

PART 2 – BODY OF THE AMENDMENT

All of this part of the document entitled PART 2 – BODY OF THE AMENDMENT, consisting of the following text and attached maps, constitute Amendment No. 117 to the Official Plan of the City of Niagara Falls.

DETAILS OF THE AMENDMENT

The Official Plan of the City of Niagara Falls is hereby amended as follows:

1. MAP CHANGES

- i. SCHEDULE A – LAND USE PLAN of the Official Plan is amended by identifying the Thundering Waters Secondary Plan Area and referring to Schedule A-4 for land use designations as shown on the map attached entitled “Map 1 to Amendment No. 117”.
- ii. A new SCHEDULE A-4 – THUNDERING WATERS SECONDARY PLAN is added as shown on the map attached entitled “Map 2 to Amendment No. 117”.
- iii. PART 5 – APPENDICES is amended with the addition of APPENDIX VIII-A, VIII-B, AND VIII-C, shown on “Maps 3, 4, and 5 to Amendment No. 117”.

2. TEXT CHANGES

- i. PART 2 – LAND USE POLICIES, SECTION 13 – SPECIAL POLICIES AREAS is amended by:
 - a. Deleting the text within Section 13.56 Special Policy Area “56” in its entirety.
- ii. A new SECTION 2 – THUNDERING WATERS SECONDARY PLAN is to be added to PART 5 – SECONDARY PLANS.

PART 5 - SECONDARY PLANS

SECTION 2 – THUNDERING WATERS

PREAMBLE

The purpose of the Thundering Waters Secondary Plan is to provide a detailed land use plan for the development of the lands within the Thundering Waters Secondary Plan Area. The Secondary Plan applies to the lands shown on Schedule A-4 to the Official Plan.

The Thundering Waters Secondary Plan Area encompasses approximately 270 hectares of land. The land is recognized as Greenfield except for a strip of land along the east side of Dorchester Road south of Oldfield Road and two parcels of land in the north east corner and east side which are within the Built-up Area.

The Thundering Waters Secondary Plan area is a unique parcel of land located in a strategic location in the City of Niagara Falls. It represents an opportunity to create a dynamic new community that supports densities that meet the Growth Plan requirements and takes advantage of its setting to provide an array of housing forms that will meet the needs of a variety of ages and households. With water courses on two sides, woodlots and wetlands on the property, and a golf course next door, the potential exists to create an environmentally friendly, energy efficient community which is “green” and embraces the outdoors and an active lifestyle. Development will protect key environmental features while at the same time utilizing this setting to enhance the overall design and character of the community. The Secondary Plan Area will be developed as a complete community with a mix of housing, employment, commercial services and community facilities as well as an integrated open space system that meets the needs of the residents and is intended to provide services that attract people from outside of the community and tourists. This multi-cultural community will be connected with the rest of the City and help to sustain a fiscally vibrant economy for the City and the Region.

At build-out the Secondary Plan Area is designed to accommodate, approximately:

- 8250 people
- 3300 dwelling units
- 2000 jobs

These figures will exceed the minimum combined gross target density of 53 people and jobs per hectare for designated Greenfield Areas established by the Regional Policy Plan. The calculation of greenfield density excludes lands designated Environmental Protection Area.

The following general principles and objectives establish the vision for the community as well as the framework for the subsequent policies. Development applications are intended to implement the vision and be consistent with the policies.

Principles and Objectives

The following principles and objectives are to be achieved in the Thundering Waters Secondary Plan Area.

1. Principle – Create a Healthy, Complete Community

The Secondary Plan is designed to create a safe, liveable, attractive, healthy and multicultural community, which will provide living, working, learning, recreational and community services opportunities. This complete community will be based on a balanced environment with linkages to the natural features that encourage healthy, active living and create a strong sense of community.

Objectives

- (a) to create a vibrant, memorable community core which is focused on lively streets that provide local residents and tourists with a multicultural setting and which acts as the focal point and draw for the community;
- (b) to create an interconnected street system that is transit-supportive, comfortable and engaging for pedestrians and efficiently transports people and goods;
- (c) to provide for a range of residential, commercial, employment, institutional, community and retirement facilities and uses that meets the daily and weekly needs of residents and employees;
- (d) to create an interwoven system of parks, greenways, trails and open space linkages throughout the community that encourages active transportation and a healthy lifestyle and facilitates connections to nearby recreational opportunities;
- (e) to integrate into the existing context and protect and minimize conflicts with adjacent industrial uses by mitigating any potential environmental air quality, noise and vibration effects.

2. Principle – Create a Sustainable, Resilient, Green Community

Approximately 42 percent of the Secondary Plan Area is provincially significant wetland which will be protected and provide the core for a healthy and “green” community that is developed in harmony with the environment. The community will draw inspiration from water both externally through visual connections to the Welland River and OPG Canal and internally through the water features. The community will embrace the outdoors and will be focused on “green” design and building strategies.

