Planning Rationale for Site Plan Control and Zoning By-law Amendment -Wateridge Village Phase 1B

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1.0 INTRODUCTION

This report has been prepared in support of applications for Site Plan Control and a Minor Zoning By-law Amendment for the following blocks in the Wateridge Village Phase 1B - Block 15, Block 22, and Block 24. A conceptual plan will be prepared for Block 19 and a site plan application will be submitted for approval in a later phase. The proposed development will permit a range of low-rise and mid-rise residential units including rear lane townhouses and stacked townhouses. As part of the newly adopted CFB Rockcliffe Community Design Plan, development in Wateridge Village Phase 1B is subject to Site Plan Control.

The former Canadian Forces Base (CFB) Rockcliffe now known as Wateridge Village is the largest undeveloped piece of land within Ottawa's Greenbelt. The total site area is 131 hectares. CFB Rockcliffe is owned primarily by the Canada Lands Company (CLC). Through the Community Design Plan CLC prepared a master plan for the overall development of the lands and development will occur by the private sector on a phased basis. Due to the site's proximity to downtown, the new community will be built at relatively high densities compared to the outer suburbs. This will lead to a variety of low to mid-rise housing types, including single-family dwellings, row housing, walk-ups and stacked units, lane-oriented housing and apartments.

Development in the CDP will have particular focus on compact and complete mixed-use forms; transit and pedestrian connections to the surrounding city fabric; enhance the existing natural environment; prioritize non-vehicular movement; respect the heritage and legacy of the Algonquin peoples; commemorate the military heritage of the site; and lastly, the community will be designed as an attractive, compact urban community with aesthetically interesting and sustainable urban neighbourhoods. Low impact development (LID) techniques will be the hallmark of the Wateridge community.

2.0 SITE LOCATION, SITE CONTEXT AND DEVELOPMENT PROPOSAL

2.1 SITE LOCATION

The subject blocks are located in Phase 1B of the Wateridge Village, Blocks 19, 22, 24 and 15 are centrally located in Phase 1B. Blocks 19, 22 and 24 are north of Mikinak Road. Block 19 forms part of the community core and will comprise mid-rise mixed use development in the future. The northern portion of Block 22 is located north of the proposed Veterans House to be built by Ottawa's Multi-Faith Housing Initiative and is located east of Block 19. Block 24 is located to the west of the proposed French public elementary school site and east of Block 22. Block 15 is south of Mikinak Road, adjacent to the future park to the west and proposed English elementary school site to the east and Block 24 to the north (see Figure 1).

Figure 1 – Location Map.

Figure 2 – Location Context.

Phase 1B is conveniently located close to existing employment, retail, transit, and greenspace. As the CFB Rockcliffe site is the last undeveloped piece of land inside Ottawa's Greenbelt, development in the community will have access to existing and established amenities in the surrounding urban area (Figure 2).

2.2 SITE CONTEXT

The site is located in an area surrounded by greenspace systems along the Sir George Etinne (Rockcliffe and Aviation Parkways), the Montfort Woods, and a densely-treed escarpment overlooking the Ottawa River (Figure 3). The site is approximately six and a half kilometres east from the downtown core and six hundred metres north of the Montfort Hospital and NRC to the east.

The site benefits significantly from its proximity to the Ottawa River which provide for spectacular views. The land is sloped down towards the north and the site elevation ranges from approximately 70 to 100 metres above sea level. The location of the site offers unobstructed vantage points with views to the River and surrounding area. The area when developed as a military base, was graded to level the land and since that time, vegetation and tree regeneration has produced a mixture of deciduous and coniferous trees. The tree conservation report identified a Burr Oak tree over 100 years old in the western portion of the subdivision. As identified by the City of Ottawa, the landscape, ecology, and urban natural features of the CDP area are significant, and protective measures are in place to mitigate impact during development.

The plan for the CFB Rockcliffe area seeks to maximize pathway and transit connections to the surrounding area.

Figure 3 – Site Context.

2.3 DEVELOPMENT PROPOSAL

This application for Site Plan Control and Zoning By-law Amendment proposes to develop three blocks in the Wateridge Village development. Included in the application are site plans for three of the Blocks; Block 15, 22 and 24. As noted a fourth Block owned by Mattamy, Block 19, located in the community core will be developed as a later phase. Each Block proposes residential dwellings in a mix of townhouses, stacked townhouses, or a combination of the two. The densities proposed on each block are planned to provide a gradual transition of housing and density from the existing residential neighbourhood south of Block 15 on Burma Road; towards Block 19, the highest density area of the community. The blocks also feature rear lanes and mews, to enhance the public realm, provide an interesting and varied streetscape and maximize opportunities to innovate by incorporating Low Impact Development best practices. The incorporation of mews and rear lanes will result in residents and the public having access to accessible, attractive landscaped spaces as substitutes for rear yards.

2.3.1 Proposed Development Block 15:

The development is located south of Mikinak Road, a proposed arterial road through the Wateridge development (Figure 4). Squadron Crescent is a proposed local road which connects the west side of Block 15 at Mikinak Road, down to the bottom of the block and back up to Mikinak Road on the east. The interior lanes (Lane A-E), a total of 5, will be private lanes. These lanes serve as the access point to residential garages and can accommodate emergency vehicles. The lanes are 6.5 metres wide. The mews running along the central corridors of the interior blocks are 10.2m wide with a 1.8 metre walkway running north/south and accommodate interchanging pedestrian pathways, bioswales, landscaping and central gathering spaces. These mews are available to the public. Connections are proposed throughout the blocks to provide multiple points of access and permeability to the entire block, community park and adjacent residential areas.

Residential Dwellings:
A total of 19 blocks of two different sized rear lane townhouses = 125 residential units

- Each block has between 3-8 units
- Type A townhouses are 5.79m wide, total gross floor area is 5,100m^2 with a total of 30 units
- Type B townhouses are 4.75m wide, total gross floor area is 8,493m^2 with a total of 57 units
- Type C townhouses are 5.22m wide, total gross floor area is 2,223m^2 with a total of 13 units
- Type D townhouses are 5.22m wide, total gross floor area is 4,150m^2 with a total of 25 units

The total density for Block 15 is 63.8 uph and the landscaped area covers 32% of the development. A multi-use pathway is located along Mikinak Road and is 3.6m wide, sidewalks line Squadron Crescent with an adjacent bike path and is tree lined. Depressed curbs are proposed along all access points to the roadways and laneways to increase accessibility. All parking on Block 15 is proposed within each rear lane townhouse unit, with attached garages. The narrow towns will accommodate 1 car.

