

Tamarack (Queen Street Corp.)

Official Plan Amendment Submission Planning Rationale

Cardinal Creek Village Area 11 Expansion Area

Project No. RH1-1-PH2

Prepared By:

Richard W. Harrison & Associates
Consultant in Urban Planning and Land Development

Date Submitted

November 2012

Table of Contents

	Page
1 Introduction	1
2 The Subject Lands	2
2.1 Location and General Characteristics	2
2.2 Background Documentation.....	2
2.3 Land Ownership	5
2.3.1 Study Area	5
3 Existing Planning Policy Framework	7
3.1 Provincial Policy Statement (PPS)	7
3.2 Official Plan	12
4 Specific Lands Subject to This Amendment.....	13
5 The Demonstration Plan	16
5.1 Introduction.....	16
5.2 Residential.....	17
5.3 Commercial	18
5.4 Institutional	18
5.5 Schools.....	18
5.6 Parks and Open Space.....	19
5.7 Neighbourhood Parks	19
5.8 Community Parks	19
6 Technical Studies.....	20
6.1 Introduction.....	20
6.2 Natural Environment	20
6.3 Transportation Study	22
6.4 Municipal Servicing.....	22
Phasing Plan.....	23
6.5 Existing Social and Economic Conditions	23
7 Summary of Opinion	26

1 Introduction

This Planning Rationale has been prepared on behalf of Tamarack (Queen Street) Corporation for lands generally located east of Cardinal Creek and south of Ottawa Road 174 in the Orleans/Cumberland area of Ottawa. The purpose of this report is to provide the planning framework (including a demonstration plan) for the preparation of a Secondary Plan to be adopted by the City of Ottawa. These lands are being evaluated under the “Integrated Process” of the Environmental Assessment Act (EAA) and the Planning Act to determine the ultimate urbanization of the study area. As outlined in the covering letter, this Planning Rationale has been prepared in support of the Demonstration Plan. When the Final Land Use Plan approaches completion, an accompanying Planning Rationale will be submitted.

Richard W. Harrison & Associates (Planning), with technical support from David Schaeffer Engineering Ltd. (Civil Engineering), Delcan (Environmental Assessment), IBI Group (Transportation), J.F.S.A. Inc. (Stormwater Management), Muncaster Environmental Planning Inc. (Environment), Paterson Group (Hydrogeology & Geological Engineering) and Walker Nott Dragicevic Associates Ltd. (Planning and Urban Design) has been retained to prepare a land use plan, technical analysis and planning analysis in support of a new community of approximately 13,000 persons. The area will be known as Cardinal Creek Village.

This report is divided into five sections beginning with an introduction, a discussion of the existing policy framework, a description of a Demonstration Plan, overviews of environmental, traffic and engineering considerations and a summary.

2 The Subject Lands

2.1 Location and General Characteristics

The subject lands, known as Cardinal Creek Village, are located in the east end of Ottawa and east of Cardinal Creek, west of the estate residential development along Ted Kelly Lane, south of Ottawa Road 174 and generally north of lands currently designated Agricultural Resource Area in the City's Official Plan. The area is illustrated in Figure 1. The lands consist of approximately 225 ha (556 acres).

The property consists of a series of four plateaus rising north to south beginning near the Ottawa River in the north at an elevation of approximately 50m ASL and stepping up towards the highest elevation at 95m ASL along the southern boundary.

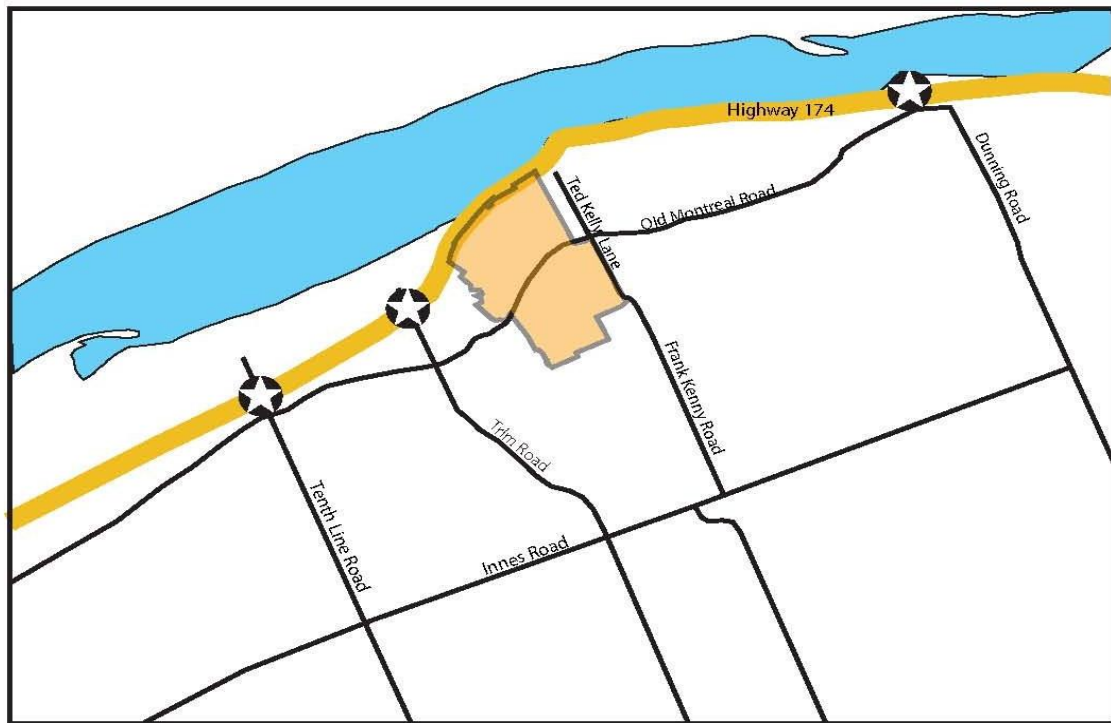
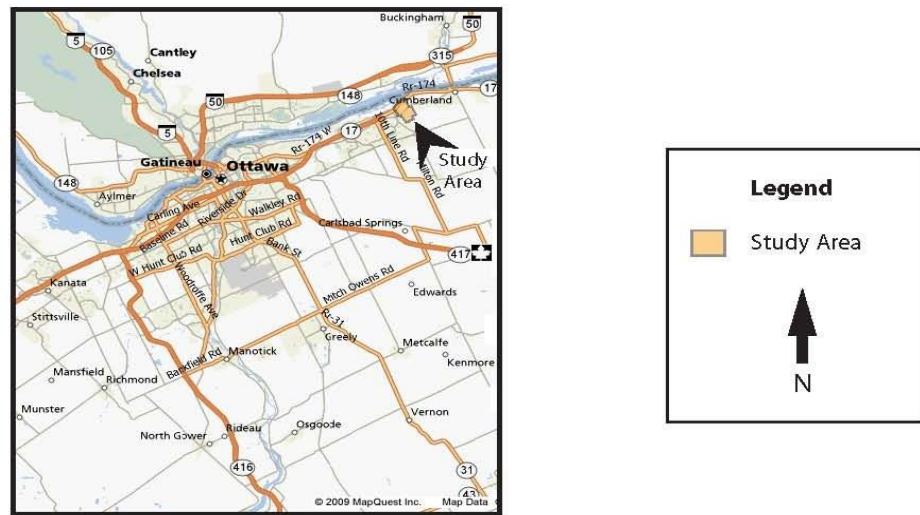
Current uses of these lands are diverse and include large lot rural residential, institutional, and nursery and landscape supply. Approximately 50% of the area is pasture. The entire study area is designated as Urban Expansion Study Area by Order of the Ontario Municipal Board on June 12, 2012.

