

City of Peterborough Official Plan

Adopted by Council of the Corporation of the City of Peterborough on November 29, 2021 through By-law Number 21-105



Land Acknowledgement

We respectfully acknowledge that the City of Peterborough is situated on the treaty and traditional territory of the Mississauga Anishinaabeg. We offer our gratitude to the First Peoples for their care for, and teachings about, our earth and our relations. May we honour those teachings.

Table of Contents

1.0	INTRODUCTION	1
1.1 1.2 1.3 1.4	Context Purpose and Effect Organization How to Read This Plan	3 4
2.0	VISION AND GUIDING PRINCIPLES	9
2.1 2.2	Vision Statement	
3.0	PLANNING FOR FUTURE GROWTH	19
3.1 3.2 3.3	Implementing the Vision Population and Employment Forecasts Planning for Growth in an Urban Structure	19
4.0	LAND USE DESIGNATIONS	35
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Introduction Neighbourhoods The Central Area Mixed-Use Corridors Employment Districts Natural Heritage System The Rural Transitional Area Designation	59 88 98
5.0	COMMUNITY DEVELOPMENT POLICIES	127
5.1 5.2 5.3 5.4 5.5	Cultural Heritage Housing Parkland and Open Space Urban Design The Urban Forest	136 143 160 166
5.6 5.7	Local Food Production Climate Change	

6.0	INFRASTRUCTURE POLICIES	173
6.1	Servicing and Utilities	173
6.2	Transportation: A Linked Community	
7.0	IMPLEMENTATION	219
7.1	Indigenous Peoples of Canada and the Duty to Consult	219
7.2	Public Consultation and Community Engagement	220
7.3	Official Plan Amendments	223
7.4	Zoning By-Laws	229
7.5	Committee of Adjustment	233
7.6	Legal Non-Conforming Uses, Buildings or Structures	236
7.7	Site Plan Approval	237
7.8	Plans of Subdivision and Condominium	240
7.9	Site Alteration	242
7.10	Municipal Finance	242
7.11	Land Acquisition	244
7.12	Parkland Dedication	245
7.13	Securement of Lands within the Natural Heritage System	
7.14	Community Benefits Charge	
7.15	Development Charges	248
7.16	Community Improvement Plans and Areas	
7.17	Demolition Control	252
7.18	Maintenance and Occupancy By-Law	254
7.19	Brownfield Site Development	255
7.20	The Community Planning Permit System	255
7.21	Pre-Consultation and Complete Application Requirements	256
8.0	INTERPRETATION AND DEFINITIONS	267
8.1	Interpretation	267
8.2	Definitions	
9.0	SECONDARY PLANS	293
9.1	Lily Lake Secondary Plan	293
9.2	Lift Lock Secondary Plan	

LIST OF SCHEDULES

Schedule A: Urban Structure Schedule B: Land Use Plan Schedule C: Central Area Plan Schedule D: Road Network Plan

Schedule E: Trails and Bikeways Network Plan

Schedule F: Natural Heritage System and Environmental Constraints

Schedule G: Food Store Sub-Areas Schedule H: Source Water Protection Schedule I: Road Allowance Widths Schedule J: Lily Lake Secondary Plan Schedule K: Lift Lock Secondary Plan

LIST OF APPENDICES

Appendix I: The Natural Heritage System Background Study

This page is intentionally left blank.







1.0 INTRODUCTION

1.1 Context

Part of the traditional territory of the Michi Saagiig (Mississauga Anishinaabeg) peoples, the City of Peterborough was formed around a site known as 'Nogojiwanong' in Anishinaabemowin, meaning 'the place at the end of the rapids'. For upwards of 10,000 years, Peterborough has been a significant place to the Michi Saagiig Nation for trading, harvesting, ceremonies and canoe travel.

In 1818, Treaty 20 was signed between the Michi Saagiig and British Crown to allow for settlement to take place within their territory. This Treaty enabled Adam Scott to settle along the west shore of the Otonabee River in 1820, creating a sawmill and gristmill. A settlement soon grew around the mill and became known as Scott's Plains. In 1826, the settlement was renamed Peterborough in honour of Peter Robinson, who was instrumental in bringing additional settlers to the area, many of whom were emigrants from Ireland.

In 1850, the modern City of Peterborough was incorporated. Early development capitalized on water resources which led to hydroelectric power and industrial development. While the City has retained this industrial legacy, its local economy continues to diversify by supporting a range of business sectors, including the knowledge-based, service, aviation, aerospace, entrepreneurial, and cleantech sectors.

Today, the City is a single-tier municipality known as "the Gateway to the Kawarthas" in recognition of its key location on the Trent-Severn waterway, which links Lake Ontario to Georgian Bay through the Kawartha Lakes system. Peterborough's landscape is defined by an abundance of natural features as well as drumlins and landforms created by glaciation, such as the Otonabee and Jackson spillways. The Otonabee River, Jackson Creek and Trent Canal characterize three greenways which form an interconnected network of trails and open space throughout the City.

Peterborough's historic downtown opens to Little Lake, providing a scenic waterfront and a marina that allows boaters easy access to the core. Tourists are attracted to the Peterborough Lift Lock, the Canadian Canoe Museum, and to numerous cultural venues, festivals and sporting events in the City. The City is the urban hub of the northeast portion of the Greater Golden Horseshoe (GGH) and is the focus of the broader region for health, education, industry, commerce, entertainment and other services. Peterborough is home to a number of large institutions that serve a much broader area, including Trent University, Fleming College and the Peterborough Regional Health Centre. The Peterborough Airport, located outside of City boundaries, supports business activities both within the City and in nearby municipalities.

The City has an older average demographic and smaller average household size than many other GGH communities. Based on prevailing demographic trends, it is expected that the City's population growth will be driven by immigration and intra-provincial migration, where residents move to Peterborough from elsewhere in the province. Along with an increasingly diverse and aging population, Peterborough faces a number of challenges including climate change, which Council has declared to be an emergency, rising costs of living and housing, economic restructuring, and advancements in technology. These challenges represent a turning point in which the community needs to plan and respond to rapid change and uncertainty. The City of Peterborough's Official Plan will guide the strategic decisions that manage the effects on the social, economic, built and natural environment and support the achievement of the vision for the City.

1.2 Purpose and Effect

- a. This Official Plan (this Plan) comprises of comprehensive and integrated policies and schedules that provide the framework for making decisions with respect to physical change in the City and its associated impacts on the welfare of the social, economic, cultural and natural environment. The purpose of this Plan is to set out a planning policy framework in accordance with the Planning Act and other relevant Provincial policies and guidelines. In addition, this Plan:
 - i. Provides for a planning period to the year 2051;
 - Applies to all decisions in respect of the exercise of the City's authority that affects planning matters;
 - iii. Must be read in its entirety and all relevant principles, objectives and policies are to be applied to each situation; and,
 - iv. Will be implemented in a manner that is consistent with the Ontario Human Rights Code and the Canadian Charter of Rights and Freedoms.
- b. This Plan will be reviewed no less frequently than 10 years after it comes into effect, and every five years thereafter. In addition:
 - No By-Law may be passed and no public work may be undertaken by the City which does not conform with this Plan; and,
 - ii. The capital works program and capital works budget are tools to implement the vision, principles and policies of this Plan.
- c. The City will liaise with the County of Peterborough, surrounding municipalities and Indigenous communities in managing its future growth and development.

1.3 Organization

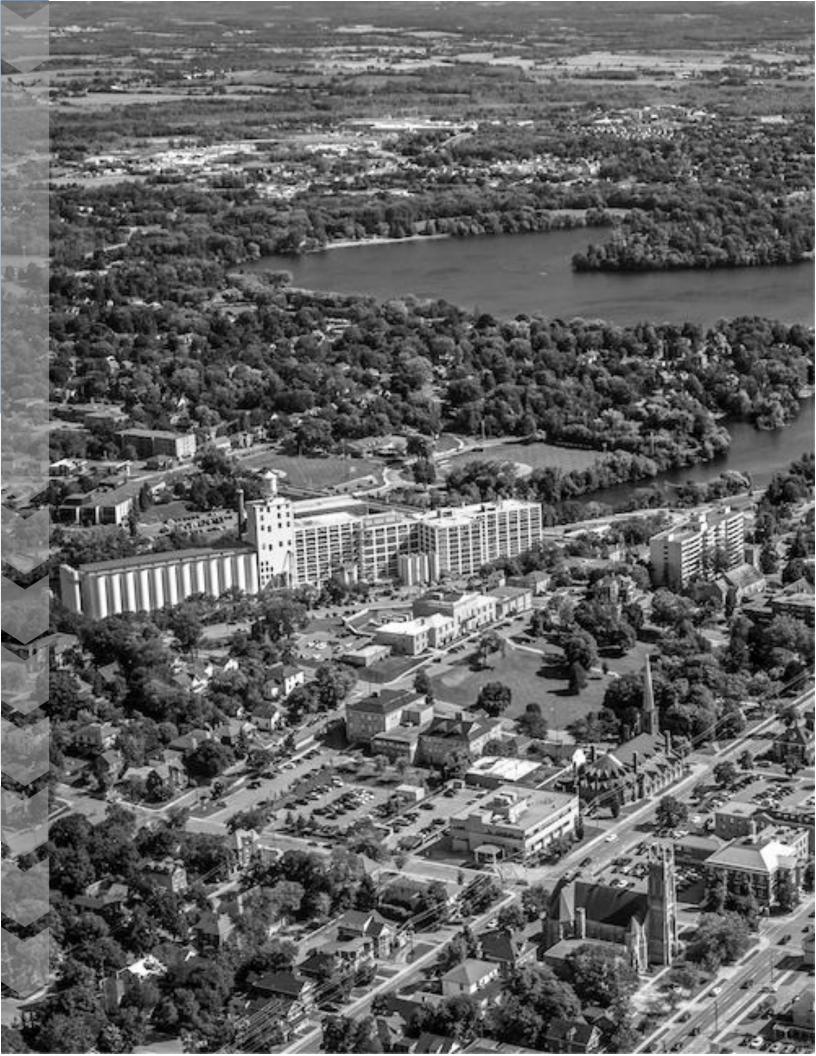
- a. The operative components of this Plan include Sections 1 through 9, as well as Schedule A: Urban Structure, Schedule B: Land Use Plan, Schedule C: Central Area Plan, Schedule D: Road Network Plan, Schedule E: Trails and Bikeways Network Plan, Schedule F: Natural Heritage System and Environmental Constraints, Schedule G: Food Store Sub-Areas, Schedule H: Source Water Protection, Schedule I: Road Allowance Widths and Schedules for Secondary Plan Areas. Changes to the Sections and Schedules of this Plan will require an Official Plan Amendment, unless otherwise identified in the policies of this Plan. In addition, Appendix I: The Natural Heritage System Background Study is attached to this Plan for information purposes. Appendix I is not an operative component of this Plan, and may be modified at any time by Council Resolution.
- b. The organization of this Plan is described as follows:
 - i. Section 1, INTRODUCTION, describes the Plan's context, purpose and effect, and organization;
 - Section 2, VISION AND GUIDING PRINCIPLES, sets out the City's basis for future development. The vision and principles were developed based on the results from the broad-based community consultation, and various housing, transportation, environmental, cultural and commercial studies conducted by the City;
 - iii. Section 3, PLANNING FOR FUTURE GROWTH, contains broad strategies for implementing the Vision, the identification of population and employment forecasts, objectives for growth management and planning for growth in an urban structure;
 - iv. Section 4, LAND USE DESIGNATIONS, establishes land use designations and associated permitted uses and development policies to guide new development in each area of the City;
 - v. Section 5, COMMUNITY DEVELOPMENT POLICIES, sets out policies applicable to the entire City, addressing cultural heritage, housing, parkland and urban design;
 - vi. Section 6, INFRASTRUCTURE POLICIES, sets out policies to direct the provision of water and sewer services, stormwater management facilities, utilities, energy generation and transmission and transportation facilities in coordination with land use planning;

- vii. Section 7, IMPLEMENTATION, describes the range of tools and processes available to the City for implementing the policies of this Plan;
- viii. Section 8, INTERPRETATION AND DEFINITIONS, outlines how this Plan is to be interpreted and provides a glossary of terms used within this Plan to support policy implementation; and,
- ix. Section 9, SECONDARY PLANS, includes the Secondary Plans for defined areas of the City.

1.4 How to Read This Plan

- a. This Plan is not intended to be read as individual, stand-alone Sections addressing specific topics, but rather must be read as a comprehensive and cohesive whole to support successful city-building. For any individual part to be properly understood, this Plan must be read as a whole.
- b. Some areas of the City where greater growth is anticipated need more detailed guidance than this Plan provides, in which case Secondary Plans have or will be prepared. Secondary Plans establish local development policies to guide growth and change in defined areas of the City, such as new neighbourhoods and **Strategic Growth Areas**, and are adopted as amendments to this Plan. This Plan also contains a number of existing Secondary Plans which have been kept in whole or part because they continue to provide a relevant policy framework for future community growth. These Secondary Plans are included as Section 9 of this Plan and are to be interpreted as operative components of this Plan.
- c. Appendix I: The Natural Heritage System Background Study is not an operative component of this Plan, but provides additional background information, methodology and other detail with respect to the identification of the Natural Heritage System.
- d. This Plan consists of a wide range of policies and schedules, as well as non-policy textual commentary in shaded boxes, to make this Plan more accessible and to make the context and intent of the policies more readily understandable. The non-policy textual commentary is not to be afforded any independent status in interpreting this Plan and is to take on meaning only as an explanation of the policies and schedules. Boundaries shown on schedules are approximate and serve as visual aids.

- e. The specific language used throughout the policies of this Plan is intentional and indicates the level of flexibility, or lack thereof, that exists in implementing this Plan.
 - Definitive language such as "shall", "will" and "must" indicates an obligation on the subject of the policy to meet the stated requirements, with little flexibility in interpretation; and,
 - ii. Discretionary language such as "may", "should" and "encourage" provides guidance, but with inherent flexibility in the interpretation of the policy to ensure that it responds to individual contexts.
- f. In the text of the Official Plan, **bolded terms** refer to terms which are defined in Section 8.





2.0 VISION AND GUIDING PRINCIPLES

2.1 Vision Statement

2.1.1 Establishing a Vision

- a. The City of Peterborough undertook an extensive community consultation program to provide a comprehensive foundation for the direction of this Plan. Together with Provincial policies and strategic planning documents prepared by the City, this valuable input has directly shaped the Vision, Guiding Principles and general direction of this Official Plan. The Vision and Guiding Principles in this Section are intended to guide growth and land use planning decisions by reflecting local priorities, knowledge, preferences and aspirations. The Vision expresses an aspirational future for the City, and the more detailed direction to achieve this future is articulated in the Guiding Principles. The policies of this Plan have been developed to work together to achieve the Vision and Guiding Principles as Peterborough continues to grow and evolve to 2051.
- b. The Vision for Peterborough's future is articulated in the following aspirational statement:

Peterborough is a prosperous community, distinctive in its natural beauty, cultural heritage, and strong sense of community. As a leader in responding to climate change, resilience planning and environmental sustainability, planning in Peterborough uses infrastructure and land efficiently, promotes healthy lifestyles and incorporates green initiatives to increase the City's adaptive capacity. The City will continue to develop as a complete and connected community that provides a high quality of life, supports a strong and diverse economy and promotes a unique, vibrant sense of place. Peterborough is equitable and accessible for all residents and visitors and celebrates its engaged, inclusive and diverse community.

2.2 Guiding Principles

a. Guiding Principles provide more detailed action statements that represent a clear commitment from the City on how the Vision is to be achieved over time. While the Guiding Principles have been categorized here for clarity, they are interconnected and will contribute to achieving multiple objectives throughout the City.

2.2.1 Complete Community

- a. A **complete community** is one that meets people's needs for daily living throughout their lifetime by providing convenient access to a mix of jobs, services, housing, food, **public service facilities**, open space, and transportation choices. Peterborough will continue to grow as a **complete community** by:
 - Fostering an inclusive and accessible community by providing a balanced mix of land uses including a range of housing, employment, commercial, public service facilities, infrastructure, a range of transportation modes, and access to parks and open spaces;
 - Undertaking growth management in accordance with Provincial policies and Plans, including the achievement of intensification targets in the Delineated Built-Up Area and density targets in Designated Greenfield Areas and in downtown Peterborough's Urban Growth Centre;
 - iii. Encouraging the provision of a mix of uses to support daily needs and providing access to a full range of transportation modes at the neighbourhood level;
 - iv. Encouraging increased intensification in built-up areas where sufficient infrastructure capacity is available or planned and active modes of transportation can be supported, as a way of promoting an overall reduction of the City's carbon footprint in response to a changing climate, reducing land consumption and maximizing the efficiency and cost effectiveness of infrastructure investments;

- v. Encouraging and supporting the provision of a full range and mix of housing options throughout the City to meet the needs of all residents throughout their lives. New development and redevelopment should address shifting household structures, provide for affordable and accessible housing units and maximize the number of residential units which are in close proximity to active transportation and transit routes, shops and services, and public service facilities. Higher density forms of housing may also enhance life-cycle options and increase housing affordability; and,
- vi. Supporting a high quality of life by encouraging initiatives that improve social and spatial equity, ensure that residents have access to health and social services and healthy food options, and promote a high quality **public realm** and compact built form.

2.2.2 Environmental Stewardship and Sustainability

- a. Part of a comprehensive response to a changing climate includes the promotion of environmental sustainability, which means meeting the resource and service needs of current and future generations without compromising the health of the ecosystems that provide them. Peterborough will ensure that development contributes to a more sustainable environment over the long term by:
 - i. Considering the environmental implications of all future municipal planning decisions to ensure that potential impacts and opportunities are properly considered and acted upon;
 - ii. Improving the access of residents and their connection to natural and green spaces;
 - iii. Identifying, protecting, restoring and enhancing **natural heritage systems**, functions and resources using a **watershed** approach;
 - Taking a leadership role in encouraging and promoting green buildings, infrastructure resilience, and sustainable development practices that mitigate and adapt against climate change;
 - v. Protecting water quality, water quantity and **sensitive surface water features**;
 - vi. Fostering the conservation of energy and the use of renewable and alternative energy systems;
 - vii. Supporting local food sources and urban agriculture;

- viii. Protecting and enhancing the City's **urban forest**;
- ix. Restricting development in areas that contain hazards to human health or safety; and,
- x. Becoming a leader in fostering partnerships and developing creative initiatives to address environmental protection and sustainability, including with Indigenous communities, post-secondary institutions and other governmental bodies.

2.2.3 Vibrant and Unique

- a. Peterborough is home to a vibrant arts, culture and heritage community that includes a wide variety of museums; a vibrant theatre scene; hundreds of cultural workers, producers, and organizations; a busy festival calendar; and well-preserved built heritage. Additionally, Peterborough is home to the rich cultural history of the Michi Saagiig Nation. Peterborough's location in the Kawartha Lakes region offers a wide range of opportunities for recreational and leisure activities that cater to active lifestyles including fishing, boating, swimming, camping, and hiking. The Otonabee River, Little Lake, the Trent-Severn Waterway and the historic hydraulic lift lock are unique features that help define Peterborough's identity.
- b. Communities have social and physical characteristics that make them special and unique and which foster a sense of attachment and belonging for residents and visitors. Peterborough will foster its unique and vibrant identity by:
 - i. Supporting a vibrant, multi-functional Central Area as the civic, cultural, entertainment, arts and economic heart of the City;
 - ii. Supporting and enhancing the community's environmental, recreational, cultural and arts facilities/amenities;
 - iii. Ensuring a publicly accessible system of parkland, major open spaces and trails throughout the City, including the shorelines of the Otonabee River, Little Lake and the Trent-Severn Waterway, for the benefit of residents and visitors;
 - iv. Protecting and enhancing **cultural heritage resources** over the long term;
 - v. Fostering excellence in design in both the public and private realms;

- vi. Acknowledging the importance of the local Indigenous language, known as Anishinaabemowin in Ojibwa, and including Indigenous place names on the landscape of the City;
- vii. Providing opportunities for Indigenous **placemaking** and working with Indigenous communities to celebrate and commemorate Indigenous history and/or culture in public spaces;
- viii. Creating new, unique and vibrant spaces, including focal points, landmarks, and gateways that support social interaction;
- ix. Involving residents, Indigenous communities and stakeholders in the decision-making process through continuous, mutually respectful, meaningful and inclusive engagement; and,
- Defining memorable spaces with the use of public art. X.

2.2.4 Well-Connected with Options for Mobility

- a. Peterborough is a social, cultural and economic hub, made possible by its ability to move people and goods throughout the city and region. An efficient, integrated and multi-modal transportation system provides choice for easy, accessible travel by facilitating all forms of transportation, including active transportation, transit, automobile, rail, air and water. Fostering a multimodal, linked transportation system enhances the community's economic competitiveness, fosters active and healthy lifestyles, facilitates social and economic inclusion, and supports a comprehensive response to a changing climate by promoting environmental and economic sustainability. Peterborough will create a more linked community by:
 - i. Integrating land use planning with multi-modal transportation planning;
 - ii. Planning for an improved and safe transit and active transportation system, including through pedestrian-oriented development, **complete** streets design and enhanced infrastructure to increase a modal shift towards sustainable transportation options;
 - iii. Directing growth and development to areas with existing infrastructure and to **Strategic Growth Areas** that provide a range of services in convenient locations and encourage active transportation and transit use;
 - iv. Providing new linkages between key destinations and the multi-modal transportation network;

- v. Ensuring that new development uses **universal design** and is easily accessible in accordance with the Accessibility for Ontarians with Disabilities Act standards, and that existing development is retro-fitted, wherever possible, balancing accessibility needs with the need to conserve the cultural heritage value of its heritage properties;
- vi. Working with relevant partners to ensure access to high quality telecommunications networks and a range of transportation modes to support telecommuting and other creative work options and minimize the need for automobile trips; and,
- vii. Protecting transportation corridors, planned corridors, major goods movement facilities, and utility corridors over the long term for their intended purpose and reusing abandoned corridors in a manner that preserves their linear integrity, where feasible.

2.2.5 Strong and Diverse Economy

- a. A strong, diverse economy is integral to a successful community. Peterborough is fortunate to be home to an abundance of natural resources, world-class educational and recreational facilities, a modern regional health care centre, a strong government sector, a diverse industrial sector including clean technology, food services, manufacturing and aerospace, a dynamic arts and culture sector, and a highly skilled, creative workforce. Peterborough is further recognized as having a strong and resilient entrepreneurial community. Peterborough is favourably positioned with strong regional agricultural and tourism sectors, a growing regional airport, and convenient transportation links to regional, national and international markets.
- b. Peterborough recognizes the economic benefits and importance of being accessible to all people. Diversity and inclusion are important drivers of economic growth and innovation. Strong and diverse economies capitalize on existing community assets and are sustained by: strategic infrastructure investment; maintaining and protecting a sufficient land base for employment; developing and retaining a talented, creative labour force; fostering partnerships and economic diversification; and by enhancing quality of life. Peterborough will support a strong, diverse and creative economy by:
 - i. Providing for a wide range of employment opportunities;
 - ii. Fostering a high quality of life to attract and retain a diverse workforce and new investment:

- iii. Planning for, protecting and preserving Employment Districts for current and future employment uses and ensuring that the necessary infrastructure is provided to support current and future needs;
- iv. Protecting Employment Districts for the long term by limiting the conversion of such areas to other uses and preventing the infiltration or encroachment of uses which would undermine the function and viability of Employment Districts;
- v. Protecting Employment Districts near major transportation facilities and corridors associated with the inter- and intra-provincial movement of goods for uses which require such locations;
- vi. Cooperating with existing and prospective businesses to facilitate economic growth and opportunity, with a particular focus on supporting and providing opportunities for small and medium-sized businesses, local business and local economies;
- vii. Considering opportunities to offer incentives for business growth, particularly in the green and knowledge economies and food production;
- viii. Strategically planning the location, function and built form of Mixed-Use Corridors to support their vitality and the vitality of the Central Area; and,
- ix. Developing an Employment Land Strategy and an Economic Development Strategy in co-operation with the County of Peterborough, other levels of government and key agencies and stakeholders.

This page is intentionally left blank.





3.0 PLANNING FOR FUTURE GROWTH

3.1 Implementing the Vision

- a. This Section of this Plan identifies the broad urban structure for the City of Peterborough – an urban structure that begins with historical development patterns, and that will evolve into a logical, efficient and **transit-supportive** community.
- b. The key elements of the urban structure are an organizing framework within which the City will make decisions respecting planning for growth to the year 2051. The policies of this Section conform with, and implement the requirements of the Growth Plan and they promote sustainability, support investments in transit and facilitate the efficient and cost-effective use of infrastructure.

3.2 Population and Employment Forecasts

- a. The City of Peterborough will plan for population and employment growth in accordance with the population and employment forecasts in Schedule 3 of A Place to Grow: Growth Plan for the Greater Golden Horseshoe.
- b. In terms of residential growth, the City will grow from a population of 83,000 people in 2016 to a projected population of 125,000 people by 2051. The City will also accommodate growth in employment, aiming to achieve an **Activity Rate** of at least 2 residents for every 1 job through 2051. It is anticipated that the employment sector will grow from 45,000 jobs in 2016 to 63,000 by 2051.
- c. Notwithstanding the 2051 time horizon, Peterborough is expected to continue to attract growth and to evolve well beyond 2051. As such, this Plan does not represent an end state for the City of Peterborough, but rather a tool to manage its ongoing evolution.

- d. Growth will be managed by the City through the development approval processes provided in the Planning Act. All planning approvals will be undertaken in a financially responsible and environmentally sustainable manner that matches the growth, intensification and density targets of this Plan. All planning approvals will be evaluated on the basis of:
 - Conformity with the relevant policies of this Plan;
 - ii. Conformity/consistency with relevant Provincial policies, legislation, municipal standards and by-laws;
 - iii. Consistency with any applicable City approved Design Guidelines or Development Standards;
 - iv. Confirmation of the availability of adequate municipal infrastructure and public and private utilities; and,
 - v. Confirmation of the availability of adequate **public service facilities**.

3.3 Planning for Growth in an Urban Structure

3.3.1 Introduction

- a. Schedule A: Urban Structure identifies, conceptually, the urban structure of the City of Peterborough as it evolves throughout the 21st Century. It identifies a number of key geographic components of the City that assist in articulating where and how growth will occur, in accordance with Provincial policy, and that will consequently influence Peterborough's success in achieving its stated Vision for the future. Schedule B: Land Use Plan identifies the specific land use designations which regulate how new development can occur, with associated policy frameworks outlined in Section 4.
- Peterborough will continue to develop as a complete community by managing growth in a logical and well-defined urban structure, as depicted on Schedule
 A: Urban Structure which, at the highest level, consists of:
 - i. The **Delineated Built-Up Area**;
 - ii. The Designated Greenfield Area;
 - iii. The Natural Areas; and,

iv. The Rural Transitional Area.

3.3.2 Objectives for Growth Management

- a. The City of Peterborough will continue to evolve as a healthy, safe and balanced community. To support this evolution, choices about where and how growth occurs need to be carefully made. Understanding the urban structure of the City on a broad level is necessary for directing growth to appropriate locations, while minimizing undue, adverse development-related impacts on existing built-up areas.
- b. The City will ensure that sufficient development opportunities are made available to accommodate a wide range of land uses to meet the community's projected needs to 2051. Planning for infrastructure, **public service facilities** and **Employment Districts** may extend beyond the horizon of this Plan.
- c. Growth to 2051 will occur through a combination of intensification within the Delineated Built-Up Area and development within the Designated Greenfield Area. In this Plan, these two primary development contexts have substantially different policy frameworks to guide their planning approvals and, ultimately, their development.
- d. Peterborough needs to provide a mix of jobs and housing to create opportunities for people to work close to where they live. Peterborough also needs to grow at **transit-supportive** densities, with **transit-oriented** street configurations. This Plan:
 - Facilitates the intensification of residential, commercial and institutional uses within the existing **Delineated Built-Up Area**. Compact urban form and intensification efforts go hand-in-hand with efficient and enhanced transit - not only do they support each other, they are both necessary. This correlation is fundamental to where and how Peterborough will grow; and,
 - Supports a more efficient use of land and infrastructure investment by promoting the development of more compact neighbourhoods in Designated Greenfield Areas.

- e. To facilitate intensification and redevelopment, the City may identify key strategic development and investment areas which shall be the focus for the implementation of a range of financial and planning tools. Key strategic development and investment areas are identified as having the potential to support the City's desired vision and objectives, including the creation of community hubs with a mix and range of land uses, a high quality public realm and waterfront, transit improvements, and the restoration of natural heritage features. The financial and planning tools which may be implemented include, but are not limited to:
 - i. Community Improvement Plans;
 - ii. Tax increment financing;
 - iii. Reduced or deferred development charges;
 - iv. Community benefits;
 - v. Major transit station area studies;
 - vi. Economic development strategies;
 - vii. Public-private partnerships/agreements;
 - viii. Community planning permit systems;
 - ix. City-initiated secondary plans or other area-specific plans;
 - x. City-initiated land acquisition/disposition/development; and,
 - xi. City-initiated Official Plan and/or Zoning By-Law amendments.
- f. The following key strategic development and investment areas shall be considered as priorities:
 - i. Market Plaza, municipally known as 81 and 127 George Street North;
 - General Electric Lands, municipally known as 107 Park Street North, 1063
 Monaghan Road, 140 Stewart Street, 297 Rink Street and 107 Rubidge Street; and,
 - iii. Former Public Works Yard, municipally known as 182 Townsend Street.

- g. The Natural Areas is located throughout the City and is a defining element of the City's urban structure. These areas will be protected from development and will be enhanced over time to ensure that significant natural heritage features and their associated **ecological functions** are protected.
- h. The Rural Transitional Area will continue to contribute to the overall urban structure of the City, but its role in accommodating growth is limited. It is expected that the Rural Transitional Area will, at some point in the future, be identified as **Designated Greenfield Area**, in order to accommodate residential and/or employment growth beyond the 2051 horizon of this Plan.

3.3.3 The Delineated Built-Up Area

- a. The **Delineated Built-Up Area** will be the focus of a significant portion of the City's future growth through appropriate intensification in locations where infrastructure capacity exists or can be readily improved. Intensification will facilitate development that is more compact and mixed-use, supports **complete communities**, makes efficient use of land and resources, responds to changing housing needs, optimizes the use of existing and planned infrastructure, supports public transit and **active transportation**, contributes to improving air quality and promotes energy efficiency.
- b. All development within the **Delineated Built-Up Area** shall be identified as intensification. Each year, a minimum of **50 per cent** of new housing units approved by the City will be in the form of intensification.
- c. Peterborough's **Delineated Built Boundary** is identified on **Schedule A: Urban Structure**. It represents the City's developed urban area as of June 16, 2006 and the former hamlet of Coldsprings. The **Delineated Built Boundary** is an administrative boundary to facilitate implementation and monitoring of the growth management policies of this Plan. The **Delineated Built Boundary** defines the **Delineated Built-Up Area** of the City, and includes the following components:
 - i. Strategic Growth Areas;
 - ii. Neighbourhoods; and,
 - iii. Employment Districts.

- d. Intensification will be achieved through conversions of non-residential uses to residential, infilling, additional residential units, and redevelopment to promote an increase in planned densities. Development of employment opportunities through intensification will also be encouraged, where appropriate.
- e. Higher density forms of intensification shall be primarily focused in the **Strategic Growth Areas**. These areas will accommodate mid and high-rise forms of housing, as well as an array of **population-related employment** opportunities.
- f. The defined components of the urban structure will provide different community functions, and will therefore be different in terms of character, scale, mix of uses, function and potential to accommodate future growth. Intensification proposals will be considered on their merits and must demonstrate to the satisfaction of the City that:
 - i. The scale and character of the proposed development is compatible with and sensitive to the surrounding neighbourhood;
 - ii. The appropriate infrastructure, transportation facilities, including public transit and **active transportation** facilities, and **public service facilities** are or will be available;
 - iii. A high quality of urban design is incorporated into the development; and,
 - iv. Identified on-site or adjacent **cultural heritage resources** are appropriately **conserved**.
- g. Residential intensification initiatives within the Neighbourhoods will be limited. That does not mean that Neighbourhoods will not evolve. Their contribution to the intensification target will be primarily through complementary and compatible development on vacant lots, minor redevelopment and infill development and the establishment of additional residential units and garden suites. The City shall conduct intensification studies or neighbourhood plans for established residential areas where additional pressures for intensification and redevelopment and other significant neighbourhood issues are being experienced.

- h. The City will undertake intensification studies to identify/delineate priority areas for intensification City-wide and inform the creation of Secondary Plans for **Strategic Growth Areas**. The City will:
 - i. Plan to achieve the minimum average density target within the defined
 Urban Growth Centre;
 - ii. Implement the annual minimum residential intensification target generally throughout the **Delineated Built-Up Area** and, in particular, encourage the intensification of people and jobs in the **Strategic Growth Areas**;
 - iii. Encourage new development within the **Delineated Built-Up Area** to have a compact form and an appropriate mix of uses and densities that allow for the efficient use of land, infrastructures and **public service** facilities;
 - iv. Provide sufficient land to accommodate an appropriate range and mix of employment opportunities, housing and other land uses to meet projected needs to 2051;
 - v. Encourage the remediation and redevelopment of **brownfield sites** to uses that revitalize neighbourhoods; and,
 - vi. Encourage the reuse and/or conversion of **greyfields** and underutilized sites.

3.3.4 The Designated Greenfield Area

- a. The **Designated Greenfield Areas** represent those lands within the City that are outside the **Delineated Built Boundary**, but excluding those lands within the Rural Transitional Area. The **Designated Greenfield Area** lands are intended to accommodate a portion of the City's anticipated residential and employment growth in conjunction with intensification within the **Delineated Built-Up Area**, to the year 2051. The **Designated Greenfield Area** includes the following components:
 - i. Neighbourhoods;
 - ii. Strategic Growth Areas; and,
 - iii. Employment Districts.
- b. The **Designated Greenfield Areas** are expected to accommodate a maximum of 50 percent of the City's residential growth to 2051, and to develop with new residential neighbourhoods, mixed-use areas, business parks and **public service facilities**, contributing to a healthy and **complete community**. Greenfield development initiatives will be subject to the following:
 - i. New residential neighbourhoods within the Designated Greenfield Area shall be planned to achieve an overall minimum density of 60 residents and jobs combined per hectare of developable land area and will include population-related employment opportunities (public service facilities, retail, institutional and smaller scale office uses). The overall Designated Greenfield Area shall be planned to achieve an overall minimum density of 50 residents and jobs combined per hectare by 2051;
 - ii. New Employment Districts within the **Designated Greenfield Areas** shall be planned to achieve an overall minimum density of **30 jobs per hectare** of **developable land area** and will include primarily **employment land employment** opportunities (industrial/warehouse uses with associated office and accessory retail uses), along with limited **population-related employment** opportunities; and,
 - iii. New residential neighbourhoods and business parks within the Designated Greenfield Areas should be planned to include higher density, mixed-use centres and corridors to achieve the required density targets.

- c. Development of the **Designated Greenfield Areas** will be planned to be compact and **transit-supportive** through Secondary Plans that will provide:
 - Mixed-use communities that include local services, social amenities (including schools, parks and healthcare), a range of housing (including affordable and accessible housing) that will be suitable for a broad range of age groups, and convenient and accessible transportation systems to the City's Strategic Growth Areas and identified Employment Districts;
 - ii. Urban form and densities that support and encourage the use of transit and the safe and convenient use of **active transportation**;
 - iii. A diverse mixture of land uses, including residential, institutional and local commercial or other employment opportunities;
 - iv. High quality urban design of streetscapes and public open spaces that provide convenient and accessible linkages and foster the use of transit, walking and cycling as alternatives to the private automobile; and,
 - v. Appropriate phasing of development that complements the intensification objectives of this Plan.

3.3.5 The Rural Transitional Area

a. The Rural Transitional Area is identified on **Schedule A: Urban Structure**. Rural Transitional Area lands, as they are located within the Settlement Area, are anticipated to accommodate urban land uses at some point in the future beyond the 2051 planning horizon of this Plan. Typical rural/agricultural land uses are expected to continue until lands within the Rural Transitional Area are determined to be needed to accommodate urban growth. Lands within the Rural Transitional Area are intended to represent **excess lands**, which are not expected to accommodate any significant portions of the City's projected growth to 2051. Development decisions within Rural Transitional Area must consider, and must not preclude, the future orderly expansion of the City's urban development.

3.3.6 Coldsprings Special Study Area

- a. The Coldsprings Special Study Area is identified on Schedule A: Urban Structure and Schedule B: Land Use Plan. The lands identified as Coldsprings Special Study Area are approximate and does not constitute as a land use designation.
- b. The lands within the Coldsprings Special Study Area are anticipated to accommodate growth to 2051. Unless determined otherwise by a city-wide land needs assessment, it is intended that approximately 80 hectares of **developable land area** will be designated as Prestige Employment and approximately 60 hectares of **developable land area** will be designated for other community uses.
- c. The completion of a Secondary Plan for the Coldsprings Special Study Area is a priority of the City. The City will complete a Secondary Plan and an Official Plan Amendment to establish the appropriate urban structure, delineate land use boundaries, and provide urban design guidelines and development policies that will support of the establishment of employment land and **compatible development**.
- d. Until such time that a Secondary Plan and an Official Plan Amendment are approved for the Coldsprings Special Study Area, the policies of the Rural Transitional Area Designation shall apply.

3.3.7 The Functional Urban Structure Components

a. The following more detailed functional components of the Urban Structure identify the framework upon which Peterborough's future growth will be focused and accommodated.

Neighbourhoods

- b. Neighbourhoods, as identified on Schedule A: Urban Structure, are focused on residential land uses, but also include community facilities, parks, major and smaller scale institutional uses and supportive local retail and service commercial uses. The Neighbourhoods comprise a diverse range of communities within the City of Peterborough, from stable historic districts to recently constructed subdivisions and will accommodate a full range and mix of housing types.
- c. Neighbourhoods are expected to evolve over time, with new development and intensification within a Neighbourhood being evaluated based on the concept of compatible development. Intensification within Neighbourhoods will be primarily through development on vacant lots, minor infill development and the establishment of additional residential units and garden suites.
- d. New development on full urban services is required for residential growth in Neighbourhoods. New residential development on partial or private services is expected to be limited to minor infilling and minor rounding out of existing development where there are no urban services available or expected, provided that the site conditions are suitable for the long-term provision of such services with no negative impacts.

Strategic Growth Areas

- e. **Strategic Growth Areas**, identified on **Schedule A: Urban Structure** are to be the focus for accommodating intensification and/or higher intensity mixed-uses in a more compact built form. Major development/redevelopment opportunities may include infill, **brownfield sites**, the expansion or conversion of existing buildings, **greyfields**, or the development of new mixed-use, higher density corridors and centres serving emerging greenfield communities. The City will encourage appropriate development applications within the **Strategic Growth Areas** by considering:
 - i. A comprehensive strategy for municipal infrastructure in advance of anticipated development pressure;
 - ii. Reduced parking and parkland dedication requirements;
 - iii. Reduced or deferred Development Charges;
 - iv. Prezoning lands for appropriate forms of development;
 - v. Financial incentives offered through a Community Improvement Plan;
 - vi. Preparing Secondary Plans; and/or,
 - vii. Establishing urban design guidelines.
- f. The **Strategic Growth Areas** include the identified **Urban Growth Centre**. The **Urban Growth Centre** will be planned to achieve an average gross density of 150 residents and jobs per hectare combined by 2031 or earlier, through intensification of under-developed parcels of land and redevelopment. The **Urban Growth Centre** will further be planned:
 - i. As a focal area for investment in regional **public service facilities**, as well as commercial, recreational, cultural, and entertainment uses;
 - ii. To accommodate and support the transit network at the regional scale;
 - iii. To serve as a high-density major employment centre; and,
 - iv. To accommodate significant population and employment growth.

- Development proposals within **Strategic Growth Areas** will be planned to: g.
 - i. Accommodate transit-supportive densities and promote active transportation and a range and mix of uses and activities;
 - ii. Include a diverse mix of uses, including **affordable** and **accessible housing**, to support existing and planned transit service levels;
 - iii. Accommodate alternative development standards, such as reduced parking requirements;
 - iv. Minimize land uses and built form that would adversely affect the achievement of transit-supportive densities;
 - Foster collaboration between public and private sectors, such as joint ٧. development projects;
 - vi. Provide necessary social, community and municipal infrastructure;
 - vii. Provide a broad array of retail and service commercial uses as well as mid and high-rise forms of housing;
 - viii. Promote land use and built form transitions and urban design approaches that protect:
 - The stability or amenity of adjacent Neighbourhoods;
 - Employment uses from land use conflicts and adverse effects from encroachment by sensitive uses; and,
 - Areas of cultural heritage or areas of natural heritage sensitivity.
- h. Strategic Growth Areas are located both within the Delineated Built-Up Area (intensification opportunities) and within the Designated Greenfield Area (new development opportunities) and will evolve as an important connecting element of the City's Urban Structure.
- i. New development on full urban services is required for growth in **Strategic Growth Areas**. New development on partial or private services is expected to be limited to minor infilling and minor rounding out of existing development where there are no urban services available or expected, provided that the site conditions are suitable for the long-term provision of such services with no negative impacts.

Employment Districts

- j. The Employment Districts currently accommodate a range of employment land employment opportunities, as well as some population-related employment opportunities. The Employment Districts are a crucial component of the urban structure in terms of the economic well-being of the City. The Employment Districts are expected to evolve over time, and while they are not planned to substantially intensify over time, they may.
- k. Key Employment Districts within the City are designated as Prestige Employment and will be protected from conversion to other land uses in recognition of their important economic role.
- The introduction of non-employment generating uses or sensitive land uses will not be permitted within any Employment District, or adjacent to any Employment District, if those uses have a negative impact on the ongoing operations of existing industries.
- m. The City will prepare an Employment Land Strategy in collaboration with the County of Peterborough, other levels of government and appropriate agencies to ensure that there is a healthy supply of designated land to accommodate employment-generating uses.
- n. Employment Districts shall be planned to achieve an overall minimum density of 25 jobs per hectare of **developable land area** by 2051.

.





4.0 LAND USE DESIGNATIONS

4.1 Introduction

4.1.1 Defining the Urban Structure

- a. Schedule A: Urban Structure identifies the broad elements of the City of Peterborough's historic and existing development pattern. It categorizes the City into elements that are used to describe growth management in conformity with the requirements of the Growth Plan. Schedule B: Land Use Plan and Schedule C: Central Area Plan further subdivide the elements of Schedule A into a finer grain of land use designations that provide a more detailed policy framework to be articulated throughout the City.
- b. It is the policy of the City that land shall be developed in accordance with the land use pattern shown on **Schedule B: Land Use Plan** and **Schedule C: Central Area Plan.** The objectives and policies in this Section outline the desired land use pattern, standards for development and range of uses appropriate for each land use designation. This Section must be read in conjunction with all other parts of this Plan.
- c. **Schedule B: Land Use Plan** and **Schedule C: Central Area Plan** establish the pattern of land use within the City, organized as follows:
 - i. Neighbourhoods
 - Residential Designation;
 - Major Institutional Designation;
 - Major Open Space Designation;
 - ii. Central Area
 - Downtown Core Area Designation;
 - Business District Designation;

- Industrial Conversion Area Designation;
- Downtown Neighbourhood Designation;
- Downtown Open Space Designation;
- Little Lake South District Designation;
- Jackson Creek Special Policy Area;
- iii. Mixed-Use Corridors
 - Major Mixed-Use Corridor Designation;
 - Minor Mixed-Use Corridor Designation;
- iv. Employment Districts
 - Prestige Employment Designation;
 - General Employment Designation;
- v. Natural Heritage System
 - Natural Areas Designation; and,
- vi. Rural Transitional Area Designation.

4.1.2 General Policies for All Designations

- a. In all designations, excluding the Natural Areas Designation, public parks, playfields, schools, public and private utility installations, transportation infrastructure/commuter facilities, institutional and quasi-institutional uses and other **public service facilities** which provide services directly to all properties in the City, or to the immediate neighbourhood, shall be permitted, provided that:
 - i. Such use is necessary or essential; and,
 - ii. Installations are or can be made compatible with adjacent properties and the neighbourhood.

- b. **Public service facilities** shall be planned in coordination with land use planning and in consideration of the following:
 - Public service facilities and public services should be co-located in community hubs and integrated to promote cost-effectiveness and convenient access;
 - Priority should be given to maintaining and adapting existing public service facilities and spaces as community hubs to meet the needs of the community and optimize the long-term viability of public investments;
 - Existing public service facilities that are located in or near Strategic
 Growth Areas and are easily accessible by active transportation and transit shall be the preferred location for community hubs;
 - iv. The City shall collaborate and consult with service planning, funding, and delivery sectors to facilitate the co-ordination and planning of community hubs and other public service facilities; and,
 - v. Preference for sites accommodating new **public service facilities**, including hospitals and schools, should be given to sites that are easily accessible by **active transportation** and transit.
- c. Notwithstanding the list of permitted uses within any land use designation, nothing in this Plan requires that every permitted use be permitted on every site. The Zoning By-Law shall establish the appropriate range of permitted uses on a site-specific or area wide basis. Further, the full range of permitted uses may not be permitted in instances where the location is subject to area specific policies contained in this Plan.
- d. In all designations, any new development, redevelopment or **public realm** improvement shall strive to incorporate **universal design** principles wherever possible, to ensure accessibility and ease of mobility for all residents and visitors. To facilitate this, the City may prepare **universal design** guidelines, as appropriate.

- e. When development, redevelopment, **site alteration** and/or infrastructure is proposed that has potential to impact **natural heritage features** not previously investigated or mapped as part of the **natural heritage system**, a preliminary natural heritage feature screening will be required to determine whether any **natural heritage features** exist on or adjacent to the subject site that meet the criteria for **natural heritage system** Level A, B, or C. If **natural heritage features** are identified that appear to meet the criteria of a **natural heritage system** Level A, B or C feature, an Environmental Impact Study will be required in accordance with the policies of this Plan and approved by the City in consultation with the **Conservation Authority** and any agency having jurisdiction. Any identified features will be added to the Natural Areas Designation and protected in accordance with its policies, and required mitigative measures shall be implemented without amendment to this Plan.
- f. The development of **major retail facilities** or **major office** uses will, in accordance with Provincial guidelines, avoid, or where avoidance is not possible, minimize and mitigate adverse impacts on industrial, manufacturing or other uses in Employment Districts that are particularly vulnerable to encroachment.

4.1.3 General Policies for Hazard Lands

- a. Protecting public health and safety and considering the increasing risks associated with climate change are critical to the social well-being, environmental sustainability, and long-term prosperity of the City. Both natural and human-made hazards, such as **flood plains**, unstable slopes, wildland fires and contaminated sites, can pose risks to health and safety as well as damage to property and infrastructure if not appropriately considered.
- b. Hazard lands include both natural and human-made hazards. Development will generally be directed to areas outside of hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards, and hazardous sites.

General Policies Applicable to Natural Hazards

c. The delineation and regulation of hazardous lands and hazardous sites are generally administered by the Conservation Authority and are generally shown on Schedule F: Natural Heritage System and Environmental Constraints. Changes to the boundary of hazardous lands and hazardous sites may be facilitated through a study approved by the Conservation Authority without the need to amend this Plan. Where the delineation of hazardous lands and hazardous sites falls outside the jurisdiction of the Conservation Authority, the study must be approved by the City.

- Development shall be directed away from areas identified on Schedule F:
 Natural Heritage System and Environmental Constraints, consistent with
 Section 3.0 of the Provincial Policy Statement.
- e. Some buildings, structures and lots are existing within or adjacent to a **flood**plain and/or erosion hazard limits as identified by the **Conservation Authority**.
 The expansion of an existing building or structure within or adjacent to
 hazardous lands will generally not be supported. Redevelopment or relocation
 of existing uses/structures within or adjacent to hazardous lands may be
 permitted subject to the approval of the **Conservation Authority**.
- f. A Special Policy Area may be applied in an area that has historically existed in the flood plain and where site-specific policies approved by the Province in consultation with the Conservation Authority are intended to address the significant social and economic hardships that would result from strict adherence to Provincial policies.
- g. Development adjacent to an identified flood or erosion prone area may be subject to a setback from the **Regulatory Flood** or the stable top of bank, whichever is greater. The location of the **Regulatory Flood** and stable top of bank shall be determined by the **Conservation Authority** in conjunction with the City.
- h. Flood plains and hazardous steep slopes are most often included within the Major Open Space Designation. In these hazardous lands, development and site alteration will be restricted to protect the public. As part of the development approval process, the zoning of hazard lands to an appropriate open space zone shall be required.
- i. Hazardous forest types for wildland fire are forest types assessed as being associated with the risk of high to extreme wildland fire using risk assessment tools established by the Ontario Ministry of Natural Resources and Forestry, as amended from time to time. Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards.
- j. When reviewing an application for development, or other applicable process, the City shall consider the potential impacts of climate change that may increase the risk associated with natural hazards.

General Policies Applicable to Human Made Hazards

- k. Development on or adjacent to lands affected by mine hazards, oil, gas and salt hazards, former mineral mining operations, mineral aggregate operations, or petroleum resource operations may be permitted only if rehabilitation measures to address and mitigate known or suspected hazards are underway or have been completed.
- I. Contaminated sites shall be remediated as necessary prior to any activity on the site associated with the proposed use such that there will be no adverse effects to human health.

4.1.4 Food Store Distribution in the Urban Structure

- a. The City recognizes the distribution of food retail as a critical component to achieving complete communities. As such, small-scale food stores are permitted in Neighbourhoods and Strategic Growth Areas. Large-scale food stores are directed to Strategic Growth Areas. The City will encourage an equitable distribution of large-scale food stores based on population growth and needs. To achieve this objective:
 - i. Schedule G: Food Store Sub-Areas divides the City into four Sub-Areas: North, East, Central, and West. Priority will be given to directing new large-scale food stores to growth areas by implementing a target range of 0.33 to 0.46 square metres of food store floor space per capita in each of the Sub-Areas:
 - ii. An application to establish a **large-scale food store** shall be considered through a Zoning By-Law Amendment accompanied by justification that the proposed food store floor space is appropriate considering the existing population and 5-year population forecast within the Sub-Area and is consistent with the objectives of this Plan;
 - iii. The City will encourage the retention and development of food stores in the Central Area to support the day-to-day shopping needs of current and future residents in the Central Area and the continued success of the Central Area as a **complete community**;
 - iv. The City may identify sites for future **large-scale food stores** through the preparation of Secondary Plans; and,
 - v. The City will monitor population growth, post-secondary student housing, and food store floor space growth to implement the intent of this Plan.

4.2 Neighbourhoods

4.2.1 Introduction

Intent

- a. The Neighbourhoods, identified on **Schedule A: Urban Structure** include the areas of the City that are focused on residential land uses, including a variety of housing types, but also including **public service facilities**, parks, institutional uses and supportive local retail and **service commercial uses**. The Neighbourhoods comprise a diverse range of communities within the City, from historic districts to recently constructed subdivisions and planned neighbourhoods.
- b. The land use policy framework included in this Section of this Plan is intended to:
 - i. Permit and facilitate a variety of appropriately located and scaled residential building types, as well as an array of supportive land uses; and,
 - ii. Ensure that all new development is compatible with the existing community character and surrounding land uses.

Objectives

- c. The objectives of this Section of this Plan with respect to Neighbourhoods are to:
 - Encourage the provision of a broad range of housing types with respect to location, size, cost, tenure, design, and accessibility, including affordable housing, to meet the needs of all residents;
 - ii. Encourage residential intensification and infill development in residential areas where the impacts of development on existing uses can be minimized and where development can efficiently utilize existing municipal services and facilities;
 - Support the provision of non-residential supporting uses that enhance the quality of the residential environment and contribute to the creation of complete communities;
 - iv. Support the development, at appropriate locations, of residential facilities that meet the housing needs of persons requiring specialized care;

- v. Support the continued success and growth of Peterborough's institutions to ensure access to wide range of services and opportunities for Peterborough residents;
- vi. Ensure that the character and array of institutional uses contribute to the image of the City and its desirability as a place to live and invest in;
- vii. Support non-profit groups in developing non-profit and co-operative housing projects and promote housing initiatives that facilitate revitalization, compact urban form and an increased variety of housing options;
- viii. Maintain and enhance a high quality and accessible municipal public open space system which is fully interconnected with the City's **active transportation** network and meets the needs of Peterborough's diverse population; and,
- ix. Encourage the joint use of community open spaces and institutional uses.

Designations

- d. The Neighbourhoods include the following land use designations:
 - i. Residential Designation;
 - ii. Major Institutional Designation; and,
 - iii. Major Open Space Designation.

4.2.2 Residential Designation

Intent

a. The Residential Designation is intended to accommodate a wide range of housing forms as well as other land uses that are integral to, and supportive of a residential environment. Housing may range in scale from single-detached dwellings to high-rise apartment buildings, and therefore the development policies of this Designation provide an appropriate policy framework to guide the development of the various built forms.

Permitted Uses

- b. Permitted uses on lands within the Residential Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Low-rise, mid-rise and high-rise residential uses;
 - ii. Communal housing, which may include **special needs** housing;
 - iii. Additional residential units;
 - iv. Home occupations, including bed and breakfast establishments; and,
 - v. Neighbourhood supportive uses.

Development Policies

- c. The City shall consider the following criteria when reviewing an application for development or intensification within the Residential Designation:
 - i. All development shall be identified as **compatible development**;
 - The type, mix, density and affordability of the housing form proposed for the site positively contributes to the area and the provision of a diverse housing stock, including a mix of unit sizes;
 - iii. The adequacy of municipal services available to the area or to the site, including water, wastewater and stormwater management services;
 - iv. The promotion of **active transportation** and transit and mitigation of adverse impacts on traffic and the surrounding transportation system;
 - The adequacy of existing and/or proposed amenities within easy access to serve future residents and the existing community, including **public** service facilities, commercial opportunities and parks and open spaces;
 - vi. The provision of adequate vehicular and bicycle parking, buffering, and landscaping;
 - vii. The prevention of adverse impacts on cultural heritage features;
 - viii. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**;

- ix. The incorporation of sustainability features, including green infrastructure, green building practices, energy conservation measures and renewable/alternative energy systems;
- x. The financial viability of life-cycle costs of new and existing infrastructure and **public service facilities** required to service the development;
- xi. The phasing of development is consistent with the availability of municipal services and City intensification and/or density objectives; and,
- xii. Where applicable, consistency with approved urban design and architectural control guidelines.

Policies for Low-Rise Residential Development

- d. Low-rise residential uses shall generally be located within the interior of neighbourhoods, on Local Roads and Collector Roads. The maximum building height for low-rise residential uses shall be 3 storeys. Other building elements that ensure **compatible development** will be identified by the Zoning By-Law. Built-forms that are considered low-rise residential include:
 - i. Detached, duplex and semi-detached dwellings;
 - ii. Triplexes, quadruplexes and street and block townhouse dwellings;
 - iii. Apartment buildings; and,
 - iv. Additional residential units.
- e. Where permitted by the Zoning By-Law, low-rise residential uses that are located adjacent to Provincial Highways and Arterial Roads will be required, wherever possible, to develop in a manner that will minimize direct access to such highways or roads, but which avoids backlotting on Arterial Roads.
- f. Multi-unit low-rise residential built forms must provide for adequate on-site amenity spaces, **active transportation** routes and on-site waste pickup.
- g. New low-rise apartment buildings shall:
 - i. Be on a site of suitable size for the proposed development, and shall provide adequate landscaping, amenity features, on-site parking, buffering and stormwater management features including low impact development; and,

ii. Be sited so as to minimize their effect on neighbouring low-rise residential land uses particularly with regard to privacy, traffic generation, and reduction of sunlight. The visual impact of each project will be carefully considered.



Policies for Mid-Rise Residential Development

- h. Mid-rise residential uses shall generally be greater than 3 storeys, but no higher than 6 storeys. Built-forms that are considered mid-rise residential include:
 - i. Stacked townhouse dwellings;
 - ii. Apartment buildings; and,
 - iii. Other cluster or multiple unit dwellings.

- i. New mid-rise residential uses may be prezoned or may be approved subject to a site-specific Zoning By-Law Amendment, and shall:
 - Have direct access to a Collector or Arterial Road. If direct access to such a road is not possible, the development may gain access to the Collector or Arterial Road from a Local Road, subject to the City's approval;
 - Have convenient access to public transit. If convenient access to public transit is not possible, the development may be supported where it has convenient access to high quality active transportation routes, subject to the City's approval;
 - iii. Be on a site of suitable size for the proposed development, and shall provide adequate landscaping, on-site amenity features and spaces, on-site parking, on-site waste pickup, buffering and stormwater management features including **low impact development**;
 - iv. Be located in proximity to amenities, such as parks, open space, schools, shopping, active transportation routes and other public service facilities, services and amenities;
 - v. Address the surrounding neighbourhood with particular regard to common elements such as access points, driveways, landscaping and parking areas;
 - vi. Not cause a traffic hazard; and,
 - vii. Be subject to Site Plan Approval.

Policies for High-Rise Residential Development

- j. High-rise residential uses shall be greater than 6 storeys in height. Built-forms that are considered high-rise residential include:
 - i. Apartment buildings; and,
 - ii. Other multiple unit dwellings.
- k. New high-rise residential uses may be prezoned or may be approved subject to a site-specific Zoning By-Law Amendment, and shall:
 - i. Have direct access to a Collector or Arterial road;
 - ii. Be at a highly accessible location connected to the active transportation network, including sidewalks; within 250 metres of an existing or planned public transit route; and generally within 500 metres of schools, commercial facilities and/or parks, open space and/or other public service facilities, services and amenities;
 - iii. Be on a site of suitable size for the proposed development, and shall provide adequate landscaping, on-site amenity features and spaces, on-site waste pickup, on-site parking, buffering and stormwater management features including **low impact development**;
 - iv. Address the surrounding neighbourhood with particular regard to common elements such as access points, driveways, landscaping and parking areas. The City shall encourage underground parking facilities and bicycle storage for all high-rise residential developments;
 - v. Not cause a traffic hazard; and,
 - vi. Be subject to Site Plan Approval.

Policies for Communal Housing

- I. Policies for communal housing include:
 - i. Communal housing is a single housekeeping unit in a residential dwelling in which residents live under responsible supervision consistent with their particular needs. This does not include a Lodging House as defined by the Zoning By-Law, a Lodging House as may be licenced under the Lodging House By-Law, or a Foster Home;
 - ii. Communal housing will be allowed "as-of-right" in any residential dwelling within the Residential Designation to a maximum of 6 bedrooms for residents, exclusive of supervisory staff and receiving family;
 - iii. Communal housing accommodating 7 to 10 bedrooms for residents, exclusive of supervisory staff and receiving family, may be allowed in any residential dwelling within the Residential Designation, subject to a rezoning application; and,
 - iv. The City shall require the registration of communal housing as permitted by the Municipal Act.

Policies for Special Needs Housing

- m. Policies for **special needs** housing include:
 - The City recognizes the need for **special needs** housing in the community and supports the integration of these housing types at appropriate locations, subject to the policies of this Plan;
 - ii. **Special needs** housing will be permitted in any land use designation which permits residential uses, subject to Zoning By-Law regulations; and,
 - iii. Notwithstanding the above, **special needs** housing shall be on a site of suitable size for the proposed development, and shall provide adequate landscaping, amenity features, on-site parking, and buffering.

Policies for Additional Residential Units

- n. **Additional residential units** may be permitted in accordance with the provisions of the Zoning By-Law and as follows:
 - Only two additional residential units for each single detached, semidetached, or row/townhouse dwelling unit will be permitted;
 - ii. One **additional residential unit** may be contained within each of a primary residential dwelling and a building accessory thereto;
 - iii. Severances to subdivide an **additional residential unit** from its primary residential dwelling will not be permitted;
 - iv. Additional residential units shall be directed to areas outside of hazardous lands which are impacted by flooding hazards and/or erosion hazards and shall not be permitted within a floodway; and,
 - v. **Additional residential units** shall be developed with municipal water and wastewater services unless permission is granted otherwise in the Zoning By-Law.

Policies for Home Occupations

- Home occupations, including bed and breakfast establishments, may be permitted as an accessory use within a dwelling unit or the accessory building of a dwelling unit subject to the following:
 - i. The home occupation functions as a subordinate activity to the main residential use;
 - ii. The home occupation does not alter the residential character of the dwelling and the property;
 - iii. The use can demonstrate the availability of appropriate water and sewage disposal facilities; and,
 - iv. There is no outside storage of goods associated with the home occupation.

Policies for Secondary and Elementary Schools

- p. Secondary and elementary schools and other uses pursuant to the Education Act may be permitted in the Residential Designation, in accordance with the following policies:
 - i. Secondary and elementary school sites shall be provided in accordance with the standards of the appropriate Board of Education, where applicable;
 - ii. Applications for the development of a new secondary or elementary school shall address the surrounding neighbourhood with particular regard to common elements such as access points, driveways, landscaping and parking areas;
 - iii. The development of secondary or elementary schools in conjunction with municipal parkland and other **public service facilities** may be considered, so that a complementary integration of lands and facilities may be achieved;
 - iv. The coordinated use of recreational facilities located within secondary or elementary schools, or on school properties will be encouraged;
 - v. Adequate parking and other required facilities shall be provided on site. However, schools may provide a portion of the parking and shared parking off-site with nearby parkland and other **public service facilities**, as determined by the School Board in consultation with the City;

- vi. Direct **active transportation** access shall be provided to schools from all parts of the surrounding residential area; and,
- vii. Specific regulations for secondary and elementary schools shall be provided in the Zoning By-Law. Applications for a secondary or elementary school shall be subject to Site Plan Approval.
- q. The City will consider the acquisition of surplus school sites based on an evaluation of whether a **public service facility** or other community use may be appropriate for the site.

Policies for Neighbourhood Supportive Uses

- r. The City will support the integration of **neighbourhood supportive uses**, which are complementary and serve the needs of residents, at appropriate locations in the Residential Designation to support the development of a walkable and **complete community**. Individual properties will be zoned to achieve an appropriate mix of uses, building types, scale and density, that are compatible with the surrounding residential uses. **Neighbourhood supportive uses** shall be permitted as stand-alone buildings or integrated with residential uses in a mixed-use development and shall generally not comprise more than 2,000 square metres of gross leasable area per lot.
- s. Within the Residential Designation the following **neighbourhood supportive uses** may be permitted through a Zoning By-Law:
 - i. Artisan establishments, studios and craftsman shops;
 - ii. Business and financial institutions, to a maximum of 350 square metres per use;
 - iii. Healthcare offices and clinics, to a maximum of 350 square metres per use;
 - iv. Recreational, fitness and/or cultural facilities;
 - v. Places of worship;
 - vi. Day care facilities;
 - vii. Small-scale food stores; and,
 - viii. Small-scale convenience retail facilities, restaurants and **personal** service commercial uses, to a maximum of 350 square metres per use.

- t. The City will have regard for the following when evaluating an application to permit **neighbourhood supportive uses** in the Residential Designation:
 - i. Whether the use will contribute to a walkable and complete community;
 and.
 - ii. Depending on the size and scale of a **neighbourhood supportive use**, front yard parking may not be permitted. Where it has been determined by the City that front yard parking will negatively impact the streetscape, on-street parking and rear yard parking and servicing areas may be considered.
- Where a proposed non-residential development abuts a residential use, the City shall require that impacts be mitigated through site design including appropriate screening and landscape treatments.
- v. **Neighbourhood supportive uses** should be clustered to create a focal point for the neighbourhood and to facilitate access by all forms of transportation. **Neighbourhood supportive uses** shall generally be located at an intersection with a Collector or Arterial Road and shall be provided with appropriate access to those roads, in accordance with the requirements of the City.
- w. To help establish neighbourhood focal points, the City will encourage **neighbourhood supportive uses** to locate together and to be integrated with residential uses in mixed-use developments or in mixed-use buildings, where appropriate and desirable. In mixed-use buildings, non-residential uses shall be encouraged to locate on the ground floor, with residential uses located above the ground floor.
- x. Specific regulations for **neighbourhood supportive uses** shall be provided in the Zoning By-Law. Applications for a neighbourhood supporting use shall be subject to Site Plan Approval.

4.2.3 Major Institutional Designation

Intent

- a. The Major Institutional Designation is intended for institutional uses that are of a community or regional scale. Major Institutional Designation uses are intended to be integrated into the City fabric, and are a fundamental component of a **complete community**.
- b. The Major Institutional Designation primarily consists of Trent University, Sir Sandford Fleming College, and the Peterborough Regional Health Centre, recognizing the importance of these major institutions to the City and the wider region. This Designation does not preclude the establishment of new major institutions or separate colleges and facilities and may include the development of clusters for innovation and technology-driven entities.
- c. Major institutions, particularly post-secondary institutions, are important both as resources and key players in a changing and increasingly knowledge-based economy.

Permitted Uses

- d. Permitted uses on lands within the Major Institutional Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Research and development facilities;
 - ii. Manufacturing and employment uses that are related to a research and development facility or are compatible with the intent of this Designation;
 - iii. Places of worship; and,
 - iv. Complementary uses, such as residential, convenience retail, small scale office, day care facilities, service commercial, financial and personal service, food service and other hospitality services, and recreational and cultural facilities may also be permitted provided they primarily serve the needs of those persons associated with a major institution.

Development Policies

- e. When considering an application for development within the Major Institutional Designation, the following shall be evaluated:
 - i. The landscape, built form and functional character of the surrounding community is enhanced;
 - ii. All development shall be identified as **compatible development** and no undue, adverse impacts are created on adjacent properties in the vicinity;
 - iii. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**;
 - iv. Identified on-site or adjacent **cultural heritage resources** are appropriately **conserved**;
 - v. The height and massing of nearby buildings is appropriately considered and buffering and/or transitions in height and density to adjacent properties are implemented, where necessary;
 - vi. There is convenient access to public transit and/or **active transportation** routes;
 - vii. On-site amenity space is provided where appropriate and is, at a minimum, reflective of the existing patterns of private and public amenity space in the vicinity; and,
 - viii. Utility, infrastructure and transportation system capacity exists to serve the proposed development and there are no undue adverse impacts on the City's sewer, water, stormwater management and transportation systems.
- f. Specific regulations for **major institutional** uses shall be provided in the Zoning By-Law. Applications for development within the Major Institutional Designation shall be subject to Site Plan Approval.

4.2.4 Major Open Space Designation

Intent

- a. Major Open Spaces are a valuable resource to the community and contribute to the quality of life in Peterborough. The primary intent of the Major Open Space Designation is to provide for a comprehensive and connected open space system of parks and trails, maintain a buffer between land uses, and increase the opportunities for recreation and general enjoyment, while having regard for the City's natural areas that are not designated as part of the **Natural Heritage System**.
- b. The Major Open Space Designation includes Community Parks and Regional Parks in excess of 3 hectares in size. Neighbourhood and Local Parks are not usually designated as Major Open Space unless they form part of a larger land area of open space.

Permitted Uses

- c. Permitted uses on lands within the Major Open Space Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Active and passive recreational uses;
 - Horticultural uses including community gardens, garden plots, and nursery gardening;
 - iii. Conservation, forestry and wildlife management uses;
 - iv. Cemeteries;
 - v. Golf courses; and,
 - vi. Campgrounds.
- d. Accessory buildings and structures, and limited commercial uses which serve the main permitted use, such as concession stands, and restaurants, may be permitted subject to all other policies of this Plan and the requirements of the Zoning By-Law.

e. Provided that public access to the shoreline is maintained, commercial development such as marinas, motels, hotels, museums, restaurants and small-scale retail uses may be permitted along the Otonabee River or Trent-Severn Waterway system only within the Central Area or as an integral part of planned park development in the Lift Lock area.

Development Policies

- f. Lands which are designated Major Open Space shall be developed in accordance with the City's Strategic Plan for Recreation, Parks, Arenas and Culture and/or other relevant municipal plans, and all other applicable policies of this Plan.
- g. The designation of privately owned lands as Major Open Space does not necessarily imply that such lands are available for public use or that they will be purchased by the municipality or a public agency.
- When considering an application for development within the Major Open Space
 Designation, the compatibility of development with surrounding land uses shall
 be evaluated including, but not limited to, the consideration of applicable
 Provincial guidelines relating to Land Use Compatibility and Environmental
 Noise.

- i. If a proposal is made to amend the Major Open Space Designation applied to private land, the City shall consider the following:
 - i. The purpose of its designation as Major Open Space;
 - ii. The adequacy of public open space in the vicinity and City wide;
 - iii. The strategic significance of the property or part of the property in contributing to a linked system of parkland;
 - iv. The potential for appropriate integration with surrounding uses and the potential need to protect adjacent properties from the impact of the proposed new use;
 - v. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**; and,
 - vi. The feasibility of acquiring all or parts of the property.

If a proposed amendment would result in development that would have a significant **negative impact** on the **Natural Heritage System** or disrupt the continuity of the linked open space system, the amendment will not be supported.

