

July 7, 2017

To the Mayor and City Council:

**SDC Delegation to Committee of the Whole
on Tremaine Dundas Secondary Plan**

From the June 26th, 2017 Tremaine Dundas Secondary Plan provided by the Planning and Development Depart the following statements were made about the Sustainable Development concern:

“Concern: Development reflects typical suburban planning as opposed to urban planning. The plan should be reconsidered in the current planning context allowing for more residential/commercial units on the property ideally approximately 1,200 to 1,500 units.

Staff Response: The Secondary Plan identifies residential uses within the Residential and Mixed-use General designations. The Secondary Plan includes policies for Phasing which allow for 400 units within the first phase of development based on comments received from the Region based on their Best Planning Estimates. The mixed use component originally considered for the Secondary Plan area along Tremaine Road was replaced with the Business Corridor designation to address compatibility concerns with industrial uses designated in the Town of Oakville. Upon submission of a future draft plan of subdivision application, a planning analysis and review will be completed to determine the total number of residential units that should be accommodated on Phase Two of the site.”

SDC feels Staff did not adequately address our concern. In a summary form let us go through our thinking.

Initially this was considered to be Employment Land. The committee strongly supports that land use because of the 'isolated' location and proximity to transportation, however, the use has changed to be a combination of residential, mixed use and employment land.

The Committee reviewed the applicant’s Draft Plan (Figure 1) and had two general observations:

1. Land use within the site is highly segregated, with clusters of residential, naturalized zones, a business corridor, and mixed-use corridors. While these are comparatively near each other, they have been kept separate on the site. This design approach, reminiscent of streetscapes like Alton, produces a homogeneous neighbourhood character, and fails to inspire a sense of “community”.
2. It appears that the developer has made an effort to protect the natural heritage areas; however we find that the development would be improved with integrating these areas with increased green space. Move away from the single family, townhouse clusters and instead add density and through that create a community where people live in and around the natural heritage and green space. The City should grant clear permission to Evergreen to develop with higher density provided it is able to achieve the aims expressed in the City’s emerging planning approach.

. Select comments from Principles and Objectives Review give you our general feelings of the design:

- The approach to handling protection of the natural heritage system is certainly proactive. However, the committee notes the integration of natural heritage only goes as far as needed.
- Decisions made in the Plan are certainly heading in the right direction, but the residential area is a homogenous desert. Green space should be near or surrounding the residential areas and these can be improved by tying them together with the natural heritage system.
- The plan to train each house owner about the area is good. More trees and green space are required. Integration of residential horticulture, perhaps a community garden, is seen as essential elements.
- Regarding replanting, the developer needs to consider tree planting, particularly in the residential areas.
- The City is missing an opportunity to implement its goals for the Strategic Plan with respect to sustainable development, urban built form, economic prosperity, and intensification.
- Though the Secondary Plan has conformed to rules around allowable density and protection of the natural heritage system, and has tried to maintain the integrity and diversity of the parcels, it fails to reach its full potential.
- Space has not been used to maximum potential, and the result is a Plan that achieves conformance, but misses the goals of the new Strategic Plan.

We struggled with this design for a few weeks and four meetings. How can we make this property sustainable? How do we make this isolated location self-sufficient providing its own essential services? How do we bring transit to the site?

What emerged is we recognized this as an opportunity. This property is an untouched, blank canvas, its location 'isolated' from neighbours would give the city and developer the opportunity to build a cutting edge, designed community without the threat of a negative public response. This community could be built with a density that would encourage in-community services such as a grocery, dry cleaner etc. reducing the number of needed car trips. This increased density would also give transit the ridership needed for frequent service.

The use of mid and high density residential would allow the developer to meet their financial objectives and be able to invest in both the design and environmental expenses that contribute to a development that has not yet been built in Burlington. The increased density would also give the developer the ability to 'double' the planned green space and integrate fully with the natural heritage elements.

We need an emphasis towards the creation of a complete community using a placemaking approach to design.

Complete Community – develop a community that vibrant, mixed use, pedestrian-oriented, transit supportive and human scale. The approach suggests a tight integration of a wide range of, including community infrastructure such as facilities, programs and social networks that improve the quality of life.

Placemaking – multi-faceted approach to the planning, design and management of public spaces that reflect shared value and support healthy communities.

We should move away from the traditional to a more sustainable community in the long run such as Hammarby Sjöstad (Figure 2). See accompanying photos of Hammarby Sjöstad to how Natural Heritage was integrated into Hammarby Sjöstad.

We recognize to develop a community such as this with 4-6 storey buildings would require intensification to support its development.

The City seeks to have its mixed use areas follow patterns of urban (rather than suburban) design, and Council should insist on application of high-quality urban design guidelines as part of the Evergreen development process. These design guidelines will ensure that the principles of sustainability, compatibility, placemaking, pedestrian and transit-oriented development and efficient and attractive urban form are achieved.