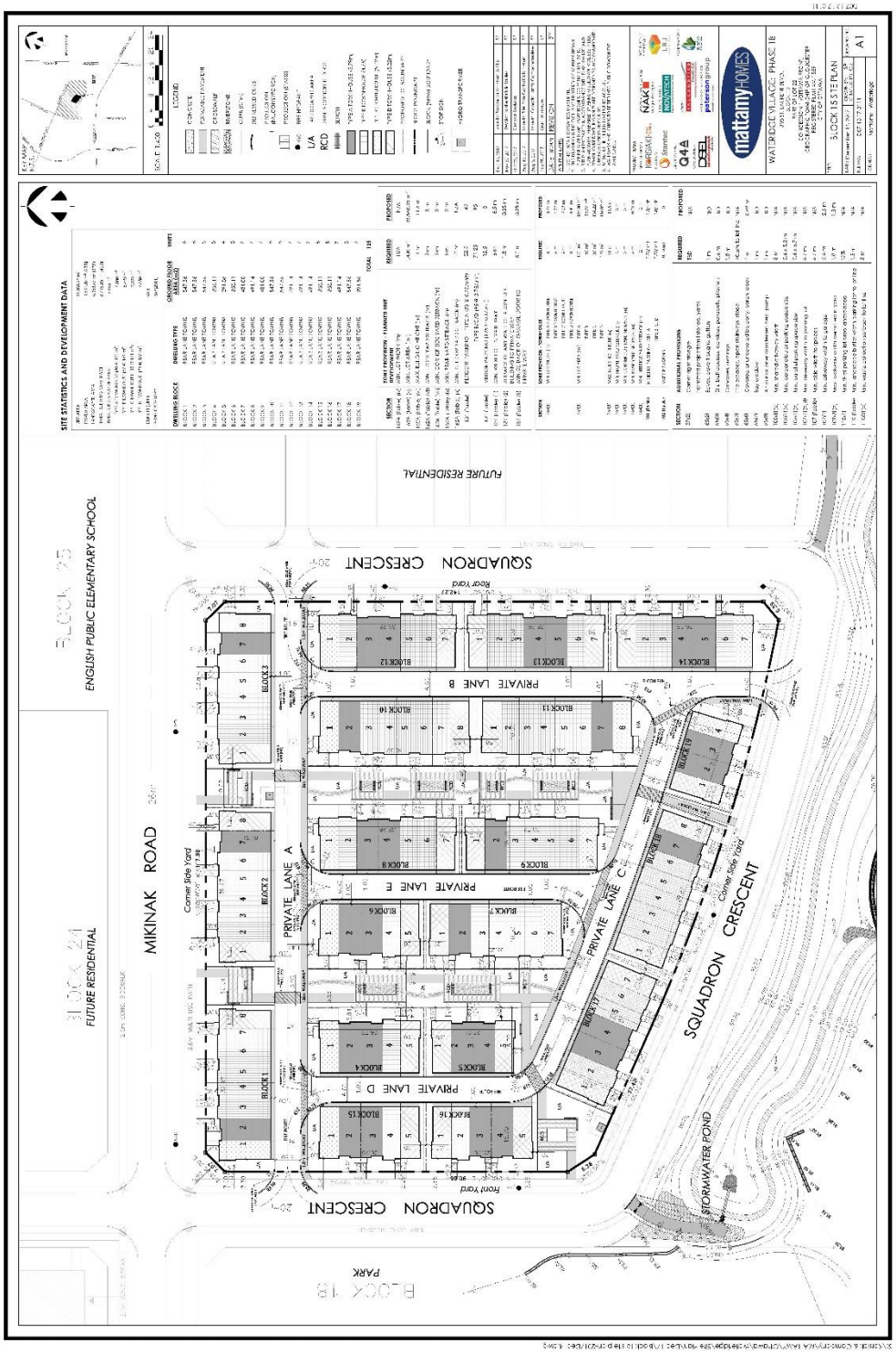

Figure 4 – Site Plan Block 15.

2.3.2 Proposed Development Block 22:

The proposed development is on the north side of Block 23, south of Hemlock Road. The site is bound by Michael Stoqua Street on the west and Moses Tennisco Street on the east. Lane A is private and connects to the east and west streets on either side of the block. There are four residential blocks in Block 22, consisting of townhouses and stacked townhouses. The rear lane townhouses are located on the north end of the block, facing Hemlock Road and the two blocks of stacked townhouses face east and west with an internal surface parking lot. Adjacent to the internal parking lot is a molok waste disposal area that will be used by the residents for garbage disposal.

A bioswale runs along the south side of the site creating a soft landscape separation between the proposed Veterans House and Block 22. Landscaping is proposed along the edges of the surface parking adjacent to the sidewalk to soften the visual and physical effects of the parking lot. Private Lane A can accommodate emergency vehicles, the east access point to the site is 6.5m wide. A 2m bike path and 1.8m sidewalk are located at the north end of the block, along Hemlock Road, with sidewalks running along the two local roads on the east and west. Depressed curbs are proposed along all access points to the roadways and sidewalks central to the site to increase accessibility. The total density for Block 22 is 111.1 uph and the total landscaped area is 37%

Residential Dwellings:
A total of 4 blocks of townhouses and stacked townhouses = 51 units

- Type A townhouses are 5.79m wide, total gross floor area is 680m^2 with a total of 4 units
- Type B townhouses are 4.75m wide, total gross floor area is 447m^2 with a total of 3 units
- Type C townhouses are 5.22m wide, total gross floor area is 342m^2 with a total of 2 units
- Type D townhouses are 5.22m wide, total gross floor area is 332m^2 with a total of 2 units
- Stacked townhouses have mixed floor plates and total gross floor area is 4,180m^2 with a total of 40 units
- Block 1 has 5 units, mix of Type A, B, C, and D townhouses
- Block 2 has 6 units, mix of Type A, B, C, and D townhouses
- Block 3 has 20 units, stacked townhouses
- Block 4 has 20 units, stacked townhouses

The rear lane townhouses will accommodate one car for each unit. Spaces, including two barrier free spaces, are proposed for the stacked townhouses, providing 20 spaces, off-site parking on Block 19 will be available once constructed.

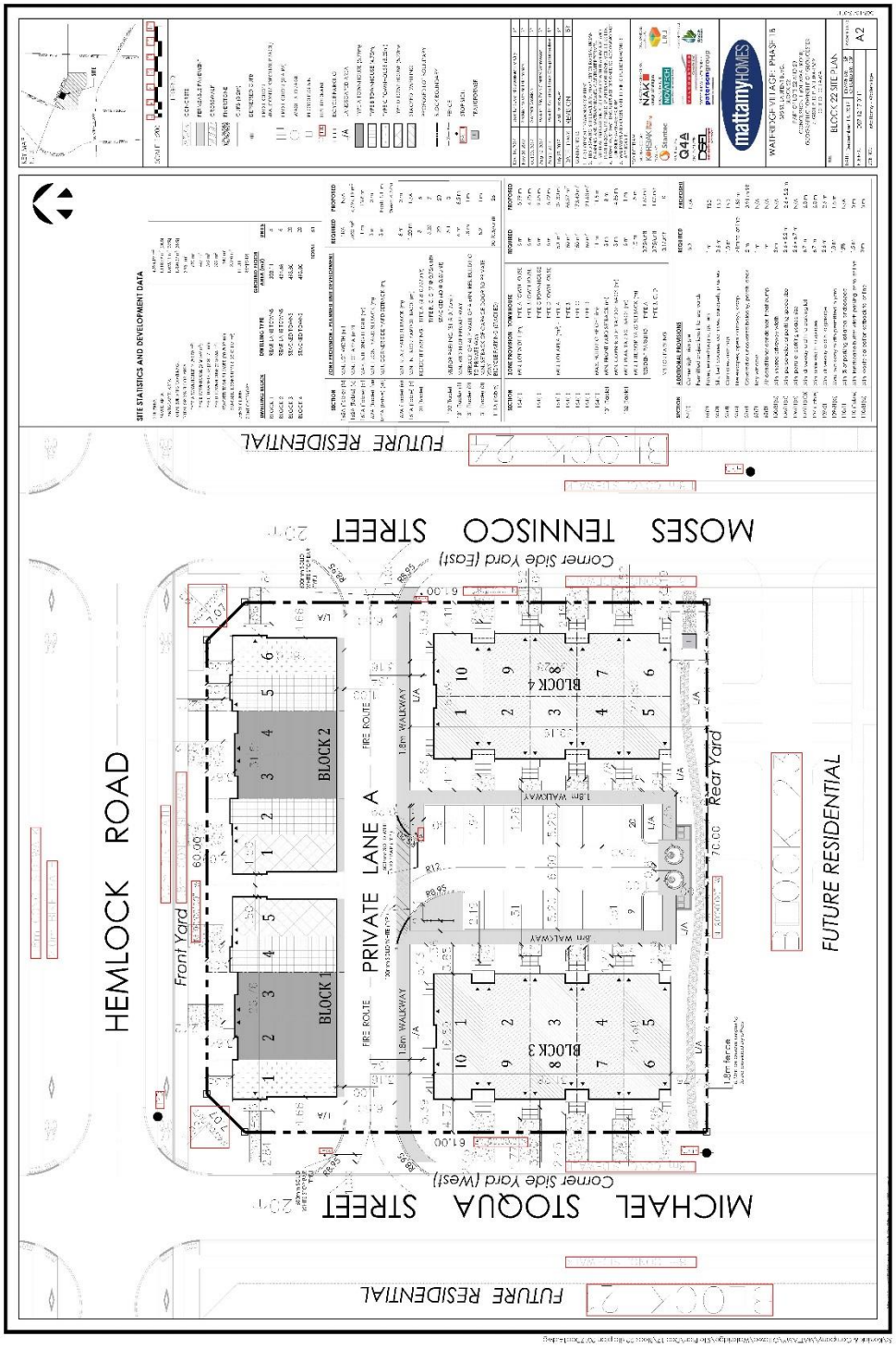

Figure 5 – Site Plan Block 22.

