

Planning Rationale &Integrated Environmental Review
In Support of a Draft Plan of Subdivision and Zoning By-Law Amendment
1053, 1075 and 1145 March Road City of Ottawa

This planning rationale and integrated environmental review has been prepared by:

Novatech

Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario K2M 1P6



On behalf of : **CU Developments Inc.**





July 24, 2018 Novatech File: 116132 Ref: R-2018-088

July 24 2018

City of Ottawa
Planning, Infrastructure and Economic Development Department
110 Laurier Ave. West, 4th Floor
Ottawa, Ontario
K1P 1J1

Attention: Louise Sweet, Planner III

Reference: 1053, 1075 and 1145 March Road

Draft Plan of Subdivision and Zoning By-Law Amendment

Planning Rationale and Integrated Environmental Review Statement

Novatech is pleased to submit this Planning Rationale and Integrated Environmental Review Statement on behalf of CU Developments Inc. in support of Draft Plan of Subdivision and Zoning By-Law Amendment applications for lands municipally known as 1053, 1075 and 1145 March Road in Kanata North.

CU Developments Inc. intends to develop a residential subdivision with a total of 825 units including 295 single detached dwellings, 314 townhouse dwellings, and 216 multi-unit residential dwellings. The subdivision is in the northwest quadrant of the Kanata North Community Design Plan and incorporates a portion of the north tributary of Shirley's Brook, as well as institutional blocks, a neighbourhood park, and a stormwater management pond. The subdivision will develop in multiple phases.

The attached Planning Rationale and Integrated Environmental Review outlines the proposed development, summarizes the required technical studies, and demonstrates that the proposal is consistent with relevant provincial and municipal policy documents.

Should you have any questions or comments, please do not hesitate to contact me.

Yours truly,

NOVATECH

Ellen Potts, BES (Honours Planning)

Planner

TABLE OF CONTENTS

1.0 INT	RODUCTION	1
1.1 1.2 1.2.1 1.2.2 1.2.3	2 Kanata North Community Design Plan	3 5 5 8 11
2.0 THI	E PROPOSAL	13
2.1 2.2	Proposed Development Proposed Zoning By-law Amendment	15 21
3.0 PO	LICY REVIEW	23
3.1 3.2 3.3 3.4	Provincial Policy Statement City of Ottawa Official Plan Kanata North Community Design Plan Building Better and Smarter Suburbs	25 29 33 34
4.0 INT	EGRATED ENVIRONMENTAL REVIEW	39
4.1 4.2 4.3 4.4 4.5 4.6 4.7	Archaeological Resource Assessment Environmental Impact Statement and Tree Conservation Report Phase 1 Environmental Site Assessment Geotechnical and Hydrogeological Investigation Noise Control Feasibility Study Site Servicing and Stormwater Management Report Transportation Impact Assessment	41 43 43 43 44 44
5.0 CO	NCLUSION	45
API	PENDICES	48
	Appendix A - Draft Plan Appendix B - Zoning Schedule	48 50



TABLE OF CONTENTS

Figures & Tables

Figure 1: Location of Subject Lands	4
Figure 2: Shirley's Brook Tributaries	5
Figure 3: Existing Surroundings Context	5
Figure 4: City of Ottawa Official Plan, Schedule B - Urban Policy Plan	6
Figure 5: OP Schedule E - Urban Road Network	7
Figure 6: OP Schedule C - Primary Urban Cycling Network	7
Figure 7: OP Schedule I - Scenic Entry Route	7
Figure 8: OP Schedule D - Rapid Transit Network	7
Figure 9: Demonstration Plan Showing Proposed Subdivision Boundary	9
Figure 10: Existing Zoning	11
Figure 11: Proposed Draft Plan	15
Figure 12: Pedestrian Connectivity Plan	17
Figure 13: Parkland Comparison - CDP and Proposed Subdivision	18
Figure 14: Storm Water Management Pond Comparison	20
Figure 15: Southwest Wooded Area - 2015 GeoOttawa Air Photo	30
Figure 16: Southwest Wooded Area - 2017 GeoOttawa Air Photo	30
Table 1: Parkland Dedication Based on Official Plan	19
Table 2: Parkland Dedication Based on Demonstration Plan	19
Table 3: Proposed Zoning Schedule	21



INTRODUCTION

1.0 INTRODUCTION

Novatech has been retained by CU
Developments Inc. to prepare a Planning
Rationale in support of a Draft Plan of
Subdivision and Zoning By-Law Amendment
(ZBLA) to permit the development of 1053,
1075 and 1145 March Road in Kanata North
(the "Subject Lands"). The Subject Lands are
in the northwest quadrant of the Kanata North
Urban Expansion Area (KNUEA) which is
subject to the Kanata North Community Design
Plan (CDP).

An Integrated Environmental Review Statement (IER) has been prepared as part of this Rationale, as required under Section 4.7 of the Official Plan. The purpose of an IER is to demonstrate how supporting studies influence the design of the development with respect to effects on the environment and compliance with the appropriate policies of Section 4 of the Official Plan.

The Subject Lands' boundary is irregular due to existing land uses and privately-owned parcels of land along March Road consisting of developed residential properties with existing single detached houses and institutional uses including the St. Isidore Church and the St. Isidore Catholic School. The majority of the Study Area is undeveloped and consists of open cultivated fields and recently fallow regenerating meadows. A tributary for Shirley's Brook, referred to as Tributary #2 in the CDP, runs through the Subject Lands in the northwest to southeast direction. A second Shirley's Brook tributary, referred to as Tributary #3, runs from the northwest to southeast direction just south of the Subject Lands, as shown in Figure 2.

1.1 Site Location and Context

The Subject Lands are owned by CU Developments Inc. and encompass approximately 48.05 hectares. The lands are legally described as Part of Lot 13 and 14, Concession 3, Township of March.

The Subject Lands include most of the northwest quadrant on the KNUEA, as shown on **Figure 1**.



Figure 1: Location of Subject Lands

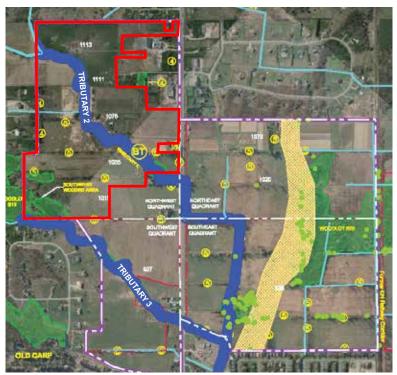


Figure 2: Shirley's Brook Tributaries (source: KN CDP, pg. 21)

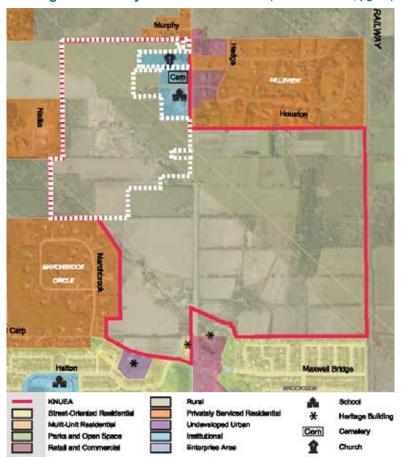


Figure 3: Existing Surrounding Context (source: KN CDP, pg. 17)

A number of rural estate subdivisions are located around the periphery of the Subject Lands: Hillsview subdivision to the northeast, Panandrick Estates to the west, and Marchbrook Circle to the southwest, as shown in Figure 3. St. Isidore Catholic Church and cemetery, and St. Isidore Catholic School abut the Subject Lands to the east, with a landscape depot and pool company located directly across March Road. Several other uses are located immediately south of the KNUEA boundary including a street-oriented residential subdivision, retail and commercial lands at the intersection of March Road and Maxwell Bridge Road, an institutional site containing Jack Donohue Public School, and various parks and open spaces.

1.2 Planning Context

1.2.1 City of Ottawa Official Plan

The Subject Lands are designated General Urban Area and Urban Natural Features in the City of Ottawa Official Plan. An excerpt from Schedule B - Urban Policy Plan, is provided as Figure 4.

