NS*
- *Wingate Inn Working Drawings, NS*
- *Sydney Academy Working Drawings, NS*
- *North Sydney Interpretive Stands Working Drawings, NS*
- *Trinity Subdivsion Working Drawings, NS*
- *Cavendish Community Park Working Drawings, PEI*
- *Ashley Furniture Working Drawings, NS*
- *Mount Royal Subdivision Working Drawings, NS*
- *Precision Biologic Working Drawings, NS*
- *Bedford Waterfront Trail Working Drawings, NS*
- *Mic Mac Mall Entry Working Drawings, NS*
- *Columbus Park, NS*
- *Parkland Drive Planting Plan, NS*
- *Truro Prince Street Condo, NS*
- *Richmond Villa Working Drawings, NS*
- *Porters Lake Working Drawings, NS*
- *White Point Subdivision, NS*
- *Port Morien Working Drawings, NS*
- *Car Star, John Savage Ave., Working Drawings, NS*
- *East Region All-Weather Turf Facility Working Drawings, NS*
- *Port Hawkesbury Landscape Working Drawing, NS*
- *Dieppe Subdivision Plan, NB*
- *Kingstec Working Drawing, NS*
- *Boutiliers Point School Working Drawings, NS*
- *HRM All Weather Turf Bus Loop Working Drawings, NS*
- *Dieppe Kite Park Master Plan, NB*
- *NSCC Sign Manual Working Drawings, NS*
- *The Ravines of Bedford South, NS*

- *Heritage Gas Facility Working Drawings, NS*
- *Fox Creek Golf Community Plan, NB*
- *Halifax Mainland Common School Site Plan, NS*
- *Sydney Cruise Ship Trail, Sydney, NS*
- *Wentworth Park Master Plan, Sydney, NS*
- *MacCaull Site Evaluation, NS*
- *Sacred Heart Boys School Working Drawings. NS*
- *The Mother House Concept Plan, NS*
- *Victoria Park Phase 1 Working Drawings, NB*
- *Simmons Mattress Gallery Working Drawings, NS*
- *Morris Street Condos Planting Plan, NS*
- *Stanley Bridge Subdivision, PEI*
- *Bedford Waterfront Conceptual Plan, NS*
- *New Waterford All Weather Turf Facility, NS*
- *NS Hospital Greenway, Dartmouth, NS*
- *Dartmouth Waterfront Greenway Plan, NS*
- *Carrol Arena Condos Working Drawings, NB*
- *Sobey's Plaza Working Drawings, NB*
- *Victoria General Greenspace, NS*
- *Gladstone Property Concept, NS*
- *Butler Property Concept, NS*
- *Westhaven Subdivision, NB*
- *Shubenacadie Canal Interpretive Park, NS*
- *HRM All Weather Turf Facility, NS*
- *New Highland View Reginonal Hospital, Amherst NS*
- *Mont Blanc Terrace Planting Plan, NS*
- *QEII Packade Planting Plan, NS*
- *West Kings High School Renovation Drawings, NS*
- *Purdy's Wharf Redevelopment Plan, NS*
- *Truro Junior High School, NS*
- *Halifax International Airport Addition, NS*

Resort & Golf Course Master Plans

- *Mountain Golf Club, NS*
- *Valley Wood Golf Course, ??*
- *Magnetic Hill Golf Club, NB*
- *Cole Harbour Pitch N' Putt, NS*
- *Kingswood Golf Course, ??*
- *Chang Ying Golf, China*
- *Ben Eoin Golf Course, NS*
- *Magnetic Hill Golf Community, NB*
- *Fox Creek Golf Course Club House Area, NB*
- *Island Sunset Resort & Spa, Cape Breton*
- *White Point Beach Resort , NS*
- *Abbycombec Ocean Village Master Plan, NS*
- *The Dundee Resort Golf Course, NS*
- *Moncton Golf & Country Club Course Master Plan, NB*
- *Inverary Resort, NS*
- *Bell Bay Golf Resort, NS*

ROGER BOYCHUK, P. ENG.
Lead Transportation Engineer

YEARS OF APPLICABLE EXPERIENCE: 14 **YEARS WITH SNC-LAVALIN INC.: 4**

MANAGERIAL AND TECHNICAL EXPERTISE:
Mr. Roger Boychuk, P. Eng., is Manager of Transportation and Civil Engineering in SNC-Lavalin's Maritime operation. He has more than 14 years of consulting experience in transportation engineering and project management roles. Mr. Boychuk is a registered professional engineer in the Provinces of Nova Scotia and Manitoba and has successfully completed projects across Canada, in the United States, Mexico, South America and Africa. Key areas of expertise include traffic engineering, road safety engineering, asset management, design and construction and he has been involved in a wide variety of other transportation engineering studies.

EDUCATION:
2007 Masters Certificate in Project Management, Saint Mary's University, Halifax, Nova Scotia, Canada
2003 Access Management, Location and Design, Halifax, Nova Scotia, Canada
2001 Beyond Safety Audits Workshop - Calgary, Alberta, Canada
1999 Road Safety Audit Workshop - Halifax, Nova Scotia, Canada
1995 Bachelor of Science in Engineering (Civil) University of Manitoba, Winnipeg, Canada.

