

The East Urban Community Phase 3 Area Community Design Plan

November 2020

Prepared by:

Richcraft Group of Companies
Fotenn Consultants Inc. - Planning, Design, and Landscape Architecture
David Schaeffer Engineering Ltd. (DSEL) - Civil Engineering
Castleglenn Consultants Inc. - Transportation Engineering
Niblett Environmental Associates Inc. - Natural Environment
Morrison Hershfield Inc. - Environmental Planning
Paterson Group Inc. - Geotechnical Engineering











Image Credits: Fotenn Consultants Inc.

Contents

1	Ir	Introduction		
2	Т	he Study Area and CDP Development	2	
	2.1	Land Ownership	6	
	2.2	How This Plan Has Been Prepared	6	
3	Α	Vision and Principles for Development of this New Community	9	
4	Н	istory of the East Urban Community Phase 3 Area	.11	
	4.1	Constraints and Opportunities for the Development of the Study Area	.12	
	4.2	Additional Resources for the Preparation of this Plan	.15	
5	Р	lans for the Development of the EUC Phase 3 Area	.17	
	5.1	Land Use Plan	.17	
	5.2	Demonstration Plan	.20	
	5.3	Street Hierarchy Plan	.33	
	5.4	Pedestrian and Cyclist Facilities Plan	.36	
	5.5	Transit Facilities Plan	.38	
6	С	ommunity Design Policies and Guidelines	.40	
	6.1	Streetscape Policies and Guidelines	.40	
	6.2	Policies and Guidelines for Parks and Greenspace	.43	
	6.3	Policies and Guidelines for Site Design and Built Form	.45	
7	Ir	mplementation	.51	
	7.1	CDP Amendments	.51	
	7.2	Transit Service	.52	
	7.3	Affordable Housing	.53	
	7.4	Development Approvals	.53	
	7.5	Development Agreements	.54	
	7.6	Cost Sharing Agreements	.54	
	7.7	Parkland and Greenspace Acquisition	.55	
	7.8	Development Phasing	.56	
	7.9	Development Monitoring	.56	
	7.10	D Environmental Permitting	.56	
	7.1	1 Build-Out	.58	
A	ppe	ndix A: Team Members	.59	
Α	ppe	ndix B: Existing Conditions	.61	

Appendix C: Species at Risk Mitigation and Permitting	72
Employment	69
Transportation	68
Archaeology	67
Natural Environment	64
Drainage and Hydrogeology	6′
Geotechnical	6′

List of Figures

Figure 1. East Urban Community Phase 3 Area CDP Study Area	4
Figure 2. Hydro Corridor	4
Figure 3. Snow Disposal Facility	4
Figure 4. Innes Park Woods	6
Figure 5. Employment Land Review Final Report (November 2016)	12
Figure 6. City of Ottawa Official Plan Schedule B- Urban Policy Plan	12
Figure 7. Land Use Plan	19
Figure 8. Demonstration Plan	21
Figure 10. Five-Minute Walking Distance (450 metres) from Parks	31
Figure 10. Street Hierarchy Plan	35
Figure 11. Pedestrian and Cyclist Facilities Plan	37
Figure 12. Transit Facilities Plan	39
List of Tables	
Table 1: Land Use Distribution	18
Table 2: Estimated Units by Housing Type for the CDP	22
Table 3: Estimated Population Based on Unit Estimates	23
Table 4: Estimated Number of Jobs	28
Table 5 Types of Streets	33
Table 6. Environmental Approvals	56
Table 7. Species at Risk Mitigation Measures and Permitting Requirements	72

1 Introduction

Community Design Plans (CDP) are Council-approved documents that guide the growth and development of growing neighbourhoods. In coordination with the Official Plan, a CDP informs Zoning, Site Plan Control and decision-making on land use planning matters and sets out Council's priorities for new development in an area.

The East Urban Community (EUC) Phase 3 Area (formerly called the East Urban Community Mixed Use Centre) is located at the south end of Orléans and is one of the last remaining greenfield areas in eastern Ottawa. Situated south of the Innes Road Arterial Mainstreet corridor, the Study Area lies to the east and south of a number of established neighbourhoods and to the north of a quickly growing residential area.

This CDP is one of the documents that have been prepared to guide land use and development of this greenfield area. Other documents include the: Area Parks Plan (APP); Master Servicing Study (MSS); and Master Transportation Study (MTS). These supporting documents fulfill the requirements under the Municipal Class Environmental Assessment (Class EA) for a coordinated process.

Development of the EUC Phase 3 Area will provide a liveable community based on implementation of a Land Use Plan, Demonstration Plan, APP, MSS, MTS, and design guidelines. The CDP will serve as a guiding policy document for the City of Ottawa when reviewing applications for development within the Study Area.

2 The Study Area and CDP Development

The East Urban Community (EUC) Phase 3 Area Community Design Plan (CDP) Study Area	(

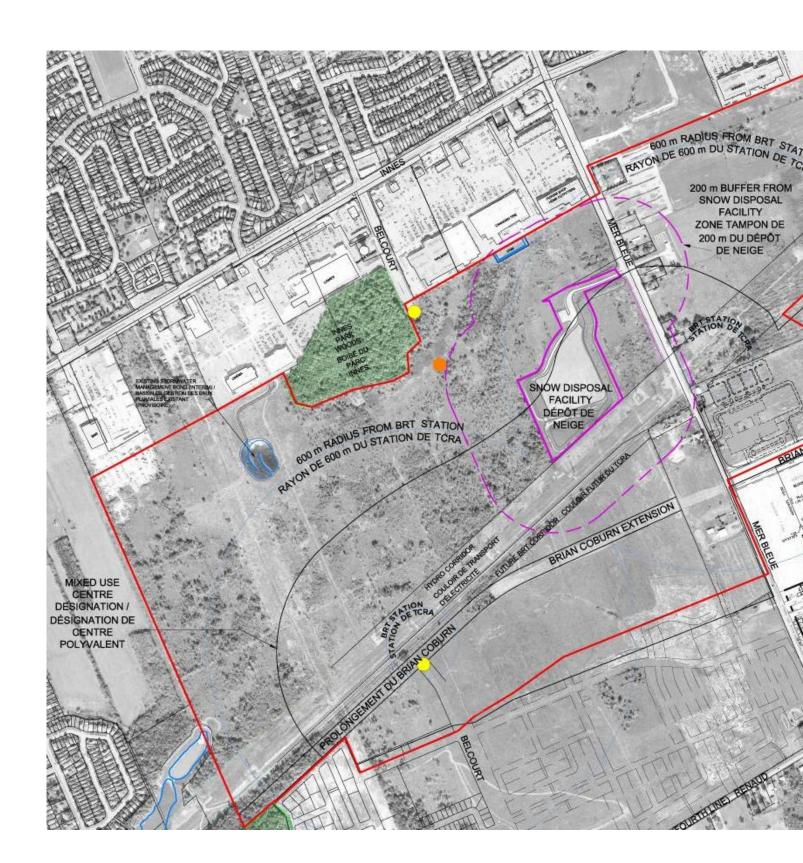


Figure 1) is located at the southern limit of Orléans and is currently occupied by former and current agricultural operations, residences, car dealerships, stormwater management facilities, a municipal snow disposal facility and a golf driving range. The total land area of the Study Area is 220 hectares.

A hydro right-of-way runs through the Study Area in a northeast-southwest direction (**Error! Reference source not found.**). The hydro corridor is 91 metres (300 feet) wide and is managed by Hydro One Networks Inc. via an easement over privately-owned lands.

In 2009, the City of Ottawa developed a snow disposal facility in the Study Area (Error! Reference source not found.). The facility, which is approximately seven hectares in area, is located on the west side of Mer Bleue, abutting the north side of the hydro corridor. The lands were purchased by the City in the 1990's and zoned in the early 2000's. Section 3.9, Policy 4 the Official Plan (OP) states that the impacts of snow disposal facilities for existing or committed sites shall be mitigated through urban design and site plan control measures.

The Orléans Health Hub by Santé Montfort is located at the northeast corner of Brian Coburn Boulevard and Mer Bleu Road, within the Study Area. The site is served by a CDP that was prepared in 2006. This CDP does not amend the 2006 CDP but takes the approach that the current CDP is complementary to the more specific 2006 plan. In this context, Santé Montfort was engaged in the CDP / Environmental Assessment (EA) study. The site was rezoned in 2010, site plan control approval for the first phase of development was issued in 2019, and construction of the first phase is underway.

The lands located to the immediate west of the Study Area are draft approved, zoned, and partially registered for a new residential subdivision (named Orléans Village) by Caivan Communities. The design of this subdivision has been coordinated with the EUC Phase 3 Area so that the pedestrian pathways, streets, and other infrastructure aligns. The Caivan subdivision does not offer a street connection with the Chapel Hill South neighbourhood further west.

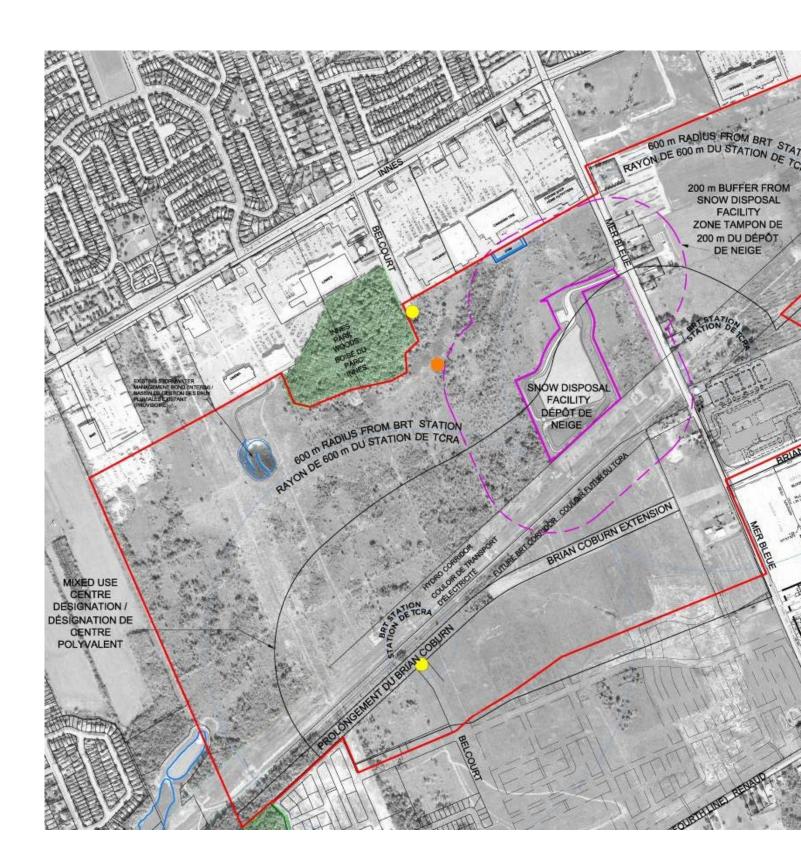


Figure 1. East Urban Community Phase 3 Area CDP Study Area



Figure 2. Hydro Corridor



Figure 3. Snow Disposal Facility

The following land uses surround the Study Area:

North

Over the past 15 years, the Innes Road Arterial Mainstreet located to the north of the Study Area has developed into one of the primary shopping corridors in Orléans. Existing land uses include retail stores, retail food stores, banks, restaurants, coffee shops, recreational and athletic facilities, medical offices, a movie theatre, and a water tower which serves as a wayfinding landmark. As reflected by the Arterial Mainstreet designation in the Official Plan, development is generally concentrated on the south side of the road.

Between Innes Road and the northern boundary of the western half of the Study Area is Innes Park Woods, a City-owned woodlot (Figure 4). A rock barren is located along the southern edge of the woodlot (within the Study Area), continuing east across the future southern extension of Frank Bender Street. The rock barren has been identified as Significant Wildlife Habitat by the Ministry of Natural Resources and Forestry (MNRF).

North of Innes Road are residential neighbourhoods that were developed between the 1970s and 1990s (including Chapel Hill North, Orléans Village-Chateauneuf, Queenswood Heights, and Fallingbrook). Highway 174 is located approximately three kilometres to the north of the Study Area, followed by additional residential neighbourhoods and the Ottawa River.

East

To the east of the Study Area are the developing communities of Avalon and Summerside, beyond which are additional subdivisions that have been developed over the past 15 years. To the southeast of the Study Area is the Mer Bleue Expansion Area, a CDP and Secondary Plan for which were approved in 2017.

West

Caivan's draft-approved, zoned, and partially registered residential subdivision (named Orléans Village) is located to the immediate west of the Study Area. The first phase of construction started in 2019.

Chapel Hill South, a low-density residential community that was developed in the 1990s, is located to the west of Caivan's subdivision.

Further west is the Greenbelt, within which is a Royal Canadian Mounted Policy (RCMP) facility, a quarry, and the community of Blackburn Hamlet. The City's Central Area is located approximately 18 kilometres to the west of the Study Area.

South

To the south of the Study Area is Trailsedge, a growing residential neighbourhood that has been under development since approximately 2010. South of Trailsedge are additional new residential developments, including Crème at the intersection of Navan Road and Renaud Road and Eastboro to the south of Renaud Road. Further southwest are additional residential neighbourhoods that were developed over the past 10 years, such as Spring Valley Trails and Bradley Estates. Further south and west are the Greenbelt, including the Mer Bleue Bog, a Provincially Significant Wetland.

Less than 1.5 kilometres to the south of the Study Area, on the south side of Navan Road, is a landfill (Waste Connections of Canada). The rural Village of Notre-Dame-des-Champs is located approximately 1.6 kilometres southeast of the Study Area.



Figure 4. Innes Park Woods

2.1 Land Ownership

Richcraft owns approximately half of the lands located within the Study Area. Other major landowners include the City of Ottawa, Glenview Homes, Smart Centres Real Estate Investment Trust., Santé Monfort, and BlackSheep Developments. The remainder of the land within the Study Area is owned by approximately 15 other individuals and companies.

2.2 How This Plan Has Been Prepared

The CDP for the EUC Phase 3 Area has been prepared by a Core Project Team (CPT) composed of the primary landowner (Richcraft), the Consultant Team, and staff of the City's Community Planning Unit (see Appendix A for a full list of participants). The primary role of the CPT was to review reports, resolve issues and achieve consensus at each step of the CDP work program.

This planning and EA process was privately initiated (developer-driven and funded). City staff's role has been to work with the property owners to resolve issues and help provide opportunities for the local community and other interested parties to participate in the planning process. City staff have contributed directly to the final CDP and supporting studies to ensure that they comply with City and Provincial policies, procedures and public consultation requirements.

A Technical Advisory Committee (TAC) was created to provide guidance and review critical deliverables. TAC meetings were held at several milestones in the process to discuss the evolving Land Use Plan and information related to the preparation of the supporting studies. In addition, members of the TAC were available to provide input throughout the CDP process. Appendix A contains a list of the representatives that were invited to participate in the TAC.

Consultation with the public is an important component of both the City planning and Class EA processes as it provides an opportunity for residents to be meaningfully involved in planning for new communities. In the preparation of this CDP, three public consultation events, including two public open houses and a workshop session, were held in the South Orléans community.

Based on the public consultation and further discussion with stakeholders, this CDP document has been prepared to reflect the public's input and their enhanced knowledge of this growing community in the City.

2.2.1 Community Consultation

The preparation of the CDP and Class EA has included substantive opportunity for public participation.

The first open house was held on June 26, 2014. The purpose of the open house was to introduce the project to the public, explain the process and timelines, and obtain community input on existing conditions and a guiding vision for the Study Area. The open house provided the public and interested stakeholders with an opportunity to discuss the study with the study team.

The second opportunity for public participation occurred at a workshop held on October 14, 2014. The purpose of the workshop was to provide an overview of the project progress to date and to present the Existing Conditions Report and the draft preliminary Vision and Objectives of the CDP to the public for feedback. During the workshop portion of the event, residents developed concept plans for the area based on the assumptions provided by the CPT.

The preferred Land Use Plan for the CDP resulted from an evaluation of the concept plans that were prepared by the public in October 2014 and a concept plan that was prepared by the planning team. Evaluation criteria were developed for different categories (including natural and physical environment, social environment, transportation, servicing, and economics) and each concept plan was evaluated against these criteria. The concept plan with the greatest number of preferred criteria became the base of the preferred Land Use Plan, with modifications made to reflect the desirable features of the other concept plans. Details on the concept plan evaluation are provided in the CDP Consultation Report prepared by Morrison Hershfield.

On May 16, 2018, a final public open house was held to present and receive feedback on the preferred Land Use Plan. In keeping with requirements for the Class EA, options and preferred alternatives for servicing and transportation projects were also presented. The meeting concluded with a discussion of next steps, including preparation of the final CDP document, an Official Plan Amendment (OPA), Master Servicing Study (MSS), Master Transportation Study (MTS), Area Parks Plan (APP), and final Class EA documentation.

2.2.2 The Coordinated Municipal Class Environmental Assessment

A critical element of the EUC Phase 3 Area CDP process was the coordination of the planning process under the Official Plan with the Class EA process for proposed infrastructure projects. The objective of a coordinated process is to create a set of guiding documents that will shape the development of a healthy, vibrant, and liveable community.

Combining the CDP process with the Class EA creates an opportunity to coordinate the requirements of the Environmental Assessment Act and the Planning Act and provides an integrated approach to the planning and development of all aspects of the community.

The coordinated planning process is efficient because background studies and existing conditions reports can be shared between the two processes; stakeholders and advisory committees are able to consider all aspects of planning and servicing; and the public review and approval processes can be consolidated and simplified.

2.2.3 Funding and Cost Recovery

Funding for the CDP and has been front-ended by Richcraft Homes. Policies contained with the Secondary Plan that implement the CDP require that all landowners within the EUC Phase 3 Study Area enter into a Funding Agreement to share the costs of developing and preparing the CDP and supporting studies. This agreement must be prepared and developers must be in good standing before a development application for lands within the Study Area will be approved.

This excludes the developments that were completed within the Study Area while the CDP Terms of Reference was underway, namely the three automobile dealerships located on the east side of Mer Bleue Road (south of Innes Road) and the Tamarack Chaperal condominium located northwest of Brian Coburn Boulevard and Gerry Lalonde Drive. As previously discussed, the Orléans Health Hub parcel was part of the Mer Bleue CDP (2006) and therefore is not required to contribute to the EUC Phase 3 Area CDP Funding Agreement.

