

1020 & 1070 March Road

Planning Rationale

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Prepared for:

JG Rivard Ltd. & Valecraft Homes

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Revision	Description	Author		Quality Check		Independent Review	
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Introduction

1.0 INTRODUCTION

Stantec Consulting Ltd. has been retained by JG Rivard Limited (Valecraft Homes) to prepare this Planning Rationale in support of concurrent Draft Plan of Subdivision and Zoning By-law Amendment applications for their property at 1020 and 1070 March Road. The properties are located within the Kanata North Community Design Plan and will be developed with a combination of residential and commercial uses in combination with school, park and open space blocks.

1.1 SITE LOCATION AND SURROUNDING USES

The properties are located approximately 20 kilometres west of Ottawa's downtown core in the developing Kanata North Urban Expansion Area. The proposal is composed of two adjacent properties; the north property is addressed as 1070 March Road (PIN: 04570071) and occupied by the Dekok Berry Farm and is legally described as *Part of Lot 13, Concession 4, Geographic Township of March, now City of Ottawa*. The second property, 1020 March Road (PIN: 04570074 & 04570075), is immediately south and occupied by a combination of fields, cultural woodlands, and, farther east, wooded areas; the property is legally

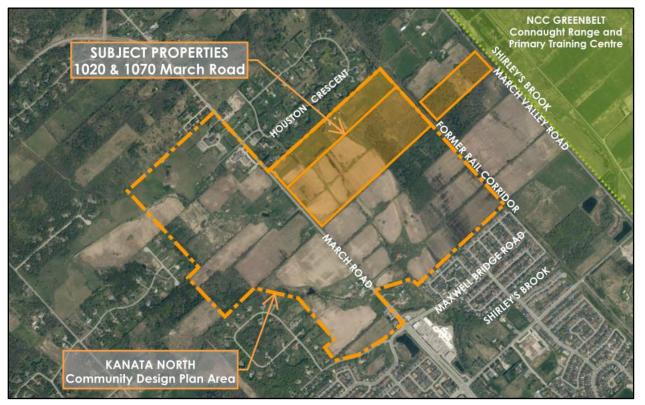


Figure 1: Aerial image of properties (orange) and surrounding land uses. The boundary of the Kanata North Community Design Plan is shown as an orange dash.



Introduction

described as *Part of Lot 13, Concession 4, Part 1 on 5R-13961, Geographic Township of March, now City of Ottawa.* Combined, the two properties have an area of 39.7ha, 456m of frontage on March Road, and 200m of frontage on March Valley Drive.

The properties and surrounding landscape are rural in nature and characterized by fields and abandoned farms, residential estate lot communities on private services, and other commercial and institutional uses fronting onto March Road. A tributary to Shirley's Brook (Shirley's Brook Tributary 2) enters the property from a culvert under March Road before turning south to follow the roadside ditch, then east along the properties' southern boundary. Several deciduous hedgerows divide the properties into smaller fields.



Figure 2: Southeast corner of 1020 March Road looking north (Left). View of properties looking west towards March Road (Right) (Source: Muncaster)

The properties are generally flat with a north-to-south ridge running across the properties 500m east of March Road. A former rail corridor, still owned by Canadian National, is located east of the properties and divides 1020 March Road into two discrete areas. The east portion of 1020 March Road is partially covered by a wooded area, known as Woodlot S23, composed of mature deciduous trees- including a number of butternut trees.

The properties, and lands to the south and west, were added to the city's urban area in 2016 (Official Plan Amendment 173) at the culmination of an exhaustive community design planning process which produced the Kanata North Community Design Plan. The Kanata North Community Design Plan (CDP) encompasses approximately 260ha and proposes the development of a combination of low and medium density residential neighbourhoods with supporting commercial/mixed-use, schools, parks, and open spaces. When completed, the new community will accommodate nearly 3,000 dwellings (over 8,000 residents) as well as up to four schools, several parks, a widened March Road corridor with dedicated bus lanes, park and ride, fire station, and a community-level shopping district with library.

Introduction

The properties are surrounded by the following uses:

- North: The properties are bounded by the Hillsview community to the north- a residential country estate lot subdivision with several detached dwellings on large landscaped lots and serviced by private well and septic. These dwellings are located in the Rural Policy Area and zoned Rural Residential-RR3. A small retail plaza is located further north at the corner of March Road and Maxwell Road.
- East: An abandoned rail corridor, owned by Canadian National, bounds the two properties to the east and defines the eastern edge of the Kanata North community. JG Rivard's 1020 March Road property extends across the rail corridor to March Valley Drive. Lands east of March Valley Road are located within the city's Greenbelt and managed by the Department of National Defense as part of the Connaught Range and Primary Training Centre.
- South: Lands south of the property 936 March Road, are currently vacant and subject to concurrent Draft Plan of Subdivision and Zoning Bylaw Amendment applications (City File No.: D07-16-18-0032 & D02-02-18-0109). The proponent, Minto Communities, is proposing a subdivision consisting of 818 dwellings, a school, two parks, several open space blocks. The west portion of this property will be developed as a mixed-use commercial shopping centre.
- West: March Road bounds the properties to the west. Three detached dwellings with private services on large lots are located on the west side of March Road. CU Developments has submitted concurrent Draft Plan of Subdivision and Zoning By-law Amendment applications (City File No.: D07-16-18-0023 & D02-02-18-0076) on a large parcel surrounding the existing dwellings. The proponent is proposing a subdivision consisting of 825 dwellings, part of a school block, two parks, several open space blocks, a fire hall and a park and ride facility block.

Development Proposal

2.0 DEVELOPMENT PROPOSAL

Valecraft is proposing to develop the northeast portion of the new Kanata North community envisioned by the Kanata North CDP. The subdivision is structured around a network of two collector and several local streets arranged in a modified grid pattern (Figure 4). The subdivision includes 297 detached dwellings, 315 townhomes, 116 back-to-back townhomes as well as commercial mixed uses adjacent to March Road. A school block (Block 310), a park block (Block 309), and open space blocks containing the realigned Tributary 2 corridor (Block 311) and adjacent recreational pathway (Block 312) comprise the community's green network.

A stormwater management pond is located on the east side of the rail corridor and will accommodate stormwater management storage and treatment for the proposed development and the adjacent proposed subdivision to the south. A woodlot, identified as Woodlot S23, is located between the stormwater facility and March Valley Road and would be retained and transferred to the City as public lands. Lands east of the rail corridor have not been included on the Plan of Subdivision since both the stormwater pond and woodlot will be transferred to the City of Ottawa.

The following sections discuss the layout and structuring elements of the proposed development.

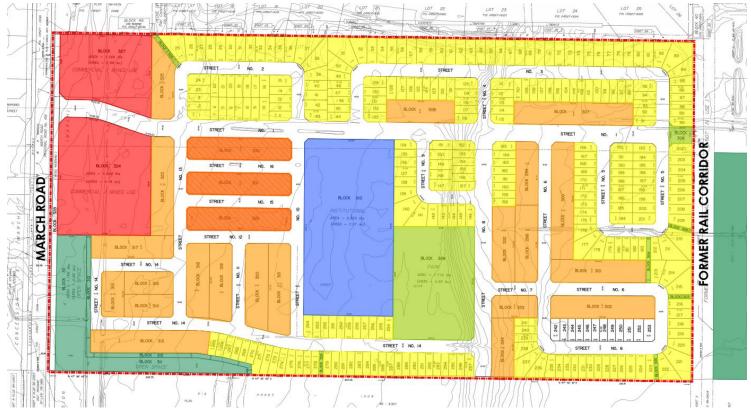


Figure 3: Colourized Plan of Subdivision for the subject properties.



