PLANNING REPORT

SILVERCREEK JUNCTION

35, 40 AND 55 SILVERCREEK PARKWAY SOUTH, GUELPH

Silvercreek Guelph Developments Limited and 2089248 ONTARIO INC.

December 5, 2019

Project No. 1016

ASTRID J. CLOS

PLANNING CONSULTANTS

423 Woolwich Street, Suite 201, Guelph, Ontario, N1H 3X3 Phone (519) 836-7526 Email astrid.clos@ajcplanning.ca Table of Contents

1.	Introdu	lction	1
2.	Backgr		1
	2.1	2009 Minutes of Settlement	1
	2.2	Revised 2013 Planning applications and Concept Plan Approved	2
3.	Existin	g Conditions and Surrounding Land Uses	2
4.	Descri	ption of the Proposal	4
	4.1	Official Plan Amendment	4
		4.1.1 Employment Land Conversion	11
		4.1.2 Community Mixed-Use Centre	13
	4.2	Zone Change	13
	4.3	Draft Plan of Subdivision	22
5.	Plannir	ng Framework	22
	5.1	Provincial Policy Statement (2014)	22
	5.2	A Place to Grow (2019)	23
	5.3	Guelph Official Plan (March 2018 Consolidation)	25
	5.4	Guelph Zoning By-law	26
6.	Summa	ary of Supporting Reports	27
	6.1	Functional Servicing and Stormwater Management Report	27
	6.2	Urban Design Brief	28
	6.3	Traffic Impact Study	29
	6.4	Scoped Environmental Impact Study	29
	6.5	Phase 1 and Phase 2 Environmental Site Assessment and	
		Record of Site Assessment	30
	6.6	Archaeological	30
	6.7	Geotechnical Report	30
	6.8	Hydrogeological Report	32
	6.9	Noise and Vibration Study	33
7.	Conclu	Ision	34
Figure	1	OMB Approved Concept Plan	1
Figure		Revised City Approved Concept Plan	2
Figure		Surrounding Land Use	3
Figure		Current Official Plan Land Use Designations	4
Figure	5	Proposed Official Plan Land Use Designations	5
Figure		Summary of Proposed Official Plan Land Use Designations	6
Figure	7	Proposed Zoning Map	13
Figure	8	Summary of Proposed Zoning	14
Figure	9	Back-to-Back Townhouse Building Elevation Example	15
Figure	10	Back-to-Back Townhouse Building Layout Example	15
Figure	11	Lane Decked Townhouse Building Elevation Example	16
Figure	12	Lane Decked Townhouse Building Layout Example	16
Figure	13	On-Street Townhouse Building Elevation Example	17
Figure	14	On-Street Townhouse Building Layout Example	17
Figure	15	R.3B Zoning Compliance Analysis	18
Figure		CC Zoning Compliance Analysis	20
Figure		Holding Zone Conditions	21
Figure		Proposed Land Use Schedule	22
Figure		Growth Plan Elements	26
Figure	20	Existing Zoning from Defined Area Map Numbers 10 and 15	27

Page

1. Introduction

This report has been prepared in support of Official Plan Amendment, Zone Change and Draft Plan of Subdivision applications for the property municipally addressed as 35, 40 and 55 Silvercreek Parkway South located in the City Guelph and owned by Silvercreek Guelph Developments Limited and 2089248 ONTARIO INC. This property is known as Silvercreek Junction. This Planning Report was requested by the City of Guelph in a pre-consultation meeting.

The property subject to these applications has an area of 16.52 hectares. The owner was pursuing the approval of a Draft Plan of Subdivision which would implement the existing Official Plan designations and Zoning in effect for the subject property. The City then requested the owner to reconsider the proposal entirely which resulted in these applications.

2. Background

2.1 2009 Minutes of Settlement

On March 17, 2009 Silvercreek Guelph Developments Limited, the Howitt Park Neighbourhood Residents Association and the City of Guelph entered into Minutes of Settlement with respect to the entire lands. Figure 1 shows the Concept Plan approved by the OMB.

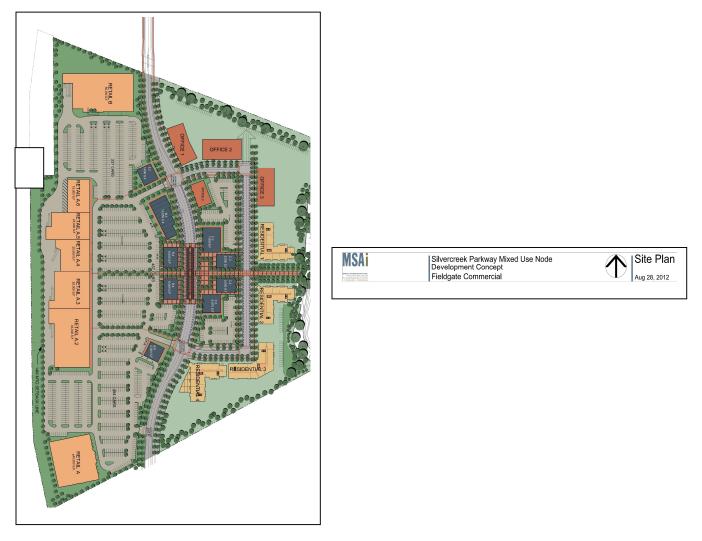




2.2 Revised 2013 Planning Applications and Concept Plan Approved

On December 2, 2013 Guelph Council approved revisions to the Official Plan designations, Zoning Bylaw and the Concept Plan previously approved by the OMB. The main purpose of these applications was to add a food store as an additional permitted use and to remove the timing restrictions related to the issuance of building permits for any retail uses. The revised Concept Plan approved by Council on December 2, 2013 is included below as Figure 2.

Figure 2 – Revised City Approved Concept Plan



3. Existing Conditions and Surrounding Land Uses

The Silvercreek Junction property was formerly operated by Lafarge Canada Inc. The site is currently vacant and has been since the Lafarge facility closed in 1994. Silvercreek Junction represents a significant brownfield redevelopment opportunity for the City of Guelph. This brownfield site has been "cleaned up" by the owner and a Record of Site Condition has been issued.

The property subject to these applications has a total area of 16.52 hectares. The subject property has existing frontage on the Hanlon Parkway (Highway No. 6). The site is bounded to the north by the CNR Mainline (Metrolinx) and to the south by the south by a secondary rail line. As requested by the City, Silvercreek Parkway South will be maintained on its current alignment. Silvercreek Guelph Developments Limited has conveyed the lands for the stormwater management facility and open space located to the east of the subject property to the City of Guelph in accordance with the 2009 Minutes of Settlement.

Figure 3 – Surrounding Land Use



The surrounding land uses include:

- North CNR Mainline (Metrolinx), single detached residential.
- East Howitt Creek and stormwater management.
- South -CNR Secondary Line, single detached residential, religious establishment/conference Centre.
- West Hydro lands and Hanlon Expressway (Highway No. 6)

4. Description of the Proposal

4.1 Official Plan Amendment

The subject property is currently designated as Community Mixed-Use Centre, Corporate Business Park, High Density Residential and Open Space and Park on <u>Schedule 2 – Land Use Schedule</u> of the March 2018 Consolidation of the City of Guelph Official Plan. In addition, Silvercreek Parkway South is shown on an alternate alignment. Figure 4 illustrates the current Official Plan designations on the subject property.