Through the lens of Burlington's Strategic Plan 2015 – 2040 allowing this development to proceed in accordance with the Draft Plan of Subdivision would represent an enormous wasted opportunity for both the City and Evergreen. A quick assessment by the Committee shows an increased number of Strategic Plan objectives compared to Staff's objectives could be achieved by following this approach (Appendix 1). If the Plan is revisited in the current planning context, the Committee believes that the development can better meet the newly-expressed strategic goals and emerging policies of the City with respect to Mixed-use development and neighbourhood design, and at the same time, allows Evergreen to incorporate more residential/commercial units on the property.

Recommendation:

- Defer work on Plan of Subdivision.
- Develop set of urban design guidelines using complete communities and placemaking to support design similar to Hammarby Sjöstad.
- Determine density required to support effort and its feasibility.
- Consider a portion of property along Dundas be considered changed to Mixed Use.

Yours sincerely,

Guy Sheppard, Chair of Policy and Development Sub-committee of the Sustainable Development Committee

Figure 1



Figure 2



Appendix 1

Additional Objectives addressed in Strategic Plan (additions shown in green)

A City that Grows

- Promoting Economic Growth
 - 1.1 c) The city's vision for employment lands has been developed with aggressive targets. The community, developers and industry together are achieving our economic potential. The city, along with its partners, supports the development of employment lands through timely planning, infrastructure investments and other incentives.
 - 1.1 d) Employment lands are connected to the community and region and through active transportation links and public transit. Employment Lands include transit links and options that are easy to access and contribute to a sustainable, walkable and bikeable community.
- Intensification
 - 1.2 d) New and transitioning neighbourhoods are being designed to promote easy access to amenities, services, recreation and employment areas with more opportunities for walking, cycling and using public transit
 - 1.2 f) City policy encourages and rewards energy-efficient buildings and other on-site sustainable features, reducing Burlington's environmental footprint. Existing buildings are renovated to improve efficiency.
 - 1.2 i) Architecture and buildings are designed and constructed to have minimal impact on the environment reflecting urban design excellence that create buildings and public spaces where people can live, work or gather.
- Focused Population Growth
 - 1.3 a) Burlington is an inclusive and diverse city that has a growing proportion of youth, newcomers and young families and offers a price range and mix of housing choices.

A City that Moves

- Increased Transportation Flows and Connectivity
 - 2.1 c) Complete Streets vision is put in place through a co-ordinated plan, which will include on-road and off-road bike lanes, sidewalks, multi-use paths and trails and a public transit system that are all well connected throughout the city.
 - 2.1 d) Employment areas are well-served by public transportation and riders can access the regional and provincial transportation network.
 - 2.1 e) All levels of government work together to create a transportation experience that offers convenient and timely connections between municipalities.
 - 2.1 g) Walkability has guided the development of new/transitioning neighbourhoods and the downtown so that people rely less on automobiles.

A Healthy and Greener City

- Healthy Lifestyles o
 - 3.1 a) Every resident of Burlington lives within a 15 to 20-minute walk from parks or green spaces
 - 3.1 b) Parks and green spaces are multi-dimensional. Residents and visitors will be able to use them in a number of ways.
 - 3.1 d) The trail system is being linked to the city's park network, to neighbourhoods and to other regional systems including transit, ensuring that the city's rural area and waterfront are easily accessible and accommodate walking and cycling.
- Environmental and Energy Leadership
 - 3.2 a) The city has a healthy, natural heritage system that is protected, well connected, conserved and enhanced and forms a fundamental component of the city's urban and rural areas.
 - 3.2 e) The city will work with community stakeholders to implement the Community Energy Plan and achieve the goals and objectives related to energy conservation, generation and availability.
 - 3.2 g) The city recognizes that climate change is a significant issue and is working with the community and all levels of government towards the goal of the Burlington community being *net carbon-neutral.
 - 3.2 h) The city will become a leader in storm water management and low impact development.

An Engaging City

- Good Governance
 - 4.1 h) The city actively encourages and welcomes collaboration with residents and stakeholders in the decision-making process.

SDC Submission – Tremaine Dundas Attachment A



Hammarby Sjöstad, Stockholm



1. Hammarby Sjöstad. Aerial view of the community.



2. Hammarby Sjöstad. Public commons with integrated stormwater and wastewater management, green spaces and cultural objects.

Hammarby Sjöstad



3. Hammarby Sjöstad. Integration of wetland margin natural heritage system with built form.



4. Hammarby Sjöstad. Integration of wetland margin natural heritage system with built form.

Hammarby Sjöstad



5. Hammarby Sjöstad. Integration of archipelago and wetland margin natural heritage system with built form.



6. Hammarby Sjöstad. Public space meets retail meets natural heritage system at the margin of the development.

Hammarby Sjöstad



7. Hammarby Sjöstad. Restaurant and public commons.



8. Hammarby Sjöstad. Restaurant and public commons.

Hammarby Sjostad & El Paso, Tx



9. Hammarby Sjöstad. Residents socializing in the public commons.



The rendering shows the central square of a prototypical neighborhood for east El Paso, Texas. Through changes in El Paso's zoning regulations, the inclusion of public spaces such as the one shown can again become a feature of new neighborhoods.

Credit: Dover,
Kohl & Partners.