- j. The City recognizes the significance of the Trent-Severn Waterway and the Otonabee River within the City. Maximum effort will be made to recognize the unique potential of this system and to maintain its environmental integrity as part of the open space system in the City, which also serves the region and beyond. Without precluding other areas throughout the system that may be recognized by further study, the following areas are specifically noted:
 - The Peterborough marina, the Del Crary Park area and the Downtown Waterfront as a focus for tourism and tourist oriented commercial development;
 - ii. The Peterborough Hydraulic Lift Locks as an area of historical significance with tourism potential; and,
 - iii. Natural areas adjacent to and including the Trent-Severn Waterway, Otonabee River and Little Lake.

k. Where other types of recreation land and facilities such as schools, conservation areas, private/commercial recreation properties, Provincial and Federal recreation/open space holdings, churches and municipal buildings are located in conjunction with public open space or parkland, such land may be shown as a part of the area designated as Major Open Space. The City will work cooperatively with the owners of such property to encourage its development and maintenance so as to complement the character of adjacent public open space or parkland.

Policies for Cemeteries

- I. The establishment of new cemeteries, or the enlargement of existing cemeteries shall be in accordance with Provincial Land Use Compatibility Guidelines and shall have regard for:
 - i. Potential impacts on adjacent existing and planned land uses;
 - ii. Access to the road system which does not create traffic hazards;
 - iii. Provision of adequate onsite parking facilities; and,
 - iv. Screening and landscaping to complement the plot plan and provide buffering with adjacent land uses.

Policies for Campgrounds

m. A campground use is only permitted provided that it does not include permanent dwelling units and that it is appropriately serviced to the satisfaction of the City.

4.3 The Central Area

4.3.1 Introduction

Intent

- a. The Central Area is identified on **Schedule B: Land Use Plan**, with the more refined designations for the Area identified on **Schedule C: Central Area Plan**. The Central Area is the historic heart of the community and will continue to develop as a multi-faceted, mixed-use activity centre for the City and surrounding region. It is a focus for office, administrative, art, cultural and entertainment uses as well as a diverse range of retail facilities and services serving both regional and local residents. The Central Area is also the focus for government activities, community and recreational uses, higher density and specialized forms of housing, heritage sites and buildings, tourism and hospitality facilities, and the home of several key industries. The success and health of the Central Area are contingent upon a concentration of residents, workers and visitors, with supporting amenities to encourage a vibrant living and visiting experience that radiates outwards. The Central Area is a place that attracts investment.
- b. The Central Area Master Plan, as amended from time to time, has been in effect since 1991. The Central Area Master Plan has informed the development of this Plan and includes a host of strategic actions.

Objectives

- c. The objectives of this Plan with respect to the Central Area are to:
 - i. Promote the Central Area's function as a regional service centre providing a broad range of activities, goods and services to meet the diverse needs of its own resident population, local work force, business and institutional sectors and visitors, as well as those in a widespread regional area who look to Peterborough for a range and depth of facilities and functions;
 - Maintain the economic vitality, historic and community value of the Central Area by encouraging the development and rehabilitation of the area for a diverse range of uses, while promoting the appropriate conservation of its cultural heritage resources;

- iii. Undertake, through direct municipal action, a program of ongoing improvements to the Central Area that:
 - Enhance its efficiency, convenience, safety and accessibility for all residents and visitors;
 - Improve the appearance of the **public realm** and the activities it accommodates, including through streetscape improvements, universal design and waterfront and riverside enhancement projects;
 - Upgrade/expand municipal infrastructure and facilities; and,
 - Build/provide active transportation infrastructure and transit facilities;
- iv. Increase the amount and intensity of residential uses within the Central Area by supporting multi-unit residential and mixed-use developments;
- v. Support the continued viability of Peterborough's vibrant arts community, as well as small and/or locally scaled retail and business uses;
- vi. Require that all development within the Central Area be **transit-supportive** and pedestrian-oriented, incorporating high-quality design to support **active transportation**, and creating a strong **public realm**, which includes built form, architectural details, landscaping and signage to create a sense of place;
- vii. Encourage opportunities for new **major office** and institutional uses within the Central Area, particularly a post-secondary institutional facility and/or campus/satellite campus;
- viii. Allow the ongoing evolution of the retail sector within the Central Area to occur with a minimum of policy interventions with respect to the amount and type of space/facilities;
- ix. Encourage opportunities for new tourist uses within the Central Area;
- x. Encourage new development to use structured parking and accommodate a mix of uses, including a range of housing types, institutional, community and **service commercial uses**, to support the development of a **complete community** easily accessible to the surrounding communities by a range of transportation modes;

- Recognize and enhance the ecological, hydrologic and cultural xi. significance of the Otonabee River, Little Lake and Jackson Creek; and,
- xii. Implement and periodically update the Central Area Master Plan.

Designations

- d. The Central Area, as identified on Schedule C: Central Area Plan includes the following land use designations:
 - i. Downtown Core Area Designation;
 - ii. Business District Designation;
 - iii. Industrial Conversion Area Designation;
 - Downtown Neighbourhood Designation; iv.
 - Downtown Open Space Designation; V.
 - vi. Little Lake South District Designation; and,
 - vii. Jackson Creek Special Policy Area.

General Policies Applicable Throughout the Central Area

- In order to maintain and enhance the breadth, depth and continued viability of e. the Central Area, the City will prioritize development which fulfills the following functions:
 - i. Small-scale higher-order retail facilities such as specialty shops, which attract and serve residents from throughout the City and surrounding region;
 - ii. All forms of office uses including business, government and professional offices;
 - iii. Service commercial uses and community facilities including recreational facilities;
 - iv. Cultural, arts and entertainment facilities including cinemas and theatres;
 - Post-secondary institutional facilities and/or a campus/satellite campus. ٧.
 - vi. Hospitality and tourism facilities;

- vii. Conference/convention facilities;
- viii. A mix of higher density housing options, including **affordable** housing; and,
- ix. Retail commercial uses that support residential uses in the Central Area and nearby areas, such as **large-scale food stores**, drug and convenience shopping uses, personal services and other facilities.
- f. Anticipated development throughout the Central Area is intended to promote economic revitalization within the context of historic preservation, recognizing the potential for adaptive re-use, redevelopment and intensification. In addition, when considering an application for a development within the Central Area, the following shall be considered:
 - i. All development shall be identified as **compatible development**;
 - ii. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**;
 - iii. Identified on-site or adjacent **cultural heritage resources** are appropriately **conserved** and compatibility with the heritage built form is achieved:
 - iv. The height and massing of nearby buildings is appropriately considered, and buffers and/or transitions in height and density to adjacent properties are implemented, where necessary;
 - v. On-site amenity space is provided in a manner that reflects or improves upon the existing patterns of private and public amenity space in the vicinity;
 - vi. The development is **transit-supportive** and pedestrian-oriented, and uses high quality design to create a strong **public realm**;
 - vii. Streetscape patterns, including block lengths, setbacks and building spacing are maintained, except where prevailing patterns detract from the quality of the Central Area; and,
 - viii. Utility, infrastructure and transportation system capacity exists to serve the proposed development and there are no undue, adverse impacts on the City's sewer, water, stormwater management and transportation systems.

- g. The **Urban Growth Centre**, as identified on **Schedule C: Central Area Plan** will be planned to achieve a gross density of 150 residents and jobs combined per hectare by 2031 or earlier.
- h. In most instances, lands within the Central Area will be pre-zoned to permit the full range of uses contemplated for various areas subject to Site Plan Approval and other implementation processes. This Plan promotes developments that are mixed-use, either a mixture of permitted uses on an individual site, or within individual buildings.
- i. Exemptions may be granted from all or part of the off-street parking required by a proposed development in the Central Area in exchange for the payment of **cash-in-lieu** of parking. In addition, the City may consider reduced parking requirements for any development within the Central Area, as supported by appropriate parking studies and the proximity of the subject lands to transit facilities and well-connected **active transportation** routes, to the satisfaction of the City.
- j. Where appropriate and deemed necessary to meet parking needs, the City may seek opportunities to create new, public, structured parking facilities within the Central Area to facilitate intensification, particularly of existing surface parking lots. The City will explore a range of strategies, including direct City action and through public private partnerships.
- k. Low-rise residential uses shall be located on Local Roads and Collector Roads. The maximum building height for low-rise residential uses shall be 3 storeys. The appropriate lot coverage will be identified by the Zoning By-Law. Builtforms that are considered low-rise residential include:
 - i. Detached, duplex and semi-detached dwellings;
 - ii. Triplexes, quadruplexes and street and block townhouse dwellings;
 - iii. Apartment buildings; and,
 - iv. Additional residential units.
- I. Multi-unit low-rise residential built forms must provide for adequate on-site amenity spaces and on-site waste pickup.

- m. Mid-rise residential uses shall generally be greater than 3 storeys, but no higher than 6 storeys. Built-forms that are considered mid-rise residential include:
 - i. Stacked townhouse dwellings;
 - ii. Apartment buildings; and,
 - iii. Other cluster or multiple unit dwellings.
- n. New mid-rise residential uses may be prezoned or may be approved subject to a site-specific Zoning By-Law Amendment, and shall:
 - Have direct access to a Collector or Arterial Road. If direct access to such a road is not possible, the development may gain access to the Collector or Arterial Road from a Local Road, subject to the City's approval;
 - Have convenient access to public transit. If convenient access to public transit is not possible, the development may be supported where it has convenient access to high quality active transportation routes, subject to the City's approval;
 - iii. Be on a site of suitable size for the proposed development, and shall provide adequate landscaping, amenity features, on-site vehicle and bicycle parking, and buffering;
 - iv. Be located in proximity to amenities, such as parks, open space, schools, shopping, active transportation routes and other public service facilities, services and amenities;
 - v. Be sited so as to minimize their effect on neighbouring low-rise residential land uses particularly with regard to privacy, traffic generation, and reduction of sunlight. The visual impact of each project will be carefully considered;
 - vi. Address the surrounding neighbourhood with particular regard to common elements such as access points, driveways, landscaping and parking areas;
 - vii. Not cause a traffic hazard; and,
 - viii. Provide for adequate on-site amenity spaces and on-site waste pickup.

- o. High-rise residential uses shall be greater than 6 storeys in height. Built-forms that are considered high-rise residential include:
 - i. Apartment buildings; and,
 - ii. Other multiple unit dwellings.
- p. New high-rise residential uses may be prezoned or may be approved subject to a site-specific Zoning By-Law Amendment, and shall:
 - Have direct access to a Collector or Arterial road. If direct access to such a road is not possible, the development may gain access to the Collector or Arterial Road from a Local Road, subject to the City's approval;
 - ii. Be at a highly accessible location connected to the active transportation network, including sidewalks; within 250 metres of an existing or planned public transit route; and generally within 500 metres of schools, commercial facilities and/or parks, open space and/or other public service facilities, services and amenities;
 - iii. Be on a site of suitable size for the proposed development, and shall provide adequate landscaping, amenity features, on-site vehicle and bicycle parking and buffering;
 - iv. Be sited so as to minimize their effect on neighbouring low-rise residential land uses particularly with regard to privacy, traffic generation, and reduction of sunlight. The visual impact of each project will be carefully considered;
 - v. Address the surrounding neighbourhood with particular regard to common elements such as access points, driveways, landscaping and parking areas. The City shall encourage underground vehicular parking facilities for all high-rise residential developments;
 - vi. Not cause a traffic hazard; and,
 - vii. Provide for adequate on-site amenity spaces and on-site waste pickup.

- q. The maximum building height for each designation shall only be achieved subject to:
 - i. The application of appropriate landscape treatments, setbacks, step backs and/or generally a 45 degree angular plane, which are to be further articulated within the Zoning By-Law. For streets with a historic character, step backs shall be required above the prevailing historic street wall height, to the satisfaction of the City; and,
 - ii. The provisions of any applicable Heritage Conservation District or Heritage Impact Assessment will establish appropriate maximum building heights. The City will complete a Heritage Conservation District study for the Central Area.
- r. Within the Central Area additional building height may be considered by the City on a site by site basis through an Official Plan Amendment where it can be demonstrated that the proposed development is considered **compatible development**.
- s. The City shall identify **public realm** improvement priorities and establish incentive programs, such as a Community Improvement Plan, to assist the private sector in improving their properties and to encourage the intensification of the Central Area.
- t. The City will encourage a high standard of design and will continue to rely on the Central Area Master Plan as a basis for the evaluation of Site Plan Applications. The City may also develop Urban Design Guidelines for the Central Area to help evaluate applications.
- The City will continue to work with the Business Improvement Areas and individual landowners to encourage the maintenance and improvement of existing buildings and facilities throughout the Central Area.
- v. The City will ensure that adequate financial resources are available to maintain and improve existing public facilities within the Central Area, including programs to ensure that these areas maintain a public image of quality and cleanliness and foster civic pride.
- w. Drive-through facilities shall not be permitted in the Central Area.
- x. Where permitted, home occupations, **additional residential units** and **neighbourhood supportive uses** shall be in conformity with the respective policies of the Residential Designation of this Plan.

- y. The Central Area Master Plan has identified the following strategies that will be implemented throughout the course of this Plan:
 - i. The creation of a Public Square, a multi-purpose outdoor venue for gatherings and community celebrations.
 - ii. The promotion of a "Downtown First" philosophy for public investment in municipal cultural and entertainment facilities, evidenced by:
 - The pursuit of a permanent off-street venue for a downtown
 Farmer's Market, initially in the Public Square.
 - The pursuit of a downtown location alternative for the Peterborough Museum and Archives in order to enhance the critical mass required for a more successful tourism offering.
 - The active encouragement of more central Downtown locations for the Canadian Canoe Museum and an expanded Art Gallery.
 - iii. The active promotion, in cooperation with Trent University and Fleming College, of a Downtown solution for expanded or modified academic programs, or as institutional facility issues change.
 - iv. The preparation of neighbourhood plans for distinct residential areas in the Downtown Neighbourhood Designation, reflecting the unique planning opportunities and challenges of each neighbourhood.
 - v. The development of an enhancement strategy for the Aylmer/Bethune corridor to promote a positive environment for investment and a safe interface between the Downtown Core Area and the Downtown Neighbourhood Designations. As a component of the enhancement strategy, establish a future for the Bethune Street right-of-way.
 - vi. The commitment to advocate for a change in Provincial school funding policy so that local School Boards have the financial capacity to retain midtown schools in Peterborough.
 - vii. The proactive planning of the Industrial Conversion Area for long-range and intensive redevelopment purposes, and residential uses in particular.
 - viii. The assignment of priority to the completion of the Otonabee River Trail connections to Downtown.

- ix. The establishment of a north-south walkway/cycling corridor serving the Central Area connecting the Trans Canada Trail at Brock Street and Bethune to the Extension of the Crawford Trail at Townsend Street and Bethune, as part of the refreshed Bethune Street right-of-way.
- x. The assignment of priority to the renewal of the Charlotte Street right-of-way from Water Street to Park Street.
- xi. The resolution of a sustainable municipal funding solution for an appropriate level of maintenance and safety.
- xii. The implementation of the conclusions of the Jackson Creek Flood Reduction Environmental Assessment on an accelerated basis.
- xiii. The expansion of the municipal off-street parking supply in the Hunter Street East Business District (Village BIA Area).
- xiv. The investigation of opportunities to establish additional off-street parking supply in the new Café District (Hunter Street).
- xv. The comprehensive pre-zoning of all properties in the Central Area, excluding the Downtown Neighbourhood area until neighbourhood plans are prepared pursuant to policy 4.3.1(y)(iv), to fulfill the full opportunity envisioned by the Official Plan and the neighbourhood plans.
- xvi. The implementation of a program to refresh the "Downtown" brand.
- xvii. The development of a Downtown-specific Tourism Development Strategy.
- xviii. The completion of an urban design program to celebrate the gateways to the Central Area.
- xix. The establishment of a developer/staff task team to identify the barriers to downtown development and a program for regulatory reform.
- xx. The adoption of a Community Improvement Plan for the Central Area.
- xxi. Refresh existing Implementation Plans in the following areas to account for the physical expansion of the "Downtown" to the "Central Area":
 - Site and Building Design Guidelines
 - Residential Intensification Study
 - Streetscape Design Guidelines

- xxii. Develop new Implementation Plans in the following areas to support the growth implications of "Places to Grow":
 - Servicing Capacity and Constraints Study
 - Open Space Needs Analysis
- xxiii. Respond to the Findings of Parallel Planning Initiatives including:
 - The Transportation Plan Update
 - The Peterborough Policy Response to Places to Grow
 - The Little Lake Master Plan
 - Municipal Cultural Plan
 - Heritage Conservation Plan

4.3.2 Downtown Core Area Designation

Intent

a. The Downtown Core Area Designation is intended to continue as a significant concentration of retail, office, entertainment and **service commercial uses** in the City. It is anticipated that the Downtown Core Area Designation will accommodate a significant amount of intensification, while ensuring that new development respects the existing heritage character and reinforces a strong pedestrian-oriented built form.

Permitted Uses

- b. Permitted uses on lands within the Downtown Core Area Designation, as identified on **Schedule C: Central Area Plan**, may include the following:
 - i. Retail and service commercial uses:
 - ii. Restaurants;
 - iii. Office uses and major office uses;
 - iv. Hotels and other tourism facilities;
 - v. Entertainment, recreational and cultural facilities;
 - vi. Artisan studios, galleries and associated retail sales facilities;
 - vii. Mid-rise and high-rise residential uses, including live-work units and communal or **special needs** housing;
 - viii. Day care facilities;
 - ix. Home occupations;
 - x. Places of worship;
 - xi. Conference/convention facilities; and,
 - xii. Parking facilities at-grade and/or in structure.

- Notwithstanding the permitted uses for the Downtown Core Area Designation, C. the permitted uses in the rear portion of the properties known municipally as 184, 188 and 192 Dalhousie St within the Jackson Creek Special Policy shall be limited to parking facilities.
- d. In addition to the policies for the broader Central Area, all development should reinforce the character of the Downtown Core Area as a pedestrian shopping area in a 'main street' setting and should generally be based on conformity with the following criteria:
 - i. Active, pedestrian-oriented uses, particularly retail and service **commercial uses**, are preferred at grade, with any residential or office uses in upper storeys to maintain the continuous street-level shopping function;
 - ii. Existing buildings and/or facades which contribute positively to the character of the Downtown Core Area and/or have heritage value shall be conserved, whenever practical;
 - iii. New buildings, particularly those on 'main streets', shall be designed to respect the existing rhythm and scale of building facades in the immediate vicinity, maintaining the character associated with nearby cultural heritage resources;
 - iv. Active transportation linkages throughout the Downtown Core Area, particularly to parking areas and open space areas, shall be improved;
 - The design of sites which abut Jackson Creek shall recognize and ٧. enhance the relationship of the site to the creek; and,
 - vi. All development or redevelopment in proximity to the Otonabee River and Little Lake will reinforce the relationship to the waterfront by adhering to high standards of urban design, providing enhanced landscaping, and providing strong pedestrian linkages to the waterfront.
- Within the Downtown Core Area Designation the minimum building height shall e. be 2 storeys and the maximum building height shall be up to 8 storeys, subject to the policies of this Plan.
- f. To facilitate the opportunity for mixed-use development throughout the Downtown Core Area Designation, development must be designed so that the first floor height is sufficient to accommodate a range of non-residential uses (generally 4.25 metres).

g. Notwithstanding any other height related policy of this Plan, development on lands abutting the intersection of Charlotte Street and George Street North shall generally match the cornice line (2.5 storeys) of the Market Hall building to the satisfaction of the City.



4.3.3 Business District Designation

Intent

a. The Business District Designation includes clusters of commercial establishments with diverse ownerships and tenants along a major street and is distinguished by built form rather than land use. The Business District Designation generally includes small scale commercial uses operating from less intensively developed sites. It is the intent of this Plan that the Business District Designation will accommodate new intensification which will introduce mixeduse developments and contribute to higher quality site design and streetscapes.

Permitted Uses

- b. Permitted uses on lands within the Business District Designation, as identified on **Schedule C: Central Area Plan**, may include the following:
 - i. Retail and service commercial uses;
 - ii. Restaurants;
 - iii. Car wash facilities to a maximum area of 250 m² and vehicle repair shops to a maximum area of 400 m², with no combination of these **automobile-focused uses** on the same site exceeding 400 m²;
 - iv. Office uses and major office uses;
 - v. Hotels and other tourism facilities;
 - vi. Entertainment, recreational and cultural facilities;
 - vii. Artisan studios, galleries and associated retail sales facilities;
 - viii. Low-rise and mid-rise residential uses, including live-work units and communal or **special needs** housing;
 - ix. Additional residential units;
 - x. Day care facilities;
 - xi. Home occupations;
 - xii. Places of worship; and,
 - xiii. Parking facilities at-grade and/or in structure.

- c. In addition to the policies for the broader Central Area, the following policies apply within the Business District Designation:
 - i. The Lansdowne Street West Business District recognizes an established cluster of retail and service uses, including **automobile-focused uses**, and low-rise apartment buildings, which create important opportunities for intensification. This Plan encourages redevelopment to include additional mixed-use opportunities and improvements to site conditions, including buildings addressing and facing onto the street, high quality façades and architectural treatments, streetscaping and landscaping. Development within the Lansdowne Street West Business District shall be compatible with adjacent residential uses and the Zoning By-Law will establish a range of commercial uses that minimize land use conflicts and promote sound urban design; and,
 - ii. The George Street South Business District recognizes an established cluster of retail, office and personal service uses connecting the Downtown Core Area to Lansdowne Street. This Plan supports the redevelopment of a limited number of residential properties along George Street to establish a high quality commercial corridor denoting its gateway profile for the Downtown. Development within the George Street South Business District shall be compatible with adjacent residential uses and the Zoning By-Law will establish a range of commercial uses that minimize land use conflicts and promote sound urban design. While the retention of existing buildings will be encouraged, the assembly and redevelopment of properties will be permitted to promote comprehensively planned development and high urban design standards.
- d. Within the Business District Designation the minimum building height shall be 2 storeys and the maximum building height shall be up to 6 storeys, subject to the policies of this Plan.
- e. To facilitate the opportunity for mixed-use development throughout the Business District Designation, development must be designed so that the first floor height is sufficient to accommodate a range of non-residential uses (generally 4.25 metres).

- f. The following locational and design features are to be applied to permitted automobile-focused uses:
 - i. Automobile-focused uses should be limited to no more than two at any intersection;
 - ii. No outside storage associated with an automobile-focused use shall be permitted;
 - Car washing facilities shall be located and designed to minimize visual and noise impacts on adjacent properties; and,
 - Automobile-focused uses shall not be located generally within 120 iv. metres of Otonabee River/Little Lake or 200 metres of the following intersections:
 - George Street South, Roger Neilson Way, and Lansdowne Street West; and,
 - Lansdowne Street West and Edwards Street.

4.3.4 Industrial Conversion Area Designation

Intent

- The Central Area currently includes a number of industrial operations on a. isolated sites. While the Industrial Conversion Area Designation does not permit new industrial operations, this does not diminish the contribution that these existing industrial uses make to the vitality of the Central Area. The City will continue to work with all industrial uses to encourage their ongoing viability and fit within the Central Area.
- b. Notwithstanding the above, the City may permit the conversion of some, or all of the lands within the Industrial Conversion Area Designation in conformity with the conversion requirements of the General Employment Designation of this Plan.
- The Industrial Conversion Area includes an area along the western edge of the Central Area and recognizes a node of old, predominately single-storey industrial buildings. The intent of the Industrial Conversion Area Designation is to facilitate the utilization of industrial buildings and sites for a wide variety of alternative uses including retail commercial and service commercial uses, office and artisan studio uses, and institutional, cultural and recreational uses.

Permitted Uses

- d. Subsequent to a decision by the City to convert any lands within the Industrial Conversion Area Designation, permitted uses on lands within this Designation, as identified on **Schedule C: Central Area Plan**, may include the following:
 - i. Retail and service commercial uses;
 - ii. Restaurants;
 - iii. Office uses and major office uses;
 - iv. Hotels and other tourism facilities;
 - v. Entertainment, recreational and cultural facilities;
 - vi. Artisan studios, galleries and associated retail sales facilities;
 - vii. Mid-rise and high-rise residential uses, including live-work units and communal or **special needs** housing;
 - viii. Day care facilities;
 - ix. Home occupations;
 - x. Places of worship; and,
 - xi. Parking facilities at-grade and/or in structure.

Development Policies

e. Subject to conversion and a Zoning By-Law Amendment, this Plan encourages the introduction of mid-rise and high-rise residential development within the Industrial Conversion Area Designation, which may be supported by Community Improvement Plan incentives. The introduction of residential uses in this area will take full advantage of its location within the Central Area, the proximity to the waterfront and the future trail system. Careful consideration and incorporation of the older industrial buildings is encouraged to maintain the heritage character within the Industrial Conversion Area Designation.

- f. In addition to the policies for the broader Central Area, all development should generally be based on conformity with the following criteria:
 - Active, pedestrian-oriented uses, particularly retail and **service** commercial uses, are preferred at grade level, with any office and residential uses in upper storeys to maintain the continuous shopping function; and,
 - ii. **Active transportation** linkages throughout the Industrial Conversion Area, particularly to parking areas and open space areas, shall be improved.
- g. Within the Industrial Conversion Area Designation the minimum building height shall be 2 storeys and the maximum building height shall be up to 12 storeys, subject to the policies of this Plan.
- h. To facilitate the opportunity for mixed-use development throughout the Industrial Conversion Area Designation, development must be designed so that the first floor height is sufficient to accommodate a range of non-residential uses (generally 4.25 metres).

4.3.5 Downtown Neighbourhood Designation

Intent

The Downtown Neighbourhood Designation is located at the edge of the a. Central Area and provides a transition between these mixed-use areas and the residential neighbourhoods adjacent to, and just outside of the Central Area. It is the intent of the Downtown Neighbourhood Designation to recognize and permit a diversity of land uses which are compatible with residential uses and which support the transitional character of this area.

Permitted Uses

- b. Permitted uses on lands within the Downtown Neighbourhood Designation, as identified on Schedule C: Central Area Plan, may include the following:
 - i. Low-rise and mid-rise residential uses, including live-work units and communal or special needs housing;
 - Home occupations, including bed and breakfast establishments; ii.
 - iii. Neighbourhood supportive uses;

- iv. Additional residential units;
- v. Artisan studios, galleries and associated retail sales facilities;
- vi. Small-scale office uses;
- vii. Places of worship; and,
- viii. Small-scale tourism facilities.

- c. For the purposes of the Downtown Neighbourhood Designation, small-scale shall be defined as less than 350 square metres per individual use on a specific site.
- d. In addition to the policies for the Central Area, all development applications shall demonstrate how they meet the following criteria:
 - Ensure that new buildings are designed in a manner compatible with the existing buildings with respect to height, massing, setbacks and lot coverage;
 - ii. Ensure that traffic impacts are adequately mitigated and developments which generate a significant amount of vehicular traffic are only permitted on Arterial or Collector Roads;
 - iii. Recognize and enhance the natural amenities of the site, particularly sites which abut Jackson Creek, and respect the Creek as a public amenity and pedestrian corridor; and,
 - iv. Provide **active transportation** linkages with adjacent districts, both within and adjacent to the Central Area.
- e. Within the Downtown Neighbourhood Designation the maximum building height shall be up to 6 storeys, subject to the policies of this Plan.
- f. Where a development in the Downtown Neighbourhood Designation abuts a low-rise residential use, or any lands within the Residential Designation, the City shall ensure an appropriate transition between built forms and uses, and shall moderate the height of new development through the application of a 45 degree angular plane, setbacks, step backs and/or landscape buffering requirements.

g. Prior to rezoning sites for non-residential development in the Downtown Neighbourhood Designation, the City may require the approval of an Urban Design Study to ensure consistency in development standards on a block basis or larger area, rather than on individual sites.



4.3.6 Downtown Open Space Designation

Intent

a. The Downtown Open Space Designation recognizes the existing and potential open space areas along the Otonabee River and Jackson Creek and the major public parks in the Central Area, such as Morrow Park. These park and open space areas are a major asset for the Central Area, and it is intended that they be maintained, enhanced and expanded wherever possible.

Permitted Uses

- b. Permitted uses on lands within the Downtown Open Space Designation, as identified on **Schedule C: Central Area Plan**, may include the following:
 - i. Active and passive recreational uses;
 - ii. Horticultural uses including community gardens, garden plots and nursery gardening;
 - iii. Cemeteries; and,
 - iv. Conservation, forestry and wildlife management uses.

- c. The City will continue to make improvements within the Downtown Open Space Designation along the Central Area's waterfront.
- d. The development of a diverse range of public recreation, leisure, cultural and entertainment activities, in addition to supporting tourism uses, will be encouraged within the Downtown Open Space Designation.
- e. The development and redevelopment of parkland and open space within the Downtown Open Space Designation shall be in accordance with the Parkland and Open Space policies of this Plan, and should consider the following urban park hierarchy:
 - Urban Community Parks intended to be greater than 8,000 square metres in size and the primary focal point of Central Area communities. These parks provide multifunctional flexible space and programming for large-scale social gatherings, festivals and civic functions, and accommodate facilities for the entire community;
 - ii. Urban Squares intended to generally be between 1,000 and 8,000 square metres in size and play an important role in the **public realm** network. These parks are community focal points that should accommodate special features such as public art that add visual interest and contribute to **placemaking**;

- iii. Urban Pocket Parks intended to generally be between 75 and 1,000 square metres and may be either publicly or privately owned and publicly accessible. These parks will generally be integrated with the surrounding built form and are small, pedestrian-friendly spaces that accommodate socializing in dense urban areas, forming part of the **public realm** network;
- iv. Sliver Parks intended to be small spaces, often fronting retail spaces and functioning as substantially widened sidewalks to create plazas or forecourts, while denoting a clear path of travel. These parks may be either publicly or privately owned and publicly accessible;
- v. Courtyards intended to be small interior or exterior spaces that are surrounded by buildings, and lined with small stores, restaurants and outdoor cafes. These parks may be either publicly or privately owned and publicly accessible and contribute to the logical wayfinding/navigation system and a fine-grained **public realm** network; and,
- vi. Connecting Links outdoor walkways that may be linked with small stores, restaurants and outdoor cafes and which may be either publicly or privately owned and publicly accessible. These parks provide valuable opportunities to improve connections between the public sidewalk system and other components of the **public realm** network.
- f. The City will consider opportunities for rediscovering/daylighting Jackson Creek in the Central Area through the creation of open space.

4.3.7 Little Lake South District Designation

Intent

- a. The Little Lake South District Designation is located along the south shoreline of Little Lake between George Street and Little Lake Cemetery. This Designation has been subject to a Land Use and Urban Design Study that resulted in specific recommendations for this area.
- b. The Little Lake South District Designation is intended to support moderate intensification scaled to its context that will bring more residents and businesses to the centre of the City. It will frame views and vistas of Little Lake that, through high quality architecture and landscaping, will project a strong positive image of Peterborough. It will continue to be an important public place, which serves as a location of scenic natural beauty, a community meeting place for recreation and community events and an amenity for pedestrians and cyclists.
- c. The vision for the Little Lake South District Designation will be achieved by the following land use and urban design principles:
 - i. Ensure a publicly accessible waterfront;
 - ii. Enhance public spaces through landscaping and amenities;
 - iii. Use public art to celebrate the area's identity;
 - iv. Preserve the role of the waterfront in community life;
 - v. Preserve existing mature trees where possible;
 - vi. Add additional trees and greenery while preserving views;
 - vii. Ensure new development fits within its context in terms of design and transitions;
 - viii. Ensure the architectural compatibility of new development with the existing character of the area;
 - ix. Respect the area as an important view/vista;
 - x. Control and calm traffic along Crescent Street;

- xi. Improve amenities for pedestrians and cyclists and link to broader walking and cycling networks; and,
- xii. Promote accessibility for those with disabilities and limited mobility.

Permitted Uses

d. Throughout the Little Lake South District Designation, as identified on Schedule
 C: Central Area Plan, the predominant land use shall be residential. The exception to this is along Lake Street. At-grade retail and service commercial uses along the Lake Street frontages are permitted.

- e. Development within the Little Lake South District Designation will be in accordance with the following:
 - i. "Sub-Area 1" is defined as the block bounded by Crescent, Romaine, George and Lake Streets. Mid-rise buildings may be permitted, transitioning in height from a maximum of 6 storeys along George and Lake Streets, to a maximum of 3 storeys at the corner of Lock and Romaine Streets; and,
 - ii. "Sub-Area 2" includes the blocks defined by Crescent, Haggart, Ware and Lock Streets, plus the half block defined by Lock Street, the former CP Rail spur-line corridor and Romaine Street. Low-rise apartments and stacked townhouse development at a scale compatible with existing detached dwellings may be permitted.
- f. Garages shall not front on Crescent, Ware, Haggart and Lock Streets. Along these streets, parking and loading should only be accessed from a public rear laneway system accessed from Ware and Romaine Streets.

4.3.8 Jackson Creek Special Policy Area

Definitions for the Interpretation of the Jackson Creek Special Policy Area

Regulatory Flood

The flood resulting from the Timmins Storm centred event, or the 1:100 Year Flood, whichever is greater, as determined by the **Conservation Authority**.

100 Year Flood

The flood based upon analysis of precipitation, snow melt or a combination thereof, which has a return period of 100 years on average or which has a 1% chance of occurring or being exceeded in any given year, as determined by the **Conservation Authority**.

Regional Storm

A Timmins Storm design event.

Floodproofing

A combination of structural changes and/or adjustments incorporated into the basic design and/or construction or alteration of individual buildings, structures or properties subject to flooding so as to reduce or eliminate flood damages.

Safe access

Pedestrian and vehicular access/evacuation routes direct or elevated, for residential purposes, not flooded to a depth greater than 0.3 metres.

Safe parking

Parking facilities designed to the satisfaction of the City and the **Conservation Authority** so as to minimize flood damages and not interfere with flood flows. Parking facilities for residential purposes shall be considered safe where flood depths do not exceed 0.3 metres.

Development

The construction, erection or placing of new buildings or structures, including additions, on land and includes such site related activities as grading and placing of fill and includes a minor addition or renovation.

Redevelopment

The removal of buildings or structures from land and the development of new buildings or structures on the same site and includes a minor addition or renovation.

Minor addition or renovation

The alteration of existing building or structure that increases the size of a building by less than 50% of the existing ground floor area and which does not substantially increase the value of the building.

Conservation Authority

The Otonabee Region Conservation Authority or its successor.

Intent

a. Within the Downtown Area there are certain lands along the Jackson Creek which are susceptible to flooding under a **Regulatory Flood**. This Plan identifies these lands on Schedule C: Central Area Plan with the Jackson Creek Special **Policy Area**. These lands are part of the historic centre of the City of Peterborough and special policies will promote the continued economic and social viability of the area.

Permitted Uses

b. The permitted land uses within the Jackson Creek **Special Policy Area** will be in accordance with the policies of this Plan for the underlying land use designations, as identified on **Schedule C: Central Area Plan**.

- All buildings will be flood proofed to the **Regulatory Flood** level where C. practical. Where it is not technically or economically feasible or practical to flood proof to the **Regulatory Flood** level, the minimum flood proofing level will be the average of the 100 Year Flood level and the Regulatory Flood level.
- d. All buildings or structures shall be designed such that their structural integrity is maintained during a Regional Storm.
- Flood storage loss compensation for all development/redevelopment within the e. **Special Policy Area** will not be required, however, new development/redevelopment must not adversely impact existing properties upstream or downstream as a result of increasing flood levels and/or velocities.
- f. Land uses associated with substances of a chemical, hazardous or toxic nature which may pose an unacceptable threat to public safety if damaged as a result of flooding or failure of flood proofing measures, shall not be permitted below the **Regulatory Flood** level.

- g. Communal and/or special needs housing, hospitals, day care centres, or other similar uses for which flooding could pose a significant danger to the inhabitants shall not be permitted below the Regulatory Flood level.
- h. Land uses associated with services such as those provided by fire, police and ambulance stations and electrical substations which would be impaired during a flood emergency as a result of flooding, or failure of flood proofing measures, shall not be permitted below the **Regulatory Flood** level.
- i. Building services such as electrical and heating systems shall be located above the **Regulatory Flood** elevation, but where this is not possible, building services shall be flood proofed to the **Regulatory Flood** level.
- j. Basements or expansions to basements will not be permitted unless the basement is flood proofed and designed to withstand hydrostatic pressures, to the satisfaction of a Professional Engineer.

Policies for Commercial and Non-Residential Uses

- k. Development and redevelopment of commercial and non-residential structures shall be permitted provided:
 - i. The minimum lowest opening elevation shall be the **Regulatory Flood** elevation;
 - ii. Where i. is not feasible because of technical or legal reasons or would cause major disruption in the streetscape, flood proofed doors or shields or other solutions acceptable to the City of Peterborough and the **Conservation Authority** may be utilized; and,
 - iii. New mechanical, electrical, heating and air conditioning equipment will be located above the **Regulatory Flood** level or flood proofed to the **Regulatory Flood** level.
- I. Notwithstanding any other applicable policy of this Plan, a development which is considered a minor addition/renovation to existing commercial and non-residential structures shall be permitted provided the proposed floor level is not lower than the existing ground floor level and flood proofing measures are acceptable to the **Conservation Authority** and the City.

Policies for Residential Uses within Commercial Structures

m. Development which creates residential units shall be permitted subject to the Policies for Commercial and Non-Residential Uses and shall also include the provision of safe access and safe parking.

Policies for Residential Uses

- Residential development and redevelopment will be permitted provided the n. structure is flood proofed to the **Regulatory Flood** level and:
 - i. The habitable floor space elevation of any residential dwelling unit is located above the **Regulatory Flood** level;
 - ii. Safe access and safe parking can be achieved; and,
 - iii. Mechanical, electrical, heating and air conditioning equipment are located above the **Regulatory Flood** level.
- Renovations to increase the number of residential units will only be permitted Ο. where the above noted policies can be achieved.
- Notwithstanding any other applicable policy of this Plan, a development which p. is a minor addition/renovation to buildings used solely for residential purposes shall be permitted provided flood proofing to the satisfaction of the City in consultation with the Conservation Authority is provided and the proposed floor level is not lower than the existing ground floor level.

Policies for Implementation

- The City will amend the Zoning By-Law to identify those lands within the q. Jackson Creek Special Policy Area which are subject to the Special Policy Area policies and Ontario Regulation 167/06: Regulation of development, interference with wetlands and alterations to shorelines and watercourses under the Conservation Authorities Act, as amended.
- Applications for planning approvals within the Jackson Creek Special Policy r. Area shall not be approved until the City has been notified by the **Conservation Authority** that the future development arising from the application can be approved under the development, interference with wetlands and alterations to shorelines and watercourses regulation, Section 28 of the Conservation Authorities Act, as amended.
- Applications for site plans within the Jackson Creek **Special Policy Area** shall S. conform to the Conservation Authority permit with respect to matters under Section 41 of the Planning Act, as amended, such as lot grading and drainage.
- t. Upon completion of the foundation of the building or structure the Conservation Authority and the City may require a letter from an Ontario Land Surveyor or Professional Engineer verifying that the floor is at the required elevation.

u. Upon completion of the building or structure, the **Conservation Authority** and the City may require a letter of compliance by a Professional Engineer verifying that the floodproofing measures have been implemented as required and are in conformity with the policies of this Plan.

4.4 Mixed-Use Corridors

4.4.1 Introduction

Intent

- a. The Mixed-Use Corridors have the potential to accommodate significant growth, in an intensified built form, with mid-rise and high-rise buildings as well as community or regionally scaled retail and **service commercial uses**, institutional facilities and office uses. The Mixed-Use Corridors also play a crucial role in defining the planned urban structure of the City, and in supporting successful transit and **active transportation** systems.
- b. Mixed-Use Corridors are intended to be responsive to changes in land use patterns and densities, and permit a broad range of uses depending on the location within the City's urban structure. An appropriate mix and range of commercial, retail, office, institutional and residential uses at different scales and intensities will be encouraged and supported within the Mixed-Use Corridors.
- c. To promote the ability to accommodate anticipated growth and development within the Mixed-Use Corridors, it is the intent of the City to ensure that:
 - There is a significant supply of lands identified within the Mixed-Use Corridors to provide multiple opportunities for a diversified economic base that supports a wide range of activities and considers the needs of existing and future residents and businesses;
 - ii. The necessary infrastructure is available to support current and projected growth and development; and,
 - iii. All development within the Mixed-Use Corridors incorporates high quality design including building materials, architectural details, landscaping and signage.

Objectives

- d. The objectives of this Plan with respect to Mixed-Use Corridors are to:
 - i. Promote Peterborough's function as a regional service centre providing the broadest range of activities, goods and services to meet the diverse needs of its own resident population, work force, business and institutional sectors and visitors, as well as those in a wider regional area who look to Peterborough for a range and depth of facilities and functions not locally available;
 - Maintain the economic vitality, and community value of Peterborough's Mixed-Use Corridors by encouraging development, redevelopment and rehabilitation for a diverse range of uses;
 - iii. Undertake, by both direct municipal action and private sector incentives, a program of ongoing improvements in the Mixed-Use Corridors to enhance the efficiency, convenience, safety and appearance of the Mixed-Use Corridors and the activities they accommodate, including through streetscape improvements, **universal design**, waterfront and riverside enhancement, infrastructure upgrading and by building **active transportation** infrastructure and transit facilities;
 - iv. Increase the amount and intensity of residential uses in and around the Mixed-Use Corridors by supporting appropriate multi-unit residential or mixed-use development;
 - Require that all development within the Mixed-Use Corridors be transitsupportive and pedestrian-oriented, incorporate high-quality design to support active transportation, and create a strong public realm;
 - vi. Allow the ongoing evolution of the retail sector within the Mixed-Use Corridors to occur with a minimum of policy interventions with respect to the amount and type of space/facilities. New retail development shall be encouraged to locate in parts of the City experiencing the most growth; and,
 - vii. Encourage new development to accommodate a mix of uses, including higher density forms of housing, institutional, community and **service commercial uses** to support the development of **complete communities** and high quality **public realms**, and provide locations for service-oriented commercial activities easily accessible to the surrounding communities by a range of transportation modes.

Designations

- e. The Mixed-Use Corridors are further subdivided into the following land use designations that are identified on **Schedule B: Land Use Plan**:
 - i. Major Mixed-Use Corridor Designation; and,
 - ii. Minor Mixed-Use Corridor Designation.

General Policies Applicable Throughout the Mixed-Use Corridors

- f. When considering an application for a development within the Mixed-Use Corridors, the following shall be considered:
 - i. All development shall be identified as **compatible development**;
 - ii. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**;
 - iii. Identified on-site or adjacent cultural heritage resources are appropriately conserved and compatibility with the heritage built form is achieved;
 - The height and massing of nearby buildings is considered, and buffers and/or transitions in height and density to adjacent properties are implemented, where necessary;
 - v. On-site amenity space is provided and it is reflective of the existing patterns of private and public amenity space in the vicinity, except where deviating from existing patterns will make a positive contribution to the built form of the City;
 - vi. **Active transportation** routes and facilities are provided;
 - vii. Streetscape patterns, including block lengths, setbacks and building separations are maintained, except where deviating from existing patterns will make a positive contribution to the built form of the City;
 - viii. Utility, infrastructure and transportation system capacity exists to serve the proposed development and there are no adverse impacts on the City's sewer, water, stormwater management and transportation systems; and,

- ix. Higher priority is generally given to locating active commercial uses atgrade, at intersections with a Collector or Arterial Road and at corner properties, rather than locating these commercial uses at mid-block locations.
- g. Development in the Mixed-Use Corridors shall generally be part of a comprehensively planned project with some common parking and/or loading facilities and shared ingress and egress. Freestanding buildings are also permitted on individual sites, provided they do not adversely affect access or traffic circulation within the broader Mixed-Use Corridors.
- h. Where permitted, home occupations, **additional residential units** and **neighbourhood supportive uses** shall be in conformity with the respective policies of the Residential Designation of this Plan.

4.4.2 Major Mixed-Use Corridor Designation

Intent

a. The lands within the Major Mixed-Use Corridor Designation are intended to represent a key commercial component of the Urban Structure, and will be designed as focal points for **major retail facilities** and other associated commercial development. This Plan focuses on broadening the mixture of land uses within the Major Mixed-Use Corridor Designation, and promoting good urban design and high quality architecture and landscapes. Lands within the Major Mixed-Use Corridor Designation are considered to be key destinations for the existing and planned transit and **active transportation** systems.

Permitted Uses

- b. Permitted uses on lands with the Major Mixed-Use Corridor Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Retail and **service commercial uses**, including **large-scale food stores** subject to the policies of this Plan;
 - ii. Restaurants;
 - iii. Automobile-focused uses:
 - iv. Office uses;

- v. Mid-rise and high-rise residential uses, including live-work units and communal or **special needs** housing;
- vi. Hotels, motels and other tourism facilities;
- vii. Recreational and cultural facilities;
- viii. Places of worship;
- ix. Day care facilities;
- x. Home occupations; and,
- xi. Parking facilities at-grade and/or in structure.

- c. Buildings and sites throughout the Major Mixed-Use Corridor Designation may develop as comprehensively planned commercial centres, consisting of individual buildings or multi-unit buildings. New development is encouraged to accommodate an array of uses. This mixture of uses is encouraged not just within the Designation in general, but also on individual development sites, and within individual buildings. Uses within stand-alone buildings are also permitted, unless specified otherwise within the policies of this Plan, or by the Zoning By-Law.
- d. Small-scale retail uses may only occur within **major retail facilities** or as part of mixed-use development containing residential units.
- e. Permitted **automobile-focused uses** shall be subject to specific design guidelines developed by the City to enhance their compatibility with the surrounding community context.
- f. Permitted office and residential uses shall be permitted in stand-alone buildings, but are encouraged to locate in the upper storeys of a mixed-use building/development. They may be located on individual sites, or form part of a larger, comprehensively planned site.
- g. Within the Major Mixed-Use Corridor Designation, the minimum building height shall be 2 storeys and the maximum building height shall be 8 storeys.

- h. The City acknowledges several key intersections that have the potential to reinforce a **community hub** or gateway through intensification, the design of adjacent buildings and improvements to the **public realm**. Notwithstanding the identified maximum height limit, additional building height may be considered by the City on a site by site basis, including at these key intersections, to a maximum total building height of 12 storeys, where additional building height may enhance the distinction and landmark quality of corner buildings or visual terminus sites or may accentuate the visual prominence of a site. As such, the City will require mid-or high-rise development with high quality **public realm** improvements and building design and encourage mixed-use development at the following intersections:
 - i. Lansdowne Street West and Clonsilla Avenue;
 - ii. Lansdowne Street West and Monaghan Road;
 - iii. Lansdowne Street West and Park Street South;
 - iv. Lansdowne Street West and Spillsbury Drive;
 - v. Lansdowne Street East and Ashburnham Drive;
 - vi. Clonsilla Avenue and Sherbrooke Street;
 - vii. Parkhill Road West, Water Street and George Street North;
 - viii. Chemong Road and Towerhill Road; and,
 - ix. Chemong Road and Wolsely Street.
- i. Where a development in the Major Mixed-Use Corridor Designation abuts a low-rise or mid-rise residential use, the City shall moderate the height of new development through the application of a 45 degree angular plane, setbacks, step backs and/or landscape buffer requirements.
- j. Adequate parking, loading and waste collection/storage facilities for all permitted land uses shall be provided on the site. To promote a high quality appearance, these facilities, except for a limited amount of visitor parking, shall generally not be located between the building(s) and Arterial Roads, or Collector Roads. Loading and waste collection/storage facilities shall be oriented away from existing or planned residential areas by setbacks, screening, landscaping or other buffering measures. Shared access and parking among various properties is encouraged.

- k. The City may consider the payment of cash-in-lieu of parking for all or part of the off-street parking required by a proposed development in the Major Mixed-Use Corridor Designation. In addition, the City may consider reduced parking requirements for any development within the Major Mixed-Use Corridor Designation, as supported by appropriate parking studies and the proximity of the subject lands to transit facilities and well-connected active transportation routes, to the satisfaction of the City.
- I. Sidewalks, walkways and other pedestrian facilities linking the major retail components of the development, and to nearby transit stops, cycling facilities and public sidewalks, shall be provided within new developments to promote and support **active transportation** and public transit use.
- m. Landscaping is required adjacent to existing or planned residential uses and abutting streets, except where crossed by access points.
- n. The following locational and design features are to be applied to permitted automobile-focused uses:
 - i. **Automobile-focused uses** should be limited to no more than two at any intersection;
 - Outside storage associated with an automobile-focused use shall be permitted where it is located behind the main building and appropriately screened from view from the street and from any adjacent residential and/or open space uses;
 - iii. Car washing facilities should be located and designed to minimize visual and noise impacts on adjacent properties; and,
 - iv. **Automobile-focused uses** shall not be located generally within 120 metres of Otonabee River/Little Lake or 200 metres of the following intersections:
 - Lansdowne Street West and Clonsilla Avenue;
 - Lansdowne Street West and Monaghan Road;
 - Lansdowne Street West and Park Street South;
 - Lansdowne Street West and Spillsbury Drive;
 - Lansdowne Street East and Ashburnham Drive;
 - Clonsilla Avenue and Sherbrooke Street;

- Parkhill Road West, Water Street and George Street North;
- Chemong Road and Towerhill Road; and,
- Chemong Road and Wolsely Street.
- o. The City may consider the preparation of a Community Improvement Plan to establish a vision for a defined area, identify **public realm** improvement priorities and establish incentive programs to assist the private sector in improving their properties and to encourage the intensification of the corridors in accordance with the City's planned urban structure.
- p. Development in the Major Mixed-Use Corridor Designation shall be subject to Site Plan Approval and the City will require a high standard of urban design. The City will complete secondary plans and may develop urban design guidelines to assist landowners in preparing development plans, and to be used as a basis for the evaluation of site plan applications. The City may also utilize Site Plan Approval to ensure appropriate building materials, colours, architectural details and adequate delineation between paths of travel and amenity areas subject to City adopted guidelines.

4.4.3 Minor Mixed-Use Corridor Designation

Intent

- a. The Minor Mixed-Use Corridor Designation recognizes areas that are primarily low-rise residential, but that also function as part of the connective spine of the City. Minor Mixed-Use Corridors provide a significant opportunity for creating vibrant, pedestrian, cyclist and **transit-oriented** places through investment in infrastructure, as well as modest residential intensification, infill and redevelopment, with particular attention to the adjacent context.
- b. Areas that are designated Minor Mixed-Use Corridor are evolving, and will continue to evolve over time. These corridors are expected to accommodate limited intensified development, while maintaining a broad mix of compatible land uses that support investment in transit and the achievement of **complete communities**.

Permitted Uses

- c. Permitted uses on lands within the Minor Mixed-Use Corridor Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Small-scale office uses:
 - ii. Low-rise and mid-rise residential uses, including live-work units and communal or **special needs** housing;
 - iii. Additional residential units:
 - iv. Home occupations, including bed and breakfast establishments; and,
 - v. Neighbourhood supportive uses.

- d. Buildings and sites throughout the Minor Mixed-Use Corridor Designation are encouraged to accommodate an array of uses. This mixture of uses is encouraged not just within the Designation in general, but also on individual development sites, and within individual buildings. Uses within stand-alone buildings are also permitted, unless specified otherwise within the policies of this Plan or by the Zoning By-Law.
- e. Development within the Minor Mixed-Use Corridor Designation shall conform with the applicable policies within the Residential Designation, except where more specific policy direction is provided by this Section. Where there is a conflict between the policies of the Residential Designation and the policies of this Section, the policies of this Section shall prevail.
- f. Within Minor Mixed-Use Corridor Designation, the maximum building height shall be 4 storeys. Notwithstanding the identified maximum height limit, additional building height may be considered by the City on a site by site basis, to a maximum total height of 6 storeys, where additional building height may enhance the distinction and landmark quality of corner buildings or visual terminus sites or may accentuate the visual prominence of a site.
- g. Where a development in the Minor Mixed-Use Corridor Designation abuts a low-rise residential use, or any lands within the Residential Designation, the City shall ensure an appropriate transition between built forms and uses, and shall moderate the height of new development through the application of a 45 degree angular plane, setbacks, step backs and/or landscape buffering requirements.

- h. Adequate parking, loading and waste collection/storage facilities for all permitted land uses shall be provided on the site. Front yard parking will not be permitted for non-residential uses and mid-rise residential uses and parking and servicing areas shall be located at the rear or side of the building and not visible from the street. The parking and servicing areas must further be set back and appropriately buffered from existing or planned residential areas. The City may consider exceptions to parking locations to accommodate accessible parking.
- i. The City may consider the preparation of a Community Improvement Plan to establish a vision for a defined area, identify **public realm** improvement priorities and establish incentive programs to assist the private sector in improving their properties and to encourage the intensification of the corridors in accordance with the City's planned urban structure.
- j. Development in the Minor Mixed-Use Corridor Designation shall be subject to Site Plan Approval and the City will encourage a high standard of urban design. The City may develop design guidelines to assist landowners in preparing development plans, and to be used as a basis for the evaluation of site plan applications. The City may also utilize Site Plan Approval to ensure appropriate building materials, colours, architectural details and adequate delineation between paths of travel and amenity areas subject to City adopted guidelines.

4.5 Employment Districts

4.5.1 Introduction

Intent

- a. Peterborough's local economy continues to evolve, and needs to be diverse and adaptable to changing trends. The City places a high priority on the protection of its Employment Districts, identified on **Schedule A: Urban Structure**, to preserve its long-term economic health and vitality. Having an appropriate supply of designated land intended to accommodate employment generating land uses is critical to the economic health and fiscal sustainability of the City.
- b. Employment Districts recognize areas with significant existing industrial development, and which may accommodate new, potentially intensified industrial and supportive uses. The potential for a diversity of uses within the identified Employment Districts requires a recognition and understanding of diverse circumstances to satisfy the needs of the various users and the community at large. The Employment Districts are expected to provide opportunities for business and commerce, and industrial development. These lands are intended to provide adequate space to meet the future needs of this aspect of Peterborough's economy over the time horizon of this Plan.
- c. The redevelopment of outmoded industrial uses to other compatible uses, particularly in conjunction with the Mixed-Use Corridors, is contemplated and may be considered where such proposed uses are deemed compatible with surrounding uses, and in conformity with the policies of this Plan.

Objectives

- d. The objectives of this Plan with respect to Employment Districts are to:
 - i. Provide opportunities for a diversified economic base which supports a healthy, stable economy and enhances employment opportunities;
 - ii. Ensure that an adequate supply of employment land is designated to maintain a reasonable vacancy rate and that the necessary infrastructure is provided to support current and projected needs;
 - Optimize the efficient use of existing and new infrastructure and land for employment growth through redevelopment, infill and intensification and facilitate the development of transit-supportive built forms;
 - iv. Improve the functional relationship and compatibility between industrial establishments and other adjacent uses, including through urban design, streetscaping and an enhanced active transportation and transit networks;
 - v. Protect Employment Districts from the encroachment of nonemployment or auxiliary activities which may undermine their stability by impacting land values, or by the imposition of physical and operational restrictions on employment uses and development; and,
 - vi. Allow flexibility in the range of permitted uses in older industrial areas in transition, while ensuring the protection of the viability of existing uses.

Designations

- e. The Employment Districts include the following land use designations:
 - i. Prestige Employment Designation; and,
 - ii. General Employment Designation.

General Policies Applicable Throughout the Employment Districts

f. Business operations within the Employment Districts are to be protected from intrusions of sensitive land uses that may restrict the operations of existing or planned industrial land users in accordance with the Provincial Land Use Compatibility Guidelines. Residential uses and **major institutional** uses are not permitted in the Employment Districts.

- g. All permitted development within the Employment Districts shall be conducted in a manner that prevents pollution from smoke, noise, vibration, odour, dust or other forms of pollution, and be in compliance with all applicable municipal and Provincial policies, standards and guidelines.
- h. Building design, location and treatment should be compatible with surrounding uses. Buildings are expected to present a best face forward design approach, particularly adjacent to the Highway 115 and Arterial Roads, to heighten the aesthetic appeal of the location and the surrounding area, including the use of landscaping.
- i. Adequate parking, loading and waste collection/storage facilities will be provided on site. To promote a high quality appearance, these facilities, except for a limited amount of visitor parking, should generally not be located between the building(s) and the street. Shared vehicular access and parking for adjacent developments is encouraged, together with shared internal roadways, to reduce the need for motorists to use local streets. Notwithstanding the above, surface parking should be minimized where possible, and alternative transportation solutions should be considered.
- j. Adequate visual screening between the uses permitted in the Employment Districts and adjacent residential and open space uses shall be provided.
- k. Outside storage or display areas may only be permitted provided that they are properly screened from public view, and shall be subject to the following:
 - i. All storage areas shall be located away from any adjacent existing residential and/or open space uses, or have adequate buffers that will visually screen the storage area from adjacent lands;
 - ii. All buffers, fencing and screening shall visually enhance the site, and shall be of permanent construction; and,
 - iii. Where natural landscaping is utilized it shall be of adequate size to appropriately screen the storage area when it is installed.
- I. The City will encourage the design and built form of new development to be **transit-supportive**, compact and **active transportation**-friendly.

- m. In reviewing development applications, the City shall have regard for:
 - i. The appearance of frontages, in terms of building design and materials, landscaping, signs and accessory structures;
 - ii. Access location and design, parking area screening, and the layout of loading and truck manoeuvring areas;
 - iii. The location and screening of any permitted outside storage areas;
 - iv. The exposure of industrial developments and activities to more sensitive abutting land uses;
 - v. Effective integration of any accessory uses, particularly accessory retail components;
 - vi. The appropriate protection of natural features and **ecological functions** of the **Natural Heritage System** from **negative impacts**;
 - vii. Identified on-site or adjacent **cultural heritage resources** are appropriately **conserved**; and,
 - viii. Sustainable design elements.
- n. Development within the Employment Districts shall be subject to Site Plan Approval, in accordance with the policies of this Plan.



4.5.2 Prestige Employment Designation

Intent

a. The Prestige Employment Designation generally applies to the City's inventory of large modern business parks, typically along the Highway 115 and the rail corridor. Lands within the Prestige Employment Designation shall include clusters of business and economic activities including, but not limited to, manufacturing, warehousing, and associated retail and ancillary facilities. It is intended that development within the Prestige Employment Designation will exhibit a high standard of building design and landscaping, and accommodate a full range and mix of employment generating land uses.

Permitted Uses

- b. Permitted uses on lands within the Prestige Employment Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Processing and manufacturing in wholly enclosed buildings;
 - ii. Warehousing and distribution centres;
 - iii. Research and development facilities, including data processing businesses:
 - iv. Business service establishments:
 - v. Office uses associated with any other permitted use;
 - vi. Limited ancillary uses; and,
 - vii. Limited retail sales of products manufactured, processed or assembled on the premises.

Development Policies

- c. This Plan specifically protects the Prestige Employment Designation for future economic growth and development, recognizing their limited supply and the important contribution that these lands make to the City's economy. To ensure the long-term protection of the existing Prestige Employment Designation, amendments to this Plan that have the effect of reducing the extent of any Prestige Employment Designation can be considered at the time of a Municipal Comprehensive Review, or in accordance with other relevant policies of this Plan.
- d. The City may consider Prestige Employment Designation conversions through a Municipal Comprehensive Review process. In considering such a request, it shall be demonstrated to the satisfaction of the City that:
 - i. There is a need for the conversion;
 - ii. An analysis of the City-wide supply of, and demand for lands within the Prestige Employment Designation identifies a long-term oversupply of lands in the Employment Districts;
 - iii. An analysis of the City-wide supply of, and demand for the proposed land use identifies a shortfall in the inventory of land for the proposed use;

- The City will continue to meet its allocated employment forecasts, as well as the density and intensification targets and any other applicable policies of the Province and/or City;
- v. The conversion will not adversely affect the overall viability of any adjacent Employment District lands;
- vi. The conversion will not create a land use conflict and/or assists the City in resolving an existing, defined land use conflict;
- vii. There is existing or planned infrastructure and **public service facilities** to accommodate the proposed conversion; and,
- viii. Cross-jurisdictional issues have been considered.
- e. The City, upon considering the establishment of new employment uses in existing Prestige Employment Designation lands and the extension of the Prestige Employment Designation, shall encourage such uses in locations which:
 - i. Take advantage of existing and proposed transportation facilities including goods movement facilities and corridors and public transit;
 - ii. Can be provided with sewer, water and other municipal services; and,
 - iii. Can be appropriately separated and buffered from residential development and other sensitive land uses in accordance with Land Use Compatibility Guidelines established by the Province.

4.5.3 General Employment Designation

Intent

a. The General Employment Designation represents existing pockets of older industrial development that are integrated into the historic fabric of the City. The General Employment designated lands play an important role in the economy of the City, but it is recognized that, given their location in proximity to residential neighbourhoods or other sensitive land uses, some existing businesses may be better served in the long-term in a more modern location within one of the City's Prestige Employment designated areas. In some cases, existing uses will not be permitted by Provincial regulation to expand in proximity to residential or other sensitive land uses.

Permitted Uses

- b. Permitted uses on lands within the General Employment Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Warehousing and logistics facilities;
 - ii. Processing and manufacturing in wholly enclosed buildings;
 - iii. Artisan studios, galleries and associated retail sales facilities;
 - iv. Micro-breweries and micro-distilleries and associated retail sales and hospitality facilities;
 - v. Research and development facilities, including data processing businesses;
 - vi. Recreational facilities and health clubs;
 - vii. Business service establishments;
 - viii. Automobile-focused uses;
 - ix. Office uses associated with any other permitted use;
 - x. Limited ancillary uses;
 - xi. Limited retail sales of products manufactured, processed or assembled on the premises; and,
 - xii. Contractor and construction premises.
- c. In addition to the permitted uses of the General Employment Designation, the south portion of the property known municipally as 300 The Parkway may be used for **service commercial uses**, restaurants, retail commercial uses requiring large sites for display or storage areas, hotels, and other hospitality and tourism services as specified in the Zoning By-Law.
- d. In addition to the permitted uses of the General Employment Designation, the property known municipally as 485 The Parkway may be used for a membership warehouse club.

e. In addition to the permitted uses of the General Employment Designation, the property known municipally as 3800 Fisher Drive may be used for a gaming club or casino. Such facility shall not include a live performance venue or theatre but may include live music and other performing acts ancillary to the operation of the gaming club or casino.

Development Policies

- f. The following locational and design features are to be applied to permitted **automobile-focused uses**:
 - i. Gas bars should be limited to no more than two at any intersection; and,
 - ii. Car washing facilities should be located and designed to minimize visual and noise impacts on adjacent properties.
- g. An application for conversion of a site or area identified as General Employment on **Schedule B: Land Use Plan** shall be considered through an Official Plan Amendment accompanied by a study that demonstrates to the satisfaction of the City that:
 - i. The conversion will not adversely affect the overall viability of the adjacent employment generating land uses;
 - ii. The application has considered the opportunity to replace the jobs that the subject site/area accommodates, or has the potential to accommodate;
 - The application provides opportunities on the subject site/area for the accommodation of other employment generating land uses that may be appropriate to mitigate the defined impact on adjacent sensitive land uses;
 - iv. The conversion will not create a land use conflict and/or assists the City in resolving an existing, defined land use conflict; and,
 - There is existing or planned infrastructure, including active transportation facilities, and public service facilities to accommodate the proposed conversion.

4.6 Natural Heritage System

4.6.1 Introduction

Intent

- a. The City recognizes the important contribution that natural heritage features and their associated ecological functions make to the community's unique identity and to the creation of a vibrant, livable City. The Natural Heritage System is made up of wetlands, woodlands, valleylands, watercourses, significant wildlife habitat, areas of natural and scientific interest and the linkages between natural heritage features. Benefits provided by a functional Natural Heritage System include, but are not limited to: flood moderation, erosion control, air quality improvements, pollination services, genetic resources, recreation opportunities and human health. The intrinsic value of natural areas and the flora and fauna that inhabits natural areas are highly valued by the community. Further, it is acknowledged that water and wetlands are sacred and are of utmost importance to the Michi Saagiig Nation.
- b. Developing a Natural Heritage System approach is the preferred method to protecting natural heritage features and their associated ecological functions. A Natural Heritage System approach recognizes the interdependence of features and functions, and thus seeks to maintain connections among natural heritage features, so that their existing ecological functions are maintained or enhanced. In this Natural Heritage System, the existing patterns of natural heritage features have been incorporated along with the identification of Regional Connections on Schedule F: Natural Heritage System and Environmental Constraints which provide general pathways of connectivity between the City's Natural Heritage System and the County's Natural Heritage System. Protecting an interconnected system can facilitate adaptations that contribute to the resiliency of habitats and organisms when faced with threats associated with a changing climate.
- c. The **Natural Heritage System** ensures that an appropriate balance is struck between protecting the key elements of the natural environment and the need to accommodate and manage future growth in a sustainable and healthy environment.

d. It is the intent of this Plan that a comprehensive, functional and resilient Natural Heritage System is implemented through strong planning policies that identify and maintain long-term sustainability of the valuable natural heritage resources within the City, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

Objectives

- e. The Natural Heritage System contains natural heritage features and their associated ecological functions that are identified for preservation within the urban environment of the City. The Natural Heritage System also includes policies that identify minimum vegetation protection zones and lands which physically link natural heritage features and their associated ecological functions in order to achieve the following objectives:
 - Provide protection from the impacts of development on natural heritage features and their associated ecological functions that are of Provincial significance and additional natural areas which, in the view of the City, have local importance or value in complementing the urban environment;
 - Provide access, where appropriate, to the Natural Heritage System for the purposes of environmental education, traditional harvest, and naturebased recreation, and integrate nature-based recreation opportunities within parks and along walking trails and bicycle routes that facilitate active transportation;
 - iii. Enhance connectivity between the **Natural Heritage System** and the established trail system including the Rotary Greenway Trail, Jackson Park Trail and the Trans-Canada Trail System, and establish new linear connections associated with the Bethune Street Corridor, Bears Creek, Byersville Creek and Harper Creek; and,
 - iv. Promote diversity in the approach to urban development in proximity to the Natural Heritage System by appropriate conservation techniques and, where they exist, the integration of natural heritage features and their associated ecological functions in ways that improve the quality of both the urban and natural environments.

Designations

- f. The **Natural Heritage System** includes:
 - i. The Natural Areas Designation, which comprises of natural heritage features, vegetation protection zones, as well as linkages.

4.6.2 Natural Areas Designation

Intent

- a. It is the intent of the Natural Areas Designation to:
 - i. Protect the health and water quality of the Otonabee River Watershed and all of the subwatersheds within the City;
 - ii. Conserve biodiversity;
 - iii. Protect **natural heritage features** and their associated **ecological functions**; and,
 - iv. Protect surface and underground water resources.

Levels and Components

- b. Natural Areas are designated on Schedule B: Land Use Plan and Schedule F: Natural Heritage System and Environmental Constraints and are further articulated in Appendix I. In recognition of the wide spectrum of natural heritage features that comprise the Natural Heritage System, a graduated protective approach is applied that reflects the function and significance of the various system components, as follows:
 - i. Level A features are afforded the highest level of protection and the intent is to protect the form and function of these areas in situ. Development and site alteration will not be permitted in Level A Provincially Significant Wetlands, Significant Woodlands, Significant Life Science Areas of Natural or Scientific Interest or Significant Wildlife Habitat in natural features. In accordance with Provincial and Federal requirements, development and site alteration may be permitted in Level A Fish Habitat or Level A Habitat of Endangered or Threatened Species.

- ii. Level B features are important to the overall function of the Natural Heritage System. The intent is to preserve the function that these areas provide to the Natural Heritage System while allowing some flexibility in the protection of the feature in cases where it can be demonstrated that a net gain in function can be achieved through mitigation or a compensation strategy.
- iii. Level C features are recognized for the supporting role they provide to the **Natural Heritage System**. Development and **site alteration** will be considered where there is an opportunity to replicate the function on site or elsewhere in the City, in conformity with Provincial and/or Federal requirements.
- c. Level A is comprised of the following **natural heritage features and areas**:
 - i. **Provincially Significant Wetlands**;
 - ii. Significant Woodlands;
 - iii. Significant Valleylands;
 - iv. Provincially or Regionally Significant Life Science or Earth Science

 Areas of Natural and Scientific Interest:
 - v. **Permanent** and **Intermittent Watercourses** (including Little Lake);
 - vi. Habitat for Threatened or **Endangered Species**; and,
 - vii. Significant Wildlife Habitat within natural features.
- d. Level B is comprised of the following **natural heritage features and areas**:
 - i. **Non-Provincially Significant Wetlands** or **Unevaluated Wetlands** greater than 0.5 hectares or 0.2 hectares to 0.5 hectares that meet one or more of the following:
 - Located within a flood plain;
 - Contiguous with a permanent or intermittent watercourse, a
 Significant Valleyland or Level A or Level B woodland;
 - Identified as a fen or a bog; or,
 - Identified as part of a Proximity Linkage or Regional Connection;

- ii. Non-Significant **Woodlands** greater than or equal to 0.2 hectares;
- iii. Non-Significant Valleylands;
- iv. Locally Significant Life Science or Earth Science Areas of Natural and Scientific Interest;
- v. Naturally Occurring Waterbodies; and,
- vi. **Significant Wildlife Habitat** within **semi-natural features**.
- e. Level C is comprised of the following **natural heritage features and areas**:
 - All wetlands that do not otherwise qualify under Natural Heritage
 System Level A or Level B; and,
 - ii. Ephemeral watercourses.
- f. Regional Connections are areas that provide a general pathway of connectivity between the City's Natural Heritage System and the County's Natural Heritage System. They are illustrated on Schedule F: Natural Heritage System and Environmental Constraints. It is the intent that the connectivity function be maintained and where possible enhanced in the vicinity of these areas.
- g. Proximity Linkages occur where **Natural Heritage System** Level A and **Natural Heritage System** Level B features occur within 60 metres of each other and a functional **linkage** (i.e. free of barriers) is present. They are illustrated on **Schedule F: Natural Heritage System and Environmental Constraints**. The intent is that these areas are to be treated in a manner similar to Level B **Natural Heritage System** features. In the instance of land development, the function may be addressed through various solutions established through site specific investigation and an Environmental Impact Study to determine the location and dimensions best suited to the **Natural Heritage System** function.