2.3.3 Proposed Development Block 24:

The proposed development is on the south side of Hemlock Road, north of Mikinak Road. The site is bounded by Moses Tennisco Street on the west and a future French public elementary school on the east. There are four private interior lanes, Lane A-D and one parking aisle that is one way with angled parking. There are fourteen blocks, consisting of rear lane townhouses and stacked townhouses. The stacked townhouses are on the eastern portion of the block that can be accessed by Lane B and have angled parking. There is surface parking along Lane D that be accessed from either Lane A or Lane B. Rear lane townhouses can access garages through Lanes A, B and C.

The central mews running mid-block on Blocks 6-9 provide access to landscaped spaces. This is a public mews that connects to Hemlock Rd to the north and Mikinak Road to the south. The mews run as the central pedestrian corridors of the interior blocks, are 8.1m wide. They accommodate interchanging pedestrian pathways, bioswales, landscaping and central gathering spaces. The mews is available to the public and is a connecting element to the greater subdivision. The mews connects from Hemlock to Mikinak Road. There are concrete sidewalks running along the interior blocks east to west, with pedestrian crossings across roadways and parking lots. Molok garbage disposals are proposed for residents, and landscaping is proposed along all edges of the block with pedestrian sidewalks and bike paths along the north and south routes. The total density for Block 24 is 77.8 uph and the total landscaped area is 29%.

Residential Dwellings:
A total of 14 blocks of townhouses and stacked townhouses = 125 units

- There are 12 blocks of rear lane townhouses with four different types, Type A, B, C, and D, each block of townhouses has between 6-7 units, not exceed 40 metres per block
- Type A townhouses are 5.79m wide, total gross floor area is 3,740m^2 with a total of 22 units
- Type B townhouses are 4.75m wide, total gross floor area is 5,215m^2 with a total of 35 units
- Type C townhouses are 5.22m wide, total gross floor area is 1,368m^2 with a total of 8 units
- Type D townhouses are 5.22m wide, total gross floor area is 2,656m^2 with a total of 16 units
- There are two blocks of stacked townhouses, each block of stacked townhouses has 22 units
- Stacked townhouses have mixed floor plates and total gross floor area is 4,598m^2 with a total of 44 units

The rear lane townhouses will accommodate one car for each unit. A total of 115 spaces are provided, off-site parking on Block 19 will be available once constructed.

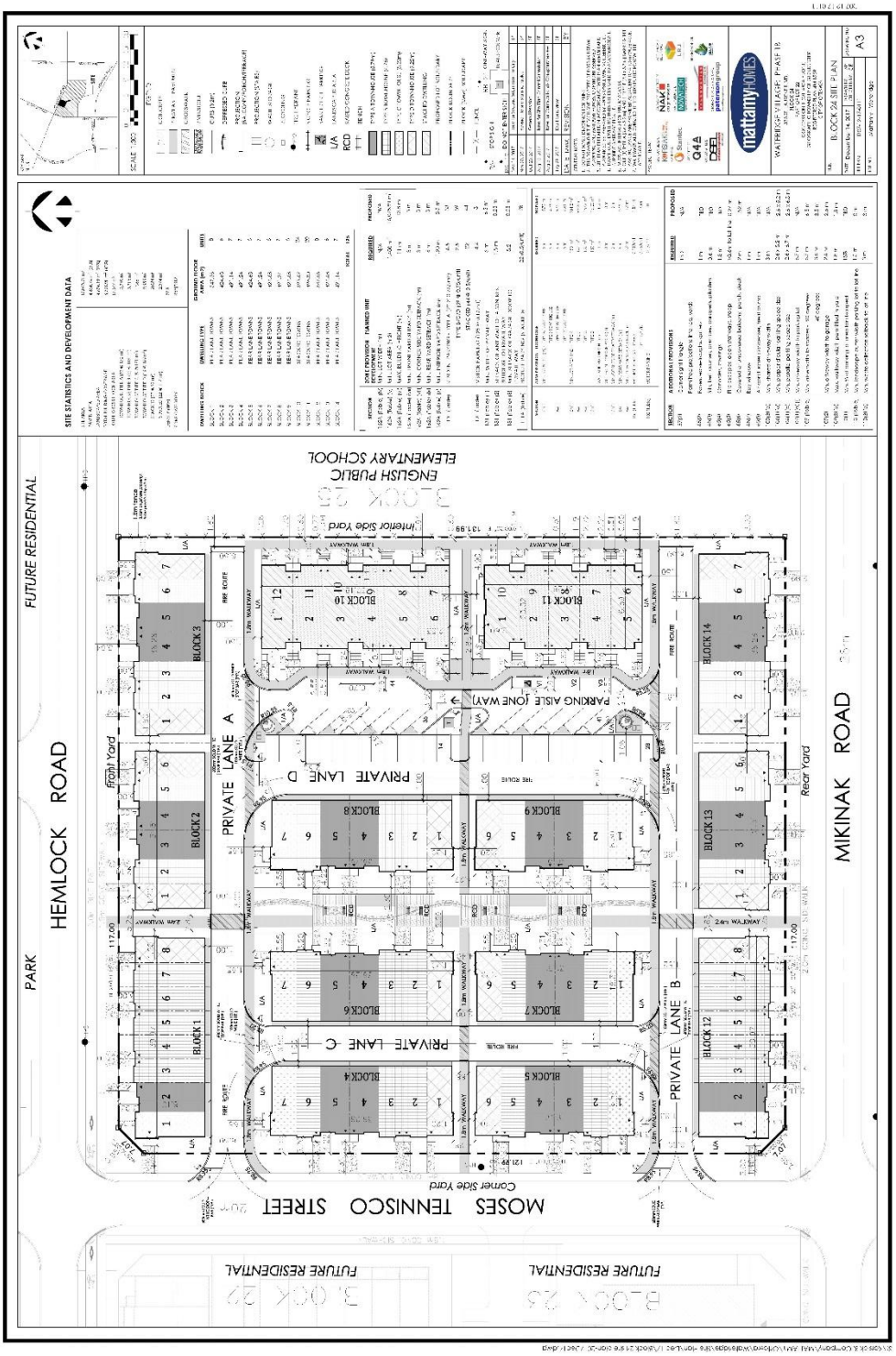

Figure 6 – Site Plan Block 24.

3.0 POLICY AND REGULATORY FRAMEWORK

3.1 PROVINCIAL POLICY STATEMENT 2014

The Provincial Policy Statement (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 build strong communities, promote the efficient use of land, existing infrastructure, and existing public facilities. The PPS is a guide for all development by encouraging the inclusion of an appropriate range and mix of housing, land uses and employment opportunities.

There are a number of policies that directly influence planning of lands within the Wateridge site. These policies are found in sections 1.1, 1.2, 1.4, 1.6, 2.2 of the PPS and specifically focus on:

Accommodating a range and mix of land uses;
Promoting cost-effective development;
Establish phasing policies for the orderly progression of development;
Promote efficient use of water and stormwater management best practices; and
Promoting healthy communities and active modes of transportation;

These policies are integral to the planning process that was used to develop the subject plans for development.

3.2 CITY OF OTTAWA OFFICIAL PLAN

Schedule B – Urban Policy Plan of the Official Plan designates the site as "General Urban Area", which permits "the development of a full range and choice of housing types to meet the needs of all ages, incomes, and life circumstances, in combination with conveniently located employment, retail, service, cultural, leisure, entertainment and institutional uses". The range of residential uses proposed for the development are permitted under the General Urban Area designation.

In Section 2.2.2 – Managing Intensification within the Urban Area notes that intensification may occur in a variety of built forms from low-rise to high-rise, provided urban design and compatibility objectives are met. Building heights and densities will be established through the Former CFB Rockcliffe Community Design Plan and implemented through zoning, as is the case with the subject site. The designation and subsequent CDP recognized the opportunity to create a complete, sustainable community within a development pattern that prioritizes walking, cycling and transit over the automobile.