2.2 Background Documentation

Extensive background research and review of planning studies have been completed by the study team including the following:

- City of Ottawa Official Plan, January, 2007
- Official Plan Amendment #76
- Several Orders of the Ontario Municipal Board Hearing of OPA76
- Ontario Provincial Policy Statement, 2005
- Municipal Drains Classification Map, RVCA, Oct 2007
- Design Brief (CCL, 2000)
- The Soils of the Regional Municipality of Ottawa-Carleton (Ministry of Agriculture and Food, 1987)
- Erosion and Slope Stability Evaluation Cardinal Creek, for the Township of Cumberland, Golder Associates Ltd., January 1990

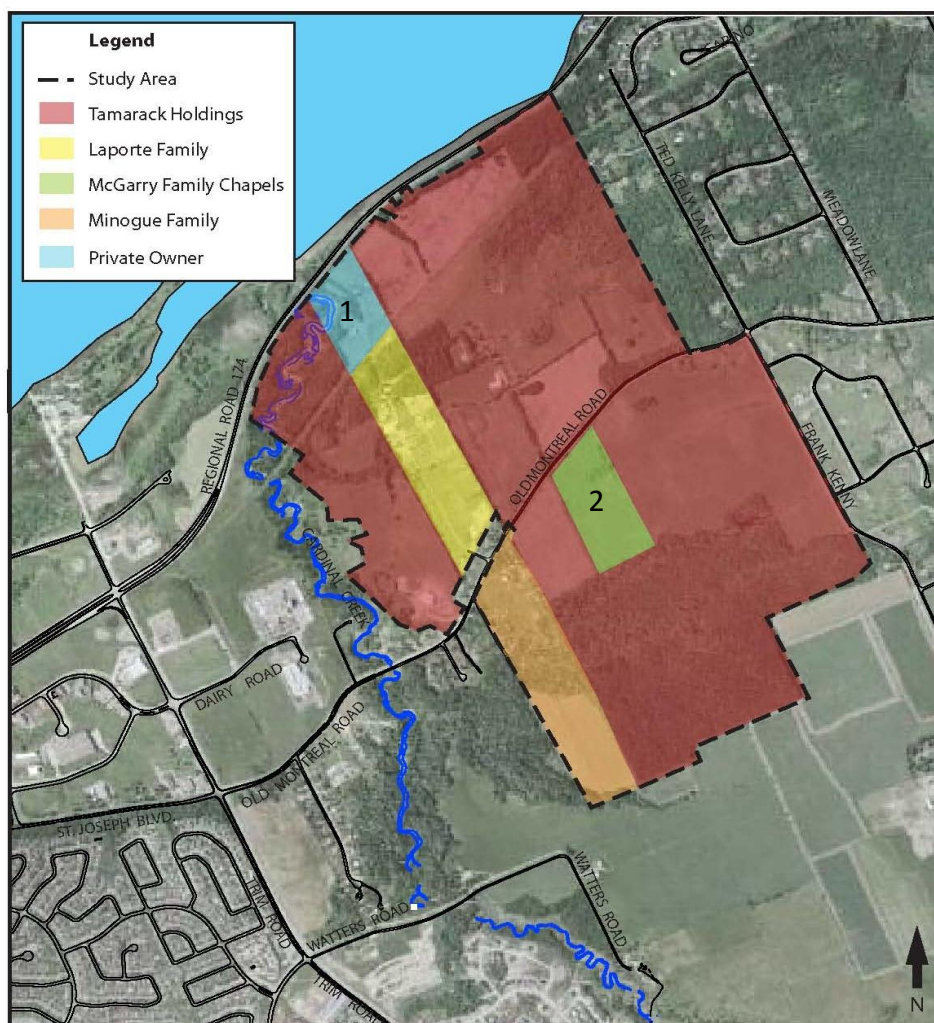
- Geotechnical Evaluation Cardinal Creek Karst Area, Watters Road, for the Cloverhurst Co-Tenancy, Golder Associates Ltd., June 1991
- Appendix E, Township of Cumberland E.U.C. Expansion Area Master Drainage Plan, Environmental Evaluation, Niblett Environmental Associates Inc., January 1992
- Various City staff reports on the official Plan process (March 20, 2009, May 4, 2009, June 24, 2011, September 1, 2001)
- Ontario Municipal Board decision dated June 3, 2011
- Master Drainage Plan, for the Township of Cumberland, East Urban Community, McNeely Engineering, December 1992
- Stormwater Design Plan, Cardinal Creek Business Park, for the Township of Cumberland, Paul Wisner & Associates Inc., July 1992
- Hydrologic and Water Quality Studies for the Cardinal Creek MDP, Volume II, for the Township of Cumberland, Paul Wisner & Associates Inc., 1992
- Update to the Master Drainage Plan East Urban Community Expansion Area, for the City of Cumberland, Cumming Cockburn Limited, August 31 2000
- Supplementary Report to the Master Drainage Plan and Environmental Study Report, for the City of Cumberland, Cumming Cockburn Limited, August 2000, Revised May 2001
- Attachment 1, Design Brief Cardinal Creek Online Stormwater Management Facility, for the City of Ottawa, Cumming Cockburn Limited, July 2001
- Gloucester and Cumberland East Urban Community Expansion Area and Bilberry Creek Industrial Park Master Servicing Update, for the City of Ottawa, Stantec Consulting Ltd., November 2004, updated June 2005, October 2005 and July 2006
- Cardinal Creek Geomorphic Assessment, for the City of Ottawa, Geomorphic Solutions, April 2007



