

Mahogany Community, Manotick

Background Report



January 2008

Mahogany Community, Manotick

Background Report

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CONTENTS

Chapter 1 -

Introduction	1
1.1 The Lands.....	1
1.2 Planning History.....	2
1.3 Subject Area.....	3
1.4 Land Ownership.....	3
1.5 Developer's Initiative for Energy Efficiency	4

Chapter 2 -

A Community Building Exercise	7
2.1 Purpose of the Development Concept Plan	7
2.2 Supporting Studies	7
2.3 Planning and Consultation Process	8

Chapter 3 -

The Village Profile.....	11
3.1 The Early Years	11
3.2 Municipal History	12
3.3 Population Growth - Waves of Development	19
3.4 Development Unit Potential Analysis.....	22
3.5 Cultural Landscape	26

Chapter 4 -

The Planning Framework	29
4.1 Policy Framework	29
4.2 Zoning	42
4.3 Natural Resources.....	42
4.4 Transportation	46
4.5 Municipal Servicing	50
4.6 Soil Conditions and Hydrogeology.....	51
4.7 Environmental Constraints	52

Chapter 5 -

Development Concept Plans.....	55
5.1 Preliminary Concept Plans	55
5.2 Evaluation of Concept Plans	58
5.3 Conclusion.....	58

Appendix A -

Historical Analysis	A-1
References	A-5

Appendix B -

Development Unit Potential Analysis - Village of Manotick	B-1
Vacant Land Analysis	B-1
Village Core Analysis	B-5

Appendix C -

Evaluation of Draft Concept Plans	C-1
-----------------------------------------	-----

FIGURES

Figure 1-1 - Location Map1
Figure 1-2 - County of Carleton, 1881.....2
Figure 1-3 - Manotick Secondary Plan3
Figure 1-4 - DCP Subject Area.....4
Figure 3-1 - County of Carleton.....12
Figure 3-2 - Hillside Gardens15
Figure 3-3 - Township of North Gower
Official Plan17
Figure 3-4 - Population Projections (1978-2026).....21
Figure 3-5 - Employment by Locations22
Figure 3-6 - City of Ottawa Land Use Map (2005)24
Figure 3-7 - Development Unit Potential
Not Including Subject Area25
Figure 4-1 - City of Ottawa Official Plan (2003)
Consolidated January 200730
Figure 4-2 - Manotick’s Historic Core33
Figure 4-3 - Village Amenities34
Figure 4-4 - Areas of Archaeological Potential.....35
Figure 4-5 - Schedule K -
Environmental Constraints35
Figure 4-6 - Village of Manotick
Secondary Plan (2001)38
Figure 4-7 - Rural Pathways Plan (2006).....40
Figure 4-8 - Existing Zoning By-law 2004-42842
Figure 4-9 - Draft Zoning By-law,
September 200742
Figure 4-10 - Natural Features.....44
Figure 4-11 - Existing Transportation Routes47
Figure 4-12 - Water Services.....50
Figure 4-13 - Sanitary Services50
Figure 4-14 - Geotechnical Conditions.....51
Figure 4-15 - Hydrogeological Conditions.....52
Figure 4-16 - Environmental Constraints53

Figure B-1 - Development Unit Potential B-3
Figure B-2 - Unit Count Map B-4
Figure B-3 - Village of Manotick Core Area B-7
Figure B-4 - Village Core Analysis B-7

TABLES

Table 3-1 - Population Growth.....21
Table 3-2 - Employment by Occupation22
Table 3-3 - Unit Potential Not Including
Subject Area23
Table 3-4 - Village Core and Vacant Land Analysis23
Table 4-1 - Village of Manotick
Secondary Plan Objectives37
Table 4-2 - Rural Pathways Plan
Recommendations41

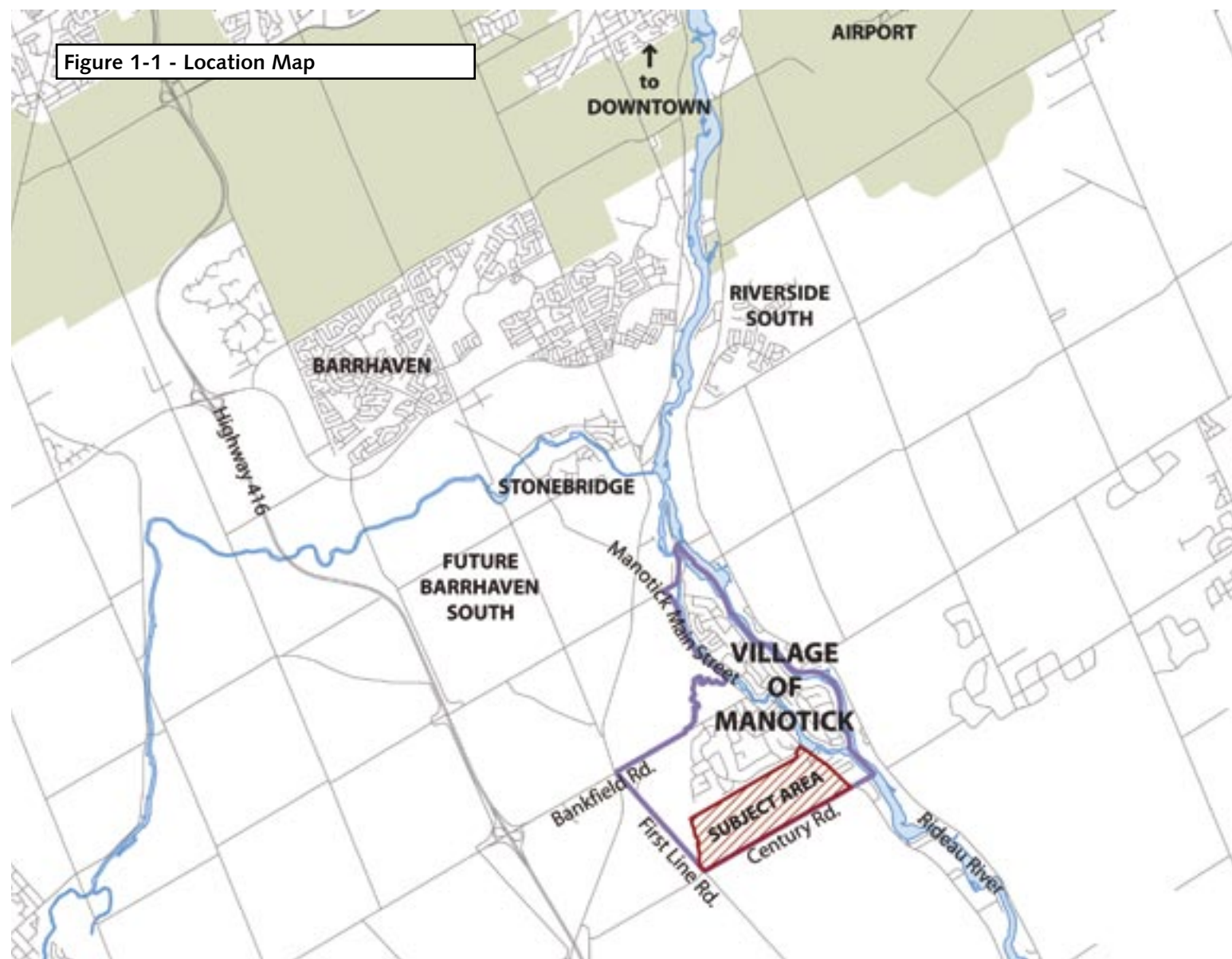
Table A-1 - First Settlers A-4
Table B-1 - Unit Potential Not Including
Subject Area B-2
Table B-2 - Village Core and Vacant Land Analysis... B-5
Table B-3 - Village Core Analysis..... B-6
Table C-1 - Evaluation of Draft Concept Plans
Review of Policies and
Draft Guiding Objectives..... C-3
Table C-2 - Evaluation of Draft Concept Plans C-5
Table C-3 - Proposed Land Use Distribution..... C-12

CHAPTER 1 - INTRODUCTION

The Mahogany Community, Manotick Development Concept Plan for the Serviced Development Area (i.e. Subject Area lands) is required by the Village of Manotick Secondary Plan, 2001. Minto Developments is proposing a residential development, Mahogany Community, on the lands south of the existing Village Core and within the Village boundary of Manotick. This Background Report provides contextual, historical, transportation and environmental information. It is an update of the previously issued Background Report, April 2007. It supports the Development Concept Plan (DCP), January 2008 and should be read in conjunction with it.

1.1 THE LANDS

The Village of Manotick is located in the City of Ottawa, approximately 30 minutes (40 km) from downtown Ottawa and approximately 20 minutes (20 km) south of the Ottawa Macdonald-Cartier International Airport, as illustrated in Figure 1-1. The Village is situated south of the existing and future communities of Barrhaven South, Riverside South, and Stonebridge. Prior to amalgamation, the Village formed part of the Township of Rideau.



1.2 PLANNING HISTORY

The Village of Manotick is situated at the intersection of four former townships; North Gower, Nepean, Gloucester, and Osgoode as illustrated in Figure 1-2, which is a map of the County of Carleton. The plans for the Village of Manotick were registered with Carleton County by Kent Moss Dickinson in 1861.

Manotick was incorporated as a Police Village within the Township of North Gower by the Carleton County Council in 1903. The Police Village included both the mainland and portions of Long Island.

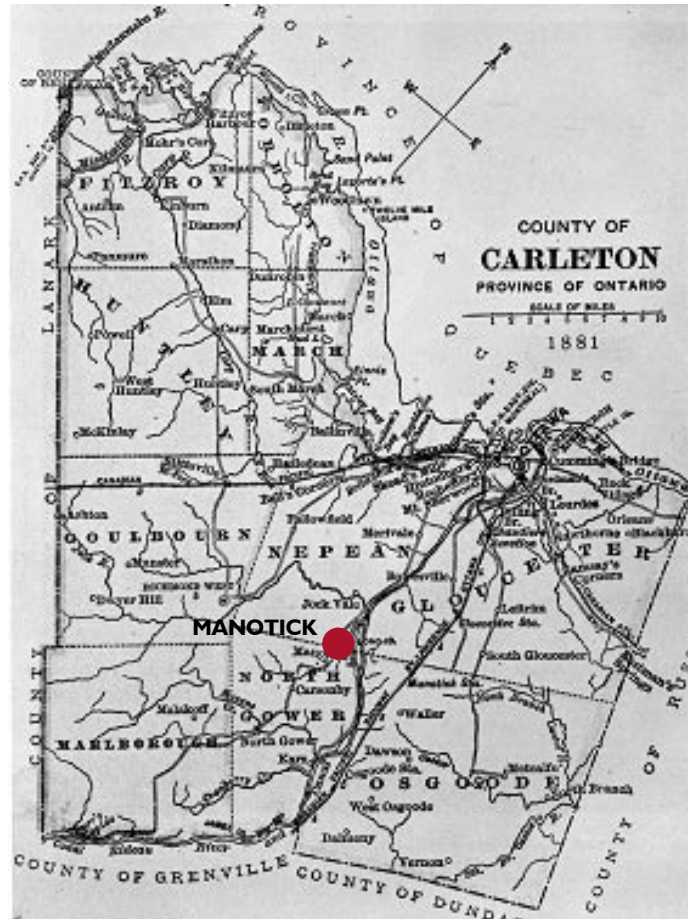
At a higher level, North Gower, Nepean, Gloucester, and Osgoode Townships became a part of the Regional Municipality of Ottawa-Carleton when it was formed in 1969.

On January 1, 1974, the Township of Rideau was formed through the amalgamation of North Gower and Marlborough Townships. When this happened, the Manotick Police Village was dissolved and the Village of Manotick, including both the mainland and Long Island portions, became part of Rideau Township.

In response to Rideau Township's draft official plan amendment to expand the village boundary of Manotick, the Ministry of Environment provided a response on February 9, 1990 that provided the following observation and conclusion:

"In conclusion this Ministry does not support the concept of growth of Manotick to a population of 6,000 persons on the basis of private wells supplies and septic tank disposal systems. It is recommended that the extension of municipal services from the Nepean South Community be considered."

Figure 1-2 - County of Carleton, 1881



The 1992 Rideau Official Plan expanded the village boundary to include the Subject Area lands that are now owned predominantly by Minto. The village boundary was approved by the Regional Municipality of Ottawa-Carleton in 1995; however, development within the village boundary was deferred pending completion of a Servicing Options Study and a Secondary Plan.

The Servicing Options Study completed by Robinson Consultants recommended that development of the Subject Area lands be on the basis of central sewer and water services.

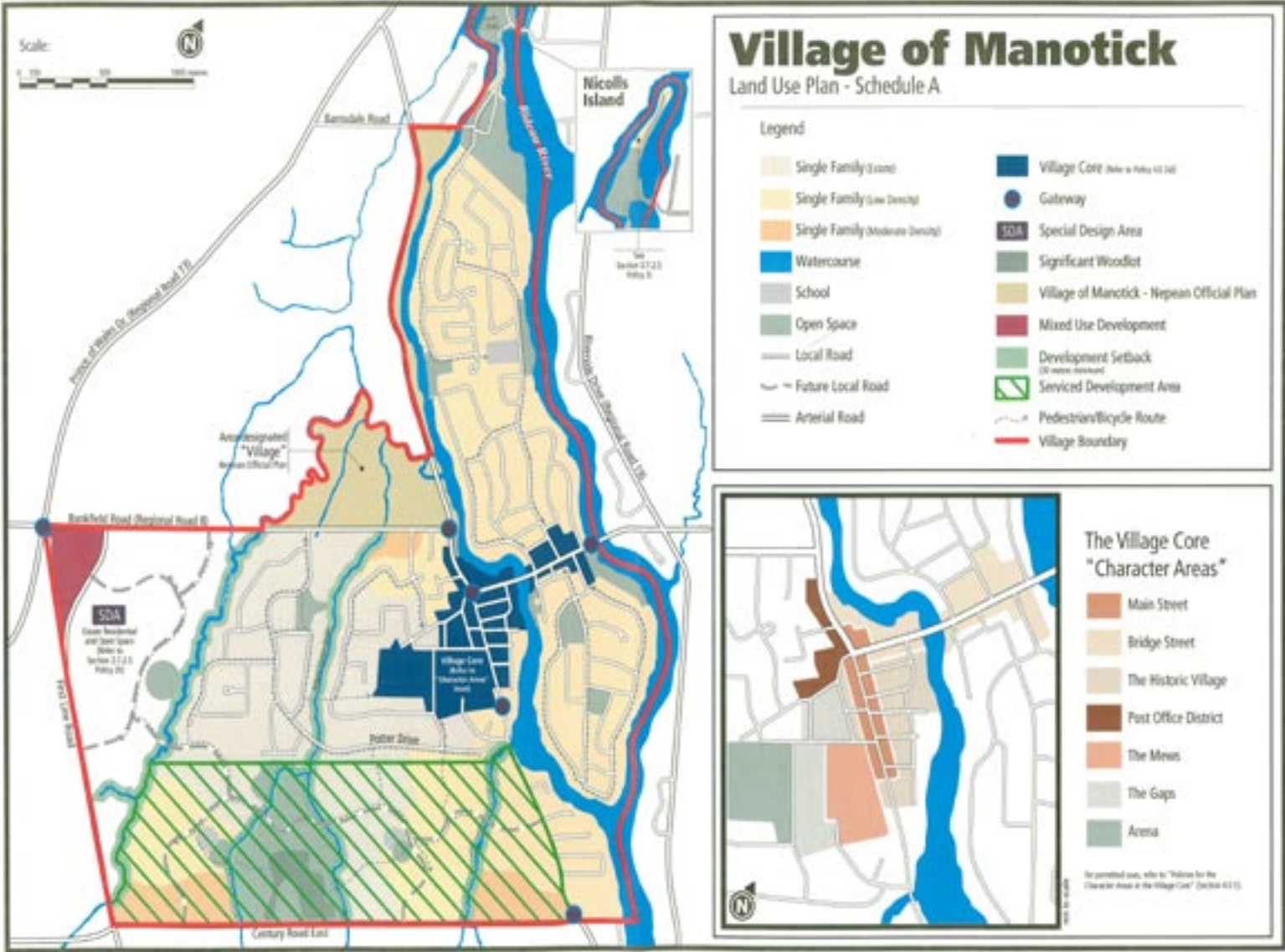
The Secondary Plan was adopted by Rideau Township in 2000. The Plan designates the Subject Area outlined in Figure 1-3 as Serviced Development Area which is subject to the following policies:

1. Areas designated Serviced Development Area on Schedule A shall be developed without amendment to this Plan provided the following conditions are satisfied:
 - i) All development shall be on the basis of central water and wastewater services.
 - ii) A comprehensive development concept plan has been prepared for the entire area, to the satisfaction of the City of Ottawa, that will facilitate the logical phasing of development in the area (the integration of transportation links, parks and open space, schools, pedestrian links and stormwater) and that will form the basis for various, subsequent plans of subdivision; and
 - iii) The location and ownership of the schools, recreation and/or open space areas will be to the satisfaction of Council, and determined in consultation with the affected land owners and the Manotick community.

In 2001, the new City of Ottawa was created by the amalgamation of 11 urban and rural municipalities and the Regional Municipality of Ottawa-Carleton. Rideau Township was included in this amalgamation and thus, Manotick is now a part of the City of Ottawa.

The Manotick Secondary Plan was approved by the new City of Ottawa in 2001. The Subject Area shown in Figure 1-3 has been approved for future development since 2001. This document is the Background Report to the Development Concept Plan (DCP), which has been completed, as required by the Secondary Plan and will be subject to the approval by the City. The DCP is available under separate cover.

Figure 1-3 - Manotick Secondary Plan



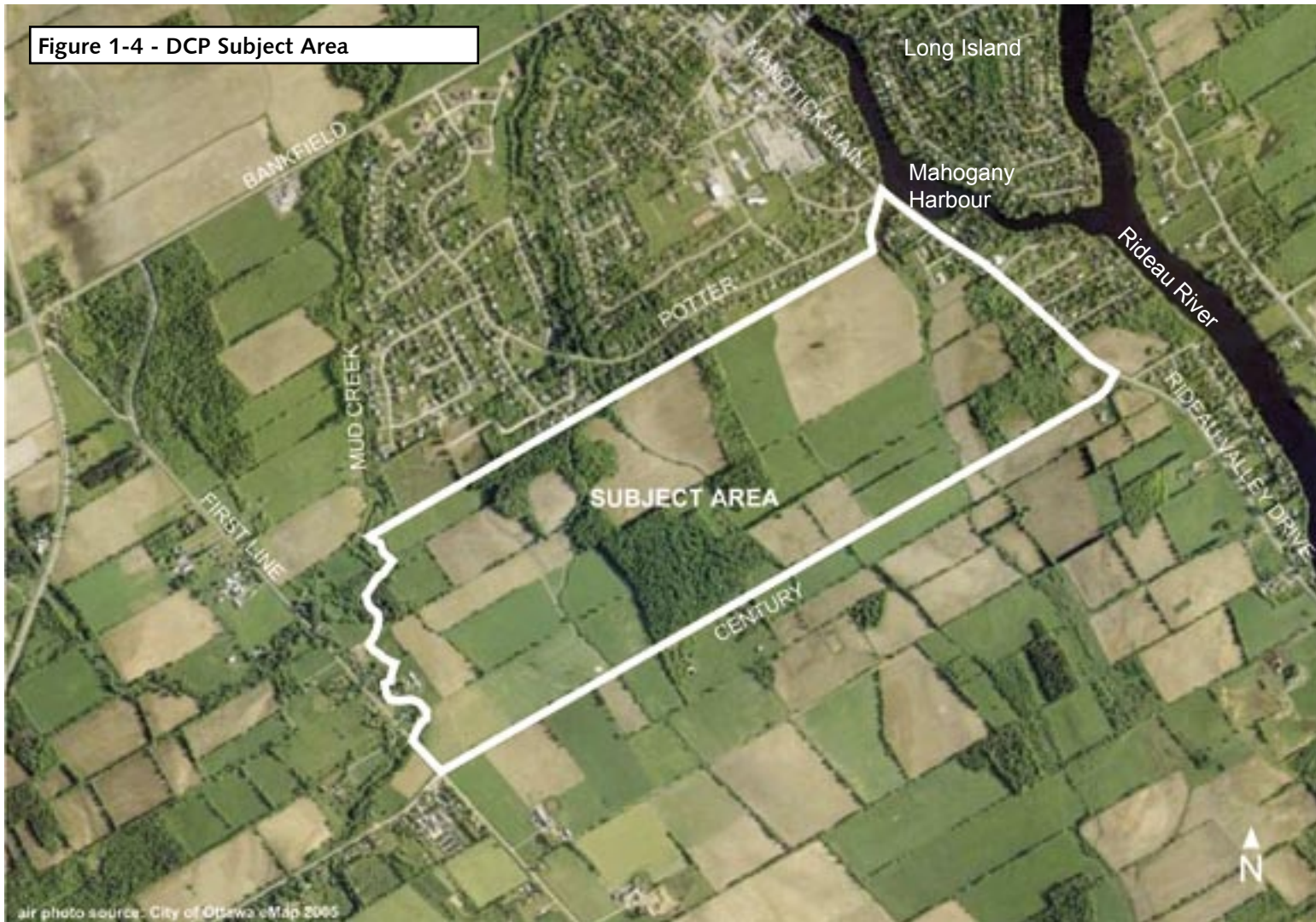
1.3 SUBJECT AREA

The Development Concept Plan (DCP) Subject Area includes all of the lands designated Serviced Development Area in the Manotick Secondary Plan illustrated in Figure 1-3. The Subject Area illustrated in Figure 1-4 is approximately 194 ha (480 acres) within the Village of Manotick boundary, south of the Village Core. The Subject Area is bounded to the north by the existing residential area of Manotick Estates, Watterson Street, and Carrison Drive; to the south by Century Road; to the east by Manotick Main Street; and to the west by First Line Road and Mud Creek as illustrated in Figure 1-4. To the east of the Subject Area is the Rideau River and Long Island, which also forms part of the Village of Manotick. The Special Design Area (SDA) lands are west of Mud Creek. Mahogany Harbour on the Rideau is at the northeast corner of the Subject Area.

1.4 LAND OWNERSHIP

The majority of the Subject Area lands is owned by Minto Developments Inc. There are other parcels along Manotick Main St. and First Line Road, and a parcel of land located in the southwest corner of the Subject Area, which are owned by private individuals or condo corporations. These lands are included and illustrated within the Subject Area boundary for contextual and long range planning purposes.

Figure 1-4 - DCP Subject Area



1.5 DEVELOPER'S INITIATIVE FOR ENERGY EFFICIENCY

Minto views the Mahogany Community in Manotick as an exciting and leading edge opportunity to build energy efficient houses in today's increasing awareness of energy efficiency and responsibility to sustainable community development.

"Inspiration - the Minto Eco Home" in Manotick was one of 12 projects selected by the Canada Mortgage and Housing Corporation (CMHC) to build a Net Zero Energy House from 72 entries across Canada. One of the most important features is the high level of insulation in the building envelope, including double wall construction along with strategically located triple pane windows. In addition, the home would have a sophisticated ducted-filtered solar ventilation systems to maintain humidity and temperature levels. Minto has also made a commitment that all homes in Mahogany Community will be a minimum of Energy Star™ rated.

The Inspiration House is an example of energy efficient, sustainable housing. It is anticipated that "Inspiration" will open its doors in 2008, with tours guiding visitors through features and benefits of real world sustainable living. It is planned that many features of the Net Zero Energy Model will be available to future home owners in the Mahogany Community.



While Minto's Mahogany Community is not part of the Leadership in Energy and Environmental Design - Neighbourhood Developments (LEED-ND) US Pilot Program, efforts have been made to apply the standards to this development. Additional information on Minto's application of LEED criteria in the Mahogany Community can be found further in this Background Report.

Energy Efficiency and Environmental Initiatives

In 2007, Minto was selected by CMHC as one of the 12 proposals out of 72 entries as a winner in their EQuilibrium Housing Initiative to create a healthy, energy-efficient home. The goal of the program is to build a house that produces as much energy as it consumes in one year; a “net of zero” units of yearly power consumption. Heating, hot water, ventilation are powered by both traditional hydro and renewable energy sources such as solar panels. Combined with smart design and planning practices, (i.e. orientating the house to make maximum use of natural solar heating/cooling) a Net Zero energy home, at a minimum, will produce an annual energy output that is equal to the amount of energy it consumes. With opening planned for spring 2008, the EcoHome and its technologies will serve as an inspiration for the rest of the community. It is planned that many of its energy saving features and sustainable systems will be made available to future Mahogany homeowners.

The Minto Energy Management group (MEM), which is responsible for ‘greening’ Minto, is committed to exploring sustainable practices and employing environmentally responsible building technology, much of it directly from the EQuilibrium Project – and further to consider the land use and community-level design. As a minimum, all homes in the community will be ENERGY STAR™.

In addition to employing responsible housing technology, Minto is also conscientiously designing the new Manotick community with an eye towards the LEED-ND pilot guidelines for environmentally sustainable community-level development. Concepts such as compact development, diversity of uses, affordable for sale housing, walkable streets that tie into the pathway systems, efficient street network, provision of transit facilities, access to surrounding vicinity and public spaces, (i.e. access to the Village Core, schools and parks for the existing village of Manotick), as well as community outreach and involvement will be integrated as much as possible.

On a village-wide scale, approximately 30% of the site will remain as open spaces, including the watercourses and significant areas of woodlots. Well planned transit routes, pocket parks, community level parks, short streets that promote walking and an extensive bike/pedestrian path network that connects to the Village Core will help promote sustainable transportation choices throughout Manotick.

It is Minto’s hope that the Mahogany Community will encourage the Village of Manotick to become a leader in sustainable communities for Ottawa. Some of the environmental initiatives that will guide the new Community are:

- extensive plantings and greenspaces
- water conservation & alternate stormwater management
- generous setbacks from the creeks
- retaining the watercourses and woodlot
- streets designed to promote walking and cycling (& reflect village character)
- pocket parks and community level parks
- extensive pathways
- multi-unit housing (reducing the building footprint)
- bus route planning (encouraging efficiency of public transit to Manotick)
- tree transplanting & preservation
- solar orientation
- ENERGY STAR minimum rating
- options from “Inspiration”
- promotion of environmentally sustainable construction & practices through the Minto EcoHome and contribution to research regarding sustainable building practices.

CHAPTER 2 - A COMMUNITY BUILDING EXERCISE

2.1 PURPOSE OF THE DEVELOPMENT CONCEPT PLAN

The Mahogany Community, Manotick Development Concept Plan (DCP) is a developer-initiated and funded project. However, the City of Ottawa coordinated the process and provided the regulatory framework within which the DCP was completed.

The Draft Background Report, April 2007, prepared by FoTenn Consultants Inc. and the existing conditions reports were reviewed by the City of Ottawa. Terms of Reference for the preparation of the DCP were completed and approved by the City and are available from the City under separate cover.

The purpose of the Mahogany Community, Manotick Development Concept Plan (DCP) is to follow the process for development set out in the Manotick Secondary Plan. The DCP provides a comprehensive and cohesive vision and a conceptual framework to guide future development of the lands south of the Village Core consistent with the 2005 Provincial Policy Statement and in conformity with the City of Ottawa Official Plan policies and the Primary and Secondary Objectives of the Village of Manotick Secondary Plan. The Land Use Concept Plan and Demonstration Plan in the DCP illustrate how the Subject Area lands will be developed based on a set of objectives, principles, and community design guidelines established during the collaborative community planning process.

The key objectives for the DCP are as follows:

- Document the background existing conditions including: natural environment, village character, demographics, transportation, archaeology, servicing and geological conditions to define constraints and development limits;
- Prepare Development Concept Plan options within the development areas with consideration for transportation and servicing infrastructure. The options will propose land use and densities for a mix of uses and housing types, as well as locations for schools and parks/open space, in consultation with the community;
- Develop Guiding Objectives, Principles and Community Design Guidelines in consultation with the community;
- Create a Land Use Concept Plan and Demonstration Plan that detail the land uses, housing mix and densities, as well as Transportation and Master Servicing Plans; and
- Develop an implementation and phasing strategy for the Final Concept Plan, to form the basis of subsequent development applications (i.e. Official Plan Amendment, Zoning By-law Amendment, Plans of Subdivision).

2.2 SUPPORTING STUDIES

Several supporting studies were completed to provide information on existing conditions and guidance on the framework and components of the Development Concept Plan. These include:

- A **Draft Background Report, April 2007**, prepared by FoTenn Consultants Inc.
- A **Cultural Landscape Analysis, January 2007**, undertaken by Corush Sunderland Wright.

- A **Natural Environment Existing Conditions Report, January 2008**, prepared by EcoTec Environmental Consultants Inc.

The following reports were prepared by Delcan Corporation:

- **Minto's Manotick Development Concept Plan Existing Conditions Report, Transportation (March 28, 2007);**
- **Mahogany Community in Manotick, Development Concept Plan Transportation Overview (July 11, 2007);**
- **Transportation Overview Clarification re: Phase 1 Requirements (November 6, 2007);**
- **Mahogany Development Concept Plan (DCP) DRAFT Phase 1 Traffic Impacts (November 27, 2007);** and
- **Letter to NCE/GENIVAR in response to public comment (8 January 2008).**
- A **Servicing Existing Conditions Report, March 2007**, and a **Draft Master Serviceability Study for Mahogany in Manotick, Mahogany Community Village of Manotick (City of Ottawa), June 2007**, prepared by David McManus Engineering Ltd. (DME).
- A **Phase 1 Environmental Site Assessment, January 2007**, prepared by the Paterson Group.
- A **Draft Mahogany Community Stormwater Management Servicing Report, July 2007**, prepared by IBI Group.
- A **Preliminary Groundwater Impact Assessment Minto Lands – First Line and Century Road, Manotick, ON, July 2007**, prepared by the Paterson Group.
- A **Preliminary Geotechnical Investigation, January 2007**, prepared by the Paterson Group.
- An **Archaeological Assessment (Stage 1) of the Proposed "Mahogany Community in Manotick" Part Lots 4 & 5, Concession 'A', Geographic Township of North Gower, February 2007**, prepared by Adams Heritage.

Key highlights and findings from these studies are found in Chapters 3 and 4 of this report.

The detailed supporting studies are available under separate cover on FoTenn's web site at <http://www.fotenn.com/?q=projects/village-of-manotick-development-concept-plan>. This project website will be functional up until Council consideration in February 2008.

2.3 PLANNING AND CONSULTATION PROCESS

2.3.1 The Team

The preparation of the Background Report and DCP involved ongoing collaboration and dialogue amongst the Team and with key City of Ottawa staff from the following departments:

City of Ottawa

- Planning, Transit and the Environment Department
- Environmental Sustainability Division
- Transportation and Infrastructure Planning Division
- Planning and Infrastructure Approvals Branch
- Community Planning and Design Division
- Community and Protective Services Department
- Parks and Recreation Branch
- Emergency Services
- Councillor Glenn Brooks Office

The "Team" was composed of three groups: The Project Team, which included key City of Ottawa Staff; the Consulting Team; and the Community "Leaders" Group. The composition of these groups included representatives of the following organizations and companies:

Project Team (Lead)

- City of Ottawa
- Minto Developments Inc.
- FoTenn Consultants Inc.
- Corush Sunderland Wright

Consulting Team

- Delcan Corporation
- EcoTec Environmental Consultants
- Paterson Group
- David McManus Engineering Limited
- IBI Group
- Adams Heritage

Community "Leaders" Group

- Agricultural & Rural Affairs Advisory Committee (City of Ottawa)
- A.Y. Jackson Park Group
- Councillor Glenn Brooks office
- City of Ottawa
- Environmental Advisory Committee
- First Line Neighbourhood Association
- Hyfield Place
- Kiwanis Club of Manotick
- Knox Presbyterian Church
- Manotick Action Group
- Manotick Art Association
- Manotick Business Improvement Area
- Manotick Classic Boat Club
- Manotick Community Association
- Manotick Secondary Plan Committee
- Manotick Softball Association
- Manotick United Church
- Manotick Walking Tours
- Manotick Woman's Business Network
- Ottawa Forests and Greenspace Advisory Committee (City of Ottawa)
- Ottawa South United Soccer Association
- Rideau Senior's Centre
- Rideau Township Historical Society
- Rural Issues Advisory Committee (City of Ottawa)
- Rural Pathways Project
- St. James Anglican Church
- St. Leonard's Catholic Church

- Watson's Mill
- West Manotick Community Association
- Other public members at large

Technical Review Agencies

- School Boards
- Rideau Valley Conservation Authority
- Additional technical review agencies as required (e.g. Ministry of Environment)

2.3.2 The Consultation Process

Since November 2006, the consultation process to date has involved a number of key local stakeholders, special interest groups, and City of Ottawa advisory committees.