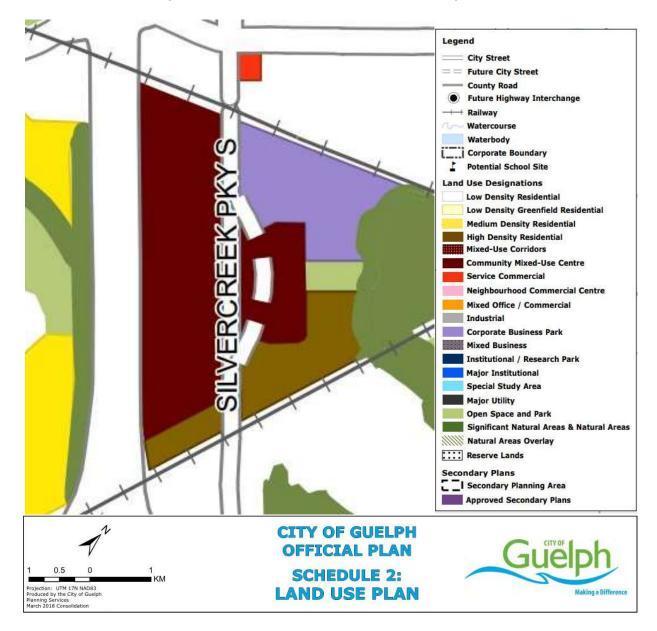


Figure 4 - Current Official Plan Land Use Designations

The Official Plan Amendment application proposes to reconfigure the Community Mixed-Use Centre designation to reflect Silvercreek Parkway South remaining on its current alignment. High Density Residential remains within the property with Medium Density Residential being added to create a walkable urban village. The Corporate Business Park designation is proposed to be removed from the property. A more generous Neighbourhood Park is proposed to be designated as Open Space and Park and be conveyed to the City as parkland dedication to meet the need of the additional residential proposed. What was referred to previously as the Market Square, is now proposed to be designated Open Space and Park as an Urban Square to also be conveyed to the City as parkland dedication. A stormwater management facility has been included to be designated Open Space and Park. Figure 5 illustrates the proposed Official Plan designations on the subject property.

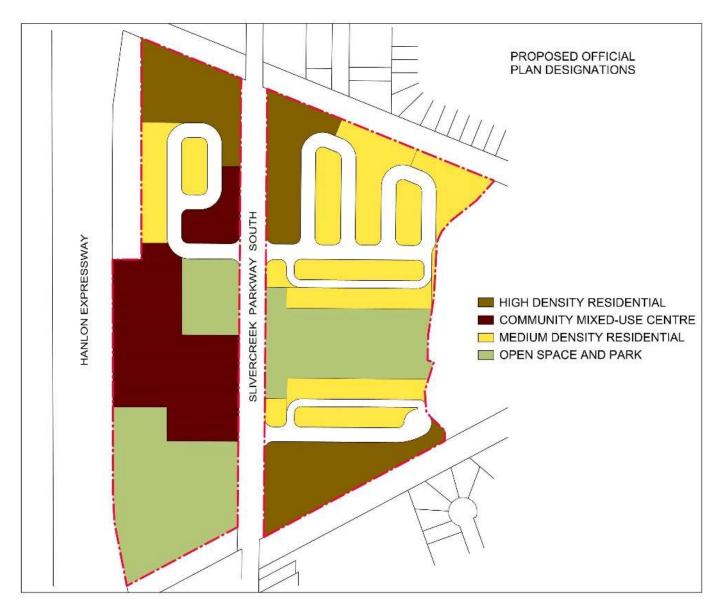


Figure 5 - Proposed Official Plan Land Use Designations

Figure 6 - Summary of Proposed Official Plan Land Use Designations

Use	Subdivision Block Numbers	Proposed Official Plan Designation	Area (hectares)	Number of Units and/or Commercial GFA	Minimum and Maximum Density	Minimum and Maximum Building Height
Apartment	1-3	High Density Residential	3.01	301 units	100 to 150 units per hectare	3 to 10 storeys
Townhouse	4-15	Medium Density Residential	3.74	200 units	35 to 100 units per hectare	2 to 6 storeys
Mixed-Use	16, 17	Community Mixed-use Centre	2.71	271 units Minimum 6,500 m ² Commercial GFA	100 to 150 units per hectare	Maximum 10 storeys
Park	18, 19	Open Space and Park	2.27			
Stormwater Management	20	Open Space and Park	2.20			
Roads/Lanes			2.59			
TOTAL	20		16.52	772 units Minimum 6,500 m ² Commercial GFA		

In addition to the proposed changes to <u>Schedule 2 – Land Use Schedule</u> of the Official Plan, section 9.13 of the Official Plan contains Site Specific Policies reflective of unique circumstances in consideration of the general land use policies and were subject to previous site specific planning approvals. The Silvercreek Junction Site Specific Policies are included in this report with strikeouts where text is proposed to be deleted and red text where text is proposed to be added to these Site Specific Policies through this Official Plan Amendment application.

"9.13.2.5.1 Urban Form Statement – SilvercCreek Junction

The area contains the former LaFarge lands, an abandoned brownfield site, straddling Silvercreek Parkway between the CNR and Goderich and Exeter (GEXR) rail-lines south of Paisley Road, abutting the Hanlon Expressway. Redevelopment of these lands shall be focused around the creation of a central, urban "village market square" straddling west of Silvercreek Parkway which will assist in creating a neighbourhood composed of a mix of land uses.

The public village market urban square feature will be complemented by a cohesive, mixed-use redevelopment scheme permitting a range of land uses, including large format and specialty retail commercial, a range of employment uses, institutional uses, office, high and medium density residential uses and open space on the

surrounding lands. The central village market urban square area will house a limited range and scale of specialized service free-standing commercial uses, mixed-use or freestanding residential buildings live work arrangements that are intended to serve the surrounding employment and residential uses.

The redevelopment scheme on the subject lands shall also incorporate a new neighbourhood-scale public park that links the central village market urban square to the Howitt Creek valley to the east. The development will also involve the re-alignment of a portion of the existing Silvercreek Parkway through the central part of the lands, to the extent appropriate, to optimize a functional and cohesive layout of a mix of uses proposed. A New local public roads east and west of re-aligned Silvercreek Parkway will also be developed to provide frontage and access for the above-noted neighbourhood park and a series of viable redevelopment blocks for employment medium and high density residential uses in the area between Howitt Creek and Silvercreek Parkway.

9.13.2.5.2 Urban Form Objectives – Silvercreek Junction

- a) To provide a desirable mix of compatible land uses that include a variety of building types to minimize travel requirements between homes and places of employment or shopping.
- b) To ensure an innovative development, which reflects the city's commitment to environmental sustainability, compact development and energy conservation.
- c) To enhance the function and naturalization of Howitt Creek and provide pedestrian views and access to this feature.
- d) To provide active and passive recreational opportunities to help fulfill the City's recreational and open space requirements.
- e) To create a variety of public spaces (streets, squares, and parks and open spaces) that encourage social interaction and provide pedestrian connections throughout the development.
- f) To require high quality built form oriented to all streets, including Silvercreek Parkway, throughout the development.
- 9.13.2.5.3 Urban Design Policies Silver Creek Junction
- a) Public streets will be developed to provide a high quality urban environment with reduced setbacks, street trees and other landscape features and on-street parking.
- b) Parking areas, loading and other less desirable design elements will be screened from public streets by buildings or landscaping.
- c) Outdoor storage of goods or materials shall be prohibited with the exception of seasonal products projects.

- d) The development will include extensive landscaping and plantings associated with the development shall generally be native trees and ground cover.
- e) Public safety and security will be considered in the development including the optimum visibility of public open spaces, adequate lighting, multiple pedestrian routes and opportunities to control the speed of vehicles.
- f) Reduced parking standards shall be considered for all land use components within the development to encourage alternative transportation alternatives.

9.13.2.5.4 Infrastructure Requirements – Silver Creek Junction

Redevelopment of the former Lafarge lands is dependent upon certain key improvements to public infrastructure, most notably:

- 1) the construction of a grade-separated crossing of the CN main line by an improved Silvercreek Parkway;
- 2) the extension of Silvercreek Parkway northward to connect with Paisley Road; and;
- 3) the construction of a new stormwater management facility on open space lands east of Howitt Creek, to accommodate existing off-site (upsteam) storm flows during major storm events.

The site-specific implementing zoning provisions shall include the use of holding "H" provisions to address required infrastructure improvements, including the Silvercreek Parkway/CNR underpass, other required road projects and traffic improvements, the remedial stormwater management facility, related land dedications (i.e. for roads, stormwater management, parks and open space) through the draft plan of subdivision process and the pre-requisite site plan approval subdivision and registration of the related agreement on title to the subject lands, prior to the redevelopment of the lands.