Location Map
Figure 1

2.3 Land Ownership

There are several land owners within the study area with Tamarack being the beneficial owner of approximately 225 hectares or 90% of the lands (Figure 2). Accordingly, Tamarack has taken the initiative to prepare this submission for consideration by the City of Ottawa on behalf of itself, the Laporte Family, McGarry Family Chapels and the Minogue Family



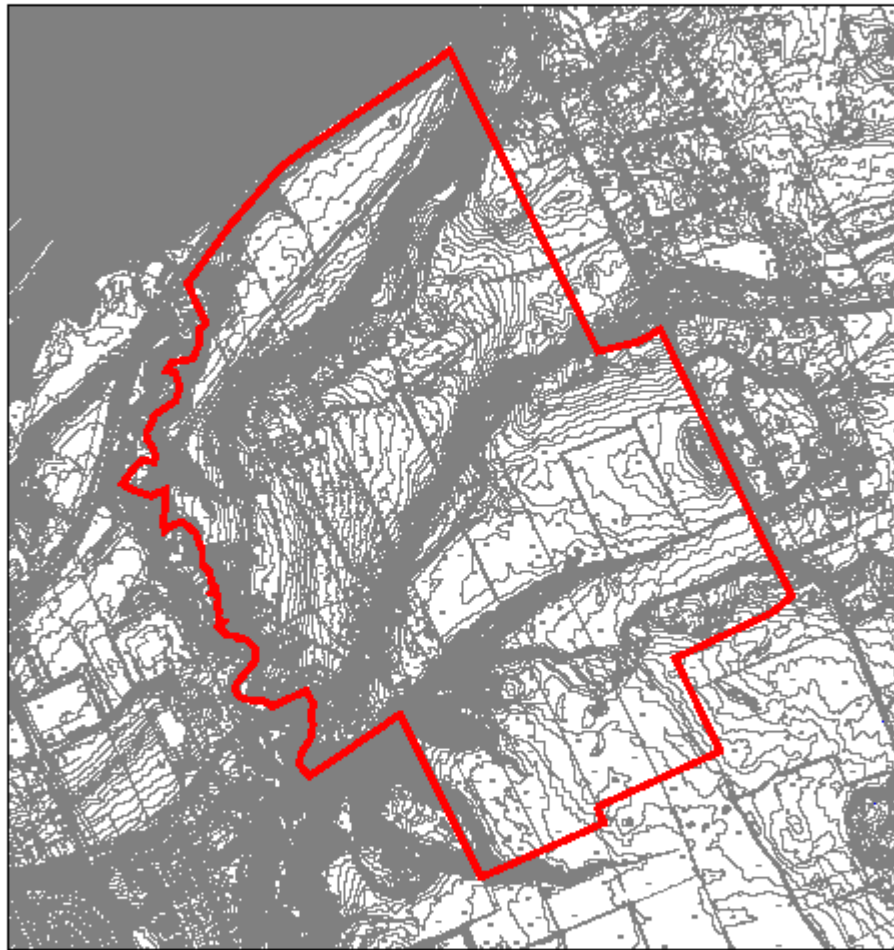
Ownership Map
Figure 2

2.3.1 Study Area

This report is based upon the study area as identified in Figure 2A. The study area boundary is interpreted from the lands known as Area 11 in the City of Ottawa's recent 5 year review of its Official Plan. The Study Area is a larger area of land than is subject to Amendment by this application.

Note 1 – lands recently acquired by Taggart

Note 2 – Taggart/McGarry agreement for development of approximately 2/3 of these lands



Plan Showing Study Area
Figure 2A

3 Existing Planning Policy Framework

3.1 Provincial Policy Statement (PPS)

The Provincial Policy Statement provides policy direction on matters of Provincial Interest related to land use planning and development. The PPS was issued under Section 3 of the Planning Act and came into effect on March 1, 2005. The salient policies applicable to the subject application are as follows:

BUILDING STRONG COMMUNITIES

Ontario's long-term prosperity, environmental health and social well-being depend on wisely managing change and promoting efficient land use and development patterns. Efficient land use and development patterns support strong, liveable and healthy communities, protect the environment and public health and safety, and facilitate economic growth.

1.1 MANAGING AND DIRECTING LAND USE TO ACHIEVE EFFICIENT DEVELOPMENT AND LAND USE PATTERNS

1.1.1 Healthy, liveable and safe communities are sustained by:

- a) promoting efficient development and land use patterns, which sustain the financial well-being of the Province and municipalities over the long term;*
- b) accommodating an appropriate range and mix of residential; employment (including industrial, commercial and institutional uses); recreational and open space uses to meet long-term needs;*
- c) avoiding development and land use patterns, which may cause environmental or public health and safety concerns;*
- d) avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas, which are adjacent or close to settlement areas;*
- e) promoting cost-effective development standards to minimize land consumption and servicing costs;*

- f) *improving accessibility for persons with disabilities and the elderly by removing and/or preventing land use barriers which restrict their full participation in society; and*
- g) *ensuring that necessary infrastructure and public service facilities are or will be available to meet current and projected needs.*

The Demonstration Plan complies and enhances these policies by being appropriately designed and incorporating a full mix of residential unit types, mixed use areas and commercial lands. The study area was thoroughly analyzed by the City as a logical extension to the then urban boundary during its 5 year review of the Official Plan. It is approved by the OMB as Urban Expansion Study Area.

1.1.3 Settlement Areas

1.1.3.1 *Settlement areas shall be the focus of growth and their vitality and regeneration shall be promoted.*

1.1.3.9 *A planning authority may identify a settlement area or allow the expansion of a settlement area boundary only at the time of a comprehensive review and only where it has been demonstrated that:*

- a) *sufficient opportunities for growth are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon.*
- b) *the infrastructure and public services facilities which are planned or available are suitable for the development over the long term and protect public health and safety.*
- c) *in prime agricultural areas:*
 - 1. *the lands do not comprise specialty crop areas;*
 - 2. *there are no reasonable alternative which avoid prime agricultural areas: and*
 - 3. *there are no reasonable alternatives on lower priority agricultural lands in prime*

agricultural areas; and

d) impacts from new or expanding settlement areas on agricultural operations which are adjacent or close to the settlement area are mitigated to the extent feasible.

During the 5 year review of the 2003 Official Plan, the City selected 11 geographic areas of the City to be considered for urban expansion, each of which was subject to a rigorous evaluation scoring system. Cardinal Creek Village was known as Area 11 and consistently scored, in whole and in parts, highly in the process. As ultimately determined by the OMB the Cardinal Creek Village lands are considered appropriate for urban expansion.

