CITY OF HAMILTON GRIDS 2/MCR – PLANNING FOR GROWTH TO 2051:

DRAFT EVALUATION FRAMEWORK AND PHASING CRITERIA (WHITEBELT LANDS)

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MCR GRIDS2
Moving Forward Together

URBAN BOUNDARY EXPANSION
WHITEBELT LANDS

Where it has been determined that planned growth cannot be accommodated within the existing urban area, then an urban boundary expansion may be considered. An urban boundary expansion means that whitebelt lands may be added to the urban area, if appropriate and feasible. **Figure 1** shows community area and employment area whitebelt lands.

Urban boundary expansions require justification to satisfy a number of Provincial and local policy tests. The land needs assessment for GRIDS 2 provides the overall justification for additional greenfield lands from a land needs perspective and as a next step there is a requirement to assess the feasibility of potential Candidate Expansion Areas to determine which lands are suitable for new urban designation. The Province and the City outline very specific feasibility criteria to be assessed for an urban boundary expansion.

Specifically, Policy 2.2.8.3 of the Growth Plan outlines the policy tests for assessing the feasibility of lands for urban boundary expansion. The City's Urban Hamilton Official Plan and the GRIDS 10 Directions to Guide Development complement and support the policies outlined in 2.2.8.3 of the Growth Plan.

The overall approach for assessing Candidate Expansion Areas is a two-step process:

1. Evaluation to determine which whitebelt lands are feasible for expansion based on provincial and local criteria; and,
2. Phasing analysis, including more detailed technical analysis and modelling to determine which areas are most suitable for expansion and the associated timing for development.
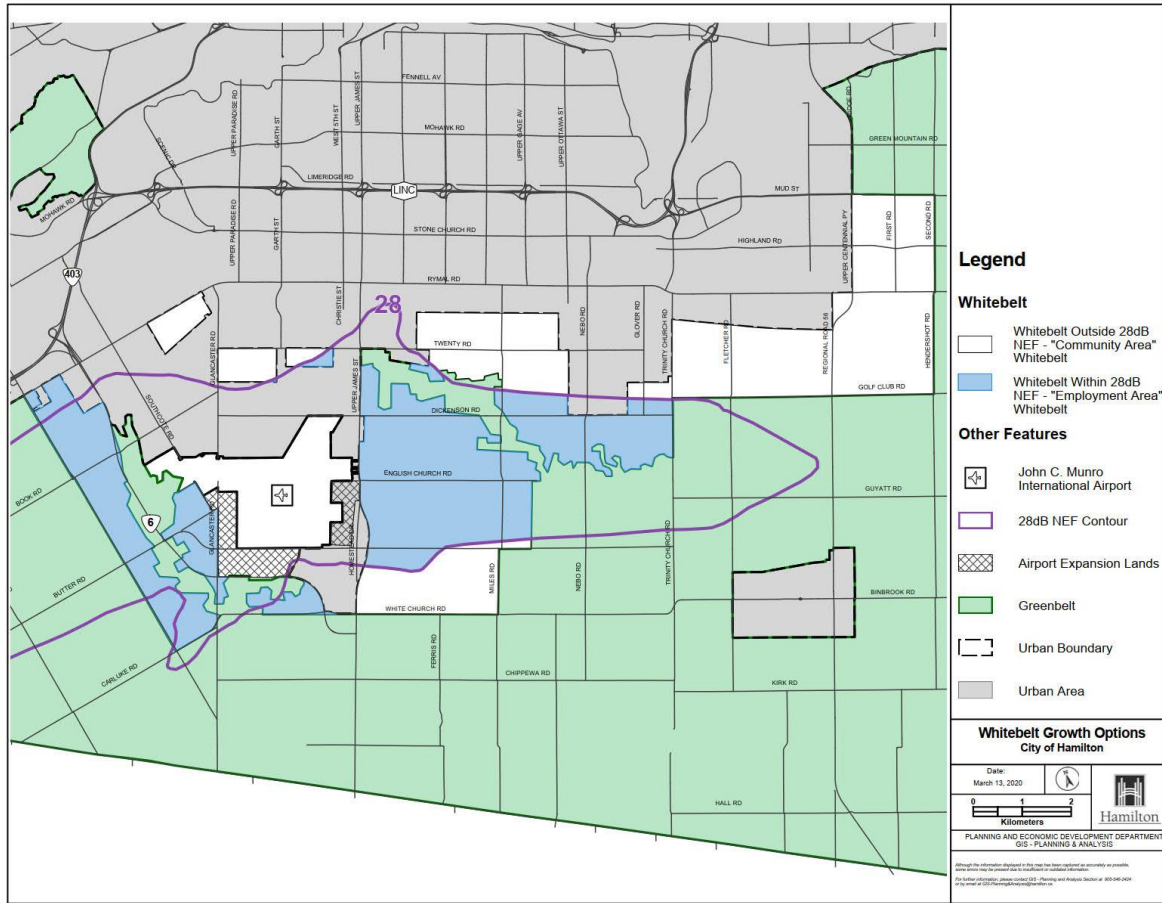
FIGURE 1: WHITEBELT LANDS IN HAMILTON