SELECTED WORK EXPERIENCE: Since 2005, SNC-Lavalin – Manager Transportation Engineering and Senior Project Manager

- **Chester Spur Line Functional Alignment**, Halifax Regional Municipality, Halifax, Nova Scotia (2009): SNC-Lavalin was retained to provide engineering services to carry out the design of a functional alignment for the connections between the Chester Rail Spur Line and other proposed and/or planned active transportation (AT) corridors. The work includes development of multiple on- and off-road options for connecting the former rail corridor to AT routes on the Halifax peninsula, including identification of barriers and development of solutions.
- **Rebuild Glenwood Intersection and Rebuild Hangar 1 Access Road**, 4 Wing Cold Lake, Alberta (Ongoing) – Project Manager. Services include concept validation and option analysis, design development and detailed design.
- **Allan Street Neighbourhood Shortcutting Study**, Halifax Regional Municipality, Halifax, Nova Scotia (2007) - Project Manager and Lead Transportation Engineer for the investigations, public participation and reporting related to the implementation of traffic shortcutting measures.
- **Modal Split Cordon Counts**, Halifax Regional Municipality, Halifax, Nova Scotia – Project Manager, responsible for collecting vehicle occupancy information at 15 locations throughout the Municipality and analyzing, summarizing and reporting on modal split result.
- **CFB 12 Wing Shearwater Road and Underground Utilities Reconstruction**, Eastern Passage, Nova Scotia (2005) - Project Manager for the design of approximately $5.5 million of road ways, parking lots, active transportation routes and underground utilities reconstruction.
- **Conception Bay South Traffic Study,** Town of Conception Bay, Conception Bay, Newfoundland (2008) – Project Manager. Study involved the study of an existing 21 km long corridor of Route 60 Highway with numerous signalized and stop controlled intersections, various cross-sections and adjacent commercial and residential land uses. Specific duties included site investigations to determine existing traffic operations and conditions and development and calibration of a Synchro/SimTraffic model for the corridor.
- **Safety Conscious Design for Vulnerable Road Users,** Primary technical author, and carried out research and development of technical content, curriculum and case studies for a learning guide, workbook, series of cross-Canada workshops, and on-line course distributed through the Transportation Association of Canada (TAC).
- **Intersection Safety Audit Program, Walking Security Index**, City of Ottawa, ON. - In-service safety audits and collision analysis of 11 priority locations focusing on vulnerable road user infrastructure and populations, including intersections and interchange ramps at various urban and suburban locations. Information was used to develop network-screening procedures and identify locations for further consideration.

MIKE CONNORS, E.I.T.
Transportation Engineer-In-Training

YEARS OF APPLICABLE EXPERIENCE: 2 **YEARS WITH SNC-LAVALIN INC.: 1**

TECHNICAL EXPERTISE:
Mr. Connors is a graduate of the University of New Brunswick (UNB) in Fredericton, NB, where he obtained a Bachelor's Degree and a Master's Degree in civil engineering. Since joining SNC-Lavalin as an engineer-in-training in 2008, Mike has participated in several traffic and transportation engineering projects, performing duties including traffic modeling, traffic impact studies, transportation needs assessments, and coordination of data collection programs.

EDUCATION:
2008 Master of Science in Civil Engineering, University of New Brunswick (UNB Fredericton), Fredericton, New Brunswick, Canada

2006 Bachelor of Science in Civil Engineering, University of New Brunswick (UNB Fredericton), Fredericton, New Brunswick, Canada

SELECTED WORK EXPERIENCE: Since 2008, SNC-Lavalin – Engineer-in-Training, Transportation Engineering

- **Chester Spur Line Functional Alignment**, Halifax Regional Municipality, Halifax, Nova Scotia (2009): SNC-Lavalin was retained to provide engineering services to carry out the design of a functional alignment for the connections between the Chester Rail Spur Line and other proposed and/or planned active transportation (AT) corridors. The work includes development of multiple on- and off-road options for connecting the former rail corridor to AT routes on the Halifax peninsula, including identification of barriers and development of solutions.

- **Downtown Halifax Traffic Model, Halifax Regional Municipality,** Halifax, Nova Scotia (2008-09): Development of a calibrated Synchro / SimTraffic traffic model representing a large portion of the Halifax Peninsula. SNC-Lavalin completed all necessary vehicle, pedestrian and bicycle data collection, network building, traffic modelling, and calibration to provide an up to date model of traffic operations for weekday AM and PM peak periods in downtown Halifax.

- **Jack's Lake Traffic Impact Study**, ECL Properties Limited / Halifax Regional Municipality, Halifax, Nova Scotia (2008-09):A study that investigated the traffic impacts associated with the development of a transit facility and residential/commercial properties at the Highway 102 (Exit 3) interchange in Bedford, Nova Scotia. Work included data collection, traffic modeling, and evaluation of current and future traffic demands and infrastructure requirements, including a feasibility analysis for the installation of a roundabout option.

- **Modal Split Cordon Counts**, Halifax Regional Municipality, Halifax, Nova Scotia (2008 - 2010): Responsible for coordinating efforts for the collection of vehicle occupancy pedestrian and bicycle information at 15 locations throughout Halifax Regional Municipality and analyzing, summarizing, and reporting on modal split results.

- **Queen Street Traffic Impact Analysis**, ECL Properties Ltd, Nova Scotia (2009): SLI was retained to evaluate the operational and safety impacts of access and parking modification. Particular attention was required to the impacts on vulnerable road user populations.

Atlantic Road & Traffic Management

Traffic Engineering Specialist

RESUME

Kenneth R. O'Brien, MEng, PEng
149 Rufus Ave., Halifax, N. S. B3N 2M2
Phone (902) 443-7799 Fax (902) 443-7747
Email: traffic@ns.sympatico.ca

EDUCATION: Bachelor of Science in Engineering (Civil)
University of New Brunswick, 1968

Master of Engineering (Transportation)
University of New Brunswick, 1974

BIO-SKETCH:

Ken O'Brien, Principal of *Atlantic Road & Traffic Management*, has 36 years experience in traffic engineering and transportation planning, including 29 years with the Nova Scotia Department of Transportation & Public Works (TPW). He has a broad knowledge of transportation issues, including traffic engineering, system planning, design, safety, economics, environmental concerns, maintenance and capital needs, urban transportation planning, and multi-modal systems. During the past seven years he has managed and completed many traffic impact, traffic engineering and transportation planning studies in Atlantic Canada. Clients have included TPW, Halifax Regional Municipality (HRM), several towns, and many firms operating in Atlantic Canada.