10. El Paso, TX. Rendering of a central square public commons for a proposed neighborhood design.

Hammarby Sjöstad



11. Hammarby Sjöstad. Complete street.



12. Hammarby Sjöstad. Complete street 2.

Vancouver & Portland



Vancouver

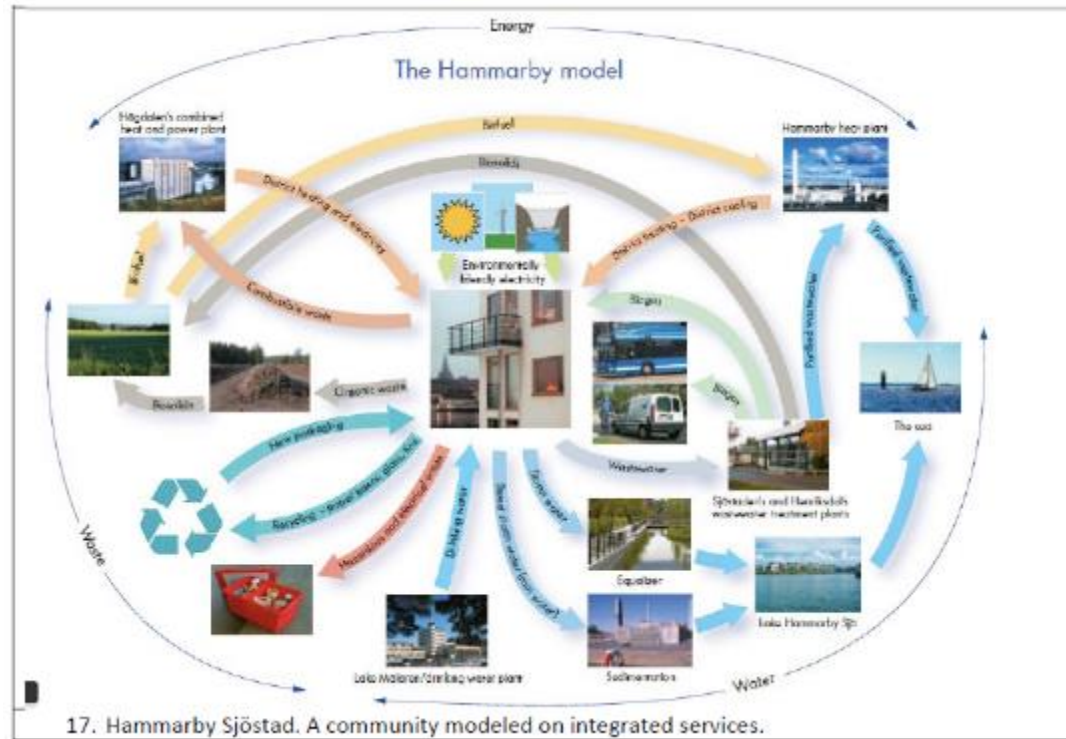


15. Vancouver, BC. Pedestrian laneway in residential neighborhood.



16. Vancouver, BC. Pedestrian-friendly sidewalk and human-scale construction along Water St.

Hammarby Sjostad



18. Hammarby Sjöstad. Bioswale integrated to natural landscape and walkways.

Hammarby Sjostad & Portland



19. Hammarby Sjöstad. Public commons with integrated stormwater and wastewater management, green spaces and cultural objects.