Objectives

- (a) to sustain and enhance the natural environment through protection of key wetlands features and associated buffers and promote opportunities for functional linkages of

protected areas using a combination of natural corridors and green space and special features which are incorporated into the built form;

- (b) to maintain and improve the hydrological function of the protected wetlands;
- (c) to provide for views to natural areas, parks and open spaces as well as to the Welland River and OPG Canal where possible in order to assist in the creation of a unique sense of place;
- (d) to provide contemporary municipal services (water, wastewater and storm) which satisfies the requirements of the regulatory bodies, and to encourage the use of storm water management best management practices, where appropriate, which mimic the natural hydrology of the area and protect water quality;
- (e) to promote travel by more sustainable and less environmentally harmful modes of transportation, such as walking and cycling and to facilitate the use of electric vehicles where feasible;
- (f) to preserve existing mature trees located outside of the environmental protection areas where possible and to integrate them into the built environment; and
- (g) to encourage environmentally sustainable development, construction and servicing standards which consider climate change resiliency.

3. Principle - Create a Dynamic Residential Community

To develop a dynamic residential community with its own special character that integrates with the established character of the Niagara Falls urban area and ensures land use compatibility with surrounding areas, while providing for a diverse range of housing types and densities that caters to people in all stages of their lifecycle and allows for a range of affordability levels.

Objectives

- (a) to ensure that the residential built form contains a range of low to high rise buildings in the Secondary Plan Area and ensures an appropriate transition between housing types;
- (b) to meet the needs of residents of all ages including children, students, adults, and seniors, and ensure that development is accessible to all abilities;
- (c) to provide a range of affordability, consistent with targets established by Regional Niagara; and
- (d) to develop neighbourhoods that each have a “sense of place” created by the design of the development, including the pedestrian orientation of the buildings and streetscapes, and the provision of parks and greenways which are designed to

facilitate interaction.

4. Principle - Development of a Linked Open Space System and Natural Heritage System

A linked open space, greenways, Environmental Protection, and parkland system, which collectively forms the basis of the natural heritage system (NHS), is a central feature of the community. The road pattern is designed to provide accessibility to the natural heritage and open space system both physically and visually. Parks and greenways are also used as central “meeting places” for neighbourhoods and sub-neighbourhoods to increase the quality of life for residents.

Objectives

- (a) to integrate parkland and key community features with the greenways and open space system;
- (b) to provide connected public open spaces throughout the community to enhance connectivity as well as provide view corridors;
- (c) to integrate the Con Rail drain into the design of the community as a receiver of treated storm water drainage as a component of the storm water management systems and an aesthetic enhancement to the community; and
- (d) to ensure that development protects significant natural heritage features by providing appropriate separation distances and buffers;

5. Principle - Create Employment Opportunities and support a Vibrant Local Economy

Creating a variety of employment opportunities in the Secondary Plan Area in order to provide opportunities for employment close to home will be essential to the development of a complete community.

Objectives

- (a) to retain the existing employment designations on Dorchester Road, recognize existing industry on Oldfield Road and create new employment opportunities through the creation of an office business area adjacent to the Stanley Avenue Business Park;
- (b) to create a new community core located on Dorchester Road which provides for a variety of commercial, entertainment, health care and tourist facilities and to create new institutional facilities all of which provide a variety of employment opportunities;
- (c) to achieve high quality urban design on employment and commercial lands; and
- (d) to provide an efficient, integrated transportation network that enables connectivity between employment and residential areas, maintains linkages to the greater community, accommodates the long term travel needs of the area and supports the use of all modes of transportation (including walking, cycling and public transit).

POLICIES

1. General

- 1.1 The land use framework is illustrated on Schedule A-4 to the Official Plan. Development is to be consistent with the land use pattern and arterial and collector road system shown on Schedule A-4. Master Plan maps shown in Appendix XI-B, XI-C and XI-D provide more details that will help to guide overall development of the community and implement the principles and objectives. While local roads are conceptually shown on these Master Plan maps, their exact location and width will be determined through individual plans of subdivision.

The phasing of development within the Secondary Plan Area will occur generally in accordance with the Phasing Concept Plan shown in Appendix XI-E.

The Master Plan maps and the Phasing Concept Plan do not constitute part of the Secondary Plan and are included in the appendices as supporting documentation.

- 1.2 The following land use policies and designations are established for the Secondary Plan Area and are shown on Schedule A-4. Any changes in land use designation from that shown on Schedule A-4 shall require an amendment to this Plan, save and except for revisions to the boundaries of the limits of the Environmental Protection Area designations as set out in policies 2.7 and 2.8.