- h. Lands within the Natural Areas Designation are not intended to represent an exhaustive inventory of **natural heritage features** and their associated **ecological functions**. Additional features and functions may be added to the Designation as more detailed information becomes available. Such information may be incorporated as part of a regular update of this Plan or by Official Plan Amendment. In addition, the City may:
 - Undertake studies and use environmental data collected through planning studies, environmental assessments, development applications, and other means, to maintain and update the inventory of **natural** heritage features and their associated ecological functions; and/or,
 - ii. Work with other levels of government, the Conservation Authority, local First Nations and the community to gather data on natural heritage features and their associated ecological functions and support education, outreach and landowner stewardship programs.

Permitted Uses

- Permitted uses on lands within the Natural Areas Designation, as identified on Schedule B: Land Use Plan, may include the following, subject to the results of an Environmental Impact Study:
 - i. Conservation uses;
 - Trails and other associated passive recreational opportunities and facilities that do not require substantial site alterations;
 - iii. Buildings or structures appropriate and supportive of trails and other associated passive recreational opportunities and facilities;
 - iv. Buildings or structures necessary for flood or erosion control; and,
 - v. Existing lawful uses, restricted to their geographic location as of the date of the passing of this Plan.
- j. Permitted uses within vegetation protection zones may include the following subject to an assessment of negative impacts undertaken through an Environmental Impact Study:
 - Conservation uses;
 - Trails and other associated passive recreational opportunities and facilities that do not require substantial site alterations;

- iii. Buildings or structures necessary for flood or erosion control; and,
- iv. Existing lawful uses, restricted to their geographic location as of the date of the passing of this Plan.

Development Policies

- k. The establishment of any permitted use shall demonstrate, through the required Environmental Impact Study, conformity with the below criteria for the applicable Level:
 - i. For Level A features, notwithstanding the permitted uses identified above, an Environmental Impact Study shall consider the protection of features and functions associated with the Natural Heritage System as paramount. Development and site alteration will not be permitted in Level A Provincially Significant Wetlands, Significant Woodlands, Significant Life Science Areas of Natural or Scientific Interest or Significant Wildlife Habitat in natural features. In accordance with Provincial and Federal requirements, development and site alteration may be permitted in Level A Fish Habitat or Level A Habitat of Endangered or Threatened Species.
 - For Level B features, additional uses may be considered where it can be demonstrated to the satisfaction of the City, in consultation with the Conservation Authority and any other agency having jurisdiction:
 - That there is no **negative impact** to the function of the features within the overall **Natural Heritage System**;
 - That a net gain of **Natural Heritage System** function will be achieved through compensation; and,
 - That conformity with Provincial and Federal policies/regulations is achieved.
 - iii. For Level C features, additional uses may be considered where there is an opportunity to replicate Natural Heritage System functions elsewhere on-site or within the City as well as conform with Provincial and Federal policies/regulations.
 - iv. For Regional Connections, additional uses that maintain or enhance connectivity within the **Natural Heritage System** may be considered.

- v. For Proximity Linkages, additional uses that maintain or enhance connectivity function through various solutions established through site specific investigation and an Environmental Impact Study to determine the location and dimensions best suited to the **Natural Heritage System** function may be considered.
- In addition to those permitted land uses, the extension of existing municipal infrastructure projects where the alignments or locations of those facilities have been established in this Plan, approved Secondary Plans, Plans of Subdivision and/or approved Environmental Assessments, may be permitted within lands designated as Natural Areas, including the vegetation protection zone for a natural heritage feature, subject to the application of specific mitigation measures as set out in an approved Environmental Impact Study and provided they are in conformity with Federal and Provincial requirements.
- m. When an Environmental Impact Study has determined the need for a vegetation protection zone (or buffer), the vegetation protection zone area shall be added to the Natural Areas Designation to protect its ecological and hydrological functions.
- n. A vegetation protection zone shall be established in accordance with Table A. The width of the vegetation protection zone is to be determined by a site-specific Environmental Impact Study when development or site alteration occurs within 120 metres of a Level A, B or C natural heritage feature and shall be of sufficient width to protect the feature and its functions from the negative impacts associated with the proposed development or site alteration. Where a site-specific Environmental Impact Study establishes the need for a vegetation protection zone that exceeds the minimum width specified in Table A, the larger recommended protection zone shall be established.

Table A: Natural Heritage Feature Minimum Vegetation Protection Zones

Feature	Minimum Vegetation Protection Zone Width
Provincially Significant Wetlands or Unevaluated Wetlands	30 metres
Non-Provincially Significant Wetlands or Unevaluated Wetlands that have been excluded from a wetland evaluation as per the Ontario Wetland Evaluation System for Southern Ontario	15 metres
Woodlands	10 metres from dripline
Valleylands	10 metres in conjunction with Conservation Authority requirements
Permanent and Intermittent Watercourses (Cool/Cold Water)	30 metres
Permanent and Intermittent Watercourses (Warm Water)	15 metres
Naturally Occurring Waterbodies	15 metres
Significant Wildlife Habitat	To be determined through an Environmental Impact Study
Provincially or Regionally Significant Life Science or Earth Science Areas of Natural and Scientific Interest	To be determined through an Environmental Impact Study
Habitat for Threatened or Endangered Species	To be determined through application of the appropriate legislation

- o. No development or **site alteration** may be permitted within the Natural Areas Designation and the associated **vegetation protection zones**, except with the approval of the City, in consultation with the **Conservation Authority** and any other agency having jurisdiction. Where development and/or **site alteration** is proposed within the Natural Areas Designation, the City shall require that an Environmental Impact Study be prepared that demonstrates conformity with the requirements of the **Natural Heritage System** Level that may be affected.
- p. Where fish habitat and/or the habitat of endangered species and/or the habitat of threatened species are identified, the required Environmental Impact Study shall ensure that all Provincial and Federal requirements have been satisfied.

- q. Existing legal non-conforming uses within the Natural Areas Designation are permitted and may be replaced if destroyed by natural causes. An application, except where prohibited by Provincial policy, for the expansion or enlargement of such structures and uses may be considered by the City, subject to the submission of an Environmental Impact Study, in consultation with the Conservation Authority and any other agency having jurisdiction. The application shall demonstrate conformity with the requirements of the Natural Heritage System Level that may be affected.
- r. The City shall recognize all existing planning approvals as of the effective date of this Plan that were supported by an Environmental Impact Study. Where an existing planning approval is within the Natural Areas Designation, but has not yet been developed, the City will work with the developer to mitigate the impacts of that development on the natural heritage features and/or their supporting ecological and hydrological functions.
 - In cases where an Environmental Impact Study was completed and approved in support of the existing planning approval, further Environmental Impact Study requirements may be waived by the City. Where changes to existing planning approvals are requested, the City may require that an Environmental Impact Study be carried out to ensure conformity with the requirements of the **Natural Heritage System** Level that may be affected.
- s. The removal or destruction of a **natural heritage feature** or any associated ecological function by unauthorized development or **site alteration** is prohibited. Such removal or destruction will not provide the rationale for the removal of these lands from the Natural Areas Designation. Restoration, to the satisfaction of the City with reference to the **site alteration** by-law in consultation with the **Conservation Authority** and any other agency having jurisdiction, will be required where the removal or destruction of a **natural heritage feature** or any associated ecological function by unauthorized development or **site alteration** has occurred.
- t. Significant changes to the Natural Areas Designation may only be considered through an Official Plan Amendment supported by an Environmental Impact Study.
- u. Minor adjustments to the boundary of the Natural Areas Designation in accordance with the Level classification may be facilitated through an Environmental Impact Study without the need to amend this Plan. Where a minor adjustment to the boundary of the Natural Areas Designation is approved by the City, in consultation with the **Conservation Authority** and any other agency having jurisdiction, the adjacent land use designation as identified on **Schedule B: Land Use Plan** shall apply, without the need to amend this Plan.

- v. Lands within the Natural Areas Designation may be dedicated to the City or other public authority, subject to the approval of the City, without cost and shall not be considered as part of the required parkland dedication.
- w. The City, in coordination with appropriate parties, will evaluate all of the wetlands within the City following the Ontario Wetland Evaluation System for Southern Ontario to determine significance. Prior to evaluation of a wetland by the City, a landowner may complete an evaluation following the Ontario Wetland Evaluation System for Southern Ontario to determine significance.
- x. Where a negative impact is unavoidable within a Level B Natural Heritage System feature, then the City at its sole discretion, and in consultation with the Conservation Authority and any other agency having jurisdiction, may accept a compensatory mitigation approach. Where compensatory mitigation is proposed, development and site alteration will only be considered if it can be demonstrated that a net gain of Natural Heritage System function will be achieved through compensation (e.g., replacement, restoration, and/or enhancement) as well as conformity with Provincial and Federal policies/regulations.
- y. Where the proposed establishment of any permitted use within a Level C

 Natural Heritage System feature is anticipated to result in a negative impact, the City at its sole discretion, and in consultation with the Conservation

 Authority and any other agency having jurisdiction, may accept an approach that replicates the functions to be removed elsewhere within the City, in conformity with Provincial and/or Federal requirements.

4.7 The Rural Transitional Area Designation

4.7.1 Introduction

Intent

- a. This Plan recognizes that the Rural Transitional Area Designation, identified on Schedule A: Urban Structure and Schedule B: Land Use Plan, constitutes an important component of the City's urban structure and contributes to the local economy. The Rural Transitional Area Designation is intended to represent excess lands which, due to their location, physical features or current level and type of development, are not considered as areas for urban forms of development during the planning horizon of this Plan.
- b. It is the intent of this Plan that the Rural Transitional Area Designation will eventually accommodate urban development on full municipal services in the future and it is therefore the intention of the policies of this Plan to avoid development which might preclude or interfere with the proper and orderly urban development of these areas through appropriate study and amendments to this Plan. While it is expected that existing lawful uses may continue, no development will be permitted within these areas until the lands can be redesignated through a Municipal Comprehensive Review unless specified otherwise within the policies of this Plan.

Objectives

- c. The objectives of this Plan with respect to the Rural Transitional Area Designation are to:
 - Protect the potential for future urban development on full municipal services within the Rural Transitional Area Designation, beyond the time horizon of this Plan;
 - ii. Sustain the City's Rural Transitional Area Designation lands as longer term future growth areas while maintaining a secure, financially viable rural resource area; and,
 - iii. Permit development that promotes the ongoing contribution of the Rural Transitional Area Designation to the economy of the City.

Permitted Uses

- d. Permitted uses on lands within the Rural Transitional Area Designation, as identified on **Schedule B: Land Use Plan**, may include the following:
 - i. Agricultural uses;
 - ii. Single detached dwellings on existing lots of record;
 - iii. Accessory residential uses on farm properties;
 - iv. Bed and breakfast establishments;
 - v. Home occupations;
 - vi. Home industries and on-farm diversified uses;
 - vii. Agricultural-related uses; and,
 - viii. Agri-tourism uses.

Development Policies

- e. All development shall be designed, located and managed to be complimentary to the primary agricultural role of the Rural Transitional Area Designation.
- f. Where permitted uses of a non-agricultural nature are sought through a Zoning By-law Amendment and/or Site Plan Approval, the City may require the preparation of an Agricultural Impact Assessment as part of a complete application.
- g. New or enlarged livestock buildings and facilities shall comply with the Minimum Distance Separation Two (MDS II) calculation. In addition, the location of new dwellings and the creation of new lots shall comply with Minimum Distance Separation One (MDS I). The MDS Guidelines shall be implemented through provisions in the Zoning By-law.

Single Detached Dwellings on Existing Lots of Record

h. Every lot of record within the Rural Transitional Area Designation is permitted to have one single-detached dwelling. Building siting and setback requirements shall be identified in the Zoning By-law, and may be subject to an Environmental Impact Study, where necessary.

Accessory Residential Uses on Farm Properties

- i. The establishment of additional dwelling unit(s) on a farm for bona fide farm help is permitted, subject to the Zoning By-law. Prior to considering an application for re-zoning, The City shall be satisfied that the second dwelling unit:
 - Is required for farm help as set out in a detailed submission addressing matters such as labour requirements related to the size and nature of the farm operation, and an assessment of the available residential accommodation on the farm;
 - ii. Will be located within the existing farm-building cluster, where possible; and.
 - iii. Can be serviced by appropriate sewage and water services.
- j. The future severance of the lands which are the site of the accessory residential use is not permitted.

Bed and Breakfast Establishments

- k. Bed and breakfast establishments are permitted within the Rural Transitional Area Designation in a single-detached dwelling subject to the Zoning By-law. Prior to the approval of bed and breakfast establishment, the City shall be satisfied that:
 - i. The use is clearly secondary to the primary residential use in terms of floor space utilization;
 - ii. The bed and breakfast establishment is the principal residence of the owner and operator;
 - iii. The character of the dwelling as a private residence is preserved;
 - iv. Adequate parking facilities are available on the lot for the proposed use;
 - v. The use will not cause a traffic hazard;
 - vi. The use can be serviced with an appropriate water supply and an appropriate means of sewage disposal; and,
 - vii. The signage advertising the use is to be designed and located in accordance with the City's Sign By-law.

Home Occupations

- I. Home occupations are permitted within the Rural Transitional Area Designation in a single-detached dwelling or within a detached garage or workshop, subject to the Zoning By-law, and in consideration of the following the development criteria:
 - i. The building and the lot area shall be appropriate for the use;
 - ii. The building or building space shall be limited in floor area and will be a dedicated building or room within a building for the home occupation; and,
 - iii. Home occupations involving training or education will require the provision of additional parking spaces.

Home Industries and On-Farm Diversified Uses

- m. Home industries and on-farm diversified uses are secondary industrial or commercial uses that are limited in area, are accessory to an agricultural operation or a single-detached dwelling and are permitted within the Rural Transitional Area Designation. These uses should not detract from the primary use of the property for agricultural or residential purposes, nor shall these uses detract from the objectives of this Plan as they relate to the Rural Transitional Area Designation.
- n. Such uses may include contracting businesses, workshops for skilled trades and services, or small-scale production and processing facilities undertaken in a workshop or agricultural building. The accessory retail sale of products produced in conjunction with the home industry or on-farm diversified uses is also permitted.
- 0. The establishment of a home industry or on-farm diversified use shall be subject to the Zoning By-law and Site Plan Approval. In considering approval of such uses, the City shall be satisfied the following criteria have been addressed:
 - i. The building housing the use is located within the existing farm-building cluster;
 - ii. The building housing the use has a floor area that is limited in size and is in keeping with the size of the parcel and scale of farm buildings;
 - iii. The use and any activity area associated with the use is suitably set back from all lot lines;

- iv. The type and level of traffic generated by the use is compatible with the character of the area and the function of adjacent roads;
- v. The operator of the home industry or on-farm diversified use permanently resides on the property, however a limited number of employees of seasonal or permanent nature may be permitted;
- vi. All machinery and equipment, with the exception of motor vehicles required for the use, is located within enclosed buildings;
- vii. Any permitted open storage associated with the use is screened from view and located within a fenced compound; and,
- viii. Any retail component of the use is clearly accessory to the home industry and does not detract from the primary use of the property or adjacent properties.

Agricultural-Related Uses

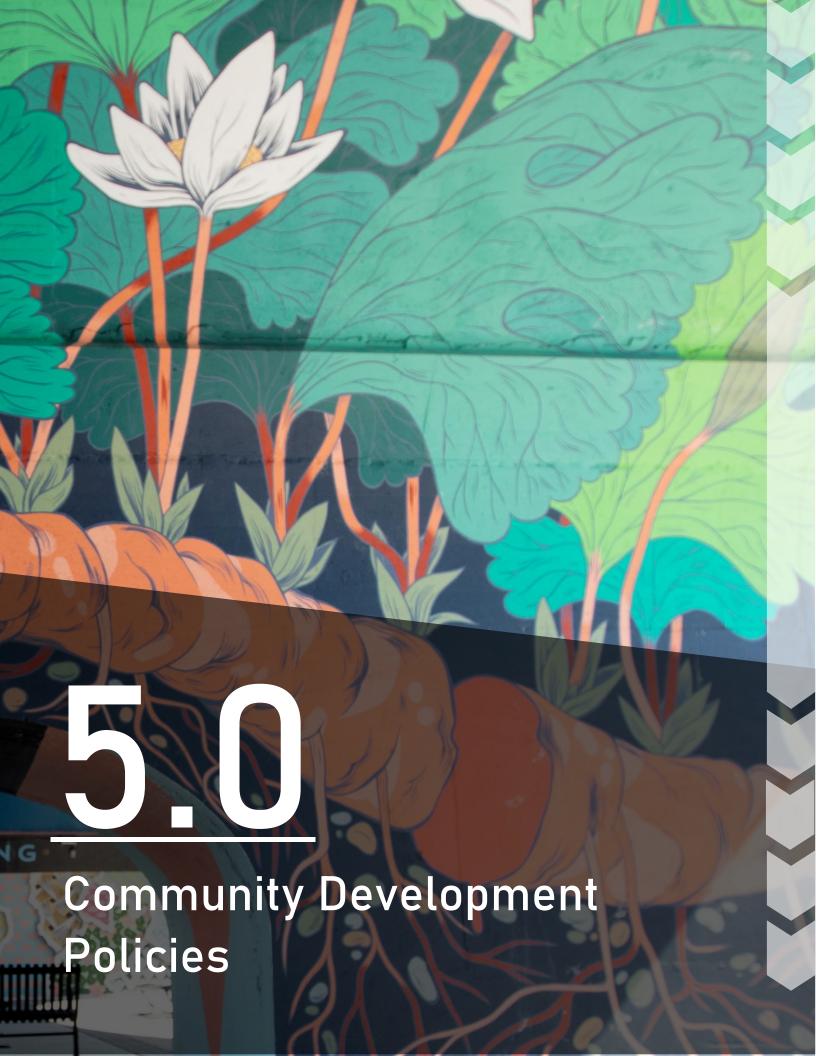
- p. Agricultural-related uses are uses that are industrial or commercial in character that provide services or products to farm operations, are beneficial to the agricultural community and are permitted in the Rural Transitional Area Designation. The City shall consider the following criteria in accordance with the Zoning By-law and Site Plan Approval. When evaluating applications to permit a new agricultural-related use the City shall consider the following criteria:
 - i. The proposed business would not remove active agricultural land from production and the location would be compatible with and not hinder surrounding agricultural operations and other existing land uses;
 - ii. The size and character of the proposed use is appropriate within the Rural Transitional Area Designation; and,
 - iii. The proposed business is compliant with Minimum Distance Separation Guidelines.
- q. In cases where the proposed business involves vehicles or equipment providing contract services (i.e. trucking), the City shall be satisfied that the nature of the contracting business exclusively serves farm operations. The Zoning By-law will regulate the size of the business operation and the land area available for vehicle or equipment storage and/or parking.

Agri-Tourism Uses

- r. Uses such as farm tours, petting zoos, hay rides and sleigh rides, processing demonstrations, small-scale farm theme playgrounds and small-scale educational establishments that focus on farming instruction are permitted in the Rural Transitional Area Designation as an accessory use on a commercial farm subject to the Zoning By-law, and in consideration of the following criteria:
 - i. The use and any activity area associated with the use is suitably set back from all lot lines;
 - ii. The type and level of traffic generated by the use is compatible with the character of the area and the function of adjacent roads; and,
 - iii. The operator of the agri-tourism use permanently resides on the property, however a limited number of employees of seasonal or permanent nature may be permitted.

This page is intentionally left blank.





5.0 COMMUNITY DEVELOPMENT POLICIES

5.1 Cultural Heritage

5.1.1 Introduction

- a. Peterborough's cultural heritage resources make a vital contribution to its unique sense of place, economic vitality and high quality of life for its residents. It is the objective of this Plan that the cultural heritage resources within the city be identified, conserved, promoted and enhanced and that development should occur in a manner which protects and complements the City's heritage.
- b. The City recognizes the importance of cultural heritage resources and their contribution to fostering community identity across Peterborough, and particularly in the Central Area and other Strategic Growth Areas. Significant built heritage resources and cultural heritage landscapes will be identified and conserved so that they continue to be experienced and appreciated by residents, visitors and future generations.
- c. The City recognizes the need to protect cultural heritage resources while also providing a greater level of certainty to the development community to support the achievement of the City's intensification target and density target for the Urban Growth Centre. To this end, the City will evaluate cultural heritage resources to identify properties where heritage conservation will be prioritized, properties where sensitive renovation should occur, and properties where well-designed redevelopment is appropriate.
- d. **Cultural heritage resources** include, but are not restricted to:
 - i. Archaeological sites and marine archaeological sites, including cemeteries and burial grounds;

- ii. Properties with design value or physical value;
- iii. Properties with historical value or associative value;
- iv. Properties with contextual value;
- v. Heritage conservation districts, **cultural heritage landscapes** and other areas of cultural heritage value or interest and/or scenic interest; and,
- vi. Historic waterways.
- e. The protection of **cultural heritage resources** is a shared responsibility between the Federal and Provincial governments, the City and, as appropriate, Indigenous Communities. The City will seek to develop partnerships between all levels of government that strengthen the municipal capacity to preserve the City's heritage. The City will pursue funding initiatives and adopt programs enabled by upper levels of government that support local cultural heritage preservation.
- f. The City will consult with the Peterborough Architectural Conservation Advisory Committee on matters relating to the conservation of **built heritage resources**, including, but not limited to:
 - i. Heritage preservation activities mandated by the Province;
 - ii. The protection and management of heritage properties under the Ontario Heritage Act;
 - iii. The alteration of designated properties;
 - iv. The creation and enforcement of heritage easements and covenants; and,
 - v. The identification of study areas and the passing of plans for Heritage Conservation Districts.
- g. It is recognized that the geographic area of the City of Peterborough is located on Treaty 20 Michi Saagiig territory and in the traditional territory of the Michi Saagiig Nation. As such, the City shall engage with Indigenous Communities and consider their interests when identifying, protecting and managing cultural heritage and **archaeological resources**.

- h. All new development permitted by this Plan shall:
 - Ensure the identification and protection of significant cultural heritage resources;
 - ii. Be planned in a manner that conserves and enhances the context in which **cultural heritage resources** are situated; and,
 - iii. Wherever possible, incorporate these resources into any new development plans.
- i. Cultural heritage resources may be identified and conserved using a variety of methods, including but not limited to:
 - i. Heritage Impact Assessments, related conservation plans and supportive policies and programs in Community Improvement Plans and Secondary Plans;
 - ii. Municipal and Provincial conservation grants and loans, and other financial incentives;
 - iii. The Municipal Heritage Register;
 - iv. Conservation easements/restrictive covenants;
 - v. Zoning By-Law regulations restricting the use of the lands to current or compatible uses;
 - vi. Urban Design Guidelines;
 - vii. Conditions within Plans of Subdivision; and,
 - viii. Site Plan Approval.
- j. Significant historic or cultural events, people, places and Indigenous place names shall be acknowledged on the physical landscape of the City, including but not limited to, street names, park names, public art, civic building naming, and naming of other City assets.

5.1.2 Designation of Cultural Heritage Resources

- a. The City may, by By-Law, designate built heritage resources, heritage conservation districts and cultural heritage landscapes of cultural heritage value or interest in accordance with the regulations and criteria established under the Ontario Heritage Act and implementing regulations.
- b. In consultation with the Peterborough Architectural Conservation Advisory Committee, property owners and residents, and pursuant to Part V of the Ontario Heritage Act, the City may, by By-Law, designate any area within the City as a Heritage Conservation District. Properties located within a Heritage Conservation District may also be designated under Part IV of the Ontario Heritage Act.
- c. Prior to designating a Heritage Conservation District, the City shall complete a Heritage Conservation District Study that meets the requirements of the Ontario Heritage Act. The Study shall be prepared by a qualified heritage consultant who is a professional member in good standing of the Canadian Association of Heritage Professionals. The study process will include consultation with the public and any Indigenous Communities having interest.
- d. Pursuant to the Ontario Heritage Act, the City may, by By-Law, place interim control measures on an area identified as a Heritage Conservation District Study Area which prohibit or set limitations with respect to alterations of property, and new construction, demolition or removal of buildings or structures.
- e. Subsequent to the adoption of the recommendations of a Heritage Conservation District Study, a Heritage Conservation District Plan, adopted by Council and enabled by By-Law, will be completed which includes guidelines for managing alterations, additions, new development, demolitions and removals within the district.

5.1.3 Heritage Register

- a. The City, pursuant to the requirements of the Ontario Heritage Act, and in consultation with the Peterborough Architectural Conservation Advisory Committee and affected property owners, shall maintain a Heritage Register. The Register shall contain a list of properties designated by By-Law under the Ontario Heritage Act.
- b. The City may also list non-designated properties on the Heritage Register, which Council believes to be of cultural heritage value or interest to the community, in accordance with the provisions of the Ontario Heritage Act, and criteria as established by the City.
- c. Applications for demolition of a designated heritage building shall be subject to the provisions of the Ontario Heritage Act and the City's Demolition Control By-Law. Property owners seeking to demolish a building on a designated property shall be required to provide to the City, at a minimum, a Heritage Impact Assessment.
- d. It is the intent of the City to conserve and enhance cultural heritage resources in situ, whenever possible. The proposed relocation, removal or demolition of designated structures and the development of new structures on a designated property shall be subject to the requirements of the City and provisions of the Ontario Heritage Act, consultation with the Peterborough Architectural Conservation Advisory Committee, and the City's Demolition Control By-Law. As a condition of any development approval, the City may require specific measures to conserve, restore or otherwise ensure the preservation of any affected cultural heritage resource.

5.1.4 Heritage Impact Assessments

- a. Applications for development or site alteration of a property that is a listed or designated built heritage resource, or adjacent to a designated built heritage resource, will require a Heritage Impact Assessment to the satisfaction of the City. The requirement to prepare a Heritage Impact Assessment may also apply to previously unknown or undocumented heritage resources that are discovered during the pre-consultation, development application or construction stage. The Heritage Impact Assessment shall demonstrate how the heritage values, attributes and integrity of the property are to be conserved during development or site alteration and how any negative impacts will be mitigated.
- b. The heritage attributes of a property as defined in a Heritage Impact
 Assessment shall be maintained or enhanced through the sensitive planning of
 additions, alterations, renovation and restoration or **site alteration**.
- c. Where an application for development or **site alteration** is of a minor nature, the City, in consultation with the Peterborough Architectural Conservation Advisory Committee and Indigenous Communities as applicable, may waive the requirement to complete a Heritage Impact Assessment, or scope the study requirements accordingly.
- d. All Heritage Impact Assessments will be prepared by a qualified professional retained by the proponent in accordance with the City's requirements and approved by the City in consultation with the Peterborough Architectural Conservation Advisory Committee and Indigenous Communities as applicable. The City may require that a peer review of the work completed by the proponent's consultant team be carried out, to be paid for by the proponent.

5.1.5 Heritage Conservation Incentives

- a. The City, may offer financial incentives to encourage and assist with the conservation, restoration and reuse of **cultural heritage resources**.
- b. To encourage the conservation, restoration and reuse of cultural heritage resources, the City may permit expansions of permitted land uses and/or relaxed parking standards through amendments to the Zoning By-Law.
- c. In accordance with the policies of this Plan, and pursuant to Section 28 of the Planning Act, the City may prepare Community Improvement Plans for areas of the City with special heritage qualities to preserve and enhance the heritage character of these areas.
- d. The use of funding for the conservation, restoration and reuse of **cultural** heritage resources through programs from all levels of government and other appropriate authorities will be supported.

5.1.6 Archaeological Resources

- a. Archaeological sites exist across the Peterborough landscape, as places associated with past human activities, endeavours, or events that are of cultural heritage value or interest. These sites may occur on or below the modern land surface.
- b. A marine archaeological site is an archaeological site that is fully or partially submerged or that lies below or partially below the high-water mark of any body of water. The City will only require archaeological assessments for marine sites not subject to Federal jurisdiction. If a Federal agency requires the completion of an archaeological assessment by a project proponent, a copy of the assessment will be provided to the City as part of the relevant planning application.
- c. Where burial sites are encountered during any excavation or other action, the provisions of the Funeral, Burial and Cremation Services Act and its regulations will apply. Curve Lake First Nation and Hiawatha First Nation will be notified in regard to the encounter of burial sites and archaeological resources of an Indigenous context.

- d. Upon receiving information that lands proposed for development or site alteration may include archaeological resources or constitute an area of archaeological potential, the City will not take any action to approve the development, and the owner of such land will be required to have an Archaeological Assessment and fieldwork studies carried out by a licensed archaeologist in accordance with Provincial standards.
- e. Development and **site alteration** shall only be permitted on lands containing **archaeological resources** or areas of archaeological potential if the significant **archaeological resources** have been **conserved**. Conservation in situ will be considered the preferred option and may necessitate alternative development approaches to maintain the heritage integrity of the site. In situ conservation of an archaeological site or resource should be secured in a heritage easement agreement.
- f. Where areas of archaeological potential or **archaeological resources** are identified through an Archaeological Assessment and are found to be Indigenous in origin, the proponent is required, through their consultant archaeologist, to ensure all Indigenous Communities having interest, as identified by the City, receive a copy of the Archaeological Assessment Report prior to the development proceeding. The proponent shall have regard for the applicable First Nations archaeology protocols within the Treaty 20 area. The City will engage local Indigenous Communities to ensure the identification and appropriate protection of significant Indigenous **archaeological resources**. Early and on-going engagement with Indigenous Communities throughout the Archaeological Assessment process is advised.
- g. Where the preservation of the **archaeological resources** in situ is not possible, the proponent must engage with Treaty 20 First Nations to address their interest in the resource and define interpretive and commemorative opportunities related to the resource. These measures will apply to any development projects, including infrastructure development, conducted by private property owners or the City of Peterborough.
- h. The City will cooperate with the Provincial government to designate archaeological sites in accordance with the Ontario Heritage Act. The City may also adopt By-Laws for prohibiting any land use activities on a site which contains significant **archaeological resources**.

- i. It is the policy of the City to keep confidential the existence and location of archaeological resources to protect against vandalism, disturbance, and the inappropriate removal of resources. The City will maintain current archaeological resource data and locations, from the Provincial archaeological database, under the provisions of a Municipal-Provincial Data Sharing Agreement. These site data and locations will be maintained for the purpose of heritage conservation planning and development review and will be updated periodically as new archaeological resources are identified.
- j. The City may, in partnership with local First Nations, Métis, and relevant stakeholders, prepare an Archaeological Management Plan, to be reviewed on the same schedule as this Plan. A Contingency Plan will also be prepared, with the advice of a licensed archaeologist and the Province and adopted by By-Law, for emergency situations to protect **archaeological resources** that are accidentally discovered or are under imminent threat(s).

5.1.7 Heritage Master Plan

- a. A Heritage Master Plan may be prepared by the City to provide an overarching strategy for the identification, conservation and management of **cultural heritage resources** within the City, including those identified on the Heritage Register and unidentified and/or potential heritage properties, districts, landscapes and character areas. The Heritage Master Plan will outline policies, programs and strategies to conserve significant **cultural heritage resources**.
- b. The Heritage Master Plan is to be prepared by the City, in consultation with the Peterborough Architectural Conservation Advisory Committee with direct representation of all Indigenous Communities having interest, as identified by the City.

5.2 Housing

5.2.1 Introduction

- a. Housing is vital to the creation of healthy, sustainable, and **complete communities**. Residents of all ages, income levels and abilities rely on a range and mix of housing types to offer a meaningful place to grow and a safe and secure place to live. An appropriate range of housing choices contributes to the overall health and well-being of communities.
- b. Facilitating an appropriate and adequate mix of housing types and tenures is central to accommodating not only existing needs but also new growth. By creating a multitude of housing opportunities, the supply of housing available within the City can more effectively respond to local housing needs and changes in demand. The policies of this Plan aim to create an inclusive and diverse community through the provision of an appropriate range of housing choices.

5.2.2 Housing Production

- a. The City acknowledges the need to ensure the provision of an adequate supply and variety of housing, including **affordable** and **accessible housing**, with different forms, tenures and cost. In an effort to provide housing opportunities, the City will strive to maintain a supply of land through residential intensification, redevelopment, and, as necessary, lands designated and available for residential development. This will include a twelve year supply of land zoned for residential intensification and residential lots/units in registered and draft plan approved subdivisions within the context of the population target to 2051 contained in this Plan.
- b. The City shall maintain at all times servicing capacity sufficient to provide at least a five year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans. The City shall further maintain at all times the ability to accommodate residential growth for a minimum of 15 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development.
- c. The City shall ensure that adequate municipal programmes are undertaken separately or jointly with senior levels of government to provide adequate housing for all the residents of the City.

5.2.3 Housing Supply

- a. The City shall provide for a range of housing types and densities to meet projected requirements of current and future residents of the regional market area by:
 - i. Permitting and facilitating all forms of housing required to meet the social, health and well-being needs of current and future residents, including affordable, accessible and special needs housing;
 - ii. Supporting all forms of residential intensification, including additional residential units, and redevelopment in appropriate locations, with an emphasis on Peterborough's Strategic Growth Areas;
 - iii. Directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;
 - Promoting new housing at densities which efficiently use land, resources, iv. infrastructure and public service facilities, and which support the use of active transportation and transit in areas where it exists or is to be developed; and,
 - Establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate a compact built form, while maintaining appropriate levels of public health and safety.
- b. The City shall require:
 - i. Greater housing diversity by requiring a mix of housing types, sizes and densities in new development and encouraging a mixture of tenures, unit sizes and affordability which will accommodate changes in community needs over time; and,
 - ii. Opportunities for increased housing densities and intensification for residential development.
- It is important to maintain and improve the existing housing stock to acceptable C. property standards and to allow for the appropriate intensification to new and innovative housing forms. Based on an assessment of need, the City should identify neighbourhoods as Community Improvement Areas, and plan for, and implement neighbourhood improvement programs, in accordance with the applicable policies of this Plan.

5.2.4 Accessible, Assisted and Affordable Housing

- a. The City has developed a Housing and Homelessness Plan, in consultation with the County and Townships, that establishes a strategy to meet the current and future **affordable** housing needs of all residents. The City will strive to achieve the targets for the provision of **affordable** housing identified in the Housing and Homelessness Plan, specifically **affordable** housing for low and moderate income households and for those requiring support services.
- b. The City requires that at least 20 per cent of all new residential units across the City be **affordable** housing, on an annual basis.
- c. The City will encourage options for accessibility within all new residential developments.
- d. **Affordable** and **accessible housing** shall be supplied in a variety of housing types, provided for a range of household sizes and encouraged in all neighbourhoods within the City.
- e. The following objectives may be considered by the City in an effort to achieve **affordable** and **accessible housing** objectives:
 - i. Promote infill development, which includes higher density housing forms where housing is more **affordable** due to reduced per unit land costs and more accessible due to the more stringent requirements of Ontario's Building Code for these types of buildings. Increased residential densities shall be supported in appropriate locations, in accordance with the policies of this Plan;
 - ii. Encourage the development of smaller dwelling units, where housing is considered more **affordable** due to lower construction costs;
 - iii. Support alternative residential development standards to facilitate **affordable** and **accessible housing** and a more compact development form;
 - iv. Encourage the inclusion of **affordable** and **accessible housing** units within subdivisions and other developments;
 - v. Develop educational materials to increase awareness of innovative and non-traditional housing models that make home ownership more **affordable**;

- vi. Ensure that the provisions of the Zoning By-Law are sufficiently flexible to permit or explore a range of innovative housing types and sizes, including additional residential units, accessory dwelling units, garden suites, cohousing, tiny homes, communal housing and life-lease housing;
- vii. Support affordable and accessible independent living options that address the needs of an aging population and persons with disabilities.
- viii. Support, where appropriate, the conversion of single-detached dwellings into multiple dwellings, subject to an appropriate approval process and compatibility with existing development;
- ix. Encourage the renovation and rehabilitation of residential uses above commercial uses; and,
- X. Encourage the provision of **affordable** and **accessible housing** as a community benefit in accordance with the City's Community Benefits Bylaw or Province's regulations, as applicable.
- f. The City will encourage and assist, where possible, in the creation of **affordable** and/or accessible housing by:
 - i. Exploring opportunities for fast-tracking development applications that are providing affordable and/or accessible housing;
 - ii. Partnering with the private sector and other levels of government to implement housing programs that assist in the creation of **affordable** and accessible housing;
 - iii. Considering **affordable** or **accessible housing** as priority uses for surplus City-owned land and working with other levels of government to make surplus land available to providers of affordable or accessible housing development at little or no cost;
 - iv. Applying for government grants and/or subsidies, including land dedication, that will reduce overall development costs;
 - ٧. Informing the community of government grants available to encourage the creation of additional residential units, converted units, accessible units and accessory units;
 - vi. Discouraging the demolition of rental apartment buildings with more than 4 rental apartment units, unless replacement units are provided and the rents of the replacement units are at, or below the average market rents in the City at the time of the application;

- vii. Considering the reduction of parking requirements for projects that provide **affordable** or **accessible housing**;
- viii. Supporting and assisting the non-profit housing sector, where possible, in providing **affordable** and **accessible housing** and related services;
- ix. Providing financial relief from development, planning, permit, and other fees normally charged for projects or in the form of tax incentives and payment of fees through mechanisms such as a Municipal Capital Facilities By-Law and a Community Improvement Plan for projects that provide permanent **affordable** or **accessible housing**;
- x. Exploring opportunities to co-locate **affordable** housing with new **public** service facilities;
- xi. Exploring opportunities for the City to have a more proactive role in creating/delivering **affordable** housing; and,
- xii. Considering the establishment of a Housing Development Corporation to secure and leverage property, partnerships and funding to deliver **affordable** housing.
- g. The City will work with developers to maximize the provisions of **affordable** and/or **accessible housing** by:
 - i. Encouraging an adequate mix of rental and ownership tenure units for a wide range of household types, particularly for larger development applications; and,
 - ii. Encouraging that new subdivisions provide a variety of housing types and densities which contribute to meeting the City housing targets as set out in the City's Housing and Homelessness Plan.
- h. The location and development of accessible, assisted and/or affordable housing units will have regard for the proximity of transit and active transportation routes, schools, recreation facilities, open space and commercial areas and other amenities.
- i. The City will permit and encourage the creation of additional residential units within single detached, semi-detached, townhouse dwellings and within detached accessory buildings throughout the City. When permitting additional residential units, the City will consider factors such as adequate parking and servicing capacity. The Zoning By-Law will establish appropriate standards, which may include but not limited to parking, floor area and scale, which will facilitate the creation of additional residential units.

- Garden suites shall be permitted and encouraged in an accessory building on residential lots containing single-detached dwellings.
- k. **Infill housing** will be encouraged in all residential areas subject to the following provisions:
 - i. Infill housing shall be designed to be compatible with adjacent properties and be sensitive to the continuity of the existing residential streetscape; and,
 - ii. Adequate off-street parking and landscaped open space will be provided as part of an **infill housing** development. The parking area will be suitably buffered so as to provide more attractive views of the property by reducing the prominence of the parking area.

5.2.5 Conversions of Rental Housing

- a. Conversion of an existing rental housing project to condominium ownership shall be conditional upon:
 - i. Council approval;
 - ii. Approval of condominium plan under the Planning Act and Condominium Act;
 - iii. The results of a Rental Market Impact Study/Rental Housing Conversion Assessment;
 - iv. Satisfactory incentives being provided to established tenants to allow them to purchase or remain in the unit after the conversion to condominium;
 - v. The completion of an independent engineering study, funded by the developer, to determine:
 - The structural integrity of the building;
 - Any Building Code and maintenance deficiencies;
 - An appropriate replacement reserve, pursuant to the Condominium Act; and,
 - The need for landscaping and site servicing improvements.

- vi. An agreement with the City by the developer to:
 - Undertake all remedial work identified in the engineering study prior to registration;
 - Create and fund a replacement reserve in accordance with the engineering study; and,
 - Enter into a new site plan agreement to upgrade all site improvements to current design standards; and,
- vii. The completion of any conditions of approval in accordance with the Council decision.
- b. The City will discourage the conversion of rental housing units to condominium when the vacancy rate for rental accommodation is below 3 per cent.
- c. The City may approve a conversion of rental housing to condominium if the conversion results in the creation of **affordable** home ownership or **accessible housing**.
- d. The City will consider regulating the short-term rental of residential units through the Zoning By-law and other means, as appropriate.

5.2.6 Monitoring the Housing Supply

- a. In order to track the City's housing stock, the City should, from time to time, monitor, evaluate and report on changes within the housing market as well as the City's progress in achieving its housing objectives through implemented housing policies including:
 - i. The inventory of vacant lands and lands with the potential for development;
 - ii. The **affordable** housing target identified within this Plan;
 - iii. The supply of lands designated for residential uses; and,
 - Residential construction activity, including the tenure and type of housing (single detached, semi-detached, townhouse, additional residential units, garden suites and multi-unit forms) being developed.
- b. The City shall review infrastructure programs so that any constraint on the supply of serviced residential land can be identified and overcome.

5.3 Parkland and Open Space

5.3.1 Introduction

- a. The shoreline of the Otonabee River, Little Lake and the Trent-Severn Waterway, supplemented by other key regional and community parks and trails, will be set aside as part of the City's parks and open space network. A complementary program to provide active and passive open space and recreation facilities will be developed to prevent any deficiency in park area and to provide adequate recreation opportunities for the residents of the City of Peterborough and for visitors to the City. Special emphasis will be placed on ensuring the continuity and accessibility of a connected system of parkland throughout the City of Peterborough.
- b. The City will manage municipally-owned land in an environmentally conscientious manner. This may include the preparation of management plans to address practices such as the reservation of natural buffer strips in relation to water courses and the limitation of pesticides, herbicides and road salt being applied on lands adjacent to **natural heritage features**.
- c. Development of parks and recreation facilities will be guided by the preparation of a 10-Year Strategic Plan for Recreation, Parks, Arenas and Culture. The document may describe design standards for facilities and rationalize the development of City parkland and provision of recreation facilities. The 10-Year Strategic Plan for Recreation, Parks, Arenas and Culture shall be reviewed from time to time to ensure its currency with respect to changing trends, inventory changes, budget realities and new development in and around the City.
- d. The City will develop parkland, recreational facilities and services in consultation with local residents and in cooperation with other providers of open space such as school boards and other **public service facilities**.

5.3.2 Provision of Parkland

- a. The City will, wherever possible, consolidate parkland and provide a continuous and accessible linked system of open space using linear parks and trails systems to connect larger blocks of parkland. The City will promote, wherever practical, opportunities to link parks and open space through pedestrian pathways, sidewalks, trail systems, bicycle routes, natural heritage **corridors**, utility or hydro corridors and drainage systems.
- The City will provide a public park system that provides opportunities for physical recreation, socialization, cultural pursuits, community identification, active transportation, community gardens, nature appreciation and education.
 All publicly owned components of the public park system shall be open and accessible to the public.
- c. The City will expand the supply of parkland, community facilities and recreation services through direct provision and partnership arrangements. This will include maximizing the use of existing facilities and services, as well as joint ventures and facility sharing with other institutions and community groups.
- d. Where applicable, lands to be reserved for future public open space and trail linkages will be identified as part of a development proposal.

A Five-Tiered Classification System

- e. City parkland and other public and publicly available open space have been organized into five categories that represent a hierarchy. Placement in the hierarchy is based principally on:
 - i. The distance that most visitors travel to make use of/appreciate facilities and features:
 - ii. The level/scale of outdoor and indoor facilities:
 - iii. The degree of uniqueness and/or specialty of facilities, features and other assets (including geological features, built heritage and **natural heritage features**); and,
 - iv. The location within the urban structure of the City.

- f. The five categories within the parkland hierarchy are:
 - i. Regional Parks and Other Open Spaces;
 - ii. Community Parks and Other Open Spaces;
 - iii. Neighbourhood Parks and Other Open Spaces;
 - iv. Pocket Parks; and,
 - v. Urban Park Spaces.
- g. The fifth category (Urban Park Spaces) has been developed to respond to the accelerating trend toward the promotion of high-density mixed-use **Strategic Growth Areas** that will be located throughout Peterborough. The **Strategic Growth Areas** will contain a hierarchy of Urban Park Spaces that is unique to these areas.



5.3.3 Regional Parks and Other Open Spaces

Purpose

a. Regional Parks are intended to accommodate a wide array of opportunities that appeal to people of all ages, abilities and cultures. The unique features and the higher scale of culture and recreation facilities found in Regional Parks attract visitors from across the City and beyond. They can contain museums, clusters of outdoor sport facilities, culture and recreation centres, specialized recreation facilities, venues for large public gatherings and events, marinas, campgrounds, display gardens, beaches, waterplay facilities, playgrounds, and other facilities of a scale and purpose suitable for a Regional Park.

b. Regional Parks assist in protecting and enhancing the image of Peterborough as a 'city in the country'. They can protect natural and historic features from the impacts of development. They can act as a buffer for a high-value natural heritage feature, where required. Regional Parks can be integral to the linked open space system, recreational trail network and active transportation system. Regional Parks can restrict development from occurring in areas that would be hazardous and in doing so, provide naturally vegetated amenity space for passive recreation and nature appreciation. Typically, this level of park or other open space attracts day-use activities but could include a campground or marina.

Planning + Design Guidelines

- C. Regional Parks include City parkland and other public and publiclyavailable open space with a similar purpose and draw (e.g., County, Federal and Provincial parkland; Conservation Authority lands; golf courses; community centres, etc.). The following planning and design guidelines apply to Regional Parks and Other Open Spaces:
 - i. Generally, these are large parks, but can also be small properties, depending on the focus, features and functions;
 - ii. If the focus of a Regional Park is 'active' recreation, it should be predominantly prime/table land;
 - iii. All or part of a Regional Park or Other Open Space may include stormwater retention features, steeply sloping (hazardous) lands, waterfront and natural heritage features;
 - iv. If a Regional Park is principally or entirely comprised of **natural heritage features**, the property may be called a nature reserve or similar name:
 - If a Regional Park is not considered a nature reserve, it should be ٧. accessible and appealing to all residents - and be useable yearround;
 - vi. Generally, Regional Parks should be highly visible and accessible to the full range of transportation modes, including public transit and active transportation. Directional signage should be provided on arterial streets and on separated active transportation routes throughout the City to indicate appropriate access to these parks. Where possible, secondary access should be provided along linked public lands for cyclists and pedestrians;

- vii. New Regional Parks should be designed with a minimum of 25 per cent of the perimeter exposed to Arterial or Collector Roads. Variations will only be considered on the basis of the specific role or focus of the park identified by the Arenas, Parks and Recreation Advisory Committee and/or the 10-Year Strategic Plan for Recreation, Parks, Arenas and Culture;
- viii. Special focus parks should be designed to ensure that activities in certain parts of the park do not detract from the primary focus of the park;
- ix. Where Regional Parks incorporate river banks, **wetlands**, significant woodlots and other environmentally sensitive features, the design of the park should be respectful of and sensitive to these **natural heritage features**;
- x. Regional Parks can celebrate arts, history and culture;
- xi. Regional Parks may celebrate and/or acknowledge Indigenous **placemaking**/history; and,
- xii. Regional Parks that accommodate large public gatherings and sport tournaments should include public washroom facilities, as well as off-street parking facilities and other relevant amenities, wherever possible.

5.3.4 Community Parks and Other Open Spaces

Purpose

a. Community Parks attract visitors from beyond their immediate neighbourhood and from across the City. Although the focus of Community Parks is typically on higher level outdoor sports facilities, they can also accommodate a wide variety of other active and passive culture and recreation facilities and features. Community Parks can be partially or completely comprised of **natural heritage features**. They can also contain large-scale landscape features to enhance urban aesthetics in high profile locations.

Planning + Design Guidelines

b. The following planning and design guidelines apply to Community Parks and Other Open Spaces:

- i. Size can vary from very small to 40 hectares (and larger), depending on role and characteristics. If a Community Park is principally a sports park, the minimum size should be 10 hectares;
- ii. Generally, Community Parks should be highly visible and accessible to the full range of transportation modes, including public transit and active transportation;
- iii. New Community Parks should be designed with a minimum of 25 per cent of the perimeter exposed to public streets, preferably Arterial or Collector Roads. Variations will only be considered on the basis of the specific role or focus of the park identified by the Arenas, Parks and Recreation Advisory Committee and/or the 10-Year Strategic Plan for Recreation, Parks, Arenas and Culture;
- iv. It is appropriate for a Community Park to be located adjacent to a secondary school, elementary school or post secondary education campus - with the sites planned and developed into a joint park/school open space campus where facilities are shared with the community. Sometimes, it is appropriate to similarly share with a place of worship;
- Community Parks that accommodate public gatherings and sport ٧. tournaments should include public washroom facilities, as well as offstreet parking facilities, either on-site or in conjunction with adjacent lands, wherever possible;
- vi. Although most Community Parks should be predominantly or entirely prime/table land to support the primary focus of active recreation, some sites (or parts of sites) can incorporate a stormwater retention feature, steeply sloping lands and/or natural heritage features:
- vii. Where they are adjacent or in close proximity, Community Parks shall be linked to the municipal and regional trail network, greenway system and the transit system;
- Community Parks should be appealing and accessible to all residents viii. - and be useable year-round;
- ix. Community Parks can celebrate arts, history and culture;
- Х. Community Parks may celebrate and/or acknowledge Indigenous placemaking/history; and,

xi. If a Community Park is not focused on a natural heritage feature or an historic entity, the location should be influenced by criteria such as: direct access to high traffic roads and public transit, as well as being a high visibility property.



5.3.5 Neighbourhood Parks and Other Open Spaces

Purpose

a. Neighbourhood Parks are intended to serve the close-to-home social and recreation needs of a neighbourhood or part of a neighbourhood – and to be 'a gathering place for the neighbourhood'. The scale, size and appeal of Neighbourhood Parks and other open spaces and associated facilities provide opportunities for less organized/structured, passive leisure and social activities, contribute to the aesthetics of Neighbourhoods and enhance the connectivity of parkland and other open spaces. Neighbourhood Parks are to be provided at a rate of approximately 1 hectare per 1,000 residents and serve the population that is within about a 5 minute walk (400 metre radius) from the Park.

Planning + Design Guidelines

- b. The following planning and design guidelines apply to Neighbourhood Parks and Other Open Spaces:
 - i. A Neighbourhood Park shall be within approximately 0.5 1.5 hectares in size. Parks of less than 0.5 hectares may be established or retained only where:
 - The property may potentially form part of a linear park;
 - The property could be merged with an adjacent schoolyard; or,
 - No alternative public open space opportunities exist within a service radius of 400 metres;
 - ii. Residents should not have to cross a busy street (high capacity Arterial Road) to access a Neighbourhood Park;
 - Neighbourhood Parks should incorporate outdoor facilities and features that suit the scale and role of this category of park; therefore unlit, smaller-scale and unscheduled facilities are preferred;
 - iv. Neighbourhood Parks should be appealing to all age groups and accessible to all residents;
 - Neighbourhood Parks shall be linked to the sidewalk system and to the municipal trail and walkway systems where provided - and some can be linear in shape;
 - vi. For new Neighbourhood Parks, ensure that a minimum of 25 per cent of the perimeter fronts onto a street, and most of the park is visible from the street(s). Variations will only be considered on the basis of the specific role of the park identified by the Arenas, Parks and Recreation Advisory Committee and/or the 10-Year Strategic Plan for Recreation, Parks, Arenas and Culture;
 - vii. Although most or all of the Neighbourhood Park site should be prime/table land, Neighbourhood Parks may also be used to provide enhanced protection to **natural heritage features**;
 - viii. In some cases, it is preferred that a Neighbourhood Park be located adjacent to an elementary or secondary school and jointly planned, developed and used as a park-school campus; and,

ix. Off-street parking is not required within Neighbourhood Parks. The City will consider the need for accessible parking, where appropriate.

5.3.6 Pocket Parks

Purpose

- a. Pocket parks are small, intensively developed spaces generally located outside of the Strategic Growth Areas, as identified on Schedule A: Urban Structure.
 Pocket Parks located outside of Strategic Growth Areas have two purposes:
 - i. To augment the role of Neighbourhood Parks in the existing residential neighbourhoods; and,
 - ii. To improve the public use and appearance of curb extensions and road islands (green streets).

Planning + Design Guidelines

- b. The following planning and design guidelines apply to Pocket Parks:
 - i. Pocket Parks are small spaces, of variable scale based on the adjacent urban fabric;
 - ii. Generally the service area for a Pocket Park is within a 2 to 5 minute walk (approximately 150-400 metres) of residents;
 - iii. Pocket Parks should be designed, developed and maintained to support more intensive levels of use than Regional, Community and Neighbourhood Parks;
 - iv. Pocket Parks should be:
 - Attractive and welcoming and draw people in;
 - Useable by all age groups; and,
 - Usable in all seasons;
 - v. These spaces can celebrate arts, history and culture;
 - vi. Pocket Parks may celebrate and/or acknowledge Indigenous **placemaking**/history; and,

vii. Pocket Parks should be highly visible, intensively developed and contain facilities and features that complement other nearby parks and align with the needs and interests of nearby residents.

5.3.7 Urban Park Spaces

- Urban Park Spaces are to be located within the **Strategic Growth Areas** a. identified on **Schedule A: Urban Structure** where intensified development forms are to be promoted. Urban Park Spaces are pedestrian-friendly spaces that accommodate socializing in a dense urban area. They include both hard and soft landscape elements and are equipped with ample amenities that respond to the needs of the adjacent mixed-use community. It is expected that all of the Primary Urban Park Spaces be acquired, owned, developed and maintained by the City, notwithstanding that there may be opportunities where private ownership options are appropriate.
- b. As intensification proceeds, the City will ensure that adequate urban park space is provided to support these growing communities.

Primary Urban Park Spaces

The two primary components of the parks and open space system within C. the intensively developed Strategic Growth Areas are Urban Community Parks and Urban Squares.

Urban Community Parks

- d. Urban Community Parks are the largest and highest profile component of the Urban Park hierarchy. They are intended to be the primary focal point of a growth area. They are expected to provide multifunctional flexible space and programming for large-scale social gatherings, festivals and civic functions, and to accommodate facilities for the entire community. Urban Community Parks may include concert venues, public markets, water play, playgrounds and organized or unorganized sporting activities for all age groups and abilities and are to be developed with the following criteria in mind:
 - i. Expected to be greater than 8,000 square metres in size, and can be much larger;
 - ii. Have frontage on at least two public streets but may be surrounded by public streets where the scale of the park is appropriate;

- iii. Be designed such that they provide 40 per cent of the area of the park in tree canopy by the end of the tenth year after its opening, with priority given to shading seating areas;
- iv. Be primarily soft surfaced and green but may include hard surface elements;
- v. Include substantial programmable spaces such as performance venues, sports fields, courts and playful elements for children; and,
- vi. Include seating and a full furniture program (e.g., lighting, facilities for dogs, facilities for various age groups, water features and public art).

Urban Squares

- e. Urban Squares are moderately-scaled components of the **public realm** network and Urban Park hierarchy. Urban Squares may provide multifunctional space and programming for social gatherings, festivals and civic functions. Urban Squares are community focal points that should accommodate special features, such as public art, that add interest and contribute to **placemaking**.
- f. Urban Squares are expected to develop with the following criteria in mind:
 - i. Expected to be greater than 1,000 square metres in size, but generally less than 8,000 square metres;
 - ii. Expected to serve the resident population and/or local business community within approximately a ten-minute walk or 800 metres;
 - iii. Have frontage on at least one public street but may be surrounded by public streets where the scale of the square is appropriate;
 - iv. Require that adjacent built form have primary and active frontages facing the Urban Square, where appropriate;
 - v. Be designed such that they provide 40 per cent of the area of the square in tree canopy by the end of the tenth year after its opening;
 - vi. Be primarily hard surfaced but may include soft surface elements;
 - vii. Include community and civic spaces, as well as performance venues and playful elements for people of all ages and ability; and,

viii. Include seating and a full furniture program (e.g., lighting, opportunities for outdoor cafes and restaurants, facilities for various age groups, water play features and public art).

Secondary Urban Park Spaces

- g. Secondary Urban Park Spaces are typically smaller than Primary Urban Park Spaces and are generally wholly integrated within/adjacent to buildings. It is the intent that Secondary Urban Park Spaces may be publicly or privately owned. They are important connectors within the **public realm** network and provide diversity and interest within the **Strategic Growth Areas**. Secondary Urban Park Spaces include: Urban Pocket Parks, Sliver Parks, Courtyards and Connecting Links.
- h. Privately owned Urban Park Spaces will only be considered as part of the required parkland dedication of the Planning Act where the City is satisfied that the park space component is accessible to the public, has been designed to City standards, and is to be maintained to City standards. Legal agreements to ensure the long-term satisfaction of these requirements will need to be established.

Urban Pocket Parks

- i. Urban Pocket Parks are small, pedestrian-friendly spaces that accommodate socializing in dense urban areas. Urban Pocket Parks are key elements of the inter-connected **public realm** network. They provide social spaces animated by their adjacent uses such as cafes and shops. Urban Pocket Parks are intensively developed and used.
- j. Urban Pocket Parks are expected to develop with the following criteria in mind:
 - i. Expected to be less than 1,000 square metres in size, but generally greater than 75 square metres;
 - ii. Generally, within a 2 to 5 minute walk (approximately 150-400 metres) of residents, visitors and businesses within a high density, mixed-use neighbourhood;
 - iii. Have frontage on at least one public street but may be surrounded by public streets where the scale of the park is appropriate;

- iv. Require that adjacent built form have primary and active frontages facing the park, where appropriate;
- v. Be designed such that they provide 50 per cent of the area of the park in tree canopy by the end of the tenth year after its opening, with priority given to shading seating areas; and,
- vi. Be primarily hard surfaced but may include soft surface elements.

Sliver Parks

- k. Sliver Parks are narrow linear spaces that often front retail spaces and function as a substantially widened sidewalk, creating plazas or forecourts between the face of the adjacent building and street right-of-way. They are extensions of the public sidewalk system, with adjacent uses that help to animate the space, improve safety and encourage use.
- I. Sliver Parks are expected to develop with the following criteria in mind:
 - i. Are small, and will have variable sizes based on the urban fabric;
 - ii. No specific service area. Sliver Parks will be provided where appropriate;
 - iii. Be established adjacent to a building frontage, wherever possible;
 - iv. Require that adjacent built form have primary and active frontages facing these open spaces, with significant glazing where possible;
 - v. Be primarily hard surfaced, with limited planting and soft surface elements; and,
 - vi. Be flexible to accommodate spill out retail space, as well as outdoor cafes and restaurants.

Courtyards

- m. Courtyards are interior or exterior spaces that are surrounded by buildings, and are lined with small stores, restaurant and outdoor cafes. They promote a high standard of quality and pedestrian comfort.
- n. Indoor and outdoor Courtyards are sometimes public spaces but are often privately owned and publicly accessible. Although they all enable pedestrians to travel through the community quickly and easily, many are destinations unto themselves with seating, restaurant and retail frontages, and public art. They provide valuable opportunities to improve connections between the public sidewalk system and the other components of the **public realm** network.
- o. Courtyards are expected to develop with the following criteria in mind:
 - i. Small spaces based on the adjacent urban fabric;
 - ii. No specific service area. Courtyards will be provided where appropriate;
 - iii. Have several egress opportunities to the public sidewalk system;
 - iv. Contribute to the logical wayfinding/navigation system and help to establish a fine-grained **public realm** network;
 - v. Require that adjacent built form have primary and active frontages facing the courtyard space; and,
 - vi. Have a combination of high quality landscaping and hard surfaces.

Connecting Links

p. Connecting Links are outdoor walkways that may be linked with small stores, restaurants and outdoor cafes. These spaces are sometimes public spaces but are often privately owned and publicly accessible. Although they all enable pedestrians to travel through the community quickly and easily, many are destinations unto themselves with seating, restaurant and retail frontages, and unique public art. Connecting Links provide valuable opportunities to improve connections between the public sidewalk system and other components of the public realm network. They will play an important role in creating a logical wayfinding/navigation system and assist in the establishment of a more beautiful and inviting public realm network within the Strategic Growth Areas.

- q. Connecting Links are expected to develop with the following criteria in mind:
 - i. No specific size guideline;
 - ii. No specific service area. Connecting Links will be provided where appropriate;
 - iii. Be provided in high pedestrian volume areas, for easy of movement, as well as the creation of unique urban spaces;
 - iv. Be located between pedestrian destinations and may become destinations themselves;
 - v. Have opportunities for retail along their length, or alternatively, a green, soft landscape treatment with plantings and lighting;
 - vi. Be safe and secure with adequate lighting; and,
 - vii. Width should consider scale of adjacent buildings and ease of access for all users.

5.3.8 Parkland and Stormwater Management

- a. In cases where parks or portions of parkland include or are designed to include stormwater management facilities, such facilities would be subject to the approval of the City and the **Conservation Authority**. Where a stormwater facility precludes the use of a portion of the land for parkland purposes, the stormwater management facility shall not be accepted as a part of parkland dedication.
- b. The following principles shall be adhered to in the design of stormwater facilities involving parkland or other open spaces, or as identified by this Plan:
 - Stormwater will be considered a resource rather than a waste product of development;
 - ii. Stormwater facilities will be designed to maintain or improve the ecological integrity of the environment;
 - iii. Where open **watercourses** exist, or are used for stormwater management and/or conveyance purposes, they are to be retained, wherever feasible, in their uncovered, unchannelized, natural state in order to maintain the natural integrity of the **watercourse**;

- iv. Stormwater facilities will be designed, wherever possible, to provide community amenities. Lands immediately adjacent to watercourses shall be planted to establish riparian buffers for the protection of water quality. Where possible, such facilities will be designed with naturalized edges to a standard that would not require fencing from the standpoint of public safety; and,
- Stormwater management facilities must be maintained in accordance with any Federal or Provincial regulations and operating requirements.
 While stormwater management facilities can naturalize overtime, their primary role will be stormwater management.
- c. Where existing parks or portions of parkland are retrofitted to include stormwater management facilities, such facilities shall be situated within the park to minimize adverse impacts on the parkland.

5.3.9 Parkland and Educational Facilities

- a. It is recognized that school sites often provide an important open space resource within the community and the City will continue to co-operate with the local Boards of Education in obtaining new school sites and integrating such sites with municipal parkland.
- The provision of public open space within the City will include those lands associated with schools and institutions where access can be facilitated by joint use agreements.
- c. The City shall coordinate planning initiatives and work with school boards in locating satisfactory sites for schools based on population projections and appropriate community structure. A required school site shall be shown on plans of subdivision and shall be located and designed so as to maximize ease of access to the population it intends to serve, by the full range of transportation modes.
- d. Where playgrounds and other recreation facilities are provided on parkland adjacent to school properties, the provision of such facilities shall be justified by the Parks and Recreation Master Plan and addressed in joint use agreements with the school authority.

5.4 Urban Design

5.4.1 Introduction

- a. An attractive and inviting environment provides a sense of belonging, offering areas to reflect, gather, or interact with others. Designing places for people, or enhancing those that currently exist, is a key element of celebrating the community while planning to meet the needs of a growing population.
- b. The City will continue to create new, vibrant, publicly accessible and public urban spaces through the approval of development applications, Urban Design Guidelines, partnerships with public and private organizations, including consultation with the arts community, and other civic actions. The following policies shall be read in conjunction with all other policies of this Plan.
- c. The City recognizes that there are many components that contribute to the City's unique and vibrant sense of place for both residents and visitors to the community. These include Peterborough's riverfront location on the Otonabee River and the Trent-Severn Waterway; its heritage resources, cultural amenities, rolling topography, scenic natural areas and waterfront trails; and the City's distinctive public areas such as Little Lake, the Central Area, the Lift Lock and Jackson Park. In its approval of new development or redevelopment, the City will build on and enhance the amenity of these valued places, wherever possible.
- d. Urban design is an important tool for creating public and private spaces that contribute to a distinctive and vibrant sense of place. The City's general objectives for urban design are to:
 - i. Provide safety, comfort and amenity for those experiencing the area or space and foster social interaction;
 - ii. Provide accessible, coherent, attractive, safe and distinctive public spaces
 including streetscapes, gateways, urban squares, parks or waterfront areas;
 - iii. Promote innovative and diverse urban forms and excellence in architectural design;
 - iv. Integrate areas of differing form or character in a harmonious manner; and,

- ٧. Create distinctive places and locales, including the Central Area, new developing greenfield areas, and high profile locations such as the gateways to the City and the Central Area.
- The City will maintain and enhance its **public service facilities** and spaces as e. well as built cultural heritage resources for the benefit of all residents and as amenities for visitors to the City. Specific measures include:
 - i. Integrating these facilities and services with community planning initiatives, including development and redevelopment opportunities;
 - ii. Establishing Urban Design Guidelines to promote enhanced streetscapes, landscaping, and building design, and reduced visibility of parking areas;
 - iii. Fostering the enhanced development of Little Lake, the Trent-Severn Waterway and Lift Lock area and planned trails;
 - iv. Enhancing gateways to the City and to the Central Area, with initial focus on Hunter Street, Park Street, Charlotte Street and George Street;
 - Exploring options for an inter-municipal transportation/transit station in the Central Area;
 - vi. Investigating the feasibility of rediscovering/daylighting Jackson Creek in the Central Area through the creation of open space that will increase synergy with other cultural amenities; and,
 - vii. Promoting access to a range of recreational facilities, programs and services and **public service facilities** for all current and future residents.
- f. The City shall seek opportunities for the acquisition of land abutting its waterways for the purposes of improving public access and enjoyment of the water's edge.
- The City is committed to achieving a high quality of urban design and g. architectural excellence to provide both innovative and diverse urban forms that promote an accessible, sustainable, dynamic and livable environment. In order to promote visually appealing, safe and pedestrian-oriented experiences, development proponents will be encouraged to design buildings which include building materials and colours, landscaping and architectural styles compatible with the context of the area, while achieving variety along the streetscape. Development proponents will be further encouraged to incorporate architectural detailing and high-quality durable materials that maintain and enhance the character of the existing area and extend the life cycle of the built environment.

- h. Urban Design Guidelines may be prepared for areas as determined by the City over the course of this Plan and development shall be consistent with the applicable Urban Design Guidelines. In this regard, initial priority may be directed towards the following areas:
 - i. Strategic Growth Areas, including provisions for the Hunter Street, George Street, Charlotte Street, and Park Street Gateways to the Central Area; and,
 - ii. Development areas adjacent to the Peterborough Lift Lock.
- i. The City may prepare Urban Design Guidelines for mid-rise and high-rise development to ensure that they are designed in a way which promotes a high quality built form and **public realm**, ensures compatibility and supports a healthy urban environment.
- j. All development, with a focus on streetscapes, parks and open spaces, parking lots and other publicly accessible areas, shall consider the following design principles:
 - i. Clear sight lines, allowing view from one end of the walkway to the other;
 - ii. Appropriate landscaping, but avoiding landscaping that might create blind spots or hiding places;
 - iii. Adequate fencing and windows;
 - iv. Clear signage that delineates permitted use and speed;
 - v. Streetscape and building design that promotes 'eyes on the street'; and,
 - vi. Lighting that is energy efficient (e.g., PV, LED), Dark Sky/Nighttime Friendly compliant, and adequate for vehicular, cyclist, and pedestrian requirements.