DEMONSTRATED ABILITIES :

- leadership and staff motivation
- program management
- project team building and management
- public speaking
- public information and consultation.
- communication skills
- problem solving
- expertise in traffic engineering
- expertise in transportation planning
- needs and economic analysis

EXPERIENCE:

June 1, 1997 to present	*Atlantic Road & Traffic Management* ***Principal***
Dec. 10, 1987 to May 31, 1997	Nova Scotia Department of Transportation and Public Works ***Assistant Director of Planning***
March 1, 1975 to Dec. 9, 1987	Nova Scotia Department of Transportation and Public Works ***Senior Traffic Engineer***
June 3, 1968 to Feb. 28, 1975	Nova Scotia Department of Transportation and Public Works ***Traffic Control Engineer***

MEMBERSHIPS: Association of Professional Engineers of Nova Scotia
Association of Professional Engineers and Geoscientists of Newfoundland
Transportation Association of Canada (Private Sector Member)
Institute of Transportation Engineers

REFERENCES: Mike Croft, P Eng, Manager Access Management, TPW. Phone (902) 424-3548
Dave McCusker, P Eng, Manager Trans. Task Force, HRM. Phone (902) 490-6696
Earl Richardson, Vice President, Clayton Developments Ltd. Phone (902) 445-2000

Atlantic Road & Traffic Management

Traffic Engineering Specialist

RESUME

Gregory R. O'Brien, *P. Eng.*
231 Greenwood Ave, Timberlea, NS, B3T 1H8
Phone (902) 446-7147 Fax (902) 443-7747
Email: traffic@ns.sympatico.ca

EDUCATION: Master of Engineering - Transportation (90% complete)
Dalhousie School of Engineering

Bachelor of Engineering - Civil
Technical University of Nova Scotia (TUNS), 1999

Diploma in Engineering
Saint Mary's University (SMU), 1996

BIO-SKETCH:

During the past seven years Greg has been involved in many projects including economic cost benefit studies, route location studies, urban transportation studies, and intersection and traffic signal design studies. Many of these projects involved extensive amounts of data collection. He has expertise to manage traffic counting programs in which multiple locations must be collected simultaneously, and then use the collected data to determine the level of service of the system using such software programs as Synchro 6.0, and HCS 2000. Recent specialized courses that Greg has completed include: a week long QRSII workshop; Intersection Design and Channelization Workshop at the Northwestern University Traffic Institute; Highway Capacity 2000 Seminar conducted by the McTrans Center; and an advanced Synchro / SimTraffic seminar. These courses and his project experience give Greg extensive abilities with the latest traffic analysis and modeling software, and traffic engineering techniques.

EXPERIENCE:

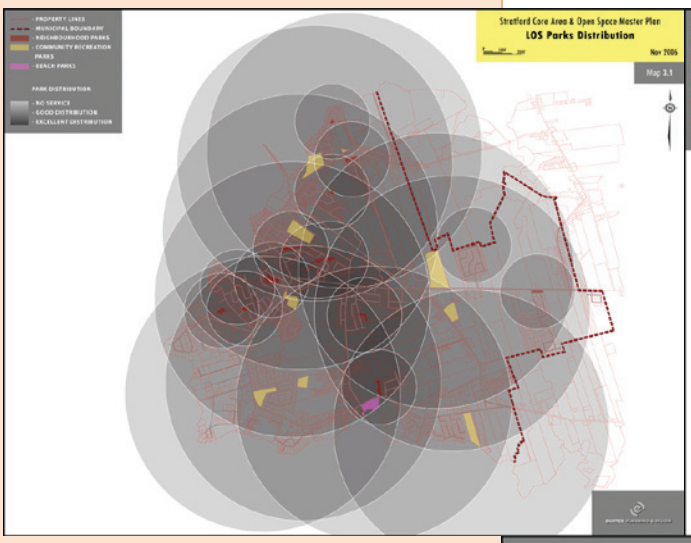
May 1999 - Present	Atlantic Road & Traffic Management, *Halifax, NS* Traffic Engineer
June 1999 - March 2000 *(Part Time)*	Nova Scotia Department of Transportation & Public Works, Infrastructure Management Division, *Halifax, NS* Traffic Engineering Support Staff
October 1997- April 1999 *(Part Time)*	Atlantic Road & Traffic Management, *Halifax, NS* Traffic Engineering Support Staff
September 1998 - December 1998	Nova Scotia Department of Transportation & Public Works, Infrastructure Management Division, *Halifax, NS* Traffic Engineering Support Staff
December 1997 - May 1998	Nova Scotia Department of Transportation & Public Works, Infrastructure Management Division, *Halifax, NS* Traffic Engineering Support Staff

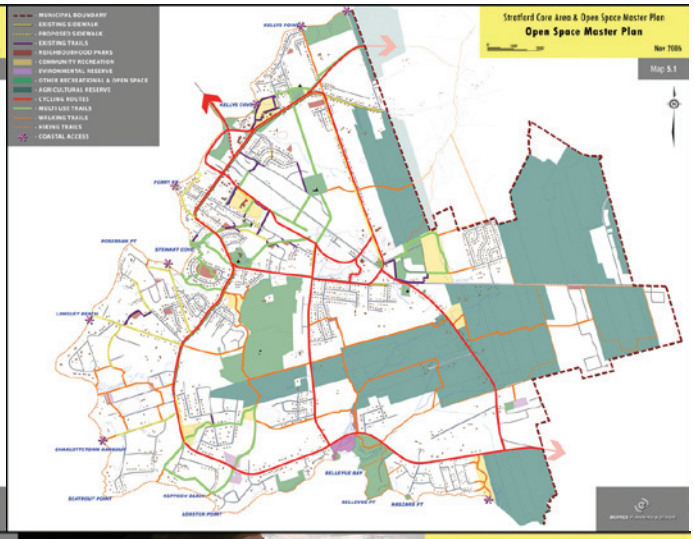
MEMBERSHIPS: Association of Professional Engineers of Nova Scotia (APENS)
Institute of Transportation Engineers (ITE)

