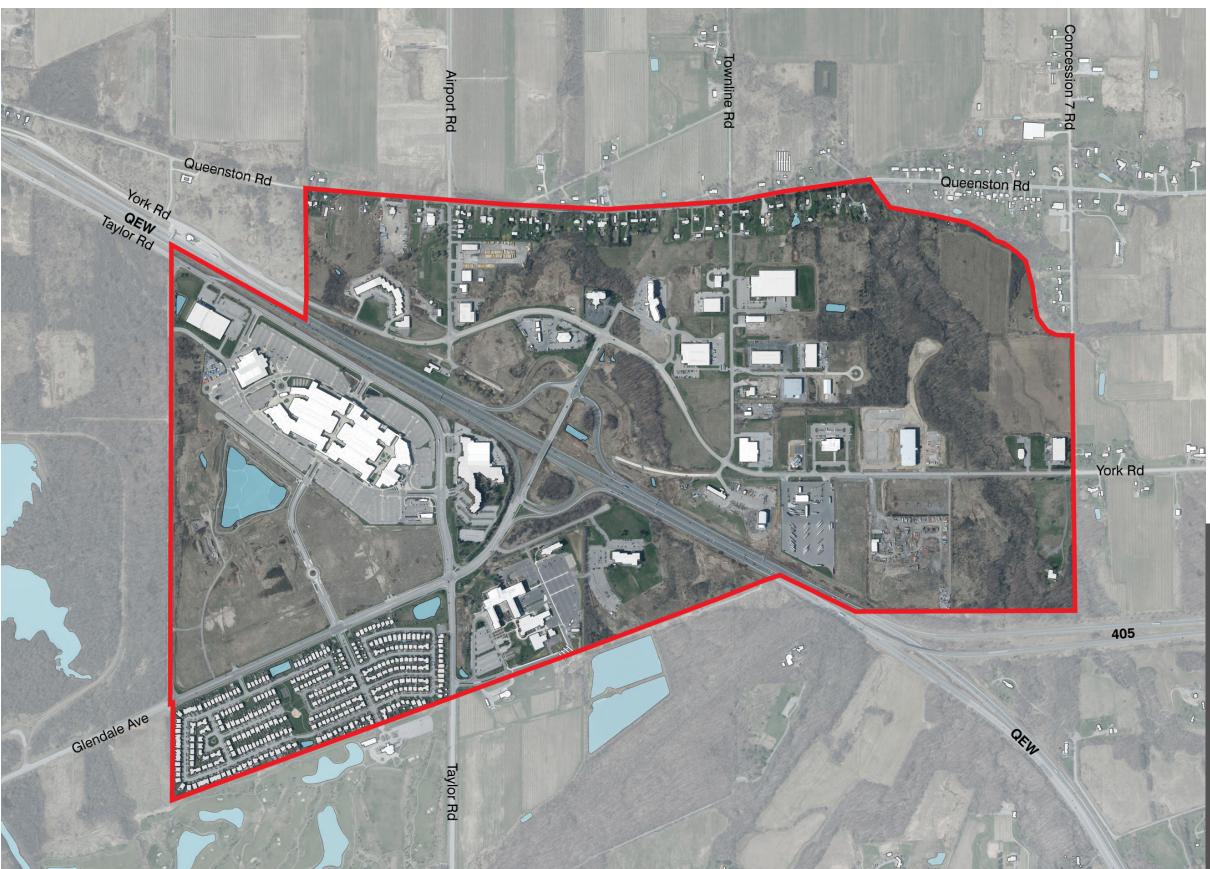
Glendale Secondary Plan Update





Public Information Session June 21, 2023

June, 2023

The Planning II22 Partnership

urbanMetrics GM Blue Plan LEA HDR NRSI Matrix

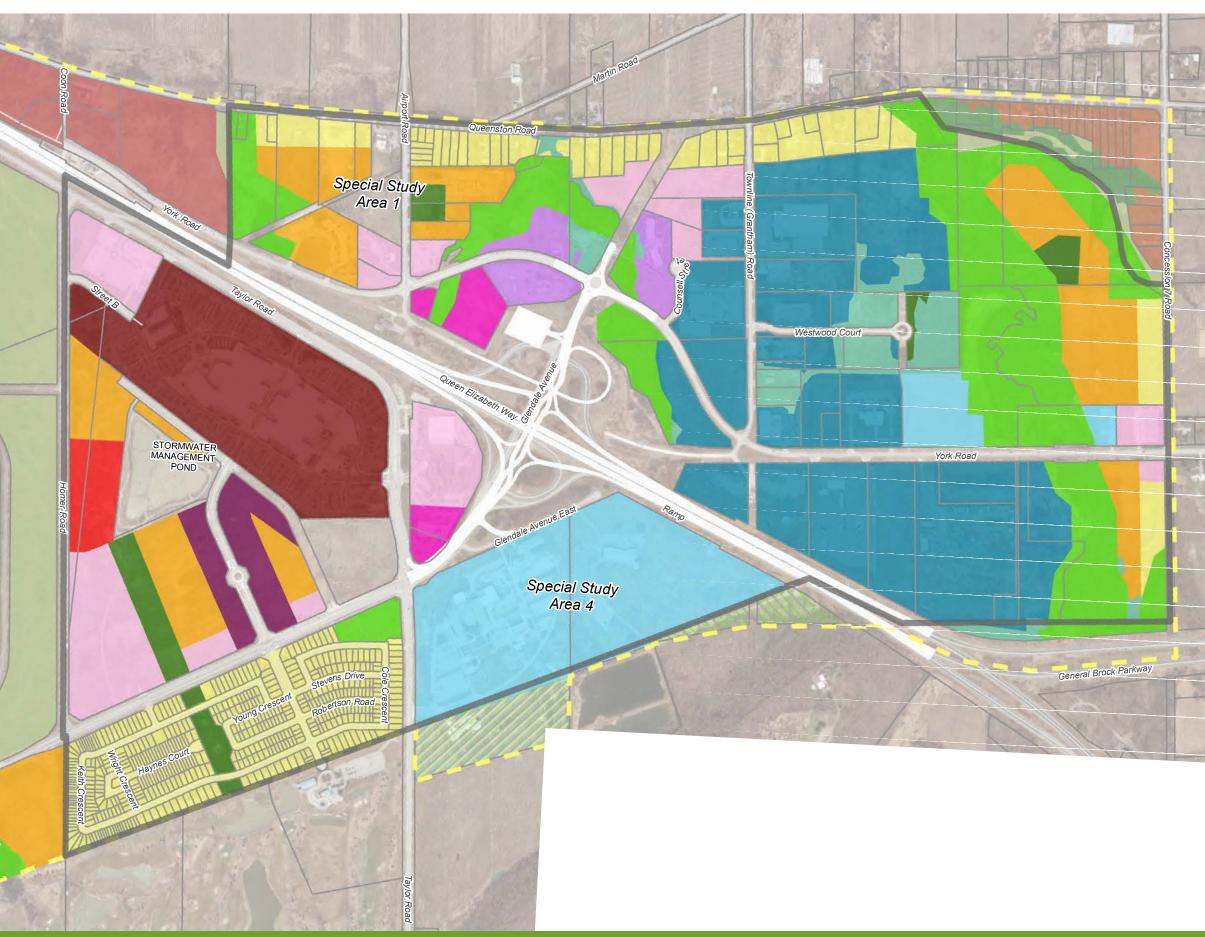
Purpose of Today's Meeting

Phase 2 of our work program - Confirming the Land Use Concept

- Key influences on the Emerging Land Use Concept
- The Emerging Land Use Concept
- Employment and Commercial Land
- Natural Heritage and Subwatershed
- Transportation
- Servicing