5.4.2 Buildings and Sustainable Design

- New development shall be designed so that buildings reinforce street edges, a. have main entrances from the sidewalk and have a ground floor design and uses that help provide interest at ground level. Facades facing public streets should be articulated to provide interest and have significant windows; blank walls shall not face streets.
- b. Buildings should be located and designed to screen parking from the **public realm**. In general, parking and servicing access should be located to the rear of buildings, or in parking structures screened from the street.
- New development is encouraged to emphasize key gateways through the C. location and design of public space, adjacent buildings and public art.
- d. Building heights should be designed to appropriately transition to adjacent areas through application of a 45 degree angular plane or as otherwise directed by Urban Design Guidelines established by the City.
- e. Mid-rise and high-rise buildings are encouraged to be designed to minimize shadow and wind impacts. High-rise buildings are further encouraged to incorporate a podium base to define and frame the street edge, topped by a tower with a smaller floor plate to mitigate impacts on the surrounding area.
- f. The City will take a leadership role in promoting green building design and construction and encourage the private sector to consider the following for all new building designs:
 - i. Include on-site renewable or alternative energy systems which produce at least 5 per cent of building energy use. Alternatively, identify opportunities for the provision of centralized, integrated energy systems, such as district energy for heating and cooling;
 - ii. Maximize solar gains and/or passive solar design through:
 - Building orientation to maximize potential for passive and active solar energy;
 - South facing windows;
 - Building construction that facilitates future solar installations (i.e. solar ready);
 - Adequate shading of south and west windows/facades to reduce energy use;

- iii. Mitigate heat island effects by:
 - Locating trees or other plantings to provide shading for a least 50 per cent of the surface area of sidewalks, patios, and driveways within 15 metres of new buildings;
 - Installing light-coloured paving materials including white concrete, grey concrete, open pavers and any material with a solar reflectance index of at least 29;
 - The incorporation of green/white or other high albedo roofs into building designs for all buildings that achieve a **floor space index** of 1.5 or greater;
- iv. Promote water conservation by including the installation of rainwater harvesting and re-circulation/reuse systems for outdoor irrigation and outdoor water use, and achieving 10 per cent greater water efficiency than the Ontario Building Code, 2017;
- v. Use regionally and locally sourced building materials to the greatest extent possible in new construction, and divert construction waste from landfills;
- vi. Include three stream waste collection capability in all multi-residential buildings;
- vii. Promote sustainable landscape practices by implementing:
 - The use of water efficient, drought resistant plant materials in parks, along streetscapes and in public and private landscaping;
 - Avoidance of turf grass areas, and when required, install drought resistant ground covers;
 - Low impact development, including installation of permeable driveway and parking lot surfaces, to reduce the impact caused by new development on the natural hydrological cycle;
- viii. Bird-friendly design measures for predominantly glass buildings, particularly those adjacent to the **Natural Heritage System** or waterways;
- ix. Electric vehicle charging infrastructure; and,
- x. Carbon neutral, passive house or net zero energy building designs.



5.4.3 Public Art

- a. The City of Peterborough recognizes that public art adds significant value to the cultural, social, aesthetic and economic vitality of the community. Public art that fosters community pride by capturing local history, traditions and culture, including Indigenous artwork, is encouraged in all public and privately owned, but publicly accessible spaces.
- b. Public art is encouraged throughout the City, particularly in areas of cultural significance and in parks, urban squares, plazas, gateways and civic building sites, as well as integrated in public works, for the purpose of enhancing Peterborough's unique sense of place, history and culture. The City will also encourage private developers to introduce public art installations as part of developments.

- c. The City will adopt policies and procedures for the implementation of a successful public art program which will contribute to a strong civic identity. The City will encourage the inclusion of Indigenous artwork as part of any public art program, in consultation with local Indigenous Communities.
- d. The City will consider public art throughout the planning and design stages of City construction or renovation projects and other appropriate capital projects.
- e. The City will pursue public-private partnerships with businesses to establish public art.

5.5 The Urban Forest

- a. The **urban forest**, which includes trees and shrubs on public and private lands, provides ecological benefits that support natural area functions and assists in mitigating against climate change and the urban heat island effect. The City further recognizes the importance of the **urban forest** in maintaining the natural image of Peterborough. As of 2020, the City's woodland cover was 16 per cent and its overall tree canopy cover was 27 per cent. It is the intent of this Plan to increase woodland cover and tree canopy cover over the timeframe of this Plan.
- b. The City is committed to managing the **urban forest** by promoting community stewardship and strategic practice to preserve, renew and enhance this essential resource and recognizes the Urban Forest Strategic Plan as the mechanism by which **urban forest** management is guided.
- c. Trees or other plantings shall be located throughout the community to provide shading for at least 50 per cent of the surface area of sidewalks, parks and open spaces and other publicly accessible areas. In addition, the City shall achieve an overall tree canopy cover of 35 per cent by 2051 or an alternate target as prescribed by the Urban Forest Strategic Plan, whichever is greater. The City's Restoration and Enhancement Strategy will guide stewardship activities and priority areas for enhancement. To this end, the City shall:
 - i. Implement the Restoration and Enhancement Strategy and street tree and naturalization programs to increase urban tree canopy cover; and,
 - ii. Require the planting of trees on-site or in proximity to the site in all City infrastructure-related works, where feasible.

- d. The **urban forest** shall include a diversity of trees that are non-invasive, climate-adaptable and urban tolerant. All trees shall be of a species adapted to this region, preferably native species, and that would provide a large canopy and shade over sidewalks, parks, open spaces and other publicly accessible areas. The City will further encourage the planting of species that are culturally significant to Indigenous Communities.
- e. To preserve and protect Peterborough's **urban forest**, the City will promote public and private initiatives to increase the planting of trees within the City so that there will be an increase in overall tree canopy cover over time.
- f. The City will regulate the cutting of trees, require the replacement of any trees which must be removed, and require protection of trees during site development or construction where appropriate. Tree planting and replacement will be used as a means of enhancing the **Natural Heritage System** where appropriate.
- g. It is the City's intention that where trees must be removed, they be replaced on the same site. Trees will be replaced in accordance with the City's tree by-laws. If it is not feasible to replant trees on the same site, a **cash-in-lieu** fee of equivalent value will be paid to the City to support replanting trees on other available sites as determined by the City.
- h. Development and redevelopment of City owned open space and parkland associated with school yards involving the removal of trees will require a comprehensive shade audit as part of the plan.
- i. Where trees are removed as a result of municipal development or infrastructure works, trees will be replaced in accordance with the City's tree by-laws. If it is not feasible to replant trees in the same location, the City will replant trees on other available municipally owned land or private land with consent of the owner.
- j. The City will require the submission of a Tree Inventory and Protection Plan as a condition of a development application. The Tree Inventory and Protection Plan will identify the trees proposed to be removed, their condition, justify the need for their removal, specify a replacement/replanting program, and identify mitigative measures to protect remaining trees.
- k. In an effort to increase the city's canopy cover, opportunities for tree planting of native species on municipally owned lands will be identified and implemented in coordination with other public agencies and local interest groups.
- I. Trees should be located with consideration of their function/impact on regulating temperature and energy use.

5.6 Local Food Production

- a. Community gardens, urban agriculture, and farmers markets provide residents with increased access to healthy food, leisure and educational opportunities and support sustainable food practices. The City acknowledges the benefits of local food and urban agriculture on the local economy, food security, sustainability, social inclusion and community building.
- b. It is the intent of this Plan to encourage and support local food activities and urban agriculture. The City will encourage increased production and access to local food sources through the following means:
 - i. Supporting the growing of food and the sharing of produce in local neighbourhoods through access to community gardens and community kitchens:
 - ii. Supporting the continued operation of the farmers markets in the Central Area and Morrow Park and the creation of food spaces that will enable people of all incomes and abilities to meet and to access nutritious food;
 - iii. Supporting the continued use of excess lands for agriculture, until they are needed for urban development in accordance with this Plan, recognizing that Peterborough's excess lands are not prime agricultural lands;
 - iv. Considering the expanded use of City land for growing food, including edible landscapes;
 - v. Considering permissions for small-scale food processing and distribution (e.g. food co-ops, community food centres);
 - vi. Considering permissions for food-related home occupations/industries, subject to applicable policies and regulations;
 - vii. Encouraging private gardens throughout the community and roof top gardens in higher density development as part of the private outdoor amenity; and,
 - viii. Designating sufficient land for food-related industry and uses.

5.7 Climate Change

- a. Strong, liveable and healthy communities are resilient to climate change. In the face of a changing climate, the City recognizes the need to adopt climate change mitigation and adaption measures to enhance the resiliency of its built and natural environments. The intent of this Plan is to support energy efficiency, improved air quality, reduced greenhouse gas emissions and climate change adaption through sustainable land use patterns and the integration of green infrastructure.
- b. The City will promote development and land use patterns that conserve biodiversity and consider the impacts of a changing climate. The City has adopted the Greater Peterborough Area Community Sustainability Plan/Sustainable Peterborough Plan (2012) and Greater Peterborough Area Climate Change Action Plan (2016) to reduce local contributions to climate change and to better prepare for a changing climate. In addition, the City should consider:
 - The preparation of Sustainable Neighbourhood Action Plans for all existing communities identified as Neighbourhoods on **Schedule A: Urban Structure**;
 - The establishment of climate change policies which build adaptive capacity, and which would apply to all capital works projects, including those within existing neighbourhoods;
 - iii. Developing strategies to reduce greenhouse gas emissions and improve resiliency;
 - iv. The development of greenhouse gas inventories and forecasts; and,
 - v. Monitoring and reviewing greenhouse gas emission reduction targets.
- c. Peterborough will grow as a sustainable community over the long term by utilizing planning and capital investment tools, as well as urban design approaches, in its strategic planning for infrastructure and approval of development. Such sustainability considerations include:
 - Promoting an efficient, cost effective land use pattern as well as built forms which conserve land, capitalize on existing infrastructure, and minimize the cost of new infrastructure;

- ii. Avoiding development or land use patterns which may create environmental, public health or safety concerns;
- iii. Recognizing, protecting and, where possible, enhancing **natural heritage features** and their ecological and hydrologic functions;
- iv. Planning for increased densities and a greater mixture of uses to create a more efficient, **transit-supportive**, walkable and bikeable community;
- v. Promoting zero or low carbon and energy efficient built forms and the use of renewable energy;
- vi. Providing increased mobility options that promote walking, cycling and transit to reduce dependence on automobiles and improve air quality; and,
- vii. Protecting water quality and quantity, including promoting best practices for stormwater management and **low impact development**.
- d. New planning, engineering and conservation concepts need to be considered and incorporated, particularly related to climate change, energy conservation and **green infrastructure**. The City shall encourage and provide policy direction on the following:
 - The implementation of strategies or initiatives related to water conservation, energy conservation, air quality protection and integrated waste management opportunities;
 - Opportunities for energy efficiency and alternative energy strategies, such as district energy generation, renewable/alternative energy systems and distribution and demand management plans, as well as land use patterns and urban design standards to support energy conservation objectives;
 - iii. The promotion of innovative residential and public building designs that contribute to low carbon design, energy use reduction and natural resource conservation, as well as synergies between buildings and site management practices; and,
 - iv. **Green infrastructure** to complement existing infrastructure, including the requirement for innovative **low impact development** opportunities and best practices that minimize the risks associated with natural hazards.
- e. To encourage energy conservation, energy efficient practices and sustainable design, the City may consider the development of a **Community Energy Plan** and/or Green Development Standards.





6.0 INFRASTRUCTURE POLICIES

a. This section sets out the City's general policies governing the planning and provision of municipal infrastructure. Detailed information on infrastructure plans and priorities will be established by supporting City Plans including a Transportation Master Plan, Water Master Plan, Wastewater Master Plan and a Stormwater Plan. As this Plan requires a close link and relationship between land use planning and infrastructure planning and development, a review of this Plan may lead to a review of the supporting plans, and vice versa.

6.1 Servicing and Utilities

6.1.1 Introduction

a. Municipal services and utilities, which support the day-to-day needs of residents, businesses and visitors, are an essential part of a complete and healthy community. This includes ensuring the economical and efficient provision of adequate domestic water supply, storm and sanitary sewers, stormwater management, solid waste collection services, and utilities for energy and communications/ telecommunications. While the City does not have jurisdiction for the provision and maintenance of all the aforementioned services and utilities, the City will work collaboratively with all service providers to ensure that appropriate facilities and infrastructure are in place.

Objectives

- b. The objectives of the City with respect to servicing and utilities are to:
 - Provide services, infrastructure and utilities in a co-ordinated, efficient, and cost-effective manner that is integrated with planning for growth so that these services meet the City's current and projected needs;
 - ii. Ensure efficient use of existing municipal services before extending or developing new services;

- iii. Ensure that the provision of new or upgraded infrastructure supports the policies of this Official Plan, including in meeting the intensification and density targets;
- iv. Ensure sufficient infrastructure capacity in **Strategic Growth Areas**;
- v. Promote cost-effective development patterns and standards to help minimize servicing costs;
- vi. Undertake the appropriate financial planning, including identifying full life cycle costs, to make the necessary investments in infrastructure to accommodate long term growth; and,
- vii. Consider the impacts of a changing climate, including assessing infrastructure risks and vulnerabilities and identifying strategies to address these challenges.
- c. Notwithstanding the planning horizon of this Plan, longer term population and employment forecasts or the life-cycle of infrastructure assets may be used for infrastructure planning studies undertaken by or for the City, provided that they conform to Provincial growth forecasts.

6.1.2 General Policies

- a. Future urbanization will be coordinated with the provision or extension of municipal services to ensure that growth and redevelopment take place in an efficient, cost effective and environmentally sound manner. All development shall be provided with municipal water, sanitary sewers and a stormwater drainage system, unless otherwise specifically exempted by the policies of this Plan.
- b. The rate, staging and location of development, especially residential development, will generally be related to the logical extension or expansion of existing services to ensure contiguous growth and to minimize the underutilization of municipal services and will have regard for the City's ability to assume the financial costs. If the City cannot assume the financial costs, the developer may assume the financial costs, subject to a Front-Ending Agreement satisfactory to the City. The various public and private authorities involved will attempt to make full use of existing facilities and to program extensions in the most economic manner.

- c. Where adequate municipal water, sanitary or storm sewer capacity does not exist to support proposed development or redevelopment, the City shall not be obligated to provide such services in advance of available budget resources. Development proposed on lands where restricted capacities exist will be required to conduct all necessary assessments in order to provide adequate services to the satisfaction of the City.
- d. The development of lands will normally be approved and permitted in stages of orderly progression depending upon the provision of municipal services and utilities from the termination of existing services. If it is deemed that lands suitable for and considered to be required for development in accordance with this Plan are being withheld from immediate development, the extension of services through or beyond such lands to other lands for development may be permitted. The extension of services to other lands and the by-passing of intervening lands shall only be considered if such lands are satisfactory for development.
- The City acknowledges the large tracts of undeveloped land primarily found e. in the recently annexed areas and that it is in the best interest of the City to undertake a comprehensive planning review for these areas before granting planning approvals to allow development. Development opportunities in these areas will generally be established through Secondary Plans. These Secondary Plans will be utilized to facilitate development in these areas, but will not imply a pre-commitment by the City to provide municipal services. Secondary Plan policies, Conditions of Draft Plan of Subdivision Approval and "H" - Holding Provisions will be applied to planning applications to allow consideration of proposals without committing municipal services. Official Plan, Draft Plan of Subdivision and Zoning approvals granted to development applications within these areas will not be considered in the calculation of the City's uncommitted reserve capacity until Final Approval for plans of subdivision are granted, and "H"-Holding Provisions are removed.
- f. Public utilities, including sanitary sewage infrastructure, storm sewer systems, municipal water, hydro, gas, telecommunication infrastructure, or any other utilities shall be permitted within any land use designation of this Plan. The location of public utilities should avoid lands designated Natural Areas. Where the construction of any municipal infrastructure project is proposed within the lands designated Natural Areas or on lands within 120 metres of **natural heritage features**, the project shall be required to submit an Environmental Impact Study, and/or other appropriate studies, in accordance with the policies in this Plan.

- g. Subdivision, development or redevelopment of land shall be provided with a municipal water supply, sanitary sewer and a stormwater disposal system. Full municipal services are not required in connection with agriculture and most major open space developments and accessory or service uses to agriculture and major open space.
- h. Utilization of existing lots or limited infilling in areas lacking one or more municipal services may be permitted, provided the general intent and purpose of this Plan is maintained, and that the site conditions are suitable for the long-term provision of such services with no negative impacts. The impact of this exemption must be fully considered with respect to present and future development.
- i. The extension of municipal sewer and water services shall be planned, designed and constructed in accordance with a comprehensive water or wastewater master plan or equivalent, informed by watershed planning, which:
 - Demonstrates that the effluent discharges and water takings associated with the system will not negatively impact the quality and quantity of water;
 - ii. Identifies the preferred option for servicing growth and development in accordance with the policies of this Plan, which must not exceed the assimilative capacity of the effluent receivers and sustainable water supply for servicing, ecological and other needs;
 - iii. Identifies the full life cycle costs of the system and develops options to pay for these costs over the long term; and,
 - iv. Includes a servicing strategy for those lands which are designated for development in this Plan, but which are currently beyond the extent of municipal services.
- j. The lands within the **Designated Greenfield Area** will accommodate a substantial population. This population will be realized at varying rates in each specific project or plan of subdivision. The sequencing of development within the **Designated Greenfield Areas** will be prioritized in areas where municipal infrastructure is available throughout or can be readily extended to each site.
- k. Development applications will demonstrate adequate servicing capacity to meet the requirements of the development and shall not adversely impact adjoining or downstream properties.

Ι. All lots shall have frontage onto a public road. Lots that do not have frontage and direct access to a public road, which is maintained year round, shall be placed in an appropriate zone in the Zoning By-Law, which identifies the limited service aspects of these areas. This does not apply to condominium roads.

6.1.3 Water and Waste Water Systems

- a. All new development within the City shall be connected to municipal water, sanitary sewers and a stormwater drainage system, unless otherwise specifically exempted by the policies of this Plan.
- b. The City will prepare and update a Water Master Plan and Wastewater Master Plan to inform this Plan. The Official Plan will be amended accordingly to implement the conclusions and recommendations of the Water and Wastewater Master Plans.
- C. The capacity of the sewage treatment plant and water treatment plant will be expanded as required to accommodate the population and development projected in this Plan.
- d. The City will promote intensification by directing and accommodating growth and development in a manner that achieves the Province's minimum intensification targets and promotes the efficient use and optimization of existing municipal water services and sanitary services to minimize the number of pumping stations required. Further, the City will pursue and promote programs that promote water use reduction in new development, and throughout the City, in accordance with the policies of this Plan.
- The City will prepare and update, as appropriate, studies to assess Citye. wide or area-specific sanitary sewer capacity, and/or review studies prepared and submitted by developers or third parties, in order to determine requirements for upgrades and maintenance, and plan for long term needs.
- f. New development will be responsible for the installation of all necessary localized sanitary sewer services, which will meet the City's standards and specifications. Sanitary sewer services shall be designed, constructed and maintained to:
 - i. Provide adequate service to the proposed development;
 - ii. Accommodate full development of the drainage area;

- iii. Utilize gravity flow wherever possible, to avoid the need for pumping stations;
- iv. Protect the natural characteristics of the landscapes in which they are located;
- v. Provide for sufficient depth and capacity to serve those areas which may ultimately be connected; and,
- vi. Consider infiltration/inflow and downstream capacity issues.
- g. The City shall ensure that all water and sanitary sewer services are provided in a manner that:
 - i. Can be sustained by the water resources upon which such services rely;
 - ii. Is financially viable and complies with all regulatory requirements;
 - iii. Protects human health; and,
 - iv. Allows lot creation only where there is confirmation of sufficient reserve municipal water and sanitary sewer service capacity.
- h. Pumping stations may be considered as an alternative option to gravity based sanitary servicing where gravity options are not feasible. Details such as feasibility, cost analysis, operation and maintenance, downstream capacity, and related studies shall be determined by the City as part of the development approvals process.
 - Where a pumping station is proposed by an owner/applicant to service a proposed development, the cost related to the feasibility studies, environmental assessment, design, construction and start-up, operation and maintenance including monitoring, removal and decommissioning, and the integration of the system with the permanent servicing solution will be the responsibility of the developer.
- i. The City will monitor the quality and quantity of industrial sewage effluent entering the municipal sanitary sewage system, to control its impact on the operation and capacity of the waste water collection and treatment system and on the receiving **watercourse**. All effluent shall meet the standards of the City Sewer Use By-Law. Where this is not possible, an agreement with the City is required in accordance with the By-Law.

6.1.4 Water Resources

- a. The City occupies nine primary **watersheds** that all drain into the Otonabee River, which is named after an Anishnaabe word, meaning the river that beats like a heart. Healthy **watersheds** and water resources are vital to the quality of life and health of residents of the City and downstream communities. The benefits of healthy **watersheds** include: safe drinking water, greater adaptive capacity in the face of climate change, erosion control, flood mitigation, fish and **wildlife habitat** and nature-based recreation opportunities.
- b. The City will prepare a Watershed Plan and Implementation Plan to identify water resource systems and provide a management framework for the protection of water resources. The City will use watershed plans and the watershed planning process to protect, improve and restore the hydrological function of the City's water resources. In addition to the policies of this Plan, the City's Watershed Plan will be the guiding document for goals and objectives of the watershed and all subwatersheds in the area. The Official Plan will be amended accordingly to support the implementation of the Watershed Plan and watershed planning objectives.
- c. The City will lead the implementation of **watershed planning** initiatives, in partnership with the **Conservation Authority**, neighbouring municipalities, Indigenous Communities and other agencies, that:
 - Protect and enhance watercourse system functions, linkages and sensitivities;
 - ii. Meet water quality and quantity objectives for the **watershed**;
 - Address the long-term cumulative impact of development on the watershed as necessary;
 - iv. Protect and enhance existing geology, hydrology, hydrogeology, geomorphology, limnology, aquatic and terrestrial habitats and the quality, quantity and function of groundwater recharge areas;
 - v. Provide guidelines for sustainable development, design and construction; and,
 - vi. Where practical, facilitate modifications to existing neighbourhoods to ensure better hydrologic and water quality function.

- d. The City will promote and play a leadership role in the efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality. Such practices may include encouraging educational initiatives, supporting other agencies with programs related to water conservation, sustaining water quality, respecting Indigenous Knowledge systems, incorporating stormwater management best practices, including green infrastructure and/or low impact development and considering technological and other system improvements to address such issues as inflow and infiltration of sanitary sewers.
- e. Development and **site alteration** will be restricted in or near **sensitive surface water features** and **sensitive** groundwater features such that these features and their related hydrologic functions will be protected, improved or restored. Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore **sensitive surface water features**, **sensitive** groundwater features, and their hydrologic functions.
- f. The City will require hydrogeological assessments in support of all major development applications, which will include requirements to maintain preto-post development water balances and measures to substantially maintain infiltration, recharge, and peak flow rates relative to existing conditions.
- g. For a large development proposal on a waterbody, an impact assessment or equivalent shall be required to ensure water quality protection. The study should take into consideration the existing water quality of the water body, surface water run-off, impact and loadings of phosphorous from septic systems if applicable, type of soils, stormwater management and nature of vegetation.

For new lot creation, development, including the septic system tile bed if applicable, must be set back a minimum of 30 metres from the normal-high water mark or active channel/bankfull level of the waterbody with non-disturbance of the native soils and very limited removal of shoreline vegetation. For existing lots of record, new development should be set back 30 metres if possible, otherwise as far back as the lot permits.

- h. The City will protect, improve or restore the quality and quantity of water by:
 - Using the watershed as the ecological meaningful scale for integrated and long term planning;
 - ii. Minimizing potential **negative impacts**, including cross-jurisdictional and cross-**watershed** impacts;
 - iii. Identifying water resource systems consisting of groundwater features, hydrologic functions, natural heritage features and areas, and surface water features which are necessary for the ecological and hydrological integrity of the watershed;
 - iv. Implementing restrictions on development and **site alteration** to:
 - Protect all municipal drinking water supplies and designated
 Vulnerable Areas; and,
 - Protect, improve or restore vulnerable surface water and groundwater, sensitive surface water features and sensitive groundwater features, and their hydrologic functions;
 - Maintaining linkages and related functions among surface water and groundwater features, hydrologic functions, and natural heritage features and areas, and surface water features including shoreline areas;
 - vi. Promoting planning for efficient and sustainable use of water resources, including through practices for water conservation and sustainable water quality, such as water demand management and water recycling; and,
 - vii. Ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.

Source Water Protection

- i. Schedule H: Source Water Protection identifies the Vulnerable Area, or more specifically the Intake Protection Zones, Wellhead Protection Areas, Significant Groundwater Recharge Areas and Highly Vulnerable Aquifers for the Peterborough Municipal Drinking Water System as defined under the Clean Water Act, 2006 and in accordance with the approved Trent Source Protection Plan and Assessment Report. Specific land use activities are identified which are or would be a significant drinking water threat if undertaken in the Vulnerable Area. To protect the intake municipal drinking water sources, significant drinking water threat activities are subject to policies set out in the Trent Source Protection Plan which was developed under the Clean Water Act, 2006.
- j. The following land use activities shall be prohibited in the Intake Protection Zones 1 and 2 (IPZ-1 and IPZ-2) where they would constitute a significant drinking water threat, unless otherwise stated in the Trent Source Protection Plan:
 - i. The establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage;
 - ii. The management or storage of **agricultural source material** or application of **agricultural source material** to land;
 - iii. The handling, storage or application of **non-agricultural source material** to land;
 - iv. The handling, storage or application of commercial fertilizer to land;
 - v. The handling, storage or application of pesticides to land;
 - vi. The handling or storage of road salt;
 - vii. The storage of snow;
 - viii. The handling and storage of fuel;
 - ix. The handling and storage of a dense non-aqueous phase liquid;
 - x. The handling and storage of an organic solvent;
 - xi. The management of runoff that contains chemicals used in the deicing of aircraft;

- xii. An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body; an activity that reduces the recharge of an aquifer;
- xiii. The use of land as livestock grazing or pasturing land, an **outdoor confinement area** or a **farm-animal yard**;
- xiv. Maintenance of mown grass for parks and recreation purposes that facilitate the congregation of waterfowl near water;
- xv. The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act and the activity would not require a **Prescribed Instrument**; and,
- xvi. The establishment and operation of a liquid hydrocarbon pipeline.
- k. A development application on lands within an Intake Protection Zone-1 or 2 as identified on Schedule H: Source Water Protection will be subject to the following:
 - The proponent will be required to pre-consult with the Risk
 Management Official; and,
 - ii. A Notice under Section 59(2) of the Clean Water Act, 2006, as amended, from the **Risk Management Official** is a required item for a complete application.
- I. Land uses that will create **transport pathways** should not be permitted within the **Intake Protection Zone-1**.
- m. New development within the **Intake Protection Zones** will be serviced by a municipal waste water collection system where such a connection is feasible given financial and technical constraints. Where such a connection is not feasible, new development will be serviced by a waste water collection system constructed to the standards of the Ontario Building Code to ensure that the activity is not a **significant drinking water threat**.
- n. To prevent the activity causing the **significant drinking water threat** in the **Intake Protection Zones**, the City shall consider the acquisition of properties located in the most **vulnerable areas** on an ongoing basis.

- The City shall plan to minimize the amount of impervious surfaces that may require the application of road salt located within the Intake Protection
 Zones, and in consultation with the Risk Management Official, consider the circumstances where the application of road salt to impervious surfaces is, or would be a significant drinking water threat.
- p. The establishment of a new waste water collection facility within an **Intake Protection Zone** is generally prohibited. Such a facility shall only be permitted in cases where:
 - i. The proposed facility is intended to replace an existing facility;
 - ii. The proposed facility would be more protective of drinking water; and,
 - iii. The instrument for the proposed facility contains conditions that ensure that it does not become a **significant drinking water threat**.

All existing development located within **Intake Protection Zone** 1 requiring sewage disposal must be connected to a municipal waste water collection system where the connection is feasible given financial and technical constraints.

- q. Construction of waste water collection facilities that collect or transmit sewage containing human waste within the **Intake Protection Zones** shall comply with construction standards that will ensure that the activity is not a **significant drinking water threat**.
- r. The City will implement a maintenance program for existing stormwater management facilities within the **Intake Protection Zones**, which will prioritize regular inspections, maintenance and asset management activities to ensure they are being adequately maintained such that the facility is not a **significant drinking water threat**.
- s. The City will develop a Management Plan to reduce the presence of waterfowl on municipally owned properties with the **Intake Protection Zones**. The Plan will follow an adaptive approach to waterfowl management that includes habitat modification and ongoing monitoring of the effectiveness of the Plan. The Plan may include but is not limited to **site alterations** to reduce the attractiveness of the property to waterfowl, such as shoreline planting and installation of physical barriers.
- t. The City will support efforts to implement any incentive programs that promote and support the use of best management practices as would apply to activities that are or would be **significant drinking water threats** within the **Intake Protection Zones**.

- u. The City will ensure the development and implementation of an ongoing education and outreach program which will seek to educate anyone engaging in an activity that is or would be a **significant drinking water** threat and may include:
 - i. The location of Vulnerable Areas;
 - ii. Best management practices that can minimize or eliminate the impacts of the subject activities on the drinking water source; and,
 - iii. Opportunities for funding under the Ontario Drinking Water Stewardship Program or other applicable incentive programs.
- The City will provide an annual report to the Source Protection Authority ٧. regarding source protection initiatives in accordance with the Trent Source Protection Plan and the Clean Water Act, 2006.
- In accordance with the Clean Water Act, 2006, the approved Trent W. Assessment Report identifies all Intake Protection Zones, Wellhead Protection Areas, Significant Groundwater Recharge Areas and Highly **Vulnerable Aquifers** within the Source Protection Area and the relevant circumstances where an activity or condition is or would be a significant, moderate, or low drinking water threat. Within the City of Peterborough, such vulnerable drinking water areas in the Assessment Report include:
 - i. **Intake Protection Zone** 1 (IPZ-1): The primary protection zone is the most vulnerable area for surface water intakes due to its proximity to the intake and is based on setbacks from the intake pipe and the area within a 120 metre setback of the high water mark of the related surface water body..
 - ii. **Intake Protection Zone** 2 (IPZ-2): A secondary protective zone that generally extends upstream of the IPZ-1 and is defined as the area within and around a surface water body or transport pathway that may contribute water to an intake within two hours of a contamination event. Where the IPZ-2 abuts land, the area within a 120 metre setback of the high water mark of the related surface water body is included in the delineation.
 - iii. Intake Protection Zone 3 (IPZ-3): A protective zone where early warning activities such as monitoring may be effective and the area within each surface water body that may contribute water to the associated intake. Where the IPZ-3 abuts land, the area within a 120 metre setback of the high water mark of the related surface water body is included in the delineation.

- iv. **Wellhead Protection Area** E (WHPA-E): An area that is delineated where a municipal well is considered to be under the direct influence of surface water (groundwater under the direct influence or GUDI).
- v. Significant Groundwater Recharge Area (SGRA): An area where a volume of water moves downward from the surface to recharge an aquifer and is therefore desirable to regulate or monitor drinking water threats that may affect the recharge of the aquifer.
- vi. **Highly Vulnerable Aquifer** (HVA): An aquifer that is susceptible to contamination from the surface. The depth and type of subsurface material over the aquifer affect its vulnerability.
- x. Where development or **site alteration** is proposed within an IPZ, a WHPA, a SGRA, or an HVA, a hydrogeological assessment or Impact Assessment may be required to demonstrate that the quality and quantity of water will be protected, improved or restored. The requirement and scope of the study will be determined by the City in consultation with the **Conservation Authority**. The recommendations or results of the study may be implemented as per site plan control approval, use of a holding symbol and/or special zone provisions. If it is determined through a hydrogeological assessment or Impact Assessment that the risk cannot be mitigated to the City's satisfaction, the City should not approve the planning application.

6.1.5 Stormwater Management

- a. The effects and impact of stormwater management, including quantity and quality control and **low impact development** features, form an integral and important part of development, redevelopment and public works. As such, stormwater management should be an important part of any development consideration.
- b. The objectives for stormwater management are as follows:
 - i. Maintaining or enhancing surface water quality;
 - ii. Preventing and limiting flood risk for both new development and existing built up areas;
 - iii. Maintaining and enhancing the natural hydrologic cycle, including the promotion of water balance, volume control and low impact development;

- iv. Creating a system that is sustainable, well maintained and cost effective; and,
- v. Promoting a system that enhances the environmental, aesthetic and recreational potential of the City.
- c. Stormwater management facilities, including stormwater management ponds, shall be permitted on lands in any land use designation, with the exception of the Natural Areas Designation, the vegetation protection zone for a natural heritage feature, or a natural hazard unless authorized by the Conservation Authority. Notwithstanding the above, limited engineering components, such as stormwater management pond outlets, may be considered in the Natural Areas Designation, the vegetation protection zone for a natural heritage feature, or a natural hazard, subject to the results of an Environmental Impact Study and subject to the approval of the City and Conservation Authority.
- d. All new development in the City shall utilize stormwater management techniques to control the quality of run-off and control erosion and sedimentation during and after construction, in accordance with the City's prevailing engineering design standards, in order to minimize adverse effects on the receiving body of water. The City's Watershed Plan, Flood Reduction Master Plan and Engineering Design Standards will guide the quality and quantity control criteria.
- e. Stormwater quality control, in accordance with the latest Provincial guidelines, shall be implemented for new development, incorporating an integrated treatment train approach. Every effort will be made to incorporate **low impact development** techniques, **green infrastructure** and other innovative methodologies to minimize changes to the water balance on the development site by reducing peak flow and runoff volumes, and provide appropriate quality and quantity control of runoff at the source.
- f. The City encourages development proponents to propose innovative stormwater management works, including but not limited to, underground stormwater storage and source control techniques, to control stormwater quality and quantity, erosion, sedimentation and temperature, subject to approval by the City and the **Conservation Authority**.
- g. The City will pursue opportunities to implement quantity and quality controls for stormwater management works and/or source control programs where current controls do not exist or are not adequate.

- h. The City will develop a stormwater plan, or equivalent for its serviced settlement area that:
 - i. Is informed by watershed planning;
 - ii. Protects the quality and quantity of water by assessing existing stormwater facilities and systems;
 - iii. Characterizes existing environmental conditions;
 - iv. Examines the cumulative environmental impacts of stormwater from existing and planned development, including an assessment of how extreme weather events will exacerbate these impacts and the identification of appropriate strategies for building adaptive capacity;
 - v. Incorporates appropriate **low impact development** and **green infrastructure**;
 - vi. Identifies the need for stormwater retrofits, where appropriate;
 - vii. Identifies the full life cycle costs of the stormwater infrastructure, including maintenance costs, and develops options to pay for these costs over the long-term; and,
 - viii. Includes an implementation and maintenance plan.
- i. The City recognizes that effective stormwater management involves a hierarchy of planning and management techniques. As such, in addition to a Watershed Plan, the City may undertake Sub-watershed Plans, Master Drainage Plans, Functional Servicing Plans and Stormwater Plans to ensure appropriate stormwater control and management.
- j. No Official Plan Amendment, Zoning By-Law Amendment or Plan of Subdivision shall be approved if the proposed development would have an adverse impact on the hydrologic cycle.
- k. Required stormwater facilities shall not be considered as part of any parkland dedication where the lands are not useable for any other purpose. The City will encourage stormwater management works which allow the land to be usable for other purposes.
- I. The City may acquire, where deemed appropriate, access to **watercourses** or easements along **watercourses** for the purposes of stream improvement works and maintenance, flood/hazard mitigation and works to protect human health.

- m. Stormwater Management Plans are required for all new Secondary Plans, Plans of Subdivision, Official Plan Amendments, vacant land Plan of Condominiums, Zoning By-Law Amendments, developments under Site Plan Control, and may be required for developments, which by their nature, magnitude or location have a potential for **negative impact** on the drainage area. The proposed Stormwater Management Plan shall be acceptable to the relevant agencies and bodies having jurisdiction and shall be designed in accordance with any City design standards, and if applicable, the Master Drainage Plan for the sub-watershed area. The Stormwater Management Plan will:
 - i. Be informed by a sub-watershed plan or equivalent;
 - ii. Incorporate an integrated treatment approach to minimize stormwater flows and reliance on stormwater ponds, including the incorporation of appropriate low impact development and green infrastructure;
 - Establish planning, design and construction practices to minimize vegetation removal, grading and soil compaction, sediment erosion, and impervious surfaces;
 - iv. Align with the City-wide stormwater master plan, where applicable; and,
 - v. Address such matters as best management practices, consideration of watershed flow regimes and headwater areas, stormwater flow control, centralized facilities, impact on groundwater resources, maintenance of base flow and storage levels and effects on water quality including temperature, wildlife, fisheries and the implementation of any mitigating measures.
- n. The City shall establish a protocol to monitor and maintain its stormwater management infrastructure throughout the City.

6.1.6 Utilities and Telecommunications

- a. All utilities, telecommunications/communications facilities and other cable services shall typically be located underground and can potentially be grouped into a single utility trench as part of new development. In the case of existing built up areas, they shall be relocated underground and grouped as part of any major road reconstruction, where feasible. For larger equipment, and facilities that are required to be located above grade, the City shall ensure that appropriate locations are identified and/or cluster sites have been determined, which take into consideration the location requirements for larger infrastructure within public rights-of-way, as well as easements on private property. New utility plants on public roads will require a Municipal Consent from the City.
- b. Utility and telecommunications/communications services shall be permitted in all land use designations. Where any of these facilities are to be located on lands within the Natural Areas Designation or within 120 metres of a natural heritage feature, an Environmental Impact Study or equivalent shall be prepared.
- c. The City shall support the shared placement of utilities, including distribution pipelines, within easements and rights-of-way to minimize land requirements and increase efficiency of utility construction and maintenance.
- d. Distribution pipelines will be encouraged to locate in such a manner so as not to impact on the function, amenity or safety of adjacent land uses and shall be designed and constructed in consultation with the City and at the sole cost of the utility and/or the appropriate developer. Utility installations shall respect the surrounding context and character to the extent possible.
- e. The City will encourage, support and pursue the provision of electronic communications technology involving high capacity fibre optic networks, or other technologies, to enhance telecommunications and high-speed broadband throughout the entire City. The City will consider a development standard that would ensure the provision of high capacity fibre optic lines in all new developments.
- f. Lands required to be used for large utility structures shall be shown as a block(s) on a draft plan of subdivision and the location shall be confirmed as a condition of draft plan approval or Site Plan Approval, to the satisfaction of the utility provider and the City.

g. Utility providers, whether public or private, will be consulted and will be part of a co-ordinating committee to assure the most economic provision of utilities and services and to minimize the disruption to the activities of the City.

6.1.7 Extension Beyond City Limits

- Municipal utility services, sanitary sewer and water supply shall not be extended beyond the City boundaries, except in the case where such infrastructure is to serve City owned facilities such as the Peterborough Airport.
- b. Notwithstanding any other policy of this Plan, municipal water and sanitary sewer services may be extended beyond City limits to the Woodland Acres Settlement Area (Township of Smith-Ennismore-Lakefield), not to exceed a total servicing equivalent of 272 dwelling units.
- c. Notwithstanding any other policy of this Plan, municipal water and sanitary sewer services may be extended beyond the City to the Donwood Settlement Area (Township of Otonabee-South Monaghan), not to exceed a total servicing equivalent of 300 dwelling units.

6.2 Transportation: A Linked Community

6.2.1 Introduction

- a. Successful communities are supported by planning public streets, spaces and facilities to be safe, accessible, inclusive and equitable, to foster social interaction and health, to facilitate community connectivity, and to meet the needs of pedestrians, cyclists, transit users and motorists.
- b. The City's transportation system is intended to move goods and people in a safe, efficient and economical manner. The system may include roads, public transit, pedestrian linkages, bicycle routes, multi-use trails and air and rail facilities.
- c. Land use planning and the transportation system will be developed as complementary parts of this Plan to ensure efficient and practical accessibility throughout the city. Efficient use will be made of existing and planned transportation infrastructure.

Objectives

- d. The development of the City's transportation system shall be directed to achieve the following objectives:
 - To develop, support and maintain a convenient, accessible, affordable and integrated transportation system that incorporates and accommodates active transportation, public transit and vehicular traffic;
 - ii. To encourage the use and development of all modes of transportation, considering such factors as land use, economics, growth and urban form, economic development, affordability, greenhouse gas emission reductions, and energy conservation, to provide access to services and facilities throughout the City;
 - To plan for a more balanced transportation system which supports and encourages the increased use of public transit and active transportation;
 - iv. To have regard for the overall quality of life of all residents and visitors in the provision of transportation services and facilities;
 - v. To provide a transportation system with appropriate connections between City, regional and Provincial transportation systems; and,

vi. To implement appropriate, selective Transportation Demand Management (TDM) measures in order to affect how, when and by what mode travel is conducted within the City.

6.2.2 General Policies

- The City's transportation system will be planned to: a.
 - i. Be safe, energy efficient and fully accessible;
 - ii. Offer a balance of transportation choices that reduce reliance on the automobile and which support and encourage the increased use of public transit, cycling and pedestrian facilities;
 - iii. Provide connectivity among transportation modes for moving people and goods; and,
 - iv. Address future projected needs within the City in consultation with the County of Peterborough, neighbouring municipalities and other levels of government.
- b. The City will prepare and update a Transportation Master Plan to inform this Plan. The Official Plan will be amended accordingly to implement the conclusions and recommendations of the Transportation Master Plan.
- C. The City supports land use planning that is integrated with safe and efficient transportation systems for the movement of people and goods. Where feasible, Transportation Demand Management (TDM) strategies will be employed to create a more balanced and efficient multi-modal transportation system that addresses current and future needs and reduces single-occupancy vehicle travel. The TDM strategy may include carpooling programs, preferential parking, transit pass incentives, cycling incentives, provision of shuttles and walking programs. The City's goals with respect to TDM will be further achieved through the following strategies:
 - i. Approval of increased height and density on transit corridors to support more frequent service;
 - ii. Provision of a wider range and mix of uses throughout the City to minimize the need for vehicle trips and trip lengths and to allow residents to use active transportation and transit to reach services and amenities; and,
 - Connecting various modes of transportation, including connections which cross jurisdictional boundaries.

- d. The primary function of public rights-of-way shall be for the movement of people and goods, while also providing appropriate access to infrastructure and adjacent properties, supporting public gathering space and social interaction, and accommodating recreational activities. The maintenance of an adequate right-of-way width to accommodate all planned modes of transportation for a public street shall also consider the placement of utility and communication services in both aboveground and underground locations, as well as the placement of appropriate landscape/streetscape features, low impact development features, traffic management devices and signage.
- e. Transportation infrastructure shall be designed and located to maximize safety and energy efficiency, and to minimize the impact on the **Natural Heritage System**.
- f. The City shall coordinate with the Province, the County, the railway companies, inter-city bus companies and other authorities, in order to provide an effective regional transportation system, adequate external roadway capacity, suitable access to and from the City, and to preserve and enhance the urban environment and function of the City.
- g. The City will plan for and protect transportation corridors, planned corridors and major goods movement facilities over the long term to meet the current and projected needs of the City's population and businesses. Specific means of achieving that goal include the following:
 - Development within the planned corridors will be limited to types of development that will not preclude or negatively affect the use of the corridor for its intended purpose;
 - ii. New development proposed on adjacent lands to existing or planned corridors will be compatible with the long term purpose of the corridor and will be designed to avoid or mitigate any negative impacts on both the adjacent use and the corridor;
 - iii. In consultation with the County of Peterborough and neighbouring townships, the City will plan for uses near the airport and major intersections of Highway 7-115 so that major goods movement facilities (including the airport) will be protected over the long term;
 - iv. Any sensitive land uses that may be permitted near a major goods movement facility will be appropriately separated, designed or buffered to ensure the long term use of the facility in accordance with Provincial guidelines, and,

- v. Wherever feasible, protecting and re-using abandoned corridors in a manner that preserves their linear connectivity.
- h. The planned locations of Arterial Roads, Collector Roads and bicycle routes are shown on **Schedule D: Road Network Plan** and **Schedule E: Trails and Bikeways Network Plan**. The locations of facilities and intersections illustrated on **Schedule D: Road Network Plan** are approximate and as areas are developed, it may be necessary to alter their alignment or location. Such alterations shall not require an amendment to this Plan provided that:
 - i. The roadway classification is not altered;
 - ii. The alteration is recommended as a result of a Secondary Plan process, the approval of a draft plan of subdivision, or a Class Environmental Assessment process; and,
 - iii. The adjacent land use designations are not affected in any significant way as determined by the City.
- i. Schedule D: Road Network Plan and Schedule E: Bikeways and Trails Network Plan does not attempt to comprehensively delineate all future roadways, bikeways and trails. Future roadways, bikeways and trails may be delineated through the completion of a transportation master plan, detailed Secondary Plans, plans of subdivision and Environmental Assessments and incorporated into Schedules D and/or E as part of an Official Plan Amendment.
- j. New development shall consider the needs of emerging online retail and transportation trends. This includes, but is not limited to, ensuring that sufficient space is provided to accommodate ride-sharing drop-off zones, short-term parking for frequent delivery vehicles, bicycle parking and charging stations for electric vehicles.

6.2.3 Active Transportation

- a. This Plan requires that all development contribute to the creation of a 4-season walkable and connected community with multiple destinations within walking or cycling distance of all residents. Development will be accommodated on a connected and permeable grid of streets including Arterial Roads, Collector Roads, Local Roads and laneways with associated parks and open spaces to establish development blocks that achieve an orderly and efficient pattern and visual interest and diversity. Development block lengths shall be designed to be between 150 to 250 metres.
- b. This Plan shall provide for a balanced transportation system that promotes **active transportation** facilities to encourage walking and cycling. This Plan requires that a highly walkable community is developed based on an interconnected network of streets with pedestrian supportive streetscapes. This network will provide for ease of access, orientation and safety for pedestrians, cyclists, and motor vehicles, ensuring that all members of society have a range of transportation options.
- c. Sidewalks, bike lanes and multi-use trails will connect to the street network and to community amenities and **public service facilities** and will ensure that corridors between key destinations are fully accessible and support **active transportation**. The winter maintenance of **active transportation** facilities will be an important consideration, particularly along routes that connect pedestrians to key destinations such as schools and transit stops.
- d. **Active transportation** routes, such as sidewalks, bike lanes and multi-use trails, will include streetscaping and design elements that promote pedestrian and cyclist comfort and safety, and are designed to enhance accessibility for all residents, in compliance with the Accessibility for Ontarians with Disabilities Act.
- e. The creation of a generous promenade is encouraged along key **active transportation** corridors, including wide sidewalks and significant tree plantings. Where feasible, the design of major corridors should include a greenway treatment, accommodating multi-use trails, landscaping, stormwater management facilities, and small parks and/or seating.
- f. Mid-block walkways, pedestrian mews and landscaped spaces are encouraged to supplement the street pattern and connect open spaces to major destinations and transit corridors.

Municipal Active Transportation Plan

- g. The City should develop a Municipal Active Transportation Plan, either independently or part as a Transportation Master Plan. The Municipal Active Transportation Plan shall include, at a minimum, requirements for:
 - i. Sidewalks/trails in new development;
 - ii. New sidewalks and trails, and enhancements to existing sidewalks and trails in the built-up areas;
 - iii. Dedication of lands in new development to complete future road and multi-use trail connections;
 - iv. Cycling and pedestrian safety measures (bike lanes, signage);
 - v. Implementation of Accessibility for Ontarians with Disabilities Act standards; and,
 - vi. Secure bicycle racks and shelters, with appropriate connections to buildings.

Streetscapes/Sidewalks

- h. The coordinated installation of roadways, utilities, sidewalks, bike lanes, streetscaping elements, lighting, tree planting and **low impact development** features will be part of the planning, design, and development of all streets. Particular regard will be given to adequate space and safety provisions for the movement of pedestrians and cyclists, with a clear system of through routes, and for safe transfers on and off of transit vehicles.
- i. Sidewalks shall form a continuous network throughout the community, connect to the trails network and constitute an integral part of the pedestrian system to promote active transportation. The City shall implement a Sidewalk Strategic Plan to address fragmented sidewalks and lack of connectivity within existing residential areas.
- Pedestrian crossing facilities should be provided at locations where important civic destinations and/or significant pedestrian traffic is anticipated, such as near **public service facilities** and significant retail facilities.

- k. Streetscaping elements shall be provided throughout the community. They shall be designed to be consistent and complementary to the character of the community. Streetscaping elements may include a unified furnishings palette and a paving pattern that denotes which transportation modes have priority. The streetscaping palette shall include, but is not limited to:
 - i. Street lighting:
 - ii. Street trees;
 - iii. Landscape plantings;
 - iv. Low impact development features;
 - v. Street furnishings; and,
 - vi. Signage/wayfinding.
- I. The City should develop an active urban street tree planting program which shall include:
 - i. Locations and distribution of street trees;
 - ii. Appropriate tree species; and,
 - iii. Design and planting specifications.
- m. The requirements of the Accessibility for Ontarians with Disabilities Act shall be incorporated into the design or re-design of all sidewalks, including geometric standards, placement of furniture and landscaping, use of curb cuts and ramps, drainage and route signage.
- n. Sidewalks shall be required on all public roads as follows:
 - i. On both sides of Arterial and Collector Roads;
 - On both sides of all Local Roads, including culs-de-sac with 30 or more residential units, and any cul-de-sac having a through pedestrian connection.

Sidewalks will also be required on at least one side of new condominium private roads and public or private lanes. Where the City determines that physical or practical circumstances would prohibit or not warrant a sidewalk connection, such facilities may not be required.

Multi Use Trails

- o. The City will continue to expand and enhance its trails system to promote connectivity, mobility, accessibility and active transportation within and between neighbourhoods, Employment Districts, public service facilities and the waterfront. Any proposed trail within the Natural Areas Designation or the associated minimum vegetation protection zone will require the approval of the City, subject to the policies of this Plan.
- p. In developing a comprehensive multi use trails network throughout the City, the following will apply:
 - The multi-use trails network will include and link to trails within the Natural Heritage System, stormwater management facilities, parks and open spaces and the sidewalks and bike lanes within the street network;
 - Rights-of-way for the multi-use trails network that are not already on public lands, will be dedicated to the City as part of the land requirements for transportation through new development;
 - iii. Multi-use trails, where within the street right-of-way, will generally be separated from the road right-of-way by a landscaped area; and,
 - iv. Where a multi-use trail is adjacent to, and within the prescribed minimum **vegetation protection zones** (or buffer) of the **Natural Heritage System**, it will be designed to avoid impacts on the features and ecological and hydrologic functions, including the requirement to utilize native, non-invasive plant materials.

- q. The multi-use trails network shall be designed to:
 - i. Be of a sufficient width to accommodate all users, of all abilities, and to accommodate two-direction travel;
 - ii. Meet the requirements of the Accessibility for Ontarians with Disabilities Act, including with respect to slopes;
 - iii. Encourage water infiltration;
 - iv. Include wayfinding/directional signage throughout;
 - v. Provide, at trail heads, and at regular intervals along the route, benches, waste and recycling receptacles and bicycle racks;
 - vi. Minimize vehicular crossings, but where they do cross, provide clear signage and appropriate curb-cuts and safety measures; and,
 - vii. Accommodate lighting that is energy efficient (e.g. PV, LED), Dark Sky/Nighttime Friendly compliant, and adequate for vehicular, cyclist and pedestrian requirements, where deemed appropriate.



Cycling Infrastructure

- r. The Bikeway Network illustrated on **Schedule E: Trails and Bikeways** Network Plan is comprised of a network of on- and off-road routes for cycling and other forms of non-motorized vehicular movement that shall be provided as part of or separate from streets to minimize conflict with motorized vehicles and pedestrians.
- The City shall continue to provide for the development of connected S. bikeways by:
 - i. Implementing the Schedule E: Trails and Bikeways Network Plan as per the recommendations of the Transportation Master Plan and/or Cycling Master Plan;
 - ii. Ensuring that all new development proposals and infrastructure works provide bikeways and support facilities, such as bicycle parking, in accordance with Schedule E: Trails and Bikeways Network Plan and the Transportation Master Plan and/or Cycling Master Plan;
 - Maintaining the surface condition, including repair and clearing, markings and signage of on- and off-road bikeways;

- iv. Ensuring that bikeway design and implementation is coordinated with pedestrian routes and open space systems as well as access to public transit;
- v. Updating and implementing a cycling master plan associated with **Schedule E: Trails and Bikeways Network Plan**; and,
- vi. Considering the connectivity of the City's **active transportation** network to the Province-wide Cycling Network identified by the Province.
- t. Proposed development or improvement to transportation facilities along routes designated as Bikeways on **Schedule E: Trails and Bikeways Network Plan** shall incorporate appropriate design measures to improve conditions for accommodating non-motorized forms of travel. Specifics of such designs will be required to be included as part of Class Environmental Assessments, site plans or development agreements involving properties along such routes.
- u. Wherever possible, bicycle and pedestrian networks will be separated from each other, physically and/or through use of surface markings, signage and/or other means, to avoid potential conflicts.
- v. The City will prepare road or area-specific cross-sections to illustrate required components of the right-of-way, where appropriate.

6.2.4 Complete Streets

- a. A **complete street** is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including cyclists, pedestrians, transit riders, and motorists, appropriate to the function and context of the facility.
- b. In the design of all roads, regard will be given to the provision of adequate space and safety measures for pedestrians and cyclists, and for safe transfers on and off transit vehicles. Specific road requirements shall be determined at the detailed design stage and in addition to traffic demand, be based upon considerations such as the preservation of trees and overall effect upon the streetscape.
- c. Improvements, road reconstruction and standards will follow, as much as possible, the most recently adopted Transportation Master Plan, and the applicable policies of this Plan and in particular the policies related to complete streets.

- d. The road network serving the Peterborough community will be developed under the principle of complete streets, with appropriate facilities which balance the needs of pedestrians, cyclists, transit users, and motorists. All streets will be designed as important components of the public realm, providing a network that is appealing, safe and accessible for all transportation modes. The road network shall be designed to provide vistas and view sheds to public parks and open spaces and to the Natural Heritage System to assist in the creation of a sense of place. In addition, and where feasible, development plans will maximize solar gains through street orientation to maximize potential for passive and active solar energy.
- e. The City will establish a **complete streets** approach for the design of new streets and the refurbishment and reconstruction of all existing Arterial, Collector and Local Roads to accommodate the needs and safety of all road users. As such, the City shall:
 - i. Consider the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities and services on the public road network;
 - View all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in the City and to recognize bicycle, pedestrian, and transit modes as integral elements of the City's transportation system;
 - iii. Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams;
 - iv. Build **complete streets** that facilitate bicycle, pedestrian, and transit travel, beginning early in system planning and continuing through project delivery, maintenance and operations;
 - v. Give greater emphasis to pedestrians in all design and capital works within the Central Area designations;
 - vi. Promote collaboration and partnerships among the Provincial government, all City departments and community stakeholders to plan, develop, and maintain a network of **complete streets**;

- vii. Prepare a Complete Streets Guide that outlines statutory requirements, planning policy, and project delivery procedures to facilitate multimodal travel, which includes connectivity to public transit for cyclists and pedestrians, and that provides tools and establishes processes that ensure regular maintenance and operations activities meet the safety and mobility needs of all users, including cyclists, pedestrians, and transit users. The Complete Streets Guide should include consideration of:
 - Reduced right-of-way and traffic lane widths;
 - Permission for on-street parking;
 - A hierarchy of bike lanes, from fully separated to demarcated to sharrows;
 - Requirements for wider sidewalks and mid-block pedestrian crossings;
 - Requirements for transit amenities; and,
 - The use of design features such as curb bump-outs, enhanced medians and boulevards and defined standing areas for pedestrians and/or cyclists at intersections.



6.2.5 Public Transit

- a. Transit planning and land use planning will be integrated and mutually supportive. Plans for new development will provide safe, convenient and efficient connection to applicable public transit, pedestrian and cycling facilities. To facilitate the development of a **transit-supportive** environment, development plans will address the following measures:
 - i. Densities that are supportive of transit and commensurate with the type and frequency of transit service planned for the area;
 - ii. A road pattern and related pedestrian and cycling network that provide for direct pedestrian and cycling access to transit routes and stops; and,
 - iii. Transit stops and user amenities on primary and secondary transit corridors and Arterial Roads, and the incorporation of these features into road design requirements.

- b. The City shall continue to operate and improve a public transit system to provide efficient and equitable transportation to all residents, in direct response to the public's need for and use of the public transit system. Well-designed transit can serve as a stimulus for residential intensification and can shape where and how growth happens in the City.
- c. The City will require development and redevelopment proposals to provide for and support pedestrian and cycling facilities and provide access to existing or planned public transit services within a walking distance of no more than 500 metres, subject to the Public Transit Operations Review.
- d. The City will design a scheduled fixed route transit service to provide access within a maximum 500 metres walking distance over 95 per cent of the City's developed urban area.
- e. The City, through Peterborough Transit, will re-consider the continuation of any scheduled fixed route service on any transit route proven to continually provide for less than 10 trips per revenue hour.
- f. The City will require that development proposals be designed to facilitate easy access to public transit by:
 - Ensuring that all new development forms and street patterns support the use of transit in accordance with established transit and transportation planning principles;
 - ii. Requiring that Collector and Arterial Road patterns support the extension of transit routes in areas of new development;
 - Requiring that sidewalks and other pedestrian facilities connect major traffic generators to public transit, including internal connections through individual sites;
 - iv. Ensuring that the design and maintenance of transit facilities take user comfort and safety into consideration, including the provision of amenities including, but not limited to bicycle parking, weather protection, seating, waste/recycling receptacles, lighting, route information, and automated fare machines;
 - v. Ensuring the appropriate design of streets to accommodate public transit use; and,
 - vi. Requiring appropriate pedestrian facilities and road improvements to provide for on- or off-site transit facilities in order to integrate transit use within large individual developments.

- g. The City will work in association with local school boards to minimize any duplication of service between the boards and Peterborough Transit, and to determine where greater overall efficiencies can be achieved through coordination of services.
- h. The City will continue to upgrade regular transit service to full accessibility, and maintain a parallel, specialized service for those persons unable to utilize the regular service.
- i. The City shall work with Peterborough County, the Province, adjacent municipalities and any other applicable agencies to support transit service integration within and across municipal boundaries and between transit and other modes of travel beyond the City's boundaries.

6.2.6 Road Network

- a. The road network within Peterborough is illustrated on Schedule D: Road
 Network Plan and shall be classified as follows:
 - i. Provincial Highway to serve the free flow of large volumes of interurban, intra-urban and regional traffic through the City at high speeds and to interconnect with controlled access to the Arterial Road network.
 - ii. High Capacity Arterial to serve intra-municipal and inter-regional traffic between major land use areas at medium speeds through the City, with controlled access primarily from Arterial and Collector Roads, except where existing land use development makes this impractical. The High Capacity Arterial can be expected to accommodate up to 800 vehicles per hour per lane with a potential cross-section of up to 6 travel lanes plus turning lanes and separated bikeways within a 36 metre right-of-way. High Capacity Arterials shall include sidewalks on both sides.
 - iii. Medium Capacity Arterial to serve intra-municipal and inter-regional traffic between major land use areas at medium speeds through the City, with controlled access primarily from Collector Roads, except where existing land use development makes this impractical. Medium Capacity Arterials can be expected to accommodate up to 700 vehicles per hour per lane with a potential cross-section of up to 4 travel lanes plus turning lanes and on-street bike lanes in a 30 metre right-of-way. Medium Capacity Arterials shall include sidewalks on both sides.

- iv. Low Capacity Arterial to serve intra-municipal and inter-regional traffic at medium speeds through the City, with controlled access except where existing land use development makes this impractical. Low Capacity Arterials can be expected to accommodate up to 600 vehicles per hour per lane with a potential cross-section of up to 4 travel lanes plus turning lanes, in a 30 metre right-of-way. Low Capacity Arterials shall include sidewalks on both sides and may accommodate some on-street parking and/or on-street bike lanes.
- v. High Capacity Collector to serve intra-municipal traffic for medium distances between Arterials and Local streets, with access to adjacent properties. High Capacity Collectors can be expected to accommodate up to 500 vehicles per hour per lane with a potential cross-section of up to 4 travel lanes in a 26 metre right of way. Private driveways and onstreet parking and bikeways may be accommodated along such streets and sidewalks shall be included on both sides.
- vi. Low Capacity Collector to serve intra-neighborhood traffic for short distances between Arterial and Local streets, with access to adjacent properties. Low Capacity Collectors can be expected to accommodate a capacity of up to 400 vehicles per hour per lane with a potential cross-section of up to 2 travel lanes in a 23 metre right-of-way. Low Capacity Collectors pass through areas with fronting properties, driveways, onstreet parking and possible on-street bikeways.
- vii. Local Roads to serve traffic from abutting properties to Collector Roads within a right-of-way of 20 metres. On-street parking may be expected and through traffic is usually discouraged. On-street bikeways maybe established to ensure a continuous, logically linked network, and sidewalks shall be included on both sides, except on culs-de-sac with fewer than 30 residential units and no through pedestrian connection.
- b. The preceding roadway classifications describe maximum roadway capacities and base widths for the road rights-of-way that may be expected. **Schedule I: Road Allowance Widths** provides a more specific description of the width of rights-of-way required by the City to implement the Transportation Master Plan.

- c. Where a property is the subject of an application for planning approval, including Site Plan Approval, and abuts a road right-of- way that does not meet the expected width as described in **Schedule I: Road Allowance Widths**, it is intended that the developer provide sufficient land to meet the width, at no cost to the City, as a condition of approval.
 - Land for road widenings shall generally be taken equally from both sides of the road right-of-way unless topographic features or other unique conditions necessitate taking a larger widening or total widening on one side of an existing right-of-way. Additional land for widening roads and intersections to improve sight lines at intersections, provide off-street bicycle lanes, accommodate landscaped medians, accommodate transit amenities, provide turning lanes and provide grade separations may also be required. The length of each side of the sight triangle abutting the road shall be in accordance with City standards.
- d. Notwithstanding Policy c., the required right-of-way allowance widths and/or sight triangle requirements may be waived or adjusted on a case-by-case basis by the City where:
 - i. An application for development and/or **site alteration** is of a minor nature;
 - ii. It is determined through the development review process that it is not feasible or desirable to widen an existing right-of-way width to the prescribed width in consideration of, but not limited to, the existing streetscape, natural heritage features, **cultural heritage resources**, built form and public need; or,
 - iii. An environmental assessment, Secondary Plan study, or other transportation or planning study approved by Council has deemed an alternative right-of-way width as appropriate.
- e. Where a proposed development that results in increased vehicular traffic which cannot be effectively or safely accommodated within the expected right-of-way is approved, the City may re-evaluate the road classification or require additional lands along the entire road frontage to provide for potential turning lanes and public transit, bicycle and pedestrian facilities.
- f. For newly created Arterial Roads, direct access to adjacent properties will normally be prohibited by the establishment of 0.3-metre reserves or be designated by By-Law as controlled access streets.

- g. New direct access to Arterial Roads in developing areas will be avoided for new residential development, except where it facilitates residential intensification in accordance with the policies of this Plan. Where redevelopment and/or intensification occurs, the development of shared access will be encouraged to reduce the number of driveways accessing Arterial Roads. Existing private access associated with redevelopment may be further regulated or eliminated where possible and a 0.3-metre reserve may be taken to restrict access to the Arterial Road.
- h. For Arterial Roads in established urbanized areas, development and redevelopment will consider the appropriateness of relocating access to other streets, satisfactory spacing and design of access locations. New development or redevelopment that would require backing a motor vehicle onto an Arterial Road will not be permitted.
- i. Where permitted by the Zoning By-Law, low-rise residential uses that are located adjacent to Provincial Highways and Arterial Roads will be required, wherever possible, to develop in a manner that will minimize direct access to such highways or roads, but which avoids back lotting on Arterial Roads.

j. Where the City's Transportation Master Plan indicates the need to protect long-term future municipal roadway corridors in proximity to the City's boundaries to meet future needs for transportation and coordinated regional connectivity associated with growth beyond the population horizon of this Plan, the general location of Long Term Corridor Protection Areas may be identified on **Schedule D: Road Network Plan** by amendment to this plan, in consultation with the County of Peterborough and affected adjacent municipalities, final alignments for any identified corridors will be determined on the basis of corridor protection studies and Class Environmental Assessments in partnership with the County and affected adjacent municipalities.

Where Long Term Corridor Protection Areas have been identified with concurrence from the County and affected adjacent municipalities, the City will cooperate with the County and affected adjacent municipalities to protect these corridors through negotiation in the review of area plans, plans of subdivision and Official Plan and/or Zoning By-Law Amendments. Where the ultimate alignment and right-of-way of a long-term corridor has been determined, the City will seek to ensure the required road allowance is reserved either as part of, or independent from such planning approvals. Where such allowances have not been determined, the City will request a corridor study in conjunction with proposals to develop land where an allowance may be required to determine which portion of the subject land should be reserved for the future road allowance.

In addition to all applicable municipal requirements, all development proposals adjacent to and in the vicinity of Provincial Highways will be subject to Provincial review and approval. Early consultation with the Province is encouraged to ensure the integration of municipal planning initiatives with Provincial transportation planning. Areas identified for future development that are located adjacent to or in the vicinity of a Provincial Highway or an interchange/intersection will be subject to the Province's policies and standards.

k. Traffic management strategies, signals and management techniques shall be considered where they would provide for the safe and efficient use of existing transportation facilities and minimize the potential impacts of traffic. Such measures may include the diversion of non-local traffic to peripheral Arterial Roads, use of traffic calming measures, on-street parking and inclusion of enhanced cycling and walking facilities.

- I. The City will designate and manage truck routes to provide for safe and efficient truck movement through and within the City, considering access to industrial and commercial locations. This same approach to truck route management will be used by the City to discourage truck traffic on Local and Collector Roads in predominantly residential areas.
- m. Future transportation master plans will consider the role, impact and accommodation of emerging technologies, such as car shares, ride sharing, online shopping deliveries, electric vehicles and autonomous vehicles.
- n. Culs-de-sac, crescent streets, and loop streets will be discouraged unless they are located adjacent to or nearby, and provide active transportation connections to, significant infrastructure, or are abutting the Natural Heritage System. Where culs-de-sac, crescent streets, and loop streets are deemed necessary, every effort will be made to minimize their impact on the connectivity and walkability of the street network. Further, back lotting or reverse lot frontages shall be avoided where feasible and not considered unless demonstrated to be the only alternative.

6.2.7 Parking

- a. Adequate and accessible off-street parking and loading areas shall be provided for all permitted uses. Specific requirements for vehicular and bicycle parking shall be articulated in the Zoning By-Law.
- b. The City may consider the payment of cash-in-lieu of parking for all or part of the off-street parking required by a proposed development located with Strategic Growth Areas or a proposed development for affordable and/or accessible housing.
- c. The City may enter into partnerships and/or develop a system for the provision of adequate off-street parking in defined parts of the City. Development of shared parking spaces between **public service facilities** and municipal parks is encouraged where the facilities are within walking distance.
- d. The City shall provide bicycle parking facilities at all municipally owned and operated facilities to promote the use of bicycles as an alternative to motor vehicles. Site Plan approval will require consideration of bicycle parking facilities for all new development.

- e. Development shall include context appropriate on-site vehicular and bicycle parking, as required in the Zoning By-Law. Vehicular parking is encouraged to be located in parking structures, either above or below grade, however, surface parking lots are permitted. Parking lots are subject to the following development requirements:
 - i. Parking facilities at-grade and/or in structures shall be appropriately designed and landscaped to complement the urban streetscape;
 - Above grade parking structures shall incorporate active uses at-grade facing onto any Arterial Road or Collector Road; and,
 - iii. Access to parking facilities shall be from secondary public roads, wherever possible.
- f. New City-owned structured parking facilities shall be subject to the following development requirements:
 - i. Parking facilities shall be appropriately designed and landscaped to complement the urban streetscape;
 - ii. Parking facilities shall include bicycle parking on the main level;
 - iii. Above grade parking structures shall incorporate active uses at-grade facing onto any Arterial Road or Collector Road; and,
 - iv. Access to parking facilities shall be from secondary public roads, wherever possible.

6.2.8 Railways

- The City shall encourage and support measures that will enhance the level of passenger rail service available to City residents, including commuter rail service.
- b. The City shall monitor and cooperate with railway companies to identify portions of railway lands that may be practical opportunities for transportation facilities. The City shall consider opportunities to share such lands and should such land become surplus to the railway company needs, consider the acquisition of such lines or lands for the City's possible use for transportation, utility, environmental, recreational or cultural purposes.

6.2.9 Navigable Waterways

- a. The navigable waterway comprises the Trent Canal and navigable portions of the Otonabee River. Maximum effort shall be made to minimize interruptions to other modes of traffic by traffic on the navigable waterway.
- b. The City will work with the Trent-Severn Waterway in planning for the development of recreational trails along portions of the Canal System's shorelands as shown on **Schedule E: Trails and Bikeways Network Plan**.



6.2.10 Air Transportation

a. Air transportation for the City and for the region is focused at Peterborough Municipal Airport, outside of the City. The airport will be developed to serve the City and the regional area. Regulations will be developed in cooperation with adjacent municipalities to ensure that expansion of the airport is not unduly restricted, while minimizing the impact of the airport on adjacent lands.

b. The City and County will ensure that streets and roads provide required groundside access to and from the Airport, and link where appropriate to other area transportation services.