- Residential, low density;
- Residential, medium density;
- Residential, high density;
- Mixed Use;
- Institutional;
- Industrial;
- Office Business Park;
- Open Space;
- Environmental Protection Areas

- 1.3 The overall greenfield density target for the Secondary Plan Area shall be a minimum of 53 people and jobs per hectare. The calculation of anticipated greenfield density is provided in Appendix IX-F as supporting data. The density is calculated on the Gross Developable Land Area over all of the lands outside the Built Area Boundary. Gross Developable Land Area is the total Greenfield Area less the area of protected natural heritage features. Protected natural heritage features are those that are designated Environmental Protection Area. Lands within the Secondary Plan Area that are within the Built-up Area will not be used in the greenfield density calculation. Densities will be monitored by the City to ensure that the target density is achieved, across the Secondary Plan Area. Lands may be developed at densities lower than the minimum on individual parcels without amendment to this Secondary Plan as long as it is demonstrated through

appropriate analysis using the approved land use that the overall greenfield target density for the Secondary Plan will continue to be met.

- 1.4 Notices will be included in subdivision agreement(s), condominium agreements, site plan agreement(s) and purchase and sale agreements where appropriate regarding the proximity of heavy industrial land uses and railway lines to residential dwellings and the possibility that noise and vibration from them may be discernable.
- 1.5 Home occupations will be permitted in accordance with the regulations contained within the Zoning By-law.
- 1.6 Second dwelling units may be permitted within single detached, semi-detached and townhouse dwellings in order to provide rental housing alternatives that can meet the needs of some of the City's residents. Appropriate standards for second dwelling units will be implemented through the Zoning By-law. Second dwelling units must also satisfy any other applicable regulations such as the Ontario Building Code.
 - 1.6.1 Zoning regulations related to second units in residential zones shall include the following provisions:
 - only one principal dwelling unit plus the second unit shall be permitted on one lot;
 - the lot size and configuration shall be sufficient to accommodate adequate parking, green space and amenity areas for both units;
 - second units requiring building additions or substantial alterations to the principal dwelling will be designed to maintain the overall character of the principal dwelling and the neighbourhood; and
 - the establishment of a second dwelling unit is deemed to comply with the density requirements of this Plan.
- 1.7 Employment opportunities are necessary in order to create a complete community and therefore the provision of employment uses is an important component of this Secondary Plan. The conversion of employment lands to non-employment uses is not permitted and may only be considered through a Municipal Comprehensive Review.
- 1.8 Any Planning Act application(s) within the Thundering Waters Secondary Plan Area will be subject to the public notification requirements of the Planning Act and will include circulation of notice(s) to the registered owners of the heavy industrial lands in the Stanley Avenue Business Park.

2. Land Use

2.1 Residential, Low Density

Lands designated Residential, Low Density as shown on Schedule A-4 are intended to be ground oriented units including single detached units, semi-detached, duplex

and triplex dwellings.

2.1.1 Development within the Residential, Low Density area shall have a minimum density of 8 units per net developable hectare and a maximum density of 30 units per net developable hectare.

2.1.2 Building heights will be determined in the Zoning By-law but maximum building heights shall generally not exceed 2 storeys.

2.1.3 Reverse lot frontage will be discouraged and building design should minimize the visual impact of garage doors on the streetscape.

2.2 **Residential, Medium Density**

Lands designated Residential, Medium Density as shown on Schedule A-4 allow for a mix of housing types in the Secondary Plan Area including on-street and block townhouses, stacked townhouses, low rise apartment buildings, and retirement homes. These lands are generally located in proximity to the open space system and/or the community centre in order to provide residents easy access to a variety of amenities.

2.2.1 Development within the Residential, Medium Density area shall have a minimum overall density of 20 units per net hectare and a maximum density of 75 units per net hectare.

2.2.2 Building heights shall generally not exceed 4 storeys.

2.2.3 Buildings should be designed with a pedestrian-oriented street frontage that locates buildings close to the street and provides front entrances that are visible from the street. Parking lots should be located within rear or interior side yards. Landscape buffers along any property line shall be designed to provide appropriate levels of screening.

2.2.4 Block and stacked townhouses should be designed to integrate with the streetscape by facing the street and reverse lot frontage is discouraged.

2.2.5 Vehicular access, where possible, should be located on a collector road.

2.3 **Residential, High Density**

Lands designated Residential, High Density including stacked townhouses, apartment buildings, and retirement and long term care facilities are shown on Schedule A-4.

2.3.2 Residential, high density areas shall be developed at a minimum density of 75

units per net hectare. Despite Policy 2.3.1, dwelling types permitted in Residential, Medium Density may be permitted on a site specific basis:

- (a) within a development site to provide for a mix of housing if the overall density for the development meets the minimum for this designation; or
- (b) where justified by market conditions and the overall density target for the Plan Area is not jeopardized.