Private cost sharing agreements will be required to develop the infrastructure recommended in this CDP, where applicable. For example, a Core Services Agreement, Master Parkland Agreement, and agreement(s) for other shared works will be developed. Some infrastructure recommended in this CDP will be front-ended by private landowners with planned recoveries from Development Charges, such as the stormwater management pond, sewer oversizing, and select transportation works.

3 A Vision and Principles for Development of this New Community

It is envisioned that the East Urban Community (EUC) Phase 3 Area will be a hub of activity for the residents of Orléans and the rest of the city. Its mix of housing, offices, shops and commercial services, combined with leisure and recreational opportunities will make it an attractive place to live, work, and play. Rapid transit will have successfully transitioned from bus priority measures on roadways shared with other traffic, to buses travelling on an exclusive Bus Rapid Transit (BRT) right-of-way. The BRT will provide excellent connections for commuters travelling to jobs in other communities or arriving to work in the Community Design Plan (CDP), which will offer a range of employment opportunities.

An offset grid pattern street network with regularly spaced intersections will allow for efficient transit, cycling, and vehicular travel and pedestrian movements. The hydro corridor will provide a strong linear corridor for pedestrians and cyclists and will form part of a Greenspace Network which links features such as Innes Park Woods, watercourses, parks, and open spaces. With its compact form, mix of uses, and strong orientation towards walking, cycling and transit, the CDP area will be a model of sustainable design and development.

The following principles have been established to support the vision for the CDP:

- / Establish a new, vibrant centre in Orléans which accommodates a range of uses, such as office, low, medium and highest density residential, retail, entertainment, and institutional uses, and acts as a central node of activity for the surrounding community.
- Achieve compact growth which makes efficient use of land and existing infrastructure and is phased in step with required infrastructure improvements.
- / In anticipation of the future BRT Transitway, establish a Transit-Oriented Development (TOD) pattern which incorporates "complete streets", which provide safe, convenient and comfortable conditions for walking, cycling and public transit for all ages and abilities.
- / Ensure that connections across the hydro corridor, the BRT Transitway, and Brian Coburn Boulevard are provided for the safe and efficient passage of pedestrians, cyclists, and motorists from one side of the CDP area to the other.
- Foster growth that complements the existing community of Orléans and facilitates connectivity between the Transit Stations and surrounding neighbourhoods through such measures as multi-use pathways (MUPs), and cycle tracks, safe road crossings, and an efficient road network.
- Protect, improve and restore the Natural Heritage System within and adjacent to the CDP area and create a Greenspace Network which connects natural features, such as woodlands and stormwater ponds, and community features, such as public parks, and shopping areas.
- / Encourage the establishment of a distinct identity for the currently undeveloped CDP area through the creation of area-specific design guidelines which recognize and

- celebrate existing features and promote the creation of new public parks and civic spaces that contribute to a sense of place and foster a sense of community.
- Support the economic development potential of Orléans by creating development opportunities within this CDP area for a range of employment uses that are well-served by

4 History of the East Urban Community Phase 3 Area

When the Official Plan for the amalgamated City of Ottawa was developed in 2003, a Mixed Use Centre designation was established in South Orléans in the approximate location of the two planned Bus Rapid Transit (BRT) stations at Fern Casey Boulevard and Mer Bleue Road. The boundary of the Mixed Use Centre designation evolved over time as the lands to the south, southeast, and southwest were developed.

The South Orléans Mixed Use Centre was further modified in 2016 through Council's approval of Official Plan Amendment (OPA) 180. More specifically, the Ontario Municipal Board (OMB) ordered that the City prepare an Employment Lands Review (ELR) in order to address appeals to the 2013 update to the Official Plan (OPA 150). The ELR determined that there was an oversupply of employment land in the City and proposed re-designating land in certain areas. In recognition that the lands in South Orléans are challenged to attract employment uses seeking convenient access to highways and high visibility, the ELR recommended that the western half of the South Orléans Employment Area be re-designated to General Urban Area, a primarily residential designation. The results of the ELR were implemented in OPA 180.

In order to reinforce the remaining Employment Area at the east end of South Orléans, the ELR recommended that the northeast portion of the Mixed Use Centre designation be re-designated to Urban Employment Area with an area-specific policy that ensures high-density employment uses are located close to the future BRT station (specifically a minimum density of 200 jobs per hectare within 400 metres of the station) (Figure 5). A motion passed when OPA 180 was approved by Council states that the employment density target at the future Mer Bleue Road BRT station is permitted to be modified through the Community Design Plan (CDP) process.

Through the development of this CDP, it was proposed that the South Orléans Mixed Use Centre designation (Figure 6) be removed and replaced with the General Urban Area designation. The General Urban Area designation was determined to be more suitable for South Orléans for a number of reasons, including:

- The lands are far removed from 400-series and City highways (namely Highways 417 and 174) and the City's Trillium and Confederation Light Rapid Transit (LRT) lines.
- Given the distance from major roads and LRT, development on the lands located adjacent to the two BRT stations are expected to mainly serve the Orléans community as opposed to the City as a whole.
- The achievement of 5,000 jobs in the Mixed Use Centre, combined with the expected minimum of 2,000 jobs in the Employment Area designation, is unrealistic given that the east end of the City has historically struggled to achieve significant employment growth.

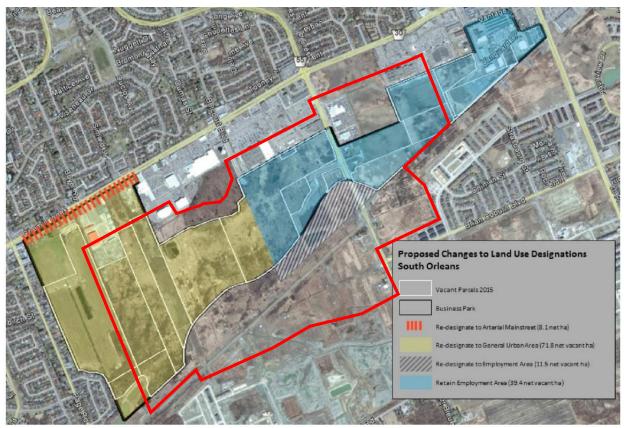


Figure 5. Employment Land Review Final Report (November 2016)

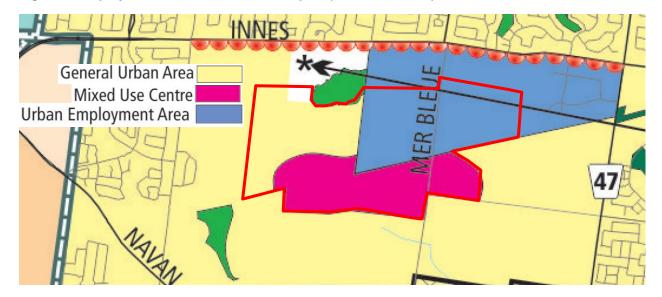


Figure 6. City of Ottawa Official Plan Schedule B- Urban Policy Plan

4.1 Constraints and Opportunities for the Development of the Study Area

The existing conditions reports, including preliminary field studies, informed the identification of constraints and opportunities within the Study Area. Features that were reviewed included landforms, soils and geology, surface water and groundwater resources, aquatic and fish

habitat, headwater features, wetlands, terrestrial vegetation, potential Species at Risk (SAR) and wildlife habitat.

The following constraints were identified:

- The rock barren and the adjacent 30 metres of land located at the northern edge of the Study Area (abutting Innes Park Woods) has been identified as significant wildlife habitat. No additional setbacks or buffers are required beyond the 30 metres of adjacent land and the adjacent five metre setback. Given that the proposed southern extension of Frank Bender Street would bisect this rock barren, additional design criteria and mitigation measures are required to ensure that the construction and operation of this road would minimize the impact on the natural feature and its functions.
- / Sensitive marine clay soils are present in part of the Study Area. Preliminary permissible grade raise recommendations are 2 metres at the northern edge of the Study Area (in the location of the bedrock with shallow overburden) and 0.5 to 1.5 metres at the southern edge of the Study Area (in the location of the silty clay deposit). Atterberg testing has been completed and two zones have been identified. Tree setbacks of 4.5 metres are recommended in the low-medium soil plasticity areas and tree setbacks of 7.5 metres are recommended in the areas of high plasticity soils. These tree setbacks will be confirmed at the Plan of Subdivision stage.
- The stormwater management facility proposed in the southwest corner of the Study Area must respect the environmental setbacks for Reach 7 and Reach 12 that are identified in the report by Kilgour & Associates Ltd. titled "Environmental Impact Statement for SWM Expansion in East Urban Community Mixed Use Centre" (September 5, 2018). The stormwater management facility must also respect the geotechnical setbacks identified in the report by Golder Associates Ltd. titled "Slope Stability Assessment Reaches 7 and 12 Storm Water Management Pond Block 3490 Innes Road Development" (March 2020).
- Recommendations from the Mud Creek and Vanguard Environmental Assessments (EAs) (to be included when available).
- / Breeding bird surveys found seven bird SAR at the provincial and/or federal level (bobolink, least bittern, barn swallow, eastern—wood-pewee, bank swallow, wood thrush and eastern meadowlark) and eight Area Sensitive bird species. SAR birds and their habitat may pose challenges and constraints to future development. See Table 7 in Appendix C for suggested mitigation measures as well as potential permitting requirements for the SAR.
- For the rock barren located at the northern edge of the Study Area (abutting Innes Park Woods), the quality of infiltrating water must be considered if future infiltration measures are proposed. The 30 metre adjacent lands and five metre setback proposed from the rock barren on the Land Use Plan will provide an adequate buffer to protect the sensitive area from groundwater impacts as a result of nearby development.
- / Portions of the Study Area that have been identified as possessing archaeological potential will be subject to Stage 2 archaeological assessment by a licensed archaeologist prior to any future disturbance. No further archaeological assessment is

required for areas indicated as possessing no/low archaeological potential or previously assessed areas.

The Specific Use Provisions found in Part 3 of the Comprehensive Zoning By-law (2008-250) provide guidance regarding the impact of the snow disposal facility that is in the Study Area. Section 90, subsection 1 of the Comprehensive Zoning By-law states that where permitted, a snow disposal facility must be located at least 200 metres from a residential zone. Subsection 2 states that despite subsection 1, the minimum required 200 metre setback may be reduced to a minimum of 100 metres provided that noise attenuation measures are introduced to mitigate the noise level of the snow disposal facility so that it does not become a nuisance to surrounding dwellings.

The wetland communities located in the Study Area are not designated natural heritage features and as such, are not a constraint to development. Further, given that there is no critical aquatic habitat, SAR, or sensitive spawning areas in or around the Study Area's aquatic features, no significant development constraints were identified based on these grounds. As addressed in Niblett's Headwater Drainage Feature (HDF) Assessment Summary report (March 28, 2018), management recommendations have been finalized for all watercourses and no further HDF assessments are required. The mitigation measures required for select headwater drainage features will be implemented through the Master Servicing Study (MSS). Based on the management recommendations, the preferred Land Use Plan and Demonstration Plan did not require any changes due to the presence of watercourses.

Prior to development, a qualified biologist should reassess SAR habitat and species presence through an Environmental Impact Statement. Natural features should also be reassessed to confirm their presence, form, function, and ecosystem value, and to identify any additional mitigation measures needed to protect the features and their functions, once more details about the nature and timing of the adjacent development are known.

The following opportunities have been identified in the Study Area:

- From a geotechnical perspective, the existing soils in the Study Area are suitable for commercial and residential structures, with or without basements.
- The presence of the Innes Park Woods and the rock barren provides an opportunity for the new community's residents to experience nature in proximity to their homes.
- / The hydro corridor presents an opportunity for pedestrian and cycling connectivity and possibly some wildlife movement.
- To offset the impacts of the proposed development, a compensation plan may be developed which contains measures that could improve the habitat of species in the area.
- The historic use of most of this area for agriculture has left very few mature trees on the landscape and there is considerable opportunity to improve the local urban forest through tree planting along streets, in parks and open spaces, and on private property, where space permits. The retention or transplanting of existing trees, where possible, would also contribute to tree cover.

There are two wooded areas surrounding the existing stormwater management pond located in the southwest corner of the CDP study area that will be impacted by the required pond expansion, neither of which meet the definition of Significant Woodland in the Official Plan. More specifically, the wooded area located along the southern edge of the eastern end of the existing pond will be removed completely and 0.89 hectares of a wooded area located along the northern edge of the eastern end of the existing pond will be removed. An existing Significant Woodland located further west, which includes a forest stream, will be fully retained.

The wooded area located along the northern edge of the pond includes habitat for Eastern Wood-pewee, which is not protected under the Endangered Species Act (ESA) but is subject to the federal Species at Risk Act (SARA) and the Migratory Bird Convention Act. Further, Eastern Wood-pewee is a Species of Special Concern, therefore its habitat is considered Significant Wildlife Habitat. The wooded area (including the Significant Woodland) proposed to be retained along the northern edge of the pond is anticipated to be sufficient to maintain the current Eastern Wood-pewee population. No SAR protected under the ESA were found to be present on or adjacent on the lands during field surveys. Therefore, no impacts to SAR or SAR habitats are anticipated from the above noted tree removal.

The two existing Urban Natural Features that are located to the north (Innes Park Woods) and southwest (woodlot at Navan Road and Pagé Road) of the Study Area must be retained. The existing Innes Park Woods Urban Natural Feature will benefit from the protection of the abutting rock barren and its adjacent lands.

4.2 Additional Resources for the Preparation of this Plan

The following subsections describe the key studies and policy documents that informed the development of this CDP.

4.2.1 Environmental Assessments

The guiding documents of the coordinated planning and environmental assessment (EA) process include this CDP, an MSS and a Master Transportation Study (MTS). The supporting studies to these documents establish a network of streets and municipal infrastructure, including water, sanitary and stormwater management systems. These facilities will ultimately be dedicated to the City of Ottawa through the subdivision approvals process as they will become municipal infrastructure. The Province of Ontario's Environmental Assessment Act requires an EA for any major public sector undertaking, including public streets, transit, water, sanitary, and stormwater installations. This EA process has been integrated into the implementation of this CDP.

Two additional EA studies have also been completed, including the Vanguard Drive Class EA and the Mud Creek Cumulative Impacts Study Class EA. The Vanguard Drive EA was completed to determine the preferred alignment and design of the extension of Vanguard Drive from its current terminus to Mer Bleue Road. The Mud Creek Cumulative Impacts Study has been completed to provide parameters for the development of new stormwater management infrastructure and to improve downstream erosion on Mud Creek.

4.2.2 Building Better and Smarter Suburbs (BBSS) (2015)

On March 10, 2015, Planning Committee approved the report titled "Building Better and Smarter Suburbs: Strategic Directions and Action Plan" (BBSS), which aims to support land efficiency and functionality in new suburban subdivisions. The Vision for the BBSS initiative is "the principles of good urbanism should apply to the suburbs as they do to other parts of the City". This vision is supported by four principles which speak to Ottawa's suburbs being: land efficient and integrated; easy to walk, bike, bus, or drive; well designed; and financially sustainable.

The following nine core topic areas are identified in the BBSS, each of which has its own objectives, strategic directions, and action plan:

- 1. Street Network and Land Use
- 2. Parks and Open Space
- 3. Stormwater Management
- 4. School Sites
- 5. Parking
- 6. Road Rights-of-Way
- 7. Rear Lanes
- 8. Trees
- 9. Utility Placement

While many of the strategic directions established through BBSS apply at the Plan of Subdivision, Zoning, and Site Plan Control stages, these matters have been considered throughout the development of a Land Use Plan for the East Urban Community (EUC) Phase 3 Area CDP.

4.2.3 Urban Design Guidelines for Greenfield Neighbourhoods (2007)

The "Urban Design Guidelines for Greenfield Neighbourhoods" were approved by City Council on September 26, 2007 and are intended to illustrate the City's expectations for greenfield neighbourhoods within the Urban Area of the City of Ottawa. The guidelines address several elements of subdivision design, including structuring layout, street design, residential building and site design, non-residential building and site design, greenspaces, and utilities and amenities. The guidelines were considered in the development of the CDP's Land Use Plan and Demonstration Plan.

4.2.4 Park Development Manual, Second Edition (2017)

The intent of the City of Ottawa "Park Development Manual, Second Edition (2017)" is to define, standardize, and improve the park and pathway development process in the City. The Manual establishes a parks classification system and contains guidelines for the development of each park type. In keeping with Official Plan policy 2.4.5.7, which targets a 30% tree canopy for the entire City, the Manual notes that a 30% tree canopy is desirable in City parks. Additionally, conformity with the policies of OPA 159 (Cost-Sharing for Park Development Outside the Greenbelt and in the Rural Area) is required.

5 Plans for the Development of the EUC Phase 3 Area

The Plans for the development of the East Urban Community (EUC) Phase 3 area were prepared iteratively following the preparation of extensive background information and feedback from the Technical Advisory Committee (TAC), Councillors and the public.

5.1 Land Use Plan

The Land Use Plan for the EUC Phase 3 Area Community Design Plan (CDP), shown in Figure 7 Figure 7, illustrates the approximate location of arterials and collector streets, parks, a stormwater management facility, and varying residential densities. The Land Use plan should not be confused with the Demonstration Plan, which illustrates the preferred way that the Land Use Plan should develop, including potential local road patterns and blocks sizes/orientation (see Figure 8). The following land use categories are identified on the Land Use Plan:

- / Low Density Residential
- / Medium Density Residential
- / Highest Density Residential
- / Commercial
- / Mixed-Use
- / Employment
- / Institutional
- / Park
- / Rock Barren (with 30 metres of adjacent land and an additional five metre setback)
- / Stormwater Management Facility
- / Hydro Easement/Open Space
- / Snow Disposal Facility (and associated setback)

The intent and permitted uses of each land use category are outlined in the following subsections and will be subject to the Community Design Policies and Guidelines included in Section 6. The distribution of land uses in the Land Use Plan are summarized in Table 1.