- Community Group Leaders Meetings (6)
- Landowner Meeting (1)
- Manotick Parkland Group Meeting (1)
- Public Meetings (3)
- Public Meeting #1 – March 3, 2007
- Public Meeting #2 – June 27, 2007
- Public Meeting #3 – October 30, 2007
- Rural Issues Advisory Committee (RIAC) (2)
 - June 19, 2007
 - November 27, 2007
- Ottawa Forests and Greenspace Advisory Committee (2)
 - June 25, 2007
 - November 26, 2007
- Agriculture and Rural Affairs Committee (ARAC)
 - January 24, 2008
- City Council Consideration
 - February 13, 2008

Community Leaders Meeting

The Manotick DCP team held six (6) meetings with the Community "Leaders" Group at key intervals throughout the process to obtain

input and to review the analysis and work to date on the opportunities for development in the DCP Subject Area. The participation of the Community Leaders has been invaluable to the discussions and enhancement of the Land Use Concept Plan through the DP process.



Landowner’s Meeting, January 15, 2007

On January 15, 2007, a meeting was held with landowners who live within or adjacent to the Subject Area. Approximately 25 landowners attended and were presented with the DCP planning process, timing, and the public consultation program. A question and answer period followed the presentation. Some of the concerns were regarding servicing, access to the Subject Area, protection of the natural environment, and what commercial uses were proposed for the Subject Area.

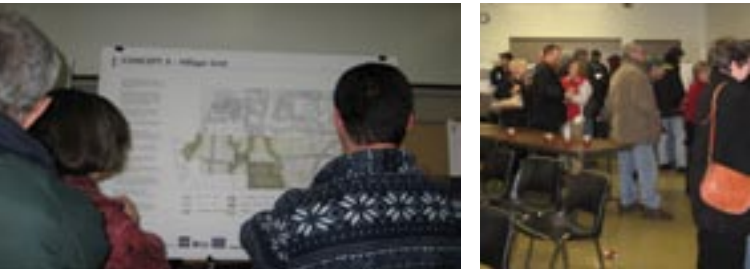
CMHC Design Charette

On November 23 and 24, 2006, an Integrated Design Charette was held with approximately 40 expert participants representing all disciplines to start with a blank slate in developing the Net Zero Energy Healthy Home (i.e. “Inspiration - The Minto Eco Home”). The participants were led by a three-person facilitation team. The basic approach for the Charette was to use The Natural Step Framework’s definition of sustainability, which includes four system conditions (scientific principles) that lead to a sustainable society. The results of the Charette were incorporated into the design of the house, as well as land use and site development. Minto plans to explore sustainable design, where possible, in all aspects of this project including: water conservation; recycling; composting;

alternative stormwater design; and wastewater management.

Public Meeting & Open House, March 3, 2007

Approximately 200 public members attended the first Public Meeting and Open House held at the Manotick Arena. The Project Team presented the DCP process, the existing background conditions, the Draft Guiding Objectives, Design Principles and the three Draft Concept Plans. There were several questions related to the overall DCP process. The issues that were raised related to the following three themes:



- **“Village character.”** There was concern expressed by some members of the public that the development would have a significant impact on the “village character” and “lifestyle.” Manotick has a strong identity based on being a small community village, with “unique houses” on large lots (private services) with a rural feel and abundant access to natural areas. The community felt that the density (and resultant population increase) proposed through the 3 concepts presented at the public meeting could potentially change the community feel of Manotick and dramatically alter the physical layout of this low density village. There was a desire expressed by some members of the public to maintain the existing density and rate of development that has historically existed in the village, on private services. Maintaining the existing village character was considered through the evaluation of the three draft concept plans, and efforts were made to minimize impact on current residents in the Land Use Concept Plan.

- **“Traffic – Village infrastructure.”** The overall theme that emerged was the potential impact of the development on traffic and infrastructure in Manotick (i.e. roads, sewers, recreation facilities, libraries, schools, police and fire services). A greater focus is required on how the developer will work with the City to consider the long-term impact of the proposed development. Consideration will be given to the infrastructure planning and in the provision of services, particularly with respect to the development of “triggers” and the eventual phasing of infrastructure as it relates to the Development Concept Plan.



- Detailed comparison or evaluation of the three **Draft Concept Plans** by the public was very limited in scope. Despite detailed questions on the comment sheets, most respondents focused their comments on the general level of opposition to the density proposed and existing traffic issues in the Village Core during peak periods. Values-oriented statements concerning preservation of village character and natural areas were common. The public was most interested in the proposed size of lots and density of development, preservation of natural features (specifically woodlots), housing form (specifically

townhomes), and proposed land-uses adjacent to existing residential areas.

Public Meeting & Open House #2, June 27, 2007

A second Public Open House was held in June 2007 at St. Mark's High School in Manotick. Approximately 400 public members attended. The Land Use Concept Plan, Demonstration Plan, Village Character, the Natural Environment, the Transportation Analysis, the need for an Official Plan Amendment to the Secondary Plan, and the timing of infrastructure with phasing of development were the key components presented by the Team to the public. Similar concerns to those raised at the March Public Open House were also raised at the second Public Open House. Many questions related to the process and the Secondary Plan as well as servicing of the Village overall. The rate of growth was also a major concern. In addition, there were positive comments on the variety of housing types, the preservation of natural areas as well as the parks and greenspaces proposed as illustrated on the Land Use Concept Plan.

During the month of May and early June smaller group meetings were held to discuss specific components of the Development Concept Plans (e.g. the Manotick Parkland Group). These comments and others were discussed and considered through the steps of the public process.

Public Meeting and Open House #3, October 30, 2007

Minto submitted an Official Plan Amendment (OPA) application and the Mahogany Community Development Concept Plan (DCP) to the City on July 17, 2007. This was circulated to the community, City departments and technical agencies for review and comment. The City of Ottawa hosted a public meeting at Tudor Hall on October 30, 2007 that was attended by several hundred people. The City presented a summary of the comments from the public and from the technical circulation; a summary of issues and how they may be addressed; and the City's initial findings on the OPA and DCP.

The City's preliminary responses are as follows:

- The City supports development on these lands
- The total amount of development should be reduced from 1,800 dwelling units to 1,300 - 1,400 dwelling units
- The development of these lands will depend on the construction of the Strandherd/Armstrong Bridge
- The pace of growth will be dependent on provisions of infrastructure
- The size of single family lots should be increased to reflect village character
- Up to 25 per cent of multiple units are appropriate if mixed in neighbourhoods – no blocks
- Buffering should be enhanced for existing development on Main Street
- Architectural guidelines are required to reflect village character
- The significant woodlot should be protected as a Natural Environment Area
- Additional study is required to support preservation of the pond
- Carrison & Potter Connections should be pedestrian/cycling – no road
- Parks plan needs to be revised
- School site needs to be relocated

The Public Open Houses provide opportunities for the public at large to review the DCP process and provided input on the development concept plans, guiding objectives and principles, as well as the design guidelines. City staff, the local Councillor, and other interested parties reviewed the work of the Project Team through the DCP process.

The consultation process will conclude with a statutory public meeting under the Planning Act at the City of Ottawa's Agricultural Rural Affairs Committee (ARAC) on January 24, 2008, where the DCP and OPA will be presented for recommendation to Council for approval. The public will have an opportunity to provide comments on the DCP and OPA at the ARAC meeting. The Council meeting will be held a few weeks after ARAC on February 13, 2008.

The Manotick DCP Team will continue to consult with the community in the next few months according to the consultation and approval process.

CHAPTER 3 – THE VILLAGE PROFILE

3.1 THE EARLY YEARS

“A piece of rougher wilderness could with difficulty be found in Canada; a road opened through it would greatly benefit the progress of the works.” (Rideau Township Historical Society, 1997). This was the description of Long Island by James MacTaggart, Clerk of Works to Lieutenant Colonel John By in 1827, who had been instructed by Colonel By to investigate a route along the Rideau Canal to connect Ottawa to Kingston.

The history and establishment of today’s Village of Manotick can be traced back to the British Government in 1827 where an alternate route to Kingston, once the seat of Canada’s Federal Government



Watson’s Mill
Source: FoTenn Consultants Inc., 2007

from 1841 to 1844 and then eventually to Ottawa in 1857, was to be established for protection in times of war with the United States. The alternative route was the 202 km Rideau Canal, which linked to navigable rivers, such as the Rideau River, which flows on the east and west sides of Long Island in Manotick.

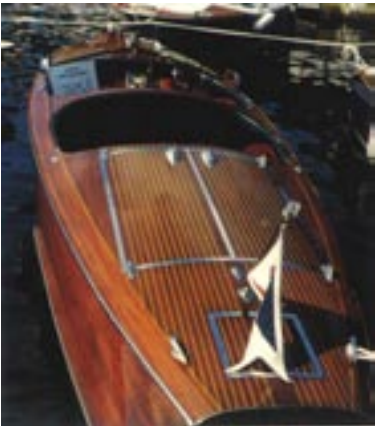
During the construction of the locks at Long Island, a few settlers had obtained Crown grants. This along with the construction of a store, hotel and the Methodist and Presbyterian churches, Long Island resulted in a busy little town. By the time the Rideau Canal was completed in 1832, a small settlement of approximately 11 buildings, had developed on the mainland adjacent to the locks. The settlement was surveyed in 1849 on Lot 25, Rideau Front, Gloucester and registered as the “Village of Long Island” in 1861. It was expected that a village would grow in that location. However, after the mill’s construction by Moss Kent Dickinson, one of Manotick’s early settlers, the Village actually developed 3 km further south, where Manotick is now situated. Dickinson is responsible for the name ‘Manotick’, which means “island in the river” in Objibwa (Ellis, 2004; Carroll and Humphreys, 1997).



Dickinson House
Source: Commonwealth Historic Research Management Limited, 2006

The decision in 1868 to build a swing-bridge directly east of Dickinson’s Mill, as opposed to at the locks as originally planned, further assisted the development of Manotick in its current location. By 1870, the growth of Manotick was overshadowing the Long Island settlement and by 1891 the Village of Long Island ceased to exist. The Manotick Centennial Committee indicated that the Village of Long Island’s churches were moved to the new Village of Manotick, leaving the cemeteries as the only evidence that a settlement had existed.

According to the following website, boating.ncf.ca, the Village of Manotick is the last stop for supplies before Ottawa, but is also the only town that waterway boaters cannot easily access. Boaters who required supplies, anchored in Mahogany Harbour, named for the boats moored there.



Mahogany Boat
www.portcarlingboats.com

Pioneer Families

Table A-1 in Appendix A provides detailed information of other pioneer families in Manotick, which “occupy a position of great significance in the chronicles of Manotick and vicinity” (Manotick’s Centennial Year Souvenir Book,1959). Furthermore, Appendix A includes additional information regarding Manotick’s first inhabitants through an analysis of the Village’s existing street names from Larry Ellis’s publication, Looking Back Some More (2005).

3.2 MUNICIPAL HISTORY

Four Townships

The Village of Manotick is situated at the intersection of four former townships; North Gower, Nepean, Gloucester, and Osgoode as illustrated in Figure 3-1, which is a map of the County of Carleton. The plans for the Village of Manotick were registered with Carleton County by Moss Dickinson in 1861. The Illustrated Historical Atlas of the County of Carleton, Ontario, published in 1879, provides the following geographic description of Manotick:

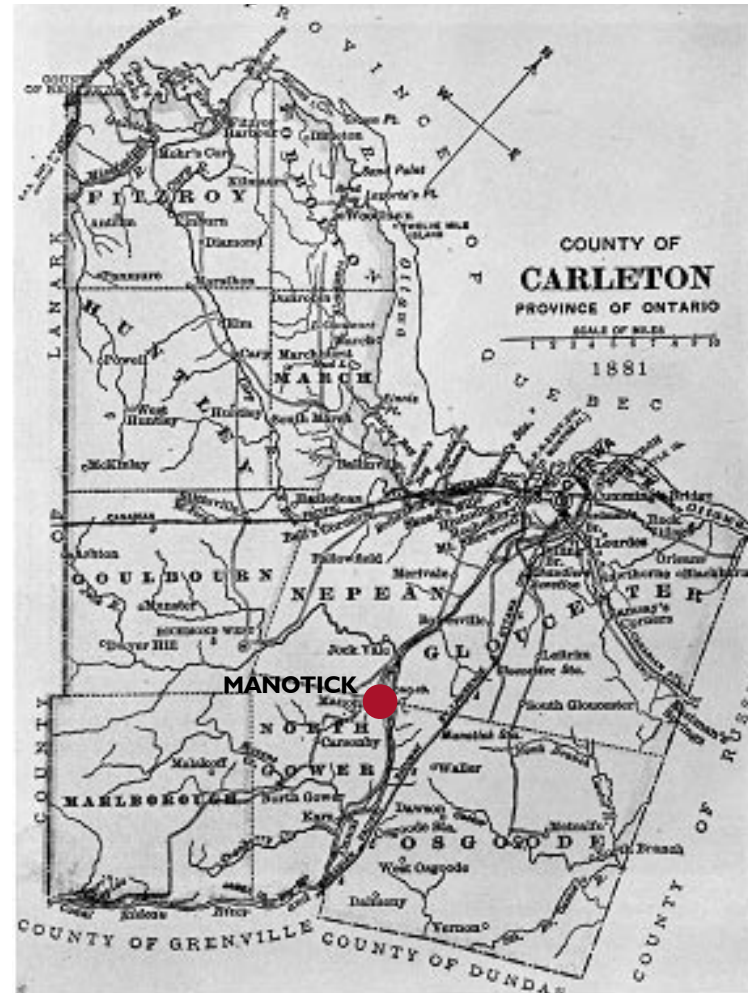
Part of Lots 1 and 2 Broken Front North Gower Township and Part of Lots 7 and 8 in Subdivision of Long Island Gloucester Township and South Part Lot 8 and Part of 9 in Subdivision of Long Island Osgoode Township.

Police Village

Manotick was incorporated as a Police Village within the Township of North Gower by the Carleton County Council in 1903 (By-law 472) (Bickerton, Jackson and Rush, 1990). A map titled Plan Showing Parts of Nepean, North Gower, Osgoode and Gloucester, County of Carleton, surveyed by McRostie Associates in 1961, illustrates the limits of the Police Village set out in By-law 472. The Police Village included both the main land and portions of Long Island.

According to a volunteer at the Rideau Township Archives, Police Villages were formed when a Village was large enough to pool their taxes and hire a police officer. The Village could set the tax rate, but the collection of these taxes, the approval of a budget, and the passing of by-laws was still the authority of the relevant Township. A publication from Manotick's 125th anniversary (1984) found in Appendix A indicates that the Manotick Police Village had three elected trustees which were responsible for road maintenance, snowploughing, garbage collection and fire protection, while still

Figure 3-1 County of Carleton



being under the jurisdiction of the four townships.

Regional Municipality of Ottawa-Carleton

At a higher level, North Gower, Nepean, Gloucester, and Osgoode Townships became a part of the Regional Municipality of Ottawa-Carleton when it was formed in 1969.

Rideau Township

On January 1, 1974 the Township of Rideau was formed through the amalgamation of North Gower and Marlborough Townships. When this happened, the Manotick Police Village was dissolved and the Village of Manotick, including both the mainland and Long Island portions, became a part of Rideau Township.

In 1992 the Township of Rideau Official Plan expanded the Village of Manotick's boundaries to the existing boundaries. The Regional Municipality of Ottawa-Carleton approved these boundaries in 1995. A Secondary Plan for the Village was adopted by Rideau Township in 2000 and was approved by the new City of Ottawa in 2001.

City of Ottawa

In 2001, the new City of Ottawa was created by the amalgamation of 11 urban and rural municipalities and the Regional Municipality of Ottawa-Carleton. Rideau Township was included in this amalgamation and thus, Manotick is now a part of the City of Ottawa.

Aerial Photo Analysis

Aerial photographs of the Village of Manotick were obtained from the National Air Photo Library and the City of Ottawa for the period from 1936 to 2005, which illustrate the growth in the Village. In total, photographs for 12 different years were obtained. A summary of the years analyzed based on FoTenn's aerial interpretation is provided below.

1936

In 1936, the Village of Manotick was concentrated in the area east of Manotick Main Street and south of Bridge Street. An area of development also existed immediately across the Rideau River on Long Island, centred on Bridge Street. The area of development on Long Island was approximately one quarter the size of the development found on the mainland.

What appear to be ten clusters of farm buildings were located within the Village’s current boundaries. Seven of these farms were accessible off Manotick Main Street and off First Line Road. The remaining farms were located on Long Island.

Carroll and Humphreys (1997, pg. 8) state that the majority of Long Island was occupied by six farms belonging to the Driscoll, Halpenny, Hennan, McCarney, and Rowat families. The aerial photograph shows that all of the farms were connected via Long Island Road, which runs in a north-south direction across the island.

Forested areas of varying sizes existed along Mud Creek and the Wilson-Cowan Drain. Five wooded areas also existed where Manotick Estates and the Serviced Development Area of the Village’s Secondary Plan are now located. The remainder of the land within the Village’s boundaries was farmland.

1946

An aerial photograph from 1946 shows no significant changes from the 1936 photograph. Development was still concentrated in what is now the Village Core. The forested areas and farmhouses are also not visibly different, with the exception of one farm, on Long Island, which seems to have ceased to exist.

In a public comment sheet received during the CAUSE for Manotick Study in 1995, a local resident claims that in 1945 there were

about 20 homes on Long Island while the rest of the Island was farmland.

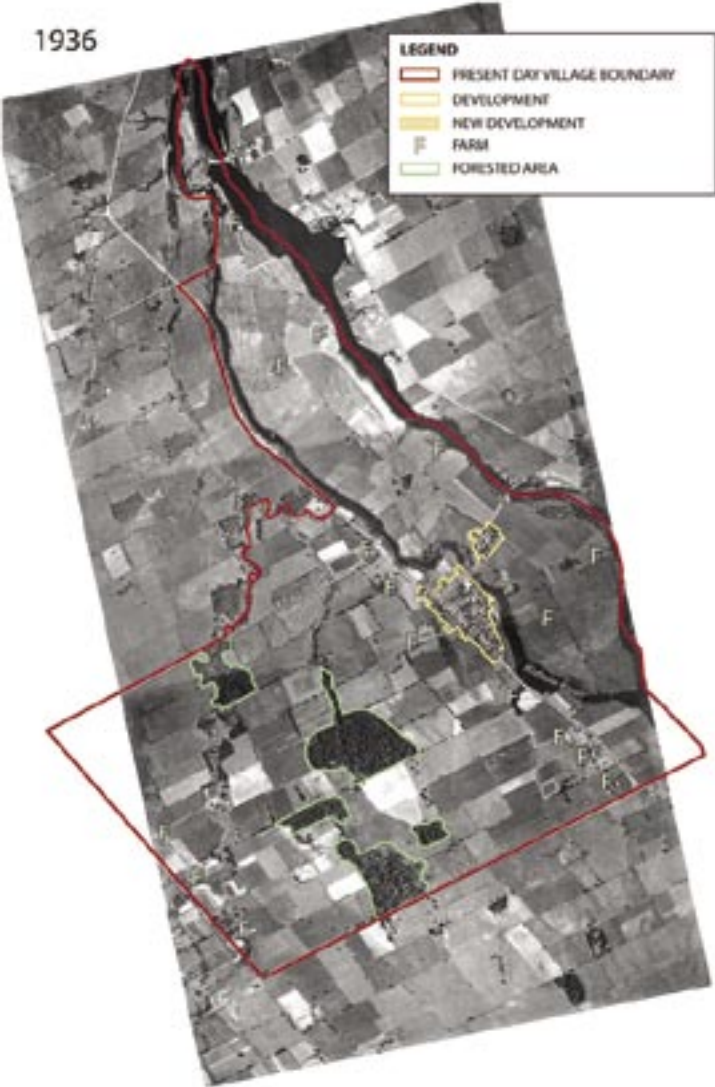
This photo illustrates a sixth wooded area south of Bankfield Road and west of Mud Creek.

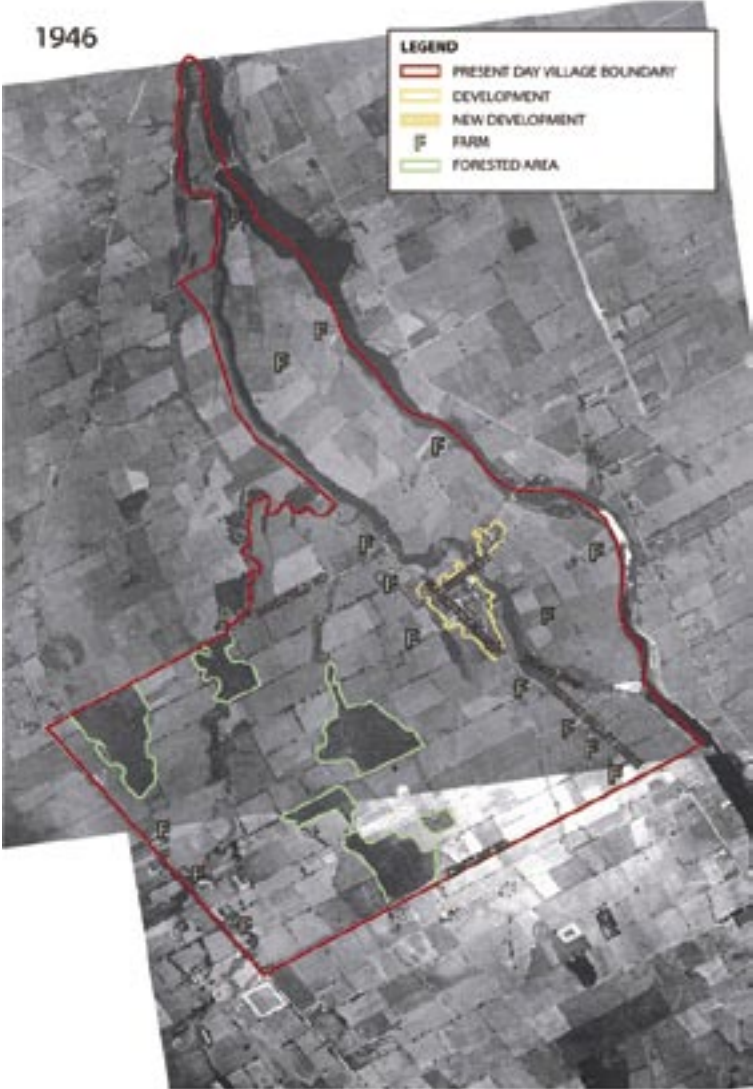
1956

An aerial photograph taken in 1956 indicates that modest development had occurred over the past decade. Visible changes on the mainland include the expansion of the Village Core south, between Manotick Main Street and the Rideau River, as well as north, between Bridge Street, Manotick Main Street, and the Rideau River. Other changes are evident on Long Island, which include the construction of houses along Firefly Lane, Herwig Place and Antochi Drive, as well as immediately west of this area on the opposite side of Rideau Valley Drive South. Additional new development includes the construction of Island View Drive and a slight realignment of the Century Road-Rideau Valley Drive North intersection.

On Long Island, houses had been constructed along the eastern side of North Riverside

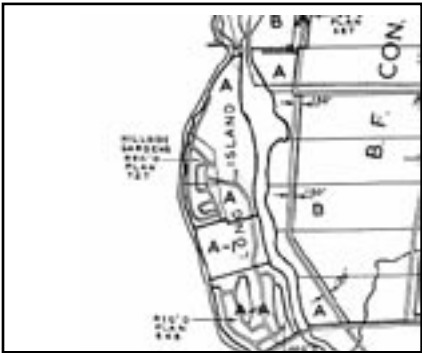
Carroll and Humphreys (1997) suggest that one man was responsible for initiating post-war development on Long Island, the Honourable John Bracken, former Premier of Manitoba (1922-43) and former leader of the Progressive Conservative Party of Canada (1943-48). Beginning in 1951, Bracken purchased farms on the Island, laid out small subdivisions, and organized the construction of houses through George McLean, a local builder. George McLean subsequently went on to purchase the Driscoll farm in 1956 and created the subdivision known as “Hillside Gardens”. The first houses in the subdivision of roughly 214 lots were built by McLean in 1959. Due to provincial and municipal regulations, McLean was required to install a water supply and pumping station.





According to Schedule A of the Township of Gloucester Zoning By-law No. 26 of 1960, Hillside Gardens is illustrated in Figure 3-2 as registered under Plan 727. It can also be seen from Figure 3-2 that another area south of Hillside Gardens was registered under Plan 646.

Figure 3-2 Hillside Gardens



According to Carroll and Humphreys (1997) the northeast corner of the Island, adjacent to Hillside Gardens, was the location of the last working farm on the Island. Developers purchased the land in the 1980s and constructed a subdivision that contains some of the Island’s largest houses.

In terms of forested areas, the aforementioned woodlots did not change between 1946 and 1956.

1966

By comparing aerial photographs taken in 1956 and 1966, it is evident that modest growth had again occurred in the Village of Manotick, particularly on Long Island. The most evident change on Long Island is the creation and/or paving of roads in the southern half of the island and north of Bridge Street to accommodate new residential development. It appears that only 3 farms remained on Long Island.

On the mainland, the Village Core was expanded to the west of Manotick Main Street.

The forested areas present in previous aerial photographs had remained unchanged in 1966.

1975

The 1975 aerial photograph shows residential development both on the mainland and on Long Island, with changes evident in the northern half of the Island. In the south of Long Island, new roads had been built and residential development continued.

On the mainland, development continued to expand west of Manotick Main Street, north of the new development described in the 1966 analysis. New roads, along which houses had been built are evident. Signs of commercial and other land use development, including the Manotick Mews Shopping Centre are evident in the 1975 aerial photograph. According to a publication celebrating Manotick’s 125th anniversary (1984), Manotick Mews opened in 1974. The publication also indicates that Manotick Arena opened in 1975, which is located at the corner of Beaverwood Road and Dr. Leach Drive. The Arena can also be seen on the 1975 aerial photograph.

No changes to the forested areas had occurred.

1981

No significant changes to the built environment of the Village of Manotick are visible between the 1975 and 1981 aerial photographs. The only noticeable change is on the northern half of Long Island where Hilltop Drive had been extended north to connect with the northern end of West River Drive. New residential dwellings had been constructed along this stretch of road.

No changes to the wooded areas are evident.

1987

Dramatic growth occurred in Manotick between 1981 and 1987. On Long Island, the majority of developable area that existed in 1981 had been built-out by 1987. New housing construction occurred in the northern half of the Island. Other roads were





constructed in the southern part of the Island. New roads had experienced residential development along them. It appears that there were two areas remaining on the Island for development.

On the mainland, the Village Core continued to expand westerly. The beginnings of what is now known as Manotick Estates are evident by the road and house construction on Potter Drive. The “CA” wooded area appears to have been altered by some vegetation lost to development.

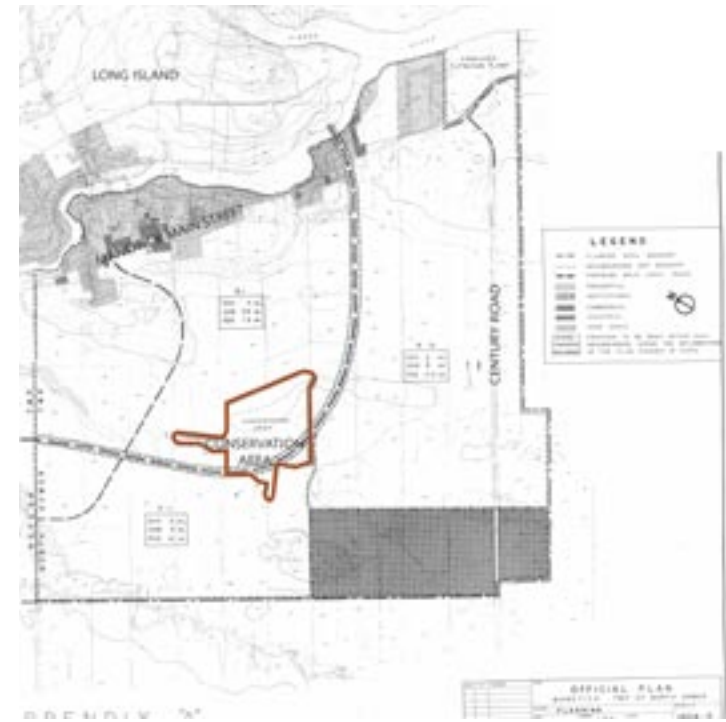
The eastern half of the development known as Manotick Estates had been constructed. More specifically, the following roads were built and developed with estate-housing: Eastman Avenue, Potter Drive, Dr. Leach Drive, Whitewood Avenue, Clothier Court, and the final/western segment of Beaverwood Avenue.

1991

Significant growth again occurred in Manotick between 1987 and 1991. The western half of Manotick Estates had been constructed. This development resulted in the removal of a significant portion of the Conservation Area woodlot, as illustrated originally on Appendix A of the Township of North Gower Official Plan (Figure 3-3). The Conservation Area lands were in an area known as the “Manotick Expansion Area”. The effect of Official Plan Amendment No. 8 to the former Rideau Township Official Plan redesignated the Conservation Area lands to Low Density Residential Area and Open Space. Only a small portion of the original treed lands were preserved as part of the Manotick Expansion Area for the Manotick Estates subdivision.

New development on Long Island from 1987 to 1991 was limited to the construction of one new road, Waterpark Place, on one area aforementioned under the analysis of the 1987 aerial photo, which had not yet been developed with residences. The northern tip of the Island remained undeveloped.

Figure 3-3 Township of North Gower Official Plan



1994

The only change in the Village of Manotick between 1991 and 1994 was the ongoing development of housing construction in Manotick Estates and on Long Island along the new roads described in the 1991 analysis.

1999

Slight changes occurred in Manotick between 1994 and 1999. One street, Mahogany Harbour Lane, west of Manotick Main Street had been constructed and showed early signs of development. Existing streets continued to fill-out and vegetation on residential lots continued to mature.

The lack of new development on Long Island is supported by Carroll and Humphreys who in their 1997 publication wrote that the Island was now “full”, except for a few lots.

2002

Construction and residential development continued to occur along the northern and western edges of Manotick Estates.

On Long Island, further development of houses on Waterpark Place is evident.

2005 to 2006

The final aerial photograph available, shows that in the southwest corner of Manotick Estates, Watterson Street had been extended to connect with Carrison Drive. No other changes to the Village are noticeable.

It is also evident that new road construction north of Bankfield was underway for the approved Miller’s Point Subdivision.

In 2006, the City of Ottawa approved a concept plan for the Special Design Area, which is the area west of Mud Creek for approximately 200 estate residential lots.

2007 and Beyond

Using the 2005 aerial, the year of the most current available photograph at the time of this report, the next wave of development in the Village of Manotick is Minto’s proposed Mahogany Community.



