

Jackson's Point

Redevelopment Plan



Technical Review

September 2017



GEORGIA

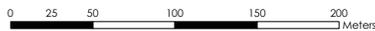
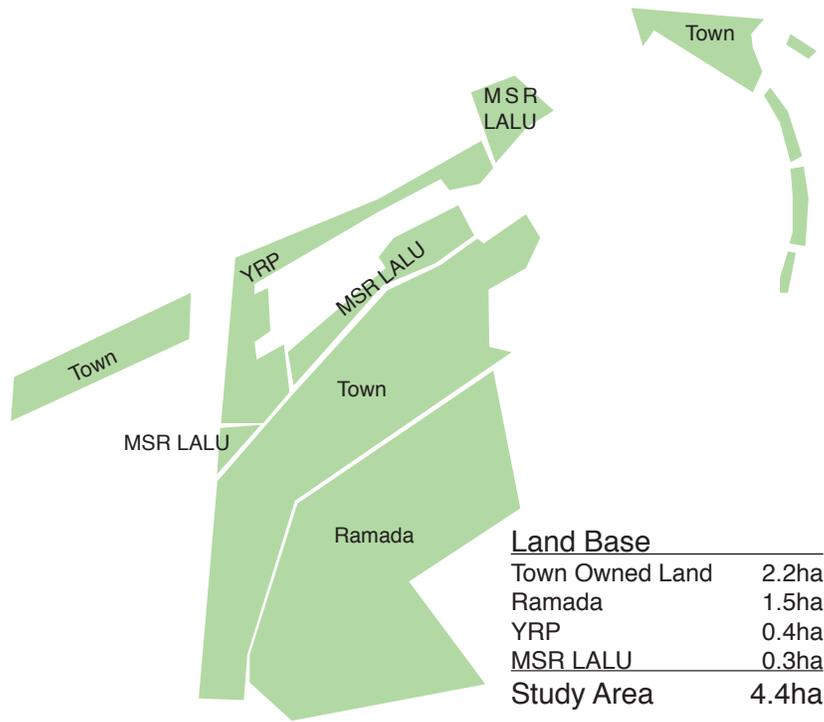
The Planning Partnership
TOURISTICS
SCS Consulting Group Limited
Baird
Plan B Natural Heritage

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Introduction

This report is a summary of the information available on natural heritage, coastal engineering, boating and servicing for the Jackson's Point Harbour Redevelopment Plan study area.



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01 The Planning Partnership - *Planning Background*

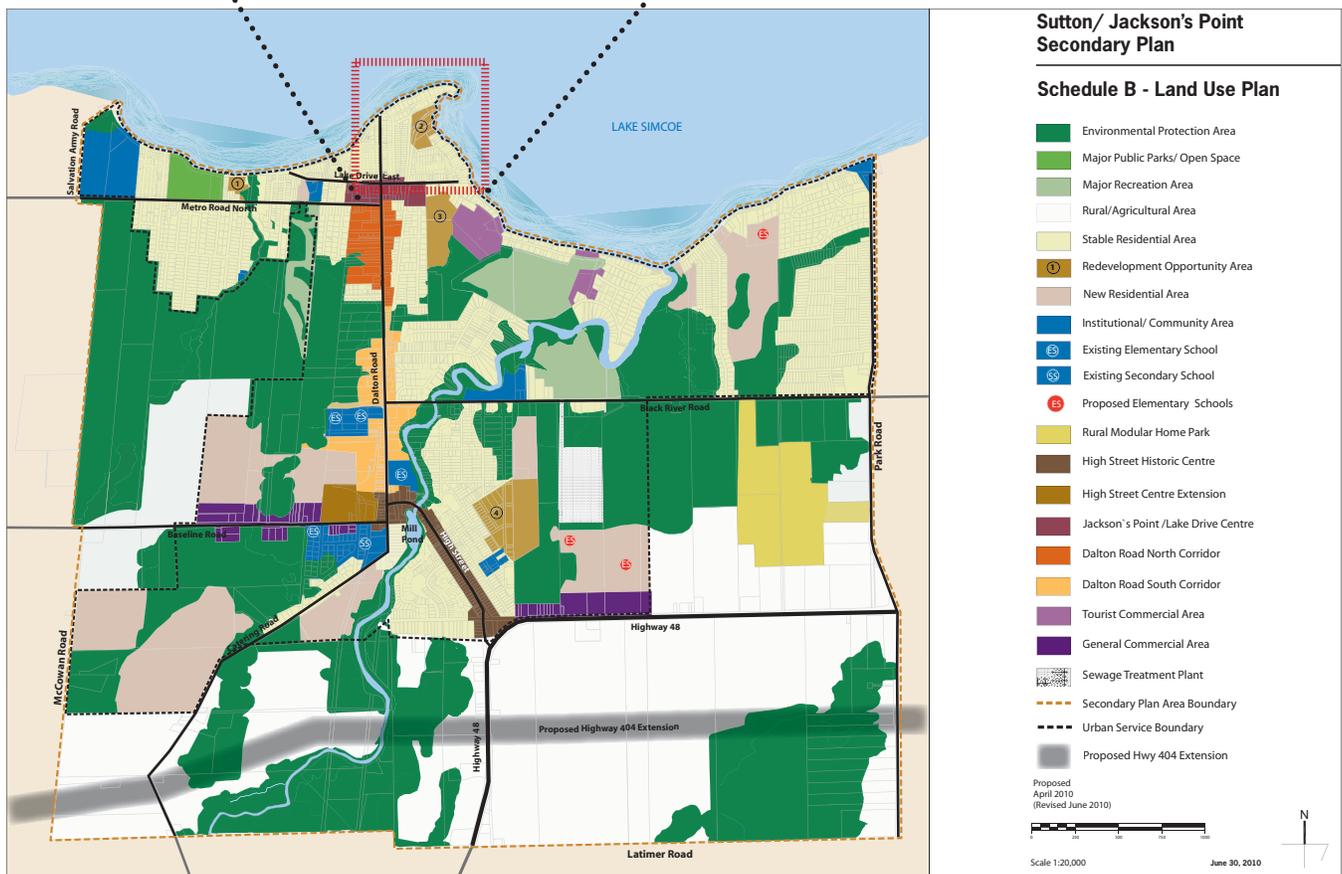
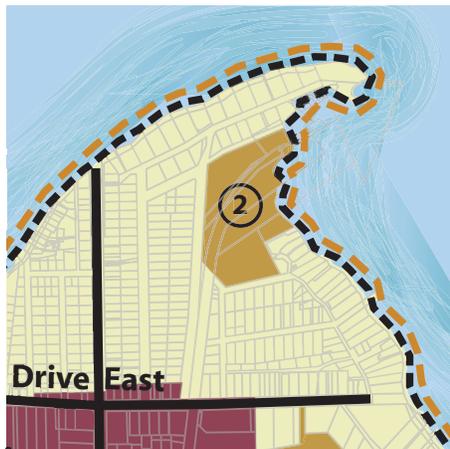
Jacksons Point Harbour Redevelopment Planning Background Summary

Official Plan

Sutton/Jackson's Point Secondary Plan

The three principal properties – most of MSR/LALU lands, Bonnie Park and the Ramada site – are Redevelopment Opportunity Areas

The remaining properties within the study area – Malone Wharf, a small parcel belonging to MSR/LALU, and the right of way – are within a Stable Residential Area



Redevelopment Opportunity Area

This designation recognizes the redevelopment potential of Jackson's Point Harbourfront, (Redevelopment Area 2). It is planned for a mixed density residential community with primarily medium and higher density house forms, a hotel/resort, parkland/open space, the marina, and marine related uses. Redevelopment policies include:

- Protect the environment and contribute to improved water quality in Lake Simcoe
- Protect and enhance public access to the water's edge
- Improve the visual appeal of the area
- Create improved economic development opportunities in Jackson's Point/Lake Drive Centre
- Enhance connectivity to Lake Drive and the Jackson's Point commercial area
- Improve the functional aspects of landscape, drainage, community and new development
- Create an enhanced park for local residents, visitors and tourists

Stable Residential Area

This designation recognizes, protects and enhances existing stable residential neighbourhoods and prohibits incompatible land uses and built forms within them, while supporting an appropriate housing mix and community uses. Permitted uses include:

- Low density house forms including single detached, semi-detached and townhouses (12-25 u/ha) that maintain the character of the surrounding neighbourhood
- Bed and breakfast, local commercial uses, schools, Town/Region uses, emergency services uses
- Utilities and infrastructure
- Parks, open space, conservation uses

Urban and Architectural Design Guidelines

Forming a part of the Jackson's Point Secondary plan, these guidelines provide design principles aimed at achieving high quality and well designed public and private realms.

Guidelines for the Public Realm – roads and open spaces

- Safety through overlook and ease of access to buildings, clear views, appropriate signage
- Public spaces and entrances oriented to public roads
- Interconnected roads, public spaces and trails
- Adjacent residential units should front to the park

Guidelines for the Private Realm – development blocks and lots

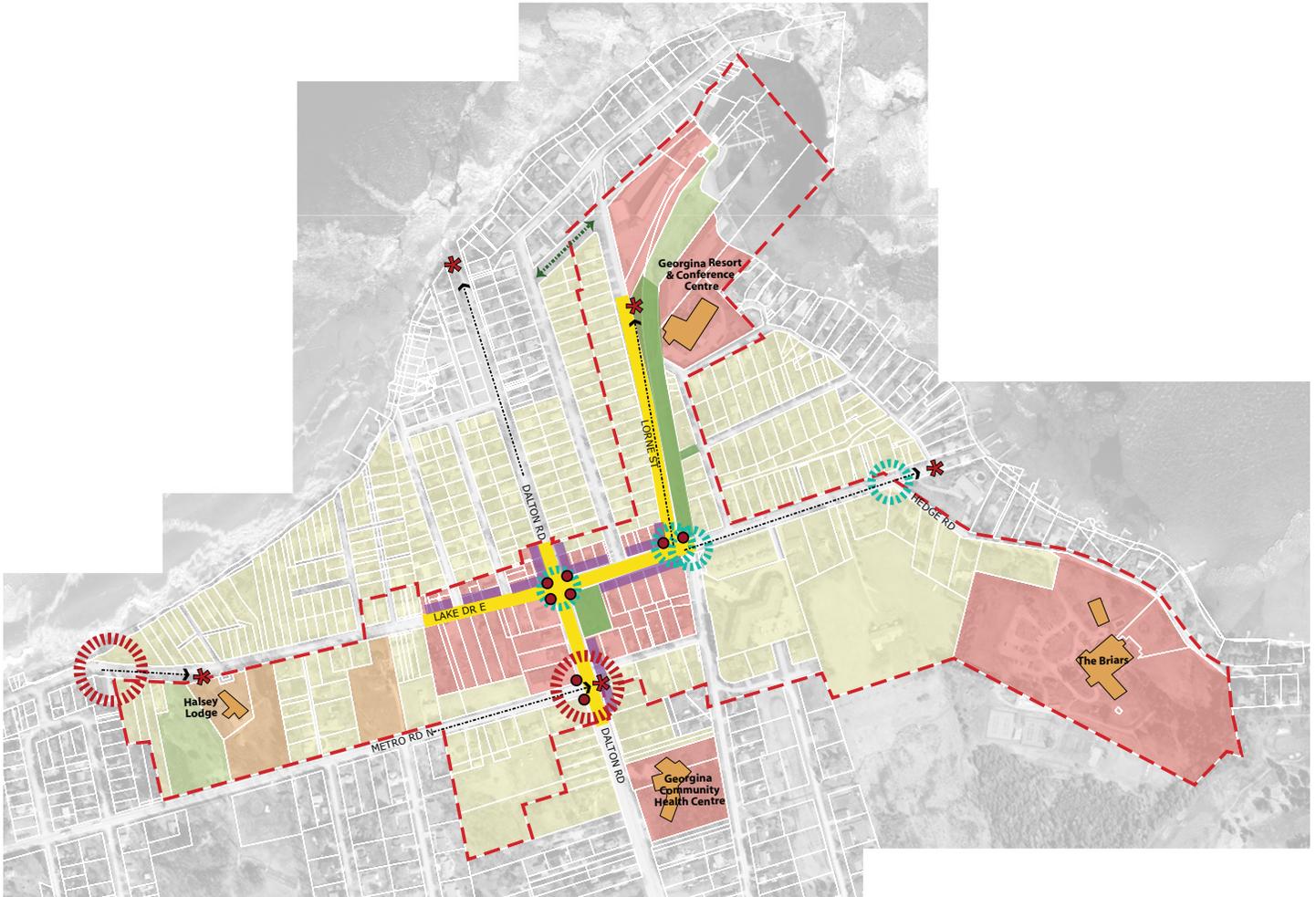
- Promote pedestrian movement
- Complementary character, use of distinctive architectural elements (porches, dormers, materials), visible entrances
- Avoid privacy/undue impacts to existing properties
- Parking lots/structures with significant road frontage to be avoided, prefer underground or at rear
- Define edges of streets and public spaces

Downtown Community Improvement Plan for Jackson's Point

The goal of the Community Improvement Plan is to help revitalize Jackson's Point, focused on Lake Drive East and Jackson's Point Harbour, and it provides a number of incentives, tools and guidelines to accomplish this. It has four guiding principles:

1. Connect Jackson's Point with other assets in the area
2. Enhance the pedestrian experience by creating a safe, comfortable and appealing environment
3. Strengthen identity
4. Market the uniqueness of Jackson's Point

The structure plan emphasizes linking Lake Drive East with Jackson's Point Harbour through key corner design, views and termini sites, and open space (Lorne Park).



MEMORANDUM

To: Donna Hinde The Planning Partnership
From: Brad Bricker PLAN B Natural Heritage
Date: September 18th, 2017
Re: Jackson's Point Harbour Front Redevelopment – Natural Environment Overview

Introduction

The following memorandum provides an overview of the existing environmental conditions and opportunities/constraints associated with a proposal to redevelop a section of the Lake Simcoe shoreline at Jackson's Point (Town of Georgina). The study area is comprised of the following three parcels of land:

- Town of Georgina – Bonnie Park, Bonnie Boulevard, Malone Wharf;
- Ramada Inn; and,
- Bonnie Boats Marina.