Section 3.1 of the Official Plan establishes a range of generally permitted uses which are permitted in all land use designations, subject to certain policies. The western half of the CDP area (west of Frank Bender Street) is designated "General Urban Area" in the Official Plan, which is primarily a residential designation. It is expected that the lands designated General Urban Area, excluding parks and the stormwater management facility, will be zoned Residential First (R1), Second (R2), Third (R3), Fourth (R4) or Fifth (R5) Density Zone in the Comprehensive Zoning By-law (2008-250). The R1 through R5 zones all permit the following generally permitted uses, subject to certain provisions:

- / Home-based business
- / Home-based day care
- / Bed and breakfast
- / Group home

- / Retirement home, converted
- / Diplomatic mission
- / Secondary dwelling unit
- / Urban agriculture
- / Park

Other permitted uses include a secondary dwelling unit and a coach house. Table 1. Land Use Distribution

Category of Land Use	Land Use	Subtotal Area	Total Gross Area (%)
Residential	Low Density Residential*	58 ha (26%)	
	Medium Density Residential	5 ha (2%)	
	Highest Density Residential	15.5 ha (7%)	
			78.5 ha (35%)
Commercial			7 ha (3%)
Mixed Use			12 ha (5%)
Employment	General Employment Lands	37.5 ha (17%)	
	Snow Disposal Facility	7 ha (3%)	
			44.5 ha (20%)
Institutional			9 ha (4%)
Open Space	Parkland	10.5 ha (5%)	
	Rock Barren (including 30 metre adjacent lands and 5 metre setback)	5 ha (2%)	
	Stormwater Management Facility (expansion area)	1.5 ha (1%)	
	Hydro Easement/Open Space	23 ha (10%)	
			40 ha (18%)
Transportation	Bus Rapid Transit (BRT) Transitway	9 ha (4%)	
	Collector and Arterial Streets	21 ha (10%)	
			30 ha (14%)
Total			220 ha

^{*}Local streets are expected to account for approximately 20% of the gross area of the Low Density Residential designation

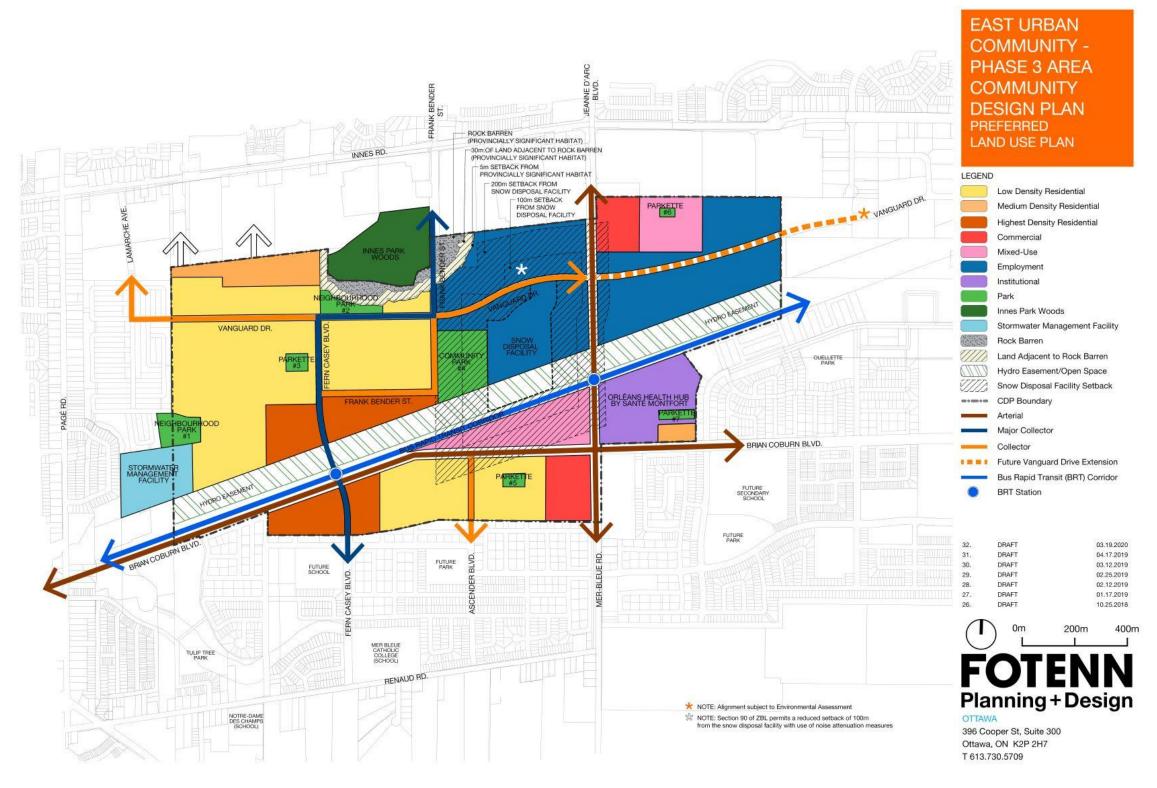


Figure 7 . Land Use Plan

5.2 Demonstration Plan

A Demonstration Plan has been developed for the CDP in order to illustrate the intent for development (Figure 8). The Demonstration Plan illustrates a preferred local street layout for the Low Density Residential designation as well as locations of parks, stormwater infrastructure, and the BRT Transitway and stations. The proposed local road network is designed to achieve connectivity and permeability, while reducing cut-through traffic patterns.

The Demonstration Plan illustrates development blocks which could accommodate low density residential (detached, semi-detached, and townhouse units) as well as blocks that could accommodate medium density residential uses and highest density residential. The densities are deliberately disbursed throughout the Demonstration Plan in order to reduce localized traffic and parking impacts and create a good mix of housing options across the community.

As required in the Official Plan, an area of land has been reserved for the development of apartment units or alternative forms of multiple-attached dwellings that achieve similar residential densities, such as stacked and back-to-back townhouses. The highest density residential blocks are shown immediately adjacent to the western BRT station.

Although the Demonstration Plan is the preferred development pattern, it may be necessary to deviate from this plan to address unforeseen constraints and opportunities that may arise during the development application approvals process. Any development that deviates from the Demonstration Plan must respect the overall vision and intent of the CDP. Such deviations from the Demonstration Plan may not necessarily require an amendment to the Official Plan or an update to the CDP (see Section 7.1).

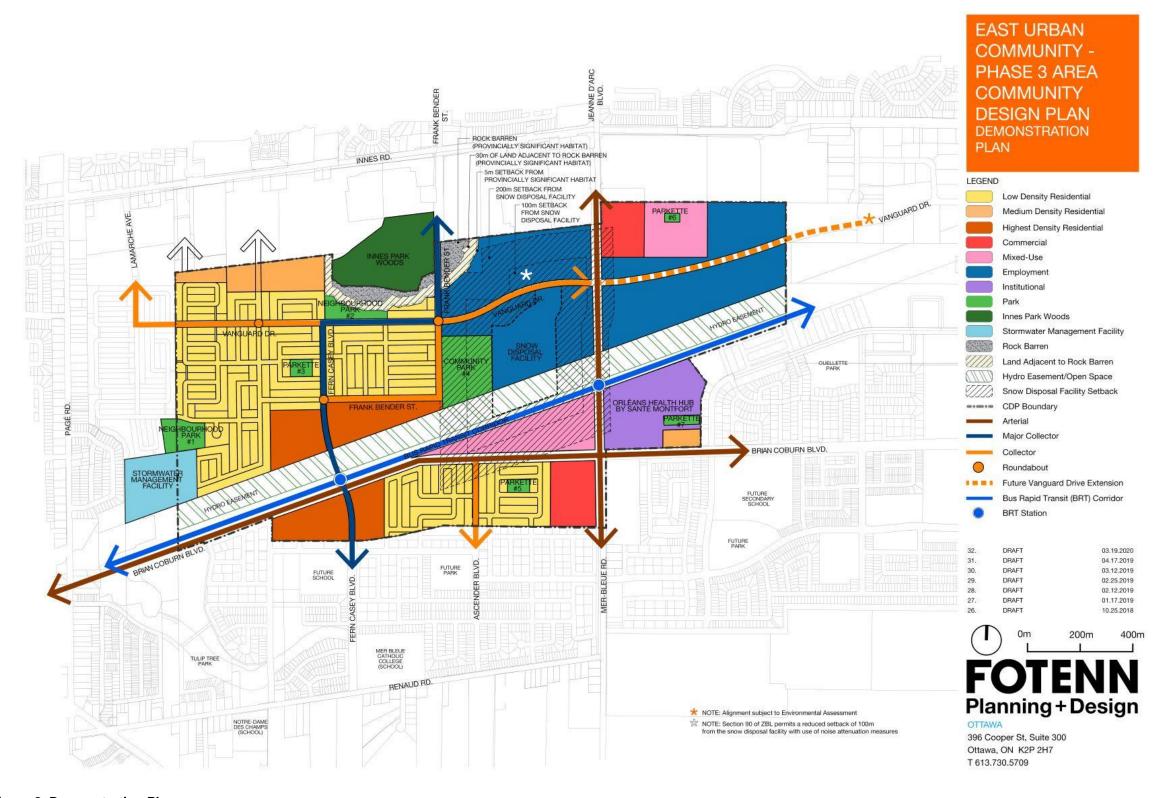


Figure 8. Demonstration Plan

5.2.1 Residential Areas

Residential areas are proposed in the location of the underlying General Urban Area designation in the Official Plan. This includes areas of Low, Medium and Highest Density Residential land uses, which are broken down in Table 2 below. Official Plan policy requires that lands outside of the Greenbelt that are included in a CDP have a mix of residential dwellings with at least 30%, but not more than 55% detached dwellings, at least 10% apartment dwellings (which may include alternative forms of multiple-attached dwellings that achieve similar residential densities, such as stacked townhouses), with the remainder being multiple dwellings other than apartments. The Official Plan also requires a minimum density of 34 units/net hectare.

Table 2 assumes that the unit type split in the Low Density Residential designation will be 30% detached units and 70% townhome units, which equates to a density of 43 units/net ha. This density reflects the highest density anticipated in this designation and, to be conservative, the Master Servicing Study (MSS) and Master Transportation Study (MTS) use this upper estimate in their analysis of future required infrastructure. However, it is possible that the actual split in the Low Density Residential designation may be as low as 60% detached units and 40% townhouse units, which would reduce the density to 34 units/net ha and the total number of units to 1,500 units.

Table 2. Estimated Units by Housing Type for the CDP

CDP Designation	Approximate Net Area (ha)	Estimated Number of Units	Estimated Density
Low Density Residential	46.5 net ha	2,000 units 30% detached units 70% townhome units	43 units/net ha
Medium Density Residential	5.0 net ha	330 units*	62 units/net ha
Highest Density Residential	15.5 net ha	1,240 units	80 units/net ha
Mixed-Use (50% residential)	6.0 net ha	480 units – 1,658 units**	80 units/net ha
Total Residential Units	73 net ha	4,050 to 5,230 units	

^{*}The estimated number of units includes 84 units for the parcel located on the north side of Brian Coburn Boulevard, east of Mer Bleue Road (which are already constructed) and 62 units/net ha on the vacant lands

Table 3 presents population estimates based on the estimated household sizes and estimated number of units.

^{**}The 1,658 unit estimate includes 1,406 units proposed for 4200 Innes Road (as per a Zoning By-law Amendment application), which equates to greater than 80 units/net ha

Table 3. Estimated Population Based on Unit Estimates

Land Use		Household Size (p/u)	Estimated Number of Units	Estimated Population (2016 Census)
		(2016 Census*)		
Low Density	Detached	3.4	600 units	2,040 people
Residential	Townhome	2.57	1,400 units	3,600 people
Medium Density Residential		2.18	330 units	720 people
Highest Density Residential and Mixed-Use (50% residential)		1.55	1,720 to 2,900 units	2,670 to 4,495 people
Total			4,050 to 5,230 units	9,030 to 10,855 people

^{*}The residential population per unit values used in the MSS and MTS are based on Ministry of Environment, Conservation, and Parks (MECP) guidelines for servicing demand calculations, which differ from 2016 Census values

General Residential Designation Policies

1. Throughout the residential designations, small-scale neighbourhood, commercial activity will be permitted on corner lots facing or abutting collector streets.

5.2.1.1 Low Density Residential

The goal of the Low Density Residential designation is to provide for ground-oriented dwellings with a minimum density of 34 units per ha.

The Low Density Residential designation will be characterized by detached, semi-detached, linked-detached, and townhome units. Zoning will permit a maximum of 4 storeys. Rear lane townhomes and back-to-back townhomes may be distributed throughout the Low Density Residential designation but will not be the predominate built form.

Low Density Residential Policies

- Ground-oriented multiple-attached dwellings will be distributed throughout the Low Density Residential areas in order to provide a complete range of ground-oriented housing opportunities, including affordable housing, and to create more diverse and attractive neighbourhoods.
- 2. Stacked townhomes may be permitted along a collector street,
- 3. Back-to-back-stacked townhomes, and apartments are not permitted in the Low Density Residential Area designation.

5.2.1.2 Medium Density Residential

The goal of Medium Density Residential designation is to provide a neighbourhood context that is supportive of public transit and pedestrian and cycling movement. A density of 62 units/net hectare was used to project the number of units in this designation, however, this density is not a minimum requirement for each development parcel.

The Medium Density Residential designation will be characterized by townhomes, rear lane townhomes, back-to-back townhomes, stacked townhomes, back-to-back stacked townhomes, and low-rise apartments (minimum 2 storeys up to 4 storeys). Under certain conditions, mid-rise apartment buildings up to 9 storeys may also be permitted.

Medium Density Residential Policies

- 1. The permitted heights in the Medium Density Residential designation are:
 - a. a minimum of two storeys
 - b. a maximum of 4 storeys for townhomes, and low-rise apartments
 - c. a maximum of 9 storeys for mid-rise apartments fronting on a collector street.
- 2. Detached, semi-detached, and linked-detached dwellings are not permitted in the Medium Density Residential designation.
- 3. West of the Innes Park Woods the city will permit, without need for an Official Plan Amendment, any extension of the Medium Density Residential designation area south to Vanguard Drive.

5.2.1.3 Highest Density Residential

The goal of highest density residential housing is to provide for connected housing within a neighbourhood context that is based on public transit and pedestrian and cycling movement. A density of 80 units/net hectare was used to project the number of units in this designation, however, this density is not a minimum requirement for each development parcel.

The Highest Density Residential designation will be characterized by stacked back-to-back townhomes, low-rise apartments (up to 4 storeys) and mid-rise apartments (5 to 9 storeys). If fronting on an arterial or major collector high-rise apartments may also be permitted. Back-to-back and stacked townhomes may be permitted, where appropriate. Rear lane townhomes will only be permitted where they provide an urban design benefit, such as fronting units onto abutting collector streets.

When the Highest Density Residential blocks are developed, consideration should be given to the provision of convenient, comfortable, safe, easily navigable, continuous and barrier-free pedestrian and cyclist connections to the BRT station at Fern Casey. This may include municipal easements to allow for connections through the hydro corridor and/or through the Highest Density Residential blocks.

Highest Density Residential Policies

- 1. The maximum height permitted is 4 storeys for stacked townhomes and low-rise apartments and 5 to 9 storeys for mid-rise apartments.
- High-rise apartments fronting on a major collector or abutting an arterial street may have a maximum height of 12 storeys. Subject to an application to amend the Comprehensive Zoning By-law, high-rise apartments greater than 12 storeys may also be permitted.
- 3. Detached, semi-detached, linked-detached, and townhome dwellings are not permitted in the Highest Density residential areas.

5.2.2 Commercial Designation

The Land Use and Demonstration Plans designate two commercial areas. The first is a 3.5-hectare area at the northern boundary of the Study Area, on the east side of Mer Bleue Road. This 3.5 ha parcel has developed with three separate automobile dealerships in recent years. The second is a 4.3-hectare area located at the southern boundary of the Study Area, on the west side of Mer Bleue Road. These lands are currently vacant.

Each of the two commercial areas are associated with Mer Bleue Road, which is an arterial road. The southern commercial area is located in to order to allow both pedestrian and vehicle access.

The goal of the Commercial designation to provide lands to allow for commercial activity that meets the needs of residents. Due to the large amount of commercial activity on the Innes Road Arterial Mainstreet, it is anticipated that small scale stores, restaurants and grocery will locate in the commercial area. More specifically, permitted uses in the Commercial designation include:

- / Retail, retail food, convenience stores, and click-and-collect pick-up points
- / Restaurants
- / Banks and other financial services
- / Service and repair uses
- / Personal service businesses
- / Recreational and athletic facilities
- / Professional offices
- / Medical facilities
- / Instructional facilities
- / Animal care establishments and hospitals
- / Post office
- / Municipal service centre
- / Higher density residential development
- / Private parks and open spaces

Commercial Policies

- 1. Buildings in the commercial area will be low-rise, with a maximum height of four storeys. The buildings will be sited along the Mer Bleue Road frontage to define the street edge and create an active streetscape.
- 2. On-street parking will not be permitted in the Mer Bleue Road right-of-way.

Development within the Commercial area shall be subject to the policies and guidelines found in Section 6 of this CDP.

5.2.3 Mixed-Use Designation

Two areas are designated Mixed-Use on the Land Use Plan. The first is a 6.3 hectare, triangular-shaped parcel of land located southwest of the Mer Bleue BRT station. This parcel is bound by Mer Bleue Road to the east, Brian Coburn Boulevard to the south, and the BRT Transitway to the north. The second is a 4.9-hectare parcel of land at 4200 Innes Road, which is designated and zoned Arterial Mainstreet in the Official Plan. These lands were recently zoned to accommodate a Concept Plan proposing six 10-storey buildings with ground floor and standalone commercial/retail uses.

The goals of Mixed-Use designation are to allow for the development of a range of commercial and service-oriented land uses served by public transit in proximity to residential areas, office uses, and medium and highest density residential uses. Permitted heights in the Mixed-Use Designation are a minimum of 3 storeys and a maximum of 12 storeys. Uses may be mixed in individual buildings or occur side by side in separate buildings. High density residential land uses are encouraged to provide non-residential uses. Permitted uses include:

Residential Land Uses

- / Apartment buildings (low-, mid-, and high-rise)
- / Retirement homes

On the mixed-use block west of Mer Bleue Boulevard Road and south of Brian Coburn Boulevard, stacked townhomes and back-to-back stacked townhomes may be permitted over a minority of the area (<50%) in order to maximize land efficiency.

Non-Residential Land Uses

- / Retail, retail food, convenience stores, and click and collect facilities
- / Restaurants and bars
- / Banks, bank machines, and other financial services
- / Personal service businesses
- / Service and repair uses
- / Recreational and athletic facilities
- / Daycares
- / Offices
- / Hotels
- / Medical facilities
- / Instructional facilities and schools

- / Animal care establishments and hospitals
- / Post office
- Municipal facilities such as community centres, municipal service centres, community health and resource centres, and libraries
- / Theatres
- / Residential care facilities
- / Places of Worship
- / Private parks and open spaces

Uses that are similar in nature to those listed above may also be permitted, subject to the discretion of City Staff.