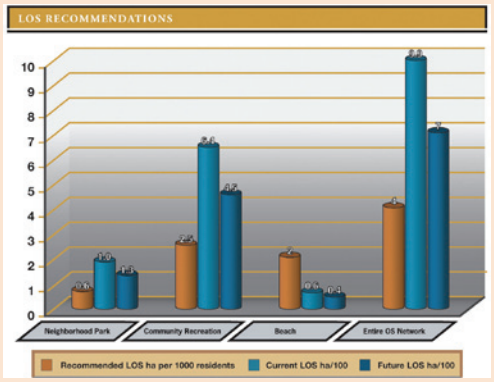
REFERENCES: Nouman Ali, Professor of Trans. Engineering, Dalhousie University, (902) 494-3970
Phil Corkum, Manager Needs & Programs Group, TPW, (902) 424-7501
David McCusker, Manager Trans. Task Force, HRM., (902) 490-6696

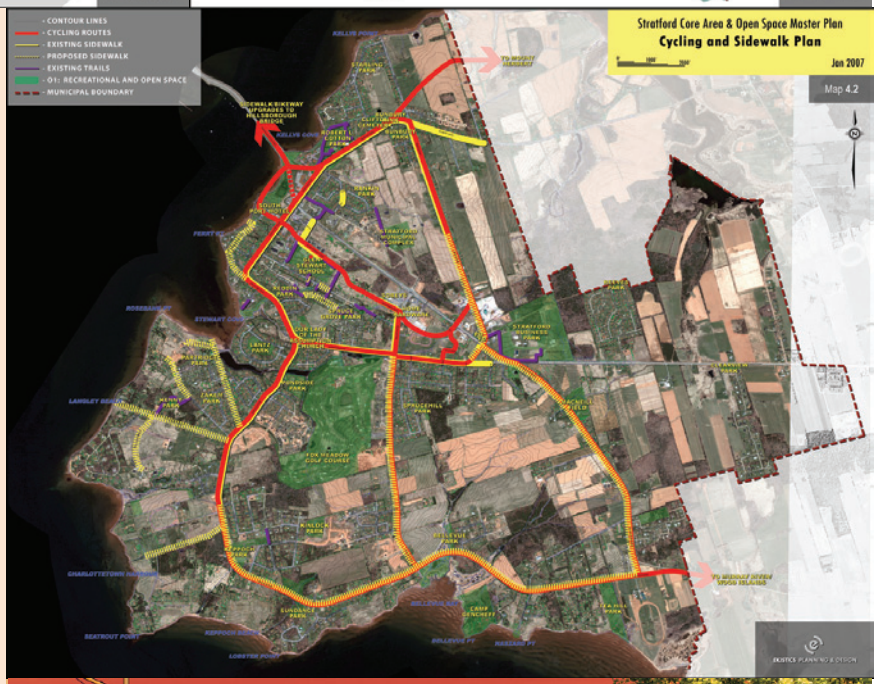
Stratford PEI

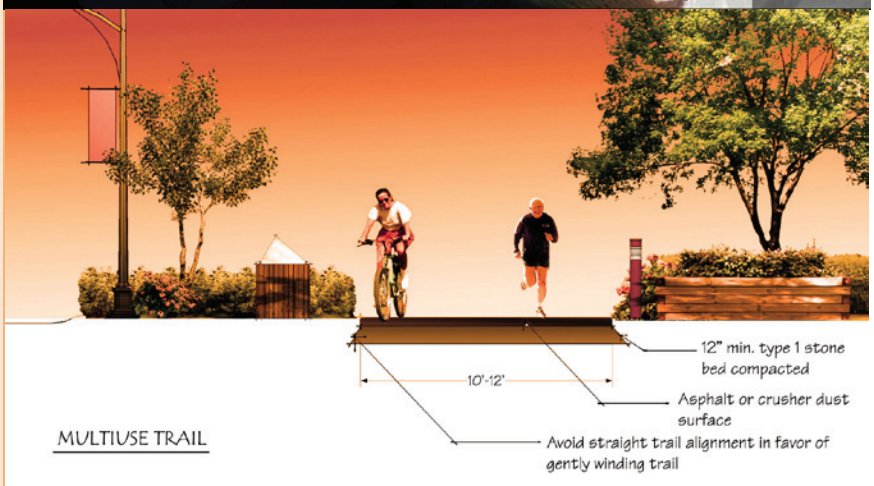
Active Transportation & Open Space Plan











Project Summary:

Ekistics was retained by the Town of Stratford to prepare an Active Transportation and Open Space Master Plan for the Town using a full public process.