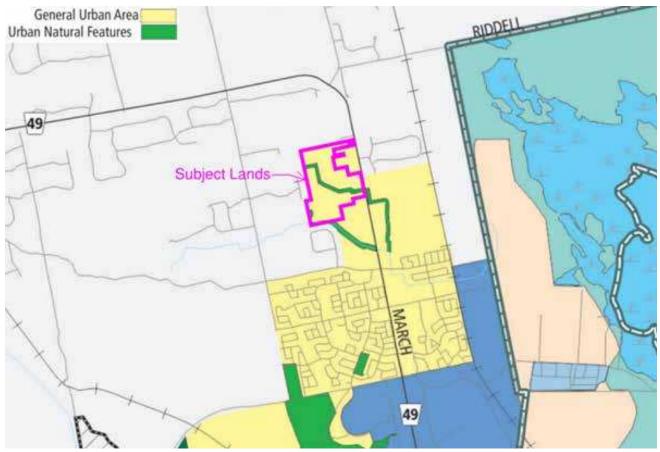


Figure 4: City of Ottawa Official Plan, Schedule B - Urban Policy Plan

The General Urban Area designation permits a wide range of uses, including housing, employment, retail, service, cultural, leisure, entertainment and institutional uses. The proposed residential, institutional and open space uses are permitted in the General Urban Area.

Urban Natural Features are identified natural landscapes including woodlands, wetlands, watercourses and ravines that provide a valuable contribution to biodiversity and wildlife habitat in the urban area and provide an amenity to residents. Policies for Urban Natural Features are set out in Section 3.2.3 of the Official Plan.

March Road is designated as an arterial road on Schedule E – *Urban Road Network*. The collector roads identified in the Kanata North

CDP are shown on Schedule E as collectors (**Figure 5**). March Road is also designated as an On-Road Cycling Route on Schedule C – *Primary Urban Cycling Network*, with off-road cycling routes (multi-use pathways) shown alongside the collector roads (**Figure 6**). March Road is also designated as a scenic entry route on Schedule I – *Scenic Entry Routes* (**Figure 7**).

The Official Plan also identifies March Road as a Bus Rapid Transit (BRT) route on Schedule D – Rapid Transit Network (Figure 8). The northern terminus is located within the Subject Lands, also identified as the location of a parkand-ride facility.

Section 3.2 of this report contains further discussion of Official Plan policies.

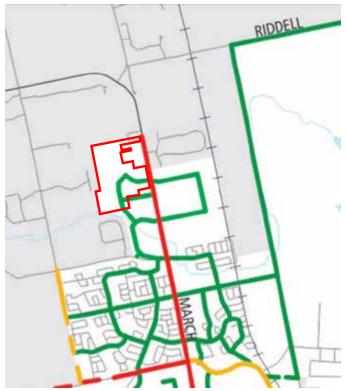


Figure 5: OP Schedule E - Urban Road Network

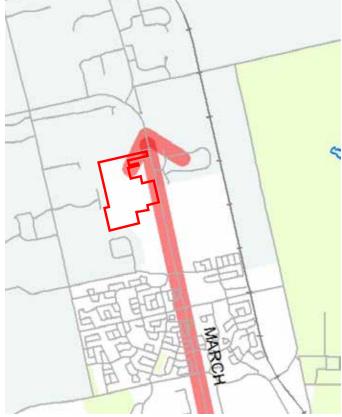
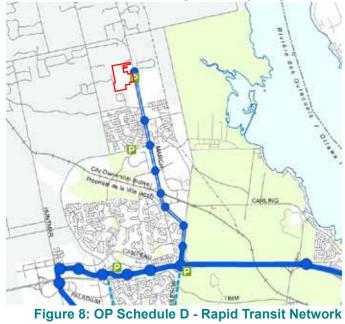


Figure 7: OP Schedule I - Scenic Entry Routes



Figure 6: OP Schedule C - Primary Urban Cycling Network



1.2.2 Kanata North Community Design Plan

The Kanata North CDP was adopted in June of 2016 as part of Official Plan Amendment (OPA) 173 to establish a community-wide land-use framework for the KNUEA that reflects the principles, objectives and policies for community development as directed by the Official Plan.

The KNUEA is approximately 181 hectares in area. It was established as one of the City's Urban Expansion Areas during the 2009 Official Plan review through OPA 76 to accommodate the projected population growth to 2031. The major landowners in the area, known collectively as the Kanata North Land Owners Group (KNLOG), then initiated a Community Design Plan process to fulfill the requirements of the Official Plan to permit the review of development applications in the KNUEA. The KNLOG represent approximately 87% of the land within the KNUEA.

The Sponsoring Landowners include

- Metcalfe Realty Company Ltd.
- Brigil (3223701 Canada Inc.)
- Valecraft (8409706 Canada Inc.)/JG Rivard Ltd.
- CU Developments Inc. [formerly Junic/ Multivesco (7089121 Canada Inc.)]

Early in the process formal invitations were sent to other landowners to participate; however, none other than the group listed above chose to join the KNLOG. Non-participating landowners have been involved in the CDP process through consultation and opportunities to comment as the plan evolved.

The CDP process was integrated with the OPA process and the Municipal Class Environmental Assessment (Class EA) processes for associated infrastructure processes. The

objective of this integrated process was to create a set of guiding documents that would help shape the development of Kanata North. The guiding documents include:

- Kanata North Community Design Plan, Prepared by Novatech, Report No.: R-2016-020, dated June 28, 2016 (CDP)
- Kanata North Master Servicing Study, Prepared by Novatech, Report No.: R-2016-041, dated June 28, 2016 (MSS)
- Kanata North Environmental Management Plan, Prepared by Novatech, Report No.: R-2016-017, dated June 28, 2016 (EMP)
- Kanata North Transportation Master Plan, Prepared by Novatech, Report No.: R-2015-161, dated June 28, 2016 (TMP)

Based on the existing conditions research that was conducted and public consultation, key structural elements were identified as the "building blocks" of the CDP and were used to produce preliminary land use concepts and public workshops. The building blocks include:

- Stormwater management ponds
- Schools
- A public library
- · Parks and recreational facilities
- Park-and-Ride facilities
- Retail/Commercial Space

Based on these land use concepts, four alternative land use concepts were developed. Following review of these concepts, a number of plans were advanced which reflected comments received at the public meetings and technical analysis. The culmination of this process resulted in the Demonstration Plan, as shown in **Figure 9**.





Figure 9: Demonstration Plan Showing Proposed Subdivision Boundary (source: KN CDP, pg. 56)

Several factors influenced the location of these building blocks throughout the KNUEA. Given the topography of the KNUEA, which slopes toward the Ottawa River in the east, it was determined that at least one storm pond would be required on the west side of March Road.

The locations and sizes of the school blocks were selected based on the wishes of the four area school boards (OCDSB, OCSB, CEPEO, and CECCE). Stakeholder discussions determined that co-locating a public library within a school or within the commercial core area would be preferable to reserving a specific location through a standalone designation within the CDP.

The locations and sizing of park blocks were determined through extensive consultation with the City based on the parkland dedication policies of the Official Plan, Section 4.10, the Parks and Pathways Manual (2012), and priorities of the Parks and Recreation department. Parkland was distributed to ensure convenient access for all residents.

Kanata North was determined as the favoured location for a Park and Ride facility. It was determined that a parcel of 2.5 hectares would be sufficient to provide 500 parking spaces to meet the projected demand.

The location of the Retail and Commercial Land was determined through a Retail Market Demand and Feasibility Study, prepared by Shore-Tanner & Associates, dated January 2014, which recommended the east side of March Road, and not within the subject lands. The Subject Lands contain several land use designations, including street-oriented and multi-unit residential, institutional including a portion of a school block, a fire hall and park-and-ride facility, a stormwater management block, a neighbourhood park, and areas designated as Natural Feature (i.e. the Tributary #2 corridor and the southwest wooded area). Please see Section 3.3 of this Rationale for a discussion of how the proposed development complies with the relevant CDP policies.

The proposed subdivision, as detailed in Section 2.1 of this Rationale, and its supporting studies (i.e. the Site Serviceability and Stormwater Management report, the Noise Feasibility Study, and the Transportation Impact Assessment) are consistent with the Kanata North CDP Demonstration Plan and the above-noted guiding documents. Based on the detailed analysis that was conducted for the development proposal, some recommendations from the guiding documents have been modified and updated. For example, minor modifications have been made to the street layout and to the shape of the stormwater management facility. Each supporting study contains details and rationale regarding the specific modifications. These modifications maintain the plan presented in the CDP while proving its conceptual feasibility for the development which has been identified for the KNUEA.

