FORMER CFB ROCKCLIFFE
COMMUNITY DESIGN PLAN

August 14, 2015

Canada Lands Company
Société immobilière du Canada

Ottawa

Algonquins of Ontario

MMM GROUP

MELOSHE AND ASSOCIATES LTD.
PLANNING AND DEVELOPMENT CONSULTANTS

PROJECT TEAM MEMBERS

Canada Lands Company

City of Ottawa

MMM Group

Meloshe and Associates

Brook McIlroy

Janet Rosenberg Studio

Applied Ecological Services

Parsons

IBI Group

Momentum

DST

N. Barry Lyon Consultants

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1 | A NEW FUTURE FOR THE FORMER CFB ROCKCLIFFE

1 A NEW FUTURE FOR THE FORMER CFB ROCKLIFFE

1.1 INTRODUCTION

The former Canadian Forces Base (CFB) Rockcliffe is the largest undeveloped piece of land within the Ottawa Greenbelt. This 131 hectare redevelopment site is at an exceptional location on high ground which overlooks the Ottawa River. It is bounded on multiple sides by greenspace systems along the Rockcliffe and Aviation Parkways, the Montfort Woods and a treed escarpment.

The base was decommissioned many years ago, and the opportunity exists today to reconnect this site back into the urban fabric of the city and create a highly desirable mixed-use community for approximately 9,800 residents. The long-term development period to full build-out is estimated to be 15-20 years. There is also the opportunity to provide space for a variety of employment uses providing approximately 2,600 permanent jobs.

Due to the proximity to the downtown, the new community will allow for more intensive development than in the outer suburbs, yet at a lower scale than one would see closer to the core. A variety of housing types will provide a range of choices for people with different housing needs. A community core will have the greatest mix of land uses to provide amenities to the new neighbourhoods, and it will also have the most active and vibrant streets in the community.

A modified grid of collector and local roadways will meet the community's mobility needs and create an outstanding public realm including spacious sidewalks, multi-use pathways, and enhanced streetscaping.

A hierarchy of public park spaces provide opportunities to appreciate the drama of the Ottawa River and meet local recreational needs. This park system will be interconnected by a series of pathways that will be integrated with the stormwater management system.

1.2 PLANNING AREA BOUNDARIES

The Planning Area is a 131 hectare site located within the Greenbelt. It is approximately bordered by the Aviation Parkway to the west, the Sir George-Étienne Cartier Parkway to the north, the National Research Council (NRC) Campus to the east and Montreal Road to the south. The majority (125.5 ha) of the site is owned by Canada Lands Company. The remaining 5.3 hectares of the site are owned by the National Research Council. The site location is shown in Figure 1.1.

This is the last vacant site of this size located within the Greenbelt that is available for development.

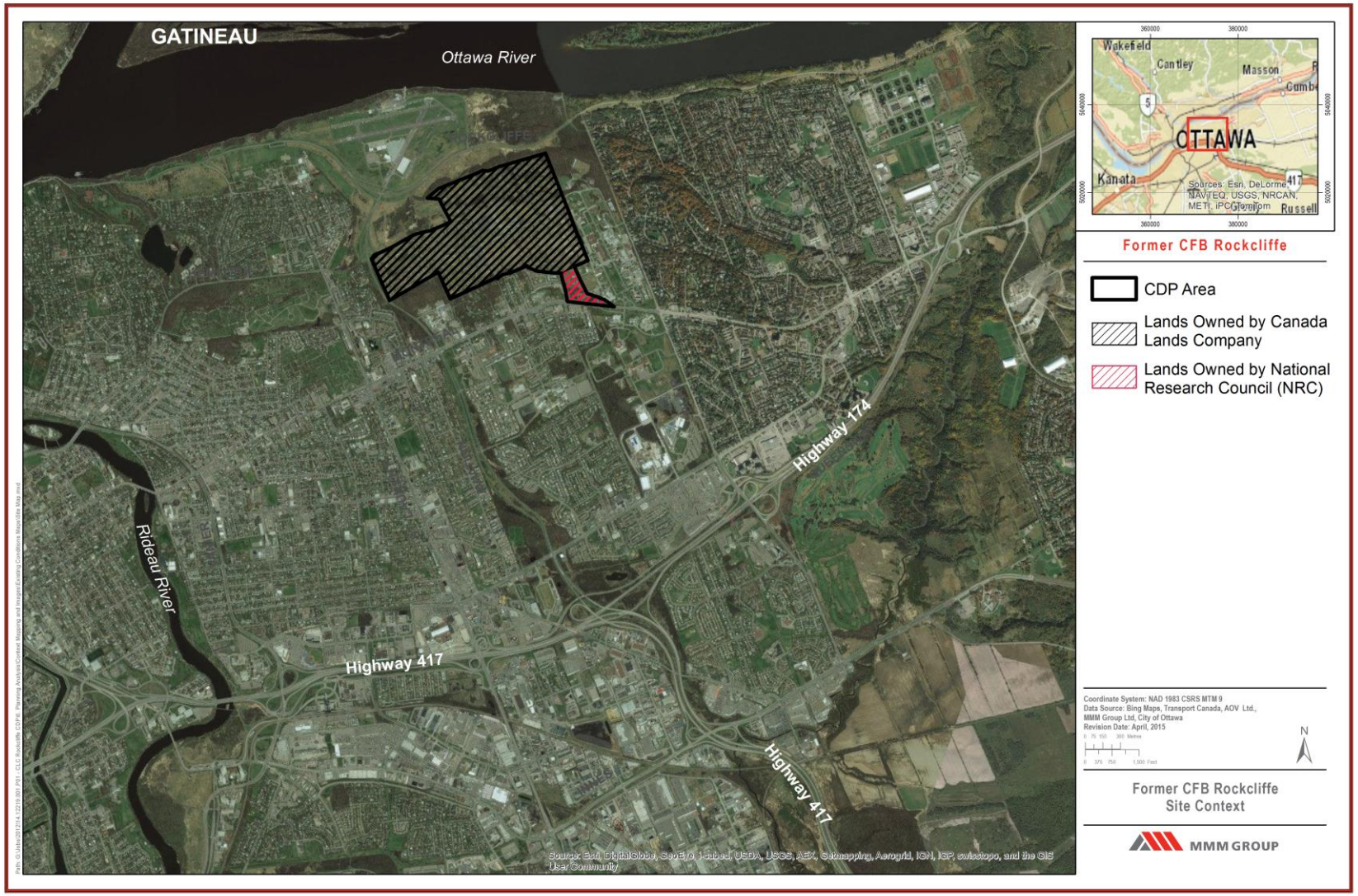


Figure 1.1: Site Location

1.3 GUIDING VISION

The Guiding Vision describes the aspirations of both Canada Lands Company and the City of Ottawa for the future development of the site, with input from various stakeholders. It forms the basis for principles, planning policies and guidelines that follow later in this document.

The Guiding Vision for the site is as follows:

The redevelopment of the former Canadian Forces Base (CFB) Rockcliffe will be a contemporary mixed-use community. It will be walkable, cycling-supportive, transit-oriented and built at a human scale. These principles will be realized through improved connectivity to the surrounding neighbourhoods, and by providing access to open space for everyone. The site will connect to the history of the Algonquin people. It will celebrate its military heritage. Redevelopment of the former CFB Rockcliffe will demonstrate urban design and landscape excellence, innovation in sustainability, cultural/social dynamism, and a high quality of life. It will be forward-looking in its development approach by integrating the site's natural ecological functions into the design.

1.4 PRINCIPLES SHAPING THE FUTURE OF THE COMMUNITY

To turn the ambitions described in the Guiding Vision into an implementable plan, a series of planning principles was developed based on the existing conditions of the site and Ottawa's planning policy context. Through the various iterative design studies of the consulting team, extensive discussions early in the process with different stakeholder groups and input from the public, Canada Lands Company adopted nine planning principles. The Public Advisory Group (PAG) and Technical Advisory Committee (TAC) reviewed and commented on the principles. The design team then used them to prepare the plan.

Table 1.1 lists all of the principles and summarizes how they have been integrated into the plan:

Table 1.1: Planning Principles

Principle	Strategy
Principle #1: Canada Lands Company will design the former CFB Rockcliffe Community to be a compact and complete mixed-use community accommodating its future population in a range of housing types.	The plan will provide a mix of uses to support a complete community that allows people of all ages to live, work and play at the former CFB Rockcliffe. The community will include mixed-use areas, residential areas, employment areas, a comprehensive open space system, and local schools. Employment uses will primarily be office-oriented to maintain compatibility with the planned and existing adjacent uses. The plan will include a limited amount of commercial and retail, to the extent that the community can support it. Commercial and retail in the new community will serve the general area (both within and outside the new community), but will not compete with established businesses along Montreal Road. Canada Lands Company will make targeted efforts to attract commercial and retail uses that may be lacking in the area (e.g., grocery supermarkets, restaurants, small specialty retail). A range of housing will be provided, including single-family dwellings, row housing, walk-ups, lane-oriented housing and apartments, and will meet the Official Plan affordability targets. Aside from the prominent community entry points in the southeastern and southwestern corners, the plan will concentrate medium densities adjacent to the town square.

Principle	Strategy
Principle #2: The former CFB Rockcliffe Community will re-connect the site with the surrounding city fabric, with appropriate land use transitions from adjacent land uses and open spaces.	Canada Lands Company will seek to create as many road and pathway connections to the surrounding primary road network as are feasible. This will include new or enhanced connections to the Aviation Parkway and connections to the surrounding city streets on Hemlock, Codd's and Burma Roads. Wherever possible, Canada Lands Company, the City and the NCC will collaborate to create additional pathways that provide connections within the site, and to neighbourhoods surrounding the site, making efforts to connect these pathways to existing pathways outside the site. The plan will provide appropriate transitions throughout the site. Low-rise residential development will be in the south western portion of the site as a transition from the adjacent community. This will place compatible development at the southern edge of the site where adjacent low-density residential uses exist. Canada Lands Company will provide two employment precincts on the site. One employment precinct will be on the eastern boundary of the site in order to provide an appropriate transition from the National Research Council site. The second cluster will be a mixed-use area, providing a transition from the Aviation Parkway to the quieter residential communities in the interior of the site. The plan will also provide a central community core, located along the major transportation route, which will provide opportunities for additional small-scale employment and commercial uses.

Principle	Strategy
Principle #3: The community will enhance the existing natural environment. It will include an integrated greenspace strategy that protects key natural features where the open space is part of a functioning ecological and natural framework.	To the extent practical, the plan is designed to place development in such a way that preserves significant tree stands. The plan will capitalize on the unique topographic characteristics of the site. This includes minimizing soil disruption through major cut and fill requirements and maintaining existing drainage patterns around the site in order to maintain the flow patterns that supported (and will continue to support) growth of the native vegetation. The plan will create an interconnected network of public open space. This will include active recreation areas, passive greenspace, protected natural areas, and a vibrant network of green corridors that contribute to the natural drainage strategy. The community design will provide visual and physical connections to the Montfort woodlot, and the placement of parks and open spaces will maintain and enhance public access to significant views from the site.
Principle #4: The community will prioritize mobility for pedestrians, cycling, and transit over private vehicle use.	The plan will weave the community into the fabric of the city with a series of collector roads that will provide sidewalks, segregated cycling facilities, and efficient transit service that will operate on a grid-based network of streets. The plan will have pedestrian scale neighbourhoods based on a five-minute walking distance, and a mix of accessible amenities, with particular emphasis given to short walking distances to local school sites and convenience retail. The community design will include multi-use pathway connections to the existing NCC pathway systems on the Sir George-Étienne Cartier and Aviation Parkways. It will also connect to the neighbourhoods to the east.

Principle	Strategy
Principle #5: The community will be a vibrant hub of activity with dynamic and attractive urban spaces, in a set of aesthetically pleasing and sustainable urban neighbourhoods.	In addition to natural, passive open spaces, the community will include a number of active public spaces such as squares and parkettes. The City and Canada Lands Company will use the Design Guidelines and Policies of the Community Design Plan to ensure the implementation of a high standard of architectural, streetscape, and open space design. Furthermore, Canada Lands Company will use its own architectural guidelines to ensure any development partners achieve excellence in built form design. Notable community entry points will have aesthetic distinctiveness. Higher density buildings will be focussed at these locations to give the site a prominent presence in the surrounding community. Tall buildings will be in locations that are sensitive to view corridors to the Ottawa River, and at key gateway locations. Canada Lands Company will set sustainable development performance requirements for the implementation of built form and infrastructure on the site. Canada Lands Company will adopt a sustainability framework with priorities, objectives, indicators, targets, monitoring, and evaluation systems that best reflect the context of the site, the city, the region, and Canada Lands Company. Canada Lands Company will work with stakeholders to promote innovative practices for the management of stormwater on the site where feasible. Canada Lands Company will promote innovative practices for the energy design and will seek partnerships with the NRC and Montfort Hospital for this initiative. The CDP will include provisions for connections to a future national cultural institution on the NCC site to the north.

Principle	Strategy
Principle #6: The community will reflect and respect the heritage and legacy of the Algonquin peoples and will serve to connect cultures.	The Algonquins of Ontario will be an integral partner throughout the development of the new community. Through this partnership, the community will provide a meaningful connection to the history of the Algonquin people. An area will be set aside for Algonquin commemoration at the ridge at the northern boundary of the site that overlooks the Ottawa River. Subject to consultation with the Algonquins of Ontario, Canada Lands Company will use street naming, public art, and commemorative signage to celebrate the association of the site and the region with the Algonquin peoples.
Principle #7: The community will commemorate the military heritage of the site and the contributions made by people who served in the military to Canada.	Canada Lands Company will use street and park naming, public art and commemorative signage to celebrate the past military heritage of the site.
Principle #8: The former CFB Rockcliffe community will be designed as an urban community, at a human scale, that encourages interaction within the site.	The former CFB Rockcliffe community will be designed to encourage movement and interaction at a human scale. Streets will be designed to promote active transportation. Buildings will not overwhelm the streetscape and will have densities that support this vision for the site.
Principle #9: The former CFB Rockcliffe community will be resilient and flexible to be able to adapt to changing conditions.	The plan for the former CFB Rockcliffe will be flexible to respond to changing conditions. The plan will be adaptable to respond to development opportunities as they arise. It will be resilient to ensure that changes in the economy do not halt development of the community. The plan will provide enough flexibility to ensure that a change in context does not result in a change in the ability of the community to adapt, while at the same time maintaining the commitment to the guiding principles described above.

2 | PLANNING & INTEGRATED EA PROCESS

2 PLANNING AND INTEGRATED EA PROCESS

2.1 COMMUNITY DESIGN PLAN OVERVIEW

Community Design Plans (CDPs) are a tool for implementing the principles and policies of the City of Ottawa Official Plan (OP) at the community level. Section 2.5.6 of the Official Plan describes the purpose and contents of CDPs. They provide critical direction regarding density, desired land use and built form, development of the public realm, place-making, mobility and servicing in a defined CDP area.

Developing a CDP is a collaborative process among community members and the City of Ottawa, focused on building trust and partnership.

2.2 PLANNING AND DESIGN APPROACH

The overall planning and design strategy emerged out of the Guiding Vision and Principles Shaping the Future of the Community (refer to Chapter 1) for the project.

The planning process was iterative and involved a number of steps. To establish a context for the development of the plan, components of the natural systems to be maintained on site were identified, opportunities and constraints were highlighted, and surrounding neighbourhoods were studied. This information was consolidated to create an overall land use and open space strategy. Based on this strategy, the site was structured into different land uses and scales of development which will surround major parks, smaller parkettes and natural areas to be preserved to create the new community. The structure of the new community is presented in Chapter 5.

As a Canadian Forces Base, connectivity to the site was limited in the past for security reasons. To

remedy this, a transportation network was developed which will include various road types, cycling lanes and pedestrian pathways (see Chapter 5). This transportation network will be linked to the existing City transportation network and will increase the connectivity of the site to the surrounding city.

To guide the development of the site, a series of policies and guidelines were established for: land uses; height, bulk and massing; setbacks; architectural design and built form; parking; loading and servicing; mobility and circulation; the public realm; and infrastructure. These policies and guidelines are presented in Chapter 6.

Finally, an implementation strategy was created to guide the development process and is presented in Chapter 7. This strategy outlines the process for implementing the plan and delegates the roles of those responsible for making it happen.

2.3 CLASS ENVIRONMENTAL ASSESSMENT PROCESS

Municipal servicing and transportation plans are required to support a development of this size. As described in Chapter 3, the existing infrastructure on the site is degraded has reached the end of its useful life and will not meet the needs of a new community.

New infrastructure requires approval under the Ontario Environmental Assessment Act through the Municipal Class Environmental Assessment. The planning process for the former CFB Rockcliffe addressed this requirement concurrently with the Community Design Plan process.

The four phases of the Municipal Class EA were completed, which included a stakeholder consultation event for every phase. A description of the four phases is provided below:

- Phase 1: Background research and inventory of existing conditions, and identification of the infrastructure problems requiring resolution.
- Phase 2: Development of planning alternatives, and evaluation and selection of recommended planning alternatives (i.e., nature of road and infrastructure upgrades).
- Phase 3: Selection of preferred design alternative and refinement of the designs (road routing, cross-sections, buried and drainage infrastructure locations).
- Phase 4: Refinement of preferred design based on stakeholder feedback and plan finalization, and completion of a Class EA report that accompanies this CDP.

Canada Lands Company will prepare and submit an Environmental Study Report (ESR) in accordance with the Municipal Class EA parent document.

2.4 CONSULTATION PROCESS

The study process benefited from early and regular engagement with various stakeholders.

The process involved three Public Open Houses (POHs) to present progress on the project, seek input on alternatives, and seek input on drafts of the plan. The POHs were held on November 26, 2012, May 25, 2013 and February 18, 2014.

Canada Lands Company established a Public Advisory Group (PAG), which included representatives from surrounding Community Associations, Greenspace Alliance, the Quartier Vanier Business Improvement Association, and the Rockcliffe Yacht Club. This group met regularly during the process to provide input and advise Canada Lands Company on ways to improve the draft consultation materials for presentation to the broader public.

The Technical Advisory Committee (TAC) included members from various departments at the City of Ottawa (including representation from transportation, planning, emergency services, OC Transpo, Housing, Economic Development, etc.), representatives from the National Capital Commission, representatives from the Rideau Valley Conservation Authority, and from the National Research Council. This group provided advice on how various design iterations needed to be refined to meet City or other agencies' policies. In some instances, small working groups met to follow up and resolve specific technical issues.

In addition to the formally-established PAG and TAC, the project team held numerous meetings to coordinate with the surrounding communities, land-owners, approval authorities, and interest groups, including, but not limited to Transport Canada, the Montfort Hospital, National Research Council, the four Ottawa-area school boards, and the Canada Aviation and Space Museum.

The 2010 Algonquins of Ontario – Canada Lands Company Participation Agreement provides a framework for an ongoing relationship and the realization of mutual benefits as the former CFB Rockcliffe site is developed. This agreement laid out a framework for consultations with the Algonquins of Ontario during the development of the site, including during the CDP process.

All information about the stakeholder engagement component of this project is detailed in the Former CFB Rockcliffe CDP Public Consultation Report.

2.5 HOW THIS CDP WILL BE USED

This CDP will be adopted by City Council as the roadmap for future development of the site. Some elements of the CDP will be entrenched in a Secondary Plan and a Zoning By-law amendment. This is identified in more detail in Chapter 7 which deals with implementation.

Unless specifically noted otherwise, the plans in this document are demonstration plans. They illustrate one way the former CFB Rockcliffe could develop in accordance with the policies and guidelines of the CDP within the CDP boundary. The Secondary Plan and the Zoning By-law will contain the rules that all future development applications must follow. In the event of proposed deviations from the concepts/direction of the CDP, Chapter 7 discusses how this will be handled during the approval process.

Canada Lands Company will use the CDP to commission more detailed development plans for portions of the site such as plans of subdivision. Canada Lands Company will ensure that the development meets the design intent for the site by creating agreements with development partners based on the guidelines and policies of this CDP.

City councillors and staff will use the CDP to evaluate capital projects and development applications and to ensure that new developments reflect the recommendations, vision, and principles of the CDP.

Residents, businesses and community associations will refer to the CDP to ensure that the principles and priorities identified during the CDP process are respected as the community evolves.

The CDP complements overarching City policies, including the City of Ottawa Official Plan and the City's Urban Design Guidelines, and should be read alongside these policies when evaluating development applications. The CDP's design policies will take precedence over these guidelines in the case of any inconsistencies. The City's general design guidelines apply to any design matter not addressed otherwise in the CDP.

3 CFB ROCKCLIFFE TODAY

A full review of the existing conditions of the former CFB Rockcliffe CDP planning area and surrounding areas is provided in the Existing Conditions Report. A brief summary of the key aspects of this report that are relevant to the CDP is provided here.

3.1 TOPOGRAPHY, VIEWS AND VISTAS

The site benefits significantly from its location near the Ottawa River.

The site elevation ranges from approximately 70-100 metres above sea level, and generally slopes down to the north, providing beautiful views of the Ottawa River from some unobstructed vantage points. The slopes are gradual as the site is terraced.

Views to the River are interrupted with existing significant tree stands, which are a visual attribute themselves. Significant views are illustrated in Figure 3.1.

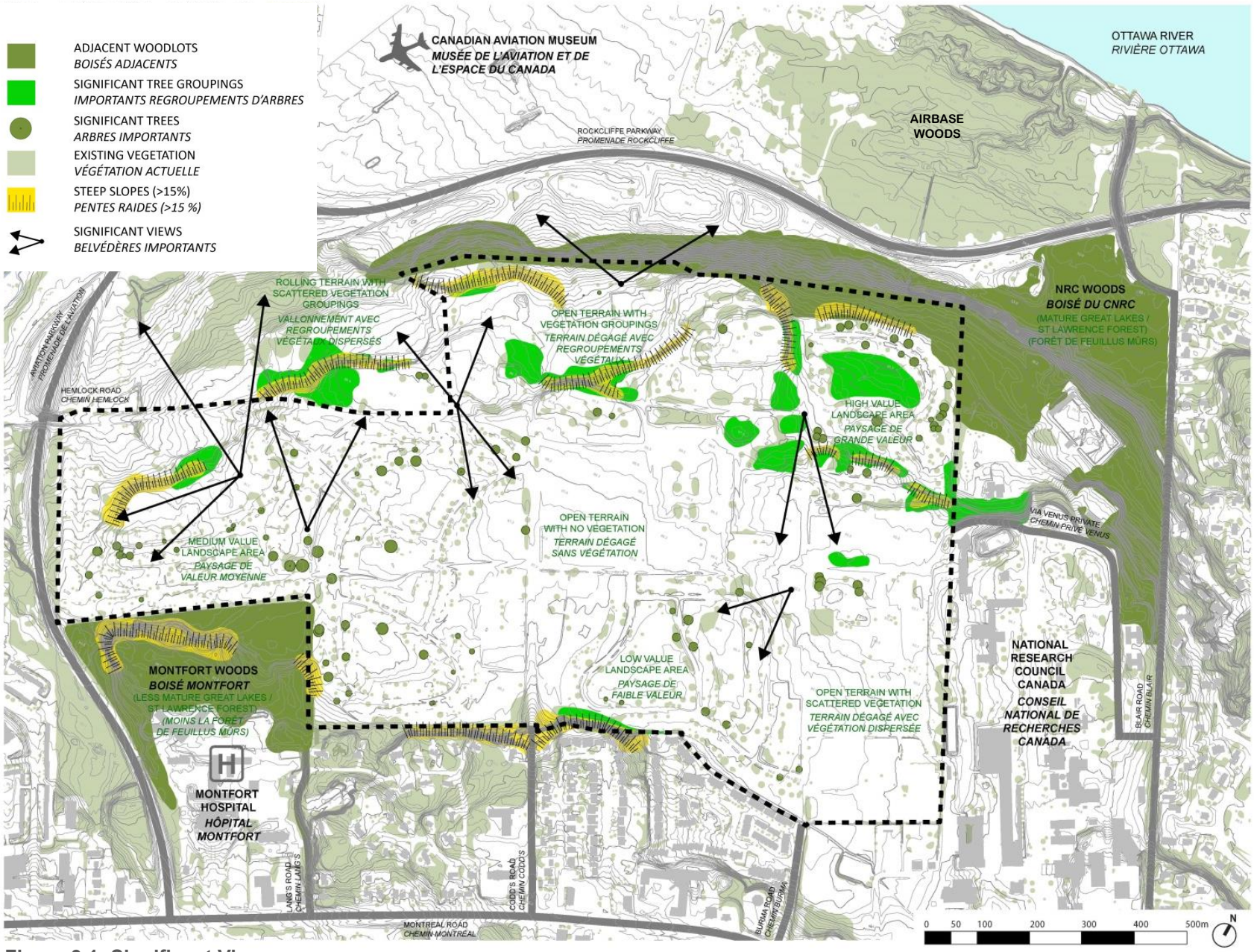


Figure 3.1: Significant Views

Both the Aviation and the Sir George-Étienne Cartier Parkways border the site. These Parkways are owned by the National Capital Commission (NCC) and are landscaped with greenspace and trees.

3.2 WATER RESOURCES, GEOLOGY, AND SOILS

The topography of the site forms two catchment areas, one where water flows approximately northwest into the Ottawa River and the other where water flows northeast into the Ottawa River. This is shown in Figure 3.13.

There are two creeks that have headwaters near or within the former CFB Rockcliffe site, and both outlet to the Ottawa River. The eastern creek starts just north of the site and slightly east of Burma Road. The western creek starts at the northern site boundary, just east of the north-bound on-ramp to the Aviation Parkway. The western creek is generally straight, with the final section of the creek running through 550 metres of underground storm piping. It is geomorphically stable, with most reaches lacking obvious signs of ongoing erosion. However, specific sites show signs of instability, particularly the area immediately downstream of the culvert north of the Aviation Parkway, where flow from the culvert has eroded the downstream channel. This will need to be addressed through the improvements to stormwater drainage.

The eastern creek has straight sub-reaches at the upstream and downstream ends, but generally it meanders, including a very tight meander bend near the downstream end. The hydraulics of the channel are slightly unusual because flow appears to infiltrate into the ground at several locations, including the channel terminus. Several sub-reaches in the eastern creek show signs of channel instability, including exposed roots on channel banks and over-sized channel dimensions. The most upstream reach appears to be the most destabilized, which is likely attributable to the culvert under the Sir George-Étienne Cartier Parkway. Water is held back by the recreational path at the outlet point to the Ottawa River and ponds, causing it to slowly permeate through the ground at this location. There is no direct connection to the Ottawa River.

Groundwater on site flows from north to northwest, approximately following the local topography, and descends towards the Ottawa River. Infiltration rates for overburden across the property are generally low, especially in the silty clay overburden material. This is particularly useful where it occurs immediately north of the site, as the low hydraulic conductivity combined with the low permeability barrier makes this a suitable location for stormwater management features such as ponds.

Overall, the soil and geological conditions on site will not constrain development, however, they may impact decisions on the construction methodology used in certain portions of the site. Conditions which could impact construction decisions include:

- The presence of shallow bedrock over at least 18% of the site could add to the cost of new infrastructure and underground parking;
- Deep clay soils are found in the southern and western portions of the site. These may not present a problem for low-rise commercial or institutional development, but will have an impact on the type of foundation required for high-rise buildings. Flattening of the clay slope is required on the western portion of the site in order to provide adequate engineering conditions for construction. This will need to be verified through an assessment of the slope stability including seismic loading conditions; and
- Site remediation will be required to remove former building foundations (where necessary) as well as potentially contaminated soils.

3.3 LANDSCAPE AND ECOLOGY

Canada Lands Company has commissioned a report by arborist Dan Baker to accompany this CDP. The document is titled CFB Rockcliffe Vegetation Survey.

When the former CFB Rockcliffe site was previously developed, the construction philosophy of the day prevailed, and the majority of the site was graded to level the land for its function as a military base. Since that time, vegetation and tree regeneration has produced a mixture of deciduous and coniferous trees, including a large Bur Oak, shown below, estimated to be over 200 years old.

Figure 3.2: Bur Oak

3.3.1 Tree Preservation

To the extent possible, this plan was developed with the overall intention of protecting significant trees and tree groupings. The criteria used to identify significance included:

- Tree groupings with a low Ash species component due to the presence of the Emerald Ash Borer.

- Tree groupings in Good to Fair condition with some natural regeneration of native species in the understory.
- Tree groupings that function to stabilize and provide aesthetic benefit to steep slopes.
- Trees with a high landscape value that are in good condition and possess a diameter at breast height (DBH) of 40cm or greater with a predominant focus on hardwood trees for their immense overall retention value.
- Trees located along edges of property lines that function in continuation with forest patches in adjacent communities and protected forests around the site, most notably the NRC and Montfort Hospital Woods.
- Larger groupings of specimen trees located in areas adjacent to forest groupings where grades will already be maintained and buffer areas will incorporate the trees into the site's open natural green spaces.
- Trees in good condition located in areas to be designated as non-recreationally focused parkland.
- Tree groupings that are adjacent to surface water features.
- Rare species and plant communities, including all Butternut trees (Juglans cinerea) to be retained as required by the Ministry of Natural Resources, due to their status as an endangered native tree species in Ontario.

The final selections resulting from this criteria review are shown in Figure 3.13. The Tree Inventory and Arborist Report, CFB Rockcliffe Vegetation Survey prepared by Dan Baker, describes the methodology, evaluation, and selection process in detail. Wherever possible, outstanding tree specimens and groupings are located within lands designated as parks and open spaces.

Significant trees that fall within development blocks will be managed in accordance with the City of Ottawa's Tree Preservation By-law.