Development Proposal

Transportation

The subdivision's primary access will be from March Road. The ultimate cross-section for March Road includes two vehicular lanes in each direction, median bus rapid transit (BRT) lanes, cycle tracks and sidewalks within a 44.5m right-of way. The BRT network is an extension of the proposed Kanata North Transitway and would terminate at the proposed park-and-ride facility on the west side of March Road, opposite mixed use Blocks 324 and 327.

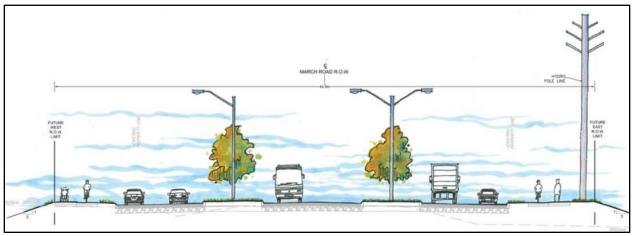


Figure 4: Ultimate cross-section of March Road, including median BRT (Kanata North CDP).

Two collector streets with 24m rights-of-way traverse the development. The first, Street One, extends east from March Road to Street Eight; Street One will operate as a local street between Street Eight and Street Five. Block 306 will allow Street One the possibility of extending farther east in the future if warranted. The other collector, Street Eight, extends south from its intersection with Street One and connects to Minto's subdivision to the south. Streets One and Eight will be designed as future bus transit routes with multiuse pathways on the south and west sides, respectively.

Local streets and pathway blocks have been arranged in a modified grid pattern to minimize cut-through vehicle traffic and create distinct street communities while facilitating pedestrian and cycling movement throughout the development and surrounding neighbourhoods.

Mixed Use Development

Two mixed use blocks (shown in red on Figure 3) are located on either side Street One adjacent March Road; these blocks will accommodate commercial uses to serve the surrounding community and those travelling March Road. The commercial blocks will allow transit users to access goods and services within a short walk of the BRT terminal and facilitate non-motorized forms of transportation. At this time, no tenants or specific uses have been selected for the two blocks. Land Use Concepts showing how the two mixed use blocks could be developed in the future are included in Appendix B of this report. The two blocks will be subject to future Site Plan Control applications and more detailed design will occur through this development approval s process.



Development Proposal

Residential

A range of residential dwelling types are proposed for the development to accommodate future residents from a range of economic means and life stages. Generally, higher density dwelling types, such as townhomes and back-to-backs (orange, Figure 3), are closer to the March Road corridor and two proposed collector streets. These homes will be best served by future transit along the two collector streets and within walking distance of the future BRT terminal on the west side of March Road. Townhouse and back-to-back dwellings will also be within a short walk of the neighbourhood park and school at the core of the development, facilitating walking and easy access to community amenities. Detached dwellings (yellow, Figure 3) are located along the north and east boundaries of the development in a series of streets crescents. Corner lots have been arranged to flank adjacent to collector streets whenever feasible to minimize potential driveway or bus stop conflicts.

Open Spaces and Natural Areas

The proposed development will be augmented by a network of natural areas, parks and pathways to provide a range of active and passive recreational opportunities (green, Figure 3). A 1.71-hectare neighbourhood park (Block 309) has been located at the centre of the development and has been arranged to retain an existing stand of white cedars. Shirley's Brook Tributary 2 is currently located in a roadside ditch on the east side of March Road. As part of the development, the stream will be realigned within a 40m-wide corridor and naturalized with native trees and shrubs. Habitat for Blanding's turtle will be integrated into the corridor's design, as will a recreational pathway adjacent the corridor's east edge. On the east side of the former rail corridor, a woodlot, currently owned by Valecraft Homes, will be transferred to City ownership for use as publicly-accessible open space. On the east side of the woodlot, adjacent to March Valley Road, a stormwater management pond (Pond 3) will be constructed to interface with the adjacent woodlot and function as part of the community's open space network.

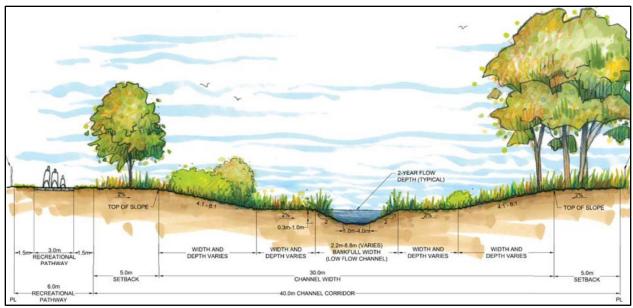


Figure 5: Cross-section of Tributary 2 and adjacent recreation path (Kanata North CDP)

Development Proposal

A network of recreational pathways, multiuse pathways, sidewalk, and walkway blocks will connect future residents to the community's parks and open spaces and provide for safe and comfortable walking or cycling.

Lots bordering the north edge of the development will back onto treed rural residential lots fronting onto Houston Crescent. The dwellings along Houston Crescent predate the urban area expansion and are on private services. These proposed lots will have additional depth to reduce potential impact on existing trees and provide additional space for grading.

School

A 2.92-hectare school block has been reserved adjacent to the neighbourhood park at the centre of the development. The block has been arranged with frontages on two streets to facilitate safe bus queuing and drop-off. A Multiuse pathway on the south side of Street One, as well as a larger network of sidewalks and pathway blocks, will facilitate safe walking or cycling to and from the school block.

2.1.1 Proposed Zoning By-law Amendment

The properties are currently zoned General Rural- RU and RU[114r]. The current zoning does not reflect the General Urban designation in the Official Plan and will not permit the uses proposed by the Kanata North CDP.

To permit the proposed development the lands must be rezoned to a series of urban zones to implement the Kanata North CDP. The following table outlines lots and blocks on the Plan of Subdivision, planned future uses, and the proposed zones:

Lot or Block	Proposed Land Use	Proposed Zone
Lots 1 to 24	Detached dwellings	R3Z
Lots 25 to 38	Detached dwellings	R1TT
Lots 39 to 49	Detached dwellings	R3Z
Lots 50 to 83	Detached dwellings	R1TT
Lots 84 to 297	Detached dwellings	R3Z
Blocks 298 to 302	Multiple attached dwellings (townhomes)	R3Z
Blocks 303 to 305	Walkway	R3Z
Block 306	Collector street (reserve for future extension to east)	R3Z
Blocks 307 to 308	Multiple attached dwellings (townhomes)	R3Z
Block 309	Neighbourhood park	01
Block 310	School block (Ottawa-Carleton District School Board)	I1A/R3Z
Blocks 311 to 312	Stream corridor and parallel recreational pathway	EP

Development Proposal

Blocks 313 to 321 Multiple attached dwellings (townhomes)		R3Z
Block 322 Multiple attached dwellings (back-to-back townhomes)		R3Z[1319]
Block 323 Multiple attached dwellings (townhomes)		R3Z
Block 324	Commercial/mixed use	GM15
Block 325	Multiple attached dwellings (townhomes)	R3Z
Block 326	Walkway	R1TT
Block 327	Commercial/mixed use	GM15
Block 328	Road widening (March Road)	Same as adjacent zone(s)
Block 329	Walkway	R3Z
Blocks 330 to 331	Multiple attached dwellings (back-to-back townhomes)	R3Z[1319]

A figure showing the arrangement of proposed zones is included in Appendix A of this report.

