







Planning Rationale - Village of Richmond, West Supporting the Plan of Subdivison & Zoning Amendment Application

Prepared For:

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1 INTRODUCTION

1.1 Background

The Village of Richmond is an active community within the rural west area of the City of Ottawa. In response to recent growth and infrastructure pressures as well as policy direction to focus regional growth within villages, the City of Ottawa has completed a comprehensive policy review for the Village of Richmond, resulting in an updated Secondary Plan and new Community Design Plan (CDP). The purpose of the policy review was to create a vision for future growth in the Village, which would be implemented through a series of policies and guidelines.

The Village of Richmond CDP process (2008-2010) facilitated input and consultation in regards to a Community Design Plan, Master Servicing Study, Transportation Master Plan, and Environmental Management Plan. These documents formed the backbone of the CDP and corresponding Secondary Plan.

Two Official Plan Amendments were sought concurrently with the CDP approval in June 2010. The first (by the City of Ottawa), to establish a new Secondary Plan for the Village of Richmond (based on the framework of the CDP), which would replace the Former Township of Goulbourn Secondary Plan. The second (by Mattamy Homes - OPA # D01-01-09-0002), to support the re-designation of 131.5 ha of land, identified in the CDP as the 'Western Development Lands', to permit residential development.

With the approval and adoption of the new Secondary Plan, Official Plan Amendment D01-01-09-0002 was no longer required, and was never brought forward to the Agriculture and Rural Affairs Committee (ARAC).

Late in 2010, Richmond Village (North) Ltd. and Richmond Village (South) Ltd. (controlled by Caivan Communities) purchased 53 Hectares of the original 131.5 ha 'Western Development Lands' holding for the purpose of advancing the development of a residential subdivision.

1.2 Purpose

This Planning Rationale assesses and confirms the appropriateness of the Draft Plan of Subdivision and Zoning By-law Amendment proposed by Richmond Village (North) Ltd. and Richmond Village (South) Ltd. in the context of the overarching policy and regulatory framework, the surrounding community, and the findings of the required technical studies that accompany the application. This analysis is presented in

Sections 2-5 of this report. The findings of applicable supporting studies and reports are summarized in Section 6. Sections 7 and 8 contain the Conclusions and Zoning By-Law Amendment, respectively.

1.3 Required Planning Approvals

An approved Plan of Subdivision and Zoning By-law Amendment are required in order to proceed with the proposed development. The following is a list of studies completed, to date, in support of the applications.

- Site Servicing Study and Storm Water Management Plan (SWMP)referencing the Master Servicing Study completed by Stantec as
 part of the 2009-10 Official Plan Amendment and confirming the
 findings from the 2010 SWMP as part of the Village CDP and 200910 Official Plan Amendment (File # D01-01-09-0002) and Class EA
 process, DSEL.
- Transportation Impact Study Letter-report using the analysis completed for the 2010 Transportation Master Plan as part of the 2009-10 Official Plan Amendment(File # D01-01-09-0002), Genivar.
- Tree Conservation Report assessing existing site vegetation including a review of all elements within the City's Tree Conservation Guidelines, Kilgour & Associates.
- Geotechnical Review Letter confirming findings from Jacques Whitford's work as part of the 2009-10 Official Plan Amendment (File # D01-01-09-0002), Golder & Associates.

2 COMMUNITY AND SITE CONTEXT

2.1 Village of Richmond (Community Context)

The Village of Richmond is located in Ottawa's rural west area, approximately 25 kilometres southwest of the downtown core and approximately 15 kilometres south of Kanata in the Rideau-Goulbourn Ward.

The Village was initially conceived as a military settlement in 1818 and was made an autonomous municipality by the operation of the Municipal Act in 1850. During the early-mid 1800s, the Village of Richmond served as a primary business centre, although with the construction of the Rideau Canal, Richmond's importance as a trading hub soon diminished and business moved to Bytown. In 1974, a provincial reorganization

amalgamated Stittsville and rural Goulbourn with Richmond to form Goulbourn Township. The Township of Goulbourn became part of the City of Ottawa through amalgamation in 2001.

Richmond is intended to function as a service and social centre for the surrounding rural and agricultural community as it did when first established. While the Village offers some commercial, employment and community services, it functions predominantly as a bedroom community, with many of the residents commuting to larger urban areas such as Kanata or Ottawa Centre for work and commercial goods. Nonetheless, it remains the second largest village in the City of Ottawa with approximately 4,500 residents.

Existing community amenities include: emergency services (police and fire); educational facilities (two elementary schools and one secondary school); small scale retail and commercial services; and a community centre and arena complex. The Richmond agricultural fairgrounds are home to the Fall Fair which occurs annually every September and is the largest of its kind in the Ottawa region.

Housing form is predominantly single detached dwellings varying between single and double storey, with a number of heritage homes preserved along McBean Street running north-south between Perth Street and Ottawa Street.

The Jock River provides an idyllic green corridor through the centre of the Village.



Home Hardware (just west of the northern parcel)



Local Fire Hall (just east of the southern parcel)

2.2 Site Location

The subject site ('Richmond West') is legally described as Lot 22, Concessions II, III, and IV, Village of Richmond. It consists of two (2) contiguous parcels identified legally as Plan 4D-21 units 13, 15, 16, 20, 21 and part of unit 23; Plan 4D-25 units 9 & 10; and Reference Plan 4R-23166 Parts 2-7 respectively, and occupies approximately 133 acres (53 hectares) of land along the west side of the Village boundary. The municipal addresses are 6335 and 6431 Perth Street.

Overall, the terrain is very flat with active farming and agriculture operations. Perth Street runs east-west through the subject site dividing it into two separate parcels, hereafter referred to as the northern and southern parcels. A hydro corridor is located along a narrow linear tract of land which bisects the development property north of Perth Street. The hydro corridor is owned by Infrastructure Ontario but not in active use.

