Halton Region IGMS Response

July 2021

Submitted on behalf of

Mattamy Homes & The Remington Group Inc.

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EXECUTIVE SUMMARY

Section 1.0 - Introduction

This submission is provided on behalf of Mattamy Homes and The Remington Group Inc. Both companies have extensively contributed to the building of complete communities throughout the Region to date and own land in all four of the Region's municipalities. We also build a full range of housing types from low-density to high density apartments as well as planning and delivering a wide range of jobs from logistics warehousing through to office. Based on this, we take a holistic approach when reviewing the proposed Growth Concepts.

The Region has proposed five Growth Concepts based on their Land Needs Assessment work completed to date that contemplate a range of scenarios on how population and employment growth will be accommodated in the Region and whether the Region will require a settlement boundary expansion. The amount of new Designated Greenfield Area ranges from a no settlement boundary expansion growth scenario under Growth Concept 3B to 3,300 hectares of new Designated Greenfield Area in Concept 4.

The purpose of this submission is to contribute to the Integrated Growth Management Strategy (IGMS) discussion on the proposed Growth Concepts in order to ensure that the Preferred Growth Concept contemplates a balanced approach to future growth and compliments the long-range vision of the Region and its respective communities. A balanced approach should include the following priorities and objectives:

1. Address housing supply and affordability by supporting a market-based choice in housing;
2. Protect and enhance the Region's Natural Heritage System;
3. Support growth that will contribute to reducing the impacts of Climate Change, preserve Agricultural Land and support a local food supply;
4. Protect and promote job creation and a diversified economy;
5. Deliver community uses such as parks, community centres, schools, hospitals and places of worship;
6. Balance the impact of growth on stable neighbourhoods and planned communities while planning for appropriate densities in intensification areas such as Major Transit Station Areas (MTSAs), nodes and corridors;
7. Make efficient use of existing and planned Regional infrastructure; and,
8. Consider the local context and vision by acknowledging that the four local municipalities are at different stages of their community build-out.

Section 2.1 - Housing Choice and Affordability

Recent updates to the Provincial Policy Statement (PPS) and A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Growth Plan) have extended the planning horizon for municipalities in order to ensure that housing supply is not constrained by deficiencies in land availability. The Growth Plan now requires that municipalities plan for population and employment growth to 2051. The PPS and Growth Plan also require that municipalities provide a market-based supply of housing. In Halton Region, the market is driven by young families and first-time homebuyers who continue to show a strong preference for grade related housing.

As forecasted by the August 2020 Hemson Technical Report prepared for the Ministry of Municipal Affairs and Housing Growth Plan update, the estimated unit mix based on market demand for the Region of Halton is 77% ground related units and 23% apartments. The five Growth Concepts presented by the Region deviate significantly from the forecasted unit mix (refer to Figure 1 on page 12 for a more detailed comparison). For example, concept 3A and 3B propose a unit mix of 32% ground related units and 68% apartment units.

It is our position that the unprecedented shift from ground related units to apartment units has repercussions on the Region's ability to achieve complete communities:

1. Firstly, the rate of apartment housing completions in the Region would have to dramatically increase. To achieve the apartment growth contemplated in the Growth Concepts an increase in apartment unit completions between 175% to 283% to 2051 would need to be realized. Table 2 on page 14 provides a further breakdown of the number of apartment units that would need to be built under each Growth Concept.
2. Additionally, home-buyer preference would need to shift. Some discussion on the Growth Concepts has focused on a possible shift in home-buyer preference towards apartments based on affordability (i.e. the notion that apartment units are more affordable for families than ground related units). However, it is important to note that apartment units are only intrinsically more affordable because they are smaller; increasing the size of an apartment unit to accommodate families also increases cost. Figure 2 on page 15 provides on overview of the cost comparison between a 1,750 square foot 3 bedroom townhouse and a 1,200 square foot 3 bedroom apartment unit in Milton. It concludes that a 3 bedroom townhouse is more affordable. This raises a number of questions including – will families choose to live in an apartment unit if a comparably sized ground related unit is more affordable?
3. Planning for a balanced mix of housing is essential. Overly relying on apartment units to accommodate growth results in the following risks:
    A. Increased upward pressure on housing affordability resulting from artificially restricting the supply of ground related units.

B. Losing population and associated jobs to neighbouring municipalities who offer more affordable ground related options. This possibility was highlighted in StrategyCorp's April 21, 2021 presentation to Regional Council. StrategyCorp noted that a diverse population is essential for attracting new businesses and creating complete communities.
C. Growth forecasts may not be realized due to a reliance on significant levels of redevelopment required to accommodate apartment growth, which relies on an unpredictable land supply resulting from land assembly challenges. Additionally, it is not clear if the Region has contemplated how community uses associated with intensification development (i.e. parks, schools, hospitals, places of worship and community centres) would be accommodated in these areas. As noted above, without population growth the Region also risks losing jobs.
D. Unrealized growth (i.e. a shortfall in ground related units that is not met by demand for apartments) has impacts on municipal revenues such as capital funding deficits resulting from spending based on growth forecasts that are not met and shortfalls in Development Charge revenues in the magnitude of hundreds of millions of dollars. It will also impact the Region's Allocation Program funding model as apartment units and infill are not subject to front-end financing of infrastructure.

Section 2.2 - Job Growth and a Diversified Economy

The Region's Growth Concepts focus on shift in the Region's economy from manufacturing and warehousing to a mixed use, more compact employment built form. While these forms should be encouraged, the importance of manufacturing, logistics and warehousing (Employment Land Employment – ELE) should not be underestimated. The current vacancy rate for ELE is around 1% whereas the vacancy rate for a balanced industrial market is around 4-5%. Restricting the expansion of the settlement boundary will result in exacerbated shortages of ELE, pushing users outside of the Region, resulting in lost jobs and tax revenue. Employment lands, as identified in ROPA 38 as Future Strategic Employment Areas, and further located within Provincially Significant Employment Zones (PSEZs), should be included within the Region's urban boundary in order for the Region to remain competitive in attracting employers and jobs.

Section 2.3 - Impact to Existing and Planned Neighbourhoods

One of the differentiating factors between each of the Growth Concepts is the level of Densification under each scenario. The term Densification is unique to the Region's IGMS work and is not contained in provincial policy. It is our understanding that the term Densification refers to the amount of growth that will be accommodated in existing Designated Greenfield Areas. The use of this term, and lack of specific information on where densification is to be

applied within Designated Greenfield Areas, has raised many questions. An exhaustive list of questions is provided on page 21, which highlights the uncertainty of how the concept of Densification will be implemented and its affects on existing and planned communities in the Region.

The emphasis on development within the Region's Built Up Area under each of the Growth Concepts will have the largest impacts on existing and stable neighbourhoods within the Town of Milton and the Town of Halton Hills. Milton and Halton Hills are at different growth maturities compared to Oakville and Burlington and do not have the same opportunities to accommodate substantial intensification on available land around transit corridors and MTSAs. Additionally, the Built Up Areas of Oakville and Burlington are 3-4 times larger than the Built Up Areas of Milton and Halton Hills. In order to avoid adverse impacts on existing and stable neighbourhoods, the distribution of intensification growth should be based on the local context and should not be a one size fits all approach for each of the local municipalities.

A shift from ground related units to apartment units also requires a larger annual property tax rate increase. As summarized in Figure 6 on page 24, Growth Concept 3A would require Regional taxpayers to fund $290 million more per year in additional operating costs than Growth Concept 4.

Section 3.0 - Sustainability

Climate change is an important and key consideration for Halton's future growth. We believe that greenfield land development and construction can and will play a role in climate change objectives based on the following reasons:

- The National Building Code and Ontario Building Code are targeting Net Zero Energy Ready homes for all new housing by 2030; which will include all urban boundary expansion lands being discussed today.
- Mattamy and Remington are leaders in innovation and sustainability. Mattamy today builds every home in the GTA to Energy Star standards which are 15-20% more energy efficient and are currently constructing three mid-rise blocks in Oakville with geothermal heating and cooling systems.
- Remington also builds homes to Energy Star equivalent standards.
- Remington's Downtown Markham site is powered by the Markham District Energy plant with the overall system supplying energy for more than 12 million sq.ft. of building connections, generating 11.5MW of power for the local grid and producing enough power for 15,000 Markham Centre condominium units.
- Planning for new greenfield has changed significantly over the past 10 years with our communities based on the principles of a 15-minute neighbourhood; compact and

walkable communities, with densities of 65ppl+jobs/ha or higher, protection and enhancement of natural heritage features, transit supportive, cycling friendly, community uses including parks and schools, and a wide range of housing and employment opportunities.

- Emerging sustainable technologies (i.e. EV, solar readiness, advancements in Low Impact Development) will make communities of the future more sustainable.
- Advancements in energy reduction for ground related product (i.e. geothermal technology and district energy systems) will contribute to reduced GHG emissions.
- Government policies and targets are in place that will assist in shifting consumer behaviour and actions to meet net zero by 2050.
- As detailed in subsection 3.1.4, the last two points were not included as part of the Comparative Greenhouse Gas Emissions Assessment prepared by Sustainability Solutions Group on behalf of the Region to evaluate the differences in GHG emissions between the proposed Growth Concepts. The inclusion of these two components in the analysis would have the affect of reducing the difference in GHG emissions between concept 3A and 4.

With respect to preserving local food supply, it is important to evaluate the impact of the proposed settlement area boundary expansions under each of the Growth Concepts from a broader provincial food system perspective. It is also important to evaluate the current challenges farms within potential settlement boundary expansion areas face due to their proximity to urban uses that impede their viability (please refer to section 3.1.6 for further detail).

Growth Concept 4 retains 91% of the Region's Prime Agricultural Lands that exist today. Coupled with the opportunities for new greenfield developments to support urban farming and advances in compact food production technology, we believe that the settlement boundary expansions proposed under the Region's Growth Concepts will have minimal impact on the broader provincial food supply system.

None of the settlement area expansions proposed under the Region's Growth Concepts constitute sprawl. This is based on that fact that the rate of population growth over the next 30 years far out paces the rate of proposed settlement boundary expansion, greenfield development is being built at densities that support compact and walkable communities (as highlighted above), and that the majority of lands identified by the Region as potential areas suitable for settlement area boundary expansions can be serviced by existing or planned Regional infrastructure.

Section 4.0 - Growth Plan Conformity

The Land Needs Assessment (LNA) Methodology is a key component of the Growth Plan that municipalities are required to follow in order to ensure conformity. It requires that an appropriate amount of land be determined to accommodate for all housing segments, avoid housing shortages, consider market demand and plan for all infrastructure that is needed to meet the complete communities objectives of the Growth Plan. The Region's five Growth Concepts do not conform with this methodology due to the significant shift from the market-based housing demand with an unprecedented development of apartment units being required. We have provided a detailed summary of the key components of the LNA methodology that are not addressed in Section 4 of this submission.

Section 5.0 - Conclusion

The Municipal Comprehensive Review (MCR) is a complex process with the outcomes having lasting impacts on the identity of the respective municipalities within the Region. Each municipality has its own unique context and vision for how it should grow to 2051 and we believe the decisions of the local Councils should be respected and built into the Preferred Growth Concept by the Region. Although there appears to be a significant range in Council positions we believe when assessed in their entirety these positions can be combined to create a well balanced and complete community for Halton Region.

It is our respectful submission that a hybrid concept should be developed that provides for the following:

- Promotes additional density and job opportunities within the existing built boundary through intensification. Good development in the right locations; considering impacts to stable neighbourhoods and local context and supported by transit while maximizing existing infrastructure is prudent place making.
- Oakville and Burlington should focus on development of their MTSAs and intensification and densification of their nodes and corridors. As these communities are mostly planned and built today, they are in a great position to incorporate higher densities into their large built-up areas and provide the necessary transit and community services that are required to make these complete communities.
- Milton should be allowed to continue to grow and be able to properly plan out extensions to their existing communities with their Modified Growth Concept 4 – "Halton Balanced", consistent with Milton Council's stated objective, as outlined in Milton staff report DS-055-21. This will allow for a balanced approach to growth and the ability to meet housing demand and attract key employment opportunities to create complete communities.

- Halton Hills can achieve balanced growth through a modest expansion providing approximately 900 ha (400ha of community lands and 500ha of employment lands) of new greenfield area, consistent with Halton Hills staff report PD-2021-0045, to account for continued economic development, a new hospital and associated uses, new community parks as well as housing choice.

We believe this hybrid approach meets many of the objectives of the Region;

- **It will still require a significant shift to apartments but will also provide housing choice and affordability that will continue to attract families to Halton Region,**
- **It will develop key nodes and corridors within the Region making them more transit supportive;**
- **It will allow for development of key community services like hospitals, places of worship and community parks;**
- **It will allow for incorporation of emerging sustainable building practices in new greenfield areas including addressing some key elements of climate change and carbon emissions;**
- **It will allow for continued economic development with shovel ready land supply for new businesses and jobs; and,**
- **It will account for the local context and vision of each individual community.**

Overall, we believe our hybrid concept will create a balanced complete community for the future of Halton Region.

1.0 INTRODUCTION

This submission is provided on behalf of Mattamy Homes (Mattamy) and The Remington Group Inc. (Remington). Both companies have extensively contributed to the building of complete communities throughout the Region to date and own land in all four of the Region's municipalities. Mattamy and Remington share the common goal of being community building leaders in the Region, delivering sustainable, walkable and complete communities for the residents of Halton. We build a range of housing forms including single detached, townhouses, stacks, mid-rise and high-rise. In addition, Remington owns key employment lands within Halton Region and is an active developer in the Derry Green Employment Lands in Milton. Our companies are committed to innovation and sustainability as we build communities that will shape how the residents of Halton will live in the future. It is this history and forward-thinking approach to community building that allow us to have a holistic and Region wide perspective on the Region's proposed Growth Concepts and their impact on shaping future communities within the Region.

Mattamy and Remington would like to take this opportunity to acknowledge the tremendous amount of work undertaken by the Region of Halton in preparing the Growth Concepts as part of their Regional Municipal Comprehensive Review (MCR) process and Integrated Growth Management Strategy (IGMS). The five Growth Concepts presented for consideration cover a range of possible growth scenarios for the Region and have initiated both productive debate and public consultation on how the Region should grow.

The purpose of this submission is to contribute to this dialogue from the perspective of the ultimate implementers of the majority of policies that will result from the conclusion of the Region's MCR and IGMS work. It aims to provide constructive feedback on the proposed Growth Concepts in order to ensure that the Preferred Growth Concept contemplates a balanced approach to future growth and compliments the long-range vision of the Region and its respective communities.