Policy and Regulatory Framework

3.0 POLICY AND REGULATORY FRAMEWORK

3.1 PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement provides policy direction on land use planning and development matters of provincial interest. Under Section 3 of the Planning Act, decisions affecting planning matters "shall be consistent with" the PPS.

3.1.1 Building Strong Healthy Communities

Section 1.1.1 of the PPS states that healthy, liveable and safe communities are sustained by:

- (a) promoting efficient development and land use patterns which sustain the financial wellbeing of the Province and municipalities over the long term;
- (b) accommodating an appropriate range and mix of residential (including second units, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;
- (c) avoiding development and land use patterns which may cause environmental or public health and safety concerns;
- (d) avoiding development and land use patterns that would prevent the efficient expansion of settlement areas in those areas which are adjacent or close to settlement areas;
- (e) promoting cost-effective development patterns and standards to minimize land consumption and servicing costs;
- (f) improving accessibility for persons with disabilities and older persons by identifying, preventing and removing land use barriers which restrict their full participation in society;
- (g) ensuring that necessary infrastructure, electricity generation facilities and transmission and distribution systems, and public service facilities are or will be available to meet current and projected needs; and
- (h) promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate.

The property is located within Ottawa's urban boundary and is designated General Urban Area by the Official Plan. The General Urban Area designation permits the development of a full range of housing types and other uses to create complete and sustainable communities. The Kanata North CDP further details how lands within the community will develop to ensure the efficient use of land, avoid land use patterns which could cause environmental or public health concerns, coordinate the provision of infrastructure and public service facilities, and protect environmental features and assets.

Section 1.1.3.2 a) states that land use patterns in settlement areas shall be based on 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



Policy and Regulatory Framework

6. are freight-supportive

The Kanata North CDP is a comprehensive community plan which accommodates a wide variety of land uses including commercial retail, institutional, parks, and open space, as well as low and medium density residential. These uses are in proximity to planned public transit and are arranged within a modified grid street network which permits direct movement of pedestrian, bicycle and vehicular traffic.

Streets and pathways have been arranged in a modified grid to calm vehicular traffic while ensuring a dense network of pedestrian-supportive infrastructure. Collector streets have been arranged to facilitate active transportation and ensure efficient transit routing. Higher density uses, such as townhomes and back-to-backs, have been located within walking distance of the future BRT station and along collector streets designed to support public transit vehicles. The provision of both hard and soft infrastructure and public service facilities has been coordinated through the Kanata North CDP and will ensure efficient use of land, and resources.

3.1.2 Coordination

Policy 1.2.1 states that a coordinated, integrated and comprehensive approach should be used when dealing with planning matters within municipalities, as well as with agencies and boards.

The Kanata North CDP is the culmination of over three years of coordinated, integrated and comprehensive planning which engaged a range of stakeholder agencies (such as conservation authorities and provincial agencies), municipal staff (from the City, OC Transpo, Ottawa Public Health, Ottawa Library, and Ottawa Fire Service), all four publicly-funded school boards, and federal entities (such as the National Capital Commission and Department of National Defense). This is in addition to a comprehensive public engagement initiative including open houses, neighbourhood meetings, a design charette, and an active public advisory committee composed of residents and area Councillors.

3.1.3 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 have been arranged in a modified grid pattern within the proposed development; this arrangement creates a dense, continuous network of pedestrian connections to adjacent communities, schools, parks, and public transit facilities. Most of the proposed dwellings are within 250m of several nearby parks proposed in the CDP.

A neighbourhood park (Block 309) is proposed at the centre of the proposed development; the size of the park, and planned park facilities, has been coordinated with other major landowners as part of the Kanata North CDP.

Policy and Regulatory Framework

3.1.4 Sewage, Water and Stormwater

Section 1.6.6 of the PPS states that infrastructure shall be provided in a coordinated, efficient and costeffective manner to accommodate projected needs. The proposed development will be serviced by municipal water and wastewater infrastructure. Stantec has prepared a Site Servicing and Stormwater Management Report outlining the servicing approach and is summarized in section 4.2 of this rationale.

3.1.5 Transportation Systems

Section 1.6.7 states that transportation systems should be safe, energy efficient, facilitate the movement of people and goods, and appropriate to address projected needs; transportation and land use considerations shall be integrated at all stages of the planning process.

Stantec has prepared a Transportation Impact Assessment (TIA) for the proposed development. The subdivision will access the larger road network through two collector streets- one traversing the properties east from an intersection at March Road (Street One), the other connecting to the adjacent Minto development to the south (Street Eight). The proposed development is consistent with the Kanata North Transportation Master Plan (TMP) prepared as part of the CDP process. Planned improvements to March Road and the eventual extension of BRT will ensure sufficient transportation capacity for the proposed development.

3.1.6 Wise Use and Management of Resources

Section 2.0 of the PPS provides further policies related to the protection natural resources, summarized below.

- Section 2.1 (Natural Heritage) prohibits development or site alteration within natural heritage features such as provincially significant wetlands, woodlands, valleylands, wildlife habitat and areas of natural and scientific interest unless there will be no negative impacts to natural features or functions. McKinley Environmental has been retained to investigate the property and prepare an environmental impact statement and tree conservation report (EIS/TCR). The EIS/TCR builds upon the recommendations of the Kanata North Environmental Management Plan and demonstrates that the proposed development will not impact natural features or their functions.
- Section 2.2 (Water) states development and site alteration shall be restricted near sensitive surface or groundwater features unless their hydrologic functions are protected, enhances or restored. The development will not impact groundwater features, natural heritage features or municipal drinking water supplies. The watercourse along the west and south boundary of the property is will be retained and reconstructed within a 40m-wide open space corridor. Stormwater management infrastructure will ensure that runoff is controlled for quantity and treated for quality prior to discharging into a roadside ditch leading to Shirley's Brook.
- Section 2.3 (Agriculture) protects prime agricultural lands or specialty crop areas, from encroachment by incompatible uses. The property is not identified as prime agricultural land, nor within a specialty crop area.

Policy and Regulatory Framework

- Section 2.4 (Minerals and Petroleum) prevents uses which could preclude or hinder the development of known or potential mineral or petroleum resources. There are no mineral or petroleum resources on or near the property.
- Section 2.5 (Mineral Aggregate Resources) protects mineral aggregate resources for long-term use. There are no known mineral aggregate resources on or near the property. The proposed development will not impact areas of mineral aggregate potential.
- Section 2.6 (Cultural Heritage and Archaeology) requires the conservation of significant built heritage resources, cultural heritage landscapes, and archaeological resources. Paterson Group prepared a Stage 1 Archaeological Assessment for the property in 2013 as part of the CDP process; a Stage 2 assessment was recommended at that time and will be completed as a condition of Draft Plan approval.