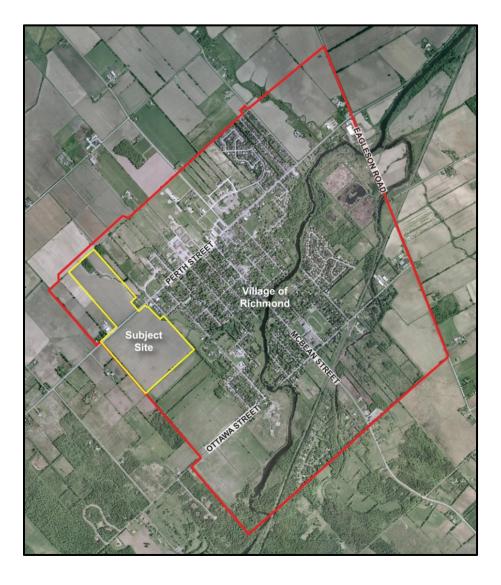


Figure 1 – Aerial of Site Location

Lands to the north, south and west are located outside of the Village boundary and are occupied generally by rural and agricultural uses. Immediately west of the northern parcel and on the north side of Perth Street is the local Home Hardware store. Lands to the east are within the Village boundary and developed primarily with low density residential.

The Van Gaal Drain runs through the site along the eastern boundary in a north-south direction. This drainage corridor ultimately connects to the Jock River, which is located south of Ottawa Street, outside of the subject sites boundary. Both the northern and southern parcel boundaries are typically defined by hedge rows of mature trees. Other vegetation, although minimal, also exists within the drainage corridor.



Western boundary-Northern parcel



Western boundary-Southern parcel



Eastern boundary-Northern parcel



Eastern boundary-Southern parcel



Northern boundary–from Perth St.



Southern boundary—from Perth St.

3 INFRASTRUCTURE CONTEXT

The Village of Richmond is predominantly serviced by publicly provided sanitary sewers along with private and communal wells, relying entirely on groundwater to service its domestic water needs. While existing municipally operated services provide a strong framework for future growth and development, many systems are nearing capacity and infrastructure improvements will be required in order to accommodate future growth.

3.1 Servicing

Water

Currently, the majority of residences and businesses within Richmond Village have private shallow or deep wells for their water supply. A small part of the Village is serviced by a City operated communal well system in King's Park, known locally as the Glen. The Hyde Park development is serviced by a private communal well system.

Wastewater

The Village of Richmond, with the exception of a few properties, is serviced entirely by City sanitary sewers that convey wastewater to the Richmond Pumping Station (PS) located south of the Jock River. Under dry weather and most wet weather flow conditions, the Richmond PS and the sanitary sewers have sufficient capacity to convey the flows generated in the system. During large wet weather flow events, however, capacity constraints exist. As a result, upgrades as outlined in the Master Servicing Study will be required as the Village grows.

<u>Stormwater</u>

The drainage for the Village of Richmond is provided by various systems including storm sewers, sump pumps, road side ditches and municipal drains. The ultimate outlet for the drainage of the Village is the Jock River. Except for portions of the subject site that may drain directly to the Jock River, most of the stormwater drains to the Van Gaal/Arbuckle Drain.

As the elevation of the subject site and of the Village is very similar to the elevation of the Jock River, proposed site drainage will need to address complex site conditions (geotechnical, hydrological, etc.). The use of sump pumps is the only viable option for site drainage within the Village.

3.2 Transportation

The direction of travel during the morning peak hour in the Village of Richmond is northbound toward Ottawa / Kanata reversing to southbound during the afternoon peak hour. The existing transportation network in the village is generally characterized by a grid pattern of predominantly two-lane roads. More recent residential development is characterized by curvilinear roads.

The subject site has frontage along (and will be accessed via) Perth Street, designated "Arterial" on Schedule 'H' of the Official Plan. Other main roads in the village include Eagleson Road, McBean Street, Martin Street, King Street, Maitland Street and Burke Street. The majority of intersections are un-signalized and generally do not provide exclusive turning lanes. [CDP, 2.5]

The village is currently served by OC Transpo Express Route 283, which provides peak hour service. Sidewalks are provided on both sides of Perth Street and along the majority of McBean Street and on the east side of Fortune Street between Perth and Ottawa streets. There are also limited sidewalks on some local streets, but most do not have sidewalks. [CDP, 2.5]

4 PROPOSED DEVELOPMENT

The proposed development is characterized by a mix of residential dwelling types and densities selected to meet the needs of a variety of incomes, lifestyles, life stages and preferences.

The new neighbourhood at full build out will accommodate roughly 1,000 dwellings comprised of approximately 30-40% attached townhouse units and 60-70% single detached homes. Build out of the community will be phased, with approximately 50-100 units completed per year.

Vehicular access to both the northern and the southern parcels of Richmond West will be from Perth Street, the gateway to this new community. Two road connections will be provided north of Perth Street, to future development land west of the subject site. A road connection is proposed through the hydro corridor owned by Infrastructure Ontario (IO). The proposed connection will be subject to review and approval by both IO and Hydro One Networks Inc. (HONI).

Pedestrian connections to the existing village will be created by on road sidewalk extensions and off road pathway linkages.

The proposed housing mix will offer greater alternatives for current and future residents of the community. The predominantly single-detached housing form in the village will be complimented by new smaller-lot single-detached dwellings and attached townhouses, which will continue to meet the needs of growing families while also catering to first-time home buyers and retirees as well as other segments of the population needing/requiring smaller or more affordable housing. Densities vary throughout the site based on lot width and housing type. Lot widths for single detached dwellings are anticipated to range from 9.1m to 15.24m, while attached street townhouse frontages are anticipated to range from 6.4m to 7.1m (per dwelling). The provision of a new 'Village Home' product will create a compact alternative to the traditional townhouse. These back to back attached units provide frontages of 6.2m on a reduced lot depth of 13.5m establishing a viable high density lifestyle choice for rural residents. The proposed development has regard to the density targets established for both attached and detached dwellings.

Architectural detail will be compatible with the vision for future growth in the Village, reflecting some of the historic design elements of the village. Compatible design will be accomplished by creating an engaging street presence through robust front porches; ample landscaping; intimate streetscaping through reduced road widths; diverse façade treatments; and additional design focus on corner lots.

Development along the existing built-up area to the east will take the form of single-detached housing and natural areas in order to ensure a sensitive transition between new and old. Higher densities will generally be focused along Perth Street and the new north-south collector road as well as in close proximity to the local neighbourhood park.