2.0 BALANCING PRIORITIES

As mandated by A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020) (Growth Plan), municipalities in the Greater Golden Horseshoe (GGH) must plan to accommodate population and employment growth to 2051. Schedule 3 of the Growth Plan requires that the Region of Halton accommodate, at a minimum, 1,100,000 people and 500,000 jobs by 2051. This means that Halton will need to plan for 479,000 people, or approximately 174,000 dwellings units, and 220,000 jobs between 2021 and 2051. It is the Region's responsibility, with input and direction from lower-tier municipalities on local growth priorities and objectives, to undertake a Land Needs Assessment (LNA) that evaluates the amount of land required to accommodate

population and employment growth to 2051 and whether a settlement boundary expansion is needed. The Region has proposed five Growth Concepts based on their LNA work to date that contemplate a range of scenarios on how growth will be accommodated in the Region. The amount of new Designated Greenfield Area ranges from a no settlement boundary expansion growth scenario under Growth Concept 3B to 3,300 hectares of new Designated Greenfield Area in Concept 4.

To date, the discussions at the public information sessions and at Regional and local council meetings have highlighted public opinion that climate change mitigation/adaptation and protection of agricultural land should be at the forefront of determining the Preferred Growth Concept for the Region. We undoubtedly agree that these are important components of sustainable communities and, to this point, have included discussion on how Mattamy and Remington are contributing to and advancing sustainable initiatives in our communities in Section 3 of this submission. However, we also believe that these priorities should be balanced with other objectives in creating complete communities. These priority objectives include:

1. Addressing housing supply and affordability by supporting a market-based choice in housing;
2. Protecting and promoting job creation and a diversified economy;
3. Delivering community uses such as parks, community centres, schools, hospitals and places of worship;
4. Balancing the impact of growth on stable neighbourhoods and planned communities while planning for appropriate densities in intensification areas such as Major Transit Station Areas (MTSAs), nodes and corridors;
5. Making efficient use of existing and planned Regional infrastructure; and,
6. Consideration for the local context and vision acknowledging that the four local municipalities are at different stages of their community build-out.

The following sections provide more detail on each of these priorities.

2.1 HOUSING CHOICE AND AFFORDABILITY

2.1.1 MARKET DEMAND VS. ASPIRATIONAL PLANNING

Market Demand

The Provincial Policy Statement (2020) (PPS) requires that municipalities maintain a sufficient supply of land to accommodate an appropriate range of housing, job opportunities and mix of uses and densities over a 25-year planning horizon. The Growth Plan further establishes the

planning horizon for the GGH to 2051. These extended planning horizons were introduced to provincial policy in order to ensure that housing supply is not constrained by deficiencies in land availability, resulting in implications on housing choice and affordability.

In addition, the requirement to provide a market-based supply of housing was introduced into provincial policy in order to further ensure that enough land is set aside for desirable housing typologies and that the supply of these units is not constrained. For clarity, the PPS requires a land supply to meet demand for grade related housing and apartments - there is no stated preference beyond the intensification targets and compact growth policies that highlight planning for more dense housing forms. This supports the Province's *More Homes, More Choice Act* mandate to address the provincial housing affordability crisis through increasing housing supply. In this regard, it is crucial for the Region to plan for all forms of housing with a market-based housing lens, to the greatest extent possible.

The Halton Region housing market is primarily driven by home buying preferences of first-time homebuyers and families. The largest census cohorts moving into Halton from other areas of the Greater Toronto Area (GTA) is 25-44 and 0-14, indicating that families looking for family-oriented housing are moving to the Region. Reports from RBC[1] and StatsCan[2] confirm that first time homebuyers and young families continue to show a strong preference for ground related family-oriented housing – a trend that has been amplified by the COVID 19 Pandemic.

Similarly, the Bank of Montreal's (BMO) latest Housing Survey (April 2021)[3] confirms that first-time homebuyers desire single detached homes:

- 61% of the respondents indicated that they would like to purchase a detached home;
- 32% indicated that they are looking for a townhouse;
- 28% indicated that they are looking for a semi-detached; and,
- 27% indicated that they are looking for a condo.

Another key finding of the BMO Housing Survey is that first time homebuyers are planning to look for housing in the suburbs versus major city centres. The driving forces behind this trend are the affordability of moving further away from major city centres and the ability to purchase

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[1] RBC (September 4, 2020) https://royal-bank-of-canada-2124.docs.contently.com/v/hot-summer-housing-market-stretched-into-august-though-not-everywhere-report

[2] StatsCan (April 4, 2021) https://www150.statcan.gc.ca/n1/daily-quotidien/210422/dq210422d-eng.htm & StatsCan (July 21, 2020) https://www150.statcan.gc.ca/n1/daily-quotidien/200721/dq200721c-eng.htm

[3] BMO Bank of Montreal (April 22, 2021) https://newsroom.bmo.com/2021-04-22-The-Suburb-Shuffle-First-time-Buyers-Head-to-the-Suburbs-BMOs-Housing-Survey-Finds

a larger home. Additionally, 92% of respondents indicated that they are looking for a balance between homeownership and other life style goals such as shopping, travelling and savings.

Immigration will also play a significant role in planning for the future in the GTA and Halton Region and will impact housing demand. The Federal Government has increased immigration targets to 1% per year for the next 3 years as part of the COVID recovery strategy. This will bring over 400,000 new Canadians per year or 1.2 million people by the end of 2023. The GTA has historically taken a large share of immigration (approximately 35%). This would bring an additional 425,000 people to the GTA by 2023. Historically over 65% of new immigrates have been within the 25-35 year range. These new Canadians will be highly educated, will sustain above average salaries and will be at or near their family formation years; which will drive strong demand for affordable ground-related housing choices. It would be imprudent to not plan for this growth.

Aspirational Planning

Figure 1 shows the proposed unit mix of apartments compared to ground related units proposed under each Growth Concept in comparison to the existing Halton Region housing stock and the August 2020 Hemson Technical Report prepared for the Ministry of Municipal Affairs and Housing (referred to in the remainder of this submission as the "Hemson Growth Plan background report"). The Hemson Growth Plan background report unit mix shown in Figure 1 reflects the estimated market demand and trends as described above. This figure confirms that none of the proposed Growth Concepts meet the forecasted demand for apartments or ground related units.

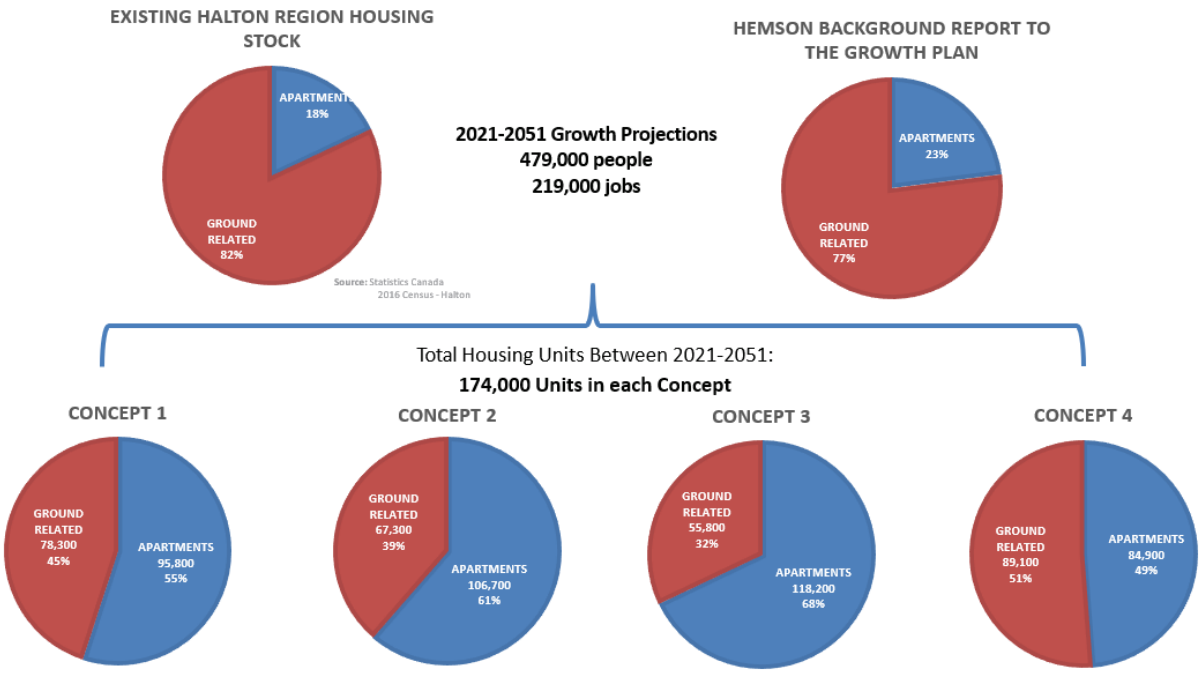


Figure 1. Unit mix (ground related vs. apartments) proposed in each Growth Concept compared to the Region's existing housing stock and unit mix based on market demand as outlined in the Hemson Growth Plan background report.

Deviating from the Hemson Growth Plan background report requires varying levels of policy intervention. Growth Concept 4 comes closest to reflecting market demand and trends but still does not truly reflect market demand. This can be attributed to applying the Growth Plan policy that requires 50% of growth be directed to the Region's delineated Built Up Areas. However, it should be noted that Growth Concept 4 does not fully conform to Growth Plan policies and the LNA Methodology for reasons set out in Section 4.0 of this submission. Compared to the Hemson Growth Plan background report, Growth Concept 4 results in a shortfall of 41,000 ground related units. This shortfall is exacerbated as you move from Growth Concept 1 to 3A/3B. Concept 3A/3B results in a shortfall of 75,000 ground related units (please refer to Table 1 below).

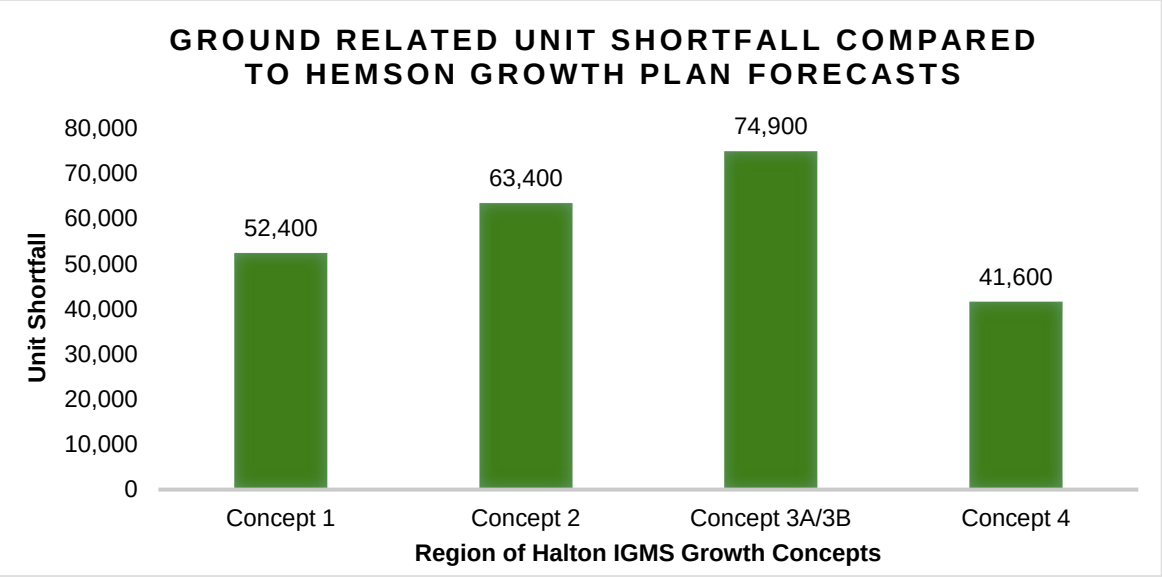


Table 1. This table shows the shortfall in ground related units being proposed in each of the Region's Growth Concepts compared to the number of ground related units that would need to be planned for based on the Hemson Growth Plan background report.

The IGMS attempts to address the shortfall in ground related units, in part, by relying on seniors moving out of their existing ground related units. However, an aging population and the associated turnover of housing units by older generations over time to younger households is already accounted for within the Hemson Growth Plan background report. Therefore, the estimated market demand presented in the Hemson Growth Plan background report is the net market demand by housing type after these housing units are turned over. The assumption in the IGMS that there may be additional turnover is contrary to Hemson's housing forecast methodology. Additionally, although this concept has been discussed historically, the trend has not materialized. The 2016 census showed that only 17% of households aged 65+ moved over the previous 5-year period. This is likely due to the fact that most seniors are living in mortgage free housing, making aging-in-place the most affordable option for seniors.

In order to counteract the shortfall of ground related units, the Region is proposing an unprecedented shift in Halton's housing patterns to suggest that more and more families will live in apartment buildings. This is not in line with market trends, as detailed in BMO's Housing Survey, StatsCan and RBC reports referenced above. To achieve this shift in housing patterns, the rate of apartment housing completions in the Region would also have to dramatically increase. Table 2 below breaks down the number of apartment units required in each municipality based on the Region's Growth Concepts. 84,900 to 118,200 apartment units would need to be constructed over the next 30 years based on the five Growth Concepts. In comparison, based on the Hemson Growth Plan background report, the Region would need to plan for 42,900 apartment units from 2021-2051 in order to meet market demand. It is

important to note that between 2010-2019, the Region averaged 1,030 new apartment unit completions per year. To achieve the apartment growth contemplated in the Growth Concepts, an increase in apartment unit completions between 175% and 283% to 2051 would need to be realized.

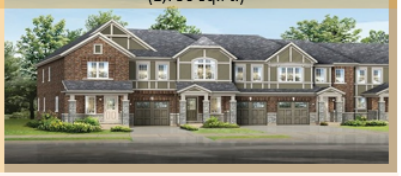
Municipality	Number of Apartments (2021-2051)	Average Annual Apartments Required
Burlington	26,400-29,820 units	880-990 per year
Oakville	26,400 – 44,800 units	1,015-1,495 per year
Milton	22,050 – 35,650 units	735 – 1,120 per year
Halton Hills	6,430 – 9,110 units	210 – 305 per year
Total Halton Region	84,900 – 118,200 units	2,830 – 3,940 per year
Total Halton Region Based on Market Demand	42,900 units	1430 per year

Table 2. provides a comparison between the number of apartment units that would need to be built under the Region's Growth Concepts and the forecasted number of units that would need to be built based on market demand.

In order to realize the policy-driven shift in the magnitude of apartment growth, home-buyer preference for these units would also need to shift dramatically. As outlined above, market trends have established that young families show a preference towards ground related housing and that first-time home-buyers are conscious about housing affordability and being able to maintain a balanced lifestyle. Some discussion around the Growth Concepts has focused on a possible shift in home-buyer preference towards apartment units based on affordability (i.e. that apartment units will offer an affordable option to first-time home-buyers and young families). However, it is important to note that increasing the size of an apartment unit to accommodate a family also increases the cost. Figure 2 provides an overview of the cost comparison between a 1,750 square foot 3-bedroom townhouse and a 1,200 square foot 3-bedroom apartment unit for an average family of four in Milton.