3.1.7 Protecting Public Health and Safety

Section 3.0 of the PPS provides policies related to reducing the potential public cost of, and protection of residents from, natural or human-made hazards.

- Section 3.1 (Natural Hazards) directs development to areas outside of hazardous lands, such as those
 impacts by flooding or erosion hazards, dynamic beach hazards, or wildland fire hazards. The property
 is not located on lands impacted by hazardous sites, erosion and/or dynamic beach hazards, or large
 inland lakes. A Geotechnical Investigation report was prepared by Paterson and discussed further in
 section 4.4 of this rationale.
- Section 3.2 (Human-Made Hazards) requires appropriate mediation of human-made hazards- such as mine hazards, oil, gas or salt hazards, or former resource extraction operations, prior to development on or abutting these lands. No mining, aggregate operation or petroleum resource operation hazards exist on or near the property. Morey Associates was retained to conduct a Phase 1 ESA of the property and concluded a Phase 2 assessment was not warranted, as there was no evidence of contamination.

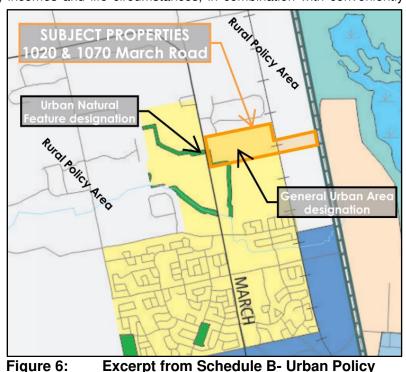
3.2 OFFICIAL PLAN

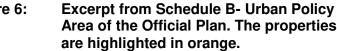
The property is designated as General Urban Area on Schedule B of the Official Plan (see Figure 3). Section 3.6.1 of the OP states that the General Urban Area designation permits a full range and choice of housing types to meet the needs of all ages, incomes and life circumstances, in combination with conveniently

located employment, retail, service, cultural, leisure, entertainment and institutional uses. A variety of uses are found within this designation, from ground-oriented single-purpose to multi-storey mixed-use.

The creek corridor is designated Urban Natural Feature and will be retained, realigned and restored in accordance with the Kanata North Environmental Management Plan.

The proposed development is consistent with the broad intent of the General Urban Area designation.





3.2.1 Site Specific Policies and Secondary Plan Policies

Section 4.1 of the OP states that site-specific policies may be applicable to certain parts of the City and shall conform to the Official Plan while providing additional detail and guidance. The property is subject to the policies of the Kanata North CDP, which will be discussed in section 3.3 of this rationale.

3.2.2 Walking, Cycling, Transit, Roads and Parking

Section 4.3 provides policies on walking, cycling, transit and road infrastructure development.

The streets within the development are arranged in a modified grid and integrated with the adjacent street networks to the south and west. The alignment of streets and intersections has been coordinated with the surrounding proposed developments and discussions will continue with adjacent landowners as the proposal progresses to ensure coordination of street and pedestrian connections. Two proposed collector streets will be designed to accommodate transit service within 400m of all proposed dwellings.



Stantec has prepared a Traffic Impact Assessment for the proposed development; the report demonstrates that vehicular, cycling, and pedestrian traffic generated by the proposed development can be safely and appropriately managed by the proposed development's street and pathway network. The TIA provides infrastructure improvement recommendations to facilitate development within the Kanata North community required to accommodate the population and employment growth projections of the Official Plan. The TIA report has been summarized in section 4.1 of this rationale.

The proposed development has adequate provisions for non-auto travel modes, including easy access to local pedestrian, bicycle, and transit systems as shown in the Kanata North CDP.

3.2.3 Water and Wastewater Servicing

Section 4.4 of the OP outlines policies regarding the provision of water and wastewater services. The proposed development is located with the City's Public Service Area and will be serviced by municipal water and wastewater services. Stantec has prepared a Site Servicing and Stormwater Management Report to demonstrate that the proposed development can be adequately served by municipal water, wastewater and stormwater infrastructure. A summary of the report is provided in section 4.2 of this rationale.

3.2.4 Archaeological Resources

Section 4.6.2 requires that an archaeological resource assessment be conducted where archaeological potential exists. Paterson Group competed a Stage 1 Archaeological Assessment for the property which recommended a Stage 2 assessment be completed. A Stage 2 assessment will be completed as a condition of Draft Plan approval.

3.2.5 Scenic-Entry Routes

Schedule I of the Official Plan designates March Road as a Scenic-Entry Route. Section 4.6.4 states that scenic-entry routes form a network linking major tourist, recreation, heritage and natural environment designation in and beyond Ottawa. The OP states that the pattern of development along these routes "must create a favourable first impression of Ottawa".

Commercial blocks and an open space block containing the rehabilitated tributary to Shirley's Brook will be located adjacent to the March Road frontage to avoid the use of noise barriers and present an active and green façade to the arterial road. Since the design of these development blocks have not been determined at this time, landscaping and other design features will be determined through subsequent Site Plan Control processes.

3.2.6 Environmental Protection

Section 4.7 of the Official Plan discusses protection of natural features and functions, including the identification of endangered or threatened species and their habitat, protection of stream corridors

Valecraft has retained McKinley Environmental to prepare a combined Environmental Impact Statement and Tree Conservation Report (EIS/TCR) for the property. The EIS/TCR is discussed further in section 4.5 of this rationale.

3.2.7 Protection of Health and Safety

Section 4.8.3 of the Official Plan requires that applications for plan of subdivision be supported by a geotechnical study to demonstrate that the soils are suitable for the proposed development. There are no unstable slopes within the subject property identified on Schedule K Official Plan.

A Geotechnical Assessment was prepared by Paterson for the property and summarized in section 4.4 of this rationale. No unstable slopes exist on the property. The site was determined to be suitable for the proposed development using standard engineering practices.

Section 4.8.4 of the Official Plan requires applicants to document previous uses of a property subject to a development application to determine the potential for site contamination. As noted previously, a Phase I Environmental Site Assessment was prepared by Morey Associates to investigate the presence of anthropogenic hazards on or adjacent to the property. No sources of potential contamination were identified, and a Phase 2 ESA is not warranted.

Section 4.8.7 states that the City will require a noise study where new noise sensitive development is proposed within 100m of an existing or proposed arterial or collector road. While the proposed development has been arranged to set noise-sensitive residential uses back from March Road there are a number of dwellings within 100m of the arterial, or the two proposed collector streets, within the development.

Gradient Wind has prepared a Noise Impact Assessment for the proposed development which is summarized in Section 4.6 of this rationale. The proposed development has been designed to minimize the need for noise attenuation barriers by orienting building facades towards the collector streets to buffer outdoor amenity areas from traffic noise. Sensitive land uses have been set back from March Road.

3.2.8 Parks and Greenspace Requirements

Section 4.10 of the Official Plan sets out parkland dedication for new development or redevelopment. The location and size of parks within the Kanata North community has been determined through the CDP and listed in Figure 29- Parks by Sector in Hectares of the CDP. The neighbourhood park (Block 309) area is consistent with the CDP and Kanata North Parks Master Plan.

3.2.9 Urban Design and Compatible Development

Sections 2.5.1 and 4.11 of the Official Plan discuss design objectives the City of Ottawa uses to influence the built environment.