Richmond West along with the balance of the 'western development lands' will be serviced by a new publicly-owned and operated communal well system as well as an extension/expansion of the existing municipally operated sanitary system. Three storm water management ponds are proposed for storm drainage across the entire western development lands area. One of those ponds is located within the subject site. A 'dry pond' is also located within the subject property at the northeast corner. The pond will be designed to create an attractive natural feature with connection to pathways for passive recreation.

Sump Pumps will be used on this site to accommodate drainage and grading constraints. This is the only effective method of drainage for the site given the existing low lying conditions of the subject property,

notable to the Village of Richmond, and geotechnical constraints which limit permissible grade raises.

Parkland and open space areas are provided in accordance with the Community Design Plan. A neighbourhood park of 1.0 ha is proposed in the southern section of the community adjacent the new north-south collector road. Natural Areas have been created in and around the Van Gaal drainage corridor and the future storm water management ponds to provide for passive recreation and a linear green corridor along the eastern boundary of the community. These natural areas represent a land area of 9.2 ha and provide an excellent balance of passive and active open space alternatives for local residents.

The land uses illustrated on the concept plan below, can be broken down as follows:

			% of
Block(s)	Land Use	Area (Ha)	Total Area
1 to 65	Residential Lots	25.2	47.5
65-71	Passive Open Space (Drainage Channel)	2.6	4.9
72	Active Open Space (Park)	1.0	1.9
73	Storm Water Pond	5.9	11.1
74,75,76	Passive Open Space (Natural Areas)	6.3	11.9
77	Street Widening	0.1	0.2
78 to 89	0.3m Reserves	0.03	0.05
Streets	-	11.9	22.45
TOTAL		53.0	100.0



5 POLICY AND REGULATORY FRAMEWORK

5.1 Applicable Policies and Regulations

The Planning Act sets the regulatory framework for planning in Ontario regarding procedures, public meetings and provincial policy. Through the Planning Act, the Province may issue policy statements on matters relating to municipal planning that in the opinion of the Province are of provincial interest.

The following sub-sections identify the policies, regulations and guidelines applicable to the proposed development. A thorough response to these policies as they apply to the following policy themes — Land Use; Infrastructure; Parks and Recreation; Natural Environment; Built Form and Urban Design- is provided in **Section 5.2.**

5.1.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) came into effect on March 1, 2005. The PPS provides direction on matters of provincial interest related to land use planning. While local land use planning authorities are permitted and encouraged to compliment these provincial policies within their local Official Plans, local planning decisions "shall be consistent with" the policies of the PPS.

The underlying principles of the Provincial Policy Statement relate to the Province's long-term economic prosperity, environmental health and social well-being, which depend on efficient land use and development patterns, which support strong, liveable and healthy communities, while protecting the environment and public health and safety and facilitating economic growth.

Policy 1.1.3.1 of the PPS indicates that settlement areas shall be the focus of growth and their vitality and regeneration shall be promoted. The policy goes on to describe a "settlement area" as urban areas and rural settlement areas within municipalities such as villages that are:

- Built up areas where there is a mix of land uses; and
- Lands which have been designated in an Official Plan for development over the long term planning horizon.

Policy 1.1.3.2 in the PPS states that land use patterns within settlement areas shall be based on densities and a mix of land uses which:

Use land and resources efficiently;

- Are appropriate for and efficiently use infrastructure and public service facilities which are planned or available, and avoid the need for unjustified and/or economical expansion; and,
- Minimize negative impacts to air quality and climate change and promote energy efficiency [Policy 1.1.3.2 (a)]

In addition, planning authorities shall establish and implement phasing policies to ensure orderly development along with the timely provision of infrastructure to meet current and future demand. [Policy 1.1.3.8]

The PPS also provides housing policy to ensure an appropriate range of housing types and densities as outlined in *Policy 1.4 - Housing*. Specific to regional markets, Policy 1.4.3 stresses the importance of:

- a) Establishing and implementing minimum targets for the provision of housing which is affordable to low and moderate income households.
- b) 1) Permitting and facilitating all forms of housing required to meet the social, health and well-being requirements of current and future residents, including special needs requirements; and [...]
- c) Directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;
- d) Promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of alternative transportation modes and public transit in areas where it exists or is to be developed; and
- e) Establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety. [Policy 1.4.3]

Public spaces are encouraged as a means of ensuring healthy and active communities. New development proposals should provide for a full range of publicly-accessible built and natural settings for recreation, including facilities, parklands, open space areas, trails and, where practical, water-based resources [Policy 1.5.1b].

Section 1.6.4 – Sewage and Water describes municipal sewage services and municipal water services as the preferred form of servicing for settlement areas. Policy 1.6.4.3 further states that municipalities may choose to use private communal sewage services and private communal water services where:

- Municipal sewage services and municipal water services are not provided; and
- The municipality has established policies to ensure that the services to be provided satisfy the criteria set out in Policy 1.6.4.1.

Section 2.2 – Water outlines that development restrictions may be necessary in order to protect all municipal drinking water supplies and designated vulnerable areas and improve or restore the hydrologic function of these sensitive areas. [Policy 2.2.1d] Proposed stormwater management practices should look to minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces [Policy 2.2.1g]

Mitigation measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions. [Policy 2.2.2]

The proposed development is consistent with the policies of the Provincial Policy Statement.

5.1.2 City of Ottawa Official Plan (consolidated 2007)

The Official Plan (OP) provides a vision and a policy framework to guide the future growth of the City of Ottawa. The Official Plan was recently amended by OPA 76 as part of the five (5)-year OP review however at present the amendment in its entirety is not in full force and effect as it has been appealed by numerous parties. Nonetheless, it should be recognized that both OP 2003 and OPA 76 are based on the same 20/20 Guiding Principles and therefore strive to meet the same policy objectives. The subject site's designation is unchanged in OPA 76.