A density of 62 units/net hectare was applied to half of the Mixed Use land area in order to project the number of residential units in this designation, however, this density is not a minimum requirement for each development parcel.

Mixed Use Policies

- 1. Detached, semi-detached, and townhome dwellings are not permitted.
- 2. The maximum height permitted is:
 - a. 4 storeys for low-rise apartments;
 - b. 5 to 9 storeys for mid-rise apartments; and
 - c. 12 storeys for High-rise apartments and retirement homes.
- 3. Subject to an application to amend the Comprehensive Zoning By-law high-rise apartments greater than 12 storeys may also be permitted.
- 4. The minimum height permitted is 3 storeys.
- 5. The development of any sensitive land uses (including residential) within 200 metres of the snow disposal facility is dependent on a detailed noise study and the use of noise mitigation measures to mitigate the noise level. All lands within 200 metres of the snow disposal facility, regardless of use, will require a warning clause concerning noise and fugitive light from the operations of the snow disposal facility.
- 6. No sensitive land uses are permitted within 100 metres of the snow disposal facility.

5.2.4 Employment

The Employment designation applies to those lands designated Urban Employment Area in the Official Plan. These lands are located in the eastern half of the Study Area, north of the hydro corridor, both east and west of Mer Bleue Road. The land uses permitted within the Urban Employment Area designation are permitted in the Employment designation, including:

/ Traditional industrial uses such as manufacturing, warehousing, distribution, storage, communications, construction;

- / Uses that store most products outdoors and require large land areas devoted to external storage, sale or service of goods or for vehicle sales and service;
- Office uses and similar uses at similar densities, including, research & development and emergency services.
- / Sample and showroom uses, meaning that portion of a building operating only in association with a warehouse or other permitted use in the same building.
- A variety of ancillary uses, such as recreational, health and fitness uses, child care, and service commercial uses (e.g. convenience store, doctor and dentist office, shoe repair shop, coffee shop, restaurant, bank, dry-cleaning outlet, service station or gas bar) consisting of small occupancies on individual pads, within a building containing a permitted use, in groups as part of a small plaza, or on small lots.

It is anticipated that lands located within 400 metres of the Mer Bleue BRT station are more likely to be developed with transit-supportive employment uses that provide higher job ratios and exhibit a more compact footprint, such as multi-storey office buildings. Over time, when the BRT Transitway is developed and functional, infill development may be accommodated on these lands through the use of underground or structured parking.

In comparison, the lands located further from the BRT station are expected to be developed with uses such as manufacturing, warehousing, distribution, research and development facilities and utilities, which have lower job densities due to larger land area requirements.

The existing municipal snow disposal facility located on the west side of Mer Bleue Road, abutting the northern edge of the hydro corridor, is expected to remain functional for the life of this CDP but may ultimately be redeveloped with employment-generating uses. Noise sensitive uses (residential, day care, hospital, etc.) are not permitted within 200 metres of the snow disposal facility, or 100 metres if noise attenuation measures are employed.

Employment Policies

- As per Policy 3.6.5.14 of the Official Plan, for the lands identified by Parcel Identification Numbers (PIN) 145631528 and 145630011, which are located immediately northeast of the future BRT station at Mer Bleue Road, up to four separate enclosed Recreational and Athletic Facilities, totalling 45,000 m² of combined gross floor area, are permitted.
- 2. The maximum permitted height is 12 storeys. Additional height may be permitted subject to an application to amend the Comprehensive Zoning By-law.

Table 4. Estimated Number of Jobs

Location	Approximate Gross (Net) Land Area	Estimated Density	Estimated Number of Jobs
Employment CDP designation- within 400 metres of BRT station	14 ha (12 ha)	120 jobs/net ha (office)	1,440 jobs

Location	Approximate Gross (Net) Land Area	Estimated Density	Estimated Number of Jobs
Employment CDP designation- beyond	24 ha (20 ha)	35 jobs/net ha (industrial)	700 jobs
400 metres of BRT station	Part of 4200 Innes Road: 5 ha (4 ha)	Based on concept plan associated with 2017 Zoning By-law Amendment application: 256-bed residential care facility at 1 job/bed and 10,924 m ² industrial space at 1 employee/74 m ²	255 jobs (residential care facility) + 150 jobs (industrial)
Mixed Use CDP designation (50% residential, 50% employment)	Southwest of Mer Bleue BRT station: 50% of 6 ha (5 ha) = 3 ha (2.5 ha)	70% (2 net ha) at 120 jobs/net ha (office) 30% (1 net ha) at 50 jobs/net ha (retail/commercial)	240 jobs (office) + 50 jobs (retail/commercial)
	Part of 4200 Innes Road: 5 ha (5 ha)	Based on concept plan associated with 2017 Zoning By-law Amendment application: 350-unit retirement home at 1 job/5 units and 2,774 m ² retail/commercial at 1 employee/45 m ²	70 jobs (retirement home) + 60 jobs (retail/commercial)
Commercial CDP designation	7 ha (6 ha)	50 jobs/net ha	300 jobs
Institutional CDP designation (Orléans Health Hub by Santé Montfort)	9 ha (9 ha)	Job range based on the estimate for the first phase of development (100 jobs) (2018) and the estimate for the ultimate number of jobs (1,500 jobs) noted in the Zoning Bylaw Amendment application (2010)	100 jobs to 1,500 jobs
TOTAL			3,365 to 4,765 jobs

5.2.5 Institutional

The Institutional designation applies to the property municipally known as 2225 Mer Bleue Road, which is located immediately southeast of the Mer Bleue BRT station. This property is planned to be developed with the Orléans Health Hub by Santé Montfort, which will allow hospital and community-based partners to deliver services in one location that spans the continuum from community support to specialized care.

The uses permitted in the Institutional designation are those permitted in the existing Mixed-Use Centre Zone with Exceptions (MC [1812]) zoning for the property.

A Site Plan Control application for this property was approved in 2019. A one-storey building is proposed close to the intersection of Brian Coburn Boulevard and Mer Bleue Road, with a surface parking area to the north. A 0.5-hectare parkette (Park #7 on the Area Parks Plan (APP)) is proposed in the southeastern corner of the site. As previously noted, a CDP was prepared for these lands in 2006. This CDP does not recommend amendments this plan but takes the approach that the current CDP is complementary.

5.2.6 Parkland

An Area Parks Plan (APP) was prepared in accordance with the City of Ottawa "Park Development Manual, Second Edition (2017)" and the Community Design Policies and Guidelines contained in Section 6 of this document. The APP is a high-level planning document that explores and makes recommendations on the distribution, programming and high-level costing for parks within the Study Area. The goal of the APP is to ensure that all residents have access to open space and recreation opportunities.

Seven parks totalling 10.78 hectares are proposed within the Study Area, including a Community Park (4.65 hectares); two Neighbourhood Parks (1.82 hectares and 1.29 hectares); and four parkettes (1.5 hectares, 0.56 hectares, 0.50 hectares, and 0.46 hectares). Each of the parks is distributed so that the majority of residents will be within a five-minute (450 metre) walking distance of a park (Figure 9). The total area of parks meets the requirements of the Parkland Dedication By-law (2009-95). If actual unit counts at the time of Plan of Subdivision are notably lower or higher than projected in the CDP, the size of the proposed parks will be adjusted.

The APP contains Facility Fit Plans which identify anticipated facilities for each park and demonstrate how these facilities could be accommodated on the park blocks. Both the facilities and the park block layouts are subject to change at the time of detailed park design, which will not occur until the Parkland Dedication By-law (2009-95) is triggered at the Plan of Subdivision stage.

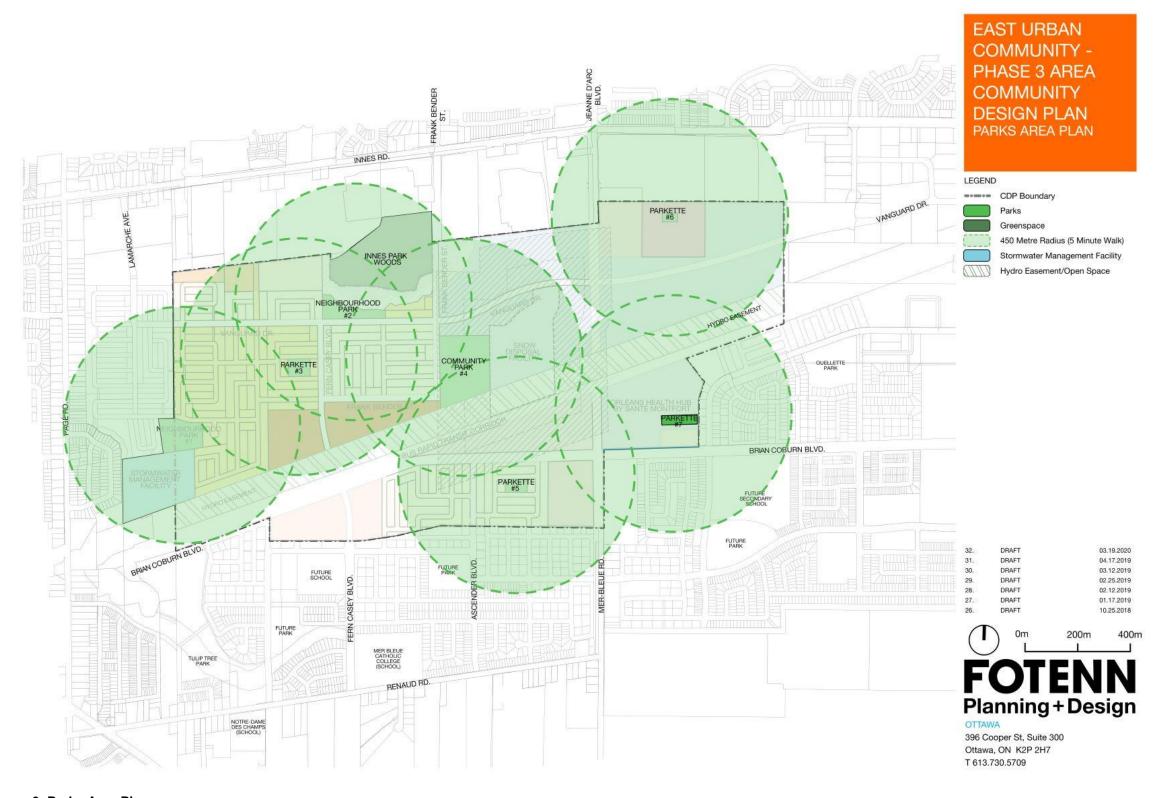


Figure 9. Parks Area Plan

5.2.7 Rock Barren

A rock barren featuring large areas of exposed limestone bedrock is located along the northern edge of the Study Area, to the immediate south and east of Innes Park Woods. The rock barren and the adjacent 30 metres of land have been identified as Significant Wildlife Habitat for snakes due to the presence of an overwintering habitat (hibernacula) within the fractured limestone of the rock barren. At least three species of snakes have been identified using this habitat (eastern gartersnake, milksnake, and northern redbelly snake).

In order to provide suitable separation between the Significant Wildlife Habitat and future development, an additional five metre setback is provided on the Land Use Plan and Demonstration Plan. Low intensity land uses are permitted immediately adjacent to the five-metre setback, including:

- / A Neighbourhood Park at the western end;
- Low-density residential (with deeper than average lots) in the central portion; and
- / Employment east of Frank Bender Street, which aligns with the applicable Urban Employment Area Official Plan designation for this area.

These adjacent land uses are expected to be compatible with the nearby Significant Wildlife Habitat.

The extension of Frank Bender across the rock barren presents some challenges. The area must be protected from encroachment and is particularly susceptible to changes in water infiltration (in terms of both quantity and quality) and shading of the rocky outcrops. The road also poses a barrier to wildlife movement, which should be avoided or reduced to the extent possible through the use of ecopassages, protective barriers, and other measures.

Construction impacts on the rock barren and the local wildlife will also need to be controlled. Design and construction of the road therefore will require additional design criteria and mitigation in order to protect the Significant Wildlife Habitat and the wildlife that depend on it.

Rock Barren Policies

- The extension of Frank Bender Street across the rock barren will be permitted subject to a detailed design approved by the City, in consultation with the Ministry of Natural Resources and Forestry (MNRF) and the Conservation Authority.
- In order to offset the impacts of the proposed development, a compensation plan may be developed which contains measures that could improve the habitat of species in the area.

5.2.8 Stormwater Management Facilities

There is an existing, temporary 0.85-hectare stormwater management pond currently located in the northwest corner of the Study Area. The pond was constructed in 2008/2009 to manage the stormwater from the large format retail development along Innes Road to the north, which was constructed at the same time.

There is also an existing stormwater management pond located along the northcentral edge of the Study Area, behind the commercial along Innes Road, which is to remain as-is.

Finally, there is an existing permanent pond located in the southwest corner of the Study Area which was constructed before 2012 in order to service the new residential communities to the south of the hydro corridor, including Trailsedge, and to allow for future development of a business park to the north of the hydro corridor.

The MSS outlines a stormwater management strategy which involves the removal of the two existing temporary ponds and the expansion of the existing permanent stormwater management pond. The mitigation measures required for select headwater drainage features (HDFs), as identified in Niblett's Headwater Drainage Feature Assessment Summary report dated March 28, 2018, forms part of the stormwater management strategy. The MSS also addresses the implementation of Low Impact Development (LID) best management practices.

5.2.9 Hydro Easement/Open Space

A 91-metre wide hydro corridor runs through the approximate centre of the Study Area in a northeast-southwest direction. The hydro corridor is accommodated via an easement over privately-owned lands managed by Hydro One Networks Inc.

As illustrated on the CDP Pedestrian and Cyclist Facilities Plan (Figure 11), an off-road Multi-Use Pathway (MUP) is proposed along the entire length of the hydro corridor. Several northsouth off-road MUPs are planned to connect with the MUP through the hydro corridor and there will also be connections with planned sidewalks along abutting municipal streets.

The northern extension of Fern Casey Boulevard, a Major Collector, will cross the hydro corridor, which will require technical approvals from Hydro One.

The individual easements on title specify the permissions and restrictions that apply to the hydro corridor lands. In accordance with the Provincial Secondary Land Use Program, secondary uses, such as active and passive recreation, agriculture, community gardens, other utilities and uses such as parking lots and outdoor storage that are accessory to adjacent land uses, are encouraged on hydro corridor lands, where compatible with surrounding land uses. However, a proponent should be aware of the primacy of the electricity transmission and distribution facilities and that secondary uses require technical approval from Hydro One Networks Inc.

5.3 Street Hierarchy Plan

The proposed street network consists of a standard hierarchy of street typologies, including arterials, collector streets, and local streets (Figure 10). Each street type serves a different function, as defined in Annex 1 of the Official Plan. The intended function of each street type is summarized in Table 5 below.

Table 5. Types of Streets

Arterials are the major streets of the City that carry large volumes of traffic over the longest

distances. Arterials are meant for urban driving conditions. The speeds present challenges for safe cycling and pedestrian movement. Driveways and on-street parking are discouraged on arterial streets.

Collector streets connect neighbourhoods and distribute traffic between the arterial system and the local street system. Collector streets in the EUC Phase 3 Area are meant for moderate speeds (40 km/h or less) and have infrastructure to facilitate pedestrian and cycling movements between neighbourhoods. On-street parking and driveways are permitted on collector streets. A major collector is a roadway that acts as a connection between an arterial and collector streets.

Local streets are found within communities and connect arterial and collector streets to individual properties, typically over short distances. Select local streets in the EUC Phase 3 Area have sidewalks. Local streets are meant for vehicular speeds of 30 km/h or lower.

The Demonstration Plan illustrates all three types of streets within the proposed road network. Brian Coburn Boulevard and Mer Bleue Road are arterials, reflecting their role as major transportation corridors.

Four collector streets are proposed through the CDP area, including:

- / A westward extension of Vanguard Drive
- / A southward extension of Frank Bender Street
- / A northward extension of Fern Casey Boulevard
- / A northward extension of Ascender Boulevard

As illustrated on the Street Hierarchy Plan, a portion of Fern Casey Boulevard, Vanguard Drive, and Frank Bender Street will be a Major Collector, which will connect Renaud Road (a collector to the south) with Innes Road (an arterial to the north).

The remaining streets illustrated on the Demonstration Plan are classified as local streets.

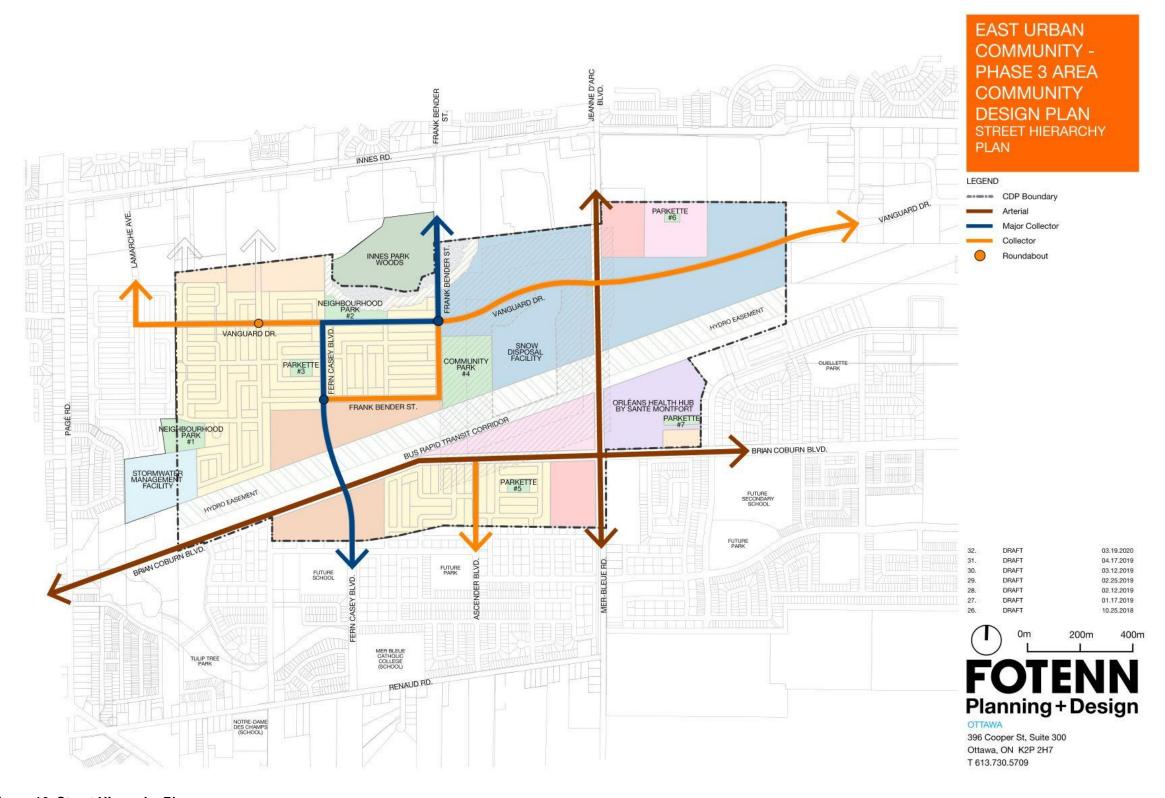


Figure 10. Street Hierarchy Plan

5.4 Pedestrian and Cyclist Facilities Plan

The Pedestrian and Cyclist Facilities Plan (Figure 11) illustrates the potential location of sidewalks, mid-block connections, and cycling facilities within the CDP area. The Pedestrian and Cyclist Facilities Plan is consistent with the direction established in Chapter 4- *Maximize Walkability* of the City's Transportation Master Plan (TMP). The TMP calls for a continuous, well-connected pedestrian network that creates a walkable environment and improves pedestrian safety.