A site walk was held on April 25th, 2017 to document the existing condition and to identify opportunities and constraints to the redevelopment of the subject parcels of land. The following background data sources were also reviewed as part of the analysis:

- Sutton-Jackson's Point Secondary Plan;
- MNRF NHIC data base;
- LSRCA regulation mapping;
- Lake Simcoe Protection Plan;
- Environmental Impact Study (Draft) York Regional Police Marine Unit Facility, Jackson's Point, Town of Georgina (GEMS 2014);
- Phase One Environmental Site Assessment, Bonnie Park, Town of Georgina (CRA 2012);
- Jackson's Point Harbour Environmental Assessment, Township of Georgina (F.J. Reinders and Associates Canada Limited 1986); and,
- Jackson's Point Harbour Expansion Feasibility Study (E7 Engineering 1997).

Site Overview

The vegetation features associated with the subject properties are mainly cultural (anthropogenic) in character, and are mostly comprised of planted ornamental trees and shrubs with some regeneration in non-manicured areas. Tree species present within the study area include eastern white cedar, white ash, Manitoba maple, locust, white pine, Austrian pine, white spruce, Norway maple, sugar maple, basswood, crack willow, common buckthorn, bramble and red-osier dogwood. The majority of the trees are in the 10 cm to 30 cm diameter range.



The near shore areas support patches of submerged, shallow aquatic vegetation such as coontail, milfoil, waterweed and green algae.

The study area is cultural in character with manicured/landscaped properties, a small sand beach and property line hedgerows (cedar, Manitoba maple dominant). As a result, the breeding bird community is expected to be mainly comprised of common habitat generalist species. Species of birds previously recorded from the study area by GEMS (2014) included common grackle, red-winged blackbird, cedar waxwing, northern cardinal, American crow and Canada goose. During a May 2014 site visit, GEMS (2014) did not observe any amphibian or turtle activity within the study area. This observation reflects the absence of wetland conditions within the study area and the overall level of disturbance associated with an existing urban developed area.

From a fisheries perspective, Lake Simcoe supports a diverse fish community comprised of coldwater, coolwater and warmwater species. Fish species present include lake trout, whitefish, cisco, sculpin, burbot, northern pike, yellow perch, walleye, smallmouth and largemouth bass, pumpkinseed, bullhead, and a wide variety of minnow species (GEMS 2014). During the April 25th site walk, small schools of minnows were observed around the Bonnie Boats marina.

According to GEMS (2014), approximately 60% of the existing harbour area is comprised of submerged, shallow aquatic vegetation interspersed with areas of sandy substrate. The water depth in the harbour ranges from 1.5 m to 2.5 m in depth. The combination of aquatic vegetation, sandy substrate and protection from wave action (breakwater) in the harbour provides foraging, rearing and spawning opportunities for a variety of fish species.

In terms of species at risk, the potential for the study area to provide a critical habitat function is very low, at best. With the exception of 1962 records for Massasauga rattlesnake and lake sturgeon, both listed as Threatened in Ontario, no species at risk have been previously recorded from the study area (Source: MNRF NHIC database). Suitable habitat for the above species does not exist within the study area.

GEMS (2014) completed a habitat suitability assessment of potential species at risk from the LSRCA watershed. Based on habitat preferences, GEMS concluded that the study area does not support habitat for species at risk known to occur within the LSRCA watershed jurisdiction.

Opportunities and Constraints to Redevelopment

The study area consists of existing developed properties (i.e. Bonnie Boats, Ramada Inn) and Town of Georgina parkland (i.e. Bonnie Park, Bonnie Boulevard). Based on the above overview of existing conditions and the background study review, it is our professional opinion that there are no significant constraints to redevelopment of the existing properties. The subject lands support a limited amount of cultural vegetation that is mainly comprised of planted native and ornamental species in a manicured, park like setting. There is no natural shoreline condition within the study area. The shoreline is comprised of an existing marina with docks and boathouses, a sand beach (Bonnie Park), and a “hardened” shoreline associated with the Ramada Inn property.

Given that the study area supports existing development in proximity to the shoreline, consideration should be given to flexible setback/buffer standards, provided appropriate mitigation measures can be implemented to address wave action (flooding), protection/restoration of the shoreline, and

protection of water quality and fish habitat during decommissioning of structures and future re-development activities.

The existing marina is located in a sheltered harbour that provides foraging, rearing and spawning habitat for a variety of fish species. With proper mitigation and habitat compensation, expansion of the marina (and the breakwater) could be accommodated. The creation of additional breakwater will provide habitat opportunities for fish species and would compensate for any removal of habitat. To the best of our knowledge, the existing harbour and shoreline littoral zone do not provide a critical fish habitat function that would preclude consideration of improvements or alterations to the harbour and the shoreline.

In terms of setback requirements, the LSRCA regulations stipulate a 30 m setback from the high water mark of Lake Simcoe. The Lake Simcoe Protection Plan policies require a 30 m buffer from the edge of the shoreline. Both policy documents provide some degree of flexibility with the width and treatment of the buffer/setback, subject to meeting certain tests and conditions. Section 6.0 of the Lake Simcoe Protection Plan provides an overview of the applicable policies that apply to developed shorelines. Chapter 6 of the LSRCA Guidelines for the Implementation of Ontario Regulation 179/06 provides an outline of the policies and guidelines that apply to development along the Lake Simcoe shoreline.

Key Issues & Recommendations

Based on the above opportunities/constraints analysis, the following issues have been identified that will need to be addressed as part of a formal development application:

- Redevelopment options for the site will require a permit from LSRCA for any works within a regulated area, including the shoreline and near shore areas. The slope to the west of Bonnie Boats marina is a regulated feature.
- An Environmental Impact Study (EIS) will be required by LSRCA, under Ontario Regulation 179/06 (Development, Interference with Wetlands and Alterations to Shorelines), due to the proximity of Lake Simcoe.
- Under the Lake Simcoe Protection Plan (2014), a Natural Heritage Evaluation (NHE) report will be required for any development within 120 m of the shoreline. The NHE must demonstrate that there will be no negative impacts to key natural heritage or key hydrologic functions. The key natural heritage and hydrologic feature within the study area is Lake Simcoe. New developments must demonstrate how the water quality protection targets for Lake Simcoe will be achieved, and how the shoreline will be protected and enhanced.
- MNRF Aurora District Office species at risk biologists should be contacted to confirm the presence/absence of species at risk within the study area, and to determine if follow-up surveys are required.
- A DFO project review submission will likely be required for proposed changes to the shoreline, expanded marina and breakwater construction. If DFO determines through the project review that significant harm to fish or fish habitat will occur, a Fisheries Act authorization will likely be required to detail the impacts of the project and the proposed mitigation and habitat compensation measures. DFO review and approval will likely be

required due to the location of the study area (Lake Simcoe) and the direction of the Lake Simcoe Protection Plan.

- Any decommissioning of building or structures along the shoreline will require erosion and siltation control measures in accordance with LSRCA standards. Construction timing windows will apply for any in-water work (e.g. shoreline treatments, expanded marina, and breakwater). The timing window will be based on the fish community present within the harbour.
- Stormwater management controls must meet the requirements of the Lake Simcoe Protection Plan as well as LSRCA and Town guidelines. Bio-swales, where feasible, should be incorporated in the redevelopment and within existing parking areas to collect, filter and polish runoff before it discharges to Lake Simcoe.
- If tree removal is required for re-development, it should occur outside of the nesting window for migratory and nesting birds (i.e. early-April to mid-August). Trees should be replaced on a 1:1 basis with locally indigenous native species or in accordance with municipal and agency tree compensation requirements. Tree protection measures, in accordance with Town standards, should be implemented for trees and vegetation to be maintained.
- An environmental management plan should be prepared as part of the EIS/NHE that deals specifically with the various environmental protection measures that will be required to address the requirements of the Lake Simcoe Protection Plan, LSRCA regulations and MNRF/DFO permitting requirements.

Respectfully submitted by,

PLAN B Natural Heritage



Brad D. Bricker, M.Sc.
Certified Senior Ecologist (ESA)



Jackson's Point Waterfront Master Plan
Coastal Engineering Review

Baird.
Innovation Engineered.

Jackson's Point Waterfront Master Plan

Coastal Engineering Review

Prepared for:

Prepared by:

The **Planning** Partnership

The Planning Partnership

Baird.
Innovation Engineered.

W.F. Baird & Associates Coastal Engineers Ltd

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Rev 2	11/09/2017	Final		FJLD	MOK	FJLD
Rev3	18/09/2017	Final		FJLD	MOK	FJLD

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1. Introduction

Jackson's Point, located on the south shore of Lake Simcoe in the Town of Georgina includes several hundred metres of waterfront. The project site includes lands owned by the Town of Georgina, property recently acquired by York Region Police and lands privately held by the Ramada Inn. Key features include a marina, boat house, boat launch, parkland, a public beach, parking lot, hotel, wharf and a series of offshore breakwaters that provide shelter to the marina.

In March 2017, The Planning Partnership, with Baird & Associates as sub-consultant was retained by the Town of Georgina to develop a Waterfront Master Plan for Jackson's Point. Baird & Associates provided coastal engineering services to the project.

The Waterfront Master Plan is divided into four phases and includes: 1) an update to conditions since the 2009 Jackson's Point Master Plan; 2) a design charrette with Stakeholders and the Public; 3) development of a Preferred Plan; and 4) implementation activities including assistance with any required Official Plan and Zoning By-law Amendments, technical studies, assistance with land swap agreements and availability to support the Town at Ontario Municipal Board hearings if required.

Section 2 provides an overview of the site based on two site visits and background reports provided by the Town of Georgina. Regulatory requirements for the development of coastal structures on Lake Simcoe are summarized in Section 3. Section 4 provides a summary of constraints, issues and additional coastal engineering studies that would be required to support future development. In Section 5, three alternative Development Plans prepared by the study team are reviewed.

No analysis or field investigations were undertaken in support of this assessment. The information is not suitable for design purposes and additional analysis would be required for the development of any design work.

2. Site Location and Description

The study site includes several hundred metres of waterfront as shown in Figure 2.1. Key features include a marina, boat house, boat launch, parkland, a public beach, parking lot, hotel, wharf and a series of offshore breakwaters that provide shelter to the marina. The study area was visited by personnel from Baird on two occasions: April 25, 2017 and June 8, 2017.

The Ramada Inn shoreline is protected by a series of low crested concrete, steel sheet pile and timber seawalls as shown in Figure 2.2 to Figure 2.4. Cracks in the concrete are visible. A detailed inspection including underwater inspection would be required to assess the condition of the structures. At the north end of the Ramada Inn property, the concrete docks have been faced with timber. The timber is susceptible to damage from exposure wave action and ice. The shoreline between the concrete docks is protected with a low crested timber wall; overtopping was evident (see Figure 2.5).

A timber dock extends from shore on Town property immediately north of the Ramada Inn property line. The Town beach is located on the north side of the timber dock, shown in Figure 2.6. The shoreline at the north end of the public beach is protected with armourstone. A steel sheet pile wall with concrete apron protects the shoreline from the beach northward to the marina (see Figure 2.7). A detailed inspection would be required to determine the condition of the wall.

The marina is located north of the public beach and includes a pile supported timber dock with two finger piers (see Figure 2.9 and Figure 2.14). A series of detached rubblemound breakwaters extend from Malone Wharf, providing shelter for the marina (see Figure 2.14).

Malone Wharf is located north of the marina. The concrete wharf is in a deteriorated state of repair with significant cracking and spalling (see Figure 2.11). The timber rub rail has been damaged. Depths observed along the wharf were generally less than 1 metre (see Figure 2.12). The wharf is currently used by a barge operator. During the June 8 site visit, several people were fishing from the wharf.

There is an old concrete boat launch located on the north side of Malone Wharf (see Figure 2.13). The boat launch has not been maintained, is no longer in use, and much of it is covered in sand.

A canal with boathouses on either side is located north of the parking lot (see Figures 2.14 and 2.15 and 2.17). The timber walls along the canal are in a state of disrepair and there is evidence of subsidence. A concrete boat launch is located on the south side of the canal (see Figure 2.16). It is our understanding the boat launch will not be available for public use in the future.