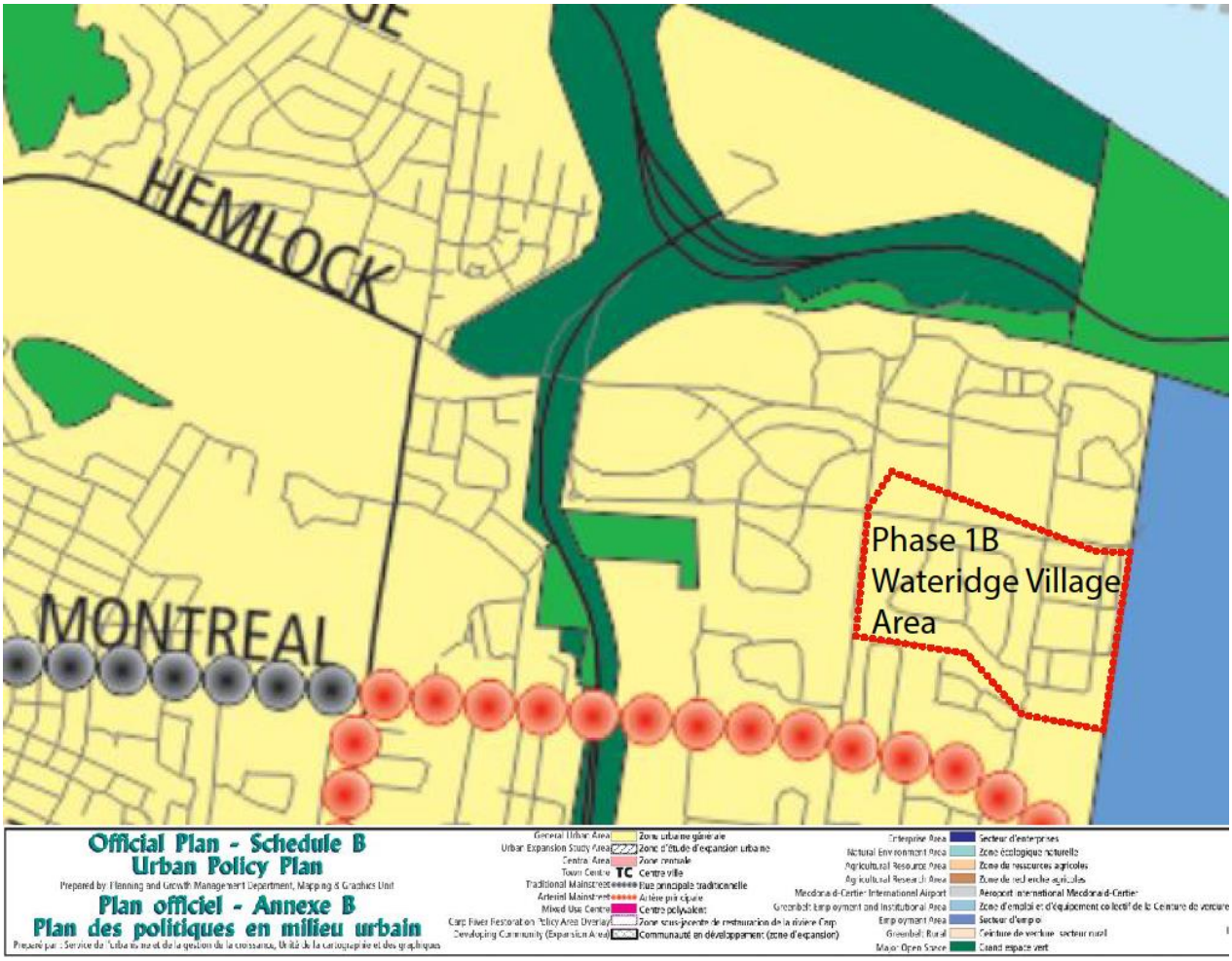

Figure 7 – General Urban Area.

3.3 FORMER CFB ROCKCLIFFE SECONDARY PLAN

The purpose of the Secondary Plan is to guide future growth and development on the Former CFB Rockcliffe lands. The Plan provides the policy direction on land use, densities, building heights, open space and mobility. The Plan is City Council's policy direction for municipal actions, particularly in the review of Subdivision, Zoning and Site Plan applications, applications to the Committee of Adjustment and the undertaking of public works.

The Plan provides in Section 6.2 3 that each residential and mixed use land use has a minimum density requirement. Master Concept Plans prepared with the Site Plan Control application submitted by Mattamy 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 that the minimum required, however the overall average density for the area covered by the Master Concept Plan must meet the minimum identified in the Plan. The proposed development plans meet the overall average density for the area covered in the Master Concept Plan.

PHASE 1B	Land Area (ha)	Required Density (units/ha)	Required Units	Proposed Density (units/ha)	Proposed Units
BLOCK 15	1.96	91	179	63	125
BLOCK 19	1.63	143	234	208	340
BLOCK 22	0.46	105	49	110	51
BLOCK 24	1.61	105	169	77	125
TOTAL	5.66	-	631	-	641

Figure 8 – Density Targets CFB Rockcliffe Community Design Plan.

3.4 FORMER CFB ROCKCLIFFE COMMUNITY DESIGN PLAN

A Community Design Plan (CDP) is a tool for implementing the principles and policies of the City of Ottawa Official Plan at a community level. It provides critical direction regarding density, desired land use and built form, development of the public realm, place-making, mobility and servicing.

The Former CFB Rockcliffe CDP outlines how future development in the area should occur. The vision within the CDP is of a contemporary mixed-use community that is walkable, cycling supportive, transit-oriented and built at a human scale. The CDP land use plan identifies both residential and mixed-use neighbourhoods that are focused around a central mixed-use core that would serve as the heart of the new community. The CDP accommodates up to three elementary

schools, a range of residential building types as well as neighbourhood and community serving uses. The CDP includes a range of building heights and densities in order to create a vibrant and dynamic urban community.

The proposed development is located in the East neighbourhood (Figure 9), which extends from the Core to Burma Road and is characterized by residential uses comprising of low to mid-rise housing, townhouses and stacked townhouses.