3.3 POPULATION GROWTH - WAVES OF DEVELOPMENT

Based on the information provided in the historical aerial photo analysis, it is clearly evident that Manotick has experienced a long history of growth and development of varying scales and durations. The most prominent growth period spanned over a decade between 1981 and 1991 on both Long Island and the mainland. The predominant development on the mainland was the Manotick Estates area. The character of the Village changed, but the Village survived during and beyond this growth period.

1859 to 1903

It is estimated that in 1864-65, five years after the settlement of Manotick, the Village's population included 100 people (Walker and Walker, 1968, pg. 403). Estimates of Manotick's population for the period from 1871 to 1874 range from 200-330 people, while three sources confirm a population of 400 people in 1879 (Manotick Women's Institute, 1967, pg. 26 and 56; CAUSE, 1995, pg. 8; Spencer & Co., 1999, pg. 4; Manotick Centennial Committee, 1959, pg. 48; Manotick, 1984, pg. 7). In 1903, when Manotick was incorporated as a Police Village, the Village population was estimated at 1,500 people (Bickerton, Jackson, and Rush, 1990, pg. 11; CAUSE, 1995, pg. 8).

1903 to 1981

Due to Manotick's location at the junction of four townships and its incorporation into Rideau Township in 1974, population figures solely for the Village of Manotick are not readily available for the period from 1900 until 1981. However, in 1981 Statistics Canada developed an individual Census Tract (number 201) for the Village of Manotick within the Ottawa-Hull (now Gatineau) Census Metropolitan Area.





Residential Development



Private Park

A few population estimates from this period have been obtained. A photo of a highway sign from the Rideau Township Local Architectural Conservation Advisory Committee (LACAC) files, thought to have been taken around 1945, reads “MANOTICK pop 300” (Rideau Township LACAC, 1995, Section 2). Similarly, in a public comment sheet received during the CAUSE for Manotick Study in 1995, a local resident claims that a road sign stating “Population 200” existed when he moved to the Village in 1945.

Additionally, a publication from Manotick’s 125th anniversary (1984) found in Appendix A indicates that Manotick had a population of 3,600 people in 1959.

A third document, written by the Manotick Board of Trustees of the Police Village in 1969, indicates that Manotick had a population of approximately 2,500 people at the time.

Statistics Canada estimates a population of 2,800 for Manotick in 1976, when the Village was a part of the Rideau Township Census Tract.

Since the above five population estimates do not illustrate a linear growth pattern, it is likely that they either pertain to different Village boundaries or some of the estimates are incorrect.

1981 to 1991

From 1981 to 1986, Manotick experienced a dramatic increase in population with an increase of almost 20%. An even greater increase in population of 31% occurred between 1986 to 1991. The population increase during the 1980s, was largely due to the development of the Manotick Estates, an estate-lot development located immediately west of the Village Core.

Growth also occurred during this period on Long Island, with the expansion of Hillside Gardens in the north and the construction of additional roads in the south along which residential development was subsequently built.

1991 to 2001

Manotick’s population growth in the 1990s was low but steady, with a 1.5% increase between both 1991 to 1996 and 1996 to 2001. Part of the low growth was due to the Ministry of Environment response to the former Rideau Township’s draft official plan amendment, on February 9, 1990, which stated:

“In conclusion this Ministry does not support the concept of growth of Manotick to a population of 6,000 persons on the basis of private wells supplies and septic tank disposal systems. It is recommended that the extension of municipal services from the Nepean South Community be considered.”

As such a freeze was placed on growth and new subdivision development until municipal services were provided.

2001 to 2006

From 2001 to 2006, the Village’s population has grown modestly by just under 6%. The population increase is likely attributable to the construction of the approved Miller’s Point subdivision of 59 residential lots.

2007 and Beyond

The population of Manotick will continue to increase based on the approved Special Design Area Concept Plan for approximately 200 estate lots.

The next wave of development is expected to occur almost 20 years later in 2009, with the construction of the Mahogany Community. The following Table 3-1 and Figure 3-4 illustrate Manotick’s population from 1864 to 2006 based on historical information and Statistics Canada census data. The proposed number of dwelling units by Minto of approximately 1,700 units demonstrates that the next wave of development and the change in population is less than the growth the Village experienced between 1981 and 1991. The

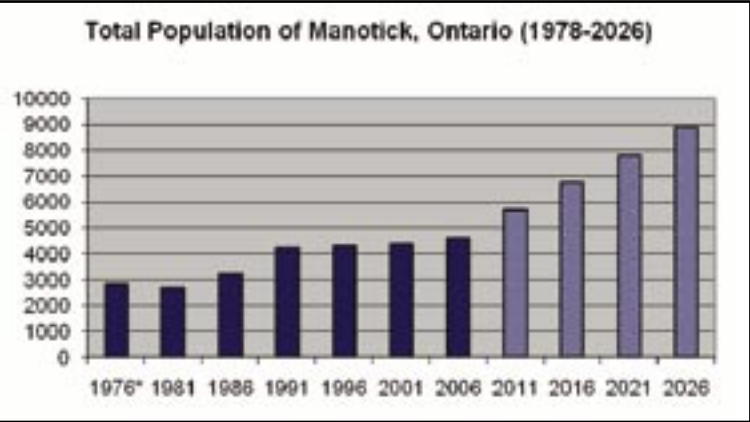
Village will continue to survive and thrive and achieve a population that will make it sustainable.

Table 3-1 - Population Growth

Year	Population	Change
1864/65	100*	n/a
1871-1874	400*	300%
1903	1,500*	275%
1976	2,800*	87%
1981	2,701	-3.54%
1986	3,230	19.59%
1991	4,238	31.21%
1996	4,304	1.56%
2001	4,368	1.49%
2006	4,623	5.84%
2011	5,686*	22.99%
2016	6,749*	18.70%
2021	7,812*	15.75%
2026	8,875*	13.61%

*Shaded text is estimated based on 1,700 units and an annual construction of 85 units/year with an average of 2.5 persons per household. The number of units/year was derived from 1700 units divided by a 20 year period (i.e. 2006-2026). <http://www40.statcan.ca/l01/cst01/famil53f.htm>). Therefore, every 5 years, the population would increase by 1,063 persons

Figure 3-4 - Population Projections (1978-2026)



Source: Graph extrapolated from the 2006 Census data from Statistics Canada

Demographics

The demographics in this section of the report are based on the 2001 Census, 100% Sample Data as reported by Statistics Canada. References to the 100% data from the 2006 Census are included; however, it is noteworthy that not all of the 2006 data was available at the time of this document.

It has been reported by Statistics Canada that the population for Manotick in 2006 was 4,623. This was an increase by 255 persons or 5.8% from the 2001 population figure of 4,368. Approximately 15% of the total population in 2001 were seniors (i.e. 60 years of age and older).

According to the 2006 Census data, the total number of private dwellings in 2006 was 1,612, which is an increase of 157 units from the 2001 Census which reported the number of private dwellings as 1,455.

The breakdown of dwellings into structural type for the 2006 Census is as follows:

Single-detached	1,460 units or 93.3% of the total # of dwelling units
Semi-detached	10 or 0.6% of the total # of dwelling units
Row house	91 units or 5.8% of the total # of dwelling units
Apartment, detached duplex	10 units or 0.6% of the total # of dwelling units
Apartment building > 5 or more storeys	0
Apartment building < 5 storeys	0

From these statistics, the predominant form of housing is single-detached.

The breakdown of the household composition is as follows:

- 1 person = 195
- Couple without children = 550
- Couple with children = 705 or
- Other household types = 120

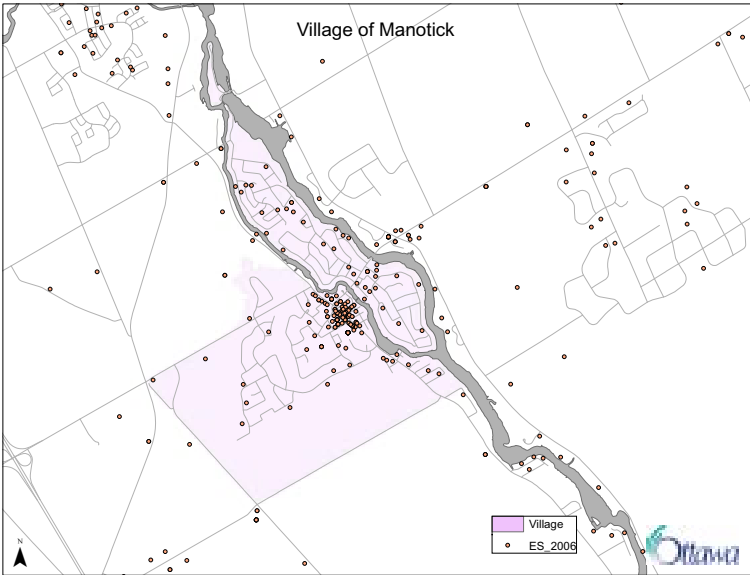
It is evident from these statistics that the majority of the households are occupied by couples, likely young or empty-nesters, as well as families.

According to the 2001 Census, the average family income in 2000 was \$130,000. The information provided by Statistics Canada demonstrates an affluent village community of young families and seniors living in predominantly single-detached housing.

Employment

Based on the recent "Employment in Ottawa Results of the 2006 Employment Survey", published by the City of Ottawa in November 2007, employment grew by 39,907 jobs (8.3%) from 2001 and 2006 in the City of Ottawa. According to the City,

Figure 3-5: Employment by Locations



the employment figure increased in Manotick by approximately 5.3% or by 67 jobs from 1,271 to 1,338. A breakdown of the employment by major sector in the village is provided in Table 3-2. It is evident from Figure 3-5 that there employment locations exist not only in the Village Core, but also in Manotick Estates, which are likley home-based businesses. It is noteworthy that at the time of this report, the offices for a consulting firm and the Rideau Valley Conservation Authority are planned to be relocated out of Manotick, resulting in some job less in Manotick. However, the opportunity exists for job creation through new home-based businesses in Mahogany Community, which would be implemented through zoning. It is noteworthy that at the time of this report, the offices for a consulting firm and the Rideau Valley Conservation Authority are planned to be relocated out of Manotick, resulting in some loss of jobs in Manotick.

Table 3-2: Employment by Occupation

Major Sector	Locations	2006		Total
		Full-Time	Part-Time	
Primary	0	0	0	0
Utilities	2	0	2	2
Construction	12	61	3	64
Manufacturing	2	2	0	2
Wholesale	2	3	0	3
Retail	42	177	150	327
Transportation and Warehousing	1	6	2	8
Information and Cultural	6	26	8	34
Finance and Insurance	7	44	10	54
Real Estate and Rental Leasing	9	28	16	44
Professional, Scientific and Technical Services	25	104	9	113
Management of Companies and Enterprises	1	1	0	1
Administrative and Support, Waste Management & Remediation Services	11	41	29	70
Education Services	7	56	12	68
Health Care and Social Assistance	15	42	68	110
Arts, Entertainment and Recreation	9	36	20	56
Accommodation and Food Services	12	83	51	134
Other Services	34	160	84	244
Federal Public Administration	0	0	0	0
Provincial Public Administration	0	0	0	0
Local Public Administration	1	4	0	4
Total	198	874	464	1,338

3.4 DEVELOPMENT UNIT POTENTIAL ANALYSIS

FoTenn Consultants Inc. conducted two analyses to identify infill development opportunities in the Village. The analysis was conducted in two parts: (1) a development unit potential analysis on vacant lands in December 2006 and (2) an analysis on the potential for multiple housing units in the Village Core in May 2007. The results of these analyses follows.

3.3.1 Vacant Land Analysis

The purpose of this analysis was to determine the number of residential units that may eventually be serviced once water and sewer are brought to the Village. Although this may take a long time, capacity may have to be reserved for this potential. The detailed methodology and analysis are provided at Appendix B.

Based on FoTenn's site visit in December 2006 to all of the vacant parcels that were illustrated on the City's 2005 Land Use Map as illustrated in Figure 3-6, many parcels were no longer vacant.

As a result, there were approximately 30 vacant parcels as of December 2006, excluding Parcels 10, 11, 12A, 12B, 12C, and 50B as illustrated in Figure 3-7. The Special Design Area (SDA) is approximately 76.3 ha (188.5 acres) and includes the lands bounded by Bankfield Road, First Line Road and Mud Creek. A concept plan for the SDA was approved in 2006 for residential development on private servicing (i.e. private water and septic systems) and are not planned to be connected to full municipal services (i.e. public water and sewer) in the future.

Parcel 10, which is the Subject Area, is not included in this specific analysis but it will be specifically addressed through the Development Concept Plan.

Based on the research, observations, and analysis, the unit potential in the Village of Manotick is illustrated in Figure 3-7 and summarized in Table 3-3 as follows:

Table 3-3 - Unit Potential Not Including Subject Area

	Number of Units	To Remain on Private Services
Existing as of Dec. 2005	1,574	17
Approved Plans of Subdivision/Concept Plan for SDA	59	210
Non-approved area potential subdivision plans	161	12
Infill unit potential excluding parks, open space and commercial spaces	56	
Total	1,857	239

In preparing the DCP it is necessary to review the total potential number of units that could be serviced within the Village boundaries outside the DCP Subject Area and estate areas. Assuming that the Special Design Area (Parcels 11, 12A, 12B and Parcel 12C) would remain on private servicing, the capacity that will need to be reserved for public services is for approximately 1,850 units leaving a residual capacity for the Subject Area.

3.3.2 Multiples in the Village Core Analysis

The purpose of the analysis is to identify parcels of land that could potentially accommodate multiple family housing units in the Village Core.

Under the Village of Manotick Secondary Plan, the Village Core lands are categorized into the following seven (7) land use designations and are illustrated in Figure 4-6:

- Bridge Street: Residential uses are permitted, including multiple family housing
- Main Street: Residential uses are permitted, provided they are located above retail commercial
- Historic Village – East Sector: Residential uses are permitted, including multiple family housing. Mixed-use development is also permitted provided that 2 or more permitted uses may be physically integrated within a building or separate buildings on the same lot. Multiple family housing is also permitted on Ann St. in the West Sector
- Post Office District: Residential uses are permitted, including multiple family housing
- The Gaps: Residential uses are permitted, including a multiple family district. A conceptual development scheme or a demonstration plan is required for this area before development can proceed.
- The Mews: Residential uses are permitted.
- The Arena: Residential uses are not permitted.

FoTenn identified eleven (11) sites that could have development potential for multiple-unit housing. These 11 sites are currently vacant or could be severed to create development opportunities. The total land area of the 11 sites is approximately 3.24 hectares (8.0 acres).

Based on the former Rideau Township Zoning By-law 2004-428, which was in effect at the time of this report, the minimum lot area of 0.195 ha was used. Sites 1 to 6 met this minimum lot area. The size of

the six sites total 2.576 ha. This land area was discounted by 20% for roads (i.e. 0.515 ha), resulting in 2.016 ha of developable land.

Based on the built density of existing multiples of 40 units/ha, the estimated development potential on the 6 sites, having a minimum lot area of 0.195 ha, could generate approximately 80 additional multiple family housing units in the Village Core as demonstrated in Table 3-4.

Table 3-4 Village Core and Vacant Land Analysis

	2001 Census	FoTenn’s Vacant Land Analysis of existing Village and Core Area	Sub-Total
Private Dwellings	1,455 units	1,850 units (serviced lots)	1,850 units
Multiples	55 units	80 units (additional units in the Core Area)	135 units
Percentage of Multiples	3.78 %	N/A	7.3 %

This means that there is the potential of 135 multiple units (55 existing + 80 additional) or 3.78% of the housing types in the existing Village of Manotick, including the Village Core area would be as a multiple unit.

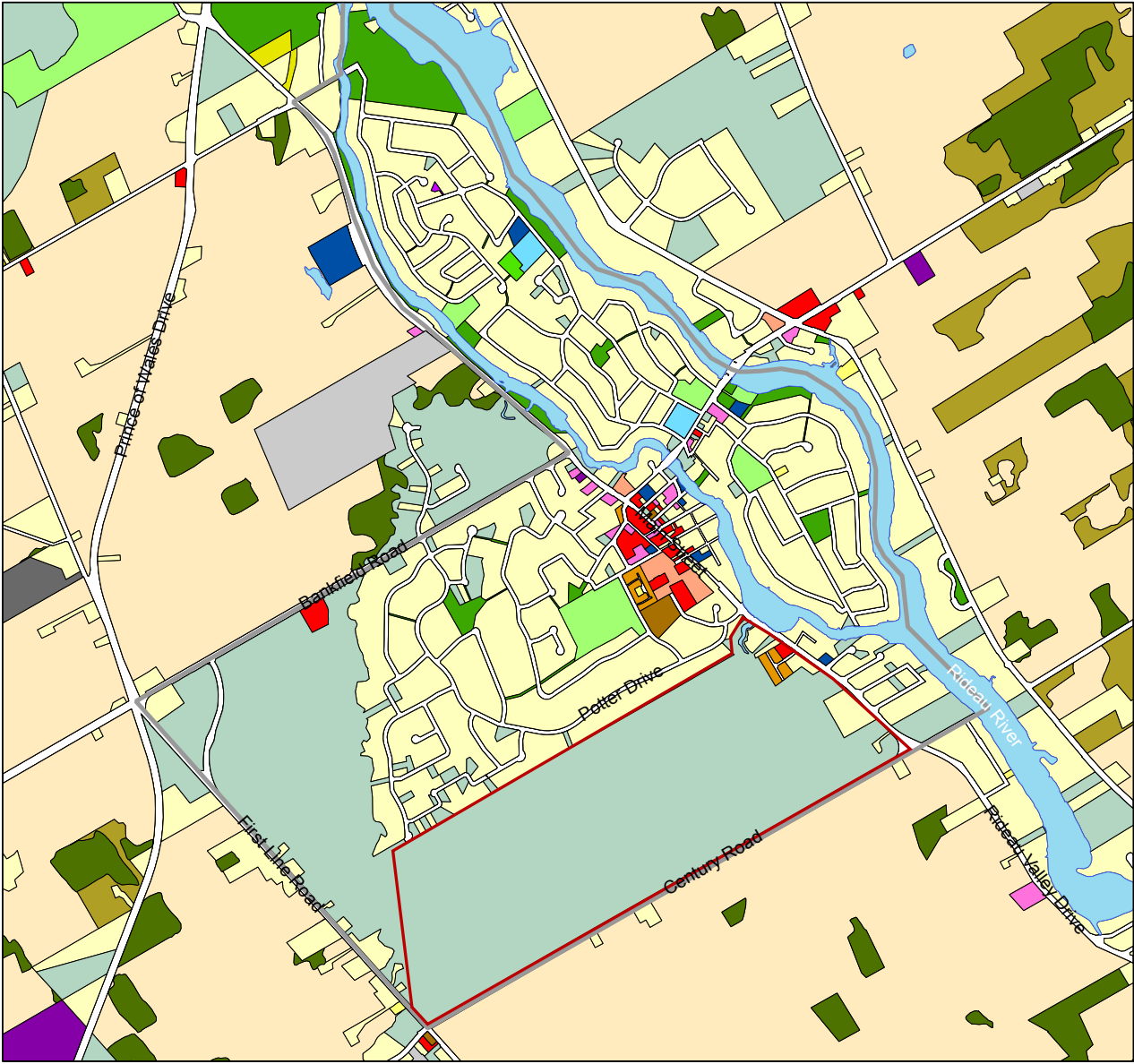
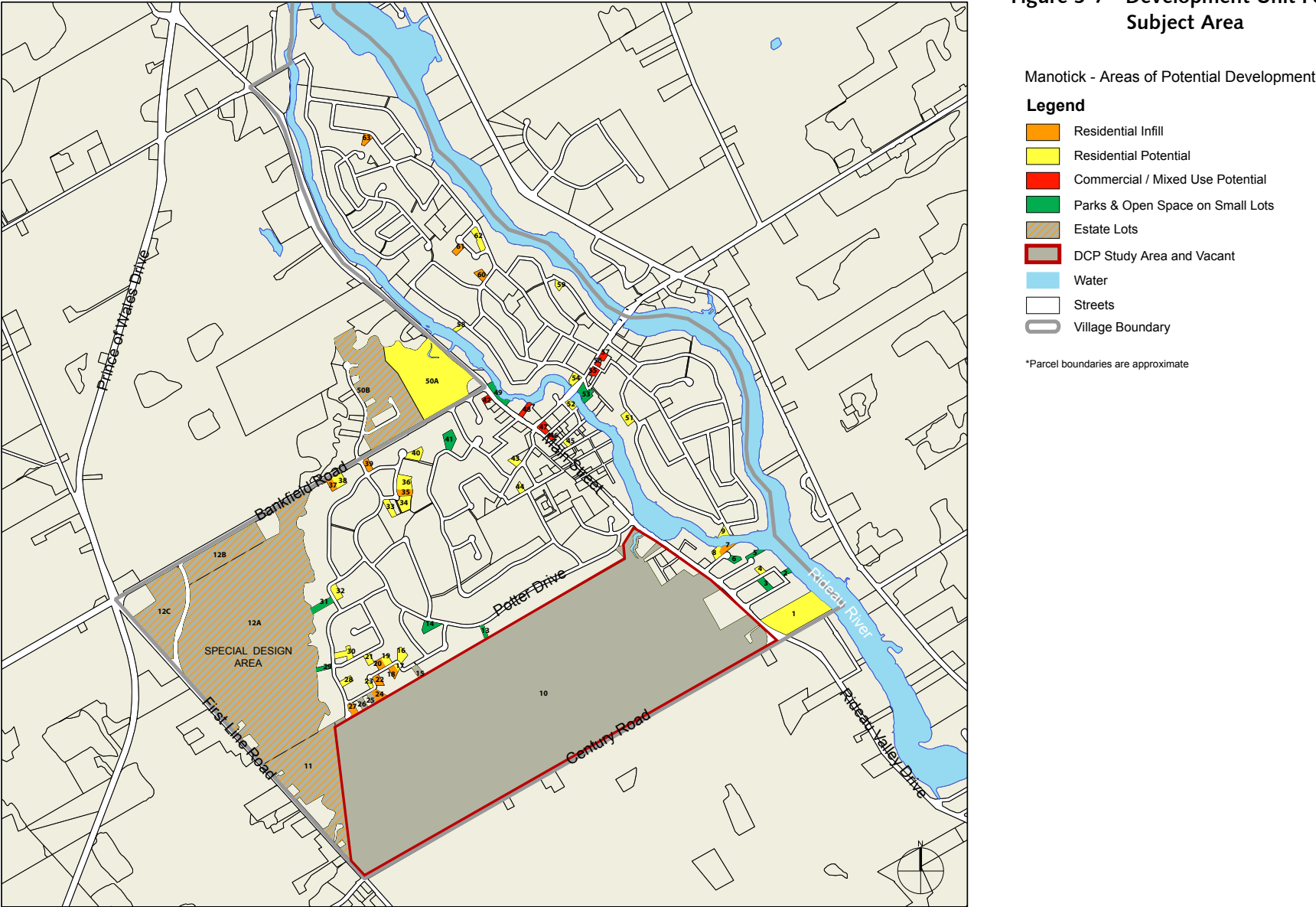


Figure 3-6 - City of Ottawa Land Use Map (2005)

- Legend**
- Single-detached residential
 - Semi-detached residential
 - Row and townhomes
 - Apartments
 - Mobile homes
 - Regional shopping centre
 - Community shopping centre
 - Other commercial
 - Elementary school
 - Secondary school
 - Post-secondary school
 - Post-secondary residence - postsecondaire
 - Hospital, rehabilitation, nursing home
 - Other institution
 - Industrial
 - Industrial condominium
 - Transportation
 - Utility
 - Communications
 - Office
 - Active recreation
 - Active recreation on school property
 - Passive recreation
 - Passive recreation on school property
 - Open space
 - Idle and shrub land
 - Agriculture
 - Forest
 - Pits and quarries
 - Vacant land
 - Vacant building
 - Wetland
 - Street
 - Water
 - Village boundary

Figure 3-7 - Development Unit Potential Not Including Subject Area



3.5 CULTURAL LANDSCAPE

The primary objective under the Secondary Plan is “to preserve and maintain the quality and character of life enjoyed by the people who live or work in Manotick.”

Corush Sunderland Wright (CSW) prepared a “Village of Manotick Cultural Landscape Analysis” in January 2007 to address the primary objective of the Secondary Plan. The CSW Analysis provides an illustrative depiction of the existing landscape and the unique features that form part of the Village. The following paragraphs are a summary of the Analysis.

The Village of Manotick has a unique village character within the Ottawa area and can be described as two character areas or “eras”.

The original village remains the core of the community with its commercial Manotick Main Street, as well as key landmark



Watson's Mill
Photo Courtesy of FoTenn

buildings, such as Watson's Mill and places of worship. Between Main Street and the Rideau River, the buildings are predominantly pre-World War II vintage on short, narrow streets.

The shops and arena on the west side of Main Street date back to the 1960s and 70s, but retain the pedestrian scale of the original village street grid. Along Main Street and several side streets in the Village Core, buildings are set right up against the sidewalk in a traditional commercial pattern. There is however, space between the buildings rather than a continuous street wall. The other residential neighbourhoods are typical post-war development, with a curvilinear street pattern, but with architectural variation within a generous and mature landscape.

Scale

The physical area of the Village is fairly small. The village is approximately 3.5 km long (north-south) and 2.5 km wide (east-west). The Village is composed of several neighbourhoods on Long



Historic Millstone
Photo Courtesy of CSW

Island as defined by the Rideau River, and the physical features in the vicinity of the Village Core. Most of the residential buildings are two-storey structures with pitched roofs. The homes in the Village Core and on the south end of Long Island are generally conventional in size while there are larger estate-residential homes on the north end of Long Island and along Potter Drive.

Form

The physical constraints such as the Rideau River define the Manotick neighbourhoods. Many of the neighbourhoods have a clear sense of entry either from a well-treed collector road onto a local residential street or by crossing over a bridge in the case of Long Island. Although these entries or gateways are not literal, they create a defining edge and passage experience in and out of the various neighbourhoods.

Topographic features also define the Village. There is a hill east of Main Street in the original village and Maple Street and Old Colony Road are on a larger hill. The most dramatic sense of topography is experienced along the steep banks of the Rideau River or from the Long Island Bridges. These views along the River in combination with the mature trees restrict long vistas. The key views are to the Rideau River or of key heritage buildings such as Watson's Mill, and the spires of Manotick United and St. James Anglican Churches.

Manotick's landscape is generally informal and mature, with many large deciduous and coniferous trees as boulevard planting, and in larger groups and small woodlots.

Character

There are relatively few authentic and high quality heritage buildings, such as Watson's Mill, St. James Anglican Church and Manotick United Church. Commercial buildings and older homes have a heritage character with their pitched roofs, painted clapboard siding, raised panel doors and painted windows, however there are also many bland structures, such as the two commercial plazas.

The surrounding landscape on the west side of the Village is a rural agrarian landscape with farm fields, hedgerows, woodlots and occasional groupings of farm buildings. This rural context comes right up to the edges of the Village, giving it very clear spatial definition and a sense of scale.

There are several artifacts and memorials in the Village that speak to the community's heritage values. These include the stone entrance walls with the Manotick name and a millstone at Main and Bridge Streets, a monument on Mill Street, the Cenotaph by the River on Mill Street and the lookout at A.Y. Jackson Park. The navigational aids and views of docks and boats on the Rideau River are reminders of the Village's location on this heritage waterway.

While Manotick is fairly large in physical terms, there is still a sense of 'village' conveyed by the combination of scale, development pattern and informal landscape.

Nonetheless, there is an overall impression that Manotick is an authentic older settlement, which had an independent life of its own based on a real relationship with the surrounding farms and proximity to the Rideau waterway. In other words, Manotick is not a new suburb of Ottawa, but a place with a past.

It is envisioned that the proposed development of the Subject Area lands is an extension of the existing Village in terms of scale, form, and character, where possible, to reflect the authenticity and uniqueness of the Village to address the primary objective of the Secondary Plan.

Community Design Guidelines have been prepared specific to the Mahogany Community and are discussed in more detail in the Development Concept Plan document.



Commercial and institutional buildings along Main Street
 Photo courtesy of CSW

CHAPTER 4 - THE PLANNING FRAMEWORK

This Chapter provides an overview of the planning framework used in preparation of the DCP. It also includes a land use policy framework and summaries of existing conditions that have been completed for this project including the natural environment, as well as transportation and servicing infrastructure.

4.1 POLICY FRAMEWORK

4.1.1 Provincial Policy Statement 2005

The 2005 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. One of the key policies in the PPS is to build strong communities by managing and directing land use to achieve efficient development and land use patterns.

In addition, the Province’s long term prosperity, environmental health and social well-being depend on the protection of the natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits (Section 2.0).

For example, Policy 2.1.4 (e) states that development and site alteration shall not be permitted in significant areas of natural and scientific interest, as identified by the Ontario Ministry of Natural Resources, unless no negative impact on the natural features or on their eological functions has been demonstrated. Also, development and site alteration in fish habitat is not permitted except in accordance with provincial and federal requirements (i.e. the [Fisheries Act](#)).

Under the PPS, settlement areas “shall be the focus of growth and their vitality and regeneration shall be promoted” (Policy 1.1.3.1). A “settlement area” is defined in the PPS as urban areas and rural settlement areas within municipalities such as villages that are:

- Built up areas where there is a mix of land uses; and,
- Lands which have been designated in an Official Plan for development over the long term planning horizon (Section 6.0).

One of the key policies in the PPS states that land use patterns within settlement areas shall be based on:

- Densities and a mix of land uses which:
 - o Use land and resources efficiently;
 - o Are appropriate for and efficiently use infrastructure and public service facilities which are planned or available, and avoid the need for unjustified and/or economical expansion; and,
 - o Minimize negative impacts to air quality and climate change and promote energy efficiency (Policy 1.1.3.2 (a)).

In addition, planning authorities shall establish and implement phasing policies to ensure orderly development along with the timely provision of infrastructure to meet current and future demand.

The Province recognizes the need for efficient development patterns that optimizes the use of land, resources and public investment in infrastructure and public service facilities, and directs land use to achieve efficient development and land use pattern which accommodate “an appropriate range and mix of residential, employment (including, commercial and institutional uses), recreational and open spaces uses to meet long-term needs” (Policy 1.1.1 (b)).

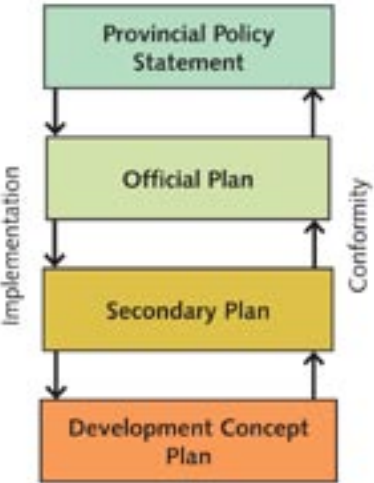
In addition, the PPS contains housing policies which require planning authorities to provide for an appropriate range of housing types and densities required to meet current and future residents (Policy 1.4).

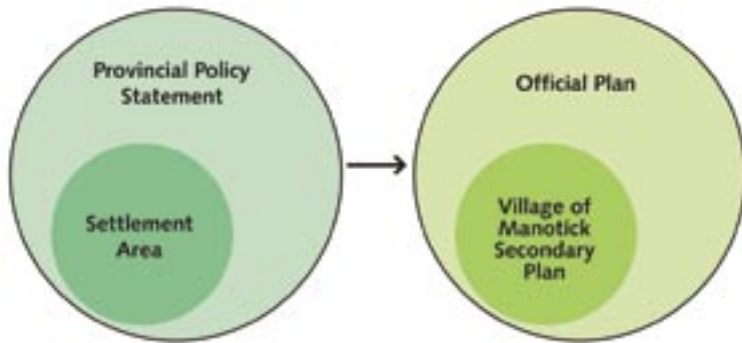
The PPS also encourages municipalities to establish and implement minimum targets for the provision of affordable housing.