1.3 EMPLOYMENT AREAS

1.3.1 Planning authorities shall promote economic development and competitiveness by:

a) providing for an appropriate mix and range of employment (including industrial, commercial and institutional uses) to meet long-term needs;

b) providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs for existing and future business:

c) planning for, protecting and preserving employment areas for current and future uses; and

d) ensuring the necessary infrastructure is provided to support current and projected needs.

The Demonstration Plan incorporates opportunities for an appropriate mix and range of commercial lands. And upon more detailed assessment to be undertaken during the Integrated Process, commercial areas will be sited.

1.4 HOUSING

1.4.3 Planning authorities shall provide for an appropriate range of housing types and densities to meet projected requirements of current and future residents of the regional market area by:

- a) establishing and implementing minimum targets for the provision of housing which is affordable to low and moderate income households;*

The study area will comply with the City's mix and location of housing such that no less than 45% and no more than 55% will be single family, at least 10% will be apartment form and the remainder as other multiple family units. Cardinal Creek Village will be designed to create unique residential neighbourhoods that serve the needs of residents of different lifestyles and incomes.

1.5 PUBLIC SPACES, PARKS AND OPEN SPACES

1.5.1 Healthy, active communities should be promoted by:

- b) providing for a full range and equitable distribution of publicly-accessible built and natural settings for recreation, including facilities, parklands, open space areas, trails and, where practical, water-based resources;*

The Demonstration Plan will identify and preserve as public open space, key natural heritage areas. The Cardinal Creek and other significant natural heritage features provide important contributions to the greenspace network and will be protected within the Cardinal Creek Village community. Not only do these green spaces have environmental value, they also provide open space and active/passive recreational amenities and will contribute to a healthy community.

1.6 INFRASTRUCTURE AND PUBLIC SERVICE FACILITIES

1.6.4 Sewage and Water

1.6.4.1 Planning for sewage and water services shall:

a) direct and accommodate expected growth in a manner that promotes the efficient use of existing:

- 1. municipal sewage services and municipal water services; and*
- 2. private communal sewage services and municipal water services are not available;*

b) ensure that these systems are provided in a manner that:

- 1. can be sustained by the water resources upon which such services rely;*
- 2. is financially viable and complies with all regulatory requirements; and*
- 3. protects human health and the natural environment;*

c) promote water conservation and water use efficiency;

d) integrate servicing and land use considerations at all stages of the planning process; and

e) subject to the hierarchy of services provided in policies 1.6.4.2, 1.6.4.3 and 1.6.4.4, allow lot creation only if there is confirmation of sufficient reserve sewage system capacity and reserve water system capacity within municipal sewage services and municipal water services or private communal sewage services and private communal water services. The determination of sufficient reserve sewage system capacity shall include treatment capacity for hauled sewage from private communal sewage services and individual on-site sewage services.

In a separated document prepared by David Schaeffer Engineering Ltd, it is concluded that the existing water main and sanitary sewer infrastructure can support the development of the study area. Storm servicing will be provided by on-site stormwater management ponds discharging to both Cardinal creek and the Ottawa River.

3.2 Official Plan

The City of Ottawa Official Plan (OP) was adopted by City Council on May 14, 2003 and was approved and modified by the Minister of Municipal Affairs and Housing on November 10, 2003.

Beginning in 2007, the City of Ottawa undertook a comprehensive “five year Official Plan Review” as required by the Planning Act. The Official Plan for the City of Ottawa (OPA 76) was adopted by The Council of Ottawa on June 24, 2009 and was approved with the modifications by the Minister of Municipal Affairs and Housing on December 24, 2009.

The purpose of OPA 76 was to meet the legislated requirements under Section 26 (1) of the Planning Act, to update the 2003 City Official Plan, to address the 2005 Provincial Policy Statement and to provide an updated policy framework to guide development to 2031.

The evaluation undertaken as part of OPA 76 determined that there was a need for approximately 850 additional hectares over the next 20 years (2031) within the urban boundary. A city wide analysis was commenced to determine the location where these additional lands. Eleven candidate areas were identified by staff and analyzed on a comparative basis. Cardinal Creek Village was identified as Candidate Area # 11. It consistently scored highly against the City’s evaluation criteria.

The detailed chronology of events are part of the public record, but after approximately one year of deliberation at the Ontario Municipal Board, OPA76 was approved, as modified and ordered by the Board. The Cardinal Creek Village lands were approved for inclusion in the City’s urban area on June 12, 2012 and designated “Urban Expansion Study Area” in the Official Plan.

For the purposes of this report the consolidated version of the Official Plan as published on the City’s website was utilized. It incorporates all Ministerial modifications, all amendments to the plan up to and including amendment #81 and all orders of the Ontario Municipal Board with respect to the Hearing on OPA76, as concluded.

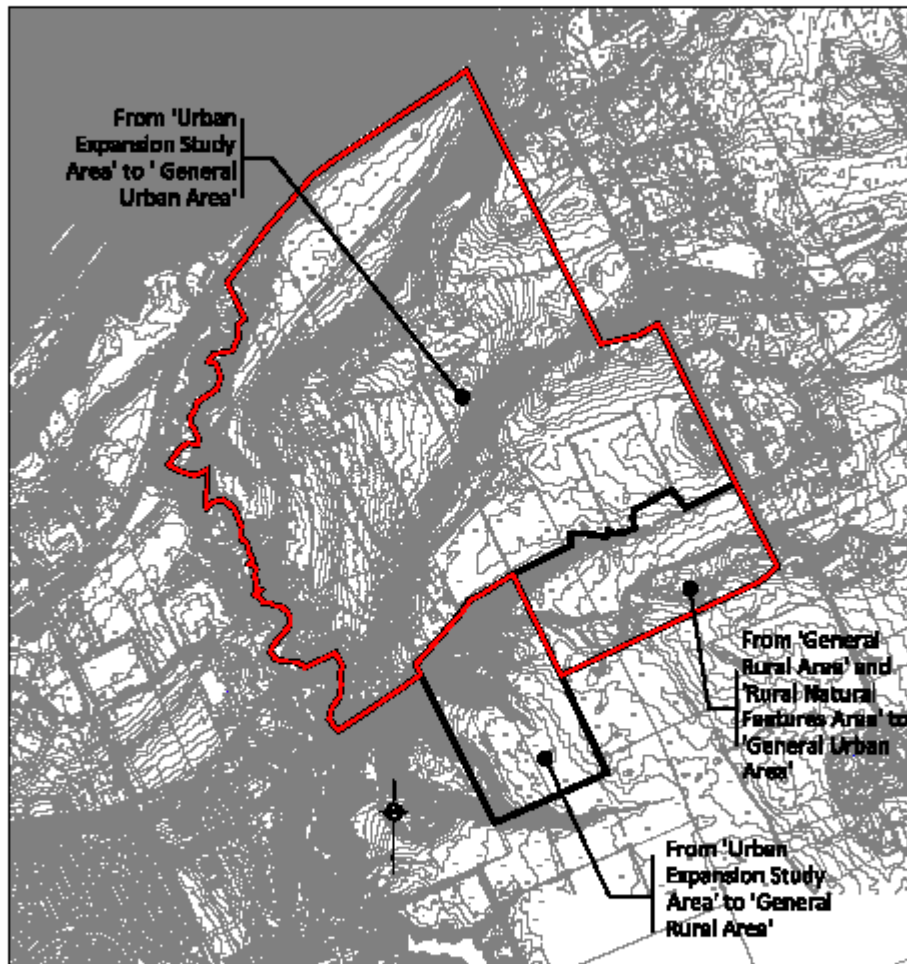
4 Specific Lands Subject to This Amendment