9.13.2.5.5 Land Use – Silver Creek Junction

The Silver Creek Junction lands are designated "Community Mixed-Use Node Centre", "Specialized Corporate Business Park", "High Density Residential", "Medium Density Residential" and "Open Space and Park" on Schedule "A 2" and shall be subject to the following site-specific policies for the applicable designations"

1 Community Mixed-Use Node Centre:

The Community Mixed-Use Node Centre is intended provide a wide range of retail, service entertainment and recreational commercial uses. as well as complementary uses including open space, institutional, cultural and educational uses, hotels and live work studios. Medium and high density multiple residential development and apartments shall also be permitted in accordance with the policies of Section 9.2.

The policies contained in Sections 9.4.2.1 to 9.4.2.12 shall apply to the Community Mixed-Use Node Centre.

The Silver Creek Junction Mixed-Use Node is divided into 2 Sub Areas as follows:

Sub Area 1:

A maximum of 21,830 sq m (235,000 sq.ft.) of retail gross leasable floor space shall be permitted in Sub Area 1 only as shown on Schedule "A". This total floor area will be comprised of either:

- a) a maximum of one (1) large-format retail store comprised of one of a retail establishment, warehouse membership club or home improvement retail warehouse, with a maximum gross floor area of 13, 470 sq. m (145,000 sq. ft.) together with retail stores with a maximum gross floor area per individual retail store of 5,574 sq. m (60,000 sq. ft.) in a minimum of at least two separate buildings, OR,
- b) A combination of retail stores, with a maximum individual retail store gross floor area of 5,574 sq. m (60,000 sq. ft.) in a minimum of at least two (2) separate buildings.

Commercial development to this area shall incorporate a reduced retail parking standard, to be established through the site specific implementing zoning provisions.

Sub Area 2:

The maximum of 3,900 sq. m (42,000 sq. Ft.) of service commercial gross leasable floor shall be permitted in Sub Area 2 only as shown on Schedule "A". Within this gross leasable floor area a maximum of 929 sq. m (10,000 sq. ft) shall be permitted as retail uses. This area shall be subject to a restricted range of service commercial uses, to be established in the implementing zoning by-law; the policy intention is to focus on true convenience-oriented service uses to serve the neighbourhood such as restaurants, financial institutions and personal services. The range of permitted uses will also allow a mixed-use design with residential or office space permitted above ground floor commercial and live work arrangements. A minimum building massing equivalent to two (2) storeys (7.6m) shall be achieved in the street line with primary entrances facing the street and grouped in manner to reinforce the limits and identity of the village market square focal point. Reduced building setbacks shall be encouraged from the public streets, to help define the streetscape and enhance the pedestrian environment.

Commercial development in this area shall incorporate a reduced parking standard, to be established through the site-specific implementing zoning provisions.

Within the "Specialized Business Park" designation on the east side of Silvercreek Parkway adjacent to Howitt Creek, development shall conform with Section 9.5.3 of this plan and the following:

- a) permitted uses shall include a range of employment activities including offices, research and development facilities, computer establishments and laboratories that are compatible with the adjacent residential uses. Complementary uses such as institutional (schools and religious establishments), a public or private recreational facility or club, as well as high density residential uses shall also be permitted provided that they are limited in scale and do not detract from the primary development of the lands for employment purposes; and,
- b) reduced building setbacks and minimum building heights shall also be required, to help define the streetscape and enhance the pedestrian environment.

3 High Density Residential

Within the "High Density Residential" designation on the east side of Silvercreek Parkway adjacent to Howitt Creek, development shall conform with the Section 9.3.5 of this plan and with the following:

- residential development may take the form of individual apartment buildings on separate parcels, or a single cohesive scheme comprising several buildings and may include Nursing or Retirement homes;
- b) development shall generally occur in buildings ranging in height from 3 to 8 storeys, provided that the height and massing of buildings shall be sensitive to the proximity of these lands to existing low density residential development to the southeast, on the opposite side of the Goderich and Exeter (GEXR) rail line adjacent to the south edge of the site; further floor space indices (FSI) may be used to control the design of the developments; and,
- c) notwithstanding the density provisions of Policy 9.3.5.3, the minimum net density of residential development of the subject lands shall be 175 units per hectare; the intention of this site-specific policy is to require a minimum of 350 residential units to be developed on these lands.



SCHEDULE "A" SILVER CREEK LAND USE PLAN Plan to be deleted

4.1.1 Employment Land Conversion

The current Corporate Business Park designation is proposed to be removed from the property. The <u>City of Guelph Employment Lands Strategy - Phase 2</u> dated April 23, 2010 prepared by Watson & Associates on page 5-4 concluded that the Lafarge Site (ie. Silvercreek Junction) employment lands met all of the "*Planning and Economic Considerations and Evaluation of Potential Conversion Site*" which included the following;

- "A Site is located outside of an established or proposed industrial/business park
- *B* Site is isolated from surrounding designated employment lands
- C Site is surrounded by non-employment land uses on at least three sides
- D Conversion would not create incompatible land uses
- *E* Conversion of site will not negatively affect employment lands in the area
- F Conversion would be consistent / supportive of City policy planning objectives
- G Conversion doesn't contravene any City policy planning objectives
- H Site offers limited market choice for employment lands development due to size, configuration, physical conditions, other
- I Site does not offer potential for future expansion by neighbouring employment lands"

On page 5-8 of the Watson Report it states,

"Based on discussions with City planning staff, the Lafarge lands have been designated and available for "Industrial" development in the City of Guelph Official Plan for over 20 years. Given the broad range of market choice for employment lands in Guelph, it is foreseeable that the Lafarge Lands could remain vacant throughout the 2006 to 2031 forecast period and beyond.

Given the generally isolated location of the Lafarge Lands, conversion to non-employment uses would not have a negative impact on surrounding employment uses in comparison to sites of similar size located within an established or proposed industrial business park."

The Watson Report recommended the conversion of 13.92 hectares of the Silvercreek Junction property from employment to non-employment land uses which was subsequently approved. It is important to note that the 5.5 hectares which remain as employment lands on the Silvercreek Junction property share all of the same characteristics of the converted lands and meet all the same criteria for conversion. In fact the remaining 5.5 hectare employment land designation on the Silvercreek Junction property now surrounded by lands approved for residential development is smaller, more isolated with more potential for land use conflicts and less market advantage if it remains as employment land. In addition, the current Corporate Business Park B.5-6(H27) Zone permits an Apartment Building to be constructed within this zone. When the apartment building land, municipal road and park areas are netted out of the 5.5 hectares, there is only 0.89 hectares remaining which would be available for employment lands.

The Watson Report in section 5.6 "Growth Plan/PPS Policies Addressed" includes that following analysis on page 5-10;

"City will meet the employment forecasts allocated to Guelph pursuant to this Plan

Phase 1 of this study established an employment forecast that is consistent with Schedule 3 of Places to Grow (Growth Plan). As summarized in Chapter 4 of this report, this forecast can be accommodated.

The conversion will not adversely affect the overall viability of the employment area, and achievement of the intensification target, density targets, and other policies of the Plan

These potential conversion sites are for the most part isolated and/or fragmented parcels which are independent of the main employment areas of the City and, thus, will have little to no impact on main employment areas. Given the relatively poor marketability of the subject sites, they will likely remain underutilized over the long term, which is inconsistent with Provincial and local policies.

There is existing or planned infrastructure to accommodate the proposed conversion

All sites considered for conversion are within the built area of the City and have existing or planned infrastructure to allow for future development.

The lands are not required over the long term for the employment purposes for which they are designated

As highlighted in Chapter 4, the City has sufficient supply of vacant employment lands to meet forecast demand over the 2006-2031 period even if all potential conversion lands are removed from the vacant employment lands inventory.

Cross-jurisdictional issues have been considered

None of the lands proposed conversion sites are adjacent to a municipal boundary, with the exception of 63 Woodlawn Rd. site, which has been addressed specifically under the site analysis section."

The remaining 5.5 hectares of employment lands on the Silvercreek Junction property also meet the Growth Plan and PPS conversion policies.

As noted in the Watson Report on page 5-8, the Silvercreek Junction employment lands have been designated and available for development for over 20 years and it is foreseeable that these lands could remain vacant throughout the 2006 to 2013 forecast period and beyond.

The Watson Report section 6 "Needs Analysis based on Recommended Conversions" on page 6-1 concludes that;

"Assuming all identified conversions are removed from the employment land supply, the City of Guelph will still have an adequate supply of employment lands to meet long-term needs. As of **2031**, a **net surplus of 44 ha** (108 acres) has been identified. This does not include the proposed Guelph Innovation District and South Guelph Special Study Areas which would potentially **increase the supply to 239 net ha** (591 net acres)."