PART 1: EVALUATION APPROACH FOR WHITEBELT LANDS

This first part of the document presents the approach to step 1, the evaluation of whitebelt lands. The evaluation criteria outlined in this document will be used to assess the four Candidate Expansion Areas in Hamilton's whitebelt area. For ease of understanding, the urban boundary expansion evaluation criteria are organized around nine major themes (following page). While the themes have been identified as distinct items for simplicity, it is important to note that they are complementary and sometimes overlap. For example, prioritizing public transit as part of the consideration of the transportation system also supports climate change mitigation.

Evaluation Criteria Themes

1. Climate Change

2. Municipal Finance

3. Servicing Infrastructure

4. Transportation Systems

5. Natural Heritage and Water Resources

6. Complete Communities

7. Agricultural System

8. Natural Resources

9. Cultural Heritage

Each of the evaluation criteria themes includes multiple key considerations. The key considerations are connected to the policy tests outlined in the Growth Plan, Urban Hamilton Official Plan and the GRIDS-2 10 Directions to Guide Development. To assess each consideration, the analysis will draw upon a number of information sources to test the feasibility of each Candidate Expansion Area. The evaluation results will be documented in a detailed Technical Appendix, showing the line-by-line findings for each theme and the associated considerations. A theme-level summary will also be provided to help communicate how well each Candidate Expansion Area addresses the key considerations. Based on the balance of considerations, each Candidate Area will receive a theme-level assessment according to the following categories:
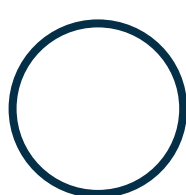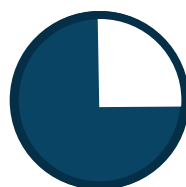
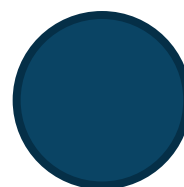| Addresses none of the considerations	Addresses few of the considerations	Address some of the considerations	Address most of the considerations	Fully addresses all considerations

The overall recommendation as to whether a given Candidate Expansion Area is feasible for expansion will be based on the comprehensive application of all of the criteria and the most appropriate areas will advance to a more detailed Phasing Analysis in Part 2. A Candidate Area may not be carried forward to the detailed phasing analysis in an instance where the evaluation shows that the area addresses none or very few of the considerations.

It is also important to note that from a policy alignment perspective, there are foundational considerations which must be addressed in a fulsome manner in order for a growth option to proceed to the next steps, including a phasing analysis. For example, Growth Plan Policy 2.2.8.3(a) states that there is to be "sufficient capacity in existing or planned infrastructure and public service facilities" to accommodate the expansion which includes (but is not limited to) consideration of sewage and water systems, transit and transportation corridors and facilities, police and fire protection, and health and educational programs. Similarly, Growth Plan Policy 2.2.8.3(b) requires that the "infrastructure and public service facilities needed would be financially viable over the full life cycle of these assets". These considerations differ from others, such as agriculture, where the Provincial direction is to avoid prime agricultural lands where possible and to minimize and mitigate the impact on the agricultural system where prime agricultural lands cannot be avoided. Accordingly, based on the interpretation of Provincial Growth Plan policies, if any one of the Candidate Areas addresses none of the considerations for Infrastructure Services, Transportation Systems or Municipal Finance, then the Candidate Area would likely not be feasible for expansion.

Climate Change

Climate change has the potential to have a range of impacts on the City including on infrastructure, the natural environment, and on existing and future residents and their communities. This demands consideration of climate change in the context of long range planning, recognizing both the risks and opportunities for climate change mitigation and climate change adaptation.

What are the key considerations?

How will we measure this?