Section 2.5.1 is addressed below:

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



Policy and Regulatory Framework

The development has been designed as an integrated part of the Kanata North community- a comprehensively designed complete community which includes a range of residential uses, parks, schools and commercial areas.

2. To define quality public and private spaces through development.

Dwelling facades will be oriented towards public streets and use consistent front and corner setbacks to frame and public realm and provide passive surveillance. Private amenity spaces will be provided for all dwellings in the form of rear yards or balconies. Public amenity spaces include a network of parks, natural areas, open spaces across the Kanata North community, including the neighbourhood park, realigned Tributary 2, and woodlot proposed as part of this development.

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

The subdivision has been designed with an integrated road network with connections to adjacent subdivisions. A network of sidewalks, pathway blocks and recreational pathways, provide connections to surrounding neighbourhoods and natural areas. The proposed pedestrian network will be designed in coordination with all adjacent development proposals to ensure integration between the proposed development and concurrent proposals.

4. To ensure that new development respects the character of existing areas.

The development's design has been coordinated with the surrounding planned subdivisions. Buildings within the development will be of a consistent quality and character to establish a coherent community identity. The proposed street layout, widths and lot layout are consistent with other developing neighbourhoods within the larger community.

5. 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 mix of detached, townhouse and multi-unit dwellings will contribute to a full range of housing options within the Kanata North community and are consistent with the land use arrangement of the CDP.

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

The proposed development retains and enhances several natural features which form integral parts of the new community. Tributary 2 will be realigned away from March Road within a 40-metre naturalized corridor. A stand of white cedars in the centre of the properties will be retained within the new neighbourhood park, and a woodlot on the east side of the former rail corridor will be retained and transferred to City ownership for public use.

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

Policy and Regulatory Framework

The proposed subdivision will contribute to making Kanata North a complete community with a range of residential uses and densities. The development has been oriented to maximize solar gain to the extent possible in light of the approved CDP and provides opportunity for sustainable transportation modes.

Urban Design and Compatible Development are also discussed in Section 4.11 of the Official Plan. When evaluating compatibility of development applications, Policy 1 of Section 4.11 states that the City will have regard for the policies of the site's land use designation and all applicable site-specific plans, policies and urban design guidelines. This section discusses the relationship between new and existing development and provides policies to evaluate the compatibility of a development with regard to Views, Building Design, Massing and Scale, and Design Priority Areas. The following summarises how the proposed development meets the Official Plan criteria:

- Views: no significant viewsheds were identified on the property;
- Building Design: The proposed dwellings are oriented to the street and will display strong architectural design elements. The buildings will be of a similar height, massing and setbacks to the surrounding proposed development;
- Massing and Scale: All proposed development is low-rise, compatible and complementary in scale to the planned adjacent development. Massing and scale are regulated through zoning which is further discussed in section 3.4 of this rationale;
- High-Rise Buildings: No high-rise buildings are being considered as part of this proposed development;
- Outdoor Amenity Areas: All dwellings will have access to private rear yard or balcony amenity areas. Future residents will have access to sidewalks, parks and a network of walking paths throughout the larger community;
- Design Priority Area: the subject property is not located in a design priority area.

The proposed development meets the requirements of Section 3.6.5 of the Official Plan and is consistent with the design and compatibility objectives of Section 2.5.1 and 4.11 of the Official Plan.

3.3 KANATA NORTH COMMUNITY DESIGN PLAN

The Kanata North Community Design Plan (CDP) encompasses approximately 260ha and proposes the development of a combination of low and medium density residential neighbourhoods with supporting commercial/mixed-use, schools, parks, and open spaces. When completed, the new community will accommodate nearly 3,000 dwellings (over 8,000 residents) as well as up to four schools, several parks, a widened March Road corridor with dedicated bus lanes, park and ride, fire station, and a community-level shopping district with library.

Figure 16- Land Use Plan of the CDP designates the subject property as a combination of 'Service Mixed Use', 'Residential Street-Oriented', 'Residential Multi-unit', 'School' and 'Neighborhood Park' (Figure 7). Two collector roads traverse the properties, as does a portion of the creek corridor.

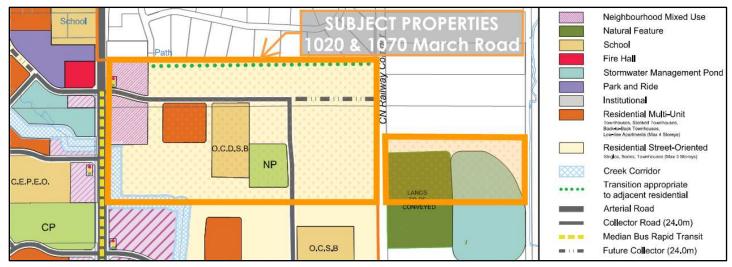


Figure 7: Extract of the Kanata North Land Use Plan. The properties are highlighted in orange.

Blocks and lots on the Draft Plan of Subdivision are arranged to implement the CDP and are nearly identical to the CDP's Land Use Plan. Refinements to street and block arrangement have been made to accommodate Valecraft's proposed unit types and dimensions.

The following designations on the land use plan affect the subject property; the following section will summarize the policies of each designation and demonstrate how the proposed development conforms to the CDP.

Residential Street-Oriented permits detached, semi-detached and townhouse dwellings up to three storeys in height with individual entrances facing onto the public street. Portions of the properties designated residential street-oriented will be developed as detached and townhouse dwellings fronting directly onto public streets. The proposed zoning will permit buildings up to three storeys, or 11m, in height. Proposed lots along the development's north boundary- backing onto the existing large lots on Houston Crescent, will be 34m in depth to provide for additional rear yard grading and tree retention.



Policy and Regulatory Framework

Residential Multi-Unit are distributed throughout the community and permit townhouse, stacked, back-toback and low-rise apartment (up to four storeys) dwellings. While buildings in the designation will address adjacent public streets, private streets within the development blocks are also permitted. Blocks 322, 331, and 332 are proposed for freehold back-to-back townhomes on public streets. Back-to-back townhomes achieve high net residential densities (approximately 99 units per net hectare) consistent with the targets of the CDP.

Neighbourhood Mixed Use permits local commercial services to meet the needs of future residents as well as higher density residential uses- either in standalone or mixed use buildings. Blocks 324 and 327 of the proposed development are designated neighbourhood mixed use and will be zoned General Mixed Use-GM15. Specific uses and building types have not been selected for these blocks and will be dependent on market demand and tenant interest. A concept has been developed to demonstrate how these blocks could be developed into the future based on the CDP's urban design guidelines and proposed zoning provisions (attached in Appendix B). Development of these blocks will be subject to future Site Plan Control applications.

School sites were requested by each of Ottawa's four school boards as part of the larger Kanata North CDP process. Block 310 of the proposed development measures 2.92ha in size and has been allocated to the Ottawa-Carleton District School Board for potential development of a public school. The block has been 'dual-zoned' I1A and R3Z- should the school board elect to not acquire the block it may be developed for residential.

Adjacent to the school block is the Northeast Quadrant Neighbourhood Park; the park's size was determined though the CDP process and will have an area of 1.71ha. The number of proposed dwellings within the proposed development is similar to the estimates prepared as part of the CDP. Should significantly more dwellings be proposed- such as by including residential units within the neighbourhood mixed use blocks, additional parkland or cash-in-lieu will be warranted; this will be provided through the Site Plan process.