Later sections in this Planning Rationale describe the components of a Demonstration Plan and overviews of the natural environment, transportation and municipal servicing. The plan and the background studies are all based on a study area boundary which described Area 11 of the City's Official Plan Review (Figure 2A). The actual area of land subject to this requested amendment is different (generally smaller) and is shown on Figure 3. For greater certainty, this amendment application applies only to the lands shown on Figure 3 and not to the area of land shown on the Demonstration Plan or to the area of land referenced herein as 'study area'.

During the course of the urban boundary aspects of the Ontario Municipal Board hearing on the City Official Plan discussions were held with City staff to alter the boundary of the future urban area on lands owned by Tamarack in the south-western part of the study area. Due to the existence of a deeply incised valley and natural area at the northern limits of these lands it was agreed that the more logical sequence of servicing would only be available from the lands further to the south-east as they are developed. Accordingly it was agreed with Staff that the General Urban Area designation on the Tamarack lands be shifted to lands contiguous with the south-east urban boundary on an "acre for acre" basis.

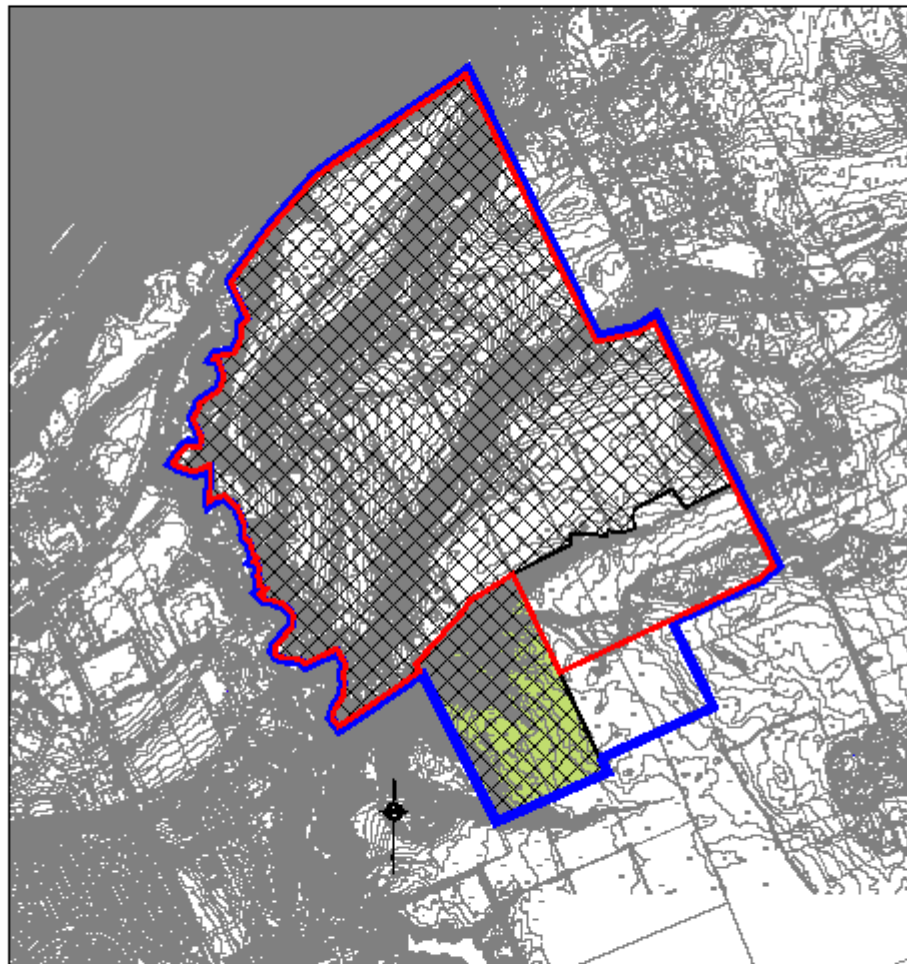
During the course of the preparation of this application, it was determined that lands owned by the Minogue Family immediately to the west of the Tamarack lands are also subject to this same significant constraint to urban servicing. It is therefore submitted that the urban designation on the south-west portion of Area 11 is in fact premature. A more logical planning solution is to transfer the urban designation (and therefore the urban boundary) to the south-east in its entirety. The lands from which the urban designation is being transferred would be more logically considered for urban expansion during the next 5 year review of the Official Plan. Figure 3 depicts this and represents the requested amendment to the Official Plan by this application.

Throughout this report and in the technical reports submitted as a part of this application various lands are referenced by different titles. To assist the reader, these areas are shown on Figure 3B.