A sidewalk is proposed along one side of all 24 metre wide collector streets, with a MUP on the opposite side. However, during the time the CDP and supporting studies were being finalized, the City's 'Designing Neighbourhood Collector Streets' guidelines have been approved, which call for a wider right of way with sidewalks on both sides of collector streets, as well as cycle tracks. Accordingly, the type of active transportation facilities to be provided along the identified 24 metre wide collector and major collector streets will be reviewed and confirmed at the Plan of Subdivision stage.

Sidewalks are also proposed along one or both sides of select local streets. More specifically, sidewalks are strategically placed adjacent to parks and the stormwater management facility in order to facilitate pedestrian access. Sidewalks are also proposed abutting the Highest Density residential blocks, providing an efficient connection from surrounding residential neighbourhoods to the western BRT station.

The mid-block connections shown on the Pedestrian and Cyclist Facilities Plan are walkways that provide convenient connections for walkers and cyclists to move through the community. These connections augment the grid pattern of street and allow for neighbours to better interact.

The sidewalks, mid-block connections, and cycling facilities shown on the Pedestrian and Cyclist Facilities Plan are potential locations; the final number, location and type will be confirmed at the Plan of Subdivision stage.

For collector streets, the symbols denoting sidewalks and cycling facilities are shown in the centre of the Right-of-Way (ROW). In contrast, for local streets, the sidewalk symbol is shown on the side of the street that the sidewalk is anticipated. Changes may occur to the sidewalk locations along local streets, however, the sidewalk must always be located on the same side as a municipal park, where applicable.

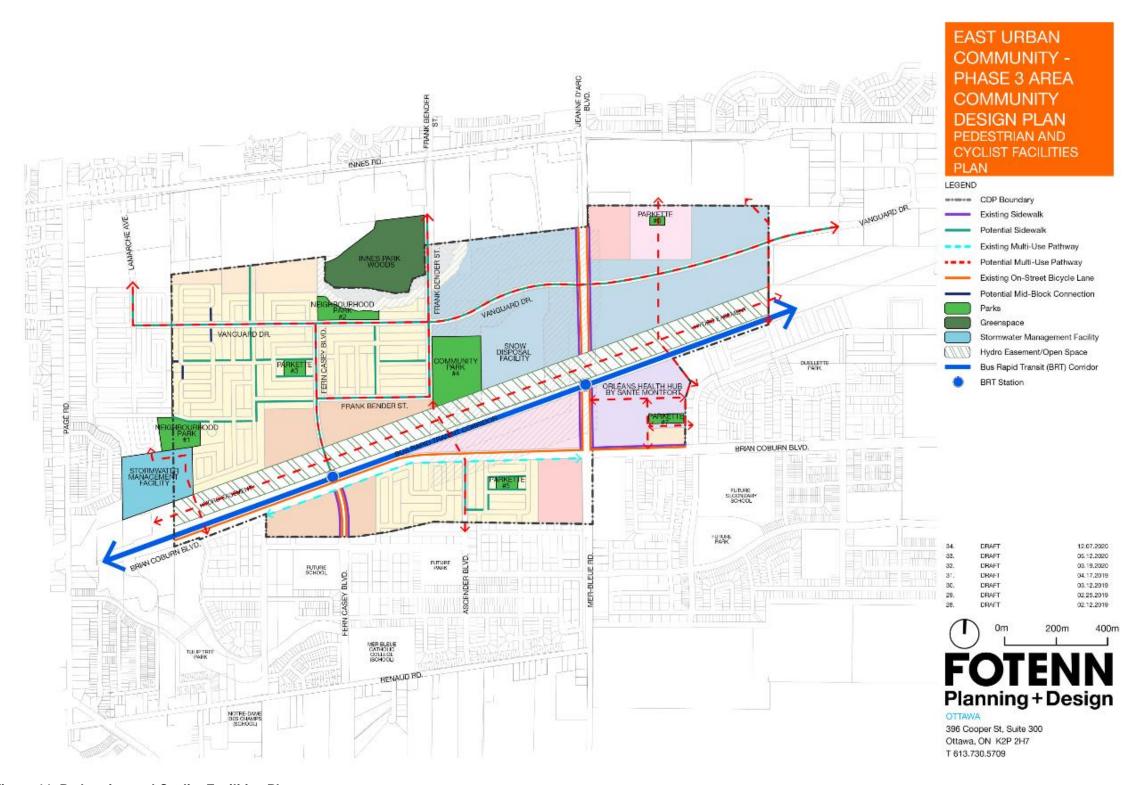


Figure 11. Pedestrian and Cyclist Facilities Plan

5.5 Transit Facilities Plan

A Transit Facilities Plan has been developed to illustrate the BRT Transitway, BRT stations, and existing and potential local transit routes (Figure 12). The "Cumberland Transitway West of Navan Road to East of Tenth Line Road Preliminary Design (2013)" report identifies two transit stations in the CDP area, including a station at Mer Bleue Road and a station at Fern Casey Boulevard (formerly Belcourt Boulevard), which are reflected in the City's 2013 TMP and Official Plan.

The 2013 report indicates that the BRT station at Mer Bleue is planned to be grade-separated while the western BRT station is planned to be at-grade. The western BRT crossing may be reconsidered in the future given that crossings of BRT corridor are typically grade-separated. It is anticipated that only the stations will be lit, not the entire length of the corridor. In Fall 2019, a municipal Park & Ride facility opened along the BRT corridor at the station planned approximately 800 metres west of the Study Area (Chapel Hill).

The MTS identifies the transportation plan for the community in conjunction with the needs already established in the City of Ottawa 2013 TMP. The MTS also serves as the Class Environmental Assessment (EA) document for the proposed transportation and transit infrastructure and satisfies the requirements of Phase 1 and 2 of the coordinated EA and Planning Act process.

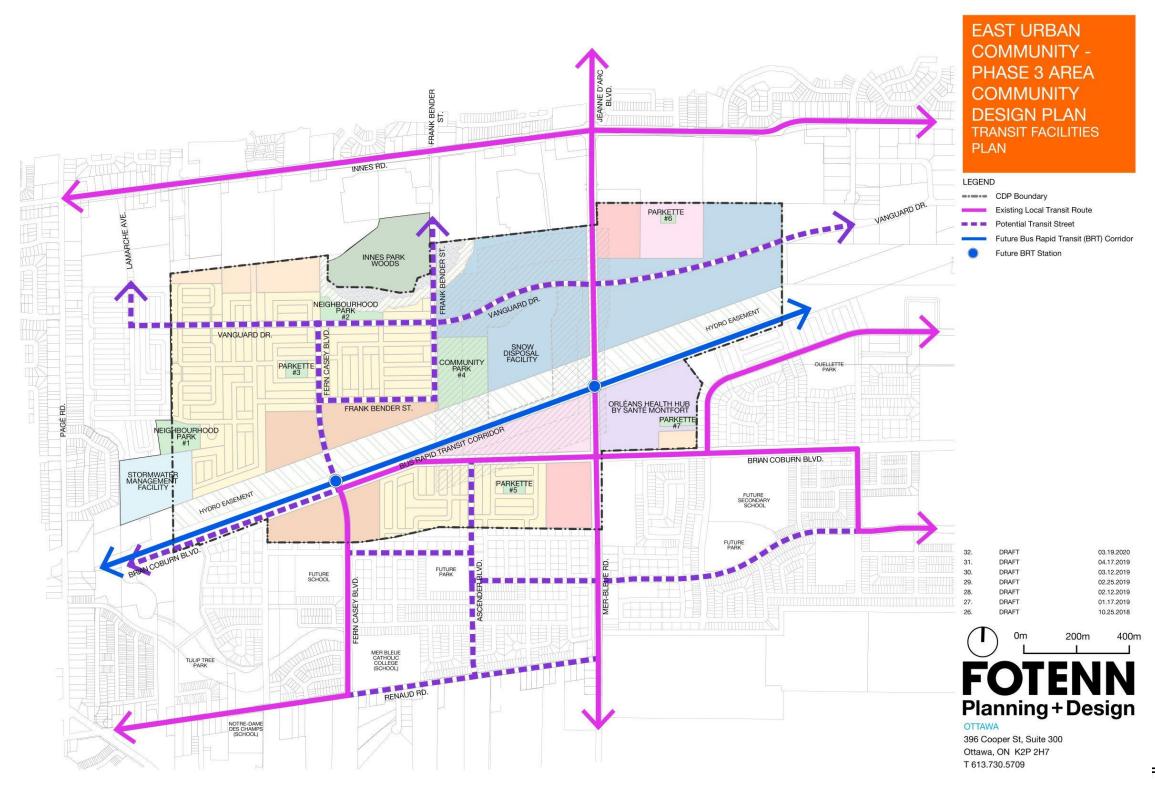


Figure 12. Transit Facilities Plan

6 Community Design Policies and Guidelines

The goal of this section of the Community Design Plan (CDP) is to provide design policies and guidelines that contribute to the overall identity of the East Urban Community (EUC) Phase 3 Area. The policies and guidelines will apply to all new buildings, streetscapes, and parks within the community. These design policies and guidelines, in conjunction with Official Plan policies and other Council-approved documents, such as the "Urban Design Guidelines for Greenfield Neighbourhoods (2007)" and the "Building Better and Smarter Suburbs (BBSS)" initiative will help ensure that the EUC Phase 3 Area becomes an attractive, livable and healthy community composed of well-designed structuring elements.

The key structuring element of the EUC Phase 3 Area are the streets and blocks. The streets and blocks in the Land Use Plan and Demonstration Plan were based on a fully-connected, offset grid street pattern. This pattern provides optimal permeability in support of the transit service, walking and cycling, while the movement of automobiles is controlled to appropriate speeds for the safety of pedestrians / cyclists. The block sizes created by the street network and pathway blocks are designed to ideally be 180 by 60 metres in size and about 1 hectare in area. This block size provides safe, comfortable, and convenient movement for pedestrians and cyclists of all ages and discourages automobile acceleration and speeding.

The following subsections provide specific direction to the streetscape and block development by providing both policies and guidelines. Policies are specific and should be considered compulsory in future subdivision design. Guidelines are less specific and, although every effort should be made to achieve them, there is an understanding that this is not possible in all instances through future subdivision design.

In all instances when a policy or guideline is unachievable, alternatives should be developed which respect the goals and policies that follow.

Finally, lists of policies and guidelines have been numbered. This is to support reference in future applications; there is no implied precedence of one policy or guideline over another based on numbering.

6.1 Streetscape Policies and Guidelines

The following policies and guidelines will be applied to support the streetscape:

6.1.1 Streetscape Policies

- 1. Along arterials, access from local streets will be limited, except as an offset grid street pattern that does not allow for full directional access.
- 2. Streets shall be lined with trees. Sufficient soil volume will be provided in or adjacent to the right of way to support the growth of such trees to maturity.
- 3. Along all streets, the majority of residential dwellings will face the street.
- 4. The design of the collector streets will be consistent with the City's "Road Corridor Planning and Design Guidelines- Urban Collectors (2008)" and any subsequent updates.

- 5. Development in the CDP area will provide for a framework of complete streets as contemplated by the City's Transportation Master Plan (TMP).
- 6. Acoustic Fencing (noise walls) will be discouraged on collector streets.
- 7. Window Streets will not be permitted along collector streets.
- 8. Collector streets accommodating transit routes should be designed with the necessary travel lane widths and generally with a 24.0 m right-of-way
- 9. Local streets will generally be designed with an 18.0m right-of-way and should include a paved road surface with one driving lane in each direction, a boulevard on both sides of the street, and a sidewalk on one side of select local streets, in accordance with the TMP, Multi-modal Level of service guidelines, Pedestrian Master Plan and in coordination with street tree planting. Local soil conditions may require a larger road right-of-way.

6.1.2 Streetscape Guidelines

The following guidelines will be applied to the design of streets:

Guidelines for All Streets

- 1. The location of underground services and utilities within the rights-of-way may be refined during the detailed subdivision design. The intent is that services and utilities should be made as invisible as possible within the community.
- 2. Streets will be designed to include bump-outs to better define crossing points, shorten the crossing distance, and ensure visibility between parked cars. Signage to warn drivers of pathway crossing locations will also encourage reduced speeds and improve safety. These measures will be constructed at the onset of development.
- Bus stops and associated infrastructure (such as concrete waiting areas, shelters and / or benches), should be provided at designated locations as determined by OC Transpo through the development approval process or as needed.
- 4. Community mailboxes, newspaper boxes and bus shelters, seating, waste receptacles, and mailboxes should be located together, and should facilitate and prioritize pedestrian and cycling access.
- The location of trees, street fixtures, telecommunications equipment, utility and light poles and on street parking locations will be coordinated as a condition of subdivision approval.

Arterial Guidelines

1. The use of acoustic fencing (noise walls) along arterials should be avoided except where no other design options are available.

Collector Street Guidelines

1. New collector street rights-of-way should include:

- A paved road surface with one driving lane in each direction;
- A boulevard on both sides of the road;
- Pedestrian facilities on both sides of the road;
- Cycling facilities on at least one side of the road; and
- Where feasible, one parking lane protected by bulb-outs and intersection narrowings.
- On collector streets identified for transit service, on-street parking may only be permitted along one side of the collector street and the sides may alternate to produce traffic calming.
- 3. Where a MUP or cycle tracks cross a collector street, traffic calming measures will be provided, such as standard pedestrian crossovers, to provide safe and comfortable road crossings. Speed bumps / humps should not be installed on collector streets to maintain efficiency of transit operations.
- 4. Collector streets will generally be designed to have a target operating speed of 40 km/h.
- 5. Cycle tracks are strongly encouraged and should be designed within the street right-of-way with the appropriate facilities to ensure cycling is safe for all ages.
- 6. Where most effective, traffic calming measures, such as landscape boulevards, parking lanes, narrowed intersections, or elevated crosswalks, will be provided on collector streets abutting school sites.

Local Street Guidelines

- 1. The local street pattern will be designed as a fully-connected, offset grid.
- Single-loaded window streets may be designed with a minimum 14.0m right-of-way.
- 3. Primary consideration will be given for the provision of safe crossing points for pedestrians.
- 4. A row of trees shall be planted on each side of the street with regular spacing between trees (in accordance with City of Ottawa standards).
- 5. Local streets will be designed to have a target operating speed of 30 km/h or less.

Street Trees and Boulevard Design Guidelines

In addition to their environmental benefits, street trees contribute a range of health benefits for residents, ranging from more comfortable environments for physical activity, more engaging public spaces, and improved mental health outcomes.

- 1. Trees and other plant materials, lights, directional signage, transit amenities and street furniture should be provided.
- 2. Coordinate the location of trees, street fixtures, telecommunications equipment, utility and light poles, transit amenities and signs.

- 3. A row of trees should be planted in the boulevard on both sides of the street with regular spacing between trees (in accordance with City standards).
- 4. Landscape features and planting, in accordance with City standards, should be integrated into any traffic circles, and require minimal maintenance by the City.
- 5. The number, type and location of street trees to be planted with any street right-of-way shall be in conformity with the City's standards and where necessary, address any constraints presented by the underlying soil conditions.
- 6. The planting of trees and the installation of distribution poles along public roadways will require planning and coordination with the utilities.
- Where soil conditions permit, consistent street tree planting will be encouraged in order to create neighbourhood character among many other benefits, along all street frontages, at the developer's cost.
- 8. Opportunities to accommodate tree planting and landscaping will be encouraged, such as locations along noise fences, window streets, bio-swales, or other remnant pieces of land.

6.2 Policies and Guidelines for Parks and Greenspace

The parks and open space system of the EUC Phase 3 Area is comprised of several elements, including municipal parks, a stormwater management facility, and pathways. Development of all parks is to be based on the Area Parks Plan (APP) and stormwater management will be developed based on the Master Servicing Study (MSS). In all cases, parkland acquisition will be based on the City Parkland Dedication By-law (2009-95).

The Land Use Plan integrates, where possible, the existing natural elements of greenspace. The pedestrian pathways and cycling infrastructure are the connectors to link residential neighbourhoods, schools, parks, and transit, and provide a linkage to the pathways established by the City's Official Plan (OP) and TMP. Parks facilities are generally distributed so that there is at least one park within a five-minute walking distance of each dwelling within the CDP area.

6.2.1 Parks Policies

The purpose of the Park land use category is to identify lands that accommodate a full range of recreational opportunities, ranging from active spaces such as sports fields and organized play areas, to more passive leisure areas including pathways, trails, and seating areas.

Public parks and trails, community centres, washroom and change facilities, parking facilities, and commercial uses in support of the primary park function are all permitted uses within the Park land use category.

The Community Park proposed along the east side of Frank Bender Street in the CDP is intended as a focal point of recreation and leisure in the community. The Community Park shall be designed for all ages and incorporate a variety of active recreational opportunities such as a baseball diamond, skateboard park, toddler, junior and senior play equipment, splash pad, permanent boarded rink and other facilities determined by the City. Smaller parks (the

Neighbourhood Parks and Parkettes) will provide a common green space within the residential neighbourhoods and key social gathering places for local residents. The parks have been strategically located on the Land Use and Demonstration Plans to connect with the Pedestrian and Cyclist Facilities Plan.