The PPS contains overarching policies with which local Official Plan policies must be consistent as it relates to land use planning and development. Therefore, these broad Provincial policies are further refined in subsequent policy documents as described in the following sections.

4.1.2 Former Township of Rideau Official Plan 1995

Although not in effect, the Subject Area is designated in the former Township of Rideau Official Plan, 1995 as **Special Policy Area R-2**. The policies indicate that it is an area of potential development and that development can only proceed after the completion of a detailed study and development of a concept plan and a secondary plan.





4.1.3 City of Ottawa Official Plan, 2003, Consolidated January 2007

The Ottawa Official Plan provides policies to implement the direction provided in the PPS. The Official Plan (OP) states that growth in the rural areas will be focused in villages as they provide residents with better access to community facilities and services, particularly for seniors and youth. There are 26 villages, including Manotick, designated in the Official Plan. The village land use policies of the Plan support a variety of land uses to provide for the daily needs of the rural community. It is intended that they remain distinctly rural in character and scale.

The general intent of the policies is to allow a wide range of housing forms to be permitted in Villages. The policies also state that “Village development means that the open space character of the rural area will be maintained” (Section 2.2.2). In addition, Section 2.2.2 states that focusing growth in Villages provides residents with better access to community facilities and services, especially for seniors and youth.

Village Boundaries (Section 2.2.2)

In the City of Ottawa Official Plan 2003, Consolidated January 2007, the Subject Area is designated as **Village** on Schedule A – Rural Policy Plan (Figure 4-1).

Growth within the rural area, which historically has accommodated about 10% of the city’s population, will be focused on Villages.

The general intent of the policies is to allow a wide range of housing forms to be permitted in Villages. The policies also state that “Village development means that the open space character of the rural area will be maintained” (Section 2.2.2). In addition, Section 2.2.2 states that focusing growth in Villages provides residents with better access to community facilities and services, especially for seniors and youth.

Villages (Section 3.7.1)

The intent of the Village policies is to permit a variety of land uses to provide for the daily needs of the rural community and to ensure that they remain rural in character and scale (Policy 3.7.1.1). The distribution of land uses and intensity within a Village will be determined in the context of any plan for the Village contained in Volume 2, or a community design plan. The Village of Manotick Secondary Plan is found in Volume 2C and forms part of the Official Plan. Section 4.1.4 of this report contains the Secondary Plan policies as they relate to the Subject Area lands.

The Official Plan policies encourage the development of residential uses in a variety of forms and modest employment opportunities, in the form of commercial, tourism and small-scale industrial development in Villages (Section 3.7.1). In addition, Policy 3.7.1(3) states that “a wide range of housing forms to meet the needs of the Village’s population will be permitted in Villages”. Policy 3.7.1(4) provides a list of permitted uses, which includes retail and commercial service facilities of up to 10,000 m² of gross leasable area, restaurants, offices, and personal service establishments, light industrial uses, institutional uses such as schools, community meeting and recreational buildings, places of worship and public open spaces.



**Figure 4-1 - City of Ottawa Official Plan (2003)
Consolidated January 2007**

Growth within the rural area, which historically has accommodated about 10% of the city’s population, will be focused in Villages. Section 2.3 of the Official Plan states that land use and infrastructure issues are strongly inter-related and form a cornerstone of the City’s growth management program. The provision of urban infrastructure such as wastewater disposal shapes development patterns by making more intensive use of the land base possible. Policies governing the extension and upgrading of infrastructure are key in managing growth.

Transportation (Section 2.3.1)

In 2003 the City of Ottawa adopted a Transportation Master Plan, which identifies policies, facilities and services to meet the travel needs in Ottawa. The City will develop a road network to provide for the safe and convenient movement of people and goods. In order to develop a road network, the City will protect rights-of-way. According to Table 11 of Annex 1 in the Official Plan, Century Road is protected for a 30 m right-of-way.

Water and Wastewater Services (Section 2.3.2)

Policy 2.3.2 (4) (b) states that the City will provide for the creation of new Public Service Areas to support growth in Villages based on intensification of use and the recommendations contained in a Village community design plan. The Village of Manotick Development Concept Plan (DCP) is similar to a “community design plan”.

Compatibility and Community Design (Section 2.5.1)

The Official Plan contains a section on compatibility and community design. According to Section 2.5.1, “compatible development means a development that, although it is not necessarily the same as or similar to existing buildings in the vicinity, nonetheless enhances an established community”. A number of Design Objectives and Principles have been developed, and the Design Framework in Annex 3 provides suggestions in designing new communities.

Affordable Housing (Section 2.5.2)

The City of Ottawa’s Official Plan policies recognize that the “need to accommodate social diversity is a cornerstone of a livable community” (Section 2.5.2). The City “will encourage the production of affordable housing in new residential development” (Policy 2.5.2(2)).

Schools and Community Facilities (Section 2.5.3)

The City, through the Human Services Plan, is currently reviewing its physical infrastructure for providing facilities for recreation, arts, libraries and services such as community health and resource centres, childcare and long-term care facilities, as well as emergency services and dispatch centres. Opportunities to locate facilities and services in the same location and to work with public and private partners are being explored by the City.

Schools are viewed as a multi-use facility by providing space for day cares, informal meeting places, as well as indoor and outdoor

recreational space within communities. In new communities, new schools are needed to reduce crowding and bussing of students.

Although schools are not part of the City’s jurisdiction, Policy 2.5.3 (1) states that the City “will work in partnership with school boards and school communities to ensure that schools are provided in all communities.”

FoTenn and Minto contacted the four local school boards in order to assess school site needs within the Subject Area. The Ottawa-Carleton District School Board has expressed a potential need for a school site. The Ottawa-Carleton Catholic School Board has also indicated the need for a school site in the DCP Subject Area. The French Public and French Catholic School Boards advised they do not have a need for a school site within the Subject Area.

Natural Features and Functions (Section 2.4.2)

The Official Plan defines natural features as “physically tangible elements of the environment” such as forests, rivers, and associated wildlife habitat areas along the edge of, or which support ecological functions within the natural feature (Section 2.4.2). The policies state that the City will maintain a full range of natural communities in good conditions, as well as the provision for the needs of a variety of wildlife including seasonal habitats and linkages (Policies 2.4.2.1 (c) and (d)). One way the City intends to implement these policies is through a “design with nature” approach, where the features of a site are incorporated into the design of a proposed development.

Greenspaces (Section 2.4.5)

Section 2.4.5 of the Official Plan contains policies for greenspaces and woodlots in Villages that serve natural functions and are valued for serving human needs (e.g. a place for outdoor recreation). A key objective is to identify a greenspace network, which can include natural features and linkages for wildlife movement and for public accessibility to pathways on river banks.

In addition, Policy 2.4.5 (9) states that “all homes will be within 400 metres of a greenspace” in residential areas in the urban area.

Agricultural Resources (Section 3.7.3)

The lands beyond the Village of Manotick boundary are designated in the Official Plan as Agricultural Resources. The Official Plan policies recognize the importance of these lands as areas of economic activity for farmsteads and for related businesses. Policy 3.7.3 (19) requires that all new non-farm development comply with the Minimum Distance Separation (MDS) formulae. The Ministry of Agriculture, Food and Rural Affairs updated the MDS formulae in 2006 and has been in effect since January 1, 2007. Based on discussions with the City, the MDS formulae may apply to lands within the urban boundary (or village); however, this does not apply to farms outside the urban boundary adjacent to residential uses, since this was considered in establishing the boundary.

Environmental Protection (Section 4.7)

This section of the Official Plan describes how “design with nature” is implemented through the development review requirements, which include a number of environmental, hydrogeology and other studies to demonstrate any potential impacts on the natural environment. These required studies have been completed by numerous consultants as part of the DCP process and are available under separate covers. The highlights from these are provided throughout this document and under the Draft Background Report, April 2007, prepared by FoTenn Consultants and is available on the FoTenn web site.

River Corridors (Section 4.6.3)

To examine any impacts the development may have on the Rideau River, a cultural heritage impact assessment is required for development adjacent to the Rideau River. EcoTec states that because of close proximity of the watercourses to the Rideau River they may be used by northern pike for reproductive purposes.

Protection of Vegetation Cover (Section 4.7.2)

One of the Official Plan objectives is to achieve 30% tree cover at the time of subdivision or site plan approval. To demonstrate this objective, a tree conservation and protection plan and a landscape planting plan will be required as part of the plan of subdivision application. According to Policy 4.7.2 (1) (a), the plans will “retain as much natural vegetation as feasible, especially along watercourses, steep slopes, valued woodlots and in areas linking green spaces, with a particular emphasis on high quality or rare vegetative communities.” In addition, the plans will identify, among others, tree stands or individual trees that warrant retention, measures for protection, the nature of tree loss and propose compensation measures, tree planting or vegetative cover required to provide protection for stream courses or steep slopes In addition, where there is substantial alteration of the natural vegetation cover on the site, the impact on fauna or rare species during and after construction will need to be considered as well as mitigation measures.

Endangered Species (Section 4.7.4)

The City’s endangered species policy states that no development is permitted in significant portions of the habitat of endangered and threatened species. Development and site alteration on lands adjacent to the habitat may be permitted if there is no negative impact on the habitat.

A Strategy for Parks and Leisure Areas (Section 2.5.4)

Section 2.5.4 explains that parks and leisure areas include major facilities such as arenas, community centres, and major community complexes that combine recreation, child-care, libraries, and other facilities. Policy 2.5.4 (2) provides a target for the City’s urban areas and villages “of a minimum of 2.0 hectares per 1,000 population, or approximately 8 per cent to 10 per cent of developable land, will be pursued.” The Official Plan provides the following mechanisms for the City of Ottawa to achieve this target:

- Parklands dedicated to the City under the Planning Act;
- Lands leased from or secured by agreement with other public agencies (e.g. National Capital Commission) for park and leisure purposes; and
- Large parks purchased by the City.

In the past couple of years, the City of Ottawa’s Parks and Recreation Branch have worked with a Manotick Parks Needs Working Committee, which resulted in targeting the Manotick Works Yard site on Rideau Valley Drive as a potential location for both an active park and a snow disposal facility. The proposed park plan would be located adjacent to the Ottawa Public Yards, north of the Miller’s Point subdivision. The park is proposed to consist of several playing fields, suitable for day to day programming and tournaments.

Although a park is proposed adjacent to the Ottawa Yards, the City’s Parks and Recreation Branch identified that there is a need for a comprehensive planned park and open space system for the Subject Area. The park and open space system must address both the active and passive recreational needs of the new community. This should also include comprehensive linear open space linkages which provide important pathway connectors to existing Manotick Neighbourhoods, new and existing community destination points and to other existing and planned linear connectors, such as the proposed Mud Creek pathway corridor. The system should also take advantage of any natural features that are retained within the Subject Area.

The park and open space system should include focal neighbourhood and community parks. The focal parks should be of a functional size and shape (square or rectangular), with significant road frontage. The focal parks, where possible, should be associated with or adjacent to the linear open space system and natural open spaces.

In addition, there should be a focal neighbourhood park serving each neighbourhood, and a centrally located community park. Each neighbourhood park may include but not limited to such elements as

play structures, seating/park furniture, hard surface areas, informal grassed open areas for informal active use and possibly for an outdoor rink, landscaping and other facilities as warranted.

The community park(s) may include but not be limited to the above elements as identified for neighbourhood parks, plus one or more sports fields, water play facility, concrete storage bunker, vehicular parking, and other facilities as warranted.

Any focal parks which may contain sports fields shall not be situated immediately adjacent to a school site, however they may be situated across the street from a school site.

Stormwater management facilities, if designed in a natural and complimentary manner, may be situated adjacent to dedicated public parks and natural open spaces, since an appropriate design for these facilities may contribute to the natural environment and open space system. The sites on which stormwater management facilities are situated shall not form part of the dedicated public parks/open spaces.

The Natural Environment Area, as confirmed by the City, will not be included as part of the required 5% parkland dedication.

These elements were considered in the preparation of the three development concept plans and the Land Use Concept Plan.

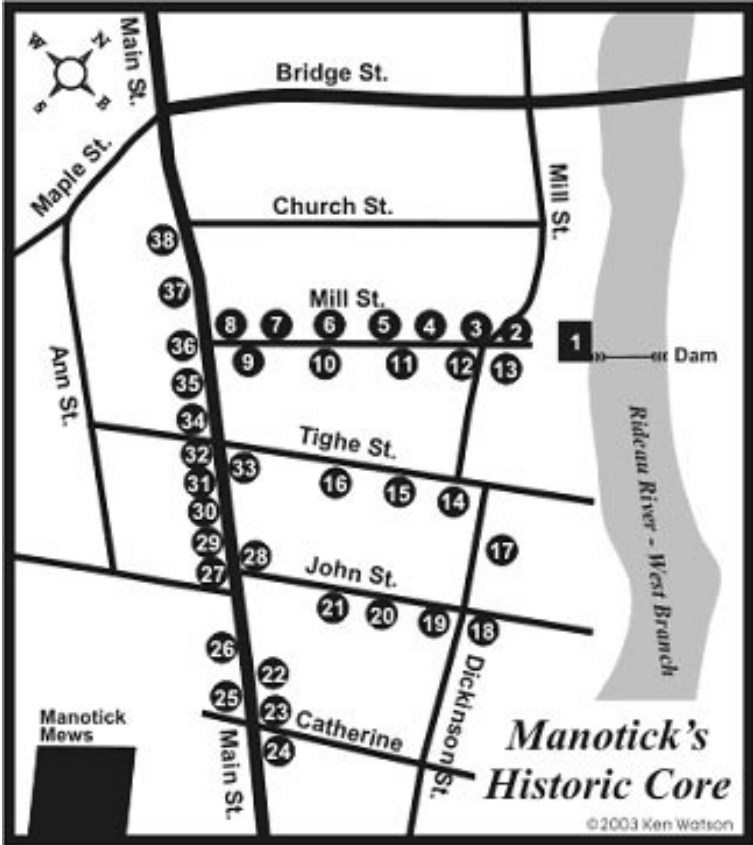
Cultural Heritage Resources (Section 2.5.5)

Heritage defines the uniqueness and distinction between one community from another. Cultural heritage includes: built heritage; cultural heritage landscapes; archaeological resources; and documentary and material heritage.

Policy 2.5.5 (3) states that the “City may recognize core areas of Villages, older residential neighbourhoods, cultural landscapes or

other areas as Cultural Heritage Character Areas, “where design guidelines will be prepared to reflect the identified cultural heritage features of a community.” The City has prepared design guidelines for thematic land uses and various roadways, however design guidelines for Villages were not available at the time of this report. As part of the DCP planning process, community design guidelines were developed for the DCP Subject Area.

Figure 4-2 - Manotick's Historic Core



Source: Rideau Township LACAC, 2003

Heritage Properties

Manotick’s Village Core is rich in properties of heritage significance. The oldest surviving building is Watson’s Mill, built in 1860. According to a walking tour designed by the former Rideau Township Local Architectural Conservation Advisory Committee (2003), approximately twenty buildings in the Village were constructed in the late 1800s and another thirteen between 1900 and 1930 (Figure 4-2).

The first businesses to be established in Manotick were blacksmiths, waggoners, and agricultural implement dealers, suggesting that the majority of trade came from the neighbouring farming community (RVCA, 1980). In addition to these uses, the heritage buildings found in Manotick’s Core were originally built as the following: general store, jewelry store, hat shop, dress shop, barber’s shop, veterinarian office, doctor’s office, harness maker, undertaker, bank, hotel, church, and residence.

Eleven properties in Manotick are designated under Part 4 of the Ontario Heritage Act. They include:

- Manotick United Church (5567 Main Street)
- Watson’s Mill (5525 Dickinson Street)
- Dickinson House (1127 Mill Street)
- The Weavers’ House (1131 Mill Street)
- Miller’s Oven, Oddfellows’ (1137 Mill Street)
- Delightful Fancies (5538 Main Street)
- The Pretty Old Shop (5562 Main Street)
- Sunflower Lane (5561 Main Street)
- Kit and Kaboodles (5559 Main Street)
- Lincez (1130 John Street)
- MacOdrum, Laird (1126 John Street)

The Ontario Heritage Trust’s Online Plaque Guide indicates that one provincial plaque exists in Manotick, which is located at

Watson’s Mill.

Figure 4-3 illustrates the village amenities including elementary schools, both of which are located on Long Island, the recreational facilities, including the Manotick Arena, which is located to the north of the Subject Area, and the built heritage area of Dickinson Square.

Archaeological Resources (Section 4.6.2)

According to the City of Ottawa’s Archaeological Resource Potential Mapping Study, there are areas identified as having archaeological potential, primarily along the watercourses as illustrated in Figure 4-4. Ottawa Official Plan Policy 4.6.2(1) requires that an archaeological resource assessment be carried out in areas where there is existing archaeological potential.

In February 2007, Adams Heritage conducted a Stage 1 Archaeological Assessment for the Subject Area lands. The archaeological consultants agreed with the City of Ottawa’s mapping. In addition, the consultants reported that there are areas of moderate to high archaeological potential based on topographical conditions which indicate the possibility that pre-contact (i.e. from approximately 10,500 years ago until 400 years ago) archaeological sites may exist within the Subject Area and that there is a possibility of the presence of historic settlement from the early and mid-19th century. A Stage 2 Archaeological Assessment will be required at the subdivision stage.

Unstable Soils or Bedrock (Section 4.8.3)

Mud Creek, the Wilson-Cowan Drain and its tributary are illustrated in Figure 4-5 as having Unstable Slopes, which is an extract of the City of Ottawa’s Official Plan Schedule K-Environmental Constraints. Details of these watercourses and environmental features are provided in section 4.3 of this document.



Figure 4-3 - Village Amenities

- Legend

Study Area

Village Boundary

Parks / Open Space

Recreational Facility

1 Manotick Arena

2 Swim Club

Civic Institution

1 Dickinson Square / Watson's Mill

2 Manotick Public Library

School

1 Manotick Public School

2 St. Leonard Catholic Elementary School

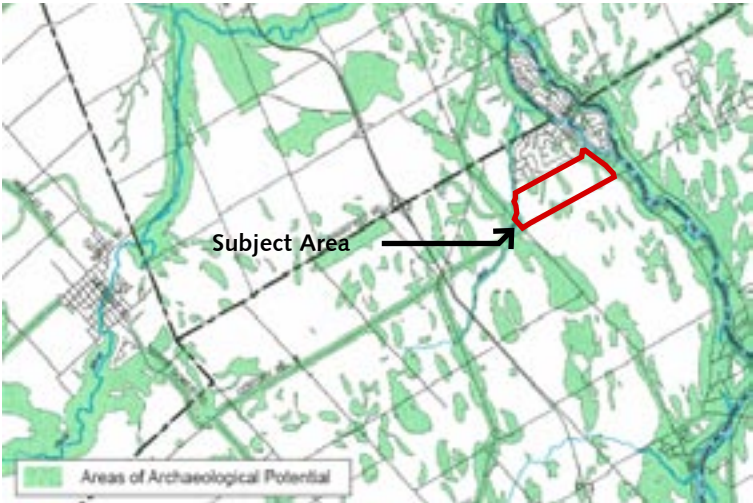


Figure 4-4 - Areas of Archaeological Potential

Policy 4.8.3 (1) states that a plan of subdivision shall be supported by a geotechnical study to demonstrate that the soils are suitable for development. Minto retained Paterson Group to conduct the geotechnical work. As discussed in more detail in Section 4.6 of this report, the Subject Area is generally suitable from a geotechnical perspective.

4.1.4 Village of Manotick Secondary Plan (2001)

The Secondary Plan provides detailed policies that state how the Village will develop in the future. The Subject Area lands are designated as Serviced Development Area in the Secondary Plan.

The Secondary Plan requires that a comprehensive development concept plan is prepared for the entire area, to the satisfaction of the City of Ottawa, that will facilitate the logical phasing of development in the area (the integration of transportation links, parks and open space, schools pedestrian links and stormwater) and that will form the basis for various, subsequent plans of subdivision.

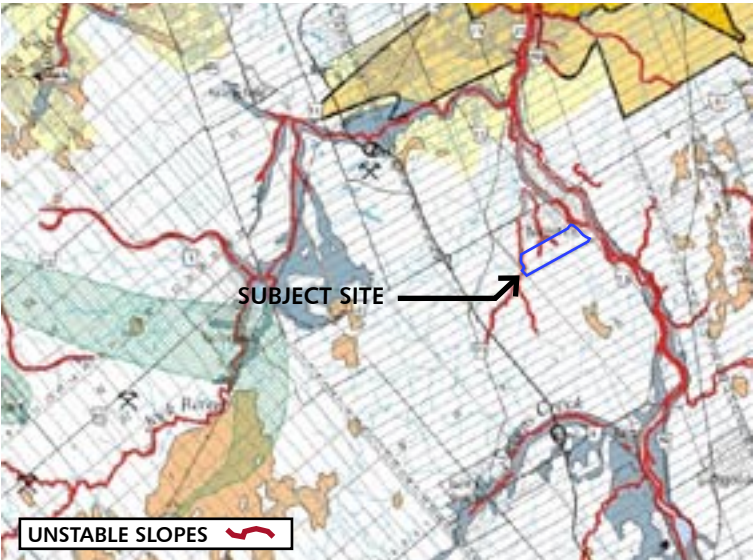


Figure 4-5 - Schedule K - Environmental Constraints

The following paragraphs describe the key Secondary Plan objectives and will demonstrate how the DCP conforms to these objectives. Reasons are also provided where the DCP does not conform to two objectives.

Primary Objective

The primary objective of the Secondary Plan “is to preserve and maintain the quality and character of life enjoyed by the people who live or work in Manotick” (Secondary Plan Policy 3.7.2.2).

The quality and character of the Village of Manotick is not homogeneous. The Village has developed over one hundred years in different waves of settlement that are evident as one walks or drives around the Village. The Village Core with small lot sizes, buildings close to the street, grid street pattern, and the key landmarks such as Watson’s Mill depict the early years of settlement in the Village pre-World War II.

The next wave of settlement was post-World War II. With the dominance of the automobile, the settlement began to extend east and west of the Village Core, including Long Island. One of the key elements of the post-World War II era is the curvilinear street pattern.

The two most recent waves of settlement are different in terms of the scale and nature of development. One of these waves is the townhouse development of Village Walk, which is in the Village Core, developed as small lot sizes, with a narrow street pattern and relatively minimal landscaping. The most recent wave of development is the approval of estate lots in Manotick Estates, the Special Design Area and Miller’s Point, all of which have large homes on large lot sizes, which is visually different from the small lots in the Village Core.

The purpose of describing the waves of settlement is to demonstrate that the Village does not have one specific quality that is homogeneous throughout the area. Manotick has had periods of settlement that have created heterogeneous qualities in the Village and have brought people to the area. The Mahogany Community is another wave of development that will contribute to the heterogeneous quality, variety, and character of the Village, while recognizing that it is a place with a past.

Based on the information provided in the historical analysis in Section 3.2, it is clearly evident that Manotick has experienced a long history of growth and development of varying scales and durations. The most prominent growth period spanned over a decade between 1981 and 1991 on both Long Island and the mainland. The predominant development on the mainland was the Manotick Estates area. The character of the Village changed, but the Village survived and continues to thrive.

The next wave of development is expected to occur almost 20 years later in 2009 with the construction of the Mahogany Community. The proposed number of dwelling units demonstrates that the next wave of development and the change in population is less than

the growth the Village experienced between 1981 and 1991. The Village will continue to survive, even with the new development, as it did 20 years ago.

The DCP maintains this primary objective in a variety of ways by providing a variety of land uses, house types, and lot sizes similar to the Village and by preserving large areas for parks and open spaces. The primary objective will be implemented by the Community Design Guidelines.

Secondary Objectives

There are fifteen (15) Secondary Objectives in Section 3.7.2.2 (B) of the Secondary Plan. All fifteen objectives were evaluated prior to the preparation of the Land Use Concept Plan and can be found in Appendix C. Some of the objectives were not applicable to the Subject area. Table 4-1 lists these objectives and demonstrates how the DCP conforms to the objectives and which objectives do not apply since they are outside of the Subject Area.

Objective 10 -

Compatibility with Established Character & Built Form

A transition area is provided along the northern edge of the Subject Area lands consisting of large estate, single family lots, similar to the existing residential lots on Potter Drive, Watterson Drive and in Manotick Estates.

Community Design Guidelines which form part of the DCP for the transition area illustrate how buffering could be provided through rear yard setbacks, which would be established and implemented through the zoning provisions.

With respect to character, the DCP identifies a central Spine Road, which would be structured as a “rural lane” with informal hedgerows, sidewalks inside boulevard trees with homes in adjacent neighbourhoods. In addition, there is a pathway proposed along the Spine Road which would also contribute to the rural character

of the area.

Furthermore, the proposed lot sizes are consistent with the existing Draft City of Ottawa Comprehensive Zoning By-law (September 2007). Examples of similar zones in serviced Villages include: V2D in the Village of Greely; V2D, V3A and V3E in the Village of Richmond; and V2E, V3B, and V3I in the Village of Carp.

The overall growth management guiding principle for the Village is to ensure that new residential development outside of the Village Core is primarily single family, detached housing (Policy 3.7.2.3(A) (2)).

In terms of population, the Secondary Plan policies “[a]llow the area of the village to be serviced on central services to gradually grow to accommodate approximately 2,000 housing units, and up to 2,000 jobs by the year 2020” (Policy 3.7.2.3 (C) (1)).

The Subject Area has a number of designations including Single Family (i.e. Estate, low density and moderate density) with a **Serviced Development Area** overlay (Figure 4-6). Although the predominant use for the Special Design Area is residential estates development on 0.4-0.6 hectare lots, the densities proposed in the Secondary Plan for the Subject Area (i.e. Serviced Development Area) lands are generally low for greenfield developments on municipal services.

The policies for lands designated Serviced Development Area shall be developed without an Amendment to the Plan, provided that the following conditions are satisfied:

- All development shall be on the basis of central water and wastewater services;
- A comprehensive development concept plan is prepared for the entire area, including a phasing plan for future development, and that it form the basis of subsequent plans of subdivision; and

- The location and ownership of schools, recreation and/or open space areas will be to the satisfaction of Council and determined in consultation with landowners and the Manotick community.

The following are other objectives identified in the Secondary Plan:

- To provide for a range of community service and institutional uses which support the needs of the Village and its residents (Policy 3.7.2.7 (1) (a));
- Community services and institutional uses shall be centrally located in residential areas along collector roads and pathways to provide ease of access for vehicles, pedestrian and cyclists (Policy 3.7.2.7 (2) (a));
- The area between the east and west branches of the Wilson-Cowan Drain located north of Century Road shall be retained as a natural area (Policy 3.7.2.8 (2) (c) (i));
- To provide a network of cycling and pedestrian paths throughout the Village (Policy 3.7.2.8 (1) (a));
- To create a safe and convenient cycling and pedestrian environment (Policy 3.7.2.8 (1) (b));
- To maintain and expand upon open spaces and recreational areas (Policy 3.7.2.8 (1) (c));
- An eastern and western open space node shall be developed in the area located south of the Potter Drive residential area. The intended function of which are neighbourhood parks and shared open spaces with possible future school sites (Policy 3.7.2.8 (2) (c) (ii));

Table 4-1 - Village of Manotick Secondary Plan Objectives

Secondary Plan Objectives (Policies 3.7.22 (B)(1 to 15))	Conformity		
	Yes	N/A	How
1. Federal & Provincial Policies: To have regard to Federal & Provincial policies inasmuch as they apply to a Village;	✓		DCP is consistent with the Provincial Policy Statement
2. Rideau Official Plan: To provide policies to conform with the Ottawa Official Plan;	✓		DCP conforms to the Official Plan
3. Periodic Review: To provide for the periodic review of this Plan and its performance not less frequently than each five (5) years and to take action as deemed appropriate where the Plan's performance is proceeding in a manner which is not consistent with the Primary Objective;	✓		A 5-year review of the Village of Manotick Secondary Plan has not been completed, however background studies have been completed as part of the DCP, which provide updated information on transportation, servicing, and natural environment.
4. Natural Resources: To conserve Manotick's natural resources and to encourage their preservation;	✓		Land Use Concept Plan proposes to preserve portion of the Candidate ANSI, NESS Area 506, and Stream Corridors
5. Rideau River Shoreline: To provide for the preservation and/or acquisition of the Rideau River shoreline and its availability for public enjoyment;		✓	Beyond Subject Area limits
6. Heritage Resources: To conserve and enhance Manotick's heritage resources and the Village's identity and character as an historic town on the Rideau Canal National Historic Site, a Canadian Heritage River;	✓		Community Design Guidelines
7. To protect and enhance the environmental quality of the Rideau Canal (River), a Canadian Heritage River, by encouraging shore land property owners to naturalize their shore lands in the interests of improving water quality and to re-establish the natural appearance of the Rideau Canal shore land;		✓	Beyond Subject area limits
8. Infrastructure: To provide a strategy for the provision of infrastructure to Manotick;	✓		Master Servicing Plan has been prepared
9. Pedestrian and Cycling Routes: To provide safe, convenient and pleasant pedestrian and cycling routes throughout the Village;	✓		Transportation Plan has been prepared
10. Compatibility with Established Character & Built Form: To ensure compatibility of any new development or redevelopment with the existing community and its established character in terms of the type, scale and built form of the new development or redevelopment;	✓		*See Objective 10 text in following paragraphs.
11. Village Core Commercial: To protect and enhance the commercial functions of the Village core;	✓		No commercial is proposed on the Land Use Concept Plan
12. Jobs & Housing: To provide adequate opportunity for jobs and housing in the overall community in a manner that is desirable for a Village and consistent with the community's Vision;	✓		Mix of housing is provided
13. Recreation & Leisure Facilities: To provide recreation and leisure facilities that are conveniently located and accessible to all residents;	✓		Land Use Concept Plan provides for parks and open space areas throughout the community
14. Orderly Growth & Development: To provide for an orderly growth and development strategy within the Village; and,	✓		Phasing and Monitoring Policies as part of DCP
15. Housing Mix: To provide an adequate mix of housing in the Village as a whole as opposed to any one residential neighbourhood or new development area.	✓		Mix of housing is provided, which adds to the overall variety to the Village as a whole

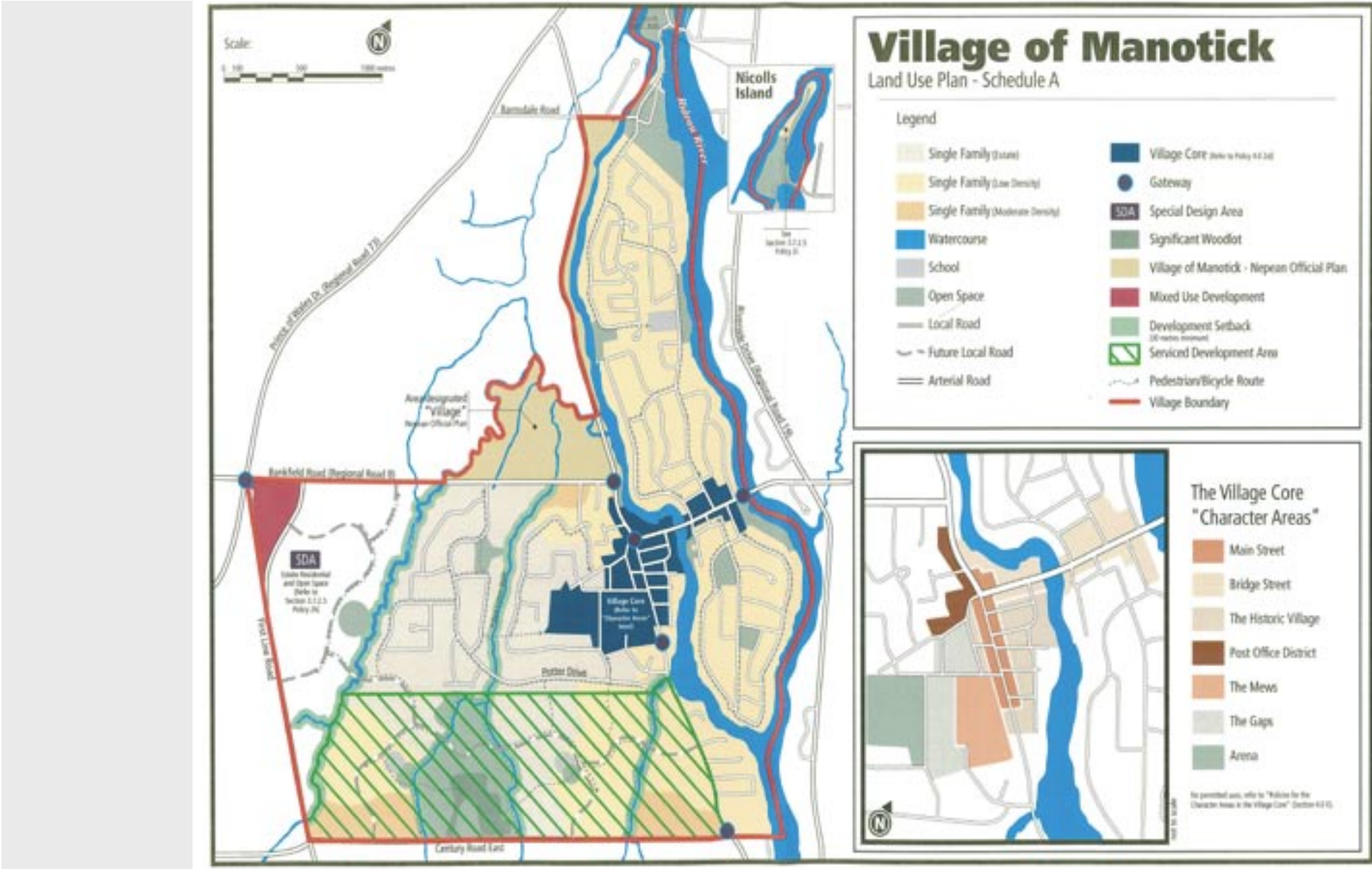


Figure 4-6 - Village of Manotick Secondary Plan (2001)

- To support the Village's character and vision by providing for the safe, accessible and efficient movement of pedestrians and vehicles throughout the community (Policy 3.7.2.10 (1) (a));
- To promote a pedestrian friendly and transit accessible environment (Policy 3.7.2.10 (1) (b));
- Preserve and protect the natural resources and areas of environmental significance within the Village (Policy 3.7.2.11 (1) (a));
- To build on the existing heritage in the Village to create a venue that is attractive and interesting (Policy 3.7.2.12 (A) (1) (c));
- Public access and views to the Rideau River should be conserved and enabled when opportunities arise (Policy 3.7.2.12 (B) (1));
- Transition zones, or buffers, should be provided between areas of similar use but markedly different densities, or between different and potentially incompatible uses and areas (Policy 3.7.2.12 (B) (5));
- Natural environment areas should be conserved and enhanced, and significant land forms and watercourses should be recognized and incorporated into newly developing areas as defining elements of the Village's urban form and land use pattern (Policy 3.7.2.12 (B) (6));
- To preserve the unique character and natural setting of the Village (Policy 3.7.2.13 (1) (c)); and,
- To guide the phasing of new development in a rational, incremental extension of the existing built form of the Village (Policy 3.7.2.13 (2) (c)).