What are the key considerations?	How will we measure this?
Reduced GHGs and Sustainable Transportation • Does the Candidate Expansion Area have the ability to promote a community form that reduces reliance on private automobiles helping to reduce transportation GHG's?	• Level of connectivity of Candidate Expansion Area to existing or planned transit and active transportation network
District Energy • Does the Candidate Expansion Area provide an opportunity for district energy?	• Input from City staff and electrical distribution providers

What are the key considerations?	How will we measure this?
Infrastructure Resiliency • Is there sufficient capacity in existing stormwater management systems to manage potential changes in weather patterns and increased climate variability? • Does the proposed stormwater management provide resilience and consider climate change adaptability? • Does the proposed stormwater management consider Low Impact Development Best Management Practices	• Capacity in existing stormwater management system based on population and employment forecast • Input from City staff
Prioritizing Tree Canopy Protection/Enhancement • Does the Candidate Expansion Area support the maintenance and enhancement of the existing tree canopy?	• Assessment of existing tree canopy and potential for maintenance and enhancement should a boundary expansion occur • Based on input from City with reference to available mapping and data.
Avoid Natural Hazardous Lands • Does the Candidate Expansion Area contain any natural hazards?	• Assessment of identified hazardous lands including but not limited to flood plains and other CA regulated areas • Based on input from City and Conservation Authority staff with reference to available mapping and data

Municipal Finance

Municipal Finance involves managing existing and future financial impacts on the City, to ensure that the costs associated with growth are financially viable over the long term.

What are the key considerations?

How will we measure this?

What are the key considerations?	How will we measure this?
• Does the Candidate Expansion Area have an unreasonable or unanticipated financial impact on the City?	• High level assessment of potential financial impacts for Candidate Expansion Areas • Based on input from City staff with reference to the Financial Impact Assessment
• Would the municipal infrastructure (water, wastewater and transportation) and public service facilities needed be financially viable over the full life cycle of the assets?	• Relative assessment of new infrastructure costs

Servicing Infrastructure

Servicing Infrastructure includes the physical structures that form the foundation for development and generally include water and wastewater systems, stormwater management systems and waste management systems. Transportation systems are addressed in the following section.

What are the key considerations?

Water Infrastructure

- Is there sufficient capacity in existing or planned water distribution and treatment systems?
- Does the Candidate Expansion Area maximize existing capacity within the available water distribution systems?

How will we measure this?

- High level assessment of new infrastructure requirements
- Assessment of capacity in existing and planned water/wastewater systems

What are the key considerations?	How will we measure this?
• Are significant extensions / expansions beyond planned/budgeted trunk infrastructure required in order to service this area?	• Based on input from City staff and with reference to Water/Wastewater Master Plan
Wastewater Infrastructure • Is there sufficient capacity in existing or planned wastewater distribution, collection and treatment systems? • Does this option maximize existing capacity within the available wastewater collection systems? • Are significant extensions / expansions beyond planned/budgeted trunk infrastructure required in order to service this area?	• High level assessment of new infrastructure requirements • Assessment of capacity in existing and planned water/wastewater systems • Based on input from City staff and with reference to Water/Wastewater Master Plan
Stormwater Management • Is there sufficient capacity in existing or planned stormwater management systems based on current stormwater management criteria?	• Assessment of capacity in existing and planned stormwater management systems • Assessment of new infrastructure requirements and costs • Based on input from City staff and with reference to existing master plans and related documents.
Integrated Waste Management Planning • Is there sufficient capacity in existing waste management facilities? • Is there sufficient capacity in planned waste management facilities?	• Assessment of capacity in existing and planned waste management facilities • Based on input from City waste management staff and with reference to the Solid Waste Management Master Plan

Transportation System

Transportation Systems support the movement of residents and goods within the city as well as establishing a connection to the wider regional transportation network. Transportation Systems are comprised of facilities, corridors and rights-of-way and include roads, transit stops and stations, sidewalks, cycle lanes, bus lanes, HOV lanes, rail facilities, park and ride lots and a host of other transportation facilities.

What are the key considerations?

Prioritizing Public Transit

- Does the Candidate Expansion Area contain an existing City transit route or stops?
- Is the Candidate Expansion Area adjacent to an existing City transit route or stops?

How will we measure this?

- Assessment of the location of existing HSR transit routes/stops and planned or funded transit (BLAST) within 800 metres of Candidate Expansion Areas
- Based on reference to applicable UHOP, RHOP, and master plan mapping.

What are the key considerations?	How will we measure this?
• Can the Candidate Expansion Area be connected to a planned City transit route or stop in a way that is financially viable?	• Based on reference to the Financial Impact Assessment
Comprehensive Active Transportation Network • Does the Candidate Expansion Area contain an existing or planned pedestrian or cycling networks? • Can the Candidate Expansion Area be connected to existing or planned pedestrian or cycling networks?	• Proximity to existing or planned pedestrian or cycling network • Based on reference to applicable UHOP, RHOP, and master plan mapping.
Connected Street Network • Is there sufficient reserve capacity in the existing street network (with consideration to the proposed street network) to accommodate the proposed increase in population and/or employment? • Is the proposed or potential street network within the Candidate Expansion Area a logical extension of the existing street network? Does it connect the Candidate Expansion Area to surrounding areas and key destinations?	• Assessment of potential street connectivity and block size • Based on input from City staff and with reference to the existing street network and applicable UHOP, RHOP, and master plan mapping.