- 1. As per the City's "Park Development Manual, Second Edition (2017)", the Community Park is to be approximately 3.2 to 10 hectares in area but may be reduced as approved by Parks and Facilities Planning.
- 2. As per the City's "Park Development Manual, Second Edition (2017)", the size of the Neighbourhood Parks is to be approximately 0.8 to 3.2 hectares in size but may be reduced as approved by Parks and Facilities Planning.
- 3. As per the City's "Park Development Manual, Second Edition (2017)", the size of the Parkettes are to generally be 0.4 to 0.8 hectares in size but may be reduced as approved by Parks and Facilities Planning.
- 4. Sidewalks and street trees will be provided within the right-of-way of all streets that abut parks. The sidewalks will extend beyond the park in either direction.
- 5. Parks will have a minimum of 50% street frontage, or a percentage approved by Parks and Facilities Planning.
- 6. Intersection narrowings shall be provided around all park edges to facilitate safer pedestrian crossings.

6.2.2 Parks Guidelines

- 1. Pedestrian connections should be provided through the park to the sidewalks in the abutting rights-of-way and other pedestrian access points.
- 2. Consider the placement of facilities such as playing fields and parking lots to facilitate sharing of facilities.
- 3. View corridors terminating at the parks should be highlighted through landscape treatment.
- 4. Where possible, amenities such as shade structures and trees should be incorporated into the design of the parks.
- 5. Exploring opportunities for better integration between parks and other City facilities is a priority of the BBSS initiative.

6.2.3 Stormwater Management Policies

1. The stormwater management facility expansion will be partially located within the EUC Phase 3 Area Study Area.

6.2.4 Stormwater Management Guidelines

1. The design of the stormwater ponds will generally be naturalized (slopes, contours).

- 2. Edges of stormwater management areas may feature hard edges as part of a public realm plan that incorporates stormwater ponds as a water feature in a public space.
- 3. Stormwater ponds will be designed with native plant materials.
- 4. MUPs should be provided around the stormwater management ponds and, where possible, be integrated into the community trail network, which may include co-ordination with trails in municipal parks.
- 5. Pedestrian walkways around ponds and corridors should double as access streets, where necessary.

6.2.5 Policies for Linkages and Pathways

- 1. Pathway connections will be included mid-block along residential streets to enhance permeability and encourage pedestrian and cycling activity between neighbourhoods.
- 2. Bicycle routes should be permitted within the street right-of-way.

6.2.6 Guidelines for Linkages and Pathways

- Where possible, pedestrian pathways should be provided from residential neighbourhoods to adjacent uses such as commercial and institutional uses and transit.
- 2. Amenities, such as seating, lighting, signage, and garbage and recycling containers should be provided along pathways.
- Design pathways to reduce the negative impacts on open space and natural features and habitats.
- 4. Crime Prevention through Environmental Design (CPTED) should be considered in the design of pathways and their linkages.
- 5. All pathways and cycling facilities should be clearly signed / identified and any street crossings should be marked.
- 6. Where possible, connections should be provided between residential neighbourhoods.
- Where practical, some selected pathways should be developed to accommodate yearround use.

6.3 Policies and Guidelines for Site Design and Built Form

The goals of this CDP include a number of key design and built form considerations. A high-quality public realm is sought because this will emphasize quality of life, aesthetics and a sense of place. Finally, there is the desire to make sure that the EUC Phase 3 Area provides a range of housing types and densities to support a diversity of ages and income levels.

The following subsections provide additional policies and guidelines to ensure future development that facilitates the highest possible level of quality of life and sense of place in this suburban community. The Land Use Plan provides direction to the Zoning By-law regarding the location of different land use types.

6.3.1 General Policies for Residential Site Design and Building

- 1. A variety of housing densities and designs will be provided to enhance the streetscape.
- 2. Front entrances should face and be visible from the street.
- 3. Garages should not project significantly past the front wall of the home.
- 4. Small scale service and retail will be permitted on corner lots on collector streets. To permit these uses in strategic locations, use of the "-c" suffix may be considered through the Zoning By-law Amendment process for the CDP area. No additional parking is to be provided on such sites.
- Wherever possible, utility elements and equipment should be located away from publicly exposed views and are discouraged from being located in the front yard or corner side yard.
- 6. Where utilities are required to be located in the front or corner side yard, the utilities should be located in a discreet area or screened from public view through landscaping or other screening mechanisms, while ensuring there is suitable access for maintenance.

6.3.2 Guidelines for Residential Site Design and Building

- 7. Residential dwellings should be located close to the street to reinforce a strong street edge.
- 8. Residential dwellings located on window streets should face the street and incorporate a high quality of architectural design and detail.
- 9. Residential dwellings that face or flank a park should incorporate a higher quality of architectural interest.
- 10. Driveways should be designed to avoid conflict with the driveways of adjacent uses, such as parks, commercial blocks, etc.

6.3.3 Guidelines for Low and Medium Density Residential Site Design and Building

- 1. To avoid the impacts of long, straight streets, minor variation in the siting of residential dwellings within the streetscape will be encouraged.
- 2. Flankage elevations of corner lots should be consistent in the quality and detail of the front elevation.
- 3. Driveways should be paired, wherever possible, to maximize on-street parking capacity, provide for ample space for trees within the boulevard, and allow for the locating of bus stops along streets identified for transit service.
- 4. There should be enough space between driveways for a full parking spot, where possible.
- 5. Where possible, residential dwellings on streets that intersect with collector streets on which transit will operate, should be oriented to face the local street to provide the opportunity for the placement of transit stops on the collector street.

- 6. Residential dwellings located on elbowed, 'T'-intersections, and cul-de-sac streets should be sited to minimize the visual impact of the garage and increase the opportunity for special landscaping treatments. Architectural elements (such as porches, turret/bay windows) are encouraged to provide visual interest.
- 7. Additionally, for townhouse blocks:
 - / A variety in the elevation and massing within each block is encouraged;
 - Sufficient articulation should be provided to avoid large unbroken expanses of roof or wall planes (such as the stepping of units and / or the use of bay windows or other architectural features);
 - The end units should be designed with the same architectural features (such as turrets, bay windows or other suitable architectural features) as the other units on the block;
 - / Where possible, blocks of even numbers of units are encouraged to allow for paired driveway locations and improvements to the streetscape.

6.3.4 Guidelines for Highest Density Residential Site Design and Building

- All residential apartments should be located close to a public street with a principal façade and entry facing a street or public open space. For buildings that are interior to the site, the main entrance should be oriented toward the interior driveway and where applicable, the amenity area.
- 2. Surface parking areas, excluding private driveways, should primarily be to the side or rear of buildings.
- 3. Architectural design on all elevations should be consistent.
- 4. Parking areas should be screened from the public street through landscaping.
- 5. Visitor parking spaces should be provided in visible and convenient locations that are in proximity to building entrances.
- 6. Bicycle parking spaces for both residents and visitors should be provided.
- 7. Service areas should be located at the rear of the building and screened from public view.
- 8. Interior driveways should have the look and feel of a narrow public street and include sidewalks on at least one side. They should be posted and designed at a maximum of 20 km/h or less.

6.3.5 Guidelines to Provide Parking Opportunities in Residential Areas

- 1. In general terms, there should be proximity between:
 - / Dwelling types with narrow lots and dwelling types with wider lots; or
 - Dwelling types with narrow lots and dwelling types with consolidated vehicular access.

- 2. Wherever possible, lot widths should account for one on-street parking space in front of each house. Alternatives to this include:
 - / Wider lots with less depth;
 - Pairing of driveways on narrow lots to allow for at least one on-street space per pair of dwellings;
 - Use of consolidated vehicular access to provide a longer curbside supply of onstreet parking;
 - / Use of block flanks (i.e. the narrow sides of blocks) to provide angled on-street parking, instead of parallel parking; and
 - Use of public rear lanes (minimum cross-section of 8.5 metres) or privatelyowned lanes is preferred.
- 3. Where possible, fire hydrants will be located in order to allow for a full parking spot between driveways.

6.3.6 Policies for Commercial Site Design and Building

- 1. Entrances to commercial buildings will be clearly defined and visible from the street.
- 2. Ground floor spaces of commercial buildings facing the street will have windows and an active door which faces directly onto the street.
- 3. Commercial buildings are to be located at the street edge.
- 4. Interior driveways for commercial properties will have the look and feel of narrow public streets and include sidewalks on at least one side. They will be designed and posted at a maximum speed limit of 20 km/h.

6.3.7 Guidelines for Commercial Site Design and Building

- 1. The provision of a continuous street frontage is strongly encouraged and preferred.
- 2. Pedestrian and vehicle access and circulation within an individual site should provide safe and well-defined routes.
- 3. Continuous weather protection for pedestrians along the retail and other appropriate frontages should be provided, where possible.
- 4. Surface parking areas should be located at the side or rear of the buildings.
- 5. Driveways should be designed to avoid conflict with the driveways of adjacent uses, such as parks, commercial blocks, etc.
- 6. Surface parking areas should be well lit to ensure public safety.
- 7. Bicycle parking should be provided in convenient and visible locations.
- 8. Lighting for commercial buildings and parking areas should be directed away from adjacent properties.

- 9. Where a section of the parking area is located adjacent to the street, the street edge of the commercial site should be designed with a landscape treatment to provide visual screening of the parking area from the street.
- 10. Loading, garbage facilities and other service functions and utilities should be away from the street and screened from public view. Location of these facilities within or at the rear of buildings is encouraged.
- 11. Trees and landscaping on commercial sites are encouraged, including in parking areas.

6.3.8 Guidelines for Mixed Use Site Design and Building

- 1. The scale of a mixed use building should be compatible with adjacent development.
- 2. The highest density and tallest buildings will be planned closest to the planned Bus Rapid Transit (BRT) station at Mer Bleue Road.
- 3. Step down building heights and densities will be implemented between high density, taller development and low-density communities.
- 4. Buildings will be oriented towards the BRT station planned at Mer Bleue Road and provide direct pedestrian access that minimizes conflicts with vehicles.
- 5. Create highly visible landmarks through distinctive design features that act as wayfinding features in the community.
- 6. Locate loading areas behind or underneath buildings and screen them from view.
- 7. Consider locating surface parking in the abutting hydro corridor as a secondary land use (consultation with Hydro One Networks Inc. is required).
- 8. Encourage underground parking (outside of the hydro easement).
- 9. Provide designated parking spaces for car sharing and carpooling, where possible.
- 10. Explore the use of shared parking facilities with abutting land uses that may have off-set parking demands, such as lands designated Employment in the CDP and Urban Employment Area in the Official Plan.
- 11. Provide convenient and comfortable pedestrian and cyclist connections through mixed use areas, including to neighbouring land uses. Key destinations include:
 - / The Orléans Health Hub
 - / The existing commercial/service uses along Innes Road
 - / Municipal parks
 - Existing and planned bus routes along Mer Bleue Road, Innes Road, Vanguard Drive, and the proposed collector streets
 - / The planned BRT station at Mer Bleue Road, and
 - Crossing points over the BRT Transitway (providing access from the south to the MUP planned within the hydro corridor).

at Mer Bleue Ro	oad.		

12. Provide indoor and outdoor signage that directs pedestrians to the planned BRT station

7 Implementation

This section describes the processes and mechanisms that will guide the implementation of the East Urban Community (EUC) Phase 3 Area CDP in fulfilment of the policies of the Official Plan (OP) and the Community Design Plan (CDP). The principal mechanisms include:

- / Implementation of an Official Plan Amendment (OPA);
- Technical Studies: Master Servicing Study (MSS) and Master Transportation Study (MTS);
- / Guidance on the interpretation of the CDP;
- / Process to modify or amend the CDP and Class Environmental Assessment (EA);
- / Preparation of a financial implementation plan and landowner agreement, involving cost sharing agreements; and
- / Schedule for staging of key infrastructure to service the lands.

The CDP will guide the form and character of the neighbourhoods in the EUC Phase 3 Area. The CDP will guide the Zoning, Subdivision and Site Plan Control processes, as well as capital expenditures in this area. While the end product may differ in detail from the various plans contained within this document, it is intended that development will have a framework consistent with the policies and guidelines that are described in this CDP.

7.1 CDP Amendments

The EUC Phase 3 Area CDP and the accompanying Master Studies were prepared through an extensive process involving technical analysis and public consultation. Development should proceed in a manner that is consistent with the policies, plans, and recommendations contained in the documents. However, it is not possible to anticipate every circumstance or issue that may arise over the course of the development of the lands. Accordingly, there must be a mechanism to make amendments, as deemed necessary.

The amending process distinguishes between minor and major changes.

7.1.1 Minor Changes

Minor changes to the Land Use Plan and Demonstration Plan are changes that result from applications for development such as:

- / Minor adjustments to the street network and the location of pathway blocks; and
- / Changing the location, size and shape of parkland.

These changes can be made through the City's development approvals process, provided they are consistent with the general intent of the CDP.

Minor design changes are changes which do not appreciably change the expected net impacts or outcomes associated with the project. Slight changes in alignment or facility footprints, which

have the agreement of all affected landowners, would also be considered as minor. All affected landowners and appropriate stakeholders will be provided details of the modification. The majority of such changes could be dealt with during the detailed design and development approvals phase and would remain the responsibility of the proponent to ensure that all relevant issues are taken into account.

It is noted that the precise limits of the stormwater management facility shown in the southwest corner of the Land Use and Demonstration Plans will be determined through the approved MSS and detailed engineering analyses conducted in conjunction with a development application(s). Any refinements to this block shall be considered a minor change.

7.1.2 Major Changes

Major changes are considered those which change the intent of the CDP or EAs or appreciably change the expected net impacts or outcomes associated with the project. If the proposed modification is major, an amendment or addendum to the CDP and/or Master Studies may be required to document the change, identify the associated impacts and mitigation measures and allow related concerns to be addressed and reviewed by the appropriate stakeholders. Major changes will be subject to approval by Planning Committee and external agencies, as required.

Staff-initiated changes to the Land Use Plan and to the text of the CDP may be made at the discretion and approval of the General Manager of Planning, Infrastructure and Economic Development and shall involve notice to owners of affected development and redevelopment parcels, as may be required. Where changes are substantive, or where there is disagreement between Staff and the landowners affected by such proposed changes, approval by the Planning Committee may be sought.

Changes to the Land Use Plan that require amendments to schedules of the OP, such as a substantive realignment in the network of collector streets or a reduction in the minimum amount of overall parkland are considered major changes will be subject to approval by Planning Committee and external agencies, as required.

Where lists of examples of permitted uses are provided in this CDP, they are intended to illustrate the possible range and type of uses that are to be considered. Specific uses that are not listed but considered by the City to be similar to the listed uses and to conform to the general intent of the applicable land use category may be recognized as a permitted use in the implementing Zoning By-law.

7.2 Transit Service

Transit service is to be integrated into the community structure from the outset of development in support of the OP target of reaching a city-wide 50% share of travel by sustainable modes – walking, cycling, transit, and automobile passenger.

During the early phases of development, the provision of transit should be sought through the creation of Early Service Agreements between developers and the City (OC Transpo). This may include an initiative whereby OC Transpo passes are provided to new homeowners, but it will not include the provision of a developer-funded shuttle service.

7.3 Affordable Housing

Affordable housing will be provided in the Study Area in accordance with Section 2.5.2 of the OP, which defines affordable housing as rental or ownership housing, for which a low or moderate-income household pays no more than 30% of its gross annual income.

The OP encourages that 25% of all new housing development and redevelopment should be affordable to households at or below the 30th income percentile for rental and at or below the 40th income percentile for ownership (as adjusted annually in accordance with inflation and the consumer price index). Therefore, within the CDP area, approximately 25% of all housing should be within the above-noted affordability range, assessed at the time of Subdivision approval.

To support the development of affordable housing, the City will negotiate the use of the following municipal incentives and direct supports, including but not limited to:

- / Deferral or waiver of fees and charges; and
- / Other incentives to be negotiated depending on the depth of affordability achieved.

When municipal incentives are provided to support affordable housing, the City will enter into agreements with developers to preserve the level of public interest in affordable housing. Agreements will reflect the level of public investment required, with more investment resulting in greater levels of affordability. Agreements will include mechanisms to maintain affordability, will specify the mix of units to be provided, and will typically be registered on title and / or become a municipal housing facilities by-law.

In addition, consideration should be given to locating affordable housing sites in proximity to existing or planned transit routes, parks and cycling facilities.

7.4 Development Approvals

Development approvals for lands within the EUC Phase 3 Area CDP will initially proceed by Plan of Subdivision to secure the necessary road network, servicing infrastructure and parkland dedication. Development applications shall include all information required under the OP.

All development applications shall include a description and / or illustration as to how the development proposal meets the intent of the EUC Phase 3 Area CDP and related design guidelines. All residential development applications shall also address how the proposed residential uses and density contribute to the projected housing mix established in the EUC Phase 3 Area CDP and the OP.

Landowners are not required to develop their lands precisely as shown on the Demonstration Plan found in Figure 8. The purpose and role of the Demonstration Plan is to:

/ Provide guidance on the intent for development;

- / Demonstrate possibilities and methods for addressing specific development challenges;
- / Illustrate ways to achieve the design guidelines for various land uses; and
- / Illustrate some specific objectives the CDP is seeking to achieve.

Applications for some development blocks will require Site Plan Control Approval, as required by the City's Site Plan Control By-Law (2014-256, as amended).

The City will impose conditions on the development of the land through the Plan of Subdivision or Site Plan Control process. These conditions will address provision of matters such as, but not necessarily limited to parks and open space; water, sanitary sewers, and stormwater management facilities; transit; construction of streets and infrastructure; widening and daylight triangles; and utilities.

The execution of development agreements (as discussed below) will be required before development will be approved.

Zoning By-law Amendments will be required to permit the development established by the Land Use Plan in conjunction with Plan of Subdivision and / or Site Plan approval. It is anticipated that Zoning By-laws will amend the zoning to appropriate urban residential, commercial and mixed-use zones to enable development in accordance with the Land Use Plan. The City may also use Holding Zones to specify the future uses of lands that, at the present time, are considered premature for development due to inadequate road, servicing or community facilities infrastructure being available within a reasonable period.

7.5 Development Agreements

As development proceeds within the EUC Phase 3 Area CDP, implementation strategies, including the use of appropriate development agreements, shall be established to ensure the timely advancement of municipal infrastructure and community amenities and facilities. Development agreements may address parks and open space; water, wastewater collection and stormwater management facilities; transit; road infrastructure; telecommunications; and other utilities.