The park has frontage on two public streets and has been located to retain existing trees and afford views to the Ottawa River from the top of the north-south ridge.

The northwest branch of Shirley's Brook runs along a roadside ditch within the March Road right-of-way before turning east along a portion of the properties' southern boundary. As part of the widening of March Road, the creek will be realigned to the east within a naturalized 40m-wide corridor. A 6m-wide block on the east side of the creek corridor will accommodate a recreational path. The woodlot on the east side of the former rail corridor will be retained and transferred to City ownership for public use; several pedestrian walkways will connect the woodlot and stormwater management pond of the development.

3.3.1 Environmental Management Plan

The Kanata North Environmental Management Plan (EMP) documents the existing natural conditions for the Kanata North community and recommends measures to mitigate any environmental impacts from the proposed development.



Policy and Regulatory Framework

A stormwater pond (Pond 3) is located on 1020 March Road east of the former rail corridor. The pond will be designed to address stormwater quantity, quality and thermal control prior to discharging treated water to Shirley's Brook east of March Valley Road. The pond's configuration has been designed to minimize impacts on woodlot S23, located between the rail corridor and the pond.

As discussed above, Shirley's Brook is identified as Blanding's turtle habitat through the CDP process. As a Species at Risk, special consideration has been afforded to the enhancement of existing, and development of new, habitat within the Shirley's Brook corridor. The realigned portion of the Tributary 2 to Shirley's Brook will include additional habitat features such as off-line pools, basking rocks and stream vegetation as outlined in the EMP.

3.3.2 Master Servicing Study

The Kanata North Master Servicing Study (MSS) provides a functional design for servicing the entire Kanata North community with water, sanitary and stormwater infrastructure.

Stormwater from the proposed development will drain to Pond 3, with storm sewers accommodating flows up to 5-year return period. Overland flow routes include the road system and certain walkway blocks to convey storm water from larger events.

Sanitary services will drain to two separate trunk sewers. Development closer to March Road and above the north-south ridge will drain west to a trunk sewer within the March Road right-of-way. Development east of the ridge will drain to a trunk sewer parallel to the former rail corridor which will discharge to the Briar Ridge Pumping Station.

Water services will be provided by a trunk main within the March Road right-of-way as well as from the subdivision to the south.

Proposed storm, sanitary and water services are being coordinated with adjacent proposed development within the framework of the MSS.

3.3.3 Transportation Master Plan

The Kanata North Transportation Master Plan (TMP) analyzes the transportation infrastructure needs of the new community for all modes in line with the City-wide 2013 TMP. The development will include Block 328- a required widening for the redevelopment of March Road. Two intersecting collector roads with 24m rights-of-way designed to accommodate a multi-use pathway on one side, a sidewalk on the other and local bus transit operations. Local streets and pathway blocks have been arranged in a modified grid system to facilitate pedestrian and cycling movement while managing vehicular traffic volumes and speeds. On-street parking will be provided throughout the development where driveway spacing, sightlines, transit operations or other requirements allow.

Policy and Regulatory Framework

3.4 ZONING BY-LAW 2008-250

The property is currently zoned RU and RU[114r]. To permit the proposed development and bring the zoning in-line with the designations in the CDP, a Zoning By-law Amendment is required. Section 2.1 and Appendix A of this rationale summarize the zones proposed. The proposed zoning will permit residential uses in-line with the designations in the Kanata North CDP.

3.5 BUILDING BETTER AND SMARTER SUBURBS INITIATIVE

Building Better and Smarter Suburbs: Strategic Directions and Action Plan was approved by Planning Committee in March 2015. 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: Local streets will have 14.5 or 18-metre wide rights-of-way and have been 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 limit vehicular speeds and improve safety for pedestrians and cyclists. Traffic calming features will be explored as part of detailed design.
- Parks and Open Space: The proposed development is part of the larger Kanata North CDP, which allocates the number and size of open space and park facilities across the entire study area. A 1.7ha neighbourhood park is located within the proposed development, several additional parks will be in proximity to the proposed dwellings. Sidewalks will extend through the community to connect parks, open spaces and other land uses.
- Stormwater Management: The stormwater management system design is consistent with the Kanata North MSS and EMP. A stormwater management pond (Pond 3) is located on the east side of the former rail corridor to manage runoff from the proposed development and surrounding lands. The use of parks or open space blocks as detention areas was not considered through the study. The stormwater pond will be located adjacent to woodlot S23 and integrated with future public open space.
- School Sites: A school site allocated to the OCDSB and is consistent with the dimensions and criteria within the CDP. The school site fronts on 2 public streets and is co-located with the neighbourhood park. A network of sidewalks and pathways will provide safe walking routes to and from the school.
- 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 a public sidewalk. Sidewalks will be located to minimize potential driveway conflicts by locating along flanking lots. On-street parking will be permitted on all streets.

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- Road Right-of-Way: Street rights-of-way will use standard City cross-sections, which have been designed to accommodate all required streetscape elements including travel lanes, on street parking, sidewalks, landscaping and utilities. Detailed streetscape plans will be prepared through detailed design and will be informed by the recommendations of the EIS/TCR.
- Trees: 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. The woodlot on the east side of the former rail corridor will be transferred to City ownership for use as publicly-accessible open space and function as part of the community's open space network. A stand of white cedars will be retained and integrated into the design of the new neighbourhood park.

4.0 OVERVIEW OF TECHNICAL STUDIES

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. This process will be implemented through an application of the integrated environmental review process". The Official Plan describes an integrated environmental review as a process which, "considers, as a whole, the significant findings from individual support 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 section provides a summary of each technical study prepared in support of the proposed development. Detailed and technical information can be obtained by reviewing the respective studies.

4.1 TRANSPORTATION IMPACT ASSESSMENT

Stantec has prepared a Transportation Impact Assessment for the proposed development.

Access to the development will be provided by a new intersection with March Road and Street One; this access will be shared with the proposed subdivision on the west side of March Road. Street Eight, a north-south collector, will provide access from another proposed subdivision south of the properties. The proposed development is anticipated to generate 409 and 492 net new auto trips (two-way) during the AM and PM peak hours, respectively.

Streets One and Eight will include a sidewalk on one side and a multi-use pathway on the other. The curb radii were reduced from 10m to 5m at intersections along Streets One and Eight to reduce pedestrian crossing distances and reduce vehicle turning speeds. A pedestrian crossover is included at the intersection of Street One and Street Eight to improve the pedestrian connectivity.



Overview of Technical Studies

Two bus transit stop pairs are proposed along Street One; the first stops are located approximately 180m east of March Road; the other pair at the intersection of Streets One and Eight. Intersection narrowings are included at the proposed transit stop locations reduce pedestrian crossing distances and reduce vehicle speeds. With the above design criteria Streets One and Eight will achieve Pedestrian, Cycling, and Transit Level of Service targets (Truck Level of Service are not applicable) within the proposed community.

Three intersections were investigated as part of the TIA: March Road and Maxwell Bridge Road/Halton Terrace, March Road and Street One, and March Road and Dunrobin Road.

The intersection of March Road at Maxwell Bridge Road/Halton Terrace is projected to operate at or above capacity during the morning peak hour by the 2031 horizon. Projected volumes along March Road are also significant. All remaining study area intersections (March Road and Street One, and March Road and Dunrobin Road) are projected to operate satisfactorily under all study horizons.