3.3.2 Urban Natural Features

In addition to vegetation on site, a number of moderate-to-high-value Urban Natural Features (UNF), identified by the City of Ottawa in the Urban Natural Areas Environmental Evaluation Study (2005) and Greenspace Master Plan for their natural features, surround the site as shown in Figures 3.1 and 3.13. These include:

- The *Airbase Woods*, which received a high evaluation rating for the level of biodiversity and native plant species present on site. The City has identified the Airbase Woods as an Environmentally Significant Area (ESA);
- The *NRC Woods North*, which also received a high evaluation rating for the level of

biodiversity and native plant species present on site;

- The *Montfort Hospital Woods*, shown in Figure 3.3, which received a moderate evaluation for the level of biodiversity present on site; and
- The *Assaly Woods,* which received a low evaluation rating.

The most valuable vegetated areas from an ecological standpoint are the *Montfort Hospital Woods, NRC Woods North,* and the *Airbase Woods*. Canada Lands Company will prepare an Environmental Impact Statement prior to development, which will include all of these natural areas, to identify/confirm environmental impacts and develop an appropriate mitigation strategy. Canada Lands Company will also complete Species at Risk surveys prior to development to determine the presence of any Species at Risk (SAR) and/or their critical habitat. Should SAR be observed or suitable habitat be identified, appropriate mitigation measures to avoid impacts to these species will be developed.

In 2004, the City of Ottawa Zoning By-law was amended to rezone the Montfort Hospital Woods from Community and Leisure Zone and Major Institutional Zone to Environmental Protection Zone (EP). In addition, the NCC is planning to update the Plan for Canada's Capital (PFCC) and the amendment will designate the Montfort Hospital Woods as a "Natural Heritage Area". This is the most protective designation in the PFCC.

Figure 3.3: Montfort Hospital Woods

3.4 INFRASTRUCTURE

The following is a brief synopsis of the site's existing infrastructure conditions.

3.4.1 Transportation

3.4.1.1 Roads

When the site was operating as a military base, there were three access points via Codd's Road to the south, Hemlock Road to the west, and Douglas Street to the east. The road configuration within the site was an irregular grid, with many loops and meandering segments. When the base was closed, the existing road network and access points to the site were closed to general traffic since the road conditions on the site had fallen to a state of disrepair, and were not safe.

The higher-order road network surrounding the site is shown on Figure 3.4 and includes:

- St. Laurent Boulevard, which is an arterial road south of Hemlock Road and a collector north of Hemlock Road;
- Montreal Road, which is an arterial road;
- Hemlock Road, which is an arterial road west of St. Laurent Boulevard and a collector road east of St. Laurent Boulevard;
- Blair Road, which is a major collector road north of Montreal Road, and an arterial road south of Montreal Road;
- Aviation Parkway, which is a Federally-owned parkway;
- Sir George-Étienne Cartier Parkway, which is a Federally-owned parkway; and,
- Codd's Road / Carson's Road, which is a collector road from Hemlock Road to Den Haag Drive.

Levels of service (LoS) for intersections surrounding the site are currently operating well, with the exception of the Montreal Road/St. Laurent Boulevard intersection which is operating at a LoS 'E' during the afternoon peak hour, the Ogilvie Road/Aviation Parkway intersection which is operating at a LoS 'E' and 'F' during the weekday morning and afternoon peak hours, respectively, and the Beechwood Avenue/Vanier Parkway intersection which is operating at a LoS 'F' and LoS 'E' during the weekday morning and afternoon peak hours, respectively.

3.4.1.2 Transit

Although transit does not currently run through the site, a number of bus routes have stops within an approximate 10 minute walk from the site. Bus routes that currently run along Montreal Road, St. Laurent Boulevard, Blair Road, Hemlock Road, and the Aviation Parkway include the 5, 7, 12, and 129. In addition, the Transportation Master Plan identifies Montreal Road as a future location for Transit Priority. The planned rapid transit network in the vicinity of the site is shown in Figure 3.5.

3.4.1.3 Cycling

There are currently no cycling or pedestrian trails on the site. The Ottawa Cycling Plan identifies that a future cycling route will enter the site on the east side, and run through the site to connect to the Beechwood / Hemlock corridor. Existing cycling routes around the site are shown in Figure 3.6.

Multi-use pathways surround the site, with pathways located along the Aviation Parkway and the Sir George-Étienne Cartier Parkway. In addition, gravel pathways are located at the Ottawa River edge. These pathways are displayed in Figure 3.7.

3.4.1.4 Existing Modal Split

Since the site is vacant, it is necessary to look at surrounding neighbourhoods to get a sense of the modal share between automobile use, transit, cycling and pedestrian activity.

The modal share for the communities of Ottawa East and Beacon Hill are similar, with auto modal shares of 60%. Of the people who are not driving an automobile, 10% of the total trips (all modes) are auto passengers, 25% use transit, and 50% use non-auto modes (e.g., pedestrians and cyclists).

3.4.2 Municipal Infrastructure

The existing water supply infrastructure on the site is in poor condition and it does not have sufficient capacity to support redevelopment. It will be replaced entirely at the time of development, in coordination with the construction of the new road network.

There are two combined sewer systems on the site, installed to handle both the wastewater and most of the stormwater runoff generated on the site. Both systems discharge wastewater and surface runoff to a trunk sewer east of the property, which feeds to the R.O. Pickard central treatment plant. The combined sewer system has reached the end of its useful life, and redevelopment of the site will include the construction of a new separated sewer system. The new sanitary sewers will be designed with sufficient capacity to collect wastewater from the site, as well as from several external areas, including the Montfort Hospital and Thorncliffe Park.

In addition to the existing combined sewer systems on the site, there are two dedicated storm sewer systems: one collects surface runoff from the central portion of the property (near Via Venus and Codd's Road) and the second carries runoff from the Thorncliffe Park residential development (immediately south of the site). Both systems eventually discharge into the Ottawa River through a series of culverts, roadside ditches, and/or natural watercourses.Wastewater flows are also delivered to the R.O. Pickard central treatment plant by the Interceptor Outfall Sewer (IOS), which is a large

trunk sewer that flows through the middle of the Rockcliffe site in a west to east direction. This major collector sewer is 2.4 metres in diameter and was constructed approximately 45 metres below the existing ground surface. The location of the IOS is shown in Figure 5.15.

3.4.3 Utilities

Utilities extending to the site, including gas, hydro, and communication lines, have been downsized over the years as people have moved off the site and the need for services has decreased. Existing utilities will not be practical for re-use in the development plan, and the redevelopment of the site will require installation of new utility services which will be located mostly underground.

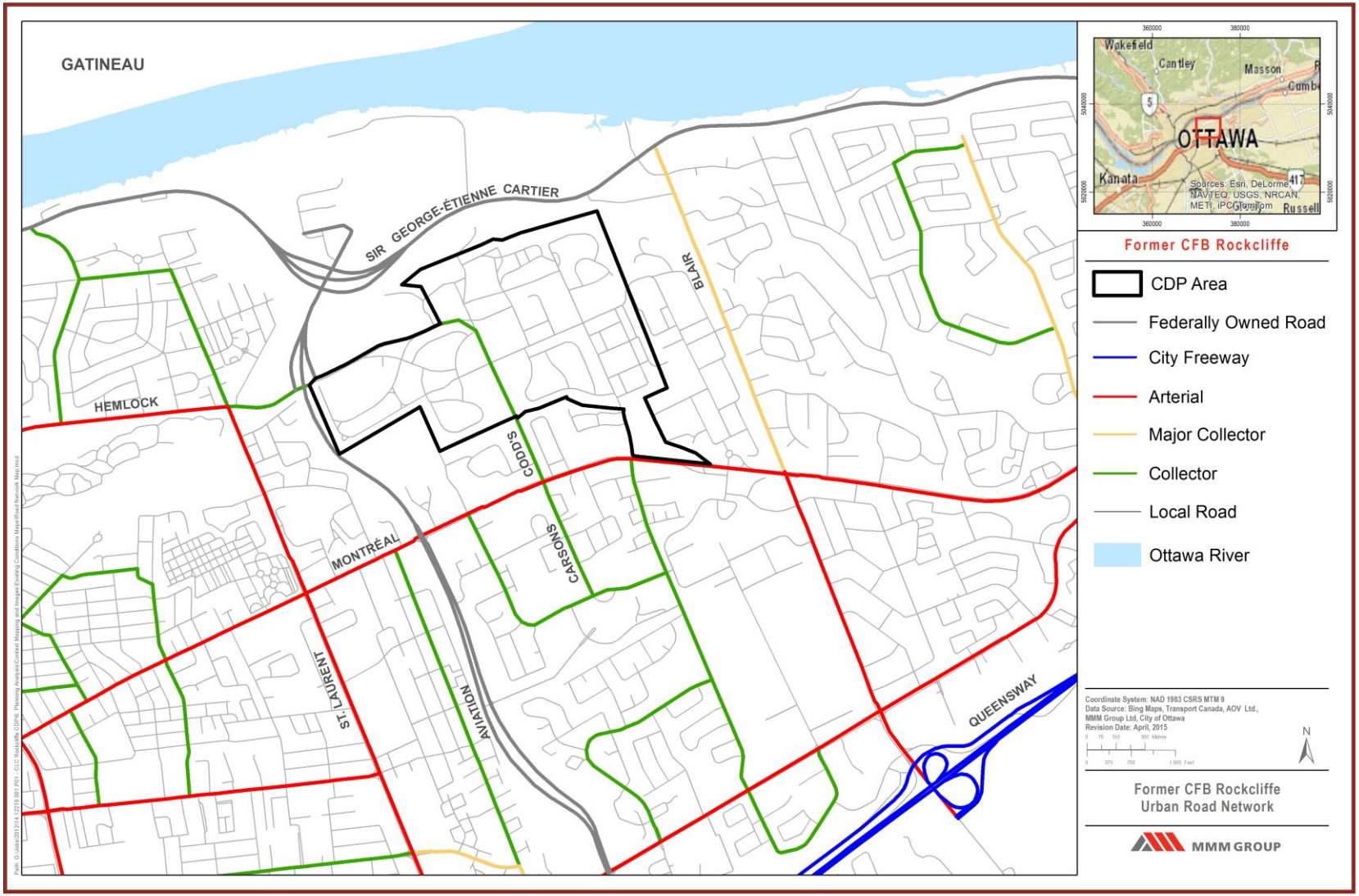


Figure 3.4: City of Ottawa Urban Road Network

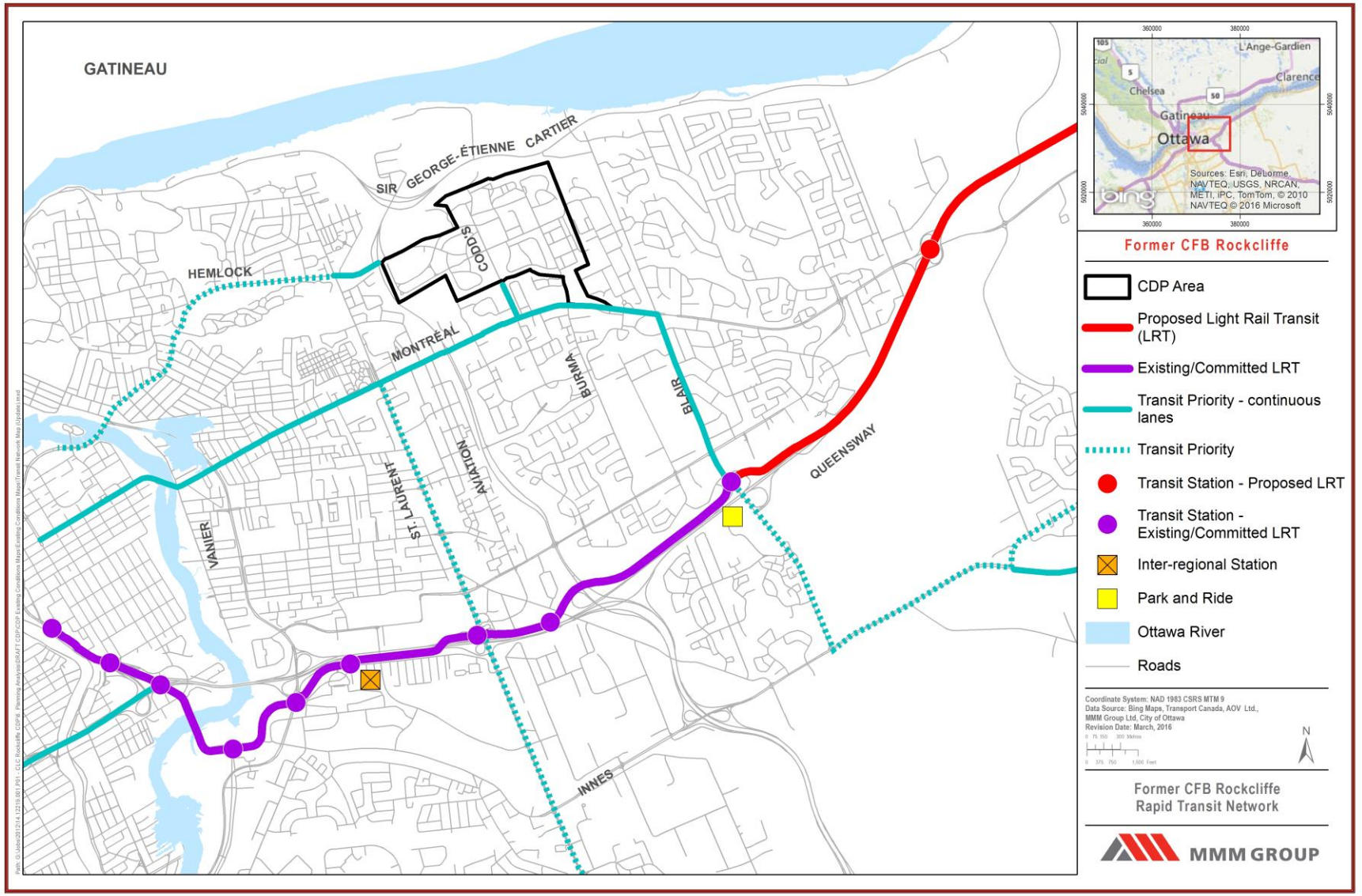


Figure 3.5: Planned Rapid Transit Network

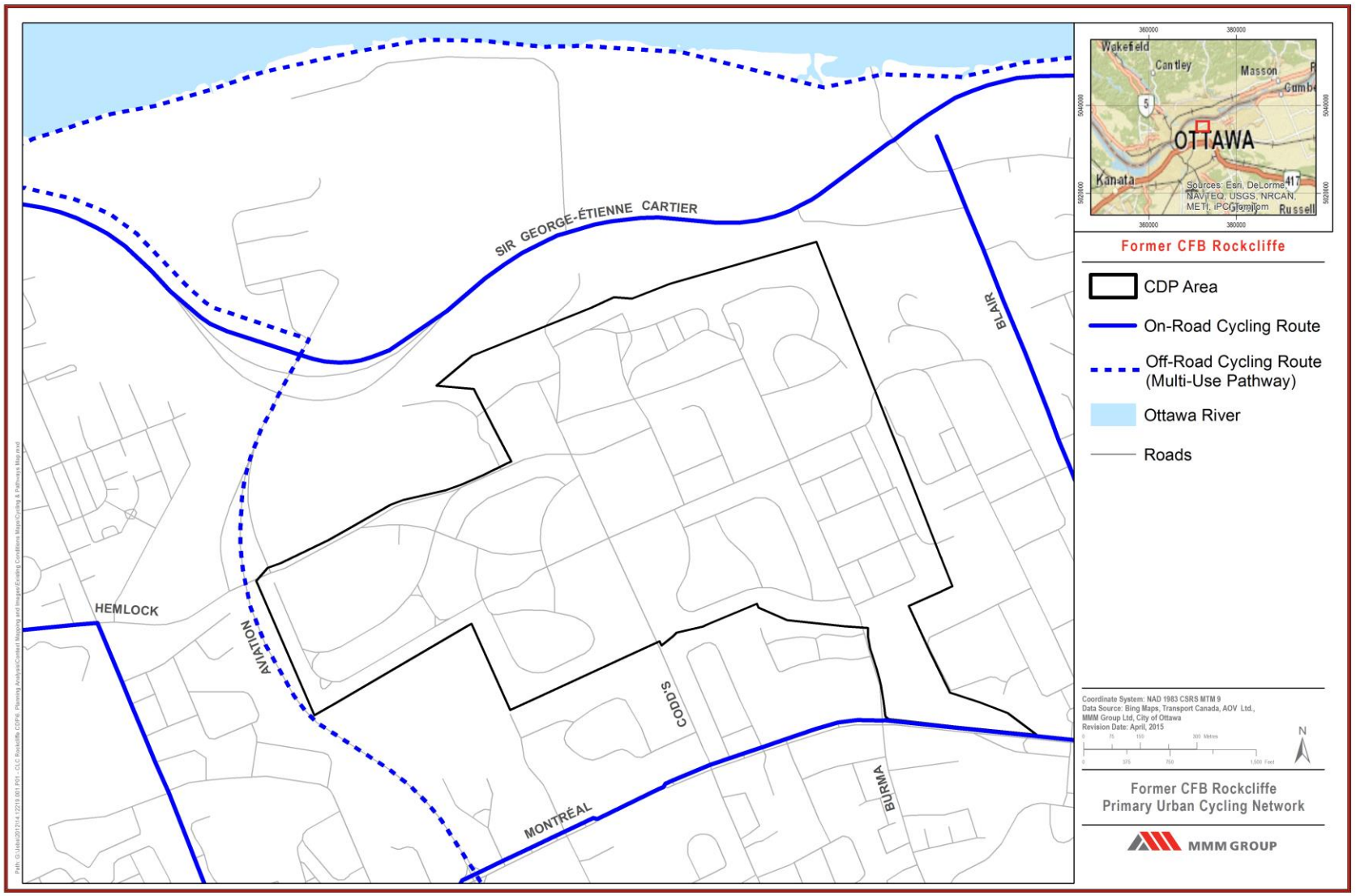


Figure 3.6: Primary Urban Cycling Network

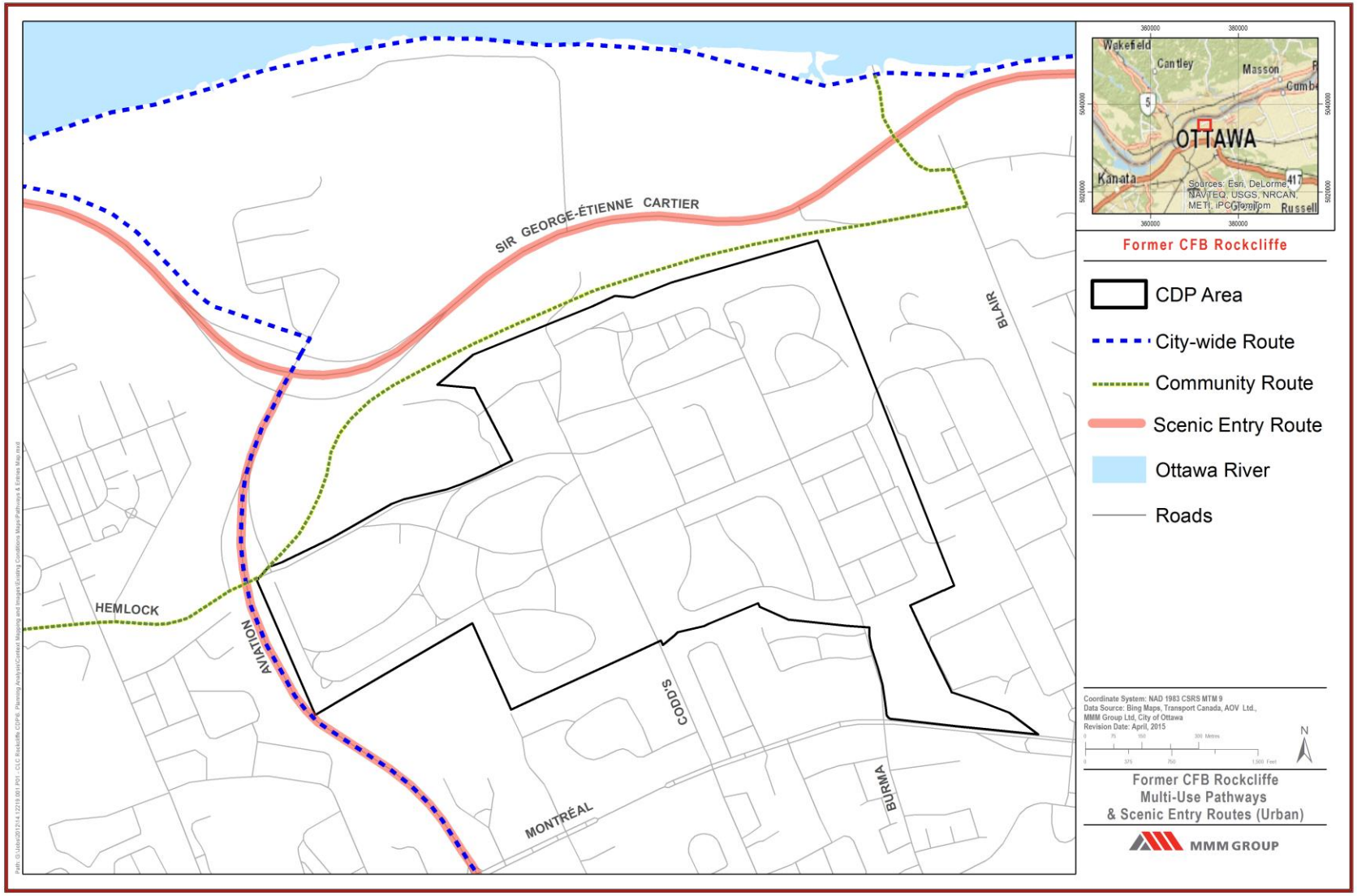


Figure 3.7: Multi-Use Pathway Network

3.5 BUILT FORM AND LAND USE

3.5.1 Surrounding Non-Residential Land Uses and Ownership

Land uses and ownership immediately surrounding the site are shown in Figures 3.8 and 3.9 and are described below.

3.5.1.1 National Research Council Campus

Adjacent to the east side of the site, the National Research Council (NRC) occupies two parcels of land with frontage on Montreal Road. These parcels total approximately 380 acres (154 ha) and extend south from the Sir George-Étienne Cartier Parkway, across Montreal Road, to Ogilvie Road. The low-rise campus buildings include primarily office and laboratory space, with large floor plates of 600 – 3,000 sq. m.

The NCC Capital Urban Lands Plan (2015) designates these lands as a Major Federal Employment Area. The intent of this designation is to ensure that federal lands are used efficiently and are better integrated with surrounding areas over time.

The NRC has asked that Canada Lands Company and the City of Ottawa consider the compatibility of any future land uses immediately adjacent to the NRC campus. Sensitive land uses such as residential may not be compatible in this location due to occasional noise from heavy equipment that is associated with the operations of some of the laboratories on the NRC campus.

Current traffic patterns do not permit access to the Rockcliffe site through the NRC campus from Blair Road; however the possibility to allow future access for transit, cyclists and pedestrians to the Rockcliffe site through the NRC campus exists.

3.5.1.2 Montfort Hospital

The Montfort Hospital site is approximately 8 acres and is located southwest of the Rockcliffe property, at the northeast intersection of the Aviation Parkway and Montreal Road. It was established in 1953 and is an academic hospital, conducting research and providing training to health care professionals through its partnership with the University of Ottawa. Buildings at the Montfort Hospital site range up to approximately twelve storeys and typically have large floor plates.

3.5.1.3 NCC Future Cultural Institution Lands

A triangular parcel of land is located on the northwest border of the Canada Lands Company property. This land is owned by the NCC and currently functions as passive greenspace, but is being reserved for a future National Cultural Institution. The NCC Capital Urban Lands Plan designates this parcel as a Cultural Institution & Facility, the intent of which is to promote Canadian values, art, history and achievements through the setting

and the architecture of National Cultural Institutions. Locations along Capital parkways and pathways have been prioritized for National Cultural Institutions. This designation also encourages excellence in urban design, a range of major and national events at these sites, enhanced wayfinding and visitor orientation, and sustainable and active transportation as a means of access to these sites.

3.5.1.4 Rockcliffe Airport and Canada Aviation and Space Museum

The Ottawa Rockcliffe Airport and the Canada Aviation and Space Museum are located north of the Aviation Parkway and the Sir George-Étienne Cartier Parkway junction. The collection on the Museum site includes over 130 aircrafts, housed within two main buildings. The owner and operator of the Rockcliffe Airport is the Canada Science and Technology Museum Corporation.

Federal Airport Zoning Regulations have been promulgated under the Aeronautics Act, which governs aviation matters in Canada. Transport Canada Advisory Circular AC 300-009, which was revised prior to adoption of this CDP in November 2014, relates to both the activities of aerodromes and jurisdictional matters that may apply to surrounding lands. There are no regulations currently governing the Rockcliffe Airport that restrict or affect activities or development (including noise or building height, orientation, or materials) beyond the property lines of the Canada Aviation and Space Museum.

Specifically, no existing Transport Canada regulations prevent or restrict the building height regime or development plan proposed in this CDP. Any new regulations for the Rockcliffe Airport would have to respect both built and approved development as surrounding existing conditions, as is the case for the existing high-rise buildings, the Montfort Hospital, and approved zoning to the south of this CDP. Once approved, this CDP, its related zoning, and all other City of Ottawa approvals intended to implement the CDP will take precedence with respect to any new airport regulations and operations. Neither the Canada Science and Technology Museum Corporation, the Canada Aviation and Space Museum, the Rockcliffe Flying Club, nor Transport Canada would be able to impose height restrictions contrary to the approved CDP for the former CFB Rockcliffe.

Canada Lands Company and the City of Ottawa will collaborate with the Canada Science and Technology Museum Corporation, the Canada Aviation and Space Museum, and the National Capital Commission (NCC) to design the northern stormwater pond on NCC lands so that conflicts with airport operations involving large waterfowl (e.g. geese and cranes) can be minimized.