2.3.3 Building heights shall generally not exceed 8 storeys.

2.3.4 Buildings should be designed to contribute to a pedestrian-oriented, attractive streetscape with front entrances that are visible from the street, front and exterior side yards landscaping that complements the streetscape and where appropriate, podiums set close to the street. Housing forms permitted in the Residential, Medium Density designation may be utilized along street frontages in combination with higher density apartment dwellings located internally.

2.3.5 Parking areas should be located within rear or interior side yards. Landscape buffers along all property lines shall be designed to provide appropriate levels of screening. Where a rear or exterior lot line or the rear or side building facade abuts a public road, enhanced landscaping and building treatments should be employed to ensure that building facades and servicing areas are attractive and/or appropriately screened from view.

2.4 Institutional

2.4.1 Lands designated Institutional or lands under any of the Residential designations may be used for institutional uses that include public schools, private schools, places of worship, community centres and retirement homes and long term care facilities. The permitted uses are subject to the following policies:

2.4.2 Private School, Recreational Facilities

2.4.2.1 Private Schools and Recreational Facilities are to be designed in accordance with the following:

- (a) Institutional uses shall not have access onto a local road.
- (b) Parking areas should be located within rear or interior side yards. Landscape buffers along any property line shall provide appropriate levels of screening.
- (c) Buildings should be located in close proximity to the street frontage to provide a street presence.
- (d) Where Institutional uses are located within 300 metres

of lands designated Industrial or 75 metres of the railway line, appropriate building design and mitigation measures may be required to address noise and/or vibration issues.

2.4.3 Public Schools

2.4.3.1 The need for publicly funded schools will be determined by the respective School Board. While a school site is illustrated schematically on Schedule A4, the ultimate location is to be guided by the following policies:

- (a) A public school site should be centrally located such that the majority of students are within an 800 metre radius to contribute to its walkability.
- (b) A public elementary school site shall have an area of approximately 2 hectares and be located with adequate frontage on at least one collector road.
- (c) A public school site should be integrated with the open space system.
- (d) A public school site should be located away from lands designated Industrial and CP Rail line. If a public school is located within 300 metres of lands designated Industrial or 75 metres of the railway line, appropriate building design and mitigation measures may be required to address noise and/or vibration issues.

2.4.4 Places of Worship, Retirement Homes and Long Term Care Facilities

2.4.4.1 Places of worship, retirement homes and long term care facilities are to be located and designed in accordance with the following:

- (a) Places of worship shall not have access onto a local road.
- (b) Parking areas should be located within rear or interior side yards. Landscape buffers along any property line shall provide appropriate levels of screening.
- (c) Buildings should be located in close proximity to the street frontage to provide a street presence.
- (d) Places of worship, retirement homes and long term care facilities should be located away from lands designated Industrial and CP Rail line. Where places of worship, retirement homes and long term care facilities are located within 300 metres of employment uses or 75 metres of the railway line, appropriate building design and mitigation measures may be required to address noise and/or vibration issues.

2.4.4.2 Places of worship may be integrated with Residential, Medium

Density as part of an overall development that is primarily residential.

2.4.5 **Community Centres**

2.4.5.1 Community centres may be permitted as either stand-alone buildings or integrated within a mixed use building or other public facility such as a school and designed in accordance with the following.

- (a) Community centres are to be located on arterial or collector roads.
- (b) Parking areas should be located within rear or interior side yards. Landscape buffers along any property line shall provide appropriate levels of screening.
- (c) Buildings should be located close to the street to provide a street presence.
- (d) Community centres shall be located away from lands designated Industrial. Where community centres are located within 300 metres of employment uses or 75 metres of the railway line, appropriate building design and mitigation measures may be required to address noise and/or vibration issues.

2.5 **Mixed Use**

The lands designated Mixed Use, as shown on Schedule A-4 are generally located east of Dorchester Road north of the railway.

2.5.1 The intent of the Mixed Use designation is create a dynamic community core that serves the community's needs and acts as a tourist draw by providing a diverse range of uses in an attractive pedestrian oriented setting. The Mixed Use designation will permit a variety of commercial and residential uses.

2.5.2 Buildings may be developed as mixed use or stand-alone commercial or residential uses. The area will be designed to include public squares which provide visual landmarks and public gathering opportunities and that are linked by walkways that extend to the greenways and open space areas where possible. The existing ConRail drain will be enhanced as an open space feature that is attractively landscaped.

2.5.3 Building heights shall generally be a minimum of 2 storeys although 2 functional storeys may not be required and maximum of 12 storeys with building massing increased at major road intersections. Buildings will be designed and massed to frame streets and open spaces, enhance the public realm, and provide a comfortable pedestrian environment during all four seasons by ensuring adequate sunlight to public spaces and limiting uncomfortable wind conditions.