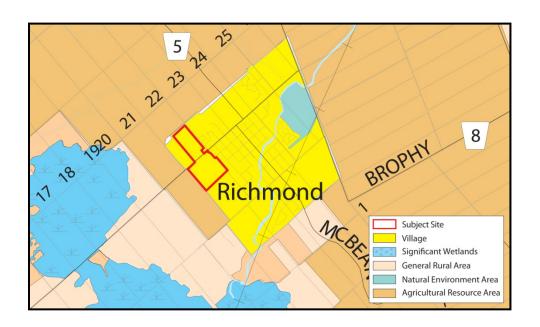


Figure 4 –Schedule A: Rural Land Use (Official Plan)

In the City of Ottawa's Official Plan, the subject site is designated "Village" as shown on the Rural Policy Plan in Schedule A. The Village designation permits a variety of land uses to provide for the daily needs of the rural community and to ensure a rural scale and character is maintained through development. Preservation of "Villages" and their traditional functions is critical to the continued vitality of the rural area.

Section 3.1 of the Official Plan identifies generally permitted uses that are necessary for daily life and community function within existing and establishing communities. Policy Nine (9) defines public utilities (which includes municipal services) and indicates that they are permitted in any land use designation when subject to the Environmental Assessment (EA) Act. Policy Ten (10) further stipulates the limits of public utility and municipal service construction within certain land use designations when not subject to the EA Act.

Section 3.7.1-Villages highlights the importance of new development to provide a variety of uses that meet the daily needs of the rural community, along with a range of housing types to meet the requirements of the Village population. It goes on to discuss the policy requirements for approval of any future development application within the Village designation.

This proposal will be subject to the policies outlined in Section 2.2 – Managing Growth; Section 2.2.2 – Village Boundaries; Section 2.5.1 – Compatibility and Community Design; and Section 4.11 – Compatibility Criteria, along with additional policy considerations outlined in Section

3.7.1 itself, and other relevant policy documents discussed throughout this report.

Section 2.2 – Managing Growth, indicates that within the rural context, growth is to be directed toward villages to provide for better access to community facilities and services for all residents.

Section 2.5.1 – Compatibility and Community Design, recognizes that introducing new development in existing areas requires a sensitive approach, and sets forth design objectives that will help achieve compatibility of form and function. It is acknowledged that some flexibility and variation that complements the character of existing communities is central to successful intensification.

Section 4.11 – Compatibility, indicates a set of criteria on which all development applications will be evaluated. Specifically, 1) Traffic; 2) Vehicular Access; 3) Parking Requirements; 4) Building Height and Massing; 5) Pattern of the Surrounding Community; 6) Outdoor Amenity Areas; 7) Loading Areas; 8) Lighting; 9) Noise and Air Quality; 10) Sunlight; 11) Microclimate; and 12) Supporting Neighbourhood Services.

Portions of the subject property are also highlighted with "Flood Plain", and "Wellhead Protection" overlays on the Environmental Constraints Plan in Schedule K. These environmental constraints are subject to further technical analysis and policy review prior to development commencing. From a policy perspective, development within floodplain and on land subject to wellhead protection is subject to review under Sections 4.8.1-Flood Plains and 4.8.2-Wellhead Protection of the OP. From a serviceability standpoint, the necessary technical analysis has been completed as part of this application and is discussed in Section 6.2 of this rationale.

Section 4.7.3 – Protection of Surface Water sets forward minimum watercourse setback requirements under Policy Two (2) to be the greater of:

- a) Development limits as established by the regulatory flood line;
- Development limits as established by the geotechnical limit of the hazard lands;
- c) 30 metres from the normal high water mark of rivers, lakes and streams, as determined in consultation with the Conservation Authority; or
- d) 15 metres from the existing top of bank, where there is a defined bank. [OMB decision #1754, May 10, 2006] [OP 4.7.3.2]

Development proposals must comply with one of the above, unless rationalized at a reduced setback under the circumstances described in Policy Four (4). Relative to the subject site, Policy 4 item c) warrants consideration.

Exceptions to the setbacks in policy 2 will be considered by the City in consultation with the Conservation Authority in situations where development is proposed:

c) Adjacent to an existing top of bank where the regulatory flood line and the geotechnical limit of the hazard lands are within 15 metres from the existing top of bank [OMB decision #1754, May 10, 2006] [OP 4.7.3.4c]

Section 4.8.1 – Floodplains requires that review and approval of future development in a floodplain area by the conservation authority must take place prior to any construction. Section 4.8.2 – Wellhead Protection notes restrictions on any potentially contaminating land use in areas where a well is used to supply public water.

The design objectives established in the Official Plan are set forth below. It should be noted that the Guiding Principles prepared as part of the Richmond Village Community Design Plan echo the intent of these objectives.

- 1) To enhance the sense of community by creating and maintaining places with their own distinct identity.
- 2) To define quality public and private spaces through development
- 3) To create places that are safe, accessible and are easy to get to, and move through.
- 4) To ensure that new development respects the character of existing areas.
- 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. To understand and respect natural processes and features, and promote environmental sustainability in development.

The proposed development is consistent with the applicable policies of the Official Plan. Following completion of the final drainage channel design, environmental and slope stability analysis will be conducted to assess the feasibility of a reduced setback for the Van Gaal Drain. This approach is consistent with Section 4.7.3 Policies four (4) and six (6) which allow for consideration of an alternative setback under certain circumstances.

5.1.3 Village of Richmond Secondary Plan

In the 2003 Official Plan, Volume 2C contains the Secondary Plans for Ottawa's Villages, and specific to this application, the Secondary Plan for Richmond (RSP).

Under Section 2.0 Managing Growth the RSP outlines the three key areas for policy development are Water, Wastewater and Transportation. The policy direction throughout the document responds to these key areas of focus.

The RSP is based on a twenty-year planning period, from 2010 to 2030, and highlights the requirement for upgrades to infrastructure services within the village in order to accommodate residential growth from approximately 1,550 dwelling units to between 4,400 to 5,500 units (including existing units).

The Plan encourages a variety of residential densities and dwelling forms in appropriate locations, and sets density targets for each within the Western Development Lands under Section 3.3.4. These are outlined in the table below. The RSP also strives to respond to local residents interest in attracting visitors to support the commercial core, while remaining independent and self-sufficient.

An interim floodplain overlay is in effect on the northern section of the subject site (to Perth Street) until the necessary construction works to amend the flood plain on site are completed. Once the construction works are complete the overlay can be adjusted to accurately reflect the new conditions and development can proceed in accordance with the underlying land use designations. These changes will not necessitate further amendment to the Secondary Plan [3.3.6.3].