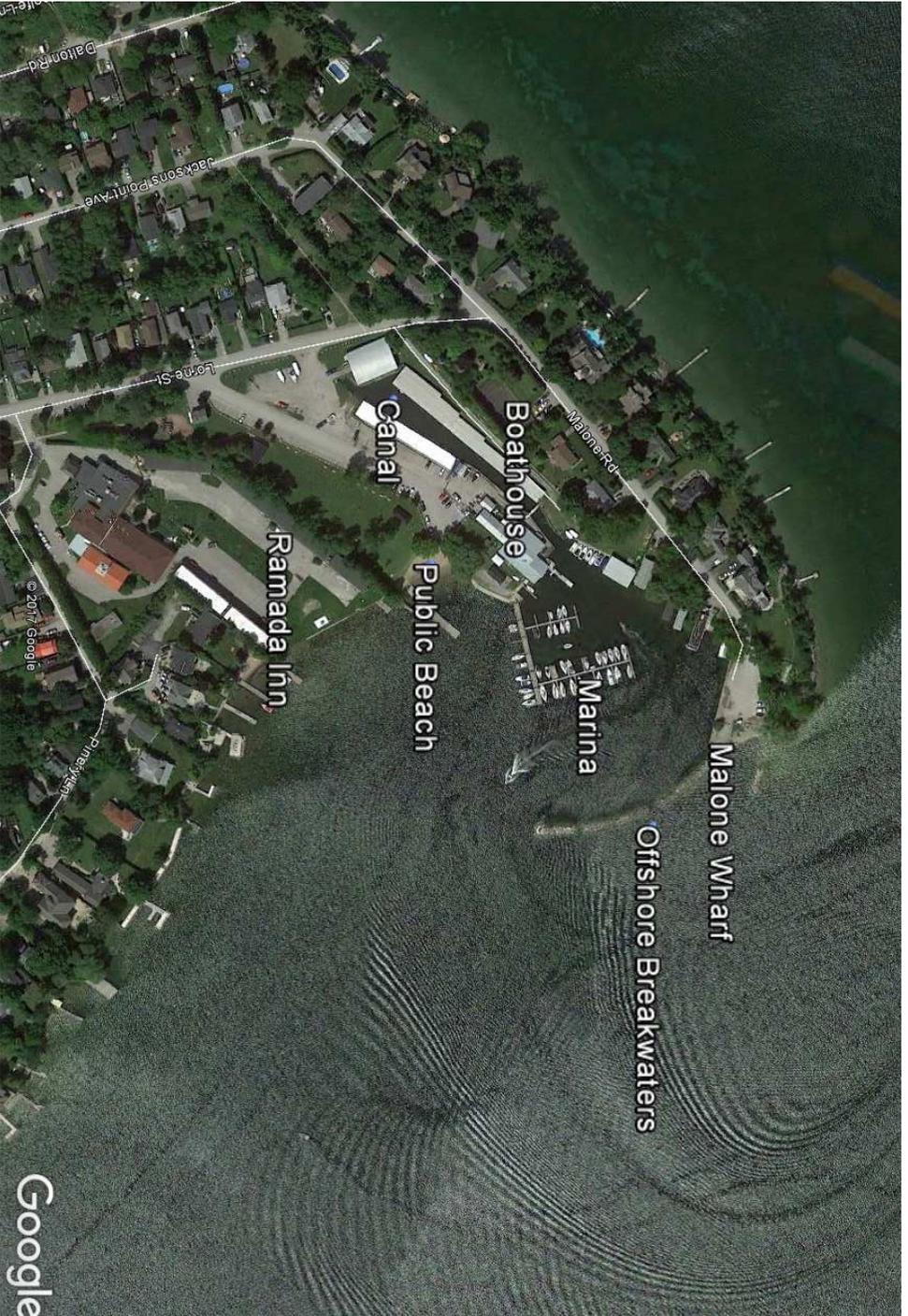


Figure 2.1 : Site Location Map showing Key Features

Jackson's Point Waterfront Master Plan
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Figure 2.2: View south along Ramada Inn shoreline showing concrete seawall.



Figure 2.3: View north along Ramada Inn shoreline showing steel sheet pile wall with concrete cap.



Figure 2.4: North end of Ramada Inn property showing concrete seawall in foreground, wood faced concrete dockwalls in background.

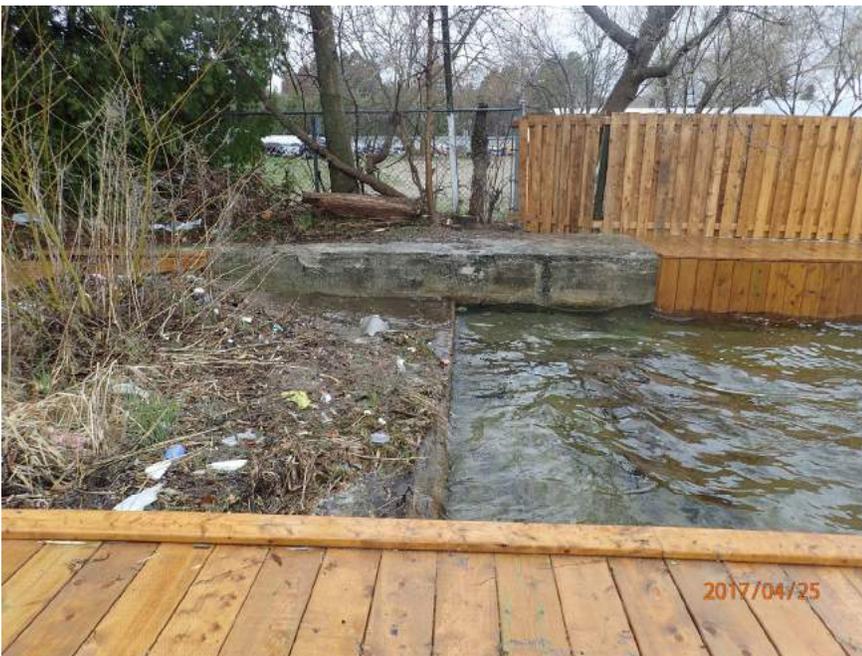


Figure 2.5: Low crested timber wall between concrete docks.



Figure 2.6: Town beach and timber dock at south end of sand beach.



Figure 2.7: Steel sheet pile wall with concrete apron located south of marina.



Figure 2.8: Marina with pile supported docks in foreground, rubblemound breakwaters in background.



Figure 2.9: Pile supported timber docks at marina.



Figure 2.10: Rubblemound breakwater offshore of marina basin, note displaced armourstone.



Figure 2.11: View south along Malone Wharf showing damage to concrete.



Figure 2.12: Shallow waters at Malone Wharf.



Figure 2.13: Old federal boat launch on north side of Malone Wharf with breakwater in background.



Figure 2.14: View northwest along canal to boathouse.



Figure 2.15: View northeast to boathouse with timber wall in a state of disrepair and subsidence behind wall in foreground.



Figure 2.16: Boat launch at west end of parking lot.



Figure 2.17: Timber wall on north side of canal in state of disrepair.

3. Regulatory Framework

This section provides an overview of some of the regulatory requirements for coastal structures on Lake Simcoe.

Ontario Regulation 179/06 gives the Lake Simcoe Region Conservation Authority authorization to regulate development in areas adjacent or close to the shoreline of Lake Simcoe that are affected by flooding, erosion or dynamic beach natural hazards, and wetlands. The regulation requires all development to be setback a minimum distance of 30 metres from the *normal high watermark* of Lake Simcoe. There may be exceptions to this in relation to existing development. The Regulation Limit for the study area is shown in Figure 3.1. Coastal works including marinas, boat houses, shoreline structures and placement/removal of fill require a permit.

The **Lake Simcoe Protection Plan (2009)** includes policies governing shorelines and setbacks. In Settlement Areas, an application for development or site alteration shall establish or increase the extent and width of a vegetation protection zone adjacent to Lake Simcoe to a minimum 30 m where feasible. Policies are included for boathouses and shoreline structures, which may not impede the natural flow of water along the shoreline.

The **Species at Risk Act (SARA)** was enacted to prevent wildlife species in Canada from disappearing, and to provide for the recovery of wildlife species that no longer exist in the wild, are endangered, or threatened as a result of human activity, and to manage species of special concern from becoming endangered or threatened. Project review by qualified personnel is required to ensure any species at risk are identified and the requirements of the SARA are addressed.

Provincial Policy Statement 2014 sets out policies for directing development away from natural hazards, including hazardous lands adjacent to the shorelines of the Great Lakes - St. Lawrence river system and large inland lakes which are impacted by flooding hazards, erosion hazards and/or dynamic beach hazards (PPS 3.1.1.a). The **MNR Technical Guide for Large Inland Lakes** is used to support the interpretation and application of the natural shoreline hazard policies contained in the Provincial Policy Statement 2014.

The **Canadian Environmental Assessment Act** requires an environmental assessment be undertaken for a project, if a federal authority exercises one of the following: proposes the project, provides funding or financial assistance, disposes of an interest in land to enable the project to proceed, or exercises a regulatory duty in relation to a project, such as authorization under the Fisheries Act.

The **Fisheries Act** prohibits the carrying on of a work, undertaking or activity that results in serious harm to fish that are part of or support a commercial recreational or Aboriginal fishery. Serious harm to fish is defined as: the death of fish or the permanent alteration to, or destruction of, fish habitat, with fish habitat defined as spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes. Fisheries and Oceans Canada (DFO) is responsible for implementation of the Act.

The **Navigation Protection Act** is a federal statute designed to protect the public right of navigation in navigable waters by prohibiting the building or placement of any work without the approval of the Transport Canada. The Act was amended in 2012 and Lake Simcoe is included in the List of Scheduled Waters and is therefore included under the Act. Construction of a breakwater or any changes to docks and works in the marina would require a permit under the NPA.

The **Public Lands Act**, which is administered by the Ministry of Natural Resources (MNR) provides for the management, sale and disposition of public lands, which includes the beds of most lakes and rivers. Construction on Crown land requires the approval of MNR.



Figure 3.1 : Study site showing LSRCA Regulation Limit in yellow.

4. Constraints and Issues

This section summarizes coastal engineering constraints and issues.

4.1 Constraints

- We understand the Town may be interested in expanding the marina. The size of the marina is presently limited by the shelter area provided by the breakwaters and the land base.
- It is important to recognize permitting requirements.
- The LSRCA regulation limit is a consideration for future development.

4.2 Issues

- The beach is located in proximity to the marina, this could be a safety and water quality concern.
- The boat launch located at the south end of the parking area will not be available for public use in future.
- A number of coastal structures are in a state of disrepair and will require repair, replacement and maintenance in future.

5. Coastal Engineering Review of Options

This section provides review and comment on three alternative Development Plans prepared by the study team following the Charrette on June 10, 2017.

Table 5.1: Coastal Engineering Review of Development Plan Options

Option	Feature	Coastal Review Comments	New or Replacement Coastal Structures
Option 1 Bonnie Park Does not Shift (Figure 5.1)	8 - Expanded town slips in harbour	<ul style="list-style-type: none"> Spacing between main docks should be increased to 1.5 to 1.7 x longest slip (approximately 17 m between main docks). Refer to economic and market demand analysis for required berth size. Larger slips may be required. Some adjustments may be required to allow adequate space for boat launch, e.g. remove most northerly slips from new finger pier. In general, docks in need of repair/replacement. 	<ul style="list-style-type: none"> Replace existing docks New finger pier
	9 - New boat launch at Malone Wharf	<ul style="list-style-type: none"> The boat launch extends from the existing concrete wharf. This will require demolition of a section of the wharf. From a structural perspective, it would be preferable to use the existing boat launch. Dredging may be required to access boat launch. Additional bathymetry data is required to assess the need for dredging. Parking for trailers is not shown. 	<ul style="list-style-type: none"> New boat launch Possible dredging boat launch access
	1 - Ramada shoreline	<ul style="list-style-type: none"> A condition assessment was not undertaken and would be required to confirm the condition of the seawalls. There has been some deterioration of the concrete and steel sheet pile seawalls. The timber seawall between the two docks requires replacement. 	<ul style="list-style-type: none"> Limited shorewall improvements to section between docks at north end of property, estimated 10 m length Remaining wall to be monitored

Option	Feature	Coastal Review Comments	New or Replacement Coastal Structures
	14 - Public boardwalk	<ul style="list-style-type: none"> The existing shorewall is in a state of disrepair, a new shorewall should be incorporated in the boardwalk design. 	<ul style="list-style-type: none"> Replace existing collapsed shorewall, assume 175 m, boardwalk surfacing.
Option 2 Bonnie Park Shifts to Channel (Figure 5.2)	2 - Public boardwalk	<ul style="list-style-type: none"> See Option 1, feature 14 	<ul style="list-style-type: none"> Replace existing collapsed shorewall, assume 175 m, boardwalk surfacing.
	7 - Ramada waterfront	<ul style="list-style-type: none"> See Option 1, feature 1 	<ul style="list-style-type: none"> See Option 1, feature 1
	11 - New transient slips	<ul style="list-style-type: none"> Assess optimal size for transient slips based on marina economic and market demand analysis. Dredging may be required, also consider impacts of dredging on wharf stability, undermining. 	<ul style="list-style-type: none"> New transient slips Possible dredging access to slips.
	15 - Existing docks remain	<ul style="list-style-type: none"> In general, docks in need of repair/replacement. 	<ul style="list-style-type: none"> Replace existing docks and finger piers.
Option 3 Bonnie Park Shifts to Lake (Figure 5.3)	2 - Naturalized shoreline edge, remove steel sheet pile and concrete shorewall	<ul style="list-style-type: none"> Wave climate and ice to be considered in design. Ensure naturalized protection can withstand wave and ice forces. 	<ul style="list-style-type: none"> Remove existing steel sheet pile and concrete walls, replace with naturalized shoreline.
	8 - Expanded slips in marina, new gas dock and pump out	<ul style="list-style-type: none"> See Option 1, feature 8 	<ul style="list-style-type: none"> Replace existing docks New finger piers, gas, pump out
	9 - New pier with transient docking and pavilion	<ul style="list-style-type: none"> Pier may be exposed to wave action. Analyses required to assess exposure, possible need for breakwater extension, cost/benefit of breakwater extension. Consider ice forces in design 	<ul style="list-style-type: none"> New piled pier with transient docks. Pavilion by others Possible breakwater extension

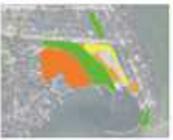
Option	Feature	Coastal Review Comments	New or Replacement Coastal Structures
	11 - Transient slips along Malone Wharf	<ul style="list-style-type: none"> See Option 2, feature 11 	<ul style="list-style-type: none"> New transient slips Possible dredging access to slips
	18 - Breakwater - pedestrian connection	<ul style="list-style-type: none"> The breakwater is segmented Design of a walkway would require consideration of potential issues with wave uplift and ice. 	<ul style="list-style-type: none"> Breakwater walkway

Jackson's Point Harbourfront

Redevelopment Plan

Option 1

Business Park, done and built



- No density is properly positioned
- No density is located in
- configuration of park
- Add a public board access

- Features of Option 1**
- 1 • Storm Park maintained in its current location and configuration
 - Additional public facilities and amenities
 - Maintain trees as buffer to Riverside property
 - Clean up the beach
 - 2 • Waterfront improved
 - 3 • Lower park wall and dogpound maintained
 - 4 • Commercial opportunity on Mill (L&L) levels
 - Could be restaurant or brew pub
 - Drive overlooking harbour
 - 5 • Planning for commercial opportunity
 - 6 • Public parking maintained
 - 7 • Warehouse redevelopment on Riverside property
 - Restore existing building
 - Add new building
 - For connection to Storm Park
 - 8 • Expanded Storm steps at harbour
 - 9 • New boat launch at Millway Street
 - 10 • Maintain drive access
 - 11 • Low density residential on Millway Road
 - Transit-only parking
 - Maintain existing legal accesses
 - 12 • 10th Regional Police certified lands with no public access
 - 13 • Existing hotel remains
 - 14 • Public boardwalk along the edge of the harbour

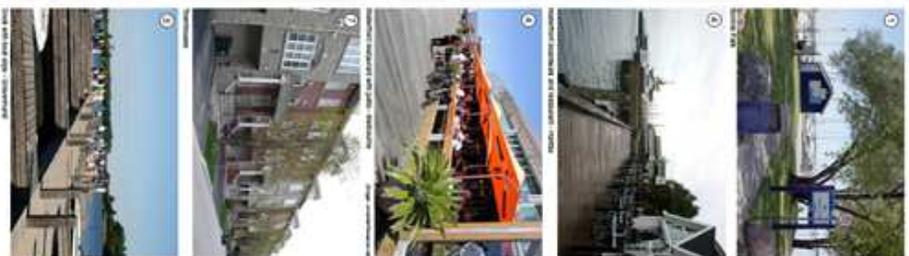


Figure 5.1: Option 1

Jackson's Point Waterfront Master Plan
Coastal Engineering Review

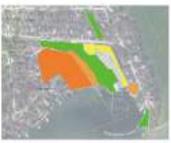
Baird.