- 2.5.4 Sidewalks and public squares should be designed to provide safe, attractive, well designed and coordinated landscaping, lighting and street furnishings that enhance the pedestrian experience. Public art may be added to public squares to provide further interest.
- 2.5.5 Parking areas should be located in structures or in the rear or interior side yards. Where a rear or exterior lot line or the rear or side building facade abuts a public road, enhanced landscaping and building treatments should be employed to ensure that building facades and servicing areas are attractive and/or appropriately screened from view.
- 2.5.6 Commercial uses may be developed in the following manner:
 - 2.5.6.1 A range of uses will be permitted including retail, office, theatre, arts, entertainment, restaurant, hotel, tourist, time share, medical, health and wellness, recreational, cultural and personal service commercial uses.
 - 2.5.6.2 The maximum amount of retail floor space envisaged within retail stores in the Mixed Use designation is 40,000 sq metres. Individual retail stores will be limited to a size which reflects an urban scale of development and supports the pedestrian oriented built form. Large floor plate retail stores will not be permitted except where necessary to provide anchor stores and a supermarket that meets weekly needs. Provisions addressing the size of individual retail stores will be established in the Zoning By-law.
- 2.5.7 Residential uses may be developed in the following manner:
 - 2.5.7.1 Densities for stand-alone residential buildings shall be a minimum of 75 units per net hectare.
 - 2.5.7.2 Residential dwelling types are intended to include apartment buildings, and retirement and long term care facilities.
 - 2.5.7.3 Residential uses except for lobbies and associated functions should occupy floors above the ground floor in mixed use buildings.
 - 2.5.7.4 Shared parking arrangements within mixed use buildings may be permitted on a site specific basis, subject to a Parking Demand Analysis being submitted, as part of an application to amend the Zoning By-law, to the satisfaction of the Director of Transportation Services.
 - 2.5.7.5 Outdoor amenity areas should be provided.

2.6 Office Business Park

The lands designated Office Business Park are shown on Schedule A4.

- 2.6.1 It is the objective of this Plan to attain an employment density of 37 jobs per hectare, and as such, this density shall be applied to Office Business Park lands when calculating overall densities across the Secondary Plan Area. Densities will be monitored by the City as employment lands develop.
- 2.6.2 The principal uses permitted within the Office Business Park designation may include:
- (a) corporate and business offices;
 - (b) government services, research and, training facilities;
 - (c) medical, health and wellness research and development facilities and clinics ;
 - (d) opportunities for live/work buildings, subject to policy 2.6.7;
 - (e) laboratories, research and development facilities, communications/telecommunications facilities, deemed not to be obnoxious by reason of dust, odour, fumes, particulate matter, noise and/or excessive vibrations;
 - (f) commercial services including banks, restaurants, health and fitness facilities, hotels, conference centres, banquet facilities, private clubs and convenience retail outlets which are intended to service the employment uses will be determined through the Zoning By-law;
- 2.6.3 Notwithstanding the list of permitted office business park uses in policy 2.6.2, the following land uses are specifically prohibited:
- (a) the outdoor display or storage of goods;
 - (b) adult entertainment parlour;
 - (c) body rub parlour; and
 - (d) taxi establishments.
- 2.6.4 The number of access points from individual lots to public roads shall be minimized. Shared access and internal connections between multiple lots is encouraged.
- 2.6.5 Office Business Park lands shall be developed in accordance with the following design criteria:
- (a) loading and servicing areas should be located in the rear yard of the lot and be screened from view through built form and landscaping;
 - (b) buildings shall front onto the road, and should have a consistent front yard setback;
 - (c) buildings should be sited and massed consistently;
 - (d) front and exterior side yards should have a minimum landscaped area of 6 metres in width; and
 - (e) shall generally have a maximum building height of 6 storeys.

- 2.6.6 The City intends to participate in discussions with telecommunications providers regarding the feasibility of servicing employment areas with leading edge telecommunications services, including broadband technology, to attract knowledge-based industries and support economic development, technological advancement and growth of existing businesses.

2.7 **Open Space System**

- 2.7.1 The Open Space System, comprised of trails, greenways, parkland and the rechanneled Con Rail Drain, is illustrated on the Master Plan (Appendix IX-A). Parkland is shown on Schedule A4, designated Open Space. Lands under this designation shall include parkland, trails and greenways. The locations are conceptual in nature and may be revised during the approval of individual draft plans of subdivision.
- 2.7.2 Neighbourhood parks should be a minimum of 2 hectares in size and may be for either active or passive recreation. The size of parkettes will be determined at the time of subdivision application.
- 2.7.3 Individual plans of subdivision or condominium that provide a dedication of parkland should ensure that the park either has connections, or can be readily connected to, other components of the open space system.
- 2.7.4 Storm water management facilities and natural heritage features will not be accepted as parkland dedication.
- 2.7.5 Greenways provide both a recreational and utilitarian function. Accordingly, connections will be made to the road network as well as to the office business park and mixed use areas.
- 2.7.6 Trails and greenways should connect with the Regional Bicycle Network System. This System, part of the Regional Bikeways Master Plan, includes Dorchester Road; and Chippawa Creek Road in the Secondary Plan Area.
- 2.7.7 An Environmental Impact Study will be prepared when requested to the satisfaction of the City in consultation with Niagara Region and the Niagara Peninsula Conservation Authority for any trails that are planned to be extended into or adjacent to an area designated Environmental Protection Area.