It is worth noting that the conclusions of the Watson Report were tested at the Ontario Municipal Board and accepted in its decision.

The Watson Report evaluated the Silvercreek Junction employment lands for conversion to nonemployment lands based on comprehensive planning, economic, Growth Plan and PPS criteria and concluded that these lands should be converted. In addition, netting out the conversion lands, as of 2031 the City will have a surplus of 44 hectares of employment lands not including the Guelph Innovation District which is anticipated to increase the supply of employment lands. The City of Guelph is oversupplied by employment lands. Based on this analysis, it is requested that the current Corporate Business Park designation be removed from the property.

4.1.2 Community Mixed-Use Centre

The Community Mixed-Use Centre designation proposes to include a minimum 6,500 square metres of commercial GFA which is consistent with the approach being proposed by City staff in Report Number: IDE-2019-94 in the City Initiated Official Plan Amendment for the Commercial Policy Review and presented at a Public Meeting at Council on September 9, 2019. The Community Mixed-Use Centre designation permits the flexibility to provide free-standing commercial buildings or free-standing apartment buildings or mixed-use buildings with both commercial and residential with a maximum building height of 10 storeys.

The proposed Official Plan mapping and policy amendments are considered to be supportable on this basis and represents appropriate development for the site.

4.2 Zone Change

The proposed zoning is indicated by Figure 7.

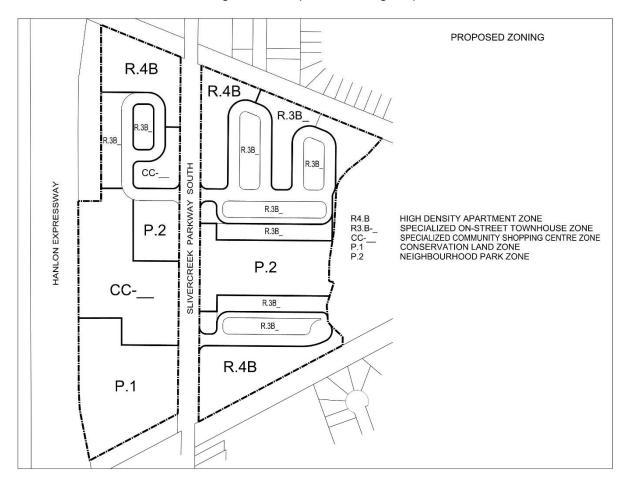


Figure 7 - Proposed Zoning Map

The R.4B High Density Residential Zone is proposed to implement the High Density Residential designation. No Specialized Zoning Regulations are requested. The three Apartment Blocks included in the Draft Plan of Subdivision are anticipated to meet the R.4B Zone requirements. A summary of the proposed zoning is included in Figure 8.

Use	Block Numbers	Zone	Area (hectares)	Number of Units and/or Commercial GFA	Maximum density	Maximum Building Height
Apartment	1-3	R.4B	3.01	301 units	150 units per hectare	10 storeys
Townhouse	4-15	R.3B	3.74	200 units	35 to 88 units per hectare	4 storeys
Mixed-use	16, 17	CC	2.71	271 units Minimum 6,500 m ² Commercial GFA	150 units per hectare	10 storeys
Park	18, 19	P.2	2.27			
Stormwater Management	20	P.1	2.20			
Roads/Lanes			2.59			
TOTAL	20		16.52	772 units Minimum 6,500 m ² Commercial GFA		

Figure 8 – Summary of Proposed Zoning

There are three different freehold townhouse products proposed within Silvercreek Junction. Back-to-Back Townhouses, Lane Decked Townhouses and On-Street Townhouses are proposed and examples of the building exterior and layout of these units are included in the following figures.

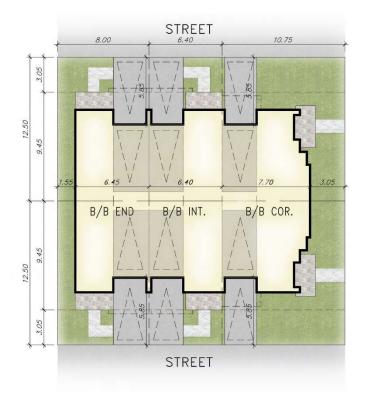
Although these three townhouse types are proposed on specific blocks in the Concept Plan prepared in support of these applications, it is recognized that there are additional townhouse types already being constructed in various markets or perhaps not yet thought of. Recently, different townhouse types have been introduced into the housing market and this is expected to continue. Creativity and innovation are being encouraged in this neighbourhood, therefore, specialized zoning regulations are being requested. Zoning cannot always keep up with new and innovative housing types, therefore, these specialized zoning regulations will allow these proposed townhouse types to be included and accommodated within the Silvercreek Junction zoning. These regulations are important to include in the proposed implementing zoning regulations. We are also mindful that the City has Site Plan approval authority and that only those projects that meet the City's technical and urban design requirements will receive the City's approval.



Figure 9 - Back-to-Back Townhouse Building Elevation Example

Source: The MBTW Group





Source: The MBTW Group



Figure 11 - Lane Decked Townhouse Building Elevation Example

Source: The MBTW Group

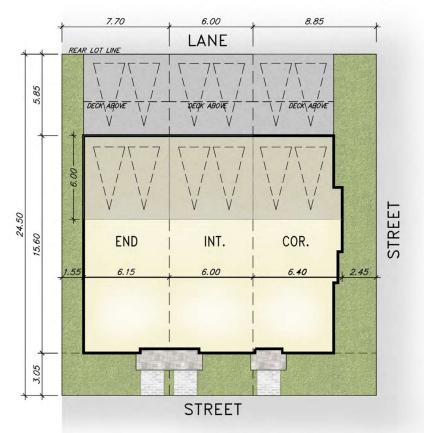


Figure 12 - Lane Decked Townhouse Layout Example

Source: The MBTW Group



Figure 13 - On-Street Townhouse Building Elevation Example

Source: The MBTW Group

Figure 14 - On-Street Townhouse Layout Example



Source: The MBTW Group

Specializ	zed On-Street To	wnhous	e R.3B- Zone			
Permitted use: On-Street Tov		Propose	sed use: On-Street Townhouse,			
	Back-to Back Townhouse, Lane Decked Townhouse					
"On-Street Townhouse" mear	ns a Townhouse w			ed on a		
separate Lot and has legal from						
	0					
"Back-to-Back Townhouse": r						
by common walls, including a						
independent entrance to the I				ne Front Yard,		
Side Yard or Exterior Side Ya	ird and does not h	ave a Re	ear Yard.			
"Lane Decked Townhouse": n	neans a Townhou	sa whare	each Dwelling Linit is I	ocated on a		
separate Lot with legal frontage						
amenity area is provided on a						
Zoning Regulation	Required		Provided	Compliance		
Minimum Lot Area	180 m ²		80 m ²	No		
Minimum Lot Frontage	6 m		4.5 m	No		
Minimum Front Yard	6 m		3 m	No		
Minimum Exterior Side Yard	4.5 m		4.5 m	Yes		
Minimum Side Yard	1.5 m		1.5 m	Yes		
Minimum Rear Yard	7.5 m		0 m	No		
Maximum Building	50%		64%	No		
Coverage	0.1			N.		
Maximum Building Height	3 storeys		4 storeys	No		
Minimum Landscaped Open Space	35%		5%	No		
Buffer Strip	Where R.3 Zone		The townhouse units	No		
	a Park Zone a B	uffer	are meant to face			
	Strip		onto the park and			
			provide eyes on the park, therefore, a 3m			
			landscape strip or a			
			solid fence will not			
			be provided.			
Maximum Number of Dwellings in a Row	8		14	No		
Maximum Driveway Width	Driveway shall n	ot		Yes		
4.13.7.2.5	exceed the Gara					
	width, as measu					
	from the outside					
	of the Garage or					
	more than 50% of					
	Front Yard, whic					
	is less, to a mini 3 metres wide.					