Schedule A of the Richmond Secondary Plan, illustrates that the majority of the proposed development area is designated "Residential One and Two Unit", which permits a range of ground-oriented, low density residential and associated uses (Section 4.3.1, RSP). A limited number of multiple attached dwellings are also permitted and a height limit of 3.5 storeys is established, with a minimum height limit of 2 storeys at gateway locations and focal points.

Pockets of land are depicted as "Residential – Ground-Oriented Multiple Attached". This residential form can include triplexes and ground-oriented attached dwellings (containing 6 units or less). A limited

number of lower density uses are permitted as long as 80% of the site specific designation is used for attached dwellings.

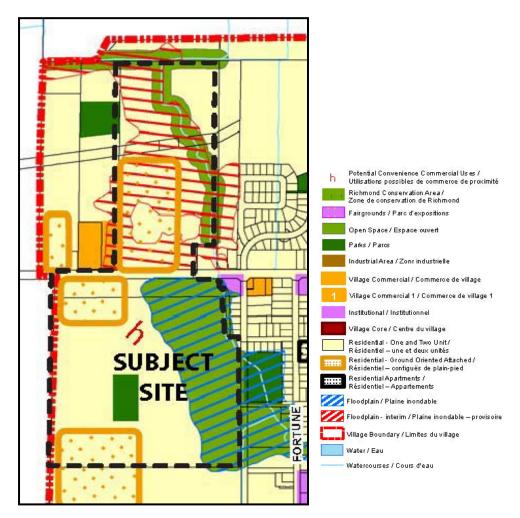


Figure 5 –Schedule A: Land Use (Secondary Plan)

Specific to the subject site, *Section 3.3.4 Western Development Lands* includes the following policies:

1. Establishing density targets within the new development land:

Dwelling Type	Max Density Units/Net Ha	Unit Mix (% of Total)
One & Two Units Large Lots	17	2-7% Minimum
One & Two Units Small Lots	30	58-78% Minimum
Townhouses	45	20-35% Minimum
Townhouses w. Rear Lanes	80	
Back-to-Back Townhouses	99	

- 2. Ensuring development phasing is in harmony with infrastructure work as shown in Section 8 of the Community Design Plan.
- 3. Evaluating new development proposals against the Demonstration Plan as displayed in the Community Design Plan.
- 4. Watercourse setbacks for the Jock River and the permanent flowing sections of the Moore Branch (Sections 1, 2 and 3 lower) and the Van Gaal/Arbuckle Drain shall be in accordance with watercourse setback policy in the Official Plan. These setbacks will be to the satisfaction of the City in consultation with the RVCA given the proposal to locate the stormwater pond within the floodplain. The pond must be located a minimum of 30 m from top of bank. [...]
- 6. Defining works required for development within the interim floodplain area north of Perth Street prior to development being permitted behind the 30 m berm from the Van Gaal Drain. The proponent will have to undertake sufficient works to demonstrate that:
 - 1. Existing flood elevations are matched;
 - 2. No increases in flood levels on adjacent properties and
 - 3. A 30m setback is maintained due to the watercourse remaining a direct fishery.

The proposed development is consistent with the policies of the Richmond Secondary Plan. In relation to Section 3.3.4 Policy 6 (regarding watercourse setbacks), environmental and slope stability analysis will be conducted to assess the feasibility of a reduced setback for the Van Gaal Drain, following the completion of a final drainage channel design. This is being conducted in consultation with the RVCA at present.

5.1.4 Village of Richmond Community Design Plan (CDP)

In July 2010, City of Ottawa adopted a Community Design Plan for the Village of Richmond. The CDP is the result of work by City of Ottawa Staff, direction from the Steering Committee and Technical Advisory Committee (both formed in 2008), and input from the public.

The key principles of the plan are outlined in Section 1.4, as follows:

- Create a liveable and sustainable community;
- Protect and enhance Richmond's historic village character;
- Protect the natural environment and incorporate constraints in the plan;
- Expand and maintain the transportation infrastructure;
- Create and protect open space, recreation and community services; and
- Ensure sustainability of servicing.



Figure 6 – Demonstration Plan (Village of Richmond Community Design Plan)

In order to meet the servicing needs of future development in the village, a Master Servicing Study (Stantec, 2008) was prepared in conjunction with the CDP making the following recommendations:

 Public water (communal wells) and wastewater (expansion of existing wastewater collection system) are the preferred option for servicing future development areas. The communal well system(s) would be owned/operated by the City and designed to accommodate all existing development should it become necessary or warranted.

- Existing development will continue to be serviced via private wells as would infill areas and development areas requiring "rounding out".
- The expansion to the sanitary system is timely given the existing system is at capacity. Decisions regarding the phasing of the proposed development and of other development on lands designated "Future Development" will be in accordance with the availability of appropriate infrastructure. [MSS, 2008)

The Transportation Master Plan, also completed for the CDP, concludes that based on preliminary traffic generation estimates between Ottawa/Kanata and the Village, the existing roadway network should be sufficient up to the 2031 OP horizon.

To accommodate future growth, the plan identifies internal village works to improve east-west capacity; overall connectivity; and decrease congestion. Internal improvements include the consideration of new collector roads, local road connections, walkway connections, off-road trails, cycle routes and transit routes.

The proposed development is consistent with the policies of the Village of Richmond Community Design Plan.

5.1.5 Zoning By-law 2008-250 (Consolidated)

Under the Comprehensive Zoning By-law, the zones currently in place on the subject property are listed as follows:

DR1 (Development Reserve 1) - Affecting the majority of developable land within the subject property, the purpose of the Development Reserve zone is to recognize lands intended for future development and limit permitted uses until such time as the lands are re-zoned in a manner that is consistent with the Official Plan. The Zoning Amendment in this case, will be guided by the recommendations of the Secondary Plan and the Village of Richmond Community Design Plan.

A floodplain overlay applies to the northern section of the subject property (to Perth Street) and along the Val Gaal drain to the western boundary. The flood plain provisions take precedence over the provisions of the underlying zone and restrict development to minimize health and safety risks. Despite the provisions of the underlying zone, development is generally prohibited within any area subject to a floodplain overlay with certain exceptions such as building additions, change of use, infrastructure, etc.