20. Portland, OR. Bioswale integrated between roadway and sidewalk.

Portland

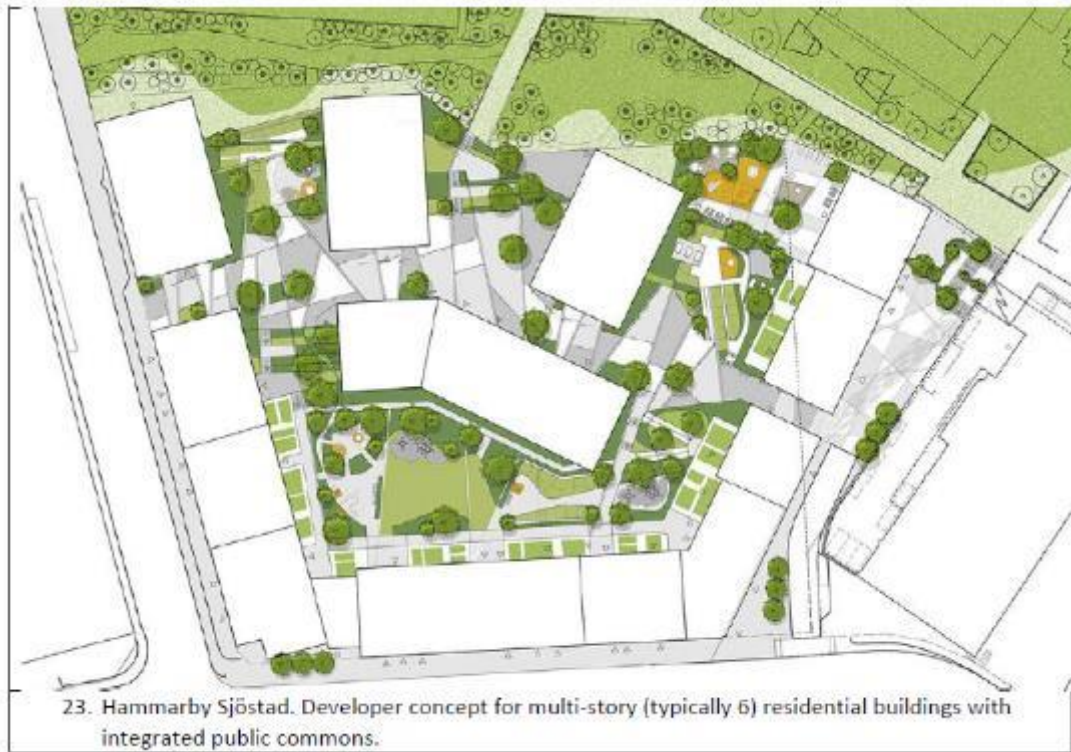


21. Portland, OR. Bioswale integrated between roadway and sidewalk.



22. Portland, OR. Bioswale integrated between roadway and sidewalk.

Hammarby Sjostad



Hammarby Sjöstad



25. Hammarby Sjöstad. Typical view from balcony.



26. Hammarby Sjöstad. Covered bicycle storage with vegetated roof and permeable ground cover for managing stormwater.

Vancouver



27. Southeast False Creek. Interior courtyard with public gardens and play space.



28. Southeast False Creek. Community garden in public commons.

Sustainability & LEED Neighbourhood Checklist - New Developments
City of Burlington
Sustainable Development Committee

Project Name: Evergreen

Address: 5421, 5453 and 5463 Dundas St. and 3232 Tremaine Rd

Project Type: Mixed Use Development

Objective:

This checklist will assist the Sustainable Development Committee in reviewing new development and/or major reconstruction projects which should meet LEED Sustainable Neighborhood standards. Reviews can be focused on specific sections of a project or overall neighborhood compliance.

Topics:

Smart Location and Linkages	Neighbourhood Pattern and Design	Green Infrastructure and Buildings
<ul style="list-style-type: none">• Location• Ecosystems and Open Spaces• Contaminated Sites• Transit-Accessible Locations• Cycling Facilities• Jobs and Housing Proximity	<ul style="list-style-type: none">• Walkable Streets• Compact Development• Neighbourhood Connections• Mixed Uses• Affordable and Diverse Housing• Parking and Transportation Demand• Parks and Recreation• Universal Design• Community Participation• Local Food• School Access and Design	<ul style="list-style-type: none">• Construction Techniques• Energy Efficiency and Conservation• Energy Production and Distribution• Water Efficiency and Conservation• Storm water and Wastewater• Green Building Process• Historic and Existing Building Reuse• Recycling and Reuse• Light Pollution

Official Plan / Existing By-Law Exception:

If any exception to the current Official Plan or existing By-Law is required, please note the current state and the requested future state details.

Current Official Plan/ By- Law	Requested Exception	What is the difference?	Impact(s)

Checklist:

Topic	Criteria	Yes	No	Maybe/NA	Solution(s)	Comment(s)
SMART LOCATION AND LINKAGES (SLL)						
Location	<i>Develops on a site that is infill, connected to adjacent development or served by transit or neighborhood amenities</i>		✓			Located on lands that have been designated for future growth or development, but have not yet been developed. The current landscape is largely agricultural in nature, consisting of farm fields and hedgerows.
	<i>Develops on a site that is connected to an existing street network</i>	✓				Includes an internal grid oriented network of streets connecting to the existing major arterial roads of Tremaine and Dundas.

	<i>Develops on a site that is located in an economically distressed area which also provides affordable housing</i>		✓			Will affordable housing be provided on the site.
	<i>Develops on a site that is highly accessible and connected to other nearby development</i>		✓			The site does not provide cycling or walking accessibility from the outside to the inside of the development.
Ecosystems and Open Spaces	<i>Conserves any on-site imperiled & endangered species and habitat</i>	✓			<i>Develop and action a habit conservation plan</i>	Channel development to urban areas with existing infrastructure, protecting greenfields and preserving habitat and natural resources
	<i>Does not build near or on wetlands or water bodies and leaves buffers of undeveloped land around them of at least 30 metres</i>	✓			Develop a long-term management plan to protect habitat and woodlands	The major wetlands will be incorporated. Buffers of 30m will be created.
	<i>Protects prime agricultural land</i>		✓			
	<i>Prevents most building on floodplains and high water table areas</i>	✓			<i>Comply with Ontario Building Code section 9.13.3</i>	
	<i>Conserves pre-existing on-site habitat, wetlands or water bodies in perpetuity</i>	✓				
	<i>Restores degraded on-site habitat, wetlands or water bodies and conserve in perpetuity</i>	✓				Section 2.2 of the PPS directs planning authorities to protect, improve or restore the quality and quantity of