Plan Showing Lands Subject to Amendment
by this Application
Figure 3

 General Urban Area Boundary



**Plan of Land Areas Discussed in This Report
by this Application
Figure 3B**

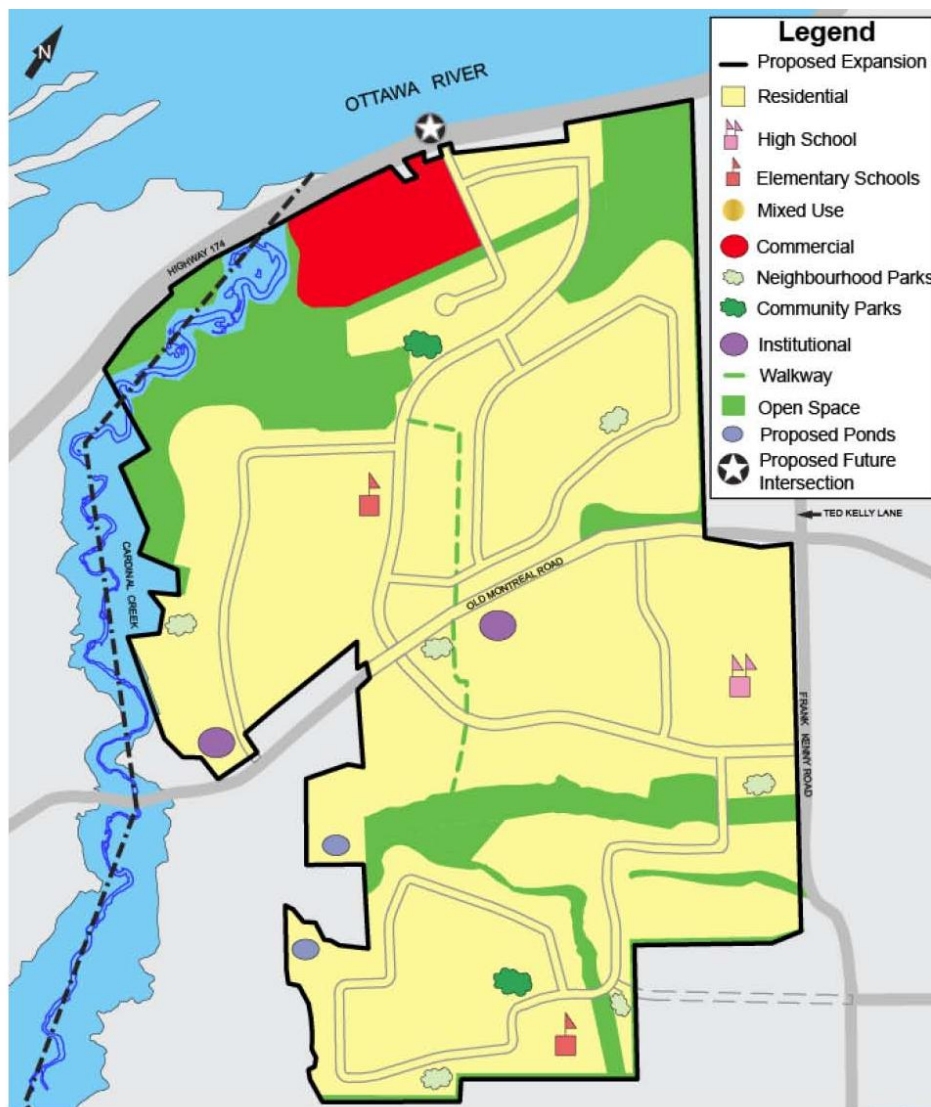
-  Study Area
-  Proposed General Urban Area Boundary
-  Existing Urban Expansion Area
-  Possible Future Development

5 The Demonstration Plan

5.1 Introduction

The location of Cardinal Creek Village is a natural progression for urban growth on non-agricultural land east of Trim Road. For the purposes of considering these lands for urban expansion a General Urban Area designation, the Demonstration Plan (Figure 3) has been prepared. The following sections describe the Demonstration Plan, its components, natural heritage, the transportation network and servicing options at an “existing” conditions level with further detail to be provided via the “Final Land Use Plan” contemplated by OP Section 3.11 sub 4. This will be implemented by the adoption of a Secondary Plan. The Demonstration Plan is based on the principals outlined in Section 3.11 of the Official Plan.

The land allocated to the various land use types are categorized into Residential, Main Street Mixed Use, Institutional, Schools, Parks and Open Space. Figure 3 identifies the location of each use on the Demonstration Plan.



Demonstration Plan
Figure 3 – August 2012

5.2 Residential

Approximately 130 ha of the study area have been allocated for residential use. An overall average density of 34 units per net residential hectare for all residential types will be used. This is based on 55% Single Family, 10% apartment dwellings and the remainder multiple dwellings (other than apartments). Based on calculations for this proposed development, there would be approximately 4550 units with a population in the range of 13,000 people.

5.3 Commercial

An Arterial Main Street Commercial site is proposed at the intersection of Ottawa Road 174 and the proposed north/south collector road. As contemplated by the City's Official Plan, Arterial Mainstreets may accommodate a broad range of employment and residential uses. Development will be planned to occur in a way that allows for the gradual transition to a more intensified pattern of land use so that, over time, residential uses will be introduced, where appropriate. Uses may be mixed within buildings and/or on the same lot, parking lots between the building and the street could be redeveloped and built upon, and the pedestrian environment will be improved.

This Ottawa Road 174 site will be characterized by a range of retail uses, with the potential for residential uses, to provide Cardinal Creek Village and the greater area with amenities and services. This location, in close proximity to Ottawa Road 174 at the ultimate entrance into the community is a superior site for retail development.

5.4 Institutional

The existing Capital City Church along old Montreal Road will continue to operate at its current level and is integrated into the proposed community.

Also along Old Montreal Road is a site owned by McGarry Funeral Homes which may at one time in the future be used for a crematorium. It will be integrated into the Village with proper buffering and urban design features. Approximately 2/3rds of the lands are under agreement with Taggart and will be utilized for residential purposes.

5.5 Schools

From analysis of similar communities in Ottawa, it is estimated that one high school and two elementary schools would potentially be required to support the proposed community. Confirmation of the number and locations of schools will occur during the Integrated Process. The elementary schools have been placed adjacent to proposed collector roads. The High School is placed along Frank Kenny (an arterial road) Road and a proposed collector road.

5.6 Parks and Open Space

Parkland is located throughout the community with optimum accessibility for all residents. It provides active recreational space to fulfill the City's mandate. The green space areas will also be linked by trails, pathways, stormwater management facilities, schools and parks to create a network of community facilities that is accessible throughout the community. Five neighborhood parks and two community parks have been strategically located throughout the Demonstration Plan and respond to the unique physical attributes of the site including views to and from Cardinal Creek and the Ottawa River. Confirmation of the number and locations of the Community and Neighbourhood Parks will occur during the Integrated Process review. This Demonstration Plan includes approximately 44 hectares of open space and 11.4 hectares of formal parkland.

5.7 Neighbourhood Parks

The focus of Neighbourhood Parks is to provide active and passive recreation to the immediate neighbors. Neighbourhood parks are approximately 0.8 hectares in size and located along a local road. The neighbourhood parks have been located approximately 400 metres from each other within the residential area, to allow walking accessibility for all residents. Five neighbourhood parks are located throughout the community.