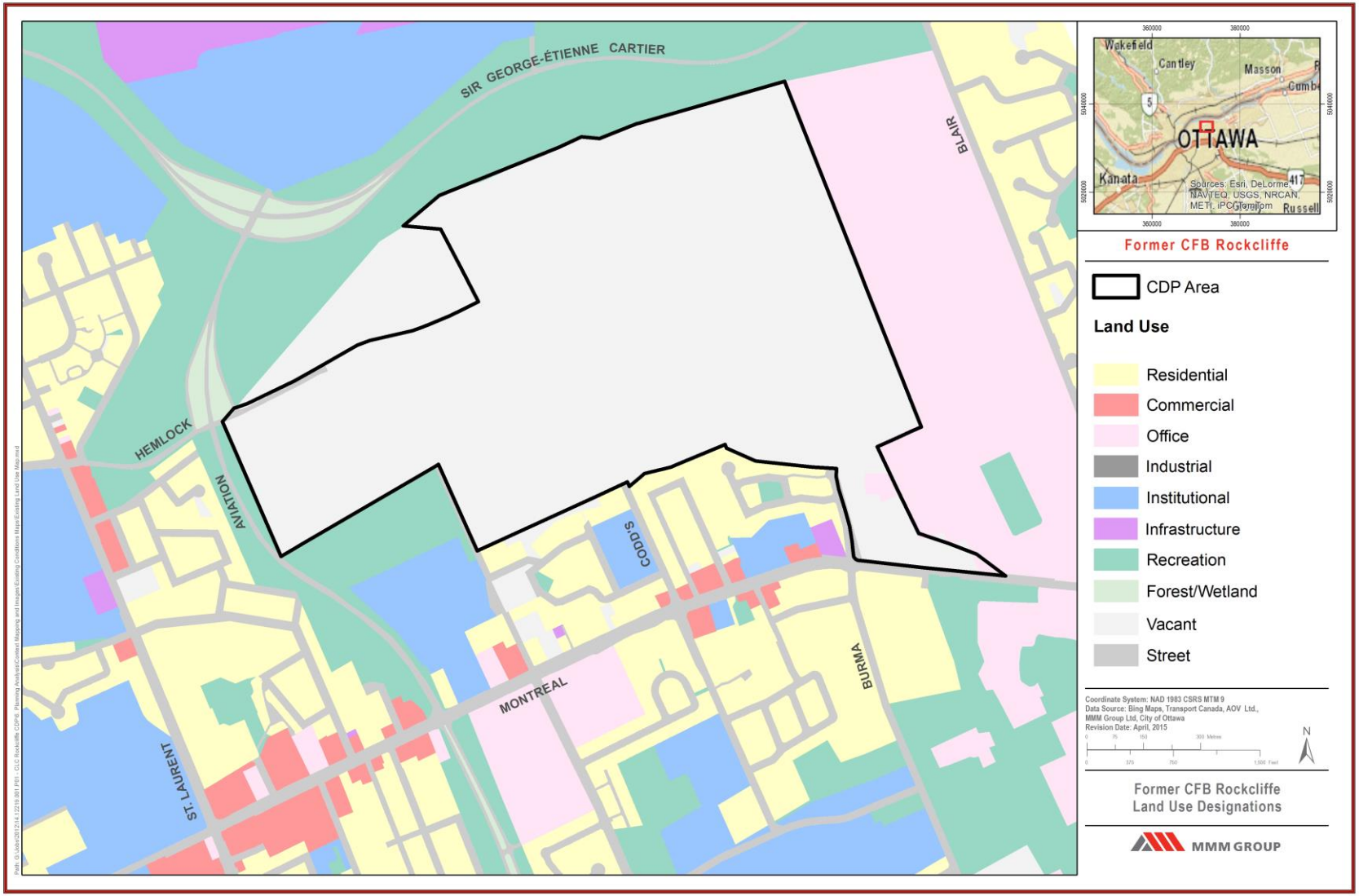


Figure 3.8: Existing Land Uses

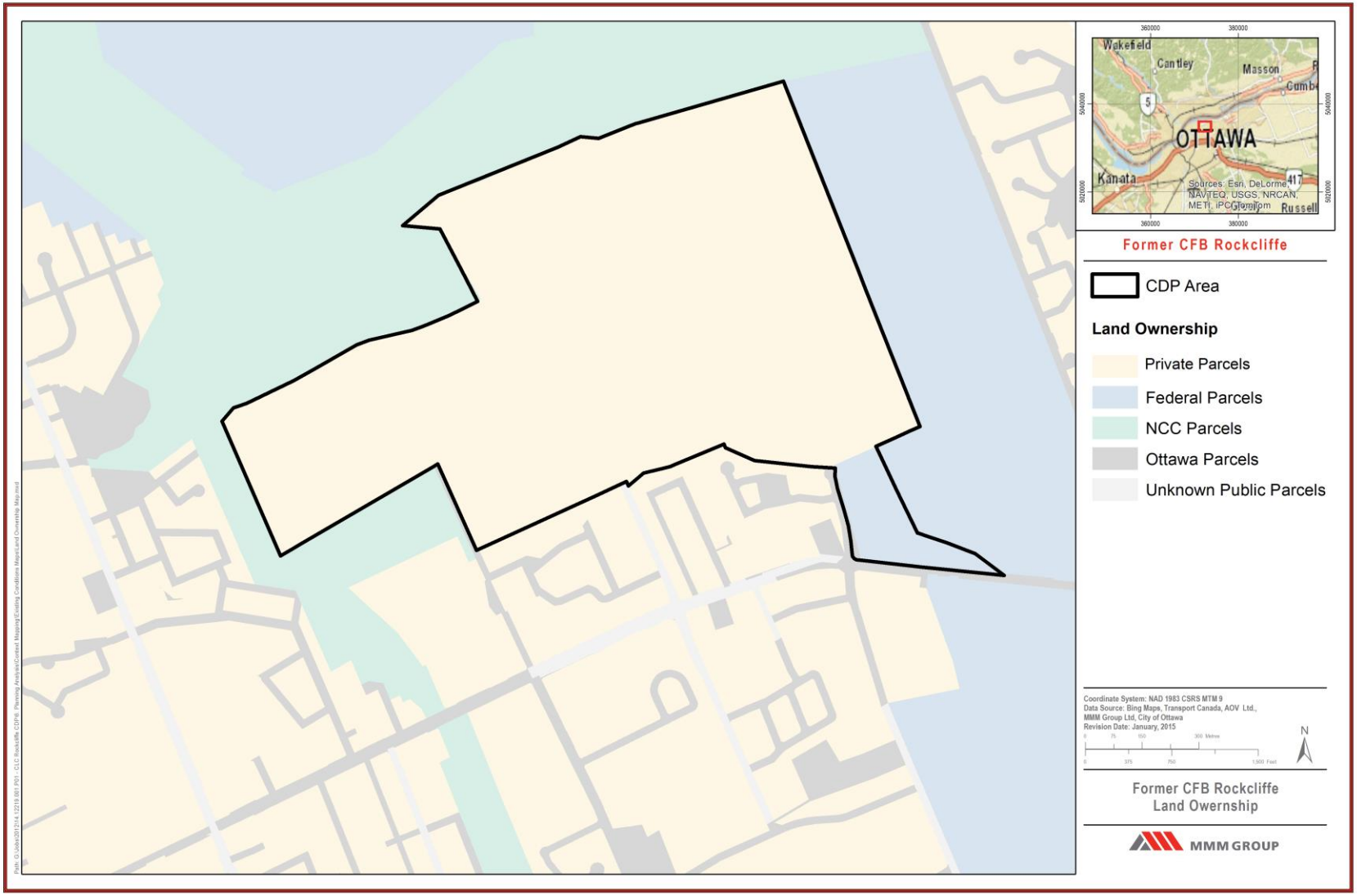


Figure 3.9: Existing Land Ownership

3.5.2 Surrounding Neighbourhoods

The Ottawa Neighbourhood Study defines the broader CFB Rockcliffe community approximately bounded by the Ottawa River to the north, Montreal Road to the south, Blair Road to the east, and St. Laurent Boulevard to the west. According to the study, a total of 5,391 residents lived in this area at the time of the 2006 census. The surrounding neighbourhoods and community facilities are shown in Figure 3.10. The footprints and heights of the buildings in the surrounding neighbourhoods are shown in Figures 3.11 and 3.12.

The Fairhaven, Foxview and Thorncliffe Village neighbourhoods abut the former base on the southern boundary of the site. Manor Park is located to the west and Rothwell Heights is located to the east.

The Fairhaven Community is located south of the former CFB Rockcliffe site, between Codd's Road and Lang's Road. One main road loop (Fairhaven Way) provides access to the majority of the lots in this community. To the west of Codd's Road, single-detached family units on lots ranging from approximately a third of an acre to just over half an acre are prevalent. This area is characterized by heavily wooded and treed lots – to a much higher degree than typically found in residential development in urban settings. These lots are privately serviced, which is also unusual for residential development in such an urban setting.

The housing fronting on Codd's Road includes single units, semi-detached units, townhouses and low- and mid-rise apartment buildings (eight storeys).

East of Codd's Road in the Foxview community the lot sizes are smaller, ranging from approximately 10,000 sq. ft. to 30,000 sq. ft. Thorncliffe Village is further east, and it contains townhouses, semi-detached housing, duplexes, and walk-up apartments.

South of Montreal Road on either side of Bathgate Drive, there are taller buildings which contain a 16 storey apartment and a 24 storey apartment.

Manor Park is a community located northwest of the Rockcliffe site. It is bounded by the Aviation Parkway, the Sir George-Étienne Cartier Parkway, Hemlock Road, and McKay Lake. Housing in Manor Park is quite dense, particularly at the east end of the neighbourhood along London Terrace, where there are mid-rise apartment buildings and three- and four-storey condominium buildings. Moving west, housing density transitions into lower density forms, moving almost exclusively to single-detached units at the west end of Manor Park.

Rothwell Heights is a community located within Beacon Hill, a

neighbourhood situated to the east of the site and east of Blair Road. The street network in this neighbourhood is a “loops and lollipops” pattern typical of suburban areas, with meandering streets and dead ends. Lot sizes are generally in the range of a third of an acre to half an acre, but some larger properties, up to two acres, do exist. Housing in this neighbourhood consists almost exclusively of single-detached units, typically one to two storeys, with the exception of five apartment units.

3.6 SOCIAL AND ECONOMIC CONDITIONS

The Montfort Hospital, the National Research Council (NRC), and the Communications Security Establishment (CSE) are major employers in the vicinity of the site and represent opportunities for integrating employment and attracting jobs to the site.

3.6.1 Community Facilities and Local Destinations

There are a number of community facilities and amenities near the Rockcliffe site, as shown in Figure 3.10. There are multiple elementary, secondary, and high schools, as well as La Cité Collégiale – Ontario’s largest French-language college. Recreational facilities in neighbourhoods surrounding the Rockcliffe site include community gardens, outdoor pools, wading pools, outdoor rinks, basketball courts, and ball diamonds.

The Ottawa Neighbourhood Study (2013) documented the following characteristics in the general area:

- 26 percent of residents 15 and older were first generation immigrants.
- There is poor access to grocery stores, specialty stores and other food outlets (fast food, convenience stores). The closest grocery store is a 30 minute walk away (just under two kilometres) from the population weighted centre of the site.
- There is little City parkland in this neighbourhood which totals approximately two km^2, or 0.15 km^2 per thousand residents (which is below the City average).
- While there is below average greenspace in Beacon Hill, there is above average greenspace in Rockcliffe-Manor Park.

3.7 HISTORY AND CULTURAL HERITAGE

Prior to European settlement, the former CFB Rockcliffe site was a territory of the Algonquin peoples within a much larger area of the watersheds of the Ottawa and Mattawa Rivers. Although the site does not appear to have had any permanent settlements, its prominent location along a ridge overlooking the Ottawa River undoubtedly made it important for cultural, strategic, and transportation reasons. The

Algonquins never ceded land to the Crown under any treaty. Negotiations for a treaty are ongoing.

Findings of a Stage 1 Archaeological Assessment conducted for the site in 1999 indicated that there was a possibility that the site could be of pre-European archaeological significance. Given the site's proximity to the Ottawa River and the historic use of the River as a major transportation corridor, the chances that the site would be of archaeological significance are good. A Stage 2 Archaeological Assessment was conducted for the site in 2007. This assessment found that the Barreille-Snow site represented a potentially significant archaeological resource. A Stage 3 archaeological assessment was recommended and, if warranted, a Stage 4 salvage excavation. If required, this will be completed after submission of a subdivision application for the final phase of the build out.

Original European settlement on the site was slow until the construction and establishment of more permanent transportation routes; namely the Rideau Canal in 1832, and Montreal Road.

In 1898, CFB Rockcliffe was established by the Department of National Defense (DND) for use as a rifle range. In 1920, redevelopment of the rifle range to an aerodrome and experimental photography station was approved. Over time, the size of the base grew until it totaled over 326 ha (800 acres) at its peak.

During World War II, the base was improved so that it could be a training facility as part of the British Commonwealth Air Training Plan. The site also provided aircraft testing and the transport of mail to Europe. Immediately after the war, the first jet aircraft demonstration in Canada happened on the base.

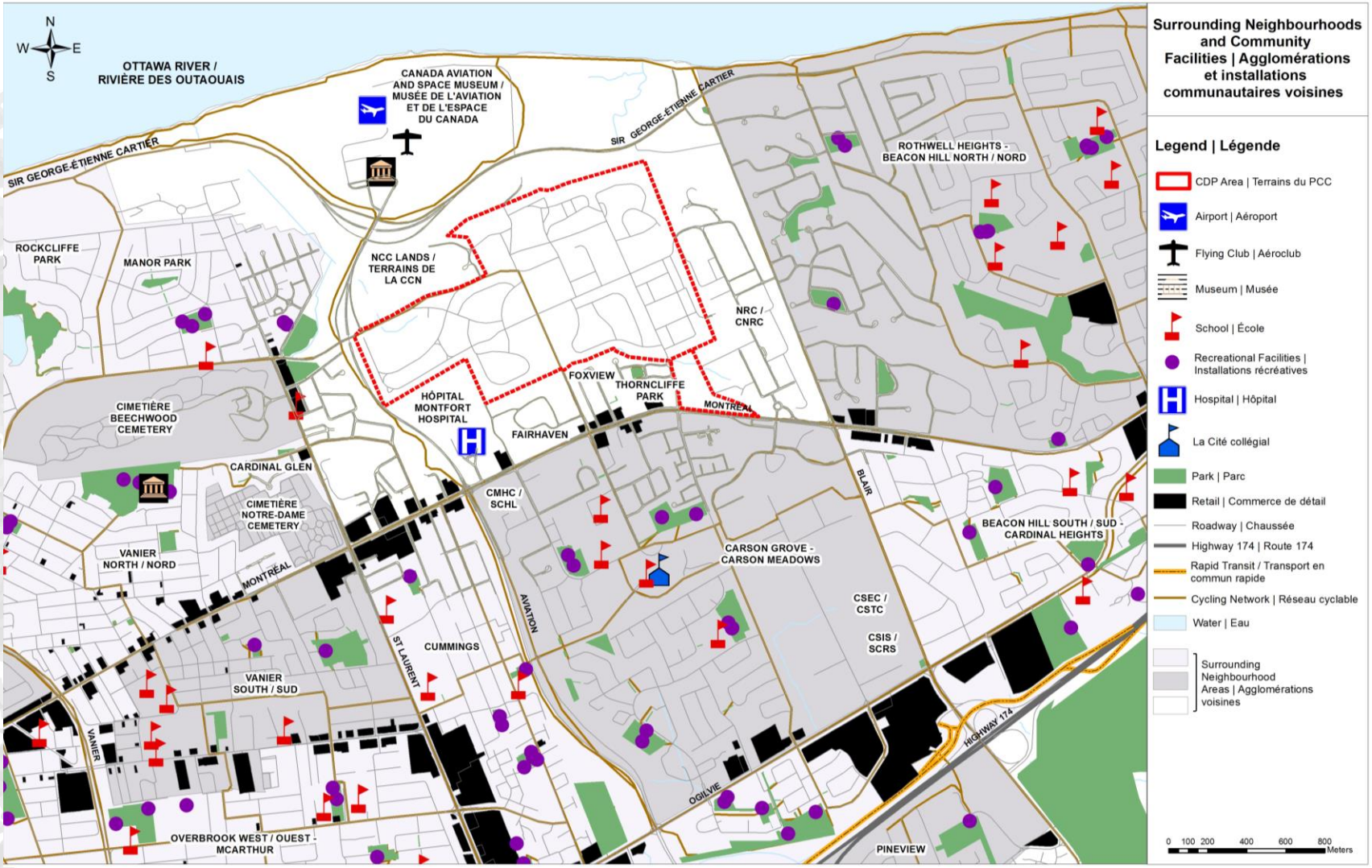


Figure 3.10: Social Amenities and Surrounding Neighbourhoods

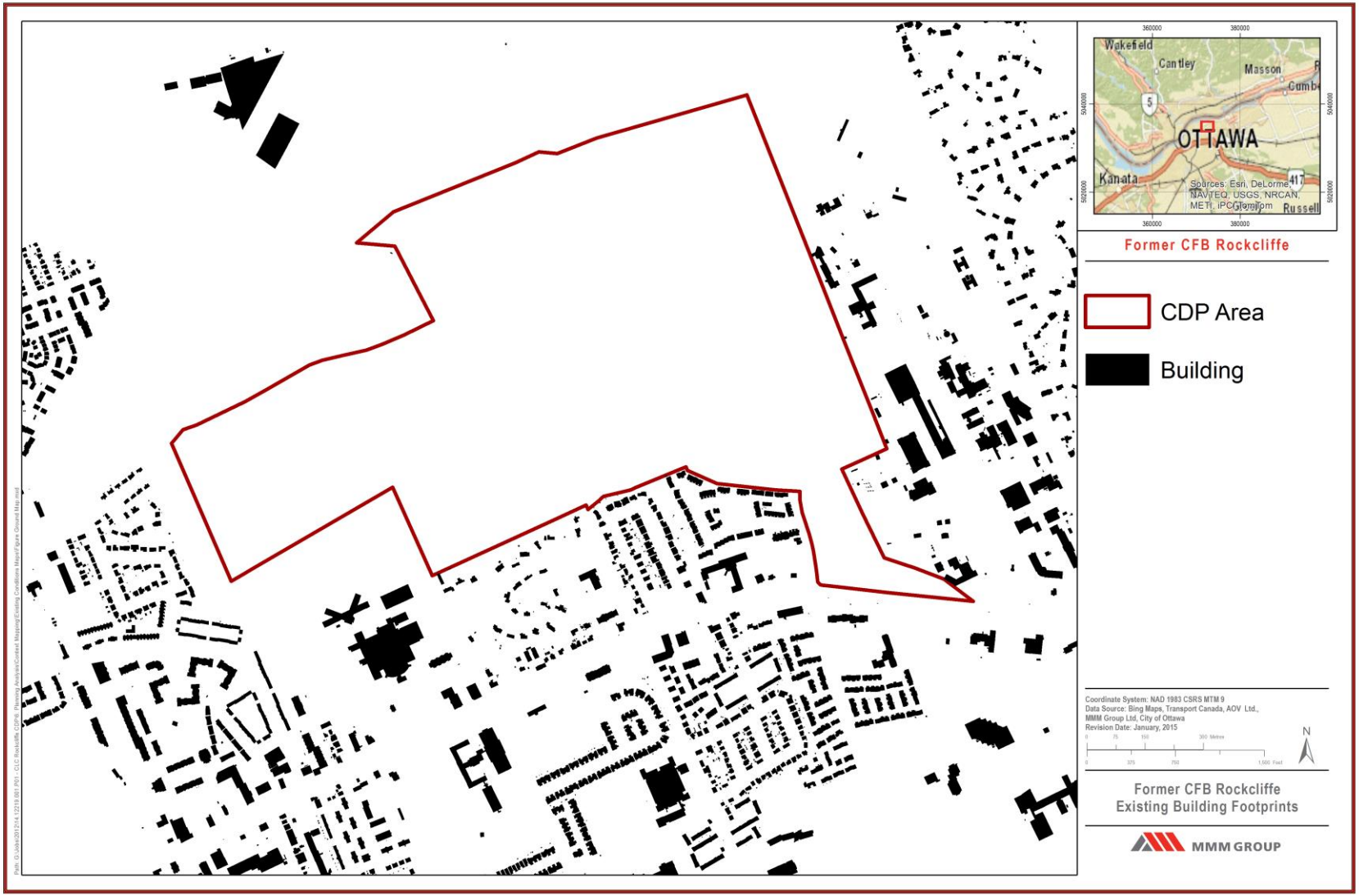


Figure 3.11: Existing Building Footprints

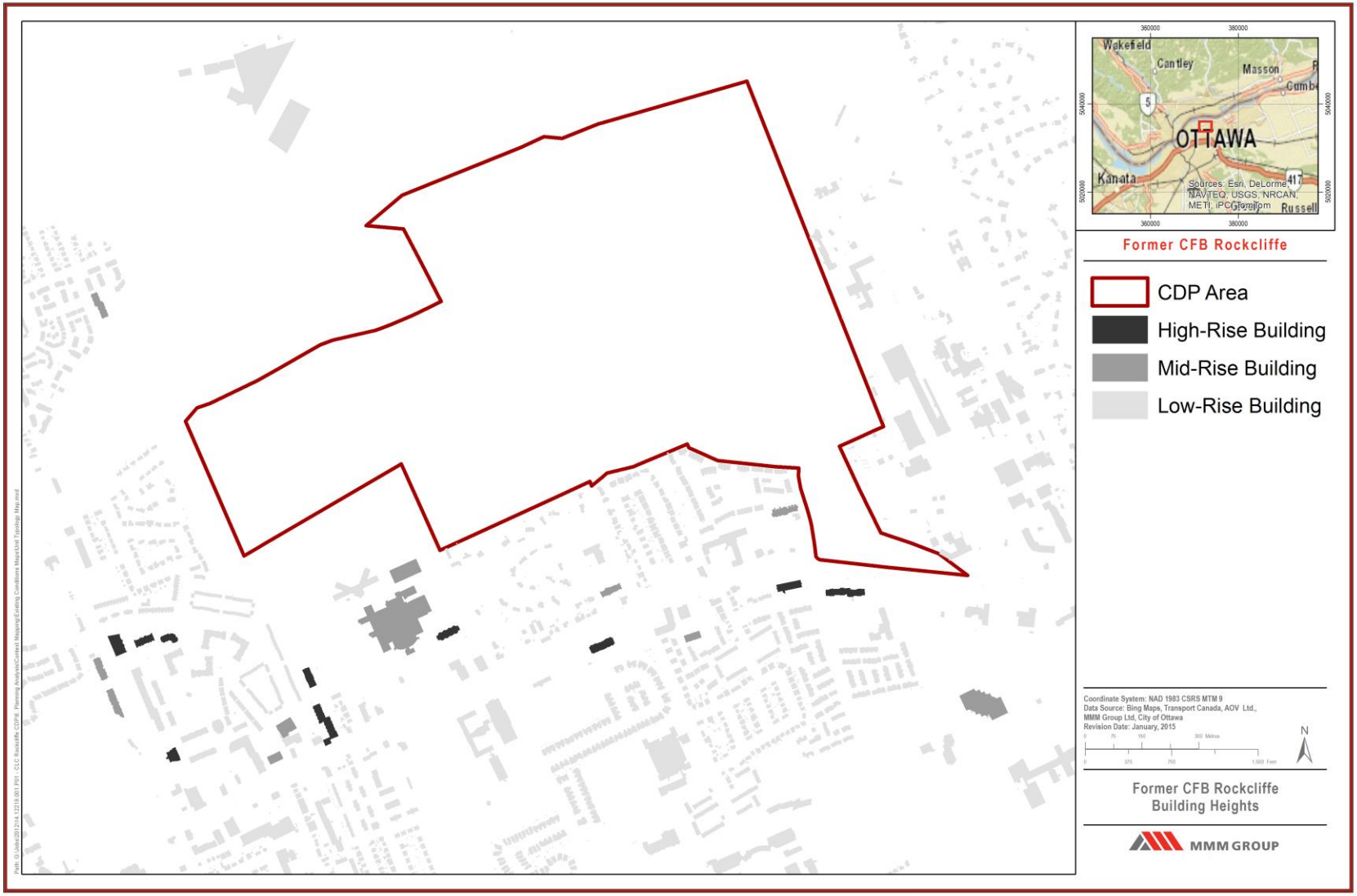


Figure 3.12: Building Heights

Following World War II, approximately 600 housing units were built to accommodate the short-term needs of returning military personnel. The shrinking presence of CFB Rockcliffe began in the 1960s, when the air operational facilities were vacated. In 1989, the Base was further reduced in size as large portions of the site were transferred from DND to other federal departments and agencies, including the Royal Canadian Mounted Police (RCMP), the National Research Council, the National Capital Commission, the Canada Aviation and Space Museum, and others. DND's Maritime Helicopter Program and DND's military housing and related support functions on the base continued until 2004.

In early 2004, the Government of Canada agreed to initiate the process to approve the transfer of 10.12 hectares of the former CFB Rockcliffe from the DND to the NCC and 125.41 hectares to Canada Lands Company.

All buildings were demolished by 2013 and the site was being prepared for future development.

3.8 OPPORTUNITIES AND CONSTRAINTS

Table 3.1 describes all of the existing site features and the opportunities and constraints associated with each.

Table 3.1: Opportunities and Constraints

Type of Site Feature	Site Feature	Constraint	Opportunity
Topography, Views, and Vistas	Terraced topography, sloping towards the Ottawa River.	A steep ridge is located at the northern boundary of the site, which is not well suited for development.	Maintaining the existing topography will help to preserve the existing hydrological cycle on the site, and continue to feed trees and vegetation on and near the site.
	Views and vistas including the Ottawa River and Gatineau, Quebec.	Building height will need to be planned carefully in order to maintain views and vistas to the extent possible.	Retaining the views and vistas will enhance the natural beauty of the site.
Water Resources, Geology and Soils	Two watersheds divide the site approximately in half.	The watershed divide will impact municipal infrastructure design.	The design for new municipal infrastructure may take advantage of the natural drainage divide. The Conservation Authority strongly encourages the post-development drainage area boundaries to match the pre-development drainage area boundaries so as to maintain the site's natural water balance and flow regimes within the watercourses.

Type of Site Feature	Site Feature	Constraint	Opportunity
	Two creeks have headwaters near or within the site.	Engineering works (e.g. culverts) have the potential to destabilize the channel.	Retaining the natural creeks will continue to provide habitat for the fauna and flora that occupy them.
	Infiltration rates for soils on and to the north of the site are low.		These are suitable locations for stormwater management features.
	Shallow bedrock covers at least 18% of the site.	The cost of developing underground parking in these areas will be high.	The bedrock presents good opportunity for developing taller buildings.
	Clay soils are located in the southern and western portion of the site.	The type of foundation that is required will be impacted by the clay soils.	
Landscape and Ecology	There are many significant trees and tree stands on the site, including a Bur Oak that is estimated to be more than 200 years old.	The CDP and subsequent development plans will need to account for the location of these features.	Preserving the significant trees and tree stands will continue to provide habitat for the fauna and flora that occupy them. Preserving significant tree stands will also contribute to the overall stormwater management scheme for the site because they slow and detain runoff and promote infiltration.

Type of Site Feature	Site Feature	Constraint	Opportunity
	A number of Urban Natural Features have been identified near the site.	Significant changes to the topography of the site would affect the condition of these UNFs.	Preserving these UNFs will increase the natural beauty of the site, and will continue to provide habitat for the fauna and flora that occupy them.
Infrastructure	There are currently three potential access points to the site for auto traffic.	Additional access points will be required to increase the connectivity of the site to surrounding areas.	Additional access points can be strategically chosen to optimize connectivity with surrounding areas.
	Four bus routes are currently within a 10 minute walk of the site.	To support transit on site there must be sufficient population.	Development on the site will be sufficient to introduce a transit route to serve residents living on the site.
	There are currently no paths for pedestrians or cyclists on the site. There are many paths surrounding the site.		Adding pathways for pedestrians and cyclists that connect to the pathway systems throughout the City will improve connectivity and encourage active transportation.

Type of Site Feature	Site Feature	Constraint	Opportunity
	The existing water supply infrastructure is in poor condition and does not have sufficient capacity to support redevelopment.	The existing water supply infrastructure cannot be used in the new development.	Developing new water supply infrastructure can service the site. The location and capacity of new water supply infrastructure can be strategically located to suit the desired development plan. Development will not be constrained by the limitations of pre-existing infrastructure.
	There are two combined sewer systems on the site which have reached the end of their useful lives.	The existing sewer and stormwater infrastructure cannot be used in the new development.	Developing new sewer and stormwater infrastructure can service the site. The location and capacity of new sewer and stormwater infrastructure can be strategically located to suit the desired development plan. Development will not be constrained by the limitations of pre-existing infrastructure.
	The Interceptor Outfall Sewer (IOS) tunnel crosses the site at approximately 45 metres below the surface.	Access to the IOS needs to be preserved through two access shafts located on the site.	

Type of Site Feature	Site Feature	Constraint	Opportunity
	Existing utilities on the site are not practical for re-use in the development.	Existing utilities cannot be used in the new development.	Installing new utilities can service the site.
Built Form and Land Use	The National Research Council (NRC) is located to the east of the site.	The research operations of the facility can generate light, noise, and vibration that may be considered a nuisance to neighbours.	There may be opportunities to plan the site such that a compatible use (office or employment) is adjacent to the NRC campus.
	The Montfort Hospital is located to the south of the site.		There may be opportunities to promote the establishment of development on the site.
	The Rockcliffe Airport and Canada Aviation and Space Museum are located to the north of the site.	Any open water on or near the site (e.g., stormwater ponds) will need to be designed to discourage bird habitat in order to minimize conflicts with the airport operations.	The heritage of the site as a Canadian Forces Base ties in well with these neighbours, and there may be opportunities for synergy. The Canada Aviation and Space Museum is a cultural institution that may be an attractive destination point for residents of the new community.

Type of Site Feature	Site Feature	Constraint	Opportunity
	The site is surrounded by a number of neighbourhoods: Fairhaven, Foxview, Thorncliffe Village, Drayton Private, Rockcliffe, Manor Park, Rothwell Heights, and Beacon Hill.	Connections to these neighbourhoods from the site are currently limited.	Constructing a more permeable transportation network on the site will increase connectivity to these nearby neighbourhoods.
Social and Economic Conditions	There is poor access to grocery stores, specialty stores, and other food outlets (fast food, convenience stores).	To support these businesses there must be sufficient population.	The CDP can improve this by facilitating development for food retailers through mechanisms such as zoning.
History and Cultural Heritage	The site was likely an important cultural, strategic, and transportation location for the Algonquin peoples.		The development could incorporate the Algonquin history of the site into its programming.
	The site operated previously as a Canadian Forces Base.	Previous development on the site contaminated the soils in some areas. The contaminated soils will need to be removed or managed on site in accordance with best management practices.	The development could incorporate the military history of the site into its programming.

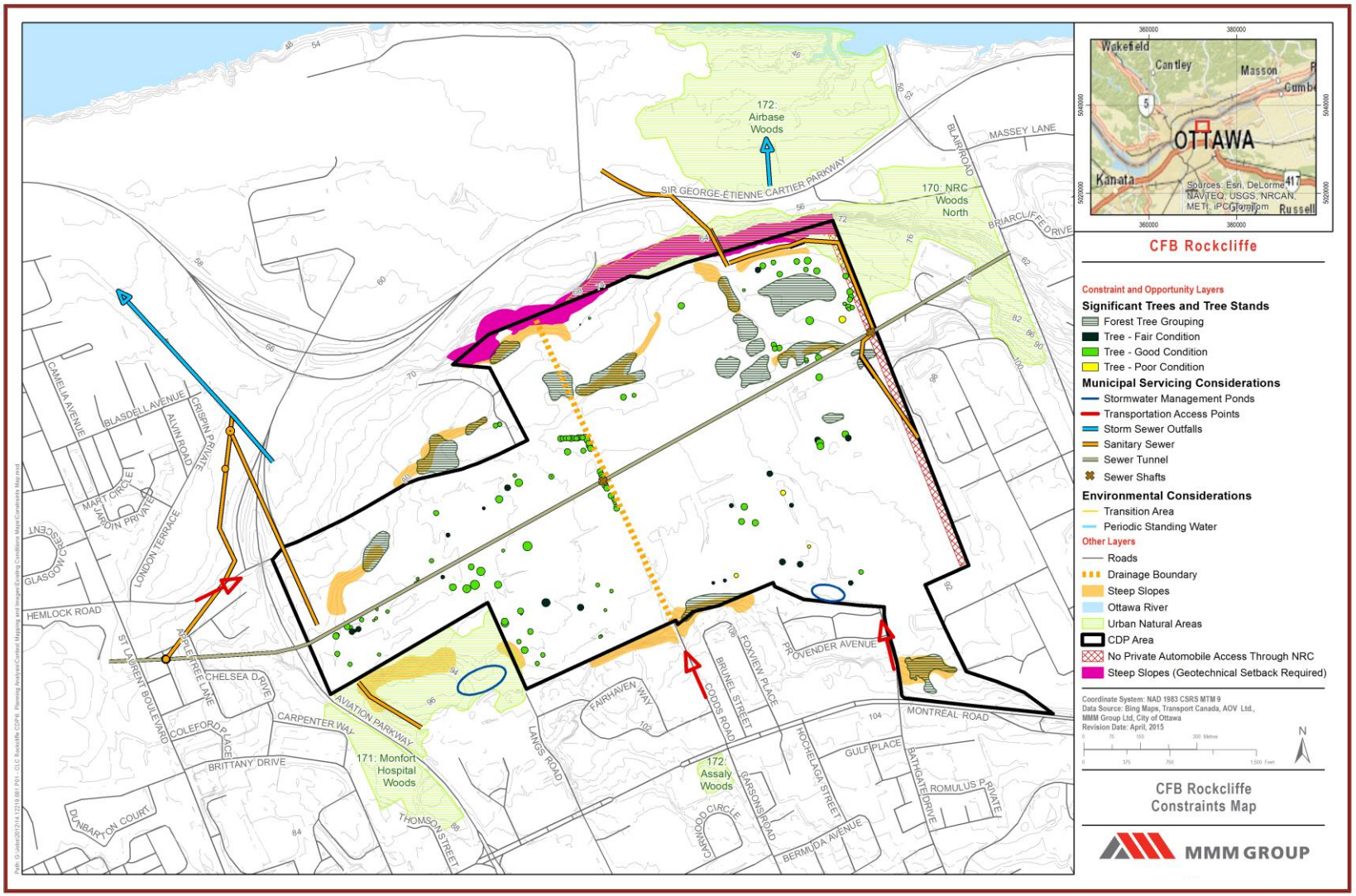


Figure 3.13: Constraints and Opportunities

4 | PLANNING AND POLICY CONTEXT

4 PLANNING AND POLICY CONTEXT

This Community Design Plan is based on policy direction from the Province of Ontario and from the City of Ottawa. The Provincial Policy Statement (2014) and the City of Ottawa Official Plan (2013) are given authority through the Ontario *Planning Act*, which gives these documents legal status.