TYPICAL 3 BEDROOM TOWNHOUSE

(1,750 Sq.Ft.)



$875,000

($500 Sq. Ft.)

TYPICAL 3 BEDROOM APARTMENT

(1,200 Sq. Ft.)

$1,020,000

($850 Sq. Ft.)

Plus additional $600 monthly

Typical Family Monthly Budget
(2 adults, 7 year old & 3 year old children)

Budget Item	Townhouse		Apartment	
	Monthly Cost	% of income	Monthly Cost	% of income
Mortgage Payment (20% down, 25yr fix rate 2.44%)	$3,100	34%	$3,600	40%
Condo fees ($0.50/sqft)	$0	0%	$600	7%
Utilities	$300	3%	$100	1%
		43%		54%
Property Tax	$500	6%	$580	6%
Food	$750	8%	$750	8%
Childcare	$1,730	19%	$1,730	19%
Clothing	$300	3%	$300	3%
Transportation/Car Ownership	$700	8%	$700	8%
Communications	$160	2%	$160	2%
Health Care	$290	3%	$290	3%
Other (recreation, personal care, household supplies, etc.)	$790	9%	$790	9%
Total Family Expenses	$8,620	96%	$9,600	107%
Net Income (avg. household gross income Halton - $155,144)	$9,000		$9,000	
Savings/Deficit per month	$380	4%	- $600	-7%

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Figure 2. Note: the average household income is per the Halton Region website, and budget item costs other than housing are based on Community Development Halton's *Calculating a Living Wage for Halton (2019 Update).* Townhouse and apartment costs are approximate values in Milton in 2021.

As can be seen, Figure 2 summarizes that a similar sized ground related townhouse unit is more affordable for families compared to an apartment unit. This is due to the higher purchase price and associated condominium fees. The condominium fees alone represent $600 a month or 7% of an average household monthly budget or an extra $180,000 over the 25 year mortgage. This is further supported by Hemson Consulting's October 2019 Memorandum to the Town of Halton Hills regarding the Halton Hills Opportunities Study Update – Market Assessment. Hemson states that apartment units are only a more affordable housing option because they are smaller. Increasing the size of an apartment unit to accommodate a family also increases the cost and makes it challenging to shift homebuyer preferences towards apartments.

This raises a number of questions – can families afford to purchase apartments versus grade related products? Will families choose to live in an apartment during family formation years at the order of magnitude projected by the Region's Growth Concepts? Will the industry build condominium projects with significantly larger units knowing price sensitivity of these housing units? Or will purchasers "drive until they qualify" - moving further away from Halton in an attempt to find suitable ground related housing?

The Region has not provided any information or analysis to confirm that the proposed deviation from market demand, as described above, is feasible. This is especially important for Concept 3A/AB, which shows the most extreme deviation from the market (refer to Figure 1 and Table 1). Consequences of deviating from a growth concept that addresses market demand and overly relies on one housing form based on aspirational policies and assumptions are explored in the following section.

2.1.2 CONSEQUENCES OF RELYING ON ASPIRATIONAL PLANNING AND POLICY INTERVENTION

Planning for a balanced housing mix and supply that addresses homebuyer preferences and demand is essential for ensuring that the Region can realistically achieve complete communities. Overly relying on aspirational policies and targets exposes the Region to risks, as summarized below:

1. **Increased upward pressure on housing affordability:**

   Artificially restricting the supply of ground related units will place additional upward pressure on ground related housing prices and limits choice of housing in the Region. If an appropriate range and mix of housing that meets the wants and needs of the market is not planned for, the Region risks losing population and associated jobs to other municipalities. This sentiment was reflected in the April 21, 2021 StrategyCorp Presentation to Council, whereby they advised that as Halton gets more expensive, families start to look for housing options further outside of the GTA. StrategyCorp also noted that a diverse population base is essential for attracting new businesses to Halton and creating complete communities. In the absence of opportunities to live/work, commuting times are longer, potentially contributing to higher greenhouse gas (GHG) emissions and would appear to be counter intuitive to responding to a climate change crisis.

   As can be seen in Figure 3 from a Royal LePage Survey completed in 2020, young households are becoming larger proportions of property owners outside the GTA, as they look for affordable housing options. Milton is shown to be one of the few options within the GTA that continues to attract these under 35 year old households that are in their family formation years; however, the proposed Growth Concepts puts this at risk. Apartments historically have been viewed as a way to achieve the Region's 30% affordable housing target. Per the Region's 2020 State of Housing Report the affordable threshold in Halton is $409,500. At an average of $850/sqft for an apartment unit in Halton Region that translates into a 480sqft apartment. Apartments do provide intrinsic

affordability given the relatively small size however, they do not provide realistic housing options for families that require larger square footage for family living accommodation.

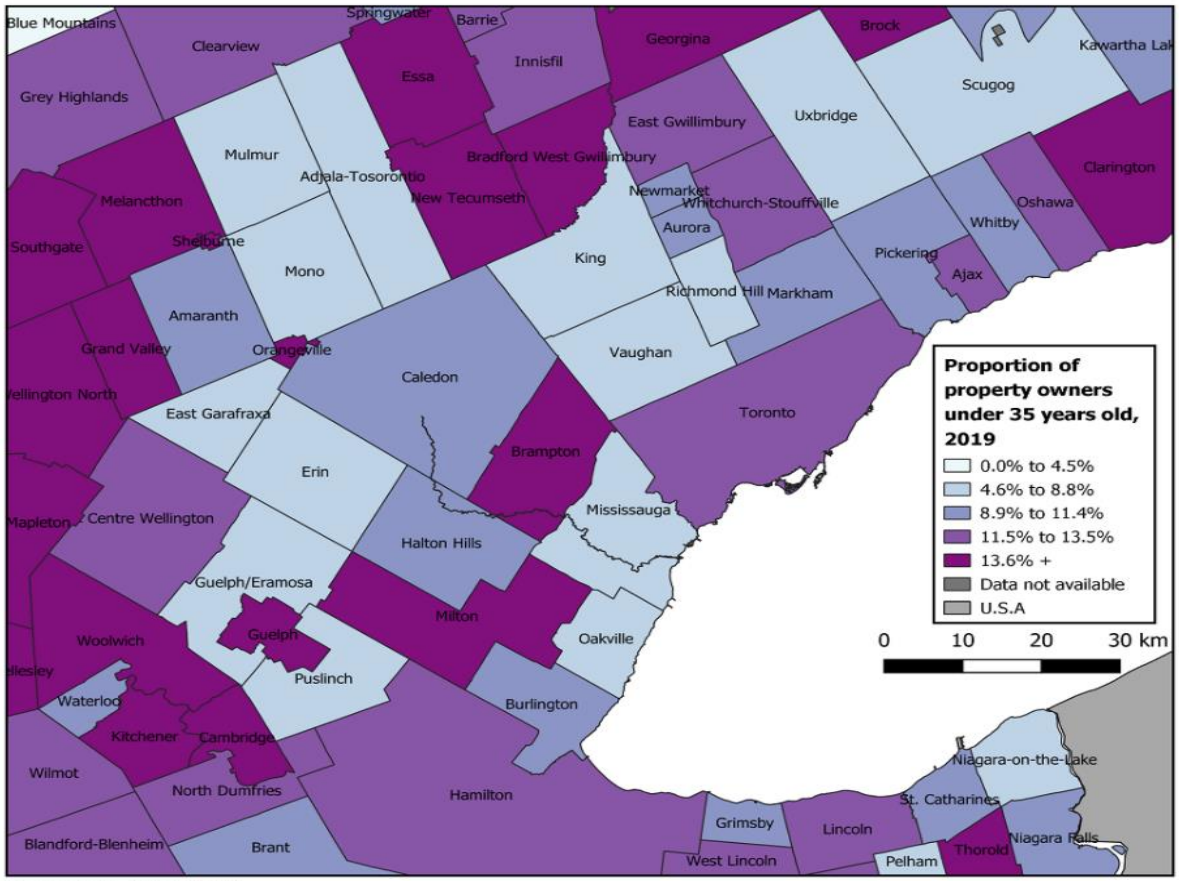

Figure 3. Royal LePage Survey, 2020

2. **Significant levels of redevelopment required to accommodate apartment growth are dependent on an unpredictable land supply**:

The Region's proposed Growth Concepts rely on varying degrees of intensification in order to accommodate growth. Each concept directs a proportion of planned growth to either Built-Up Areas, Existing Designated Greenfield Areas, Additional High Density Units in Existing Greenfields or New Greenfield Areas. Growth Concepts 1 and 4 are based on the prescribed Growth Plan intensification rate of 50% of growth being directed to the Region's Built-Up Areas. Concept 2 is based on 52% of growth being directed to Built-Up Areas and Growth Concepts 3a/3B are based on 54%. As discussed above, even the 50% intensification target contained in Growth Plan policies represent a significant shift from market-based housing. Concepts 2 and 3 amplify this shift as well as reliance on intensification and redevelopment to accommodate population growth, which presents challenges.

As identified by Hemson in their October 2019 Memorandum to Town of Halton Hills regarding the Halton Hills Opportunities Study Update – Market Assessment, many factors need to converge in order to accommodate increased intensification. Hemson notes that this includes overcoming land assembly challenges in older neighbourhoods such as older parts of Guelph Street, Downtown Georgetown and Downtown Acton, whereby assembling large enough sites to accommodate intensification and community services can be a very lengthy process. This challenge is not limited to Halton Hills and exists in all areas where redevelopment is required to accommodate intensification. Additionally, redevelopment is dependent on willing buyers and sellers, whereby most sellers are established and active businesses within existing communities. Additional impacts of intensification on stable neighbourhoods are discussed in Section 2.3.2.

Cumulatively, these challenges result in an unpredictable land supply for intensification opportunities and in this regard, overly relying on intensification to accommodate growth puts the Region at risk for not achieving the population and employment growth required to support complete communities. Additionally, it does not appear that the Region has evaluated the quantum of land required to accommodate land uses associated with intensification that support complete communities such as community services (parks, schools, community centres, places of worship, hospitals, etc.) and upgrades to existing hard infrastructure. Not understanding the magnitude of land required to accommodate intensification puts the Region at risk for not achieving the amount of planned growth forecasted and resulting in a significant housing shortage.

3. **Unrealized Growth (i.e. a shortfall in ground related units that is not met by demand for apartments) has impacts on municipal revenue**:

For example:

- If capital and infrastructure spending is based on growth forecasts that are not realized, municipalities can expect to run capital funding deficits.
- At today's development charges rates, the shortfall in ground related units, unmet by demand for apartments, would equate to a shortfall in development charges revenues for lower-tier municipalities ranging in $450 to $812 million (source: Altus Group).
- This translates into a shortfall in development charges revenues for the Region ranging from $833 million to $1.44 billion (source: Altus Group).
- A shift to apartments also impacts the Region's Allocation Program funding model as apartment units and infill sites are unable to front-end the cost of infrastructure.

Further, as will be discussed in Section 4.0, the Region is basing their analysis on the assumption that average household sizes for units, particularly apartments will increase significantly in the future. If the Persons Per Unit (PPUs) from apartments in infrastructure plans is significantly higher than reality, the Region may end up unnecessarily oversizing infrastructure such as roads, water works, sanitary sewers, placing significant pressure on capital funding sources and on-going funding for day-to-day operating and maintenance costs. As discussed in Section 4.0 of this submission, the Region is using fluctuating PPUs that rely on increased apartment PPU numbers compared to the Region's Development Charges background work.

The risks outlined above raises the question: has the Region undertaken their own risk assessment analysis to determine the impacts of deviating substantially from market-based demand (i.e. shortfall of units, impacts to the Region's current infrastructure funding model (the Regional Allocation Program), development charges revenues, demographic shifts, affordability etc)? Based on our review of the Growth Concepts, this has not been completed and is a crucial component in ensuring that the Region is planning for complete communities.

2.2 JOB GROWTH AND A DIVERSIFIED ECONOMY

Another key component in planning for complete communities is the promotion of job creation and a diversified economy within the Region. The IGMS Growth Concepts focus on a shift in the Region's economy from manufacturing and warehousing to a mixed use, more compact urban employment built form. While we agree that the Region should encourage mixed use, more compact employment uses to promote a variety of employment opportunities, we also believe that the significance of manufacturing, logistics and warehousing (Employment Land Employment - ELE) to the Region's economy cannot be underestimated.

Halton Region's ELE has historically played a key role in industrial development in the GTA representing one fifth of all industrial development between 2011-2019[4] . Halton's location and prime access to major 400 series highways provides an attractive option for new non-residential investment that can include higher density job generators, like large scale advanced manufacturing uses that require campus style developments integrating processing, research, training, and warehousing. These types of operations cannot be accommodated within existing employment lands or through intensification.

[4] Halton Hills Employment Land Needs Study, 2018 – Macaulay Shiomi Howson & Watson and Associates Inc

The significance of ELE has been highlighted by the COVID 19 Pandemic with a shift to online consumerism and a resulting need for regionally located logistics and warehousing facilities that support the "Just-in-Time" delivery supply chain. Locations like Halton Hills Premier Gateway and Milton's Prime Employment Lands along the 407 provide desirable options for these uses being easily accessible from major transportation networks and in close proximity to consumers. The Milton employment lands along the 407 also support the Province's 407 Transitway with stations strategically proposed at Trafalgar and the 407, Britannia and Ninth Line and Derry Road and Ninth Line, to highlight a few. Given the importance and desirability of these employment lands from a Regional perspective, the Region first identified these lands as Future Strategic Employment Lands in ROPA 38, with the Province then designating these lands as being located in Provincially Significant Employment Zones (PSEZs). The urgency for shovel ready ELE lands is amplified by the fact that the GTA is currently experiencing extremely low industrial vacancy rates. As shown in Figure 4, the current vacancy rate is around 1% whereas the vacancy rate for a balanced industrial market is around 4-5%.