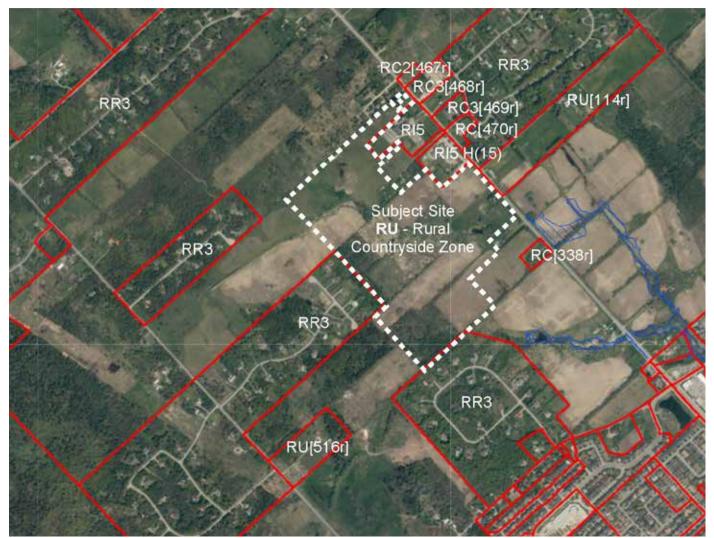


Figure 10: Existing Zoning

1.2.3 Existing Zoning (City of Ottawa **Zoning By-law 2008-250)**

The Subject Lands are currently zoned RU-Rural Countryside Zone under City of Ottawa Zoning By-Law 2008-205, as shown in Figure 10. The Zoning will be amended to reflect the proposed subdivision and bring the zoning into conformity with the Official Plan and Kanata North CDP. See **Section 2.2** of this Rationale for further discussion of the proposed zoning.

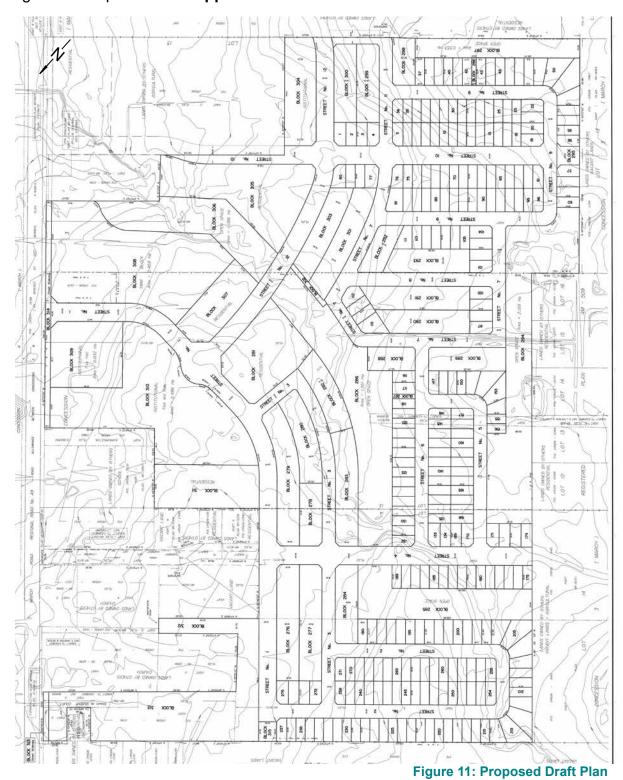
2.0

THE PROPOSAL

2.0 THE PROPOSAL

2.1 **Proposed Development**

The proposed Draft Plan is shown as Figure 11 and a larger version provided as **Appendix A**.



The proposed development comprises residential, institutional, and open space uses. It consists of 825 residential units including 295 single detached dwellings, 314 townhouse dwellings, and 216 multi-unit residential dwellings to be developed in phases, consistent with the estimated unit yield for the northwest quadrant of the KNUEA presented as Table 7 in the CDP. The proposal also includes blocks for a stormwater management pond, a portion of a school block reserved for the French Public School Board of Eastern Ontario (CEPEO), a future fire hall, and a future park and ride facility to be the terminus of the bus rapid transit planned for March Road. A linear 2.13-hectare neighbourhood park along the western boundary of the site will contain recreational facilities and continue the pathway network through the community. As discussed in **Section 2.2** of this Rationale, Tributary #2 will be realigned during site development. Several connected Open Space blocks will form a minimum 40-metre wide corridor along this watercourse. An additional 0.55-hectare Open Space block is provided in the southwest corner of the Subject Lands to preserve a portion of the Southwest Wooded Area and to provide a buffer to Tributary #3.

The future residential blocks have been located in accordance with the Demonstration Plan in the CDP to provide additional density along March Road in proximity to the planned Bus Rapid Transit route and the future mixed-use blocks of the KNUEA. The proposed residential unit yields for the Subject Lands are also consistent with the Official Plan policies for the entire KNUEA, as summarized in Table 1 of the CDP. The phasing of development will be determined later through the detailed design process.

The lands around St. Isidore Catholic Church and St. Isidore Catholic School have been accounted for in the development of the Subject Lands and are shown as blocks on the Plan of Subdivision. No road pattern has been defined as these lands will be included in future development applications. However, the supporting documents make reference to and allow for the development of these lands.

The proposed subdivision, as described above and detailed below, is generally consistent with the Demonstration Plan. Some minor modifications were made to the subdivision layout such as changes to the road pattern, park width, and the size of the stormwater management pond. These modifications are outlined in the following sub-sections.

Street Network, Cycling, and Pedestrian Connections

The proposed street pattern features a modified grid street pattern and maintains the collector roads layout set out in the Demonstration Plan in the CDP. The proposed street pattern is consistent with the general local road pattern presented in the Demonstration Plan with minor adjustments to promote the efficient use of land for improved lot configurations, accessibility, and connectivity throughout the proposed subdivision, as discussed in the pre-application consultation meeting, dated September 7, 2017.

The primary access intersection to the subdivision is provided off of March Road at Street 1, just north of the proposed stormwater management facility. A roundabout will be provided at the intersection of Street 1, Street 12, and the planned Park and Ride Facility, consistent with the findings of the KNUEA CDP TMP.

All cross-sections for roadways within the Subject Lands were developed through the KNUEA CDP TMP. The collector roads will be designed with a 24-metre right-of-way (ROW) containing a 7-metre road platform, a 2.5-metre parking lane, a multi-use pathway (MUP) on one side, and a sidewalk on the other side, as detailed in the Transportation Impact Study (see **Section 4.7** of this rationale). All local roads will have an 18 metre ROW containing an 8.5-metre road platform. Sidewalks will be provided on one side of some local roads

and along all park frontage as per the preapplication consultation meeting comments, as shown on Figure 12. On-street parking will be provided on both sides of all local roads.

A MUP will cross through the proposed subdivision along the open space corridor with mid-block pedestrian cross-overs (PXOs) located at collector road intersections to facilitate safe pedestrian and cyclist crossings.



Figure 12: Pedestrian Connectivity Plan

Parkland

Block 294 marks the location of the proposed 2.13-hectare linear neighbourhood park. The park is located along the western edge of the Subject Lands, abutting proposed local streets to the east and the rear yards of existing rural estate lots to the west. This location was strategically chosen to serve as a buffer between the proposed residential uses and the existing lots. Its location and orientation are consistent with the neighbourhood park shown in the CDP with minor adjustments to avoid pinching between the proposed recreational

pathway and mini soccer field, as identified in the pre-application consultation meeting. This is demonstrated through the comparison of the Neighbourhood Park in the CDP (top) and the proposed park block (bottom) in Figure 12.



Figure 13: Parkland Comparison - CDP and Proposed Subdivision

The park will be built by the developer, as depicted in the Facility Fit Plan, and transferred to the City of Ottawa. This includes a half basketball court with two hoops, a puddle rink, new trees, the preservation of some existing trees, a mini soccer field, benches, picnic tables, waste receptacles, bike racks, a playground, a sand play area, and a shade shelter.

Per Section 4.10 of the Official Plan, parkland dedication requirements are calculated at 1 hectare for every 300 dwelling units when densities exceed 18 units per net hectare; and 2% of the area of land that is developed or redeveloped for industrial or commercial purposes. Based on the CDP Demonstration Plan, 9.88 hectares of parkland are required for 2,965 residential units and 0.32 hectares are required for 15.91 hectares of mixed-use land. This totals a parkland dedication requirement of 10.20 hectares based on the Official Plan policies, as shown in Table 1.

Per these requirements, the CDP includes an example of how this target could be met based on the Demonstration Plan, as shown in Table

The CDP Demonstration Plan accounted for 2.11 hectares of parkland in the linear neighbourhood park. However, the proposed subdivision provides a larger 2.13-hectare park.

A parkland agreement between the landowners within the KNUEA will create a mechanism to implement the park system as shown on the CDP Land Use Plan and to equitably transfer compensation for land among the landowners through the City's Parkland Dedication By-law.