4.1 PROVINCIAL POLICY STATEMENT

The foundation of the Provincial Policy Statement (PPS) is building strong communities. To achieve this goal, the PPS provides policy direction on land use planning and development in Ontario for a time horizon of up to 20 years. A main objective of the PPS is to promote the efficient use of land, existing infrastructure and existing public facilities. This will help guide development in the Rockcliffe community by encouraging the inclusion of an appropriate range and mix of housing, land uses and employment opportunities (Section 1.1.2).

As identified in the Existing Conditions Report, there are a number of policies that directly influence planning for the former CFB Rockcliffe site. These deal specifically with:

- Accommodating a range and mix of land uses;
- Promoting cost-effective development;
- Establishing phasing policies for the orderly progression of development;
- Improving connectivity for all transportation modes;
- Maintaining the ecological function and biodiversity of natural heritage systems;
- Protecting, improving and restoring the quality and quantity of water and water resource systems;
- Recognizing Aboriginal interests in land use planning

and encouraging coordination with Aboriginal communities;
- Promoting the conservation of cultural heritage and archaeological resources;
- Promoting healthy communities and active modes of transportation; and
- Ensuring the provision of affordable housing.

These policies were carried through the planning process and were used to develop the specific planning principles for the former CFB Rockcliffe found in this CDP.

4.2 CITY OF OTTAWA OFFICIAL PLAN

The Official Plan (2013) designates the former CFB Rockcliffe lands a "Developing Community." Under the Official Plan, the intent of these areas is to designate lands that "…are vacant, or substantially vacant, that offer substantial opportunity for new residential development at increased intensities and opportunities to create complete, sustainable communities, within a development pattern that prioritizes walking, cycling and transit over the automobile."

The Official Plan requires that Community Design Plans be developed for areas designated "Developing Community" in order to implement the principles and policies of the Official Plan at the community scale, to manage change in these areas, and to further involve the community in planning through public consultation.

Section 3.6.4 of the Official Plan provides the policies that pertain to the development of Community Design Plans. Policies that have particular influence on the development of the former CFB Rockcliffe CDP include:

- Ensuring that the land use mix contributes to achieving a balance of jobs and households;
- Maximizing the number of access and egress points in the transportation system; and
- Establishing a mix of residential dwelling types that is characterized by:
  - less than or equal to 55% single-detached units;
  - greater than or equal to 10% apartment units; and
  - the remainder multiple attached dwellings (other than apartments).

4.3 RESIDENTIAL LAND STRATEGY FOR OTTAWA

The Residential Land Strategy for Ottawa (2009) identifies the former CFB Rockcliffe site as an opportune area for intensification outside of the City's target areas. The Strategy notes that the previous planning concepts for the former CFB Rockcliffe lands called for approximately 6,000 housing units.

Setting density targets for various areas of the City helps to better plan for infrastructure and services needed to support growth. The City of Ottawa uses the density benchmarks identified in Table 4.1 as a means to help justify and plan for the provision of various levels of transit. For ‘good bus service’ to be provided in an area, it should have a density between 40 and 80 people and jobs per gross hectare. For an area to provide ‘very good transit’, and potentially excellent bus service or possibly Bus Rapid Transit (BRT) and/or Light Rail Transit (LRT) it should have a density between 80 and 120 people and jobs per gross hectare. The Rockcliffe lands are not located near a major transit station or along the Transitway, however, in the Transportation Master Plan (TMP), Montreal Road is planned for Transit Priority (continuous bus lanes) in the pre-2031 timeframe.

Table 4.1: Transit Service Potential Based on Urban Density

Density range*	Transit potential	Type of service
Under 20	Low	No public transit. Requires dial-up cabs, jitneys, etc.
20-40	Modest	Marginal public transit. Buses every half-hour. Rush hour express buses.
40-80	Good	Good bus service.
80-120	Very good	Excellent bus service. Possible BRT/LRT.
120-200	BRT / LRT	High order transit.
Over 200	Subway	High order transit.

*Density is expressed as People and Jobs per Gross Hectare.
Source: Residential Land Strategy, p. A5-1.

4.4 CITY OF OTTAWA COMPREHENSIVE ZONING BY-LAW

The City of Ottawa Comprehensive Zoning By-law (2008) for the Canada Lands Company Rockcliffe lands currently zones the lands DR2 (Development Reserve 2), I1A (Minor Institutional), and R3B (Residential Third Density). The DR zone is typically reserved for undeveloped lands. I1A zone is typically used for libraries, museums, places of worship or assembly, schools, and training centres. The R3 zone is typically used for residential development ranging from detached to townhouse dwellings.

The NRC lands that are included in the CDP area are currently zoned IL (Light Industrial). This zone is typically used to permit uses such as broadcasting studios, emergency services, municipal service centres, offices, production studios, research and development centres, technology, and industries, etc.

Existing zoning for the lands within and around the site is shown in Figure 4.1.

4.5 OTHER POLICY AND GUIDELINE DOCUMENTS

In addition to these documents, a number of other policy and guideline documents were referenced during the research and development of this Plan, including (but not limited to):

- City of Ottawa Official Plan (2013)
- City of Ottawa Transportation Master Plan (2013)
- City of Ottawa Infrastructure Master Plan (2013)
- City of Ottawa Pedestrian Plan (2013)
- City of Ottawa Cycling Plan (2013)
- City of Ottawa Park and Pathway Development Manual (2012)
- City of Ottawa Urban Design Guidelines for Low-rise Infill Housing (2012)
- City of Ottawa 2011-2014 Strategic Master Plan (2011)
- City of Ottawa Residential Land Strategy for Ottawa 2006-2031 (2009)
- City of Ottawa Urban Design Guidelines for High-Rise Housing (2009)
- City of Ottawa Right-of-Way Lighting Policy (2009)
- City of Ottawa Comprehensive Zoning By-law (2008)
- City of Ottawa Road Corridor Planning & Design Guidelines (2008)
- City of Ottawa Consolidated Design Guidelines for New Development Application Gateway Features (2008)
- City of Ottawa Urban Design Guidelines for Greenfield Neighbourhoods (2007)
- City of Ottawa Transit-Oriented Development Guidelines (2007)

- City of Ottawa Greenspace Master Plan (2006)
- City of Ottawa Urban Design Guidelines for Development along Traditional Mainstreets (2006)
- City of Ottawa Urban Design Guidelines for Development along Arterial Mainstreets (2006)
- City of Ottawa Urban Natural Areas Environmental Evaluation Study (2005)
- City of Ottawa Understanding Residential Density (2005)
- National Capital Commission Plan for Canada's Capital

In addition, the City has a number of relevant Urban Design Guidelines that will help shape the development of the site in tandem with the site specific guidelines and policies presented in Chapter 6.

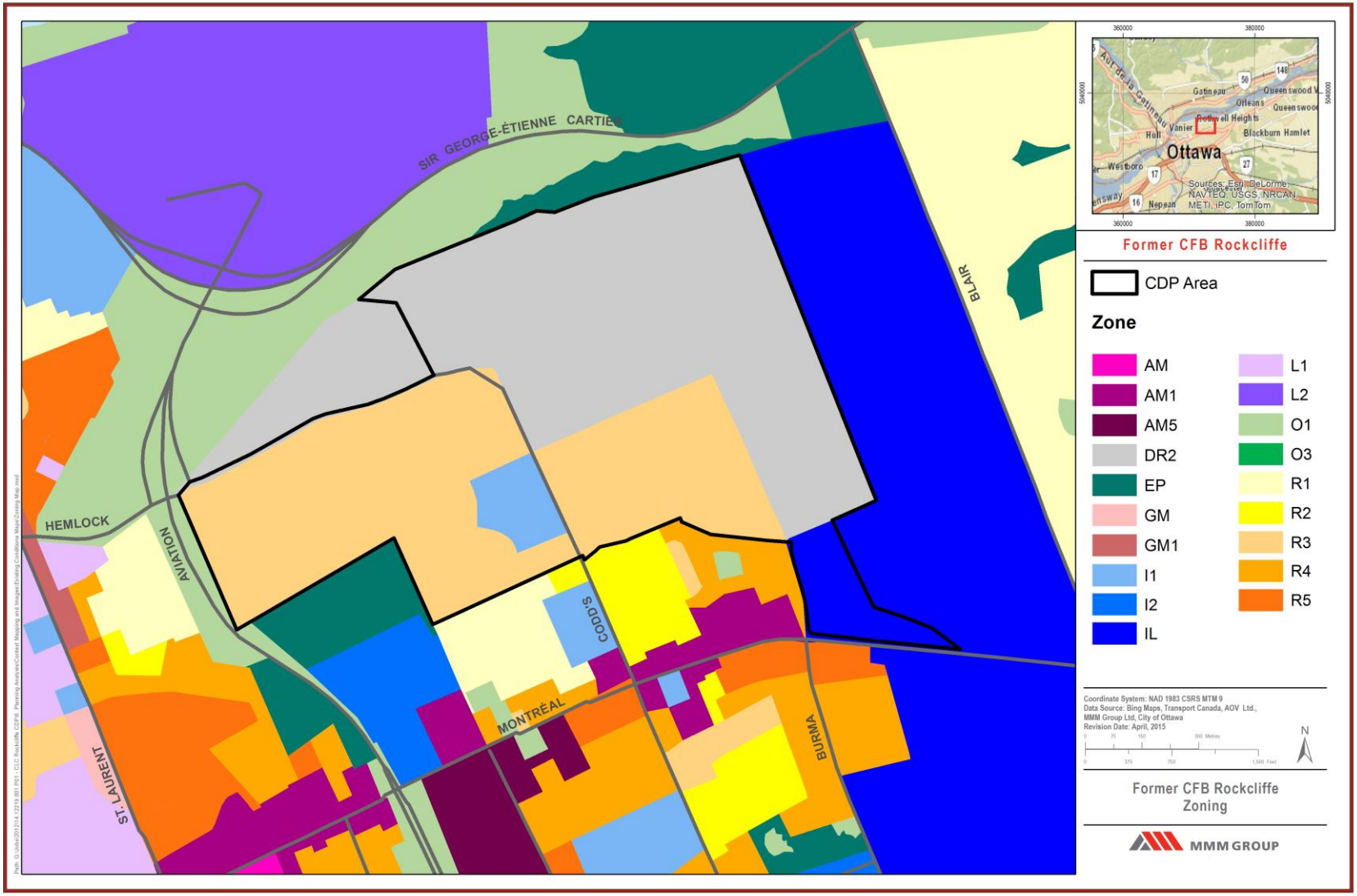


Figure 4.1: Existing Zoning

5 | STRUCTURE OF THE NEW COMMUNITY

5 STRUCTURE OF THE NEW COMMUNITY

The purpose of this chapter is to describe the general layout and character of the new community including neighbourhood structure, land uses, the mobility and circulation network, and utilities and infrastructure. The distribution of density and height across the site is also presented.

5.1 NEIGHBOURHOOD STRUCTURE

The total CDP site area is 131 hectares. Within this area there is a significant variation in land form, natural features, and site elements. These variations have informed the creation of eight smaller, individual neighbourhoods.

Each neighbourhood is located within 600 metres of a potential transit route and is intended to be compact, walkable, and transit-oriented. Each neighborhood also features easy access to exceptional public open spaces, employment, shops and services.

While they generally share these characteristics, each neighborhood is also intended to have a distinct character based on its location, intended use and existing site features. The eight neighbourhoods are shown in Figure 5.1 and described in more detail below.

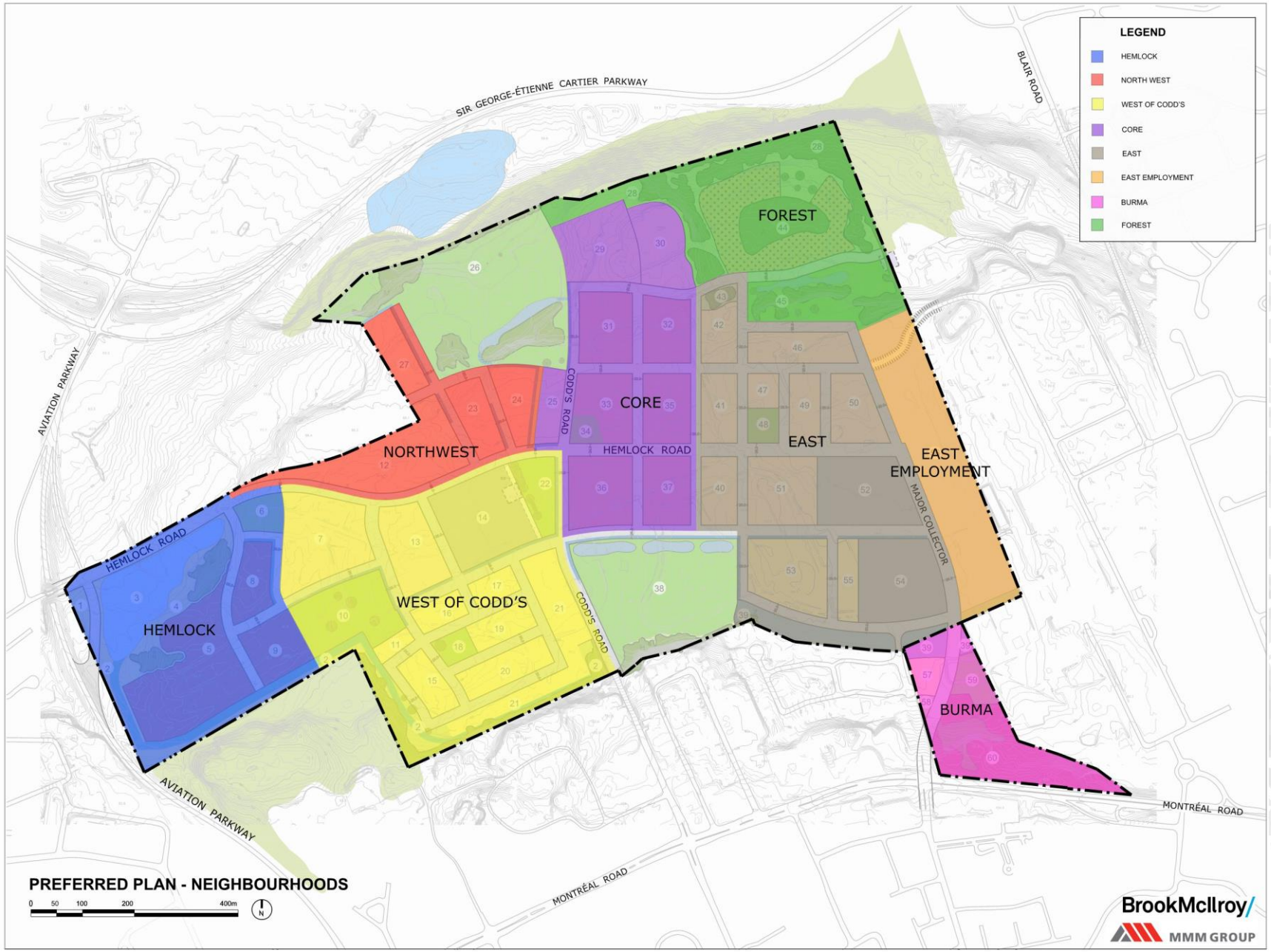


Figure 5.1: The Neighbourhoods

5.1.1 Hemlock

The Hemlock neighbourhood is located at the western boundary of the site and will act as a mixed-use, high-density area that takes advantage of, and is characterized by, its relationship with the Montfort Hospital and Montfort Hospital Woods to the south.

5.1.2 West of Codd's

Immediately adjacent to the Hemlock neighborhood, West of Codd's is bounded by Hemlock Road to the north, Codd's Road to the east, and the site's southern boundary. This neighbourhood will generally accommodate lower and medium density residential uses including single-detached, semi-detached, and townhouse units, as well as low- and mid-rise apartments. The neighborhood will contain a school site and will be characterized by excellent access to a number of parks and parkettes.

5.1.3 Northwest

This neighbourhood lies north of Hemlock Road and west of Codd's Road and is intended to be primarily residential in nature with a variety of townhouse units, stacked townhouse units, and low- to mid-rise apartments. Immediately adjacent to Codd's Road, there will be a low- to mid-rise mixed-use area, taking advantage of the proximity to the Core, which will provide opportunities for retail uses at the street edge. The Northwest neighborhood is situated immediately adjacent to a large public park affording access to recreational opportunities and spectacular views of the Ottawa River to the north.

5.1.4 Core

The Core is a nine block mid-rise mixed-use neighborhood at the heart of the community. It is strategically located in close proximity to all major parks and is intended to be a place where neighbourhood residents, those who work in the area, and outside visitors can gather and socialize. It will be a compact, pedestrian-oriented area with a variety of residential and employment uses.

5.1.5 East

This neighbourhood extends from the Core to Burma Road and is characterized by residential uses comprising single-detached, semi-detached, townhouse and stacked townhouse units, as well as low-rise and mid-rise apartments. The East neighbourhood will provide excellent access to employment, shops and services, and will accommodate two school sites along the eastern boundary.

5.1.6 Forest

The Forest neighbourhood is located in the northeast corner of the site, directly adjacent to the NRC Woods and Airbase Woods. Within this neighbourhood, there are a number of important tree groupings that will be retained and protected as new development occurs. Residential uses will be

provided in a multi-unit format nestled in the trees, resulting in an "urban forest" development concept.

- Prior to any site alteration, a master concept plan will be prepared to confirm that this development concept is viable.

5.1.7 East Employment

The East Employment neighbourhood is located east of the north-south major collector, at the very eastern edge of the site and will contain a mix of low- to high-rise office buildings. The East Employment Area will create employment opportunities that will be compatible with the adjacent research campus of the National Research Council. There will be a focus on recruiting high-technology, communications, information-technology, and research and development industries to this area.

5.1.8 Burma

The Burma neighbourhood will be an important entry point to the community and is located at the intersection of Burma Road and Montreal Road. This small area will give the community a presence on Montreal Road and will predominantly consist of high-rise mixed-use buildings. Publicly accessible shops and services will be located on the ground floor of high-rise buildings, providing a vibrant and active street frontage on Montreal and Burma Road. These will be supported by attractive streetscapes with spill-out uses that will encourage people to gather and socialize.

5.2 LAND USES

The concept plan is shown in Figure 5.2 and illustrates the overall land use, road, and block pattern for the community. This plan was designed to provide a range of places for people to live, work and play which will foster and encourage a vibrant community. The community will be walkable, compact, and transit-oriented and will contain prominent interconnected green spaces with aesthetic, environmental, and recreational qualities.

The plan includes three elementary school sites which will accommodate future schools to serve the community and surrounding areas. The School Boards that have requested schools include the Ottawa-Carleton District School Board, the Conseil des écoles publiques de l'Est de l'Ontario, and Conseil scolaire de district catholique de l'Est Ontarien.

The concept plan designates the following land uses:

- Low-rise residential;
- Low- to mid-rise residential;
- Low- to mid-rise mixed-use;
- Mid-rise mixed-use;
- High-rise mixed-use;
- High-rise employment;
- Forest Special Design Area;
- Schools;
- Parks and parkettes;
- Natural areas and important tree groupings; and
- Infrastructure (e.g., roads, off-road cycling connections, stormwater facilities).

Specific policies and guidelines for each land use are presented in Chapter 6.

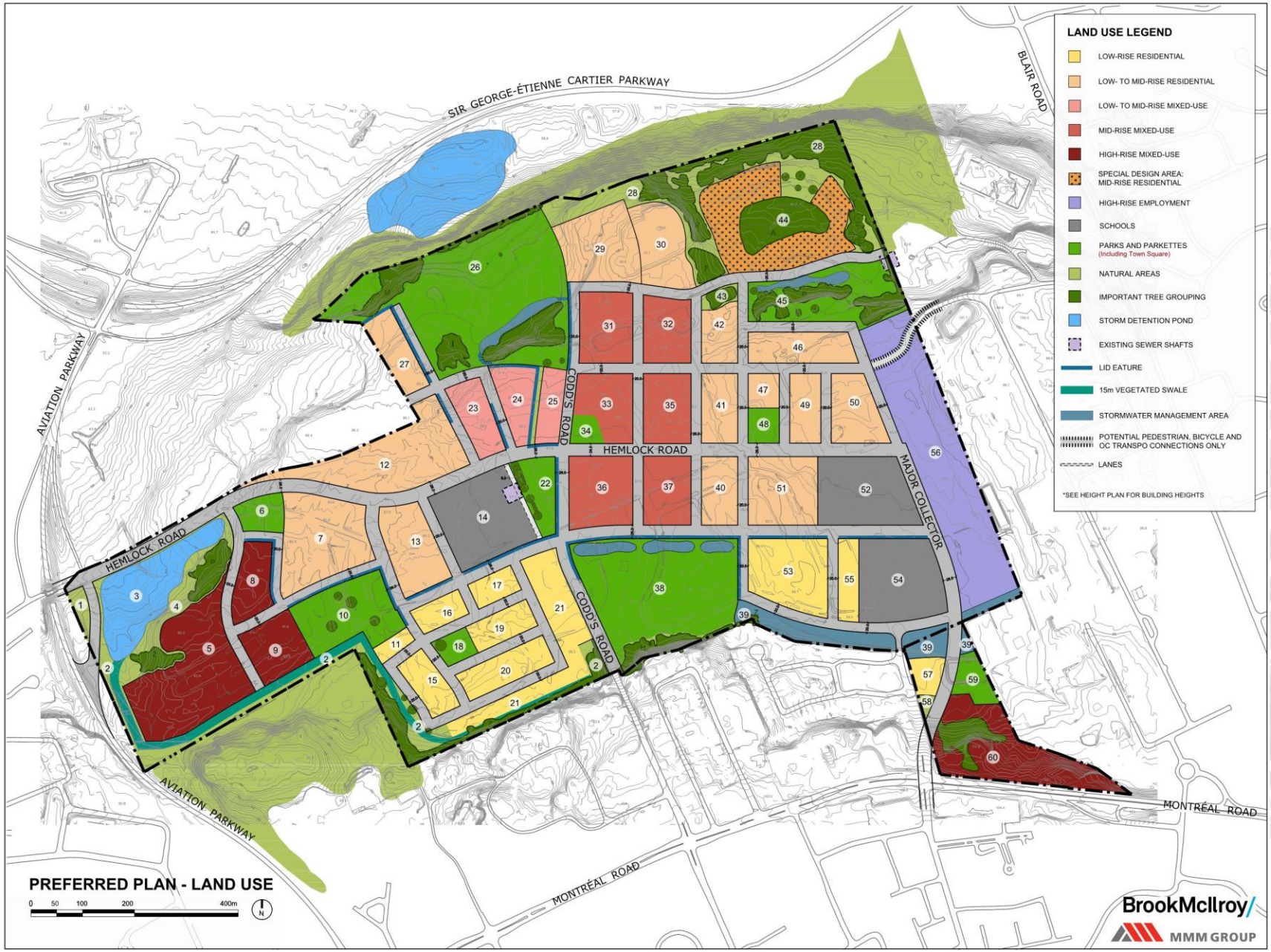


Figure 5.2: Land Uses

5.3 PUBLIC SPACES

5.3.1 Natural Areas

One of the site's significant natural areas is located along the northern and eastern boundaries in the northeast corner. It contains an extension of the NRC Woods, as well as a large and intact forest tree grouping and several outstanding specimen trees. The vegetation in this corner is of outstanding natural value which is further enhanced by the ecological connection to protected woodlots on NCC and NRC lands beyond the boundaries of the site. As a result, flora and fauna that would not be found in subdivisions, city centres, or more fragmented natural areas continue to find habitat in this location. This resource cannot be underestimated as an anchor that can help to establish a continuity of character and sense of place for the site's redevelopment. Canada Lands Company visited this portion of the site with the Algonquins of Ontario (AOO) and they indicated that this area is a natural resource of high value that is unique to the site and worthy of protection as a special feature for the community. It is important to note that Canada Lands Company has an agreement with the AOO to provide a space on the ridge overlooking the river for the commemoration of the historical Algonquin presence in this area and to celebrate and teach Algonquin culture and its lessons for present day society. These early discussions with the AOO suggest that this portion of the ridge is an ideal and appropriate area for this commemorative feature.

Another important natural area is found along the southwest boundary of the site, immediately east of Aviation Parkway within the Hemlock neighborhood. Here, the neighbourhood is bisected by a significant ridge which has been maintained to minimize disruptions to the natural characteristics of the landscape. This slope, combined with a vegetated swale and stormwater detention pond, facilitates natural drainage within the neighbourhood and forms a significant component of the overall stormwater management strategy. In addition to accommodating two important tree groupings, this area also provides a linkage to the Montfort Woods, which contain protected woodlots and vegetation of outstanding natural value.

5.3.2 Public Art

Canada Lands Company and the City of Ottawa will collaborate to identify sites for public art installations. These public art installations will be strategically located at community gateways and gathering places, may support overall community commemoration themes, and will help create a sense of identity and place within the community.

5.4 PARKS AND PARKETTES

One of the signature features of the plan is the interconnected network of open spaces, parks and pathways. These will provide residents with dramatic views, areas of mature trees, and opportunities for both passive and active recreation. These are shown in Figure 5.3.

The community will have two large Community Parks which will function as active spaces, one bordering the south end of the site (South Community Park) and the other at the north end overlooking the Ottawa River (North Community Park).

Two smaller Neighborhood Parks (East and West Neighbourhood Parks) will serve the needs of local residents; and five Parkettes, as well as the Town Square, will supplement the larger parks by ensuring park access to all residents within easy walking distance. The Town Square will provide a focus for the Core and create a dynamic gathering space for residents, employees and visitors.

The total parkland dedication area is 23.03 hectares and includes important tree groupings but excludes infiltration and storm ponds. 3.3 of the total 10.1 hectares of important tree groupings on the site are found within parks. Table 5.1 provides the size for each park, including important tree groupings, and Figure 5.3 identifies the location of each park. Note that the breakdown of land use distribution for the site shown in Table 5.2 provides separate calculations for parks and important tree groupings. Therefore, the area dedicated to parkland is reflected in Table 5.2 as 19.73 hectares.

A detailed description of each park is provided in the Parks Master Plan Appendix A which includes a list of the amenities that will be provided in each park, and a description of the layout of each park. The proposed park concept diagrams in Appendix A are intended for demonstration purposes only and are not meant to be used to direct the ultimate parks design.