Natural Heritage and Water Resources

A Natural Heritage System includes natural heritage features and areas, such as wetlands, woodlands, and wildlife habitat and the linkages that provide connectivity to support various natural processes. Water Resources are a system of features, such as groundwater features and surface water features, as well hydrologic functions which sustain healthy aquatic and terrestrial ecosystems and human water consumption.

What are the key considerations?

Protect Water Resource System

- Does the Candidate Expansion Area demonstrate an avoidance and/or mitigation of potential negative impacts on watershed

How will we measure this?

- Assessment of indicators of hydrologic function
- Based on input from City and Conservation Authority staff

What are the key considerations?	How will we measure this?
conditions and the water resource system including quality and quantity of water?	
Avoid Key Hydrological Areas • Does the Candidate Expansion Area avoid key hydrologic areas including significant ground water recharge areas, vulnerable aquifers, surface water contribution areas, and intake protection zones?	• Assessment of Impacts to key hydrological areas • Based on input from City and Conservation Authority staff with reference to available mapping and data
Connected and Protected Natural Heritage System • Does the Candidate Expansion Area avoid and protect Natural Heritage Systems as identified by the City and the Growth Plan?	• Assessment of the location of Natural Heritage System • Based on input from City and Conservation Authority staff with reference to available mapping and data
Mitigate Impact on Natural Heritage • Does the Candidate Expansion Area maintain, restore, or improve the functions and features of the area including diversity and connectivity of natural features, the long-term ecological function and biodiversity of natural heritage systems?	• Assessment of existing natural heritage features such as significant woodlots, wetlands, and species at risk wildlife habitat. • Based on input from City and Conservation Authority staff with reference to available mapping and data

Complete Communities

Complete Communities are places within a community that offer and support opportunities for people of all ages and abilities to conveniently access most of the necessities of daily living, including an appropriate mix of jobs, local stores, services, a full range of housing, transportation options and public service facilities.

What are the key considerations?

How will we measure this?

Complete Community

- Can the Candidate Expansion Area function as a complete community including an appropriate mix of jobs, stores, services, housing, transportation options, and public service facilities for all ages and abilities?

  - Assessment of the Candidate Expansion Area's ability to be designed as a complete community

Proximity to Existing Community Services and Amenities

- Based on identified gaps in specific geographies, does the Candidate Expansion Area contribute to the surrounding community's completeness?
- Is the Candidate Expansion Area contiguous to the existing settlement area boundary?

  - Consideration of ability to contribute to walkability and access to transit, amenities and park space of adjacent built up area
  - Assessment of proximity of Candidate Expansion Area to existing settlement area and any development constraints

Diverse Range of Housing and Affordable Housing

- Can the Candidate Expansion Area provide a diverse range and mix of housing options including affordable housing?

  - Assessment of Candidate Expansion Area's ability to physically accommodate a mix of housing options and affordable housing

- Does the Candidate Expansion Area have access to existing community facilities? Are there any gaps in the types of facilities currently available?

  - Assessment of proximity to existing parks, public facilities
  - Potential need for additional community facilities based on relative size of the expansion area

- Does the Candidate Expansion Area have access to planned community facilities?

  - Input from City staff

Agricultural System

The agricultural system is the land base used for the purposes of growing food and the raising of livestock, providing a source of food and employment to a community, as well as the agri-food network. The agricultural land base includes prime agricultural areas and specialty crop lands and the agri-food network refers to the elements that support the viability of sector, such as farm buildings, farm markets, distributors, processing facilities and transportation networks.

What are the key considerations?

How will we measure this?

Avoid Prime Agricultural Land / Mitigate Impact on Agricultural System

- Does the Candidate Expansion Area avoid prime agricultural areas?
- Does the Candidate Expansion Area provide an opportunity to mitigate or minimize impacts on the Agricultural System?

- Assessment of prime agricultural areas and soil classes
- Based on input from City staff with reference to an Agricultural Impact Assessment and available mapping and data

Minimize Agri-food Network, Agricultural Operations, and Agricultural Systems Impacts

- Does the Candidate Expansion Area avoid or minimized and mitigate any adverse impacts on the agri-food network, including agricultural operations?

- Assessment of agricultural operations within and in proximity to the Candidate Expansion Area
- Based on input from City staff with reference to the Agricultural Impact Assessment and OMAFRA's guideline.