Currently March Road is a two-lane arterial road with a rural cross-section and does not include any pedestrian, cycling or transit infrastructure. As a result, all three study area intersections do not meet the multi-modal level of service (MMLOS) targets under any horizon. Once March Road is widened with the Bus Rapid Transit, sidewalks and cycling facilities in place, the operations at the Maxwell Bridge/Halton Terrace and Street One intersections will change drastically. Considering this, the TIA does not recommend addressing intersection MMLOS at this time.

Although there are several concurrent Plan of Subdivision proposals within the Kanata North CDP area, the City has not updated the Transportation Master Plan to include the widening of March Road within the "Affordable Network". As such, the City is unwilling to enter into an agreement with the Kanata North Landowners Group to arrange cost-sharing or cost front-ending to improve March Road prior to the TMP's 2031 time horizon. The TIA recommends advancing the timing of the March Road widening to accommodate these future traffic volumes.

4.2 SITE SERVICING AND STORMWATER MANAGEMENT REPORT

Stantec prepared a Site Servicing and Stormwater Management Report to determine how the proposed development can be adequately serviced by water, sanitary and stormwater infrastructure. The servicing criteria for the site were outlined in the Kanata North Master Servicing Study (MSS) and the Kanata North Environmental Management Plan (EMP) prepared by Novatech in 2016 as part of the CDP-development process.

4.2.1 Water

The proposed development will ultimately be serviced through two watermain connections: a connection to a future 400mm diameter watermain in March Road, and a connection to the watermain network within the concurrent subdivision south of the properties. Novatech has completed the March Road watermain design and it is anticipated that construction of the March Road watermain extension will be undertaken through the summer of 2020.



Overview of Technical Studies

4.2.2 Sanitary

Sanitary services will drain to two separate catchment areas defined by the north-south ridge. The west portion of the properties (and first phase of the proposed development) will drain to the planned sanitary trunk sewer within the March Road right-of-way. Novatech has completed the March Road sanitary sewer design and it is anticipated that construction will begin in August 2019 with completion in the fall of 2020.

The east portion of the properties will drain southeast to a sanitary trunk running within the Minto subdivision before tying into an upgraded pipe adjacent to Celtic Ridge Crescent. This will in turn drain to the Briar Ridge Pump Station. The City will be coordinating upgrades to the Briar Ridge Pump Station through the Development Charges By-law commensurate with the rate of development. Both systems eventually discharge into the East March Trunk sanitary sewer.

Sanitary sewers will be designed in conformance with all relevant City of Ottawa and MECP Guidelines and Policies. The design parameters within the MSS were superseded by the City's current design parameters (ISTB-2018-01) which have been used to prepare this report.

4.2.3 Stormwater Management

Stormwater flows will be directed east to Pond 3 on the east side of the former rail corridor through a 1.8mdiameter trunk placed in Block 305. The development will have two major system overland flow outlets: one along Street One and through Block 306 which will discharge into an existing ditch west of the former railway corridor; the second will be provided along Street Six and through Block 303, which will also discharge into the existing ditch west of the former railway corridor and drain to Pond 3. Stormwater will be retained when necessary for quantity control, and treated for quality control, prior to discharge into the Shirley's Brook. The design is consistent with the Kanata North MSS and EMP.

4.3 ARCHAEOLOGICAL ASSESSMENT

An Archaeological Assessment is required when development is proposed on lands identified as having archaeological potential on the City's Archaeological Resource Potential Mapping. Paterson conducted a Stage 1 archaeological assessment of the property which recommended further assessment be completed. A Stage 2 archaeological assessment will be completed prior to registration of the subdivision.

4.4 GEOTECHNICAL INVESTIGATION

Section 4.8.3 of the Official Plan requires applications for plan of subdivision to be supported by a geotechnical study to demonstrate that the soils are suitable for development.

A Geotechnical Report was prepared by Paterson Group in 2013 as part of the existing conditions work to prepare the CDP. The report consolidated all existing geotechnical studies completed for individual



Overview of Technical Studies

properties. The investigation concluded that 1070 March Road consists of topsoil and compact silty sand or stiff silty clay overlaying a glacial till layer. Practical refusal to excavation was encountered between 0.9m and 4.6m depth at all test pit locations.

To the south, 1020 March Road consists of topsoil, compact silty sand, stiff silty clay and/or a glacial till layer. Practical refusal to excavation was encountered between 0.2 and 4 m depth at most test pit locations.

Groundwater levels measured in March 2013 ranged between 1.4m to 2.2m for 1070 March Road and 1.2m to 4.1m for 1020 March Road.

The investigation identified that a 2m grade raise restriction over most of 1020 March Road and the southwest portion of 1070 March Road. The northerly portion of the properties did not have any recommended grade raise restrictions. These recommendations have been fully integrated in the conceptual servicing and preliminary grading designs in the Site Servicing and Stormwater Management Report prepared by Stantec.

4.5 ENVIRONMENTAL IMPACT STATEMENT

McKinley Environmental has prepared an Environmental Impact Assessment and Tree Conservation Report (EIS/TCR) for the properties with respect to the proposed development and approved Kanata North EMP. The EIS/TCR notes that several ephemeral and perennial farm drainage channels on the property are to be removed, whereas Shirley's Brook Tributary 2 will be retained and realigned within a 40m-wide open space corridor; both measures are consistent with the approved Kanata North EMP.

Woodlot S23 (on the east side of the former rail corridor) and a stand of white cedars within woodlot S20 are to be retained. The stand of white cedars is located within the neighbourhood park block and will be retained and integrated into the new park's design. Vegetation along the properties' north boundary will be retained where possible through the provision of deep lots and sympathetic grading.

The EIS/TCR notes that butternut were identified on a portion of the properties, and a Blanding's turtle was documented within the Kanata North CDP study area during fieldwork in 2015 (though not on the subject properties). Additional fieldwork was undertaken by McKinley Environmental in 2018 to address the potential presence of additional Species-at-Risk (such as bobolink, Eastern meadowlark, barn swallows, and chimney swift) and further fieldwork has been scheduled for this spring and summer. The 2019 survey results will be provided to the City through a follow-up addendum to the EIS/TCR.

Due to the presence of butternut trees and Blanding's turtle habitat, an Overall Benefit Permit under the *Ontario Endangered Species Act* is anticipated to be required to support the development. Requirements for additional SAR, if any, will be determined based on the 2019 survey results.

The Kanata North EMP proposed several measures to improve Blanding's turtle habitat within the Kanata North study area. Within the proposed development Tributary 2, which currently runs within the March Road



Overview of Technical Studies

drainage ditch, will be realigned within a 40m wide naturalized corridor. The corridor would include features to facilitate Blanding's turtle foraging, basking, a living areas used during their active season.

The majority of the butternut trees identified on the properties are located within the woodlot on the east side of the former rail corridor; this woodlot will be retained and transferred to the City as a publicly-accessible natural area.

Should the regulatory, mitigation, and avoidance measures outlined in EIS/TCR be properly implemented the proposed development is not anticipated to have a significant negative effect on natural features or their functions.