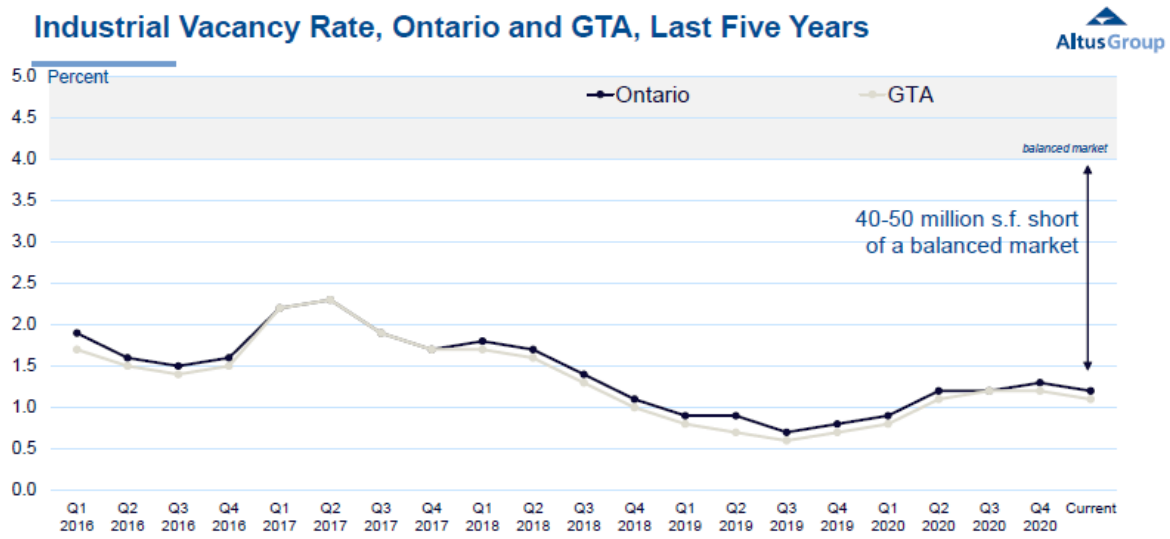

Figure 4.

Restricting the expansion of the settlement boundary will result in continued shortages of ELE space, placing upward pressure on rents and pushing ELE users outside of Halton. This will result in lost job opportunities and a significant loss in tax assessment growth for the Region impacting the local municipality's ability to have healthy non-residential to residential tax ratios. Growth concepts 1, 2, 3A and 4 would generate 31.5 million to 39.3 million square feet of industrial space and generate between $101 million to $126 million per year in property taxes at build out (source: Altus Group). Furthermore, the Preferred Growth Concept needs to recognize that each local municipality has different attributes that make them more desirable for different types of

employment. This should be considered to ensure each municipality will realize their employment growth targets.

2.3 IMPACT TO EXISTING AND PLANNED NEIGHBOURHOODS

2.3.1 DENSIFICATION

One of the differentiating factors between each of the Growth Concepts is the level of Densification under each scenario, ranging from 0% in Concept 4 to 30% in Concept 3A/3B. It is our understanding that the term Densification, as defined by the Region, is the amount of growth that will be accommodated in existing Designated Greenfield Areas (and outside of the delineated Built-Up Area) and employment conversion areas. According to this definition, growth proposed as Densification would need to be accommodated in the Milton Phase 3 Boyne and North Oakville Secondary Plan areas. These are existing communities that are under 10 years old and are currently under construction based on the approved Secondary Plan populations. Densification would also need to be accommodated in the Milton Phase 4 Trafalgar and Britannia Secondary Plan areas, Agerton, Milton Education Village and the Vision Georgetown Secondary Plan area; which are communities that are well into the planning process and have not factored in accommodating additional growth beyond what is proposed in their Secondary Plans and background reports.

The Growth Concepts, as presented, do not provide any information regarding the implementation of the Region's Densification targets, which raises many concerns including:

- Where will Densification growth be located in these Secondary Plan areas?
- Do all planning and supporting studies (eg., SWSS) need to be revised and started over to accommodate this additional growth? Does this not delay commitments that have been already secured through the Halton Allocation Program? Does this not put the Region further behind in meeting it's planned growth targets as per the Region's Best Planning Estimates and ROPA 39?
- How will the existing communities in the Milton Phase 3 Boyne Secondary Plan and North Oakville Secondary Plan be affected by additional population not contemplated when these communities were being planned?
- The Milton Phase 4 Trafalgar Secondary Plan has been adopted by Town of Milton Council. The Secondary Plan process took years to complete with input from multiple stakeholders. How does the Region propose to introduce Densification to a community that has already gone through a lengthy public planning process? What does this mean

for the Region's growth forecasts and local permit activity as construction starts in these communities are inevitability going to be significantly delayed?

- It is our understanding that Regional staff have proposed that Densification can be accommodated by building to the maximum density ranges in the Secondary Plan policies. Has the Region undertaken a market demand analysis to determine if building to these maximum densities are desired/feasible? Does this require the Secondary Plans to be amended through a formal planning process to increase the minimum density requirements?
- The Milton Phase 4 Britannia Secondary Plan process is underway and is planned to accommodate growth to 2031. Is the intent of the Region that the Britannia Secondary Plan area now be built to accommodate population 2051? How does this achieve conformity with ROPA 39, which put into place phasing policies for growth to 2031?
- What impacts does Densification have on the capacity of planned / existing community services within these areas (i.e. parks, community centres, schools, servicing infrastructure that has been planned to accommodate a certain population, places of worship, hospitals)? How will these communities be complete communities if these services are not sized appropriately?

2.3.2 STABLE COMMUNITIES WITHIN BUILT-UP AREAS

The emphasis on development within the Region's Built-Up Areas under each of the Growth Concepts will have varying impacts on existing and stable neighbourhoods within the Built-Up Areas. The largest impacts will be to the Town of Milton and the Town of Halton Hills, who do not have the same opportunities as Oakville and Burlington to accommodate substantial intensification on available land around transit corridors and MTSAs and are at a differing stages of growth compared to Oakville and Burlington who are nearly/fully built out. Furthermore, the Built-Up Areas of Oakville and Burlington are 3-4 times larger than the Built-Up Areas of Milton and Halton Hills.

Figure 5 shows a typical land budget required for each municipality within their Built-Up Area to accommodate the 50% intensification requirement and provide the necessary parkland, schools and stormwater management infrastructure to create a complete community.

	Land Requirements by Municipality				
	Burlington	Oakville	Milton	Halton Hills	Total Region
Units added to BUA	28,870	32,460	20,350	6,470	88,150
Population added to BUA	49,935	58,468	37,080	12,750	158,233
Development Land (net)	333 ha.	390 ha.	247 ha.	85 ha.	1,034 ha.
Park Land	95.5 ha.	108.2 ha.	67.8 ha.	21.6 ha.	293.1 ha.
School Land	10.3 ha.	13.5 ha.	8.9 ha.	3.8 ha.	36.5 ha.
SWM Land	13.3 ha.	15.6 ha.	10 ha.	3.4 ha.	42.2 ha.
Total	452 ha.	527 ha.	334 ha.	114 ha.	1,426 ha.
Total BUA* *excludes existing parkland	6,081 ha.	6,563 ha.	1,945 ha.	1,695 ha.	16,284 ha.
2021-2051 BUA Land Needs as % of BUA	7.4%	8.0%	17.2%	6.7%	8.8%

Figure 5. provides a comparison between the amount of BUA that would need to be available to accommodate the proposed growth in each of the local municipalities.

The Town of Milton has been allocated 20,350 units in the Built-Up Area. This translates into 37,080 persons. The percentage of Built-Up Area that would need to be available in Milton to accommodate this population is 17.2% compared to the other municipalities that would require approximately 7-8% of their Built-Up Areas to be available for growth.

Additionally, and as highlighted in Section 2.1.2 above, it is unclear how established neighbourhoods, such as the stable neighbourhood around the Georgetown GO Station in Halton Hills, will accommodate not only the proposed population growth but also the municipal servicing infrastructure and community services (i.e. parks, schools, community centres etc.) that are required to accompany this growth in order to create a complete community. Furthermore, intensification in these neighbourhoods are faced with land assembly challenges. These challenges were discussed in Section 2.1.2 of this submission.

The distribution of intensification growth between the local municipalities and the balance of intensification versus new greenfield expansion for Milton and Halton Hills should therefore be carefully considered to avoid adverse impacts on existing stable neighbourhoods. It should not be a one size fits all approach for each of the local municipalities.

2.3.3 IMPACT TO TAX PAYERS

An increased emphasis on apartments requires larger annual property tax rate increases. As summarized in Figure 6 below, Growth Concept 3A would require Regional taxpayers to fund $290 million more per year in additional operating costs than Growth Concept 4. The impacts on tax assessments under Growth Concepts 3B are exacerbated due to lost industrial property tax revenue as discussed above.

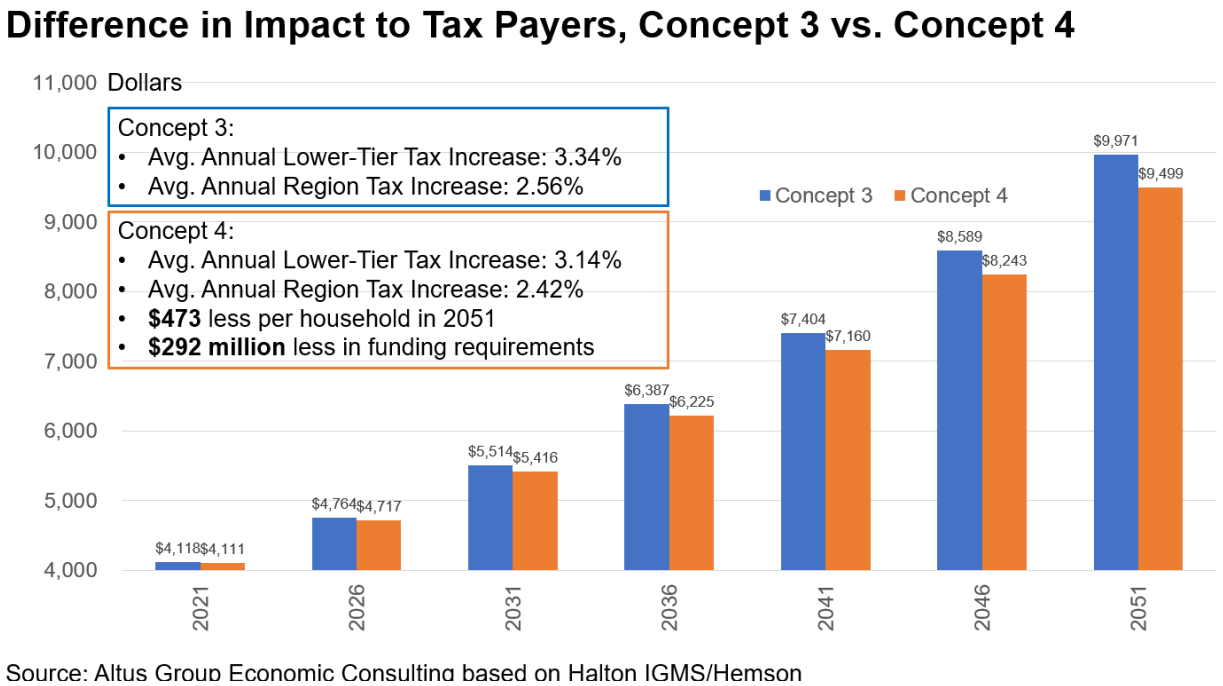

Figure 6. highlights the differences in property tax increases in 5 year increments between Growth Concept 3 and Growth Concept 4.

Although some have argued that a shortfall in tax revenue will eventually be made up by the introduction of larger apartment units, this is dependent on larger apartment units being built based on market demand. As discussed earlier in this submission, there is significant risk of relying on a drastic shift in market demand from ground related to apartment units. What happens to the taxpayer if the apartment growth doesn't come to fruition as being relied upon in the various growth concepts. Is this a gamble the Region is prepared to take?

2.4 SUMMARY OF SECTION 2 QUESTIONS:

Below is a summary of the questions posed in this section. We ask that these be addressed prior to consideration of a Preferred Growth Concept.

- Has the Region undertaken their own risk assessment analysis to determine the impacts of deviating substantially from market-based demand (i.e. shortfall of units, impacts to the Region's current infrastructure funding model (the Regional Allocation Program and property taxation), development charges revenues, demographic shifts, affordability etc)?
- With respect to the concept of Densification:
    - Where will Densification growth be located in these Secondary Plan areas?
    - How will the existing communities in the Milton Phase 3 Boyne Secondary Plan and North Oakville Secondary Plan be affected by additional population not contemplated when these communities were being planned?
    - The Milton Phase 4 Trafalgar Secondary Plan has been adopted by Town of Milton Council. The Secondary Plan process took years to complete with input from multiple stakeholders. How does the Region propose to introduce Densification to a community that has already gone through a lengthy public planning process? Does this require that these planning processes and supporting studies all be re-evaluated and started over? What does this mean for the Region's growth forecasts and local permit activity as construction starts in these communities are inevitability going to be significantly delayed?
    - It is our understanding that Regional staff have proposed that Densification can be accommodated by building to the maximum density ranges in the Secondary Plan policies. Has the Region undertaken a market demand analysis to determine if building to these maximum densities is desired/feasible? Does this require the Secondary Plans to be adjusted to increase the minimum density requirements?
    - The Milton Phase 4 Britannia Secondary Plan process is underway and is planned to accommodate growth to 2031. Is the intent of the Region that Britannia Secondary Plan area now be built to accommodate population 2051? How does this achieve conformity with ROPA 39, which put into place phasing policies for growth to 2031?
    - What impacts does Densification have on the capacity of planned / existing community services within these areas (i.e. parks, community centres, schools, servicing infrastructure that has been planned to accommodate a certain population, places of worship, hospitals)? How will these communities be complete communities if these services are not sized appropriately?

- Has the Region included consideration of necessary community uses (i.e. hospitals, community parks / centres, schools, Stormwater Management Infrastructure) in the determination of the amount of new Community Area proposed under each growth concept?
- Has the Region prepared a land budget and considered the local context to determine the impact and feasibility of intensification in stable neighbourhoods?

3.0 SUSTAINABILITY TO 2051

3.1.1 CLIMATE CHANGE

In 2019 Halton Region and the local municipalities declared climate change emergencies and through our participation in the PICs, industry consultations and review of the Council meetings to date we have heard that climate change is an important and key consideration for Halton Region's future growth. As industry leaders in sustainability and innovation Mattamy and Remington agree that climate change needs to be addressed when considering any urban boundary expansions. **We believe however, that new greenfield developments can and will play an important role in mitigating the effects climate change and achieving green house gas (GHG) emission reduction objectives of the Region.**

Furthermore, we believe that climate change needs to be looked at holistically to ensure that planning policies in Halton do not result in unintended negative impacts to the overall climate change targets for Canada. If policies push families to move further out of the core GTA and appropriate transit and live/work opportunities are not implemented to accommodate the intensification and densification areas, it could lead to significant transportation issues and may result in higher GHG emissions from longer commute times.

We also believe that climate change objectives are only one piece of complete communities and that all the priorities of the Region need to be considered to have a balanced approach to growth and to be able to accomplish sustainable communities.

3.1.2 HOW HAVE WE RESPONDED TO CLIMATE CHANGE?

The Ontario Building Code (OBC) has made significant advances to build energy efficient homes as an industry standard. Figure 7 below shows the advances in energy efficiency and carbon emissions of an OBC 2017 new single detached home and net zero ready homes compared to a typical 1980/1990 built home. Energy has been reduced by half and carbon emissions are 5 times lower for a new home built today to OBC 2017 standards.