CDP DEMONSTRATION PLAN		OFFICIAL PLAN TARGET	PARKLAND AREA	
RESIDENTIAL UNIT COUNT	2965 UNITS	1 Ha/ 300 UNITS	9.88 Ha	
TOTAL MIXED USE AREA	15.91 HA	2% OF TOTAL	0.32 HA	
TOTAL PARKLAND REQUIR	RED		10.20 HA	

Table 1: Parkland Dedication Based on Official Plan (source: KN CDP, pg. 59)

CDP DEMONSTRATION PLAN	PARKLAND AREA
COMMUNITY PARK (SOUTHWEST QUADRANT)	4.23 Ha
NORTHWEST QUADRANT LINEAR PARK	2.11 HA
NORTHEAST QUADRANT NEIGHBOURHOOD PARK	1.72 Ha
SOUTHEAST QUADRANT NEIGHBOURHOOD PARK	2.12 Ha
REMNANT OPEN SPACE ADJACENT TO NATURAL FEATURE AND CREEK CORRIDOR	0.20 Ha
TOTAL PARKLAND PROVIDED	10.37 HA

Table 2: Parkland Dedication Based on Demonstration Plan (source: KN CDP, pg. 59)

Stormwater Management Pond

Block 308 marks the location of the proposed stormwater management pond. As shown in **Figure 14**, the location of the stormwater management block in the Draft Plan (right) is consistent with the Demonstration Plan (left), except that it encompasses the parcel of land at the southwest corner of Street 1 and March Road (1053 March Road). Since this parcel of land was acquired as part of the Subject Lands, the proposed stormwater management bock is larger than what was presented in the CDP.



Figure 14: Storm Water Management Pond Comparison

2.2 **Proposed Zoning By-law Amendment**

Table 3 presents the proposed zoning to permit the subdivision, as described above. Please note that these zones may change due to subsequent discussions during the review process. A larger version of the proposed zoning schedule is provided as Appendix B.

Proposed Land Use	Block on Draft Plan	Proposed Zoning
Residential Street- Oriented	Blocks 1 to 280, 282 to 284, 288 to 293, 298 to 301, and 303	R3Z
Residential Multi-Unit	Blocks 281, 305, 307, and 311	R4Z
Institutional (school, park and ride, fire hall)	Blocks 304, 309, and 310	I1A
Creek Corridors	Blocks 285, 286, 297, 306	EP
Pathways	Blocks 287, 296, and 302	R3Z
SWM Pond	Block 308	01
Neighbourhood Park	Block 294	01

Table 3: Proposed Zoning Schedule



3.0

POLICY REVIEW

3.0 **POLICY REVIEW**

The following subsections outline how the proposed development is consistent with the relevant provincial and municipal policies.

3.1 **Provincial Policy Statement**

The 2014 Provincial Policy Statement (PPS) provides policy directions on land use planning and development matters of provincial interest, as set out in Section 2 of the Planning Act. All decisions affecting planning matters are required to "be consistent with" policies of the PPS

Section 1.1 of the PPS speaks to managing and directing land use to achieve efficient and resilient development and land use patterns.

Policy 1.1.1 states that healthy, liveable and safe communities are sustained by promoting efficient land use patterns with a range and mix of uses arranged so to minimize land consumption and servicing costs. Further, development patterns should avoid environmental or public health and safety concerns, conserve biodiversity, and consider the impacts of a changing climate.

The proposed development will contribute to creating a complete community within Kanata North including housing options for people of all ages and supportive uses such as parks, open space and various institutional uses that will provide amenities for both the local and wider community. The subdivision has been arranged as a modified grid street and pathway pattern around the existing watercourse that runs through the Subject Lands. This street arrangement efficiently uses the land while promoting active transportation, enhancing connectivity, and respecting existing natural features.

Policy 1.1.3.2 requires land use patterns within settlement areas to be based on:

- b) densities and a mix of land uses which:
- 1. efficiently use land and resources;
- 2. are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;
- 3. minimize negative impacts to air quality and climate change, and promote energy efficiency:
- 4. support active transportation;
- 5. are transit-supportive, where transit is planned, exists or may be developed, and;
- 6. are freight-supportive.

The proposed development is consistent with the Land Use Plan and Demonstration Plan in the CDP which envisions a mix of residential dwelling types including singles, semis, towns, and low-rise apartments, an open space corridor that provides a natural buffer along the existing watercourse, a stormwater management pond, institutional blocks, a service mixed use block, and parkland with an integrated pathway network. Infrastructure and public service facilities, including stormwater management facilities, road pattern, parkland, and multi-use trails have been coordinated with adjacent developments and with the wider KNUEA.

Section 1.1.3.6 of the PPS states that new development should occur adjacent to the existing built-up area and allow for the efficient use of land. The proposed development is located within the KNUEA which is adjacent to the existing developed urbanized area.

Public Spaces, Recreation, Parks, Trails and **Open Space**

Policy 1.5.1 states that healthy, active communities should be promoted by planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.

Streets and pathways have been arranged in a modified grid pattern, connected to existing and future adjacent developments. This arrangement creates a dense, continuous network of pedestrian connections to adjacent communities, open spaces and future planned bus and cycling facilities. The future multi-use trail adjacent to the realigned creek corridor will provide active transportation connections to the adjacent communities and City-wide cycling routes.

Infrastructure and Public Service Facilities

Section 1.6 of the PPS states that infrastructure shall be provided in a coordinated, efficient and cost-effective manner to accommodate projected needs. The proposed development will be wholly on municipal services. The Site Servicing and Stormwater Management Report discussed under Section 4.6 of this Rationale, demonstrates that there is adequate infrastructure to support the proposed subdivision.

Transportation Systems

Section 1.6.5 of the PPS promotes safe, energy efficient transportation systems that facilitate the movement of people and goods. The Transportation Impact Assessment discussed under Section 4.7 of this Rationale. addresses interaction with the adjacent

community and confirms that the proposed subdivision can be safely and adequately accommodated.

Wise Use and Management of Resources

Section 2.0 of the PPS - Wise Use and Management of Resources speaks to protecting natural heritage, water, agriculture, mineral aggregate, petroleum, cultural heritage and archaeological resources.

Section 2.1.1 states that *Natural features and* areas shall be protected for the long term: and Section 2.1.2 states that the diversity and connectivity of natural features in an area. and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

Both the Tributary #2 corridor and the Southwest Wooded Area (SWWA) on the Subject Lands are considered Urban Natural Features in the Official Plan. Through the realignment of Tributary #2, as discussed in Section 4.2 of this Rationale, this watercourse will be restored, enhanced, and protected by an open space corridor with an integrated recreational pathway to buffer it from the development while allowing residents to access and enjoy this natural feature. As discussed in Section 3.2 of this rationale, the forest stand that formerly abutted the SWWA was removed by the adjacent landowner. Consequently, the SWWA no longer contains ecological significance.

Section 2.1.6 states that development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

As stated in Section 1.6 of the Environmental Impact Statement (EIS) (see Section 4.2 of this Rationale), the realignment of Tributary #2 will require alteration to fish habitat. The EIS also notes that the Tributary does not appear to provide significant habitat for recreational or commercial fisheries, and the realignment will provide net improvement in the quality of the fish habitat. As such, the EIS concludes that authorization under the Fisheries Act is unlikely to be required, but a submission of a review request will go to the Department of Fisheries and Oceans.

Section 2.1.7 states that development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

As discussed in **Section 4.2** of this Rationale. the Subject Lands contain suitable habitat for three Endangered Species: the Blanding's Turtle, the Bobolink, and the Barn Swallow. As stated in Section 1.6 of the EIS, all structures with Barn Swallow nests were demolished following obtainment of the confirmation of impact registration. Habitat compensation requirements have been fulfilled for the Barn Swallow impact registrations, and long-term monitoring will continue in 2018, 2019, and 2020. Mitigation and compensation measures to provide an overall benefit to Blanding's Turtles will be determined in consultation with the Ministry of Natural resources and Forestry (OMNRF) through the Overall Benefit Permit process. Impacts to Bobolink habitat will be addressed based on the extent of habitat that is present at the time of development. The

OMNRF Online Registration Process and habitat compensation requirements implies no net loss of habitat.

Section 2.1.8 states that development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

As described above, the SWWA no longer contains ecological significance due to the removal of the abutting forest stand by the Land Owner. Tributary #2 will be restored, enhanced, and protected by an open space corridor.

Section 2.2.1 states that *Planning Authorities* shall protect, improve or restore the quality and quantity of water; and Section 2.2.2 states that Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored.