Jackson's Point Harbourfront

Redevelopment Plan

Option 2

Bonnie Park skills to Channel



- Recycling zone to channel side maintain same area
- Commercial development on south side of park
- Expand the boat slips
- No boat launch

Features of Option 2

- 1 - Bonnie Park skills to channel side
 - Maintain the boat
 - Provide additional view and access to water's edge
- 2 - Public boardwalk along edge of channel
- 3 - Lorne Park trail and playground maintained
- 4 - New development, apartments with potential ground floor commercial
 - Up to 4 stories in height
- 5 - Shared parking for park, commercial and residential
- 6 - Parking for residential and hotel
- 7 - Private waterfront at the Remedy, no connection to Bonnie Park
- 8 - New gateway entrance from Lorne Street
- 9 - Low density residential along Milsons Road
- 10 - Additional parking (Approximately 50 vehicles)
- 11 - New barrier along Milsons Wharf
 - Address encroachment in parking area
 - Maintain dive access
- 12 - Permanent washrooms on Milsons Wharf
- 13 - York Regional Police conceded lands with no public access
- 14 - Existing hotel remains
- 15 - Existing docks maintained
- 16 - New washroom



Figure 5.2: Option 2

Jackson's Point Waterfront Master Plan
Coastal Engineering Review



Jackson's Point Harbourfront Redevelopment Plan

Option 3

Borman Park adds to Lake



Recreate park to extend along into new development considered in center of site west of park. Road utility, expanded deck, gas pump

Features of Option 3

- 1 • Borman Park access to waterfront and ground edge
• Playground moves to new Borman Park
- 2 • Naturalized shoreline edge, remove sheet piles
- 3 • Playground relocated to be close to the beach
- 4 • New washrooms, open overlooking marina
- 5 • Parking for park
- 6 • New boat launch
- 7 • Waterfront boardwalk
- 8 • Expanded slips to marina
• New gas dock and pump out
- 9 • New pier with transient docking and pavilion
- 10 • New development
• Focus the new Borman Park on 2 sides
• Parking is minor to the development block in a parking structure
• Up to 4 dining establishments or could be townhouse
- 11 • Transit stop along Malone Wharf
• Maintain five seasons
• Seasonal access to breakwater (bridge)
- 12 • Low density residential along Malone Road
- 13 • New development along Larne Street
• New development
• Represents a swap for a larger park along the waterfront (e.g. land exchange with MRC/LAU)
- 14 • Additional parking (approximately 20 vehicles)
- 15 • York Regional Police controlled lands with no public access
- 16 • Existing hotel remains
- 17 • Gateway plaza links Larne Street train with new sidewalk
- 18 • New pedestrian connection to and along the breakwater



Figure 5.3: Option 3

Jackson's Point Waterfront Master Plan
Coastal Engineering Review

6. Recommendations for Additional Studies

This section identifies additional studies that would be required prior to final design for coastal engineering structures discussed in Section 5.

- Bathymetry data is required prior to any expansion of the marina including the replacement of boat docks and finger piers, additional slips and boat launch. It would be useful to compare historical bathymetry if it can be found, with new data, to assess sedimentation rates and to assess any future maintenance dredging requirements.
- A wave study would be required to assess wave exposure, for the proposed new pier with transient docking. This study would also be required to develop design criteria for any extension to the existing rubble mound breakwaters, or design of a walkway linking the breakwaters.
- A detailed inspection of marine structures including offshore breakwaters, Malone Wharf, seawalls and docks was not undertaken for this study and would be required for any future design involving these structures. The condition of the offshore breakwaters that provide shelter to the marina is unknown. A detailed inspection would be required to confirm whether there has been settlement and the extent of displaced armourstone (displaced stone was observed on the breakwater closest to Malone Wharf).

1.1 Municipally Owned Boating Facilities in Georgina

The Town of Georgina owns the Jackson's Point Harbour Marina and the Island Grove Wharf. Jackson's Point Harbour Marina has 56 slips, 48 of which are seasonal and 8 dedicated transient slips. Island Grove Wharf which is currently leased to the Snake Island Cottagers Association has a capacity for approximately 8 to 10 boats.

1.1.1 Jackson's Point Harbour Marina

Based on our discussions with the Sail Georgina Association, representatives of 41 other marinas, yacht, and boats clubs within the seasonal market area of Jackson's Point Harbour Marina, and information provided by the Town of Georgina there is excess demand for seasonal slips in the marina particularly for slips capable of accommodating boats of 28 to 30 feet. The overall seasonal market area had a 94.6 percent occupancy rate for seasonal slips in 2016 (4,840 of 5,114 occupied). As shown in EXHIBIT A, the majority of the boating facilities within the seasonal market area offer longer slips than those available at Jackson's Point and a higher percentage of slips with 30 amp. power as well as water. In addition to the number and size of slips the EXHIBIT also provides the facilities and services available at each of the marinas, yacht, and boat clubs.

Our discussions with the Sail Georgina Association and a review of the revenues and expenses for the period between 2012 and 2016 indicate that the dedicated transient slips are under-served even on weekends.

Based on our work with marinas throughout Ontario we have found that an established marina offering transient slips in a good market can expect to reach high occupancy rates on holiday weekends and established special event weekends, as shown below. Monday through Friday are difficult days to attract transient boaters even with attractive discounts. Special events that draw on the history of the area are of increasing interest to transient boaters. Other events that have been successful in drawing transient boaters are in-water boat shows emphasizing early wooden boats, historical re-enactments portraying the municipality's early industry and its ties to the waterfront, antique/classic car shows and music festivals.

Table 1 – Occupancy Rates for Established Transient Marina in Good Market Area

Time Period	Occupancy Rate
Holiday Weekends	95 to 100% or more
Existing Special Event Weekends	85 to 100% or more
New Special Event Weekends	65 to 85%
Normal Weekends	55 to 65%
Normal Weekdays	5 to 10%

According to our interviews with the yacht and boating clubs in Ontario, transient boaters are looking for the following in the order of importance expressed in Table 2 following.

Table 2 – Importance of Amenities and Services for Transient Boaters

Facility/Service	Percentage Ranking Most Important	
Safe (relatively sheltered) marina basin harbour	100.0%	Extremely Important
Clean and well lit washrooms	100.0%	
Fuel service	100.0%	
Staff at docks to assist in docking and providing local directions and advice	100.0%	
Access to provisions within walking distance	98.4%	
Sturdy full length finger docks	95.3%	
List in marina office with telephone numbers of off-site services of interest to boaters	93.8%	

Restaurant within walking distance	90.6%	Very Important
Internet/WiFi	82.8%	
30 amp dockside power	82.8%	
Clean and well lit shower facilities	78.1%	
Dockside freshwater supply	76.5%	
Access to provisions on-site	67.2%	Somewhat Important
50 amp dockside power	64.1%	
Restaurant on-site	64.1%	
Variety of nearby attractions or events	64.1%	
Security gates at entrance to main docks	60.9%	
A place to exercise pets	51.5%	

1.2 Recommendation for future development of Jackson's Point Harbour Marina

Given that overall occupancy on Lake Simcoe is at maximum practical capacity (i.e. 95%) and both the Town of Georgina and the Sail Georgina Association have existing waiting lists we recommend that consideration be given to removing the short docks on the south-east side of M Dock, and adding a main and finger docks for boats at least in the 28 to 32 foot range. This will also allow the harbour to better accommodate the projected increase in the length of boats in Ontario between 2017 and 2037. This will require holding discussions with the owners of the Ramada Inn regarding use of their waterlot. Ideally the Town could obtain the waterlot extending along the eastern edge of the Ramada property and arrange an exchange for a portion of the waterlot to the west of the Town's waterlot. The new docks should be serviced with water and 30 amp. power.

Table 3 – Projected Growth in Ontario Boats by Length (2017 to 2037)

Length	2017	2022	2027	2032	2037	% increase
20 ft. to <26 ft. (6 m. to <8 m.)	55,470	57,020	58,050	58,600	59,190	6.7%
26 ft. to <30 ft. (8 m. to <9 m.)	13,320	15,150	15,920	16,540	17,050	28.0%
30 ft. to <36 ft. (9 m. to <11 m.)	21,240	24,440	27,550	30,300	32,670	53.8%
36 ft. to <46 ft. (11 m. to <14 m.)	13,360	16,050	18,840	21,490	24,250	81.5%
46 ft. and over (14 m. or more)	7,800	9,820	12,060	14,490	17,060	118.7%

Source: Transport Canada, National Marine Manufacturers Association - Canada, Ontario Marine Operators Association (Boating Ontario), Canadian Yachting Association, Ontario Sailing Association, discussions with Canadian boat builders/manufacturers and boat dealers/brokers, and TOURISTICS

In order to better serve seasonal and transient boaters the washroom and shower facilities should be upgraded. If access to the existing launch ramp on the former Bonnie Boats property cannot be maintained it is recommended that a launch ramp be considered at another location in Jackson's Point Harbour if it is economically feasible. We would also recommend that the pay station for transient boaters be moved to a more visible location and/or better signage be introduced. Maintaining the fuel dock (with gas and diesel fuel) and pumpout would assist in attracting more transient boaters, although the fuel dock will likely have less impact on the seasonal boaters due to the larger proportion of sail to power boats in the harbour.

If revenue generation is an over-riding factor in the operation of the marina we recommend that consideration be given to reducing the number of dedicated transient slips available (i.e. 4 rather than 8) for a period of two to three years to see if there is any significant impact on weekend turnaways.

1.3 Meeting Future Seasonal Boater Demand

Consideration should be given to increasing the number of seasonal slips available in Jackson's Point Harbour. An increase in the seasonal slips will help alleviate the loss of the 60 slips at Bonnie Boats, address the documented excess demand for seasonal slips on Lake Simcoe, as well as the waiting lists for slips with Sail Georgina and the Town of Georgina, and meet the increased demand for slips that will

be generated by the growth in number of longer recreational boats between 2017 and 2037 especially those 9 metres (i.e. 30 feet) or more in length as shown in Table 3 above.

1.4 Recommendation for future use of the Island Grove Wharf

Given that the slips at this wharf are only generating approximately \$1,600 annually which does not cover the annual maintenance or replacement cost, we recommend that either the rate be increased to cover annual maintenance cost and an annual contribution to a reserve for replacement or the lease arrangement with the Snake Island Cottagers Association be ended and the Town's asset is freed up for other users. We understand that there may be an opportunity for the Snake Island Cottagers Association to use space owned by the Ojibway's for their operation of a ferry service.

2.1 Operation of Jackson's Point Harbour Marina

While our review of the revenues and expenses for the marina between 2012 and 2016 indicates that the marina does extremely well financially, it is recognized that indirect costs covered by the municipality are not included within the specific facility budget. Revenue from seasonal slip rentals represents the major revenue source with only a small portion coming from transient slip rentals, parking and boat launch sales. The profit margin before depreciation and amortization, and reserves for replacement at Jackson's Point Harbour Marina ranged between 55.8 percent and 141.3 percent compared to the range of 11.7 percent (for resort/residential marinas) to 23.8 percent (for private marinas) and 20.0 percent (for municipal marinas) as shown in EXHIBIT 2.

We do not believe that another form of operation and management than that presently being used by the Town of Georgina to operate the harbour marina would produce more favourable financial results. The number of available seasonal slips (i.e. 48) at Jackson's Point Marina would preclude the option of leasing the property to a private operator. There are currently only three other facilities in the seasonal boating market area with less slips than Jackson's Point (i.e. McGregor on the Water – 50, Coves of Keswick Marina – 52, and Island Grove Landing & Marina – 18). The fixed costs (labour, office supplies, and insurance) associated with operating a marina typically mean that a private operator has to offer in excess of 150 slips to be profitable. Insurance in particular is much higher with privately operated marinas as municipalities can get a ryder on their overall insurance policy to cover that of the marina.

Our review of the memorandum of agreement between the Town and the Sail Georgina Association leads us to believe that the Town is receiving full value for the 30 percent discount in fees in terms of an almost full time on-site presence of at least one member, educating staff on boating safety, docking boats and providing sailing school/camps to the community at an affordable price. With the aging of the boating population there is a concern among many marina operators that younger people are not taking up boating. Between 2000 and 2015, the age of the average new boat buyer has increased from 45 to 53. During that same time period the percentage of new-boat buyers under 40 has shrunk by nearly one-half (Figure 1).