This page is intentionally left blank.





7.0 IMPLEMENTATION

- a. This Plan shall be implemented by means of the powers conferred upon the City by the Planning Act, The Municipal Act and such other relevant Provincial statutes, enabling legislation, Plans, policies, guidelines and programs as may be applicable.
- b. The City shall undertake the implementation of this Plan in conjunction with citizens and other interested and affected stakeholders within the City.
- c. This Section outlines and describes the tools that the City may use to implement the Vision and Guiding Principles, objectives and policies of this Plan.

7.1 Indigenous Peoples of Canada and the Duty to Consult

- a. Peterborough is located on land which is in the traditional territory of the Michi Saagiig Nation and covered by Treaty 20 (Rice Lake Treaty, 1818). The signatories to Treaty 20 are Curve Lake First Nation, Hiawatha First Nation, and Scugog Island First Nation.
- b. In the spirit of reconciliation, in acknowledging the "free, prior and informed consent" as set out in the United Nations Declaration on the Rights of Indigenous Peoples as applied and interpreted by Courts of competent jurisdiction, and the right to carry out traditional pursuits in a respectful and unrestricted manner, Peterborough will continue its work on building a new relationship with Treaty 20 First Nations. "Free, prior and informed consent" involves consulting with Treaty 20 First Nations prior to development and gaining consent before moving forward, where appropriate.
- c. The City recognizes the urban Indigenous population in Peterborough and the broader interest of the Treaty 20 First Nations from a local and regional planning perspective. The City will engage and partner as appropriate with Indigenous Communities when considering planning matters that may affect their rights. Collaboration with the First Nations of Curve Lake, Hiawatha and Scugog Island will be the priority, with continued cooperation and communication with the Nogojiwanong Friendship Centre.

- d. In the spirit of reconciliation and the Aboriginal and treaty rights as set out under Section 35 of the Constitution Act, 1982, Peterborough shall work with local Treaty 20 First Nations and other Indigenous Communities on building a constructive and cooperative relationship based on mutual respect.
- e. Under this Plan, Peterborough will continue efforts to engage with local and regional Indigenous Communities on protocols for land use and development approvals. This approach will balance the growth and development requirements of the Provincial Policy Statement while acknowledging the traditional knowledge and cultural heritage of the Treaty 20 First Nations and other Indigenous Communities.
- f. The City acknowledges the value of the traditional knowledge and cultural heritage of Indigenous Communities and will encourage further partnerships to achieve the objectives of this Plan, support mutual learning and understanding and strengthen relationships. Involvement and engagement with Indigenous Communities will occur as early as reasonably possible on future planning proposals.

7.2 Public Consultation and Community Engagement

7.2.1 Introduction

a. The City recognizes the importance and value of community engagement to the planning process. The policies of this Plan seek to support opportunities for meaningful and inclusive community engagement, while balancing the need to process development applications within the timelines prescribed by the Planning Act.

Objectives

- b. The objectives for community engagement are as follows:
 - i. To progressively seek input from residents, agencies, and other stakeholders on planning matters;
 - ii. To offer mutually respectful, continuous and meaningful engagement;
 - iii. To provide equitable opportunity for a wide demographic to be informed and involved on planning matters;

- iv. To consider, explore and utilize partnerships and innovative methods/tools for public engagement; and,
- To enhance accessibility and transparency.

General Policies

- Community engagement will be conducted in accordance with the Planning C. Act, the Accessibility for Ontarians with Disabilities Act and other applicable legislation, policies, and regulations.
- d. The City will provide opportunities for community engagement during:
 - i. The Municipal Comprehensive Review, and amendments to this Plan;
 - ii. The development and review of the Zoning By-Law and other applicable By-Laws;
 - iii. The preparation and review of Secondary Plans, other Area-Specific Planning Studies, and Community Improvement Plans;
 - iv. The development review process, where appropriate; and,
 - Any other planning matter that the City considers appropriate for public ٧. engagement.
- When preparing and releasing materials for the general public, the City is e. committed to communicating in plain language and ensuring the legibility, graphics, and presentation of materials is consistent with the City's Guide to Accessible Documents and the Accessibility for Ontarians with Disabilities Act.
- f. Community engagement will take place early in the planning process and on a continual basis, as practical and appropriate.
- When a public open house, public meeting, or community engagement event g. is required or appropriate, the City will consider the following:
 - i. The accessibility of the venue with respect to the Accessibility for Ontarians with Disabilities Act, public transit, active transportation, and private vehicles:
 - ii. Community gathering places such as farmers markets, public libraries, shopping malls, the downtown, special events, and other venues where higher volumes of people congregate and which are accessible to a broad demographic range;

- iii. Partnerships with local community organizations and service providers where appropriate; and,
- iv. Where possible and applicable, the geographic appropriateness and convenience with respect to the area of the City most impacted by the planning matter under deliberation.

7.2.2 Public Meetings and Notification

- a. The Planning Act contains provisions regarding public meetings, notification requirements, and processing timelines for the consideration of development applications. The City will follow the public notification procedures and regulations on planning matters in accordance with the provisions of the Planning Act. The City may require additional public consultation measures beyond the minimum requirements outlined in the Planning Act, as determined on a case by case basis.
- b. The City of Peterborough will use the provisions for public meetings and notifications outlined in this Section to allow for enhanced consultation during the early review process, and not rely solely on the notice of public meeting as outlined in the Planning Act. This will foster the communication and education of issues to people and groups early in the decision- making process.
- c. The City will utilize a variety of communication methods to seek public consultation, participation and input on planning matters. Depending on the planning matter in question, the City shall choose the most appropriate method of communication, which may include, but is not limited to:
 - i. Direct mail outs;
 - ii. Newspaper notice;
 - iii. Public Notice signs;
 - iv. Sign postings;
 - v. Electronic or mailed surveys;
 - vi. Public information open houses/Neighbourhood Ward meetings;
 - vii. Statutory Public Meetings;
 - viii. City website postings;

- ix. Design charrettes;
- x. Workshops;
- xi. Other broadcast media, such as television and radio; and,
- xii. Social media.
- d. In addition to the methods identified in this Section, the City will use the following mechanisms to promote public participation in the planning process by:
 - i. Requiring the proponent to post one or more signs, clearly visible to the general public, on properties undergoing a planning approval process;
 - Requiring the proponent to host a public information meeting for informing and obtaining the views of the public of a development application; and,
 - iii. Any other means deemed appropriate by the City.

7.3 Official Plan Amendments

7.3.1 Official Plan Review

- a. The City will review the policies in this Plan as part of a provincially mandated review program, to ensure the continued relevance of the objectives and policies contained herein. Such a review will occur no less frequently than 10 years after it comes into effect, and every five years thereafter, in accordance with the requirements of the Planning Act.
- b. Monitoring and reviewing of this Plan is required to identify trends in planning issues in the City, to analyze the effectiveness of the policies, and to allow for adjustments and updating. It is critical to monitor, review, update and consolidate this Plan from time to time to ensure its continued relevance and usefulness.
- c. The City will review existing and future legislation contained in the Planning Act, the Municipal Act and other relevant Provincial statutes that apply to areas of municipal jurisdiction. The City will, where necessary, amend existing By-Laws or pass new By-Laws to ensure ongoing conformity with the policies of this Plan.

7.3.2 Land Needs Assessment

a. The City has undertaken a Land Needs Assessment in accordance with Provincially-prescribed methodology to quantify the amount of community area and employment area required to meet community's projected needs to 2051. The City shall review its Land Needs Assessment as part of a Municipal Comprehensive Review of this Plan no less frequently than 10 years after the Plan comes into effect, and every five years thereafter. The City will also review its Land Needs Assessment in response to amendments to Schedule 3 of A Place to Grow: Growth Plan for the Greater Golden Horseshoe. Land Needs Assessment updates shall be submitted to the Province for review and shall be used to review the extent of excess lands identified as Rural Transitional Area on Schedule A: Urban Structure and Schedule B: Land Use Plan of this Plan.

7.3.3 Monitoring

- a. Monitoring and measuring the performance of this Plan is crucial to determine if:
 - i. The assumptions of this Plan remain valid;
 - ii. The implementation of the policies fulfills the overall Vision, Guiding Principles and Objectives of this Plan;
 - iii. Provincial growth and intensification targets, as well as the other targets in this Plan, are being met; and,
 - iv. The priorities identified in this Plan remain appropriate or require change.
- b. Monitoring and measuring performance will be conducted through both available qualitative and quantitative measures. The results from monitoring activities may be used to inform future policy direction and updates to this Plan.

7.3.4 Planning Studies

a. The City may undertake planning studies to monitor progress of planning initiatives, understand new trends, ensure an appropriate response is provided to issues which may arise, or for any other purpose deemed suitable by the City. This could include the review and analysis of population/demographic forecasts to inform decision-making and the provision of services.

- b. The City will dedicate sufficient resources, or seek partnership funding where possible, for planning studies so that the work can be undertaken with appropriate professional diligence.
- c. The City may implement the findings of a planning study with an Official Plan Amendment, a Secondary Plan, a Zoning By-Law Amendment, a By-Law or any mechanism deemed appropriate.
- d. The City will develop an economic development strategy in partnership with the County of Peterborough and other key agencies and stakeholders, which may include consideration of Smart City strategies. To support an economic development strategy, the City will conduct periodic employment surveys and/or business counts, which may be done in partnership with Peterborough and Kawartha Economic Development.

7.3.5 Amendments to this Plan

- a. The City will consider applications for site specific Amendments to this Plan within the context of the policies and criteria set out throughout this Plan.
- b. Applicants for an Official Plan Amendment shall be required to submit a Planning Justification Report(s) to demonstrate the rationale for an Amendment to this Plan, and shall be required to evaluate and address such matters, including but not limited to:
 - An assessment of the conformity of the proposed Amendment with Provincial policies and plans;
 - ii. An assessment of the conformity of the proposed Amendment to the Vision, Guiding Principles, Objectives and policies of this Plan, and other City approved policies and plans;
 - iii. A statement identifying the need for the proposed Amendment;
 - iv. An analysis of the suitability of the subject lands for the proposed use:
 - v. An evaluation of compatibility with existing and future uses of surrounding lands; and,
 - vi. An evaluation of the adequacy of municipal infrastructure and community facilities to support the proposed use.

- c. In accordance with the Planning Act, there will be no appeal with respect to the refusal or failure of the City to adopt an Official Plan Amendment and/or the passage of a Zoning By-Law Amendment:
 - i. For the re-designation or conversion of lands designated as Prestige Employment; and,
 - ii. For the expansion of the Settlement Area Boundary.
- d. Further to the above, there will be no appeal with respect the passage of Official Plan policies or a Zoning By-Law Amendment authorizing the creation of additional residential units and any related requirements or standards.
- e. Notice of Official Plan Amendments will be given in accordance with the procedures as provided for in the Planning Act and the applicable policies of this Plan.
- f. Technical revisions to this Plan will not require an Official Plan Amendment provided they do not change the intent of the Plan. Technical revisions include:
 - i. Changing the numbering, cross-referencing and arrangement of the text, tables, Schedules, figures and maps;
 - ii. Altering punctuation or language for consistency;
 - iii. Correcting grammatical, dimensional and boundary, mathematical or typographical errors; and,
 - iv. Adding technical information to maps, figures or Schedules.

7.3.6 Secondary Plans

- a. Secondary Plans shall be prepared for any major development, or for any area within the municipality where the City deems it necessary to undertake a comprehensive study to ensure orderly and logical development.

 Secondary Plans shall be prepared in accordance with the following:
 - Secondary Plans shall be adopted as an Amendment to this Plan and, as such, will follow the procedures in accordance with the Planning Act;
 - ii. An adopted Secondary Plan shall be implemented by Zoning By-Laws, Plans of Subdivision/Condominium, Development Agreements, Site Plan Approval, or other means as required; and,
 - iii. An adopted Secondary Plan may also require land securement through acquisition, dedication, or other means as required.
- b. It is anticipated that planning approvals within the **Strategic Growth Areas** will be facilitated through the preparation of comprehensive, area-focused Secondary Plans prepared by the City, and associated Zoning By-Laws. Where applications for development approval within a **Strategic Growth Area** precede the approval of a Secondary Plan, applicants may be required to prepare a Tertiary Plan that addresses a number of key planning and engineering issues. The City will determine the appropriate study area and the detailed requirements for the Tertiary Plan at the required pre-consultation meeting with the applicant.
- c. Where a Secondary Plan is required for lands within the **Designated Greenfield Area**, planning approvals for those lands will only be considered following the approval of a comprehensive Secondary Plan, prepared by the City. Secondary Plans for the **Designated Greenfield Areas** and phases within Secondary Plans will be released for development in accordance with municipal need and demand. The City will have regard for the following factors when approving Secondary Plans for the **Designated Greenfield Areas**:
 - i. The supply of vacant designated lands in the land use category;
 - For residential development, the availability of registered and draft approved residential lots and blocks intended for affordable housing;
 - The availability and capacity of municipal services and public service facilities and the capital and operating costs of providing new services and facilities; and,

- iv. The promotion of development in a logical, contiguous manner in order to achieve a compact, pedestrian-friendly and healthy urban form.
- d. Until such time as a required Secondary Plan is approved for an area, the City may permit only limited land division and/or development, and only where such development it is in conformity with this Plan and where the outcome of the Secondary Plan is not prejudiced, to the satisfaction of the City.
- e. Secondary Plans shall generally address the following:
 - i. Patterns of land use, land use designations and built form;
 - ii. Connectivity and integration with existing developed or planned development areas of the City;
 - iii. Urban design and sustainable design;
 - iv. The Natural Heritage System;
 - v. Cultural heritage resources and archaeological resources;
 - vi. Transportation, including transit and active transportation facilities;
 - vii. Municipal infrastructure planning and design;
 - viii. Public service facility requirements;
 - ix. Phasing of development;
 - x. Water resources, including surface and groundwater, **watershed** and sub-watershed studies and stormwater management plans;
 - xi. Demographic analysis;
 - xii. Implementation of specific policies of this Plan;
 - xiii. Conformity with the policy frameworks of the Provincial Growth Plan and this Plan; and,
 - xiv. Any other matters deemed appropriate by the City.

7.4 Zoning By-Laws

7.4.1 The Comprehensive Zoning By-Law

- a. Zoning By-Laws, prepared in accordance with the provisions of the Planning Act, shall implement the policies of this Plan by regulating the use of land and the character, location and use of buildings and structures. The Zoning By-Law may be more restrictive than the provisions of this Plan. It is not intended that the full range of uses, built forms, or heights permitted by this Plan will be permitted by the Zoning By-Law in all locations.
- b. Within three years of the adoption of this Plan, the existing Zoning By-Law will be reviewed and amended, or a new Zoning By-Law prepared and adopted, to conform to the policies of this Plan, in accordance with the Planning Act.
- c. Until such time as the Zoning By-Law is amended, the existing Zoning By-Law shall remain in effect. However, any Amendment to the existing Zoning By-Law shall be required to be in conformity with this Plan.
- d. Areas of the City that were annexed into the City are subject to the applicable Township Zoning By-Laws that were in effect for these areas prior to their annexation. These By-Laws remain in effect until they are replaced by the City's Zoning By-Law.
- e. The City may, in the Zoning By-Law, permit a use of land or the erection, location or use of buildings or structures subject to one or more prescribed conditions.

7.4.2 Holding By-Laws

- a. The City may enact a Holding provision in conjunction with any zoning category which enable lands to be zoned for specific uses but prevents development and redevelopment from occurring until the City is satisfied that certain conditions have been met. Under Section 36 of the Planning Act, the City may pass a "Holding" By-Law that places an "H" symbol on a comprehensive or site-specific basis, and specifies the conditions that shall be met before the "H" symbol is removed and the lands can be developed.
- b. The City may use a site-specific holding symbol in conjunction with the Zoning By-Law for one or more of the following reasons:
 - i. To ensure that certain conditions, studies or requirements related to a proposed zoning change are met;
 - ii. To achieve orderly staging of development or redevelopment, in accordance with municipal and Provincial policies;
 - iii. To ensure that adequate infrastructure and **public service facilities** are, or shall be available in accordance with municipal standards;
 - iv. To adopt measures to mitigate negative impacts resulting from the proximity of lands to transportation and utility corridors, incompatible land uses or any other source of nuisance or hazard to public health and welfare;
 - To satisfy the policies of this Plan related to heritage conservation, site plan control, potentially contaminated sites, protection of the Natural Heritage System, community improvement and any other planning matters determined to be relevant to the development of the lands;
 - vi. To ensure the payment of monies for services and/or local improvements; and,
 - vii. To ensure the execution of legal agreements, approval of subdivision plans and/or approval of necessary studies by the appropriate authorities to satisfy any of the criteria set out above.

- C. Before enacting a By-Law to delete the holding provision in accordance with the Planning Act, the City shall be satisfied that:
 - i. Adequate servicing, such as water supply, sewage disposal facilities, stormwater drainage, solid waste collection and disposal, roads and any other required utility can be provided;
 - ii. All necessary requirements of the City have been satisfied;
 - All necessary subdivision or development agreements have been entered into, and that the conditions of these agreements have been, or will be met; and,
 - iv. Development satisfies all other relevant policies of this Plan.
- d. The use of land, building or structures that are permitted until the holding symbol is removed will generally be limited to existing uses provided that they are compatible with the ultimate use of the land. Additional permitted interim uses will be specified in the Zoning By-Law, in accordance with the permitted uses within the Official Plan land use designation of the subject lands.

7.4.3 Interim Control By-Laws

- Pursuant to Section 38 of the Planning Act, the City may enact a By-Law to a. control the development of land within the municipality on an interim basis while a study of land use planning policies is undertaken by the municipality.
- b. Interim Control By-Laws will specify the permitted uses and any additional applicable regulations while the By-Law is in effect, provided that such interim uses do not conflict with the ultimate designated use of the lands.
- Interim Control By-Laws shall define the specific area affected and establish C. an expiry date of not more than one year from the date of passing thereof.
- d. The City may pass a further By-Law to grant an extension of the Interim Control By-Law for up to one additional year. The City may not enact another Interim Control By-Law on the same lands where one has lapsed, for a period of three years.
- e. Interim Control By-Laws shall not prohibit the use of lands for any purpose lawfully in existence, or for which a building permit has been issued under the Building Code Act, on the date of passing of the Interim Control By-Law.

7.4.4 Temporary Use By-Laws

- a. The City may pass Temporary Use By-Laws in accordance with Section 39 of the Planning Act to authorize the temporary use of land, buildings or structures for any purpose that would otherwise not be permitted by the Zoning By-Law.
- b. A Temporary Use By-Law will define the land to which it applies and will prescribe the period of time during which it is in effect.
- c. The City may grant extensions of the temporary use. Any extension will be granted through passage of a By-Law, in accordance with the provisions of the Planning Act.
- d. Prior to the approval of a Temporary Use By-Law, the City shall be satisfied that the proposed temporary use meets the following conditions:
 - i. That it is compatible with surrounding land uses;
 - ii. That adequate on-site parking can be provided;
 - iii. That sufficient services such as water, sewage disposal and roads can be provided without the extension or expansion of existing municipal services;
 - iv. That an adverse impact on traffic will not be created;
 - v. That the construction of a permanent building or structure is not required; and,
 - vi. That the use is in general conformity with the intent and policies of this Plan.
- e. Upon the expiry of the time period(s) authorized by a Temporary Use By-Law, the use of land, buildings or structures that were permitted under such a By-Law will cease to exist and will not be considered legal non-conforming within the context of the Planning Act or this Plan.

7.5 Committee of Adjustment

7.5.1 Purpose

- a. The City shall appoint a Committee of Adjustment to consider minor variances to the Zoning By-Law and land severances, in accordance with Sections 45 (1), 45 (2) and 53 of the Planning Act.
- b. The Committee may further grant the enlargement or extension of a legal, non-conforming building or structure, or the change of use of a non-conforming use, as provided by the Planning Act provided the general intent and purpose of the Zoning By-Law and the Official Plan are maintained.
- c. Decisions of the Committee of Adjustment will maintain the general intent and purpose of this Plan, and will be in accordance with requirements of the Planning Act and all other applicable legislation.

7.5.2 Minor Variances

- a. The Committee of Adjustment shall consider applications for minor variance to the use and/or regulation provisions of the Zoning By-Law in accordance with the provisions of the Planning Act. The Committee shall authorize minor variances only where it is satisfied that:
 - i. The proposed variance is minor;
 - ii. The proposed variance is desirable for the appropriate development or use of the lands;
 - iii. The general intent of the Zoning By-Law is maintained; and,
 - iv. The general intent of the Official Plan is maintained.
- b. The Committee of Adjustment may attach such conditions as it deems appropriate and desirable to the approval of an application for minor variance.

7.5.3 Consent to Sever

- a. Consents may be permitted for the creation of a new lot, boundary adjustments, rights-of-way, easements, long term leases and to convey additional lands to an abutting lot.
- b. Approval for consent to create new lots shall only be granted only where:
 - i. A plan of subdivision is deemed to not be necessary;
 - ii. The lot(s) can be fully serviced by water, wastewater and storm drainage facilities;
 - iii. The lot(s) will have frontage and direct access onto a public street and access will not result in a traffic hazard;
 - iv. The lot(s) conform to the policies of this Plan, including any Secondary Plans where one exists;
 - v. The lot(s) comply with the Zoning By-Law or an approved minor variance
 - vi. The lot(s) will not restrict the ultimate development of adjacent lands; and.
 - vii. The lot(s) reflect the general scale and character of the established development pattern in the surrounding area by taking into consideration lot frontages and areas, building height, coverage, mass, setbacks, privacy, and overview.
- c. The Committee of Adjustment may attach such conditions as it deems necessary to the approval of a consent. Such conditions may include, but are not limited to the following:
 - i. The fulfillment of all servicing, grading, easement and financial requirements of the City;
 - The dedication of appropriate road widenings or land for intersection improvements where required and/or improvements or extensions to existing rights-of-way; and,
 - iii. The preparation of development agreements respecting the development of the land.

7.5.4 Other Powers of the Committee of Adjustment

- a. In accordance with Section 45(2) of the Planning Act, the Committee of Adjustment may also permit an extension or enlargement of a legal non-conforming uses, building or structure, where:
 - i. The land, building or structure was lawfully used for a purpose prohibited by the Zoning By-Law on the day the Zoning By-Law was approved; and,
 - ii. The use has continued until the date of application to the Committee of Adjustment.
- b. If the criteria identified in this Plan are met, the Committee of Adjustment may also permit a different use for the land, building or structure, provided the use of the land, building or structure is similar or more compatible than the purpose it was used for on the day the Zoning By-Law was passed. In this case, the similar or more compatible use shall be an interim use.
- c. In no circumstance may permission be granted to enlarge or extend the building or structure beyond the limits of the land owned and used in connection with the use on the day the Zoning By-Law was approved.
- d. Prior to permitting extension or enlargement of lands, buildings or structures associated with a legal non-conforming use, the Committee of Adjustment shall be satisfied that the proposed development:
 - i. Is in the public interest;
 - ii. Represents good planning;
 - iii. Will not create undue, adverse impacts upon abutting properties with regard to increased noise, vibration, fumes, smoke, dust, odours, lighting or traffic; and,
 - iv. Represents an evolution of the existing legal non-conforming use, or in the case of a similar or more compatible use, will be an improvement over the existing use in terms of appearance and function in relation to the surrounding area and will more closely satisfy the intent of the policies of this Plan and provisions of the Zoning By-Law than the purpose for which it is being used.

7.6 Legal Non-Conforming Uses, Buildings or Structures

- a. The use of lands, buildings or structures which do not comply with the Zoning By-Law but which lawfully existed prior to the approval of the Zoning By-Law and which continue to be used for such purpose, shall be recognized as legal non-conforming uses. If such legal non-conforming uses cease for a period of up to one year, then the rights derived from the legal non-conforming use shall terminate.
- b. It is the intention and expectation that legal non-conforming uses, buildings or structures shall eventually cease to exist and be replaced by uses, buildings or structures that conform with the intent of this Plan and comply with the Zoning By-Law.
- c. Notwithstanding any other policy in this Section, a legal non-conforming use(s) destroyed by fire or natural disaster may be rebuilt provided that the dimensions of the building and/or structure are not substantially increased and the use of the building and/or structure is not substantially altered and all applicable approvals are obtained.
- d. The City may recognize uses that exist at the time of the approval of this Plan and which do not have a negative impact on the environment and do not pose a significant threat to health and safety. This will be done by means of appropriate site-specific Zoning By-Laws. Such specific zoning will not be considered to be in contravention of the policies of this Plan and will:
 - i. Only be accomplished by the adoption of a site-specific Zoning By-Law which will incorporate specific and appropriate regulations relative to the existing specific use and site; and,
 - ii. Be restricted to the property boundaries of the land owned at the time of the approval of this Plan.

7.7 Site Plan Approval

- a. Site Plan Approval is a tool used to achieve high-quality site and exterior building design. It is used to achieve appropriate siting and massing of development and to ensure safety, accessibility, attractiveness and compatibility of a development within the site context and overall urban landscape. It is also used by the City to secure land for road widenings and to implement streetscape improvements in public boulevards adjoining development sites. Site Plan Approval is one of the key tools for implementing the City's policies on urban design in accordance with this Plan, and any current or future Urban Design Guidelines.
- b. The City will establish, by By-Law, a Site Plan Approval Area which will encompass all of the lands within the boundaries of the City and will be applicable to all development or redevelopment.
- c. Notwithstanding any other policy of this Plan, the City may exempt development which would otherwise be subject to Site Plan Approval where it considers such approval to be unnecessary due to the type or scale of development proposed. The City may by By-Law:
 - i. Require Site Plan Approval as a condition of a subdivision agreement;
 - ii. Require Site Plan Approval as a condition of any decision of the Committee of Adjustment; and,
 - iii. Require Site Plan or Building Permit Approval prior to the issuance of a demolition permit(s) for properties formally designated under the Ontario Heritage Act, and for those properties that the City has identified as having significant heritage attributes.

- d. Site Plan Approval will be used in accordance with Section 41 of Planning Act as a means of achieving well-designed, functional, accessible, safe and sustainable built form and public space. Proposed development or redevelopment within the Site Plan Approval Area may not be permitted until such time as the City has approved drawings showing plan, elevation and cross-section views for all buildings to be erected (including all buildings to be used for residential purposes regardless of the number of units) and for other site development works sufficient to display the following:
 - i. Exterior building design considerations including, without limitation:
 - Appearance;
 - Character, including building materials and colour;
 - Design features;
 - Scale;
 - Signage, where applicable; and,
 - Sustainable design;
 - ii. Design elements within and/or adjacent to the City right-of-way, including without limitation:
 - Bicycle parking facilities;
 - Buffers;
 - Curb cuts and driveway ramps;
 - Other plantings and groundcover;
 - Public transit facilities, where applicable;
 - Street furniture including location of public art;
 - Landscaping including trees, shrubs and/or hedges; and,
 - Waste, recycling and composting containers; and,
 - iii. Site development works and site design including, without limitation:
 - Universal design and accessibility;
 - Grading, drainage, erosion and sedimentation control;
 - Facilities for the storage of garbage, recycling and other waste material;
 - Landscaping, revegetation, buffering and fencing;
 - Lighting;

- Loading and parking areas;
- Pick-up/drop-off zones for specialized transit, accessible taxi, deliveries and ride sharing, where appropriate;
- Outdoor amenity and/or play facilities, where appropriate;
- Pedestrian access and bicycle facilities;
- Active transportation routes and connections, including to transit stops, sidewalks and bicycle lanes;
- Signage, where applicable;
- Stormwater management design and areas; and,
- Road widenings and road improvements.
- e. The exterior design of all buildings proposed through the Site Plan Approval process shall be consistent with any applicable urban design policies contained in this Plan, and any other design policies and reports approved by the City.
- f. The City may require an Urban Design Brief be submitted in support of a development application or **public realm** improvement project. The Urban Design Brief will be in accordance with the policies of this Plan, and any current or future Urban Design Guidelines, and may be used to guide the Site Plan Approval process.
- g. The City shall acquire the widenings for rights-of-way, turn lanes and daylight triangles at intersections, in accordance with the policies of this Plan, as a condition of Site Plan Approval.
- h. The City may, as a condition of approval, require the owner of lands subject to site plan control to fulfill conditions of Site Plan Approval and enter into an agreement which may be registered against the title of the subject lands.

7.8 Plans of Subdivision and Condominium

7.8.1 Plan of Subdivision

- a. All lands within the City shall be subject to subdivision control pursuant to Section 50 and 51 of the Planning Act.
- b. The division of land shall occur by draft plan of subdivision where:
 - A new road or extension to an existing road, extension of services and/or reconfiguration of the stormwater management system is required; or,
 - ii. The City deems it necessary in the public interest for the proper development of the lands.
- c. The City, when considering applications for plans of subdivision, will have regard for the provisions of the Planning Act and related Provincial policies and plans, along with the **Conservation Authority** policies and procedures. In addition, the City will approve only those plans of subdivision that meet the following criteria:
 - i. The plan conforms to the policies of this Plan;
 - ii. The plan will not impose an unacceptable financial burden on the City;
 - iii. The plan of subdivision can be supplied with adequate services and **public service facilities**;
 - iv. The plan will not adversely impact upon the transportation system and will support public transit, cycling and walkability;
 - v. The plan will not adversely impact the **Natural Heritage System**;
 - vi. The plan will be integrated with surrounding lands, subdivisions and streets; and,
 - vii. The plan meets the urban design policies contained in this Plan and any current or future Urban Design Guidelines.
- d. As a condition of draft plan of subdivision approval, the City shall require proponents to satisfy certain conditions prior to final approval and registration of the plan. The applicant may be required to meet the conditions within three years which, if not met, may cause the draft plan approval to lapse. To ensure that conditions are bound to the owner and the land, the City shall require the

- proponent to enter into a Subdivision Agreement which will be registered on title.
- e. When an extension to an approved draft plan of subdivision is requested, the City may request Amendments to the approved plan to ensure the development is consistent with the policies of this Plan and current legislative requirements.
- f. Pursuant to Section 50 (7) of the Planning Act, the City may enact a By-Law to exempt properties from Part-Lot Control, to permit the creation and conveyance of lots or blocks within a registered plan of subdivision, to make minor boundary adjustments, and to establish easements.
- g. If a plan of subdivision or part thereof has been registered for eight years or more and does not meet the growth management objectives of this Plan, the City may use their authority under subsection 50(4) of the Planning Act to deem it not to be a registered plan of subdivision and, where appropriate, amend sitespecific designations and zoning accordingly.

7.8.2 Plan of Condominium

- a. Only those development proposals submitted under the Condominium Act that conform to the general policies of this Plan shall be considered for approval.
- b. The City, when considering applications for plans of condominium, will have regard for the provisions of the Planning Act and related Provincial policies and plans, along with the **Conservation Authority** policies and procedures. In addition, the City will approve only those plans of condominium that meet the following criteria:
 - i. The plan conforms to the policies of this Plan;
 - ii. The plan will not impose an unacceptable financial burden on the City;
 - iii. The plan of condominium can be supplied with adequate services and **public service facilities**;
 - iv. The plan will not adversely impact upon the transportation system and will support public transit, cycling and walking;
 - v. The plan will not adversely impact the natural environment;
 - vi. The plan will be integrated with surrounding lands, subdivisions and streets; and,

- vii. The plan meets the urban design criteria contained in this Plan and any current or future Urban Design Guidelines.
- c. The Condominium Act allows the approval authority to exempt a plan of condominium from the relevant provisions of the Planning Act, which deal with the draft plan approval with conditions and parkland dedication. The City may consider granting an exemption for plans of condominium where:
 - i. Site Plan Approval has been granted; and,
 - ii. All municipal issues are addressed.

7.9 Site Alteration

a. The City will pass a By-Law regarding **site alteration** of property to prevent the premature alteration of the natural state of land, including with respect to grading, stormwater drainage, excess soil and fill, prior to an approved plan for development. The By-Law will include the requirement for an account of the origin and destination of material associated with development of property within the City and the use of best practices for soil management.

7.10 Municipal Finance

- a. The implementation of this Plan must be financially responsible, by ensuring that the required capital expenditures to provide services for development and infrastructure improvements are paid for in an equitable and appropriate manner. The City will strive to maintain financial sustainability and integrity by managing its financial resources, assessing the fiscal impact of planning decisions and by undertaking development in a fiscally responsible manner.
- b. The City shall continue to maintain a balance between the demands for services and its overall fiscal capacity and, in approving new development, the City shall be cognizant of maintaining an appropriate balance between residential and non-residential assessment. In addition, future development will be monitored to ensure that a balance is maintained between demands for service and the overall fiscal capacity of the City.

- c. Municipal capital expenditures implementing any aspect of this Plan will be guided by an Asset Management Plan and a Multi-Year Capital Budget, which will be reviewed annually. The City will undertake capital works programs, in accordance with the approved Asset Management Plan and Capital Budget, to provide the municipal services and infrastructure necessary for intensification areas and new growth.
- d. Where possible, the City will use financial mechanisms available to it under any legislative authority, including the Municipal Act, Development Charges Act, Planning Act and any other applicable legislation, for the purposes of land use planning and the provision of infrastructure and **public service** facilities.
- e. The City may request a Municipal Financial Impact Assessment from the owner/applicant of any development application, including a review of capital costs, the degree to which development charges finance these costs and potential mitigation that could reduce the magnitude of any negative impacts. The terms of reference of such a study will be determined by the City.
- f. A Municipal Financial Impact Assessment will be prepared and may be peer reviewed at the owner/applicant's expense. Development proposals may be refused or deferred on the basis of financial impact and burden on the City, if suitable mitigation measures are not available.
- g. The City will fulfill its financial reporting obligations to the Province as required by the Planning Act, the Development Charges Act, and other applicable legislation.

7.11 Land Acquisition

- a. The City may acquire and hold lands within the City for the purposes of implementing the Official Plan in accordance with the provisions of the Planning Act, including the strategic acquisition of land for **public service** facilities.
- b. The City recognizes that public acquisition of hazard lands, open space lands, lands within the **Intake Protection Zones** and lands designated Natural Areas improves opportunities for conservation, protection, enhancement and stewardship of natural features and the mitigation and management of natural hazards.
- c. The City shall require the conveyance of hazard lands, open space lands and lands designated Natural Areas through the development approval process, as permitted by the Planning Act and in accordance with the policies of this Plan.
- d. Where public ownership cannot be achieved through conveyance, the City may secure the long term protection of hazard lands, open space lands and lands designated as Natural Areas through other means including but not limited to easement agreements, land exchange, long-term lease, land trusts and land protection under the planning process.

7.12 Parkland Dedication

- a. In accordance with Section 42 of the Planning Act, the City shall require the conveyance of land for park or other public recreational purposes, as a condition of development, as follows:
 - For industrial and commercial development, require a maximum of 2 percent of the land proposed for development or redevelopment be conveyed to the City for public parkland purposes;
 - ii. For development related to all other land uses, require 5 percent of all the land proposed for development or redevelopment; and,
 - iii. For residential development, the City may require parkland dedication at a rate of up to 1 hectare per 300 dwelling units, or, where **cash-in-lieu** is accepted, it shall be calculated at a rate of 1 hectare per 500 dwelling units; and,
 - iv. For mixed-use development, the parkland calculations, in accordance with this Section of this Plan, shall be pro-rated to take into account the proportions of residential and non-residential lands within the net land area.
- b. The City may accept cash-in-lieu of all or part of the required parkland dedication in accordance with the provisions of the Planning Act. The amount paid shall be equal to the value of the land to be conveyed and shall be determined in accordance with the provisions of the Planning Act. However, the conveyance of land for park purposes is the City's preferred option.
- c. Where the Planning Act authority is used to require the dedication of land, that land will be intended for park or trail purposes, and be free from any encumbrances such as steep slopes, natural heritage features, cultural heritage features and municipal infrastructure, and shall be fully accessible to the public.

- d. The City's Parkland Dedication By-law may include, but shall not be limited to, provisions for:
 - Reductions or exemptions from parkland dedication requirements for the purposes of achieving intensification, economic development and/or other objectives of this Plan;
 - ii. The identification of uses, or categories of uses that may be eligible for a waiver, or reductions to parkland dedication requirements; and/or,
 - iii. The identification of lands acceptable/not acceptable for parkland dedication.

7.13 Securement of Lands within the Natural Heritage System

- a. Nothing in this Plan shall be construed to imply that the lands within the Natural Areas Designation of the Natural Heritage System or within 120 metres of a natural heritage feature are free and open to the general public or that such lands will be purchased by the City or any other public agency. It is, however, the intent of the City to work cooperatively with the Conservation Authority, the Province of Ontario, the Government of Canada and private property owners to establish ongoing financial, policy and legislative support for the protection and enhancement of natural heritage features and their associated ecological functions within the Natural Areas Designation, in accordance with the policies of this Plan.
- Mechanisms to secure lands within the Natural Areas Designation of the Natural Heritage System may include, but are not limited to, the following property acquisition tools:
 - i. Land dedications/conveyance;
 - ii. Voluntary sale and public purchase through funds allocated in the City's budget;
 - iii. Land swaps/exchanges;
 - iv. Donations, gifts, bequests from individuals and/or corporations;
 - v. Density transfers; and/or,
 - vi. Other appropriate land acquisition methods.

- c. It is recognized that the City may not be able to acquire or secure in public ownership all of the lands that are within the Natural Areas Designation of the Natural Heritage System or within 120 metres of a natural heritage feature. Where lands within the Natural Areas Designation of the Natural Heritage System are not in public ownership, the City will work cooperatively with the landowners to protect the identified natural, environmental and cultural features and/or their associated functions on private lands.
- d. In instances where the City may not be able to acquire or secure in public ownership all of the lands that are within the that are within the Natural Areas Designation of the **Natural Heritage System** or within 120 metres of a **natural heritage feature**, the City shall consider the following stewardship techniques to ensure the appropriate level of protection for the **natural heritage features** and their associated functions:
 - i. Municipal land use controls including zoning;
 - ii. Information and education programs;
 - iii. Stewardship agreements;
 - iv. Charitable tax receipts;
 - v. Conservation easements; and/or,
 - vi. Any other appropriate agreements with the landowners.
- e. The City will undertake a Restoration and Enhancement Strategy in consultation with the **Conservation Authority**, Indigenous Communities, and stakeholders to guide acquisition, compensation, restoration and stewardship activities within the City. The Restoration and Enhancement Strategy will provide recommendations regarding the identification of priority areas for restoration, enhancement and securement using principles of conservation biology and landscape ecology, including special consideration of Regional Connections and Proximity Linkages, and will allow for compensation measures to be directed in a manner that will provide a benefit for the overall **Natural Heritage System**.
- f. The City will establish a Land Securement Fund to be used to contribute to the costs of acquisitions for specific properties that are within the Natural Areas Designation of the **Natural Heritage System** or within 120 metres of a **natural heritage feature**.

g. The City should provide an annual budget allocation for a Land Securement Fund and may authorize staff to pursue funding partners and other funding opportunities to achieve the vision for the lands within the **Natural Heritage System**.

7.14 Community Benefits Charge

- a. The City will prepare a Community Benefits Charge Study and enact a Bylaw under Section 37 of the Planning Act to establish a charge for defined Community Benefits.
- The City may exempt some, or all of the Community Benefits Charge, or exempt certain development, or redevelopment from the Community Benefits Charge, as a means to promote specific development, redevelopment or revitalization objectives in accordance with this Plan.

7.15 Development Charges

- a. The City will prepare a background study and enact a By-Law under the Development Charges Act, to ensure that the capital cost of growth related services does not place a financial burden upon the City's existing taxpayers and that new taxpayers bear no more than the growth-related net capital cost attributable to providing the current level of services.
- b. The City may enact a Development Charges By-Law that applies to the City as a whole and/or that applies to specific geographic areas within the City.
- c. The City may exempt some or all of the Development Charge or exempt certain development or redevelopment from the Development Charge as a means to promote specific development, redevelopment or revitalization objectives in accordance with this Plan.
- d. The City will apply, calculate and collect Development Charges in accordance with the provisions of the Development Charges By-Law and the Development Charges Act.

7.16 Community Improvement Plans and Areas

- a. It is the intent of the City, through community improvement, to promote and maintain a high quality living and working environment throughout the City. Community improvement will be accomplished through:
 - The upgrading and ongoing maintenance of communities or areas characterized by obsolete buildings, and/or conflicting land uses and/or inadequate physical infrastructure and community services; and,
 - ii. The establishment of policies and programs to address identified economic, land development and housing supply issues or needs.
- b. Community improvement will be carried out through the designation, by the City, of Community Improvement Project Areas and through the preparation and implementation of Community Improvement Plans pursuant to the Planning Act. The community improvement provisions of the Planning Act give the City tools and powers that may be used to achieve a broad range of goals and objectives of this Plan. Community Improvement Plans identify specific projects that need to be carried out in a particular area to improve the quality of life and built environment, achieve the goals and objectives of this Plan and/or provide incentives for private sector investment to stimulate the redevelopment, rehabilitation or improvement of an area.
- c. All lands within the City are considered eligible for community improvement initiatives, and eligible to be designated as a Community Improvement Project Area, pursuant to the provisions of the Planning Act.
- d. Within a designated Community Improvement Project Area, the City may provide programs or incentives to facilitate the development or redevelopment of the area. These programs may take the form of loans, grants, reduced Development Charges or tax relief, as may be permitted from time to time by Provincial Statute and approved by the City.

- e. When designating Community Improvement Project Areas, one or more of the following criteria must be satisfied:
 - i. Building stock or property in need of rehabilitation;
 - ii. Buildings and structures of heritage or architectural significance in an area warranting conservation and/or enhancement;
 - iii. Conflicting or incompatible land uses or activities;
 - iv. Deteriorated or insufficient physical infrastructure, or infrastructure lacking in resilience such as, but not limited to, sanitary and storm sewers, water mains, hydro, public transit and utilities;
 - Deteriorated or insufficient public service facilities such as, but not limited to public recreational or community facilities, public open space/parks and public social facilities, in terms of size, space, location, access, landscaping, grading or equipment;
 - vi. Inadequate mix of housing types and densities, including insufficient **affordable** housing and **accessible housing**;
 - vii. Known or perceived environmental contamination;
 - viii. Deteriorated or insufficient parking or active transportation facilities;
 - ix. Poor overall visual amenity of the area, including, but not limited to streetscapes and urban design;
 - x. Existing Business Improvement Areas or potential for inclusion in a Business Improvement Area designation;
 - xi. Deficient streetscapes in terms of poor roads, curbs, traffic circulation, sidewalks, boulevards, tree planting, street furniture and street lighting;
 - xii. Inadequate flood protection or climate change resiliency;
 - xiii. Need for greater energy or water efficiency, or sustainable design on land or in buildings;
 - xiv. Need for waste reduction or achievement of other environmental sustainability objectives;
 - xv. Opportunities for intensification and redevelopment of under-utilized sites;

- xvi. There are a number of screening, buffering or landscaping deficiencies in the area;
- xvii. Shortage of land to accommodate building expansion and/or parking and loading facilities;
- xviii. Other barriers to the improvement or redevelopment of underutilized land or buildings;
- xix. Any other environmental, social or community economic development reasons for designation; or,
- xx. Need for **universal design** improvements.
- f. Community Improvement Plans will provide direction on one or more of the following:
 - Allocation of public funds such as grants, loans or other financial instruments for the physical rehabilitation, redevelopment or improvement of land and buildings;
 - Municipal acquisition of land or buildings and subsequent clearance, rehabilitation, redevelopment or resale of these properties or other preparation of land or buildings for community improvement;
 - iii. Encouragement of infill and rehabilitation;
 - iv. Promotion of historic preservation through the appropriate local, Provincial and Federal legislation;
 - v. Promotion of the viability of commercial areas through the establishment and support of Business Improvement Areas; and,
 - vi. Other municipal actions, programs or investments for the purpose of strengthening and enhancing neighbourhood stability, stimulating production of a variety of housing types, facilitating local economic growth, improving social or environmental conditions, or promoting cultural development.
- g. In the preparation of a Community Improvement Plan and any subsequent Amendments, the City will solicit the input of public bodies and agencies, affected residents, property owners, and other interested parties in keeping with the policies for notification and public participation of this Plan.

- h. The City will determine the priorities and sequences in which designated Community Improvement Project Areas will have individual Community Improvement Plans prepared.
- i. The City will be satisfied that community improvements shall be within the financial capability of the City.
- j. All developments participating in programs and initiatives contained within Community Improvement Plans shall conform with the policies contained in this Plan and shall comply with all municipal codes and regulations of the City.
- k. Each Community Improvement Plan will endeavour to co-ordinate individual initiatives to improve properties with municipal actions to upgrade physical infrastructure and community services and promote new types of housing.

7.17 Demolition Control

- a. Demolition Control enables the City to:
 - i. Maintain the integrity of residential neighbourhoods;
 - ii. Prevent the premature loss of housing stock;
 - iii. Avoid the creation of vacant parcels of land in stable neighbourhoods; and,
 - iv. Retain existing residential units until new uses have been considered and redevelopment plans have been approved.
- b. The City may, by By-Law, designate all lands within the City as a Demolition Control Area.
- c. A Demolition Control By-Law may be used as a tool to:
 - i. Preserve and enhance the character of an area;
 - ii. Protect existing housing stock; or,
 - iii. Preserve other buildings, structures or features which the City deems appropriate.
- d. No person shall demolish or otherwise remove the whole or any part of a residential property in a Demolition Control Area, unless that person is the holder of a demolition permit for that residential property issued by the City.

- e. This By-Law shall not apply where:
 - i. The demolition of part of the residential property does not reduce the number of dwelling units on the residential property;
 - ii. The residential property is exempted under Federal or Provincial regulations; or,
 - iii. The residential property is deemed unsafe in accordance with the Building Code Act, and an order for demolition has been issued by the Chief Building Official.
- f. Under Section 33 of the Planning Act, the City may delegate authority to the Chief Building Official to issue demolition permits where;
 - i. No City concerns have been raised regarding the proposed demolition; or,
 - ii. The property is not designated or listed under the Ontario Heritage Act.
- g. Where a building permit has been issued by the Chief Building Official, the City may impose conditions related to the timing of completion of replacement buildings, and impose a fee for non-compliance, in accordance with Sections 33(6), 33(7), and 33(11) of the Planning Act.
- h. Applications to demolish designated cultural heritage buildings or structures shall be considered in accordance the provisions of the Ontario Heritage Act and all other applicable policies of this Plan.

7.18 Maintenance and Occupancy By-Law

- a. The City shall enact a By-Law pursuant to the Building Code Act or other enabling legislation setting forth minimum standards for maintenance and occupancy of all buildings, dwellings and open space areas within the City.
- b. The City shall appoint a Property Standards Committee and Property Standards Officers to ensure the carrying out of a Maintenance and Occupancy Standards By-Law.
- c. At minimum a Maintenance and Occupancy Standards By-Law will have regard for any or all of the following matters or related items and set appropriate standards or conditions:
 - Compliance in terms of permitted use with the City of Peterborough's Zoning By-Law;
 - ii. The physical condition of buildings, including dwellings, with particular regard to, but not limited to, the following:
 - Yards;
 - Surface conditions, lot grading, drainage;
 - Outdoor storage;
 - Fences;
 - Parking areas, walks, driveways;
 - General standards for buildings;
 - Exterior and interior of buildings;
 - Garbage and storage facilities;
 - Utilities;
 - Vacant, fire damaged, or buildings under construction or demolition;
 - Egress;
 - Water, sewer, plumbing;
 - Insulation, windows, doors;
 - Electrical;
 - Ventilation; and,
 - Heating and air conditioning systems.

7.19 Brownfield Site Development

- The development or redevelopment of potentially contaminated sites shall be assessed and remediated in a manner consistent with the Environmental Protection Act and all other relevant Provincial regulations, guidelines and procedures.
- b. Proposed development on any known or suspected contaminated site shall be the subject of a study by a qualified professional, in accordance with any applicable senior government guidelines, which will investigate and provide a remedial plan as required.
- c. Where the need for remediation is confirmed, the proposed restoration works will be completed or implemented prior to development taking place or as a secured condition of the required development agreement.

7.20 The Community Planning Permit System

- a. The Community Planning Permit System is an additional implementation tool that may be used by the City to ensure the goals, objectives and policies of this Plan are realized. The Community Planning Permit System is intended to be a flexible planning tool that combines zoning, Site Plan Approval, and minor variance processes into a single process.
- b. Before passing a By-Law to establish a Community Planning Permit Area, an Official Plan Amendment shall be required to:
 - i. Identify the area to which the Community Planning Permit System applies;
 - ii. Set out the scope of the authority that may be delegated and any limitations on the delegation, if the City intends to delegate any authority under the Community Planning Permit By-Law;
 - Specify goals, objectives, and policies of the Community Planning Permit Area;
 - Set out the types of criteria and conditions that may be included in the Community Planning Permit Bylaw;
 - v. Identify the classes of development or redevelopment that may be exempt;
 - vi. Specify height and density provisions; and,

- vii. Specify complete application requirements.
- c. The City may, in a By-Law passed under the Planning Act, establish a Community Planning Permit System for one or more Community Planning Permit Areas within the City.

7.21 Pre-Consultation and Complete Application Requirements

7.21.1 Pre-Consultation Meeting

- a. Consultation with City Staff prior to the submission of an application requiring a Planning Act approval is encouraged in all instances and shall be required for applications for an Official Plan Amendment, Zoning By-Law Amendment, Draft Plan of Subdivision, Draft Plan of Condominium, Site Plan Approval and Consent.
- b. The intent of the pre-consultation meeting shall be to review a draft development proposal for the lands affected by the proposed application(s) and identify the need for, and the scope of other information and materials considered necessary by the City and other affected agencies to allow for a comprehensive assessment of the development application(s).
- c. The City shall determine the information and materials necessary for submission with the application based on the nature of the application, and in accordance with the list of studies identified in this Plan. This determination will set out clear requirements for a complete application.
- d. The City may waive the requirement for formal pre-consultation, where the City has identified that due to the nature of the proposal, the need for and scope of required information and materials can be determined without formal consultation.
- e. Where pre-consultation is required, development applications submitted to the City prior to the formal pre-consultation meeting shall be considered incomplete and returned to the applicant.

7.21.2 Complete Application Requirements

- a. In addition to the prescribed information to be submitted under the Planning Act for applications for an Official Plan Amendment, Zoning By-Law Amendment, Draft Plan of Subdivision, Draft Plan of Condominium and Consent, the City may also require the submission of additional information and material to assist in the review of an application before the application is deemed complete. This additional information will be identified in the required pre-consultation meeting and may include:
 - i. Environmental/Natural Heritage/Natural Hazards:
 - Preliminary Natural Heritage Feature Screening;
 - Environmental Impact Study;
 - Tree Inventory/Preservation/Enhancement Plan, and Arborist Report;
 - Flood plain and Erosion Hazard Study;
 - Geotechnical/Slope Stability Study and Cut/Fill Analysis including Erosion Hazards;
 - Hydrogeological Assessment including a WHPA Plan and Geotechnical Study;
 - Landscaping/Site Rehabilitation Plan;
 - Fish Habitat Assessment;
 - Energy Conservation Study;
 - Environmental Site Assessments and/or Record of Site Condition;
 - Shoreline Engineering Report;
 - Floodline Delineation/Hydraulic Study;
 - Fluvial Geomorphology Study/Meander Belt Analysis;
 - Water Balance Analysis;
 - Headwater Drainage Feature Evaluation;
 - A Master Environmental Servicing Plan; and,
 - Species At Risk (SAR) Screening/Evaluation;

ii. Cultural Heritage Resources and Archaeological Resources:

- Cultural Heritage Impact Assessment;
- Archaeological Assessment;
- Cultural Heritage Conservation Plan; and,
- Structural Engineering Report;

iii. Transportation:

- Transportation Study;
- Traffic Impact Study;
- Parking, Pedestrian and Sidewalk Analysis;
- Parking Study; and,
- Travel Demand Management Plan;

iv. Servicing and Infrastructure:

- Site Servicing Plan;
- Site Grading Plan;
- Stormwater Management Studies/Plan;
- Hydrogeological and Geotechnical Study;
- Sediment and Erosion Control Plan;
- Private Servicing Study;
- Fire Suppression Analysis;
- Water and Wastewater Servicing Capacity/Feasibility Study, including downstream capacity analysis; and,
- Water Quality Impact Assessment;

v. Development Impacts:

- Noise Impact Study/Noise Assessments and Feasibility Studies;
- Vibration Impact Study;
- Land Use Compatibility Study;
- Dust and/or Odour Impact Study;
- Agricultural Impact Analysis;
- Photometric Report and Plan;
- Public Accommodation Study; and,
- Environmental Site Assessment;

- vi. Financial and Market Impacts:
 - Retail Market Analysis;
 - Commercial Needs Study;
 - Economic Impact Study;
 - Municipal Financial Impact Assessment;
 - Infrastructure Cost Assessment; and,
 - Long Term Maintenance Cost Assessment;

vii. Planning:

- Planning Justification Report;
- Affordable Housing Report;
- Rental Housing Conversion Assessment;
- Urban Design Report and Streetscape/Public Realm Plan;
- Restricted Land Use Notice issued by the Risk Management Official for the City;
- Strategy for public consultation; and,
- Health Assessment; and,

viii. Plans and Drawings:

- Site Plan or Concept Plan in accordance with City requirements, including a digital submission;
- Tertiary Plan;
- Subdivision Plan or Condominium Plan in accordance with City requirements, including a digital submission;
- Building Elevation Drawings;
- Angular Plane Analysis;
- Shadow Impact Study; and,
- Accessibility Analysis.
- b. All required reports and/or studies shall be prepared in accordance with any applicable standards or specifications, and be completed by qualified professional consultants retained by and at the expense of the applicant. The City may require a peer review by the appropriate public agency or professional consultant retained by the City at the applicant's expense.

- c. The City may refuse all information, studies and materials, submitted as part of a complete application(s) if it considers the quality of the submission unsatisfactory. In addition, the applicant may be required to submit any other supporting information, studies and materials identified by the City during the formal pre-consultation process for the application to be deemed complete.
- d. Where a peer review is required of one or more of the studies listed in this Section, the time period to process the application shall not commence until the peer review study has been submitted to the City, and the City has been fully reimbursed by the applicant for the cost of the peer review.
- e. The City will consider the development of a health assessment tool which would outline criteria that must be met by new development, to be used in the evaluation of future development applications.

Preliminary Natural Heritage Feature Screening

- f. The intent of the Preliminary Natural Heritage Feature Screening is to determine the requirement for the preparation of an Environmental Impact Study. If a **natural heritage feature** is identified within 120 metres of Planning Act applications for development, redevelopment or **site alteration** then the need for an Environmental Impact Study is triggered.
- g. Preliminary Natural Heritage Feature Screenings are to be undertaken by the proponent and prepared by a qualified professional in accordance with City/Conservation Authority requirements at the time of pre-consultation. The City may peer review all or part of a Preliminary Natural Heritage Feature Screening prepared by the proponent in support of a development application, at the sole expense of the proponent.

Environmental Impact Study

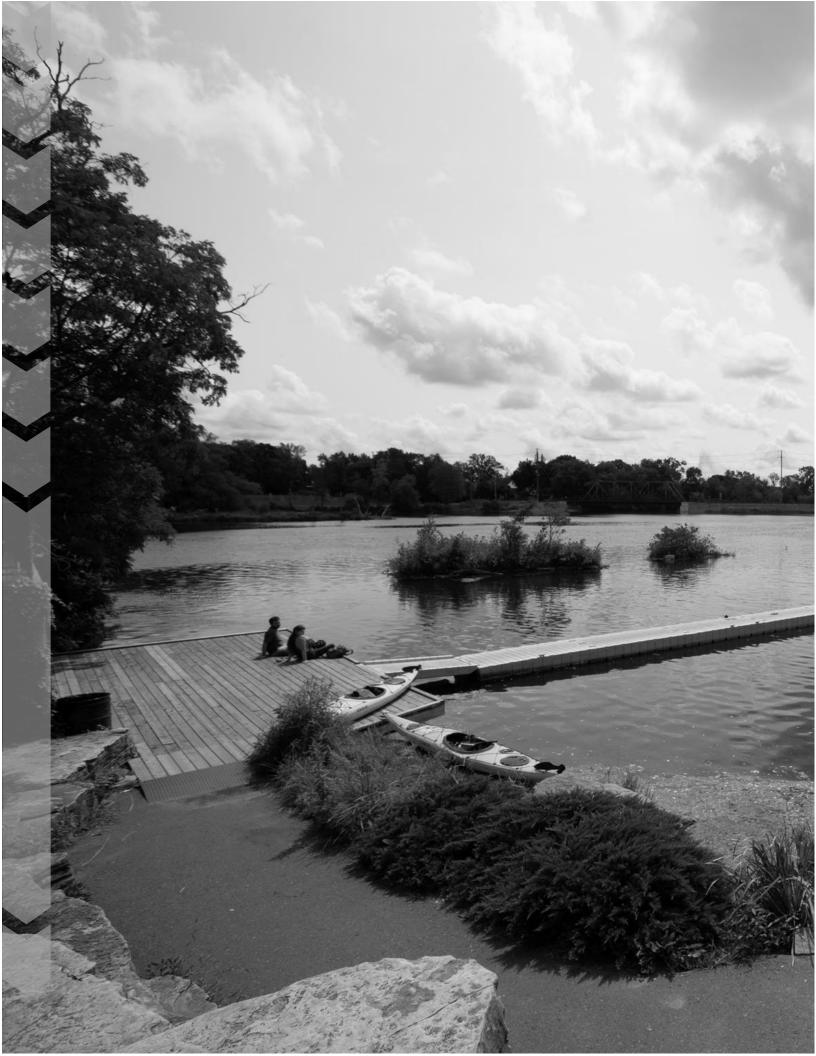
- h. An Environmental Impact Study may be required, in accordance with the policies of this Plan to:
 - i. Identify, delineate and evaluate the potential effects of a proposed development, redevelopment or site alteration on the Natural Heritage System;
 - Recommend means of preventing, minimizing or mitigating impacts as well as opportunities for enhancing or restoring the quality and connectivity of the elements comprising the **Natural Heritage System**;
 - Identify and assess the presence and function of elements of the Natural Heritage System, where insufficient information exists; and/or,
 - iv. Interpret the boundaries of the **Natural Heritage System**, where appropriate.
- i. An Environmental Impact Study shall meet the following general requirements:
 - Conclude whether the proposed development, site alteration, or boundary adjustment will have any negative impacts on the defined Natural Heritage System to enable the City to make an informed planning decision;
 - ii. If development and/or **site alteration** is permissible, identify planning, design and construction practices that will maintain or restore and, where feasible, improve the health, diversity and size of the **Natural Heritage System**;
 - iii. Demonstrate how connectivity within the **Natural Heritage System** will be maintained or restored and, where possible, improved during and after construction to allow for the effective dispersal and movement of plants and animals;

- iv. Determine if the minimum vegetation protection zones identified in this Plan are sufficient to demonstrate no negative impacts on the ecological and hydrologic functions of the various natural heritage features, and the area being assessed. If the minimum vegetation protection zone is not sufficient to protect the function of the feature or protect opportunities for feature enhancement, the Environmental Impact Study shall specify the dimensions of the vegetation protection zone. This determination will also consider the appropriateness of locating trails in the vegetation protection zone, if appropriate, and any further mitigation measures or vegetation protection zone expansions required to prevent negative impacts on the Natural Heritage System;
- v. Clearly identify and map all natural heritage features on site, including **Natural Heritage System** Level A, B or C features and other features.
- vi. Provide a thorough field inventory, mapping of species and features on site including identification of vegetation communities using the Ecological Land Classification (ELC) system, and complete lists of flora and fauna species and features that were observed on site;
- vii. Describe the survey methods and level of effort undertaken including the dates, weather conditions and number of field visits/surveys and demonstrate that assessments were conducted using appropriate methodologies at the appropriate time of year;
- viii. Provide an analysis of the ecological features and functions provided by each natural heritage feature;
- ix. Outline potential impacts from the proposed development and any mitigation measures or monitoring to address these impacts;
- x. Assess whether there will be any residual impacts after mitigation;
- xi. Determine if any lands outside of the Natural Areas Designation would be appropriate for restoration or re-naturalization to enhance the features and functions within the Natural Areas Designation; and,
- xii. Determine if any lands should be redefined to the Natural Areas
 Designation because they are required to protect **natural heritage features** and their ecological and hydrologic functions.

- j. Environmental Impact Studies are to be undertaken by the proponent in accordance with City/Conservation Authority requirements and approved by the City in consultation with the Conservation Authority and any other agency having jurisdiction. As a condition of approval, the City may peer review all or part of an Environmental Impact Study prepared by the proponent in support of a development application, at the sole expense of the proponent.
- k. The need for, scope and acceptability of an Environmental Impact Study will be determined in collaboration with the Province, Federal government and the **Conservation Authority** and any other agency having jurisdiction. If the natural heritage feature extends beyond the boundaries of the City, the adjacent municipality will be offered the opportunity to participate in this determination.
- I. Any required Environmental Impact Study will be prepared by a qualified professional and submitted together with the development application as part of the complete application requirements in accordance with the policies of this Plan.
- m. The completion of an Environmental Impact Study does not guarantee that the proposed development, redevelopment or site alteration will be approved.
 Proposed development, redevelopment or site alteration will not be approved where it is in conflict with other policies of this Plan.
- n. The City, in consultation with the **Conservation Authority**, Indigenous Communities, appropriate stakeholders and any other agency having jurisdiction, will establish Environmental Impact Study Guidelines or a Terms of Reference, to fulfill the policy requirements of this Plan and assist owners/applicants in identifying the scope of any required Environmental Impact Study.
- The City in consultation with the **Conservation Authority**, or any other agency having jurisdiction, may waive the requirement to conduct an Environmental Impact Study, or appropriately scope the study requirements where an application for development and/or **site alteration** is:
 - i. Of a minor nature or small scale and impacts to the Natural Heritage
 System are anticipated to be negligible;
 - ii. Located in an area where recent previous studies have been approved by the City and provide sufficient detailed information; or,
 - iii. Located in a disturbed area.

Tertiary Plans

- p. Tertiary Plans are a non-statutory planning tool that helps to inform Council and staff as they consider applications for development. The purpose of a Tertiary Plan shall be to:
 - i. Promote comprehensive planning at a scale appropriate to the type and scale of the proposed development;
 - ii. Provide contextual information that will help to determine the compatibility of the proposed development with adjacent properties and other properties in the vicinity;
 - iii. Understand the impact of the proposal on the future development potential of adjacent properties and other properties in the vicinity;
 - Determine appropriate requirements/dedications for the provision of parkland, Community Benefits and other **public service facilities**; and,
 - v. Determine appropriate requirements for the provision/connection to municipal service infrastructure.
- q. City staff will identify the need for a Tertiary Plan and the requirements and scope of the Plan, including definition of the adjacent properties and other properties in the vicinity, at the required pre-consultation meeting.





INTERPRETATION 8.0 AND DEFINITIONS

8.1 Interpretation

- The location of boundaries and symbols, including land use designations shown on the Schedules to this Plan, are intended to indicate the general location, except where they coincide with highways, streets, railways, watercourses or other bodies of water or other clearly recognizable or defined physical features. Future streets and transit systems shown on the Schedules to this Plan are shown in approximate locations only. Provided that the intent of this Plan is maintained, minor adjustments to the location of boundaries shown on the Schedules to this Plan shall not require an Amendment to this Plan.
- b. Throughout this Plan reference is made to "the City". For the purposes of this Plan, the City refers to the Corporation of the City of Peterborough, and includes Council, staff and/or any authorized Committee of Council. It shall be the ultimate responsibility of Council to implement the Vision, Guiding Principles, Objectives and policies of this Plan, in consultation with their duly assigned delegates.

8.2 Definitions

Defined terms are bolded throughout the text, except where otherwise stated.

Accessible Housing

Housing that is entirely developed using universally accessible design.

Active Transportation

Human-powered travel, including but not limited to, walking, cycling, inline skating and travel with the use of mobility aids, including motorized wheelchairs and other power-assisted devices moving at a comparable speed.

Activity Rate

The ratio of the number of jobs to the population.

Additional Residential Unit

Self-contained residential units with a private kitchen, bathroom facilities and sleeping areas within dwellings or within structures ancillary to a dwelling.

Additional residential units are also referred to as second units, basement apartments, accessory apartments, granny flats, in-law apartments, or nanny suites.

Adjacent Lands (Protected Heritage Property)

Those lands contiguous to a protected heritage property or lands that are directly across from and near a protected heritage property; whose location has the potential to have an impact on a protected heritage property; or as otherwise defined in a Heritage Conservation District Plan adopted by By-law.

Affordable

- a. In the case of ownership housing, the least expensive of:
 - i. Housing for which the purchase price results in annual accommodation costs which do not exceed 30 per cent of gross annual household income for low and moderate income households; or
 - ii. Housing for which the purchase price is at least 10 per cent below the average purchase price of a resale unit in the regional market area;
- b. In the case of rental housing, the least expensive of:
 - i. A unit for which the rent does not exceed 30 per cent of gross annual household income for low and moderate income households; or
 - ii. A unit for which the rent is at or below the average market rent of a unit in the regional market area.

For the purposes of this definition:

Low and moderate income households means, in the case of ownership housing, households with incomes in the lowest 60 per cent of the income distribution for the regional market area; or in the case of rental housing, households with incomes in the lowest 60 per cent of the income distribution for renter households for the regional market area.

Regional market area means an area, generally broader than a lower-tier municipality that has a high degree of social and economic interaction. In the GGH, the upper- or single-tier municipality will normally serve as the regional market area. Where a regional market area extends significantly beyond upper- or single-tier boundaries, it may include a combination of upper-, single- and/or lower-tier municipalities.

Agricultural Source Material

Includes a variety of materials that may be sources of nutrients or pathogens such as:

- Manure produced by farm animals, including bedding materials;
- b. Runoff from farm-animal yards and manure storages;
- c. Wash water that has not been mixed with human body waste;
- d. Organic materials produced by intermediate operations that process the above materials (e.g., mushroom compost);
- e. Anaerobic digestion output that does not include sewage biosolids or human body waste;
- f. Materials produced by aquaculture; and,
- g. Regulated compost that is derived from compost containing dead farm animals.

Archaeological Resources

Includes artifacts, archaeological sites, marine archaeological sites, as defined under the Ontario Heritage Act. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

Areas of Natural and Scientific Interest (ANSI)

Means areas of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education.

Automobile-Focused Uses

A building or business, or portion thereof, which caters primarily to the needs of automobiles, including, but not limited to the provision of fuel/gas, parts or products, repairs or servicing, facilities or services for washing, drive-throughs and the sale, lease or rental of automobiles of all types.

Brownfield Site

Undeveloped or previously developed properties that may be contaminated. They are usually, but not exclusively, former industrial or commercial properties that may be underutilized, derelict or vacant.

Built Heritage Resources

A building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. **Built heritage resources** are generally located on property that has been designated under Parts IV or V of the Ontario Heritage Act, or included on local, Provincial and/or Federal registers.

Business Service Establishment

An establishment servicing primarily the operational needs of the business community including: employment services, customs services, marketing services, collection and credit services, appraisal services, advertising and graphic services, accounting and bookkeeping services, research and training services, office equipment and computer services, data processing services, courier services, property management services, security services, janitorial services, and studio and communication services.

Cash-in-Lieu

A payment of money in lieu of a conveyance otherwise required under the Planning Act.

Commercial Fertilizer

Synthetic substances containing nitrogen, phosphorus, potassium or other chemicals intended for use as a plant nutrient or other substances that are intended to improve the physical condition of soils or to aid in plant growth or crop yields.

Community Energy Plan

A strategic plan developed with the objectives of attracting investment in the energy sector, ensuring a reliable energy supply, and reducing the environmental impacts associated with energy generation and consumption.

Community Hub

A central access point for a range of needed health and social services, along with cultural, recreational, and open spaces. Every community hub is unique and is defined by local needs, services and resources.

Compatible Development

Compatible development is not development that is the same as, or even similar to existing development in the vicinity. Compatible development is development that enhances the character of the surrounding community without causing any undue, adverse impacts on adjacent properties including, but not limited to, consideration of Provincial guidelines relating to Land Use Compatibility and Environmental Noise.

Complete Communities

Places such as mixed-use neighbourhoods or other areas within cities, towns, and settlement areas that offer and support opportunities for people of all ages and abilities to conveniently access most of the necessities for daily living, including an appropriate mix of jobs, local stores, and services, a full range of housing, transportation options and **public service facilities**. **Complete communities** are age-friendly and may take different shapes and forms appropriate to their contexts.

Complete Streets

Streets planned to balance the needs of all road users, including pedestrians, cyclists, transit-users, and motorists.

Conservation Authority

Means the Otonabee Region Conservation Authority or its successors.