As many people may not be aware, the National Building Code (NBC) is currently being revised with the next iteration being released later this year. The NBC will have five tiers with tier five being Net Zero Energy Ready. The OBC will then be merged with the NBC by early 2024 to

incorporate the changes and align standards across Canada including alignment with Canada wide climate change targets. Today the OBC sits at tier two of the NBC, showing that Ontario is already above the standards in some Provinces. The standards will be further increased with the NBC update in 2024, likely progressing the OBC to tier 3. The NBC will continue to be updated every five years with progression towards Net Zero Energy Ready Homes in 2030, as was committed to in the Pan Canada Framework in 2016. As can be seen in Figure 7 this will reduce energy consumption by an additional 50% and reduce carbon emissions to 5-6 times lower than today's standards. **With these advances in industry wide standards every new home built on any new community greenfield lands will be Net Zero Energy Ready at a minimum.**

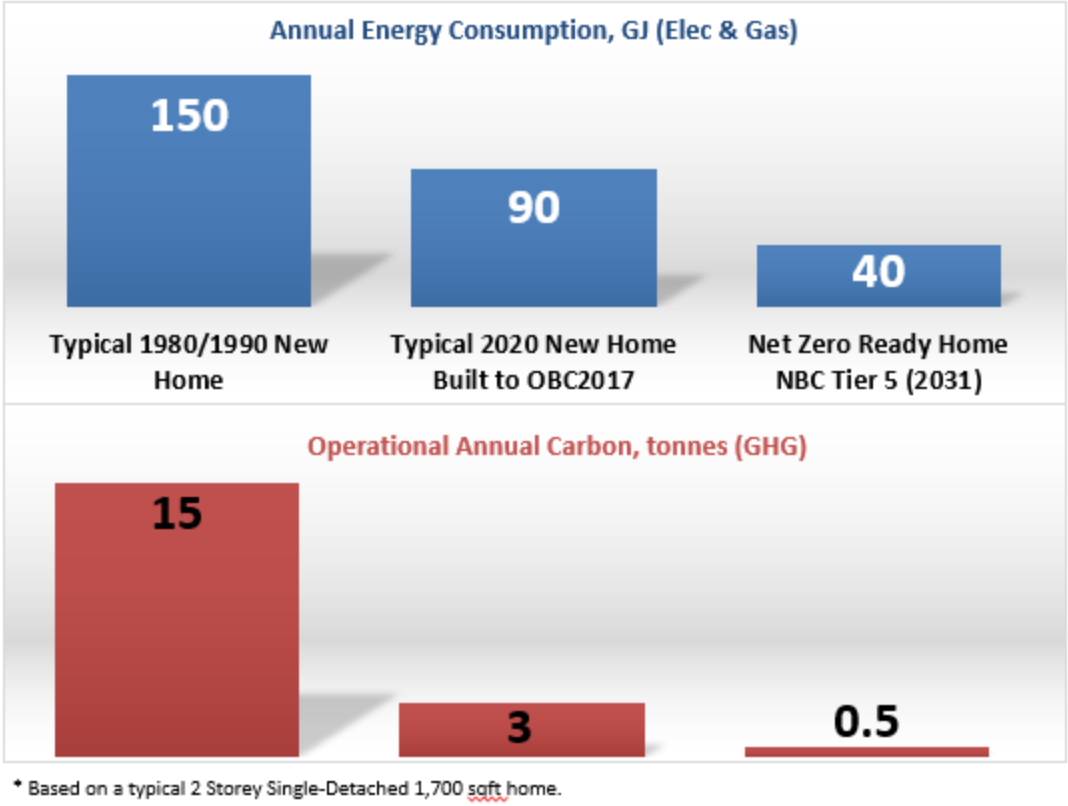

Figure 7. Source: Building Knowledge Canada

In addition to industry wide standards, Mattamy and Remington have incorporated innovative sustainable practices into the communities we are building today, further reducing our impact on GHG emissions.

- **Mattamy**:
  - Across the GTA since 2006 Mattamy has built over 20,000 Energy Star New Homes and is committed to building every new home in the GTA to Energy Star

Standards. Energy Star is 15%-20% more efficient than current OBC and every home is tested for air tightness by 3rd party energy advisors ensuring quality control. Those 20,000+ homes represent over 1.97 Million GJ of energy reduction and over 172,000 tonnes of GHG reductions, with each of these homes adding to these savings every year they operate. Mattamy is the largest Energy Star builder in all of North America.

  - Mattamy is in the process of installing geothermal on three mid-rise blocks in Oakville with construction in 2021 and is currently undertaking geothermal test sites in other GTA communities for ground related products. Geothermal is a clean reliable option for heating and cooling loads; which represent over 55% of the energy consumption of a new home today.

- **Remington:**
  - Remington is also building homes to Energy Star equivalent standards.
  - Remington's Downtown Markham site is a Master planned community that uses its economies of scale in its network of buildings to incorporate sustainable practices.
  - All commercial spaces built to LEED silver or higher.
  - A Markham District Energy (MDE) plant is located in the basement of the community's heritage site. This is one of three MDE plants located in Markham Centre.
  - The Markham Centre district energy system and MDE combined heat and power (CHP) generators supply energy for more than 12 million sq.ft. of building connections, generates 11.5MW of power for the local grid, and produces enough power for 15,000 Markham Centre Condominium units.

In addition to enhancing the energy efficiency of the building envelope, the homebuilding industry also makes significant contributions to other sustainable practices that create complete communities like construction of bike lanes, trails, and protection and enhancement of natural heritage systems.

In a typical land budget, 50% of the land in new communities are dedicated to the public realm. Mattamy and Remington alone over the last five years in Halton have planted over 7,100 trees, built 9km of trails and have dedicated over 180ac of natural heritage lands to Oakville and Milton.

We also partner with Conservation Authorities to complete natural heritage system restoration projects. All of these standard practices contribute to improving tree canopy cover and environmental regeneration within Halton, which in turn contributes to establishing carbon and heat sinks within communities.

3.1.3 FUTURE OPPORTUNITIES FOR BUILDING SUSTAINABLY

Greenfield developments provide the opportunity to design a community from the start as a 15 minute walkable community rather than trying to retrofit existing communities without being able to properly plan for all of the community uses required to support complete communities as sites are intensified. It allows for sustainable practices to be included in all infrastructure including transit, utilities, roads and to provide the necessary easements and land requirements to accommodate new sustainable practices.

Mattamy and Remington are committed to progressing sustainability initiatives within our communities. New technologies and innovations in sustainability are advancing at an accelerated rate. We are currently reviewing the following innovations and continue to pursue emerging technologies, including:

- Electrification
- Solar readiness
- EV readiness
- District energy
- Net Zero Ready
- Geothermal/Geoexchange
- Urban farming/Community gardens
- Rain gardens/ LIDs
- Building Information Modeling
- SMART Home technology

Prior to incorporating these practices into our communities we need to ensure that they do not create unintended results and that utility providers are ready to accommodate changing demands. For example, a shift to electrification, (eg., a clean energy source) without energy efficiency and adjusting homeowner operating behaviour can cause significant cost increases for homeowners to operate their homes. This is particularly troublesome in Ontario should our electric rates no longer be subsidized by government. The true cost of electricity being passed on to the consumer will be significant and will impact affordability.

Natural gas today is almost three times less expensive than a fully electrified home. Adding higher utility costs to homeowners will only continue to make homeownership less affordable. In addition, total lifecycle costs and embodied carbon needs to be considered to ensure that increasing building standards do not add more carbon than what is being saved through the operation of the homes.

Furthermore, we need to ensure the electric grid is ready to meet additional and changing loads from traditional peak demands. For example, as homes shift to all electric appliances or EV charging stations there becomes a new peak morning load that today's network is not designed to accommodate. Also, as power generation is expanded, we need to ensure that the grid is

designed to accept the power being generated. Sustainability needs to be considered holistically to incorporate it successfully.

Climate change objectives will also require a shift in consumer behaviour and actions in order to be successful. All levels of government will need to work towards these common goals and provide incentives to create a significant shift. A number of targets and commitments have already been made that will help contribute to this shift including:

- the *Canadian Net-Zero Emissions Accountability Act*, which received Royal Assent June 29, 2021, formalizes Canada's target to achieve net-zero emissions by the year 2050.
- Instill a price on carbon - a price legislated to increase to $170/tCO2e by 2030[5].
- Reduce GHG emissions by 40-45 % below the 2005 level of 732 megatonnes of CO_2 by 2030 (and a long-term agreement of 80 percent below the 2005 level by 2050).
- 100% of all light-duty vehicle sales to be zero emissions by 2035; allowing for the elimination of fossil fuel vehicles by 2050.

Overall, through building code standards, Canada wide climate change commitments, natural heritage stewardship and enhancement, new technologies and innovations, and building complete communities, greenfield land development and construction will play an important role in moving towards stated climate change objectives.

3.1.4 IGMS CLIMATE CHANGE EVALUATION

Climate change is one of the main evaluation criteria in the IGMS work completed to date. As shown in the Comparative Greenhouse Gas Emissions Assessment, completed by Sustainability Solutions Group for the Region (June, 2021), the differences between the concepts when it comes to GHG emissions range from Concept 3A being 2,933 ktCO2e to Concept 4 at 3,032 ktCO2e, a difference of only 3.3%. The assessment notes that although this seems small, it is a significant difference. However, a review of the report by Prime Strategy and Planning, attached as Appendix A, notes that the report uses a number of questionable assumptions to produce the GHG emission numbers.

Firstly, Sustainability Solutions Group's assessment notes that this is a high-level estimate and that it is based solely on average emissions from Halton Hills today with no adjustment for the different levels and types of development that will occur in each of the individual local municipalities under each Growth Concept. In addition, it does not account for changing standards and Canadian wide climate change targets that will influence behaviour over the build out period from 2031-2051. In particular the assessment states on page 5 that "*The difference in emissions stems from the differing amounts of apartments versus ground-related new residential*

[5] https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy/annex-pricing-carbon-pollution.html

units projected in each concept. Ground-related units use more energy per unit than apartment units, and, assuming a relatively similar distribution of energy using equipment for each building type, this translates to higher emissions per unit for ground-related units versus apartment units." There are many advances in ground-related energy using equipment, including solar, geothermal, and high efficiency mechanical equipment, that is inconsistent with this assumption, in addition, as standards move towards net zero energy ready homes the energy usage with ground-related products will be significantly reduced which will narrow the 3.3% difference further. Advances in EV and increasing investment in transit in greenfield developments can also reduce the GHG emissions. Factoring in the changes that will occur over the 30-year timespan and a focus on planning complete communities in new greenfield areas; all four Growth Concepts could have similar GHG emissions.

Furthermore, the evaluation only looks at direct emissions and does not factor in carbon intensity of electricity, embodied emissions in buildings or lifestyle activities, or a more holistic look at GHG including what impacts trips into and outside of the Region will have if the supply of housing and employment opportunities are based on aspirational policy shifts rather than market demand.

Given the minimal details provided on the climate change evaluation there are several questions that should be answered prior to determining a Preferred Growth Concept so that an understanding of how the concepts vary can be made clear.

- How will changes to the OBC/NBC impact the GHG emission results?
- How will the impact of Canada wide electric vehicle (EV) targets impact the GHG emission results? Has the Region analysed the impact/ability for the current electric grid to accommodate EV targets or a significant shift to EVs?
- Are Halton Hills average emissions a reasonable proxy for Halton Region given that its built form and communities are different than the other local municipalities, and generally are built at lower densities with less mixed use? Does this assumption not skew the results towards apartments and intensification? It's also important to note that Halton Hills has no public transit. Has this been factored into the analysis?
- How can the assessment use scales of GHG emissions from transportation and buildings that are beyond what the Government of Canada have advised will be permitted during this timeframe?
- What are the planned major transit initiatives that will support the proposed intensification and densification?
- Is the proposed aspirational shift to apartments sustainable if it pushes families outside of Halton Region and likely the GTA to find their preferred housing choice, resulting in increased commute times? What impact does this have on Ontario wide GHG emissions?
- What incentives and changes to current Regional and municipal standards are being proposed to promote and enable sustainable practices?

3.1.5 PROPOSED GROWTH TO 2051 IS NOT SPRAWL

The term sprawl has been used to describe the proposed settlement boundary expansions under each Growth Concept. It is important to correct the misuse of this term in this context. None of the settlement area boundary expansions proposed by the Region constitute sprawl based on the following four measures: ratio of urban expansion to population growth, the checks and balances integrated into the overall planning process, use of existing and planned infrastructure, and incorporation of complete community principles. Each of these measures will be discussed below.

As noted in the Neptis article titled *Growing Pains: Understanding the new reality of population and dwelling patterns in the Toronto and Vancouver regions* (May 2015):

"One definition of urban sprawl is that the increase in urban expansion is greater than the increase in population (Fulton et al. 2001). By this measure, the GTHA is no longer sprawling." **Expansion of land in Halton is proposed to occur at a rate of 1.7% to 5.0% over the next 30 years, while population growth over the next 30 years is expected at 73% to 89%.**

In addition, the MCR and IGMS are just the first steps in the planning process within Halton Region. These lands will have another 10 plus years of planning as they proceed through local Official Plan amendments, Secondary Plans and associated environmental studies and background reports, Blocks Plans/Tertiary Plans, and then draft plans and site plans. Every development within Halton Region is carefully and thoughtfully considered and there are many opportunities to design these communities to meet the needs of the changing population. Designating new community greenfield lands today, well in advance of when they will be required, allows the necessary time to complete the planning process and not have continued delays to meet demand for new housing.

Furthermore, the majority of the lands identified by the Region as potential areas suitable for settlement area boundary expansions are strategically located so that they can be serviced by existing/planned Regional infrastructure and sit adjacent to the current urban boundary, making them a logical extension of existing communities. See Appendix B, prepared by Urbantech Consulting, that shows the current masterplan overlayed on Growth Concept 4 and Milton's Modified Growth Concept 4 – 'Halton Balanced". Appendix B demonstrates that the majority of these lands are easily serviced by Regional water and wastewater infrastructure already planned, under construction or existing today. Urbantech Consulting also completed a review of the Region's IGMS Appendix D February 2021 document prepared by GM Blue Plan. Through their review, Urbantech identified excess capacity of 84,000-101,000 people in the Trafalgar and Lower Base Line wastewater sewers beyond the current 2031 build out. Furthermore, the trunk watermains being constructed through the 2020 Allocation Program along Trafalgar and Britannia are able to service population growth to 2051. This shows that additional population

and employment lands can be serviced with existing infrastructure for both Halton Hills and Milton and therefore, would be no additional cost to the Region nor would it require complex and invasive construction within the Region's existing road and servicing network.

Lastly, the communities that are being built today incorporate the principles of building complete communities including:

- Promoting a range of housing forms
- Building at increased densities of 65 ppl & jobs per ha or higher
- Transit supportive, pedestrian and cycling friendly
- Providing community uses such as parks and schools
- Protecting and enhancing the Region's Natural Heritage System
- Inclusion of geothermal in many of the higher density transit supportive projects

New communities within expansion areas will carry forward these principles as well as enhanced sustainable building practices and therefore, new expansion areas are not and should not be labelled as sprawl.