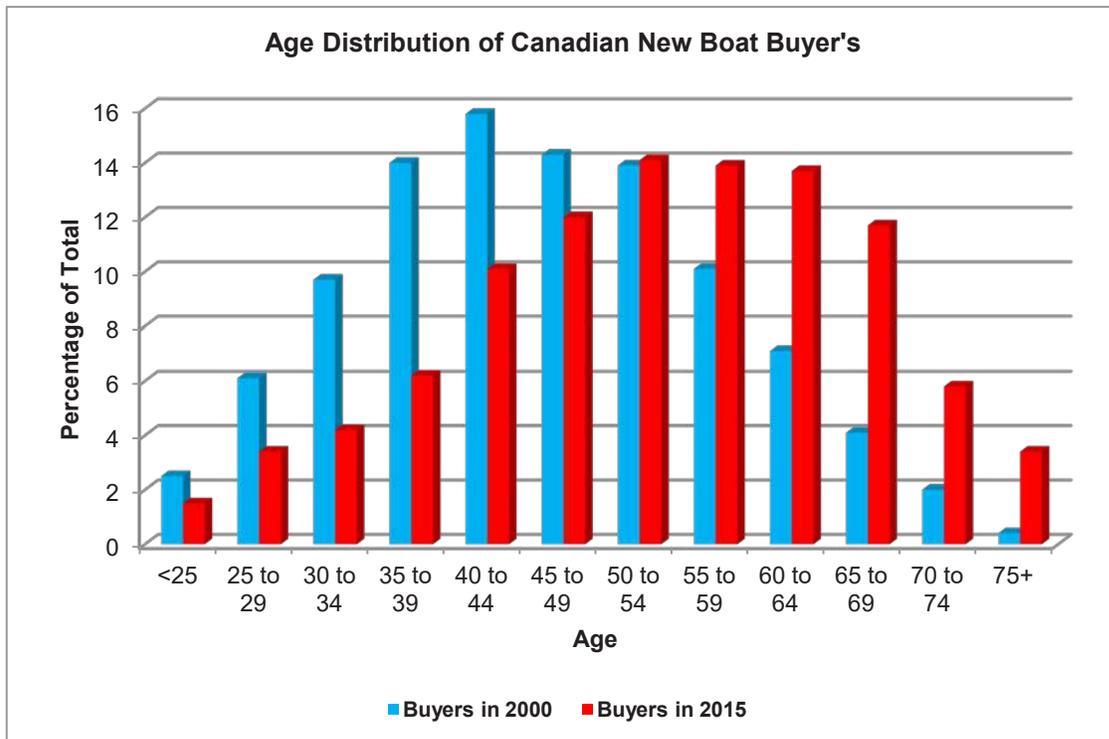
Offering sailing schools/camps and BOOM programs to the community is an excellent way to expose young people to boating. Our discussions with yacht club personnel throughout Ontario and the United States leads us to believe that a percentage of those participating in these boating schools will continue with boating, purchase a boat and require a seasonal slip.

Direct management contracts and long-term leases are the most prominent lease arrangements for municipalities. The following is a description of each.

Direct Management Contract. This is the preferred method when the municipality wants to retain ownership of the marina or when municipal, provincial or state law prevents a lease. The length of typical marina management contracts varies from three to 20 years, with 10 years the most common. Renewal is based on good revenues and performance. Generally, the municipality pays an annual management fee, which increases each year by a certain percentage, plus a percentage of revenues. In the United States, if there is any non-taxable bond money involved in the marina, IRS regulations prohibit giving a

percentage of its income to a private entrepreneur. Trent Port Marina (in Quinte West) and Kincardine Marina operate through a form of direct management contract. The manager of Trent Port Marina is employed each year from April 1st until October 31st or such time as the marina is closed for the off season. The marina manager is employed for an agreed upon amount each year for a term of three years, with the opportunity for renewal with an increase for a second three year term. Hiring of casual staff and their supervision is the responsibility of the marina manager, although they are paid by the City. Kincardine Marina is operated by Kincardine Yacht Club under the terms of a 10 year agreement with the municipality with the option of extending the agreement for another five year term. All rates are proposed by the yacht club and approved by the Municipality. The yacht club is required to submit a business plan and budget to the Recreational Services Committee for the Municipality's review and approval. The business plan budget must cover all items of operation, improvement and maintenance. All marina staff are employed by the yacht club. The yacht club is also solely responsible for the acquisition of goods and the choice of suppliers. Cash generated from the net marina operating profit is first used to repay any existing loan advanced from the Equipment Replacement Reserve Fund and the remainder is to be transferred to the Marina Reserve Fund. The profit sharing schedule is provided in EXHIBIT 3.

Figure 1 – New Boat Buyer Age Distribution



Source: National Marine Manufacturers Association, Boating Industry Magazine

Long-Term Lease. This is the preferred method when a municipal marina needs major repair and the municipality does not have the money to pay for it. The lease typically specifies the amount to be invested in capital improvements and revenue allocation. A long-term lease allows cost recovery plus profit for the private operator. Generally, long-term leases are only successful with large marina operation with a minimum of 350 to 400 seasonal slips.

3.1 Airbnb Boating

We contacted 20 of our former and existing marina operators to see how they are handling this situation. Only five of the operators had encountered this type of boating. With all the others, the annual lease

agreement with the boater precludes them from “re-selling” the use of the slip space. Our discussion with the Commodore of the Sail Georgina Association indicated that the agreement with their member boaters will not permit a use other than that specified in the agreement. Any alternative use would cause the cancellation of the agreement.

To our knowledge there are no provincial or municipal by-laws that restrict this type of over-night rental. As a result it is up to the individual marina operator to determine what is an acceptable use.

With the other five marinas, there was nothing in their existing slip rental contract that prohibited this type of use. Insurance seems to be the problem area. For three of the marinas the insurance coverage was voided when a person other than the boat owner used the boat whether for day or overnight use. The insurance provider for the other two marinas did not have a problem as long as the boats are used strictly for accommodation. However, if the boats were permitted to be operated within the harbour by the renter it was a problem. Cobourg Marina which had this problem deemed the use of the boats as being rented for use as accommodations a commercial use and applied the commercial slip rental rates to these boats. The other issue they struggled with was: should after hour access to shore facilities be granted to a non-supervised boater guest. They decided that it would be up to the boat owner to share after hour access codes with their guest. By doing so, the owner would be held accountable for any disruptive behavior or damage caused by their guest just like any other guest of boat owners. This responsibility for guest behavior is stated in their rental contracts.

Given there is waiting list for seasonal slips at Jackson's Point Harbour Marina we recommend that you first check with your insurance provider to see if there is an issue and secondly change the slip user rental agreement to preclude this use and/or make it clear that the person “re-selling” their boat space is responsible for all damages or disruptions caused by their renter.

4.1 Boat Launch at Jackson's Point Harbour

Reasons for:

- Recreational boats that typically use a launch ramp (i.e. 26 feet and less) comprise the largest share of the recreational boating market.
- Through our discussions with local boaters, there is sizable (though undocumented) boater market that would use a launch ramp at Jackson's Point Harbour.
- Daily and seasonal revenue would be generated by the use of the launch and parking of vehicles and trailers.

Reasons against:

- The loss of parkland space at the harbour which is already limited would be further diminished.
- Boats less than 26 feet in length are projected to increase by only 5.0 percent between 2017 and 2037.
- There are other existing alternative locations to launch a boat within close proximity to Jackson's Point Harbour.
- The annual revenue generated through the launch and parking activities would be insufficient to cover the estimated \$150,000 capital cost and annual maintenance cost within a reasonable time period. (i. e. beyond 10 to 12 years annual maintenance costs will increase substantially).
- Additional staff would be required or a gate and key card system implemented to ensure that all users paid for the use of the ramp and parking.

For economic reasons we recommend that a launch ramp not be included in the Town's re-developed harbour front space.

5.1 Adding Additional Longer Slips

- Boats 30 feet to less than 36 feet, 36 feet to less than 46 feet, and 46 feet and over are projected to increase by 53.8, 81.5 and 118.7 percent respectively between 2017 and 2037.
- In order to continue to attract the existing and future seasonal and transient boater market to use Jackson's Point Harbour it is necessary to provide as many slips as possible at least 30 feet in length.
- Boats 30 feet and longer, especially those 36 feet and longer require 30 and 50 amp. power to support all of the onboard amenities.
- Seasonal and transient fees are typically charged on a per linear foot basis for slip use, so the bigger the boat the more revenue generated by the marina.
- A number of the older marinas in the area have fixed rather than floating docks which will not allow them to cater to the bigger boats.
- There is a waiting list for slips on the southern end of Lake Simcoe, especially for slips 36 feet and longer.

We recommend that all of the existing docks be replaced and that depending on the water space availability within the harbour the following configuration of slip sizes and amenities be considered.

Table 4 – Recommended Configuration of Slips in Re-developed Marina

Length of Slips	Number Unserved	Number with 30 amp power and water	Number with 50 amp power and water	Total
20 ft. to <26 ft. (6 m. to <8 m.)	5	5		10
26 ft. to <30 ft. (8 m. to <9 m.)		20		20
30 ft. to <36 ft. (9 m. to <11 m.)		20		20
36 ft. to <46 ft. (11 m. to <14 m.)			25	25
46 ft. and over (14 m. or more)			5	5
Total	5	45	30	80

While we expect that the increased revenue potential from the new docks will be sufficient to cover the capital cost over the 25 to 30 year life cycle of the new docks we would recommend that a more detailed financial review be undertaken prior to final consideration.

6.1 Revenue Potential from Gas/Fuel Dock

Depending on the volume of fuel sold, the industry norm is that there is a 15 to 20 percent margin for fuel sales (i.e. \$100,000 in gas dock revenue, \$85,000 in fuel cost). With annual revenues in excess of \$150,000 the profit margin increases (i.e. \$150,000 in gas dock revenue, \$120,000 in fuel cost). Jackson's Point Harbour faces two challenges in this regard. First, 30 of the existing slips are held by sail boat users (Sail Georgina members) which use a small amount of fuel. Second, with only 80 or 81 slips in an expanded marina the profit margin would be at the lower end of the scale.

Based on an 80 slip marina with 30 slips occupied by Sail Georgina and 10 slips set aside as dedicated transients slips Table 5 below provides an indication of the revenue potential for a gas dock at Jackson's Point.

Table 5 – Projected Fuel Dock Revenues and Expenses

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	\$82,930	\$84,170	\$85,430	\$86,710	\$88,010	\$89,330	\$90,670	\$92,030	\$93,410	\$94,820
Cost of Sales	\$70,490	\$71,540	\$72,620	\$73,700	\$74,810	\$75,930	\$77,070	\$78,230	\$79,400	\$80,600
Labour Cost	\$5,250	\$5,330	\$5,410	\$5,490	\$5,570	\$5,650	\$5,730	\$5,820	\$5,910	\$6,000
Net Profit	\$7,190	\$7,300	\$7,400	\$7,520	\$7,630	\$7,750	\$7,870	\$7,980	\$8,100	\$8,220

Note: This assumes no gas sales from the 30 slips leased by Sail Georgina, 25% of transients boats will spend an average of \$125.00 per visit and 60 percent of the seasonal boats in the remaining 40 slips will purchase fuel at least once during the boating season. Cost of fuel is assumed at 85 percent of revenue and includes the salary of ½ person at \$15.00/hr. for 35 hours per week over 20 weeks.

The net profit over the first ten years would be \$76,960. The life cycle of the \$245,000 fuel pump and fuel dock is in the neighbourhood of 20 years. Therefore while the fuel dock provides an annual net profit, it would not cover the replacement cost by the end of the assumed 20 year life cycle.

While we believe a fuel dock would be an asset in attracting larger seasonal and transient boats to Jackson's Point harbour, a more thorough analysis of the overall profitability of the expanded marina would provide an indication of whether or not the annual reserve for replacement would be sufficient to cover the replacement cost of the dock system and the fuel facility.

7.1 Potential for Pump Out to Generate Revenue

While a pump out service is a welcome addition to any marina serving seasonal and transient boaters, it rarely pays for itself. To obtain some provincial, national and international certifications it is usually necessary to have a pump out service available. With greater environmental awareness among the general population and more particularly the boating population an increasing number of seasonal and transient boaters are insisting on the availability of a pump out service if they are to use that particular marina.

Table 6 following provides an indication of the revenue potential for a stand alone pump out at Jackson's Point.

Table 6 – Projected Pump Out Station Revenues and Expenses

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	\$3,680	\$3,730	\$3,790	\$3,840	\$3,900	\$3,960	\$4,020	\$4,020	\$4,080	\$4,140
Maintenance	\$1,000	\$1,020	\$1,040	\$1,060	\$1,080	\$1,100	\$1,120	\$1,140	\$1,160	\$1,180
Labour Cost	\$5,250	\$5,330	\$5,410	\$5,490	\$5,570	\$5,650	\$5,730	\$5,820	\$5,910	\$6,000
Net Loss	\$2,570	\$2,620	\$2,660	\$2,710	\$2,750	\$2,790	\$2,830	\$2,880	\$2,930	\$2,980

Note: This assumes all seasonal boaters with a boat less than 36 feet will purchase a \$40.00 seasonal pump out pass and those over 36 feet a \$60.00 seasonal pass as per area industry averages, 25% of transients boats will spend an average of \$17.00 per visit for a one time pump out, an annual maintenance cost of \$1,000 and includes the salary of ½ person at \$15.00/hr. for 35 hours per week over 20 weeks.

It is evident that a stand alone pump out service would operate at an annual loss. In our work with over 80 marinas nationally and internationally we have never had the occasion to determine the profitability of a pump out service. It is typically considered a cost of doing business and any losses are covered by the other revenue sources at the marina. Additionally, many marinas in highly competitive market areas provide a free pump out service to the seasonal boaters.

8.1 Benefit to Combined Fuel Dock and Pump Out Service

It is likely that the shared casual labour cost of operating both facilities would be less than stand alone operations but insufficient to cover the replacement cost of either or both facilities over the life cycle of the facility.

9.1 Profitability of Jackson's Point Marina

Based on the cash flow generated by the existing marina in Jackson's Point harbour under the current operating model we are of the opinion that an expansion of the slips would lead to an even greater profit margin as the addition of 25 slips would lead to a slight increase in casual labour cost that would be more compensated for with the additional slip rental revenue. The profitability of the overall expanded marina should be undertaken with and without the fuel dock and pump out service before a final decision of their inclusion or exclusion is considered.