5.8 Community Parks

Community Parks are approximately 3 hectares in size located along a major road, and generally serve residents within an 800 metre radius. This provides active recreation opportunities and facilities. Two community parks are provided for Cardinal Creek Village.

6 Technical Studies

6.1 Introduction

As a part of this submission several technical studies of existing conditions were undertaken by the study team. They include Civil Engineering, Transportation, Stormwater Management, Environment Hydrogeology and Geology.

All of these reports are under separate cover and three of them entitled Natural environment, community Transportation study and Existing Conditions (Municipal Services) are summarized below. Generally they describe the existing conditions of each discipline. As the study progresses, further detailed analysis will be undertaken to provide the rationale to support the Final Land Use Plan.

6.2 Natural Environment

Muncaster Environmental Planning Inc.'s report determined that the study area is dominated by cultivated lands but does contain some natural heritage features.

The recommended natural heritage system for the site is shown on Figure 2. The system includes the Cardinal Creek Valley and the south tributary, as well as the west, downstream, portion of the north tributary. The upper or east portion of the north tributary is not included due to a lack of fish caught (only two fish of one species caught in total across four sampling stations) and lack of features within the channel (a typical agricultural trapezoid cross-section) and the adjacent riparian corridor. As an alternative to retention of this portion of the north tributary as part of an urban development it is suggested that enhancement and rehabilitation measures be completed on Cardinal Creek and the south tributary including increasing the connectivity along the south tributary and addressing areas of erosion.

The remnant wooded areas of the valleylands of Cardinal Creek and the south tributary will be retained as well as the older wooded areas along the north slope south of the old railway line in the northeast portion of the site. These forests are relatively narrow, less than 200 metres in width, and thus utilization by area-sensitive and forest interior breeding birds is low. There was minimal representation of these species in the forests along the north slope, including lands to

the east of the site, with ovenbird, wood thrush and veery heard. The west portion of the wooded north slope contains more disturbance and a lower diversity of ecological features. The natural heritage system also includes deciduous forests along the east side of the site. This corridor will assist in providing a lineage to the Ottawa River corridor to the north, although this connection must still cross Ottawa Road 174 to the north of the site. The fresh-moist ash deciduous north forest in the northeast corner of the site is younger than the forests along the north slope but a representation of this forest is also included in the recommended natural heritage system.

Development of the site should consider retention of natural environment features on the site not specifically identified as part of the natural heritage system. Examples include the double hedgerow of deciduous trees along the driveway to 1291 Old Montreal Road and portions of the deciduous forest to the northeast of Laporte's Nursery.

The natural heritage system proposed in the Demonstration Plan is generally consistent with the draft Natural Heritage System identified for the Cardinal Creek Subwatershed Study. Some additional lands are shown on the Subwatershed Study south of the south tributary corridor. These areas have a greater level of disturbance and the woody vegetation cover is highly fragmented. The draft Natural Heritage System in the Cardinal Creek Subwatershed Study also includes some of the cultural thicket and cultural woodland habitat in the east portion of the site north of Old Montreal Road and south of the forested north slope. Based on the field surveys these areas appeared too disturbed to be included in the natural heritage system although the east portion is recommended for retention as part of the corridor along the east side of the site.

Important mitigation measures are required to protect the components of the natural heritage system and other natural environment features to be retained. These measures include buffer setbacks with no disturbances to protect the adjacent retained feature, construction timing for inwater work outside of the more sensitive March 15th to June 30th period, proper sediment and erosion control and protection for retained adjacent trees and forest edges. To protect breeding birds, no tree or shrub removal should occur between April 15th and July 30th, unless a nesting survey conducted within five days of the woody vegetation removal identifies no breeding activity. Surveys for butternut should be conducted well in advance of in areas of proposed tree removal. No site disturbances that may harm the butternuts are to occur within a radius of 25

metres of the tree until butternut health assessments are completed and as required mitigation or compensations plans are developed and approved by the Ministry of Natural Resources.

6.3 Transportation Study

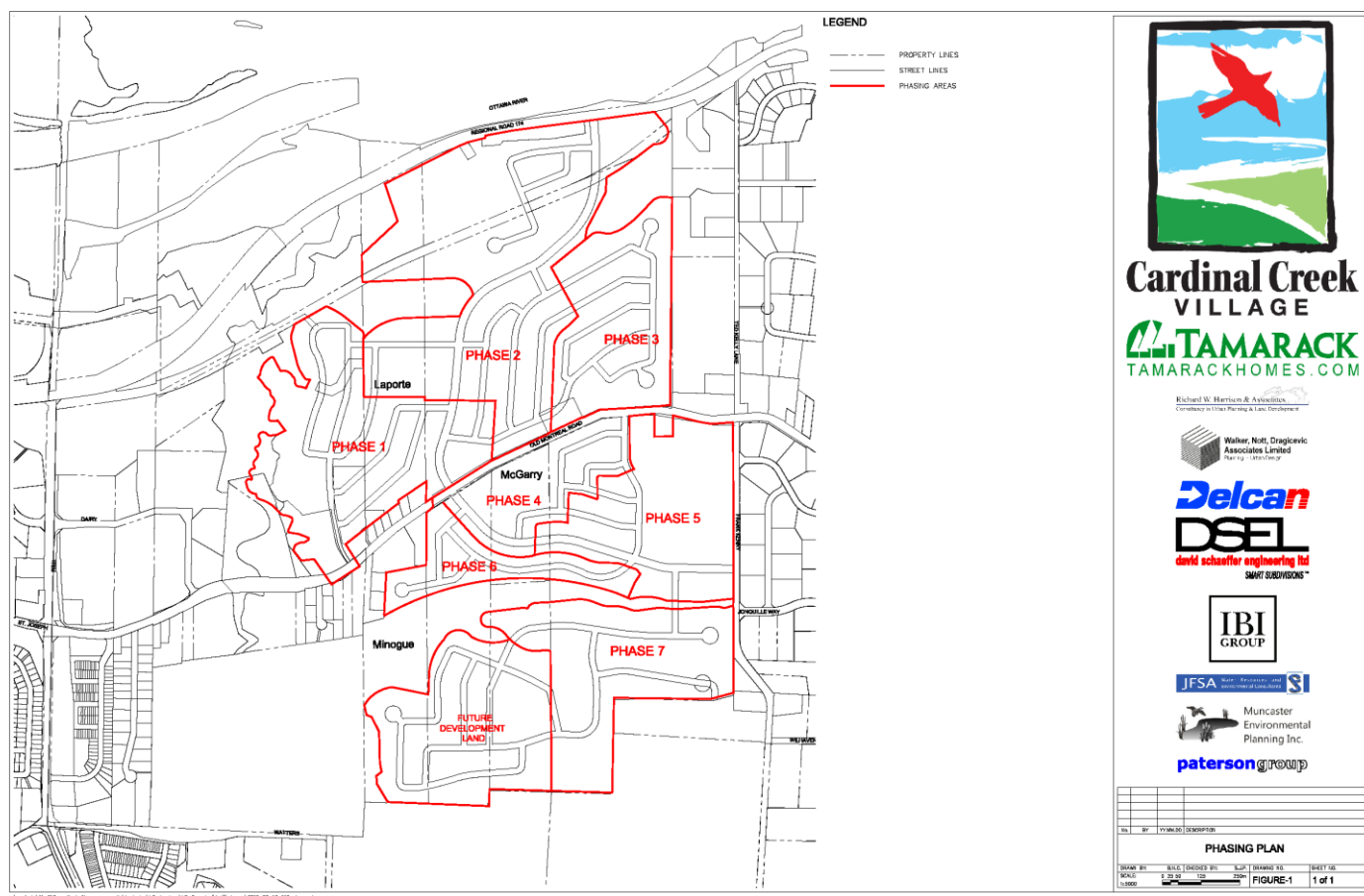
IBI Group have prepared have prepared a community transportation study based on the current Demonstration Plan and has determined that, subject to certain road improvements (some of which are currently contained within the City's Master Transportation Plan) there will be an appropriate external and internal road network available to support the ultimate development of the Cardinal Village community. Through the Integrated Process, additional transportation assessments will be undertaken in response to a refinement of the land use plan and to further consider transportation alternatives.