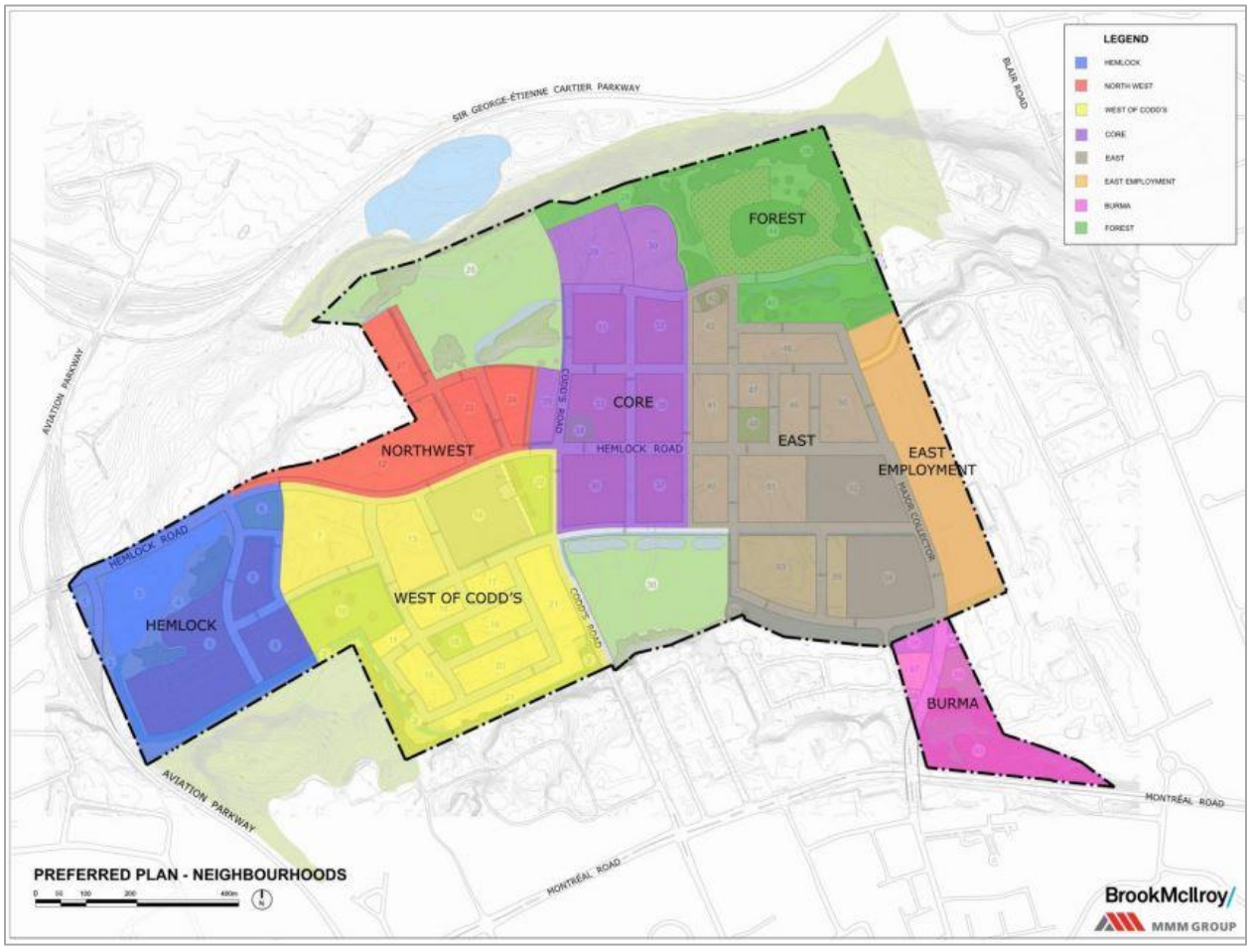

Figure 9 – CFB Community Design Plan Preferred Neighbourhoods.

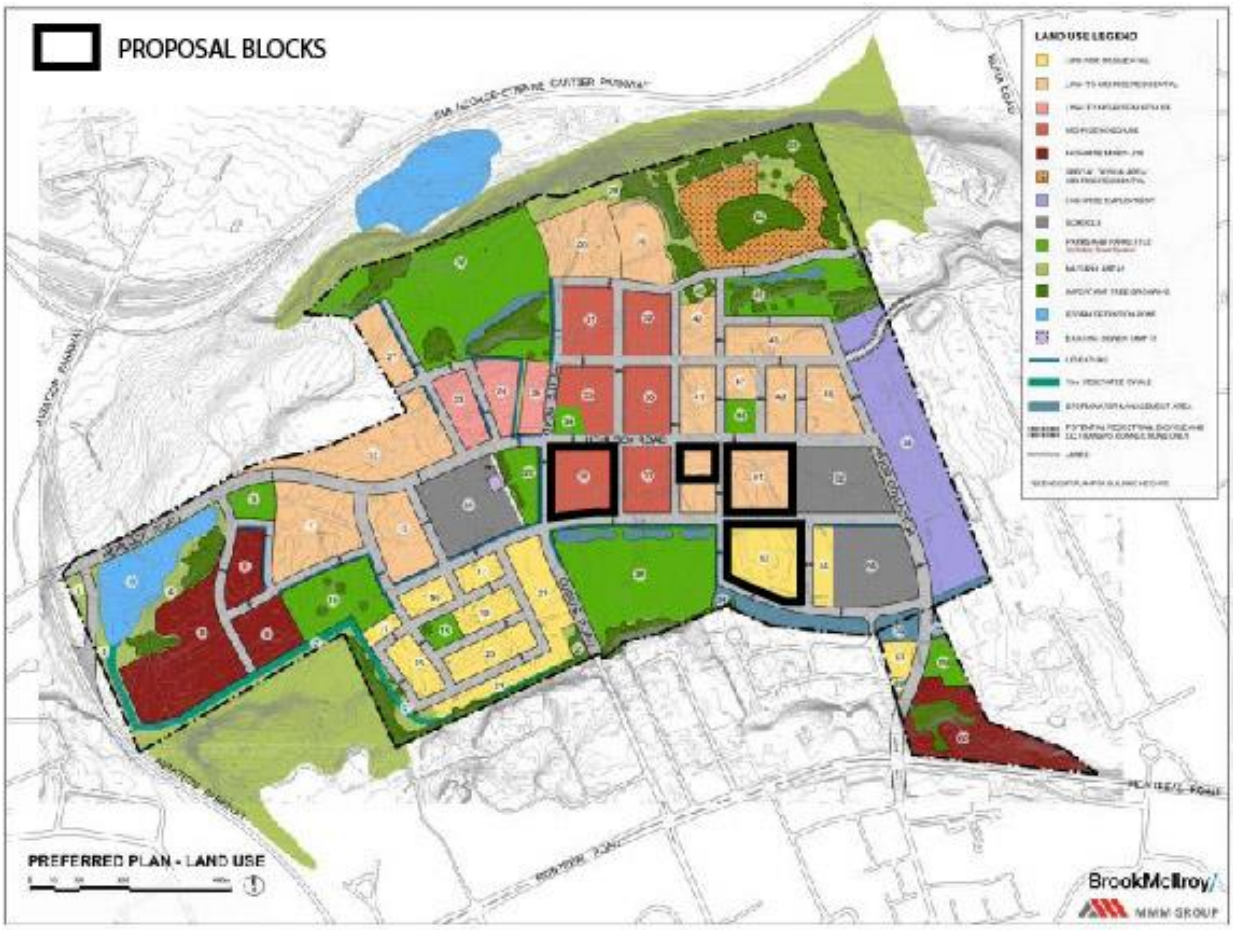

Figure 10 – Block Location on CFB Rockcliffe Community Design Plan.

3.5 WATERIDGE VILLAGE PHASE 1B URBAN DESIGN GUIDELINES & ARCHITECTURAL CONTROLS

The Wateridge Village Phase 1B Urban Design Guidelines and Architectural Controls completed for Canada Lands Company (CLC) was created to serve as a manual to implement the goals of the former CFB Rockcliffe Secondary Plan. The manual is a written and graphic document that provides guidelines focusing on elements of private properties, including: building location and orientation, site entrances, fences, landscaping, façade treatment, materiality, and garages. The guidelines are to be applied to all Phase 1B development and CLC must review the development concept prior to City Plan Control submission.

A set of planning principles was developed based on the existing conditions of the site and the planning context of Ottawa. These development principles include:

- Complete Mixed-Use Community
- Connectivity
- Integrating Sustainability and Resiliency
- The Pedestrian Environment
- Algonquin Heritage
- Military Heritage
- Human Scale and Enclosure

Proposals in Phase 1B feature a mix of building typologies and land uses that incorporate the development principles mentioned above. The architectural controls in the design guidelines aim to create a sense of identity and increase connectivity with the surrounding context, as well as create an efficient, attractive, healthy, and safe neighbourhood.

The proposed development meets the following guidelines and architectural controls:

Table 1 – Urban Design Guidelines & Architectural Control Applicable Guidelines

Townhouse Guidelines	
Townhouse block sizes may range from 3 to 8 units and should be no longer than 40 metres.	Townhouse and stacked towns are no longer than 8 units or 40 metres per block size. Mid-block breaks are provided after 8 units.
Individual blocks should be separated by public streets or mid-block connections.	Mid-block connections are provided in the form of landscaped pedestrian mews, pathways or private laneways.
Townhouse buildings will typically take the form of lane townhouses (with garages accessed from a public rear laneway) or back-to-back townhouses (with shared below-grade parking between units).	Townhouses have garage access in the form of rear lanes. Stacked townhouses propose surface parking.
Dwellings should be fully attached above grade.	All townhouses and stacked towns are attached above grade.
Enliven façades and the roofs of buildings with decks and private outdoor amenity areas for residents to inhabit.	Rooftop decks and at grade terraces are provided for all units in the development.
Architectural Style	

For low and mid-rise residential buildings that are less than 20 metres in height, incorporate some type of articulation to create a transition between the upper and lower storeys.	Architectural details delineate a transition between windows, doors, storeys, and entranceways.
Entry Features	
Entry features should be articulated through detailing or variation of materials.	Entranceways are emphasized through architectural details and landscaping leading to the doorway.
Fencing and 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.	Surface parking lots are screened using landscaping and bioswales. Mews located mid-block have landscaping on either side of the pedestrian pathways and swales.
All landscaping adjacent to a public right-of-way shall be consistent with or complementary to the right-of-way landscaping.	Tree planting and landscaping is consistent with right-of-way landscaping.
Green Streets	
Where possible, the principles of low impact development (LID) shall be implemented as directed by the City of Ottawa and/or CLC to control stormwater on-site and minimize discharge to the City's sewer system.	Principles of Low Impact Development are incorporated throughout the proposed development (such as bioswales, compact development, residential density, and underground infiltration chambers) to reduce impact on the City's sewer system.
All streets should include enhanced landscape design through tree planting and landscaping in the public and private right-of-way.	All landscaping in the public and private right-of-way will be of enhanced design.
Sidewalks and Crosswalks	
Continuous sidewalks should be provided on both sides of all streets.	Continuous sidewalks are provided along block exterior lot lines and along mews.
Sidewalks should be at least 1.8 metres wide.	All sidewalks are at least 1.8 metres wide.
Active Street Frontages	