The floodplain overlay illustrated on the zoning map does not include the new flood plain mapping north of Perth Street, approved by the RVCA in January 2010. It is anticipated that the Zoning By-law mapping will be updated based on the RVCA approved flood plain mapping and agreement in principle with the proponent following completion of required on-site channel modifications/site grading.

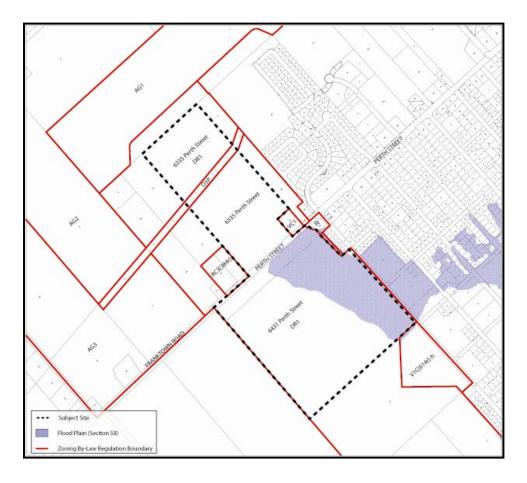


Figure 7— Zoning By-law Schedule

5.2 Response to All Applicable Policies and Regulations

5.2.1 Land Use

The development of *Richmond West* is consistent with the policy direction for future land use in the Village of Richmond. The proposed development will accommodate the growth required to drive infrastructure improvements, support new and existing employment, community and commercial services, and provide a better variety of housing types and affordability.

Residential density will be maximized throughout the site to ensure efficient land use. Based on an overall range of 1,800-2,300 dwelling

units anticipated for the Western Development Lands, the 1,000 dwelling units proposed on the subject property is reasonable. Single detached dwellings will not exceed 30 du/ha and will represent 60-70% of the unit mix. Townhouse dwellings will not exceed 45 du/ha and represent approximately 30-40% of the unit mix. The proposed development deviates slightly from the unit mix set forth in the Secondary Plan as there are no large-lot singles proposed and the percent townhouses may exceed 35%. However, because the Secondary Plan and CDP envision the majority of the medium and high density development (for the Western Development Lands) on the subject site, these slight deviations are appropriate and the overall density targets can be met when the lands to the south are developed.

The proposed dwellings will be designed to accommodate a broader diversity of age groups, incomes and lifestyles with alternative housing forms. Of interest, there is currently only five percent (5%) of residential development in the village that offers alternatives to single detached dwellings.

Benefits to the existing Village and surrounding development are achieved through the enhancement of Perth Street as a scenic entry point; additional of a new north-south spine road parallel to McBean Street; provision of parks and natural features to benefit the new residents and the existing village; and the creation of new public spaces with connection to a larger integrated trail network.

5.2.2 *Infrastructure*

The proposed development supports the servicing strategy for the Village of Richmond.

Servicing

The public services (communal well and municipal wastewater) proposed are consistent with direction in the Secondary Plan and Community Design Plan. It represents an efficient (with respect to land and economy) method of servicing and allows for an efficient use of land. The existing quantity and quality of groundwater available is optimal for this method of service delivery.

The existing sanitary system is reaching capacity; its expansion in accordance with the Master Servicing Study will allow future growth both within the existing Village (infill) and in the future development areas.

The communal well system(s) will be designed such that it can be expanded to accommodate existing development in the Village, should it become necessary or warranted, and subject to the provision of future municipal funding.

Assessment of ground water quality and the impact of the proposed communal well system on existing hydrology was completed with the Master Servicing Study for the Village of Richmond as part of the CDP. As such, a Wellhead Protection Plan is not necessary at application submission and can be submitted as a condition of Draft Approval.

As the proposed stormwater management pond is subject to the Environment Assessment (EA) process, it is permitted within the floodplain overlay [OP Section 3.1 policy 9]. By locating this necessary infrastructure within the floodplain, a more efficient use of land is achieved.

Through ongoing consultation with the Ministry of the Environment (MOE) and as part of the CDP process and completion of the Master Servicing Study for the subject lands, it has been clarified that the proposed stormwater management pond and associated works constitute a Schedule B undertaking as defined in the Municipal Class EA document. These works, when completed by a private sector proponent are not subject to the Municipal Class EA. As such, to satisfy the EA requirements for the proposed stormwater management ponds, the pond blocks will be delineated by and approved as part of the Draft Plan of Subdivision process.

The use of sump pumps for site drainage is the only viable option for development of the site. The site cannot meet the City of Ottawa hydraulic grade requirements without the application of excessive amounts of fill. The amount of fill that would be required to achieve the grade requirements without sump pumps cannot be permitted as a result of geotechnical constraints. Not only is the proposed approach the only viable option, it is also consistent with the existing drainage solution for the Village and the recommendations of the Servicing Study prepared by DSEL as part of this application.

<u>Transportation</u>

The proposed development can be accommodated by the existing roadway network. The proposed north-south collector, which functions as the spine of Richmond West, will efficiently service the proposed development. New walkway connections, extensions to the existing trail network, and improvements to the on-road cycling network will help to

reduce the need for local car travel. It is anticipated that growth generated by the proposed development, and other future development, will allow for enhanced public transit from the village to both Ottawa and Kanata.

5.2.3 Parks, Recreation and Open Space

The parks and opens spaces proposed are consistent with the Demonstration Plan in the CDP. The centrally-located 1.0 ha park will service new community and the existing village. Because the CDP anticipates a large park on the southern half of the 'Western Development lands' (owned by Mattamy Homes), the amount of parkland proposed on the subject site falls short of the City's requirement of 1 ha / 300 units, which would result in a requirement for 3.3 ha of parkland based on a 1,000 total units. To address this shortfall, it is anticipated that a Staff will require a cash-in-lieu of parkland contribution.

Multi-use pathways and sidewalks will connect parks and open spaces within the site and through to the existing Village. A pathway along the Van Gaal drain connects to the large greenspace surrounding the future stormwater management pond – providing new opportunities for passive recreation.

5.2.4 Hazards/Natural Environment

Trees along the east and west boundaries of the site will be preserved and maintained where possible to ensure a development approach that integrates natural features with new built form.