6.4 Municipal Servicing

The municipal servicing assessment prepared by David Schaeffer Engineering Ltd. has determined that, based on background studies, City of Ottawa guidelines and Ministry of the Environment guidelines, Cardinal Creek Village can be adequately serviced by connection to the existing municipal water distribution system. Based on background studies and preliminary sanitary sewer demand calculations, there is adequate Sanitary sewer capacity for Cardinal Creek Village.

Storm servicing for the site will be via stormwater management ponds on site which will discharge directly to Cardinal Creek or the Ottawa River.

Through the Integrated Process, additional servicing assessments will be undertaken in response to a refinement of the land use plan and to further consider servicing alternatives. Servicing of the area will generally follow the Phasing Plan show on Figure 4.



Phasing Plan Figure 4

6.5 Existing Social and Economic Conditions

As defined by the City, there are qualities and resources in any community that may impact on the spatial form of the community, that describe the character of the community or that set some enduring components of the community. Cardinal Creek Village is no exception.

Nonetheless, most of these lands were formerly designated 'Rural' in the Official Plan and logically the primary land use characteristic is one of a rural, agriculture and scattered rural estate residences. With its transformation into a new urban community within Ottawa, these traditional rural land uses internal to the site will disappear in the long run. Existing estate residential on the boundaries of the Village will be appropriately buffered. Only two existing uses on site will be maintained: Capital City Church and the McGarry Funeral Homes property south of Old Montreal Road (currently undeveloped). Both of these uses will be incorporated into the preferred land use plan. The Laporte Nursery lands will also be incorporated however the owners have stated they will not be proceeding to urban development for some time. This may necessitate some interim measures for urbanization at its boundaries but in the interim the preferred land use plan will define how these lands will be urbanized.

Perhaps the single most influential existing feature that will affect spatial form is the site's natural features and in particular the landform itself and the interface with Cardinal Creek. The site is comprised of four plateaus rising from the Ottawa River each offering view shed design opportunities. The interface with Cardinal Creek also offers opportunity for connection from and to the community as well as perhaps an ultimate pedestrian connection to Petrie Island to the north. In addition there are internal deeply incised valleys, existing forests and natural corridors that will be retained and influence neighbourhood design by providing pedestrian corridors throughout the community.

There are no schools or formalized parks with the subject lands. To the south and west of Trim Road bounded by 10th Line there are eight elementary schools and 2 high schools representing all four Boards of Education. Each has an associated park. There are also several neighbourhood parks in adjacent subdivisions. Two major park facilities of regional stature are nearby including Petrie Island north of Ottawa Road 174 and Millennium Park just south of Innes Road east of Trim Road.

Commercial facilities include the neighbourhood plazas at Trim and Watters (Crown Pointe Plaza) and at Trim and Innes (Millennium Park Plaza). Place d'Orleans, a regional scale shopping mall with Zellers and The Bay as anchors is approximately 5 kilometers to the west at Ottawa Rd 174.

Also to the west of the site are eight churches and one Muslim Centre.

As a preferred development concept is currently being developed and based on a set of design principles, more detailed analysis will be prepared at a later date as the results of the public process are incorporated in the Secondary Plan. Specifically these will include demographic, employment and housing profile, interface with natural features, pedestrian and cycling networks and urban design.

Transportation and infrastructure capacities are outlined in separate reports by DSEL and the IBI group. To initiate development in the community Taggart will enter into a front ending agreement with the City to fund and construct the required extension of infrastructure. Order of magnitude costing has been provided to the City based on the 2009 Development Charges background reports prepared by Watson and Associates and Stantec Consulting Limited. This results in estimates of cost of works and anticipated Development Charge contributions.

The extension of the sanitary and water main network to central services is estimated to be \$5M. Pursuant to current City policy there is an estimated payback of \$1.5M for trunk sanitary works and \$0.43M for trunk water mains. There will be an area wide landowner's agreement with respect to the remaining costs being shared by all owners based on flow calculations. The costs for storm water management, including trunk sewers and storm ponds will be shared either through an Area Specific Development Charge or a cost sharing agreement amongst the land owners. This will be determined at a later date.

The roads in the area are currently outside of the City's Transportation Master Plan. Should they be included, the funding for widening and upgrading could be through the roads component of the Development Charges bylaw.

At full build out and at the current rates the City will realize approximately \$90M in Development Charges from this community.

7 Summary of Opinion

Urbanization of Cardinal Creek Village is technically feasible and based on all policy objectives of the City and the Province is a desirable and logical area for urban development in the City of Ottawa. On the basis of the initial findings, it is my Professional Planning Opinion that the next stages of the Integrated Process, including public consultation, agency review, generation of land use and infrastructure alternatives and recommendation of a Final Land Use Plan be undertaken.

The Final Land Use Plan, resulting from the Integrated Process, should be analyzed to the standards identified in the City's Official Plan prior to the City adoption of the Secondary Plan.

Respectfully Submitted,

Richard W. Harrison, MCIP, RPP

Richard W. Harrison & Associates