2.8 **Environmental Protection (EPA) Areas**

- 2.8.1 The EPA designation shall apply to Provincially Significant Wetlands, Provincially Significant Life ANSIs, significant habitat of threatened and

endangered species, floodways and erosion hazards and environmentally sensitive areas.

- 2.8.2 Development within NPCA regulated wetlands greater than 2 ha in size may be permitted if it is demonstrated through an Environmental Impact Study that over the long term, no significant negative impact can be achieved which may include the use of compensation and mitigation measures as identified in the Environmental Impact Study prepared in preparation of the Secondary Plan and further refined through an Environmental Impact Study submitted in support of subdivision or condominium applications that is prepared in accordance with the compensation guidelines that are approved by the City, Region and Niagara Peninsula Conservation Authority for this Secondary Plan.
- 2.8.3 Linkages and natural corridors between areas designated Environmental Protection Areas and to the Welland River and Ontario Power Canal will be provided in accordance with the locations conceptually illustrated on Schedule A-4 to facilitate species movement and maintain biodiversity. The linkages may include both anthropogenic corridors provided by parks and open space areas as well as natural corridors. The width of the linkages should be a minimum of 50 metres wide but the specific location, width, function and implementation details of all linkages and natural corridors will be addressed through an approved Environmental Impact Study at the subdivision or condominium approval stage.
- 2.8.4 The Con Rail Drain through the Secondary Plan area may be enhanced to improve its ecological and aesthetic function.
- 2.8.5 Development or site alteration shall not be permitted in the EPA designation except in accordance with the policies in Section 11.2.14. Conservation measures permitted within the EPA in accordance with Section 11.2.14 b) may include Low Impact Development Best Management Practices used to create a water balance to the retained wetlands within the site subject to being located within the buffer areas of the EPA, appropriate technical supporting documentation and approval by Niagara Peninsula Conservation Authority.
- 2.8.6 Endangered and Threatened species shall be addressed in accordance with section 11.2.17
- 2.8.7 Environmental buffers shall contain naturally vegetated areas which will be maintained around Provincially Significant Wetlands. A 30 m environmental buffer between the edge of the provincially significant wetland and the Residential and Institutional designations and a 15 m environmental buffer between the Provincially Significant Wetland and the Office Business Park designation is illustrated on Schedule A-4 for reference purposes. Additional buffering between the Provincially Significant Wetlands and development within the Office Business Park designation may include lands that are privately owned but subject to restrictions within the zoning by-law and/or development agreements which enhance the function of the environmental buffer area. The precise extent of the environmental buffer shall be determined through an approved EIS and may be reduced or expanded.

Where reductions in the width of environmental buffer occur, the adjacent land use designation shall apply without amendment to this Plan. New development or site alteration within the naturally vegetated area determined through an approved EIS is not permitted.

- 2.8.8 Expansion, alteration or the addition of an accessory use in relation to an existing use within the environmental buffer may be permitted, subject to an approved EIS where:
- a) the expansion or accessory use is not located closer to the edge of the provincially significant wetland than the existing use; and
 - b) the expansion or accessory use cannot be located elsewhere on the lot outside of the environmental buffer areas.

2.9 **Tree Management**

- 2.9.1 Tree saving plans shall be required as part of subdivision and site plan applications to identify existing mature trees located outside of the Environmental Protection Areas and associated buffers in order to preserve and integrate them into the built environment where possible.

3. **Infrastructure**

3.1 **Storm Water Management**

- 3.1.1 A combination of piped storm sewers and overland drainage systems will be employed in the Secondary Plan Area.
- 3.1.2 Overland and piped storm water flows will not be directed outside of the respective watershed.
- 3.1.3 Storm drainage will be conveyed to the Welland River or OPG Canal.
- 3.1.4 The location of storm water management facilities are shown on the Master Plan. Such facilities are not shown on Schedule A-4 and may be located under any land use designation although they will generally not be permitted to locate within the Environmental Protection Area. They may be permitted to locate within the vegetated buffer area adjacent to the Environmental Protection Area in order to help maintain the hydrological function of the Provincially Significant Wetlands as determined through an approved EIS.
- 3.1.5 Private, individual or temporary storm water management facilities are discouraged. Such installations shall be undertaken at the cost of the developer.
- 3.1.6 Storm water management facilities will be constructed as naturalized features, utilizing native plant species and grading techniques to create a natural area. If required, public access will be precluded through the use of

vegetation, not fencing. Such facilities should be integrated with the Open Space System of the Secondary Plan Area.