Services Provided:

AT Planning
Open Space Planning

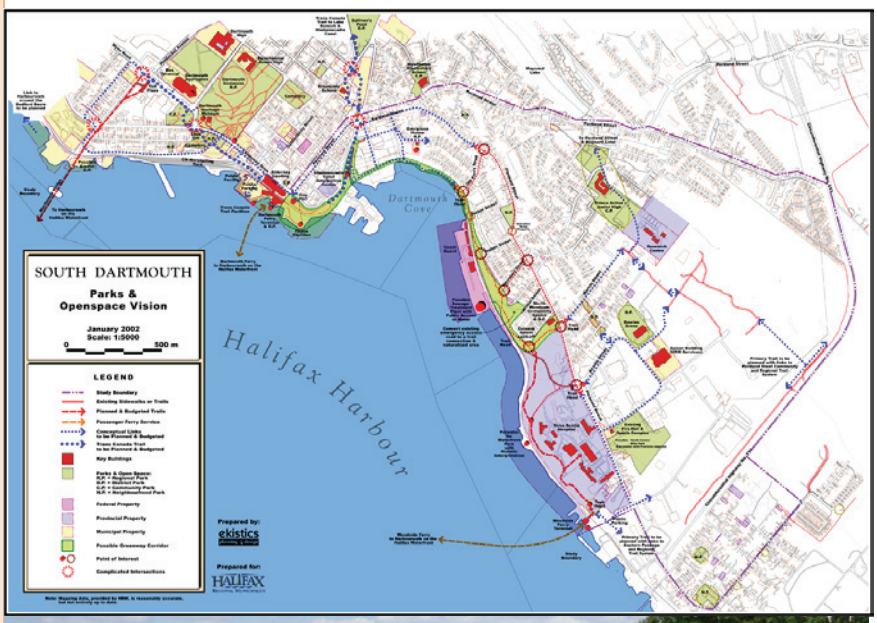
Date Started:

2007

EKISTICS PLANNING & DESIGN

Dartmouth Waterfront

Active Transportation Plan



Project Summary:

Ekistics was retained by the HRM to prepare an Active Transportation and Trail Master Plan for the Dartmouth Waterfront. Work included the conceptual master plan and working drawings for various sections of the trail including a signature bridge over the Shubenacadie Canal.

Services Provided:

AT Planning
Open Space Planning

Date Started:

2007

Bayne Street

Land Use Study

Project Summary:

Halifax Regional Municipality commissioned Ekistics to prepare a detailed land use options study for the northwest end of the Halifax Waterfront. The study had to resolve many complex land use issues including the previous Africville settlement, future twinning of the Murray Mckay Bridge, Port Authority expansion, and the demand for more residential, industrial and commercial land. In addition, several intricate transportation issues had to be identified and resolved with the plan.

Ekistics used a 3D computer model and a series of public workshops to generate 3 development options for this important parcel of land. In the end, the preferred option resolved many of the issues which were previously thought to be unattainable.

Services Provided:

Urban Design
Land Use Planning
3D Computer Modelling
Transportation Planning

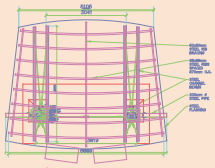
Date Completed:

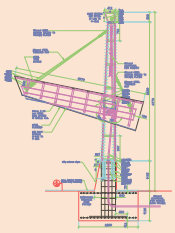
2003

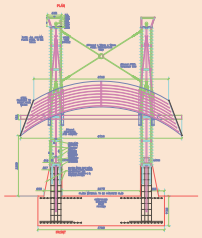
Saint John

Harbour Passage Urban Greenway

Design Development Sketch







Project Summary:

In association with The Glenn Group, Ekistics helped prepare the overall urban greenway strategy for the Saint John, NB waterfront. The development included an urban stormwater wetland, several km's of trails and several large interpretive shelters designed in the industrial waterfront character. Phase one for this project was completed in 2003 and the firms are at work on phase 2 in 2009.

Services Provided:

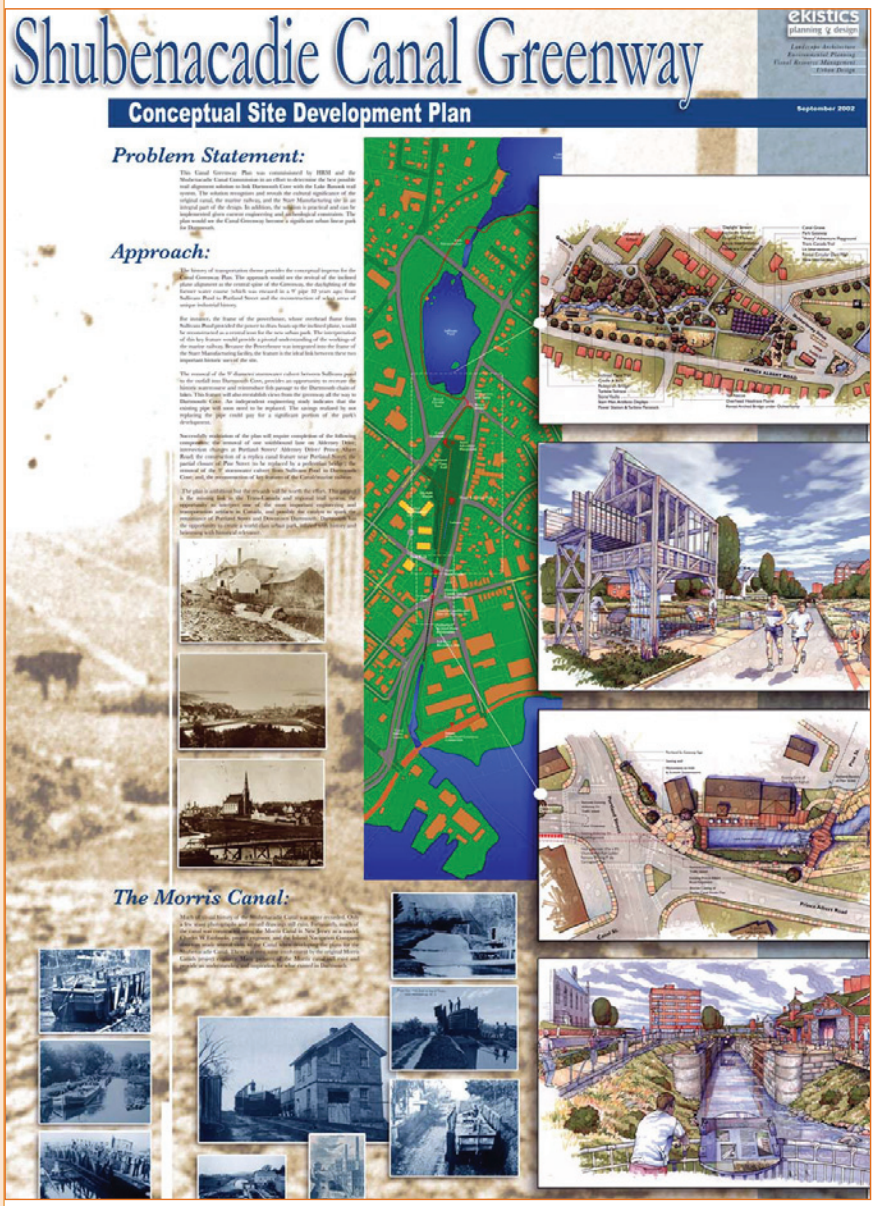
Landscape Architecture
Waterfront Planning
Signage Design
Interpretive Planning