There may be a need to amend some of the Secondary Plan policies as a result of the DCP, for example, in the Secondary Plan multiple units are only permitted in the Village Core.

4.1.5 The Rural Pathways Plan, 2006

The Manotick Community Association, together with the Ontario government and the City of Ottawa, fostered a grassroots initiative, to inventory and plan future recreational pathways in Rural Ottawa. The result of this initiative was "The Rural Pathways Plan", March 2006, which provides a vision for "walkable villages", rural destination connections, and build city-wide connections. The intent of the Rural Pathways Plan is to identify future desired pathways that can guide other community planning exercises and proposed subdivisions plans.

The Rural Pathways Plan recommends short to long-term priorities for the Village of Manotick, including pathway connections and sidewalks. The recommendations in Table 4-2 are illustrated in Figure 4-7.

Figure 4-7 - Rural Pathways Plan (2006)

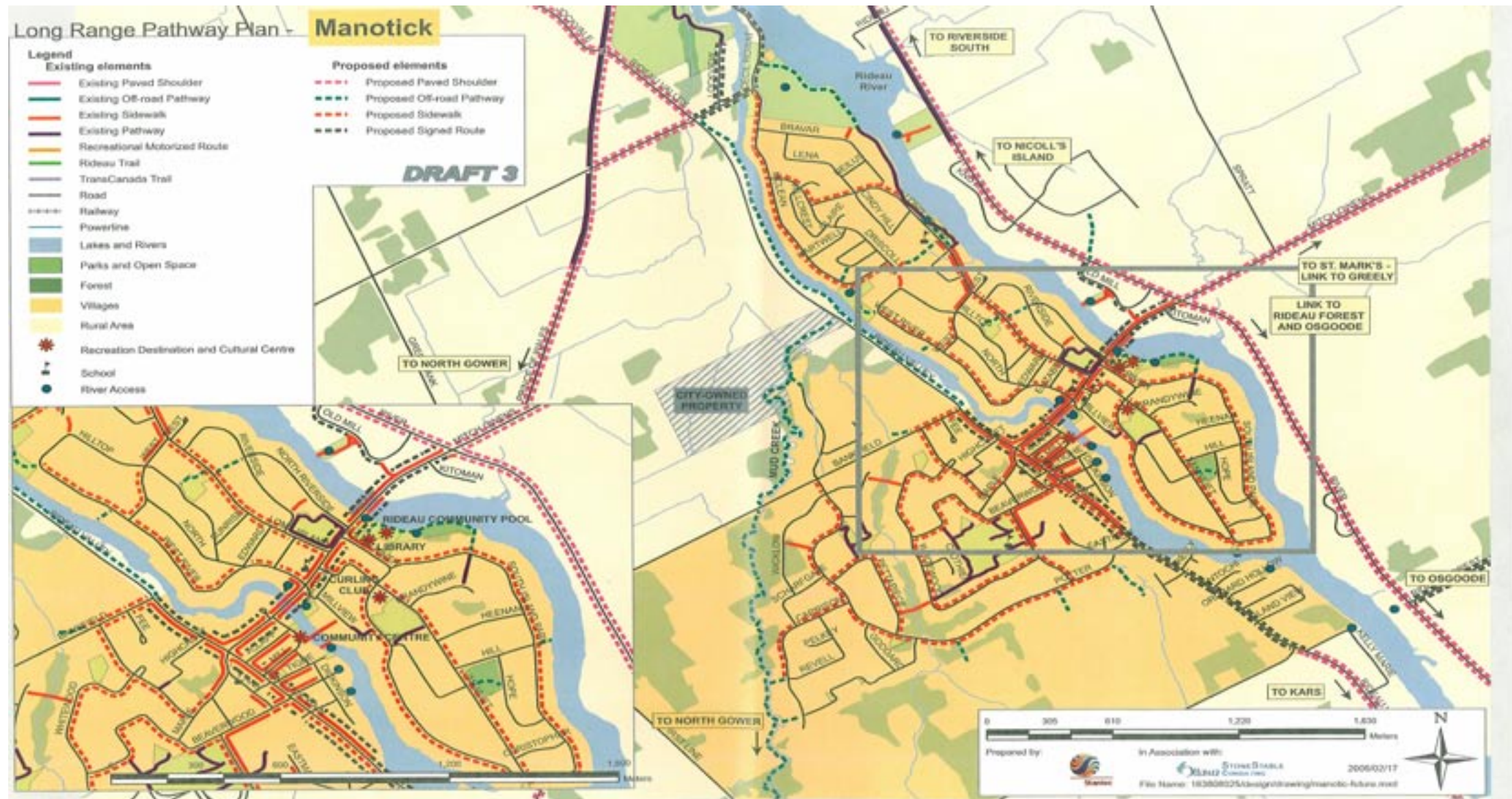


Table 4-2 - Rural Pathways Plan Recommendations

Phases	Main Priorities	Comments
Short Term (next 3 years)	Retain west side of Mud Creek for linear pathway and neighbourhood park	Stonedust pathway
	Preservation of open space & pathways along creek in the Minto developments to the south of the Estates, within the Village boundary	Stonedust pathways
	Sidewalk along at least one side of Long Island, from Bridge Street to McLean, from Driscoll to Barnsdale (west side of Long Island is preferred; priority to connect schools)	Sidewalk
Medium Term to Long Term (next 3-12 years)	Boardwalk between the Long Island Aquatic Club and Brandywine on City-owned park land	Wood chip
	Paved shoulder on Barnsdale	
	Connection between Manotick and Beryl Gaffney Park along Rideau Valley Drive	Combination of paved shoulder and paved pathway on City-owned land (old road)
	Ensure there is a safe connection to Stonebridge community and Barrhaven shopping, along Jockvale	Especially in area of High School to encourage students to walk/bike to school
	Connection to St. Marks High School and points east	

Source: City of Ottawa Rural Pathways Plan, March 2006

These recommendations were considered in preparing the development concept plans with regard to pathway connectivity within the Subject Area and to the existing Village. In addition, consideration was given to sidewalks on proposed roadways within the Subject Area.

4.2 ZONING

Under the former Township of Rideau Zoning By-law 2004-428, the DCP Subject Area has a number of zones as illustrated in Figure 4-8. The majority of the vacant lands within the Subject Area are zoned **Restricted Rural Zone (A1)**. The permitted uses in the A1 zone include a single dwelling house. A rezoning to implement the DCP would be required to permit the new development.

In addition, there are some existing developed out-parcels along the eastern boundary fronting onto Manotick Main Street that are zoned Commercial (C), Village Residential (RV), Highway Commercial (CH), and Environmental Protection (EP).

The City of Ottawa is currently working on a comprehensive Zoning By-law (ZBL) for the entire city. The comprehensive ZBL is in draft form (September 2007) and it is anticipated to go to Council for approval in Winter 2008. Under the Draft ZBL, the majority of the vacant lands within the Subject Area are zoned **Development Reserve (DR1)** as illustrated in Figure 4-9. The permitted uses are generally the same as in the current Rideau ZBL.

4.3 NATURAL RESOURCES

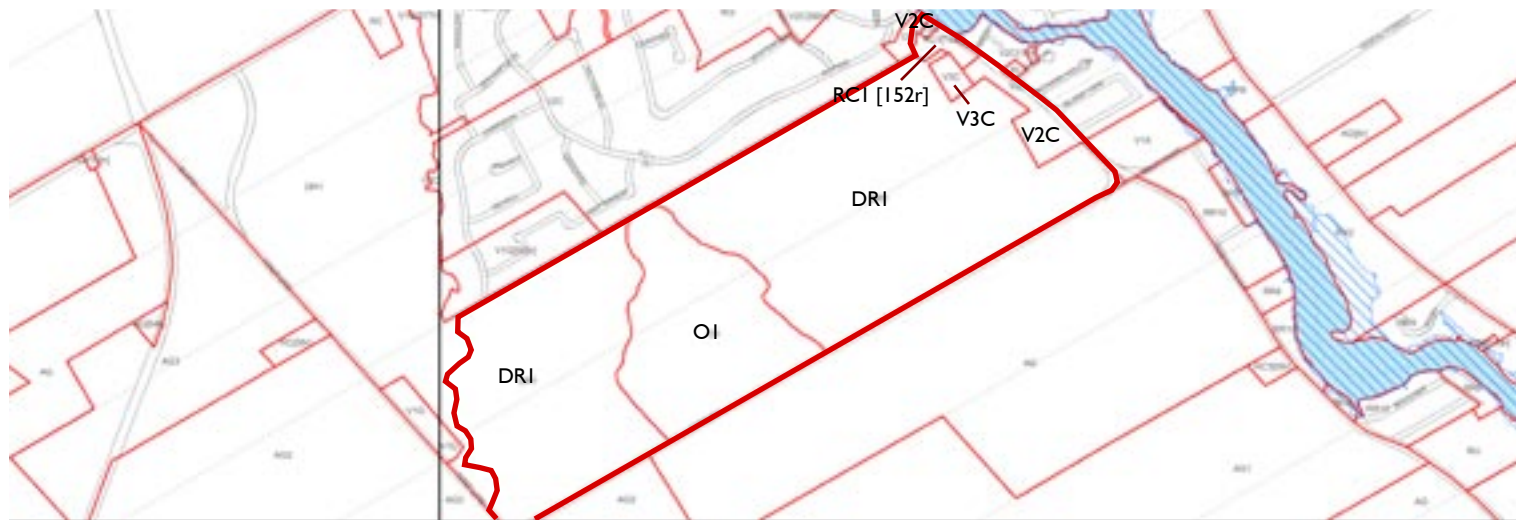
EcoTec Environmental Consultants Inc., completed a Natural Environment Existing Conditions Report in January 2008. Their analysis included field surveys in November 2006 and April, May and June of 2007 as well as aerial photo interpretation to identify and map the following:

- Existing vegetation communities;
- Resident and migratory bird species;
- Key indicator species for upland, lowland, or wetland areas;
- Critical habitat areas which constitute "environmental

Figure 4-8 - Existing Zoning By-law 2004-428



Figure 4-9 - Draft Zoning By-law, September 2007



- protection" areas; and
- Potential fisheries and aquatic habitat areas.

Vegetation Communities

According to EcoTec's Assessment, the Subject Area is approximately 18% treed, 4% old field meadow/scrubland, and 78% agricultural with no buildings or structures. An old stone foundation and a silo were noted on the property. Farm field access laneways exist within the Subject Area. There are 13 vegetation communities within the Subject Area as illustrated in Figure 4-10, including lowland meadows, hedgerows, coniferous and deciduous forests.

Prominent within the Subject Area is Natural Environment Systems Strategy (NESS) Area 506 which is a moderately significant area according to Brunton (1997). This area is located in the middle of the Subject Area and includes majority of Community 5 and the Manotick Drumlin Forest Candidate ANSI (Communities 7, 8 and 10). The significance rating of this feature is primarily due to the natural condition of the area, the rare species found on site, and the watercourses that flow through it. In particular, community 5c is a mature upland butternut deciduous forest containing more than 50 large butternut trees. The Manotick Drumlin is being considered for provincially significant status due to the rarity of this Ice Contact landform in this region. It is recommended that the Manotick Drumlin Forest be classified as a natural environment area.

Community 1 consists mainly of active hay fields and corn fields currently being used separated by hedgerows. The remainder of this community consists of moist agricultural fields which had not been hayed.

Community 2 is a small early to mid succession woodland composed predominately of trembling aspen with some white ash and European buckthorn. This forested community was relatively dense with a thick understorey of prickly ash and typical spring flowers.

Community 3 is a coniferous forest consisting of primarily white spruce, blue spruce, white cedar, white pine, red pine, scot's pine, and balsam fir. Deciduous growth in this community is less than 25% and includes American elm, oak, poplar, willow trees and black walnut. A small pond (<1 acre) is located in this community adjacent to a permanent residence.

Community 4 is described as Old Field Orchard/Meadow/Shrubland. The open portions of the community consisted mainly of grasses and plants typical of disturbed sites.

Community 5 comprises approximately 6.5 hectares of the total property area. This community consists mainly of deciduous forest dominated by sugar maple.

Community 5c is a small portion of the forest dominated by mature butternut trees. The Wilson-Cowan Drain flows through the middle of this forest.

Community 6 is a Dry – Fresh poplar deciduous forest dominated by trembling aspen with red oak, white oak, white ash, American basswood, American elm and butternut. This forest is typical of a disturbed forest in early to mid succession.

Community 7 is approximately 5 hectares and consists of deciduous forest dominated by sugar maple and American beech. This upland forest is in late succession and consists of submature and mature trees. Additional tree species included ironwood, American basswood, and black cherry. This community is considered a part of the Manotick Drumlin Forest, a candidate provincially significant Life Science, Area of Natural and Scientific Interest (ANSI). Additional species located within this area include white trillium, blue cohosh, hepatica, wild leek, leatherwood, twisted sedge, toothwort, recurved buttercup, bloodroot, Christmas fern, and maidenhair fern.

Community 8 is approximately 2 hectares consisting of a mixed forest dominated by sugar maple, yellow birch, and eastern hemlock. A number of the hemlock, birch and maple trees within this community are considered mature. This area is relatively undisturbed and contains a range of tree sizes from sapling to mature, and thus may be considered a late successional forest. Areas of standing water were noted in the spring within the eastern portion of this woodlot. The Wilson-Cowan Drain flows along the north and west sides of the forest. Woody riparian vegetation in this location was comprised mainly of Manitoba maple, ash, butternut, and elm. Additional tree species included red maple and American beech. This community is also included as part of the Provincially Significant Candidate ANSI and the NESS 506 Area.

Community 9 is located in the centre of the Subject Area and is approximately 3 hectares comprised of deciduous forest dominated by sugar maple and white ash. Additional tree species within the forest included red pine, American basswood, ironwood, and oak with poplar species around the perimeter. This forest community is greater than 50 years old with large beech, ash and maple trees throughout. This forested plot is bordered on the north side by an old field orchard (Community 4) and a branch of the Wilson-Cowan Drain on the west edge.

Community 10 is bordered on the south side by Century Road East and on the west side by upland forest (Community 7). A branch of the Wilson-Cowan Drain flows through the northeast portion of this forested swamp. This community consists of a lowland deciduous forested swamp dominated by red maple, silver maple, green ash, and black ash. The hydrophytic, mature tree and herbaceous vegetation types, as well as the large pools of surface water categorize this community as a swamp. Upland pockets within the swamp consisted of American beech, sugar maple, yellow birch, eastern hemlock, and Canada yew. The successional edges of this community, which are slightly more upland, also



contain oak, elm, ironwood, and white ash. A large butternut tree was noted at the southeastern edge. This forested area had very little disturbance and the trees ranged from sapling to mature. Common herbaceous species that exist within the undergrowth of the swamp include, spinulose woodfern, beggars-ticks, sensitive fern, jewelweed, and clearweed. This community is part of the Candidate ANSI and NESS 506 area.

Community 11, a Dry – Fresh Lowland Meadow is located immediately north of Century Road and immediately west of the east branch of the Wilson-Cowan Drain. The community is approximately 0.5 hectares dominated by meadowsweet, red-osier dogwood, as well as poplar and elm saplings. Community 11 also contains butternut saplings, grasses and plants typical of disturbed sites including milkweed, grasses, goldenrod, Queen Anne's lace, and raspberry.

Community 12 is made up of White Pine-White Spruce Plantations. These plantations were located at the northwest corner of the property. Mud Creek separates the two white spruce plantations while an old oxbow/river bed separates the white spruce plantation from the white pine. Additional tree species noted on the banks of the oxbow and along the edge of the plantation included silver maple, Manitoba maple, balsam poplar, white ash, butternut, American basswood, oak and American elm. The northern tip of this community was comprised of a small area of deciduous trees. Herbaceous understorey was minimal within the forested interior and abundant near the forest edges.

Community 13 is located in the centre of the Subject Area and is dominated by sugar maple, large-toothed aspen and white ash. Additional tree species within the forest included American elm, apple trees, Manitoba maple and hawthorn species around the perimeter.

Watercourses

Four watercourses were noted on or immediately adjacent to the

Subject Area. The Wilson-Cowan Drain, a tributary of Mud Creek, and the Rideau River tributary are considered to be permanent, warm water fish bearing watercourses with the potential to provide spawning habitat for northern pike, muskellunge and baitfish species. The Wilson Cowan Drain tributary is considered to be an intermittent cool-water creek with the potential to provide seasonal habitat for fish species. Mud Creek is considered to be a permanent cool-water creek with both baitfish and sport fish species present. Mud Creek provides spawning habitat for northern pike, muskellunge and baitfish species within the stretch associated with the Subject Area. In general, the temperature regime of a watercourse is defined as coldwater (<19°C), cool water (19 - 25°C) or warm water (>25°C).

Wildlife

Wildlife species were noted through observations (sightings, tracks and scats) and call. Twenty wildlife species, including reptiles, amphibians and mammals were noted in the Subject Area. Within the eastern half of Community 10, where the standing water within the swamp was the deepest, evidence of amphibian breeding was noted. This habitat is mainly suitable for breeding toads and the wood frog, gray tree frog, and spring peeper as water within the swamp dries up in the summer months and most other frog tadpoles overwinter. The pond in the southeast portion of the Subject Area, within Community 3, also provided habitat for amphibians with suitable breeding habitat for toad or frog species such as the wood frog, green frog, leopard frog, gray tree frog, and the spring peeper.

Community 12 may provide deer overwintering habitat. Though cedar and hemlock are the preferred food choice of deer, white pine stands do provide cover for deer during winter. Additionally, deer will eat spruce branches but these are not the preferred food of choice. Deer overwintering may also occur within the maple swamp (Community 10).

A total of 79 bird species were noted within the Subject Area boundaries, 49 of which were observed within the NESS Area 506 including the Candidate ANSI. A few bird species were observed during spring surveys which do not breed in the area, but were present at the time of sampling. These include: ruby and golden-crowned kinglets, American pipit, and the bay-breasted warbler.

Interesting breeding bird observations include the probable or confirmed nesting of the Cooper's hawk, magnolia warbler, Lincoln's sparrow and the yellow-throated vireo, listed as rare in Ottawa Carleton (Marshal Macklin Monaghan, 2005; Ottawa Field Naturalists, 2005), in the Subject Area. The Cooper's hawk and a red-tailed hawk were confirmed to be nesting within the NESS Area 506. A raptor nest was noted by Rose Fleguel (2007) within Community 9 approximately 40 m east of the Wilson-Cowan Drain tributary. The nest had been recently used and was likely inhabited by the northern harrier or the northern goshawk observed on site. A second year bald eagle was also identified during the May 2007 bird survey. Additionally several bird species noted as probable or confirmed breeding within the NESS Area 506 are species that prefer interior forest habitat, however most will nest in less desirable habitat.

Wildlife corridors or linkages occur throughout the Subject Area. The most notable linkages are the Mud Creek corridor which is considered a significant linkage in the Marshall Macklin Monaghan report (2005) and the connection from the Candidate ANSI along the Wilson-Cowan Drain to Mud Creek and eventually to the Rideau River. Habitats are connected from one side of the property to the other by fragmented hedgerows.

The forested NESS Area 506 and Community 9 provide a high diversity of habitat suitable for a variety of different wildlife species. Habitat within this area includes forest edge, forest interior, mature deciduous and mixed forest, tree cavities, standing

water, rock, leaf litter, understorey vegetation, riparian zones, and shaded watercourses. Due to the high amount of diversity of habitat over a relatively small area of land, and the presence of rare species within the habitat. these communities are considered to be important for wildlife within Manotick and the Mud Creek subwatershed. The old field meadow/scrubland and open cultivated and uncultivated fields provide a low diversity of habitat over a large area of land.

Rare Species

Background research revealed no record of any species at risk in the Subject Area, however two threatened turtle species, the Blanding’s turtle and the musk turtle, as well as a threatened bird species, loggerhead shrike, have been noted within the local area (D. Jacobs, pers. comm. 2006). Habitat potentially suitable to the loggerhead shrike was noted within the Subject Area. This is discussed in greater detail below.

Both the musk turtle and the Blanding’s turtle prefer shallow permanent bodies of water with soft bottoms and lots of aquatic vegetation. Mud Creek provides localized areas adjacent to the Subject Area which contain these features and thus these species could be found within this creek. None of the other watercourses contained habitat suitable for these turtles.

The endangered butternut tree has been located within the Mud Creek watershed and 157 trees were also found in the Subject Area within the NESS 506 Area, along hedgerows, and adjacent to Mud Creek in the northwest portion of the property by EcoTec. Additional butternut trees were noted by Rose Fleguel (2007) on subsequent visits. Most notably, eight butternut trees were found in Community 4a. The butternut is threatened by a fungal disease known as the butternut canker. This fungus is known to infect trees through open wounds and then expand rapidly to kill the infected tree within a few years though larger trees can take much longer to show dieback (ROM, 2007; Forest

Gene Conservation Association, 2007). All of the butternut trees within the property had some form of the butternut canker though trees were overall in good health, except for one immature tree in Community 4a (Fleguel R 2007). In general, butternut trees are scattered throughout a forest in low numbers. In contrast to this, Community 5c was composed almost entirely of mature butternut trees up to 96 cm in diameter.

The regionally rare Hitchcocks sedge and glade fern have been recorded by Brunton (2005) within the NESS 506 natural area. These species were not observed during the fall 2006 and spring/early summer 2007 surveys. The floating arrowhead was observed in three locations on site including Mud Creek, Wilson-Cowan Drain and the pond. This species is designated as sparse by Brunton (2005), however it appears to be locally abundant.

Additionally several species rare to the Ottawa-Carleton region were noted either nesting or as possible nesters on site including the Cooper’s hawk, magnolia warbler, Lincon’s sparrow and the yellow-throated vireo.

One of the objectives of EcoTec’s study was to assess the sites capability to hold breeding populations of loggerhead shrike (*Lanius ludovicianus*). The findings failed to indicate any evidence of this species or potential suitability of the site for this species for the purposes of breeding. The loggerhead shrike prefers habitats comprised of short grasslands (primarily in the form of pasture land) interspersed with shrubs, fencerows and a multitude of other habitat features (Alberta Sustainable Resource Development, 1999). Though some of the habitat features preferred by loggerhead shrike are present on site, the lack of short grass prairie or pasture habitat is a limiting factor for this species on this site at this time.

Summary

The natural environment features and functions have been considered in the preparation of the Land Use Concept Plan in an integrated manner based on a natural systems approach. Habitats suitable for protection/retention have been identified and mitigation measures developed including design with nature practices to reduce negative impacts.

The Official Plan defines “design with nature” as an approach that employs the aquatic, terrestrial and biological characteristics into a site design to reduce the reliance on technological solutions, which are expensive and less environmentally sensitive. The approach may include:

- Retention of natural vegetation on slopes to reduce erosion;
- Conservation of as many existing trees as feasible;
- Use of appropriate natural infiltration techniques on site to reduce the need for stormwater management ponds;
- Street and building orientation to maximize opportunities for passive solar heating and reflection of natural contours;
- Protection of natural stream corridors and the incorporation of natural features into open spaces.

4.4 TRANSPORTATION

Delcan prepared an Existing Conditions Report in March 2007 to describe the current transportation infrastructure network and operating conditions in the part of the Southwest Rural Area of the City of Ottawa encompassing the Subject Area and the proposed Minto community.

From the perspective of the existing (and future) transportation systems and operating conditions, the analysis extended beyond the Village boundaries and addressed transportation-related matters in an area bound by River Road to the east, Highway 416

to the west, Century Road to the south and Golflinks Drive (north of the Jockvale/Prince of Wales intersection) to the north.

Pedestrian and Cycling Network

The City of Ottawa Transportation Master Plan (TMP) (September 2003) identifies several major recreational pathways within the Subject Area. According to Map 2 of the TMP, recreational pathways are provided on both sides of the Rideau River through the Village, with crossings located at Bridge Street (downtown core) and Nicholls Island (just north of Rideau Road).

The sidewalk network is limited to the major roadways within the Village, namely Manotick Main Street and Bridge Street. Specifically, sidewalk facilities are located along certain sections of Manotick Main Street and along other streets in the Village. The balance of the road network within the Subject Area is not complimented with sidewalk facilities.

With regard to cycling, Map 3 of the TMP identifies Rideau Valley Drive North, Bridge Street and River Road as on-road cycling routes.

According to the Draft Ottawa Cycling Plan (March 2005), there is an existing off-road pathway that extends along the west side of the Rideau River (north of Barnsdale Road) and then along the south side of the Jock River (east of Jockvale Road). There are also several existing "additional" bicycle pathways (i.e., not in the City's network per se) that are located on local Long Island streets.

The Cycling Plan identifies a number of Spine Cycling Route elements within the Subject Area, including Prince of Wales Drive, Rideau Valley Drive North, River Road, Century Road, and Bankfield Road. Paved shoulders to accommodate bicycles are proposed for these roads except through the Village Core where a signed route would suffice. Several local streets are proposed to form part of the Community Cycling Route, including Van Vliet Road/Long

Figure 4-11 - Existing Transportation Routes



Island Drive (on the Island) and Potter Drive. These routes would be identified as signed cycling routes. Of particular note within the Cycling Plan is the proposed series of off-road pathways linking the Potter Drive area to Century Road.

Transit Network

Currently, there is no direct transit service to the Subject Area. OC Transpo Routes 186 and 45 provide peak period-only service from Manotick Arena to Baseline Transitway station and downtown Ottawa respectively. The 62-space park-and-ride lot exists at the Manotick Arena for travellers wishing to use transit. Alternatively, other OC Transpo park-and-ride lots are located at Strandherd, Fallowfield, and Greenboro, which provide direct access to Transitway or O-Train service. Existing transit routes are shown in Figure 4-11. OC Transpo staff has identified potential opportunities for extending transit service to the Subject Area.

Road Network

The following provides a summary of the major roads within the Subject Area:

Barnsdale Road	Two-lane collector (undivided) with a posted speed limit of 80 km/h. The road extends westerly from the Rideau River to Eagleson Road, but provides no direct connection to Highway 416.
Bankfield Road	Two-lane arterial (undivided) with a posted speed limit of 60 to 80 km/h. The road extends westerly from Rideau Valley Drive North to Eagleson Road, including an interchange with Highway 416.

Bridge Street	Two-lane arterial (undivided) with a posted speed limit of 40 km/h. The road extends easterly from Rideau Valley Drive to River Road, after which it transitions to Mitch Owens Drive.
Mitch Owens Drive	Two-lane arterial (undivided) with a posted speed limit of 80 km/h. The road extends easterly from River Road to rural areas east of the City.
Century Road	Two-lane collector (undivided) with a posted speed limit of 80 km/h. The road extends westerly from the Rideau River to Second Line Road (just east of Highway 416) and provides connectivity to Prince of Wales Drive. This roadway is the southern boundary of the DCP Subject Area.
Highway 416	Four-lane highway (divided) with a posted speed limit of 100 km/h. The highway provides connectivity to the majority of east-west arterial roadways within the western portion of the City, including Fallowfield/Strandherd, West Hunt Club, Richmond, and Highway 417.
Prince of Wales Drive	Two-lane arterial (undivided) with a posted speed limit of 80 km/h. The road extends northeasterly (terminating at Dows Lake) intersecting with Bankfield Road, Barnsdale Road, and Rideau Valley Drive North/Jockvale Road.
First Line Road	Two-lane collector (undivided) with a posted speed limit of 60 km/h. The road extends northerly from Roger Stevens Drive (Village of Kars) to Bankfield Road. This roadway is part of the western boundary of the DCP Subject Area.

Rideau Valley Drive North	Two-lane arterial (undivided) with a posted speed limit of 80 km/h. The road extends northerly from Roger Stevens Drive (Village of Kars) to Prince of Wales Drive, after which it transitions to Jockvale Road. Through the Village of Manotick, the road is named Manotick Main Street and has a posted speed limit of 50 km/h. Manotick Main Street is the eastern boundary of the DCP Subject Area.
River Road	Two-lane arterial (undivided) with a posted speed limit of 80 km/h. The road extends northerly from Snake Island Road (Village of Kars) to Hunt Club Road, after which it transitions to Riverside Drive.