Conserved

Means the identification, protection, management and use of **built heritage resources**, **cultural heritage landscapes** and **archaeological resources** in a manner that ensures their cultural heritage value or interest is retained under the Ontario Heritage Act. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

Cultural Heritage Landscape

A defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may involve features such as structures, spaces, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Examples may include, but are not limited to, Heritage Conservation Districts designated under the Ontario Heritage Act; villages, parks, gardens, battlefields, mainstreets and neighbourhoods, cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance; and areas recognized by Federal or international designation authorities (e.g., a National Historic Site or District designation, or a UNESCO World Heritage Site).

Cultural Heritage Resources

Built heritage resources, **cultural heritage landscapes** and **archaeological resources** that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people. While some **cultural heritage resources** may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation.

Delineated Built Boundary

The limits of the developed urban area as defined by the Minister in consultation with affected municipalities for the purpose of measuring the minimum intensification target in A Place to Grow: Growth Plan for the Greater Golden Horseshoe.

Delineated Built-Up Area

All land within the **delineated built boundary**.

Designated Greenfield Area

Lands within settlement areas but outside of **delineated built-up areas** that have been designated in an official plan for development and are required to accommodate forecasted growth to the horizon of this Plan. **Designated Greenfield Areas** do not include **excess lands**.

Developable Land Area

The area of the property less the area occupied by protected **natural heritage features**, and any related **vegetation protection zone**.

Development (not bolded in text)

The creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act, but does not include:

- a. activities that create or maintain infrastructure authorized under an environmental assessment process; or
- b. works subject to the Drainage Act.

Drinking Water Threat

An activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat under the Clean Water Act, 2006.

Ecological Function

The natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions.

Employment Land Employment

Jobs accommodated in primarily low-rise industrial-type building space and multiples, the vast majority of which are located within business parks and industrial areas.

Endangered Species

Means a species that is listed or categorized as an "Endangered Species" on the official Provincial species at risk list or Schedule 1 of the Federal Species at Risk Act, as amended from time to time.

Ephemeral Watercourse

Water flows for a short period of time in response to localized precipitation (e.g. spring freshet or storm events). Surface water channel is above the local groundwater table.

Excess Lands

Vacant, unbuilt but developable lands within settlement areas but outside of **delineated built-up areas** that have been designated in an official plan for development but are in excess of what is needed to accommodate forecasted growth to the horizon of this Plan.

Farm-Animal Yard

An enclosure for livestock, deer, elk or game animals that is not an **outdoor confinement area**.

Fish Habitat

As defined in the Fisheries Act, means spawning grounds and any other areas, including nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Flood plain

For **river**, **stream and small inland lake systems**, means the area, usually low lands adjoining a **watercourse**, which has been or may be subject to **flooding hazards** (PPS,2020).

Floodway

For **river**, **stream and small inland lake systems**, means the portion of the **flood plain** where development and **site alteration** would cause a danger to public health and safety or property damage (PPS,2020).

Flooding Hazard

Means the inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

- along the shorelines of the Great Lakes St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one hundred year flood level plus an allowance for wave uprush and other water related hazards:
- b. along **river**, **stream and small inland lake systems**, the **flooding hazard** limit is the greater of:
 - i. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
 - ii. the one hundred year flood; and
 - iii. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry;
 - except where the use of the **one hundred year flood** or the actually experienced event has been approved by the Minister of Natural Resources and Forestry as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard) (PPS,2020).

Floor Space Index (FSI)

The ratio between the total floor area of a building or buildings to the net area of the lot to which the building(s) are located. For example a **floor space index** of 1.0 means that the total floor area of the building is equivalent to the net lot area on which the building is located.

Garden Suite

Means a temporary self-contained detached residential structure that is accessory to a single detached dwelling unit and that is designed to be portable.

Great Lakes - St. Lawrence River System

Means the major water system consisting of Lakes Superior, Huron, St. Clair, Erie and Ontario and their connecting channels, and the St. Lawrence River within the boundaries of the Province of Ontario (PPS,2020).

Green Building

A building that, in its design, construction or operation, reduces or eliminates negative impacts, and can create positive impacts, on the climate and natural environment.

Green Infrastructure

Natural and human-made elements that provide ecological and hydrologic functions and processes. **Green infrastructure** can include components such as **natural heritage features** and systems, parklands, stormwater management systems, street trees, **urban forests**, natural channels, permeable surfaces, and green roofs.

Greyfields

Previously developed properties that are not contaminated. They are usually, but not exclusively, former commercial properties that may be underutilized, derelict or vacant.

Habitat of Endangered Species and/or of Threatened Species:

Means

- a. Habitat within the meaning of Section 2 of the Endangered Species Act, 2007; and/or,
- b. Habitat for aquatic species or migratory birds species listed as threatened or endangered on Schedule 1 of the Species at Risk Act on non-federal lands.

Hazardous Lands

Property or lands that could be unsafe for development due to naturally occurring processes. Along **river**, **stream and small inland lake systems**, this means the land, including that covered by water, to the furthest landward limit of the **flooding hazard** or erosion hazard limits.

Hazardous Sites

Property or lands that could be unsafe for development and **site alteration** due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

Highly Vulnerable Aquifer

An aquifer on which external sources have or are likely to have a significant adverse effect, and includes the land above the aquifer.

Infill Housing

Any project that builds new housing in an already established neighbourhood, such as:

- a. Demolishing one single-family home and building a new one on the same lot;
- b. Building a duplex where a single-family home once stood;
- c. Putting up a row of townhouses where one or more single-family homes stood previously; or,
- d. Constructing a new building on a vacant lot.

Infrastructure (not bolded in text)

Physical structures (facilities and corridors) that form the foundation for development. Infrastructure includes: sewage and water systems, septage treatment systems, stormwater management systems, waste management systems, electricity generation facilities, electricity transmission and distribution systems, communications/telecommunications, transit and transportation corridors and facilities, oil and gas pipelines and associated facilities.

Intake Protection Zone

An area that is related to a surface water intake and within which it is desirable to regulate or monitor drinking water threats.

Intermittent Watercourse

Water flows for several months during the year because of a connection with seasonally high groundwater table or flow contributions from **wetlands**. Typically flow typically ceases during the summer months (July and August).

Large-scale food store

A retail establishment specializing in food products with a Gross Floor Area greater than 1,500 square metres. This definition includes warehouse membership clubs, department stores and other retailers with more than 1,500 square metres of selling area devoted to food and grocery items.

Linkage/Corridor

A linear area intended to provide connectivity, supporting a complete range of community and ecosystem processes, enabling plants and smaller animals to move between core areas and other larger areas of habitat over a period of generations.

Low Impact Development

An approach to stormwater management that seeks to manage rain and other precipitation as close as possible to where it falls to mitigate the impacts of increased runoff and stormwater pollution. It typically includes a set of site design strategies and distributed, small-scale structural practices to mimic the natural hydrology to the greatest extent possible through infiltration, evapotranspiration, harvesting, filtration, and detention of stormwater. **Low impact development** can include, for example: bio-swales, vegetated areas at the edge of paved surfaces, permeable pavement, rain gardens, green roofs, and exfiltration systems. **Low impact development** often employs vegetation and soil in its design, however, that does not always have to be the case and the specific form may vary considering local conditions and community character.

Major Institutional

Significant institutional facilities which are generally included within the Major Institutional Designation.

Major Office

Freestanding office buildings of approximately 4,000 square metres of floor space or greater, or with approximately 200 jobs or more.

Major Retail Facilities

Large-scale or large-format stand-alone retail stores or retail centres with over 5,000 square metres of gross floor area that have the primary purpose of commercial activities.

Major Transit Station Area (MTSA)

The area including and around any existing or planned higher order transit station or stop within a settlement area; or the area including and around a major bus depot in an urban core. **Major transit station areas** generally are defined as the area within an approximate 500 to 800 metre radius of a transit station, representing about a 10-minute walk.

Mine Hazard

Means any feature of a mine as defined under the Mining Act, or any related disturbance of the ground that has not been rehabilitated.

Mineral Aggregate Operation

- a. Lands under license or permit, other than for wayside pits and quarries, issued in accordance with the Aggregate Resources Act;
- b. For lands not designated under the Aggregate Resources Act, established pits and quarries that are not in contravention of municipal zoning by-laws and including adjacent land under agreement with or owned by the operator, to permit continuation of the operation; and
- c. Associated facilities used in extraction, transport, beneficiation, processing or recycling of mineral aggregate resources and derived products such as asphalt and concrete, or the production of secondary related products.

Mineral Mining Operation

Means mining operations and associated facilities, or, past producing mines with remaining mineral development potential that have not been permanently rehabilitated to another use.

Multi-Modal

Relating to the availability or use of more than one form of transportation, such as automobiles, walking, cycling, buses, rapid transit, rail (such as commuter and freight), trucks, air, and marine.

Natural Heritage Features and Areas

Features and areas, including wetlands, woodlands, valleylands, Areas of Natural and Scientific Interest, watercourses and waterbodies, habitat of threatened or endangered species, and Significant Wildlife Habitat, which may be significant at the provincial level or important and valued at the local scale.

Natural Heritage System

Means a system made up of **natural heritage features and areas**, and **linkages** intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. The system can include **natural heritage features**, hydrologic features, Federal and Provincial parks and conservation reserves, other **natural heritage features and areas**, lands that have been restored or have the potential to be restored to a natural state, associated areas that support hydrologic functions, and working landscapes that enable **ecological functions** to continue.

Naturally Occurring Waterbodies (Lakes/Ponds)

Waterbodies that occur and persist without anthropogenic influence (i.e. was not constructed and does not require on-going maintenance).

Negative Impact

- In regard to water, degradation to the quality and quantity of water, sensitive surface water features and sensitive ground water features, and their related hydrologic functions, due to single, multiple or successive development or site alteration activities; and,
- b. In regard to other **natural heritage features and areas**, degradation that threatens the health and integrity of the natural features or **ecological functions** for which an area is identified due to single, multiple or successive development or **site alteration** activities.

Neighbourhood Supportive Uses

Uses which are complementary, serve the needs of local residents and support the development of a walkable and **complete community** and which do not create an adverse impact on the surrounding residential uses.

No Net Loss

Where unavoidable habitat, environmental and/or resource losses are balanced with the replacement of those features, such as through site restoration.

Non-Agricultural Source Material

Includes a variety of materials that may be sources of nutrients or pathogens and are intended to be applied to land as nutrients, but are not necessarily produced on a farm. Such materials may include pulp and paper biosolids; sewage biosolids; anaerobic digestion output; and, materials from dairy product or animal food manufacturing.

Non-Provincially Significant Wetlands

Wetlands that are evaluated using the Ontario Wetland Evaluation System (OWES) and confirmed by the Ministry of Natural Resources and Forestry to not be provincially significant. This may be because they were evaluated and do not score sufficient points or because they were purposefully not included in an OWES evaluation.

Oil, Gas and Salt Hazards

Means any feature of a well or work as defined under the Oil, Gas and Salt Resources Act, or any related disturbance of the ground that has not been rehabilitated.

One Hundred (100) Year Flood

Means the flood based upon analysis of precipitation, snow melt or a combination thereof, which has a return period of 100 years on average or which has a 1 per cent chance of occurring or being exceeded in any given year, as determined by the **Conservation Authority.**

One Hundred Year Flood Level

Means

- a. for the shorelines of the **Great Lakes**, the peak instantaneous stillwater level, resulting from combinations of mean monthly lake levels and wind setups, which has a 1% chance of being equalled or exceeded in any given year;
- in the connecting channels (St. Marys, St. Clair, Detroit, Niagara and St. Lawrence Rivers), the peak instantaneous stillwater level which has a 1% chance of being equalled or exceeded in any given year; and
- c. for large inland lakes, lake levels and wind setups that have a 1% chance of being equalled or exceeded in any given year, except that, where sufficient water level records do not exist, the **one hundred year flood level** is based on the highest known water level and wind setups (PPS,2020).

Outdoor Confinement Area

An enclosure for livestock, deer, elk or game animals that has the following characteristics:

- a. It has no roof, except as described in paragraph 3.
- b. It is composed of fences, pens, corrals or similar structures.
- c. It may contain a shelter to protect the animals from the wind or another shelter with a roof of an area of less than 20 square metres.
- d. It has permanent or portable feeding or watering equipment.
- e. The animals are fed or watered at the enclosure.
- f. The animals may or may not have access to other buildings or structures for shelter, feeding or watering.

Permanent Watercourse

Continuous year-round surface flow occurs in most years. Baseflow conditions are supported by year-round groundwater discharge and/or **wetland**/surface storage areas.

Personal Service Commercial

A building or part thereof used for the furnishing of personal services to individual persons, including a barber, hairdresser, beautician, tailor, dressmaker, shoemaker, self-service laundry, self-service dry cleaning establishment, dry cleaning depot - Class 2 or suntanning shop, but specifically excluding a use as a body massage parlour or an adult entertainment parlour.

Petroleum Resource Operations

Means oil, gas and salt wells and associated facilities and other drilling operations, oil field fluid disposal wells and associated facilities, and wells and facilities for the underground storage of natural gas and other hydrocarbons.

Placemaking

A planning and urban design process which seeks to create communities that offer a distinct character, a strong sense of community, a context for healthy lifestyles and a high quality of life.

Population-Related Employment

Means employment that exists in response to a resident population that is primarily not located in Employment Districts or **major office** jobs. This category includes retail, education, health care, local government and work at home employment.

Prescribed Instrument

An instrument that is issued or otherwise created under a provision prescribed by the regulations of:

- a. The Aggregate Resources Act;
- b. The Conservation Authorities Act;
- c. The Crown Forest Sustainability Act, 1994;
- d. The Environmental Protection Act;
- e. The Mining Act;
- f. The Nutrient Management Act, 2002;
- g. The Oil, Gas and Salt Resources Act;
- h. The Ontario Water Resources Act;
- i. The Pesticides Act; or,
- j. Any other Act or regulation prescribed by the regulations.

Provincially Significant Wetland

Provincially Significant Wetlands (PSW) meeting the point scoring threshold through an Ontario Wetland Evaluation System valuation and designated by the Ministry of Natural Resources and Forestry.

Public Realm

All spaces to which the public has unrestricted access, such as streets, parks and sidewalks.

Public Service Facilities

Lands, buildings and structures for the provision of programs and services provided or subsidized by a government or other body, such as social assistance, recreation, police and fire protection, health and educational programs, and cultural services. **Public service facilities** do not include infrastructure.

Redevelopment (not bolded in text)

The creation of new units, uses or lots on previously developed land in existing communities, including **brownfield sites**.

Regulatory Flood

Means the flood resulting from the Timmins Storm centred event, or the 1:100 Year Flood, whichever is greater, as determined by the Conservation Authority.

Risk Management Official

The **Risk Management Official** appointed under Part IV of the Clean Water Act, 2006. The **Risk Management Official** is responsible for making decisions about risk management plans and risk assessments and must meet the prescribed criteria in the regulations under the Clean Water Act, 2006 and is responsible for implementing source protection plan policies that utilize tools set out under Part IV of the Clean Water Act to manage **significant drinking water threats**.

River, stream and small inland lake systems

Means all **watercourses**, rivers, streams, and small inland lakes or waterbodies that have a measurable or predictable response to a single runoff event (PPS,2020).

Semi-natural Features

Natural features that require human management to persist in the current form.

Sensitive

In regard to **surface water features** and ground water features, means areas that are particularly susceptible to impacts from activities or events including, but not limited to, water withdrawals, and additions of pollutants (PPS,2020).

Service Commercial Use

A building or structure or part thereof where clerical, business, professional and administrative services such as banking, accounting, insurance, investment and financial planning, land use planning, engineering or architectural services or the services of other consultants are provided and may include personal service uses such as florists, dry cleaning, tailors, travel agents, hair salons, day spas, and shoe repair, but shall not include any Adult Entertainment Use.

Significant Drinking Water Threat

An activity which poses or has the potential to pose a significant risk to the source of a municipal drinking water system.

Significant Drinking Water Threat, Existing

- a. An activity being undertaken as of and prior to, January 1, 2015;
- b. An agricultural activity undertaken at some time between January 1, 2005 and January 1, 2015; or
- c. As otherwise established by the current source protection plan.

With respect to an existing **significant drinking water threat**, a matter is deemed to have commenced prior to January 1, 2015:

- a. In the case of a request for an official plan amendment, on the day the request is received;
- b. In the case of an official plan, an amendment to it or a repeal of it, on the day the bylaw adopting the plan, amendment or repeal is passed;
- c. In the case of a zoning bylaw or an amendment to it, on the day the bylaw is passed;
- d. In the case of an application for an amendment to a zoning bylaw, an approval of development in a site plan control area under subsection 41 (4) of the Planning Act, an application for a minor variance under section 45 of the Planning Act, an application for the approval of a plan of subdivision under section 51 of the Planning Act or an application for the approval of, or an exemption from an approval of, a condominium under section 9 of the Condominium Act, 1998, an application for a consent under section 53 of the Planning Act, on the day the application is made; or,
- e. In the case of an application to amend or revoke an order under section 47 of the Planning Act, on the day the application is made; Chapter 4: Policies Trent Source Protection Plan 27; or,
- f. As otherwise established by the current source protection plan.

Significant Drinking Water Threat, Future

An activity that is to commence after January 1, 2015 and is not an existing activity.

Significant Groundwater Recharge Area

A type of **Vulnerable Area** defined under the Clean Water Act, 2006, within which it is desirable to regulate or monitor **drinking water threats** that may affect the recharge of an aquifer.

Significant Valleyland

A valleyland which is ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or **natural heritage system**. These are to be identified using criteria established by the Province.

Significant Wildlife Habitat

Habitat of seasonal concentrations of animals, rare vegetation communities or specialized habitat for wildlife, habitat for Species of Conservation Concern and animal movement **corridors** that meets the criteria found in the Significant Wildlife Habitat Ecoregional Criteria Schedules (OMNRF 2015).

Significant Woodland

- a. **Woodlands** 2 hectares or greater in extent; or
- b. **Woodlands** 0.5 hectares or greater in extent and that:
 - Directly supports threatened or **endangered species**, with the exception of specimens deemed not requiring protection by the Province (e.g. as is sometimes the case with Butternut); or,
 - Are within 30 metres of a provincially significant wetland or permanent watercourse or intermittent watercourse; or,
 - Are identified as part of an ecologically functional corridor or linkage between natural heritage features; or,
 - Are dominated by native trees older than 100 years and having late successional characteristics.

Site Alteration

Activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site.

Small-scale food store

A retail establishment specializing in food products with a maximum Gross Floor Area of 1,500 square metres.

Special Needs

Any housing, including dedicated facilities, in whole or in part, that is used by people who have specific needs beyond economic needs, including but not limited to, needs such as mobility requirements or support functions required for daily living. Examples of **special needs** housing may include, but are not limited to, housing for persons with disabilities such as physical, sensory or mental health disabilities, and housing for older persons.

Special Policy Area

An area within a community that has historically existed in the **flood plain** and where site-specific policies, approved by both the Ministers of Natural Resources and Forestry and Municipal Affairs and Housing, are intended to provide for the continued viability of existing uses (which are generally on a small scale) and address the significant social and economic hardships to the community that would result from strict adherence to provincial policies concerning development. The criteria and procedures for approval are established by the Province.

A **Special Policy Area** is not intended to allow for new or intensified development and site alteration, if a community has feasible opportunities for development outside the **flood plain**.

Strategic Growth Areas

Within settlement areas, nodes, corridors, and other areas that have been identified by municipalities or the Province to be the focus for accommodating intensification and higher-density mixed-uses in a more compact built form. **Strategic Growth Areas** include **Urban Growth Centres**, **major transit station areas**, and other major opportunities that may include infill, redevelopment, **brownfield sites**, the expansion or conversion of existing buildings, or **greyfields**. Lands along major roads, arterials, or other areas with existing or planned frequent transit service or higher order transit corridors may also be identified as **Strategic Growth Areas**.

Surface Water Feature

Means water-related features on the Earth's surface, including headwaters, rivers, stream channels, inland lakes, seepage areas, recharge/discharge areas, springs, **wetlands**, and associated riparian lands that can be defined by their soil moisture, soil type, vegetation or topographic characteristics (PPS,2020).

Threatened species

Means a species that is listed or categorized as a "Threatened Species" on the official Provincial species at risk list or Schedule 1 of the Federal Species at Risk Act, as amended from time to time.

Transit-Oriented

Development which is designed to be well connected and integrated with transit systems, helps to make transit use more efficient, comfortable and attractive, provides quality pedestrian amenities to support the walk to and from transit services and generates ongoing demand for transit ridership.

Transit-Supportive

Relating to development that makes transit viable and improves the quality of the experience of using transit. It often refers to compact, mixed-use development that has a high level of employment and residential densities. **Transit-supportive** development will be consistent with Ontario's Transit Supportive Guidelines.

Transport Pathway

means a condition of land resulting from human activity that increases the vulnerability of a raw water supply of a drinking water system. **Transport pathways** may include, but are not limited to, the following: For groundwater systems:

- a. Wells or boreholes;
- b. Unused or abandoned wells;
- c. Pits and quarries;
- d. Mines;
- e. Construction activities involving deep excavations (such as building foundations, basements, parking garages);
- f. Underground storm sewer, sanitary sewer & water distribution system infrastructure.

Tree (not bolded in text)

Woody vegetation that can grow to a minimum of 4.5 metres in height and a minimum diameter at breast height (DBH) of 7.5 centimetres at maturity. Excluded are: European Buckthorn (*Rhamnus catharctica*), Glossy Buckthorn (*Rhamnus frangula*), Staghorn Sumac (*Rhus typhina*) and Common Lilac (*Syringa vulgaris*).

Unevaluated Wetland

Wetlands that have not been evaluated using the Ontario Wetland Evaluation System or that have been considered for inclusion in an evaluation and rejected.

Universal Design

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

Urban Forest

A collection of trees that grow within an urban area or any human settlement. Trees may be naturally occurring or planted and may exist as mixtures of individual trees, woodlots or forest, riparian complexes and fields in various stages of succession toward a tree-dominated landscape.

Urban Growth Centre

Existing or emerging downtown areas shown in Schedule 4 of A Place to Grow: Growth Plan for the Greater Golden Horseshoe and as further identified by the Minister on April 2, 2008.

Valleylands

A natural area that occurs in a depression within the landscape that has two sides and that has water flowing through or standing for some period of the year. For the purposes of the policy of this Official Plan, **Significant Valleylands** and **valleylands** exclude built-up valleyland areas within the City of Peterborough. These areas may still be subject to **Conservation Authority** regulations.

Vegetation Protection Zone

A vegetated buffer area surrounding a **natural heritage feature** that is intended to protect the feature and their ecological and hydrological functions from the **negative impacts** of adjacent land uses.

Vulnerable Area

An area defined under the Clean Water Act for the purpose of protecting the quality and quantity of drinking water sources, now and in the future.

Watercourse

An identifiable depression in the ground in which a flow of water regularly or continuously occurs.

Watershed

An area that is drained by a river and its tributaries.

Watershed Planning

Planning that provides a framework for establishing goals, objectives, and direction for the protection of water resources, the management of human activities, land, water, aquatic life, and resources within a **watershed** and for the assessment of cumulative, cross-jurisdictional, and cross-**watershed** impacts.

Watershed planning typically includes: watershed characterization, a water budget, and conservation plan; nutrient loading assessments; consideration of climate change impacts and severe weather events; land and water use management objectives and strategies; scenario modelling to evaluate the impacts of forecasted growth and servicing options, and mitigation measures; an environmental monitoring plan; requirements for the use of environmental best management practices, programs, and performance measures; criteria for evaluating the protection of quality and quantity of water; the identification and protection of hydrologic features, areas, and functions and the inter-relationships between or among them; and targets for the protection and restoration of riparian areas.

Watershed planning is undertaken at many scales, and considers cross-jurisdictional and cross-**watershed** impacts. The level of analysis and specificity generally increases for smaller geographic areas such as sub-**watersheds** and tributaries.

Wave uprush

Means the rush of water up onto a shoreline or structure following the breaking of a wave; the limit of **wave uprush** is the point of furthest landward rush of water onto the shoreline (PPS,2020).

Wellhead Protection Area

A type of **Vulnerable Area** defined under the Clean Water Act, 2006, that is related to a wellhead and within which it is desirable to regulate or monitor **drinking water threats**.

Wetlands

Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water tolerant plants. Four main categories of wetland are swamps, marshes, bogs and fens. Periodically soaked or wetlands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands.

Wildlife Habitat

Areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter and space needed to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory or non-migratory species.

Woodland

All treed areas greater than 0.2 hectares determined by dripline, includes woodlots and forested areas, including treed **wetlands**, other than a cultivated fruit or nut orchard or a plantation established for the purpose of producing Christmas trees or nursery stock. The following Ecological Land Classification (ELC) Community Classes and Series are also considered woodland:

- a. Forest coniferous forest (FOC), mixed forest (FOM) or deciduous forest (FOD);
- b. Swamp coniferous swamp (SWC), mixed swamp (SWM) or deciduous swamp (SWD); and;
- c. Cultural cultural woodland (CUW) or cultural plantation (CUP).

Treed areas separated by more than 20 metres or bisected by a roadway will be considered to be separate woodland areas. When determining the limit of a woodland, continuous agricultural hedgerows and woodland fingers or narrow woodland patches will be considered part of a woodland if they have a minimum average width of at least 40 metres and narrower sections have a length to width ratio of 3 to 1 or less (i.e., no more than 3 times longer than the average width of the narrow section). Internal undeveloped openings 20 metres or less in width are included in the calculation of woodland area. Internal undeveloped openings more than 20 metres wide but less than 0.2 hectare in area would be included in the calculated woodland area.

This page is intentionally left blank.





9.0 SECONDARY PLANS

9.1 Lily Lake Secondary Plan

a. The Lily Lake Secondary Land Use Planning Area is generally bounded by Lily Lake Road, Fairbairn Street, Jackson Park and Jackson Creek, and the Jackson Creek East Provincially Significant Wetland. The actual limits of the Planning Area are as shown on Schedule J: Lily Lake Secondary Plan of the Official Plan. It is the policy of Council that land within the Lily Lake Secondary Land Use Plan shall be developed in accordance with the land use pattern shown on Schedule J: Lily Lake Secondary Plan. Reference shall also be made to the policies of Section 9.1 in addition to other policies of the Official Plan. The land use categories of Schedule J: Lily Lake Secondary Plan shall have the same meaning as in the Official Plan or Zoning By-law.

Objectives of the Plan

- b. Council adopts the following objectives for the Lily Lake Secondary Land Use Plan:
 - i. To establish a community for the undeveloped lands within the City that are north of Jackson Park and Jackson Creek, west of Fairbairn Street, south of Lily Lake Road and east of the Jackson Creek East **Provincially Significant Wetland** that contributes to the development of the City as a complete community by including convenient access to jobs, local services, community infrastructure (including schools and parks), and a range of housing, including **affordable** housing, that will be suitable for a broad range of age groups.
 - ii. To recognize the Planning Area as a substantial new development area and identify the need to anticipate development impacts on the surrounding neighbourhood and environment and take reasonable actions to mitigate adverse impacts.
 - iii. To establish a complete transportation system that integrates the Planning Area with the surrounding community by accommodating the needs of pedestrians, cyclists, transit users and motorists.

- iv. To establish a community open space system that preserves environmental features within and adjacent to the Planning Area including Jackson Creek and the Jackson Creek Valley, Jackson Park, and the Jackson Creek East **Provincially Significant Wetland** and tributary.
- v. To establish a servicing strategy to link services in the Secondary Plan Area with services in the City in a cost-effective manner and ensure adequate standards are maintained for all services.

Development Policies

Community Structure

Open Space System

c. The Community Open Space System consists of Natural Areas as depicted on **Schedule F: Natural Heritage System and Environmental Constraints** of the Official Plan. Additionally, buffers, adjacent lands, and parklands are an integral part of the Community Open Space System and are intended to help protect the function of the Natural Area features and ensure their long-term sustainability within the urban context while also providing passive and active recreation opportunities for the community.

Residential Areas

d. Residential areas permit a range of low and medium density residential uses which will be predominantly ground-related in orientation. In addition, related uses that are complementary to residential uses shall be permitted including **neighbourhood supportive uses**, home occupation uses, public and institutional uses, parks and recreation areas, churches and special care facilities.

Transportation System

e. The community will be developed based on a modified grid street system and related off-street trail/walkway system designed to provide for a full range of transportation options with a focus on maximizing the potential for transit service and **active transportation**.

Natural Area, Open Space and Parkland

- f. When reviewing development proposals, the City will have regard for the form and function of existing natural features within and/or adjacent to the Secondary Planning Area, including:
 - The Jackson Creek East **Provincially Significant Wetland** and its associated tributary;
 - ii. Jackson Creek and its associated valley lands, woodland and tributaries;
 - iii. **Unevaluated wetland** pockets located within the Jackson Creek Valley and near the homestead at 689 Lily Lake Road;
 - iv. Wildlife habitat and connectivity; and,
 - v. Species at risk.

Where an Environmental Impact Study is required pursuant to this Section, Section 7.21.2 or as required in Section 2.1 of the Provincial Policy Statement, such study shall be completed prior to the approval of development or site alteration and shall define the limit of the Natural Area, **vegetation protection zone** requirements, and the limit of any **flood plain** associated with the Natural Area. Areas defined as Natural Area or required as a buffer to the Natural Area shall be dedicated to the City at no cost for open space purposes.

Additionally, for features and functions requiring protection, the study shall recommend measures for their protection and enhancement and for monitoring the effectiveness of these measures in accordance with Section 9.1(h).

- g. In addition to the requirements of Sections 7.21.2 and 9.1(f), any Environmental Impact Study prepared in support of a development proposal may also be required to investigate:
 - i. The incidence of foxglove beardtongue;
 - ii. The presence of, or potential for, potential turtle nesting habitat on or adjacent to the lands; and,
 - iii. The hydrologic and ecological link between water features within the Jackson Creek Valley and features above the valley.

- h. The City will establish, in partnership with the **Conservation Authority**, a comprehensive program to monitor the effects of development on the form and function, including wildlife, of the Jackson Creek East **Provincially Significant Wetland**, the Jackson Creek Valley, Jackson Creek and its tributaries, and **unevaluated wetlands** within the Planning Area. Monitoring program observations will be summarized in an annual report during the life of the program. The annual report may include recommendations that adaptive measures or future measures be undertaken. Funding for the monitoring program will be secured from development proponents as a condition of development approval for properties adjacent to and/or within the **watershed** of the features. The development proponent's obligations will be secured through a development agreement.
- i. Where development is determined to be appropriate on adjacent lands to the Jackson Creek East **Provincially Significant Wetland** pursuant to Sections 4.6 and 7.21.2, such development will be permitted without amendment to this plan and will generally consist of Low Density Residential and Stormwater Management uses.
- j. Prior to any development, **site alteration**, construction or tree removal, the City will require the submission of detailed natural features/vegetation studies, tree assessment and preservation plans (including an inventory of existing mature trees on site and measures for respecting or replacing these trees), hydrogeological and geotechnical studies, and archaeological assessment studies when reviewing development proposals.
- k. Detailed landscaping and planting plans consisting of a variety of suitable native species shall be prepared in conjunction with studies prepared pursuant to Sections 9.1(f) and (j) and with consideration to shade and visual screening for all areas to be dedicated to the City for open space, parkland, and stormwater management purposes.
- I. The Jackson Creek Valley is a **significant valleyland** and woodland area that serves to connect Jackson Park to significant natural areas beyond the City. Generally, the treeline along the top of and within the valley shall be protected. Limited tree removal may be permitted to facilitate the provision of infrastructure and trail facilities subject to the completion of studies and plans in accordance with Sections 9.1(f), (j) and (k).
- m. Development in proximity to the Jackson Creek Valley shall be supported by an Erosion Hazard Limit Study prepared in accordance with Province's guidelines.

n. To promote public accessibility to and to protect public views to and from the Jackson Creek Valley, the City will encourage the provision of open space and tree planting along the top of the valley and may consider alternative design standards for streets that abut such open space.

Land Use

- o. It is intended that the land use areas and limits of other features or site-specific land uses shown on **Schedule J: Lily Lake Secondary Plan** are approximate. Adjustments can be made without amendment to the Official Plan provided the general intent and purpose of the Secondary Plan is maintained.
- p. Development of the Planning Area will be planned to achieve a minimum average density of 50 residents and jobs per hectare combined. To achieve this, notwithstanding the provisions of Section 4.2.2, residential areas illustrated on **Schedule J: Lily Lake Secondary Plan** shall be planned for the following average minimum net densities:

Low Density – 25 units per hectare;

Medium Density – 45 units per hectare;

Medium-High Density – 60 units per hectare.

- q. Subject to conformity with Sections 6.2.3 and 6.2.6 of this Plan, the City may consider development proposals in the Lily Lake Planning Area that employ alternative development standards such as rear laneways, alternative parkland sizing and placement, reduced lot sizes and building setbacks, and alternative parking arrangements in order to facilitate the creation of a compact community that achieves a minimum average density of 50 residents and jobs per hectare over the entire Planning Area.
- r. When reviewing development proposals, the City may require development proponents to assess off-street parking requirements of the proposed development and to implement measures over and above typical lot-specific Zoning By-law standards to ensure adequate parking standards and arrangements are provided within the neighbourhood.

- s. Where an elementary school is anticipated within the Planning Area on Schedule J: Lily Lake Secondary Plan, such blocks will be zoned to permit alternative uses by the underlying land use designation on Schedule B: Land Use Plan including other institutional uses and residential uses. As part of the approval of a plan of subdivision, a lotting plan shall be submitted to demonstrate that the school block is configured in a manner which will permit future development for other purposes should a school not be developed.
- t. In addition to those uses contemplated in Section 4.2.2, institutional and cultural uses, with the exception of cinemas and theatres, shall also be permitted within neighbourhood supportive facilities identified on **Schedule J: Lily Lake Secondary Plan**.
- u. A Neighbourhood Core is outlined on Schedule J: Lily Lake Secondary Plan. The Neighbourhood Core lies along both sides of the northerly eastwest collector street and is centrally located within walking distance of most of the Planning Area. To encourage the development and use of this area as a neighbourhood focal point, to include a variety of uses and spaces, and to serve the day-to-day and "live work" needs of residents, the City will encourage properties within the Neighbourhood Core that are designated for residential purposes on Schedule J: Lily Lake Secondary Plan to integrate small-scale, neighbourhood supportive uses, as described in Section 4.2.2 and home occupations.

Development proponents within the Neighbourhood Core may be required to complete and implement a coordinated Urban Design program pursuant to Section 9.1(pp) to foster a pedestrian oriented, accessible and active streetscape and **multi-modal** transportation.

- v. Land use planning approvals for the southwest portion of the Planning Area shall protect the need for municipal infrastructure installations to Parkhill Road, in the vicinity of Ravenwood Drive, should they be deemed necessary in the future.
- w. The eastern portion of the Planning Area is encompassed by a collection of undeveloped lots created historically by a process called "checkerboarding".
 Due to fragmentation of ownership, these lands present a unique challenge to potential development. Notwithstanding the provisions of Section 9.1(p), medium density residential, as described in this Secondary Plan may also be considered in the eastern portion of the Planning Area.

Transportation

- x. It is intended that the location of streets shown on **Schedule J: Lily Lake Secondary Plan** are approximate. The location and alignment of streets will be determined at the time of subdivision approval without amendment to the Secondary Plan.
- y. Proponents of development will be required to complete Traffic Impact Studies in accordance with Sections 6.2 and 7.21.2. Implementation of required road network improvements will be secured either prior to, or as a condition of, development approvals.
- z. The City will have the authority to expand designated road rights-of-way at collector/collector street intersections and collector/arterial street intersections if determined necessary for intersection design.
- aa. Roundabout intersections will be preferred where Collector Roads intersect.
- bb. The City will cooperate with the County of Peterborough, the Township of Selwyn, and other affected authorities to facilitate implementation of any roadway improvements beyond the City's boundary that are required to serve the Planning Area.
- cc. On-road bikeways will be provided on all Collector Roads within the Secondary Plan area. The City will have the authority to expand designated road rights-of-way to accommodate planned pedestrian, cycling and infrastructure facilities if determined necessary.
- dd. Off-road bikeways and pedestrian facilities will be planned in conjunction with studies prepared pursuant to Sections 9.1(f), and (j) and implemented as a condition of development approvals. Off-road bikeways and pedestrian facilities will be planned to maximize linkages among parkland and open space features within the Planning Area and connectivity with adjacent features including the Trans-Canada Trail, Fairbairn Street and Poplar Park.
- ee. Public transit will be provided to the Lily Lake Planning Area in accordance with Section 6.2.5. The timing for the provision of a scheduled fixed transit route to the Planning Area will be evaluated through periodic route evaluation reviews. The City will assess and implement a pedestrian and cycling link between Chemong Road and the eastern collector access to the Lily Lake Planning Area in accordance with Section 6.2.3 of the City's Official Plan.

Stormwater Management

- ff. The Lily Lake Functional Planning Study and the Detailed Flood Reduction Study prepared for Jackson Creek, and the recommendations contained therein, will serve as the basis for completing stormwater management plans, including water quality and quantity measures for the Planning Area. Development approvals will be granted, subject to the approval of detailed stormwater management reports, which will include measures to:
 - i. Minimize or prevent thermal and chemical impacts on receiving waterbodies;
 - Minimize changes in water balance and erosion; prevent increase in risk to human health and safety and property damage both within the Planning Area and along downstream receiving waterbodies, particularly Jackson Creek;
 - iii. Maximize the extent and function of vegetative and pervious surfaces; and,
 - iv. Promote stormwater management best practices, including stormwater attenuation and re-use, and **low impact development**.

All stormwater management plans shall be prepared in conjunction with Environmental, Hydrogeological and Geotechnical studies and plans prepared pursuant to Sections 9.1(f), (j) and (k).

- gg. Subject to the policies of this Plan, the City will work cooperatively with the Township of Selwyn and the County of Peterborough to encourage the provision of a stormwater management facility over a portion of the lands municipally known as 645 Lily Lake Road, Township of Selwyn.
- hh. All development shall protect against adverse water quantity and quality impacts on existing area groundwater users through the implementation of appropriate mitigation measures and monitoring as conditions of approval.
- ii. Where approved **flood plain** modelling is absent for a **watercourse**, proponents shall complete the required modelling to the satisfaction of the **Conservation Authority**. All lands deemed to be **flood plain** shall be zoned for Open Space purposes and shall be deemed to be designated as **Flood Plain** on **Schedule F: Natural Heritage System and Environmental Constraints** without amendment to this Plan.

Servicing and Staging Of Development

- Development of the Planning Area will proceed in a logical sequence ij. having regard for the adequacy of municipal services including the roadway network, trails, water, stormwater and sanitary systems, the proximity of the existing built-up area, and the achievement of the residential intensification target established in Section 3.3.3.
- kk. The land use designations applied to lands within the Lily Lake Secondary Planning Area do not imply a pre-commitment of municipal services to future development. Conditions of Draft Plan of Subdivision Approval and "H" - Holding Provisions will be applied to development applications to allow the consideration of development proposals within the Planning Area without committing municipal servicing. Official Plan, Draft Plan of Subdivision and Zoning approvals granted to development applications within this area will not be considered in the calculation of the City's uncommitted reserve capacity until Final Approval for plans of subdivision are granted and "H" - Holding Provisions are removed.
- II. The establishment of new Public Services which are not included as elements of an approved Development Charge By-law such as parks, trails, landscaped open space, streets, water and wastewater shall be completed concurrent with each other by development proponents.
- mm. The City will encourage cooperation among all landowners within the Planning Area to ensure that the provision of water and wastewater servicing within the Planning Area unfolds in an efficient and timely manner.
- Subject to the policies of this Plan, the City will work cooperatively with the nn. Township of Selwyn and the County of Peterborough to encourage the provision of a trunk sanitary sewer and trail over a portion of the lands municipally known as 645 Lily Lake Road, Township of Selwyn.

Cultural Heritage

00. In addition to the requirements of Section 5.1, prior to any development, site alteration, demolition, construction or tree removal, the City shall require the submission of a Heritage Impact Assessment to assess the cultural heritage significance of existing built structures on the lands as well as the significance of the Jackson Creek Valley/Trans-Canada Trail as a **Cultural Heritage Landscape** and to identify measures for conserving features of cultural heritage significance.

Urban Design and Site Planning

- pp. To foster high quality urban design and a distinct built character in accordance with Section 3.3.4, the City may implement or may require development proponents to submit, receive approval, and implement an Urban Design program to address some or all of the following:
 - i. Site plan design, including sustainable design;
 - ii. Built form (including building articulation), massing and architectural quality;
 - iii. Exterior design such as building facades, fenestration, colour, material, rhythm and proportion of architectural elements;
 - iv. Streetscapes and the public realm;
 - v. The Community Open Space System, including trails and wayfinding components;
 - vi. Universal design, such as barrier free design;
 - vii. Circulation and parking;
 - viii. Lighting;
 - ix. Signage;
 - x. Public art, and artistic expression in infrastructure;
 - xi. Designated cultural heritage elements protected and incorporated into development;
 - xii. Stormwater management ponds in accordance with Section 5.3.8 of the Plan;
 - xiii. Bus stops, such as locations for convenient pedestrian access, in close proximity to activity nodes and **multi-modal** facilities such as bicycle parking and car share facilities and inclusion of shelters with basic amenities; and
 - xiv. Additional matters as may be determined by the City.

qq. Where development within the Secondary Plan area is subject to site plan control in accordance with Section 7.7 of this Plan, Council shall require the submission of drawings mentioned in paragraph 2 of Subsection 41(4) of the Planning Act, as amended, including drawings that are sufficient to display matters relating to, without limitation, the character, scale, appearance and design features of buildings, and their sustainable design insofar as they relate to exterior design.

Implementation and Interpretation

- rr. Development of the Lily Lake Secondary Planning Area shall take place in conformity with detailed regulations for all properties within the Planning Area established in the Zoning By-law and in accordance with the policies of this Plan.
- ss. This Plan should be read in conjunction with all other sections of the Official Plan which are also applicable to the Lily Lake Planning Area. In the event of conflict between the provisions of this Plan and any other provision of the Official Plan, the provisions of the Lily Lake Secondary Plan shall prevail.

9.2 Lift Lock Secondary Plan

a. The Lift Lock Secondary Land Use Planning Area is generally bounded by Parkhill Road East, Television Road, the Canadian Pacific Railway, and the Trent Severn Waterway. The actual limits of the Planning Area are as shown on **Schedule K: Lift Lock Secondary Plan** of the Official Plan. It is the policy of Council that land within the Lift Lock Secondary Land Use Plan shall be developed in accordance with the land use pattern shown on **Schedule K: Lift Lock Secondary Plan**. Reference shall also be made to the policies of Section 9.2 in addition to other policies of the Official Plan. The land use categories of **Schedule K: Lift Lock Secondary Plan** shall have the same meaning as in the Official Plan or Zoning By-law.

Development Policies

- b. Development of the Lift Lock Planning Area shall take place in conformity with detailed regulations for all properties within the Planning Area established in the Zoning By-law and in accordance with the following policies:
- c. The land use designations applied to lands within the Lift Lock Secondary Planning Area, do not imply a pre-commitment of municipal services to future development. Conditions of Draft Plan of Subdivision Approval and "H" Holding Provisions will be applied to development applications to allow the consideration of development proposals within this planning area without committing municipal servicing. Official Plan, Draft Plan of Subdivision and Zoning approvals granted to development applications within this area will not be considered in the calculation of the City's uncommitted reserve capacity until Final Approval for plans of subdivision are granted, and "H" Holding Provisions are removed.
- d. It is intended that the land use areas, location of streets and limits of other features or site-specific land uses shown on **Schedule K: Lift Lock Secondary Plan** are approximate. Adjustments can be made without amendment to the Official Plan provided the general intent and purpose of the Secondary Plan is maintained. The location and alignment of streets will be determined at the time of subdivision approval without amendment to the Secondary Plan.
- e. Development of the Planning Area will proceed in a logical sequence having regard for the adequacy of municipal services including water, stormwater and sanitary systems.

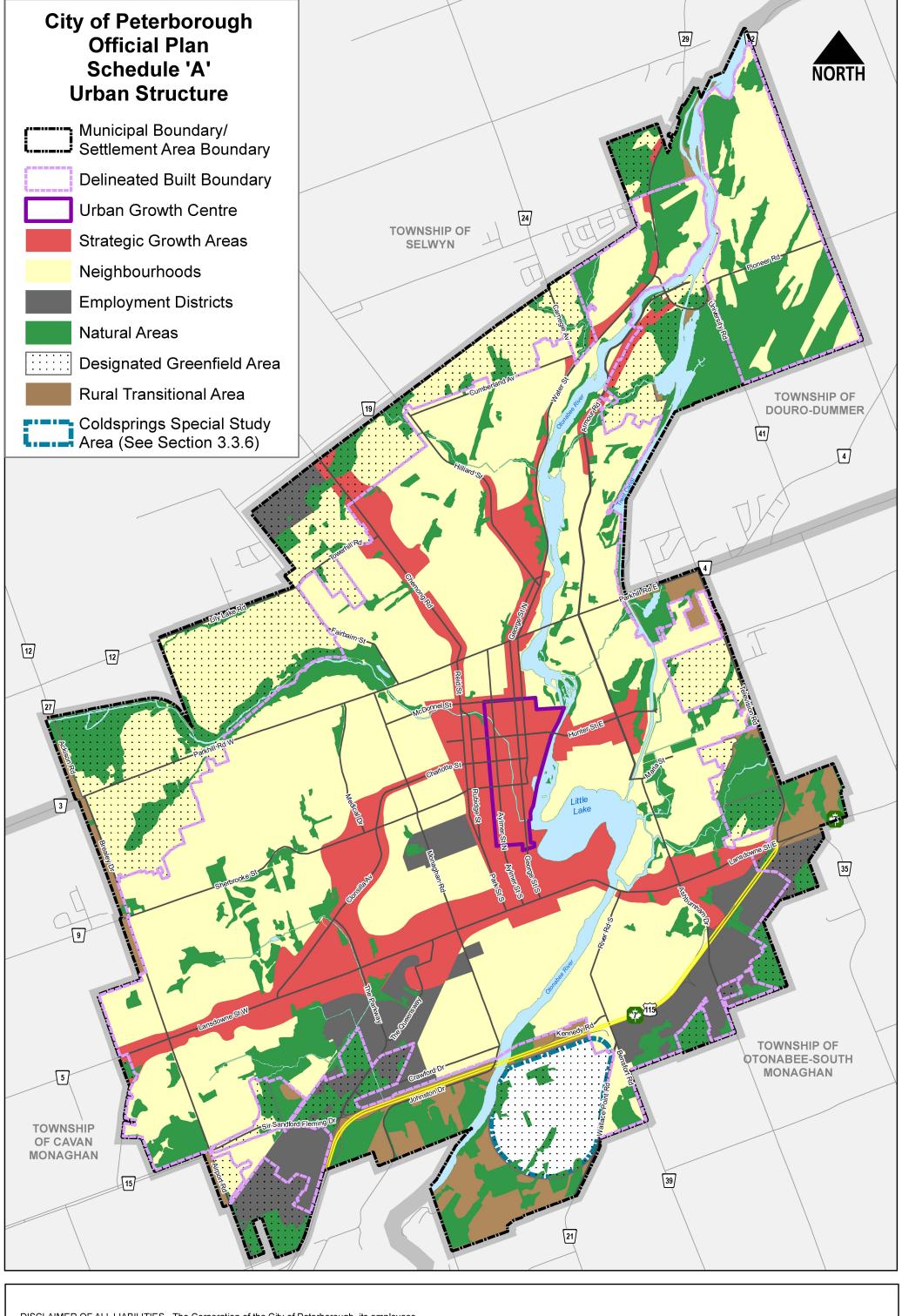
- f. When reviewing development proposals, the City will require development proponents to assess the internal and external water and sanitary servicing needs of the proposal to the satisfaction of the City Engineer and to secure implementation of any required upgrades in a manner satisfactory to the City Engineer either prior to the issuance of development approval, or as a condition of development approval.
- g. The City will have the authority to expand designated road rights-of-way at collector/collector street intersections and collector/arterial street intersections if determined necessary for intersection design.
- h. When reviewing development proposals, the City will have regard for the existing natural features of the Secondary Planning Area, particularly North Meade Creek, Curtis Creek, and Curtis Pond. Development proposals adjacent to these features shall define, through the preparation of an Environmental Impact Study as described in Section 7.21.2, the limit of the Natural Area, vegetation protection zone requirements, and the limit of any flood plain within the Natural Area. Areas defined as Natural Area or required as a vegetation protection zone to the Natural Area shall be dedicated to the City at no cost.
- i. The City may require the dedication of additional open space lands outside of the lands designated "Major Open Space" to facilitate useable parkland and linear open space systems.
- j. Where **flood plain** modeling is absent in the Planning Area, proponents shall undertake the required modeling to the satisfaction of the Authority. All lands deemed to be **flood plain** shall be zoned Open Space District 1 and shall be deemed to be designated as **Flood Plain** on **Schedule F: Natural Heritage System and Environmental Constraints** without amendment to this Plan.
- k. The City will co-ordinate with the County of Peterborough and the Townships of Douro-Dummer and Otonabee-South Monaghan and other affected authorities to ensure that adequate external roadway capacity is provided to serve the Secondary Plan area.

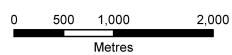
- I. When reviewing development proposals, the City will require development proponents to assess the internal and external road servicing needs of the proposal to the satisfaction of the City Engineer, consistent with the City's Comprehensive Transportation Plan, and to secure implementation of any required upgrades in a manner satisfactory to the City Engineer either prior to the issuance of development approval, or as a condition of development approval.
- m. Notwithstanding the policies of Section 4.2.2, properties designated for High Density residential use will be encouraged to integrate small-scale, **neighbourhood supportive uses**, as described in Section 4.2.2.
- n. Where development within the Secondary Plan area is subject to site plan control in accordance with Section 7.7 of this Plan, Council may require the submission of drawings noted in paragraph 2 of Subsection 41(4) of the Planning Act, as amended, including drawings that are sufficient to display matters relating to, without limitation, the character, scale, appearance and design features of buildings, and their sustainable design insofar as they relate to exterior design.
- Development approvals for lands that are illustrated without a land use on Schedule K: Lift Lock Secondary Plan shall only be available by way of an amendment to this plan.

This page is intentionally left blank

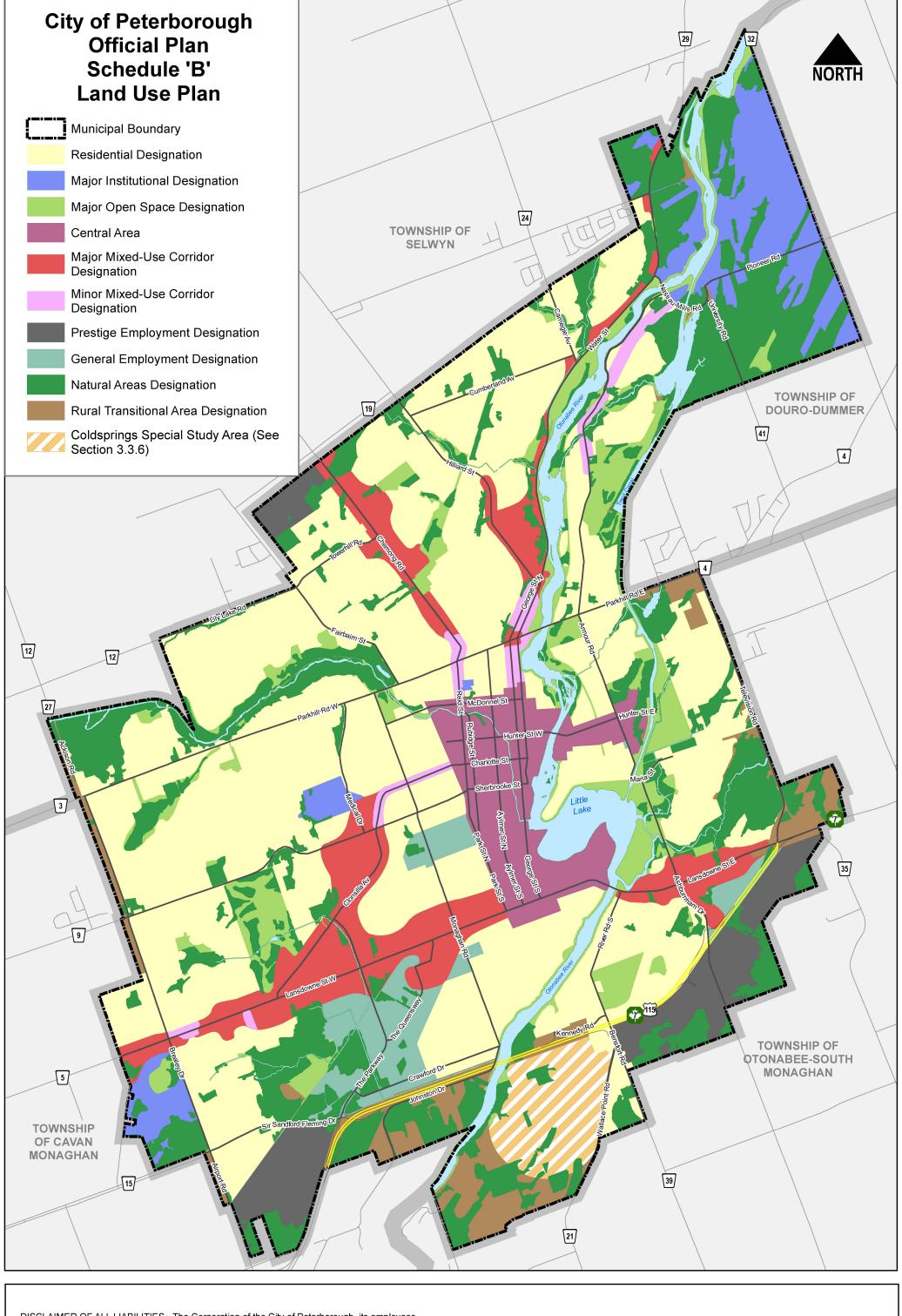


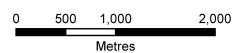




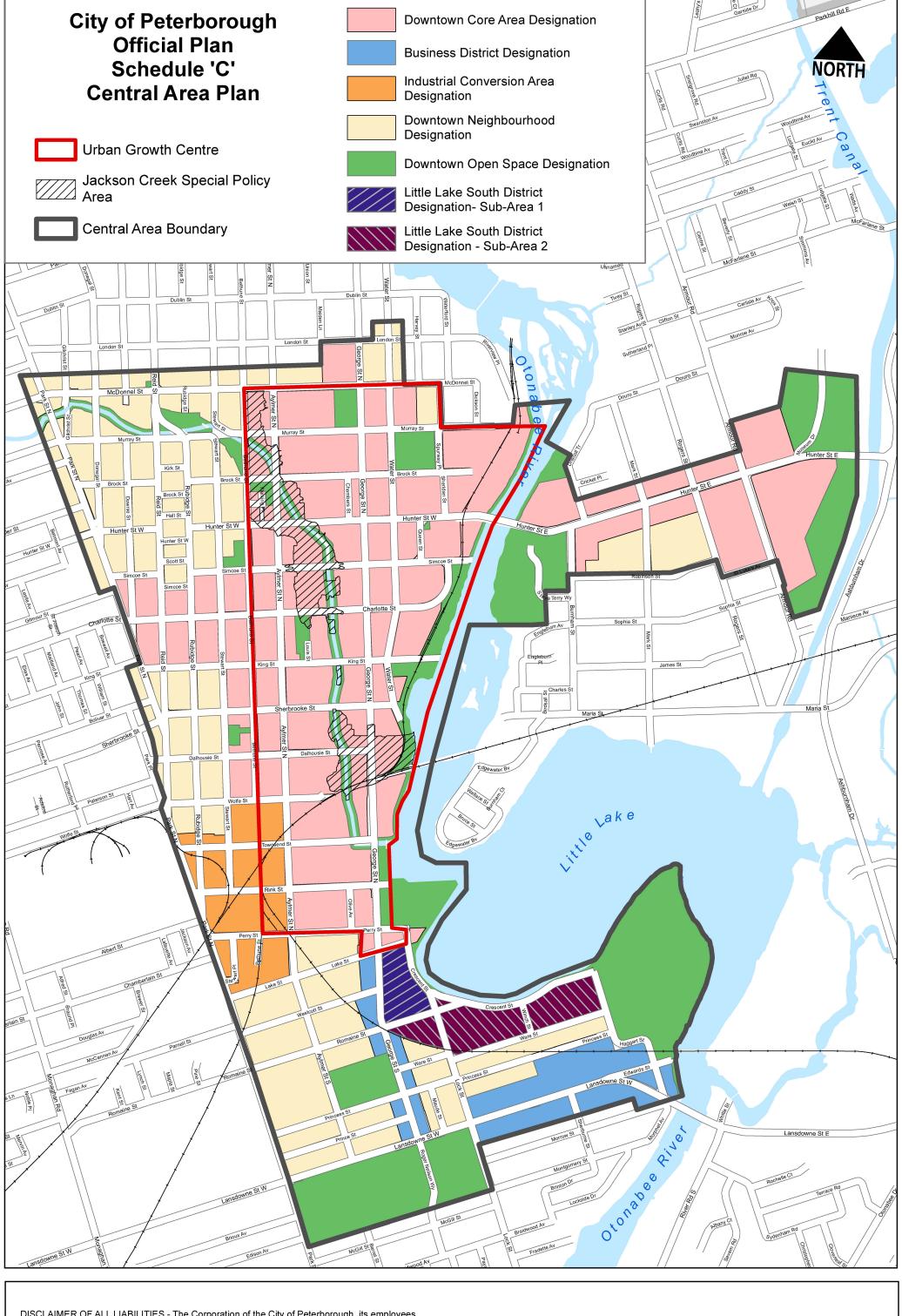


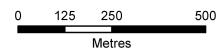




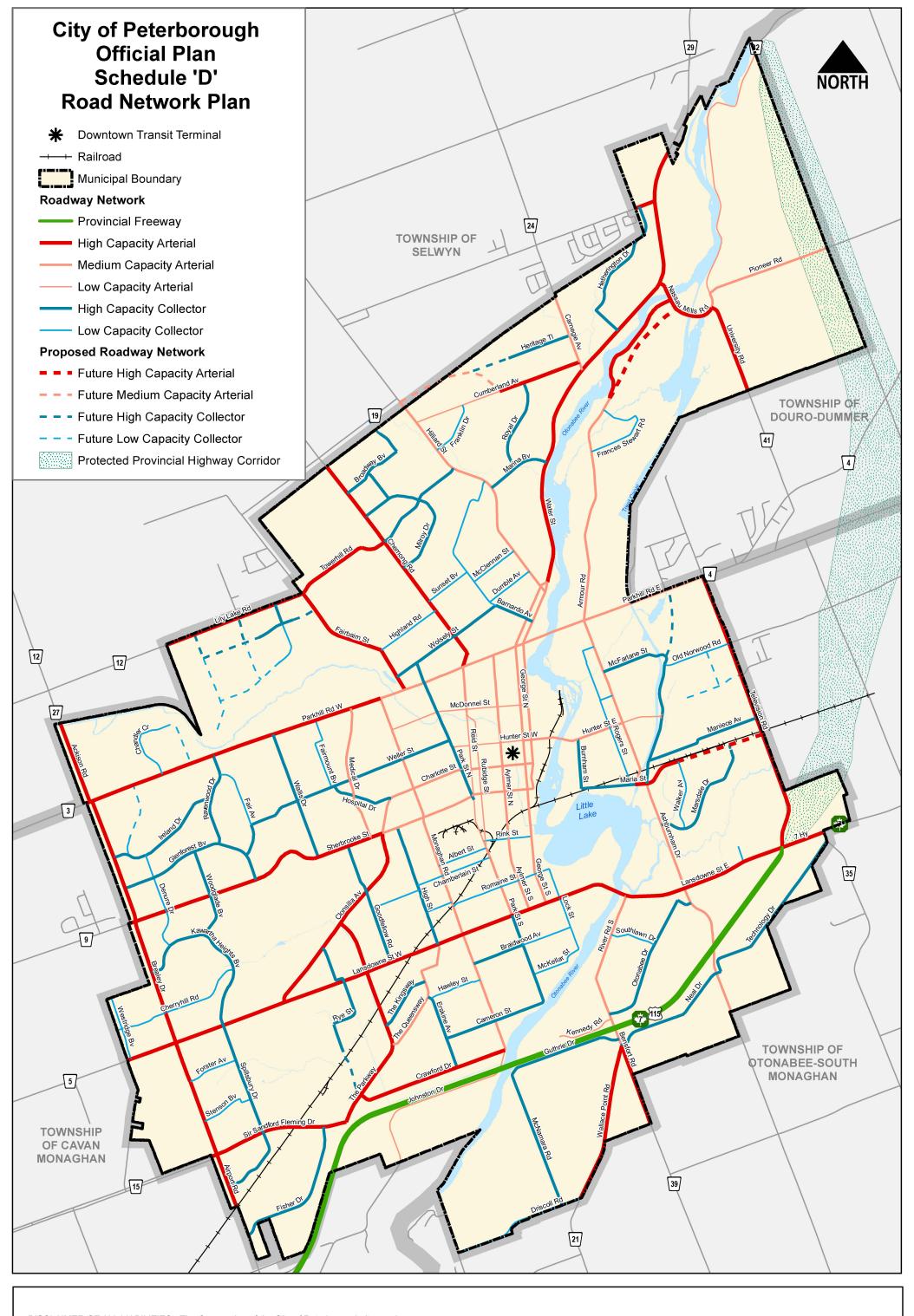


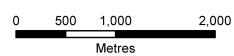




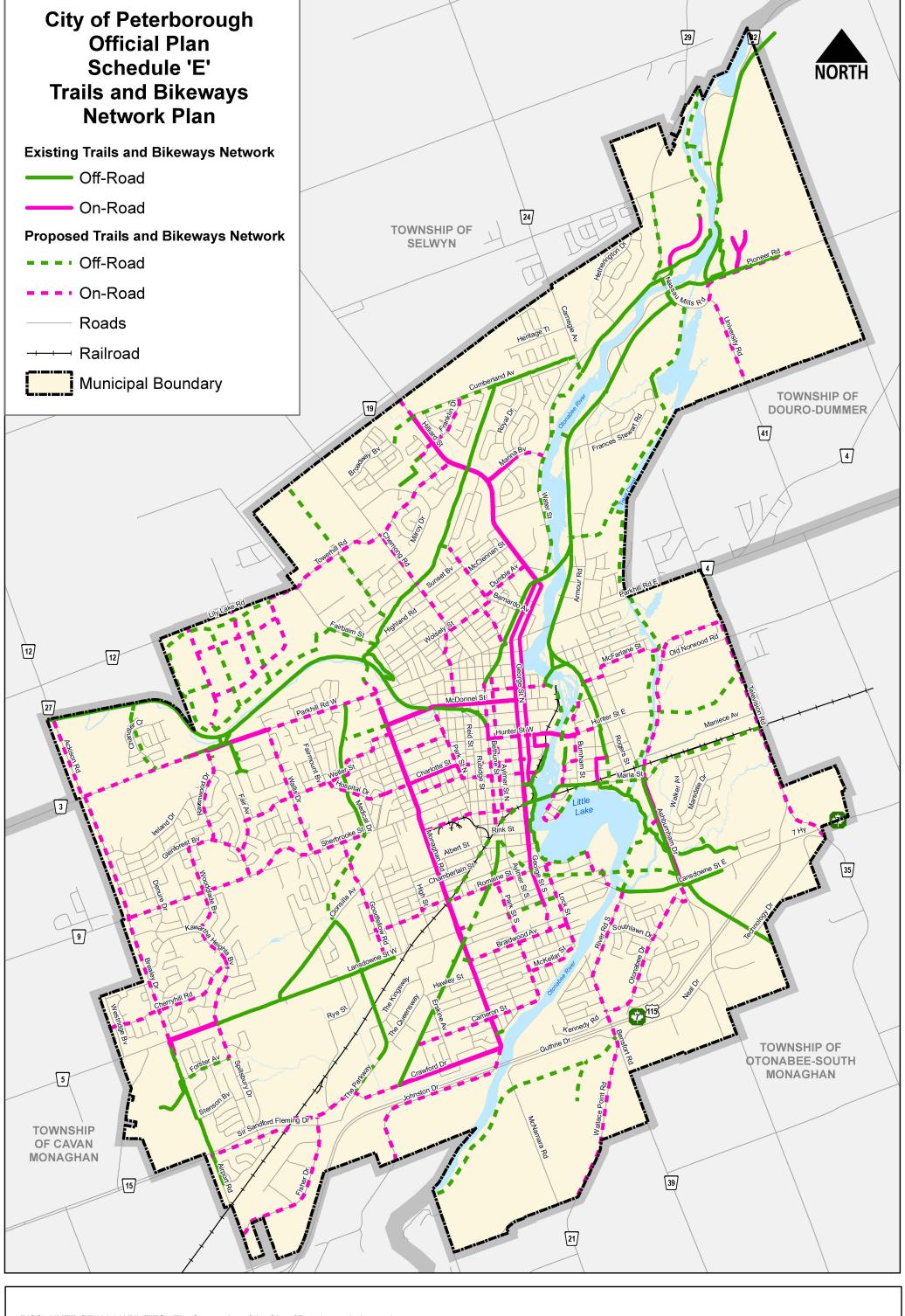


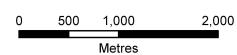




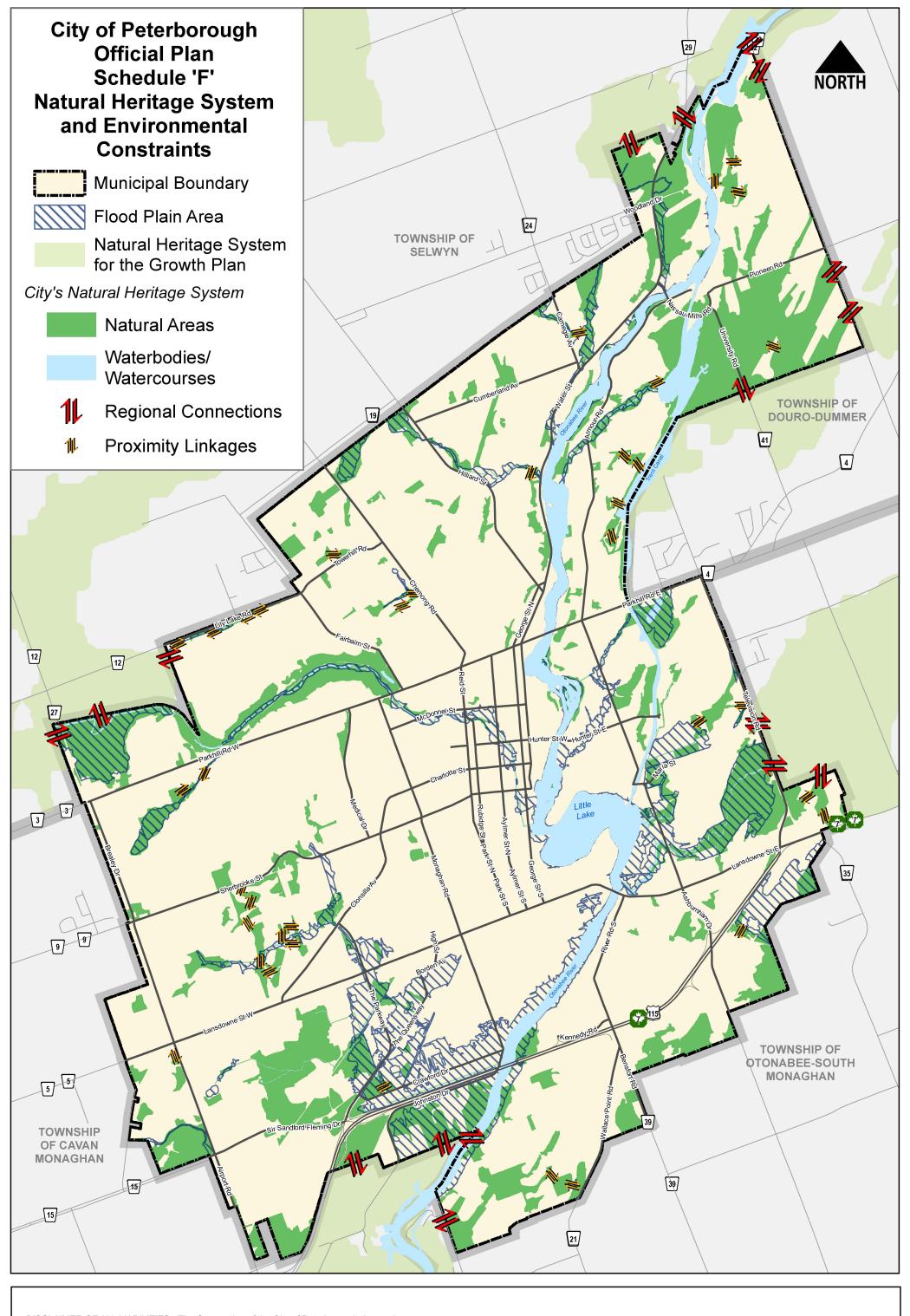


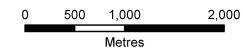




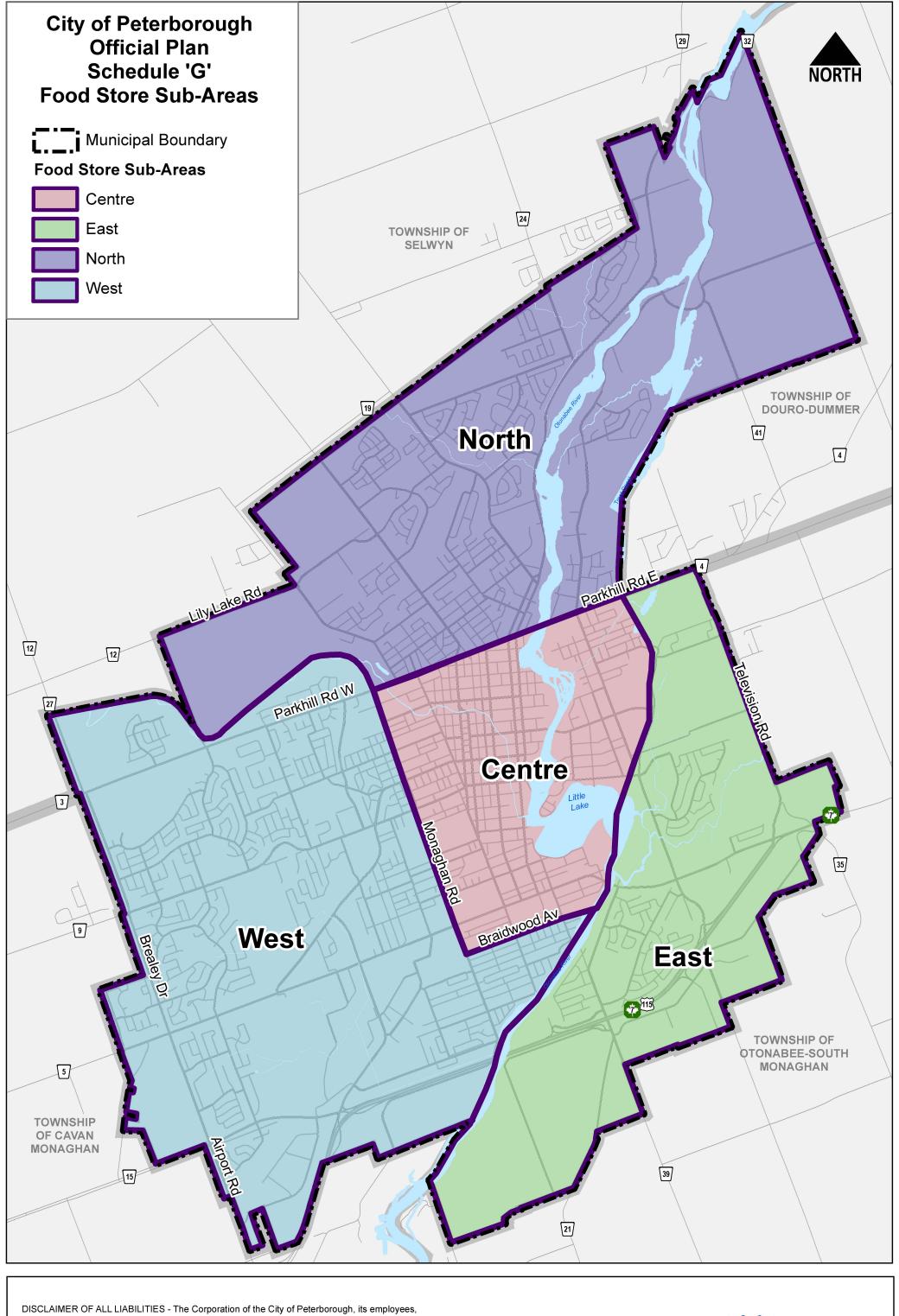




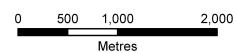




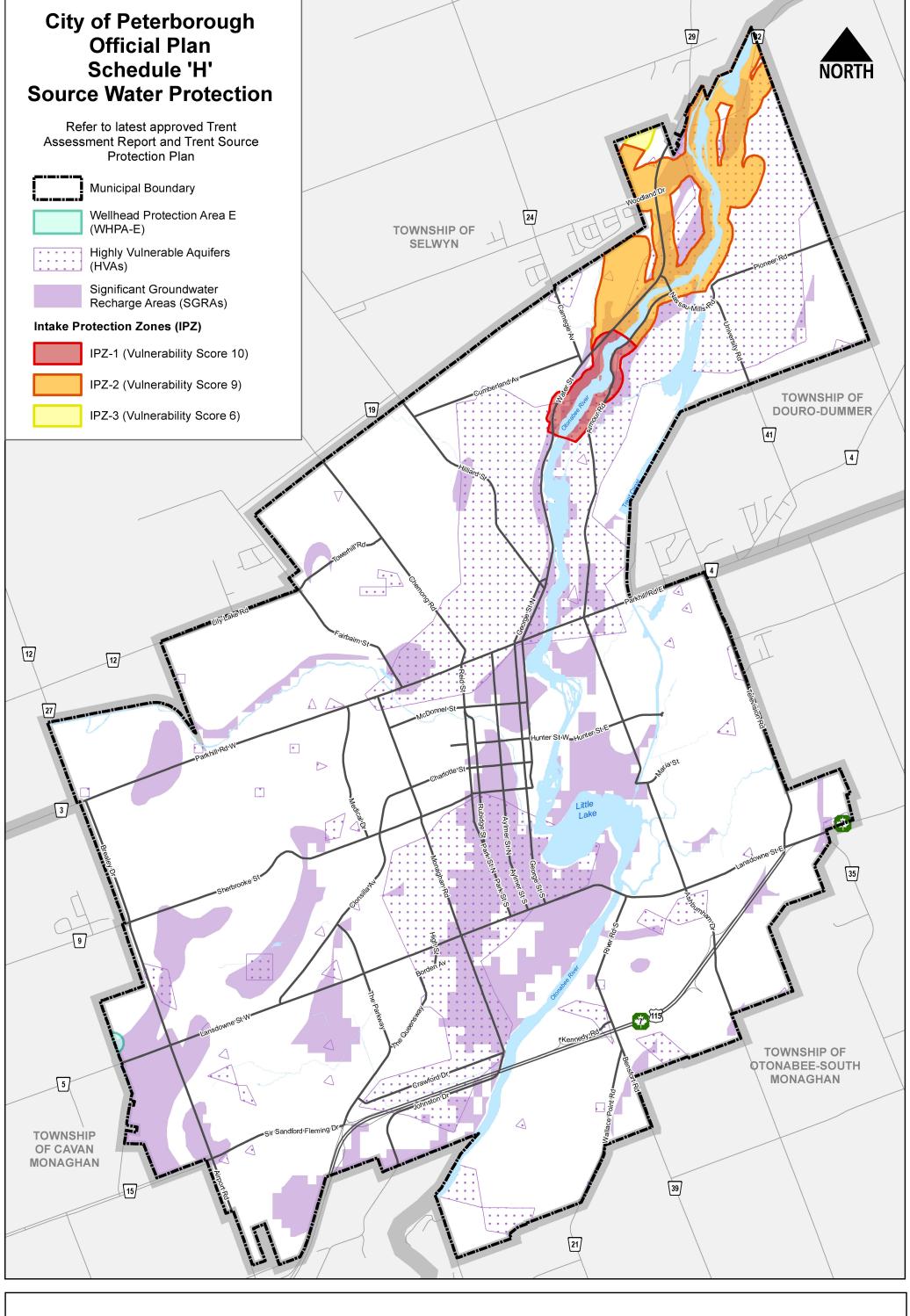




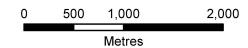
DISCLAIMER OF ALL LIABILITIES - The Corporation of the City of Peterborough, its employees, consultants and agents, make no representation or warranty concerning the accuracy, validity or fitness for use of the contents of this digital or hard copy mapfile, and disclaims all liability for any claims for damages or loss arising from their use or interpretation by any party. A mapfile does not replace a survey nor is it to be used to provide a legal description.