Will not locate parking between the street and the front façade.	Surface parking is not located between the street and front façade, parking is located in the interior of blocks.
Buildings should front and face onto the public realm in order to animate the street.	Buildings are situated to face the public realm and animate the street.
Private Streets	
Private streets should be designed as public rights-of-way with adequate paving for emergency vehicles, landscaping, and appropriate building setbacks.	All private streets are designed to accommodate for emergency vehicles.
Surface Parking	
Surface parking should be located at the rear of buildings. If the lot is not deep enough, the parking should be located at the side of the building.	With rear lanes, surface parking is located in the interior of the block or access is available through the rear lane.
Planting strips, landscaped traffic islands and/or paving articulation should be used to define vehicle routes and smaller parking courts that provide pedestrian walkways, improve edge conditions and minimize the aesthetic impact of surface parking.	Landscaping and planting strips define roadways, pedestrian corridors, and improve edge conditions. Greenspace around roadways and surface parking is defined either by grass, plantings or trees.
Rear lane access to parking amenities is preferred with the number of vehicular entrances held to a minimum. Vehicular access should be from an alley or mid-block connection on a connecting street.	Access to rear lanes or surface parking lots is kept at a minimum. Typically, access is reduced to two points, one on either side of a row of residential homes.

3.6 DESIGN GUIDELINES FOR LOW-RISE INFILL HOUSING

The Urban Design Guidelines for Low-rise Infill Housing completed in May 2012 pertains to the development of vacant lots or portions or vacant lots in established urban areas. The Wateridge development is the largest piece of infill land left for development inside the Ottawa Greenbelt. Good design is very important and include recognizing the scale and lot pattern of neighbourhoods and not permitting cars to dominate the public realm. Designs should be focused on pedestrians and cyclists to improve the quality of the city streetscape and help create liveable cities.

The aim of the guidelines is to help create infill development that will:

- Enhance streetscapes
- Support and extend established landscaping
- Be compact urban form to consume less land and natural resources
- Achieve a good fit into an existing neighbourhood, respecting its character, and its architectural and landscape heritage
- Provide new housing designs that offer variety, quality, and a sense of identity
- Emphasize front doors and windows rather than garages
- Include more soft landscaping and less asphalt in front yards
- Create at grade living spaces that promote interaction with the street
- Incorporate environmental innovation and sustainability

The development application meets the following guidelines:

Table 2 – Applicable Guidelines for Low-Rise Infill Housing

Guideline 2.1 - *Contribute to an inviting, safe, and accessible streetscape by emphasizing the ground floor and street façade of infill buildings. Locate principal entries, windows, porches and key internal uses at street level.*	The development application proposes residential entrances slightly above ground level. Architectural style has been selected to emphasize the entrance way and windows.
Guideline 2.2 - Reflect the desirable aspects of the established streetscape character.	All public and private streets will be lined with street trees. Along the public streets, uses for bikes, pedestrians and cars will be separated by street trees and landscape buffers. Pathways on site are proposed to connect to the street.
Guideline 2.3 - Expand the network of public sidewalks, pathways and crosswalks, to enhance pedestrian safety.	Connections to the existing pathways, sidewalks and bike pathways will be made where feasible. Mews are proposed to extend across the site and connect to sidewalks to separate pedestrian

	movement from vehicle movement. Crosswalks are proposed across the private lanes.
Guideline 2.7 - Ensure that new streets, if private, look, feel, function and provide similar amenities as do public streets, including sidewalks and street trees.	Private laneways will provide enhanced amenities, which include sidewalks, landscaping, street trees, lighting and maintenance. The lanes are also designed to accommodate curbside garbage pick-up.
Guideline 3.4 - Provide street trees in continuous planting pits or in clusters to support healthy growth.	Street trees will be planted in continuous planting pits to support healthy growth.
Guideline 3.6 - Support sustainability and improve environmental performance by creating landscaped green roofs that are functional and have aesthetic value.	Sustainability is a major focus for the development in the form of Low-Impact Development (LID). This includes compact residential development,
Guideline 4.1.1 - Ensure new infill faces and animates the public streets.	The development will face outwards towards the public street and private laneway and the mews.
Guideline 4.1.2 - Locate and build infill in a manner that reflects the existing or desirable planned neighbourhood pattern of development in terms of building height, elevation and the location of primary entrances, the elevation of the first floor, yard encroachments such as porches and stair projections, as well as front, rear, and side yard setbacks.	Proposed development is meeting the desired neighbourhood pattern identified in the Community Design Plan and Architectural Controls and Guidelines. Low-rise development with consistent yard encroachments, setbacks, building height, elevation and entrance locations are proposed.
Guideline 4.1.6 - Contribute to the amenity, safety and enjoyment of open spaces by offering living spaces that face them.	Living spaces and outdoor amenity areas face private-public spaces that feature pathways, bioswales and landscaping. Mews will also provide pubic amenity space for outdoor enjoyment.
Guideline 4.1.7 - Avoid the arrangement of units where the front of one dwelling faces the back of another, unless the units in the back row have façades rich in detail, recessed garages and extensive landscaping.	All façades of the development have rich detail, recessed garages and extensive landscaping to be aesthetically pleasing.
Guideline 4.2.1 - Design infill in a manner that contributes to the quality of the streetscape, and	Proposed residential dwellings are designed in a manner to provide a variety of architectural styles

that considers the impacts of scale and mass on the adjacent surrounding homes.	but at similar building height. Articulation of windows, balconies, and materials on the facades will vary in height and detail to provide interest. Corner units will also be articulated to engage both street frontages, providing an interesting street edge.
Guideline 4.2.4 **-** Locate roof projections, which provide access to decks and patios, so that height impacts are reduced.	Roof-top terraces are proposed, setback at staggered setbacks to provide for a comfortable outdoor amenity space.
Guideline 4.3.1 **-** Design all sides of a building that face public streets and open spaces to a similar level of quality and detail.	Residential dwellings will be designed with a high-manner of detail, consistent throughout the outside of the dwelling. Details on corner units will be designed to face both streets.
Guideline 5.1 **-** Limit the area occupied by driveways and parking spaces to allow for greater amounts of soft landscape in the front and rear yard.	Parking spaces and driveways are concentrated to reduce multiple access points that can negate from the pedestrian experience. Parking spaces are located at the rear of the dwellings are enclosed with the rear lane townhouses so not to detract from the main entranceway.
Guideline 5.8 **-** Limit the number and width of access depressions (curb cuts), and share driveways in order to maintain as much on-street parking as possible.	Shared driveways and access points to parking spaces are in places wherever possible to reduce curb cuts.

3.7 DESIGN GUIDELINES FOR COMPLETE STREETS

Design Guidelines for Complete Streets were completed in October 2015 and is supplemental to the Traffic Impact Assessment Guidelines completed by the City. The guidelines provide information on how to safely integrate multiple forms of transportation together. Complete streets incorporate the physical elements of a street to offer safety, comfort, and mobility for all users, regardless of age, ability, or mode of transportation.

Complete streets accommodate multiple modes of transportation, incorporate context-sensitive design principles, and can be used as a tool to improve neighbourhoods and support liveability. Each mode, such as pedestrian, bicycle, transit, truck, and vehicular, have different levels of service. Each level of service assesses different degrees of comfort, timing, level of risk/stress,

movement, reliability, and utilization. Each service tool is measured differently and do not necessarily cover the same spectrums of conditions.

The proposed development can be evaluated in conjunction with the Traffic Impact Assessment to ensure that all modes of transportation can safely, effectively, and comfortably move throughout the Wateridge development. Mews are intended to provide separation between vehicles and pedestrians; crosswalks are proposed to encourage safety on site.