The following Specialized Zoning provisions will be required for the R.3B- ____ Zone

- In addition to the uses permitted, back-to-back townhouses and decked back lane townhouses also be permitted.
- Within this zone a "Back-to-Back Townhouse": means a Building where each Dwelling Unit is divided vertically by common walls, including a common rear wall and common side wall, and has an independent entrance to the Dwelling Unit from the outside accessed through the Front Yard, Side Yard or Exterior Side Yard and does not have a Rear Yard.
- Within this zone a "Lane Decked Townhouse": means a Townhouse where each Dwelling Unit is located on a through Lot with legal frontage on a public Street and on a public lane. The private amenity area is provided on a deck located above the garage.
- A minimum 3m front yard be permitted where the zoning by-law requires 6 m.
- A minimum lot frontage of 4.5 m be permitted where the zoning by-law requires 6 m.
- A minimum lot area of 80 m² be permitted where the by-law requires 180 m².
- A maximum building height of 4 storeys where the by-law requires 3 storeys.
- A maximum building coverage of 64% be permitted where the by-law requires 50%.
- A minimum landscape open space area of 5% be permitted where the zoning requires 35%.
- A maximum of 14 dwelling units in a row be permitted where the zoning permits 8.
- A buffer strip not be required abutting a municipal park where the by-law requires a buffer strip.
- For back-to-back townhouses, a minimum rear yard of 0m be permitted where the by-law requires 7.5 m.

The following Specialized Zoning provisions will be required for the CC- ____ Zone

- In addition to the uses permitted, an Apartment Building also be permitted in accordance with the regulations in section 5.4.2.
- A minimum lot area of 3,800 m² be permitted where the by-law requires 7,500 m².
- A minimum lot frontage of 35 m be permitted where the by-law requires 50 m.
- A minimum side yard of 3m be permitted where the by-law requires half the building height.
- A minimum rear yard of 3m be permitted where the by-law requires half the building height.
- A maximum building height of 10 storeys where the by-law requires a maximum of 15 m.
- No minimum commercial GFA be required provided a minimum of 6,500 m² of commercial GFA is provided on other site(s) surrounding the urban square where the by-law requires 1,875 m².
- A buffer strip not be required abutting an urban square where the by-law requires a buffer strip.
- A parking requirement of 1 parking space per 23 m² of commercial GFA where the by-law includes separate parking requirements for each use.

In addition, there is a request that the Holding Zone be lifted on the entire property as outlined in Figure 17.

Specialized Community Commercial CCZone						
Permitted Uses: see 6.2.1.2			Uses: In addition to t			
			within 6.2.1.2, an Apa			
			so be permitted to be			
		in accorda	nce with the regulation			
Zoning Regulation	Required		Provided	Compliance		
Minimum Lot Area	7,500 m ²		3,800 m ²	No		
Maximum Lot Area	50,000 m ²		23,300 m ²	Yes		
Minimum Lot Frontage	50 m		35 m	No		
Minimum Front and	3 m		3 m	Yes		
Exterior Side Yard						
Minimum Side Yard	Half the building h not less than 3 m.		3 m	No		
Minimum Rear Yard	Half the building h not less than 3 m.	-	3 m	No		
Maximum Building Height	3 storeys to a max 15 m.	ximum of	10 storeys	No		
Minimum Gross Floor Area	1,875 m ²		No minimum commercial GFA be required provided a minimum of 6,500 m ² of commercial GFA is provided on other site(s) surrounding the urban square.	No		
Maximum Gross Floor Area	12,500 m ²			Yes		
Minimum Landscaped Open Space	9%			Yes		
Planting Area	3m landscape stri street except whe required for entry	re ramps.		Yes		
Buffer Strip	Where abutting a Park Zone		The commercial is meant to face onto the urban square and provide eyes on the park, therefore, a 3m landscape strip or a solid fence will not be provided.	No		
Off-Street Parking	In accordance with 4.13		1 parking space per 23 m ² of commercial GFA	No		
Off-Street Loading	h 4.14		Yes			
Enclosed Operations	h 4.22		Yes			

The current zoning of the Silvercreek Junction lands includes Holding Zone (H25). The conditions required to be satisfied prior to this Holding Zone being lifted are outlined in Figure 17. These conditions have already been satisfied by the owner, are standard requirements that the City is able to achieve without imposing a Holding Zone or are the City's responsibility, as has also been outlined in Figure 17. This zone change application includes the request to lift the current Holding Zone.

Figure 17 – Holding Zone Conditions

Conditions of the evicting Holding Zone (198	-					
Conditions of the existing Holding Zone (H25) "2.9.1 (xxv) (H25) Silver Creek Junction As show						
Purpose: To ensure that development of the subject lands does not proceed until the following						
conditions have been met to the satisfaction of the City related to the subject development.						
Conditions How condition has been satisfied.						
1. Completion and final approval of the class environmental assessment processes for a grade- separated crossing at the intersection of Silvercreek Parkway and the C.N.R. rail line at the north edge of the subject lands; and for the re- alignment of Silvercreek Parkway between Paisley Road and Waterloo Avenue and a new public road on the subject lands east of Silvercreek Parkway [right-of-way of 18 m (59 ft.)]	The class environmental assessment for the grade-separated crossing at Silvercreek Parkway and the C.N.R. rail line was completed on June 21, 2012 by Delcan. The new public roads are proposed to be created by the Draft Plan of Subdivision application.					
2. Registration on title to the subject lands of an executed Site Plan Agreement which addresses, among other items, appropriate infrastructure requirements.	Prior to development, an executed Site Plan Agreement registered on title is required in accordance with the City's Site Plan Control By-law. A Holding Zone is, therefore, not necessary to ensure that Site Plan Agreements will be registered on title.					
3. The Owner entering into an agreement for a financial contribution to the construction of a stormwater management facility on the portion of the subject lands east of Howitt Creek	The owner provided the required financial contribution to the City for the construction of this stormwater management facility prior to the construction of this facility commencing. Construction of the SWM facility is complete.					
4. Conveyance of any lands required for the underpass and road projects noted above, and for the stormwater management facility east of Howitt Creek, and for the proposed parks on the subject lands between Silvercreek Parkway and Howitt Creek, with the exception of the Market (public) square.	The lands required for the stormwater management facility located east of Howitt Creek were conveyed to the City by the owner in 2011. The proposed park blocks will be conveyed to the City upon the registration of the proposed Draft Plan of Subdivision.					
5. The awarding of contracts for the construction of the underpass, road and stormwater management projects noted above."	The contract for the construction of the stormwater management project has already been awarded and the facility constructed. The construction of Silvercreek Parkway and the new roads will occur prior to the registration of the Draft Plan of Subdivision. The construction of the underpass will be awarded by the City.					

4.3 Draft Plan of Subdivision

The proposed Draft Plan of Subdivision implements the proposed Official Plan designations and Zones as listed in Figure 18.

Block	Use	Proposed Official Plan Designation	Proposed Zone	Units and/or Commercial GFA	Area hectares
1-3	Apartment	High Density Residential	R.4B	301 units	3.01
4-15	Townhouse	Medium Density Residential	R.3B-	200 units	3.74
16, 17	Mixed-use	Community Mixed-use Centre	CC	271 units 6,500 m ² Commercial GFA	2.71
18, 19	Park	Open Space and Park	P.2		2.27
20	Stormwater Management	Open Space and Park	P.1		2.20
	Roads/Lanes				2.59
20	TOTAL			772 units 6,500 m ² Commercial GFA	16.52

Figure 18 - Proposed Land Use Schedule

5. <u>Planning Framework</u>

5.1 Provincial Policy Statement (2014)

The Provincial Policy Statement 2014 (PPS) is issued under the authority of Section 3 of the Planning Act and was in effect as of April 30, 2014. It replaces the Provincial Policy Statement issued March 1, 2005. In respect of the exercise of any authority that affects a planning matter, section 3 of the *Planning Act* requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act.

The Provincial Policy Statement is more than a set of individual policies. It is to be read in its entirety and the relevant policies are to be applied to each situation. When more than one policy is relevant, a decision-maker should consider all of the relevant policies to understand how they work together. The language of each policy, including the Implementation and Interpretation policies, will assist decision-makers in understanding how the policies are to be implemented.

Provincial plans are to be read in conjunction with the Provincial Policy Statement. They take precedence over the policies of the Provincial Policy Statement to the extent of any conflict, except where the relevant legislation provides otherwise.