Screenline Volumes

A screenline is defined as an imaginary line that is crossed by a limited number of traffic corridors and is therefore useful for determining current and future traffic operating conditions and network capacity requirements. The City of Ottawa monitors directional traffic volumes along all roads, transit routes, and recreational pathways that cross these screenlines.

There are three strategic screenlines located in the vicinity of the transportation area of interest: the Fallowfield Road and Jock River Screenlines, located to the north; and, the combined Rideau River South/Manotick Screenline, located to the east.

These screenlines are valuable in developing a sense of the available road network capacity, as most traffic to / from the proposed Minto development will cross one of these screenlines to access employment, shopping, and other land uses not available

within Manotick. Descriptions of the three screenlines of particular interest are as follows:

- **Fallowfield Road Screenline:** Located along the north boundary of Barrhaven, it extends from Richmond Road, west of Highway 416 to Prince of Wales Drive in the east, intercepting all the north-south major roads through the Greenbelt, including Richmond Road, Moodie Drive, Highway 416, Cedarview Road, Greenbank Road, Woodroffe Avenue, Merivale Road and Prince of Wales Drive.
- **Jock River Screenline:** Located along the Jock River, it extends from Moodie Drive in the west to the Rideau River in the east. This screenline captures traffic volumes on Moodie Drive, Highway 416, Cedarview Road, Jockvale Road, Greenbank Road, and Prince of Wales Drive.
- **Rideau River South/Manotick Screenline:** Located along the Rideau River, the Rideau River Screenline extends from Heron Road in the north to just north of Fallowfield Road. The Manotick Screenline extends from south of Fallowfield Road southerly to Mitch Owens Drive. These combined screenlines captures east-west traffic volumes crossing the Rideau River at Heron Road, Hog's Back Road, Hunt Club Road and Bridge Street.

Level of Service (LoS) is how the operation of screenlines at intersections are measured. LoS A corresponds to a volume/capacity (v/c) of 0.60 or less, indicative of excellent intersection performance. This means little, if any, delay and lots of spare capacity. At the other end of the scale and in contrast, LoS F corresponds to a v/c greater than 1.0, consistent with poor intersection performance (i.e. significant delays, queuing, and limited, if any, spare capacity).

The three screenlines of interest have available capacity in the peak direction, during the peak hours, except for the combined Rideau River South/Manotick Screenline in the afternoon peak hour (v/c = 0.92). The current City of Ottawa operational standard is Level of Service D (v/c < 0.9) or better.

Fallowfield Road Screenline: currently operates at LoS C in both the weekday AM and PM peak hours. The corresponding volume-to-capacity rates indicate that the north-south roadways that cross the screenline are 74% utilized.

The Jock River Screenline: currently operates at LoS A in the peak direction, during both the morning and afternoon peak hours, with corresponding volume-to-capacity rates of 0.42 and 0.43, respectively. This good Level of Service is reflective of available north-south capacity.

The combined Rideau River/South Manotick Screenline: currently operates at LoS D and LoS E in the peak direction, during the weekday AM and PM peak hour, respectively. The corresponding peak hour, peak direction v/c rates are 0.83 and 0.92.

Intersection Capacities

The results of capacity analysis indicate that signalized intersections in the vicinity of the Subject Area, when considering all movements at intersections, are operating at LoS D or better during the weekday commuter peak hours, based on the intersection delay.

However, even though the intersections as a whole (considering all movements) are generally operating at or above City standards as a whole (i.e. LoS D or better), there are numerous individual intersection movements that fail during the weekday commuter peak hours. The analysis results indicate that, at each of the signalized intersections considered, at least one intersection movement is operating at or beyond LoS D during the weekday AM and PM peak hours. It is noteworthy that, for all intersections, the critical movement does not vary by peak.

From field observations, Bridge Street in Manotick experiences a very high traffic demand in both directions during the weekday peak hours, (approximately 2000 veh/h) with high delays approaching

the major intersections (namely River Road and Manotick Main). In particular, the southbound left-turn movement from Manotick Main onto eastbound Bridge Street is heavy, with long queues. Once the road capacity across the Rideau River is increased with the construction of the Strandherd/Armstrong Bridge, the Bridge Street travel demand and delays at the Bridge/River/Mitch Owens and Bridge/Manotick Main intersections should diminish.

Field observations also revealed heavy left-turn volumes from Prince of Wales southbound onto southbound Rideau Valley Road North. According to the most recent City traffic count, approximately 600 veh/h complete this movement during the critical weekday PM peak hour.

In conclusion, signalized intersections, as a whole (considering all movements) in the vicinity of the Subject Area (with the exception of the Bridge/Long Island intersection), are operating at an acceptable Level of Service, based on total delay. However, various individual intersection movements at these intersections are failing, reflective of heavy, commonly-used commuter routes. This poor performance of critical movements is consistent with field observation.

In particular, Bridge Street experiences heavy volumes during the weekday commuter peak hours, reflective of the limited capacity across the Rideau River South/Manotick Screenline. The planned Strandherd-Armstrong Bridge, which is anticipated to come on-line in 2011, is expected to alleviate traffic volumes across this screenline by providing an alternate east-west route across the Rideau River.

4.5 MUNICIPAL SERVICING

David McManus Engineering Ltd. prepared an Existing Conditions report in March 2007, which summarizes the information from the following documents:

- Studies completed to accompany the Rideau Township Secondary Plan in the late 1990's, including hydrogeological, geotechnical, soils and Master Drainage Plans.
- The City of Ottawa completed a Servicing Master Plan for the Village of Manotick in 2003 with respect to sanitary and water main servicing.
- The City of Ottawa also completed an existing conditions report for the Jock River Reach 2 – Mud Creek Subwatershed Study along with an Environmental Management Plan for the Special Design Area west of Mud Creek in 2005.
- Minto Developments have completed a number of reports, studies and investigations to support the development of the subject property.

Water Services

The existing City of Ottawa water system extends southerly to the intersection of Potter Drive and Eastman Avenue. The remainder of the Village (all but the Core and Hillside Gardens) is serviced with private groundwater wells.

In 2003, the City of Ottawa and J.L. Richards and Associates prepared a Servicing Master Plan for the Village of Manotick. The report analysed the utilization of the existing water main network and trunks to service the remainder of the Village of Manotick. J.L. Richards completed a hydraulic simulation of the entire Village and concluded that a booster station or elevated storage would be required to meet future water needs, above if development exceeds an additional 850 units in the Village. The scope of the J.L. Richards study was limited and dealt only in part with provision of sufficient

Figure 4-12 - Water Services



capacity to service the Village. Figure 4-12 illustrates the areas of the existing water system that may require upgrade to service the proposed development. The proposed development is intended to be serviced via Potter Drive and Manotick Main Street.

Sanitary Services

The 2003 Servicing Master Plan included a preliminary design of a local gravity sanitary sewer for the Village of Manotick. The gravity sewer system is to be connected to Ottawa's central sewer system via a main pump station and forcemain system, outletting to the Stonebridge Subdivision. Local sewage collection will initially service the priority areas (Hillside Gardens and/or the Village Core) and gradually extend to the other areas of the Village, including the Subject Area. The design of the main pump station and forcemain sufficient to service the whole of the Village, and the design of the local

Figure 4-13 - Sanitary Services



Minto will pay its share of the capacity that they anticipate to use in the trunk system like any other property owner. Development of the Subject Area lands is not dependant on the current Local Improvement Petition.

The proposed development lands will require a sanitary sewage pumping station to service any proposed lots as illustrated in Figure 4-13. The servicing of the Subject Area, including the location of a pump station and forcemain routing will form part of the Master Servicing Plan for the Subject Area.

Storm Drainage

The proposed development area is tributary to four drainage basins. The western portion of the development drains to Mud Creek, the middle of the development outlets to the Wilson-Cowan Drain and

a branch of the Wilson-Cowan Drain, while the eastern portion of the site drains to the Unnamed Drain Tributary. A small area adjacent to the intersection of Century Road and Manotick Main Street drains to the Rideau River.

The Wilson-Cowan Drain and Mud Creek are Municipal Drains under the [Drainage Act](#).

4.6 SOIL CONDITIONS AND HYDROGEOLOGY

Unstable Soils or Bedrock (Section 4.8.3)

Mud Creek, the Wilson-Cowan Drain and its tributary are illustrated in Figure 4-5 as having Unstable Slopes, which is an extract of the City of Ottawa’s Official Plan Schedule K-Environmental Constraints. Details of these watercourses are explained in Section 4.3 of this document.

Policy 4.8.3 (1) states that a plan of subdivision shall be supported by a geotechnical study to demonstrate that the soils are suitable for development. Minto retained Paterson Group to conduct the geotechnical work. As discussed in more detail in this section of the document, the Subject Area is generally suitable from a geotechnical perspective.

Geotechnical Conditions

A Phase I - Environmental Site Assessment (ESA) was prepared by the Paterson Group in January 2007 to determine past uses in the Subject Area and to identify any potential concerns associated with the Subject Area or adjacent properties that could potentially impact future development of these lands.

The Phase 1 ESA, based on research of historical data and a site inspection, concluded that there are no concerns regarding the past uses of the Subject Area or the adjacent properties. Based on the results of the assessment, a Phase II - Environmental Site

Assessment will not be required for the Subject Area.

Paterson Group also prepared a Geotechnical Investigation (November 21, 2007) for the Subject Area. The geotechnical investigation revealed that generally, the soil profile in the western half of the Subject Area consists of an organic topsoil layer overlying silty sand and/or sandy silt, which in turn overlies layers of clayey silt to silty clay as illustrated in Figure 4-14. The silty clay is usually underlain by glacial till.

The soil profile underlying the central and eastern portions of the Subject Area consists primarily of a topsoil layer overlying silty clay and/or glacial till.

In the central and west portions of the Subject Area, the topsoil is underlain by a discontinuous silty sand with clay layer overlying silty clay which is in turn underlain by glacial till.

A perched groundwater condition will be encountered at the Subject Area at depths ranging from 1 to 2 m below the existing grade. Long term groundwater levels will be at 2 to 3 m below the existing grade.

Geotechnical Constraints

For the most part, the Subject Area is considered to be suitable, from a geotechnical perspective, for the proposed development. It is expected that grade raises will be required in selected areas to accommodate site servicing and general grading (cut and fill operation). The main geotechnical constraint associated with the site will be grade raises over 1 m overlying deep silty clay deposits. To address this issue, consolidation testing was carried out during the geotechnical investigation program to determine preconsolidation pressures and acceptable grade raises. Several options for significant grade raises are available, such as pre-loading or surcharging the site prior to construction.

Hydrogeological Conditions
Potential Recharge and Discharge Areas within the Subject Area and Surrounding Areas

Based on the preliminary hydrogeology work conducted by Paterson Group Inc., the Subject Area is generally overlain by marine clays and some isolated glacial till ranging with surficial thicknesses of 16 to 24 m. These soil types have generally low hydraulic conductivities and are not generally conducive to recharging the underlying bedrock aquifers.

Based on available Ministry of the Environment (MOE) Water Well Records, the majority of the wells consist of drilled wells completed into the bedrock. The dominant water supply aquifers appear to be contained within the Paleozoic Limestone of the Ottawa formation. Overland recharge of water to these bedrock aquifers within the Subject Area and surrounding lands, is limited to the glaciofluvial

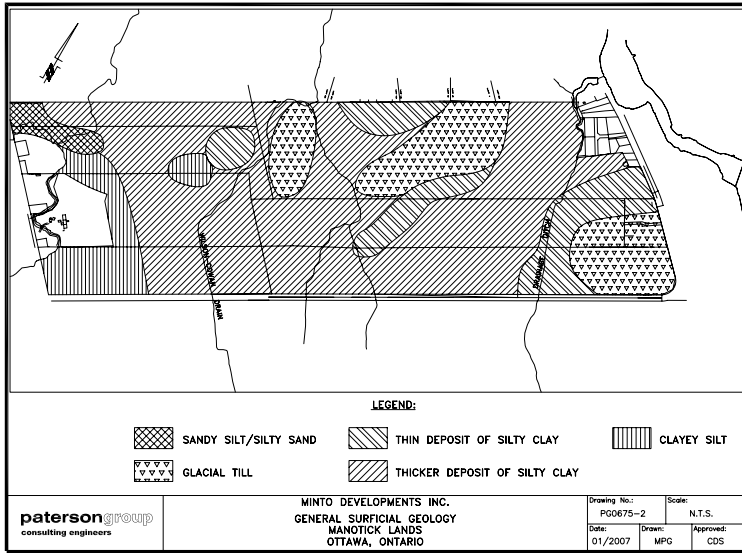


Figure 4-14 - Geotechnical Conditions

soils associated with the Kars Esker geologic formation. The general direction of groundwater flow within the bedrock aquifers is from west to east.

It appears likely that there are no groundwater discharge areas present. This is consistent with the overburden thickness of the surficial soils and relatively shallow depth of Mud Creek.

Impacts of Proposed Municipal Servicing on Existing Private Services in the Area

Based on information provided by David McManus Engineering Ltd., the maximum depth of the underground storm and sanitary service is anticipated to be upwards of 6 m throughout most of the site and may extend to approximately 12 m in the vicinity of the area of high relief located east of the Wilson-Cowan Drain.

It is anticipated that the storm and sanitary sewers will be installed in either silty clay or glacial till, both of which possess poor hydraulic conductivity properties.

According to the MOE Water Well Records, the majority of the wells are concentrated along the northern and northwestern edges of the site and extend to the bedrock and bedrock intercept aquifers. These wells draw water from bedrock aquifers and not from overburden groundwater sources. Overburden groundwater located within the Subject Area as illustrated in Figure 4-15. Therefore any impacts on existing water wells from the temporary or permanent dewatering of the perched groundwater at the Subject Area, resulting from the installation of municipal services, is likely to be negligible.

The DCP conforms to the Official Plan policies by protecting parks and open space, natural environment in keeping with the existing rural character and scale; by providing a wide range of housing forms; provides access to community facilities and services; and by providing a Transportation and Servicing Master Plans that is integrated with the planned development.

The preamble in the Secondary Plan states that one of the policies of the former Township of Rideau Official Plan is to carefully control the rate of growth in the Township's Villages, which includes the Village of Manotick, to ensure that "the present nature of these Villages is not destroyed by rapid expansion". The growth management and phasing policies for the Mahogany Community are described in the Development Concept Plan and will ensure that development is phased in sequence with the provision of infrastructure.

Figure 4-15 - Hydrogeological Conditions



4.7 ENVIRONMENTAL CONSTRAINTS

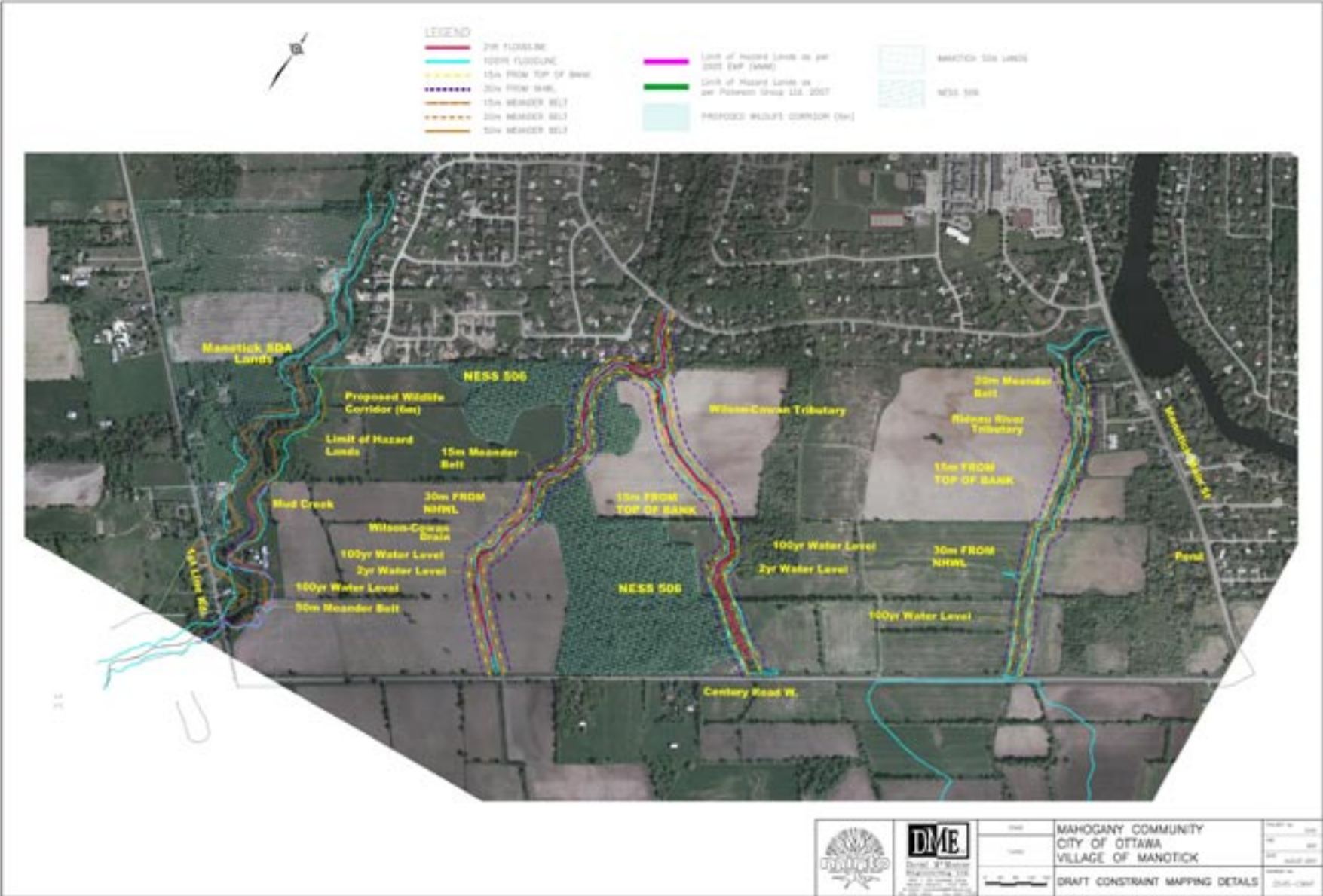
Based on the existing conditions, there are a number of preliminary features that were considered in preparing the development concept plan options. These features are listed below and illustrated in Figure 4-16:

- Mud Creek (per Marshall Macklin Monaghan’s Environmental Management Plan)
- Official Plan requirement for setbacks from watercourses
- Meander Belt widths around watercourses
- Flood limits from watercourses

Summary

In summary, the Development Concept Plan is consistent with the 2005 Provincial Policy Statement by providing a development that utilizes land efficiently; is proposed to be on full municipal services; provides a variety of housing forms; and promotes energy efficiency in terms of lot orientation for solar access.

Figure 4-16 - Environmental Constraints



CHAPTER 5 – DEVELOPMENT CONCEPT PLANS

5.1 PRELIMINARY CONCEPT PLANS

Three draft concept plans were prepared and presented to the public at large at the first Public Meeting and Open House in early March 2007 for comment. The Project Team evaluated each concept based on public input, the guiding objectives, and design principles, and the Secondary Plan. A summary of the evaluation is highlighted in Section 5.2 of this report. The detailed evaluation is in Appendix B. The Guiding Objectives and Principles used for the evaluation of the concept plans are found in the DCP.

5.1.1 CONCEPT 1 - NORTH SPINE ROAD

- Main spine road located north of the Candidate ANSI Woodlot and punctuated by traffic circles at main north-south connections
- Modified grid block pattern
- 'Front door' entrance with central median off Manotick Main Street
- Street connections including Carrison/Watterson at north-west
- Trail and path systems along all streams, with ability to link to a larger trail system along Mud Creek
- Path linkages to Potter Drive at through block easement and at utility easement by the Rideau River Tributary
- Path connections from ends of blocks to creek trail system
- Two storm water ponds located along spine road to help separate neighbourhoods
- Housing facing onto spine road with regular boulevard planting as possible depending on unit type (i.e. minimal space between driveways with townhouses)
- Central School location abutting park – if required a second School could be located west of Candidate ANSI
- Large lots (custom homes) located along north and east boundaries with pockets of townhouses and some stacked townhouses/lots in each neighbourhood 'cell'
- Parks located within core of each neighbourhood
- Small commercial plaza on spine road, west of Candidate ANSI



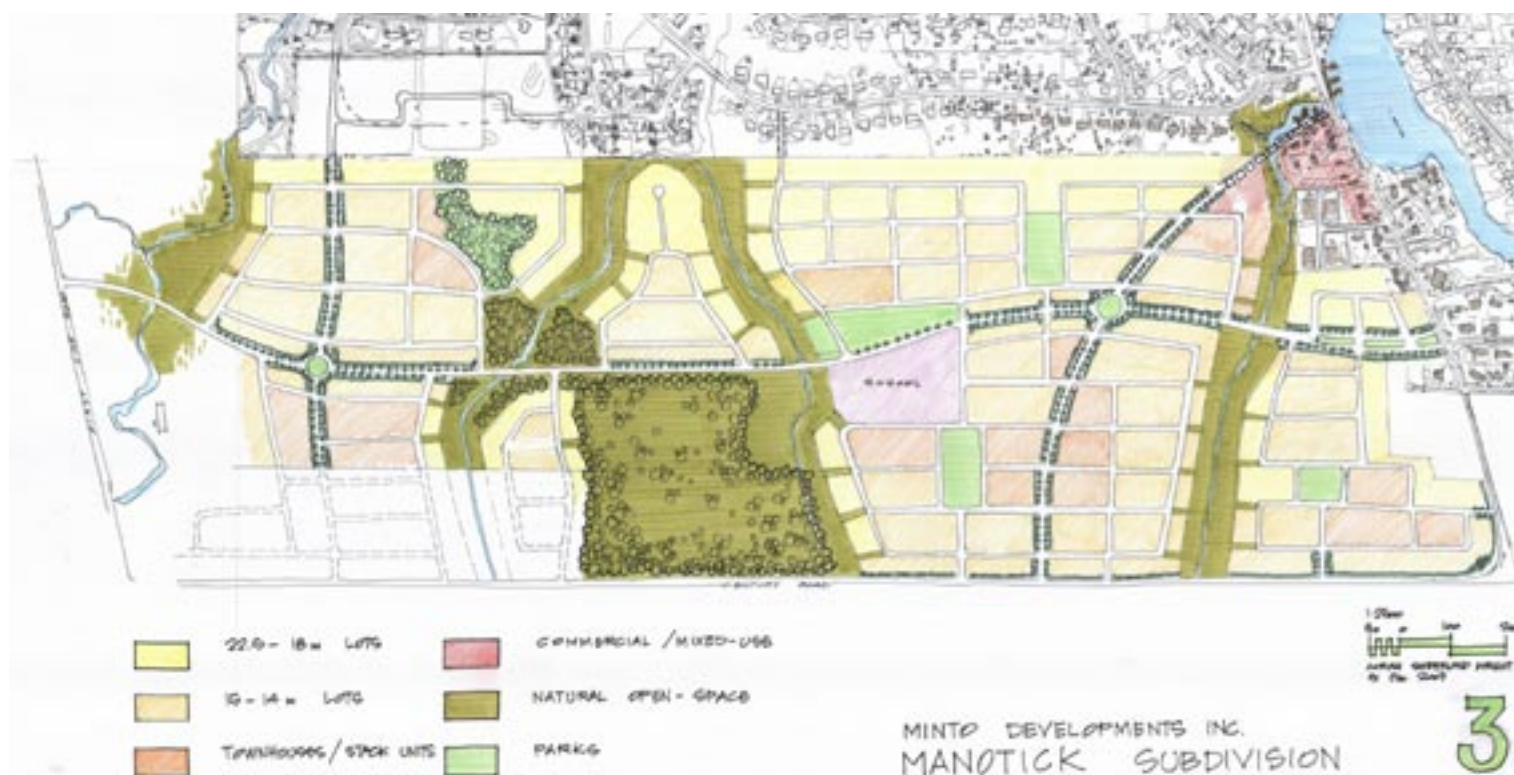
5.1.2 CONCEPT 2 - CENTRAL SPINE ROAD

- Spine road located centrally to separate and balance size of neighbourhoods
- Spine road structured as 'rural lane' with informal hedgerows, sidewalks inside boulevard trees with homes in adjacent neighbourhoods backing onto it
- Seven street connections including Carrison/Watterson at north-west
- Trail and path systems along all streams, with ability to link to a larger trail system along Mud Creek
- Three storm water ponds located along spine road to help separate neighbourhoods
- Path linkages to Potter Drive at through block easement and at utility easement by the Rideau River Tributary
- Path connections from ends of blocks to creek trail system
- Central School location abutting park – if required a second School could be located west of Candidate ANSI
- Large lots (custom homes) located along north and east boundaries with pockets of townhouses and some stacked townhouses/lots in each neighbourhood 'cell' and adjacent to existing bungalow town homes at west side of property
- Parks located along spine road to contribute to 'green spine' and enhance entry 'gateways' into neighbourhoods
- Small commercial plaza on spine road, east of Candidate ANSI



5.1.3 CONCEPT 3 - VILLAGE GRID

- Spine road located centrally and two north-south through roads to separate and balance size of neighbourhoods, punctuated by traffic circles
- Potential entry path or road suggested along Unnamed Drain from Manotick Main Street to provide for a more direct connection to Main Street and the Village Core and also as a development catalyst for the existing commercially zoned properties
- Spine road structured as 'rural lane' with informal hedgerows, sidewalks inside boulevard trees with homes in adjacent neighbourhoods backing onto it
- Grid block pattern similar to original Village with east-west orientation for improved solar access
- Maximized connectivity and little differentiation of road hierarchy with up to twelve street connections including Carrison/Watterson at north-west and connection to Potter Drive
- Trail and path systems along all streams, with ability to link to a larger trail system along
- Storm water management with wider stream corridors rather than storm water detention/retention ponds
- Central School location with park across street – if required a second School could be located west of Candidate ANSI
- Large lots (custom homes) located along north and east boundaries with pockets of townhouses and some stacked townhouses/lots in each neighbourhood 'cell'
- Parks located within core of each neighbourhood, configured as 'T' intersections to terminate long views and calm traffic
- Extend commercial zone to west side of the Rideau River Tributary, and allow for some mixed-use and higher density residential, such as a seniors residence



5.2 EVALUATION OF CONCEPT PLANS

Based on the evaluation of the three draft concept plans, no one concept came out as the preferred concept, but preferred elements were identified that were carried forward to the Land Use Concept Plan. These elements have been grouped into five (5) categories and are listed below:

Village Character

- Continue variety and provision of land uses (e.g. residential, schools, retail, mixed-use)
- Carry forward predominantly single family units, while allowing some multiples
- Provide a range of densities
- Configure the open spaces and collector roads (as a rural laneway lined with hedgerows) to separate neighbourhood cells and provide green gateways into each cell. Provide a range of cell sizes
- Continue variety of lot sizes and housing forms to suit a spectrum of household size and age (i.e. housing continuum), as well as affordability
- Provide opportunities for employment generating land uses

Transportation

- Maintain vehicular and/or pathway connections to roads located in the community to the north of the Subject Area
- Maximize road, sidewalk and trail connections to the existing Village
- Provide linkages to existing Core
- Configure natural open space to separate neighbourhood cells and provide walking and cycling links
- Maximize multi-modal options
- Maintain accessibility to land uses
- Provide a direct and easily found street leading to a waters edge path at the embayment on the Rideau River Tributary
- More curvilinear East-West Spine to break up lines of sight and reduce speed
- Remove roundabouts as they are not pedestrian/cyclist friendly

Natural Environment

- Protection of Candidate ANSI and watercourses
- Encourage protection of other woodlots and identify opportunity for design with nature
- Provide a 30 m setback from watercourses
- Further investigation of the woodlot north of the Candidate ANSI, as part of the NESS 506 area

Parks and Open Space

- Locate parks centrally in neighbourhoods to provide identity and focus
- Carry forward a high percentage of parks/open space and keep schools located on the Spine road
- Maintain open space and school node principle

Design Guidelines

- Locate larger buildings along street leading to a waters edge path at the embayment on the Rideau River Tributary to allow glimpses of the tributary landscape between buildings

The Consulting Team took the results of the evaluation and incorporated them, wherever possible into the Land Use Concept Plan, as illustrated in the Development Concept Plan document.

5.3 CONCLUSION

The proposed development will result in a net benefit to the Manotick Community and to the City of Ottawa. The proposed development respects the rural character and quality of life of the existing Village; provides sustainable house design as an environmental response to reduce unnecessary energy consumption and by using land efficiently, and will meet the needs of the existing and future village residents by providing a variety of housing types in response to the housing continuum (age in place).

The Mahogany Community will preserve the entire Candidate ANSI in its natural state and preserve large areas of natural features and will provide opportunities for outdoor learning, access and connectivity to retain the 'village feel'.

The Spine Road will be a rural roadway meandering throughout the Community with a large landscaped buffer and an informal pathway in the right-of-way.

APPENDIX A - HISTORICAL ANALYSIS



\$3

A Dickinson Day message... 2009

Much of the this book has to do with the past 25 years. What lies in store for Manotick in the next 25 years? Mayor David Bartlett agreed to be our George Oruell. Before leaping ahead to the year 2009, he left a message: "People have lived and prospered, if modestly, in our village for 125 years. We wish ourselves—Manotick—a happy anniversary."

It is Dickinson Day, Saturday, June 4, 2009 A.D., and Manotick is celebrating its 150th anniversary. Former Mayor Dave Bartlett, 83, and long retired but still spry, takes his morning walk up the hill, across the East Channel Bridge, back to the bulkhead and home again. He has followed the same route for more than 40 years. His companion walks faster, as she has for 40 years.

The bulkhead is unchanged from 25 years ago and the mallards have nested successfully, as they always do. The mother birds are still followed by a dozen ducklings but later in the summer the muskies and the mink will get some, as they always do. Nature always strives to keep a balance.

The back-channel bridge is new, though. The structures they used to design back in the 1950s had a service life of about 50 years, and both Manotick bridges had to be replaced around 2005. There was a great debate about whether they should be rebuilt in the classic style of the past century, or redesigned to be up-to-date for the second millennium. The traditionalists won, and several apprentices were encouraged to learn how to pour cement in the almost-forgotten 20th century manner.

The central part of the village—between Main Street and the mill—looked much as it always had. Some of the 20th century buildings had worn out and been replaced, but the 19th century houses seem good for another century at least.

The people lucky enough to live in the village core and on Arthur Crescent take great pride in their old houses. After all, anybody can live in a 21st century house, but nobody can duplicate the authentic past. As a result old houses, with the original "LACAC" plaque on them, go for astronomical prices, while the modern units are practical and affordable, but not nearly as much in demand. LACAC, of course, keeps considering new heritage buildings. Next year—2010—it has its eye on Karl's old Petro-Can service station.

Thanks to inflation, everyone in 2009 is a millionaire. In terms of everyday living, people are a little better off than they used to be, but prices are up too. An ice cream at McDonald's is \$53. On Parliament Hill, there is serious talk of knocking three zeros off the currency, to bring nickels and dimes back into use again. Just talk, probably.