EXHIBIT 1A MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – NUMBER AND SIZE OF SLIPS

Marina/Yacht Club	Location	Total Slips	Number of Slips by Length	Seasonal Slips	Transient Slips	Max. Length	Min. Draft	Fuel	Launch Ramp	Marine Supplies
Jackson's Point Harbour Marina	Jackson's Point, Ontario 19 Lorne Street 905-722-9717	56	32 - 20' 12 - 24' 12 - 28'	48	8	40 ft.	3 ft.			
Sibbald Point Provincial Park	Jackson's Point, Ontario 26071 Park Road 905-722-9717	Equivalent 30 - 30'	1 - 158' dock 1 - 126' dock 1 - 95' dock 1 - 94' dock		1 - 158' dock 1 - 126' dock 1 - 95' dock 1 - 94' dock	100 ft.	2 ft.		Yes	
Virginia Beach Marina and Restaurant	Sutton West, Ontario 7751 Black River Road 705-437-2533	Equivalent 13 - 30'	19 - 20' 1 - 150' dock 1 - 233' dock	32	Only when seasonals vacant	100 ft.	6 ft.	Gas	Yes	Yes
Peninsula Resort	Pefferlaw, Ontario 202 Holmes Road 705-437-1890	Equivalent 18 - 30'	1 - 600' wooden shorewall		1 - 600' wooden shorewall	200 ft.	5 ft.		Yes	
Flying Bridge Marina	Pefferlaw, Ontario 1 Laurine Road 705-437-2373	100	10 - 20' 50 - 30' 20 - 36' 20 - 40'	100		50 ft.	5 ft.		Yes	
Everglades Marina	Pefferlaw, Ontario 54 Riverside Drive 705-437-1340	284	60 - 20' 86 - 26' 74 - 30' 38 - 36' 26 - 42'	284	When seasonals vacant	42 ft	6 ft.	Gas Diesel	Yes	Yes
Quinn's Marina	Pefferlaw, Ontario 25 Quinn Road 705-437-1122	Only for boats being serviced								Yes
Beaverton Victoria Yacht Club	Beaverton, Ontario 69 Victoria Street 705-426-7309	135	25 - 20' 40 - 26' 50 - 30' 20 - 40'	115	20	45 ft.	5 ft.	Gas	Yes	
Lagoon City Yacht Club	Brechin, Ontario 84 Laguna Parkway 705-484-1359	30	30 - 30'	30		36 ft.	6 ft.			
Pride Group Lagoon City Marina	Brechin, Ontario 150 Laguna Parkway 705-484-5063	277	110 - 26' 26 - 30' 61 - 36' 30 - 46'	267	10	60 ft.	6 ft.	Gas Diesel Propane	Yes	Yes

TOURISTICS

EXHIBIT 1A MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – NUMBER AND SIZE OF SLIPS (Continued)

Marina/Yacht Club	Location	Total Slips	Number of Slips by Length	Seasonal Slips	Transient Slips	Max. Length	Min. Draft	Fuel	Launch Ramp	Marine Supplies
Marina del Rey	Orillia, Ontario 4130 Bayview Avenue 705-325-3051	150	25 - 22' 35 - 26' 32 - 30' 38 - 36' 20 - 40'	140	10	45 ft.	6 ft.			Yes
Starport Marina	Orillia, Ontario 3952 McRae Park Road 705-325-3775	215	60 - 30' 55 - 36' 50 - 40' 50 - 46"	195	20	55 ft.	6 ft.	Gas Diesel	Yes	Yes
Baer Harbour Marina	Orillia, Ontario 27 Queen Street 705-325-2132	105	65 - 26' 50 - 30'	105	Only when seasonals vacant	32 ft.	5 ft.			
Blue Beacon Marina	Orillia, Ontario 693 Atherley Road 705-325-2526	100	34 - 20' 66 - 30'	100	Only when seasonals vacant	32 ft.	6 ft.	Gas	Yes	Yes
Crothers Twin Lakes Marina	Orillia, Ontario 5 Queen Street 705-326-2525	110	30 - 20' 40 - 30' 40 - 36"	110		36 ft.	8 ft.			
Mariposa Landing	Orillia, Ontario 430 Couchiching Point Road 705-326-4660	110 + 200' dock	20 - 22' 20 - 30' 25 - 32' 25 - 36' 25 - 40' 25 - 45' 16 - 50' 14 - 55'	102	8	60 ft.	7 ft.			
Bridge Port Marina	Orillia, Ontario 434 Couchiching Point Road 705-326-7898	102	9 - 20' 24 - 30' 29 - 36' 40 - 40'	102	Only when seasonals vacant	53 ft.	6 ft.	Gas Diesel	Yes	Yes
Hammock Harbour R.V. Park	Orillia, Ontario 4569 Concession Road 705-326-7885	60	30 - 20' 15 - 24' 15 - 26'	50	10	26 ft.	4 ft.		Yes	
Ojibway Bay Marina	Orillia, Ontario 4150 Marina Road 705-326-5855	170	20 - 15' 24 - 20 ' 24 - 24' 22 - 30' 20 - 34' 20 - 38' 20 - 40' 20 - 44'	150	20	60 ft.	6 ft.	Gas	Yes	Yes

EXHIBIT 1A MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – NUMBER AND SIZE OF SLIPS (Continued)

Marina/Yacht Club	Location	Total Slips	Number of Slips by Length	Seasonal Slips	Transient Slips	Max. Length	Min. Draft	Fuel	Launch Ramp	Marine Supplies
McGregor on the Water	Washago, Ontario 3331 McClelland Road 705-689-9935	50	10 - 20' 20 - 26' 10 - 30' 10 - 36'	45	5	38 ft.	5 ft.	Gas Diesel	Yes	Yes
The Port of Orillia	Orillia, Ontario 50 Centennial Drive 705-326-6314	220	112 - 24' 64 - 35' 44 - 40'		220	80 ft.	5 ft.		Yes	Yes
Champlain Sailing Club	Orillia, Ontario 145 Cedar Island Road 705-326-8445	20 + 30 moorings	20 - 26' 16 - 30' 14 - 36'	50	On reciprocal basis	40 ft.	6 ft.		Yes	
Hawkestone Yacht Club	Hawkestone, Ontario 215 Mill Street 705-487-2700	65 mediter-ranian style	65 - 30'	65	On reciprocal basis	32 ft.	6 ft.		Yes	
Golden Medonte Powerboat Club	Oro Station, Ontario 219 Lakeshore Road West 705-487-1555	55	18 - 24' 37 - 30'	55		30 ft.	4 ft.	Gas	Yes	
Barrie Yacht Club	Barrie, Ontario 1 Johnson Street 705-728-4440	74	12 - 26' 36 - 30' 26 - 36'	74	Only on reciprocal basis	36 ft.	5 ft.			
Bayfield Street Boat Basin	Barrie, Ontario Simcoe Street 705-739-4218	50	20 - 28' 30 - 35'		50	36 ft.	6 ft.			
City of Barrie Marina	Barrie, Ontario 55 Lakeshore Drive 705-739-4218	326	64 - 20' 76 - 24' 170 - 30' 16 - 36'	310	16	60 ft.	16 ft.	Gas	Yes	
Brentwood Marine	Barrie, Ontario 342 Tollenal Mill Road 705-722-8344	132	14 - 22' 30 - 26' 30 - 30' 30 - 36' 28 - 40'	132		42 ft.	6 ft.	Gas	Yes	Yes
Friday's Harbour	Innisfil, Ontario 311 Big Bay Point Road	320	100 - 30' 100 - 36' 80 - 40' 40 - 46'	270	50	60 ft.	8 ft.	Gas Diesel	Yes	
Lake Simcoe Marine	Belle Ewart, Ontario 977 Isabella Street 705-456-3131	95	80 - 18' 15 - 25'	95	Only when seasonals vacant	26 ft.	4 ft.		Yes	Yes

TOURISTICS

EXHIBIT 1A MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – NUMBER AND SIZE OF SLIPS (Continued)

Marina/Yacht Club	Location	Total Slips	Number of Slips by Length	Seasonal Slips	Transient Slips	Max. Length	Min. Draft	Fuel	Launch Ramp	Marine Supplies
Monto Reno Marina	Lefroy, Ontario 1111 Killarney Beach Road 705-456-2122	110	20 - 18' 38 - 26' 32 - 30' 20 - 40'	100	10	45 ft.	6 ft.	Gas	Yes	Yes
Lefroy Harbour Resorts	Lefroy, Ontario 727 Harbour Street 705-456-2120	315	48 - 20' 60 - 30' 77 - 36' 60 - 45' 40 - 50' 30 - 60'	290	25	60 ft.	5 ft.	Gas Diesel		Yes
Kon Tiki Marine	Gilford, Ontario 1096 Shore Acres Drive 705-456-2339	190	36 - 20' 40 - 24' 40 - 26' 40 - 30' 24 - 36' 10 - 40'	170	20	46 ft.	5 ft.	Gas Diesel		Yes
Cooks Bay Marina	Gilford, Ontario 1155 Gilford Road 705-456-6212	140	40 - 20' 40 - 24' 30 - 26' 20 - 28' 10 - 30'	140	When seasonals vacant	30 ft.	4 ft.		Yes	Yes
South Simcoe Marina	Bradford, Ontario 850 Toll Road 905-775-3861	80	30 - 20' 20 - 24' 20 - 26' 10 - 30'	80	When seasonals vacant	40 ft.	5 ft.	Gas	Yes	
South Bay Harbour Marina	Holland Landing, Ontario 45 Morgans Road 905-235-0387	60	16 - 24' 16 - 26' 14 - 30' 14 - 36'	60		40 ft.	5 ft.		Yes	Yes
Holland River Marina	Holland Landing, Ontario 21259 Bathurst Street 905-853-6445	250	50 - 20' 50 - 24' 40 - 26' 40 - 30' 36 - 36' 34 - 40'	250	When seasonals vacant	38 ft.	6 ft.	Gas	Yes	Yes
Albert's Marina	Holland Landing, Ontario 21136 Bathurst Street 905-836-4125	300	72 - 24' 68 - 28' 52 - 30' 40 - 36' 36 - 40' 32 - 46'	285	15	55 ft.	7 ft.	Gas Diesel	Yes	Yes

TOURISTICS

EXHIBIT 1A MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – NUMBER AND SIZE OF SLIPS (Continued)

Marina/Yacht Club	Location	Total Slips	Number of Slips by Length	Seasonal Slips	Transient Slips	Max. Length	Min. Draft	Fuel	Launch Ramp	Marine Supplies
King Dragon Marina and Restaurant	Keswick, Ontario 534 Lake Drive South 905-476-6270	140	66 - 24' 54 - 28' 20 - 32'	137	3	35 ft.	4 ft.	Gas	Yes	Yes
Krates Marina Limited	Keswick, Ontario 290 The Queensway South 905-476-4552	520	90 - 20' 110 - 30' 120 - 36' 90 - 40' 70 - 50' 40 - 60'	500	20	60 ft.	6 ft.	Gas Diesel Propane	Yes	Yes
Keswick Marine	Keswick, Ontario 236 The Queensway South 905-476-4343	110	40 - 18' 50 - 28' 20 - 38'	110	When seasonals vacant	38 ft.	6 ft.			Yes
Coves of Keswick Marina	Keswick, Ontario 119 Riveredge Drive 905-476-7919	52	30 - 18' 22 - 21'	52		21 ft.	4 ft.			Yes
Island Grove Landing & Marine	Keswick, Ontario 987 Lake Drive North 905-476-7600	18	18 - 24'	18	When seasonals vacant	24 ft.	4 ft.	Gas Propane	Yes	Yes
Willow Beach Marina	Willow Beach, Ontario 1354 Metro Road North 905-476-3553	156	52 - 20' 70 - 22' 24 - 24' 10 - 26'	156	When seasonals vacant	28 ft.	5 ft.	Yes	Yes	Yes
Bonnie Boats	Jackson's Point 20 Bonnie Boulevard 905-722-3862	60	Closed					Gas	Yes	

Note: 4,840 seasonal slips and moorings were occupied during the 2016 boating season; an occupancy rate of 94.6 percent. The occupancy numbers for each individual marina within Jackson's Point's seasonal market area have been removed from the EXHIBIT to protect the confidence in which they were given.

EXHIBIT 1B MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – FACILITIES AND SERVICES

Marina/Yacht/Boat Club	Haulout	Repairs	Food	Facilities	Shore Power (amps)	Pumpout	Recreation Facilities	Sales	Hookups	Winter Storage	Plans for Future Changes
Jackson's Point Harbour Marina			Water	Washrooms Showers	15 amp.		Picnic tables, Beach, Children's Playground		Power		Under review
Sibbald Point Provincial Park			Water Grocery store, Snack bar	Washrooms Showers			Picnic area, Campsites, Nature trail				None
Virginia Beach Marina and Restaurant	Hydraulic trailer - boats up to 34'	Engines	Water/Ice Restaurant/ Snack bar	Washrooms	20 amp.	Yes			Power Water WiFi Telephone		None
Peninsula Resort			Water/Ice Restaurant	Washrooms			Picnic tables, Beach		WiFi Telephone		None
Flying Bridge Marina	30 ton travel lift	Engines	Water/Ice	Washrooms Showers Coin laundry	20 amp. 30 amp.	Yes	Children's playground, Swimming pool, Basketball court		Power Water	Yes	None
Everglades Marina	Hydraulic trailer - boats up to 42'	Engines	Water/Ice	Washrooms Showers	15 amp. 30 amp.	Yes	Picnic tables, Children's playground		Power Water Telephone	Yes	None
Quinn's Marina	Hydraulic trailer - boats up to 35'	Engines Electrical Fibreglass		Washrooms	15 amp.		Picnic area		Power	Yes	None
Beaverton Victoria Yacht Club	20 ton travel lift	Engines Electrical Hulls Sails	Water/Ice Snack bar	Washrooms Showers	30 amp.	Yes	Picnic tables, BBQs, Sauna, Swimming pool,		Power Water WiFi Telephone	Yes	None
Lagoon City Yacht Club	Mast crane		Water/Ice Kitchen	Washrooms Showers	30 amp.		Picnic tables, BBQs, Chiminea		Power Water WiFi	Yes	None
Crates Lagoon City Marina	35 ton travel lift 5 ton crane	Engines Hulls Sails	Water/Ice Restaurant/ Snack shop	Washrooms Showers Coin laundry	30 amp.	Yes	Picnic area, BBQs, Playground, Swimming pool	Boats Engines Yacht Broker	Power Water Cable TV WiFi Telephone	Yes	None
Marina del Rey	20 ton travel lift Mast crane	Engines Electrical Hulls Sails	Water/Ice	Washrooms Showers Coin laundry	15 amp. 20 amp. 30 amp.	Yes	Picnic Tables, Beach, Playground, Swimming pool		Power Water WiFi Telephone	Yes	None