As discussed in **Section 4.2** of this rationale, the EIS confirms that the proposed development is not anticipated to have a significant negative effect on the natural environment. Notably, the KNUEA Environmental Management Plan (EMP) establishes a 40-metre-wide corridor of retained and/or enhanced habitat around the tributaries of Shirlev's Brook. Within the Subject Lands, this corridor is provided by connected Open Space blocks that run in a northwest to southeast direction through the site and cover approximately 4.07 ha of land. Section 2.3.1 states that *Prime agricultural* areas shall be protected for long-term use for agriculture.

The Subject Lands are not identified as prime agricultural lands.

Section 2.4.1 states that Minerals and petroleum resources shall be protected for long-term use.

The Subject Lands do not contain mineral or petroleum resources.

Section 2.5.1 states that Mineral aggregate resources shall be protected for long-term use and, where provincial information is available, deposits of mineral aggregate resources shall be identified.

The Subject Lands do not contain mineral aggregate resources.

Section 2.6.1 states that Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

The Subject Lands do not contain significant built heritage resources or significant cultural heritage landscapes.

Health and Safety

Section 3.0 of the PPS - Protecting Human Health and Safety focuses on reducing the potential for public cost or risk to residents from natural or human-made disasters.

Regarding natural hazards, Section 3.11 states that Development shall generally be directed to areas outside of: (b) hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/

or erosion hazards. Section 3.1.2 states that Development and site alteration shall not be permitted within: (d) a floodway regardless of whether the area of inundation contains high points of land not subject to flooding.

The Mississippi Valley Conservation Authority's (MVCA) post-development floodplain mapping will be modified as proposed in the EMP such that the 100-year floodplain will be confined within the protected 40m corridor. See Section 4.6 of this rationale for further discussion.

Regarding human-made hazards, Section 3.2.1 states that Development on, abutting or adjacent to lands affected by mine hazards; oil, gas, and salt hazards; or former mineral mining operations, mineral aggregate operations or petroleum resource operations, may be permitted only if rehabilitation or other measures to address and mitigate known or suspected hazards are under way or have been completed. Section 3.2.2 states that Sites with contaminants in land or water shall be assessed and remediated as necessary prior to any activity on the site associated with the proposed use such that there will be no adverse effects.

Phase 1 ESAs were prepared by Paterson Group Inc. for the Subject Lands and identified no significant concerns or need for further assessment. See Section 4.3 of this Rationale for further discussion.



3.2 City of Ottawa Official Plan

The Subject Lands are designated as General Urban Area and Urban Natural Feature in Schedule B of the City of Ottawa Official Plan. The proposed residential, institutional and open space uses are permitted within the Land Use Designations.

According to Section 3.6.1 of the Official Plan, the General Urban Area 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 proposed residential, institutional, and open space uses are consistent with the general intent and complies with the provisions of Section 3.6.1 General Urban Area.

Section 3.2.3 describes Urban Natural Features as natural landscapes and may include woodlands, wetlands, watercourses and ravines and states that they provide a valuable contribution to biodiversity and wildlife habitat in the urban area and are enjoyed by residents.

Both the Tributary #2 corridor and the Southwest Wooded area on the Subject Lands are considered Urban Natural Features in the Official Plan. Through the realignment of Tributary #2, as discussed in Section 4.2 of this rationale, this watercourse will be restored, enhanced, and protected by an open space corridor with an integrated recreational pathway to buffer it from the development while allowing residents to access and enjoy this natural feature.

A 0.55-hectare Open Space block is located within the southwest corner of the site to

preserve a portion of the Southwest Wooded Area (SWWA) and to provide a riparian buffer for Tributary #3 of Shirley's Brook (see Figure 2). The EMP also recommended the conservation of an additional 0.3-hectare portion of the SWWA to preserve a stand of older growth forest adjacent to Woodlot S-12. However, with the clearing of this older growth forest by the adjacent landowner in 2016, the linkage between Woodlot S-12 and the 0.3-hectare section of the SWWA was eliminated, as shown in Figures 15 and 16. Therefore, the ecological value of the SWWA is no longer significant and is included within the subdivision development lands.

The CDP was specifically drafted to permit some changes in land use designations. In Section 7.2.1 of the CDP, it states that minor changes to the Demonstration Plan and Land Use Plan that result from development applications can be made through the City's development approval process, provided they are consistent with the general intent of the CDP. This is also consistent with Section 3.2.2 - Natural Environment Areas in the Official Plan. Specifically, Policy 9 states that the "boundaries of land designated Natural Environment Area are based on a variety of more detailed mapping sources. When more up-to-date information becomes available, such as detailed environmental studies, an adjustment to the interpretation of the boundary may be warranted." The EIS provides the more updated information concerning the SWWA. See **Section 4.2** of this rationale for further details.



Figure 15: Southwest Wooded Area - 2015 GeoOttawa Air Photo



Figure 16: Southwest Wooded Area - 2017 GeoOttawa Air Photo

Policy 5 of Section 3.2.3 states that development site alteration will not be permitted within 30 metres of the boundary of a designated Urban Natural Feature unless an Environmental Impact Statement demonstrates that there will be no negative impacts on the natural features within the area of their ecological functions.

As discussed in **Section 4.2** of this rationale. the EIS indicated that the proposed development is not anticipated to have significant impacts on the existing natural environment. In fact, the report states that the realignment and subsequent restoration activities will improve the quality of the aquatic habitat and riparian areas for Blanding's Turtles (a Species at Risk) and other wildlife.

As stated in Section 2.5.1 – Urban Design and Compatibility, the proposed development will be reviewed based on the evaluation criteria and design objectives under Section 2.5.1 and Section 4 11 of the Official Plan

To enhance the sense of community by creating and maintaining places with their own distinct identity.

The proposed subdivision will contribute to making the KNEUA a contemporary masterplanned community that reflects high-quality urban design standards. The proposed built form and design of the subdivision is consistent with surrounding communities. The subdivision aligns with the development goals and objectives for the KNUEA by proposing efficient, transit and pedestrian friendly development. The proposed development defines the public realm by providing street orientated residential units and encouraging active transportation by creating an inviting and safe environment. The connected Open Space blocks along the realigned and restored Tributary #2 will contribute to creating a distinct identity for this community. The stormwater management facility will act as a gateway feature to the subdivision and strengthen the community's identity.

To define quality public and private spaces through development.

The proposed street-oriented single detached homes and townhouses will frame the public streets, creating a consistent setback to define private amenity spaces. End units with entrances on corner facades, and window streets along the proposed park and open spaces will generate a quality streetscape.

To create places that are safe, accessible and are easy to get to and move through.

The proposed subdivision accommodates all modes of transportation. Multiple connections are provided to adjacent communities and amenities. Recreational pathways are provided throughout the proposed development connecting the parkland and open space corridor to the surrounding communities and amenities. Sidewalks are provided throughout the community along all collector streets and some local streets to create a continuous network that provides direct access to surrounding amenities and parks.

To ensure the new development respects the character of existing area.

The proposed subdivision has taken into consideration the surrounding existing and proposed developments to establish a consistent community identity. Its design is consistent with the Demonstration Plan that was created for the KNUEA to achieve a coherent community.

To consider adaptability and diversity by creating places that can adapt and evolve easily over time and that are characterized by variety and choice.

The proposed subdivision includes a range of housing choices, including single detached, townhome, and multi-unit residential dwellings.

To understand and respect natural processes and features in development design.

The proposed subdivision has been designed with an understanding of the existing natural conditions such as soil. Natural Features, and existing vegetation. More detailed analysis in this regard has been provided in the summary of technical studies provided as Section 4.0 of this rationale.

To maximize energy-efficiency and promote sustainable design to reduce the resource consumption, energy use, and carbon footprint to the built environment.

The proposed development allows for high efficiency in street network to minimize land consumption. Higher density residential dwellings are proposed along the collector roads, and adjacent to the planned park and ride facility to support transit use. An active transportation network is provided throughout the Subject Lands to provide convenient and efficient access to adjacent amenities.

Section 4.11 Urban Design Compatible **Development Policies:**

The proposed development allows for an efficient street network to minimize land consumption. Higher density residential dwellings are proposed along the collector roads, and adjacent to the planned park and ride facility to support transit use. An active transportation network is provided throughout the Subject Lands to provide convenient and efficient access to adjacent amenities.

View

According to the Official Plan, no significant view sheds were identified within the Subject Lands. The proposed street pattern will increase views and accessibility to the parkland and to the open space corridor. Window streets along sections of the park and open spaces will also ensure the development provides an active and attractive interface for users of the park and future recreational pathways within the park block.

The proposed stormwater management pond at the southeast corner of the Subject Site will anchor the future intersection of March Road and Street 1 and provide a gateway to the proposed subdivision.