The Provincial Policy Statement provides policy direction on matters of provincial interest related to land use planning and development. (**bolding** added for emphasis)

- **"1.1.3** Settlement Areas
- 1.1.3.1 Settlement areas shall be the focus of growth and their vitality and regeneration shall be promoted.
- 1.1.3.2.1 Land use patterns within settlement areas shall be based on:
- a. 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; and
- 3. minimize negative impacts to air quality and climate change, and promote energy efficiency in accordance with policy 1.8; and
- b. a range of uses and opportunities for intensification and redevelopment in accordance with the criteria in policy 1.1.3.3, where this can be accommodated.
- *"1.6.3 a) The use of existing* infrastructure *and* public service facilities *should be optimized;"*
 - "1.6.6.2 Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas. Intensification and redevelopment within settlement areas on existing municipal sewage services and municipal water services should be promoted, wherever feasible."

The site will be serviced with municipal sewage and water services consistent with the Provincial Policy Statement. The proposal for the subject property is consistent with the Provincial Policy Statement 2014 in that land within the settlement area should be efficiently used.

5.2 A Place to Grow (2019)

A Place to Grow May 2019 was approved by the Lieutenant Governor in Council, Order in Council No 641/2019. "The Growth Plan for the Greater Golden Horseshoe 2019 was prepared and approved under the Places to Grow Act, 2005 to take effect on May 16, 2019. This Plan applies to the area designated by Ontario Regulation 416/05 as the Greater Golden Horseshoe growth plan area. All decisions made on or after May 16, 2019 in respect of the exercise of any authority that affects a planning matter will conform with this Plan, subject to any legislative or regulatory provisions providing otherwise. As provided for in the Places to Grow Act, 2005, this Plan prevails where there is a conflict between this Plan and the PPS. The only exception is where the conflict is between policies relating to the natural environment or human health. In that case, the direction that provides more protection to the natural environment or human health prevails."

Excerpts from the Growth Plan are included in this report. **Bolding** has been added for emphasis.

- *"2.1 Policies for Where and How to Grow*
 - 2.1.1 Managing growth
 - 2. Forecasted growth to the horizon of this Plan will be allocated based on the following:
 - c.) within settlement areas, growth will be focused in:
 - *i.* delineated built-up areas;

2.2.2 Delineated built-up areas

- 1. By the time the next municipal comprehensive review is approved and in effect, and for each year thereafter, the applicable minimum intensification target is as follows:
- a. A minimum of 50 per cent of all residential development occurring annually within each of the Cities of Barrie, Brantford, **Guelph**, Hamilton, Orillia and Peterborough and the Regions of Durham, Halton, Niagara, Peel, Waterloo and York will be within the delineated built-up area; and
- 2. Until the next municipal comprehensive review is approved and in effect, the annual minimum intensification target contained in the applicable upper- or single-tier official plan that is approved and in effect as of July 1, 2017 will continue to apply.
- 3. All municipalities will develop a strategy to achieve the minimum intensification target and intensification throughout delineated built-up areas, which will:
- a. identify strategic growth areas to support achievement of the intensification target and recognize them as a key focus for development;
- b. identify the appropriate type and scale of development in strategic growth areas and transition of built form to adjacent areas;
- c. encourage intensification generally throughout the delineated built-up area;
- d. ensure lands are zoned and development is designed in a manner that supports the achievement of complete communities;
- e. prioritize planning and investment in infrastructure and public service facilities that will support intensification; and
- *f.* be implemented through official plan policies and designations, updated zoning and other supporting documents."

"2.2.5 Employment

- 9. The conversion of lands within employment areas to non-employment uses may be permitted only through a municipal comprehensive review where it is demonstrated that:
- a) there is a need for the conversion;
- b) the lands are not required over the horizon of this Plan for the employment purposes for which they are designated;
- c) the municipality will maintain sufficient employment lands to accommodate forecasted employment growth to the horizon of this Plan;

- d) the proposed uses would not adversely affect the overall viability of the employment area or the achievement of the minimum intensification and density targets in this Plan, as well as the other policies of this Plan; and
- e) there are existing or planned infrastructure and public service facilities to accommodate the proposed uses.
- 10. Notwithstanding policy 2.2.5.9, until the next municipal comprehensive review, lands within existing employment areas may be converted to a designation that permits nonemployment uses, provided the conversion would:
- a) satisfy the requirements of policy 2.2.5.9 a), d) and e);
- b) maintain a significant number of jobs on those lands through the establishment of development criteria; and
- c) not include any part of an employment area identified as a provincially significant employment zone."

The Silvercreek Junction lands are located within the Delineated Built-up Area and will assist the City in meeting the intensification target contained in the current official Plan. Intensification and investment in infrastructure is encouraged by these provincial policies. The implementation of intensification through official plan policies and designations and by updating zoning is also encouraged. Section _____ of this report has evaluated the proposed employment land conversion and concluded that the land may be converted. The proposal is in conformity with the A Place to Grow policies.

5.3 Guelph Official Plan (March 2018 Consolidation)

In addition to the discussion included in section 4.1 of this report, the Silvercreek Junction property is located within the designated Built-up Area as identified by <u>Schedule 1 – Growth Plan Elements</u> of the Official Plan as shown on Figure 19.

- *"3.7.3 Within the built-up area the following general intensification policies shall apply:*
 - *i)* by 2015 and for each year thereafter, **a minimum of 40% of the City's annual residential development will occur within the City's built-up area** as identified on Schedule 1. Provisions may be made for the fulfillment of this target sooner than 2015."

The Silvercreek Junction proposal will assist the City in meeting the target of a minimum of 40% of annual residential development occurring within the built-up area.

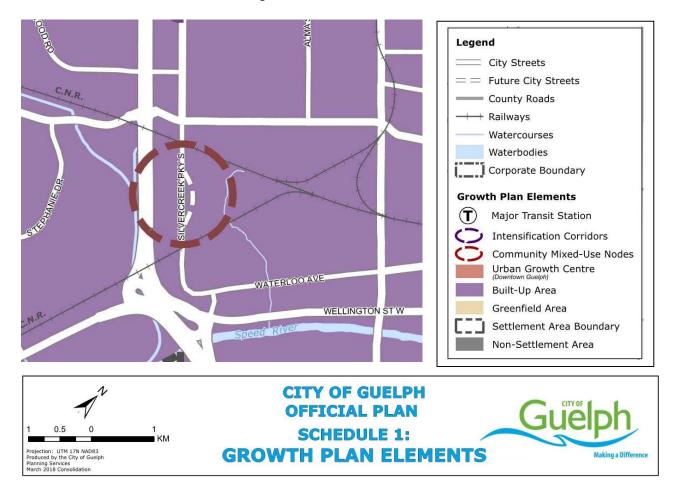


Figure 19 - Growth Plan Elements

5.4 Guelph Zoning By-law

The City of Guelph Zoning By-law (1995) – 14864 was adopted by Guelph City Council on June 19, 1995 and certified by the City Clerk on August 29, 1997. Zoning By-law (1995) – 14864, as amended, is referenced in this report. In addition to the zoning discussion included in section 4.2 of this report, the Silvercreek Junction property is currently zoned as shown by Figure 20. This current zoning does not permit the proposed development, therefore, a zone change application has been submitted as part of these applications.



Figure 20 – Existing Zoning from Defined Area Zoning Map Numbers 10 and 15

6. <u>Summary of Supporting Reports</u>

Please note that the full technical reports should be reviewed for accuracy. The following summaries of these reports are not complete and should not be relied upon.

6.1 Functional Servicing and Stormwater Management Report

R.J. Burnside & Associates Limited prepared a Functional Servicing and Stormwater Management Report dated November 2019 which concludes that;

- "Water servicing will be accomplished through interconnection of existing 300 mm diameter watermains on Paisley Road and Silvercreek Parkway to the south of the site. Local watermains will be 200-250 mm diameter.
- The development will be serviced by an existing 300 mm diameter sanitary sewer that has been extended to the site from the south.
- Quantity control will be provided in a centralized stormwater management facility.