Construction works necessary to alter the drainage channel for the Van Gaal drain and reduce the size of the floodplain north of Perth Street will be completed prior to development of the site. Plans for the works are currently being fine-tuned in consultation with the Rideau Valley Conservation Authority and in accordance with applicable policies. .

The Concept Plan illustrates both a 30.0 metre and a 60.0 metre corridor for the Van Gaal Drain. The 60.0 metre corridor (30.0 metre setback on either side of the watercourse) reflects the policy requirement outlined in Official Plan Section 4.7.3 (2) and Secondary Plan Section 3.3.4 (6).

Once the Van Gaal Drain channel design is finalised the proponent intends to undertake the necessary environmental and slop stability studies to determine whether a reduced setback can be accommodated.

in accordance with OP Policies 4.7.3 (4) &(6). The 30.0 metre (15.0 metre setback on either side of the watercourse) corridor reflects the possibility of a reduced setback, subject to consultation with stakeholders and the findings of the above mentioned studies.

The Van Gaal drainage design, corridor design and watercourse setbacks shown are preliminary and shall be finalised through further analysis with the conservation authority and technical review.

5.2.5 Built Form and Urban Design

Streets have been designed in a modified grid pattern to mimic the established (older) residential areas within the Village while also maximizing views to open space areas including the Van Gaal Drain and the proposed stormwater management pond.

Perth Street is the gateway to the Village of Richmond and as such the streetscape along this corridor is important. A roundabout is anticipated at the intersection of Perth Street and the new north-south collector (once signalisation is warranted). The majority of lots along Perth Street face the road creating an active streetscape. An element of privacy is created through the use of single loaded 'window streets' adjacent to Perth Street. For houses along Perth Street that have side yards facing the road, the character of the front façade will be wrapped around to the side yard.

Building setbacks will vary slightly to encourage a more interesting streetscape. At a minimum, dwellings will be situated 3.0m from the front property line with porches maintaining close proximity to the sidewalk, fostering a stronger relationship between the private dwellings and the public street.

Architectural elements such as front porches, articulated corner treatments, set-in garage doors, and a mix of building materials will contribute to sense of place and an attractive pedestrian realm.

6 SUMMARY OF SUPPORTING STUDIES AND REPORTS

6.1 Transportation Impact Study

In accordance with the policies of Section 4.3 of the Official Plan, Genivar prepared a Transportation Impact Study (TIS), supported by the existing Transportation Master Plan, to determine the impact of the proposed development on the transportation network, and recommend necessary

modifications to transportation infrastructure. The Study recommends the following:

- The proposed development will be built out over the course of ten (10) to twenty (20) years. With each phase individual Transportation Impact Studies will examine the site design and impact of the phase on the overall community.
- The proposed access route from Perth Street is anticipated as a roundabout once a traffic control is warranted at that location;
- The Transportation Impact Study echoes the conclusions of the Richmond Village Transportation Master Plan with respect to capacity and improvements.

Based on the proposed accesses, modifications and study findings, Genivar supports the proposed development.

6.2 Site Servicing Study and Storm Water Management Plan

In accordance with the policies of Section 4.4.1 of the Official Plan, David Schaeffer Engineering Limited (DSEL) prepared a Site Serviceability Study, supported by the existing Master Servicing Study (Stantec, 2011), to assess adequacy of existing infrastructure and make recommendations regarding site servicing. The findings and recommendations include the following:

Water Supply

Potable water will be delivered to the proposed development area via a communal well, to be located at the south end of the proposed development. The communal well will be designed similarly to the existing King's Park communal well system; consisting of groundwater wells, an at-grade water storage tank and a high lift pumping station with disinfection and treatment as required. The groundwater treatment will be minimal (sodium hypochlorite injection and chlorination).

The development will be serviced by a watermain network. Preliminary analysis for the network indicates that the 150mm, 200mm and 300mm diameter sizes will satisfy the demands.

Stormwater

Richmond West will be serviced by a conventional storm sewer system designed in accordance with the City of Ottawa guidelines. All storm flows will be directed to a stormwater management facility where the runoff will be treated for water quality and quantity control.

The stormwater management design for the subject property includes two stormwater management ponds. One of these ponds is situated in the 100-year regulatory floodplain, outside the 100-year erosion limit and 100-year summer flood elevation of the Van Gaal / Arbuckle Drain. Operations and maintenance requirements will be addressed during the detailed design stage.

Where roads cannot convey the flows, storm sewers will be designed to carry the 100-year flow. The anticipated peak flow rate from the Caivan Village of Richmond Subdivision at the two pond outlets are 1796 L/s and 1580 L/s. .

All flows in excess of the 5-year flow for the proposed development will be conveyed via the subdivision roadways, outletting to a stormwater management pond for treatment prior to discharging to the Jock River. The proposed major system stormwater design will conform to all relevant City Guidelines and policies.

Sanitary

The proposed wastewater system will outlet to the Martin Street trunk sewer and will be supported by downstream sanitary infrastructure. The following upgrades are required immediately to support this development: upgrades to local gravity sewers, expansion of the existing pump station, repair of the existing 500mm diameter forcemain, and construction of 3km of the new 600mm diameter forcemain. At full build out the remaining 10.5km of the new 600mm diameter forcemain will be required.

The wastewater system is designed in accordance with City of Ottawa guidelines, with the one exception being that the existing pump station does not provide emergency provision for flood protection. This deviation from guidelines is consistent with the existing pump station design, as well as existing residential development.

Site Grading and Sump Pumps

The Richmond West development is subject to grade raises of up to 2.0m. The proposed site grades range from 95.00 to 96.80, matching in with the existing ground elevations. Given the restrictions imposed, and existing grades on site, the proposed site grading has been designed using sump pumps. Their purpose is to drain the weeping tile surrounding the proposed residential units, rather than a conventional gravity connection. Conventional storm servicing with a gravity connection will result in significant filling of the site.

Filling of the site is not feasible for the following reasons:

- May lead to grades in excess of the grade raise restriction;
- If maximum grade raises are exceeded, the site is at risk of settlement unless specific measures are taken, which often require significant lead time;
- Importing of fill can be complicated and cost prohibitive;
- Does not provide a natural transition to the existing Village of Richmond.