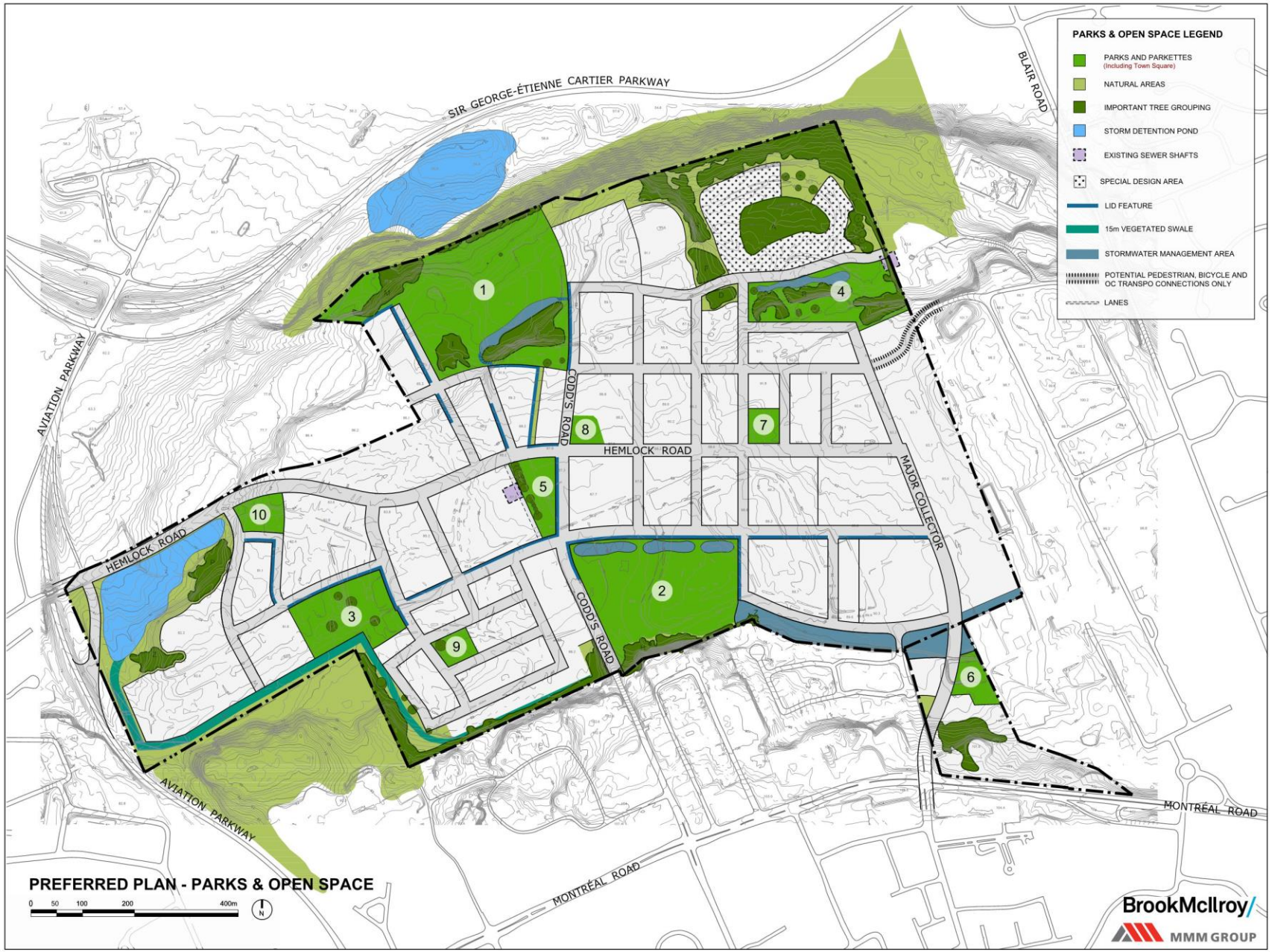


Figure 5.3: Parks & Open Spaces

Table 5.1: Parks and Parkettes

Park #	Size (Ha)
1 – North Community Park	10.34
2 – South Community Park	4.95
3 – West Neighbourhood Park	2.01
4 – East Neighbourhood Park	2.58
5 – Centre Parkette	0.90
6 – Southeast Parkette	0.55
7 – East Parkette	0.40
8 – Town Square (Parkette)	0.32
9 – Southwest Parkette	0.39
10 – West Parkette	0.59

5.5 HEIGHT

The overall building height strategy is shown in Figure 5.4. Maximum block heights were selected in a manner that will integrate the community into the surrounding city fabric and topography by ensuring that changes in building heights will be smoothly transitioned. Height will be deployed strategically to minimize visual impacts and shadows while marking the community as a prominent place in the landscape. Specific design policies and design guidelines associated with the height strategy are provided in Chapter 6.

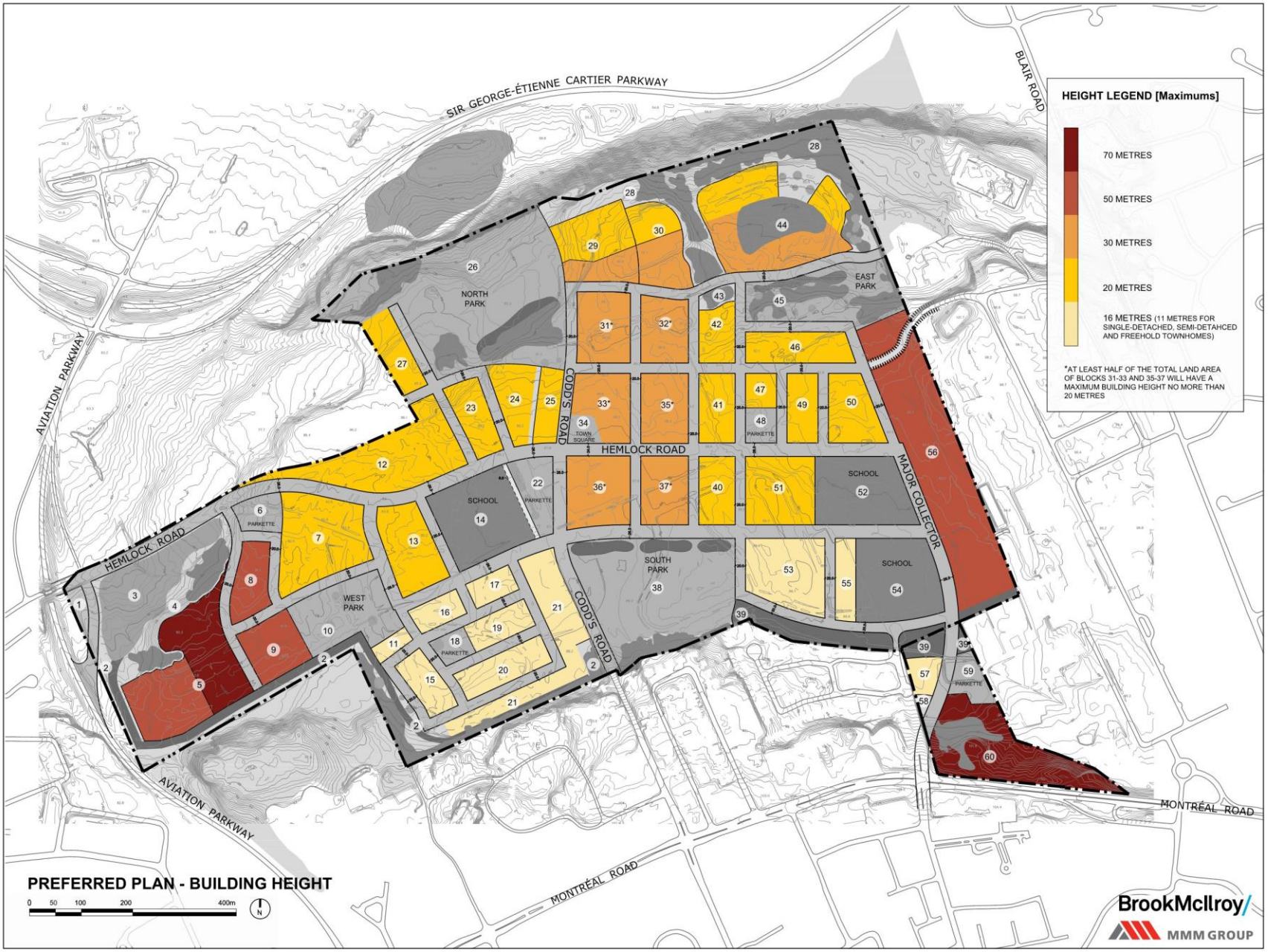


Figure 5.4: Height Strategy

5.6 BUILDING FRONTAGES AND ACTIVE STREET FRONTAGES

Active Street Frontages will be strategically applied throughout the site, primarily in the Core and along collector roads. Active Street Frontages will require a minimum of 50 percent of the ground floor facade facing the street to be composed of windows, active entrances facing the street for each tenancy, and a minimum height of 4.5 metres for the ground floor storey for non-residential buildings. These areas will typically include publicly accessible shops and services. Parking will not be permitted between the building and the street. Areas where Active Street Frontages will be required are shown in Figure 5.5.

In certain areas of the new community, predominately in areas of high pedestrian circulation, it will be important for buildings to face and front onto the public realm in order to animate the street. Along these frontages, there will be no parking between buildings and the street. Areas where building frontages will be required are shown in Figure 5.5.

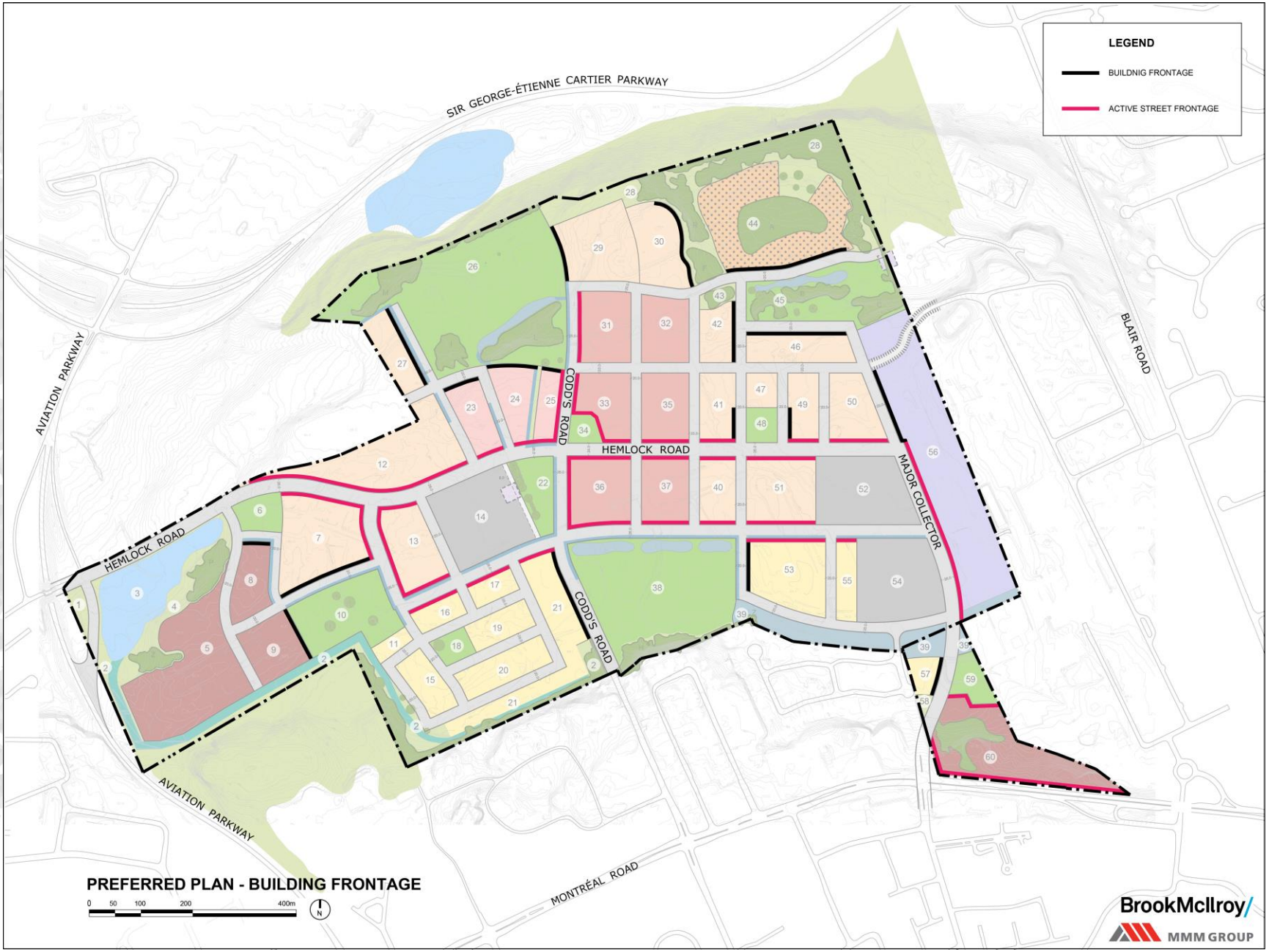


Figure 5.5: Building Frontages and Active Street Frontages

5.7 POPULATION, EMPLOYMENT AND DENSITY

This CDP achieves a density of 95 people plus jobs per gross hectare. This density will help create a vibrant public realm, support transit, and encourage efficient planning and use of municipal infrastructure.

This density translates to minimum of approximately 5,350 residential units and 2,610 jobs at full build-out.

To arrive at an overall density for the community, anticipated densities for individual land uses/blocks were applied to the proposed concept plan. These densities are summarized in Table 5.2.

Each residential and mixed-use land use has a minimum density requirement. Master concept plans submitted with development applications will illustrate how the required minimum density will be achieved. Within the area described by the master concept plan, certain individual buildings may have densities lower than the minimum required; however, the overall average density for the area covered by the master concept plan must meet the minimums identified in this CDP.

Table 5.2: Land Use Distribution and Density

Land Use	Land Area (ha)	Minimum Density (units/ha)	Minimum Units	Target Employment (jobs)	Estimated Population
Low-Rise Residential	8.94		427		1,167
Blocks 11, 15-17, 19-21, 55	*6.53*	*32*	*209*	*n/a*	*619*
Blocks 53, 57	*2.41*	*91*	*219*	*n/a*	*548*
Low- To Mid-Rise Residential	19.88	105	2,087	n/a	3,964
Forest Special Design Area	3.13	91	285	n/a	461
Low- To Mid-Rise Mixed-Use	2.27	91	206	n/a	393
Mid-Rise Mixed-Use	7.68	143	1,100	n/a	1,430
High-Rise Mixed-Use	7.3	170	1,241	n/a	2,355
Employment	15.54	n/a	n/a	2,610	n/a
Westerly Node (Blocks 5, 8, 9)	*1.56*	*n/a*	*n/a*	*580*	*n/a*
High-Rise Employment (Block 56)	*6.08*	*n/a*	*n/a*	*1,600*	*n/a*
Schools (Blocks 14, 52, 54)	*7.31*	*n/a*	*n/a*	*75*	*n/a*
Mixed-Use Retail (Blocks 23-25, 31-33, 35-37, 60)	*0.59*	*n/a*	*n/a*	*355*	*n/a*
Parks and Parkettes (not including Important Tree Groupings)	19.73	n/a	n/a	n/a	n/a
Natural Areas	5.95	n/a	n/a	n/a	n/a
Important Tree Groupings	10.10	n/a	n/a	n/a	n/a
SWM Features	7.95	n/a	n/a	n/a	n/a
Road Network and Lanes	22.35	n/a	n/a	n/a	n/a
TOTAL	**130.82**		**5,346**	**2,610**	**9,764**

5.8 AFFORDABLE HOUSING

To help create a fully inclusive and equitable community, a range of housing types and tenures are encouraged for residential uses. An appropriate stock of both rental and ownership housing will be made affordable to meet the community's needs and adhere to the City of Ottawa's Official Plan policies.

Affordable housing will be dispersed throughout the community mixed with other housing types and may include purpose-built rental housing, supportive housing, and not-for-profit subsidized housing.

The City of Ottawa and Canada Lands Company will explore partnerships within private, public, and non-governmental sectors to accommodate affordable housing projects in the new community.

In addition to participation in multi-party partnerships to secure the resources necessary to sustain a range of affordable housing types, the City of Ottawa and Canada Lands Company will facilitate affordable housing by allowing alternative development standards on a case-by-case basis, such as reduced parking requirements.

Affordable housing will incorporate innovative and flexible design to accommodate a wide range of residents and needs. Such design will provide for adaptive use and re-use over the long term.

5.9 MOBILITY AND CIRCULATION

The City's 2013 Transportation Master Plan (TMP) outlines the vision, supporting policies, and targets for mobility in the City to 2031. The TMP emphasizes sustainable transportation by prioritizing mobility for pedestrians, cyclists, and transit over private automobile drivers. The proposed transportation network for the site supports the vision and policies set out in the TMP and applies them in a context-specific manner. The result is a network of great public streets that will accommodate all users.

5.9.1 Pedestrians and Cyclists

The proposed active mobility plan illustrated in Figure 5.6 includes a linked network of sidewalks, on-road cycle tracks and multi-use pathways. This network will provide connections to adjacent neighbourhoods inside and outside of the community, and will be fully integrated with the City of Ottawa's existing pedestrian and cycling network.

As each detailed subdivision phase comes forward for approval, Canada Lands Company and the City will continue to work with the NCC and NRC to further develop the cycling and trail networks to connect the site to the surrounding areas.

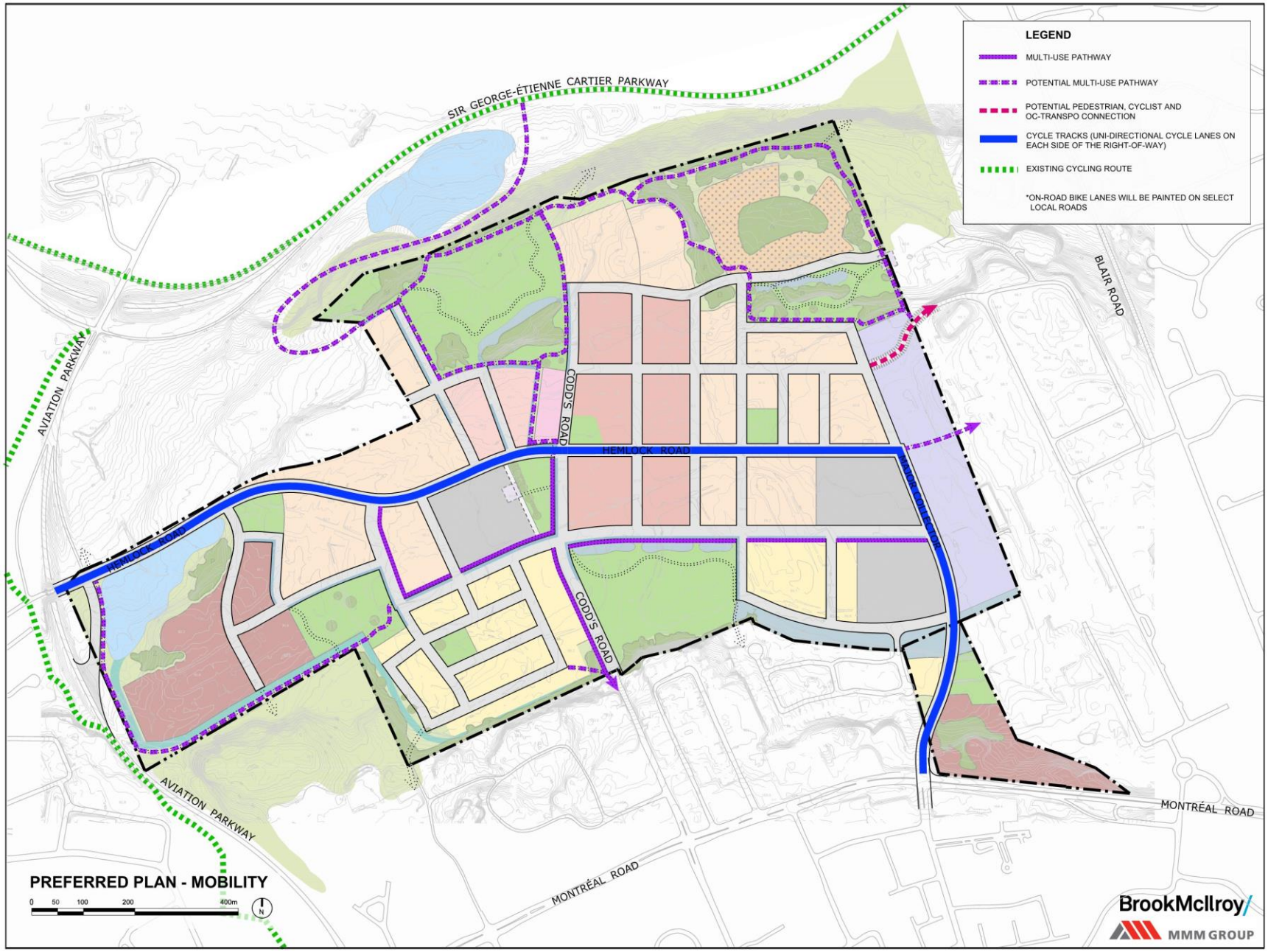


Figure 5.6: Mobility Plan

5.9.2 Public Transit

The community will be well served by local transit services. Streets potentially used for transit service are shown in Figure 5.7. A final route(s) will be determined by OC Transpo.

Canada Lands Company will partner with OC Transpo to identify creative ways to provide weather protected enclosures at key transit stops across the site. Where practical, transit shelters will be integrated within publicly accessible buildings (lobbies, commercial and retail establishments etc.).

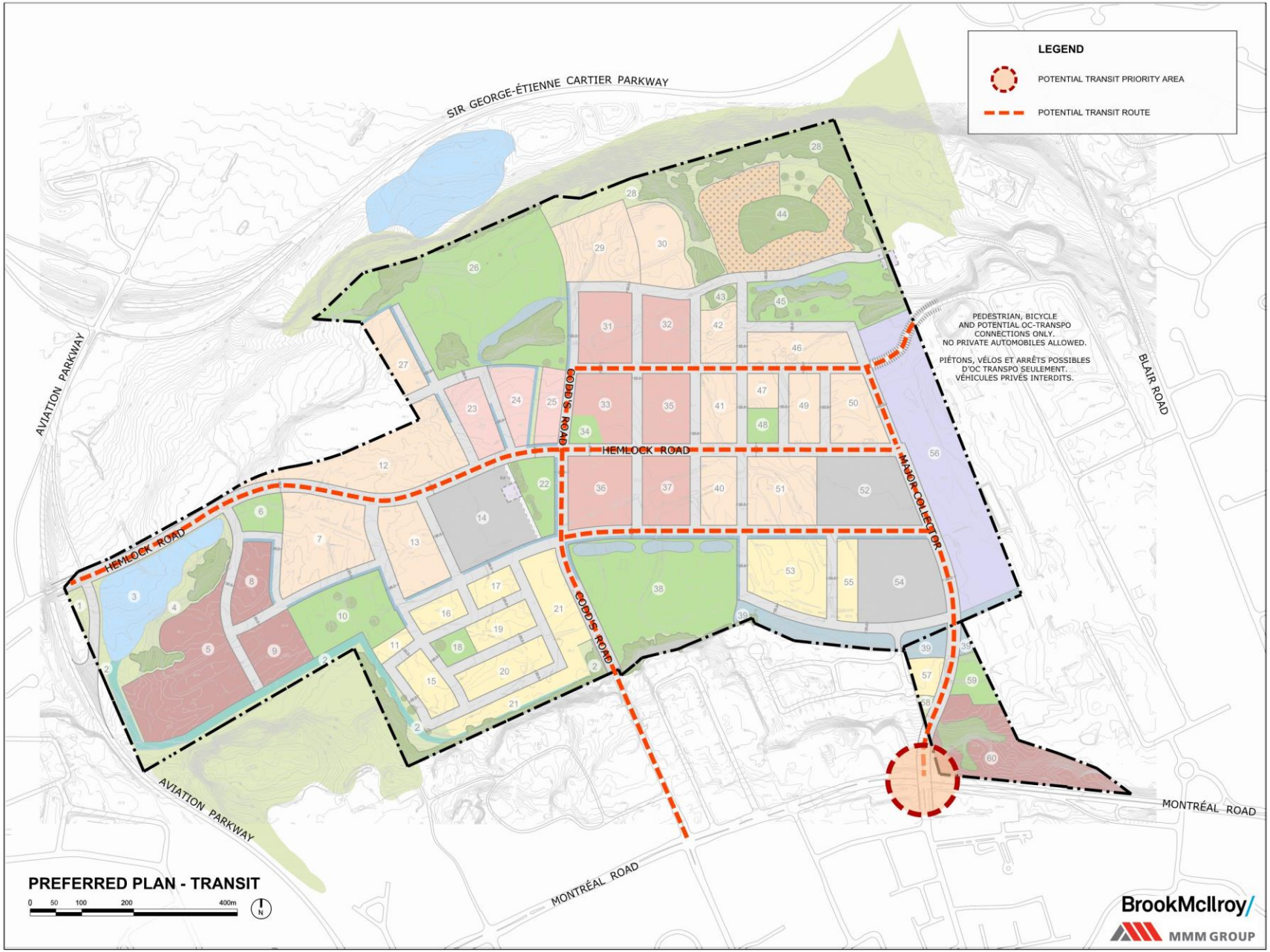


Figure 5.7: Transit

5.9.3 Street Network

When the Department of National Defence decommissioned the site, road maintenance was discontinued and roads have since fallen into disrepair. In addition, the existing road network was not built to support the use that is anticipated for the future community; therefore, Canada Lands Company will build a new street network.

The proposed street layout has been developed to:

- Increase the connectivity of the site with the surrounding neighbourhoods;
- Facilitate mobility within the site; and
- Minimize traffic cutting through the site.

The result is a modified grid that will preserve and enhance existing natural heritage features including ridges, significant tree stands, individual trees, and forested areas. Entering the community from the South, Codd's Road will maintain its historic alignment, providing a continuous view to the North Park. Where it intersects with the collector road, Codd's Road will shift to a true-north orientation to acknowledge the sacred importance Aboriginal cultures associate with the cardinal directions, and to shift the view from the ridge to the river and away from the airport.

The proposed street layout will incorporate short block lengths (i.e. less than 250 metres) for a majority of the blocks and well-connected streets to create a permeable neighbourhood and promote active transportation. To minimize cut-through traffic, a number of intersections along the collector roads will require full stops.

Table 5.3 describes the different types of roads to be included in the network as well as their intended function and key features. The specific locations of each road type are shown in Figure 5.8.

Table 5.3: Road Cross Sections

Type of Road	Function	Cross Section Widths	Key Features
Major Collector	Serve travel between collector and arterial roads	26 m	2 lanes of traffic, segregated cycling facilities, on-street parking on one side, sidewalks on both sides
Collector	Serve neighbourhood travel between local and major collector or arterial roads	26 m	2 lanes of traffic, multi-use pathway on one side, on-street parking and sidewalks on one side, may incorporate drainage features
Hemlock Core Street	Serve neighbourhood travel in the Core	24m	2 lanes of traffic, segregated cycling facilities, curbless on-street parking on both sides, sidewalks on both sides
Local	Provide direct access to adjacent lands, with a secondary function to serve neighbourhood travel to and from collector or arterial roads	20 m	2 lanes of mixed traffic, sidewalks on both sides for most streets, but only on one side for streets that also incorporate drainage swales

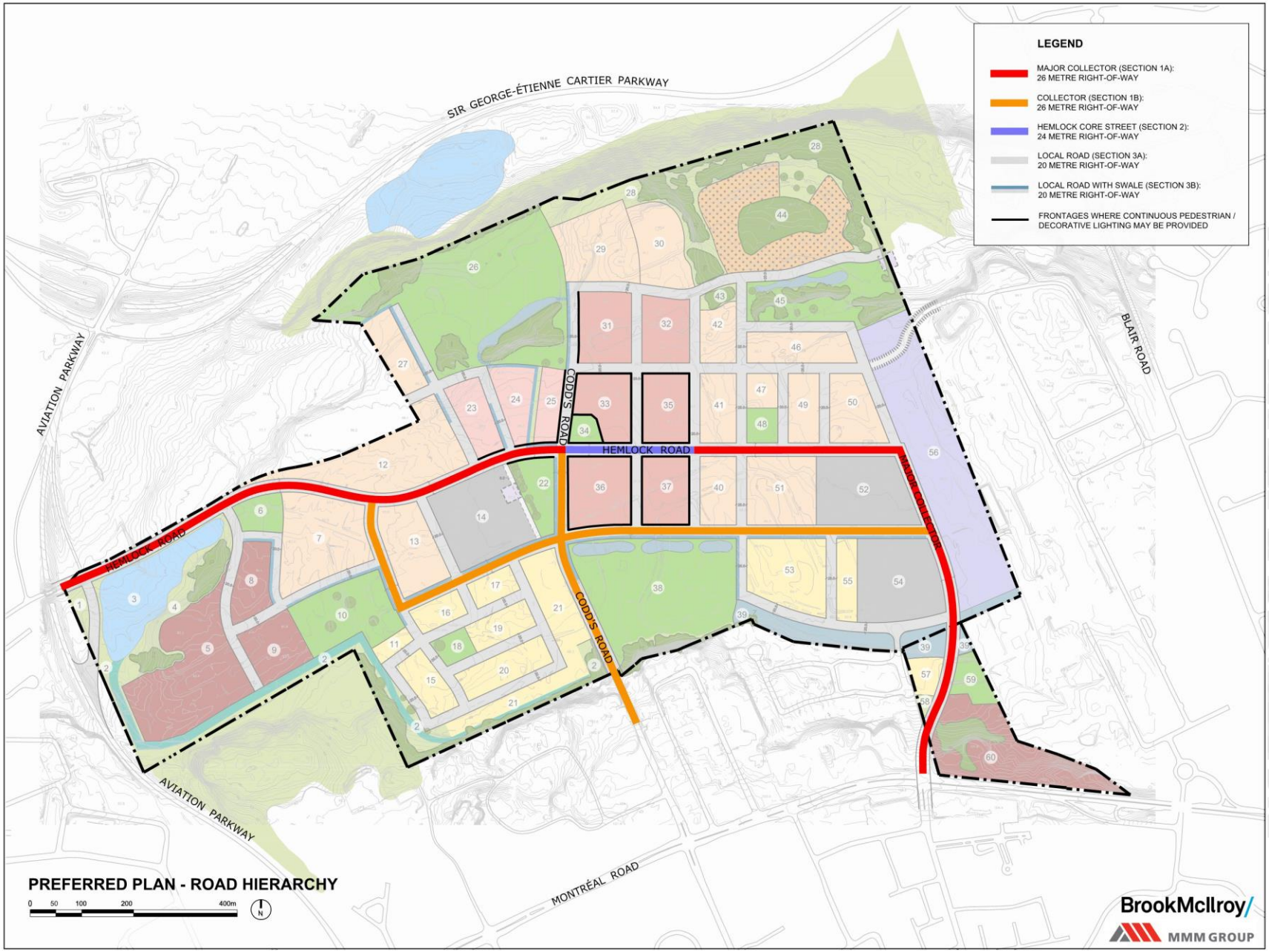


Figure 5.8: Road Sections by Type

Road Cross Sections

The plan incorporates three different widths of cross sections: 26 metres for collectors, 24 metres for Hemlock Core Street and 20 metres for local roads. A number of variations are provided within each cross section to create a strong relationship to adjacent land uses.

Primary cycling connections will be provided on the 26 metre collectors, and on the 24 metre Hemlock Core Street which will have segregated cycling lanes or multi-use pathways within the right-of-way. On the 20 metre local roads, cycling will be accommodated through shared cycling/vehicle lanes. Certain streets will be part of the stormwater management strategy and will incorporate stormwater management features such as bioswales. Every road type will incorporate generous sidewalks and boulevard planting. The sections that follow describe the vision for each street type in greater detail and include supporting street section diagrams, shown in Figures 5.9 to 5.13.