3.1.6 AGRICULTURAL SUSTAINABILITY

Local food production and maintaining prime agricultural lands has also been a key issue raised through the Growth Concept review. We agree that maintaining a local food supply is an important consideration; however, we believe that local food supply can still be maintained under all five Growth Concepts presented.

It is important to note that Ontario's local food supply is reliant on all of Ontario in order to feed our population. This is due to limitations in regional food production caused by varying soil types and climates experienced throughout the province, as is seen in the Halton context. For example, most crops cannot be productively farmed within Halton with only 4 of the 23 fruits and vegetables grown in Ontario being grown in sufficient quantity to feed the Halton population during the three months that these crops are grown[6]. Livestock operations are also generally underrepresented in Halton given the complexities of raising animals near urban centres. In addition, food is often produced in one region, processed in another, and sold through retail chains based on long standing relationships within the farming communities. Of the 451 farms in Halton today, only 18-19% of them sell directly to consumers[7]. When looking

[6] Statistics Canada "Food available in Canada" CANSIM 002-0011 & Fruit and Vegetable Survey, Statistics Canada

[7] *Data source: 2016 Census of Agriculture and Strategic Policy Branch, Ontario Ministry of Agriculture, Food and Rural Affairs, http://www.omafra.gov.on.ca/english/stats/county/index.html*

at the system as a whole the settlement area boundary expansions proposed under the Growth Concepts have minimal impact on local food supply.

Furthermore, even under concept 4 the Region continues to retain over 33,600ha of class 1-3 lands or 91% of the Region's Prime Agricultural Lands that exist today. As noted above, there is opportunity for local farms to increase their supply to local markets rather than selling outside of Halton if food supply became a concern.

Urban farming, and advances in food production technology (i.e. vertical farming and greenhouses that eliminate challenges with respect to adverse soil and climate conditions), have also become an emerging opportunity to create local food production within communities providing a direct link to the food people are eating and engaging local community groups. Urban farming takes the form of community gardens, roof top gardens, backyard chickens and backyard and front yard vegetable gardening making all housing forms an option. These local gardening activities are generally more productive per unit area than larger farms because of the intensive labour typically put into them. A study from York University suggested Toronto has the land and rooftop space available within its boundaries to produce 10% of the fresh vegetables consumed in the City.[8] Urban farming provides the opportunity for developers and local community groups to partner with public agencies in order to help maintain local food supply, while supporting education opportunities and can help balance the impacts of land required as new greenfield development to meet other Regional objectives.

Finally, there has been a lot of focus on the loss of prime agricultural farmland as part of the public consultation process to date. Factually, the land being considered for expansion is, for the most part, prime farmland by definition being Classes 1-3. The question that needs to be asked about how productive these farms are today, and will be in the future, relates their proximity to urban uses and the effect of the "urban shadow". In most cases these farms sit on very busy roads with Regional infrastructure availability and many have the nuisances of urban interactions (e.g., conformity to MDS and proximity of urban use). It is also important to note that these lands have been owned by non-farmers for many years and little to no additional investment beyond cash crop is evident. Most of the homesteads and barns have been abandoned and/or removed. Finally, there is basic land economics that have made these lands too expensive for active and full-time farmers to purchase or expand their existing farms. This is in large part due to their proximity to existing urban boundaries (e.g., urban shadow) and the expectation that whitebelt lands represent a future opportunity to accommodate future growth. Many farmers in this situation have cashed out and have either retired or taken their investment and reinvested in larger more productive farms in locations that are more suitable.

[8] https://foodsystemsjournal.org/index.php/fsj/article/view/29 - York University

4.0 GROWTH PLAN CONFORMITY

On August 28, 2020 the Province released the final LNA Methodology. The LNA is a key component of the Growth Plan, which municipalities are required to follow in order to achieve conformity. It lays out assumptions and steps required to be completed to determine the appropriate land requirements to accommodate all housing segments, avoid housing shortages, consider market demand, and plan for all infrastructure that is needed to meet the complete communities objectives of the Growth Plan. The Region's approach in the five Growth Concepts presented to date do not conform with this methodology. Below is a summary of some key components of the methodology that have been overlooked in the Region's calculations:

- Removal of existing/base-year households – existing/base-year households should not be used to accommodate net increase in housing demand by unit type. In the concepts presented, it is assumed that the shortfall in ground-related housing demand will be met by turning over existing units currently occupied by older adults. However, the housing demand forecasts presented by the Hemson Growth Plan background report already accounts for the aging of population and the turnover of ground-related units over time – the Hemson estimates of demand are already 'net' of this turnover.
- Market Demand – has not been accounted for to the full extent possible in any of the Concepts presented to date as discussed in section 2.1.1.
- Allocation by housing types - the breakdown of all four housing types (singles, semis, rows, apartments) is required by the Province - not just "ground-related" and apartments.
- Person per unit (PPU) assumptions – In order to maintain the 174,000 units in each Growth Concept the PPU for apartments fluctuates from 2.55 in Concept 4 to 2.75 in Concept 3A, representing a 63-75% increase from the 2017 DC Study PPU used for apartments (1.58) (a detailed breakdown of the PPU for each Concept can be found in Appendix C). Fluctuating PPUs suggest an unrealistic shift in how people will occupy units, or presume an unrealistically high proportion of apartments will be 2 or 3-bedroom units, despite a on-going demonstrated lack of demand for large apartment units due to the significant cost associated with these units. The extent to which the Region's assumptions about PPUs are overstated will ultimately create a shortfall of units and/or population relative to the Growth Plan forecasts the Region is required to be planning towards. Using the PPUs from the Regions 2017 DC Study (3.26 for ground-related and 1.58 for apartments) the 174,100 units in all five concepts will not generate the population required to be planned **being 57,800 to 113,600 persons short of that required in the Growth Plan**. How can the Region plan its finances on one measure but plan for its growth based on another measure?
- Contingency Factor – to acknowledge that not all lands will proceed to development due to unforeseen constraints such as 'hold-outs' of existing landowners, a contingency factor needs to be applied so as to ensure sufficient land supply.

In Appendix D we have provided a 'Concept 6' LNA calculation, prepared by Altus Group, that conforms with the Provincial methodology and the policies set out in the Growth Plan. Under this concept 2,186ha of new community greenfield lands net of the Regional Natural Heritage System would be required to meet the future housing demand. This is 106ha larger than Concept 4 presented by the Region; showing that none of the concepts presented to date conform completely with the LNA Methodology. In particular, 3A and 3B disregard the methodology entirely suggesting that proceeding with either of these concepts would not be in conformity with the Growth Plan. Concepts 3A and 3B in our view has many issues of conformity raising doubt on their approvability- why would the Region want to take this risk and allow another senior level government plan for its future?

Prior to determining a Preferred Growth Concept, the Region should provide a detailed calculation of how the community land needs has been determined. To date it is unclear how the number has been arrived at and the assumptions that have been made and therefore, it is not possible for the public to understand the impacts the concepts will have. It is not reasonable or transparent for this detailed work to be provided at the last stage of the process; making it impossible for the public to effectively engage and comment.

Furthermore, the LNA also requires that upper-tier municipalities consult with lower-tier municipalities and consider factors such as planned urban structure, housing affordability, a mix of housing types, servicing capacity and the potential for intensification. Given the various stages of development each of the lower-tier municipalities are at it is clear that each municipality will require their own unique solution to growth.

5.0 CONCLUSION

The MCR is a complex process with many competing and often conflicting priorities being used as inputs. The Region is at a critical junction in their history and placemaking with the decisions on how to grow today having lasting impacts on the identity of the respective municipalities. Furthermore, Halton Region is a diverse community with the benefit of each of its local Municipalities having unique context. With this in mind, the Growth Concepts presented to date do not acknowledge that each local municipality is at a different stage of their community build out and therefore, need different approaches to growth. We believe the decisions of the local Councils should be respected and built into the growth plans of the Region. To do otherwise is counter productive and frankly divisive. When assessed in their entirety these varying views represent a well balanced and measured place making.

It is our respectful submission that a hybrid concept should be developed that provides for the following:

- Promotes additional density and job opportunities within the existing built boundary through intensification. Good development in the right locations; considering impacts to stable neighbourhoods and local context and supported by transit while maximizing existing infrastructure is prudent place making.
- Oakville and Burlington should focus on development of their MTSAs and intensification and densification of their nodes and corridors. As these communities are mostly planned and built today, they are in a great position to incorporate higher densities into their large built-up areas and provide the necessary transit and community services that are required to make these complete communities.
- Milton should be allowed to continue to grow and be able to properly plan out extensions to their existing communities with their Modified Growth Concept 4 – "Halton Balanced", consistent with Milton Council's stated objective, as outlined in Milton staff report DS-055-21. This will allow for a balanced approach to growth and the ability to meet housing demand and attract key employment opportunities to create complete communities.
- Halton Hills can achieve balanced growth through a modest expansion providing approximately 900 ha of new greenfield area (400ha of community lands and 500ha of employment lands), consistent with Staff Report PD-2021-0045, to account for continued economic development, a new hospital and associated uses, new community parks as well as housing choice. In addition, moderate greenfield expansion reduces the pressure on Halton Hills stable neighbourhoods and MTSAs that have a unique character already and may not be able to accommodate high levels of intensification while maintaining complete communities.

We believe this hybrid approach meets many of the objectives of the Region;

- **It will still require a significant shift to apartments but will also provide housing choice and affordability that will continue to attract families to Halton Region;**

- **It will develop key nodes and corridors within the Region making them more transit supportive;**

- **It will allow for development of key community services like hospitals, places of worship and community parks;**

- **It will allow for incorporation of emerging sustainable building practices in new greenfield areas including addressing some key elements of climate change and carbon emissions;**

- **It will allow for continued economic development with shovel ready land supply for new businesses and jobs;**

- **It will account for the local context and vision of each individual community; and,**
- **Overall, we believe our hybrid concept will create a balanced complete community for the future of Halton Region.**

APPENDIX A

PRIME STRATEGY & PLANNING
innovative planning for sustainable communities

July 5, 2021

Karen Ford
Vice President, Land Development
Mattamy Homes Canada
433 Steeles Ave E, Milton, ON L9T 8Z4
karen.ford@mattamycorp.com

Dear Karen,

RE: Review of Halton Region Integrated Growth Management Strategy Growth Concepts – Comparative Greenhouse Gas Emissions Assessment, June 2021, Prepared by SSG

As part of the Official Plan Review, Halton Region commissioned SSG to conduct a comparative greenhouse gas emissions assessment of the four growth concepts, referenced here. Mattamy Homes asked for a review of the assumptions and relative findings from this report. PRIME Strategy & Planning has completed this review with support from Daniel Hoornweg, Querencia Partners, who provided technical support of the Greenhouse Gas (GHG) modelling assumptions.

Overall Analysis

The Region has presented four concepts for the growth management strategy. The analysis by SSG assessed the four concepts (1, 2, 3A and 4) to determine the expected direct emissions based on different assumptions for new residential building types and locations.

Data from detailed modelling work completed for the Town of Halton Hills was used and considered representative for Halton Region. Estimates included new buildings (commercial, apartment, ground related) and personal vehicle transportation use. In this analyses, per capita emissions intensities for the Region (tonnes per year per person) were used to scale emissions for water, wastewater, industrial, commercial and transportation emissions). The analysis was acknowledged to represent high level estimate and are not to be considered rigorous modelling, which would provide greater precision.

The Region of Halton includes municipalities which are both lower density smaller centres as well as higher density more urban places, such as Burlington and Oakville. The modelling approach based on the Town of Halton Hills is not representative to then be extrapolated on to achieve the outputs. In this analysis the differences are negligible between the four concepts. This highlights the expectation that as we plan for low carbon communities the emphasis needs to be on the full set of expectations for mitigation, adaptation and elimination of GHG. As a result, the analysis should not be given significant weight in the consideration of growth concepts, which need to address strong planning principles and still meet the GHG expectations.

Climate Change Policy Direction

At the September 11, 2019 Council Meeting, Halton Region, joining more than 500 Canadian municipalities, declared a climate emergency and directed staff to bring forward a report to Regional Council outlining a comprehensive response to climate change (mitigation and adaptation). This declaration is based on the Intergovernmental Panel on Climate Change (IPCC), as well as the Government of Canada's direction on climate change. The declared emergency includes several goals for the Region, including:

"c) outlining opportunities for a regional approach to manage growth and development to address climate change considerations through an update to the Region's Official Plan"

The consolidated 2020 Growth Plan for the Greater Golden Horseshoe identifies important direction for climate change. Section 1.2 envisions complete communities for the Greater Golden Horseshoe that are supported by resilient infrastructure and healthy natural environments. Additionally, the Growth Plan highlights adaptation and resilience as important guiding principles.

The Growth Plan (Section 4.2.10) outlines specific policies for climate change adaptation and resilience that municipalities will develop in official plans, which includes but is not limited to the following:

1. Upper- and single-tier municipalities will develop policies in their official plans to identify actions that will reduce greenhouse gas emissions and address climate change adaptation goals, aligned with other provincial plans and policies for environmental protection, that will include:

    a) supporting the achievement of complete communities as well as the minimum intensification and density targets in this Plan;

    b) reducing dependence on the automobile and supporting existing and planned transit and active transportation;

    c) assessing infrastructure risks and vulnerabilities and identifying actions and investments to address these challenges;

    d) undertaking stormwater management planning in a manner that assesses the impacts of extreme weather events and incorporates appropriate green infrastructure and low impact development;

    e) recognizing the importance of watershed planning for the protection of the quality and quantity of water and the identification and protection of hydrologic features and areas;

    f) protecting the Natural Heritage System for the Growth Plan and water resource systems;

    g) promoting local food, food security, and soil health, and protecting the agricultural land base;

    h) providing direction that supports a culture of conservation in accordance with the policies in subsection 4.2.9; and

    i) any additional policies to reduce greenhouse gas emissions and build resilience, as appropriate, provided they do not conflict with this Plan.

2. In planning to reduce greenhouse gas emissions and address the impacts of a changing climate, municipalities are encouraged to:

   a) develop strategies to reduce greenhouse gas emissions and improve resilience through the identification of vulnerabilities to climate change, land use planning, planning for infrastructure, including transit and energy, green infrastructure, and low impact development, and the conservation objectives in policy 4.2.9.1;

   b) develop greenhouse gas inventories for transportation, buildings, waste management and municipal operations; and

   c) establish municipal interim and long-term greenhouse gas emission reduction targets that support provincial targets and reflect consideration of the goal of low-carbon communities and monitor and report on progress made towards the achievement of these targets.

Overall, the Growth Plan for the Greater Golden Horseshoe identifies the crucial role that municipalities play in managing and reducing Ontario's greenhouse gas emissions and supporting adaptation to the changing climate to accommodate growth and achieve complete communities. As we address regional planning, consideration needs to be given to flexibility of the regional traveller for home and work choices. This includes the range of family needs and affordability, where emphasis on transit need is essential and may include movement outside of Halton Region.