Building Design

The proposed development will display strong architectural design elements that address the public realm and create emphasis on an active street frontage. Design of the singledetached and townhouse dwellings will focus on functionality and interaction with the public street. End units will receive special treatment to ensure an animated facade on both the front and corner. Details of the proposed residential multi-unit blocks will be addressed through subsequent site plan applications.

Massing and Scale

As discussed in **Section 2.0** of this rationale, the proposed development is compatible the nearby rural estates and residential subdivision to the south. The proposed multiunit residential dwellings are appropriately located and scaled within the development to provide increased density in proximity to future commercial and service uses in the KNUEA. the planned park and ride facility and the future BRT route along March Road.

The subdivision has been designed with consideration of the size and form of residential blocks with respect to achieving efficient internal street layout and integration into its surroundings.

High-Rise Building

The proposed subdivision does not include high-rise buildings.

Outdoor Amenity

In addition to the neighbourhood park and open spaces within the subject site, the proposed single detached dwellings and townhouses will have private access to rear yard amenity areas. The multi-unit residential dwellings will provide appropriate amenity space which will be further delineated at the site plan stage.

The proposed subdivision conforms to the Policies of the Official Plan for development in the General Urban Area and in proximity to an Urban Natural Feature, and with regard to design and compatibility. Further discussion of the requirements for technical studies set out in the Official Plan is discussed in Section 4.0 of this Rationale, through the Integrated Environmental Review.

3.3 **Kanata North Community Design Plan**

As discussed in **Section 1.2.2** of this rationale, the Subject Lands are part of the Kanata North CDP. The purpose of the CDP is to establish a community-wide land-use framework to coordinate development that encourages interconnected, vibrant, healthy and distinct neighbourhoods while respecting the area's existing natural heritage features. As stated in Section 4.2 of the CDP, the general guiding principles within its boundaries are:

- Respect existing adjacent communities and neighbourhoods;
- Create a sustainable, resilient, healthy and livable community;
- Respect existing significant natural heritage features:
- Create distinct, yet interconnected, livable neighbourhoods within Kanata North;
- Provide an opportunity for a mix of residential housing types and densities;
- Ensure timely and efficient phasing of future infrastructure:
- Provide a development pattern and efficient transportation system that accommodates and encourages walking, cycling, and transit over automobile use.

The proposed subdivision incorporates these principles by providing a range of residential types and institutional uses with a fully integrated pedestrian and cycling network that encourages active transportation modes and recreational activities and connections to existing and future developments. Further, it respects the existing natural features and functions by providing several open space blocks that create a wide buffer for Tributaries #2 and #3.



Design Guidelines

Section 6.0 of the CDP provides design guidelines to help shape Kanata North as a distinctive and unique community. More specifically, Section 6.2.3 provides the following guidelines for residential transitions and buffers for street-oriented residential development:

Street-Oriented Residential

Deeper lots will be provided adjacent to existing development to accommodate healthy trees and supplemental planting. Average lot depths within the KNUEA will range from 28-32m. Lots adjacent to existing development will range from 34 to 38m to provide deeper rear yards with screening vegetation.

The existing residential lots within the Panandrick View rural estate subdivision that back onto the western edge of the Subject Lands are buffered by the proposed neighbourhood park. As well, the existing residential lots to the south are buffered from the Subject Lands by an Open Space block. Average lot depths throughout the proposed subdivision range from 30 to 32 metres. Lots 37 to 50, which back onto the open space block adjacent to existing rural estate lots, have 35 to 36-metre-deep lots.

At the time of subdivision approval, a Tree Conservation Report (TCR) and a landscape plan will be prepared to confirm healthy and sustainable trees that can be retained along the common property line, and to propose supplemental planting where appropriate to create a natural buffer of native vegetation.

A Tree Conservation report was prepared by McKinley Environmental Solutions in June 2018. See Section 4.2 for details.

A chain link fence will be provided along the property line between existing and proposed residential uses subject to site conditions.

As previously noted, existing residential uses are buffered from proposed residential uses with Park and Open Space blocks. However, the provision of chain link fences will be included as a condition of Draft Plan approval.

Similar housing forms will back onto existing housing, with single detached dwellings backing onto existing singles and townhouses or singles backing existing townhouses.

None of the proposed residential dwellings back directly onto existing residential dwellings. Nonetheless, the proposed townhouses and multi-unit blocks have been located away from existing rural estate dwellings.

3.4 **Building Better and Smarter Suburbs**

Building Better and Smarter Suburbs: Strategic Directions and Action Plan was approved by Planning Committee in March 2015. The document is part of a larger initiative and action group working to address the challenge of supporting land efficiency and functionality in new suburban subdivisions, while at the same time improving urban design and long-term cost effectiveness. The document considers broad, strategic planning and design issues that contribute to the quality, safety, and functionality of a community.



Street Network and Land Use

The proposed subdivision meets the following objectives for Street Network and Land Use as set out in the BBSS Strategic Directions and Action Plan:

- Implement a network of street typologies that complements the land uses, densities and built form within a community.
- Create a highly connected street and block pattern with short blocks to support efficient routing of transit, short distances to transit stops and stations, and intuitive wayfinding.
- Design the street network to respond to and respect natural and cultural features.
- Design the street network to enhance access to public facilities and services; prioritize pedestrian and cycling access for short trips, and walking/cycling connections to transit stations and Park and Ride lots for longer distance trips.
- Integrate the street network with the park and open space system.
- Design the street network and block lengths to include a diversity of routes for vehicular and active transportation in order to minimize bottleneck locations.
- Reduce vehicle operating speeds, particularly on local streets, in order to improve safety by reducing vehicular and pedestrian/cyclist conflicts.
- Create a street system that promotes passive traffic calming and includes traffic calming features built in to the initial designs for local and collector roads.

The proposed street pattern is largely consistent with the Kanata North CDP Demonstration Plan (Figure 9). Collector streets (Street 1, 4, 10, and 12) will have 24-metre ROWs with sidewalks on one side of the street and MUPs on the other side to facilitate pedestrian movement to

community facilities (such as the school and neighbourhood park). Local streets will have 18-metre wide ROWs and are arranged in a modified grid pattern of smaller blocks to facilitate pedestrian movement while limiting opportunities for vehicular cut-through traffic. Local streets with shorter straight lengths will limit vehicular speeds and improve safety for pedestrians and cyclists. Street narrowing and PXOs will be used to further enhance safety at key pedestrian-vehicle intersections throughout the subdivision.

Parks and Open Space

The proposed subdivision meets the following objectives for Parks and Open Space as set out in the BBSS Strategic Directions and Action Plan:

- Achieve an accessible, connected and safe network of open spaces.
- Aim to achieve an urban tree canopy linking the green space system.
- Provide access to a range of parks and open space features within reasonable walking distances.

The proposed development is part of the larger KNUEA, which allocates the number and size of open space and park facilities across the entire study area. The location and size of the proposed neighbourhood park is consistent with the CDP (Figure 12). Sidewalks and pathways will be provided throughout the subdivision and the park to connect the surrounding land uses with the park and open space network. All dwellings will be within a reasonable walking distance of the proposed park.

Consideration was given to a pathway connection from Street 4 to Street 2, but was removed to allow the required space for the preserved tributary to meander within the Open Space corridor. A connection from the proposed multi-use pathway along the Open Space corridor in Block 306 and the stormwater management Block 309 to March Road will be provided as part of this development, as per the pre-application consultation notes.

Stormwater Management

The proposed subdivision meets the following objectives for Stormwater Management as set out in the BBSS Strategic Directions and Action Plan:

- Re-consider use of parks and open space areas for emergency storage and conveyance of stormwater.
- Plan and design beautiful stormwater management ponds that are integrated into the open space system.
- Continue assessing creative and innovative ways to manage and reduce stormwater on a community wide basis, including consideration of using public open spaces.

The proposed stormwater management facility designed by Novatech and detailed in the Site Servicing and Stormwater Management Report is consistent with the KNUEA MSS. Several areas within the proposed subdivision have been identified as potentially suitable locations for the implementation of low impact development (LID) design features (refer to Figure 7 in the Site Servicing and Stormwater Management Report (Report No.: R-2018-071, dated July 23, 2018).

School Sites

The proposed subdivision meets the following objectives for School Sites as set out in the BBSS Strategic Directions and Action Plan:

Prioritize pedestrian and cycling safety on streets around schools.

The Subject Lands include a portion of a school block reserved for the French Public School Board of Eastern Ontario (CEPEO) in the southeast corner of the Subject Lands which will be co-located with the District Park that is to be developed to the south. The school site will be dual zoned for institutional and residential uses in the case that the school board does not decide to provide a school in this location. As discussed in the TIA report, the collector roadway design will encourage the use of active transportation modes for utilitarian trips such as shopping, attending schools, and visiting neighbours.