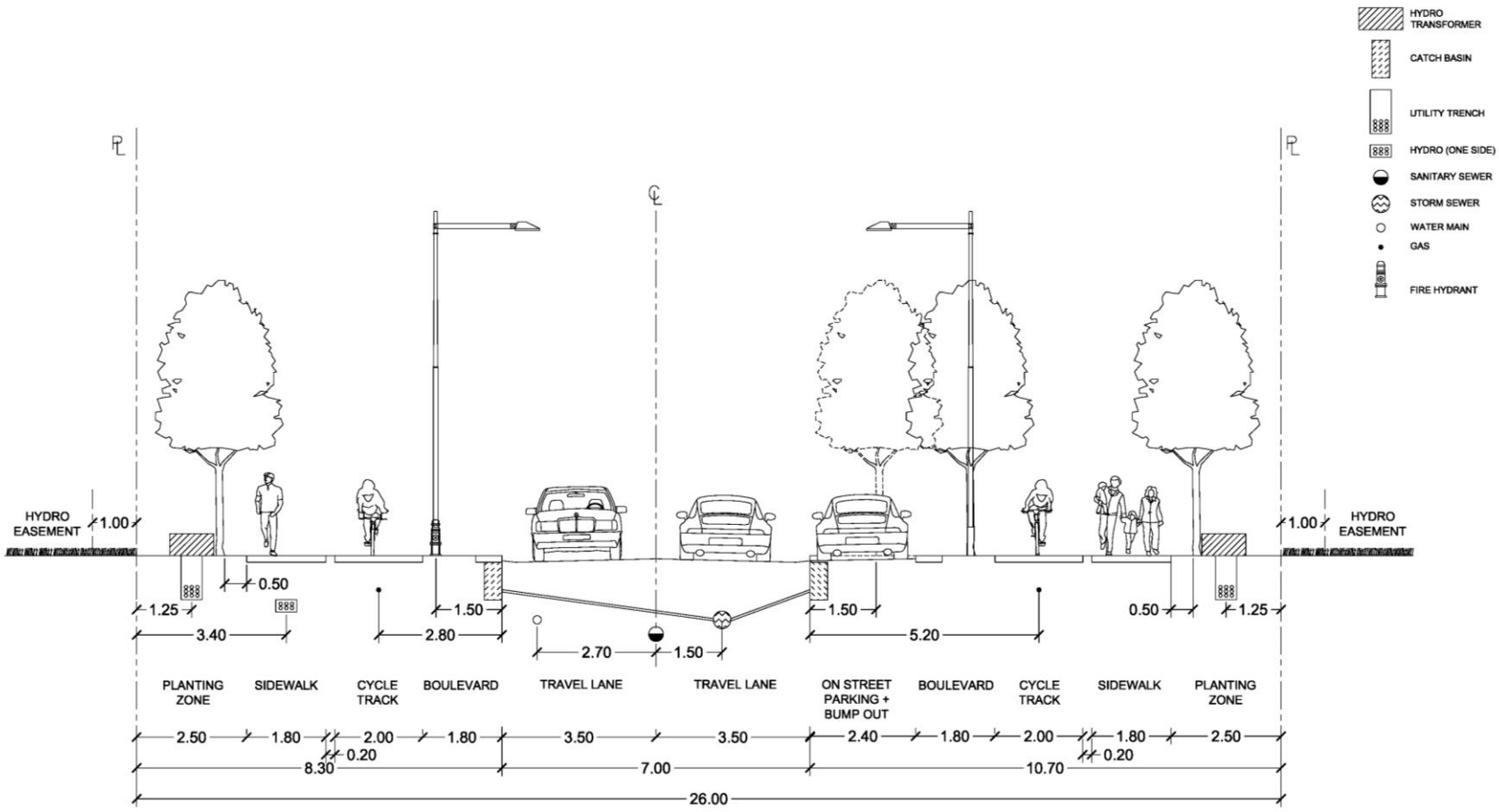
5.9.3.1 Collector Roads

The plan includes three types of collector roads: major collector roads, collector roads and the Hemlock Core Street. Major collector roads will be contained within a 26 metre public right-of-way and will include segregated uni-directional cycle tracks on each side of the street. They will serve as welcoming points into the community and will provide the primary east-west and north-south connections through the site.

Major collectors will be augmented by secondary collector roads. These will provide continuous east-west connections through the neighbourhoods south of the Core and will incorporate a multi-use pathway within the right-of-way. Collector roads will also be contained within a 26 metre public right-of-way.

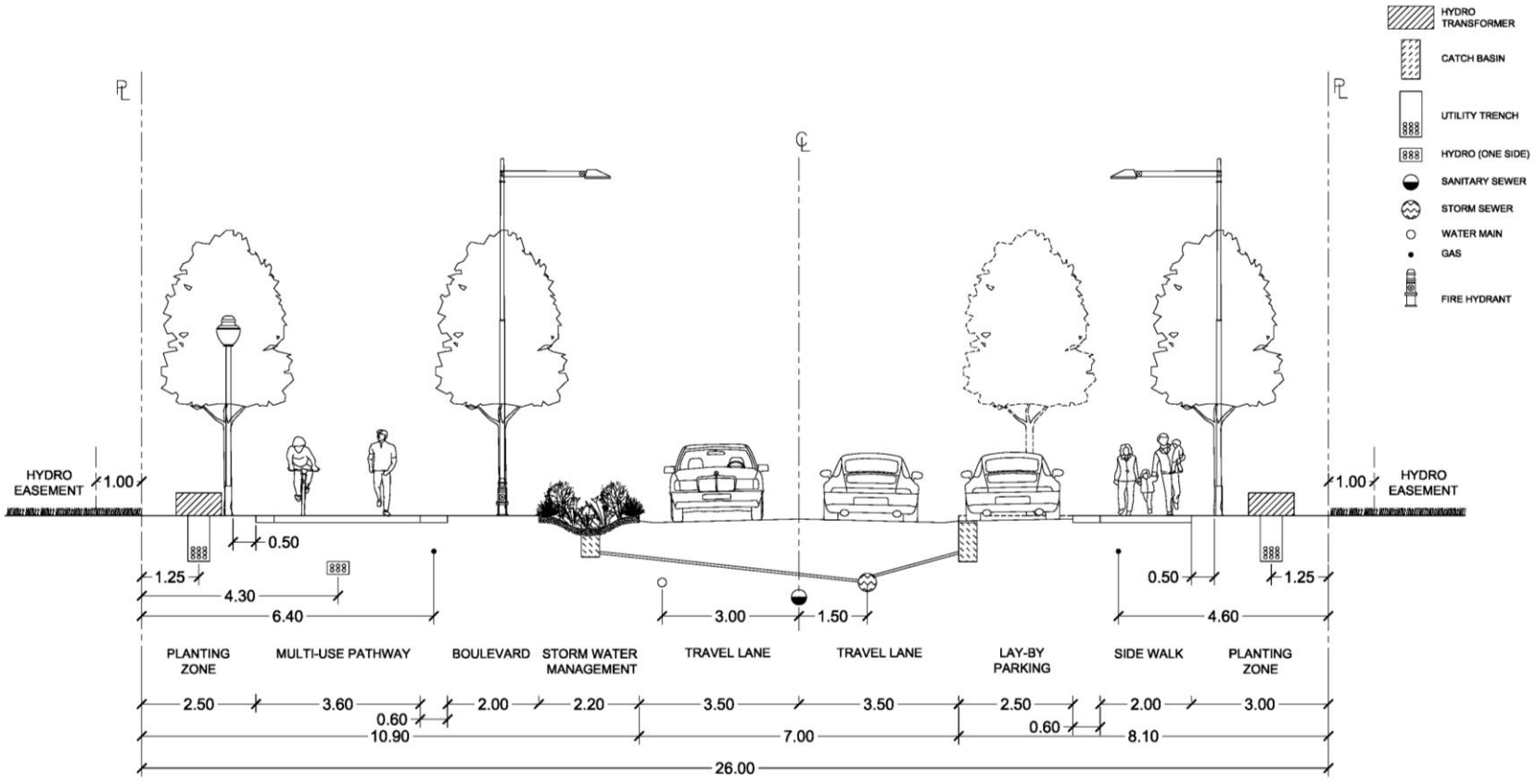
Hemlock Core Street is the two block section of Hemlock Road that transects the Core and will serve as the main street for the community. These blocks will reflect a human-scale and will be framed by compact, mid-rise and mixed-use buildings. Hemlock Core Street will feature a 24 metre right-of-way and will incorporate segregated cycling facilites, curbless on-street parking to support retail uses, and staggered tree plantings in the boulevards and bump-outs.

All collector roads will facilitate direct pedestrian, vehicle, and cyclist links between the major parks and natural features in the community. They will be ‘green streets’ that accommodate the transportation function of the road while also incorporating high-quality landscaping and innovative stormwater management facilities.



SECTION 1A - 26m ROW

Figure 5.9: Major Collector Road

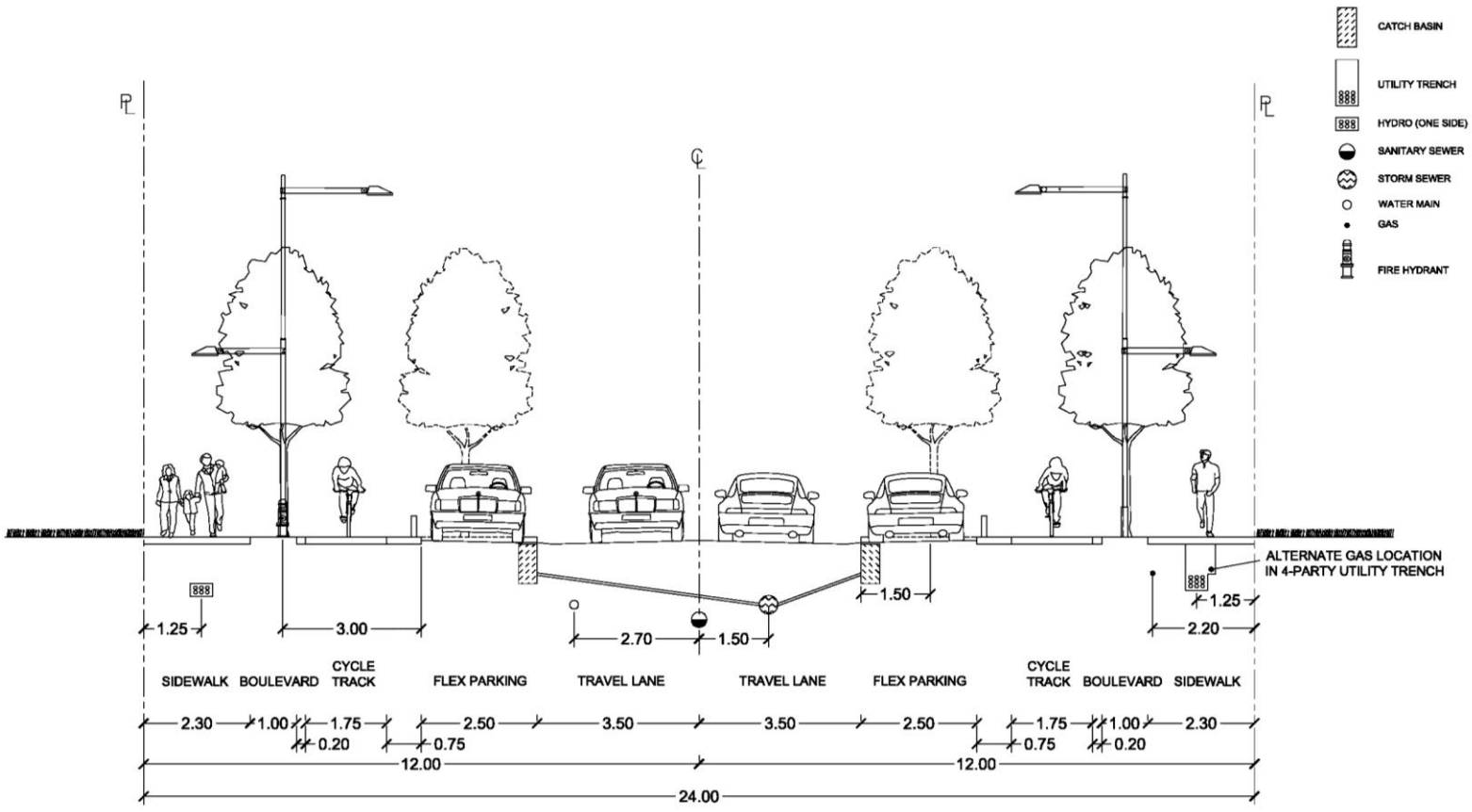


SECTION 1B - 26m ROW

NOTES:
1. THE INSTALLATION OF PEDESTRIAN LIGHTING SHALL CONFORM TO THE DESIGNATED AREA IN FIGURE 5.7 AND THE RELEVANT CDP POLICY
2. WITH THE EXCEPTION OF BURIED UTILITIES AND FIRE HYDRANTS, THE MIRROR IMAGE OF THIS SECTION WILL APPLY WHEN SWALES AND MULTI-USE PATHWAYS ARE ON THE OTHER SIDE OF THE STREET. REFER TO LAND USE PLAN FOR SPECIFIC LOCATIONS.

0 1 2 5m

Figure 5.10: Collector Road



SECTION 2 - 24m ROW

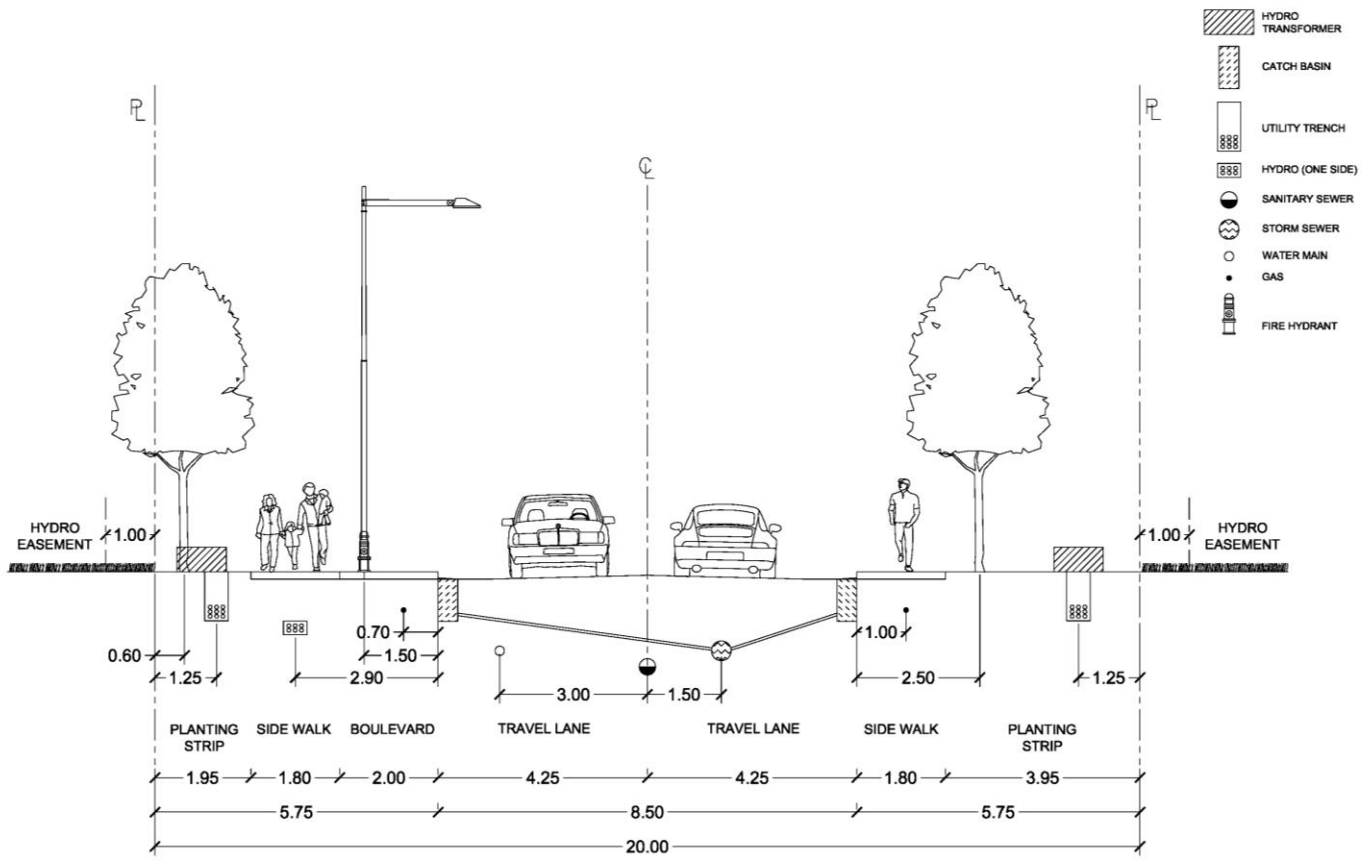
NOTES:
1. HYDRO OTTAWA WILL REQUIRE A SHARED VAULT SPACE
2. COMMUNICATIONS WILL REQUIRE EASEMENTS
3. THE INSTALLATION OF PEDESTRIAN LIGHTING SHALL CONFORM TO THE DESIGNATED AREA IN FIGURE 5.7 AND THE RELEVANT CDP POLICY

Figure 5.11: Hemlock Core Street

5.9.3.2 Local Roads

The remainder of the street network will be comprised of local roads. These roads will provide the fine-grain connections that will maximize permeability throughout the community and encourage walking and cycling.

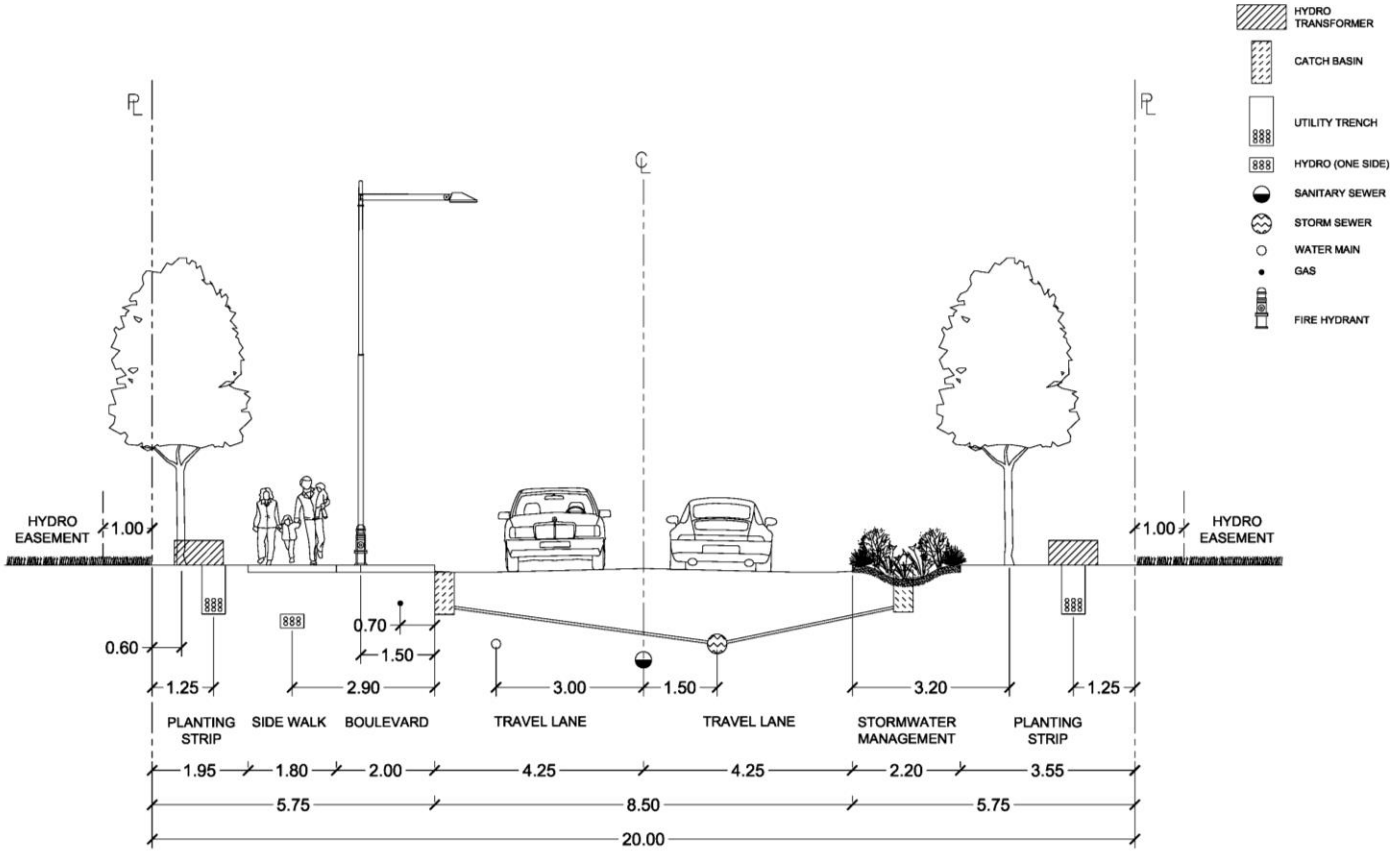
Local roads will have a 20 metre right-of-way and accommodate a wider 4.25 m shared lane in each direction. Local roads will either have sidewalks on both sides of the street or a sidewalk on one side of the street and a vegetated swale on the opposite side. Continuous trees along the boulevard will reinforce a strong urban tree canopy and augment front-yard trees on private property.



SECTION 3A - 20 M LOCAL ROAD

0 1 2 5m

Figure 5.12: Local Road



3B - 20 M LOCAL ROAD WITH SWALE

NOTES:
1. WITH THE EXCEPTION OF BURIED UTILITIES AND FIRE HYDRANTS, THE MIRROR IMAGE OF THIS SECTION WILL APPLY WHEN SWALES AND MULTI-USE PATHWAYS ARE ON THE OTHER SIDE OF THE STREET. REFER TO LAND USE PLAN FOR SPECIFIC LOCATIONS.

Figure 5.13: Local Road with Swale

5.9.4 Anticipated Traffic Impacts

Future travel patterns will be heavily influenced by adjacent large-scale commercial, institutional and employment hubs including (but not limited to):

- The Montfort Hospital, located directly north of the site;
- The NRC Campus, located immediately east of the site;
- The Canadian Aviation and Space Museum, located directly south of the site;
- La Cité Collégiale, located South of the site off of Bathgate Drive;
- The new CSEC building, located off of Ogilvie Road;
- The Gloucester Centre, located off of Ogilvie Road; and
- Downtown Ottawa/ The Market – located west of the site.

A Community Transportation Study (CTS) was prepared in support of this CDP and determined that the community is expected to generate up to 2,000 vehicles per hour during weekday commuter peak hours. At full build-out, the development is also projected to generate 1,600 to 1,800 transit patrons in peak hours and 750 to 850 cyclist and pedestrian movements.

The proposed pedestrian and cycling infrastructure is expected to achieve a multi-modal level of service of 'A', indicating a high level of comfort. The multi-modal level of service for transit is estimated to be 'C'. Understanding this level of service will assist in the evaluation of trade-offs in design decisions that affect multiple modes.

The CTS also found that at intersections which surround the site there are a significant number of movements that are currently operating close to, at, or above capacity during the morning and afternoon peak hours. Some of these intersections will continue to experience delays and queues after full build-out and there is limited opportunity to mitigate failing conditions with increased physical road capacity.

To alleviate some of this capacity, the NCC has agreed, subject to certain conditions, to permit a northbound off-ramp from the Aviation Parkway to Hemlock Road during the latter half of site development in order to relieve some of the congestion along Montreal Road. Additional intersection controls will be implemented around and throughout the site, such as the addition of turning lanes and all-way stop controls at key locations.

The pressures of added road capacity have also been addressed in the overall design of the community, which is intended to encourage sustainable modes such as public transit by including a mix of land uses at higher densities, and a high quality pedestrian and cycling network.

5.10 INFRASTRUCTURE

Canada Lands Company will work with the City of Ottawa and local utility providers to implement servicing throughout the site in accordance with an overall phasing strategy. This will include the provision of roads, pedestrian and cycling facilities, and transit connections; water and wastewater infrastructure; and public utilities such as electrical, gas, and telecommunications lines. A majority of the infrastructure provided will be new, as most of the existing systems do not have the capacity to support new development.

The Master Servicing Study, prepared to support the CDP, is a high-level study prepared based on the Water Master Plan (WMP) and the Infrastructure Master Plan (IMP). The Master Servicing Study to support the Plan of Subdivision approval must be prepared as per City guidelines such as the Water and Sewer Design Guidelines, the Fire Underwriters Survey (FUS), Related Technical Bulletins, etc.

5.10.1 Water Supply

Proposed development lands are currently serviced with potable water from the City of Ottawa's Montreal Road Pressure Zone, with pressure coming from the Montreal Road Pump Station and the Brittany Drive Pump Station. Two main watermains feed the development area from Montreal Road, one on Burma Road and the other on Codd's Road. These will be replaced with two new 400 mm diameter watermains.

The watermains located on the site will be replaced with new ones since the street network will be altered and upgraded, and the existing supply system will not be capable of supporting the proposed redevelopment to current City of Ottawa standards.

The growth projections for the former CFB Rockcliffe show that there is a need to implement pumping upgrades to properly service the site. Upgrades to the Brittany Drive Pump Station are planned and outlined in the City's Water/Wastewater Master Plan. Future upgrades, as outlined in the Water/Wastewater Master Plan will meet the demand of the CDP build out.

Portions of the site could experience water pressures that exceed maximum standards. In these areas, pressure reduction is recommended with the use of individual pressure reducing valves (PRVs).

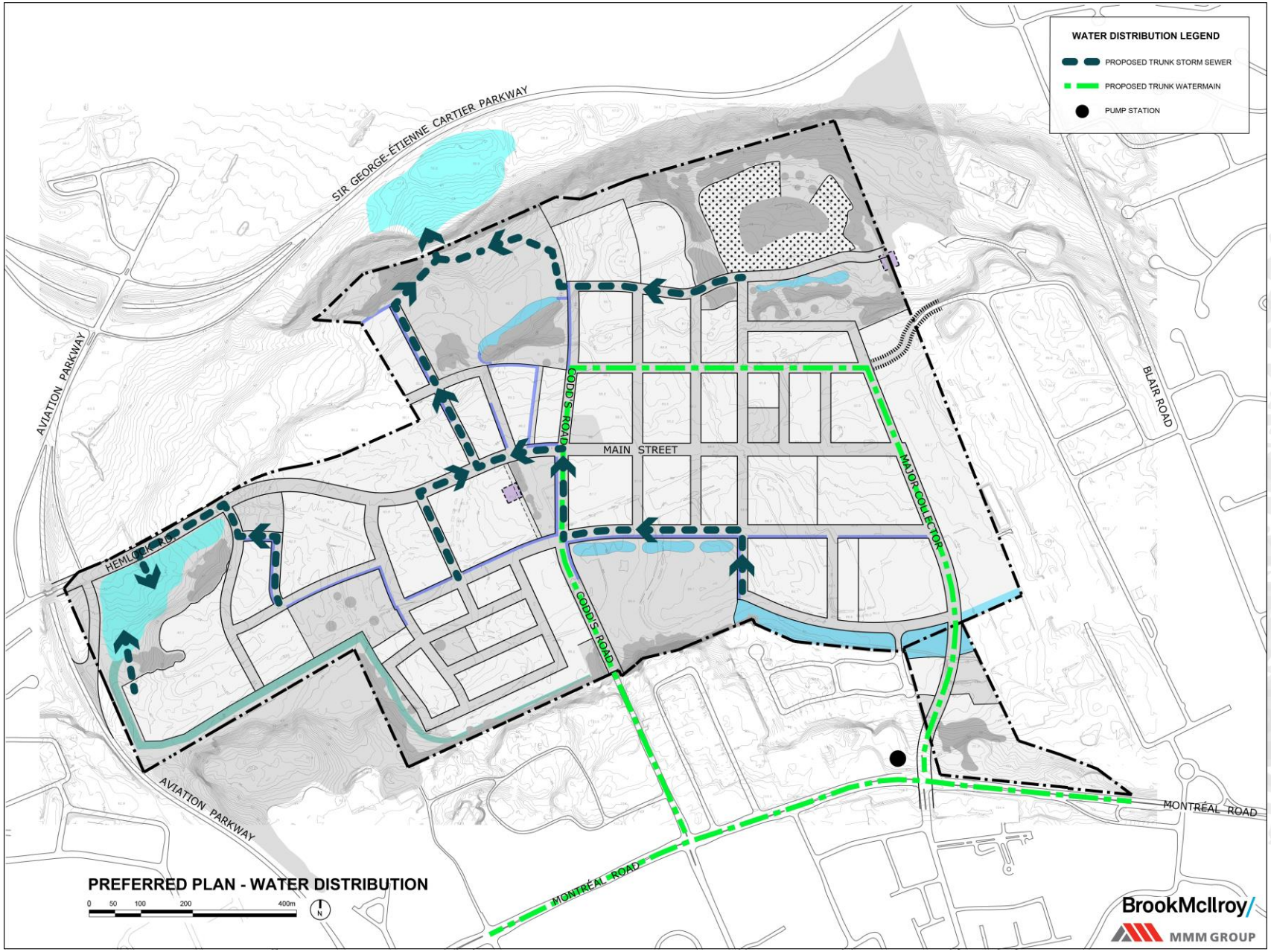


Figure 5.14 Water Supply

5.10.2 Wastewater

The current wastewater system is a combined stormwater and sanitary system which has reached the end of its useful life. Most of the existing wastewater infrastructure will be replaced with a system that separates stormwater and sanitary waste within the new road rights-of-way (ROW). The new sanitary sewer system is shown in Figure 5.15.