Based on the findings and recommendations above, DSEL supports the proposed development.

6.3 Tree Conservation Report

In accordance with the policies of Section 4.7.2 of the Official Plan, Kilgour & Associates have completed a Tree Conservation Report in support of the Plan of Subdivision application.

The findings were as follows:

- There are no existing conservation designations on or near this site (e.g., Provincially Significant Wetland, Area of Natural and Scientific Interest, NESS or UNAESS area, Natural Environment Area, Urban Natural Feature, Rural Natural Feature).
- The area consists primarily of active agricultural fields on clay soils. Hedgerows follow much of the east and west sides of the site and a small (1 ha) woodlot is located along the north side. In the open areas, 26 trees or small tree clusters with were found with DBH > 10 cm. On the entire site, 21 trees may be large enough to be considered specimen trees (i.e. > 50 cm DBH and in reasonably good health), although none of the species were unusual or regionally significant.
- The development plan calls for the removal the woodlot and all individual trees in open areas. The hedgerows on the sides of property straddle the property line and would be reduced in width.
- Recommendations to offset the loss of trees and other site vegetation include:
 - Maintain where possible existing hedge rows on the east and west sides of the site;
 - Where possible given operational constraints, the south east corner of the site, currently reserved for storm water

- management ponds, and the Van Gaal Drain corridor should be naturalized with native shrubs and trees; and
- o Individual lots in the development will be planted with appropriate native tree species as per City guidelines.

Based on the findings and recommendations above, Kilgour & Associates supports the proposed development.

6.4 Geotechnical Study

In response the requirements of section 4.8.3 of the Official Plan, Jacques Whitford Limited prepared a preliminary Geotechnical Study in 2007 in support of the Official Plan Amendment D01-01-09-0002 and concluded the following:

- A compressible deposit of clay was encountered within the northern section of the site. Due to the compressible nature of the clay, grade raises over sections of the site should be restricted to minimize total settlements. Table 4-1 summarizes the preliminary grade raise restrictions for the site.
- The groundwater table was observed to be relatively high; grade reductions may lead to drainage concerns.
- The soil conditions encountered are suitable for the use of conventional spread and strip footings for the support of structures.

An addendum letter has been prepared in addition to the above report to support the Plan of Subdivision submitted for approval here, and address the time lapse since the last bore hole investigation. Conclusions are as follows:

- Conservative assessments have been used based on the uncertainty of the interpreted pre-consolidation pressure due to a wide range of un-drained sheer strengths;
- Grade raises of up to 2.0m are likely feasible for the site;
- If the permissible grade raise cannot be accommodated alternatives could also be considered, such as light weight fill, preloading of the site, or piled foundations. These would be subject to further review.
- Additional investigation may be required at detailed design stage once design grading is known.

Based on the findings and recommendations above, Golder & Associates supports the proposed development.

7 CONCLUSIONS

Based on the information presented throughout this Rationale, it is concluded that the proposed plan of subdivision is appropriate in the context of the surrounding community, the applicable policies and regulations and the findings of the technical reports.

- The proposed development will support existing and new retail/commercial services and community facilities, accommodate a broader range of lifestages, incomes and lifestyles through a greater variety of housing types and drive infrastructure improvements that will expand the options for future uses.
- The proposed densities and unit mix are consistent with the policy framework.
- The road and pedestrian realm will be enhanced through the renewed urban design approach and focus on street character.
- Through the provision of a new park and a cash-in-lieu payment, the City's parkland requirements will be met.
- Trees and hedgerows will be protected to the extent possible,
- The public services (water and wastewater) proposed for future development areas are consistent with the policy direction and will allow for an efficient use of land.
- The proposed development can be accommodated by the existing road network.

With respect to watercourse setbacks for the Van Gaal Drain, it is important to note that until the design of the channel is finalized, the corridor/watercourse setbacks cannot be confirmed.

The preliminary 60.0 metre corridor illustrated on the Concept Plan is consistent with the applicable Official Plan and Secondary Plan policies.

The possibility of a reduced corridor for the Van Gaal drain will be explored as part of the ongoing floodplain resolution with the conservation authority.

It is recommended that Staff support the approval of the Zoning By-law Amendment, as proposed in Section 8 of this Report. It is also recommended that Staff support the proposed Plan of Subdivision.

8 PROPOSED ZONING BY-LAW AMENDMENT

As noted in *Section 6.1.5*, the site is currently zoned DR1 (Development Reserve 1) with a floodplain overlay on portions of the site.

Guided by the policies of the Secondary Plan and Community Design Plan, it is proposed that the subject site be re-zoned as follows to permit the proposed development:

- 1. Village Residential Second Density (V2E) Exception [xxx] to be applied to all sections of the subject site where predominantly Single Family Residential dwelling (in accordance with the CDP Demonstration Plan) are proposed.
- 2. Village Residential Third Density (V3B) Exception [xxx] to be applied to section of the subject site where predominantly multiple dwelling units are proposed. This zone would permit home based business which could provide for a new dwelling form along Perth St. and the new north-south collector road. The V3B also allows the flexibility to adapt dwelling form to accommodate future shifts in market demand. This zone will also be applied to the proposed park location.
- 3. Open Space Zone (O1) to be applied to the watercourse setback along the Van Gaal Drain and to the stormwater management pond and floodplain area south of Perth Street.
- 4. Floodplain Overlay to be applied to the floodplain north (when confirmed) and south of Perth Street.

The following site specific exceptions to the V2E and V3B zones are requested to accommodate the housing product proposed for the subject site:

- Reduce minimum front yard setback to 3.0m;
- Reduce minimum rear yard setback to 6.0m;
- Reduce minimum lot width to 9.0 m (single detached);
- Reduce minimum lot width to 5.0 m (townhouses);
- Reduce minimum lot depth to 25.0 m (singles and townhouses);
- Reduce minimum lot depth to 13.5m (village home);
- Establish total interior side yard setback requirement (totalling 1.8m i.e. 1.2m + 0.6m);
- Allow the porch to encroach up to 1.0m from the front lot line;
- Establish a maximum lot coverage of 55% (single detached); 65% (street townhouse); and 78% (village home) to allow flexibility based on housing type.



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