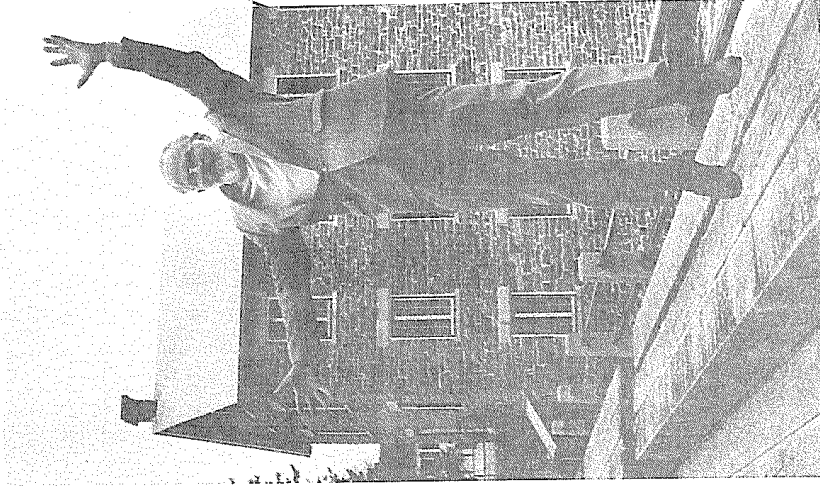
Back in the late '80s and '90s, the people of Manotick were concerned about the southward expansion of subdivisions from Barrhaven, which threatened to swallow up our community. Although some people had weighed in to defeat the first "Southern Growth Area" proposal in the mid-1970s, it was 1986 before the new threat became a major political issue in the village and region. There followed a whole series of monumental controversies. We won some and we lost some, but the establishment of a

second Green Belt between the Jock River and the road to Richmond in 1993 finally settled the question.

In this year, 2009, Manotick has a population of about 8,000. The slow growth that started half a century ago has continued to add 100 or so new people most years: it's about what the town can absorb without becoming impersonal.

As in Canada as a whole, the average age of the population is higher than it used to be. When the mayor was

(Continued on p6)



Russell Mant photo

Mayor Bartlett with that 1984 birthday feeling

Mayor's message

(Continued from p3)

young, half the population was under 20; now half the population is over 35. Recreation is as important as it ever was, but there is less emphasis on body-contact sports. When the four-day week and the 40-week working year became standard in 1988, the need for better facilities became obvious to everyone.

The new community centre was accordingly designed with a theatre and swimming pool, as well as accommodation for continuing education and the new Manotick High School, and a state-of-the-art electronic library with lots of space for (wait for it!) books! The new complex was funded through federal and provincial bi-millennial grants offered for the year 2000, but (some things don't change) it finally opened in 2002.

The old library, which served well for more than a quarter of a century, was turned over to the Scouts and Guides and the rest, as a belated replacement for their old hall which was demolished back in the early 1970s. It is, of course, too small.

The town wharf behind it has been busy from June to October, since it was built in 1987. The great efforts required to avoid pollution of the Rideau proved successful and worthwhile, and the river has come into its own as a major recreation facility for Eastern Ontario.

Greater maturity in the population, and the shorter work-week and work-year, have had implications beyond recreation. People have time to volunteer, and the community relies on volunteers as it always has.

The congregation at St. James is concerned about how to add to the church which was new in 1984, and at St. Leonard's they are glad they decided against subdividing their property next door. The Presbyterians have long since left the Mill Square, to find room to expand, and the Conservation Authority was happy to buy their building, though not so happy about the price. In 1996, the United Church built an addition over their parking lot and grumbled only a little when the council insisted that they include twice as many parking spaces underground.

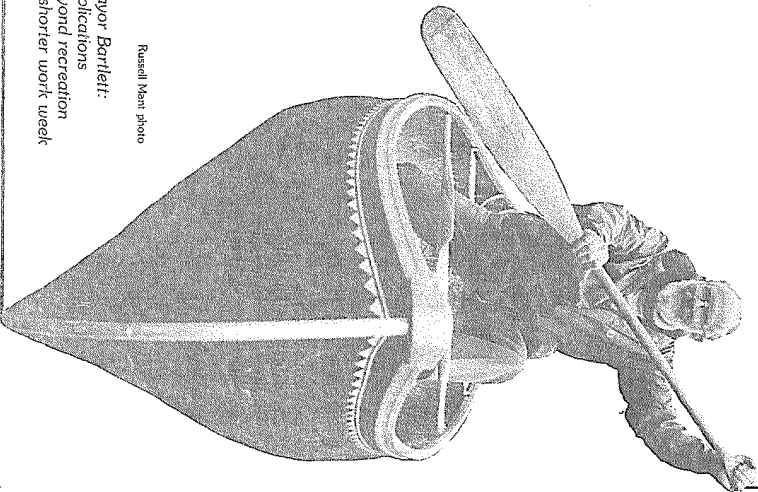
To the south of Manotick there is farmland, as there has been for 150 years. The land is used more intensively now, both for food and fibre. The devastating Third World famines of the 1990s finally persuaded everyone that land which can grow crops is too valuable for anything else. Since then, we have heard no more arguments about five or 10 acres being of no agricultural use. Farm prices were not very rewarding in 1984, but since they turned around a few years ago agriculture has been recognized as the most important industry in Rideau Township, as indeed it always was.

As he stands on the bridge in 2009, watching the ducks, the former mayor wonders what the next 25 years will bring.

Back in 1984, in the wide world beyond Manotick, the Philistines were in the ascendancy, he reflects. They fed us a jeremiad of doom and gloom through the mass media. The short term was all that mattered: take the money and run, and beggar thy neighbour. Hurrah for the "practical managers", good riddance to the Age of Aquarius.

We all know that most people are not like that, and indeed after 1984 public attitudes swung back towards concern for a better environment and a better civilization.

One thing is sure: for the next 25 years (2009—2034) as for the time since 1984, the people of Manotick can direct most of their own destiny. Some things will remain beyond our control. A great many other things are not. If we sit back and just let things be done to us, we will deserve the result, but we will most assuredly not like it. If we collectively set out to make Manotick the most agreeable, civilized and livable small town in the world, we will succeed in much, enjoy the process, and at least have the satisfaction of having tried.



Russell Mann photo

Mayor Bartlett:
implications
beyond recreation
in shorter work week

Table A-1 – First Settlers

The following is a brief description of the fourteen pioneer families in the early days of Manotick:

Family/Person	History
The Mansfield Family (1806)	
	Have lived in the area since 1806.
The Boyd Family (1845)	Members of the first Presbyterian Church at Long Island (supported by Manotick, 1984, pg. 25).
Harry Fee	Pioneered the farm at Long Island Locks.
The Condie Family	William Condie settled in Osgoode Township near the little settlement known as the “Mills”, now Manotick. John Condie operated a Blacksmith Shop in Manotick for 30 years (supported by Manotick, 1984, pg. 27).
The Moodie Family	James Moodie purchased Lot 20 Rideau Front in 1847.
The Cummings Family (late 1860s)	Mr. Cummins construct□
Orman Beach	Owner and operator of Kidd No. 2 Cheese Factory.
The Kelly Family (early 1800s)	Settled on Lot 17 Osgoode Township, four miles south of Manotick.
The Eadie Family	Settled on Long Island in 1843.
The Doyle Family.	Settled in the Manotick area in 1847.
The Findlay Family	Bought 100 acres of land in the Manotick area in 1847.
The Cameron Family	Isabelle Cameron married into a Manotick family in the mid 1800s.
The Leach Family (1904)	William J. Leach was a teacher and later a doctor in the Village of Manotick (supported by Ellis, 2005; Manotick, 1984, pg. 27)
The Dunlop Family (1844)	Built a small house on the Rideau River, south of Manotick.

The following is a brief summary of the families who have not been previously mentioned whose historical reference is evident by the street names in the Village of Manotick:

Street Name	Person/Family	Significance
Arthur Street	Arthur McKeown	First settler on Long Island who operated Dickinson’s scow (flat bottomed boat) across the west channel (confirmed by Carroll and Humphreys, 1997, pg. 8).
Richard Street, Tighe Street	Richarge Tighe	One of the early settlers (supported by Walker and Walker, 1968, pg. 399)
Heenan Terrace	Mr. and Mrs. Heenan	Farmed the south end of Long Island.

McLean Crescent, Irene Place, Claire Place, Jean Park Road.	George McLean, his wife and two daughters.	Built many homes in Hillside Gardens in the 1950s.
Driscoll Drive	Two Driscoll families	Lived in the Hillside Gardens area for many years.
Neilus Lane and Lena Avenue	Neilus Driscoll and his wife Lena.	Farmed part of Long Island years ago.
Rowat Lane	Rowat family	Farmed on Long Island.
Ann Street	Ann Crosby Currier	Wife of Joseph Currier, one of Watson's Mill's co-owners.
Fee Street	Fee family	Operated Fee's Store.
Potter Drive, Clothier Court, Scharfgate Drive, Goddard Street, Pettapiece Crescent	Various families	Farmed the area where Manotick Estates is now. Walker and Walker also indicated that John Clothier was one of the first settlers (1968, pg. 399)
Clingin Lane	John Clingin	Farmed much of the land that is now the Carleton Golf and Yacht Club (supported by Manotick, 1984, pg. 23)

Finally, other original settlers in the area include: the Todd family, the McNeil family, the Buchanan family, the Bergin family, the Dore family, and the Collins family, William Doughney, Andrew Gamble, and James Mooney (Manotick, 1984, pg. 23; Walker and Walker, 1968, pg. 399).

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Roll	Frame(s)	Year
A5403	25, 27, 29	1936
A10336	9, 238	1946
A15596	6	1956
A19674	180	1966
A31012	102	1975
A31277	1	1981
A31274	4	1981
A31480	83	1987
A31581	182	1991
A28051	25	1994
A31789	135, 179	1999
A31833	60, 107	2002

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1981	Selected Population, Dwelling, Household, and Family Distributions, Showing Selected Social and Economic Characteristics, for Census Tracts, 1981 (Ottawa-Hull: 95-537) (pg. 1-131)
1986	Selected Characteristics for Census Tracts, 1986 Census- 20% Sample Data (Ottawa-Hull: 95-136, Part 2) (pg. 1-112)
1991	Selected Characteristics for Census Tracts, 1991 Census- 20% Sample Data (Ottawa-Hull: 95-351, Part B) (pg. 131)
1996	Selected Characteristics for Census Tracts, 1996 Census- 100% Data and 20% Sample Data (Ottawa-Hull: 95-200-XPB) (pg. 238)
2001	Selected Characteristics for Census Tracts, 2001 Census- 100% Data and 20% Sample Data (Ottawa-Hull: 95-234-XPB) (pg. 291)
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APPENDIX B

DEVELOPMENT UNIT
POTENTIAL ANALYSIS -
VILLAGE OF MANOTICK

VACANT LAND ANALYSIS

Development Unit Potential Methodology

FoTenn Consultants conducted a development unit potential analysis in December 2006 to determine the number of residential units that may eventually be serviced once water and sewer are brought to the Village of Manotick. Although this may take a long time, capacity may have to be reserved for this potential.

The area considered for the purpose of this analysis included all of the lands within the Village boundary as illustrated in the Village of Manotick Secondary Plan. The areas recently approved for large estate lots on private well and septic systems (i.e. the Special Design Area (SDA)) are assumed to not be part of any future service area. In addition, the lands bounded by Bankfield Road, First Line Road and Prince of Wales are not included in this analysis since it was assumed that these lands would be on private services.

The methodology used to determine the number of units in the Village was as follows:

Methodology

1. FoTenn reviewed the City of Ottawa’s Rural Residential Land Survey 2003, published in 2005 and the Rural Residential Land Survey 2004-2005 Update, published in 2006. Although this information was relatively current, the Rural Residential Land Survey (RRLS) did not contain maps so the textual information

could not be referenced to any corresponding map and therefore was not used in the analysis.

2. FoTenn obtained the City of Ottawa Land Use 2005 map, which is a comprehensive inventory of all land uses in the City of Ottawa. The land uses are categorized into detailed land uses. Based on FoTenn’s review, there was a total of 58 vacant parcels illustrated on the City’s Land Use 2005 map. It should be noted that there was no distinction of the parcels by property ownership or natural features boundaries. Therefore, Minto Estates and the Special Design Area lands were included as one parcel at this step. The Subject Area for the Development Concept Plan is obviously a vacant parcel but is not included in this particular analysis since the total potential for development is the subject of the DCP.
3. A site visit was conducted on December 13, 2006, to confirm how many of the parcels were actually vacant. Each vacant parcel was visited and documented with notes and photographs.
4. The information gathered from the site visit was used to revise the City’s Land Use map to reflect the existing conditions of the vacant parcels. In cases where there was some doubt about lot delineation, the eMap service provided online by the City of Ottawa was accessed on January 3, 2007 to examine air photos and property lines to confirm property boundaries and parcel configurations. The air photo is dated 2005. This resulted in dividing the parcels further into smaller parcels for the analysis. For example, Parcels 34-36 were illustrated on the City’s Land Use map as one parcel. The site visit confirmed that a residential infill existed in the middle of the parcel. So this area was divided into 3 parcels to reflect the existing conditions.
5. On January 31, 2007, FoTenn used the City’s eMap service and visually counted all of the existing residential units in Manotick to determine the total at the time of this report.

Assumptions

For the purpose of this analysis, several assumptions were made:

1. The DCP Subject Area (Parcel 10) is not included in determining the development potential.
2. Parcels 11, 12A, 12B, and 12C would all be developed with estate residential lots and will never be serviced and are therefore not included in the analysis.
3. The number of units existing as of December 2006 is 1591. This includes 25 apartment units which came from the 2001 Census Data since the 2006 Census data was unavailable at the time of this report. It is recommended that this figure be confirmed with the 2006 data when available. This also includes the 12 vacant parcels that were observed during the site visit on December 13, 2006.
4. Excluding Parcels 10, 11, 12A, 12B, and 12C, there are approximately 30 vacant parcels.
5. The non approved potential subdivision areas were based on an average of the highest units/gross residential hectare stated in the Secondary Plan for the Village of Manotick (Policy 3.7.2.5 (2) (b) to (d).

The calculation is as follows:
Single family estate 2.5 to 5 units/gross residential ha
Single family low density 5 to 10 units/gross residential ha
Single family moderate density 10 to 15 units per gross residential ha

5 + 10 + 15 = 30 divided by 3 = 10

Therefore the unit potential for Parcels 1 and 50A was calculated at 10 units/gross ha. This resulted in 161 units.

6. Parcel 12C was assumed to be developed at 0.4units/gross ha. This was based on the smallest lot size approved for the SDA. This resulted in approximately 12 units in addition to the existing 7 units, for a total of 19 units.
7. Parcel 50B is the approved Miller’s Point subdivision of 59 lots.
8. The infill unit potential for the remaining 28 vacant parcels (not including Parcels 1, 10, 11, 12A, 12B, 12C, 50A, 50B) was based on a lot area of .19 ha to reflect the existing infill developments. This resulted in 56 infill unit potential.
9. Opportunities for infill development on existing lots through severance or adding additional units, within the built-up area in Manotick when full municipal services are brought to the Village were not part of the analysis.
10. Parcel boundaries are approximate.
11. Parks and open space were not assumed to be developable based on small lot sizes, community ownership, and the protection of maintaining parks and open space for the Manotick community.
12. Existing commercially-zoned parcels would remain as commercial zones as per the former Township of Rideau Zoning By-law 2004-428.
13. The retail/commercial businesses in the Village Core would maintain their parking lots for customer parking and would not redevelop them even if Manotick is on full municipal services.

Analysis

Of the vacant parcels illustrated on the City’s 2005 Land Use Map, there were:

- 12 residential infill parcels;
- 11 small parks and open space; and
- 7 commercial parcels.

Excluding Parcels 1, 10, 11, 12A, 12B, 12C, 50A and 50B, there were 28 vacant parcels as of December 2006 (Figure B-2) that have the potential for residential infill.

Estate Lots

In addition, FoTenn obtained information from Minto Developments Inc. and from the City of Ottawa regarding approved plans of subdivision for the following two areas within the Village:

Special Design Area

The Special Design Area (SDA) is located south of Bankfield, west of Mud Creek and east of First Line Road. The SDA parcel was divided into 3 parcels and totaled 220 units (i.e. 10 existing and 210 approved).

Based on this information, Parcels 11, 12A, 12B, and 12C did not form part of the vacant land use analysis in determining unit potential, but in total there would be 220 units (10 existing units and 210 approved).

Miller’s Point

Miller’s Point is the area north of Bankfield Road, west of Manotick Main Street, formerly known as the Nepean lands. This parcel was divided into two parcels 50A and 50B and are included in the analysis.

The Unit Potential is illustrated in Figure B-2 and described in Table B-1.

Table B-1 - Unit Potential Not Including Subject Area

	Number of Units	
	To Potentially be Serviced	To Remain on Private Services
Existing as of Dec. 2005	1,574 (includes 25 apartment units according to the 2001 Census data)	17 (includes 10 existing in SDA (Parcels 11, 12A, 12B) + 7 existing in Bankfield area Parcel 12C)
Approved Plans of Subdivision/ Concept Plan for SDA	59 (Miller’s Point - Parcel 50B)	210 (Special Design Area – Parcels 11, 12A, 12B)
Non-approved area potential subdivision plans	161 (Parcels 1 = 43 units and 50A = 118 units based on 10 units/gross ha)	12 (Parcel 12C based on 0.4 units/ gross ha)
Infill unit potential excluding parks, open space, and commercial spaces	56 (Based on 0.19 units / ha)	
Total	1,850	239

Conclusion: Based on this analysis, there are approximately 1,850 existing and committed units that could be serviced over and above the Subject Area. This number is generally consistent with the J.L. Richards, “Village of Manotick Servicing Mater Plan and Trunk Services Concept”, May 2003, which concluded that there were 1,655 existing and vacant units in the Village, plus 177 units for Miller’s Point (i.e. FoTenn’s Parcels 50A and 50B), for a total of 1,832 units excluding the Subject Area lands.

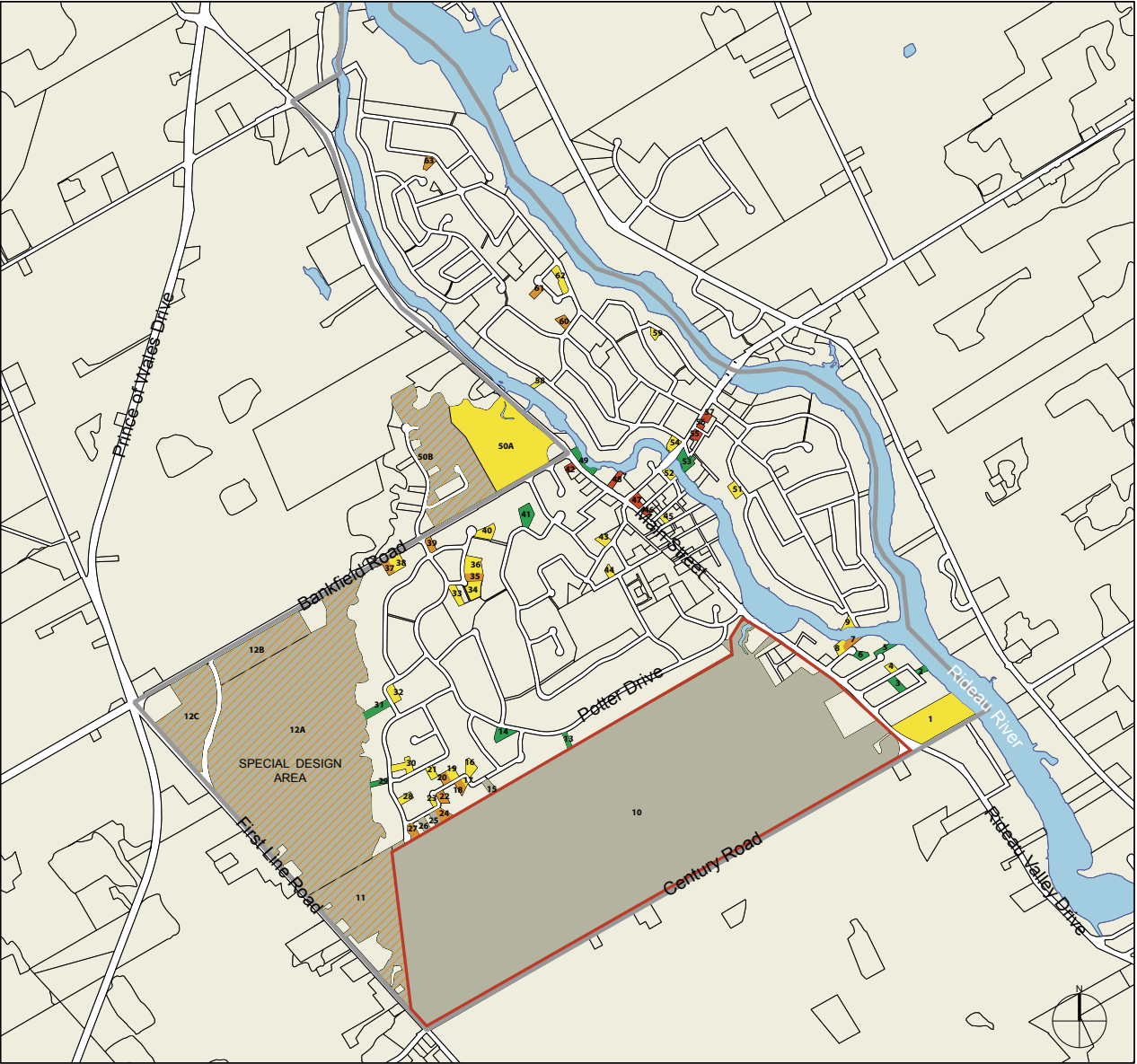


Figure B-1 - Development Unit Potential

- Legend
- Residential Infill
 - Residential Potential
 - Commercial / Mixed Use Potential
 - Parks & Open Space on Small Lots
 - Estate Lots
 - DCP Study Area and Vacant
 - Water
 - Streets
 - Village Boundary
- *Parcel boundaries are approximate

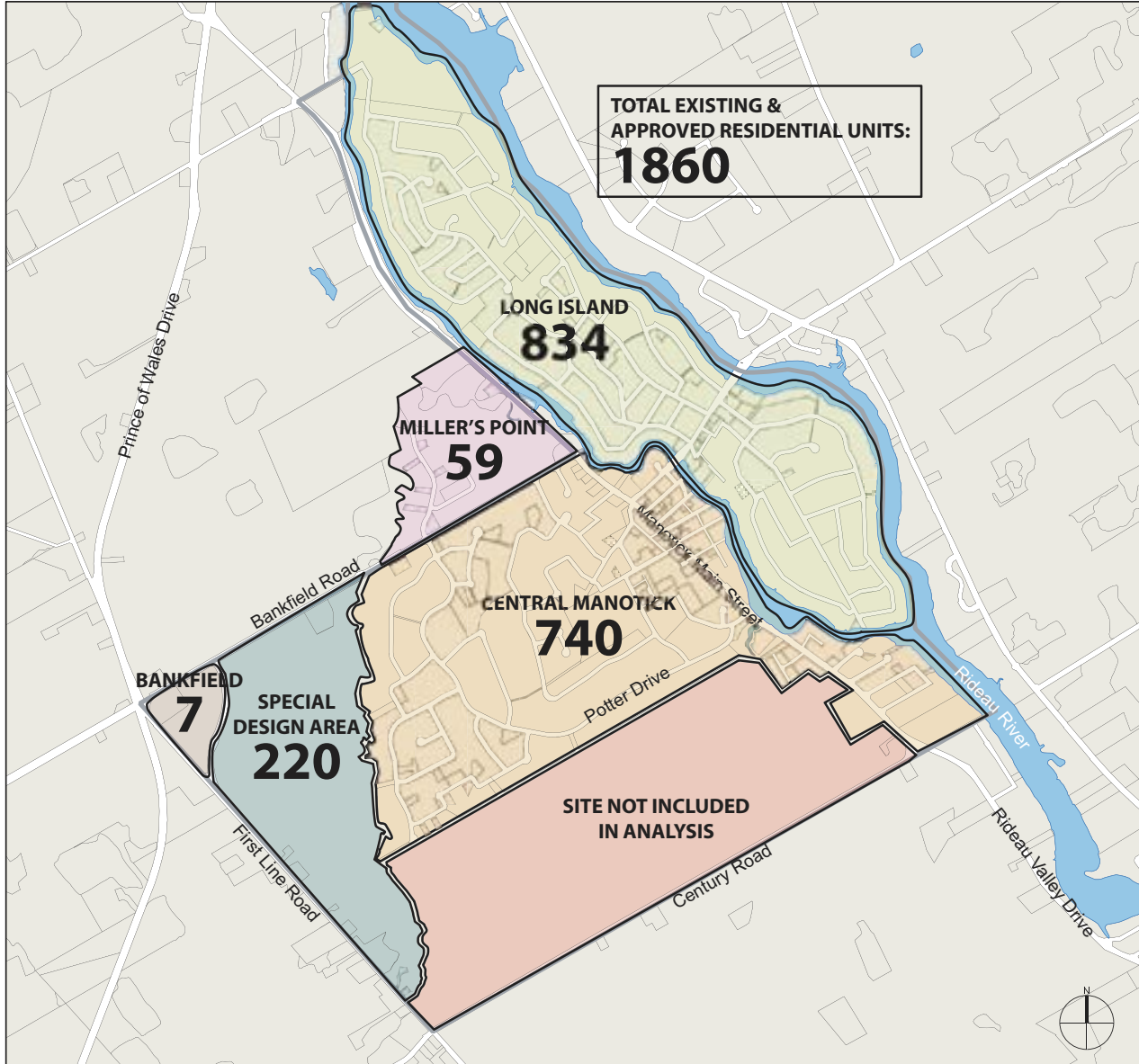


Figure B-2 - Unit Count Map

VILLAGE CORE ANALYSIS

The purpose of the analysis is to identify parcels of land that could potentially accommodate multiple family housing units in the Village Core. The following are the assumptions used for this analysis:

1. Study boundary for the purpose of this analysis is consistent with the Village Core boundary as illustrated in the Village of Manotick Secondary Plan.
2. Secondary Plan policies and designations are followed.
3. Assume development of vacant lands identified on the City of Ottawa Land Use Map, 2005 and additional lands confirmed via FoTenn’s site visit on May 22, 2007 and no redevelopment of existing buildings.
4. Full municipal servicing (i.e. storm and sanitary) would be in place.
5. Parking lots will remain in place to accommodate required parking.
6. No land assembly to create larger development parcels.
7. Division of land to create developable parcels (i.e. sever septic fields for development) would be possible.
8. The existing Rideau Township Zoning By-law 2004-428, Consolidated June 14, 2006 was applied. The City of Ottawa has a Draft Comprehensive Zoning By-law, September 2007 that contains the draft Rural Zones. These were also considered. See Table B-2.
9. Minimum lot area of 0.195 ha based on existing zoning provisions.
10. Commercially zoned properties are assumed to have residential uses as part of the existing buildings as permitted in the Rideau Township Zoning By-law. No redevelopment for new residential was assumed.

Land Use Designations

Under the Village of Manotick Secondary Plan, the Village Core lands are categorized into the following seven (7) land use designations and are illustrated in Figure B-3:

- Bridge Street: Residential uses are permitted, including multiple family housing.
- Main Street: Residential uses are permitted, provided they are located above retail commercial.
- Historic Village – East Sector: Residential uses are permitted, including multiple family housing. Mixed-use development is also permitted provided that 2 or more permitted uses may be physically integrated within a building or separate buildings on the same lot. Multiple family housing is also permitted on Ann St. in the West Sector.
- Post Office District: Residential uses are permitted, including multiple family housing.
- The Gaps: Residential uses are permitted, including a multiple family district. A conceptual development scheme or a demonstration plan is required for this area before development can proceed.
- The Mews: Residential uses are permitted.
- The Arena: Residential uses are not permitted.

Potential Multiple Housing Units Analysis

Based on the assumptions above, FoTenn identified eleven (11) sites that could have development potential for multiple-unit housing. These 11 sites are currently vacant or could be severed to create development opportunities. The total land area of the 11 sites is approximately 3.24 ha (8.0 acres).

Conclusion

Based on the former Rideau Township Zoning By-law, which was in effect at the time of this report, the minimum lot area of 0.195 ha was used. Sites 1 to 6 met this minimum lot area. The size of the six sites total 2.576 ha. This land area was discounted by 20% for

roads (i.e. 0.515 ha), resulting in 2.016 ha of developable land.

Based on the built density of existing multiples of 40 units/ha, the estimated development potential on the 6 sites, having a minimum lot area of 0.195 ha, could generate approximately 80 additional multiple family housing units in the Village Core as demonstrated in Table B-3 and illustrated in Figure B-4.

This means that there is the potential of 135 multiple units (55 existing + 80 additional) or 7.3 % of the housing types in the existing Village of Manotick, including the Village Core area would be as a multiple unit.

Table B-2 - Village Core and Vacant Land Analysis

	2006 Census	FoTenn’s Vacant Land Analysis of existing Village and Core Area	Sub-Total
Private Dwellings	1,612 units	1,850 units (serviced lots)	3,462 units
Multiples	101 units	80 units (additional units in the Core Area)	181 units
Percentage of Multiples	6.27 %	N/A	5.2 %

Table B-3 - Village Core Analysis

Number	Location	Township of Rideau Zoning	Minimum Lot Area (ha)	Res Permitted	Units Permitted	Area (ha)	Frontage (m)	Lots Under Current Zoning Based on Area Only	Lots Using 29 Units / Ha	Draft September 2007 Zoning By-law		
										V3B (Min. Lot Area .024 ha)	V3B (Min. Frontage 6m)	V2E (min. .04 ha)
1	540 Manotick Main Street	RV	0.195	Yes	1	0.215	31	1	6	9	5	5
2	5501 & Adjacent - Manotick Main Street	RV / C-18	0.195	Yes	1	0.350	42.1	2	10	15	7	9
3	Back of 5512 Manotick Main Street	RV	0.195	Yes	1	0.468	no frontage	2	14	20		12
4	Next to 1171 Maple Street	RV	0.195	Yes	1	0.216	39.7	1	6	9	7	5
5	Adjacent to Hyfield Place	RV-8	0.195	Yes	40	0.797	110.4	4	23	33	18	20
6	Behind Mews	C-5	0.195	Yes	1	0.530	30.5	3	15	22	5	13
7	1125 Bridge Street (Front Half)	CM	0.195	Yes	1	0.135	35.2	1	4	6	6	3
8	1074 Bridge Street	RV	0.195	Yes	1	0.061	20.38	0	2	3	3	2
9	Next to Medical Centre	RV	0.195	Yes	1	0.141	40.8	1	4	6	7	4
10	Behind Medical Centre - South River Drive	C	0.195	Yes	1	0.155	30.9	1	5	6	5	4
11	5495 South River	RV-1	0.195	Yes	1	0.172	30.8	1	5	7	5	4
	TOTAL					3.245		17	94	135	69	81

Figure B-3 - Village of Manotick Core Area

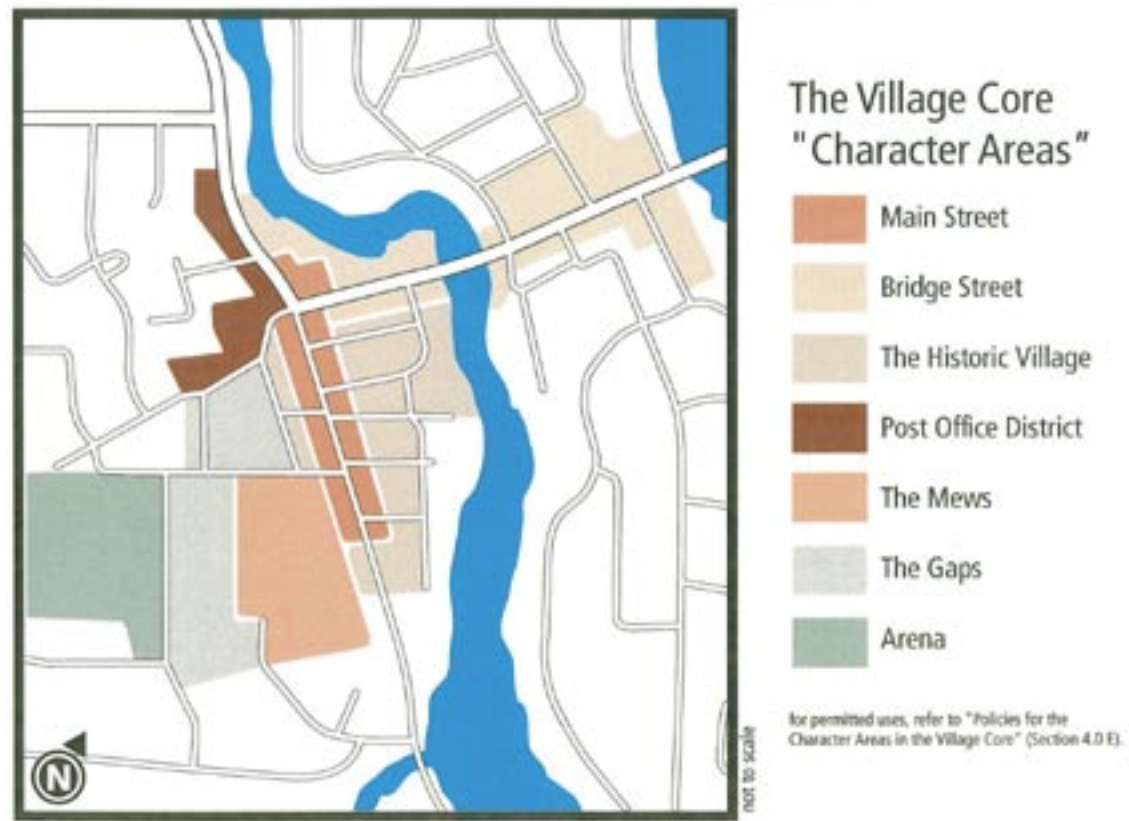


Figure B-4 - Village Core Analysis



APPENDIX C

EVALUATION OF DRAFT CONCEPT PLANS

At the March 3rd, 2007 Public Meeting & Open House held at the Manotick Arena, the public at large had the opportunity to review and comment on the three draft concept plans. The issues that were raised related to the following three themes:

- “Village character.” There was concern expressed by some members of the public that the development would have a significant impact on the “village character” and “lifestyle.” Manotick has a strong identity based on being a small rural community village, with “unique houses” on large lots (private services) with a rural feel and abundant access to natural areas. The community felt that the density (and resultant population increase) proposed through the 3 concepts presented at the public meeting could potentially change the community feel of Manotick and dramatically alter the physical layout this low density village. There was a desire expressed by some to maintain the existing density and rate of development that has historically existed in the village, on private services. Maintaining the existing village character will be considered through the evaluation of the three draft concept plans, and efforts will be made to minimize impact on current residents.
- “Traffic–Village infrastructure.” The overall theme that emerged was the potential impact of the development on traffic and infrastructure in Manotick (i.e. Roads, sewers, recreation facilities, libraries, schools, police and fire services). A greater focus on how the developer will work with the city to consider the long-term impact of the proposed development. Consideration will be given to the infrastructure planning and in the provision of services, particularly with respect to the

development of “triggers” and the eventual phasing of infrastructure as it relates to the development concept plan.