The new wastewater system will be sized to accept future flows from the Fairhaven Community in the event that the existing private septic systems currently in use are replaced with a central piped wastewater system. The system will also intercept flows from the existing Thorncliffe Village sanitary sewer.

The Master Servicing Study prepared for this Community Design Plan sets forth the functional design framework for further detailed engineering design of the sanitary sewer system.

All wastewater collected by the City of Ottawa flows to the treatment plant at the R.O. Pickard Environmental Centre, located less than 5 kilometers to the east of the former CFB Rockcliffe. Wastewater flows are delivered to this treatment plant by several large trunk sewers, including the Ottawa Interceptor Outfall Sewer (IOS). Wastewater has flowed from this CDP area directly into the IOS since the early 1960s, when it was tunneled through bedrock approximately 45 metres underneath CFB Rockcliffe.

The IOS will continue to serve as the wastewater outlet for the entire sanitary sewer system within this new community. The sanitary system will connect to the IOS through two existing shafts on the former CFB Rockcliffe. Those connection shaft locations and associated maintenance staging areas are identified in the CDP Land Use Plan.

Through the development review process, a strata easement will be secured to protect the City's ability to access and maintain the existing IOS tunnel. As the CDP accommodates the existing shafts to the IOS within future City parks, full and final easements will be protected. A new permanent IOS shaft is also needed and is anticipated to be built within one of the proposed parks. This has been taken into account through the strategic location of parks where the additional shaft and associated maintenance staging areas would be required.

From an infrastructure perspective, the preferred location for the new IOS shaft has been identified as Parkette #5 — Centre Parkette (Block 22), adjacent to the existing drop shaft. Other possible locations include the eastern edge of Park #4 — East Neighbourhood Park (Block 45), west of the existing shaft, and the north-west corner of Park #3 — West Neighbourhood Park (Block 10). Construction of the new shaft would last a few months and would require 2,000 – 3,000m^2 of

staging area. The staging area would revert to park use upon completion of the shaft construction. Criteria for locating the new shaft will be based on consultation with affected stakeholders. If the new shaft is not located on City owned land, a full and final easement will be required for access to the new shaft.

The existing IOS tunnel will also be twinned with a second sewer tunnel in the future. Subject to the ultimate routing selected for the second tunnel and its associated shaft, a second subsurface strata easement may be required to protect for the possible routing of this second tunnel and for its associated access shaft. It is also anticipated that construction of the second sewer tunnel would take place after development and occupancy of surrounding land. Accordingly, the City will engage with affected stakeholders.

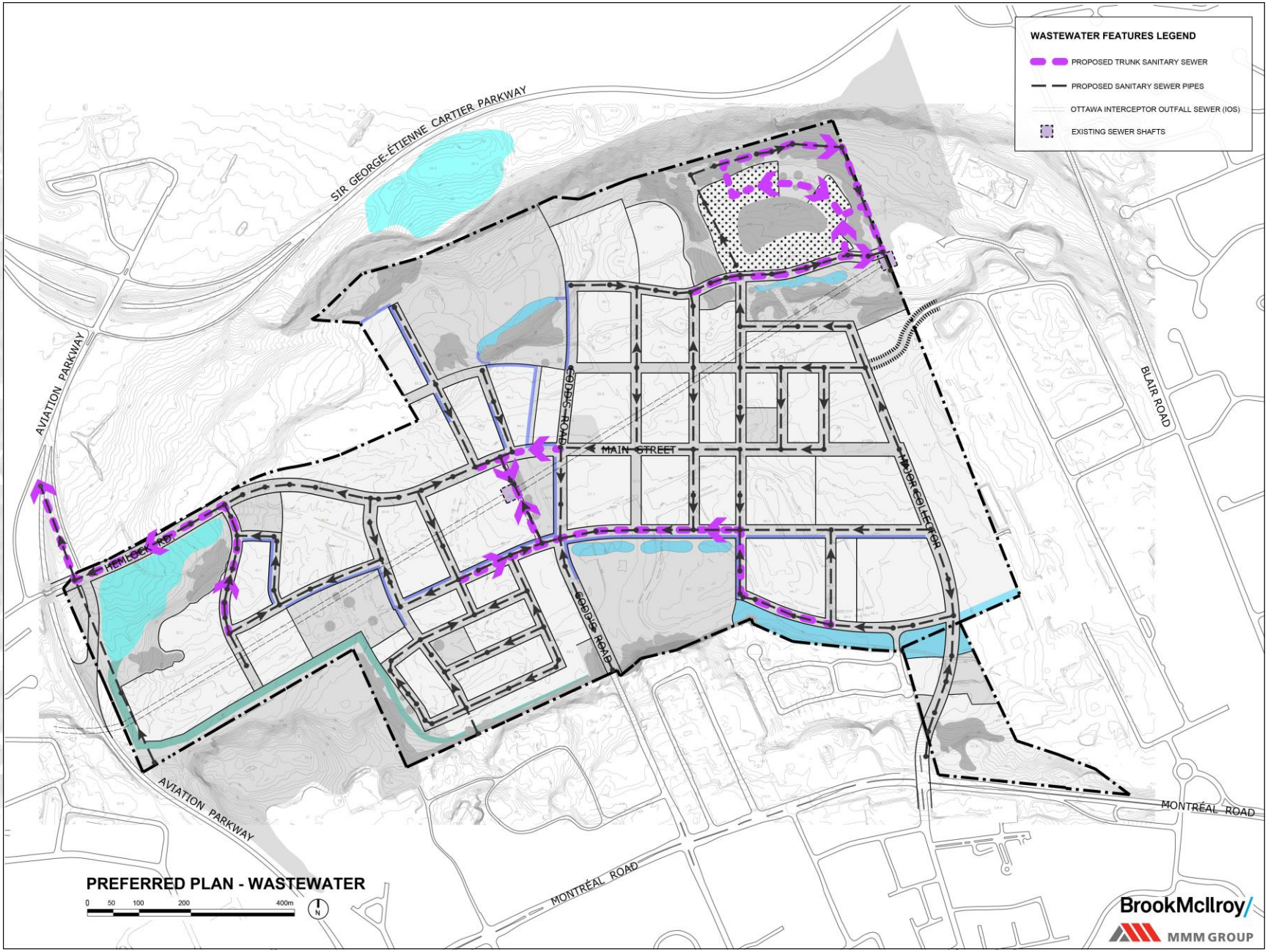


Figure 5.15 Wastewater

5.10.3 Stormwater Management

The current wastewater system, which is a combined stormwater and sanitary system, has reached the end of its useful life and a new separated stormwater system will be constructed as part of the new development. The new system is designed to convey runoff from the study area as well as several external areas, including the NRC Campus, Thorncliffe, Foxview, and Fairhaven communities, the Montfort Hospital, and the potential future national cultural institution at the intersection of Aviation and Sir George-Étienne Cartier Parkways. It will feature a dual drainage network and end-of-pipe stormwater management (SWM) facilities. In addition, the Burma Road SWM Facility will be retrofitted to increase its available storage capacity and three major system dry ponds are proposed for the site.

The dual drainage design accommodates both minor (pipe) and major (surface) stormwater runoff by featuring a combination of on-site detention (surface ponding) and direct conveyance with no ponding. The recommended minor storm sewer plan is presented in Figure 5.16.

Minor and major flow from the study area will be conveyed to the two end-of-pipe facilities for treatment prior to being released to the Ottawa River.

The Eastern SWM Facility, located on NCC land adjacent to Sir George-Étienne Cartier Parkway, is designed as a wet pond and will provide water quality treatment of urban runoff. Because the facility outlets directly to the Ottawa River, water quantity control is not required. The Western SWM Facility, located in block 3, is also designed as a wet pond and provides water quality and quantity treatment of urban runoff. It will outlet to the Ottawa River via the Western Creek. Both facilities are shown in Figure 5.16.

Runoff in excess of the minor system capture will be routed via street segments and rear yards and outlet to one of the following features: the retrofitted Burma Road SWM Facility; one of three dry ponds; the southwest channel; or directly to one of the end-of-pipe SWM facilities.

The design of and improvements to any stormwater detention ponds on site will minimize perturbation of downstream channels and ensure that the input discharge or sediment load to the existing eastern and western creeks is not changed.

The stormwater management strategy will also include a 15 metre vegetated swale that will be located on block 2 along the southern and western boundary of the site. Its main function will be to convey major overland flow from off-site areas such as the Montfort Hospital Woods into the Western SWM Facility.

In addition to these stormwater management features, Low Impact Development (LID) techniques will be incorporated as part of a phased pilot project between Canada Lands Company and the City of Ottawa, where demonstration projects are implemented, monitored and evaluated.

Depending on how successful the LID pilot project is at increasing infiltration and reducing runoff, future phases of the stormwater management system may be downsized to address actual flow requirements at the time of development.

The design of the storm detention pond on NCC lands will be subject to Federal Land Use & Design Approval. Future amendments to the CDP may be required to reflect the conclusions of these negotiations.

LID design approaches are discussed in Chapter 6.

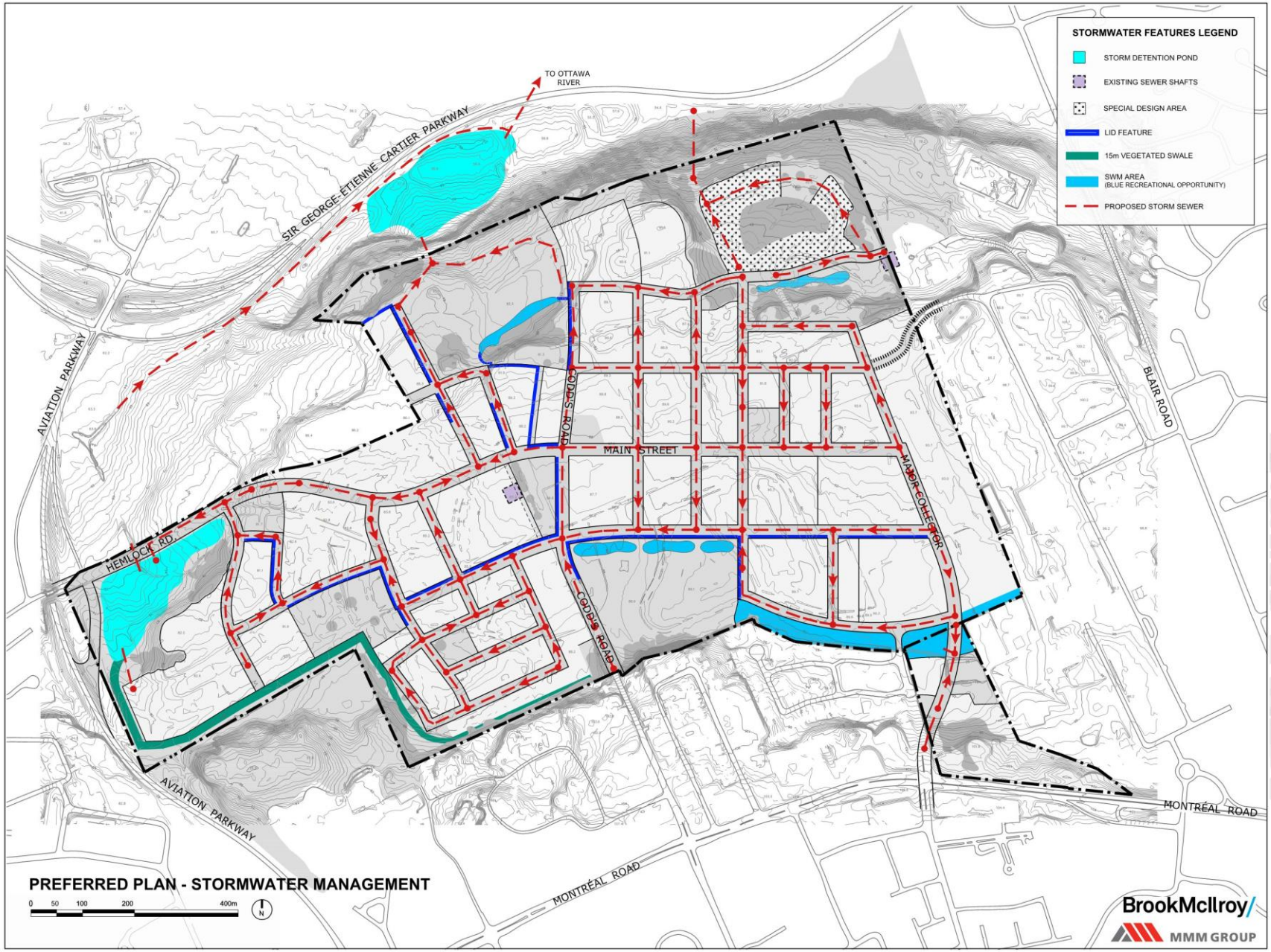


Figure 5.16: Stormwater Management Strategy

6 | DESIGN GUIDELINES & POLICIES

6 DESIGN GUIDELINES & POLICIES

6.1 OVERVIEW

This chapter of the Community Design Plan provides the principal land use, urban design and infrastructure directions for the development of the former CFB Rockcliffe site.

These design guidelines and policies must be read in tandem with the City's Zoning Bylaw and the City's applicable city-wide urban design guidelines. Applicable guidelines will be used to review and assess future development applications (i.e., plans of subdivision, and site plan applications).

Canada Lands Company has a strong commitment to design excellence. Many of its projects are award winning examples of exemplary community design. Canada Lands Company and its development partners for the former CFB Rockcliffe site will use these guidelines to shape their site-specific development proposals. In addition to the guidelines in this chapter, Canada Lands Company will develop a set of urban design and architectural controls, for its own use, to address certain design parameters that go beyond the municipal planning review process for portions of the site that need enhanced design outcomes.

The City of Ottawa has a number of approved Urban Design Guidelines and policies. The following is an abbreviated list of the key guidelines. At the time of implementation, designers should refer to the most current versions of the policies in effect:

- Urban Design Guidelines for Low-Rise Infill Housing;
- Urban Design Guidelines for High-Rise Housing;
- Urban Design Guidelines for Greenfield Neighbourhoods;

- Road Corridor Planning & Design Guidelines;
- Right-of-Way Lighting Policy.

The built form and architectural character within the new community site will distinguish it from surrounding communities. Since the site is intended to be developed at a higher density to meet City objectives for intensification, the built form guidelines in this section are intended to supplement the above mentioned City guidelines but will also go beyond them to inform the character of streetscapes, and accomplish the desired outcomes described in the Guiding Vision and Principles in Chapter 1.

The guidelines and policies that follow, cover: land uses; height, bulk and massing; setbacks; architectural design; parking; loading and servicing; mobility and circulation; the public realm; infrastructure; sustainable design; and the Forest Special Design Area.

Each policy/guideline category is organized into two sections, general design policies and guidelines that apply across the site, and where applicable, site specific policies and guidelines. Where general and site specific policies overlap or conflict, site specific policies shall take precedence.

The Forest neighbourhood is a unique area which requires a specific set of site-specific guidelines and policies. These are presented in the Forest Special Design Area section at the end of this Chapter.

6.2 LAND USES

6.2.1 Low-Rise and Low- to Mid-Rise Residential and Low- to Mid-Rise Mixed-Use

The following general land use policies and guidelines apply within low-rise residential, low- to mid-rise residential and low- to mid-rise mixed-use areas:

- Permitted residential uses in low-rise residential areas will include single-detached, semi-detached, duplex, townhouse, stacked townhouse and low-rise apartment dwelling units.
- Permitted residential uses in low- to mid-rise residential areas will include duplex, townhouse, stacked townhouse and low-rise and mid-rise apartment dwelling units.
- Permitted residential uses in low- to mid-rise mixed-use areas will include stacked townhouse and low-rise and mid-rise apartment dwelling units.
- Live/work units and day cares will be permitted in all low-rise and low- to mid-rise residential and mixed use areas.
- Small-scale retail stores; personal service uses; business, medical and professional offices will be permitted in low- to mid-rise mixed-use areas.

- Drive through facilities will not be permitted.

Mid-rise Residential development will also be found in the Forest Specia Design Area in block 44. Specific policies pertaining to the Forest Special Design Area can be found in Section 6.13.

6.2.2 Mid-Rise and High-Rise Mixed-Use

Permitted uses within mid-rise and high-rise mixed-use areas include:

- Commercial and service uses such as: retail stores; food stores; restaurants; personal service uses; financial institutions; business, medical and professional offices; private clinics; laboratories; and entertainment and recreation uses;
- Civic uses such as health care facilities, clinics, community centres; gyms; offices of a government agency; and libraries; and
- Residential uses such as apartments.
- Drive through facilities will not be permitted.

6.2.3 East Employment Area

A range of commercial and service uses will be permitted within the East Employment Area including:

- Financial institutions, business, and medical and professional offices.
- Retail stores, food stores, restaurants, and personal service uses will be permitted as accessory uses.

Uses that will not be permitted include:

- Automobile-related uses, such as gas stations or drive-through uses;
- Large floorplate standalone retail stores; and
- Residential uses.

6.2.4 School Sites

The following land use policies and guidelines apply within the School Site designation:

- Only schools and their associated uses, such as day care facilities or parks will be permitted in this land use category.
- School site requirements will be finalized during the subdivision approval process.
- Where a school board has confirmed that it does not have an interest in a site that has been identified for it within the CDP, the lands may be developed as per the Low-Rise Residential designations shown on the Secondary Plan.
- Special parking policies apply for School Sites. See Section 6.6 for specific policies.

6.2.5 Parks and Parkettes

Permitted uses in the Parks and Parkettes designation include:

- Trails, community centres, washroom and change facilities, and parking facilities in support of the primary park function.

Stormwater features serving development areas in or adjacent to parks or parkettes are not counted as parkland dedication.

- Stormwater features in parks must be located in areas where they will not impede the design and function of the park. The location of these facilities will be reviewed by Parks planners through the development review process.

6.3 HEIGHT, BULK AND MASSING

Maximum building heights for each block are shown in Figure 5.4 in Chapter 5. While the height of individual storeys can vary, the total height of all buildings cannot exceed the maximum permitted height, not including mechanical systems and rooftop protrusions. The following general design policies and guidelines apply:

- High-rise buildings should generally feature a podium and point tower arrangement to ensure that adequate light, sky exposure and public views are maintained.
- Buildings six to 12 storeys in height will incorporate a minimum two metre step back at or below the fourth storey. Buildings taller than 12 storeys will incorporate a minimum two metre step back at or below the sixth storey.
- In the high-rise residential portion of a mixed-use building, above 30 metres, floor plates will not exceed 750m^2 in floor area.
- A minimum tower separation distance of 30 metres will be provided to minimize shadowing impacts, ensure livability, and protect views and privacy.
- Buildings, where practical, should be oriented north-south to minimize shadow impacts throughout the day and to enhance efficiency through passive solar energy capture.
- The design of low-rise and mid-rise buildings should avoid straight continuous frontages longer than 40 metres. For longer frontages, buildings should be designed to appear as if they are composed of smaller parts using step backs or vertical breaks.
- Townhouse blocks should be no longer than 40 metres (i.e. 6 units) and should be separated by public streets or mid-block connections.

The following site-specific guidelines shall apply.

- Although the maximum building height in mid-rise mixed-use sections of the Core (blocks 31-33, 35-37) is 30 metres, at least half of the total land area of each of these blocks will have a maximum building height of 20 metres.
- As the Core transitions to the north, buildings on residential blocks 29 and 30 should step down to lower-density uses,

including freehold and stacked townhouses which will be located on the north half of blocks 29 and 30.

- On block 5 in the Hemlock neighbourhood, building heights on the western half can be a maximum of 50 metres and a maximum of 70 metres on the eastern half.
- Dwellings on blocks 12 and 27 in the Northwest neighbourhood should be separated to allow visual permeability through these blocks to the north, and to the future national cultural institution.

6.4 SETBACKS

The following general setbacks shall apply across the site:

- To create an appropriate transition between public and private space in low-rise, low- to mid-rise and mid-rise residential areas, buildings will be set back a minimum of three metres from the street edge and a maximum of six metres.
- In mixed-use areas, including the Core, minimum front and corner yard setbacks will be three metres where a building abuts a park or where residential units are present at grade, and 0 metres in all other cases in order to create visual interest, a sense of enclosure and to reinforce the street.
- Where setbacks in mixed-use areas are meant to include useable amenity space (i.e. patios, outside seating areas, etc.) they will be a minimum of three metres.
- In low-rise and mid-rise areas, a slight variation in setbacks is encouraged to create a varied streetscape. In all areas, side-yard setbacks on end units will be a minimum of 1.5 metres to create a total width of three metres for mid-block connections.

6.5 ARCHITECTURAL DESIGN AND BUILT FORM

Most of the design parameters for buildings in the development will be specified in architectural controls developed and enforced by Canada Lands Company. These include requirements for the appearance and material quality of more prominent buildings, such as high-rise, landmark or corner buildings which should be given additional consideration due to their visibility. Building materials used for development within the community should be context-specific and should reflect the character of surrounding neighbourhoods. Materials should be selected primarily for their longevity. They should be high-quality, durable, low-maintenance and able to withstand local seasonal extremes in temperature. The materials used throughout the site should be selected to define streetscape appearance. The architectural controls will address building

design and façade treatment which should be varied across the site to create diversity and visual interest. This includes providing a multiplicity of building heights and shapes, materials and colours, rooflines, window and door styles and sizes, and ornamentation.

6.5.1 Low-Rise Residential Buildings

General guidelines and polices related to low-rise residential buildings, which include single-detached, semi-detached, townhomes and stacked townhomes, are provided below.

- A diversity of unit types on any block is preferred for visual interest. This can be achieved by having at least two building types (e.g., single-detached and semi-detached) within each street block, varying lot widths, and using a variety of roof styles, or a combination thereof.
- Every exterior façade on a building must have a high standard of design, not just the primary façade, to ensure that buildings are visually appealing from all angles and perspectives.
- Long frontages should be varied through the use of windows, different materials, variable façade setbacks, colours, or architectural features such as bays or porches.
- Private amenity space should be incorporated into front yards, such as verandas, porches or at grade landscaped areas.
- Large windows and upper storey balconies are encouraged in units facing parks to promote casual surveillance.
- To ensure that residential units achieve adequate privacy, the first floor may be raised slightly above street level. Landscape features such as low hedges, low walls and transparent fences can be used to delineate public and private open spaces.
- Flat garage roofs are discouraged unless they form a balcony or green roof.

The following site-specific guidelines apply to the architectural design of low-rise residential buildings.

- On the parts of blocks 24, 25 and 29 adjacent to the North Park or the northern ridge area, residential units should face the open space. Residential units should not back onto either of these areas.
- Buildings on blocks 12 and 27 in the Northwest neighbourhood should have windows, openings and articulation on the rear facades, comparable to what is required by the City's urban design guidelines for frontages on the street since they will be facing a future national cultural institution.

6.5.2 Low- to Mid-Rise Residential and Mixed-Use, and Mid-Rise Mixed-Use Buildings

All mixed-use blocks will be subject to review by the City of Ottawa Urban Design Review Panel. General guidelines and polices related to low- and mid-rise mixed-use and mid-rise residential buildings are provided below.

- Street level units should be narrow so that frequent entrances are provided along the street in order to articulate building façades and to generate street level activity. All entrances must be clearly visible from the street.
- Buildings should create a fine-grained streetscape, with individual units and entrances expressed within modulated, articulated building façades. Numerous doors and windows should be provided along the primary façade to increase access and transparency.
- No building should have any length greater than 40 metres without some form of articulation that achieves a break in the visual appearance.
- Awnings, ground-floor setbacks, and recessed entrances, should be included in building design to provide weather protected storefronts and entrances.
- Large windows and upper storey balconies are encouraged in units facing parks to promote casual surveillance.
- Corners should be emphasized with elements such as bay windows, turrets or wrap around porches, distinct architectural elements, special materials, and where appropriate, setbacks for plaza spaces.
- Two to three exterior materials per building should be used to introduce texture and visual diversity to building surfaces.
- Every exterior façade on a building must have a high standard of design, not just the primary façade, to ensure that buildings are visually appealing from all angles, and perspectives.
- Mixed-use development must include active frontages with street-related, publicly accessible shops, services and amenities adjacent to areas of high pedestrian circulation.
- The façade of buildings that are less than 20 metres in height should incorporate some form of articulation such as using different building materials to create a transition between upper and lower storeys. This transition should be placed at an elevation that compliments adjacent buildings and helps create a cohesive visual pattern along the street frontage.
- Where appropriate, transit shelters or similar features should be integrated with mid-

rise residential and mixed-use buildings.

- HVAC equipment, elevator rooms, exhaust fans and other roof top protrusions should be incorporated into the overall building design and screened from direct view using architectural elements.

The following site-specific guidelines apply to the architectural design of residential, low- and mid-rise mixed-use buildings.

- On the parts of block 29 adjacent to the North Park or the northern ridge area, residential units should face the open space. Residential units will not back onto either of these areas.
- Buildings on block 31 in the Core should have prominent entrances facing Codd's Road.
- Buildings on blocks 33 and 36 in the Core should have prominent entrances on both Codd's Road and Hemlock Core Street.
- Buildings on blocks 35 and 37 in the Core should have prominent entrances facing Hemlock Core Street.
- Buildings on blocks 23, 24, and 25 in the Core and North West neighbourhoods should contain enhanced ground floor animation, particularly buildings on block 25, which fronts onto Codd's Road.
- Orientation and design of buildings in the Core should be sensitive to views and should allow natural light to penetrate from south to north.

6.5.3 High-Rise Mixed-Use Buildings

All mixed-use blocks will be subject to review by the City of Ottawa Urban Design Review Panel. General guidelines and polices related to high-rise mixed-use buildings are provided below.

- View-plane studies and a landscape character assessment will be required in order to determine the impact of built form on significant views from the adjacent Sir George-Étienne Cartier and Aviation parkways. Measures will be taken to preserve these views, of importance to the National Capital Commission, such as stepping back the upper stories of a high-rise building.
- Buildings on corner sites should be located close to the corner to reinforce the street edge. Alternatively, a landscaped area or forecourt may be used to define the street edge.
- Every exterior façade on a building must have a high standard of design, not just the primary façade, to ensure that buildings are visually appealing from all angles and perspectives.
- Street level units should be narrow so that frequent entrances are provided along the street in order to articulate

building façades and to generate street level activity. All entrances must be clearly visible from the street.

- Buildings should create a fine-grained streetscape, with individual units and entrances expressed within modulated, articulated building façades. Numerous doors and windows should be provided along the primary façade to increase access and transparency.
- No building should have any length greater than 40 metres without some form of articulation that achieves a break in the visual appearance.
- Awnings, ground-floor setbacks, and recessed entrances, should be included in building design to provide weather protected storefronts and entrances.
- Where appropriate, transit shelters or similar features should be integrated with high-rise residential and mixed-use buildings.
- HVAC equipment, elevator rooms, exhaust fans and other protrusions on building roof profiles should be incorporated into the overall building design and screened from direct view using architectural elements.

6.5.4 Employment Buildings

All employment blocks will be subject to review by the City of Ottawa Urban Design Review Panel. The following general guidelines apply to employment buildings which will be located in mixed-use areas and the East Employment area.

- Office buildings with façades longer than 40 metres should be articulated with multiple unit entrances and architectural detailing such as step-backs, projections, and windows.
- Blank walls will not be permitted and must be broken up through a change in façade articulation and the inclusion of windows / glazing.
- Every exterior façade on a building must have a high standard of design, not just the primary façade, to ensure that buildings are visually appealing from all angles, and perspectives.
- Uses which generate activity, such as lobbies or commercial establishments, should be provided at street level to help create a more vibrant public realm.
- Where appropriate, grade level uses should incorporate a high proportion of transparent glass that allows activity within to be seen from the street.
- Ground floors should have a high floor to ceiling measurement (e.g. 4.5 metres) to allow for a range of uses, and should incorporate direct entrances from the street and high transparency and glazing.
- Building units should be sited to overlook public streets and open spaces.

- Where appropriate, transit shelters or similar features should be integrated with employment buildings.
- Unique building character and signage should be considered to help tenants distinguish their business.
- Where possible, courtyards, plazas and other public amenity space should be provided for employee use.

The following site-specific guidelines shall apply to buildings used exclusively for employment uses.

- In the East Employment area, at least 70% of the block length along the north-south major collector must be occupied by buildings.
- The façade on every side of a building must have some glazing. Blank walls will not be permitted in the East Employment area.

6.6 PARKING

In general, parking across the entire site should conform to the following guidelines:

- The reduction of minimum and maximum parking requirements will be encouraged where practical.
- On-street parallel parking will be permitted on collector roads throughout the site except at awkward curves, in front of schools, in proximity to intersections, or where bus stops are required.
- With the exception of visitor or service parking, mid- and high-rise buildings should provide for parking underground. All parking for mid- and high-rise buildings should incorporate measures to provide appropriate screening and integration with the built form of the block.
- Blank walls along parking structures will not be permitted and should include publicly accessible active uses at the ground floor.
- In residential areas, garages will not project beyond the front wall of a house fronting onto a street. Portions of the building can protrude over the garage entry to help conceal it.
- Driveways for single-detached and semi-detached units and townhomes should be designed to minimize the impact on the pedestrian environment and should be limited in width. Where possible, driveways should be located at the property line where they can be paired with adjacent driveways to minimize curb cuts.
- Garages will not front onto any collector roads. In these instances, all parking must be provided via rear laneways.

The following site-specific parking guidelines shall apply:

- Generally, where parking is required in the Core, it should

be located underground within larger mixed-use buildings and supplemented by on-street parking.