						surface and groundwater water resources through watershed and land use planning
	<i>Implements a long term, well-funded management plan for on-site habitat, wetlands or water bodies</i>		✓		Develop a long-term management plan to protect habitat and woodlands	
	<i>Protects steep slopes from development</i>	✓				Steep slopes that could potentially represent slope hazards are only found in the Bronte Creek valley lands outside the Subject Property. By providing buffer zones of 30m we are protecting the development from steep slopes.
Contaminated Sites	<i>Remediates a contaminated site and redevelops</i>	✓				Refer to Phase 1 ESA.
Transit Oriented Locations	<i>Develops in an area that is well-served by transit (within 400 metres) or has a low average driving range</i>		✓		<i>Incorporate transit shelters</i>	Burlington Transit provides service west of the site and Oakville Transit provides service east of the site. The

						nearest Burlington route extends as far east as Sutton Drive (1.3 km away). The nearest Oakville route extends as far west as Colonel William Parkway (1.1 km away). The transit service currently is not available for the Tremaine-Dundas Secondary Plan Area.
Cycling Facilities	<i>Located along a bicycle network and provide bicycle storage and facility</i>		✓		<i>Build bicycle storage and facility</i>	Include bicycle racks and shelters for high density residential and employment. Cycling lanes are needed on Dundas.
Jobs and Housing Proximity	<i>Locates jobs and housing, particularly affordable housing ,nearby each other</i>		✓		This needs to be addressed in the proposal	Increasing density can lower cost of housing.
Topic	Criteria	Yes	No	Maybe/NA	Solution(s)	Comments
Neighbourhood Pattern Development (NPD)						
Walkable Streets	<i>Includes public-facing building entries, building height appropriate to street widths,</i>		✓		<i>Human scale architecture to</i>	Applicable for high density housing and

	<i>continuous sidewalks and limited garage entries</i>				<i>promote site interaction e.g. A minimum 'building-height ratio of 1 to 3 (1 ft. of height for 3 ft. of width along 30% of street length or garage doors no more than 20% of street length)</i>	employment.
	<i>Improves the pedestrian experience at the street level by providing: frequent building entries, ground level windows, on-street parking, elevated ground to floor units, low street speeds and/or minimal driveway interruptions of sidewalks</i>		✓		<i>Human scale architecture to promote site interaction</i>	Should be part of the design for the employment land and the high density housing.
	<i>Lines and shades sidewalks with non-invasive trees for 60% of street length</i>		✓		<i>Plant trees every 15 metres from tree trunk centre</i>	Trees should be different non-invasive species.
Compact Development	<i>Meets minimum density threshold</i>	✓			<i>Various with forms of housing types (at least 50 units per hectare for residential and 0.50 floor-area ratio for non-residential. Use the official plan for reference purposes</i>	Meets density level.
	<i>Exceeds increasing density thresholds.</i>		✓		<i>At least 75 dwelling units per ha for residential and 0.75 floor-area for non-residential</i>	Increase density in the residential area from 900 units to 1200-1500 units to provide more affordable housing and increase green space.

Neighborhood Connections	<i>Connects neighbourhood streets to each other and adjacent areas</i>		✓		<i>Construct pedestrian paths/walkways to create seamless transitions and avoid cul-de-sacs</i>	Neighborhood streets are connected well within the development but are not connected to adjacent areas.
Mixed Uses	<i>Enables walking access within 400 metres to commercial or civic facilities such as restaurants, schools, pharmacies, theatres, parks, libraries or retail (min 7-10 uses)</i>		✓			Mixed uses should increase and they should be defined in the report. No mention of pharmacies, libraries. Could a recreation center or library be provided?
Affordable and Diverse Housing	<i>Provides multiple housing type of different sizes & high levels of affordability, and allocate 20% to rental units, and affordability levels</i>		✓			We would like to see a better mix of housing types and affordable housing and rental units.
Parking and Transportation Demand	<i>Minimizes total surface parking area (no more than 20%). Discourage them along building frontages. Provide bicycle, car-share parking and electrical charging stations</i>		✓		<i>Underground parking; promote & accommodate alternative transit options (Includes shelters, benches, lighting and information displays at transit stops) Build E/V plugin (4-5 plus-in at ground level</i>	Include underground parking to make better use of land and develop more community space, gardens, and parks. Natural space should include more trees and greenery.
	<i>Encourages use of environmentally preferable transportation choices with transit passes , shuttles, vehicle sharing and/or unbundled parking pricing</i>		✓			Oakville and Burlington should link by bus between Sutton and Colonel Williams Parkway.

						<p>Transit should be placed at the development to encourage sustainable habits even before demand to allow citizens to make healthy decisions from the start and begin their lives at the development in a more sustainable way.</p> <p>City of Burlington and the Town of Oakville, is undertaking an environmental assessment study to consider Bus Rapid Transit along Dundas Street in Burlington and Oakville between Brant Street to Oak Park Boulevard.</p>
Parks and Recreation	<i>Enables access (within 400 metres walk distance) to public spaces such as squares, parks, paseos and plaza, and provides squares, parks and plazas within walking distance of resident and commercial tenants</i>	✓				<p>Include more parks and outdoor green space, and public squares for the community to use. This will create more sense of community.</p>
	<i>Enables easy access to publicly accessible indoor or outdoor recreational facilities</i>		✓			<p>Create community recreation space to</p>