TOURISTICS

EXHIBIT 1B MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – FACILITIES AND SERVICES (Continued)

Marina/Yacht/Boat Club	Haulout	Repairs	Food	Facilities	Shore Power (amps)	Pumpout	Recreation Facilities	Sales	Hookups	Winter Storage	Plans for Future Changes
Starport Marina	20 ton travel lift Hydraulic trailers	Engines Electrical Fibreglass Hulls Sails	Water/Ice Lounge	Washrooms Showers Coin laundry	30 amp. 60 amp.	Yes	Picnic tables, Children's plat areas, BBQs, Swimming pool, Beach volleyball		Power Water WiFi Telephone	Yes	None
Baer Harbour Marina			Water/Ice Restaurant Groceries	Washrooms Showers	20 amp. 30 amp.		Picnic tables		Power Water	Yes	None
Blue Beacon Marina	Forklift - boats up to 32'	Engines	Water/Ice	Washrooms	15 amp. 30 amp.	Yes	Rental boats & motors		Power Water	Yes	None
Crothers Twin Lakes Marina			Water/Ice	Washrooms Showers	20 amp. 30 amp.		Picnic tables BBQs		Power Water	Yes	None
Mariposa Landing	Haul out can be arranged	Engines Hulls	Water/Ice	Washrooms Showers Coin laundry	30 amp. 50 amp.	Yes	Picnic tables, Children's play area	Boats Yacht Broker	Power Water Cable TV Telephone	Yes	None
Bridge Port Marina	14 ton hydraulic trailer	Engines Electrical Fibreglass Hulls Sails	Water/Ice	Washrooms Showers Coin laundry	15 amp. 30 amp. Twin 30 & 50 amp.	Yes	Picnic tables, Private deck at each slip, Dock box, Horseshoe pits	Boats Yacht Broker	Power Water WiFi	Yes	None
Hammock Harbour R.V. Park	Haul out can be arranged		Water/Ice	Washrooms Showers Coin laundry	15 amp.	Yes	Picnic tables, Swimming pool, Par 3 golf course, Children's play area		Power Water WiFi Telephone		None
Ojibway Bay Marina			Water/Ice	Washrooms Showers Coin laundry	15 amp. 30 amp.	Yes	Picnic tables, Swimming area, Playground, Complimentary shuttle to Casino Rama		Power Water	Yes	None
McGregor on the Water	Hydraulic trailer - power boats up to 38'	Engines Fibreglass Hulls	Water/Ice	Washrooms Showers	15 amp. 30 amp.	Yes	Picnic tables, Children's play area	Boats Motors	Power Water WiFi	Yes	None
The Port of Orillia			Water/Ice Boater's lounge	Washrooms Showers Laundry	30 amp. 50 amp.		Fishing pier		Power Water WiFi		New building, more slips

EXHIBIT 1B MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – FACILITIES AND SERVICES (Continued)

Marina/Yacht/Boat Club	Haulout	Repairs	Food	Facilities	Shore Power (amps)	Pumpout	Recreation Facilities	Sales	Hookups	Winter Storage	Plans for Future Changes
Champlain Sailing Club			Water/Ice Kitchen	Washrooms			Picnic tables BBQs			Yes	None
Hawkestone Yacht Club	Mast crane		Water/Ice Kitchen	Washrooms Showers	30 amp.	Yes	Picnic tables, Beach		Power Water	Yes	None
Golden Medonte Powerboat Club	Hydraulic trailer - power boats up to 28'	Engines	Water	Washrooms						Yes	None
Barrie Yacht Club	Mast crane		Water/Ice Kitchen, Bar	Washrooms Showers	15 amp.		Picnic tables, BBQs, Beach, Swimming area				None
Bayfield Street Boat Basin				Washrooms Showers	30 amp.				Power Water		Increased number of slips to 50
City of Barrie Marina	Mast crane		Water/Ice	Washrooms Showers	30 amp.	Yes	Children's play area		Power Water		None
Brentwood Marine	Fork lift - boats up to 40' & 20 tons	Engines Electrical Hulls Sails	Water/Ice Restaurant	Washrooms	30 amp. 50 amp.	Yes		Boats Motors Trailers		Yes	None
Friday's Harbour			Water/Ice Restaurant	Washrooms Showers Laundry	30 amp. 60 amp.	Yes	Swimming area, Trails, Golf Course		Power Water WiFi		Plans for 800 to 1,000 slips
Lake Simcoe Marine	Fork lift - boats up to 26'	Engines Electrical	Water/Ice	Washrooms	15 amp.		Boat rentals	Boats Motors	Power	Yes	None
Monto Reno Marina	10 ton hydraulic trailer 8 ton fork lift	Engines	Water/Ice Restaurant Snack Bar Club House	Washrooms Showers	15 amp. 30 amp.	Yes	Picnic tables, Playground, Beach, Swimming pool, Boat rentals	Boats Motors	Power Water Cable TV WiFi	Yes	None
Lefroy Harbour Resorts	25 ton travel lift	Engines Electrical Hulls Sails	Water/Ice Restaurant	Washrooms Showers Coin laundry	30 amp.	Yes	Picnic tables, Beach, Swimming pool, Children's play area, Basketball, Volleyball	Yacht Broker	Power Water Cable TV WiFi	Yes	None
Kon Tiki Marine	Shares with Lefroy Harbour	Shares with Lefroy Harbour	Water/Ice Snack Bar	Washrooms Showers	30 amp.	Yes	Picnic area, Beach, Children's play area		Power Water Cable TV WiFi	Yes	None

TOURISTICS

EXHIBIT 1B MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – FACILITIES AND SERVICES (Continued)

Marina/Yacht/Boat Club	Haulout	Repairs	Food	Facilities	Shore Power (amps)	Pumpout	Recreation Facilities	Sales	Hookups	Winter Storage	Plans for Future Changes
Cooks Bay Marina	Hydraulic trailer - boats up to 40'	Engines	Water/Ice Snack Bar	Washrooms Showers	15 amp. 30 amp.	Yes	Picnic tables, Children's playground		Power Water WiFi	Yes	None
South Simcoe Marina		Engines Electrical Minor Fibreglass	Water/Ice Variety store	Washrooms Showers	15 amp.	Yes	Campsites, Boat rentals	Boats Motors	Power Water	Yes	None
South Bay Harbour Marina			Water/Ice	Washrooms Showers	15 amp. 30 amp.		Picnic tables, Swimming pool	Boats	Power Water	Yes	None
Holland River Marina	20 ton travel lift, 10 ton fork lift, 20 ton crane	Engines Electrical Fibreglass Hulls	Water/Ice Chip truck	Washrooms Showers Coin laundry	20 amp. 30 amp.	Yes	Picnic tables, BBQs, Children's playground, Swimming pool		Power Water WiFi	Yes	None
Albert's Marina	25 ton travel lift, Mobile crane	Engines Hulls Sails	Water/Ice Restaurant	Washrooms Showers	30 amp.	Yes	Picnic tables, Children's play area, Swimming pool, Sauna, Hot tub, Basketball, Camp sites		Power Water	Yes	None
King Dragon Marina and Restaurant	Hydraulic trailer - boats up to 35'	Engines Electrical Sails	Water/Ice Restaurant	Washrooms Showers	15 amp.		Picnic tables, BBQs, Children's play area, Beach		Power Water	Yes	None
Krates Marina Limited	50 ton travel lift, Fork lift, Hydraulic trailer	Engines Electrical Painting Hulls Sails	Water/Ice	Washrooms Showers Laundry	30 amp. 50 amp.	Yes	Picnic tables, Children's play area, Beach, 2 Swimming pools, Beach volleyball, Boat rentals		Power Water WiFi Cable TV Telephone	Yes	None
Keswick Marine	Hydraulic trailer - boats up to 38'	Engines	Water/Ice	Washrooms Showers	30 amp.	Yes	Picnic tables, BBQs	Boats Motors Yacht Broker	Power Water WiFi	Yes	None
Coves of Keswick Marina	Fork lift - boats up to 21'	Engines Electrical Fibreglass Hulls Sails	Water/Ice	Washrooms	15 amp.		Picnic tables, BBQs, Fire pit		Power Water WiFi	Yes	None

EXHIBIT 1B MARINAS, YACHT AND BOAT CLUBS WITHIN JACKSON'S POINT'S SEASONAL MARKET AREA – FACILITIES AND SERVICES (Continued)

Marina/Yacht/Boat Club	Haulout	Repairs	Food	Facilities	Shore Power (amps)	Pumpout	Recreation Facilities	Sales	Hookups	Winter Storage	Plans for Future Changes
Island Grove Landing & Marine	Rental crane		Water/Ice	Washrooms Showers	15 amp.				Power Water	Yes	None
Willow Beach Marina	Fork lift - boats up to 28'	Engines	Water/Ice	Washrooms	15 amp. 30 amp.		Picnic tables		Power Water	Yes	None
Bonnie Boats				Washrooms Showers		Yes			Power Water	Yes	Sold for residential units

EXHIBIT 2 INCOME STATEMENT RATIOS FOR MARINAS

	Municipal Marinas	Port Authorities	Private Marinas	Resort/ Residential Marinas	All Marinas
Revenues					
Dockage	47.2%	51.2%	52.4%	38.4%	49.8%
Dry Storage/Launch	0.8%	6.9%	4.0%	0.1%	3.4%
Upland Storage	2.0%	2.1%	2.4%	2.8%	2.3%
Restaurant/Concessions	1.3%	0.8%	5.2%	7.3%	4.0%
Fuel/Oil	18.0%	14.8%	6.4%	8.8%	10.0%
Chandlery/Ships Store	7.6%	3.0%	4.4%	5.9%	4.9%
Parking	1.5%	0.2%	1.7%	1.0%	1.3%
Haul Out/Repairs	6.6%	4.1%	13.7%	24.6%	12.1%
Boat Launch Revenue	0.5%	0.9%	0.6%	0.4%	0.6%
All Other Revenue	14.6%	15.9%	9.2%	10.7%	11.4%
Total Revenue	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Goods Sold					
Fuel Dock	14.3%	10.6%	4.6%	7.6%	7.6%
Chandlery/Ships Store – Cost of Merchandise	5.0%	1.8%	3.1%	4.5%	3.4%
Marine Repair Service	0.7%	1.8%	5.0%	8.4%	4.1%
All Other Direct Costs	1.9%	3.1%	6.4%	4.3%	4.8%
Total Cost of Revenue	21.9%	17.4%	19.0%	24.8%	19.9%
Gross Profit	78.1%	82.6%	81.0%	75.2%	80.1%
Operating Expenses					
Labour Expense	17.9%	18.9%	21.8%	23.9%	20.9%
Bad Debt Expense	0.7%	10.7%	0.8%	0.6%	2.3%
Bank Service Charges	0.0%	0.1%	0.2%	0.3%	0.1%
Business Licenses & Permits	0.1%	0.1%	0.1%	0.3%	0.1%
Credit Card Discounts	0.6%	0.3%	0.2%	0.5%	0.3%
Dues & Subscriptions	0.1%	0.2%	0.1%	0.3%	0.1%
Employee Benefits	4.0%	4.8%	1.9%	5.3%	3.1%
Equipment Rental	0.1%	0.1%	0.2%	0.3%	0.2%
Insurance – Business Liability	1.5%	3.2%	2.2%	2.5%	2.2%
Professional Services	2.7%	2.0%	2.1%	1.7%	2.1%
Marketing & Promotion	0.9%	1.6%	1.0%	2.0%	1.2%
Office Supplies	0.7%	0.8%	0.6%	1.0%	0.7%
Property Taxes	1.0%	1.1%	1.6%	2.8%	1.5%
Repairs & Maintenance	3.6%	5.3%	8.5%	8.1%	7.1%
Rent & Lease Expense	1.8%	3.1%	3.7%	5.9%	3.5%
Telephone/Communication	0.6%	0.5%	0.4%	1.0%	0.5%
Travel & Entertainment	0.2%	0.5%	0.2%	0.2%	0.3%
Utilities	4.5%	3.8%	3.8%	3.5%	3.9%
Other Expenses	17.3%	4.1%	7.9%	3.5%	8.5%
Total Operating Expenses	58.0%	61.2%	57.2%	63.6%	58.6%
Operating Profit (Loss)	20.0%	21.5%	23.8%	11.7%	21.5%
Other Income/Expense					
Other Income & Expenses	3.9%	1.5%	1.8%	2.0%	2.1%
Depreciation & Amortization (-)	-17.9%	-14.6%	-3.9%	-5.6%	-8.3%
Interest Expense (-)	-5.7%	-6.5%	3.0%	-5.1%	-4.3%
Capital Lease Expense (-)	0.0%	0.0%	0.0%	0.0%	0.0%
Reserves for Replacement (-)	-1.1%	-2.7%	1.1%	0.0%	-1.2%
Total Other Income/Expense	-20.8%	-22.3%	6.2%	-8.7%	-11.6%
Profit Before Taxes	-0.8%	-0.8%	17.6%	2.9%	9.8%

Source: International Marina Institute, and TOURISTICS' files

EXHIBIT 3 PROFIT SHARING SCHEDULE WITH KINCARDINE YACHT CLUB

1. For year 1 and year 2 of the agreement the cost sharing will be:
 - 50% of the net profit after operating expenditures to the K.Y.C.
 - 50% of the net profit after operating expenditures to the Municipality

In the event of a net loss:

- The Municipality will absorb the financial loss and the contractor will not receive a payment
 - The net loss will be subsequently funded from the Marina Reserve Fund
2. For years 3 through 10, the funding arrangement will be based on PSAB requirements with direct relevance to the amortization of the harbour assets.

Both parties recognize that in year #2, a specific negotiation will take place once all PSAB information is known and an appropriate financial distribution schedule will be created in accordance with PSAB requirements, subject to recommendation by Committee, and approval by Council.