3.8 DESIGN GUIDELINES FOR GREENFIELD NEIGHBOURHOODS

Urban Design Guidelines for Greenfield Neighborhoods were approved by Council September 2007. A greenfield neighbourhood refers to a larger area of land within the urban area that has not been developed or has potential to be extensively redeveloped. The guidelines are focused on providing guidance for neighbourhood design during the subdivision review and zoning processes. The Official Plan includes in one of its Guiding Principles that new communities are compact, inclusive, well designed, connected, environmentally sensitive, transit-supportive, and sustainable.

The proposed development meets or exceeds the following guidelines:

Table 3 – Applicable Guidelines for Greenfield Neighbourhoods

Guideline 1 **-** Plan and build new communities based on the inherent capacity of the natural landscape to sustain the community over time.	The development takes into consideration the natural capacity in the area. LID practices are in place (bioswales, compact development, meeting density targets) to ensure the area isn't over capacity.
Guideline 6 - Incorporate landform features and topography in the design of road and block patterns to maximize vistas and visual interest and reduce extensive earth movement requirements.	The bioswale running north to south along Block 24 and 15 will provide visual interest and reduce environmental impact on the surrounding area.
Guideline 7 **-** Locate stormwater management areas to be an integral part of the overall greenspace and pedestrian network within the neighbourhood.	The bioswale and landscaped area running down the centre of Block 24 and 15 serves as a strong public pedestrian connection between blocks.
Guideline 10 **-** Create a walkable neighbourhood with pathways, trails and sidewalks that are accessible year-round and connect destinations such as transit stops,	On all blocks, pedestrian sidewalks will be provided and serve as a connection to the remainder of the site and surrounding area. Mid-block pathway connections are

commercial areas, schools, community facilities and parks.	integrated into Block 24 and 15 to increase pedestrian connectivity.
Guideline 11 **-** Connect new streets to existing streets in adjacent developments and plan for future connections to land that has yet to be developed.	Connections are made to existing and proposed street networks adjacent to the site.
Guideline 13 **-** Layout local street patterns so that development blocks are easily walkable – between 150 and 250 metres in length.	Proposed blocks are highly walkable, with each block with pedestrian connection being no more than 130m in length.
Guideline 23 **-** Include a landscaped buffer between the arterial right-of-way and the local right-of-way for single-loaded streets fronting onto arterial roads.	A tree-lined vegetative buffer is located between the roadway, pedestrian pathway and cyclist routes. Front yards with terraces are proposed along the frontages to encourage individual owners to landscape along street frontages.
Guideline 24 **-** Plan development based on rear lanes or rear parking areas at important neighbourhood focal points such as mixed-use activity areas, surrounding parks, greenspaces and entrances to the community.	All stacked units and townhouses have rear lanes to provide active street frontages on arterial roads, or when fronting on mews, pedestrian pathways with naturalized swales.
Guideline 27 **-** Plant trees along all streets in a consistent pattern and coordinate with the location of street amenities and utilities. Base selection and location of trees on soil conditions, bearing capacity, and urban forestry principles.	Street trees will be planted in a consistent manner in coordination with the location of services and utilities.
Guideline 32 **-** Design pathways, trails and walkways that are connected to the road right-of-way so that they link to a sidewalk and cross at an intersection.	Pedestrian pathways are designed to connect from block-to-block across the public ROW and are not disjointed.
Guideline 34 **-** Locate residential buildings close to the property line with their primary face addressing the street, while making room for trees and utilities. Provide visual interest along the streetscape with a variety in setbacks and projections.	The proposed development is located close (3m) to the property line with special care taken to incorporate architectural details. Setbacks are proposed to allow for terrace and landscaping along the street frontages.
Guideline 37 **-** Design building façades so that windows and doors are prominent features that address the streets they front.	Windows and doors are emphasized on all sides with special attention paid to the front entrances and windows.

Guideline 42 **-** Locate surface parking areas of multi-unit residential buildings away from public view and not between the public street and the building. Design and landscape parking areas so they do not detract from any rear yard amenity space.	Parking lots are screened from view through the use of mews and rear lanes, or landscaping.
Guideline 43 **-** Provide a landscape buffer along the edges of multi-unit residential parking areas, in situations where they are along a public street. Provide breaks in the buffers to connect the sidewalk to walkways on the site.	A landscape buffer is provided along the parking lot in Block 22 and Block 24. Landscaping visually and physically separates the parking areas from public use sidewalks.
Guideline 44 **-** Design residential buildings so that garages do not dominate the width of the front façade and do not project past the front wall. Design driveways so that they are not wider than the garage.	Garages are designed in a manner so as to not detract from the overall architectural style. Driveways are not included and rear lanes serve as access into garages. They will be landscaped, where possible.
Guideline 46 **-** Incorporate mid-block walkways to make walking more direct and convenient where long blocks cannot be avoided. Ensure that landscaping, fencing, and facing windows support a safe and attractive environment.	Mid-block pedestrian pathways are provided and are designed to provide a safe, attractive environment.

4.0 ZONING BY-LAW

Consistent with the guiding vision established for the former CFB Rockcliffe through the Community Design Plan, the application is requesting a minor amendment to the City of Ottawa's comprehensive Zoning By-law 2008-250 in order to accommodate the proposed development plans. It is proposed that minor variations to the minimum lot area, minimum yard setbacks and maximum building heights be addressed through the zoning amendment. In our opinion the variances to the zoning will achieve a building form which is innovative, lively and compact.

Figure 11 – Zoning for proposed development.

Table 4 – Zoning Provisions Block 15, zone R4Y[2311]

Principle Dwelling Type	*Zone Provision – Table 162A*		*Required*	*Proposed*	*Compliance*
Townhouse	Minimum Lot Width (m)	Type A	6	5.79	×
		Type B	6	4.75	×
		Type C	6	7.02	✓
		Type D	6	6.41	✓
	Minimum Lot Area (m^2)	Type A	150	104.80	×
		Type B	150	85.97	×
		Type C	150	136.22	×
		Type D	150	116.02	×
	Maximum Building Height		11	11.5	×
	Minimum Front Yard Setback		3	3	✓
	Minimum Corner Side Yard Setback		3	3	✓
	Minimum Rear Yard Setback		6	0.25	×
	Minimum Interior Side Yard Setback		1.2	1.2	✓
Planned Unit Development	Minimum Lot Width (m)		N/A	N/A	✓
	Minimum Lot Area (m^2)		1,400	19,588.25	✓
	Maximum Building Height (m)		11	11.5	×
	Minimum Front Yard Setback (m)		3	3	✓

	Minimum Corner Side Yard Setback (m)		3	3	✓
	Minimum Rear Yard Setback (m)		6	3	✓
	Minimum Interior Side Yard Setback (m)		1.2	N/A	
	Total Landscaped Area (m^2)		30%	6,358.47 m^2 (32%)	✓
	Zone Provision - Table 101, 102, 131, 111A		***Required***	***Proposed***	***Compliance***
Townhouse	Resident Parking	Type A	0.75/unit	.75/unit	✓
		Type B	0.75/unit	1/unit min.	✓
	Visitor Parking		0.1/unit (1.2)	0	×
Planned Unit Development	Resident Parking	Type A	22.5	45	✓
		Type B	71.25	95	✓
	Visitor Parking		12.5	0	×
	Minimum width of private way (m)		6	6.5	✓
	Setback of any wall of a min. residential building of a private way (m)		1.8	0.25	×
	Minimum setback of a garage door to private way (m)		5.2	0.25	×

* Special Provision required the following permitted use (townhouse) to have the maximum building height of 10 metres. Unless the building has a peaked roof having a slope of 1 in 3 (4/12 pitch) or steeper, in which case the maximum building height is as per the table above.