Date Completed:

2003

Shubenacadie Canal

Greenway and Urban Park



Project Summary:

This Shubenacadie Canal Greenway Study was commissioned by HRM and the Shubenacadie Canal Commission in an effort to determine the best possible Greenway alignment solution to link Dartmouth Cove to the Lake Banook trail system. The plan evolved into an exciting conceptual design study for the potential creation of a new urban park system for Dartmouth. The plan theme revolves around the historic Shubenacadie Canal system which was constructed in the mid 1800's. Most of the infrastructure including locks and turbines are still in good shape buried beneath the site. The plan celebrates this important marine railway system by strategically uncovering and restoring important features of the marine railway. The plan also calls for the 'daylighting' of a 9' diameter culvert which runs under the property. Daylighting of this stream will restore fish habitat and will bring back an important urban ecosystem to Dartmouth.

Services Provided:

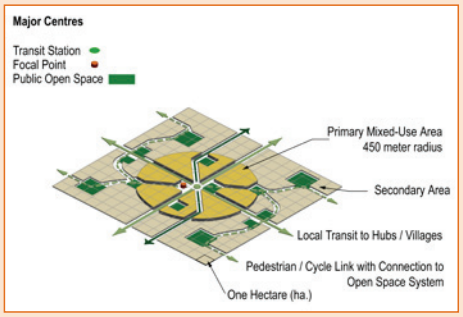
Landscape Architecture
Interpretive Planning
Urban Design
3D Computer Modelling
Environmental Planning
Greenway Planning

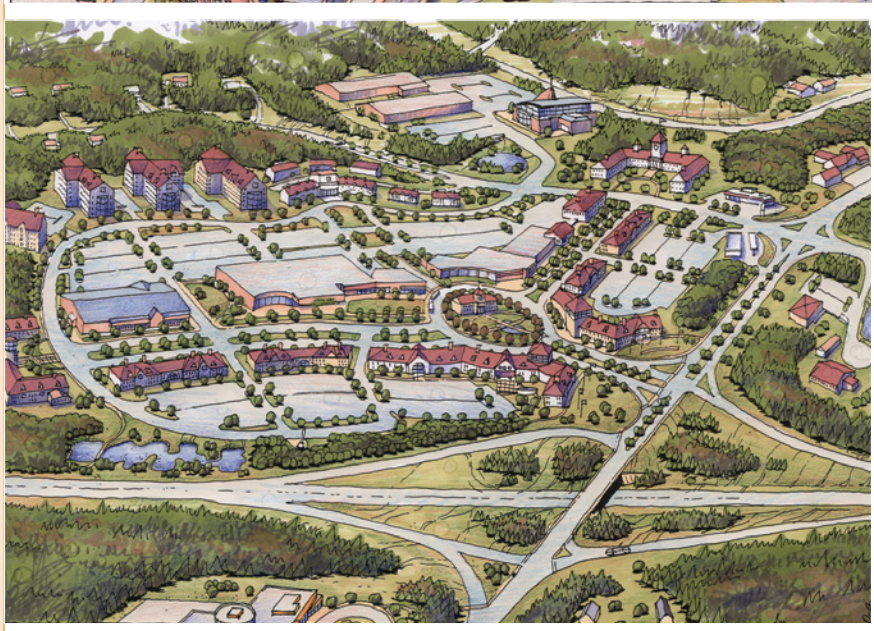
Date Completed:

2003

HRM Regional Plan

Development Visualizations





Project Summary:

Ekistics was hired by HRM regional planning staff to prepare the conceptual design proposals for the HRM Regional Plan. Work included over 2 dozen perspective renderings and almost a dozen GIS maps.