Minimize Impact on Existing Agricultural Assets

- Does the Candidate Expansion Area contain existing agricultural operational assets such as barns or processing facilities?

- Qualitative assessment of location of existing agricultural assets
- Based on information provided by the City and available through OMAFRA

Compatibility with Existing Livestock Operations

- Is the Candidate Expansion Area in compliance with the minimum distance separation formulae?

- Assessment of the distance between the Candidate Expansion Area and existing agricultural operations
- Based on the Minimum Distance Separation (MDS) Formula with reference to OMAFRA's guideline

Natural Resources

Natural resources are to be managed wisely and include mineral aggregate and petroleum resources.

What are the key considerations?

Aggregate Resources and Petroleum Resources

- Does the Candidate Expansion Area include any known mineral aggregate resource areas or petroleum resources?

- Are there any active mineral aggregate operations within or adjacent to the Candidate Expansion Area?

- Does the Candidate Expansion Area contain any active or abandoned gas and petroleum wells?

How will we measure this?

- Assessment of aggregate resource areas and petroleum resource areas
- Assessment of active mineral aggregate operations
- Assessment of active or abandoned gas and petroleum wells

Cultural Heritage

Cultural heritage resources and archaeological resources that have been determined to have cultural heritage value or interest are to be conserved in order to foster a sense of place and benefit communities.

What are the key considerations?

How will we measure this?

Cultural Heritage Resources

- Does the Candidate Expansion Area contain significant cultural heritage resources including designated heritage properties and can they be conserved?

- Assessment of existing cultural heritage resources
- Consideration of Policy Framework
- Based on input from City staff with reference to RHOP and UHOP mapping.

Archeological Resources

- Does the Candidate Expansion Area contain significant archaeological resources and can they be conserved?

- Assessment of potential archaeological resources
- Consideration of Policy Framework
- Based on input from City staff with reference to RHOP and UHOP mapping.

PART 2: PHASING CRITERIA, WHITEBELT LANDS

Phasing is about timing of development and determining the appropriate order of development over time. While the Province does not outline specific phasing criteria, both the Growth Plan and the Provincial Policy Statement provide policy direction on efficient development patterns and use of infrastructure in addition to requiring integrated planning to implement the Growth Plan. It is anticipated that the City will require all or a portion of its whitebelt lands to accommodate forecast community growth to 2051. Not all of the lands will be required for development immediately. The use of phasing criteria will allow the City to identify the timing of development for new greenfield areas. It is anticipated that a portion of the expansion lands will be required for development prior to 2031, additional lands between 2031 and 2041, and the remaining lands between 2041 and 2051.

Once the candidate area urban boundary expansion feasibility assessment is complete, all feasible expansion areas will be subject to a phasing analysis based on the criteria outlined in the following pages. To assist with the analysis, the City will identify a variety of alternative phasing scenarios. Each scenario will be tested and ranked based on a scale ranging from Most Preferred to Least Preferred. Detailed technical analysis of future population and employment is required to understand the implications for each scenario.

THEME	PHASING CRITERIA	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4
Climate Change	Does the phasing scenario present any significant opportunities associated with climate change?				
	Does the phasing scenario present any significant risks associated with climate change?				
Municipal Finance	What are the cost estimates associated with the phasing scenario?				
	Are there any significant municipal financial risks associated with the scenario?				
	What is the impact on municipal debt load/capacity?				
Servicing Infrastructure	Does the phasing scenario allow for efficient servicing based on existing or planned water infrastructure?				
	Does the phasing scenario allow for efficient servicing based on existing or planned wastewater infrastructure?				

THEME	PHASING CRITERIA	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4
Transportation System	Does the phasing scenario allow for efficient stormwater management based on existing or planned stormwater master plans/Subwatershed studies?				
	Are there options which optimize the timing and delivery of servicing infrastructure to reduce the City's financial exposure?				
	Does the phasing scenario prioritize development of areas that would be connected to the planned BLAST network or existing transit?				
	Does the phasing scenario align well with existing and planned road network and existing and planned active transportation network?				
	What are the impacts of the phasing scenario on the capacity of the road network?				
	Are there options which optimize the timing and delivery of transportation infrastructure to reduce the City's financial exposure?				

THEME	PHASING CRITERIA	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4
Complete Communities	Does the phasing scenario support the creation of a complete community?				
Agricultural System	Does the phasing scenario prioritize development of areas that are non-prime agricultural?				
	Does the phasing scenario prioritize development of areas that have fewer existing agricultural operations or active livestock operations?				
	Does the phasing scenario minimize land fragmentation?				