Considering Emissions Accountability

With respect to the GHG reduction requirements, the *Canadian Net-Zero Emissions Accountability Act*, which received Royal Assent June 29, 2021, formalizes Canada's target to achieve net-zero emissions by the year 2050. It includes establishing a series of interim emissions reduction targets at 5-year milestones toward that goal. A key aspect of the strategy is instilling a price on carbon[1]: a price legislated to increase to 170/tCO2e by 2030[2].

Within Halton Region today, the average resident generates about 20 tonnes CO_2 per year. Canada committed to reduce GHG emissions by 30 percent below the 2005 level of 732 megatonnes of CO_2 by 2030 (and a long-term agreement of 80 percent below the 2005 level by 2050). To put these values in perspective, each Canadian on average is responsible for 22.7 tonnes CO_2 in 2005. Canada has committed to reduce this to 12.5 tonnes per person in 2030 and just 3.3 tonnes per person in 2050[3] with an aspirational goal of net-zero.

While it is acknowledged that Canada and much of the world's aspirations to achieve net-zero by mid-century is significant, within 30 years, among other ambitions, the commitment requires:

- No natural gas for heating of buildings;

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[1] https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html
[2] https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy/annex-pricing-carbon-pollution.html
[3] https://sites.ontariotechu.ca/sustainabilitytoday/blog-posts/blog-posts/2019/07/the-fault-lines-over-canadas-carbon-emissions.php?__hstc=132141777.890c3a22b4c1cbb5da34b0b1f492117d.1566227056464.1624888611548.1624891296091.556&__hssc=132141777.13.1624891296091&__hsfp=2743535408

- No internal-combustion engines;
- Carbon intensity of electricity below ~75gCO_2e/kWh[4].

These actions will result from the policy put in place.

The Government of Canada and the Province of Ontario have declared that by 2050 emissions from buildings and transportation need to be zero. All four Scenarios assessed are incompatible with these aspirations and the declared climate emergencies. This means there is a disconnect between international aspirations and the Government of Canada's directives (and laws) and the Halton Region focused analysis "*Halton Region Integrated Growth Management Strategy: Growth Concepts – Comparative Greenhouse Gas Emissions Assessment (GHG Assessment).*"

The analysis of the four development scenarios (Concept 1, 2, 3A, 4) considers Scopes 1 and 2 (direct emissions). Carbon intensity of electricity (and use) is not considered, nor are any embodied emissions in buildings or lifestyle activities. These are important factors to consider overall.

Scope 1 emissions include direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed. Scope 3 includes all other indirect emissions that occur in a value chain. Fully considering a complete GHG analysis for scope 1, 2 and 3 emissions is required to provide a comprehensive review of climate mitigation actions for the Region.

Based on the per capita GHG emissions in the four scenarios assessed, the range is from 6.08 tCO2e/person (Concept 3A) to 6.29 tCO2e/person (Concept 4). This 3.3 percent variation reflects higher density development, with commensurate reduction in building and vehicle emissions. This limited shift is a generalized consideration.

In evaluating emissions more comprehensively, compared to today, these emissions would increase by about 10 tCO2e/person if all emissions are considered, i.e., Scope 3, and embodied emissions (for which international reduction targets are being established). We can anticipate increasing national ambitions for GHG reductions, such as through the upcoming COP26 in 2021.

Ontario's two most important priorities to reduce GHG emissions are to keep carbon emissions from electricity generation low (below 100 g/kWh CO2e), and to reduce transportation emissions. Transportation emissions now account for almost 40 percent of Ontario's GHG emissions. Reducing transportation emissions is however difficult as action is required at all government levels and through changes in personal behavior. The Federal government enacted two important policy drivers to reduce transportation sector GHG emissions: a rising price on carbon (i.e. $170 t/CO2e by 2030) and mandating that no internal combustion engine vehicles be sold after 2035. The Province of Ontario will also focus on transportation emissions as well as the impending loss of gas tax as cars switch to EVs (and electricity demand increase as 15% of Ontario's low-carbon electricity is lost as Pickering NGS is retired). There is an expectation for development of data platforms to enhance integrated mobility (including non-motorized and e-bikes), shared delivery systems, and regional transit. Mobility in 2050 is not yet

[4] Ontario's average is about 50gCO_2 however, this will likely increase by more than 50 gCO_2e as Pickering Nuclear GS is replaced mainly with gas-fired electricity.

defined but further integrated systems building on current and unforeseen innovations will be critical in enhancing resilience of the transportation system (in light of a changing climate).

Future Urbanization Assumptions for Climate Change

The GHG emissions analysis for growth scenarios needs to be considered in the full context of what cities need to be planning for to address climate change. The analysis completed underestimates the reductions for the change for buildings and vehicles to net zero. The analysis has also left out the critical change that will progress regarding embodied carbon, building materials, waste, and behavior.

Mitigation efforts, several orders of magnitude greater than the difference between the growth concepts need to be achieved in the next 30 years. An increasing price on carbon will continue to fundamentally shift the change.

Overall, the impacts of climate change will continue to bring more intense weather and storm events, creating longer periods of intolerable conditions and risk for infrastructure. The approach for designing new communities for climate change needs to provide for greater resiliency where it can distribute the potential load for infrastructure and provide relief opportunities for residents. This means a range of housing densities and a mix of uses locally, with increased opportunity for green infrastructure and respite throughout the communities, not just through buildings. This also puts emphasis on integrated infrastructure solutions to address impacts.

In this regard, the GHG analysis completed by SSG;

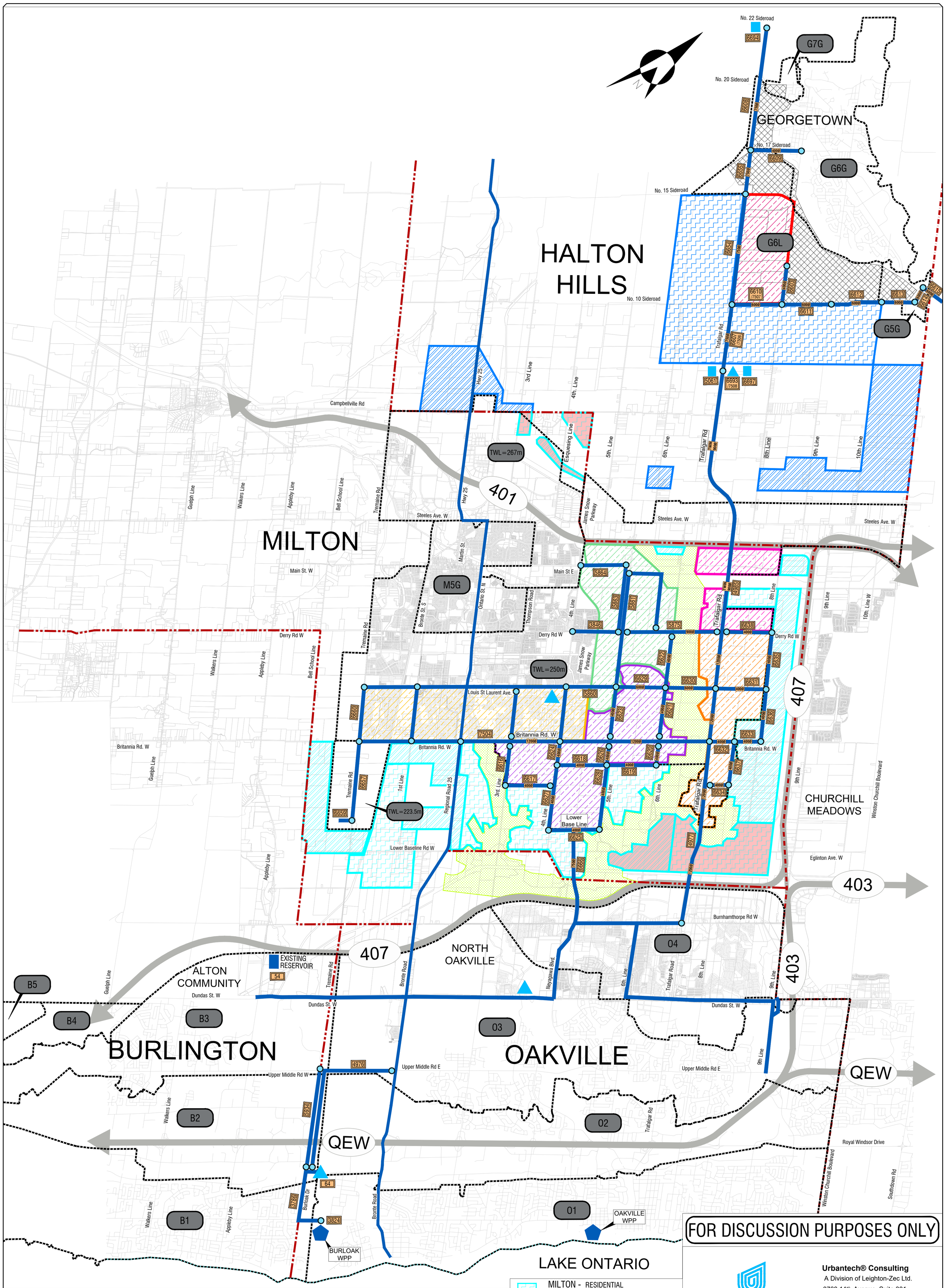
- has limited focus relative to the larger GHG reduction requirements for a net zero future
- assumes scales of GHG emissions from transportation and buildings that are clearly well beyond what the Government of Canada, and others, have advised will not be permitted.
- does not completely address the need for building diverse well designed and complete communities that are focused on all aspects of resiliency to climate change.

As this analysis creates an incomplete consideration of growth planning for climate change, it is recommended that continued engagement with the Regions growth planning process. It is important to ensure incorrect analyses is not used to draw conclusions for how growth needs to address adaptation and mitigation for climate change. If you have any questions, please contact me directly.

Sincerely,

Lisa A Prime, MCIP RPP, LEED AP

APPENDIX B



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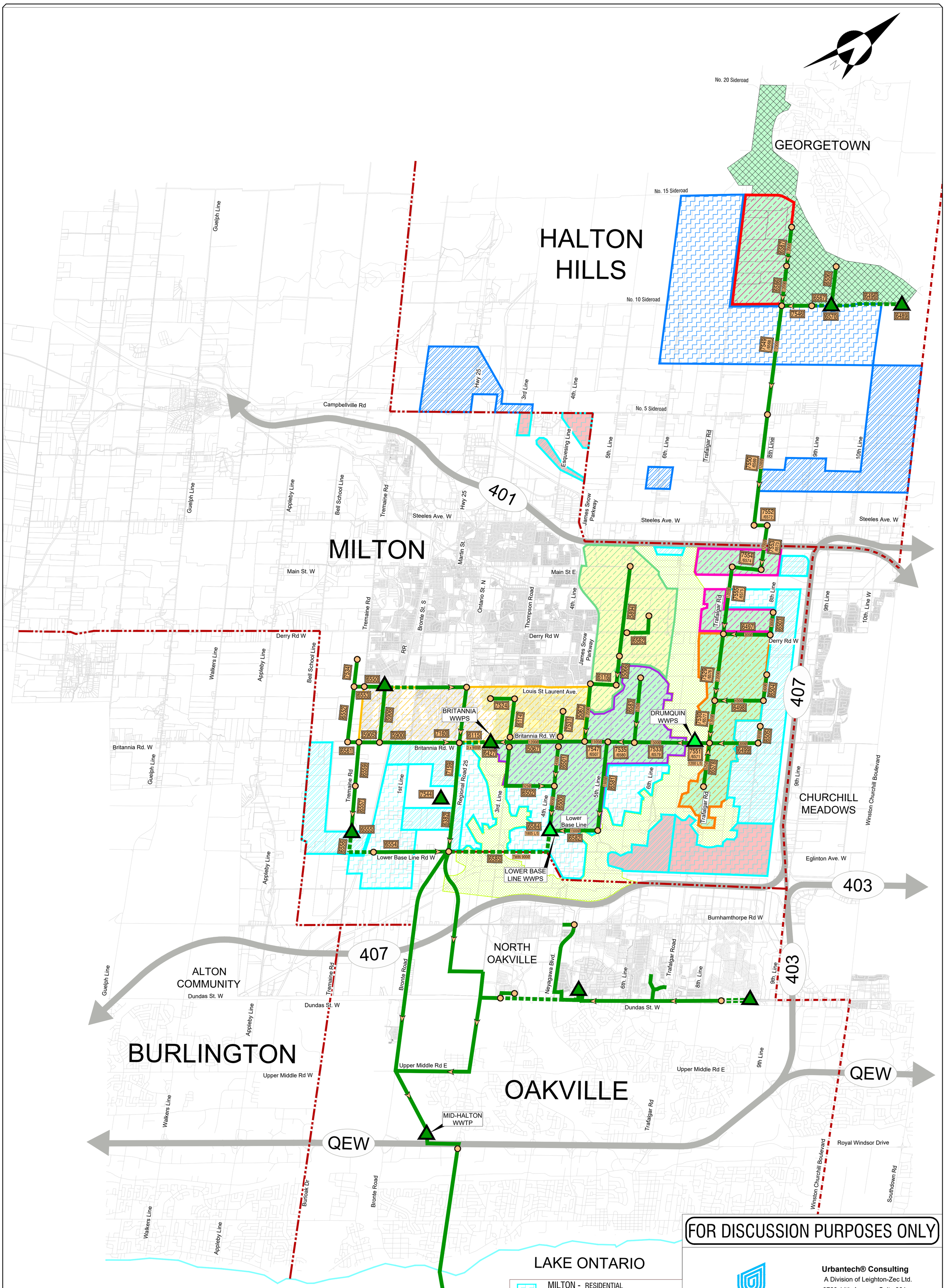
REGION OF HALTON - IGMS REVIEW

FIGURE 1
WATER SERVICING

SCALE: N.T.S.	DATE: JULY 2021	PROJECT No: 21-691

File: P:\Projects\21-691-Region of Halton IGMS Review (Mattamy-Halton)\Drawings\Preliminary Engineering & Figures\July 2021 - IGMS Review\Figure 1 - Water Servicing-IGMS Review.dwg - Revised by <MLYSYK> : Wed, Jun 30 2021 - 2:59pm



LEGEND:

- 6625 — REGIONAL PROJECT NUMBER
- 15000 — EXISTING AND/OR PLANNED 2031 WASTEWATER TRUNK SEWER
- EXISTING AND/OR PLANNED 2031 WASTEWATER FORCEMAIN
- EXISTING AND/OR PLANNED 2031 WASTEWATER PUMP STATION
- POTENTIAL UPGRADES TO EXISTING WASTEWATER PUMP STATION TO SUPPORT GROWTH TO 2051
- APPROVED DRAINAGE AREA TO THE EX. BRITANNIA WWPS (REGION I.D. 6427)
- APPROVED DRAINAGE AREA TO THE PROP. LOWER BASE LINE WWPS (REGION I.D. 6584)
- MUNICIPAL BOUNDARY
- HALTON / PEEL — REGIONAL BOUNDARY
- GREENBELT AREA
- GEORGETOWN PEEL-OFF LANDS
- VISION GEORGETOWN SECONDARY PLAN AREA
- AGERTON SECONDARY PLAN AREA
- TRAFALGAR SECONDARY PLAN AREA
- BRITANNIA WEST SECONDARY PLAN AREA
- BOYNE SECONDARY PLAN AREA
- DERRY GREEN BUSINESS PARK SECONDARY PLAN AREA
- MILTON - RESIDENTIAL (COUNCIL ADOPTED BALANCED GROWTH CONCEPT)
- MILTON - EMPLOYMENT (COUNCIL ADOPTED BALANCED GROWTH CONCEPT)
- MILTON - RESIDENTIAL (COUNCIL ADOPTED BALANCED GROWTH CONCEPT) *ADDITIONAL MASTER SERVICING REVIEW REQUIRED*
- MILTON - EMPLOYMENT (COUNCIL ADOPTED BALANCED GROWTH CONCEPT) *ADDITIONAL MASTER SERVICING REVIEW REQUIRED*
- GEORGETOWN - RESIDENTIAL EXPANSION (HALTON REGION IGMS CONCEPT #4)
- GEORGETOWN - EMPLOYMENT EXPANSION (HALTON REGION IGMS CONCEPT #4)

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REGION OF HALTON - IGMS REVIEW

FIGURE 2
WASTEWATER SERVICING

SCALE: N.T.S.	DATE: JULY 2021	PROJECT No: 21-691

File: P:\Projects\21-691-Region of Halton IGMS Review (Mattamy-Halton)\Drawings\Preliminary Engineering & Figures\July 2021 - IGMS Review\Figure 2 - Wastewater Servicing-IGMS Review.dwg - Revised by <MLYSYK> : Wed, Jun 30 2021 - 3:00pm

APPENDIX C

Estimated Required Change in PPU for Apartment Units to Achieve 2051 Forecasts, Halton IGMS

	Persons per Unit	Share of Ground-Related Units
Average Household Sizes (2017 DC Study)		*Percent*
Singles/Semis	3.577	67%
Rows	2.642	33%
Weighted Average PPU - Ground Related Units	**3.265**	
Apartments	**1.567**	

Decline in Existing Housing Unit Occupancy		
Units (2017)	205,293	*Based on Region 2017 DC Study estimates to 2031 - assumed no additional decline beyond 2031*
PPU Decline Rate (2017-2031)	(0.137)	
Total Decline in Population	(28,153)	

	Concept 1	Concept 2	Concept 3	Concept 4	Market Demand
Units by Type (2021-2051)			*Units*		
Ground-Related	78,300	67,300	55,800	89,100	133,980
Apartments	95,800	106,700	118,200	84,900	40,020
Total Units	174,100	174,000	174,000	174,000	174,000
Components of Population Change			*Persons*		
Net Population Growth Forecast (2021-2051)	479,000	479,000	479,000	479,000	479,000
Less: Estimated Household Population Decline in Existing	(28,153)	(28,153)	(28,153)	(28,153)	(28,153)
Gross Population in New Units (2021-2051)	507,153	507,153	507,153	507,153	507,153
Less: Estimated Ground-Related Population Growth	255,676	219,757	182,206	290,941	437,490
Equals: Apartment Population Growth	251,477	287,396	324,947	216,212	69,663
Apartment Units by Scenario	95,800	106,700	118,200	84,900	40,020
			Persons per Unit		
Average PPU - Apartments	2.63	2.69	2.75	2.55	1.74
Difference from 2017 DC Study Apartment PPU Assumptions	1.06	1.13	1.18	0.98	0.17
			Percent		
% Difference from 2017 DC Study Assumptions	68%	72%	75%	63%	11%

Source: Altus Group Economic Consulting based on Halton Region 2017 Development Charges Background Study, Halton IGMS Discussion Paper (February 2021)

APPENDIX D

June 30, 2021

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From: Daryl Keleher, Senior Director
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Subject: **Halton Region – Land Needs Assessment – "Concept 6"**
Our File: **P-6469**

In response to the five growth concepts provided thus far by Halton Region and their consultants, this memorandum presents an additional "sixth" growth concept based on a set of assumptions that matches both the policies set out in the Growth Plan, and the steps in the Province's Land Needs Assessment Methodology as close as possible. The land needs estimated in this memorandum represent the "Community Area Land" needs only – the estimated employment land needs to achieve 2051 employment forecasts are separate from the calculations presented here.

ESTIMATING COMMUNITY AREA LAND NEEDS

According to the Land Needs Assessment Methodology ("LNAM"), the following are the high-level steps required to be incorporated into assessing the needs for additional community lands within the Region and all single-tier and upper-tier municipalities in the Greater Golden Horseshoe:

1) **Forecast Population Growth Over Planning Horizon**
   - Based on forecasts contained in the Growth Plan, Schedule 3
2) **Forecast Housing Need by Dwelling Type**
   - Based on household formation rates and propensities to occupy particular dwelling types, population forecast is converted into a forecast of households by dwelling type
   - Number of households by dwelling type in the base year is subtracted, yielding forecasted household growth by dwelling type – this is the market-based housing demand forecast
   - Household growth by type is adjusted for any necessary factors such as:
     - Units added since base year;

- Replacement units that will be lost (demolitions, etc.);
- Changes in levels of vacancies;
- Market contingency factors, etc.

3) Allocate Housing Units by Growth Plan Policy Area

- As per policy 2.2.8.2 of the Growth Plan, assess need for settlement area boundary expansion based on minimum density and intensification targets from Growth Plan, as follows:
  - Halton Region's minimum designated greenfield area density target is 50 persons and jobs combined per hectare (policy 2.2.7.2a); and
  - Halton Region's minimum intensification target is 50% of all residential development occurring each year, within the delineated built-up area
- Assess whether policy-based housing forecast allows for the achievement of Region housing forecasts, and if not, estimate residual population growth requirements, and allocate additional housing need to BUA/DGA based on previous steps

4) Determine Housing Supply Potential

- Determine housing supply by policy area (built-up area, designated greenfield area, rural)

5) Determine Housing Unit Shortfall by Type

- Deduct housing supply by type from the forecasted housing need by type;

6) Establish Community Area Land Need

- Additional housing by type required beyond the existing supply is converted to a land requirement by applying appropriate densities that including population-related employment allocations;
- Conformity with intensification and designated greenfield area density targets is confirmed, or adjustments made to ensure conformity with the Growth Plan;
- Results in additional land to be designated for new community area through expansion of the settlement area.

LAND NEEDS ASSESSMENT TABLES

Step 1: Forecast Population Growth Over Planning Horizon

Based on population forecasts from Schedule 3 of the Growth Plan, also accounting for non-household population (1.36%) and Census undercount (4.25%).

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Figure 1

Step 1: Population Forecasts	Census Population	Non-Household Population	Household Population	Total Population (w/ Undercount)
2016 Population	548,435	7,459	540,976	571,743
2051 Forecast	1,053,250	14,324	1,038,926	1,100,000
Increase 2016-2051	504,815		497,950	528,257
Non-Household Population %	1.36%			
Census Undercount %	4.25%			

Step 2: Forecast Housing Need by Dwelling Type

The estimates of housing market demand, as stated in Halton IGMS report, are based on the Hemson August 2020 Technical Report submitted to the Ministry of Municipal Affairs as background to the Growth Plan Schedule 3 forecasts. These forecasts account for fertility, mortality, migration in determining the population forecasts, and in converting population forecasts to housing forecasts, accounts for the aging of the population and the net demand for housing by type based on the age profile of the population in 2051.

To achieve the growth of 497,950 persons to 2051, based on the weighted average PPU (2.821) that accounts for the housing mix (49.5% singles/semis, 25.6% rows, 24.9% apartments), the Region would need an additional 176,487 units to 2051. If the Region's housing forecast deviates significantly from the market-demand housing mix, additional housing units would be required to achieve 2051 population forecasts.

Figure 2

Step 2: Housing Need by Dwelling Type	Singles/Semis	Rows	Apartments	Total
2016 Census	123,015	33,815	36,150	192,980
2051 Forecast (Hemson Technical Report)	219,300	83,700	84,600	387,600
Growth 2016-2051	96,285	49,885	48,450	194,620
% Growth 2016-2051	49.5%	25.6%	24.9%	100.0%
Persons per Unit	3.520	2.676	1.583	2.821
Household Population	497,950	persons		
Average PPU - Market Demand	2.82	persons per unit		
Housing Units Required for Household Population Growth	176,487	units		

Currently, the Region is assuming that the total number of housing units required to achieve 2051 forecasts would be the same (174,000 units from 2021-2051) regardless of unit mix, meaning that the Region is assuming variable PPU factors by scenario, which if the ground-related PPUs are fixed, would mean the apartment PPUs in the Regional scenarios would need to vary between 2.50 and 2.75 to make the Region's more apartment-heavy unit mixes able to achieve the full 2051 population.

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Otherwise, by keeping the number of housing units fixed regardless of unit mix, the Region would be implicitly planning for significantly less population than forecasts for the Region to 2051.

Step 3: Allocate Housing Units by Growth Plan Policy Area

The requirements of the Growth Plan to plan to for 50% of units within the built-up area limits the ability of Halton Region to fully achieve the market-based housing forecast. However, the unit allocation within the BUA and the DGA should be optimized to both adhere as closely as possible to the market demand forecast. The allocation of units and the unit mix in the table below are based on the estimated demand from the Land Needs Analysis undertaken by the Town of Milton.[1] The overall unit mix using these projections would include 29.5% apartment units, compared to 24.9% apartment units in the estimated Hemson market demand by unit type.

Figure 3

Step 3: Allocate Housing Units by Growth Plan Policy Area

		Singles/Semis	Rows	Apartments	Total
	Housing Units Required for Household Population Growth	87,314	45,237	43,936	176,487
	Built-Up Area - Housing Units	5.0%	40.0%	55.0%	100.0%
	Designated Greenfield Area - Housing Units	64.0%	32.0%	4.0%	100.0%
	Rural	100.0%	0.0%	0.0%	100.0%
50.0%	Built-Up Area - Housing Units	4,412	35,297	48,534	88,243
49.5%	Designated Greenfield Area - Housing Units	56,476	28,238	3,530	87,361
0.5%	Rural	882	-	-	882
	Total	61,770	63,535	52,064	176,487

Step 4: Determine Housing Supply Potential

The IGMS provides housing supply within the Region's DGA as of mid-2016, as estimated by MGP in their analysis undertaken for the Town of Milton.

Figure 4

Step 4: Housing Supply Potential

	Singles/Semis	Rows	Apartments	Total
DGA Housing Unit Potential	30,455	32,141	20,168	82,764

[1] Appendix A to Town of Milton Staff Report DS-055-21.

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Step 5: Determine Housing Unit Shortfall by Type

The net unit growth in the DGA (from Step 4) is compared with the estimated housing unit potential already available within the DGA, resulting in an estimated shortfall for ground-related housing types in the DGA of 26,021 singles/semis.

Figure 5

Step 5: Determining Housing Unit Shortfall by Type

	Singles/Semis	Rows	Apartments	Total
DGA Housing Unit Potential	30,455	32,141	20,168	82,764
DGA Housing Demand	56,476	28,238	3,530	87,361
Shortfall by Unit Type	26,021	n.a.	n.a.	

Step 6: Establish Community Area Land Need

The shortfall in ground-related units is converted to an estimated net community land needs by using density factors for each unit type. It is estimated that the **net** community land needs will be 1,041 hectares, which is where the new housing units will be built.

After converting the net hectares into gross hectares (using a factor of 50% to account for non-developable lands such as parks, stormwater management facilities, transportation corridors, schools, etc.), and separately accounting for the 290 hectares of Natural Heritage System (NHS) lands, and applying a market contingency factor of 5%, the need for additional community lands in Halton Region is 2,476 hectares, or 2,186 hectares excluding the NHS lands.

Figure 6

Step 6: Establish Community Area Land Need

	Singles/Semis	Rows	Apartments	Total
DGA Unit Shortfall by Unit Type	26,021	n.a.	n.a.	
Density Factors (units per net hectare)	25.0	60.0		
Land Need for Residential Development	1,041	n.a.	n.a.	1,041
Net / Gross Factor				50%
Gross Community Area Land Needs				2,082
Adjustment: Market Contingency	5%			104
Adjusted Gross Community Area Land Needs (w/ contingency)				2,186
Add: NHS Lands				290
Total Community Area Land Need				2,476

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Step 6A: Community Jobs and Confirm Density Targets Achieved

After incorporating population-related employment at a rate of 11 residents per job (an assumption also used in the IGMS), the population and jobs generated by the units in the additional community lands equate to a density of 50 persons & jobs per gross hectare. The shortfall by unit type driving the estimated need for additional community land does not necessarily indicate the density at which the lands will be developed, rather it is ensuring that sufficient land is available in the community to meet future housing needs and mitigate future land and/or housing supply shortages.

Figure 7

Step 6A: Confirm Minimum Density Targets Achieved

	Singles/Semis	Rows	Apartments	Total
New DGA Units	26,021	n.a.	n.a.	26,021
Persons per Unit	3.520	2.676	1.583	
Population in New DGA Units (persons)	91,593	n.a.	n.a.	91,593
Population in New DGA Units w/ Undercount (persons)				95,486
Population-Related Employment (jobs)		11 residents per job		8,327
Population & Jobs in New DGA (persons & jobs)				103,812
Gross Land Area (ha) (excl. market contingency lands)				2,082
Density - New DGA (p&j per ha.)				50

COMPARISON OF COMMUNITY AREA LAND NEEDS BY SCENARIO

The Halton IGMS presents four growth concepts, where the community land needs required range from none (Concept 3) to 2,080 hectares (Concept 4). The Region has also more recently considered Growth Concept 5 (also known as Concept 3B) which would also see no new community lands added to the Region's urban boundary.

The results of the LNA presented within this report results in 2,186 hectares added to the Region's urban boundary, higher than the Region's five scenarios, but similar to that of Concept 4. The Town of Milton's LNA analysis as attached to Town Staff Report DS-055-21 resulted in an estimated need of 2,220 hectares.

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Figure 8 **New Community Land Area by Growth Concept, Halton Region**

	Community Area Land Needs (gross)
Growth Concept 1	1,460
Growth Concept 2	730
Growth Concept 3	-
Growth Concept 4	2,080
Growth Concept 5 (aka Concept 3B)	-
Growth Concept 6 (excl. NHS)	2,186
Town of Milton LNA Analysis	2,220

Source: Altus Group Economic Consulting, Halton IGMS

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