There may be a front-ending agreement(s) established for the EUC Phase 3 Area CDP, in which the City would participate, to require through development approvals financial contributions for key infrastructure requirements and to allow the developer(s) to advance the construction of certain facilities in accordance with agreed-upon financial principles.

7.6 Cost Sharing Agreements

The following Cost Sharing Agreements will form the basis of the Financial Implementation Plan for the CDP.

Funding Agreement

Funding Agreement means any work or services, limited to the extent required by an Approval Authority for approval of the CDP and OPA (Secondary Plan), including the preparation of the

CDP and associated EA, and all related studies thereto, such as, but not limited to the MSS, MTS, and Area Parks Plan (APP). All landowners will be required to become a party to the Funding Agreement and to contribute their proportionate share in the cost of these studies before development is approved by the City.

Core Services Agreement

Core Services means any work, service or facility but only to the extent required by an Approval Authority to be completed or constructed for development to proceed within the Study Area. All affected landowners will be required to become a party to a Core Services Agreement and to contribute their proportionate share in the cost of these core services before development is approved by the City.

The Core Service Agreement(s) can address front-ending requirements for infrastructure that is to be eligible for Development Charge (DC) recoveries. For example, per the Financial Implementation Plan in the MSS, storm sewer oversizing, sanitary sewer oversizing, and stormwater management facility works are to be eligible for DC recoveries, per the Development Charges By-law 2019 – 156 and Area-Specific Development Charges By-Law 2019-165 (AREA E-3 GLOUCESTER EAST URBAN CENTRE STORMWATER FACILITIES), and planned future amendments. Also, for example, select intersection projects within and outside of the EUC CDP area are to be eligible for DC recoveries, as outlined in the MTS and per the Development Charges By-law 2019 – 156. It is expected that the MUP proposed within the hydro corridor will be eligible for DC recoveries and will be added to the next City-Wide DC Background Study.

Master Parkland Agreement

A Master Parkland Agreement will also be developed for the CDP to create a mechanism that allows for compensation of parkland dedication in the event that parkland is inequitably distributed amongst landowners.

Other Shared Works

As development proceeds, the cost to construct other infrastructure that is not a Core Service but is shared by at least two landowners will be negotiated by the benefiting landowners. Examples include the oversize and over depth of infrastructure and roadways where they cross property lines or run along common property lines.

7.7 Parkland and Greenspace Acquisition

The greenspace system is comprised of a variety of elements, such as parkland, the Urban Natural Feature and the stormwater management facility. The majority of the greenspace will ultimately be in public ownership and the City will pursue acquisition of such lands through:

- / Parkland dedication as per the City of Ottawa Parkland Dedication By-law (2009-95);
- For the Urban Natural Feature, 30 metres of adjacent lands, and five metre setback, acquisition will be explored through the development approvals process; and
- / Conveyance of the completed stormwater management facility.

Dependent upon confirmation of satisfactory agreements, it is intended that the Community Park, Neighbourhood Parks, and Parkettes will be built concurrently with the development of lands within approved Draft Plans of Subdivision.

7.8 Development Phasing

The Phase 3 Area CDP will be built-out by separate landowners in discrete phases, according to the preferred timing of the individual landowners. As such, there may be works outside of phase limits that are required to support a certain phase of development. Timing and approval of such works are to be addressed as part of future detailed design and approval processes for development of the lands within the Study Area.

Options for payment of up-front costs by developers will be explored by development applicant(s) in order to secure appropriate timing for both construction and repayment. The City will provide Development Charge credits, in accordance with the relevant legislation, where infrastructure is front-ended.

All public utilities should be contacted early in the planning process regarding the area servicing of development.

7.9 Development Monitoring

The City will evaluate the total number and mix of residential units at a community-wide scale at the time of development approvals. Minor variations in the number of units are anticipated through the development approvals process. Variations can be accommodated provided it is demonstrated that both the total number of residential units and the required mix of residential unit types can be reasonably achieved by adjusting density and / or housing mix on remaining vacant lands within the CDP.

Traffic and servicing calculations used to reach the recommendations presented in the MSS and MTS and are based on unit totals generated from the Demonstration Plan.

7.10 Environmental Permitting

The Environmental Approvals involved in the next steps of the area development and the associated responsibilities are outlined in Table 6.

Table 6. Environmental Approvals

Action	Responsibilit y	Timing/Process/Permits/A pprovals
Woodlands and Forests Review opportunities for retention of woodlots / trees and incorporation into Parkland.	City	APP
Tree Conservation Report (TCR) and Landscape Plan Address opportunities for tree retention. Consider transplanting where appropriate.	Developers	Plan of Subdivision Endangered Species Act if

Provide tree planting recommendations to achieve 30% tree canopy in new parks and to enhance urban forest and canopy cover throughout the community, using native species (Appendix C).		butternut is found to be present Urban Tree Conservation By-law
Environmental Impact Statement (EIS) Complete EIS for development applications within 30 metres of designated Urban Natural Features (Innes Park Woods) to identify necessary mitigation measures for protection of the features and their functions. This 30 metres of land is already identified on the CDP Land Use and Demonstration Plans and will be undevelopable. Complete the EIS to confirm presence of known or potential Species at Risk (SAR), extent of any SAR habitat, and associated mitigation / compensation requirements, as well as other potential natural heritage features If necessary, obtain SAR permit or other authorization from the Ministry of Environment, Conservation and Parks (MECP) for bobolink, least bittern, eastern meadowlark, bank swallow and/or barn swallow.	Developers	Plan of Subdivision Endangered Species Act if protected SAR or SAR habitat are present Environment Impact Statement
Wildlife Protection Develop site specific Protocol for Wildlife Protection.	Developers	Plan of Subdivision City of Ottawa Protocol for Wildlife Protection
Water and Sewer Apply for Environmental Compliance Approval (ECA) from the MECP	Developers	Plan of Subdivision Environmental Protection Act ECA MECP
Permit to Take Water (PTTW) Permit to Take Water if more than 4000,000 I/day or registration on the Environmental Activity and Sector Registry (EASR) if between 50,000 to 400,000 I/day.	Developers	MECP Ontario Water Resources Act (OWRA) Water Taking Regulation (O. Reg. 387/04)
Previous Land Uses	Developers	Environmental Protection Act
Decommission wells.		Ontario Water Resources Act
Remove agricultural tile drains.		
Remove septic systems.		
Headwater Drainage Features Implement the recommendations of the Headwater Drainage Features Summary report prepared by Niblett (March 28, 2018)	Developers	Permit from Conservation Authority (approvals under Ontario Regulation 174/06 "Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation" under Section 28 of the Conservation Authorities Act

	(RVCA Watershed))

7.11 Build-Out

Upon build-out of the streets, Medium Density Residential areas, Highest Density Residential areas and Commercial areas, it is intended that this CDP and associated Secondary Plan may, at the discretion of the City, be retired and voided.

While small-scale change and development within the CDP area is possible after build-out, the directions contained in the CDP will have already been affected, and development policies can revert to the general policies of the Official Plan.

Appendix A: Team Members

Core Project Team (CPT):

Phil Castro, Richcraft Homes Fairouz Wahab, Richcraft Homes Julie Carrara, Fotenn Sarah Marsh, Fotenn Steve Pichette, DSEL Laura Maxwell, DSEL Arthur Gordon, Castleglenn Arman Matti, Castleglenn
Jake Berube, Castleglenn
Kelly Roberts, Morrison Hershfield
Chris Ellingwood, Niblett
Robin van de Lande, City of Ottawa
Alain Miguelez, City of Ottawa

Technical Advisory Team (TAC):

Cheryl Brouillard, City of Ottawa Robin van de Lande. City of Ottawa Alain Miguelez, City of Ottawa John Smit, City of Ottawa Peter Giles, City of Ottawa Dana Collings, City of Ottawa Mark Young, City of Ottawa Amy MacPherson, City of Ottawa Mark Richardson, City of Ottawa Katja Sostaric, City of Ottawa Julie Lebrun, City of Ottawa Steve Belan, City of Ottawa Michael Boughton, City of Ottawa Royce Fu, City of Ottawa Chris Cope, City of Ottawa Judy Flavin, City of Ottawa Lynda Mongeon, City of Ottawa Gary O'Connor, City of Ottawa Dhaneshwar Neermul, City of Ottawa Frank McKinney, City of Ottawa Jeff Shillington, City of Ottawa John Bougadis, City of Ottawa Ron Rooke, City of Ottawa Eva Spal, City of Ottawa Michel Kearney, City of Ottawa Shohan Ahmad, City of Ottawa Joe Mojsej, City of Ottawa Jacek Taracha, City of Ottawa Laurent Jolliet, City of Ottawa Darlene Conway, City of Ottawa Ted Cooper, City of Ottawa Joseph Zagorski, City of Ottawa Kevin Wherry, City of Ottawa Ingrid Coney, City of Ottawa Mary Ellen Wood, City of Ottawa

Paul Landry, City of Ottawa Dave Rvan. City of Ottawa Marc Gagné, City of Ottawa Kevin Monette, City of Ottawa Riley Carter, City of Ottawa Frank McKinney, City of Ottawa Asad Yousfani, City of Ottawa Stephen Boyle, City of Ottawa Genya Stefanoff, OC Transpo Alex Carr, City of Ottawa Inge Roosendaal, City of Ottawa Phil Castro, Richcraft Homes Fairouz Wahab, Richcraft Homes Jade Bradshaw, Richcraft Homes Domenic Idone. Minto Communities Marcel Denomme. Minto Communities Susan Murphy, Minto Communities Michael Michaud, Glenview Homes Jake Shabinsky, Glenview Homes Aaron Clodd, Smart Centres Murray Chown, Novatech J.P. Taillefer, Taillerfer Estates Bill Holzman, Holzman Consultants Julie Carrara, Fotenn Sarah Millar, Fotenn Sarah Button, Fotenn David Becker, Fotenn Pamela Sweet, Fotenn Kelly Roberts, Morrison Hershfield David Gilbert, Paterson Group Carlos Da Silva, Paterson Group Faisal Abou-Seido, Paterson Group Steve Pichette. DSEL Laura Maxwell, DSEL Kevin Murphy, DSEL

Matt Wingate, DSEL

Heather Wilson, J.F. Sabourin &

Associates

Jason Cole, Palmer Environmental

Consulting

Arthur Gordon, Castleglenn

Arman Matti, Castleglenn

Mark Baker, Parsons

Chris Ellingwood, Niblett

Lincoln Lo, Malone Given Parsons

Christina Heydorn, Malone Given

Parsons

Kyle Larmour, Malone Given Parsons

Erin Wilson, Golder Associates

Scott Ritchie, Hydro Ottawa

Spencer Warren, Hydro Ottawa

Margaret Flores, Hydro Ottawa

James Holland, South Nation

Conservation Authority

Mathieu Leblanc, South Nation

Conservation Authority

Glen McDonald, Rideau Valley

Conservation Authority

Jocelyn Chandler, Rideau Valley

Conservation Authority

Dhilan Gunasekara, Rideau Valley

Conservation Authority

Charles Goulet, Ontario Ministry of the

Environment, Conservation and Parks

Appendix B: Existing Conditions

Geotechnical

The Study Area is relatively flat and approximately at grade with neighbouring properties and adjacent roadways. The area is dominated by active and remnant agricultural uses, with isolated areas of deciduous forest and thicket swamp.

The subsurface profile varies between shallow bedrock at the northern edge of the Study Area to a deep, sensitive silty clay deposit across the remainder of the site. The overburden drift thickness varies widely from 0 metres (north) to 30 metres (south) in depth. No organic soils such as peat, marl, etc. were encountered throughout the Study Area. It is estimated that groundwater can be expected between 1.5 to 2.5 metres in depth.

Preliminary permissible grade raise recommendations are 2 metres at the northern edge of the Study Area (in the location of the bedrock with shallow overburden) and 0.5 to 1.5 metres (in the location of the silty clay deposit).

Drainage and Hydrogeology

The site is located within the Mud Creek, McKinnon Creek and Bilberry Creek watersheds. The Mud Creek and Bilberry Creek watersheds are within the regulatory limits of the Rideau Valley Conservation Authority (RVCA) whereas McKinnon Creek is within the regulatory limits of South Nation Conservation Authority (SNCA).

Marine Clay Area

The majority of the Study Area is underlain by glaciomarine clay. The clay forms a regional aquitard, limiting infiltration and groundwater flow at the site. Given the low soil permeability, perched water tables are found at depths that range from approximately 0.15 to 0.40 metres and lateral groundwater flow dominates. Shallow groundwater flow is expected to closely mimic site topography and follow watershed boundaries.

There are wetland communities located in the Study Area which are supported by direct precipitation and localized surface water runoff as opposed to groundwater discharge. The perched water table condition holds water and has allowed for the development of water tolerant vegetation communities. These wetlands lack a well-developed organic soil layer due to the fact that they are subject to seasonal water level fluctuations that leave them dry for substantial parts of the year.

Bedrock Area

A bedrock escarpment is located along the northern edge of the Study Area, to the immediate south and east of Innes Park Woods. The escarpment is situated along a fault separating two bedrock units, both of which are limestone formations that are susceptible to chemical weathering along joints and fractures. Where the bedrock is exposed at or near the surface, the

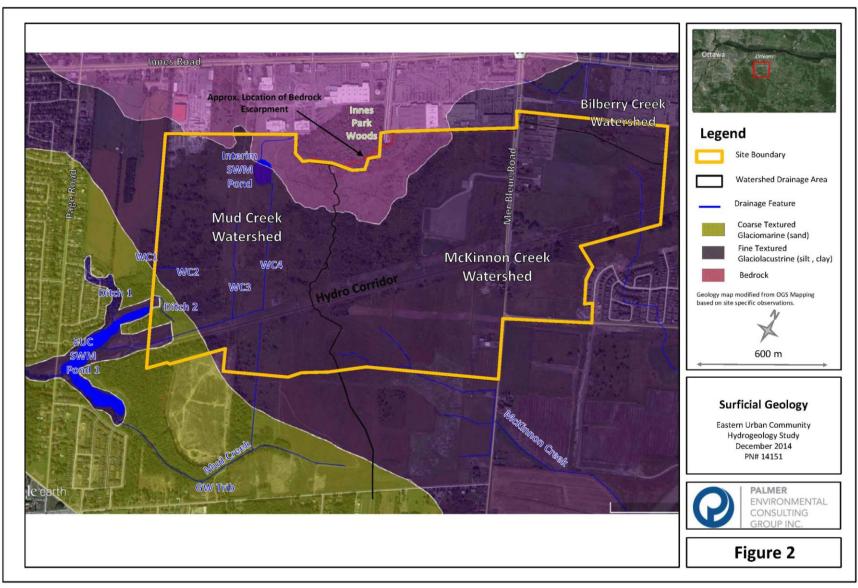
majority of precipitation will infiltrate along the fractures. Infiltration along these fractures recharges the deeper water table, below the influence of the marine clay. Deep groundwater flow is to the north, towards the Ottawa River. The fractured bedrock is classified as a Highly Vulnerable Aquifer (HVA) and Significant Groundwater Recharge Area (SGRA).

In order to maintain the pre-development infiltration rate in this area post-development, less impactful land-uses (i.e., parks) are suitable for this area or Low Impact Development (LID) measures should be considered.

Sand Area

A thin (<1 metre) area of surficial sands is located in the southwest corner of the Study Area, continuing to the west. This area has been identified as an HVA and a SGRA in the Mississippi-Rideau Source Protection Plan (2013). While infiltration in the sand area does not directly support the function of a natural feature or significant aquifer on the site, it does support the overall water balance for the Mud Creek and McKinnon Creek watersheds.

Similar to the areas of marine clay, the water table is predicted to be shallow and perched in the sand area, with horizontal groundwater flow dominating over vertical flow. Groundwater flow is towards Mud Creek, where discharge areas are expected.



Surficial Geology (Palmer, 2014)

Headwater Drainage Features

As outlined in the Headwater Drainage Features (HDF) Summary report prepared by Niblett (March 28, 2018), a total of ten potential HDF were identified in the Study Area, in both the RVCA and SNCA jurisdictions. Flow within the drainage features in the Study Area is supported by surface water runoff and not by groundwater discharge. The majority of these features were artificially created to remove standing water from the Study Area in support of agricultural uses.

Natural Environment

Species at Risk

Breeding bird surveys found seven bird Species at Risk (SAR) at the provincial and/or federal level (bobolink, least bittern, barn swallow, eastern—wood-pewee, bank swallow, wood thrush and eastern meadowlark) and eight Area Sensitive bird species. SAR birds and their habitat may pose challenges and constraints to future development.

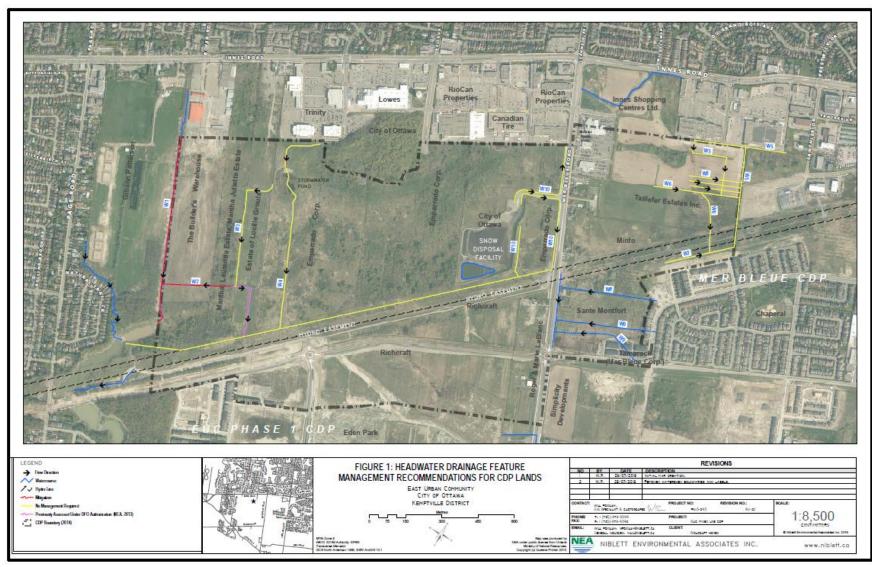
Vegetation surveys found a total of 20 vegetation community types. Of the 20 communities, no provincially Significant Wetlands or Areas of Natural and Scientific Interest (ANSI) were present. A total of 316 plant species were identified and 25 of them are classified as Regionally Significant plant species. Two Butternuts (a Provincial SAR) were found near the proposed stormwater management pond expansion site, both of which were found to be non-retainable (Category 1).