Parking

The proposed subdivision meets the following objectives for parking as set out in the BBSS Strategic Directions and Action Plan:

- Accommodate two cars per ground-oriented dwelling (one in-garage and one indriveway in single-detached, semi-detached and townhouse units with driveways) while ensuring the visual predominance of front entrances and the inhabited parts of the residence.
- Minimize the potential for conflicts between sidewalk users and vehicles in driveways.
- Minimize driveway widening and lot area dedicated to driveways in order to maximize space for tree planting, landscaping, and stormwater retention.



Use on-street parking as a traffic calming measure on streets already wide enough to accommodate on-street parking.

The proposed zoning will ensure that each dwelling unit can accommodate two cars, one in the garage and one in the driveway, without encroaching on the public sidewalk. Sidewalks will be located to minimize potential driveway conflicts by locating along flanking lots. Onstreet parking will be permitted on all streets.

Road Right-of-Way

The proposed subdivision meets the following objectives for Road Right-of-Way as set out in the BBSS Strategic Directions and Action Plan:

- Balance the needs of all elements within the street right-of-way.
- Ensure a range of street cross-sections that are appropriate for the application, area, and community context.
- Create complete streets that accommodate all modes of transportation.
- Create street environments that enhance safety and livability.
- Create beautiful tree-lined streets as a key component of the public realm.

The street rights-of-way have been designed to accommodate all required streetscape elements including travel lanes, on street parking, sidewalks, landscaping and utilities. The two gateway features identified within the CDP at the intersections of Street 1 and March Road, and Street 1 and Street 12 will have enhanced landscaping and design consideration, as per the pre-application consultation notes. A roundabout will be provided at the intersection of Street 1, Street 12, and the planned park-and-ride facility, consistent with the findings of the KNUEA CDP TMP, to improve circulation within the

community. Detailed streetscape plans will be prepared through detailed design and will be informed by the recommendations of the Tree Conservation Report (see Section 4.2 of this Rationale).

Trees

The proposed subdivision meets the following objectives for Trees as set out in the BBSS Strategic Directions and Action Plan:

- Ensure sufficient space for healthy trees in the ROW.
- Select appropriate tree species for the local environment.
- Achieve suitable conditions to ensure mature tree development.

Street trees are proposed throughout the development in accordance with City-approved road cross-sections. Details of species and tree location will be determined at the detailed design stage.



4.0

INTEGRATED ENVIRONMENTAL REVIEW

4.0 INTEGRATED ENVIRONMENTAL REVIEW

Section 4.7 of the Official Plan states that "design components will be considered as inputs into the development process and must be assessed and considered prior to establishing an initial design or lot pattern". Section 4.7.1 states the integrated environmental review process considers the significant findings from individual supporting studies and ensures that development design complies with the environmental policies contained in Section 4, and that the principles of 'design with nature' have been applied.

The following technical studies have been prepared in accordance with Section 4.7 of the Official Plan and as per the City' recommendations at the pre-consultation meeting held on September 7, 2017.

Archaeological Resource 4.1 **Assessment**

An Archaeological Resource Assessment was identified as a required study by the City though the pre-consultation process, in keeping with Section 4.6.2 - Archaeological Resources in the Official Plan. A Stage 1 Archaeological Assessment was prepared by Paterson Group Inc. in March 2013 as part of the KNUEA CDP. The study concluded that the site has archaeological potential based on its early settlement in 1828 and proximity to topographic features (i.e. a branch of Shirley's Creek). The report recommends that a Stage 2 Archaeological Assessment be conducted. Paterson has been retained to conduct this work in the Fall of 2018.

4.2 **Environmental Impact Statement and Tree Conservation Report**

A revised Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) was prepared by McKinley Environmental Solutions, dated June 2018, to assess the impact of the proposed development on the significant natural features and functions of the Subject Lands and to provide recommendations and mitigation measures for tree preservation.

Environmental Impact Statement

The EIS was undertaken in accordance with the City of Ottawa's Environmental Impact Statement Guidelines. The report confirms that the Subject Lands are not located within any wetlands. Nine species at risk (SARs) were identified as potentially occurring within the vicinity of the Subject Lands: The Bobolink, Eastern Meadowlark, Barn Swallow, Blanding's Turtle, Butternut Tree (see the following TCR section below), Little Brown Bat, Northern Long Eared Bat, Eastern Whip Poor Will, and Chimney Swift. However, surveying confirmed that the Subject Lands contain suitable habitat for only the Blanding's Turtle and Bobolink. Barn Swallows were previously found nesting in several barns and agricultural buildings within the Subject Lands. Their presence has already been addressed by completing the OMNRF Online Registration Process. All structures that contained suitable Barn Swallow habitat have been demolished, and habitat compensation requirements have been fulfilled including the construction of three artificial nesting structures.

As part of site development, Tributary #2 of Shirley's Brook will be realigned and undergo extensive restoration and enhancement activities to improve the quality of the aquatic habitat and riparian areas for the Blanding's

Turtle and other wildlife from its predevelopment state including (refer to Section 4.2.2 of the EIS for details):

- Blanding's Turtle Category 1 Habitat consisting of deep pools and artificial nesting areas;
- Blanding's Turtle Category 2 Habitat consisting of shallow pans/pools, deep channel pockets, and hard substrate features:
- wildlife passage culverts; and
- riparian planting.

Mitigation and compensation measures to provide an overall benefit to Blanding's Turtles will be determined in consultation with the Ministry of Natural resources and Forestry (OMNRF) through the Overall Benefit Permit process. Impacts to Bobolink habitat will be addressed based on the extent of habitat that is present at the time of development. The **OMNRF Online Registration Process and** habitat compensation requirements implies no net loss of habitat.

Several terrestrial and mitigation measures will be undertaken during the construction stage to reduce impacts to Blanding's Turtles, Bobolinks, and other wildlife, as detailed in Section 4.4.6 and 4.4.7 in the EIS. Monitoring for the Bobolink and Blanding's Turtle will also occur following construction. The rules and regulations of the ESA establish a fiveyear monitoring period for Bobolink habitat compensation projects that are authorized through the OMNRF Online Registration Process. Monitoring requirements for the Blanding's Turtle will be determined in consultation with the MNRF through the Overall Benefit Permit review process.

Tree Conservation Report

The TCR was prepared in accordance with the City of Ottawa's TCR Guidelines. In 2017, a cultivated Butternut Tree was discovered in the yard of a previously developed residential property at 1035 March Road along with a single seedling located nearby. A Butternut Health Assessment (BHA), presented as Appendix C in the report, was conducted to address both trees. The Assessment identified the trees as Category 1 (cultivated) and are therefore exempt from regulatory requirements.

In accordance with the tree retention recommendations of the 2016 KNUEA Environmental Management Plan (EMP), the TCR recommends the preservation of trees where feasible including the Open Space blocks surrounding the realigned North Tributary and the Open Space block in the southwest corner of the site, as well as within parkland where park design permits.

As recommended in the EMP, a 0.55-hectare Open Space block is located within the southwest corner of the site to preserve a portion of the Southwest Wooded Area (SWWA) and to provide a riparian buffer for Tributary #3 of Shirley's Brook. The EMP also recommended the conservation of an additional 0.3-hectare portion of the SWWA to preserve a stand of older growth forest adjacent to Woodlot S-12. However, as the TCR indicates, this stand of forest has been cleared by the landowner thereby eliminating any linkage between the remaining Woodlot S-12 and the Southwest Wooded Area (see Figures 15 and 16). The report therefore concludes that there is no ecological value in preserving the 0.3-hectares along the western boundary of the Subject Lands and that it is unlikely that the proposed development will negatively impact Woodlot S-12.

Despite the inclusion of this land into the development boundary, additional open space is gained by the 0.55-hectare block in the southwest corner of the Subject Lands, as well as the open space corridor along Tributary #2 which is wider than the minimum required 40 metres in some sections.

Based on the mitigation measures and recommendations outlined in the EIS, the report concludes that no significant negative effects are expected to result from the proposed development.

4.3 **Phase 1 Environmental Site** Assessment

Phase1 Environmental Site Assessments (ESA) were conducted by Paterson Group Inc., dated March 28, 2016 and July 17, 2008, for two separate sections of the Subject lands to assess the potential site contamination by current or past uses on the Subject Lands. No concerns were identified in either ESA. The 2008 ESA recommended the proper disposal of old building materials at the time of site redevelopment and the decommissioning of a potable water well that was discovered on the site. Both reports concluded that a Phase II ESA is not required.