- Detailed comparison or evaluation of the Draft Concept Plans by the public was very limited in scope. Despite detailed questions on the comment sheets, most respondents focused their comments on the general level of opposition to the density proposed and existing traffic issues in the village core during peak periods. Value-oriented statements concerning preservation of village character and natural areas were common. The information the public was most interested in was the size of lots proposed, density of development proposed, preservation of natural features (specifically woodlots), housing form (specifically the proposed location of townhomes), and proposed land-uses adjacent to existing residential areas.

Methodology

In order to address these issues and move towards a preferred concept, the Consulting Team conducted an evaluation of the three draft concept plans based on Official Plan and Secondary Plan policies and the Draft Guiding Objectives. Some of the issues will not be addressed through the evaluation process, but will be addressed as part of the DCP through implementation policies, phasing, design guidelines, etc. The methodology included the following four (4) steps:

A Review of Policy Framework & Development of Evaluation Criteria

- Review of the City of Ottawa Official Plan, 2003 policies for areas designated, “Village”. This review was limited to the Village policies since many of the Official Plan policies with regards to other matters, for example, natural environment are broader in scale, and may also be included in the Village of Manotick Secondary Plan. Furthermore, the Village of Manotick Secondary Plan contains more specific policies related to development in the Village;

- Review of the Village of Manotick Secondary Plan policies in its entirety; and,
- Review Draft Guiding Objectives prepared for the DCP process.

B Policy / Criteria Cross-Reference

- Secondary Plan policies were cross-referenced with the City of Ottawa policies and were grouped together and referenced under the Official Plan criteria;
- Secondary Plan policies were grouped together as criteria and cross-referenced if the intent of the policies was similar; and,
- Draft Guiding Objectives were grouped together and referenced with Official Plan and/or Secondary Plan criteria, where appropriate.

C Policy Groupings

Upon completion of Step B, it was evident that some of the Secondary Plan policies were not appropriate as evaluation criteria, since the policies either were not applicable to the development of the Subject Area lands (i.e policies that focuses on other locations of the Village), or the policies could be applied to all three draft concept plans. Policies applicable to all three concept plans would be addressed in the Development Concept Plan (DCP) final report as policy directives; design guidelines; or would form part of the supporting plans (eg. Master Servicing Plan) for the DCP Subject Area.

In addition, Schedule A and some Secondary Plan policies were grouped as potentially requiring an Official Plan Amendment for the following reasons:

- The DCP results in a better concept for achieving the principles and objectives in the plan than the secondary plan; and/or
- circumstances have changed that require a reassessment of the vision for the property; and/or
- community aspirations for the site have changed; and/or
- it provides solutions to problems that didn't exist at the time of the Secondary Plan; and/or
- other social, economic or environmental arguments that support the proposed development.

As a result, such policies were grouped accordingly:

- Not Applicable to Subject Area;
- Applicable to all three Draft Concept Plans; or
- May Require an Official Plan Amendment.

Table C-1 demonstrates the policies and Guiding Objectives that fall within these 3 categories.

D Evaluation of the Draft Concept Plans

The Consulting Team conducted an evaluation (see Table C-2) of the three Draft Concept Plans that were presented to the public on March 3, 2007 and identified which Concept best met the criteria and indicators and provided specific comments on how the criteria and indicators led to a Draft Preferred Concept Plan. The proposed land use distribution for each concept is found at Table C-3.

Provincial Policy Statement, 2005

The 2005 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. One of the key policies in the PPS is to build strong communities by managing and directing land use to achieve efficient development and land use patterns.

In addition, the Province's long term prosperity, environmental health and social well-being depend on the protection of the natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits (Section 2.0).

Under the PPS, settlement areas "shall be the focus of growth and their vitality and regeneration shall be promoted" (Policy 1.1.3.1). A "settlement area" is defined in the PPS as urban areas and rural settlement areas within municipalities such as villages that are:

- Built up areas where there is a mix of land uses; and,
- Lands which have been designated in an Official Plan for development over the long term planning horizon (Section 6.0).

One of the key policies in the PPS states that land use patterns within settlement areas shall be based on:

- Densities and a mix of land uses which:
 - o Use land and resources efficiently
 - o Are appropriate for and efficiently use infrastructure and public service facilities which are planned or available, and avoid the need for unjustified and/or economical expansion; and,
 - o Minimize negative impacts to air quality and climate change and promote energy efficiency (Policy 1.1.3.2 (a)).

The Province also requires that municipalities establish and implement phasing to ensure orderly development occurs within designated growth areas, along with the timely provision of infrastructure and public service facilities that are required to meet current and projected needs.

The Province recognizes the need for efficient development patterns that optimizes the use of land, resources and public investment in infrastructure and public service facilities, and

directs land use to achieve efficient development and land use pattern which accommodate "an appropriate range and mix of residential, employment (including, commercial and institutional uses), recreational and open spaces uses to meet long-term needs" (Policy 1.1.1 (b)).

In addition, the PPS contains housing policies which require planning authorities to provide for an appropriate range of housing types and densities required to meet current and future residents (Policy 1.4). The PPS also encourages municipalities to establish and implement minimum targets for the provision of affordable housing.

The Provincial Policy Statement contains overarching policies by which local Official Plan policies must conform to as it relates to land use planning and development and as such the Development Concept Plan (DCP) and any amendments to the Official Plan/ Secondary Plan have to be consistent with the PPS.

Table C-1 - Evaluation of Draft Concept Plans - Review of Policies and Draft Guiding Objectives

Policy / Draft Guiding Objective	Not Applicable	Are Applicable to all 3 Concepts and Will Be Addressed in DCP Final Report	May Require an Official Plan Amendment
a. Provision of Gateway as per Schedule A (Policy 3.7.2.10 (2) (f))	Applies to entire Village		
b. Orientation of development toward the street that bisects the Gateway and include extensive landscaping with parking areas hidden from view (Policy 3.7.2.10 (2) (f) (ii))	Applies to entire Village		
c. To ensure retail uses locate exclusively within the Village Core (Policy 3.7.2.3 (B) (1))		Outside Subject Area	
d. Conservation and enhancement of Manotick's heritage resources and the Village's identity and character as an historic town (Policy 3.7.2.2 B (6)); (Policy 3.7.2.12 (A) (1) (b)); (Policy 3.7.2.12 (A) (1) (c)); (Policy 3.7.2.12 (B) (3)); (Policy 3.7.2.13 (1) (c))		To be addressed in the Design Guidelines	
e. Compatibility of built form to existing community (Policy 3.7.2.2 B (10)); (Policy 3.7.2.12 (B) (5))		To be addressed in the Design Guidelines	
f. Conservation of the Village's built and natural areas of heritage interest (Policy 3.7.2.3 A (6))		To be addressed in the Design Guidelines	
g. Areas designated Serviced Development Area shall be on the basis of central water and wastewater services (Policy 3.7.2.5 (2) (g) (i)); (Policy 3.7.2.9 (A) (1) (c))		To be addressed in the Master Servicing Plan	
h. A comprehensive development concept plan has been prepared for the entire area to the satisfaction of the City of Ottawa, that will facilitate the logical phasing of development in the area and will form the basis for various, subsequent plans of subdivision (Policy 3.7.2.5 (2) (g) (ii))		To be addressed in the Phasing Plan	
i. Location of employment opportunities outside of the Village Core to be located primarily outside of the village boundary, primarily at the Highway 416/Bankfield interchange (Policy 3.7.2.6 (1) (a))		To be addressed in the DCP policies	
j. Implementation of special landscaping for commercial properties that abut or is in close proximity to the Rideau River (Policy 3.7.2.10 (2) (g))		To be addressed in the Design Guidelines	
k. Provision of underground or surface drainage systems as deemed appropriate by the City (Policy 3.7.2.9 (B) (a))		To be addressed in the Master Servicing Plan	
l. Draft Guiding Objective: Phase development to coincide with the provision of servicing and transportation infrastructure		To be addressed in the Master Servicing Plan	
m. Draft Guiding Objective: Incorporate sustainable elements in the planning of the new subdivision. This would include protection of the natural environment, consideration of cultural and social amenities, and opportunities for commercial development within a fiscally responsible framework		To be addressed in the DCP policies, Master Servicing Plan, and in the Design Guidelines	

Policy / Draft Guiding Objective	Not Applicable	Are Applicable to all 3 Concepts and Will Be Addressed in DCP Final Report	May Require an Official Plan Amendment
n. Draft Guiding Objective: Maximize capacity use of planned water and sewer services within an overall Village servicing strategy		To be addressed in the Master Servicing Plan	
o. Draft Guiding Objective: Design aesthetically pleasing buildings which tie into the "natural" and "informal" landscape through the appropriate use of natural materials and appropriate scale in terms of home size to landscaped areas		To be addressed in the Design Guidelines	
p. Rate of growth is managed which complements and preserves the Village's existing character (Policy 3.7.2.3 (B) (4)); (Policy 3.7.2.13 (2) (a))		To be addressed in the Phasing Plan	
q. Single Family (Estate) areas may have a density of one to two units per gross residential acre (i.e. 2.5 to 5 units per gross residential hectare) (Policy 3.7.2.5 (2) (b))		To be addressed in the DCP Report	
r. Single Family (Low Density) areas may have a density of two to four units per gross residential acre (i.e. 5 to 10 units per gross residential hectare) (Policy 3.7.2.5 (2) (c))		To be addressed in the DCP Report	
s. Single Family (Moderate Density) areas may have a density of four to six units per gross residential acre (i.e. 10 to 15 units per gross residential hectare) (Policy 3.7.2.5 (2) (d))		To be addressed in the DCP Report	
t. Provision of long-term solutions for the servicing of the Village to accommodate both new and existing development and that the servicing is in accordance with the Village of Manotick servicing strategy (Policy 3.7.2.3 (B) (5)); (Policy 3.7.2.3 (C) (4))		To be addressed in the Master Servicing Plan	
u. Draft Guiding Objective: Provide low energy consuming housing construction options			
v. Provide transition zones or buffers between areas of similar uses but markedly different densities, or between different and potentially incompatible uses and areas (Policy 3.7.2.12 (B) (5))			
w. Allow the area of the Village to be serviced on central services to gradually grow to accommodate approximately 2,000 housing units, and up to 2,000 jobs by the year 2020 (Policy 3.7.2.3 (C) (1))			
x. Location of residential development outside the Village Core shall be in areas designated "Single Family (Estate)", "Single Family (Low Density)", or "Single Family (Moderate Density)" as indicated on Schedule A (Policy 3.7.2.5 (2) (a))			
y. New policy directions and changes to Schedule A that may result from the DCP process. The DCP is supported by more detailed studies which should provide for a more accurate and up to date land use schedule.			

The following is the evaluation of the three Draft Concept Plans prepared by the Consulting Team:

Table C-2 - Evaluation of Draft Concept Plans

Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept / DCP policy direction)
Official Plan Policies (*Limited to Village Policies only)			
1 A variety of land uses will be permitted to provide for the daily needs of the rural community (Policy 3.7.1 (1)); (Secondary Plan Policies: 3.7.2.7 (1) (a)); 3.7.2.7 (2) (b); 3.7.2.7 (2) (c))	<ul style="list-style-type: none"> Provision of a variety of land uses in the Subject Area for future residents and to the existing Village residents 	<ul style="list-style-type: none"> Concept 1 has the most area (i.e. 203.65 ha) allotted to a variety of uses (i.e. residential, commercial, mixed-use, natural open space, parks) The two schools will add approximately 51/2 ha of institutional use, however they are common to all three concepts 	<ul style="list-style-type: none"> Continue variety and provision of residential, schools, retail, mixed-use in preferred concept
2 Ensure that Villages remain distinctly rural in character and scale (Policy 3.7.1 (1)) Draft Guiding Objective: Design the subdivision as an expansion of the village by reflecting the traditional and unique village design	<ul style="list-style-type: none"> Village density reflected compared to Manotick Village Core and other Ottawa Villages on services (i.e. existing zoning) Compare to Rural Zones (V1, V2, V3) in the Draft Ottawa Zoning By-law, May 2006 The existing Village is composed of a number of very well defined neighbourhoods which are well defined by natural open space. Passage through or along these natural or park areas provide a 'green gateway' for many of these neighbourhoods. 	<ul style="list-style-type: none"> Build on Concept 3 The densities in Concept 3 are very similar to the Draft Ottawa V1 and V2 zones. The densities in Concept 3 are about 16% higher than the legacy zoning for serviced lots in West Carleton and Goulbourn. 	<ul style="list-style-type: none"> Carry forward similar densities as Concept 3. Configure the open spaces and collector roads (as a rural/semi-urban laneway lined with hedgerows) to separate neighbourhood cells and provide green gateways into each cell. Provide a range of cell sizes.
3 Provision of a wide range of housing forms (Policy 3.7.1 (3)), (Secondary Plan Policy 3.7.2.2 B (15)) Draft Guiding Objective: Provide a mix of housing types to broaden choices in the village consistent with changing demographic profile	<ul style="list-style-type: none"> Variety (i.e. % of singles and multiples provided) 	<ul style="list-style-type: none"> Concept 3 provides a variety of lot sizes and housing types (assuming lot sizes are representative of house size and affordability) 	<ul style="list-style-type: none"> Continue variety of lot sizes and housing forms to suit a spectrum of household size and age as well as affordability. (Note: Inconsistent with Criteria 10)

Secondary Plan Policies			
Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
4 Maintain quality of life of existing residents (Policy 3.7.2.2 A); (Policy 3.7.2.3 A(5))	<ul style="list-style-type: none"> Maintain integrity of Village Core More density close to the Core Emergency services Open space feel Housing continuum Access to parks/open space Multi-modal options Level of services/facilities 	<ul style="list-style-type: none"> Provide good multi-modal connections to the Village core to encourage use of commercial services, recreational amenities, schools and churches. Locate multiples or housing which appeals to seniors close to the core, but provide large lots as a transition abutting existing homes and avoid a large cluster of townhomes (distribute density within each neighbourhood cell). Fire Services: all 3 concepts provide a larger population base to draw volunteers from and would be in close proximity to the fire station. Vehicular links from the Subject Area to the Village (eg. Potter Dr) would be an improvement. The connection could be a pathway with a fire hydrant on Potter Dr. Police Services: Concepts 2 and 3 are better because the road provides access for a police cruiser into a park. An arterial road (2.4 m / 8 ft wide) or a pathway connection to the lands north of the Subject Area would be helpful for policy patrol Concept 3 has more natural open space/park space (43.5 ha) Concept 1 has more land area for townhouses/ stacked units 16 ha All concepts provide access to parks/open space All concepts provide multi-modal options (i.e. pedestrian/cyclist/transit/vehicular) Walk to a variety of uses 	<ul style="list-style-type: none"> Maintain vehicular and/or pathway connections to roads north of the Subject Area Maximize road, sidewalk and trail connections to the existing village Configure natural open space to separate neighbourhood cells and provide walking and cycling links. Locate parks centrally in neighbourhoods to provide identity and focus. Provide a variety of lot sizes to accommodate different ages, household sizes and budgets. Maximize multi-modal options Maintain accessibility to land uses

Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
5 Provision of jobs (Policy 3.7.2.2 B (12)); (Policy 3.7.2.3 A(1))	<ul style="list-style-type: none"> Provision of employment-generating uses 	<ul style="list-style-type: none"> Concept 3 provides the most area dedicated to commercial/mixed use (3.70 ha) Schools will add another 51/2 ha, but this is common to all concepts 	<ul style="list-style-type: none"> Carry forward areas for employment generating land uses
6 Conserve and encourage preservation of Manotick's natural resources (Policy 3.7.2.2 B (4)); (Secondary Plan Policies: 3.7.2.8 (1) (c); 3.7.2.8 (2) (b); 3.7.2.11 (1) (a); 3.7.2.12 (B) (6)); Draft Guiding Objective: Preserve ecological and natural features (ANSI) and watercourse corridors	<ul style="list-style-type: none"> Protection of woodlots Protection of NESS Protection of water courses Areas of significant (as per OP definition) City of Ottawa Official Plan defines "significant" as it applies to natural features and functions as "ecologically important in terms of natural features and functions, representation or amount, and contributing to the quality and diversity of a defined natural area or system. In regard to... Areas of Natural and Scientific Interest, significance is established using evaluation procedures established by the province, as amended from time to time. 	<ul style="list-style-type: none"> Concept 3 protects the largest amount of the NESS and other woodlots All watercourses are protected in all concepts Concept 1 protects the Candidate ANSI as a contiguous woodlot 	<ul style="list-style-type: none"> Carry forward protection of Candidate ANSI and watercourses Encourage protection of other woodlots and identify opportunity for design with nature
7 Preservation of Rideau River shoreline for public enjoyment (Policy 3.7.2.2 B (5)); (Policy 3.7.2.12 (B) (1))	<ul style="list-style-type: none"> Provide access to Rideau River Provide views to Rideau River 	<ul style="list-style-type: none"> Concept 3 provides the most direct and easily found access to the Rideau River. The large block for group buildings would allows views between the buildings to creek. 	<ul style="list-style-type: none"> Provide a direct and easily found street leading to a waters edge path at the embayment on the Rideau River Tributary. Locate larger buildings along this street to allow glimpses of the tributary landscape between buildings.

Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
8 Provision of safe, convenient and pleasant pedestrian and cycling routes (Secondary Plan Policies: 3.7.2.2 B (9); (3.7.2.3 A (7)); (3.7.2.8 (1) (a)); (3.7.2.8 (1) (b)); (3.7.2.10 (1) (a)); (3.7.2.10 (2) (c)); (3.7.2.10 (2) (d)) Draft Guiding Objective: Design the subdivision as an expansion of the village by providing pedestrian and cycling connections	<ul style="list-style-type: none"> • Connection to Village • Continuous pathway linkages throughout the Subject Area that link to the Village Core, major recreational facilities and other open spaces (Policy 3.7.2.8 (2) (a)) • Sidewalks on one side of the Spine Road • # of local roads with sidewalks 	<ul style="list-style-type: none"> • Concept 3 is the best because of good connection to Mahogany Harbour; grid system and small blocks, therefore convenient access for pedestrians/cyclists; cycling on East-West Spine not interrupted by private driveway (as is Concept 1); all concepts connect same to subdivision to the north 	<ul style="list-style-type: none"> • More curvilinear East-West Spine to break up lines of sight and reduce speed • Remove roundabouts as they are not pedestrian/cyclist friendly
9 Protection and enhancement of Village Core (i.e. commercial functions) (Policy 3.7.2.2 B (11))	<ul style="list-style-type: none"> • Linkages to existing Core • More business opportunities compared to stand alone • Recognize mixed-use 	<ul style="list-style-type: none"> • Concept 3 provides better linkage to existing Core • Catalyst for redevelopment 	<ul style="list-style-type: none"> • Carry forward linkages to existing Core and opportunities for mixed-use development
10 Ensure that new residential development outside of the Core is primarily single family, detached housing (Policy 3.7.2.3 A (2)); (Policy 3.7.2.3 (B) (2)); (Policy 3.7.2.3 (C) (3)); (Policy 3.7.2.5 (1)).	<ul style="list-style-type: none"> • Variety (i.e. % of singles and multiples provided) 	<ul style="list-style-type: none"> • Concept 2 provides the most single units (75% singles, 25% multiples) 	<ul style="list-style-type: none"> • Carry forward predominantly single family units, while allowing some multiples (Note: Inconsistent with Criteria 3)
11 Ensure the residential growth of the Village can be serviced with existing and new community facilities that are affordable, and its residents can be integrated into the Village's social fabric (Policy 3.7.2.3 (C) (2)); (Policy 3.7.2.13 (2) (c))	<ul style="list-style-type: none"> • Provision of school sites • Provision of other services • Provision of neighbourhood retail • Linkages to Core 	<ul style="list-style-type: none"> • Concept 3 is slightly better due to waterfront road 	<ul style="list-style-type: none"> • Doesn't require a community centre because the trigger is a population base of 50,000, which is greater than the Village population even when the Subject Area lands are built out

Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
12 The location and ownership of the schools, recreation and/or open space areas will be to the satisfaction of Council, and determined in consultation with the affected landowners and the Manotick community (Policy 3.7.2.2 B (13)); (Policy 3.7.2.5 (2) (g) (iii)); (Policy 3.7.2.7 (1) (a)); (Policy 3.7.2.7 (2) (a)) Draft Guiding Objective: Provide adequate active recreational space and recreational facilities within an integrated park system	<ul style="list-style-type: none"> Recreation requirements of City, 5% or 1 ha/1,000 population Provision of school sites Location of parks Schools along collector roads for vehicular access Along pathways for pedestrian and cyclist access 	<ul style="list-style-type: none"> Concept 3 is slightly better with 43.5 ha for natural open space and parks All 3 concepts provide a school site on the East-West collector road 	<ul style="list-style-type: none"> Carry forward an integrated recreational space and parks system and keep schools located on the collector road
13 Retention of natural area between the east and west branches of the Wilson-Cowan Drain (Policy 3.7.2.8 (2) (c) (i))	<ul style="list-style-type: none"> Retention of the area between the east and west branches of the Wilson-Cowan Drain 	<ul style="list-style-type: none"> All concepts protect the "significant woodlot" between the branches of the Drain Other areas were designated as open space and intended to be used for major recreational facilities which have been provided for elsewhere and are not protected in any of the concepts 	<ul style="list-style-type: none"> Carry forward protection of the significant woodlot
14 Development of an eastern and western open space node in the area south of the Potter Drive residential area as indicated on Schedule A, for neighbourhood parks and shared open spaces with possible future school sites (Policy 3.7.2.8 (2) (c) (ii))	<ul style="list-style-type: none"> Open space node in the general area as per Schedule A School node in the general area as per Schedule A 	<ul style="list-style-type: none"> All concepts provide an open space and school node as per Schedule A 	<ul style="list-style-type: none"> Carry forward the open space and school node

Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
15 Layout and design of future local roads complements the Village's character (Policy 3.7.2.10 (2) (b))	<ul style="list-style-type: none"> The core of the Village, is a grid pattern, typical of the era. The blocks are short, and there are frequent 'T' intersections and dead end streets which terminate onto open space (or the river). The newer neighbourhoods have a modified grid or curvilinear pattern. These streets are very long, but because of the curves do not allow long, static views. There are also some "T" intersections on these newer streets. Local streets in the village are narrow, with trees close to the shoulder, few have sidewalks or curbs. 	<ul style="list-style-type: none"> With the exception of the diagonal connection to Mahogany Bay, Concept 3 grid system best mirrors the Town's core area grid The Concept 1 road network is closest to reflecting the type of road network in the estate community adjacent to the north. 	<ul style="list-style-type: none"> A more curvilinear collector road system with a tight local street grid would be a good combination
16 Extension of transit services as the Village evolves (Policy 3.7.2.10 (2) (e)); (Policy 3.7.2.10 (1) (b))	<ul style="list-style-type: none"> Provision of transit routes in the Subject Area 400 m of a transit stop 	<ul style="list-style-type: none"> Concept 3 best meets the criteria and indicators due to the grid layout, however the traffic circles would be required to be removed. 75% that is within the 400 m of a residential area would be better served with the grid layout to allow direct pedestrian linkages 	<ul style="list-style-type: none"> Maintain grid layout
17 Protection of "Development Setback" areas and "Significant Woodlot" as per Schedule A (Policy 3.7.2.11 (2) (b)); (Policy 3.7.2.11 (2) (c)) Draft Guiding Objective: Maximize opportunities for enhanced planting in the stream corridors and integrate planting into stormwater design solutions where appropriate	<ul style="list-style-type: none"> Protection of meander belts along water courses (30 m on Secondary Plan) Protection of "Significant Woodlot" 	<ul style="list-style-type: none"> All concepts provide a 30 m setback from watercourses and the protection of the "Significant Woodlot" 	<ul style="list-style-type: none"> Provide a 30 m setback from watercourses and the protection of the "Significant Woodlot"

Draft Guiding Objectives			
Policy Objective Criteria	Indicator(s)	Which Concept Best Meets The Criteria and Indicator(s)	Specific Comment (How this leads to Draft Preferred Concept)/DCP policy direction
18 Provide safe multi-modal transportation linkages including pedestrian and cycling linkages on roadways, through existing and future parks, school sites, open space, on both developed and undeveloped land to the core	<ul style="list-style-type: none"> Provides pedestrian connections to existing/planned pedestrian network and community facilities Provides bicycle pathway connections to existing/planned pedestrian network and community facilities Internal road network minimizes potential conflict points (i.e., vehicle/pedestrian, vehicle/cyclist and vehicle/vehicle interaction) Internal road network and site connections have potential to accommodate transit vehicles (buses) Maximizes opportunities for appropriate transportation connections to existing and planned road network 	<ul style="list-style-type: none"> All concepts similar for the first 2 indicators, but Concept 3 is best due to the combination of park locations, smaller road grid, and Mahogany Harbour connection, is slightly better Concept 2 best meets indicator #3 because there are no roundabouts; fewer intersections on East-West Spine road in close proximity to Rideau Valley Drive; fewer but enough connections to Century Road; fewer intersection internal to each neighbourhood due to larger grid Concept 3 best meets indicator #4 transit due to more balanced coverage and more residents within 400 m walking distance. Higher densities close to potential bus routes. Concept 3 best meets indicator #5 due to the two connections to Rideau Valley Drive; and the maximum number of connections to Century, although likely 1 or 2 too many 	<ul style="list-style-type: none"> Use smaller grid Integrate with smaller grid to have good mobility but fewer conflict points along main collector roads Maximize smaller grid and pedestrian connections ad remove traffic circles Sufficient number and located site access points to maximize efficient traffic distribution compatible with existing constraints.
19 Maximize opportunities for energy efficiency such as solar gain	<ul style="list-style-type: none"> % of lots with north/south orientation or road orientation to allow opportunities for north/south orientation 	<ul style="list-style-type: none"> The orientation and regular grid in Concept 3 allows the maximum number of homes to be oriented for solar gain, with the least (shadowing) conflicts. 	<ul style="list-style-type: none"> Carry forward the near east-west block orientation.
20 Incorporate sustainable practices in the design of water, sewer and stormwater systems	<ul style="list-style-type: none"> # of ponds Use of innovative technology 	<ul style="list-style-type: none"> Concept 3 - The street pattern (grid pattern) allows for more efficient movement of stormwater. The treatment drain approach to stormwater management removes the need for ponds and also removes the operation and maintenance issues. 	<ul style="list-style-type: none"> Carry forward grid pattern

Table C-3 - Proposed Land Use Distribution

Land Use	Concept 1 (ha)	Concept 2 (ha)	Concept 3 (ha)
22.5-18m Lots	12.60	17.95	23.70
15-14m Lots	48.25	43.00	36.90
Townhouses/ Stacked Units	16.00	14.10	11.30
Commercial/ Mixed Use	3.35	2.90	3.70
Natural Open Space	37.15	33.75	37.10
Parks	6.10	9.15	6.40
Rights-of-Way	37.40	39.65	43.10
Stormwater Ponds	1.20	1.60	n/a
Total	162.05	162.10	162.20

Summary of Evaluation

Based on the evaluation of the three draft concept plans, the following is a list summarizing the elements that are recommended to bring forward in the preparation of the Land Use Concept Plan. The elements have been grouped into five (5) categories:

Village Character

- Continue variety and provision of land uses (eg. residential, schools, retail, mixed-use)
- Carry forward predominantly single family units, while allowing some multiples
- Provide a range of densities
- Configure the open spaces and collector roads (as a rural laneway lined with hedgerows) to separate neighbourhood cells and provide green gateways into each cell. Provide a range of cell sizes

- Continue variety of lot sizes and housing forms to suit a spectrum of household size and age (i.e. housing continuum), as well as affordability
- Provide opportunities for employment generating land uses

Transportation

- Maintain vehicular and/or pathway connections to roads north of the Subject Area
- Maximize road, sidewalk and trail connections to the existing Village
- Provide linkages to existing Core
- Configure natural open space to separate neighbourhood cells and provide walking and cycling links
- Maximize multi-modal options
- Maintain accessibility to land uses
- Provide a direct and easily found street leading to a waters edge path at the embayment on the Rideau River Tributary
- More curvilinear East-West Spine to break up lines of sight and reduce speed
- Remove roundabouts as they are not pedestrian/cyclist friendly

Natural Environment

- Protection of Candidate ANSI and watercourses
- Encourage protection of other woodlots and identify opportunity for design with nature
- Provide a 30 m setback from watercourses
- Further investigation of the woodlot north of the Candidate ANSI, as part of the NESS 506 area

Parks and Open Space

- Locate parks centrally in neighbourhoods to provide identity and focus
- Carry forward a high percentage of parks/open space and keep schools located on the collector road
- Maintain open space and school node principle

Design Guidelines

- Locate larger buildings along street leading to a waters edge path at the embayment on the Rideau River Tributary to allow glimpses of the tributary landscape between buildings.