- 3.1.7 Low Impact Development storm water management best management practices, will be encouraged where appropriate, which mimics the natural hydrology of the area and protects water quality.
- 3.17 The Con Rail drain will continue to act as a component of the storm water management system and will receive treated drainage from the Secondary Plan area as well as drainage from outside of the area. It may also be enhanced with improved bed and slope treatments and added vegetation to aesthetically improve the appearance of the drain subject to approvals from the appropriate authorities.

3.2 **Sanitary and Water Services**

- 3.2.1 Sanitary services will be constructed in accordance with the recommendations of Functional Servicing Report. A pumping station required to service the Secondary Plan Area will be provided in accordance with the recommendations of Functional Servicing Report.
- 3.2.2 Water services may be constructed in concert with sanitary services in accordance with the recommendations of Functional Servicing Report.

3.3 **Utilities**

- 3.3.1 The City shall participate in discussions with utility providers such as hydroelectric power, communications/ telecommunications, pipelines and natural gas to ensure that sufficient infrastructure is or will be in place to serve the Secondary Plan Area.
- 3.3.2 Through the Environmental Assessment and subdivision processes, appropriate locations for large utility equipment and cluster sites will be determined. Consideration will be given to the locational requirements for larger infrastructure within public rights of way, as well as easements on private property.
- 3.3.3 Utilities will be planned for and installed in a coordinated and integrated basis in order to be more efficient, cost effective and to minimize disruption.

3.4 **Transportation**

- 3.4.1 The maps in Appendices XI-B, XI-C, and XI-D illustrate the conceptual design for the Secondary Plan Area. The design provides good connectivity to facilitate walking, cycling and access to transit. Individual plans of subdivision will be consistent with this approach.

- 3.4.2 Right-of-way widths for arterial and collector roads shall be in accordance with PART 3, Section 1.4.19 of this Plan. Right of way widths for local roads shall be determined at the time of subdivision approval but may be less than 20 metres subject to Council approval. The City may require road widening dedications in addition to the designated road allowances indicated in the PART 3, Section 1.4.19 without the need for amendments to this Plan for purposes of:
- 3.4.2.1 Additional site triangles at intersections and entranceways necessary for traffic operational design purposes;
 - 3.4.2.2 Turning lanes at intersections or to provide suitable access to major traffic generator developments;
 - 3.4.2.3 Sites for traffic control devices (eg roundabouts) and transit facilities (e.g. bus lay-bys); and
 - 3.4.2.4 Additional width to the scenic parkway to facilitate enhanced landscaping and active transportation facilities.
- 3.4.3 As part of an application for subdivision or Zoning By-law approval, a traffic impact study may be required to be submitted that conforms to the recommendations of the Thundering Waters Transportation Master Plan. The traffic impact study will assess the impacts of the proposed phase of development on the existing road network, intersections and recommend any improvements to the road network that will be needed for that phase. Any improvements to the existing road network or to intersections shall be constructed at the cost of the applicant unless such improvements have been identified in the Development Charges By-law.
- 3.4.4 The construction of a bridge across either the OPG canal or Welland River may be required prior to full build out of the Secondary Plan area in order to address constraints on roads outside of the Secondary Plan area and serve anticipated traffic demands for the Secondary Plan area. The bridge will be subject to a Class Environmental Assessment to determine the exact location of the bridge. The traffic impact study referenced in section 3.4.3 will verify that adequate road capacity is available to accommodate development prior to the completion of the bridge.
- 3.4.5 Dorchester Road and Chippawa Parkway are designated as arterial roads within the Secondary Plan Area and a new arterial road which connects with Chippawa Parkway through the Office Business Park is proposed. The following policies shall apply to arterial roads:
- 3.4.5.1 Upgrading and expansion of Dorchester Road and Chippawa Parkway from their current width shall generally proceed in phase with development, subject to the Development Charge revenue generated at the time being sufficient.
 - 3.4.5.2 Driveways access to arterial roads shall be minimized. On corner

lots, driveway access shall only be provided on the lesser order road frontage.

- 3.4.5.3 Reverse lot frontage should be avoided where possible.
- 3.4.5.4 Developments along arterial roads shall provide generously landscaped open space adjacent to the arterial frontage, save and except for any driveway or sidewalk access.
- 3.4.5.5 Chippawa Parkway within the Secondary Plan area is also identified as a scenic parkway with an upgraded design to provide opportunities for enhancement of the scenic nature of the road which may facilitate views to the Welland River.