Table 5 – Zoning Provisions Block 22, zone R5Y[2312]

Principle Dwelling Type	*Zone Provision – Table 162A*		*Required*	*Proposed*	*Compliance*
Townhouse	Minimum Lot Width (m)	Type A	6	5.79	×
		Type B	6	4.75	×
		Type C	6	9.58	✓
		Type D	6	6.72	✓
	Minimum Lot Area (m^2)	Type A	150	104.80	×
		Type B	150	85.97	×
		Type C	150	173.40	✓
		Type D	150	121.63	×
	Maximum Building Height		11	11.5	×
	Minimum Front Yard Setback		3	3	✓
	Minimum Corner Side Yard Setback		3	4.36	✓
	Minimum Rear Yard Setback		6	1.0	×
	Minimum Interior Side Yard Setback		1.2	1.5	✓
Stacked Townhouse	Minimum Lot Width (m)		18	39.19	✓
	Minimum Lot Area (m^2)		450	971.91	✓
	Maximum Building Height		11	13.8	×
	Minimum Front Yard Setback		5	4.37	✓

	Minimum Corner Side Yard Setback	3	3.16	✓
	Minimum Rear Yard Setback	7.5	3.85	×
	Minimum Interior Side Yard Setback	3	4.75	✓
Planned Unit Development	Minimum Lot Width (m)	N/A	N/A	
	Minimum Lot Area (m^2)	1,400 m^2	4,594.19	✓
	Maximum Building Height (m)	11	13.8	×
	Minimum Front Yard Setback (m)	3	3	✓
	Minimum Corner Side Yard Setback (m)	3	East: 4.11 West: 4.37	✓
	Minimum Rear Yard Setback (m)	6	3	×
	Minimum Interior Side Yard Setback (m)	1.2	N/A	
	Total Landscaped Area	30%	37%	✓
	Zone Provision - Table 101, 102, 131, 111A, 163	***Required***	***Proposed***	***Compliance***
Townhouse	Resident Parking Type A	0.75/unit (3)	1/unit min. (6)	✓
	Type B	5.2	7	✓
	Visitor Parking	0.1/unit (1.1)	0	×
Stacked Townhouse	Minimum Landscaping (% of lot)	30%	33.6%	✓

	Resident Parking		0.5/unit (20)	0.42/unit (20)	✓
	Visitor Parking		4.0	0	×
	Bicycle Parking		20	20	✓
Planned Unit Development	Resident Parking	Type A	3	6	✓
		Type B	5.25	7	✓
		Stacked	20	20	✓
	Visitor Parking		5.1	0	×
	Minimum width of private way (m)		6m	6.5m	✓
	Setback of any wall of a min. residential building of a private way (m)		1.8m	1m	×
	Minimum setback of a garage door to private way (m)		5.2m	1m	×
	Bicycle Parking		20	26	✓

Table 6 – Zoning Provisions Block 24, zone R5Y[2312]

Principle Dwelling Type	*Zone Provision – Table 162A*		*Required*	*Proposed*	*Compliance*
Townhouse	Minimum Lot Width (m)	Type A	6	5.79	×
		Type B	6	4.75	×
		Type C	6	8.22	✓
		Type D	6	6.41	✓
	Minimum Lot Area (m^2)	Type A	150	104.8	×
		Type B	150	85.97	×
		Type C	150	136.04	×
		Type D	150	116.2	×
	Maximum Building Height		11	11.5	×
	Minimum Front Yard Setback		3	3	✓
	Minimum Corner Side Yard Setback		3	3	✓
	Minimum Rear Yard Setback		6	0.25	×
	Minimum Interior Side Yard Setback		1.2	1.2	✓
Planned Unit Development	Minimum Lot Width (m)		N/A	N/A	✓
	Minimum Lot Area (m^2)		1,400	16,075.91	✓
	Maximum Building Height (m)		11	13.8	×
	Minimum Front Yard Setback (m)		3	3	✓

	Minimum Corner Side Yard Setback (m)		3	3	✓
	Minimum Rear Yard Setback (m)		6	3	×
	Minimum Interior Side Yard Setback (m)		1.2	5.5	✓
	Zone Provision - Table 101, 102, 131, 111A		***Required***	***Proposed***	***Compliance***
Townhouse	Resident Parking	Type A	0.75/unit	1.5/unit min.	✓
		Type B	0.75/unit	1/unit	✓
	Visitor Parking		0.1/unit	0	×
Planned Unit Development	Resident Parking	Type A	16.5	12	✓
		Type B	44.2	59	✓
		Stacked	22	44	✓
	Visitor Parking		16.5	3.0	×
	Minimum width of private way (m)		6	6.5	✓
	Setback of any wall of a min. residential building of a private way (m)		1.8	0.25	×
	Minimum setback of a garage door to private way (m)		5.2	0.25	×
	Bicycle Parking		22	18	✓
	Total Landscaped Area		30%	4,674.19 (29%)	×

5.0 OVERVIEW OF INDIVIDUAL TECHNICAL STUDIES

5.1 GEOTECHNICAL STUDY

The Geotechnical Study completed by Paterson Group August 8, 2017 will be submitted as part of the Site Plan Control and Minor Zoning By-law Amendment application. The geotechnical report provides recommendations during the stages of development for the proposed blocks. These recommendations revolve around the sampling and testing of concrete and fill materials, silt clay deposit and observation for excavation side slopes.

5.2 TRANSPORTATION IMPACT STUDY

The Transportation Overview completed by Novatech August 3, 2017 will be submitted as part of the Site Plan Control and Minor Zoning By-law Amendment application. This transportation overview is in support of the Plan of Subdivision submitted October 2016, which a Community Transportation Study was completed and submitted by Novatech. The transportation overview can be summarized in the following points:

No mitigation measures are needed to accommodate the proposed development.
On-site pedestrian walkways will be provided throughout the three blocks as shown on the proposed site plan, connected by pedestrian facilities along adjacent roadways. Walkways will connect the stacked townhouse units to the surface parking and mews.
A temporary transit route will be provided when at least 50 units are built and occupied.

5.3 SERVICING AND STORMWATER MANAGEMENT REPORT

The Functional Servicing and Stormwater Management Report for each of Block 15, 22, and 24 completed by DSEL August 2017 will be submitted as part of the Site Plan Control and Minor Zoning By-law Amendment application. For all proposed blocks of development, the following conclusions and recommendations are made:

There is sufficient pressure for water distribution and fire flow to support the development.
The proposed LID practices use underground storage tanks and oversized perforated pipes to infiltrate roof runoff, the proposed development meets the criteria outlined in the LID Demonstration Project.

5.4 NOISE ASSESSMENT REPORT

The Transportation Noise Assessment Report completed by Valcoustics Canada Ltd. August 4, 2017 and will be submitted as part of the Site Plan Control and Minor Zoning By-law Amendment application. The transportation noise assessment report provided the following recommendations for the proposed development of Blocks 15, 22, and 24:

- When building plans are provided, they must use appropriate construction for exterior walls, windows, and doors.
    - This is dependent on the wall and window areas relative to the floor areas.
- Based on projected sound levels, upgraded exterior window construction is anticipated for dwellings adjacent to Hemlock Road.
- The report provides a list of dwellings that require central air conditioning to reduce the sound level on the outside windows.
- Sound level limits do not apply to rooftop terraces because they are less than 4 metres in depth. If the building design is modified to include terraces greater than 4 metre depth or grade level amenities are added, the study will need to be updated to include these details.
- Exact calculations for wall and window noise requirements cannot be understood at this time, the final architectural plans are needed. Currently, warning clauses would be included for dwelling occupants indicating that the building has been designed to provide sound isolation performance that will result in the indoor sound level limit being met when windows and exterior doors are closed.

5.5 NATURAL ENVIRONMENTAL ASSESSMENT AND ENVIRONMENTAL IMPACT ASSESSMENT

The Tree Conservation Report completed by Kilgour & Associates July 31, 2017 will be submitted as part of the Site Plan Control and Minor Zoning By-law Amendment application. The tree conservation report found that currently, the three blocks are mostly cleared of trees. Upon the proposed development, no trees will remain on the blocks, meaning that no tree protections are likely to be required. If trees are planted on neighbouring blocks before construction begins within Mattamy's areas, to minimize impact on those trees, tree protection measures are required.

6.0 CONCLUSION

The proposed development is consistent with the Provincial Policy Statement 2014, meets the general intent of the City of Ottawa Official Plan, the former CFB Rockcliffe Secondary Plan, the former CFB Rockcliffe Community Design Plan, the various City and CLC Urban Design Guidelines and Architectural Controls described herein and the general intent of the R4 and R5 zones in the City's Zoning Bylaw 2008-250.

It is our opinion that through the implementation of good planning principles and site design elements the proposed development supports the City's vision for these lands particularly in locations close to the City's rapid transit system. The proposed development provides an excellent opportunity to realize the vision of the Community Design Plan by providing compact, innovative and dense forms of housing types while achieving an improved public realm for the area.

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