						promote healthy lifestyles.
Universal Design	<i>Designs public spaces and an acceptable amount of dwelling units for all abilities</i>		✓		<i>For residential projects provide universal accessibility for people of diverse abilities in 20% of dwelling units and non-residential projects provide 100% of public rights-of-way for universal accessibility</i>	Development of accessible dwellings should be created to allow integration of all members of society with ease. Accessible dwelling could include house structural changes, ramps to commercial businesses and employment. This needs to be addressed in the report.
Community Participation	<i>Bases project designs on community input by providing a forum where public feedback is collected and incorporated into development design</i>			✓		Open houses were conducted for members of the community to voice their opinions. Neighborhood meeting should be scheduled to discuss proposed Secondary Plan as further details have been developed.
Local Food	<i>Provides access to gardening space, local produce or a farmer's market</i>		✓		<i>Parcel land for food production use</i>	Gardening space and a neighborhood community garden should be provided for residents living in medium rise buildings.
School Access and Design	<i>Located within 1 km walking distance to local schools for young children (Elementary/Middle School)</i>		✓			

Green Infrastructure and Building (GIB)

Topic	Criteria	Yes	No	Maybe/NA	Solution(s)	Comments
Construction Techniques	<i>Implements an erosion and sedimentation control plan for construction</i>			✓	<i>Develop and implement an erosion and sedimentation plan</i>	The erosion and sediment control plan was proposed but was not created.
	<i>Preserves heritage trees and previously undeveloped land</i>	✓			<i>Preserve an appropriate amount of heritage and non-invasive trees</i>	Protects surrounding woodland and provides appropriate buffer zones. Provided overall plan of preserving trees and planning new trees but more details are needed.
Energy Conservation & Efficiency Conservation and Green House Reduction	<i>Provides superior building energy efficiency by having 90% of building square footage exceed increasing thresholds per ASHRAE 90.1</i>		✓			
	<i>Increases passive and solar access by orienting buildings or dense blocks to maximize north and south facing exposure</i>		✓			
Energy Production and Distribution	<i>Generates 12.5% of renewable energy on-site equal to offset equivalent carbon emissions from fossil fuel sources</i>		✓		<i>Utilize space conditioning (heating & cooling); hot water systems; renewable electricity systems (solar, wind)</i>	
	<i>Provides 80% of building heating and cooling through a shared neighbourhood wide district energy system</i>		✓		Put district energy where appropriate	
	<i>Provides energy-efficient neighborhood infrastructure such as traffic lights and waste</i>		✓		Provide LED lights for traffic lights.	

	<i>water pumps</i>		✓			
Bicycle and Green vehicle Facilities	<i>Provides bicycle storage, electric/hybrid vehicle charging stations, car charging programs, shuttles and similar services</i>		✓			
Water Efficiency and Conservation	<i>Meets minimum requirements for building water efficiency</i>		✓		<i>A minimum of 20% reduction over baseline</i>	Was not addressed in the proposal
	<i>Provides superior building water efficiency</i>		✓		<i>A minimum of 40% reduction over baseline</i>	
	<i>Reduces water consumption for outdoor landscaping</i>		✓		<i>A minimum of 50% reduction over baseline (e.g. plant water efficient plants for landscape and xcsaping)</i>	Was not addressed in the proposal
Storm water and Wastewater	<i>Retains and treats storm water on-site from 90th percentile rainstorm</i>	✓				6.6 Stormwater Management Strategy
	<i>Reuses 50% of treated wastewater</i>		✓			Check wastewater guide.
Green Building Process	<i>Includes multiple buildings certified under LEED or a similar green building rating system</i>		✓			
Historic and Existing Building Reuse	<i>Reuses and restores at least 20% of the existing building stock including historic or re-habilitated buildings</i>	✓				ESA Phase 1
Heat Islands	<i>Uses roofing, shading and paving that reflects instead of absorbs heat</i>		✓		<i>Utilize solar reflective roofs; shade, open grid pervious paving</i>	Not addressed in material provided.
Reuse and Recycling	<i>Use recycled content in neighborhood public infrastructure</i>		✓			Not addressed in material provided.
	<i>Provides neighborhood composting, recycling, re-use and hazardous waste</i>		✓			Not addressed in material provided.

	<i>collection (e.g. recycle or salvage 50% of construction waste)</i>					
Light Pollution	<i>Limits exterior illumination and directs it downward within the city by-laws</i>		✓		<i>Utilize motion sensors</i>	Not addressed in material provided.



July 4, 2018

SDC Comments on Tremaine Dundas Secondary Plan Excerpts and Urban Design Guidelines July 2018

General Comments

Attached to these comments are the appendices from our previous December 2016 comments:

- Attachment A - Conceptual Photographs for Evergreen Secondary Plan – Attached are some photographs to provide you with a better idea of some concepts we feel should be included in the Evergreen Secondary Plan.
- Attachment B – Evergreen LEED Neighbourhood Checklist:

Also attached are the overall comments from the SDC submitted in July 2017. This information was not included in Appendix C of the Staff Report (PB-35-18) and it makes our submission incomplete without it.

The Sustainable Development Committee (SDC) reviewed the June 11, 2018 Tremaine Dundas Secondary Plan and supporting material.