4.6 TRAFFIC NOISE FEASIBILITY ASSESSMENT

Section 4.8.7 of the Official Plan states that a noise impact assessment is warranted when sensitive land uses (such as residential or schools) are proposed within 100m of arterial or collector roads. Development within the City is to conform to the City's Environmental Noise Control Guidelines (ENCG).

Gradient Wind prepared a Traffic Noise Feasibility Assessment for the proposed development. The assessment indicates that noise levels due to roadway traffic will range between approximately 40 and 70 dBA during the daytime period (07:00-23:00). The highest roadway traffic noise levels will occur nearest to March Road. Noise from March Road and Streets One and Eight (both collector streets) may warrant noise control measures for certain outdoor living areas within 30m of these streets.

Residential lots and blocks have been oriented so future buildings will block traffic noise from outdoor living areas whenever feasible. This includes a single-loaded street facing March Road (Street 14 and Block 315). The open space block (Block 311) and two mixed use blocks (Blocks 324 and 327) have been located adjacent to March Road and will increase the distance from the arterial to other sensitive land uses beyond 30m.

The assessment confirms that noise attenuation measures can be implemented to achieve City and provincial standards. A detailed roadway traffic noise study will be required prior to registration of the subdivision and will determine specific noise control measures.

4.7 HYDROGEOLOGICAL ASSESSMENT

In 2016, Paterson completed a Hydrogeological Existing Conditions Report as part of the CDP process which recommended a sentinel well groundwater monitoring program be completed before development occurs.

Paterson's 2016 report concluded that the likelihood of dewatering and construction-related activities within the Kanata North area impacting surrounding private wells is minimal. While most wells in the area are 15m



Overview of Technical Studies

or greater in depth, excavation activities with the study area are not anticipated to exceed 6m in depth. As such, these wells are considered to have a relatively low potential to be impacted by construction dewatering activities. Despite this, the report recommended establishing baseline monitoring program, including the installation of sentry wells, in an abundance of caution.

The monitoring program is intended to establish baseline conditions as a basis for evaluating any potential impacts of construction on groundwater quality and quantity. Ten monitoring wells were place within the Kanata North study area in late 2016 and monitored electronically at 30-minute intervals for a period of 24 months. The wells recorded groundwater level fluctuations ranging from 1.1m to 2.7m. Based on the sentinel well monitoring program's results and previous investigations, it is Paterson's understanding that the long-term groundwater table at the site boundaries are within the overburden and/or shallow bedrock.

4.8 ENVIRONMENTAL SITE ASSESSMENT

Section 4.8.4 of the Official Plan requires that all subdivision applications are accompanied by a Phase 1 Environmental Site Assessment (Phase 1 ESA) completed in accordance with Ontario Regulation 153/04.

Morey Associates was retained to prepare a Phase 1 to investigate the potential for site contamination by current or past uses. The assessment did not identify any potential contamination and concluded that a Phase 2 Environmental Site Assessment is not warranted.

Conclusion

5.0 CONCLUSION

This rationale has demonstrated that the proposed development is consistent with the Provincial Policy Statement, conforms to the City of Ottawa's Official Plan and to the Kanata North CDP.

The Zoning By-law Amendment is required to facilitate the proposed development and will rezone the property from RU- general rural to several residential, institutional, open space and mixed-use zones. The proposed zones are consistent with the Official Plan and CDP and are compatible with the surrounding existing and planned uses.

The proposed development represents good planning and will form an integral part of the developing Kanata North community.

Regards,

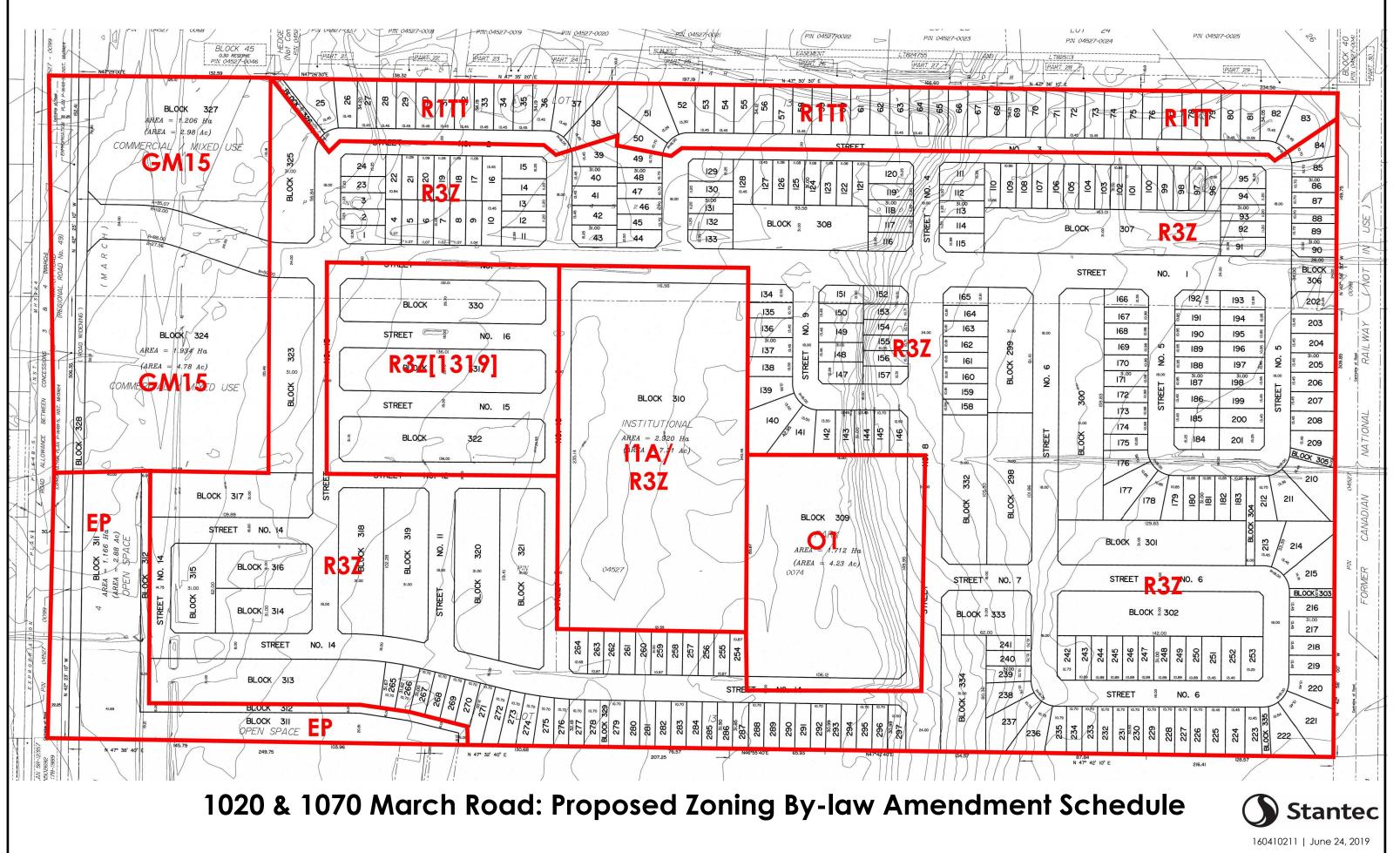
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APPENDIX A

Proposed Zoning Amendment Schedule



APPENDIX B

Mixed-Use Block Development Concepts