Services Provided:

Architectural rendering
Regional Planning
GIS
Landscape Architecture

Date Completed:

2004

Point Pleasant Park

International Design Competition

Project Summary:

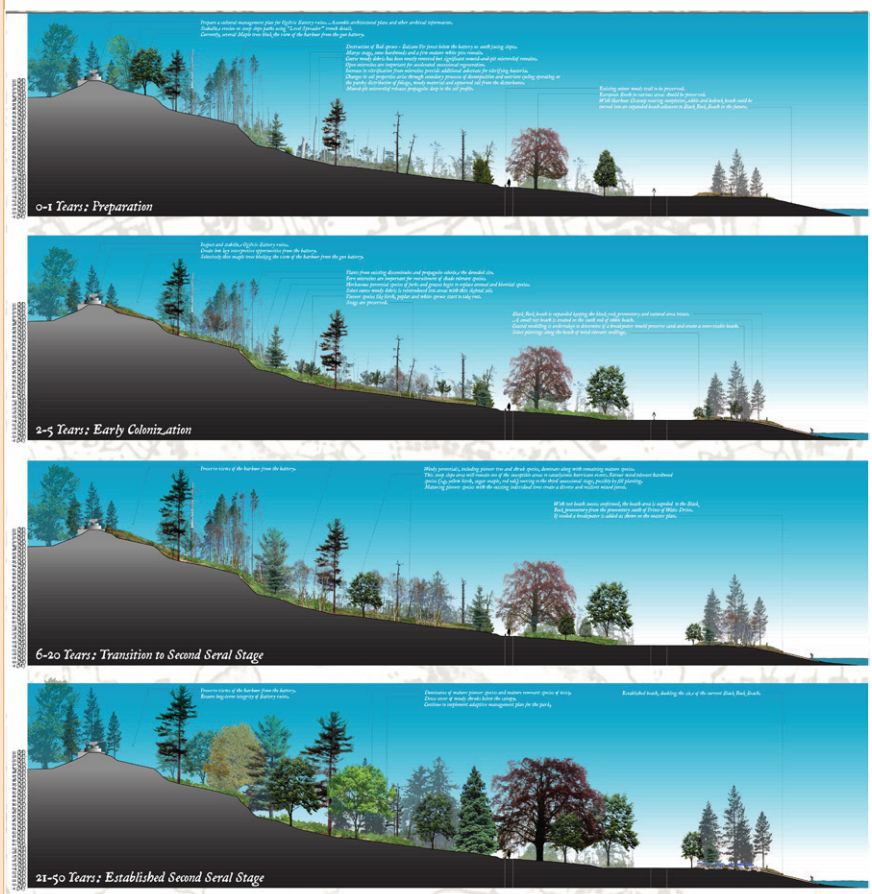
Ekistics was the co-winner of the Point Pleasant Park International Design Competition in Halifax. The city sponsored an international design competition which attracted 26 entries from around the world. The city chose two entries in a draw for the winner. Ekistics and NIP Paysage will be collaborating on the park improvement plans over the next decade.

Services Provided:

Landscape Architecture
Environmental Planning
Interpretive Planning
Urban Design

Date Started:

2005



10
Next 50 Years of Park Evolution

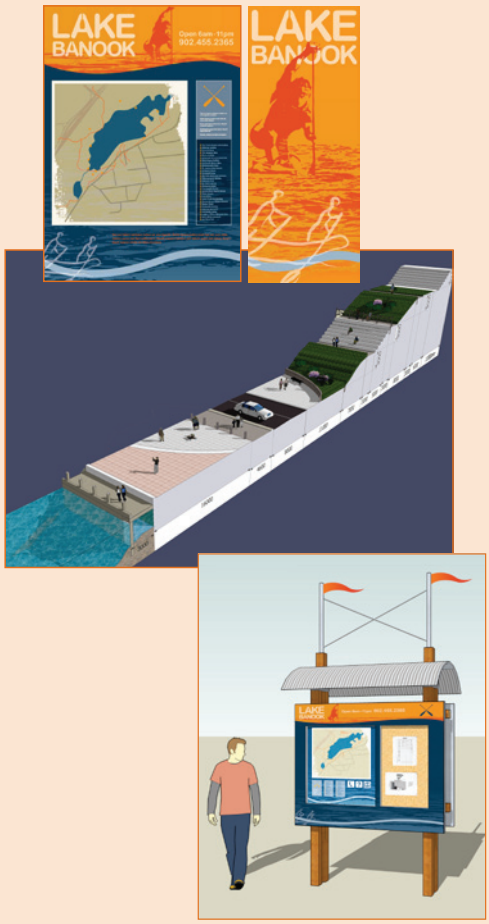
Juan hit Point Pleasant Park with catastrophic intensity (approximately 100-150 year storm). The section above shows the evolution of a key area over the next 50 years. Succession to a climax ecosystem will likely take hundreds of years. Clearly, the cataclysmic destruction of the red spruce dominated forest of 2003 provides lessons for the management of the park over the next millennium. These sections demonstrate the preferred evolution of one important area of the park.

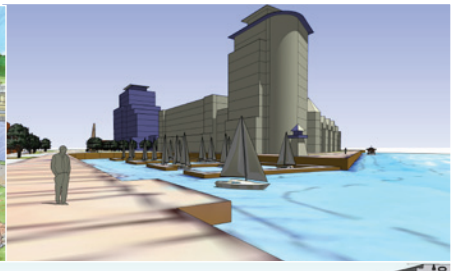
On the cultural side, the Ogilvie Battery needs to be stabilized and views from the battery to the harbour need to be preserved. A vegetation management plan around the ruins needs to be put in place. Black Rock Beach should be doubled in size. This should begin with a small trial beach section. If this proves successful, the beach can be expanded further in the future.

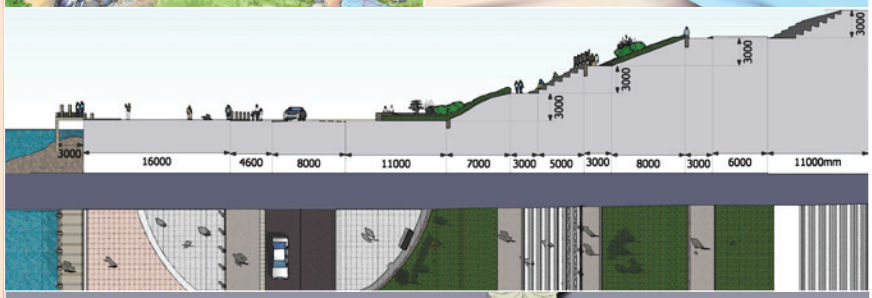
On the ecological side, the sections above show the natural succession of forest from pioneer stage to established second seral stage. As was learned in the Harvard Forest, hardwoods should be encouraged on steep south-facing slopes to minimize destruction caused by the next hurricane.