3.4.6 The collector network is shown on Schedule A-4. Collector roads are to provide for the conveyance of traffic within the community and to provide for transit routes. Accordingly the following policies shall apply:

- 3.4.6.1 Bicycle lanes should be provided on all collector roads.
- 3.4.6.2 Reverse lot frontage should be avoided where possible.

3.4.7 Traffic circles will be encouraged to be used at the intersection of collector and arterial roads.

3.4.8 The specific configuration of local roads, laneways and the resultant lot patterns are shown on Appendices XI-B, XI-C, and XI-D for illustration purposes and are to be established through individual plans of subdivision.

3.5 Sustainable Development

- 3.5.1 Development shall occur in accordance with the Energy Conservation policies established in Part 3 Section 3.1 of this Plan and will be encouraged to exceed the energy efficiency requirements within the Ontario Building Code.
- 3.5.2 New development will be encouraged to incorporate alternative energy sources where appropriate.
- 3.5.3 Development will be designed to encourage the use of transit and active modes of transportation and should facilitate the use of alternative energy vehicles where appropriate.

4 Growth Strategy

4.1 Phasing of Development

- 4.1.1 Development shall progress in an orderly, efficient and fiscally responsible manner. The phasing strategy for the Secondary Plan Area is conceptually

shown on Appendix XI-E to the Official Plan. Variations to this phasing may occur as development proceeds as long as it continues to occur in an orderly, efficient and fiscally responsible manner. The servicing of lands, including the upgrading and widening of roads, and the provision of a pumping station within this Secondary Plan Area shall be undertaken as is required by demand.

4.1.2 In order to ensure that development occurs in an orderly manner Council may use holding provisions in the zoning of lands. Holding provisions can be lifted only after the following matters have been satisfied:

- (a) that sufficient revenue has been, or will be, generated through Development Charges to finance the servicing of the proposed stage of Secondary Plan development;
- (b) that any extensions of municipal sanitary sewers and watermains required to service the lands have been designed and approved for construction;
- (c) that the extent of the short term (serviced) land supply within the Secondary Plan Area is not more than 10 years;
- (d) execution of any front ending agreement by the owner of lands subject to a holding provision, all in accordance with requirements of the Development Charges Act.

4.1.3 Development shall not proceed until a municipal sanitary sewer and watermain are extended along Chippawa Parkway and/or Dorchester Road to the Secondary Plan area. The timing of the extension of the municipal sanitary sewers and watermains will be dependent on the financial resources of the City and/or any front-ending agreements between benefiting landowners.

4.1.4 The City, through future Development Charge By-law Reviews, may consider an area specific Development Charge By-law for the Secondary Plan Area.

4.1.5 The development of employment generating uses is encouraged to proceed concurrently with residential development in order to create a complete community. Convenience retail and service commercial uses are also encouraged to develop concurrently with residential development so as to provide residents with daily services.

4.1.6 Medium and high density housing forms should develop concurrently with lower density forms. Applications should provide an indication of the phasing of each dwelling type.

4.2 **Front-ending Agreements**

4.2.1 For the purposes of this Secondary Plan, a front-ending agreement, pursuant to the Development Charges Act, is a financial contract entered into with the City whereby an individual or individuals agree to pay for the installation of infrastructure identified in the Secondary Plan in order to permit development

to proceed within the Secondary Plan Area in advance of other benefiting development paying its share of costs.

- 4.2.2 Where an application has been made for a development in advance of the installation of infrastructure identified within the Secondary Plan as required to support the subject development, including both on-site and off-site services as well as upstream and downstream system requirements, Council may consider entering into a front-ending agreement with the developer, as a condition of approval, in accordance with City policies and procedures respecting such agreements.

5 Implementation

- 5.1 The Secondary Plan shall be implemented in accordance with the requirements of the Planning Act, Development Charges Act and other applicable legislation.
- 5.2 The lands that are subject to future development shall be zoned Development Holding. Development shall proceed by way of amendment to the Zoning By-law. Applications made shall comply with the policies regarding complete applications in PART 4 of this Plan.
- 5.3 Lot creation shall proceed primarily by way of plan of subdivision or condominium. Applications for consent that do not impact on the integrity of the Secondary Plan may be considered:
- (a) for lands where plans of subdivision or condominium are not appropriate;
 - (b) for lands that have not been included in a plan of subdivision or condominium;
 - (c) for technical or purposes; or
 - (d) in the case of part lot control.
- 5.4 An air quality, noise and vibration study is required for any development for a sensitive land use that is located near a major facility such as a transportation corridor, industrial use, sewage or water treatment facility, or pumping station.
- 5.5 Urban Design guidelines should be prepared prior to approval of plans of subdivision or condominium to address public realm facilities such as pedestrian amenities within the mixed use area, neighbourhood edge interfaces, design of the scenic parkway, collector and local road design guidelines, parks, trails, open spaces and natural heritage as well as private realm matters including building setbacks, heights and parking areas.