Staff has provided a Secondary Plan by working closely with the key stakeholders to develop it. It is very comprehensive, well thought out, fairly complete and clearly outlines the expectations of the participants to achieve what is necessary to complete the Plan.

SDC appreciated the opportunity last October 2017 to complete a preliminary review of excerpts from the Sustainable Building & Community Design, Urban Design and Community Land Use sections. Many of our comments were incorporated in this Draft Document.

Most sections are fairly complete and there is little that we can add.

SDC still has some concerns:

- Residential Density – We understand that the City is limited to 400 to 450 residential units in Phase 1 by the region with a minimum density of 45 residential units and jobs. As you are well aware SDC previously stated in our presentation to the Planning and Development Committee we felt that the development would be improved with integrating these areas with increased green space. Move away from the single family, townhouse clusters and instead add density and through that create a community where people live in and around the natural heritage and green space. Greater density would be required

to create this. Staff indicated to us in discussions with us that in Phase 2 we could increase the density to achieve this. The report indicates we will probably be using at a minimum a target of 60 residential units and jobs per hectare which we feel should be higher. With Phase 2 only being zoned Residential – Medium Density using minimum density 25 units per hectare this will be hard to achieve. We should probably be aiming for at least 75 units per hectare.

- Built Form examples – should use material beyond North America to get new and innovative ideas for developing sustainable communities such as Hammarby Sjöstad (Stockholm, Sweden) photographs in Appendix A attached.
- Transportation – The transportation system at the corner of Tremaine and Dundas Street will soon be beyond its limits unless the Cities of Burlington and Oakville work together to alleviate the problem.

Overall Recommendation: Approve proposed Secondary Plan with proposed changes.

Comments on Individual Sections of Secondary Plan

This remainder of this report provides SDC's comments on the individual sections. It includes comments from our original October 2017 review and some new ones as additional material was added to the plan.

SDC appreciates that many of our initial comments have been included in the Plan. We look forward to meeting with Staff to discuss them further.

2.1. Community Sustainability Principles – Why are these not the same as the approved Sustainable Development Principles and Objectives?

2.1.2 Natural Environment Sixth Paragraph – May want to consider LEED v4 for Neighbourhood Development as well as LEED Net Zero as standards.

From our perspective obtaining LEED certification is not as important as

- reducing carbon whether through energy conservation and/or decreasing fossil fuel usage in energy generation,
- protecting water both through water conservation and reduced contamination, and
- reducing waste.



We suggest that staff take a look at LEED for Neighbourhood Development. Some examples to consider are:

- Ecosystems and Open Spaces
 - Conserve any on-site imperiled & endangered species and habitat
 - Conserve pre-existing on-site habitat, wetlands or water bodies in perpetuity
 - Restore degraded on-site habitat, wetlands or water bodies and conserve for perpetuity
 - Implement a long term, well-funded management plan for on-site habitat, wetlands or water bodies
- Cycling
 - Located along a bicycle network
- Walkable Streets
 - Improve the pedestrian experience at street level by providing frequent building entries, ground level windows, low street speeds and/or minimal driveway interruptions of sidewalks
 - Line and shade sidewalks with non-invasive trees for 60% of street length
- Mix Uses
 - Enables walking access within 400 metres to commercial or civic facilities such as restaurants, schools, pharmacies, theaters, parks libraries or retail (min. 7-10 uses)
- Parking and Transpiration Demand
 - Minimize total surface parking area (no more than 20%).
 - Encourage use of environmentally preferable transportation choices with transit passes, shuttles, vehicle sharing and /or unbundled parking pricing
- Universal Design
 - Design public spaces for all abilities
- Community Participation
 - Base project designs on community input by providing a forum where public feedback is collected and incorporated into development design
- Energy Conservation & Efficiency Conservation and Green House Reduction
 - Provide superior building energy efficiency by having 90% of building square footage exceed increasing threshold per ASHRAE 90.1
 - Increase passive and solar access by orienting buildings or dense blocks to maximize north and south facing exposure
 - Provide 80% of building heating and cooling through a shared neighbourhood wide district heating system



- Provide energy-efficient neighbourhood infrastructure such as wastewater pumps
- Stormwater and Wastewater
 - Reuse 50% of treated water
- Reuse and Recycling
 - Use recycled content in neighbourhood public infrastructure

One item Staff might want to consider in section 4 is the following approved Sustainable Development objective:

- Make land-use decisions considering the natural features, site characteristics and location relative to employment, transportation and amenities. Create vibrant, equitable communities that are healthy, walkable and transit supportive.

Residential – Medium Density 4.2.2 and Mixed Use Corridor - General 4.3.1 – Instead of stacked or back-to-back townhouses, consideration should be given to two to four storey buildings similar to those in Hammarby Sjöstad. This would allow to have more green space surrounding the buildings. Stormwater and wastewater management ponds could be incorporated into the design to create a beautiful setting. Please see attached Hammarby Sjöstad pictures that will provide the visual impact what we are suggesting. We are looking for an “urban design that will enhance and draw on natural features and character of the area to establish identifiable neighborhood identity”. Why not use what best practices from Europe and elsewhere.