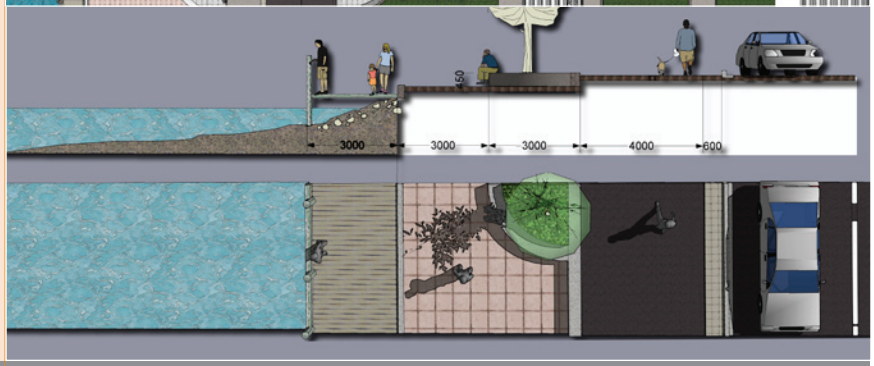
Lake Banook & Sullivans Pond

World Canoe Championships Master Plan









Project Summary:

Ekistics was retained by Halifax Regional Municipality to prepare a master plan for Lake Banook and Sullivans Pond in downtown Dartmouth. The plan had to address requirements of the 2010 World Canoe Championships, and the remaining infrastructure. The plan recommended over $8 million dollars in improvements.

Services Provided:

Landscape Architecture
Urban design

Date Started:

2007

Town of Stratford

Core Area Development Plan

Project Summary:

Ekistics was retained by the town of Stratford, PEI to prepare a 25-year Core Area revitalization plan for the town. With the Town bisected by the Trans Canada Highway, the goal was to reduce the potential for commercial sprawl while creating 3 main commercial cores (a traditional waterfront core, a civic core and a big box core). Ekistics worked with Town residents, businesses and staff for over a year to prepare a vision and implementation strategy for the core area plan.

Services Provided:

Landscape Architecture
Urban design
Civic Branding/Signage

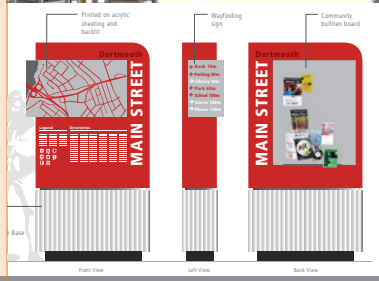
Date Started:

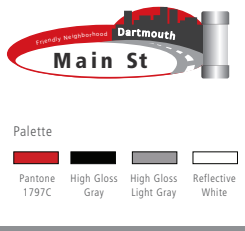
2007

EKISTICS PLANNING & DESIGN

Main Street Dartmouth

Downtown Core Study





Project Summary:

Ekistics was retained by the Halifax Regional Municipality to prepare a 25-year Core Area revitalization plan Main Street in Dartmouth. With the downtown core bisected by a major arterial highway, the goal was to reduce the potential for strip sprawl while creating a traditional mixed use core for the downtown. Ekistics worked with residents, businesses and staff for over a year to prepare a vision and implementation strategy for the downtown core area plan.

Services Provided:

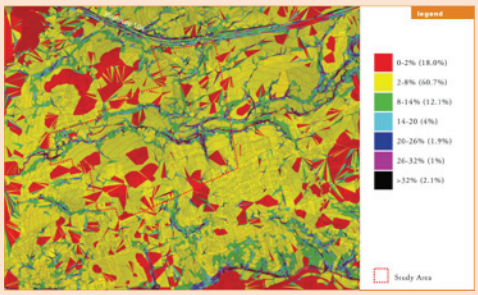
Urban design
Civic Branding/Signage

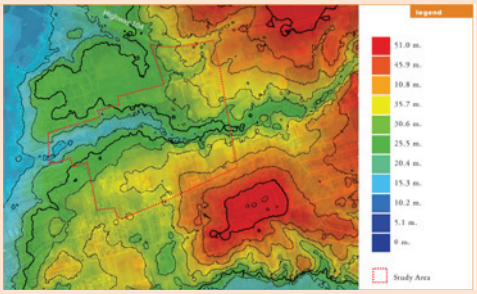
Date Started:

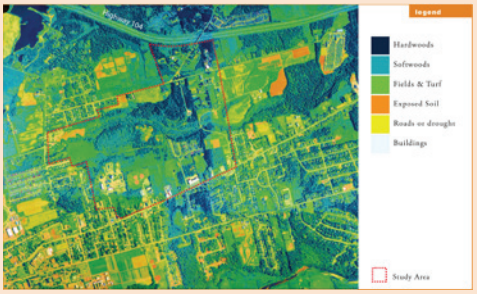
2008

Bible Hill

Village Core Plan







Project Summary:

Ekistics was retained by the County of Colchester to prepare a Village Core Plan for the town of Bible Hill (one of the fastest growing communities in Nova Scotia). Current developments patterns in the Town have favoured suburban sprawl and strip commercial sprawl. The new Village Core Plan provides an alternate form of traditional neighbouhood development for the core of the Village. The plan sets out development guidelines, architectural guidelines, new roads, a protected linear greenway and a new big box core.

Services Provided:

Urban Design
Environmental planning

Date Started:

2008

EKISTICS PLANNING & DESIGN

EKISTICS PLANNING & DESIGN