- A local storm sewer system that outlets to the centralized stormwater management facility will serve the majority of the site.
- A separate storm sewer system will serve the underpass, which bypasses the stormwater management facility.
- A centralized infiltration facility will be provided to accommodate the 7 mm runoff volume from the majority of the site.
- Private on-site infiltration galleries will be provided where drainage from building rooftops can be infiltrated.
- Enhanced stormwater quality control will be provided in the centralized SWM facility for the majority of the site.
- An OGS unit will be provided to treat flows from the underpass.
- Emergency overland flow routes will be provided throughout the site where practical.
- The site has been appropriately graded in accordance with the City of Guelph design standards."

6.2 Urban Design Brief

Mbtw prepared an Urban Design Brief dated November 2019 which includes the following:

- "The proposed development provides appropriate transitions between the townhouse, apartment and mixed-use blocks through the use of setbacks, separation distance and height distribution. The conventional, back to back townhouse units, which are 3 storeys in height, have a 6 metre front yard setback. The lane based decked townhouse units are also 3 storeys in height but have a 3 metre front yard setback. Townhouse units are predominately located within the eastern segment of the site providing a more sensitive transition to the proposed neighbourhood park and the existing open space (Howitt Park) to the east.
- Parking for apartment and mixed-use buildings will be accommodated through surface parking lots in addition to underground parking. Where possible, surface parking lots will be located at the rear or side of the building and will be masked by built form. Surface parking lots will also be screen through landscaping.
- Private parking will be provided for all townhouses. Conventional and back-to-back townhouse dwellings will have driveway access from the front of the units. Parking for lane based decked townhouses will be accessed from the rear laneway and will not be visible from the public realm.
- Enhanced architecture treatment will be proposed for the building façades facing the urban square, special attention will also be given to the ground floor treatment of mixed-use blocks to ensure they are easy to navigate and accessible. Architectural features will aim to create façades that will contribute to creating visual interest and a sense of place.
- The Silvercreek Junction community has been planned at higher densities with mixed-uses surrounding green parkland. It is envisioned as a walkable community with places to live, shop and play.
- The recharge and infiltration of rainwater on the community will be infiltrated to meet pre-development levels and create a water balance as much as is possible.
- The site is a mined-out gravel pit and provides an excellent opportunity for groundwater recharge and enhancement of the urban fabric.
- The landowner has rehabilitated this brownfield site and has a Record of Site Condition from the province."

6.3 Traffic Impact Study

BA Group completed a Traffic Impact Study dated November 14, 2019 which concluded that;

- *"It is proposed that bike lanes and sidewalks be provided along Silvercreek Parkway which will connect to the existing active transportation infrastructure around the site.*
- The forecast trip generation for the proposed development represents a reduction of 590 two-way net trips (48% fewer) in the weekday p.m. and a reduction of 875 two-way net trips (55% fewer) in the Saturday mid-day peak hours compared to the 2012 Silvercreek Concept Plan.
- With the realignment of the Silvercreek Parkway and Waterloo Avenue intersection, the northbound movement is free-flowing and will not generate queues that could potentially impede the flow of traffic from the Hanlon Expressway off-ramp to Wellington Street West.
- At the Silvercreek Parkway and Paisley Road intersection, the eastbound left turn lane movement 95th percentile queue exceeds the available storage in the weekday p.m. peak hour.
- At the Hanlon Expressway and Paisley Road intersection, the westbound left turn movement 95th percentile queue exceeds the available storage length in all of the peak hours in the existing condition.
- The signal justification warrants were not met for the two proposed intersections with Silvercreek Parkway in the 2031 total traffic scenario.
- Based on the 2031 total traffic forecasts on Silvercreek Parkway, the forecast cross-product does
 not meet the warrants for a warning system with gates at the at-grade crossing, however, the
 warning system with gates were recommended as part of the Detailed Safety Assessment in the
 Silvercreek Parkway Class EA and it is, therefore, recommended that they be implemented as
 part of the Silvercreek Parkway realignment.
- The proposed Metrolinx underpass with Silvercreek Parkway creates a new alternative northsouth connection which may divert and decrease traffic on Alma Street and neighbouring roadways.
- With the implementation of the Transportation Demand Management Plan, the realignment of the Silvercreek Parkway and Waterloo Avenue intersection and recommendations of the Silvercreek Parkway Class EA, the impact of the site-generated traffic can generally be accommodated.
- Further discussions with the City and the Ministry will be required to understand the implications of the potential Westwood Road interchange and the grade separation of the Hanlon expressway and Paisley Road in order to assess what improvements could be considered to improve traffic operations."

6.4 Scoped Environmental Impact Study

Aboud & Associates Inc. prepared the Scoped Environmental Impact Study Addendum (R4) dated November 8, 2019, which concluded that;

- "Based on the updated Grading Plan completed by R.J. Burnside (October 2019) no grading will take place within 7.5 m (radius from edge of tree) of the existing Bur oak where a Minimum Tree Protection Zone of 7.115m has been recommended. Providing a 7.5 m Minimum Tree Protection Zone ensures that the Bur oak will not be affected by the surrounding development and allow it to perform its natural functions as it had prior.
- No habitat matching the criteria for Barn Swallow, Eastern Meadowlark or Blanding's Turtle was found within the study area.
- The proposal in conjunction with the completed restoration of the Howitt Creek corridor, will not negatively impact Howitt Creek."

6.5 Phase 1 and Phase 2 Environmental Site Assessment and Record of Site Condition

Golder Associates prepared a Phase 1 Environmental Site Assessment dated June 2004 which identified issues of potential environmental concern requiring that a Phase 2 Environmental Site Assessment be completed.

Golder Associates prepared a Phase 2 Environmental Site Assessment dated July 2004 which recommended that;

"Based on the results of this Phase 2 ESA and historical field data, it is Golder's opinion that redevelopment of the Site could likely be accomplished using a Level 1 Risk Management approach in conjunction with hot-spot removal of TPH-impacted soils and groundwater."

On January 11, 2008 the Ministry of the Environment provided an Acknowledgement of Filing of Record of Site Condition Number 36700, IDS Filing Number 2886-7ARL7K for 40 Silvercreek Parkway South.

On October 20, 2008 the Ministry of the Environment provided an Acknowledgement of Filing of Record of Site Condition Number 45206, IDS Filing Number 1571-7KLS68 for 35 Silvercreek Parkway South.

6.6 Archaeological

This Land Archaeology Inc. provided an opinion dated November 15, 2016 that,

"After extensive background research and a site visit, it is our professional opinion that any archaeological resources which may have existed on this property have been removed due to disturbance of the property through quarrying, grading (adjacent residential infrastructure installation), and deposition of soils imported to the location in order to fill the voids left by quarrying activities. As such, our opinion is that no archaeological resources exist on the property."

6.7 Geotechnical Report

GWS Canada Inc. prepared an Additional Geotechnical Investigation and Summary of Previous Geotechnical Investigation Work dated February 2018. This report includes the following summary of conclusions and recommendations;

- "V.A. Wood completed 31 boreholes in January 2005 throughout the entire Site. These boreholes were advanced to depths ranging from 4.6 to 9.3m below existing ground surface.
- Peto MacCallum Ltd. completed 22 boreholes in January 2012 throughout the entire Site. These boreholes were advanced to depths ranging from 4.8 to 14.2m below existing ground surface. Four monitoring wells were installed as part of this investigation. Bedrock was encountered at five boreholes at depths ranging from 4.8 to 14.2m below existing ground surface.
- SPL Consultants Ltd. completed 5 boreholes in February 2012 throughout the entire Site. These boreholes were advanced to depths ranging from 6.2 to 6.7m below existing ground surface. A monitoring well was installed at each borehole location as part of this investigation.