Business Corridor 4.5.7 – Outside storage will not be on Tremaine to ensure protection of residential areas from Industrial noise. Business Corridor - 4.5.7 and Mixed Use Corridor – Employment – 4.46 – Should Stormwater Management Ponds etc. be allowed along Tremaine? Will these impact protections of residential areas from industrial noise?

5.5 Tree Preservation and Planting – Not strict enough. Ensure a minimum canopy of 30% in 20 years.

Parks 9.1.2 – How can this be stricter than the OP distance of 0.8 km? Why is there not criterion for hectares of park per 1,000 people? Why is cash in lieu permitted?



Appendix A - Urban Design Guidelines

1.0 Public Realm

1.1 Public Realm – Streetscape

Reference should be made to the new Downtown Streetscape guidelines currently being finalized.

After all the discussions regarding bicycle lanes including the experiment on New Street that drew so much controversy, we are surprised that the proposed streets are not in conformance with current staff recommendations for cycling.

1.1.2 and 1.1.3 Local Collector Streets and 1.1.3 - The cross-sections provided show bicycle lanes but there is no mention in the text. Staff have supported segregated bike lanes as the preferred alternative although have conceded the cost may be high for a “deluxe” version. The cross-section shows a bicycle friendly lane both sides of the road. We would prefer a paved section beside the sidewalk on one side of the street for bicycles in two directions that does not require the same road bed that a lane on the road requires and is consequently considerably cheaper to construct. This example already exists on Lakeshore Road.

1.1.4 Special Treatment Zone We are glad to see an Environmental Impact Review will be undertaken to assess factors to design appropriate mitigations measures to achieve the best possible conditions for ongoing wildlife movement. We look forward to participating.

Considerable information is available from Conservation Halton regarding the concerns involved. In particular, the work being done for the Waterdown Road widening north of the North Service Road provides a wealth of information. Two major aspects are involved: large mammal (e.g. deer) collisions with vehicles and small mammal/reptile movement. The first requires an evaluation of whether large tunnels or bridge overpasses are required or whether road alignment is sufficient. We have not seen Figure 2 but presume it is for a relatively small road that would not warrant the former. The cross-section does not show lighting that is considered essential for wildlife to enter a tunnel. Either open gratings, glass blocks or artificial lighting needs to be considered. Also, a two direction cycle lane is shown on one side only that seems to be inconsistent with the other road designs.

1.1.5 Minor Arterial Street – Tremaine. Same comments as Collector Streets. In future Oakville should provide the same sidewalks and bike lanes as Burlington. The long-term design provides 3 m bike lanes similar to what Dundas Street has as this will be a heavily travelled road in the future.



1.1.6 Major Arterial Dundas Street - Segregated bike lanes should be provided off the road bed. Cheap to install and a lot safer.

1.1.7 Streets Abutting the Central Woodland - Similar to the Local Collector Street we like the multi-use trail on one side which solves the problem of a one way bike path.

1.2 Public Realm – Open Space - This section does a good job of dealing with open space. We would like to see more discussion on the creek valley in particular with respect to current treatment of “blue belt” lands.

1.2.1 – A Community Garden should be considered.

2.0 Private Realm Guidelines

2.2.1.8, 3.2.2.7, 3.2.3.7, & 3.3.4.7 -Mention is also made of bird friendly glazing (page 22). Our understanding on the latest research in this area is that birds are not attracted by illumination but by magnetic fields which they use to migrate. When lights are on they create magnetic fields in the wiring which disrupts the navigation system of birds. The new electrical code for Ontario has changed the spacing requirements for conductors which increases these magnetic fields. Thus the shutting off of lights is only indirectly reducing the problem. Somehow we should raise this issue to the proper authorities.

A general comment for all buildings regarding architecture is to address the building envelope in conjunction with the sustainable building guidelines discussed later. Several photos of glass walled buildings are shown which gives the impression that this is good design. Glass typically has several problems including low R value, heat gain and risk of falling to the ground. Proper glazing can be effective such as chromatic glass that is controlled electronically to tint when exposed to the sun. This type of glass can save 75% of cooling costs resulting in short paybacks. However, the average builder/developer is probably not aware of this and gets the message that glass towers done the way they have always been done as acceptable and knows it is cheap construction.

Rather than get into the discussion, we would rather see no reference to glass walled buildings. Instead, a good punched window design referencing the amount of glass area needed to comply with the building code for daylight and the ratio of window to total wall area should be given. Daylight requirements apply to mainly bedrooms and are about 5% window area of the total floor area. Exterior window to wall ratios are about 17 to 22%

A glass wall for a 3 m x 3 m (9 m²) bedroom would be 3 m wide by 2.4 m high (7.2 m²). This results in a glass to floor area percentage of 125%. The exterior window to wall ratio would be 100%. This is not permitted under the Code.



Of course, spandrel panels can be used to create wall sections of higher insulation value but still have the deficiencies of clear glass.

3. Sustainable Design Guidelines

3.2 Consider use of LEED v4 for Neighbourhood Development as one of the building standards.

4 Implementation

No comment.