Urban Natural Features

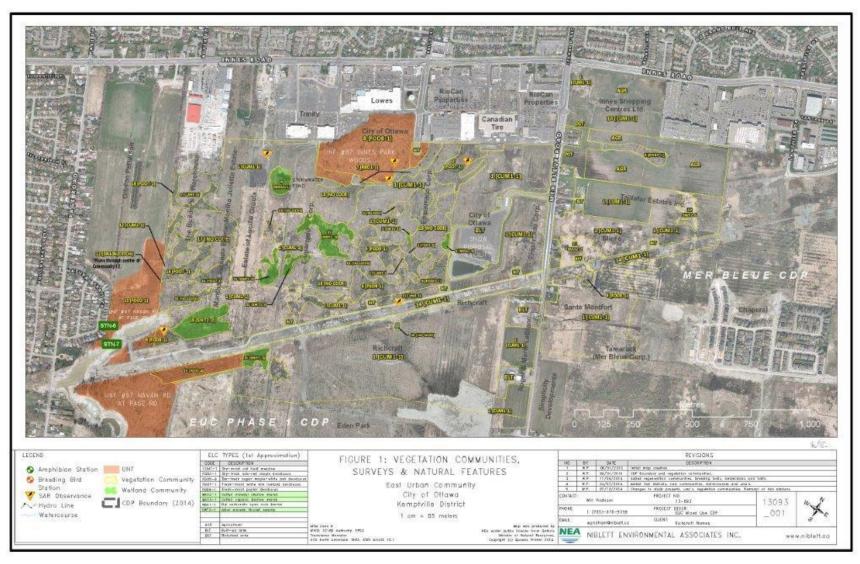
Two "Urban Natural Features" immediately abut the Study Area, including Innes Park Woods to the north and the woodlot at Navan Road and Pagé Road to the southwest. Urban Natural Features are designated on Schedule B- *Urban Policy Plan* of the Official Plan (OP). They are natural landscapes that provide a valuable contribution to biodiversity and wildlife habitat in the urban area. The purpose of the OP designation is to preserve natural features that are currently managed for conservation or passive leisure uses. The two Urban Natural Features are also identified on Schedule L1- *Natural Heritage System Overlay (East)* of the OP.

Aquatic Habitat

No critical aquatic habitat, SAR or sensitive spawning areas were found in or around the Study Area's aquatic features.



Headwater Drainage Features (Niblett, 2018) (Note: this graphic represents 2018 conditions)



Vegetation Communities (Niblett, 2015) (Note: this graphic reflects 2015 conditions)

Snakes

A minimum of three different snake species have been observed in the rock barren that is located along the southern edge of Innes Park Woods, in the northern portion of the Study Area. Given the number of snake species, the time of year that they were observed, and the location of the sightings (near potential hibernacula), the Ministry of Natural Resources and Forestry (MNRF) has confirmed that the rock barren, combined with a 30 metre buffer, is considered Significant Wildlife Habitat for terrestrial reptile. Significant Wildlife Habitat is defined in the Provincial Policy Statement (2014) and the City of Ottawa OP as "areas where plants, animals or other organisms live and find adequate amounts of food, water, shelter and space needed to sustain their populations". None of the snake species that were observed in the rock barren have specific protection under the Endangered Species Act.

Stormwater Management Pond Expansion

In order to accommodate the new development that is planned for both the Study Area and the lands located to the immediate west, an expansion of the existing stormwater management pond in the southwest corner of the Study Area is required.

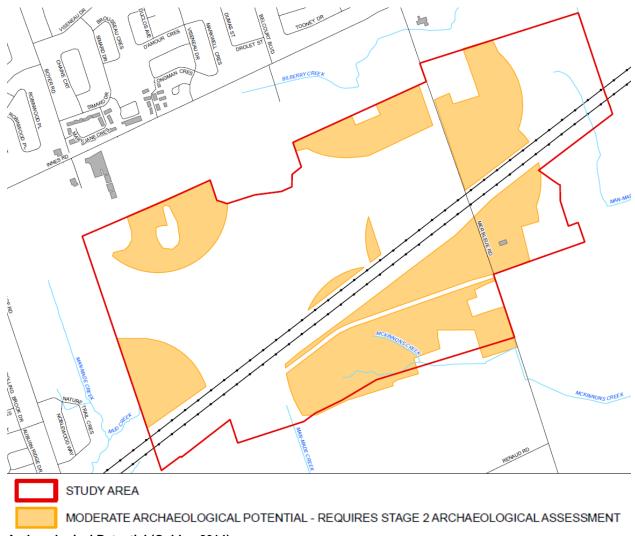
The pond expansion will result in the removal of a total of 1.9 ha of wooded area, none of which is considered Significant Woodlands. The proposed pond expansion allows for more of a buffer along an existing forest stream than other designs that were considered.

The existing forest area has the potential to provide roosting habitat for SAR bat species, therefore bat surveys were undertaken. A very small number of bats from four different bat species were recorded, including big brown bat, eastern red bat, hoary bat, and silver-haired bat. None of the recorded bat species are SAR and the small number of bats present in the area does not indicate the adjacent forest as a Significant Wildlife Habitat for roosting.

Archaeology

Although no archaeological sites are registered in the Study Area, it is considered to have moderate aboriginal archaeological potential based on the City of Ottawa's Archaeological Master Plan and the Ministry of Tourism, Culture and Sport (MTCS)'s Standards and Guidelines for Consultant Archaeologists (2011). The Study Area is within 300 metres of Billberry, McKinnon's and Mud Creeks, which are considered a potential transportation corridor for aboriginal navigation as well as settlement. Historical site potential is associated with the location of eight known nineteenth century buildings within 300 metres of the Study Area. Further potential is added by the proximity of Mer Bleue Road, a pre-1879 historic transportation corridor which runs north-south through the Study Area.

Archaeological potential has been removed in certain locations by the development of the hydro corridor, the snow disposal facility, various commercial and residential properties as well as roadside development, soil stripping and fill and areas of previous Stage 2 archaeological assessments. These areas were found to be unsuitable for further archaeological assessment.



Archaeological Potential (Golder, 2014)

Transportation

The Place of Work; Place of Residence (POW-POR) commuter flow data indicates that Orléans is primarily a bedroom community where residents travel outside the community to work. More specifically, the data indicates that only 20.5% of workers living in Orléans work in Orléans, while the majority commute to work inside the Greenbelt (71.1%) with 6.6% of workers living in Orléans commuting to Gatineau to work. This is reflected in the traffic analysis which showed a generally congested level of service in the peak direction of travel demand.

The Study Area is serviced by an established network of arterial roads, including Brian Coburn Boulevard, Innes Road, Navan Road, Orléans Boulevard, Mer Bleue Road (which continues north of Innes as Jeanne d'Arc Boulevard), and Tenth Line Road. Existing collector roads include Renaud Road to the south and Pagé Road to the west. There are a number of planned future roadway infrastructure improvements relevant to the Study Area. Blackburn Hamlet Bypass, Mer Bleue Road and Navan Road are all due to be widened at various stages up to and beyond the 2031 horizon year in the City of Ottawa 2013 Transportation Master Plan

(TMP). These planned road network improvements will all have a direct bearing on the Study Area.

In terms of transit, the Study Area is currently serviced by the following bus routes:

- Route 25, a Transitway route which provides frequent service seven days/week in all time periods along Innes Road, to the Blair Light Rapid Transit (LRT) Station to the west and beyond.
- Various Connexion routes which run during morning and evening rush hours between Orléans and the Blair LRT Station (225, 228, 231, 232, and 234).
- / Various Local routes (30, 34, 131, and 138), with Route 30 running directly through the Study Area, along Mer Bleue Road (north to Highway 174 and east to Millennium).

Pedestrians and cyclists are currently accommodated on Innes Road and Mer Bleue Road by way of sidewalks and on-street bicycle lanes on both sides and along Brian Coburn Boulevard by way of a sidewalk on the north side and a Multi-Use Pathway (MUP) on the south side.

Employment

Given the existing Urban Employment Area OP designation on the east side of Mer Bleue Road, existing employment conditions in Ottawa, and specifically Orléans, were examined as they relate to changes and trends observed in jobs, commuter flow, absorption rates and employment land.

Overview of Employment Market

Between 2006 and 2012 the number of jobs in Ottawa increased from 520,800 to 565,800, growing by an estimated 8.7% over the six year period. In comparison, employment growth in Orléans outpaced that of the city average, growing by 3,040 jobs between 2006 and 2012 for a 17.1% growth. The sectors that experienced the largest job growth included Retail (18.8%), Health Care and Social Assistance (35.9%) and Accommodation and Food Services (33.1%). Declines occurred in the traditional industry sectors of Transportation and Warehousing (37.9%) and Manufacturing (24.0%).

Employment Share

Not surprisingly, the Federal Public Administration sector accounted for the largest share of employment in the City in 2012 at 21.5%. The Health Care and Social Assistance; Retail; and Professional, Scientific and Technical Services sectors were the next largest sectors accounting for 10.4%; 9.9%; and 9.8% respectively. From 2006 to 2012, the Manufacturing sector saw its share of total employment decrease from 6.0% to 4.5%.

While the importance of the Federal Public Administration sector cannot be understated for the City as a whole, its employment is nearly non-existent in Orléans. Federal jobs only amounted to 50 jobs in Orléans (dropping from 100 in 2006) accounting for only 0.2% of the area's total employment. The big employment drivers in Orléans include the Retail sector (6,200 jobs; 29.8%); the Health Care and Social Assistance sector (2,500 jobs; 12.0%); the Accommodation and Food Services sector (2,500 jobs; 12.0%); and the Education sector (2,200 jobs; 10.6%). The Transportation and Warehousing, Construction and Manufacturing sectors all saw declines in share of total employment within Orléans from 2006 to 2012.

Geographic Distribution of Employment

The majority of employment in Ottawa continues to be located within the Greenbelt (80.5%), with the urban centres outside the Greenbelt accounting for 15% of employment share and the rural share accounting for 4.5%. However, over the past two decades the urban centres have more than doubled its share growing from 6.8% of total employment in 1991 to 15% in 2012. Over half of this growth occurred in Kanata growing from 12,200 jobs in 1991 to 43,000 jobs in 2012. By comparison, Orléans has grown from 10,100 jobs to 20,800 jobs during the same timeframe with gains primarily tied to population growth.

Orléans continues to lag behind Kanata in terms of employment growth. Activity rates in Orléans (measured as number of jobs per 100 population) measured at 18.8% in 2012, which is below the average of all urban centres (27.2%) and significantly lower than Kanata (53.5%) and the City as a whole (60.5%).

Distribution of Employment by Official Plan Designation

Citywide, just under a quarter of total employment (23.2%) was concentrated on employment land in 2012. Kanata and Leitrim accommodated the greatest proportion of total employment on employment land at 69.6% and 57.0% respectively. Orléans accommodates significantly less with 24.9% of its total employment on employment lands.

The majority of the employment on employment lands in Orléans is generated from the South Orléans Industrial Park (4,120 jobs of 5,190 jobs). However, this Industrial Park is overlapped by the Innes Road Arterial Mainstreet designation which contributes 3,280 jobs (mostly retail and service commercial uses) to the employment total. Netting out this employment from employment areas, the South Orléans Industrial Park accommodates only 840 jobs; resulting in Orléans accommodating only 9.2% of its total employment on employment land.

The major urban employment designations found in Orléans include Urban Employment Area, Mixed Use Centre/Town Centre, General Urban Area and Arterial Mainstreets. The proportion of employment in Orléans located on lands that would accommodate medium to high density office uses (Urban Employment Area and Mixed Use Centre) is very small when compared to city- wide proportions. The large share of employment located on Mainstreet designated lands is a reflection of the substantial population serving employment existing in Orléans.

Employment Density Trends

Employment densities (employees per net hectare) in Ottawa's employment areas vary widely among employment areas and Ottawa's urban and rural centres. The overall employment density across the City of Ottawa is 43 employees per net hectare, with significantly higher densities within the Greenbelt. The average density for industrial lands inside the Greenbelt is 72.6 employees per net hectare. By comparison, the average density outside the Greenbelt is 48.2 employees per net hectare. The Rural Area has an average employment density of 8 employees per net hectare.

The average employment density outside of the Greenbelt, but not in a rural area, is 55 employees per net hectare, ranging from 0.4 employees per net hectare (Kanata West Business Park – undeveloped) to 96.9 employees per net hectare (South Merivale Business Park). Generally speaking, industrial lands outside the Greenbelt have achieved much lower employment densities in comparison to those within the Greenbelt. Of the urban centres outside the Greenbelt, the densest industrial lands are found in Kanata and South Nepean. Industrial areas in Orléans have an average employment density of 29 employees per net hectare, with the Youville Business Park (designated General Urban in the OP) having the highest density at 51 employees per net hectare.

Appendix C: Species at Risk Mitigation and Permitting

The recommendations in the table below identify the suggested mitigation measures as well as potential permitting requirements for the Species at Risk (SAR) that were identified in the Study Area.

Table 7. Species at Risk Mitigation Measures and Permitting Requirements

Constraint (Feature or Species)	Guiding Policies	Significance/ Rationale	Recommendations
Bobolink	Provincially and Federally Threatened Species (COSSARO,2017; COSEWIC, 2017) Protected under the Ontario Endangered Species Act (2007) and Migratory Birds Convention Act (Gov. Canada, 1994). Habitat protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.4	Identified in Community 1 south of Community 9	Prior to development at the Environmental Impact Statement (EIS) stage a qualified biologist should reassess the property for bobolink habitat. If habitat exists discussions with the Ministry of Natural Resources and Forestry (MNRF) should occur to decide the best course of action and requirements under the Endangered Species Act. A SAR permit may be required from Ministry of the Environment, Conservation, and Parks (MECP) if bobolink still exists within the field meadows. Possible compensation required on-site or off-site if removal of habitat is needed and detailed mitigation measures to be developed. Site preparation activities, no clearing to occur within the peak breeding bird period (April 15 th to August 15th) as per Environment

Constraint (Feature or Species)	Guiding Policies	Significance/ Rationale	Recommendations
			Canada
Least Bittern	Provincially and Federally Threatened Species (COSSARO, 2017; COSEWIC, 2017) Protected under the Ontario Endangered Species Act (2007), Species at Risk Act and Migratory Birds Convention Act (Gov. Canada, 1994). Habitat protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.4	One individual identified in Community 9	Prior to development at the EIS stage a qualified biologist should reassess the property for least bittern habitat. If habitat exists discussions with MNRF should occur to decide the best course of action and requirements under the Endangered Species Act permit may be required from MECP if least bittern still exists within the storm water pond prior to construction. Possible compensation required if removal of habitat is needed and detailed mitigation measures to be developed. No clearing to occur within the peak breeding bird period (Mid-April to end of August) as per Environment Canada. If dredging or other works are proposed in this pond, MNRF and MECP should be contacted regarding the
			MNRF and MECP should

Constraint (Feature or Species)	Guiding Policies	Significance/ Rationale	Recommendations
Barn Swallow	Provincially and Federally Threatened Species (COSSARO, 2017; COSEWIC, 2017) Protected under the Ontario Endangered Species Act (2007) and Migratory Birds Convention Act (Gov. Canada, 1994). Habitat Protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.4	Several individuals identified foraging over a snow dump pile in Community 1 on the northwest limits of the study property.	No further action is required. Only nests on structures are protected. Currently no structures with active barn swallow nests in Study Area. The presence/absence barn swallow nests should be conducted prior to removal of any potential barn swallow nesting structures.
Eastern Wood- peewee	Federally and provincially a special concern species (COSEWIC, 2017; COSSARO, 2017) Protected under Migratory Birds Convention Act (Gov. Canada, 1994) and the Significant Wildlife Habitat Technical Guide (MNR, 2000) Habitat protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.8	Identified in Community 8	Prior to development at the EIS stage a qualified biologist should reassess the property for eastern wood-pewee habitat. Protect the entire UNF (Innes Park Woods UNA). Special concern species covered under Significant Wildlife Habitat policies in PPS and City of Ottawa Official Plan. Forest to be preserved, no tree cutting.

Constraint (Feature or Species)	Guiding Policies	Significance/ Rationale	Recommendations
Bank Swallow	Federally and provincially threatened species (COSEWIC, 2017; COSSARO, 2017) Protected under the Migratory Birds Convention Act (Gov. Canada, 1994) Habitat Protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.4	Birds identified foraging over the property (north-west corner of Community 1 over a snow dump), no nesting habitat identified.	Currently no nesting colonies present, therefore no action under the ESA is required. Prior to development at the EIS stage a qualified biologist should reassess the property for bank swallow habitat. As these birds are opportunistic and can use temporary storage piles as nesting sites, the presence of suitable habitat and colonies should be assessed at the EIS stage. City of Ottawa Recommendation: site specific mitigation measures are needed regarding storage of topsoil/fill/etc. on-site, to avoid potential issues.
Wood Thrush	Federally threatened species (COSEWIC, 2017) and a special concern species provincially (COSSARO, 2017) Protected under the Migratory Birds Convention Act (Gov. Canada,1994) and the Significant Wildlife Habitat Technical Guide (MNR, 2000)	Identified in Community 8	Protect the entire Urban Natural Feature (UNF) (Innes Park Woods). Special concern species covered under Significant Wildlife Habitat policies in PPS and City of Ottawa Official Plan. Prior to development at the EIS stage a qualified biologist should reassess the property for wood thrush habitat.

Constraint (Feature or Species)	Guiding Policies	Significance/ Rationale	Recommendations
	Habitat protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.8		permitted until this is completed.
Eastern Meadowlark	Federally and provincially threatened species (COSEWIC, 2017; COSSARO, 2017) Protected under the Ontario Endangered Species Act (2007) and Migratory Birds Convention Act. Habitat protected under the City of Ottawa Official Plan (2003) Sections 2.4.2 and 4.7.4	Identified in Community 14	Prior to development at the EIS stage a qualified biologist should reassess the property for eastern meadowlark habitat. Permit required from MECP under the Endangered Species Act if eastern meadowlark still exists within the field meadows. Discussions with the MNRF may be required. Possible compensation required if removal of habitat is needed. No clearing to occur within the breeding bird period (April 15th to August 15th) as per Environment Canada.