Mr. Mike Baskerville
Town of Georgina
26557 Civic Centre Road
R.R. #2
Keswick, Ontario, L4P 3G1

Dear Mr. Baskerville:

Re: **Jackson's Point Waterfront Master Plan
Master Servicing Technical Memorandum
Town of Georgina**

SCS Consulting Group Ltd. has been retained by the Town of Georgina to undertake a preliminary evaluation of the sanitary, water and stormwater servicing in support of the Jackson's Point Waterfront Master Plan in the Town of Georgina.

This Technical Memorandum has been prepared to provide the preliminary finding in support of the Waterfront Master Plan process.

Sanitary Servicing

Existing Sanitary Sewer Infrastructure

- The study area is serviced by a municipal sanitary sewer system, which directs flows to the Lorne Street Sewage Pumping station, located within the study area in the municipally owned Bonnie Park, on the east side of Lorne Street, south of Bonnie Boulevard.
- The Lorne Street SPS ultimately outlets to the Sutton Water Resource Recovery facility operated by York Region. The facility was commissioned in 2003 with an original design capacity of 7,500 people. A Class EA to upgrade the facility to service 13,500 people was completed in 2010. The Region will consider bringing the expansion into their 10 year capital plan once the flow reaches 70% of the plant capacity, subject to funding availability. During 2016, the average plant flow was approximately 50% of capacity. Current timing anticipated by the Region is in 2033.
- The catchment area to the Lorne Street SPS is 99.9ha with an equivalent population of 3697 persons (37 ppha). The peak sanitary flow calculated using the Town's design criteria of 365 L/c/d Average Residential Flow and 0.21 L/s/ha Inflow/Infiltration rate is 73.5 L/s.
- The SPS was reconstructed in approximately 2007. The SPS includes two pumps, one duty and one standby, both rated for 64 L/s (MOECC Certificate of Approval, Jan 25, 2007). A 200mm diameter forcemain extends from the SPS, southerly along Lorne Street and Grew Boulevard to Dalton Road.
- A 200mm diameter sanitary sewer is located along Malone Road, draining westerly toward Lorne Street.

- A 200mm diameter sanitary sewer is located on Lorne Street, draining southerly from Malone Road to a sanitary pumping station in Bonnie Park.
- A 200mm diameter sanitary sewer is located along Lorne Street draining northerly into the sanitary pumping station.
- The Bonnie Boats and Ramada properties are currently serviced by the existing sanitary sewer systems.

Sanitary Allocation

The following information was provided by the Town of Georgina:

- Ramada Resort – 15 units @ 2.9 ppu = 43.5 persons equivalent; and
- Jackson's Point Harbour potential redevelopment area- on April 16, 2007, and through Council Resolution CW-2007-0078, 83.0 persons equivalent allocation was set aside by Council for possible assignment to a joint redevelopment project involving the Lionshead Lakefront Resort and Yacht Club site (now referred to as the "Ramada" site), and for the abutting Town park and Bonnie Boats Marina lands (i.e. redevelopment of all 3 properties together). On December 12, 2011, Council approved Report PB-2011-0109, which recommended (recommendation of Director HWL as discussed within the report) that 14.6 persons equivalent of the 83 persons equivalent be transferred to a mixed-use development proposed by 2241439 Ontario Ltc. (OLRM Devlpts.) located at Lake Drive / Grew Blvd / O'Connor Drive in Jackson's Point. Thus leaving 68.4 persons equivalent allocation remaining available (set aside) for the potential redevelopment project of the Jackson's Point Harbour area.

Sanitary Servicing Recommendation

- The study area can be serviced via the existing sanitary sewer system adjacent to the site.
- The Ramada Resort property has servicing allocation for 43.5 persons equivalent.
- The Jackson's Point Harbour Area has servicing allocation for 68.4 persons equivalent.
- Ramada Property - Based on an approximate area of 1.5ha and the Town's design criteria of 28 m³/s average daily flow for Commercial lands, a peaking factor of 2.0 for ICI flows and Extraneous Flow of 0.21 L/s/ha, the peak sanitary flow rate is 1.28 L/s, which is an equivalent of approximately 58 persons (using 365 L/c/d residential flow rate)
- Bonnie Boats Property - Based on an approximate area of 0.9ha and the Town's design criteria of 28 m³/s average daily flow for Commercial lands, a peaking factor of 2.0 for ICI flows and Extraneous Flow of 0.21 L/s/ha, the peak sanitary flow rate is 0.77 L/s, which is an equivalent of approximately 38 persons (using 365 L/c/d residential flow rate)
- The Lorne Street sanitary pumping station has a peak flow capacity of 64 L/s. The contributing peak flow rate using municipal design criteria is 73.5 L/s.
- Re-development of the study area in excess of the current servicing allocation will require a confirmation of the pumping station rated capacity and an evaluation of the current sanitary flow rate and associated residual capacity of the pumping station. Based on the age of the existing sanitary forcemain, the size and condition may need to be confirmed to accommodate any increase in pressure or flow.

Water Servicing

Existing Water Infrastructure

- The study area is serviced by a municipal water system.



- ➔ A 150mm diameter watermain is located on Malone Road, extending south on Lorne Street to immediately south of Bonnie Boulevard.
- ➔ A 150mm diameter watermain is located on Lake Drive East, extending north on Lorne Street to Richie Avenue.
- ➔ A 100mm diameter watermain extends on Lorne Street, between the 150mm diameter watermain sections noted above.
- ➔ A 150mm diameter watermain is located on Pinery Lane, connecting to the 100mm diameter watermain on Lorne Street.

Water Servicing Recommendation

- ➔ The existing watermain on Lorne Street fronting the study area is relatively small in size. A hydraulic evaluation of the water system will be required to confirm that adequate supply and pressure can be provided to any proposed re-development within the study area.

Stormwater Management and Servicing

Existing Drainage and Infrastructure:

- ➔ The study area is currently serviced by a rural road drainage system comprised of roadside ditches, which drain to the low point on Lorne Street and outlet into the private marina channel on the Bonnie Boats property. There is no municipal easement over the private lands through which the municipal road drainage enters the lake.
- ➔ The Ramada Resort has a private storm drain system which outlets directly to Lake Simcoe.
- ➔ The Bonnie Boats property sheet drains to the marina channels and directly to Lake Simcoe.
- ➔ Bonnie Park sheet drains toward Lake Simcoe. The park has some poorly drained areas which result in ponding water.
- ➔ There are no existing stormwater management controls within the study area.

Stormwater Management (SWM):

- ➔ In accordance with the Lake Simcoe Protection Plan, the Town of Georgina completed a Comprehensive Stormwater Management Master Plan in January 2017. The plan recommends that future developments shall be in compliance with a treatment train approach to SWM which utilizes source and conveyance controls, in combination with end of pipe controls.
- ➔ Any re-development of properties within the study area will be subject to the current SWM policies of the Town of Georgina, the Lake Simcoe Region Conservation Authority (LSRCA), the Lake Simcoe Protection Plan and the Ministry of the Environment and Climate Change (MOECC).
- ➔ Based on the proximity to Lake Simcoe, quantity control is not anticipated to be required.
- ➔ In accordance with the Lake Simcoe Protection Plan, the Town of Georgina completed a Comprehensive Stormwater Management Master Plan in January 2017. The plan recommends that future developments shall be in compliance with a treatment train approach to SWM which utilizes source and conveyance controls, in combination with end of pipe controls.
- ➔ Any re-development of properties within the study area will be subject to the current SWM policies of the Town of Georgina, the Lake Simcoe Region Conservation Authority (LSRCA), the Lake Simcoe Protection Plan and the Ministry of the Environment and Climate Change (MOECC).
- ➔ Based on proximity to Lake Simcoe, quantity control is not anticipated to be required.



- ➔ In accordance with the lake Simcoe Protection Plan and LSRCA policies, the following SWM controls are anticipated to be required:
 - Enhanced Level water quality control – Based on the size of the properties within the study area, this objective can be achieved through various methods including but not limited oil grit separators, enhanced swales, infiltration systems, rain gardens, bio-filtration or bio-retention. The use of Low Impact Development (LID) techniques should be encouraged to achieve the water quality goals; and
 - Phosphorous Budget – in accordance with the LSPP and current LSRCA policies, the phosphorous load from the site must be controlled to existing levels. This can be achieved through various LID techniques and also potentially through off-site off-setting if required.
- ➔ The study area includes a municipal park spanning between Lorne Street and Lake Simcoe. This property could provide opportunities to incorporate stormwater management controls for both the study area and the surrounding existing road network through incorporation of various stormwater management controls through LID approaches such as biofiltration, bio-retention, enhanced swales, raingardens etc.

Storm Servicing Recommendation

- ➔ The municipal road system currently outlets through the private marina channel. Inclusion of appropriate drainage easements or property acquisition should be considered through the re-development process.
- ➔ Incorporation of water quality and phosphorous controls will be required as part of any re-development application and will be subject to approval by LSRCA and MOECC. Opportunities to incorporate LID technologies into the re-development areas and Bonnie Park should be explored to benefit both the study area and potentially the surrounding municipal road network.

Please contact the undersigned if you have any questions or require any additional information.

Sincerely,

SCS Consulting Group Ltd.

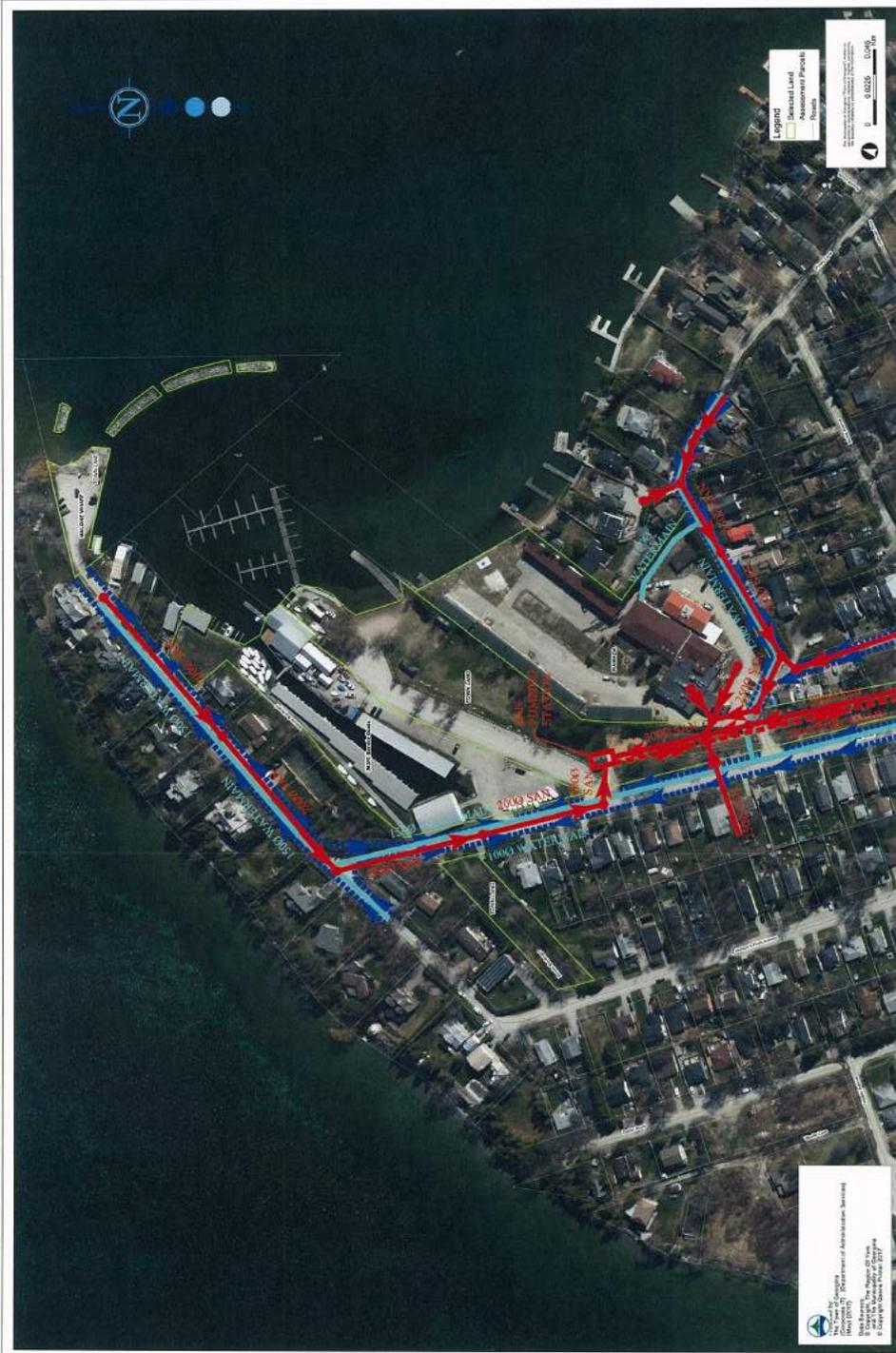


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Attachments: Figure 1.0 – Existing Servicing Schematic

P:\1924 Jackson's Point Waterfront Master Plan\Correspondence\Letters\Georgina-sms-Jacksons Point Master Servicing Technical Memo-18sep17.docx





*NOTE: LAYOUT IS SCHEMATIC ONLY. DETAILS TO BE PROVIDED AT DETAILED DESIGN STAGE.

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30 CENTURIAN DRIVE, SUITE 100
 MARKHAM, ONTARIO L3R 9B8
 TEL: (905) 475-1900
 FAX: (905) 475-8335



LEGEND:

— SANITARY SEWER
 — SANITARY FORCE MAIN
 - - - SANITARY MANHOLE
 - - - ROADSIDE DITCH
 - - - WATERMAIN

SANITARY SEWER
 SANITARY FORCE MAIN
 SANITARY MANHOLE
 ROADSIDE DITCH
 WATERMAIN

JACKSON'S POINT WATERFRONT MASTER PLAN

DESIGNED BY: M.E. 1:2500
 CHECKED BY: S.M.S.
 DATE: JUNE 2017

EXISTING SERVICING SCHEMATIC

PROJECT No: 1924
 FIGURE No: 1.0

Fig. 1.0/1924 Jackson's Point Waterfront Master Plan/Drawings/SP/Report Figures/1924-CDD-1.1 (CDD) Map - Revised by e868623 - Wed, May 31, 2017 - 4:15pm