DISCLAIMER OF ALL LIABILITIES - The Corporation of the City of Peterborough, its employees, consultants and agents, make no representation or warranty concerning the accuracy, validity or fitness for use of the contents of this digital or hard copy mapfile, and disclaims all liability for any claims for damages or loss arising from their use or interpretation by any party. A mapfile does not replace a survey nor is it to be used to provide a legal description.





City of Peterborough Schedule 'I': Road Allowance Widths

Street Name	Width of R.O.W. (metres)
Ackison Road	30
Albert Street	20
Armour Road (Maria Street to Whitaker Street)	26
Armour Road (Whitaker Street to Nassau Mills Road)	30
Ashburnham Drive	30
Aylmer Street	20
Barnardo Avenue North (Water Street to Wolsely Street)	20
Barnardo Avenue North (Wolsely Street to Hilliard Streed)	26
Bensfort Road	30
Braidwood Avenue	20
Brealey Drive	30
Cameron Street	20
Carnegie Avenue	30
Chamberlain Street	20
Charlotte Street (Monaghan Road to Water Street)	20
Charlotte Street (Monaghan Road to Weller Street)	26
Chemong Road (Parkhill Road to Highland Road)	30
Chemong Road (Highland Road to City Limits)	30
Clonsilla Avenue (Charlotte Street to Parkway)	30
Clonsilla Avenue (Parkway to Lansdowne Street)	30
Crawford Drive (Monaghan Road to CNR)	26
Crawford Drive (CNR to The Queensway)	30
Cumberland Avenue (Hilliard Street to The Parkway)	26
Cumberland Avenue (Parkway to Water Street)	30
Douro Street	20
Driscoll Road	23
Dumble Avenue	20
Erskine Avenue	26
Fairmount Boulevard	23



Street Name	Width of R.O.W. (metres)
Forest Hill Boulevard	23
Fairbairn Street	30
Franklin Street	20
George Street (Lansdowne Street to Sherbrooke Street)	26
George Street (Sherbrooke Street to Hilliard Street)	20
Goodfellow Road	23
Guthrie Drive	23
Harper Road	23
Hawley Street	20
High Street	20
High Street / Borden Avenue	26
Highland Road	20
Hilliard Street (Water Street to George Street)	20
Hilliard Street (George Street to Dumble Avenue)	26
Hilliard Street (Dumble Avenue to City Limits)	26
Hunter Street (Reid Street to Burnham Street)	20
Hunter Street (Burnham Street to Armour Road)	23
Hunter Street (Armour Road to Ashburnham Drive)	26
Johnston Drive	26
Lansdowne Street	36
Lily Lake Road	30
Lock Street	20
Maniece Avenue	26
Maria Street (Burnham Street to Ashburnham Drive)	26
McDonnel Street	20
McClennen Street	20
McFarlane Avenue	23
McFarlane Street	20
McKellar Street	20
McNamara Road	23
Monaghan Road	26
Nassau Mills Road (University Road to Pioneer Road)	30
Neal Drive	26



Schedule I: Road Allowance Widths, Page 2 of 3

Street Name	Width of R.O.W. (metres)
Otonabee Drive	26
Park Street (Lansdowne Street to Rink Street)	26
Park Street (Sherbrooke Street to Lansdowne Street)	20
Parkhill Road	30
The Parkway (Clonsilla Avenue to the By-Pass)	36
Pioneer Road	30
The Queensway	30
Reid Street (Rink Street to Rubidge Street)	20
Reid Street (Rubidge Street to Chemong Road)	26
Rink Street	20
River Road South	30
Rogers Street	20
Romaine Street	20
Rubidge Street	20
Sherbrooke Street (Water Street to Monaghan Road)	20
Sherbrooke Street (Monaghan Road to Clonsilla Avenue)	26
Sherbrooke Street (Clonsilla Avenue to West City Limits)	30
Spillsbury Drive	26
Sunset Boulevard	20
Television Road	36
Towerhill Road (West of Chemong Road)	30
Towerhill Road (Chemong Road to Hilliard Street)	26
University Road	30
Wallace Point Road	30
Wallis Drive	26
Water Street (Sherbrooke Street to George Street)	20
Water Street (George Street to City Limits)	30
Webber Avenue	23
Weller Street (Park Street to Parkway)	20
Weller Street (Parkway to Fair Avenue)	26
Wolsely Street	26



City of Peterborough Official Plan Schedule 'J' Lily Lake Secondary Plan

Legend

* See Section 9.1(i)

•••• Potential Trail/Walkway

Land Adjacent(120m) to
Provincially Significant
Wetland

---- Collector Street

—— Local Street

Neighbourhood Core

Local Commercial

Low Density Residential

Medium Density Residential

Medium-High Density Residential

Major Open Space

Parkland

Infrastructure
Corridor/Other Open Space

Public Service

Alternative Stormwater

Management

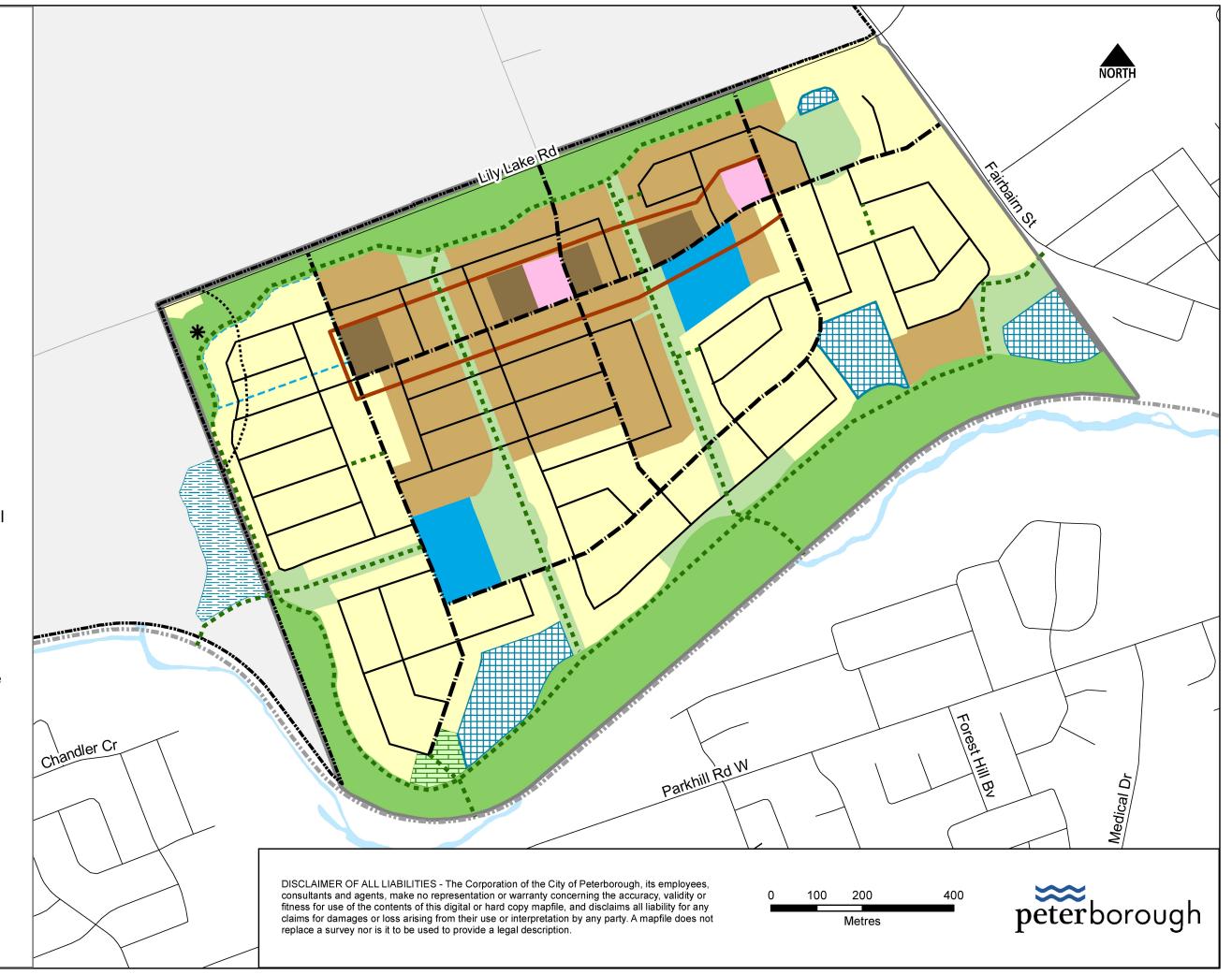
Preferred Stormwater Management

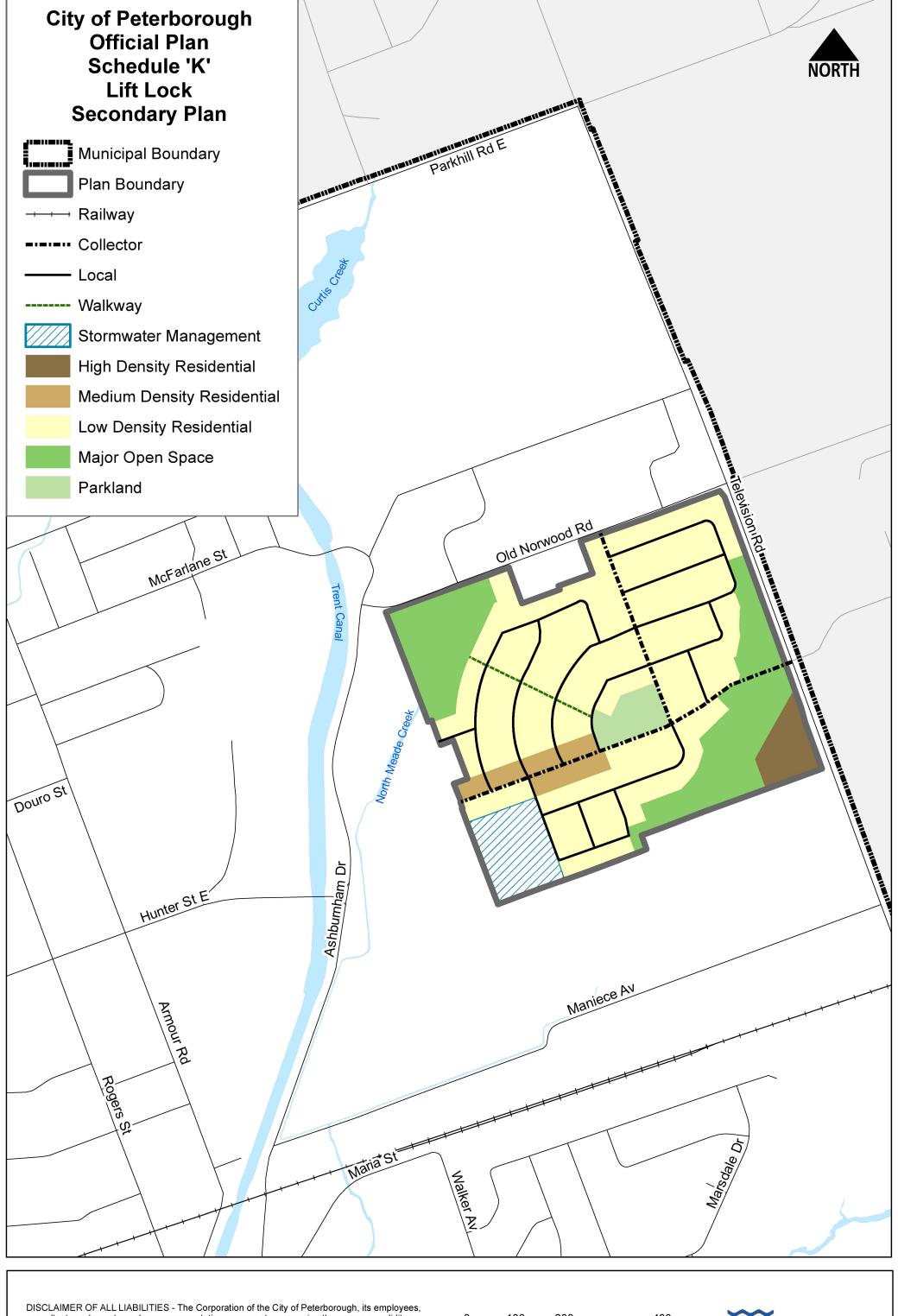
Stormwater Management

Plan Boundary

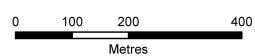
Municipal Boundary

---- Trans Canada Trail





DISCLAIMER OF ALL LIABILITIES - The Corporation of the City of Peterborough, its employees, consultants and agents, make no representation or warranty concerning the accuracy, validity or fitness for use of the contents of this digital or hard copy mapfile, and disclaims all liability for any claims for damages or loss arising from their use or interpretation by any party. A mapfile does not replace a survey nor is it to be used to provide a legal description.







GUIDING SOLUTIONS IN THE NATURAL ENVIRONMENT

City of Peterborough Official Plan Update Natural Heritage System Background Report

Prepared For:

City of Peterborough

Prepared By:

Beacon Environmental Limited

Date: Project:

November 2021 217398



Table of Contents

		page
	duction	
Appı	roach	3
2.1	Phase 1: Background Review	3
2.2	Phase 2: Component Definitions and Natural Heritage System Mapping	
2.3	Phase 3: Policy Development	
2.4	Consultation, Collaboration and Traditional Ecological Knowledge	6
Polic	cy Background	7
Exis	ting Natural Environment	9
4.1	Physiography	9
4.2	Wetlands	
4.3	Woodlands	
4.4	Valleylands	
4.5	Area of Natural and Scientific Interest	
4.6	Fish Habitat, Watercourses and Waterbodies	
4.7	Habitat for Endangered or Threatened Species	
4.8	Wildlife Habitat	
4.9	Linkages and Connections	
City	of Peterborough Natural Heritage System Components ar	nd 20
	Wetlands	
5.1 5.2	Wetlands Woodlands	
5.2 5.3	ValleylandsValleylands	
5.3 5.4	Areas of Natural and Scientific Interest	
5.5	Fish Habitat, Watercourses and Waterbodies	
5.6	Habitat for Endangered or Threatened Species	
5.7	Significant Wildlife Habitat	
5.8	Linkages and Connections	
5.9	Natural Heritage System Component and Level Summary	
Vege	etation Protection Zones	34
Envi	ronmental Impact Study	36
Cond	clusion	38
Refe	rences	39



Tables	S Control of the Cont	
Table 1.	Estimated Woodland Cover by Type	13
Table 2.	Woodland Cover by Patch Size	14
Table 3.	Endangered or Threatened Species Records in City of Peterborough	18
Table 4.	Natural Heritage System Level Criteria - Wetlands	22
Table 5.	Natural Heritage System Level Criteria - Woodlands	24
Table 6.	Natural Heritage System Level Criteria - Valleylands	25
Table 7.	Natural Heritage System Level Criteria – ANSI's	26
Table 8.	Natural Heritage System Level Criteria – Fish Habitat, Watercourses and Waterbodies	
		26
Table 9.	Natural Heritage System Level Criteria – Habitat for Endangered or Threatened Species	28
Table 10.	Natural Heritage System Level Criteria – Significant Wildlife Habitat	30
	Natural Heritage System Component and Level Summary	
	Natural Heritage Feature Minimum Vegetation Protection Zones	

Appendices

Appendix A. Significant Wildlife Habitat Criteria – City of Peterborough



1. Introduction

The City of Peterborough has undertaken an Official Plan review and update as required by the provincial *Planning Act* (1990). The Official Plan is intended to establish the vision and direction for the long-term growth and development of the City of Peterborough. As part of the Official Plan review and update, the province directs municipalities through the Provincial Policy Statement (PPS) (MMAH 2020) to develop a municipal Natural Heritage System (NHS).

In the PPS, the province defines an NHS as:

A system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue.

The development of an NHS typically relies on the use of well-defined criteria to identify and confirm NHS components for a given jurisdiction. In the case of Provincially Significant Wetlands (PSW), Areas of Natural and Scientific Interest (ANSI), fish habitat and habitat of endangered or threatened species, the criteria for identification and determination of significance are generally already established, and beyond the local planning authority's purview. However, significant woodlands, significant valleylands and significant wildlife habitat as well as ecological linkages are to be identified by the planning authorities based on criteria that they establish. The use of criteria rooted in the current principles of conservation biology and landscape ecology, that also consider the local biophysical and planning context, help ensure that the approach to NHS identification is transparent, defensible and can be updated as required.

At the outset of the Official Plan review and update process, the City of Peterborough identified a vison and guiding principles to set out the policy direction of the Official Plan. The vision and guiding principles were selected to represent the community's priorities and needs and are:

- Environmental stewardship and sustainability;
- Economic strength;
- Complete community;



- Vibrant and unique; and
- Well-connected with options for mobility.

The inclusion of Environmental Stewardship and Sustainability as one of the five guiding principles was in recognition that natural areas are a valued part of the City of Peterborough's history and current landscape. Areas such as watercourses, wetlands and woodlands, are vitally important not only from a functional ecosystem perspective but also from a social and cultural perspective by forming part of the community's identity. The intrinsic value of natural areas and the flora and fauna that inhabit natural areas are highly valued by the community of Peterborough and by Indigenous Communities.

The protection of natural heritage features has tangible benefits that contribute to sustainable and healthy communities. Benefits provided by a functional natural heritage system include, but are not limited to, flood moderation, erosion control, air quality improvements, pollination services, genetic resources, recreation opportunities and human health (OMNRF 2010; Ontario Nature 2014; Kuo 2010). Additionally, protecting an interconnected system can facilitate adaptations that contribute to the resiliency of habitats and organisms when faced with threats associated with a changing climate (Fischlin *et al.* 2007; Lemieux *et al.* 2010).

Developing a system approach is the preferred method to protecting natural heritage features and their associated ecological functions (OMNRF 2010). This approach recognizes the interdependence of features and functions, and seeks to maintain connections among natural heritage features, so that their existing ecological functions are maintained or enhanced. A well-balanced and functional NHS ensures that an appropriate balance is struck between protecting the key elements of the natural environment and the need to accommodate and manage future growth in a sustainable and healthy environment.

The goal of the City of Peterborough's NHS is to provide a comprehensive, functional and resilient system of interconnected natural features that aligns with current conservation principles, supported by strong planning policies to identify and protect the valuable natural heritage resources within the City. The purpose of this report is to provide both context and supplementary information in support of the implementation of the natural heritage policies of the City of Peterborough Official Plan.

The planning policies related to the NHS are described in the Official Plan in Section 4.6 and shown on Schedule F: Natural Heritage System and Environmental Constraints. As with any large-scale mapping projects, the mapping shown on Schedule F will need to be further amended and updated based on site-specific information. However, it is important to note that it is the principles of the NHS and the criteria used to identify the components that is the final determinant of whether or not any particular area is part of the NHS and protected through the policies of the City of Peterborough Official Plan.



2. Approach

A multi-phased approach was used for developing the City of Peterborough NHS and supporting policies. The following sections outline the framework.

2.1 Phase 1: Background Review

Phase 1 focused on completing background review of applicable natural heritage information. Existing studies such as the Peterborough Natural Areas Strategy, watershed plans, the Peterborough Ecology Strategy as well as many environmental reports were a valuable foundation upon which to build the NHS and were used in conjunction with other sources of background information.

Additional sources of information included: the City of Peterborough, Otonabee Region Conservation Authority (ORCA), Ministry of Natural Resources and Forestry (MNRF), Natural Heritage Information Centre (NHIC), Land Information Ontario (LIO). Base data, including existing NHS mapping, floodplain mapping, topographical mapping, aerial photography, hydrologic mapping, fisheries management plans, and flora and fauna data were integrated where available and useful.

Road-side reconnaissance-level surveys were required to supplement information gathered through the background review. The purpose of these investigations was to confirm background information and focused on areas where there may be some uncertainty as to the existing conditions. These surveys were limited by site access availability and were not intended to be a fulsome inventory or study of natural areas and functions.

2.2 Phase 2: Component Definitions and Natural Heritage System Mapping

Phase 2 synthesized the information gathered during Phase 1 in a manner that defined and allowed for identification of the components of the NHS that was consistent with the PPS building-block approach. The science and technical direction in natural heritage planning strongly emphasizes the need for a landscape-scale approach to the identification of significant features, the importance of feature connectivity and the importance of incorporating an understanding of habitat functions (e.g., Donnelly and Marzluff 2006; Ewers and Didham 2006; Gilbert-Norton *et al.* 2010; Hodgson *et al.* 2011; Prugh *et al.* 2008; Spring *et al.* 2010).

As stated in the Natural Heritage Reference Manual (OMNR 2010), a comprehensive NHS can be achieved by starting with the identification of natural features and build-in connectivity among these



features. Using this approach, connectivity can be achieved in two ways. The first is by overlaying the various significant natural features, which often provides some level of existing connectivity (e.g., river or creek corridors often form natural connections between various other natural features in the landscape). The second is by assessing the system that results from the overlay of the various significant features and identifying feasible and functional opportunities for linkage in the landscape.

Criteria-based identification of natural heritage features and/or municipal natural heritage systems is recognized as an effective approach to natural heritage planning (OMNRF 2006; Ontario Nature 2014). Having each significant feature (or subset of features) with a distinct set of criteria for identification and, where possible, mapped in an official plan schedule, as well as linked to a specific set of policies, makes implementing and defending protection of these areas on the ground, on a site-specific basis, more transparent, systematic, and defensible.

Criteria for defining NHS components within the City of Peterborough were developed. These criteria incorporated scientific knowledge, conservation principles, and sound planning principals. A multi-level approach to defining the features of the City of Peterborough NHS was used which considered the sensitivity, significance (including provincial significance), and function of the NHS components. This approach allowed for natural heritage features to be incorporated into the NHS in a way that is reflective of their current form and function, ties into the intent of the Official Plan, and allows a policy framework that considers each of the levels separately.

Finally, when identifying NHS components, consideration for the relationship with surrounding systems was incorporated recognizing the critical importance of the broader landscape and ecological connections with neighbouring jurisdictions in order to implement and maintain a functional natural heritage system.

GIS Mapping

Data availability is an important consideration for NHS planning, but the lack of some types of data should not preclude the inclusion of a criterion category that is considered important to the overall sustainability of the NHS, or necessary for conformity with current policies.

While it is useful and practical to develop mapping for an NHS for planning and implementation purposes, it is not always possible or practical (or for that matter necessary) to map all natural features and areas. Some components of the NHS will always be subject to site-specific review and refinement at the time of planning applications. This is particularly true with habitat for endangered or threatened species and significant wildlife habitat, which can change even from year to year.

Therefore, the approach to developing the City of Peterborough NHS map as shown in Schedule F of the Official Plan was based on the best available data at the time of preparation. It is important to recognize that the mapping is not an exhaustive representation of all NHS components but is a useful tool to use for planning and implementation subject to the following limitations:



- Mapping was developed with information from different sources, collected at different scales, and while every effort has been made to ensure that the mapping is as current and accurate as possible, there will be some inaccuracies that need to be corrected at the sitespecific scale;
- Only reconnaissance-level field reviews were conducted in support of this study and the mapping will need to be refined to reflect the applicable NHS criteria more accurately at the site-specific scale based on current and comprehensive field studies;
- Designated Natural Areas as mapped do not include buffers (or vegetation protection zones); these need to be determined as part of the planning/development process (through the appropriate studies). Note that once buffers or vegetation protection zones are established through appropriate studies these areas are added to the Natural Area Designation but not necessarily reflected on the Official Plan mapping:
- Opportunities for ecological linkages, naturalization or restoration that may be identified as part of the planning process or through a Restoration and Enhancement Strategy that have not been identified in the mapping; and
- The acknowledgement that there are development rights provided through the existing zoning by-law. However, upon adoption of the new Official Plan, the zoning by-law must be brought into conformity with the new Official Plan and reflect the NHS mapping accordingly.

2.3 Phase 3: Policy Development

Following consultation with stakeholders and rightsholders and receipt of public input and comments, Official Plan policy was developed to direct the protection of the natural features of the City of Peterborough NHS in a manner that was consistent with the overall goals and objectives of the Official Plan update.

The policy approach focused on a Natural Areas land use designation to capture the NHS components, connections and linkages. Permitted uses were prescribed for the NHS components along with development policies including minimum vegetation protection zones and consultation requirements. Permitted uses, development policies and study scoping requirements were also developed for land adjacent to features defined under the Natural Areas designation, regardless of their inclusion on Schedule F, recognizing the importance of these areas in supporting and facilitating the function of the NHS.



2.4 Consultation, Collaboration and Traditional Ecological Knowledge

A separate consultation phase was purposely not incorporated into the approach outlined above. This was in recognition of the value of obtaining the knowledge and input of stakeholders, community members and rightsholders throughout the process. Consultation and collaboration was on-going and incorporated various opportunities throughout the NHS and policy development phases to share important insight which contributed to the NHS component and policies of the Official Plan.

The work of the Beacon team has also been guided by the Natural Heritage System Taskforce, which was struck at the outset of the undertaking by the City of Peterborough and comprised of key stakeholders and rightsholders, including:

- Ministry of Natural Resources and Forestry;
- Otonabee Region Conservation Authority;
- Peterborough Field Naturalists;
- ReImagine Peterborough;
- Curve Lake First Nation;
- Hiawatha First Nation; and
- Local planning expertise.

The City of Peterborough also solicited feedback and comments from stakeholders, community members and rightsholders through written comment submissions at key points throughout the process. A summary of the various meetings, open houses, information centers are provided as follows:

- Natural Heritage System Taskforce;
- Official Plan Working Group;
- Traditional Ecological Knowledge sharing with Treaty 20 Rightsholders October 2018, November 2018 and September 2019;
- Traditional Ecological Knowledge sharing with Treaty 20 Elders January 2019;
- Public open houses to discuss urban design and natural heritage November and December 2018;
- Drop-in public open houses to review the draft Official Plan August 2019; and
- Drop-in public open houses to provide a summary of the feedback received from the public



on the draft Official Plan - September 2019.

3. Policy Background

The PPS, section 2.1, promotes a systems approach to natural heritage planning, and provides policy direction for specific natural feature categories. Both aspects of natural heritage planning are laid out in the policies and need to be addressed through local municipal natural heritage planning.

Despite the overall emphasis on a systems approach to natural heritage planning, and on the importance of linkages and connectivity, the fundamental building blocks of the system remain specific features, with specific policies that apply to each, as provided in sections 2.1.4 through 2.1.7. These features, combined, are to form a system of habitat cores and linkages to sustain the full range of local biodiversity (i.e., both common and rare species and habitats) for the long-term.

Municipalities are faced with multiple challenges when identifying and developing policies for NHSs. The challenges include providing protection for significant features, fish habitat and habitat for endangered or threatened species as well as connections between them, and also protecting connections to supporting water resources, while still accommodating changes in adjacent land uses and trying to plan for climate change.

The PPS provides direction to regional and local municipalities regarding planning policies for the protection and management of natural heritage features and resources for applications pursuant to the *Planning Act*. The 2020 PPS took effect on May 1, 2020, superseding the PPS of 2014. The PPS defines natural heritage features and provides planning policies for each natural heritage feature. The key text from the PPS that applies to the natural heritage features is reproduced below. The City of Peterborough is located with Ecoregion 6E of Southern Ontario.

- 2.1.4 Development and site alteration shall not be permitted in:
 - a) Significant wetlands in Ecoregions 5E, 6E and 7E; and
 - b) Significant coastal wetlands.
- 2.1.5 Development and site alteration shall not be permitted in:
 - a) Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
 - b) Significant woodlands in Ecoregions 6E and 7E (excluding islands in



Lake Huron and the St. Marys River);

- c) Significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- d) Significant wildlife habitat;
- e) Significant areas of natural and scientific interest; and
- f) Coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b);

unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

- 2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
- 2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

Of these features, PSWs and significant ANSIs are identified directly by the MNRF. Woodlands are identified using criteria to be provided by MNRF (none have been provided to date), and other significant features may be identified using MNRF recommended criteria or municipal criteria that meet the same standard. In Ontario, Fisheries and Oceans Canada (DFO) manages fish habitat and the MNRF manages fisheries. Habitat of endangered or threatened species is mainly governed by the provincial *Endangered Species Act* (ESA) (2007) although the federal *Species at Risk Act* may also apply.

Policy 2.1.8 of the PPS further states that development and site alteration shall not be permitted on "adjacent lands" to the natural heritage features/areas (i.e., within 120 m) addressed in policies 2.1.4, 2.1.5, 2.1.6 and 2.1.7 unless:

...the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

Adjacent lands are defined in the PPS as:



Those lands contiguous to a specific natural heritage feature or area where it is likely that development and site alteration would have a negative impact on the feature or area.

The other primary pieces of legislation that pertain to natural heritage, and related to the feature categories identified in the PPS are the provincial ESA (2007), the federal *Species at Risk Act* (SARA) (2002), the federal *Fisheries Act* (1985), and the provincial *Conservation Authorities Act* (2006). Each of these also needs to be considered in the development and implementation of municipal NHS policies.

The province has also prepared a series of the technical guidance documents to assist with the development of natural heritage systems and development of criteria to establish significance for features not designated by the province. Two key documents are the *Natural Heritage Reference Manual* (OMNR 2010) and the Significant Wildlife Habitat Ecoregion Criteria (OMNR 2015). While both documents are useful tools for natural heritage planning, they do not set criteria that must be followed by municipalities for establishing significance. This allows for municipalities to use these documents as a guidance tool while still having the flexibility to develop policies that are appropriate in the context of the landscape. A balanced approach of using provincial guidance as a tool and applying a "made in Peterborough" lens has been used for the City of Peterborough NHS.

4. Existing Natural Environment

The following sections provide a general overview of natural feature occurrence within the City of Peterborough to provide some context for the natural landscape and is not meant to be an exhaustive summary of all natural features and areas documented with the City.

4.1 Physiography

The composite geology within the City of Peterborough area has a diversity not seen in many other regions, that directly affects the ability of each subwatershed to respond to changing water balance and land use.

Peterborough is the gateway to what Ontario geologists know as 'the land between', a geological area that runs from Georgian Bay in the west to Kingston in the east, and is characterized by the complex bedrock transition from the young limestone/shale bedrocks (the Paleozoic Lowlands) of southern Ontario, to the old rolling craton rocks (the Precambrian Shield) of 'cottage country'. This complex



area directly affects the current fluvio-lacustrine and groundwater regimes, just as it directly influenced the morphology of glacial features deposited during the Laurentide glaciation.

More specifically, the City of Peterborough lies over the shaley Ordovician limestones of the Verulam Formation, which consist of grey to blue to brown fossiliferous limestone interbedded with thin layers of shale (MRD227). Fossiliferous zones contain crinoid grainstones, contemporary to the Ordovician, indicating that the Peterborough area was a shallow sea water environment at that time.

The overburden/physiology beneath the City of Peterborough is equally complex, and generally the result of widespread glacial processes associated with the advance, stagnation, and retreat of the Simcoe Lobe of the Laurentide Ice Sheet (Marich 2016). Recognized features include, but are not limited to, drumlins, eskers, moraines, kames, till planes, glaciolacustrine and glaciofluvial outwash features (Marich 2016; MRD228).

Although generally famous for the Peterborough Drumlin Fields, the greater part of the City of Peterborough is comprised of generally flat glaciolacustrine deposits with few drumlins, and a glaciofluvial outwash deposit extending north along the Otonabee River toward Lakefield. The Peterborough Drumlin Fields bracket this 'paleo-lake and spillway' feature to the east and west (MRD128; MRD228) at the City margins. Overburden thickness beneath the City of Peterborough ranges from 0 metres to 120 metres, with the thickest overburden in the west and southwest toward Cavan.

The glaciolacustrine and glaciofluvial deposits comprising the greater part of Peterborough are characterized by sand to gravel with nearshore, beach, river and deltaic textures (MRD128, MRD228).

The Peterborough Drumlin Field, which is found to the east and west margins of Peterborough, is a singular example of a drumlin field, with more than 3,000 well-developed drumlins of various morphologies and orientations extending south beyond the Oak Ridges Moraine into the Lake Ontario Basin (Marish 2016). The drumlins are composed primarily of Newmarket Till, characterized as subglacially-deposited massive silty-sand diamicton, which may have existed in the area as a single basal subglacial deposit, before being eroded as part of four or five flow sets into the familiar drumlin morphologies (Boyce and Eyles 1991). Some drumlins have been identified with fluted bedrock cores (Gravenor 1957; Boyce and Eyles 1991).



4.2 Wetlands

Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water tolerant plants. Four main categories of wetland are swamps, marshes, bogs and fens. Periodically soaked or wetlands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands.

Wetlands are recognized as an essential natural resource that help moderate water flow, contribute to groundwater recharge, improve water quality, store carbon, and provide habitat for a broad range of species including: fish, waterfowl, songbirds, shorebirds, raptors, amphibians, reptiles and insects. Wetlands also often have a special significance socially and culturally.

Wetlands have been linked to the culture, traditions, health, and well-being of the Michi Saagiig. The First Nations often consider wetlands to be sacred places containing important medicines and view wetlands as the liver and kidneys of the earth due to their ability to improve water quality.

Wetlands form a valued component of the City of Peterborough's natural areas and often coincide with the larger natural feature areas within the City. Currently eight PSWs are located within the City. These are:

- Jackson Creek Provincially Significant Wetland;
- Jackson Creek East Provincially Significant Wetland;
- Harper Creek Provincially Significant Wetland;
- Loggerhead Marsh Provincially Significant Wetland;
- Peterborough Airport Wetland Complex Provincially Significant Wetland;
- Downer's Corners Provincially Significant Wetland;
- Cold Springs and Yankee Bonnet Provincially Significant Wetland; and
- Nassau Wetland Complex Provincially Significant Wetland.

Mapped wetlands, including PSW, non-PSW and unevaluated wetlands, cover approximately 618 ha within the City of Peterborough, accounting for 9% of the total area of the City. PSWs comprise approximately 261 ha and represent 42% of the total wetland coverage. However, as not all wetlands are mapped, and the boundary of mapped wetlands do not always reflect current conditions, it is likely that these numbers are an underestimate of the total area of wetlands within the City.



4.3 Woodlands

Woodlands in this context exclude urban trees and street trees. Woodlands are treed areas, woodlots and forested areas, including treed wetlands, other than a cultivated fruit or nut orchard or a plantation established for the purpose of producing Christmas trees or nursery stock.

The following Ecological Land Classification (ELC) Community Classes and Series are considered woodland (Lee *et al.* 1998):

- Forest coniferous forest (FOC), mixed forest (FOM) or deciduous forest (FOD);
- Swamp coniferous swamp (SWC), mixed swamp (SWM) or deciduous swamp (SWD);
 and
- Cultural cultural woodland (CUW) or cultural plantation (CUP).

Woodlands provide a suite of ecosystem services, contribute to habitat diversity, support connectivity, and supply both social and economic benefits. In a landscape where woodlands are separated into smaller patches (or fragmented), such as the City of Peterborough, the size and composition of remaining woodlands combined with their position in the landscape in relation to other woodlands and natural areas influence their level of ecological functions. Often, in an urbanized landscape, the social (human) values placed on woodlands are extremely high, regardless of their level of ecological function.

Structural diversity of habitat is a key driver of biodiversity and woodlands provide a diverse range of habitats for flora and fauna. Woodlands form important building blocks of the NHS and are present in a wide range of topographic settings, substrates and moisture regimes. The structure of woodlands varies in composition on both a landscape scale and species composition. Woodlands provide a variation of habitat niches, comprised of microhabitats such as the surfaces of fissured trunks, stumps and rotting logs to macrohabitat features such as the horizontal layers within the forest (e.g., ground flora, understory, sub-canopy, and canopy).

Woodlands form a dominant component of the City of Peterborough's natural areas, often coinciding with areas valued from First Nation societal and cultural perspectives. Examples of these areas include Jackson Park, Trent Nature Areas and Harper Park. Jackson Park specifically has the distinction of being "Peterborough's best known and most popular nature area" (Greig et al. 1993) and is home to old growth White Pine, Eastern Hemlock and White Cedar (Henry et al. 2016). Often these more extensive areas of woodland cover are associated with areas of higher ecological function within the City of Peterborough and provide habitat for diverse wildlife communities.



Woodlands extend over approximately 1,070 ha, accounting for about 15.9% of the total area of the City of Peterborough (Table 1). Based on background information, interpretation of aerial photography and reconnaissance-level investigations the dominant woodland cover is a mixed canopy (FOM/SWM), accounting for an estimated 64% of the total woodland within the City and 10% of the City area.

Table 1. Estimated Woodland Cover by Type

Woodland Cover			•
Woodland Type	Area in City (ha)	Cover by Woodland Type (%)	Cover within City (%)
Cultural Plantation (CUP)	5	0.4	< 0.1
Cultural Woodland (CUW)	25	2.4	0.4
Conifer Forest (FOC)	54	5.0	0.8
Deciduous Forest (FOD)	140	13.0	2.1
Mixed Forest (FOM)	340	31.8	5.0
Conifer Swamp (SWC)	7	0.7	0.1
Deciduous Swamp (SWD)	158	14.7	2.3
Mixed Swamp (SWM)	341	31.9	5.1
Total	1,070		15.9

Woodland patch size plays an important role in determining the ecological importance of a woodland. It is widely recognized that more expansive woodland patches typically have higher ecological importance and many species require either large patches of woodland or well-connected moderately-sized patches within which to occur. The absence of expansive large patches within the City boundaries indicates that productive habitat is likely not present for some species.

The woodland cover in the surrounding landscape and the matrix within which a woodland occurs are also important factors that are indirectly related to a woodland's form and function and are independent of patch size.



The total area of woodland cover in the broader landscape is important in functional terms (see summary in *How Much Habitat is Enough* [Environment Canada 2013]). It is known that some species decline in abundance in any given habitat patch as the broader landscape level of woodland cover declines. Clearly, an urbanized landscape, such as is found within the City of Peterborough, with its 16% woodland cover will be unable to support the full suite of species that would occur if the landscape level woodland cover was, for example, above 50%; which is the level at which biodiversity changes are less likely to occur (Environment Canada 2013).

The landscape matrix within which the woodland occurs is also important in terms of species composition. The more similar the matrix is to a woodland, the more likely it may be supportive of the flora and fauna within that woodland. An urban matrix is generally unsupportive and less permeable, while an agricultural landscape may be at least more permeable. Connectivity values (i.e., the actual usage of linkages and connections) likely increase when the matrix is more inhospitable (Gilbert-Norton *et al.* 2010).

A woodland patch is defined as the total area of a contiguous patch of wooded areas. This analysis does not incorporate other parameters of function such as habitat for endangered or threatened species, as this can only be established with detailed investigations. For this analysis, GIS was used to calculate all contiguous wooded areas and determine the distribution of woodland patch sizes within the City (**Table 2**). Consistent with the *Natural Heritage Reference Manual* (OMNRF 2010) wooded areas separated by more than 20 m or a road/railway were considered separate woodlands. This analysis does not incorporate adjacent or nearby natural areas that extend beyond the City limits.

Table 2. Woodland Cover by Patch Size

Woodland Patch Size (ha)	Woodland Cover			
Woodiand Paten Size (na)	Area in City (ha)	# of Woodland Patches	% of Total Woodland Cover	Cover within City (%)
≥ 0.2 - < 0.5	5	16	0.5	0.1
≥ 0.5 - < 2.0	73	64	6.8	1.1
≥ 2.0 - < 5.0	85	28	7.9	1.3
≥ 5.0 - <10	129	18	12.0	1.9
≥ 10	779	24	72.8	11.6
Total	1,070	150		15.9



There are approximately 779 ha of woodlands in patches of 10 ha or greater, distributed among 24 patch locations. This represents 72.8% of the woodland cover if the City of Peterborough. This analysis indicates the prevalence of larger woodlands within the City of Peterborough. However, in terms of total woodland cover at 15.9% the City is at what could be considered a critical threshold. The City of Peterborough should aim to not lose woodland cover, especially that which is of good quality and provides functions associated with mature woodlands and larger patch sizes (Environment Canada 2013).

4.4 Valleylands

A valleyland is a natural depression in the landscape that has two sides and has water flowing through it or standing in it, for some period of the year. Valleylands vary in size from headwater features to wide valleys containing substantial rivers and expansive natural features. These features often form the "backbone" of a watershed because of the many important ecological functions they perform. As described in the *Natural Heritage Refence Manual* (OMNR 2010), these functions include channeling water, connecting natural heritage features, acting as movement corridors, transporting sediment and nutrients, maintaining water levels by acting as floodplains and seepage areas, and maintaining water quality through riparian vegetation communities.

Valleylands often also hold a cultural significance. Whether they were the location of indigenous meeting places, travel routes or settlements, or post-settlement development patterns, valleylands can strongly influence human settlement patterns. This is readily apparent in the City of Peterborough with large portions of the urban landscape being situated within valleylands.

Within the City of Peterborough, the presence of valleylands are typically determined through site specific field investigations and technical reports and the limits are identified with the conservation authority. Predominate valleyland features within the City of Peterborough include the Otonabee River valley and Jackson Creek valley, both of which have been identified as significant valleyland systems.

4.5 Area of Natural and Scientific Interest

Areas of Natural and Scientific Interest (ANSIs) are representative examples of the many natural landscapes, geological features, communities, plants and animals in the province. To encourage the protection of these areas that are rich in biological, geological and ecological value, the MNRF leads the ANSI program; identifying ANSI's by surveying regions and evaluating sites to decide which areas have the highest value for conservation, scientific study and education in the province.



Currently, there are neither Life Science ANSIs nor Earth Science ANSIs of any level (local, regional or provincial) within the City of Peterborough.

4.6 Fish Habitat, Watercourses and Waterbodies

Watercourses are featured prominently on the landscape within the City of Peterborough and play an important role in the area both historically and presently. The landscape of Peterborough has been shaped around watercourses and their importance is reflected in many facets of the community. There is high societal value placed on watercourses in addition to the many ecological services they provide. The Michi Saagiig view water as a sacred, living entity and the bloodline of Mother Earth. The waterways form part of the historic travelling routes of the Michi Saagiig and have played a key role in the history of the area.

Watercourses and waterbodies have an integral role in providing and supporting ecological functions, acting not only to convey or contain water but to provide habitat, act as movement corridors or stepping-stones, transport or store nutrients, and provide flood moderation. Watercourses typically provide fish habitat in either a direct or indirect capacity by providing or supporting spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes.

A watercourse is generally defined as an identifiable depression in the ground in which a flow of water regularly or continuously occurs. Watercourses are typically further classified by flow regime into one of three categories:

- Ephemeral supporting flows for a short in response to localized precipitation (e.g. spring freshet or storm events). Surface water channel is above the local groundwater table;
- Intermittent water flows for several months during the year because of a connection with seasonally high groundwater table or flow contributions from wetlands. Typically flow ceases during the summer months; or
- Permanent continuous year-round surface flow occurs in most years. Baseflow conditions are supported by year-round groundwater discharge and/or wetland/surface storage areas.

This definition captures features ranging from ploughed-through headwater drainage features in farm fields, to large riverine systems such as the Otonabee River. Within the City of Peterborough there are portions of eight distinct watersheds that drain to the Otonabee River. These are:

- Bears Creek;
- Byersville Creek;



- Unnamed Tributaries;
- Jackson Creek;
- Curtis Creek;
- Thompson Creek;
- · Riverview Creek; and
- Meade Creek.

These systems range from heavily urbanized (e.g. portions of Jackson Creek through downtown) to relatively natural and provide varied aquatic habitats, with some areas supporting critical functions such as spawning, refuge, nursery and foraging for a variety of fish species.

An example of a unique fish habitat function that occurs within the City is one of very few known coldwater urban Brook Trout systems in Ontario. This fish community is found in Harper Creek and recent studies (Harper Park Stewardship Committee 2017) have documented the fish utilizing reaches of the system that flow adjacent to a roadway as spawning habitat.

4.7 Habitat for Endangered or Threatened Species

Protection of habitat for species that are facing threat and experiencing population decline is a key tool for limiting the loss of biodiversity. In the *Natural Heritage Reference Manual* (OMNR 2010), it is noted that the protection of endangered or threatened species is necessary in order to slow or prevent the loss of species from the province, and in some cases, their extinction on a global basis.

Threatened or endangered species are designated by both the provincial and the federal governments. At the provincial level, species listed as endangered or threatened by the Committee on the Status of Species at Risk in Ontario are protected through the *Endangered Species Act* wherever they occur. In general terms, species listed as endangered or threatened on Schedule 1 of the federal *Species at Risk Act* are protected on federal lands (i.e. the Trent Severn Waterway). These lists are amended on a regular basis (i.e., at least once a year) to accurately reflect new information. For example, some species previously not considered at risk (NAR), or of special concern (SC) can become threatened or endangered, or conversely the status of species currently listed as endangered or threatened can be down-listed.

Mapping of records (including historical records) for endangered and threatened species is maintained by Ontario's NHIC. Due to the sensitivity of these data, the information is accessible as 1



km squares that capture the approximate locations for the species occurrence, and in some cases even then the name of the species is withheld. Other sources of information gathered through detailed studies, Indigenous knowledge or citizen science initiatives have been useful to develop a list of species with known occurrences within the City of Peterborough. **Table 3** provides an overview of endangered or threatened species that are known to have been recorded within the City of Peterborough that have likely bred in the area (i.e., excluding migrant birds).

Table 3. Endangered or Threatened Species Records in City of Peterborough

Croun	Common Name	Scientific Name	SARO	SARA	SARA
Group	Common Name	Scientific Name	Status	Schedule	Status
	Eastern Whip-poor-will	Antrostomus vociferus	THR	Schedule 1	THR
	Chimney Swift	Chaetura pelagica	THR	Schedule 1	THR
	Least Bittern	Ixobrychus exilis	THR	Schedule 1	THR
	Loggerhead Shrike	Lanius Iudovicianus	END	No Schedule	
Birds	Bank Swallow	Riparia riparia	THR	Schedule 1	THR
	Barn Swallow	Hirundo rustica	THR	Schedule 1	THR
	Bobolink	Dolichonyx oryzivorus	THR	Schedule 1	THR
	Eastern Meadowlark	Sturnella magna	THR	Schedule 1	THR
	Cerulean Warbler	Setophaga cerulea	THR	Schedule 1	END
	Northern Myotis	Myotis septentrionalis	END	Schedule 1	END
Mammals	Eastern Small-footed Myotis	Myotis leibii	END	No Schedule	
Mammais	Little Brown Myotis	Myotis lucifugus	END	Schedule 1	END
	Tri-colored Bat	Perimyotis subflavus	END	Schedule 1	END
Trees	Butternut	Juglans cinerea	END	Schedule 1	END
	Eastern Hog-nosed Snake	Heterodon platirhinos	THR	Schedule 1	THR
Reptiles	Spotted Turtle	Clemmys guttata	END	Schedule 1	END
	Blanding's Turtle	Emydoidea blandingii	THR	Schedule 1	THR



4.8 Wildlife Habitat

Wildlife habitat is a broad category that includes a wide range of unique and specialized habitats. It is a complex category because it encompasses such a diversity of natural and semi-natural areas both in terms of type and scale. As defined through the PPS (2020) wildlife habitat means:

...areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter and space needed to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory or non-migratory species.

At the time of developing the NHS for the City of Peterborough, wildlife habitat had not been designated within the City.

4.9 Linkages and Connections

The term "linkages and connections" can be applied in the context of land use planning to apply to pathways of connectivity along which wildlife could be expected to move, particularly in the context of anticipated land use changes (e.g., urbanization).

These connections are especially important for species that move between different habitats for survival (like some amphibians) or species that migrate in response to seasonal changes. This function is also captured by the significant wildlife habitat category for the subcategory "animal movement corridors", although these are generally interpreted as being specific locations where use by specific wildlife species has been documented.

There continues to be debate about the value of maintaining and/or creating ecological connectivity in highly fragmented landscapes, as occur in southern Ontario, and some scientists have pointed out that such connections can, and do, provide pathways for stressors that degrade natural areas (e.g., invasive species, pests and pathogens) (e.g., Proche et al. 2005; Bailey 2007). While others (e.g., Hannah 2008; Falcy and Estades 2007; Quinby 2006) have argued that in the context of climate change and ever limited resources more ecological benefits can be reaped by increasing the area of existing protected natural areas, rather than trying to connect them. However, there remains strong support for the principle that maintaining connections between otherwise isolated patches of remnant habitats is a sound conservation strategy. Research on this topic continues to demonstrate that well-connected habitats tend to support higher levels of biodiversity and facilitate important longer-term ecological functions such as: the re-population of areas subject to local extinctions of particular species of flora or fauna; the dispersal of animals and/or of plant seeds/propagules that are carried by



animals to new habitats in the post-breeding season; and the provision of habitat critical to fulfill life cycle requirements (e.g., ELI 2003; Damschen *et al.* 2006; Damschen *et al.* 2014; Gilbert-Norton *et al.* 2010; Rudnick *et al.* 2012).

The City of Peterborough is dominated by the corridor that is created by the Otonabee River and its tributaries. These were important pathways in the past when the Michi Saagiig used them extensively and remain important to the current day.

There are relatively few opportunities within the more urbanized portions of the City to expand and create pathways of natural connectivity, and most of those pathways might only be used by urbantolerant species. More opportunities exist at the margins of the built areas and where natural areas are already connected to, and part of, systems that extend beyond the City.

5. City of Peterborough Natural Heritage System Components and Levels

An NHS includes primary components that act as building blocks to construct a functional system. These components comprise different types of natural areas, ecological functions and linkages. When combined, they form an interconnected system of natural areas. This interconnected system strengthens the potential of individual components to provide ecological benefits and supports the resiliency of the natural environment. This "building block" approach has been utilized as a foundation for the City of Peterborough NHS and a "made in Peterborough" lens has been applied to ensure that the NHS reflects the natural areas of the City as well as the values of the community.

Within the City of Peterborough, there are seven component types that, together with linkages and connections, comprise the NHS. These are:

- Wetlands;
- Woodlands;
- Valleylands;
- Areas of Natural and Scientific Interest:
- Fish Habitat, Watercourses and Waterbodies;
- Habitat for Endangered or Threatened Species; and



Significant Wildlife Habitat.

These seven components are also consistent with the requirements of the PPS.

In recognition of the wide spectrum of natural features that comprise the NHS, a level designation is applied to reflect the function and significance of the different system components. The NHS comprises of natural features and areas that are categorized into one of three levels: Level A, Level B and Level C.

- Level A is the highest level of protection afforded to NHS features and the intent is to protect the form and function of these areas *in situ*. Development or site alteration will not be permitted unless in accordance with the federal *Fisheries Act*, the provincial *Endangered Species Act* or the federal *Species at Risk Act*.
- Level B is comprised of features that are important to the overall function of the Natural Heritage System. The intent is to preserve the function that these areas provide to the NHS while allowing some flexibility to the form of the features in cases where it can be demonstrated that a net gain in function can be achieved through mitigation or a compensation strategy.
- Level C features are recognized for the supporting role they provide to the Natural Heritage System. Development or site alteration will be considered where there is an opportunity to replicate the function on site or elsewhere in the City, in conformity with provincial and/or federal requirements.

The following sections summarize how features within the components of the NHS are protected through the Official Plan.

5.1 Wetlands

Provincially Significant Wetlands are afforded a high level of protection under provincial policies while all wetlands and their adjacent areas are regulated by the local conservation authority. Under the *Planning Act* Section 2.1 of the PPS states that no development or site alteration is permitted within Provincially Significant Wetlands, and development and site alteration within adjacent lands are only permitted where an environmental study demonstrates no negative impact to the feature or its ecological function.



In Ontario wetland significance under the *Planning Act* is determined by application of the Ontario Wetland Evaluation System (OWES). The OWES was developed by the MNRF primarily to address the Province's planning requirements and to provide a standardized method of assessing wetlands relative to each other. The evaluation system often serves as a preliminary inventory of a wetland (or wetland complex, which is several associated wetland units), and is based on a consideration of the following four components: biology, hydrology, social and economic values, and special features. Site-specific field studies to confirm the boundaries of evaluated, or to evaluate unevaluated wetlands, must be undertaken by persons certified by the MNRF in the application of OWES and the designation of PSWs remains under the purview of MNRF.

When describing the type of wetlands other than PSWs there are two terms that are commonly used and a third category that exists. The distinctions between the three are important to understand. These are:

- 1. A non-PSW is a wetland that has been evaluated following the OWES, however the MNRF has determined that the wetland does not meet the requirements for a PSW designation;
- 2. Unevaluated wetlands are those that have not yet been evaluated using the OWES; and
- 3. Some wetlands have been considered for evaluation but were purposefully not included in an evaluation on account of various complexing or evaluation rules; these wetlands have never been scored under the evaluation system as they have been considered not eligible for evaluation in the first place.

Wetland designations are not static and wetland evaluations are considered to be open files by MNRF. Non-PSWs are sometimes re-evaluated when new, verifiable and qualifying information is provided. In recent years there have been several instances (e.g. Harper Creek PSW and Loggerhead Marsh PSW) in the City of Peterborough where a non-PSW has been re-designated as a PSW.

All wetlands, regardless of their current evaluation status, are included within the City of Peterborough NHS and afforded protection through the applicable levels as detailed in **Table 4**. Consistent with the policies of the PPS, PSWs are afforded the highest level of protection within the NHS.

Table 4. Natural Heritage System Level Criteria - Wetlands

Component	Natural Heritage System Level Criteria		
Component	NHS Level A	NHS Level B	NHS Level C
Wetlands	Provincially Significant Wetlands (PSW) as	Non-PSW or unevaluated wetlands that meet the following criteria:	All wetlands that do not otherwise
	designated by the	i. Wetlands ≥ 0.5 ha; or	qualify under



Component	Natural Heritage System Level Criteria				
Component	NHS Level A	NHS Level B	NHS Level C		
	Ministry of Natural Resources and Forestry.	 ii. Wetlands 0.2 to 0.5 ha that meet one or more of the following: Located within floodplain; Contiguous with a permanent or intermittent watercourse, a Significant Valleyland or NHS Level A or B woodland; Identified as a bog or fen; or Identified as part of an ecologically functional corridor or linkage between natural heritage features. 	Wetland NHS Level A or B.		

There are many wetlands that have not been evaluated for significance within the City of Peterborough. This poses difficulties when an unevaluated wetland is present on a property that is subject to a development application. The City of Peterborough, in coordination with appropriate parties, intends to evaluate all wetlands within the City following the OWES for Southern Ontario to determine significance. It should be recognized that the evaluation process will result in three possible outcomes. These are: wetlands that are PSW, wetlands that are evaluated and determined to be non-PSW and wetlands that were determined not to be eligible for inclusion in an evaluation.

5.2 Woodlands

The PPS does not permit development or site alteration in significant woodlands or its adjacent lands unless it has been demonstrated that there will be no negative impacts on the feature or its ecological function. However, unlike PSWs and ANSIs, the province has not yet provided specific criteria for determining woodland significance.

As part of developing the NHS, the City of Peterborough has identified criteria by which the woodlands within the City must be evaluated to determine significance. The criterion for significance considers woodland area, and for woodlands between 0.5 ha and 2.0 ha metrics to represent quality, diversity, age and representation. As well functions that woodlands provide in the landscape such as water quality contributions, and linkages between other habitats has been incorporated. Area thresholds have been incorporated that reflect existing woodland cover within the City of Peterborough (**Table 5**). Under the City-identified criteria for the evaluation of woodland significance, 92.7% of woodlands would be considered significant based on area alone and another 6.8% of woodlands are candidates to be considered significant if they met the criteria detailed in **Table 5**.



Table 5. Natural Heritage System Level Criteria - Woodlands

Components	Natural Heritage System Level Criteria		
Components	NHS Level A	NHS Level B	NHS Level C
Woodlands	i. Woodlands 2 ha or greater in extent; and ii. Woodlands 0.5 ha or greater in extent and that: • Directly supports threatened or endangered species, with the exception of specimens deemed not requiring protection by the Province (e.g. as is sometimes the case with Butternut); or, • Are within 30 m of a provincially significant wetland or permanent stream or intermittent stream; or • Are identified as part of an ecologically functional corridor or linkage between	Woodlands ≥ 0.2 ha that do not meet the test to be identified as Significant.	Not applicable.
	natural heritage features; or • Are dominated by native trees older than 100 years and having late successional characteristics.		

The City of Peterborough is committed to increase woodland cover overtime, and at a minimum the maintenance of woodland cover. Accordingly, the protection of significant woodlands has been elevated above the requirements of the PPS. Through the policies of the Official Plan, significant woodlands are included within Level A, which prohibits development or site alteration within these features.

5.3 Valleylands

As with significant woodlands, the province does not identify significant valleylands at the provincial level and leaves the determination of significance to the municipality. The use of criteria recommended in the *Natural Heritage Reference Manual* (OMNR 2010) or developed independently that achieve or exceed the same objectives as the provincial criteria, is recommended but not required. For the purposes of the City of Peterborough NHS significant valleylands and non-significant valleylands have been incorporated as identified in **Table 6**.



Table 6. Natural Heritage System Level Criteria - V	- valleylands
---	---------------

Component	Natural Heritage System Level Criteria			
	NHS Level A	NHS Level B	NHS Level C	
Valleylands	Significant Valleylands as identified/regulated by Otonabee Region Conservation Authority.	All Non-significant valleylands as identified/regulated by ORCA.	Not applicable.	

In the City of Peterborough, large portions of the urban landscape are situated within valleylands. Recognizing this reality, for the purposes of the NHS, significant valleylands and non-significant valleylands exclude built-up valleyland areas within the City of Peterborough. However, these areas may still be subject to conservation authority regulations.

The presence and limits of all valleylands will be determined through site-specific field investigations and technical reports in association with conservation authority criteria. These limits will be established and confirmed to the satisfaction of the conservation authority and the City, as appropriate. Additionally, the flooding hazard, erosion hazard and stable or physical slope policies of the conservation authority should also be considered for applicability and may necessitate technical erosion hazard studies to establish the limits of a valleyland feature. Given these complex requirements for identification, valleylands have not been shown on the NHS mapping.

5.4 Areas of Natural and Scientific Interest

While MNRF ranks ANSIs as being provincially, regionally or locally significant, only those ranked as provincially significant meet the PPS definition for "significance". The PPS requires planning authorities to protect ANSIs that have been identified as provincially significant by not permitting development and site alteration and to only permit development and site alteration within its adjacent lands, if it has been demonstrated that there will be no negative impacts on the feature or its ecological function.

Despite the application of PPS level protection only to provincially significant ANSIs, the City of Peterborough recognizes that regionally significant ANSI's often support the function of natural heritage systems and have included them as a Level A feature of the NHS (**Table 7**).



Component	Natural Heritage System Level Criteria			
	NHS Level A	NHS Level B	NHS Level C	
Area of Natural Scientific Interest (ANSI's)	Provincially or Regionally Significant ANSI's as designated by the Ministry of Natural Resources and Forestry.	Locally Significant ANSI's.	Not applicable.	

No provincially, regionally or locally significant ANSI's have been designated by MNRF within the City of Peterborough. Therefore, the policies contained within the Official Plan related to ANSI's will only be relevant at such time that an ANSI is designated by MNRF within the boundaries of the City.

5.5 Fish Habitat, Watercourses and Waterbodies

Section 2.1.6 of the PPS requires that municipalities not permit development and site alteration in fish habitat except in accordance with provincial and federal requirements. The City of Peterborough has taken the direction provided by the province and extended protection to all watercourses and naturally occurring waterbodies through inclusion in the NHS. This is in recognition of the important role that watercourses and waterbodies have in contributing to a functional NHS beyond fish habitat. **Table 8** summarizes how fish habitat, watercourses, and waterbodies are incorporated into the City of Peterborough NHS.

Table 8. Natural Heritage System Level Criteria – Fish Habitat, Watercourses and Waterbodies

Component	Natural Heritage System Level Criteria			
	NHS Level A	NHS Level B	NHS Level C	
		Permanent Waterbodies.		
Fish Habitat, Watercourses and Waterbodies	Permanent and Intermittent Watercourses (includes Little Lake).	*does not include anthropogenic waterbodies that are created by excavating basins with no inlet or outlet channels in which surface and/or groundwater collect or	Ephemeral Watercourses.	



Component	Natural Heritage System Level Criteria					
Component	NHS Level A	NHS Level B	NHS Level C			
		facilities constructed for the treatment/storage of stormwater.				

Fish habitat is regulated by the federal government through the *Fisheries Act* as administered by DFO. The *Fisheries Act* is a permissive regulation and authorization can be obtained to alter or destroy fish habitat. Fish habitat under the *Fisheries Act* can include both direct and indirect fish habitat functions. The City of Peterborough can allow development and site alteration in fish habitat, including Level A features, if the undertaking is compliant with the federal *Fisheries Act*, conservation authority regulations and policies and any other applicable regulations. In the instance of fish habitat associated with a Level A feature this applies only to the Level A fish habitat component of the NHS and does not extend to NHS components that may occur in conjunction. For example, a PSW that is also Level A fish habitat is still a Level A wetland under the City of Peterborough NHS and is still subject to the wetland policies of the Official Plan.