Geotechnical and Hydrogeological 4.4 Investigation

As part of the CDP process, several geotechnical reports were completed across the KNUEA. Four (4) geotechnical and hydrogeological investigation reports have been completed within the lands in the northwest quadrant of the KNUEA that now make up the CU development. The 2018 Geotechnical and Hydrogeological

Investigation Report was prepared to specifically address comments received from the City through the CDP and EMP processes. The remaining three geotechnical investigations (dated 2008, 2009 and 2013) collectively cover the CU Development and were utilized for the purposes of the draft plan of subdivision application and the conceptual design of the site. During detailed design, once the road patterns and residential layout are finalized, a collective geotechnical report addressing the CU Development will be completed with information consistent with the latest geotechnical submission requirements (tree requirements, sensitive marine soil guidelines, park design, etc.). All geotechnical investigations have been completed by Paterson Group Inc.. The principal findings from the reports determined that the soil profile consists of topsoil underlain by a stiff to very hard silty clay over a glacial till which is overlying bedrock. From a geotechnical perspective, the reports consider the site to be suitable for the proposed development.

4.5 **Noise Control Feasibility Study**

A Noise Control Feasibility Study was prepared by Novatech (dated July 23, 2018, Report No. R-2018-080). This study was conducted to determine the environmental impact of roadway traffic on the proposed residential uses from March Road (an Arterial Road) and future urban collector streets: Street 1, Street 4. Street 10. and Street 12.

Section 4.8.7 of the Official Plan states that noise is regulated better by land use planning than by noise barriers. Particularly, Policy 14 states, "Acoustic barriers may only be used where all other noise attenuation methods are considered not feasible. The need for an acoustic barrier must be demonstrated by the proponent and approved by the City consistent with the Environmental Noise Control Guidelines." In keeping with such a policy, the proposed development has been designed with buildings oriented to reduce the need for noise attenuation barriers. Outdoor living areas have been oriented away from noise sources wherever possible.

As per the City's Noise Control Guidelines, when sound levels in Outdoor Living areas are predicted to exceed 55 dBA, physical forms of mitigation are suggested and which may also include the provision of warning clauses to inform purchasers of the expected noise levels and specific mitigation measures. When noise attenuation measures do not reduce noise levels below 55 dBA in the Outdoor Living Area, control measures (barriers) are required to reduce the sound below or as close to 55 dBA as technically, economically and administratively feasible.

The study finds that the predicted outdoor noise levels for the proposed residential development from March Road and the future urban collector streets are in excess of the City of Ottawa and the Ministry of Environment guidelines. To mitigate noise levels and inform potential buyers/tenants, the report recommends various noise attenuation measures including noise barriers, central air conditioning, and forced air ventilation and noise warning clauses, as detailed in the report. Further details will be determined following draft plan approval.

4.6 **Site Servicing and Stormwater Management Report**

A Site Servicing and Stormwater Management Report was prepared by Novatech (dated July 23, 2018, Report No. R-2018-071). The purpose of the report was to evaluate

the proposed storm, wastewater and water servicing for the Subject Lands. The report concludes that the proposed subdivision can be adequately serviced by extending existing municipal water and wastewater infrastructure and constructing a stormwater management facility to service the development.

4.7 **Transportation Impact Assessment**

A Transportation Impact Assessment (TIA) was prepared by Novatech (dated July 23, 2018, Report No. R-2018-039). Section 6.0 of the TIA provides a detailed summary the conclusions and recommendations. Most notably, as development progresses within the KNUEA, March Road will be widened in two phases to accommodate the increase in vehicular traffic and extend the future Kanata North Transitway. As well, the proposed development is anticipated to generate approximately 30 percent of the overall transit demand by the KNUEA lands. A temporary vehicle turnaround will be provided at the western end of Street 4.



5.0

CONCLUSION

5.0 CONCLUSION

It is our assessment that the proposed development is consistent with the Provincial Policy Statement 2014 and generally conforms to the City of Ottawa Official Plan, Kanata North Community Design Plan and other relevant guidelines.

This planning rationale, along with the associated technical studies, supports the development of the proposed subdivision. The mix of single-detached, townhouse, and multiunit residential dwellings is compatible with existing and planned surrounding uses and functions well within the surrounding context. The planned park-and-ride facility and fire hall near March Road will support the Bus Rapid Transit and provide conveniently located neighbourhood services. The open space network throughout the subdivision promotes active transportation and improves accessibility to surrounding services and amenities.

The proposed Zoning By-Law Amendment will implement the development as described in this rationale and ensure it is compatible with surrounding development. The proposed development is an appropriate and desirable addition to the community and represents good planning.

NOVATECH

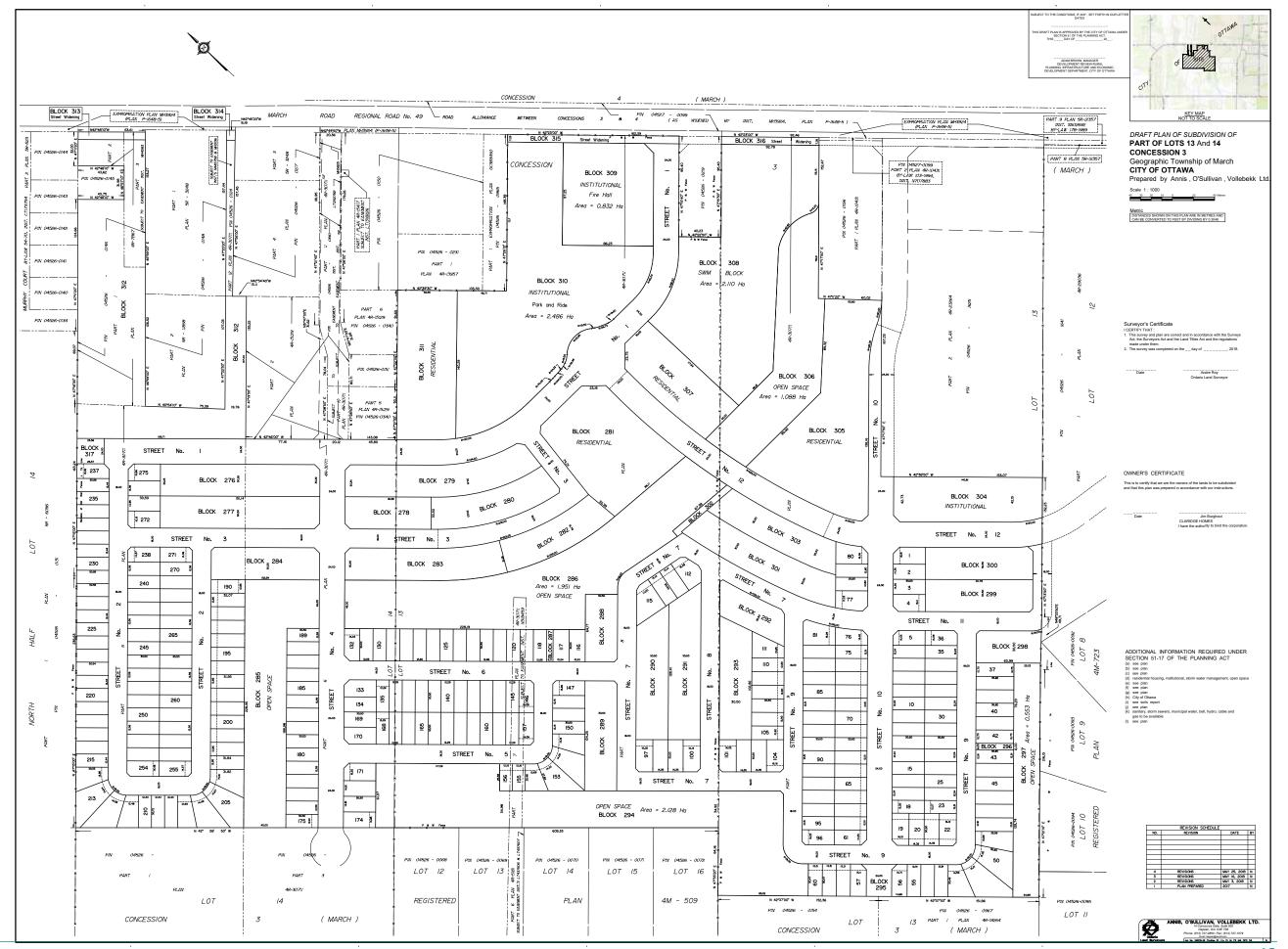
Prepared By:

Reviewed By:

Ellen Potts. BES (Honours Planning)Project Planner

Greg Winters, MCIP, RPP Project Planner

Appendix A – Draft Plan



Appendix B - Zoning Schedule