- SPL Consultants Ltd. completed 6 boreholes and 8 infiltration test holes were completed in September 2012 throughout the entire Site. These boreholes and infiltration holes were advanced to depths ranging from 2.8 to 11.2m below existing ground surface. Bedrock was encountered at four boreholes at depths ranging from 2.3 to 10.7m below existing ground surface.
- SPL Consultants Ltd. completed seven boreholes were in June 13 2013 throughout the entire Site. These boreholes were advanced to depths ranging from 2.1 to 6.5m below existing ground surface. Forty-one shallow test-pits were also excavated throughout the site. Forty-one organic matter tests were conducted on test-pit samples collected from the fill.
- WSP Canada Inc. completed three boreholes at the Site between in January 2018 to depths of 9.2 to 9.9m below existing ground surface.
- Seventy-nine boreholes and forty-four test pits have been completed as part of previous investigation work at the Site or near the Site boundaries. Three boreholes were completed as part of the current investigation. All of the borings and excavations revealed the presence of deep fill deposits overlying silt, sand, and sand and gravel deposits, glacial till deposits, and dolostone bedrock.
- The Site is a former Lafarge Canada Inc. property that is currently vacant of structures. The
 previous investigations and current investigation have revealed deep fill deposits throughout the
 site up to 7.2m below ground surface. The fill material frequently contains organic matter, topsoil,
 and wood pieces. Based on SPT "N"-values, the fill is in a very loose to compact condition, and it
 does not appear to have received systematic compaction. This material is not considered suitable
 to support the proposed structures.
- Based on the test pit/borehole data throughout the site, the existing fill in the proposed building envelopes consisted of silt, sand, sand and gravel, clayey silt, cobbles, and contained trace to some topsoil, organic matter, and wood pieces.
- This site is suitable for the ground improvement method, Rapid Impact Compaction (RIC) to increase the density of the top 5m of soils, provided that buried peat encountered in test pits 22, 27, and 28, of the August 2013 SPL investigation, is removed and replaced with suitable on-site or imported material. The areas where unsuitable soils are encountered can be identified, subexcavated, replaced with suitable on-site or imported material, backfilled, and compacted during the RIC process.
- The proposed finished floor elevations of buildings in this development will range from 319.5m to 322m. Due to the deep fill present on site that is not suitable to support building foundations, conventional strip and spread footings founded on the native soils will not be feasible for this site. Three foundation alternatives are provided; ground improvement, engineered fill, and short caissons.
- Thirteen documented monitoring wells have been installed throughout the Site as part of previous and current geotechnical investigations. An additional eleven undocumented monitoring wells were also present at the Site. The groundwater levels measured in wells that were not dry ranged from 2.4 to 10.7m below ground surface (Elev. 317.8 to 312.3m).
- No major problems with groundwater are anticipated for the installation of foundations above elevation of 318m."

6.8 Hydrogeological Report

WSP Canada Inc. prepared a Hydrogeological Assessment dated December 3, 2019 which included the following summary and conclusions:

"The subsurface investigations conducted at the Site indicate that the stratigraphy consists of fill deposits, overlying silt, sand, and sand and gravel deposits, glacial till deposits, and bedrock. The fill typically consists of silt, sand, sand and gravel, and cobbles, and extends from surface to depths up to 7.2mbg. Underlying the fill are cohesionless glaciofluvial deposits of silt, sand and gravel. Glacial till deposits were encountered in some boreholes, typically overlying bedrock. Dolostone bedrock of the Guelph Formation was encountered at depths ranging from 9.1 to 10.7 mbg.

The Site lies within WHPA-B for the City of Guelph Membro Well, approximately 980 m east of the Site. The Membro Well is installed in the Gasport Formation bedrock at a depth of 73.2 m. The Gasport Formation is not highly influenced by shallow groundwater due to the presence of the Eramosa Formation aquitard, which lies between the Guelph and Gasport Formations, isolating the Gasport Formation aquifer from surficial activities.

Howitt Creek, which is fed by stormwater systems upstream of the site, borders the Site to the northeast. Preliminary monitoring results indicate that along its length adjacent to the Site, the feature is losing water to groundwater infiltration. Given the water levels present at the Site, groundwater is not contributing to baseflow in Howitt Creek.

Shallow groundwater levels within the overburden at the Site indicate downward vertical gradients and general direction of ground water flow to the southeast on the east portion of the Site and to the southwest or west on the west portion of the Site. The average hydraulic conductivity of the shallow aquifer is 3.0×10^{-6} m/s, which is typical for a slightly silty sand to clean fine sand. The rate of shallow groundwater flow is estimated to be between 3 and 7 m/year.

Calculated infiltration rates vary from 237 mm/hr to 37 mm/hr, with an average of 81 mm/hr.

The results of the water budget analysis indicate that the development will increase the imperviousness of Site from 0% to 70%. Without mitigation measures, the development would result in a 74% decrease in infiltration and 653% increase in runoff compared to pre-development levels. Proposed mitigation measures include bioswales, a storm water management infiltration pond, and underground storage/quality control treatment/infiltration gallery systems. With these mitigation measures, the post-development water budget shows infiltration will increase 102% and runoff will decrease by 50% compared to pre-development levels.

Based on the shallow groundwater depths at the Site, it is anticipated that excavations will be above the observed shallow groundwater level and will not interfere with groundwater flow. However, excavations in the northeast portion of the Site may occur below the groundwater table. Consideration can be given to raising Site grades or reducing excavation depths in order to maintain the excavations above the observed shallow groundwater level. Further review should be completed at detailed design stage.

Groundwater controls may be required during the construction of deeper utilities such as storm and sanitary sewers if they extend below the groundwater table. Groundwater inflows are expected to be moderate to high. Further detailed assessment and a dewatering plan including a PTTW and monitoring program may be required and are recommended at the design stage.

Excavation or trench backfilling operations should be carried out with materials that are similar to the materials that have been excavated. This is to ensure that shallow groundwater flow pathways are not truncated by backfilling using lower permeability soils. Trench plugs should be installed along utility trenches that may intersect the shallow groundwater table. The use of trench plugs should be determined based on field conditions.

The monitoring wells installed at the Site need to be maintained in accordance with the Ontario Water Resources Act, O.Reg.903, Wells. Once the wells are no longer required for monitoring or sampling purposes, these wells will need to be appropriately decommissioned by a licensed well contractor as required by O.Reg.903."

6.9 Noise and Vibration Study

HGC Engineering prepared a Noise and Vibration Feasibility Study dated November 22, 2019 which provided the following recommendations:

- "A 1.8 m high acoustic barrier is required for the rear yards of townhouse dwelling units adjacent to Highway 6.
- A 2.5 m high safety berm is required abutting the Metrolinx railway.
- A 2m high safety berm is required along the spur-railway to the south.
- A detailed noise study should be performed when lotting information and grading information is available to refine the acoustic barrier heights and provide specific recommendations on a lot/block basis.
- Central air conditioning is required for the townhouse units and apartment building closest to Highway 6 and the railway to the north. Provision for the future installation of air conditioning at the occupant's discretion is required for the apartment block and townhouse units with some exposure to Highway 6 and the railways.
- Upgraded glazing constructions will be required for the townhouse blocks and buildings closest to north railway. When detailed floor plans and building elevations are available, the glazing constructions should be revised based on actual window to floor area ratios. Masonry or brick exterior wall or an acoustical equivalent will be required for the exterior facades of dwelling units and buildings with exposure to the railways. When exterior wall details are available, an acoustical consultant should review the details for compliance with this report.
- Warning clauses are required in the property and tenancy agreements and offers of purchase and sale in order to inform future owners/tenants of the sound level excesses and the proximity to the railway line and nearby commercial uses.
- Tarion Builder's Bulletin B19R requires that the internal design of condominium projects integrates suitable acoustic features to insulate the suites from noise from each other and amenities in accordance with the OBC, and limit the potential intrusions of mechanical and electrical services of the buildings on its residents. If B19R certification is needed, an acoustical consultant is required to review the mechanical and electrical drawings and details of demising constructions and mechanical/electrical equipment, when available, to help ensure that the noise impact of the development on itself are maintained within acceptable levels.
- Outdoor sound emissions should be checked to ensure compliance with the City of Guelph's noise by-law."

7. <u>Conclusion</u>

This Planning Report has been prepared in support of Official Plan Amendment, Zone Change and Draft Plan of Subdivision applications for the property municipally addressed as 35, 40 and 55 Silvercreek Parkway South, Guelph owned by Silvercreek Guelph Developments Limited and 2089248 ONTARIO INC.

The proposal is consistent with the Provincial Policy Statement and in conformity with the Growth Plan and the general intent of the Official Plan and Zoning By-law and in my professional opinion represents appropriate development and good planning.

This report has been prepared and respectfully submitted by;

[Original Signed and Sealed]

Astrid Clos, MCIP, RPP

December 5, 2019 Date