Where no detailed fish habitat and/or watercourse mapping has been completed, all waterbodies, including permanent or intermittent streams, headwaters, seasonally flooded areas, municipal or agricultural surface drains, lakes and ponds (except facilities constructed for the treatment/storage of stormwater) should be considered fish habitat, watercourse and/or waterbody for the purposes of the NHS unless it can be demonstrated to the satisfaction of the City, conservation authority and DFO, as applicable, that the feature does not constitute fish habitat and/or a watercourse and/or waterbody as defined by the *Fisheries Act* and the *Conservation Authorities Act*.

5.6 Habitat for Endangered or Threatened Species

The PPS requires that municipalities prohibit development and site alteration in the habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. The federal SARA and the provincial ESA are the mechanism by which species at risk are regulated in Ontario.

The City of Peterborough recognizes habitat for endangered or threatened species as a Level A feature (**Table 9**). However, this component is subject to the permissive regulations of the ESA and/or SARA (i.e. the province can issue a permit to destroy habitat of a species listed as endangered provincially). Therefore, habitat for endangered or threatened species within the City of Peterborough may be altered/removed in accordance with applicable federal and/or provincial regulations. Where



this is permitted, the habitat will not be considered part of the City of Peterborough NHS under this component. This applies only to the habitat for endangered or threatened species component of the NHS and does not extend to any NHS components that may occur in conjunction. For example, a significant woodland that is also habitat for an endangered species is still a woodland under the City of Peterborough NHS and is still subject to the woodland policies of the plan.

Table 9. Natural Heritage System Level Criteria – Habitat for Endangered or Threatened Species

Component	Natural Heritage System Level Criteria						
Component	NHS Level A	NHS Level B	NHS Level C				
	A) Habitat for species listed as endangered or threatened on the Species at Risk in Ontario Regulation 230/08 (under the Endangered Species Act, 2007)						
	and/or						
Habitat for Endangered or Threatened Species	B) Habitat for aquatic species or migratory birds species listed as threatened or endangered on Schedule 1 of the <i>Species at Risk Act</i> on nonfederal lands.	Not applicable.	Not applicable.				
	Note: Where a permit is obtained under either the ESA or SARA to remove/destroy habitat for endangered or threatened species the habitat will not be considered part of the City of Peterborough NHS under this component.						

Threatened or endangered species occurrence or extent of habitat is typically confirmed through detailed field studies in conjunction with either the provincial or federal authority, as appropriate. The list of the threatened or endangered species is amended on a regular basis and the occurrence of endangered or threatened species is not constant and can be ephemeral.

While the City of Peterborough must confirm the species presence through the planning process, it is ultimately the responsibility of the Ministry of Environment Conservation and Parks at the provincial



level or either Environment Climate Change Canada or DFO at the federal level to administer their legislation. It is necessary for all persons and entities to be in conformity with the applicable law.

5.7 Significant Wildlife Habitat

Policies 2.1.5 and 2.1.7 of the PPS do not permit development and site alteration in significant wildlife habitat, or their adjacent lands, unless it has been demonstrated that there will be no negative impacts on the feature or its ecological functions. As with significant woodlands and significant valleylands, the province does not identify significant wildlife habitat at the provincial level and leaves the determination of significance to the municipality.

The definitions of wildlife habitat is a broad category and the application of a test of significance adds further complexity. The province has suggested *Significant Wildlife Habitat Ecoregion Criteria* (OMNR 2015) to assist in the identification of significant wildlife habitat. While the Ecoregion Criteria are useful, the suggested thresholds for confirming significant wildlife habitat occurrence are in some instances overly prescriptive and are not always appropriate in the context of an urban landscape, as they have been developed for the entire ecoregion or have not considered site specific factors (i.e., artificial habitat, poor quality occupied habitat, patch size etc.).

The manner in which significant wildlife habitat has been incorporated in the City of Peterborough NHS has relied on the guidance of the *Significant Wildlife Habitat Ecoregion 6E Criteria* (OMNR 2015) developed by the Province but viewed through a "made in Peterborough" lens. Within the City of Peterborough significant wildlife habitat is classified as occurring in either natural or semi-natural features and further categorized into one or more of the follow groups, which are consistent with the *Significant Wildlife Habitat Ecoregion 6E Criteria* (OMNR 2015).

- Habitats of seasonal concentrations of animals;
- Rare vegetation communities or specialized habitat for wildlife;
- Habitat of species of conservation concern; and
- Animal movement corridors.

Semi-natural features are natural features that require human management to persist in the current form. A cultural meadow community is an example of this, as this feature requires management to persist and not succeed to a thicket or forested community.



Consistent with the provincial *Significant Wildlife Habitat Ecoregion 6E Criteria* (OMNR 2015) artificial features are not included as significant wildlife habitat. Examples of artificial features in include but are not limited to golf course ponds, irrigation ponds, sand traps, stormwater management facilities, sewage treatment and storage facilities, licensed/permitted aggregate areas, orchards, buildings, bridges, roadsides or constructed features.

Table 10 indicates how significant wildlife habitat has been incorporated into the NHS.

Table 10. Natural Heritage System Level Criteria – Significant Wildlife Habitat

Component	Natural Heritage System Element Criteria					
Component	NHS Level A	NHS Level B	NHS Level C			
Wildlife Habitat	Significant Wildlife Habitat within natural features.	Significant Wildlife Habitat within or associated with semi-natural features.	Not applicable			

Typically, all other natural features in the given landscape will be identified and mapped first (i.e., wetlands, woodlands, valleylands), and in most cases these will also capture most significant wildlife habitats. Significant wildlife habitat is then, generally, a supplementary step whereby a given area is screened to make sure no unique or specialized habitats have been overlooked. Although the MNRF does have mapping for a few significant wildlife habitat categories (i.e. deer winter congregation areas), usually no such mapping will exist prior to a proponent submitting a development application for most categories, and therefore evaluation will need to take place on a site-specific level.

A comprehensive evaluation will include consideration of all the categories listed in **Appendix A** *Significant Wildlife Habitat Criteria – City of Peterborough*. Identification will require determining the applicable significant wildlife habitat designation by first verifying the occurrence of candidate significant wildlife habitat using Ecological Land Classification ecosite codes and habitat criteria/habitat definitions and then establishing if confirmed significant wildlife habitat occurs based on the presence of wildlife species/indicator species as per the defining criteria. Using this process for identification of significant wildlife habitat therefore requires that both the candidate and confirmed criteria identified in **Appendix A** be met for a significant wildlife habitat designation to occur in the City of Peterborough.



If significant wildlife habitat is confirmed based on the preceding steps it will be protected through the policies of the Official Plan that correspond with NHS element level based on feature type (i.e. natural or semi-natural).

5.8 Linkages and Connections

The concept of ecological linkages is firmly supported in the PPS policy 2.1.2 even though it is not isolated as a distinct feature category. For the City of Peterborough NHS, many of the existing pathways of connectivity are being incorporated through the designation of components, such as watercourses, habitat for fish and significant valleylands.

In recognition of opportunities that may exist to reconnect features at the local level, a criterion has been incorporated in the Official Plan to identify Proximity Linkages. Proximity linkages are present where Level A or Level B NHS elements occur within 60 m of each other, and the interconnecting area is free of barriers to movement for flora and fauna. Connections that extend beyond the boundaries of the City have been incorporated through the inclusion of a Regional Connections classification in the NHS. These connections provide general pathways of connectivity between the City of Peterborough NHS, the County of Peterborough NHS and more broadly the Regional NHS for the Growth Plan for the Greater Golden Horseshoe (MMAH 2018).

Regional Connections and Proximity Linkages have been identified with a symbol on Schedule F of the Official Plan to indicate the general pathway of connectivity. These symbols are not intended to represent the precise location of linkage/corridors. The exact location of corridors should be established through site-specific investigations to determine the location and dimensions best suited to the function.

In instances where Regional Connections are identified it is intended that the connectivity function be maintained and, where possible, enhanced in the vicinity of these areas. For Proximity Linkages these are to be treated in a manner similar to Level B NHS features. In the instance of land development, the function may be addressed through various solutions established through site-specific investigation to determine the location and dimensions best suited to the NHS function.

In terms of ideal dimensions for ecological linkages there are no fixed standards. This is in part because optimal dimensions, which have been examined for a number of wildlife species and groups, vary so much between and within taxonomic groups, and are unknown for many other species (OMNR 2010; Environment Canada 2004). Minimum widths and lengths of corridors also depend on habitat structure and quality within individual corridors, nature of the surrounding habitat, and human use patterns. Key linkage or corridor attributes listed in the *Natural Heritage Reference Manual* (OMNR 2010) include the habitat needs of species expected to use it, shape, length, and width. The



manual also points out that linkage can also be achieved through multiple pathways, and for some groups of species *via* smaller, relatively close patches that serve as steppingstones. In the City of Peterborough, natural heritage components are often fragmented by highways, roads, and a variety of other linear infrastructure (e.g., railways, hydro lines, pipeline easements, etc.), alternate land uses or even inhospitable habitats (for some species) such as the Otonabee River itself.

As such, in instances of development applications in the vicinity of Proximity Linkages and Regional Connection connectivity solutions should be determined based on the following:

- Knowledge of the species present and likely to use a connection in a given landscape;
- Review of the most current data of habitat needs and mobility of those species in the
 context of the landscape matrix (i.e., agricultural *versus* urban landscapes which have
 significantly different opportunities and constraints in their ability to support biota);
- Analysis of the most suitable linkage options available in a given landscape; and
- Consideration for the minimum requirements of the selected species and/or those with the broadest needs.

5.9 Natural Heritage System Component and Level Summary

Within the City of Peterborough, the NHS incorporates seven component types, linkages, and connections. **Table 11** provides a summary of the City of Peterborough NHS components and corresponding levels of protection.

Table 11. Natural Heritage System Component and Level Summary

Component	Level A	Level B	Level C
Wetlands	Provincially Significant Wetlands	Non-PSW or unevaluated wetlands that meet the NHS criteria for Level B	All wetlands that do not otherwise qualify under NHS Level A or B
Woodlands	Significant Woodlands	Non-Significant Woodlands ≥ 0.2 ha	Not applicable



Component	Level A	Level B	Level C		
Valleylands	Significant Valleylands	All Non-significant valleylands	Not applicable		
Life Science Area of Natural Scientific Interest (ANSI's)	Provincially or Regionally Significant Life Science ANSI's	Locally Significant Life Science ANSI's	Not applicable		
Fish Habitat, Watercourses and Waterbodies	Permanent and Intermittent Watercourses (includes Little Lake)	Permanent Waterbodies	Ephemeral Watercourses		
	A) Habitat for species listed as endangered or threatened on the Species at Risk in Ontario Regulation 230/08 (under the Endangered Species Act, 2007);				
Habitat for Endangered or Threatened Species	and/or	Not applicable	Not applicable		
	B) Habitat for aquatic species or migratory birds species listed as threatened or endangered on Schedule 1 of the <i>Species at Risk Act</i> on non-federal lands				
Wildlife Habitat	Significant Wildlife Habitat within natural features.	Significant Wildlife Habitat within or associated with semi- natural features.	Not applicable		
Proximity Linkages	These are to be treated in a manner similar to Level B NHS features. In the instance of land development, the function may be addressed through various solutions established through site specific investigation to determine the location and dimensions best suited to the NHS function.				
Regional Connections	It is intended that the connectivity function be maintained and where possible enhanced in the vicinity of these areas.				



6. Vegetation Protection Zones

Vegetation Protection Zones (VPZs) (also known as buffers) can be a useful planning tool for municipalities to implement to protect natural heritage features and functions from the impacts of adjacent land uses. The *Natural Heritage Reference Manual* (OMNR 2010) provides guidance on VPZs. This guidance specifies that VPZs should:

- Be between a natural feature and lands subject to development or site alteration;
- Be permanently vegetated, preferably with native species; and
- Protect the natural feature against the impacts of the adjacent land use, rather than provide the functions of the feature itself.

If implemented correctly, VPZs play an important role protecting natural heritage features and functions in changing landscapes by providing a suite of benefits that include but are not limited to:

- Attenuate sediments and pollutants;
- Screen against human disturbances;
- Serve as a habitat transition zones;
- Maintain microclimate conditions; and
- Limit the spread of invasive species.

The concept of VPZ's is not explicitly identified as a requirement of the PPS however the need to have no negative impact on natural heritage features is clearly identified in Section 2.1 of the PPS. The PPS does reference Adjacent Lands which is a term that often gets incorrectly confounded with the concept of VPZs. Regarding the natural heritage policies of the PPS the term Adjacent Lands refers to:

Those lands contiguous to a specific natural heritage feature or area where it is likely that development or site alteration would have a negative impact on the feature or area. The extent of the adjacent lands may be recommended by the Province or based on municipal approaches which achieve the same objectives.



The function of Adjacent Lands is to ensure that the study area is appropriate to determine the natural feature boundaries, and assess impacts associated with the proposed activities. Typically, the VPZ is not equivalent to the Adjacent Lands area.

Recognizing the critical importance of establishing VPZ that are appropriate to ensure no negative impact to natural features and functions, the City of Peterborough has taken a Minimum Vegetation Protection Zone (MVPZ) approach. This approach sets out the minimum width allowed for a VPZ based on feature type, meaning that the VPZ can exceed but not be less than the MVPZ. MVPZ's are included in Section 4.6.2 (m) of the Official Plan and in **Table 12** below.

Table 12. Natural Heritage Feature Minimum Vegetation Protection Zones

Feature	Minimum Vegetation Protection Zone Width
Provincially Significant Wetlands or Unevaluated Wetlands	30 metres
Non-Provincially Significant or Unevaluated Wetlands that are not included in a wetland evaluation as per the Ontario Wetland Evaluation System for Southern Ontario	15 metres
Woodlands	10 metres from dripline
Valleylands	10 m in conjunction with Conservation Authority requirements
Permanent and Intermittent Watercourses (Cool/Cold Water)	30 metres
Permanent and Intermittent Watercourses (Warm Water)	15 metres
Naturally Occurring Waterbodies	15 metres
Significant Wildlife Habitat	To be determined through an Environmental Impact Study
Provincially or Regionally Significant Life Science or Earth Science Areas of Natural and Scientific Interest	To be determined through an Environmental Impact Study
Habitat for Threatened or Endangered Species	To be determined through an Environmental Impact Study

MVPZs established in the policies of the Official Plan will not be sufficient to protect all natural heritage features and functions. There will be instances where VPZ's that exceed the minimum will be necessary. Furthermore, for some features the range of appropriate VPZ's is so variable that



setting a MVPZ is not possible without detailed studies and site specific considerations (i.e. Significant Wildlife Habitat or ANSI's). Through the *Planning Act* application process there is requirement for environmental study (See Section 7 below for further details on environmental study requirements). One purpose of the environmental study is to make recommendations related to an appropriate VPZ based on the feature and function as determined through detailed study. The MVPZ should not be implemented without appropriate study and rationale as MVPZ are not intended to replace the need to complete an environmental study.

When establishing appropriate VPZ's many factors need to be considered including the type of feature, local biophysical conditions, change to adjacent land use and intended function of the VPZ. These factors will vary and require site specific assessment to determine. Additionally, the knowledge and science around establishing effective VPZs is still evolving, particularly for already fragmented landscapes such as the City of Peterborough. The MVPZ approach allows for site specific information to be assessed using proven and emerging information when establishing VPZ's that are suited to protect natural features and functions from negative impacts.

7. Environmental Impact Study

An Environmental Impact Study (EIS) is required when development is proposed within the adjacent lands (i.e., 120 m) of a natural heritage system component, regardless of the features inclusion in the Natural Areas Designation on Schedule F of the Official Plan. This requirement is in recognition that not all NHS components have been mapped within the City of Peterborough and there will be instances where previously un-identified natural heritage features or functions will exist in the vicinity of an application.

To determine the need for an EIS, the City will require a screening level assessment of all *Planning Act* applications. This screening level assessment is to be completed by a qualified professional (i.e. biologist, ecologist, environmental consultant etc.) retained by the applicant to determine the occurrence of features defined by the natural areas designation in Section 4.6 of the Official Plan. A screening level assessment may consider relevant background information and/or reconnaissance level site investigations. If a feature(s) is present within 120 m of the activity, the requirement for an EIS will be triggered.

The need for and scope of the EIS must be established in consultation with the City of Peterborough, and as appropriate the Conservation Authority, and any other agency having jurisdiction, to ensure the appropriate level of study is undertaken. The agreed upon scope will serve as the Terms of Reference for the EIS. The type of assessment and surveys to be included in the scope of an EIS will vary depending on the application and features present. The scope could range from primarily



desktop/reconnaissance review to multi-season targeted studies. Regardless of the extent of the scope, an EIS must fulfill the requirements of the Official Plan policies and address the following:

- Clearly identify and map all natural heritage features on site, including Natural Heritage System Level A, B or C features and other features;
- Provide a thorough field inventory, mapping of species and features on site including identification of vegetation communities using the Ecological Land Classification (ELC) system, and complete lists of flora and fauna species and features that were observed on site;
- Describe the survey methods and level of effort undertaken including the dates, weather conditions and number of field visits/surveys and demonstrate that assessments were conducted using appropriate methodologies at the appropriate time of year;
- Provide an analysis of the ecological features and functions provided by each natural heritage feature;
- Identify the type and extent of the proposed development, re-development, site alteration or boundary adjustment;
- Outline potential impacts from the proposed development and any mitigation measures or monitoring to address these impacts;
- Identify planning, design and construction practices that will maintain or restore and, where feasible, improve the health, diversity and size of the NHS;
- Establish an appropriate VPZs based on the function of natural heritage features;
 - If the minimum vegetation protection zones identified in Section 4.6.2 (m) of the Official Plan are recommended in the EIS then rationale to support the minimum vegetation protection zone must be provided;
- Demonstrate how connectivity within the NHS will be maintained or restored and, where possible, improved during and after construction; and
- Determine residual impacts to the natural heritage features from the proposed development, site alteration or boundary adjustment and demonstrate that there will be no adverse effects or negative impact on the NHS.

If the need for an EIS is identified through the screening level assessment, the EIS must be submitted as part of the Complete Application Requirements in accordance with the policies of the Official Plan. The submission of an EIS does not guarantee that the proposed development, site alteration or boundary adjustment will be approved.



8. Conclusion

The City of Peterborough NHS builds on the components required through the PPS supported by the application of scientific principles and the application of practical natural heritage planning realities. The NHS has been developed in close consultation with the Natural Heritage System Taskforce and has benefited from knowledge shared by Treaty 20 rightsholders and input from various stakeholders, which has resulted in a system that is truly reflective of the natural features of the City of Peterborough. Through the inclusion of all wetlands in the NHS designations and elevation of protection levels for components such as significant woodlands beyond what is required by the province, the City of Peterborough has demonstrated dedication to the protection of valued natural features. The NHS is supported through strong policies in the Official Plan that establish protections and permitted uses. Through the policies of the Official Plan, the City has also committed to evaluate wetlands within the City and to develop a restoration and enhancement strategy, indicating commitment to implement the NHS framework.

Overall, the NHS positions the City of Peterborough for future growth while acknowledging that a functional, resilient and sustainable NHS will require a long-term commitment to the protection of substantial areas of natural heritage features.



9. References

Boyce, J.I. and N. Eyles. 1991.

Drumlins carved by deforming till streams below the Laurentide ice sheet. *Geology*. 19(8):787-790.

Damschen, E. I., N. M. Haddad, J. L. Orrock, J. J. Tewksbury and D. L. Levey. 2006.

Corridors increase plant species richness at large scales. Science. 313:1284-1286.

Damschen, E. I. Dirk V. Baker, Gil Bohrer, Ran Nathan, John L. Orrock, Jay R. Turner, Lars A. Brudvig, Nick M. Haddad, Douglas J. Levey, and Joshua J. Tewksbury. 2014.

How fragmentation and corridors affect wind dynamics and seed dispersal in open habitats. *PNAS*. 111(9):3484-3489.

Donnelly, R. and J. M. Marzluff. 2006.

Relative importance of habitat quantity, structure, and spatial pattern to birds in urbanizing environments. *Urban Ecosystem*. 9:99-117.

Environment Canada. 2013.

How much habitat is enough: a framework for guiding habitat rehabilitation in Great Lakes areas of concern. Canadian Wildlife Service. Third edition.

Environmental Law Institute (ELI). 2003.

Conservation Thresholds for Land Use Planners. Washington D.C., ISBN# 1-58576-085-7, ELI project code 003101, 64 p.

Ewers, R. M. and Didham, R. K. 2006.

Confounding factors in the detection of species responses to habitat fragmentation. *Biological Review*. 81:117-142.



Fischlin, A., G. F. Midgley, J. T. Price, R. Leemans, B. Gopal, C. Turley, M. D. A. Rounsevell, O. P. Dube, J. Tarazona and A. A. Velichko. 2007.

Ecosystems, their properties, goods and services In: M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden and C.E. Hanson (ed) 2007. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge, UK: Cambridge University Press.

Gilbert-Norton, L.R. Wilson, J.R. Stevens and K.H. Beard. 2010.

A meta-analytic review of corridor effectiveness. Conservation Biology. 24(3):660-668.

Gravenor, C.P. 1957.

Surficial geology of the Lindsay-Peterborough area, Ontario, Victoria, Peterborough, Durham and Northumberland counties, Ontario.

Greig, J., R. Franklin, R. Lafreniere and G. Smith. 1993.

Peterborough Natural Areas Study. Natural Areas Steering Committee, Peterborough, Ontario.

Harper Park Stewardship Committee. 2017.

Harper Creek Study.

Henry, M., P. Quinby and M. McMurtry. 2016.

The Jackson Creek Old-Growth Forest. Core Area of the Jackson Creek Significant Woodland in Peterborough, Ontario. Research Report No. 33.

Hodgson J.A., A. Moilanen, B.A. Wintle and C.D. Thomas. 2011.

Habitat area, quality and connectivity: striking the balance for efficient conservation. *Journal of Applied Ecology*. 48:148-152.

Kuo, F. E. 2010.

Parks and Other Green Environments: Essential Components of a Healthy Human Habitat. National Recreation and Park Association.



Lee, H., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998.

Ecological Land Classification for Southern Ontario (First Approximation and its Application) SCSS Field Guide FG-02. September 1998.

Lemieux, C.J., T.J. Beechey, D.J. Scott and P.A. Gray. 2010.

Protected Areas and Climate Change in Canada: Challenges and Opportunities for Adaptation. Canadian Council on Ecological Areas (CCEA) Occasional Paper No. 19. CCEA Secretariat, Ottawa, Ontario, Canada.

Marich, A.S. 2016.

Quaternary geology of the Lindsay and Peterborough areas, southern Ontario. Ontario Geological Survey, Open File Report 6321.

Ministry of Municipal Affairs and Housing (MMAH). 2020.

Provincial Policy Statement. Toronto, Ontario.

Ontario Biodiversity Council. 2010. State of Ontario's Biodiversity 2010. A report of the Ontario Biodiversity Council, Peterborough, ON.

Ontario Biodiversity Council. 2011. Ontario's Biodiversity Strategy, 2011: Renewing Our Commitment to Protecting What Sustains Us. Ontario Biodiversity Council, Peterborough, ON.

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2000.

Significant wildlife habitat technical guide. 151p.

Ontario Ministry of Natural Resources and Forestry (OMNRF). October 2010. A Proposed Modelling and Scenario-based Approach for Identifying Natural Heritage Systems in Southern Ontario Discussion Paper.

Ontario Ministry of Natural Resources and Forestry (OMNRF). March 2010. *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005*. Second Edition. Toronto: Queen's Printer for Ontario.



Ontario Ministry of Natural Resources and Forestry (OMNRF). January 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

Ontario Ministry of Natural Resources and Forestry. 2018.

The Regional Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe – technical report on criteria, rationale and methods. Natural Heritage Section, Ontario Ministry of Natural Resources and Forestry. Queen's Printer for Ontario, Peterborough, Ontario.

Ontario Nature, 2014.

Best Practices Guide to Natural Heritage Systems Planning.

Prugh, L.R., K.E. Hodges, A.R.E. Sinclair, and J.S. Brashares. 2008.

Effect of habitat area and isolation on fragmented animal populations. *PNAS*. 105(52):20770-20775.

Puric-Mladenovic, D. and S. Strobl. 2012.

Designing natural heritage systems in southern Ontario using a systematic conservation planning approach. *The Forestry Chronicle*. 88(6):722–735.

Quinby, P. 2006.

Evaluating Regional Wildlife Corridor Mapping: A Case Study of Breeding Birds in Northern New York State. *Adirondack Journal of Environmental Studies*. 13(2):27-33.

Riley, J.L. and P. Mohr. 1994.

The natural heritage of southern Ontario's settled landscapes: a review of conservation and restoration ecology for land-use and landscape planning. Ontario Ministry of Natural Resources, Southern Region.

Rudnick, D.A., S.J. Ryan, P. Beier, S.A. Cushman, F. Dieffenbach, C.W. Epps, L.R. Gerber, J. Hartter, J.S. Jenness, J. Kintsch, A.M. Merenlender, R.M. Perkl, D.V. Preziosi and S.C. Trombulak. 2012.

The role of landscape connectivity in planning and implementing conservation and restoration priorities. *Issues in Ecology*. 16:1-23.



Spring, D., J. Baum, R. MacNally, M. MacKenzie, A. Sanchez-Azofeifa and J.R. Thomson. 2010. Building a regionally connected reserve network in a changing and uncertain world. *Conservation Biology.* 24(3):691-700.



Appendix A

Significant Wildlife Habitat Criteria - City of Peterborough



Appendix A

Significant Wildlife Habitat Criteria – City of Peterborough

The following tables provide the criteria for identifying Significant Wildlife Habitat in the City of Peterborough. The tables are by large consistent with the recommended *Criteria for Significant Wildlife Habitat in Ecoregion 6E* produced by the Ontario Ministry of Natural Resources and Forestry (OMNRF 2015) with minor alterations to reflect the natural heritage conditions within the City of Peterborough. These criteria will be reviewed and updated periodically by the City of Peterborough. Consistent with the provincial criteria, guidance for the SWH designation is classified into the four categories of SWH identified in the *Significant Wildlife Habitat Technical Guide* and its Appendices (OMNR 2000). Citations indicated in the table (indicated by a roman numeric symbol or ©) are directly from the provincial criteria and have not been adapted by the City of Peterborough. A list of these reference documents can be found following the schedules of the *Criteria for Significant Wildlife Habitat in Ecoregion 6E* (OMNRF 2015).

Identification of SWH in the City of Peterborough should utilize the following tables to determine the applicable SWH designation by first verifying the occurrence of Candidate SWH using Ecological Land Classification (ELC) codes and Habitat Criteria/Habitat Definitions provided then establishing Confirmed SWH on occurrence of specified Wildlife Species/Indicator Species as per the Defining Criteria. Using this process for identification of SWH therefore requires that both the Candidate SWH and Confirmed SWH criteria to be met for a SWH designation to occur.



Table 1-1. Seasonal Concentrations Areas of Animals

Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH
Wilding Habitat	winding Species	ELC Ecosite Codes	Habitat Criteria	Defining Criteria
	American Black Duck			Studies carried out and verified presence of an annual concentration of any listed species.
Waterfowl Stopover and Staging Areas	Wood Duck	CUM1	Fields with sheet water during Spring (mid-March to May).	Any mixed species aggregations of 100® or more individuals required.
(Terrestrial)	Green-winged Teal Blue-winged Teal	CUT1 Plus evidence of annual	Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl.	The flooded field ecosite habitat plus a 100-300m radius area, dependant on local site conditions and adjacent land use is the significant wildlife habitat cxlviii
Rationale: Habitat important to migrating waterfowl.	Northern Pintail Northern Shoveler American Wigeon	spring flooding from melt water or run-off within these Ecosites.	Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available cxlviii.	 Annual use of habitat is documented from information sources or field studies (annual use can be based on studies or determined by past surveys with species numbers and dates). Significant Wildlife Habitat Mitigation Support Tool (SWH MiST)
wateriowi.	Gadwall			cxlix Index #7 provides development effects and mitigation measures.
	Cackling Goose			
	Snow Goose			
	American Black Duck	MAS1		Studies carried out and verified presence of:
	Northern Pintail	MAS2		Aggregations of 100© or more of listed species for 7 days©,
	Northern Shoveler	MAS3 SAS1		results in > 700 waterfowl use days.
Waterfowl Stopover and Staging Areas (Aquatic)	American Wigeon			Areas with annual staging of Ruddy Ducks, Canvasbacks, and Redheads are SWH cxlix.
Rationale:	Gadwall Green-winged Teal	SAM1 SAF1	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment	The combined area of the ELC ecosites and a 100m radius area is the SWH cxlviii.
Important for local and migrant	Blue-winged Teal	SWD1	ponds and storm water ponds do not qualify as a SWH,	Wetland area and shorelines associated with sites identified within
waterfowl populations during the spring or fall migration or both periods	Hooded Merganser	SWD2	however a reservoir managed as a large wetland or pond/lake does qualify.	the Significant Wildlife Habitat Technical Guide (SWHTG) cxlviii Appendix K cxlix are significant wildlife habitat.
combined.	Common Merganser	SWD3	parameter quanty.	Annual Use of Habitat is Documented from Information Sources or
Sites identified are usually only one of a few in the eco-district.	Lesser Scaup	SWD4		Field Studies (Annual can be based on completed studies or
	Greater Scaup	SWD5		determined from past surveys with species numbers and dates recorded).
	Long-tailed Duck	SWD6		SWHMiST cxlix Index #7 provides development effects and
	Surf Scoter	SWD7		mitigation measures.
	White-winged Scoter			
	Black Scoter			



Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH
Whalle Habitat		ELC Ecosite Codes	Habitat Criteria	Defining Criteria
	Ring-necked duck Common Goldeneye Bufflehead			
	Redhead Ruddy Duck Red-breasted Merganser Brant Canvasback Ruddy Duck Greater Yellowlegs			
Shorebird Migratory Stopover Area Rationale: High quality shorebird stopover habitat is extremely rare and typically has a long history of use.	Lesser Yellowlegs Marbled Godwit Hudsonian Godwit Black-bellied Plover American Golden-Plover Semipalmated Plover Solitary Sandpiper Spotted Sandpiper Semipalmated Sandpiper Pectoral Sandpiper White-rumped Sandpiper Baird's Sandpiper Least Sandpiper Purple Sandpiper Stilt Sandpiper Stilt Sandpiper Short-billed Dowitcher Red-necked Phalarope Whimbrel Ruddy Turnstone	BBO1 BBO2 BBS1 BBS2 BBT1 BBT2 SDO1 SDS2 SDT1 MAM1 MAM2 MAM3 MAM4 MAM5	 Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and unvegetated shoreline habitats in May to mid-June and early July to October. Sewage treatment ponds and stormwater ponds do not qualify as a SWH. 	Studies confirming: Presence of three or more of listed species and > 1000® shorebird use days during spring or fall migration period. (shorebird use days are the accumulated number of shorebirds counted per day over the course of the fall or spring migration period). Whimbrel stop briefly (<24hrs) during spring migration, any site with >100 ® Whimbrel used for three years or more qualifies. The area of significant shorebird habitat includes the mapped ELC shoreline ecosites plus a 100 m radius area cxlviii. SWHMiST cxlix Index #8 provides development effects and mitigation measures.



Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH
Whalle Habitat		ELC Ecosite Codes	Habitat Criteria	Defining Criteria
	Sanderling			
	Dunlin			
Rationale: Sites used by multiple species, a high number of individuals and used annually are most significant	Rough-legged Hawk Northern Harrier American Kestrel Snowy Owl Short-eared Owl Bald Eagle	Bald Eagle Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area). Other Listed Species Combination of ELC Community Series; need to have present one Community Series from each land class; Forest: FOD, FOM, FOC. Upland: CUM; CUT; CUS; CUW.	 The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering sites (hawk/owl) need to be > 20 ha, cxlviii, cxlix with a combination of forest and upland. Xvi, xvii, xviii, xix, xx, xxi. Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands cxlix. Field area of the habitat is to be wind swept with limited snow depth or accumulation. Eagle sites have open water, large trees and snags available for roosting cxlix. 	Studies confirm the use of these habitats by: One or more Short-eared Owls or; one or more Bald Eagles or; At least 10 individuals and two of the listed hawk/owl species ©. To be significant a site must be used regularly (three in five years) cxlix for a minimum of 20 days by the above number of birds ©. The habitat area for a Bald Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area© SWHMiST cxlix Index #10 and #11 provides development effects and mitigation measures.
Bat Hibernacula Rationale:	Big Brown Bat	Bat Hibernacula may be found in these ecosites: CCR1	 Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. Active mine sites should not be considered a SWH. 	 All CCR/A sites with committed hibernating bats are SWH®. The habitat area includes a 200 m radius around the entrance of the hibernaculum cxlviii, ccvii, © for most development types and 1,000 m for wind farm sccv.
Bat hibernacula are rare habitats in all Ontario landscapes.		CCR2 CCA1	The locations of bat hibernacula are relatively poorly known.	Studies are to be conducted during the peak swarming period (Aug. – Sept.).
, '		CCA2	Buildings are not considered to be SWH.	SWHMiST cxlix Index #1 provides development effects and mitigation measures.
Bat Maternity Colonies Rationale: Known locations of forested bat maternity colonies are extremely rare in all Ontario landscapes.	Big Brown Bat Silver-haired Bat	Maternity colonies considered SWH are found in forested Ecosites. All ELC Ecosites in ELC Community Series:	 Maternity colonies can be found in tree cavities, vegetation and often in buildings xxii, xxv, xxvi, xxvii, xxxi (buildings are not considered to be SWH). Maternity roosts are not found in caves and mines in Ontario xxii. 	Maternity Colonies with confirmed use by; > 20 Big Brown Bats® or Silver-haired Bats with occurrence at nightly roost emergence period. The area of the habitat includes the entire woodland or a forest stand ELC Ecosite or an Ecoelement containing the maternity colonies®.



Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH
Wilding Habitat	which species	ELC Ecosite Codes	Habitat Criteria	Defining Criteria
		FOD FOM SWD SWM	 Maternity colonies located in mature deciduous or mixed forest stands ccix, ccx, ccv, with >10/ha large diameter (>25cm dbh) wildlife trees ccvii. Female bats prefer wildlife tree (snags) in early stages of decay, class 1-3 ccxiv or class 1 or 2 ccxii. Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred ccx, lxiv. 	SWHMiST cxlix Index #12 provides development effects and mitigation measures.
Turtle Wintering Areas Rationale: Sites with the highest number of individuals are most significant.	Midland Painted Turtle Northern Map Turtle Snapping Turtle	Snapping and Midland Painted Turtles ELC Community Classes; SW, MA, OA and SA, ELC Community Series; FEO and BOO Northern Map Turtle Open Water areas such as deeper rivers or streams and lakes with current can also be used as overwintering habitat.	 For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen cix, cx, cxi, cxii. Man-made ponds such as sewage lagoons or stormwater ponds should not be considered SWH. 	 Presence of five or more over-wintering Midland Painted Turtles, Any Northern Map Turtle or Snapping Turtle over wintering within a wetland. The mapped ELC ecosite area with the over wintering turtles is the SWH. If the hibernation site is within a stream or river, the deepwater pool where the turtles are over wintering is the SWH. Over wintering areas may be identified by searching for congregations (Basking Areas) of turtles on warm, sunny days during the fall (Sept. – Oct.) or spring (Mar. – May) cvii. Congregation of turtles is more common where wintering areas are limited and therefore significant cix, cx, cxi, cxii. SWHMiST cxlix Index #28 provides development effects and mitigation measures for turtle wintering habitat.
Reptile Hibernaculum Rationale: Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant.	Eastern Gartersnake Northern Watersnake Northern Red-bellied Snake Northern Brownsnake Smooth Greensnake Northern Ring-necked Snake Eastern Milksnake Eastern Ribbonsnake	All Snakes Habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice, Cave, and Alvar sites may be directly related to these habitats. Five-lined Skink	 Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include human-made structures (e.g., roadsides, bridges, foundations or buildings) or recently (two years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted Mineral Aggregate Operations. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator. 	 Presence of snake hibernacula used by a minimum of ten individuals of a Eastern Gartersnake or five of any other species. Or; individuals of two or more snake spp. Congregations of a minimum of ten Eastern Gartersnake or five individuals of any other snake sp. Or; multiple individuals of two or more snake spp. Near potential hibernacula (e.g. rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct) © Note: Sites for hibernation possess specific habitat parameters (e.g. temperature, humidity, etc.) and consequently are used annually, often by many of the same individuals of a local population (i.e. strong hibernation site fidelity). Other critical life processes (e.g. mating) often take place in close proximity to hibernacula. The feature in which the hibernacula is located plus a 30 m radius area is the SWH©.



Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH
Triano rabitat	Wilding openies	ELC Ecosite Codes	Habitat Criteria	Defining Criteria
		ELC Community Series of FOD and FOM and Ecosites: FOC1 FOC3		 SWHMiST cxlix Index #13 provides development effects and mitigation measures for snake hibernacula. Presence of any active hibernaculum for skink is significant. SWHMiST cxlix Index #37 provides development effects and mitigation measures for five-lined skink wintering habitat.
Colonially – Nesting Bird Breeding Habitat – Cliff Swallow Rationale: Historical use and number of nests in a colony make this habitat significant. An identified colony can be very important to local populations.		Cliff faces Habitat found in the following ecosites: CUM1 CUT1 CUS1 BLO1 BLS1 BLT1 CLO1 CLS1 CLT1	 Does not include human-made structures (e.g., bridges or buildings or barns) Does not include a licensed/permitted Mineral Aggregate Operation. 	 Studies confirming: Presence of one or more nesting sites with 8 cxlix or more Cliff Swallow during the breeding season. A colony identified as SWH will include a 50 m radius habitat area from the peripheral nests ccvii. Field surveys to observe and count swallow nests are to be completed during the breeding season. SWHMiST cxlix Index #4 provides development effects and mitigation measures.
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs) Rationale: Large colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Great Blue Heron Black-crowned Night-Heron Great Egret Green Heron	SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1	 Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15 m from ground, near the top of the tree. 	 Studies confirming: Presence of five® or more active nests. The habitat extends from the edge of the colony and a minimum 300 m radius or extent of the Forest Ecosite containing the colony or any island <15.0ha with a colony is the SWH cc, ccvii. Confirmation of active heronries are to be achieved through site visits conducted during the nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells. SWHMiST cxlix Index #5 provides development effects and mitigation measures.



Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH	
	Whalle openies	ELC Ecosite Codes	Habitat Criteria	Defining Criteria	
		Any rocky island or peninsula (natural) within a lake or large river (two-lined on a 1;50,000 NTS map).		Studies confirming: Presence of > 25 active nests for Herring Gulls or Ring-billed Gulls, >5 active nests for Common Tern or >2 active nests for Caspian Tern®.	
Colonially -Nesting Bird Breeding Habitat (Ground) Rationale: Colonies are important to local bird population, typically sites are only known colony in area and are used annually.	Herring Gull Great Black-backed Gull Little Gull Ring-billed Gull Common Tern Caspian Tern Brewer's Blackbird	Close Proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird) MAM1–6; MAS1–3; CUM CUT CUS	 Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas. Brewer's Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands. 	 Presence of 5 or more pairs of Brewer's Blackbird®. Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant®. The edge of the colony and a minimum 150m radius area of habitat, or the extent of the ELC ecosites containing the colony or any island <3.0ha with a colony is the SWH cc, ccvii. Studies would be done during May/June when actively nesting. SWHMiST cxlix Index #6 provides development effects and mitigation measures. 	
Deer Yarding Areas Rationale: Winter habitat for deer is considered to be the main limiting factor for northern deer populations. In winter, deer congregate in "yards" to survive severe winter conditions. Deer yards typically have a long history of annual use by deer, yards typically represent 10-15% of an areas summer range.	White-tailed Deer	Note: OMNRF to determine this habitat. ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC. Or these ELC Ecosites; CUP2 CUP3 FOD3 CUT	 Deer yarding areas or winter concentration areas (yards) are areas deer move to in response to the onset of winter snow and cold. This is a behavioural response and deer will establish traditional use areas. The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food. Agricultural lands can also be included in this area. Deer move to these areas in early winter and generally, when snow depths reach 20 cm, most of the deer will have moved here. If the snow is light and fluffy, deer may continue to use this area until 30 cm snow depth. In mild winters, deer may remain in the Stratum II area the entire winter. The Core of a deer yard (Stratum I) is located within the Stratum II area and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60% cxciv. OMNRF determines deer yards following methods outlined in "Selected Wildlife and Habitat Features: Inventory Manual" cxcv. Woodlots with high densities of deer due to artificial feeding are not significant. 	 If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4 of this Schedule. SWHMiST cxlix Index #2 provides development effects and mitigation measures. Deer management is an MNRF responsibility, deer winter congregation areas considered significant will be mapped by MNRF cylviii 	



Wildlife Habitat	Wildlife Species		Candidate SWH	Confirmed SWH	
Wilding Habitat	Whalle opecies	ELC Ecosite Codes	Habitat Criteria	Defining Criteria	
				SWHMiST cxlix Index #2 provides development effects and mitigation measures.	
Deer Yarding Areas Rationale: Winter habitat for deer is considered to be the main limiting factor for northern deer populations. In winter, deer congregate in "yards" to survive severe winter conditions. Deer yards typically have a long history of annual use by deer, yards typically represent 10-15% of an areas summer range.	White-tailed Deer	Note: OMNRF to determine this habitat. ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC. Or these ELC Ecosites; CUP2 CUP3 FOD3 CUT	 Deer yarding areas or winter concentration areas (yards) are areas deer move to in response to the onset of winter snow and cold. This is a behavioural response and deer will establish traditional use areas. The yard is composed of two areas referred to as Stratum I and Stratum II. Stratum II covers the entire winter yard area and is usually a mixed or deciduous forest with plenty of browse available for food. Agricultural lands can also be included in this area. Deer move to these areas in early winter and generally, when snow depths reach 20 cm, most of the deer will have moved here. If the snow is light and fluffy, deer may continue to use this area until 30 cm snow depth. In mild winters, deer may remain in the Stratum II area the entire winter. The Core of a deer yard (Stratum I) is located within the Stratum II area and is critical for deer survival in areas where winters become severe. It is primarily composed of coniferous trees (pine, hemlock, cedar, spruce) with a canopy cover of more than 60% cxciv. OMNRF determines deer yards following methods outlined in "Selected Wildlife and Habitat Features: Inventory Manual" cxcv. Woodlots with high densities of deer due to artificial feeding are not significant. 	 Deer Yards are mapped by OMNRF District offices. Locations of Core or Stratum 1 and Stratum 2 Deer yards considered significant by OMNRF will be available at local MNRF offices or via Land Information Ontario (LIO); If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4 of this Schedule; SWHMiST cxlix Index #2 provides development effects and mitigation measures; Deer management is an MNRF responsibility, deer winter congregation areas considered significant will be mapped by MNRF cxlviii; Use of the woodlot by white-tailed deer will be determined by MNRF, all woodlots exceeding the area criteria are significant, unless determined not to be significant by MNRF©; If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4 of this Schedule; and SWHMiST cxlix Index #2 provides development effects and mitigation measures. 	
Deer Winter Congregation Areas		All Forested Ecosites with these ELC Community Series;	Woodlots will typically be >100 ha in size ©. Woodlots <100ha may be considered as significant based on MNRF studies or assessment.		
Rationale: Deer movement during winter in the southern areas of Ecoregion 6E are no	White-tailed Deer	FOC FOM FOD	Ecoregion 6E are not constrained by snow depth,	If a SWH is determined for Deer Wintering Area or if a proposed development is within Stratum II yarding area then Movement Corridors are to be considered as outlined in Table 1.4 of this Schedule.	
constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands to reduce or avoid the impacts of winter conditions cxlviii		SWC SWM SWD	 If deer are constrained by snow depth refer to the Deer Yarding Area habitat within Table 1.1 of this Schedule. Large woodlots > 100ha and up to 1500 ha are known to be used annually by densities of deer that range from 0.1-1.5 deer/ha ccxxiv. 	SWHMiST cxlix Index #2 provides development effects and mitigation measures.	



Wildlife Habitat	Wildlife Species	Candidate SWH		Confirmed SWH
Whalle Habitat		ELC Ecosite Codes	Habitat Criteria	Defining Criteria
		Conifer plantations much smaller than 50 ha may also be used.	Woodlots with high densities of deer due to artificial feeding are not significant	

1-2 Rare Vegetation Communities or Specialized Habitats for Wildlife

Table 1-2-1. Rare Vegetation Communities

Rare Vegetation Community		Candidate SWH	Confirmed SWH
Taile regulation community	ELC Ecosite Code	Habitat Description	Defining Criteria
	Any ELC Ecosite within Community Series:		
Cliffs and Talus Slopes	TAO	A Cliff is vertical to near vertical bedrock >3m in height.	
	TAS		Confirm any ELC Vegetation Type for Cliffs or Talus Slopes lxxviii.
Rationale:	TAT	A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris.	SWHMiST cxlix Index #21 provides development effects and mitigation
Cliffs and Talus Slopes are extremely rare habitats in Ontario.	CLO		measures.
rare nabitats in Ontario.	CLS	Most cliff and talus slopes occur along the Niagara Escarpment.	
	CLT		
	ELC Ecosites:		
	SBO1		
Sand Barren	SBS1	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused	Confirm any ELC Vegetation Type for Sand Barrens lxxviii
	SBT1	by lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and	Site must not be dominated by exotic or introduced species (<50% vegetative)
Rationale;		barren to tree covered, but less than 60%.	cover are exotic sp.) ©.
Sand barrens are rare in Ontario and support rare species. Most Sand Barrens	Vegetation cover varies		SWHMiST cxlix Index #20 provides development effects and mitigation measures.
have been lost due to cottage development and forestry	from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always < 60%.	A sand barren area >0.5ha in area©.	
Alvar	ALO1 ALS1	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and	Field studies that identify four of the five® Alvar Indicator Species Ixxv, cxlix, at a Candidate Alvar site is significant.



Rare Vegetation Community		Candidate SWH	Confirmed SWH	
Rate vegetation community	ELC Ecosite Code	Habitat Description	Defining Criteria	
Rationale: Alvars are extremely rare habitats in	ALT1 FOC1	shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animals' species. Vegetation cover varies from	Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.).	
Ecoregion 6E. Most alvars in Ontario are in Ecoregions 6E and 7E. Alvars in 6E are small and highly localized just north of the Palaeozoic-Precambrian contact.	FOC2 CUM2 CUS2 CUT2-1 CUW2	patchy to barren with a less than 60% tree cover lxxviii. An Alvar site > 0.5 ha in area lxxv.	 The alvar must be in excellent condition and fit in with surrounding landscape with few conflicting land uses lxxv. SWHMiST cxlix Index #17 provides development effects and mitigation measures. 	
	Five Alvar Indicator Species: 1) Carex crawei 2) Panicum philadelphicum 3) Eleocharis compressa 4) Scutellaria parvula 5) Trichostema brachiatum These indicator species are very specific to Alvars within Ecoregion 6E©cxlix			
Old Growth Forest Rationale: Due to historic logging practices, extensive old growth forest is rare in the Ecoregion. Interior habitat provided by old growth forests is required by many wildlife species.		Old Growth forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris. Woodland areas 30 ha or greater in area or with at least 10 ha interior habitat assuming 100 m buffer at edge of forest®.	 Field Studies will determine: If dominant trees species of the area >140 years old, then the area containing these trees is Significant Wildlife Habitat cxlviii; The forested area containing the old growth characteristics will have experienced no recognizable forestry activities cxlviii (cut stumps will not be present); The area of forest ecosites combined or an eco-element within an ecosite that contains the old growth characteristics is the SWH; Determine ELC vegetation types for the forest area containing the old growth characteristics; and SWHMiST cxlix Index #23 provides development effects and mitigation measures. 	



Rare Vegetation Community		Candidate SWH	Confirmed SWH	
Kare Vegetation Community	ELC Ecosite Code	Habitat Description	Defining Criteria	
Savannah	TPS1 TPS2 TPW1	A Savannah is a tallgrass prairie habitat that has tree cover between 25 – 60% lxxix, lxxx, lxxxi, lxxxii, lxxxiii	Field studies confirm one or more of the Savannah indicator species listed in cxlix Appendix N of the SWHTG should be present ©. Note: Savannah plant spp. list from Ecoregion 6E should be used cxlviii. • Area of the ELC Ecosite is the SWH.	
Rationale: Savannahs are extremely rare habitats in Ontario.	TPW2 CUS2	No minimum size to site ©. Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	 Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). SWHMiST Index cxlix #18 provides development effects and mitigation measures. 	
Tallgrass Prairie	TPO1	A Tallgrass Prairie has ground cover dominated by prairie grasses. An open Tallgrass Prairie habitat has < 25% tree cover. lxxix, lxxxi, lxxxii, lxxxiii.	Field studies confirm one or more of the Prairie indicator species listed in Appendix N of the SWHTG should be present [®] . Note: Prairie plant spp. list from Ecoregion 6E should be used cxlviii. • Area of the ELC Ecosite is the SWH.	
Rationale: Tallgrass Prairies are extremely rare habitats in Ontario.	TPO2	No minimum size to site® Site must be restored or a natural site. Remnant sites such as railway right of ways are not considered to be SWH.	 Site must not be dominated by exotic or introduced species (<50% vegetative cover are exotic sp.). SWHMiST cxlix Index #19 provides development effects and mitigation measures. 	
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG	Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	Field studies should confirm if an ELC Vegetation Type is a rare vegetation community based on listing within Appendix M of SWHTG cxlviii.	
Rationale: Plant communities that often contain rare species which depend on the habitat for survival.	cxlviii. Any ELC Ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH.	ELC Ecosite codes that have the potential to be a rare ELC Vegetation Type as outlined in appendix M cxlviii	 Area of the ELC Vegetation Type polygon is the SWH. SWHMiST cxlix Index #37 provides development effects and mitigation measures. 	

Table1-2-2. Specialized Habitats of Wildlife

Specialized Wildlife Habitats	Wildlife Species		Candidate SWH	Confirmed SWH
Opecianzed Wilding Habitats	Wilding Openies	ELC Ecosite Code	Habitat Criteria	Defining Criteria
Waterfowl Nesting Area	American Black Duck	All upland habitats located	A waterfowl nesting area extends 120 m cxlix from a	Studies confirmed:
	Northern Pintail	adjacent to these wetland ELC Ecosites are Candidate	wetland (> 0.5 ha) or a wetland (>0.5ha) and any	Presence of three or more nesting pairs for listed
Rationale:	Northern Shoveler	SWH:	small wetlands (0.5ha) within 120m or a cluster of three or more small (<0.5 ha) wetlands within 120 m	species©;
Important to local waterfowl populations, sites with greatest number of species and	Gadwall	MAS1	of each individual wetland where waterfowl nesting is known to occur cxlix.	Any active heating site of an American black buck is
highest number of individuals are significant.	Blue-winged Teal	MAS2	KHOWIT to occur exilx.	considered significant;



Specialized Wildlife Habitats	Wildlife Species		Candidate SWH	Confirmed SWH	
Specialized Wilding Habitats	Wilding Opecies	ELC Ecosite Code	Habitat Criteria	Defining Criteria	
	Green-winged Teal Wood Duck Hooded Merganser	MAS3 SAS1 SAM1 SAF1 MAM1 MAM2 MAM3	 Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. Wood Ducks and Hooded Mergansers utilize large diameter trees (>40cm dbh) in woodlands for cavity nest sites. 	 Nesting studies should be completed during the spring breeding season (April - June); A field study confirming waterfowl nesting habitat will determine the boundary of the waterfowl nesting habitat for the SWH, this may be greater or less than 120 m cxlviii from the wetland and will provide enough habitat for waterfowl to successfully nest; and SWHMiST cxlix Index #25 provides development effects and mitigation measures. 	
		MAM4 MAM5 MAM6 SWT1 SWT2 SWD1 SWD2 SWD3 SWD4			
		Note: includes adjacency to Provincially Significant Wetlands			
Bald Eagle Nesting, Foraging and Perching Habitat Rationale:	Pold Foglo	ELC Forest Community Series: FOD, FOM, FOC, SWD,	 Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Nests are typically in super canopy trees in a notch 	 Studies confirm the use of these nests by: One or more active Bald Eagle nests in an area cxlviii. Some species have more than one nest in a given area and priority is given to the primary nest with alternate nests included within the area of the SWH. 	
Nest sites are fairly uncommon in Ecoregion 6E and are used annually by these species. Many suitable nesting locations may be lost due to increasing shoreline development pressures and scarcity of habitat.	Bald Eagle	SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands	within the tree's canopy. Nests located on man-made objects are not to be included as SWH (e.g. telephone poles and constructed nesting platforms).	 For a Bald Eagle the active nest and a 400-800 m radius around the nest is the SWH cvi, ccvii. Area of the habitat from 400-800m is dependant on site lines from the nest to the development and inclusion of perching and foraging habitat cvi To be significant a site must be used annually. When found inactive, the site must be known to be inactive for > 3 years 	



Specialized Wildlife Habitats	Wildlife Species		Candidate SWH	Confirmed SWH
Specialized Wilding Habitats	Wilding Species	ELC Ecosite Code	Habitat Criteria	Defining Criteria
Woodland Raptor Nesting Habitat Rationale: Nests sites for these species are rarely identified; these area sensitive habitats and are often used annually by these species.	Northern Goshawk Cooper's Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk	May be found in all forested ELC Ecosites. May also be found in SWC, SWM, SWD and CUP3	All natural or conifer plantation woodland/forest stands >30 ha with >10 ha of interior habitat lxxxviiii, lxxxix, xc, xci, xciii, xciv, xcv, xcvi, cxxxiii. Interior habitat determined with a 200m buffer. cxlviii Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers hawk nest along forest edges sometimes on peninsulas or small offshore islands. In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest.	 or suspected of not being used for >5 years before being considered not significant ccvii. Observational studies to determine nest site use, perching sites and foraging areas need to be done from mid March to mid August. SWHMiST cxlix Index #26 provides development effects and mitigation measures. Studies confirm: Presence of any active nests from species list is considered significant cxlviii; Red-shouldered Hawk and Northern Goshawk – A 400m radius around the nest or 28 ha area of habitat is the SWH. ccvii (the 28-ha habitat area would be applied where optimal habitat is irregularly shaped around the nest); Barred Owl – A 200 m radius around the nest is the SWH ccvii; Broad-winged Hawk and Coopers Hawk, – A 100m radius around the nest is the SWH ccvii; Conduct field investigations from mid-March to end of May. The use of call broadcasts can help in locating territorial (courting/nesting) raptors and facilitate the discovery of nests by narrowing down the search area; and SWHMiST cxlix Index #27 provides development effects and mitigation measures.
Turtle Nesting Areas Rationale: These habitats are rare and when identified will often be the only breeding site for local populations of turtles.	Midland Painted Turtle Northern Map Turtle Snapping Turtle	Exposed mineral soil (sand or gravel) areas adjacent (<100m) cxlviii or within the following ELC Ecosites: MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 BOO1	 Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. Nesting areas located on human-made structures or objects are not to be included as SWH (e.g. sand, sand traps, roadside verges, active parks etc.). 	 Studies confirm: Presence of five or more nesting Midland Painted Turtles©; One or more Northern Map Turtle or Snapping Turtle nesting is a SWH©; The area or collection of sites within an area of exposed mineral soils where the turtle's nest, plus a radius of 30-100m around the nesting area dependant on slope, riparian vegetation and adjacent land use is the SWH cxlviii; Travel routes from wetland to nesting area are to be considered within the SWH as part of the 30-100 m area of habitat cxlix;



Specialized Wildlife Habitats	Wildlife Species		Candidate SWH	Confirmed SWH	
Specialized Wilding Habitats	Wilding Species	ELC Ecosite Code	Habitat Criteria	Defining Criteria	
		FEO1	Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.	 Field investigations should be conducted in prime nesting season typically late spring to early summer. Observational studies observing the turtles nesting is a recommended method; and SWHMiST cxlix Index #28 provides development effects and mitigation measures for turtle nesting habitat. 	
Seeps and Springs Rationale: Seeps/Springs are typical of headwater areas and are often at the source of coldwater streams.	Wild Turkey Ruffed Grouse Spruce Grouse White-tailed Deer Salamander spp.	Seeps/Springs are areas where ground water comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.	Any forested area (with <25% meadow/field/pasture) within the headwaters of a stream or river system cxvii, cxlix • Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species cxix, cxx, cxxi, cxxii, cxiii, cxiv	 Presence of a site with 2 or more® seeps/springs that demonstrably support ecological functions and/or species listed should be considered SWH; The area of an ELC forest ecosite or an ecoelement within ecosite containing the seeps/springs is the SWH. The protection of the recharge area considering the slope, vegetation, height of trees and groundwater condition need to be considered in delineation of the habitat cxlviii; and SWHMiST cxlix Index #30 provides development effects 	
Amphibian Breeding Habitat (Woodland). Rationale: These habitats are extremely important to amphibian biodiversity within a landscape and often represent the only breeding habitat for local amphibian populations.	Eastern Newt Blue-spotted Salamander Spotted Salamander Gray Treefrog Spring Peeper Western Chorus Frog Wood Frog	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM SWD Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be	 Presence of a wetland, pond or woodland pool (including vernal pools) >500m2 (about 25 m diameter) ccvii within or adjacent (within 120m) to a woodland (no minimum size). clxxxii, lxiii, lxv, lxvi, lxvii, lxviii, lxix, lxx. Some small wetlands may not be mapped and may be important breeding pools for amphibians. Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat cxlviii 	 and mitigation measures. Studies confirm; Presence of breeding population of 2 or more of the listed newt/salamander species or 3 or more of the listed frog species with at least 20 individuals (adults or eggs masses) lxx or 3 or more of the listed frog species with Call Level Codes of 3©; A combination of observational study and call count surveys cviii will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the woodland/wetlands; The habitat is the wetland area plus a 230m radius of woodland area lxiii, lxv, lxvi, lxvii, lxviii, lxix, lxx, lxxi; If a wetland area is adjacent to a woodland, a travel corridor connecting the wetland to the woodland is to be included in the habitat; and SWHMiST cxlix Index #14 provides development effects 	
Amphibian Breeding Habitat (Wetlands)	Eastern Newt American Toad	used due to reduced risk to migrating amphibians ELC Community	Wetlands>500m2 (about 25m diameter) ccvii, supporting high species diversity are significant; some small or ephemeral habitats may not be identified on	 and mitigation measures. Studies confirm: Presence of breeding population of 2 or more of the listed newt/salamander species or 3 or more of the listed 	



Specialized Wildlife Habitats	Wildlife Species		Candidate SWH	Confirmed SWH	
Specialized Wilding Habitats	Tanama oposica	ELC Ecosite Code	Habitat Criteria	Defining Criteria	
Rationale: Wetlands supporting breeding for these amphibian species are extremely important and fairly rare within Central Ontario landscapes.	Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog	Classes SW, MA, FE, BO, OA and SA. Typically, these wetland ecosites will be isolated (>120m) from woodland ecosites, however larger wetlands containing predominantly aquatic species may be adjacent to woodlands.	MNRF mapping and could be important amphibian breeding habitats clxxxii. Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators.	 frog/toad species with at least 20 individuals (adults or eggs masses) lxxi or 3 or more of the listed frog/toad species with Call Level Codes of 3©; The ELC ecosite wetland area and the shoreline are the SWH. A combination of observational study and call count surveys cviii will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the wetlands; If a SWH is determined for Amphibian Breeding Habitat (Wetlands) then Movement Corridors are to be considered as outlined in Table 1.4 of this Schedule; and SWHMiST cxlix Index #15 provides development effects and mitigation measures. 	
Woodland Area-Sensitive Bird Breeding Habitat Rationale: Large, natural blocks of mature woodland habitat within the settled areas of Southern Ontario are important habitats for area sensitive interior forest songbirds.	Yellow-bellied Sapsucker Veery Blue-headed Vireo Northern Parula Black-throated Green Warbler Blackburnian Warbler Black-throated Blue Warbler Ovenbird Scarlet Tanager Winter Wren Cerulean Warbler Canada Warbler	All Ecosites associated with these ELC Community Series; FOC FOM FOD SWC SWM	Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha. cv, cxxxi, cxxxii, cxxxiii, cxxxiv, cxxxv, cxxxvi, cxxxvii, cxxxviii, cxxxviii, cxxxiii, cxiii, cxliii, cxliv, cxlv, cxlvi, cl, cli, cliii, cliv, clv, clv, clvi, clviii, clviii, clix, Interior forest habitat is at least 200 m from forest edge habitat. clxiv	 Studies confirm: Presence of multiple nesting or breeding pairs of 3 or more of the listed wildlife species. ©; Conduct field investigations in spring and early summer when birds are singing and defending their territories; and SWHMiST cxlix Index #34 provides development effects and mitigation measures. 	



Table 1-3. Habitats of Species of Conservation Concern

Wildlife	Species		Candidate SWH	Confirmed SWH
Wilding	Species	ELC Ecosite Code	Habitat Criteria	Defining Criteria
	American Bittern	MAM1		
	Virginia Rail	MAM2		
	Sora	MAM3		
	Common Moorhen	MAM4		Studies confirm:
Marsh Breeding Bird Habitat	American Coot	MAM5	Nesting occurs in wetlands	Presence of five or more nesting pairs of Sedge Wren or
Marsh Breeding Bird Habitat	Pied-billed Grebe	MAM6	All wetland habitat is to be considered as long as there is shallow water with emergent aquatic	Marsh Wren or one pair of Sandhill Cranes; or breeding by
Rationale:	Marsh Wren	SAS1	vegetation present exxiv	any combination of five or more of the listed species ©;
Wetlands for these bird species are typically	Sedge Wren	SAM1	For Green Heron, habitat is at the edge of water	Area of the ELC ecosite is the SWH;
productive and fairly rare in Southern Ontario	Common Loon	SAF1	such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it	Breeding surveys should be done in May/June when these species are actively nesting in wetland habitats; and
landscapes.	Sandhill Crane	FEO1	may be found in upland shrubs or forest a considerable distance from water.	SWHMiST cxlix Index #35 provides development effects
	Green Heron	BOO1		and mitigation measures
	Trumpeter Swan			
	Black Tern	For Green Heron:		
	Yellow Rail	All SW, MA and CUM1 sites.		
Open Country Bird Breeding Habitat Rationale: This wildlife habitat is declining throughout Ontario and North America. Species such as the Upland Sandpiper have declined significantly the past 40 years based on CWS (2004) trend records	Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Northern Harrier Savannah Sparrow Short-eared Owl	CUM1 CUM2	 Large grassland areas (includes natural and cultural fields and meadows) >30 ha clx, clxi, clxii, clxiii clxiv, clxv, clxvi, clxvii, clxviii, clxix. Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last five years) ©. Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least five years or older. The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species. 	 Studies confirm: Presence of multiple pairs 5 or more nesting or breeding pairs of two or more of the listed species. ©; A field with one or more breeding Short-eared Owls is to be considered SWH; The area of SWH is the contiguous ELC ecosite field areas; Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories; and SWHMiST cxlix Index #32 provides development effects and mitigation measures.
Shrub/Early Successional Bird Breeding Habitat	Indicator Spp: Brown Thrasher Clay-coloured	CUT1 CUT2 CUS1	Large field areas succeeding to shrub and thicket habitats>10ha clxiv in size. • Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for	Field Studies confirm: Presence of nesting or breeding of multiple pairs of 2 of the indicator species and at least 3 of the common species®;



Wildlife	Species		Candidate SWH	Confirmed SWH
Vilame	Opedies	ELC Ecosite Code	Habitat Criteria	Defining Criteria
Rationale: This wildlife habitat is declining throughout Ontario and North America. The Brown Thrasher has declined significantly over the past 40 years based on CWS (2004) trend records.	Sparrow Golden-winged Warbler Common Spp. Field Sparrow Black-billed Cuckoo Eastern Towhee Willow Flycatcher	CUS2 CUW1 CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species	 farming (i.e. no row-cropping, haying or live-stock pasturing in the last five years) ©. Shrub thicket habitats (>10 ha) are most likely to support and sustain a diversity of these species clxxiii. Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands. 	 The area of the SWH is the contiguous ELC ecosite field/thicket area; Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories; and SWHMiST cxlix Index #33 provides development effects and mitigation measures.
Terrestrial Crayfish Rationale: Terrestrial Crayfish are only found within SW Ontario in Canada and their habitats are very rare. Ccii	Chimney or Digger Crayfish; (Fallicambarus fodiens) Devil Crayfish or Meadow Crayfish; (Cambarus Diogenes)	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 MAS1 MAS2 MAS3 SWD SWT SWM CUM1 with inclusions of above meadow marsh or swamp ecosites can be used by terrestrial crayfish.	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish. • Constructs burrows in marshes, mudflats, meadows.	 Studies Confirm: Presence of 10 or more individuals of species listed or active (closed) chimneys (burrows) in contiguous suitable meadow marsh, swamp or moist terrestrial sites cci; Area of ELC ecosite or an ecoelement area of meadow marsh or swamp within the larger ecosite area is the SWH; Surveys should be done April to August in temporary or permanent water. Note the presence of closed burrows or chimneys are often the only indicator of presence, observance or collection of individuals is very difficult cci; and SWHMiST cxlix Index #36 provides development effects and mitigation measures.
Special Concern and Provincially Rare Wildlife Species Rationale:	All Special Concern and Provincially Rare (S1-S3, SH) plant and animal species. Lists of these species are tracked by the Natural Heritage Information Centre.	All plant and animal element occurrences (EO) within a 1 or 10km grid.	When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites Ixxviii.	Studies Confirm: Assessment/inventory of the site for the identified special concern or provincially rare species needs to be completed during the time of year when the species is present or easily identifiable;



Wildlife	Species	Candidate SWH		Confirmed SWH
		ELC Ecosite Code	Habitat Criteria	Defining Criteria
These species are quite rare or have experienced significant population declines in Ontario.			Cultural ecosites and constructed features are not included as SWH.	 For wildlife species multiple breeding pairs must be present for confirmed SWH; The area of the habitat to the finest ELC scale that protects the habitat form and function is the SWH, this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species e.g. specific nesting habitat or foraging habitat; SWHMiST cxlix Index #37 provides development effects and mitigation measures.

Table 1-4. Animal Movement Corridors

Habitat	Species	Candidate SWH		Confirmed SWH
Habitat		ELC Ecosite Code	Habitat Criteria	Defining Criteria
Amphibian Movement Corridors Rationale: Movement corridors for amphibians moving from their terrestrial habitat to breeding habitat can be extremely important for local populations. From the extremely important for local populations. From the extremely important for local populations.	Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog	Corridors may be found in all ecosites associated with water. • Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1	Movement corridors between breeding habitat and summer habitat clxxiv, clxxv, clxxvi, clxxvii, clxxviii, clxxix, clxxx, clxxx. Movement corridors must be determined when Amphibian breeding habitat is confirmed as SWH from Table 1.2.2 (Amphibian Breeding Habitat –Wetland) of this Schedule ©.	 Field Studies must be conducted at the time of year when species are expected to be migrating or entering breeding sites; Corridors should consist of native vegetation, with several layers of vegetation; Corridors should be unbroken by roads, waterways or bodies, cxlix; Corridors should have at least 15 m of vegetation on both sides of waterway cxlix or be up to 200 m wide cxlix of woodland habitat and with gaps <20m cxlix; Shorter corridors are more significant than longer corridors, however amphibians must be able to get to and from their summer and breeding habitat cxlix; and SWHMiST cxlix Index #40 provides development effects and mitigation measures.



Habitat	Species	Candidate SWH		Confirmed SWH
		ELC Ecosite Code	Habitat Criteria	Defining Criteria
Deer Movement Corridors Rationale: Corridors important for all species to be able to access seasonally important life-cycle habitats or to access new habitat for dispersing individuals by minimizing their vulnerability while travelling.	White-tailed Deer	Corridors may be found in all forested ecosites. A Project Proposal in Stratum II Deer Wintering Area has potential to contain corridors.	Movement corridor must be determined when Deer Wintering Habitat is confirmed as SWH from Table 1.1 of this schedule. A deer wintering habitat identified by the OMNRF as SWH in Table 1.1 of this Schedule will have corridors that the deer use during fall migration and spring dispersion. Corridors typically follow riparian areas, woodlots, areas of physical geography (ravines, or ridges)	 Studies must be conducted at the time of year when deer are migrating or moving to and from winter concentration areas. Corridors that lead to a deer wintering habitat should be unbroken by roads and residential areas Corridors should be at least 200 m wide cxlix with gaps <20m cxlix and if following riparian area with at least 15m of vegetation on both sides of waterway cxlix. Shorter corridors are more significant than longer corridors cxlix. SWHMiST cxlix Index #39 provides development effects and mitigation measures