- Limited amounts of surface parking may be accommodated within the Core, either in a small number of surface parking spaces in the interior of blocks or associated with short stay parking for businesses and residential visitors and demonstrate high urban design standards for screening, interior and exterior landscaping, and utilize permeable pavements for groundwater recharge.
- Above grade parking may only be permitted within high-rise blocks in the Hemlock and Burma neighbourhoods provided that:
  - The parking structure is located in the rear of the site, and is concealed by the podia of buildings facing the street.
  - The height of the parking structure cannot exceed the height of the podia.
  - Screening of the parking structure with vegetation or artistic treatments, such as murals and unique cladding treatments is required.
- Surface parking is not permitted in the front yard.
- Separate or paired driveways for individual or pairs of residential units will not be permitted along collector roads.
- Parking on blocks 12 and 27 in the Northwest neighbourhood which border the future national cultural institution site should be out of view. Techniques to hide parking include:
  - Underground parking;
  - Partially underground parking; or
  - Parking that is within the building envelope that is recessed behind the front façade of the building.
- Parking in the East Employment area on block 56 must be underground, or at the rear of the block out of view from the street.
- All three school sites have been situated with frontage on both local and collector roads. School bus lay-by areas will be considered in the right-of-way of all streets that front onto a school site. Where possible, it is recommended that school bus parking be accommodated on site; otherwise on-street school bus lay-by areas should be situated on local streets and not on the collector roads.
- No on-street parking will be permitted on any street frontage associated with the front of a school.
- Parking on school sites should either be located at the rear or screened so that it is not visible from the street.

6.7 LOADING AND SERVICING

Loading and servicing is an important requirement for all development on the site. For multi-unit buildings:

- Loading, service and waste management areas, transformers, utility meters, heating, ventilation and air conditioning equipment should be located in non-prominent locations that do not detract from the aesthetic appeal of the street.
- Loading areas and garbage enclosures should be screened from view from the front property line with a screening material that is complimentary to the primary building exterior materials.

The following site-specific guidelines apply for loading and servicing requirements.

- Loading areas on blocks 33 and 36 in the Core should be off of the local road to the east or by private laneways if other access is unavailable.
- Loading areas on blocks 35 and 37 should be off of the north-south local road to the west or by private laneways if other access is unavailable.
- Loading areas will not be permitted on the Codd's Road frontage on block 31.

6.8 MOBILITY AND CIRCULATION

The following guidelines and policies are intended to enhance the transportation network that was described and illustrated in Chapter 5. The focus of these guidelines is to provide an efficient pedestrian and cycling network with vehicle movements considered a secondary focus. For specifications related to the design of roadway cross-section elements, refer to the cross section diagrams included in Chapter 5. For specifications related to the design of pathways and other pedestrian routes, the Ottawa Park and Pathway Development Manual, and the Province's Integrated Accessibility Standards should be consulted.

- Wider sidewalks will be provided on collector roads to accommodate a larger volume of pedestrians than on local roads.
- All formal pedestrian crossings at major intersections will be clearly marked using changes in pavement materials, texture, and/or colour.
- In the vicinity of bus stops, additional treatment will be given to cycle tracks, such as pavement markings and posted signs informing cyclists to yield to crossing pedestrians.
- All blocks containing stacked townhouse, apartment, mixed-use or employment development will include publicly accessible connections within and through the blocks to provide pedestrian access to the community-wide system of sidewalks, multi-use pathways,

cycle tracks and trails. Such connections within and through blocks must be wide enough to accommodate easements for utilities where required.

- Amenities including wayfinding elements, seating, and drinking water fountains should be provided along pedestrian routes throughout the site.
- All new multi-unit dwellings, mixed-use buildings, and office buildings should provide enclosed and covered bicycle parking facilities within clearly visible areas either in the building or no greater than 15 metres from the building and must include bicycle ramps on exterior staircases. The quantity of bicycle parking provided should reflect the density of the building.
- Outdoor bicycle parking should be located in easily accessible locations that offer natural surveillance and are protected from weather.
- Bicycle parking facilities should be accessible in a manner that minimizes negative interaction with primary pedestrian routes. This includes the provision of landscaping and separated walkways where necessary.

6.9 PUBLIC REALM

The public realm is intended to be a vibrant, active environment where people want to gather, and interact with others. To achieve this vision, the following guidelines provide direction on the design of all public realm elements including: commemoration features; parks, squares and open spaces; street furniture; landscaping; and lighting.

6.9.1 Commemoration Opportunities

6.9.1.1 Algonquins of Ontario

Recognition of the Algonquin culture and historical relationship to the land at Rockcliffe is integral to the development of a successful public realm for the new community. The 2010 Algonquins of Ontario – Canada Lands Company Participation Agreement provides a framework for an ongoing relationship and the realization of mutual benefits as the former CFB Rockcliffe site is developed. One of the key commitments in the Participation Agreement is that Canada Lands Company will consult with the Algonquins of Ontario (AOO) to identify ways in which the Algonquin presence and heritage can be reflected on the site. The intent is that the history and connection of the Algonquin People with the Rockcliffe lands may be recognized through the installation of commemorative elements, the design of park spaces or the naming of streets. Early consultations with the Algonquin Negotiation Representatives (ANRs) and Elders have indicated the two main purposes of the Algonquin commemoration:

- The provision of space with cultural and/or spiritual value to the Algonquin People, to which all people may have access; and

- Education of the general public about the meaning of this land to the Algonquin People, with reference to the Algonquin language, culture and relationship with nature.

The importance of including elements that are aligned with traditional Algonquin culture, and in particular, associating the site with the Ottawa River, traditionally called Kitchissippi, has been identified in early AOO-Canada Lands Company discussions. Some locations may be sacred spaces, and some may have a strong cultural affinity to Algonquin traditional uses. Some ideas for commemoration that have come forward to date include:

- Using the four traditional Algonquin colours associated with the four directions: black, white, red and yellow.
- Using concentric circles in design layouts and details.
- Referencing the Seven Fires prophecy which teaches that different cultures will come together in a relationship of respect.
- Incorporating trees and shrub species of significance to the Algonquin way of life and spirituality in the planting design in a way that helps to educate about their culture.

The Participation Agreement specifically recognizes that a commemorative opportunity on parkland overlooking the Ottawa River is of particular significance and interest to the AOO. Although this CDP does not identify any particular portion of the site for this purpose, the plan does set aside significant parks and open spaces overlooking the Ottawa River, where a commemorative site or sites can be located. Canada Lands Company and the AOO will continue to collaborate on the establishment of the Ottawa River outlook and other commemorative elements within the new community. The City of Ottawa is also interested in participating in the development of Algonquin commemoration elements within city parks, for which appropriate ideas and corresponding locations could be worked out through the detailed design process.

Canada Lands Company and the City of Ottawa will collaborate with the Algonquins of Ontario to name a number of streets using Algonquin words, and to name certain parks along and Algonquin theme. This commemoration may also include public art. Wherever possible and appropriate, the use of the Algonquin theme will be accompanied by interpretive signage.

Wherever any of these elements are used, Canada Lands Company is committed to ongoing consultation with the AOO in accordance with the Participation Agreement.

6.9.1.2 Military

A number of features will be incorporated into the development as part of the commemoration of

the military heritage of the site. This will include the following:

- Canada Lands Company and the City of Ottawa will collaborate with Canadian Veterans to name a number of streets to commemorate or celebrate the site's military and aviation heritage. This commemoration may also include public art. Wherever possible and appropriate, references to military and aviation heritage will be accompanied by interpretive signage.
- The public realm will include signage to commemorate the history of the former CFB Rockcliffe, with particular emphasis on communicating its role in the British Commonwealth Air Training Plan.
- One of the parks will include a public art installation and commemorative signage that blends the site's military history with the present. The installation will commemorate the role of the site in aviation history, namely being one of the first six original air fields opened in Canada in 1920 and the site of the first jet aircraft demonstration in Canada.

6.9.2 Parks, Squares and Open Spaces

Two large Community Parks, two Neighbourhood Parks, five Parkettes, and a Town Square will be built on the site, and other natural areas will be maintained to provide passive open spaces. To enhance these areas the following policies and guidelines are recommended.

- Access points to designated park spaces should be well connected to surrounding transportation networks such as sidewalks, pedestrian pathways and cycling routes.
- Access points to designated park spaces should be prominent and highly visible from surrounding transportation networks such as sidewalks, pedestrian pathways and cycling routes and should incorporate signage, public art or ornamentation to assist with wayfinding.
- Public squares and plazas should be designed to accommodate a variety of activities throughout all four seasons, with minimum maintenance.
- To make park spaces inviting and comfortable, themed public amenities should be provided such as public art, benches, lighting, paving techniques, banners, low walls or landscaping.
- To provide shade coverage in the summer, and wind breaks in the winter, shade trees and greenery should be coordinated with lighting, public art, and required utilities.
- Park spaces will be designed to accommodate an aging population and people with disabilities. Accessible seating, appropriate access points,

shade and wayfinding elements must be provided.

A number of significant trees and tree groupings will be preserved and carefully integrated into the design of parks, open spaces and other compatible land uses.

- Development will comply with the City of Ottawa's Trees and Natural Areas Protection By-law.
- Where feasible, space will be retained around protected tree groupings for passive recreation to create a network of greenspace linkages throughout the community.
- Accessible trails, or substantial and durable boardwalks with a minimum width of three metres should be provided, where feasible, around protected tree groupings and stormwater detention areas.

6.9.3 Street Furniture

Street furniture will be provided primarily in the mixed use areas of the site, the Core and at major transit stops. Street furniture will include benches, bicycle racks, bus shelters and waste/recycling receptacles. Street furniture will be provided in a manner consistent with City of Ottawa policies on street furniture. Canada Lands Company may work with the City of Ottawa to develop enhanced street furniture at the Town Square or in the parks and parkettes as part of the commemoration strategies described in previous sections.

6.9.4 Landscaping

Landscaping will be used to enhance the visual appeal of streets and open spaces, frame view corridors, compliment building features, screen unsightly views such as parking, and provide shade for pedestrians and privacy for building occupants. The road cross sections shown in Chapter 5 illustrate where landscaping will be provided in the public rights-of-way.

The following policies and guidelines shall apply to the design and planning of landscape treatments throughout the site:

- Fencing, trellises, decorative paving, and planters should be provided on development sites for shade, visual interest and to create a more comfortable and aesthetically pleasing environment for pedestrians.
- Privately landscaped areas should be provided in transitional spaces to create an attractive transition between the public and private realm.
- Lightly coloured or reflective paving is encouraged for as much of the site's hardscape area as possible to reduce the urban heat island effect.
- Low impact development (LID) strategies for stormwater management will be implemented on individual lots and within road rights-of-way through phased pilot projects to be undertaken jointly by

Canada Lands Company and the City of Ottawa.

- LID strategies will also be implemented by builders at the block, site and building levels. Some examples of proposed LID strategies include green roofs, vegetated landscape buffers, permeable pavement and streetscape bioswales. Specific guidelines pertaining to LID strategies are provided in Section 6.11.
- New planting in the area should be designed to limit the visual impact of the project along Aviation Parkway and continue to maintain the Parkway's unique character and experience.
- Along the Aviation Parkway, incorporate a 30 metre vegetation buffer from the property line of Canada Lands Company and the buildings. Tree selection should include: 70% conifers, species diversity, native species, salt tolerance and consideration of appropriate local growing conditions.

The following guidelines pertain to the planting of new trees in the public realm.

- A continuous tree canopy along the street frontage of all single detached and townhouse lots should be provided.
- Large canopy street trees, approximately seven to 10 metres apart, on any frontages of stacked townhouses, apartments, schools, offices and mixed-use buildings should be provided.
- Substantial portions of the landscaped yards and amenity areas should be covered in tree canopy at maturity.
- Private lanes and roads should have trees at a frequency that is the same as a local road, provided that there are no conflicts with utilities.

A large part of the successful growth of new trees on site will depend on the specifications and details for tree planting, installation and soil preparation. Standard tree planting and soil preparation specifications will be provided to the City with the Plan of Subdivision application. These specifications and details should exemplify the following guidelines:

- Irrigation to all street trees planted in hard landscaping conditions must be provided.
- A minimum soil depth of 0.8 metres to a maximum soil depth of 1.2 metres will be provided for planting of all street trees.
- Structural soil cells will be required under paved areas where limited open surface areas are available to adjacent trees.
- A minimum tree opening of 1.3 metres by 1.3 metres must be provided to allow for healthy root development at the base of the tree trunk.
- Permanent fences or curbs around planting zones in high

traffic areas should be used to elevate and separate planting areas from foot traffic and potential compaction/root damage as well as to prevent unwanted items from being fastened directly to tree trunks.

- Continuous soil trenches should be used where feasible and where they will be most effective for sustaining rows of street trees.
- Engineered solutions to drainage or infiltration problems, such as sub-drainage or perforated pipes, should be implemented to sustain long-term health of street trees.

The selection of tree species used is important and will be finalized at the development application stage by the applicant's landscape architect. Selected species should exemplify the following guidelines:

- Hardwood, long-lived street trees should be selected that have a medium to large canopy size at maturity.
- Street trees that are hardy to Ottawa's climate, adaptive to urban conditions and tolerant of the site's soil should be selected.
- Tree species should be alternated regularly throughout the site to protect tree communities from diseases that attack certain species.
- Local species should be included from the Urban Natural Feature 170 "NRC Woods North" inventory for tree selection in the North-East corner "Forest" development.
- Species of significance to the Algonquin culture should be selected for the Algonquin commemoration features. Canada Lands Company will coordinate species selection with the City and AOO.

The following site specific landscaping policy, which pertains to the significant tree stands at the northern boundary of the site, shall apply.

The significant tree stands at the northern boundary of the site, identified in the Parks and Open Spaces diagram in Chapter 5, will require careful design attention. Consultation with the National Capital Commission should be conducted including a detailed forestry review with a professional arborist to identify appropriate tree management strategies as well as to identify opportunities and constraints with respect to the enhancement and retention of one or more existing views from this area to the Ottawa River. Development in this area will also require the completion of an Environmental Impact Statement.

6.9.5 Lighting

In deploying lighting, the following guidelines shall apply:

- The lighting for all public rights-of-way will follow the City's Right-of-Way Lighting Policy.
- Decorative lighting will be considered for the frontages shown on Figure 5.8 in section 5.9.3.
- Lighting in public parks and pathways will be as per the City's Parks and Pathway Development Manual.
- Highly visible buildings in the Core, commemoration features and public art should have specialized lighting.

6.10 UTILITIES & INFRASTRUCTURE

All utilities and infrastructure on site will be new or upgraded, as the existing systems do not have the capacity to support the full build-out. The following guidelines shall apply to the implementation of all utilities and infrastructure systems on site.

All utilities infrastructure, including electricity, gas, telecom and cable will be rebuilt below grade. The following guidelines related to the implementation of new utilities shall apply.

- Consideration will be given to the location of utilities within the public rights-of-way as well as on private property.
- All blocks containing stacked townhouse, apartment, mixed-use or employment development will include publicly accessible connections within and through the blocks. Such publicly accessible connections must be wide enough to accommodate easements for utilities where required.
- Utilities should be clustered or grouped where possible to minimize visual impact.
- Utility providers will be encouraged to consider innovative methods of containing utility services such as placing them on or within streetscape features (i.e. lamp posts) clustering them, or reducing their visual impact by applying visually interesting designs to the exterior of utility boxes.

6.11 BIRD & WILDLIFE FRIENDLY DESIGN

The site is located in the vicinity of natural wildlife habitat. To help protect species that may pass through the new community, the following guidelines should apply:

- Building facades should incorporate visual markers, such as patterned glass, decorative grilles or decals, in order to be more visible to birds and wildlife;
- Where glass is applied on a building façade, the reflection should be muted using strategies such as angling the glass or internal screening;
- The amount of artificial light emitted from and around buildings should be reduced and/or controlled, for example,

through the angle of light fixtures, to avoid light spillover beyond areas that need to be lit for safety; and

- Building lobbies that include a lot of greenery should not be brightly lit at night, as these features are attractive to birds.

6.12 LOW IMPACT DEVELOPMENT

The City of Ottawa and Canada Lands Company have agreed to pursue a phased stormwater management demonstration project for the Former CFB Rockcliffe site using Low Impact Development (LID) Best Management Practices (BMPs). This demonstration will be integrated with conventional piped stormwater infrastructure and stormwater management ponds.

LID is an innovative, state-of-the-art approach to managing stormwater by treating runoff (precipitation) at its source, as a resource to be managed and protected rather than a waste. LID design approaches are intended to mimic natural watershed systems as rainwater is infiltrated, evaporated and reused with the goal of protecting aquatic and terrestrial systems, habitats and functions through the preservation of the site's natural hydrology. LID measures implemented on individual lots and within road rights-of-way will encourage infiltration and reduce the quantity of runoff reaching local drainage features. LID techniques will be employed to provide additional environmental and water quality benefits on and downstream of the site, as part of the site's overall stormwater management strategy. This will include the implementation of features such as green roofs, permeable pavement, soakaway pits, vegetated and enhanced swales, bioswales, and perforated pipe systems.

The LID Pilot Project Study is intended to permit the implementation, monitoring, and evaluation of alternative stormwater management systems based upon the principles of Low Impact Development. A detailed description of the Low Impact Development features, process and phasing can be found in Former CFB Rockcliffe Redevelopment Stormwater Management Existing Conditions & LID Demonstration Project Scoping Document by Aquafor Beech.

6.13 SUSTAINABLE DESIGN GUIDELINES

Development of the former CFB Rockcliffe site will support the City's Official Plan goal of promoting environmental, economic and social sustainability. Canada Lands Company will:

- Promote the sustainable design techniques that are encouraged by the City of Ottawa;
- Require that multi-unit residential buildings, mixed-use and office buildings be designed on the basis of

sustainability rating systems; and
- Encourage additional sustainability measures.

The sustainable design techniques that are specifically encouraged by the City include:

- Using access to natural daylight to reduce energy costs and to improve occupant health and productivity;
- Using natural ventilation strategies to reduce mechanical costs;
- Using landscaping and plants to shield buildings from wind and sun, thereby reducing heating and cooling costs;
- Harvesting rainwater or recycling greywater to irrigate planting areas and flush toilets;
- Reducing stormwater runoff through the use of green roofs, permeable paving surfaces, and on-site stormwater management such as naturalized dry swales;
- Reducing the urban heat island effect through high-SRI (Solar Reflectance Index) paving materials and roofing materials, or green roofs;
- Incorporating passive solar technology such as solar walls and green roofs to reduce energy use; and
- Using renewable energy technologies including solar hot water and geothermal heating and cooling.

In addition, the following guidelines for mixed-use or multi-unit buildings will be encouraged:

- New buildings should be constructed from renewable and local materials where possible. Materials should be selected based on their longevity.
- New buildings and developments should provide flexibility in the building floor plate, building envelope and building façade design to accommodate a range of uses and unit sizes over their lifespans.
- Buildings, where practical, should be oriented north-south to take advantage of daylighting and passive solar gain, in order to reduce the need for artificial lighting. Buildings should also be oriented to capitalize on natural ventilation for passive heating and cooling.
- Larger mixed-use and office buildings should consider the use of light wells to bring natural daylight into the building.
- Interior temperatures can be further controlled through façade elements such as active shutters or louvres, roof overhangs, light shelves, high performance glazing and through the placement of landscaping.
- Renewable energy technologies such as photovoltaic cells or wind power systems, and low-impact technologies such as low-flow

water fixtures will be encouraged.

- Plant species should be adaptive to the area to reduce ongoing replacement, maintenance and irrigation requirements. Adaptive species that are also native should be incorporated into varied planting plans with a wide variety of species of complementary interest.

Canada Lands Company will encourage green roofs that offer usable outdoor space, help improve a building's level of energy consumption, reduce its heating and cooling needs, mitigate the urban heat island effect, enhance biodiversity within the study area, and add aesthetic value through additional colour and texture.

- Green roofs should provide garden or amenity space for building occupants.
- Plant species used on green roofs should be native, drought-tolerant, able to thrive in shallow soils, and be adaptive to the local climate.
- A diversity of species should be planted for colour, texture and visual interest.
- Planting beds should be mulched and planting soils amended with compost to increase stormwater absorption and reduce the need for irrigation.
- Hard landscaped surfaces that are part of a green roof should be made of reflective or lightly coloured materials, to reduce the urban heat island effect.

6.14 FOREST SPECIAL DESIGN AREA

The Forest Special Design Area (FSDA) is located within the Forest neighbourhood identified in Chapter 5. The FSDA is located in the northeastern corner of the site on block 44, which borders the NRC Woods. Development in the FSDA will surround significant tree groupings at the centre of the neighbourhood. Development here must be supported by a master concept plan that examines the water drainage regime supporting the existing tree stands, assesses the impacts of development (particularly to existing trees and important tree groupings), and recommends mitigation measures in building design. Canada Lands Company will encourage implementation of the following:

- Permitted uses will include low-rise and mid-rise residential apartments; live work units; and day cares.
- Building heights on the south side of the block cannot exceed 30 metres, and building heights on the north half cannot exceed 20 metres.
- It is anticipated that the servicing approach will incorporate LID measures refined through the outcome of pilot projects.
- Surface parking is discouraged, except where it is used to avoid deep excavations that may have an adverse

impact on tree roots or their supportive drainage system.

- Where surface parking areas are necessary, they should be broken into a series of smaller 'parking courts' through significant landscaping.
- The selection of surface parking materials should be informed by the outcome of LID pilot projects.
- In order to minimize the impact on groundwater and root systems, the maximum floor plate of any building should not exceed 1,000 m^2 and the floor plate of buildings between 16 and 30 metres in height should not exceed 750 m^2.
- Setbacks from all tree stands should be established through a site-specific ecological study that considers the natural drainage pattern and proposes appropriate ecological transitions between uses.
- Rooftop rainwater collection and reuse should be incorporated in all buildings.
- Development will not be permitted in the area shown as a significant tree stand in the centre of the block.
- Sidewalks should be provided into the site on at least one side of each private road, set back from the drainage swales.
- To ensure the area remains highly accessible to the public, a continuous network of pathways should provide links to the Park to the south as well as a direct link to the large North Park.
- Access to this neighbourhood should be limited to narrow, paved private roads, with public access easements, that have surface drainage swales and without curbs. Location of housing in proximity to these roads should be placed in a manner that reduces safety access route lengths throughout the neighbourhood to the greatest extent possible.
- Undeveloped areas should be landscaped with native species that are found in the surrounding landscape as per Urban Natural Feature assessments prepared by the City of Ottawa.

7 MAKING IT HAPPEN

The Rockcliffe CDP is an action-oriented plan that should be easy to understand and implement. Making the plan happen will involve infrastructure improvements, investment in master planning elements, investment in capital projects, and partnerships. The following sections provide clear implementation direction throughout the development process to make the plan a reality.

7.1 SECONDARY PLAN, ZONING, AND SUBDIVISION

The CDP will be a City Council approved document. It is expected to be adopted in tandem with an Official Plan Amendment, Secondary Plan, Zoning By-law Amendment and a Plan of Subdivision.

An Official Plan Amendment is required to remove the "Developing Community" designation from the lands as shown on Schedule B Urban Policy Plan and instead designate the lands as "General Urban Area".

The City will adopt a Secondary Plan to give statutory force and effect to the vision, land use, design principles, and density targets established in this CDP.

The CDP recommends an amendment to the Comprehensive Zoning By-law to accommodate specific provisions for land use, built form, and parking. The zoning by-law amendment report will detail the technical provisions and conditions.

7.2 DEVELOPMENT APPLICATIONS (DRAFT PLAN OF SUBDIVISION, SITE PLAN)

Canada Lands Company will file an application for approval of a draft plan of subdivision and will phase development according to market conditions and servicing requirements.

After the Plan of Subdivision has received draft approval, a Stage 3 Archaeological Assessment must be completed for one area of the site between the former parade square and the northern ridge. This will be a condition of draft approval.

Further development approvals will be required for development on individual sites. Site Plan Control approval is required for commercial developments and for residential projects such as townhouse complexes and apartment buildings.

An Environmental Impact Statement will be required for development within 30 metres of the NRC Woods, the Airbase Woods and the Montfort Hospital Woods, which are Urban Natural Features bordering the northeastern and southwestern corners of the site, respectively.

7.3 CAPITAL PROJECTS, FINANCING AND PRIORITIES

There are a number of infrastructure and road construction projects which will be undertaken by Canada Lands Company following the adoption of the CDP and Plan of Subdivision. These projects will provide the master plan structuring elements to the community. It is expected that Canada Lands Company will construct the primary pipe services, collector roads, storm detention ponds and naturalized dry swales. The South Park and Centre Park may also be constructed by Canada Lands Company as part of the first phase of development.

7.4 THE ROLE OF THE DEVELOPMENT COMMUNITY

The development community will play a key role in the development of the Former CFB Rockcliffe lands and will be partners with Canada Lands Company in the creation of a truly dynamic community. Canada Lands Company will sell serviced blocks to multiple developers who will construct dwelling units, mixed-use, retail and office buildings according to design requirements established by Canada Lands Company.

Builders will have to follow architectural guidelines developed by Canada Lands Company so that the land use and design vision, outlined in this CDP, is realized. Canada Lands Company will be responsible for monitoring these guidelines as opposed to the City of Ottawa.

7.5 NATIONAL CAPITAL COMMISSION – DESIGN REVIEW

Pursuant to a prior agreement between Canada Lands Company and the National Capital Commission (NCC) related to the federal land transfer of the former CFB Rockcliffe, this CDP was presented to the NCC's Advisory Committee on Planning, Design and Realty.

At the request of the NCC, a landscape character assessment will be required for the new off-ramp from Aviation Parkway.

7.6 CHANGES TO THE CDP

Some flexibility in interpretation is permitted by those carrying out the development of the site, provided the general intent of the policies and principles of this plan are maintained. If necessary, minor revisions to the street alignments and block layout shown in the CDP may be made at the discretion of the General Manager of Planning and Growth Management. These revisions will be addressed through the Plan of Subdivision and or Site Plan approval process. Subdivision and/or Site Plan Approval by the City reflecting these changes constitutes approval of the change to the CDP. Where more significant changes are proposed, the City will determine if an Official Plan Amendment and/or other planning approvals are required.

GLOSSARY

Active Street Frontage: In addition to the "building frontage" provisions, a street frontage that allows for a direct physical and visual contact between the street and the interior of a building. Active Street Frontages will require a minimum of 50 percent of the ground floor facade facing the street to be composed of windows, active entrances facing the street for each use, and a minimum height of 4.5 metres for the ground floor storey for non-residential buildings.

Active transportation: Any form of human-powered transportation, such as walking, cycling, using a wheelchair or skateboarding.

Building frontage: Locations where buildings must face and front onto the street, and where parking between the building and street is not permitted.

Building mass: The combined effect of the shape and bulk of a building or group of buildings, including height, width, and depth.

Cycling-supportive: Development that supports cycling as a prominent means of travel through the provision of cycling infrastructure that makes cycling comfortable, efficient and safe.

Environmental Impact Statement: An assessment of the potential environmental impacts of a proposed project which documents the existing natural features on and around the proposed project site, identifies the potential environmental impacts of the project, recommends ways to avoid and reduce the negative impacts, and proposes ways to enhance natural features and functions.

Façade: The principal face of a building (also referred to as the front wall).

Gateway: An important road or path which serves as a major entry into the city, into a district (including the Central Area) or into a local area.

Glazing: Clear or lightly tinted glass windows.

Green streets: Streets that include many enhancements designed to support walking and cycling in an attractive, open space environment such as wider boulevards, sidewalks, multi-use pathways, street trees and other landscaping, and roadway features.

High-rise: Ten or more storeys.

Human scale: the proportional relationship of the physical environment to human dimensions and abilities, acceptable to public perception and comprehension in terms of the size, height, bulk, and massing of buildings or other features of the built environment.

Low-rise: Up to four storeys.

Mid-rise: Five to nine storeys.

Mixed-use: A form of development in which a building contains both residential and non-residential uses and mixed-use development has the same corresponding meaning.

Modal Share: The ratio of the number of trips by a specific travel mode to the total number of trips by all modes, usually expressed as a percentage.

Multi-use pathway: A pathway that accommodates pedestrians, cyclists and other forms of non-vehicular travel.

Naturalized dry swale: A vegetated open-channel drainage way that conveys stormwater or rainwater runoff designed to reduce velocity and filter pollutants.

On-road cycle tracks: A bike lane within a road corridor that is physically separated from motor vehicle traffic and distinct from the sidewalk.

Raingarden: A planted depression designed to receive stormwater and rainwater runoff so that it can be absorbed into the ground as opposed to flowing into storm drains and surface waters to reduce the occurrence of flooding, water pollution and erosion.

Rapid transit network: The rapid-transit network consists of an interconnecting system of existing and planned rights-of-way and corridors in which a rapid-transit facility (transitway, O-train, LRT, streetcar, etc.) may be located.

Segregated cycling facilities: See on-road cycle tracks.

Shared use lanes / sharrows: A lane which is intended to be shared between vehicles and cyclists, delineated by pavement markings which show a bicycle with an arrow above it. Shared use lanes provide no reserved or separated spaces for bicycles.

Transit-oriented: Development where all elements support transit ridership. Densities are high enough to make efficient use of transit and the area is designed to make it attractive and convenient to use. This means that people can easily walk or cycle to transit and that these connections are direct, safe and appealing.

Transit priority bus service: Bus service that incorporates strategies to increase transit operating speeds and transit travel time reliability in mixed traffic relative to car travel, such as traffic signal priority or queue jumps.

Transit priority corridor: Corridors equipped with a set of coordinated priority measures that give transit vehicles preferential treatment over other vehicles. These priority measures may include peak-period transit only lanes, short dedicated lane segments, queue-jumps and traffic signal priority.

Urban Natural Feature: Lands designated on Schedule B of the Official Plan which are part of the Urban Natural System. Urban Natural Features are natural landscapes and may include woodlands, wetlands, watercourses and ravines.

Walkable: Development that prioritizes walking as a prominent means of travel through design mechanisms aimed at making walking comfortable, efficient and safe.