2

Glendale Niagara District Plan Land Use Concept



Glendale Secondary Plan Update

GLENDALE NIAGARA DISTRICT PLAN URBAN AREA BOUNDARY LOW DENSITY RESIDENTIAL MEDIUM DENSITY RESIDENTIAL HIGH DENSITY RESIDENTIAL NON-FARM RURAL MIXED USE MEDIUM DENSITY MIXED USE HIGH DENSITY MAIN STREET MIXED USE COMMERCIAL SERVICE COMMERCIAL EMPLOYMENT INSTITUTIONAL HOSPITALITY REGIONAL ENVIRONMENTAL CONSERVATION AREA REGIONAL ENVIRONMENTAL PROTECTION AREA ENVIRONMENTAL PROTECTION AREA CONSERVATION PARKS ESCARPMENT NATURAL AREA ESCARPMENT PROTECTION AREA

Key Influences on the Emerging Preferred Land Use Concept

Transit hub

- Bus terminal, with potential for additional expansion and facilities over time.
- Envisioned as co-located with community facilities.
- Possibility of a transit hub incorporated into mixed use development in the longer term.
- Policy framework will guide the establishment of a larger hub in the short vs. long term.
- Future planning for the transit hub will have to be coordinated with Niagara Region Transit, Metrolinx, car share services etc.

School Boards

- Assuming one elementary school for the Niagara Catholic and one for the District School Board of Niagara.
- Some interest in co-locating schools.
- Policies will provide direction for an "urban school model" on urban sized sites.
- Both school boards prefer to work with current requirements for schools (8+ acres).
- The Conseil Scolaire Viamonde (French Public School Board) may be interested in locating a high school in Glendale District. Further discussions are required.

Airport

- 2023.

Landowners

• Federal airport zoning regulations restrict building heights in proximity to the Niagara District Airport.

• The Region is undertaking a review of Transport Canada's regulations and the potential influence on development.

 Proposed building heights will be dependent in part on the outcome of the review. Results will be available in August

 Committed to collaborating with landowners throughout

Market Assessment

Glendale Secondary Plan Update

5

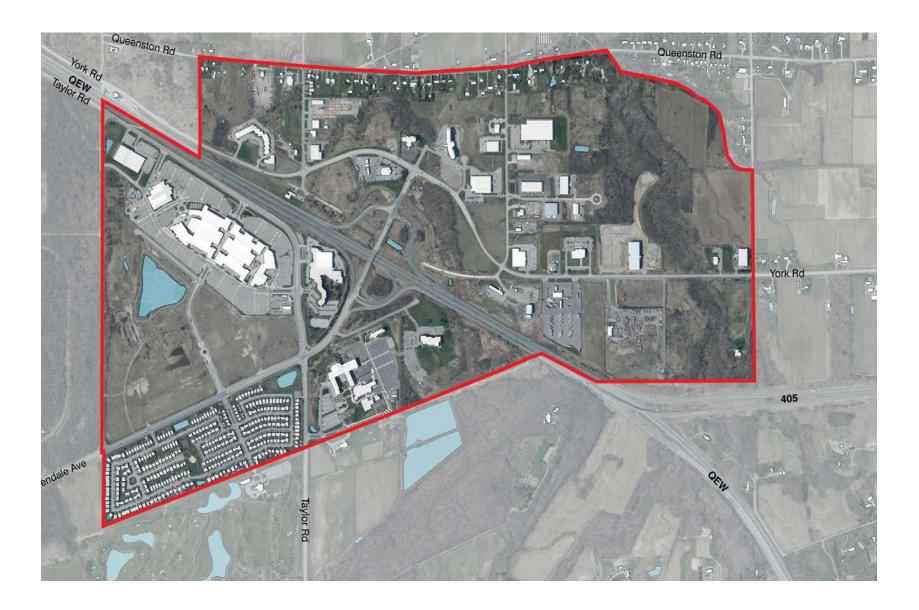
Residential Market

- 465 single family homes in the Niagara-onthe-Green Subdivision south of the Outlet Collection at Niagara
- 40 predominantly large lot homes along Queenston Road.

Very Strong Future Growth Potential

- High Levels of International Migration to Ontario
- St. Catharines Approaching Greenfield Build-out
- Excellent Highway Accessibility
- Future Expansion of GO Service into Niagara
- Housing Shortage Across GTA
- Tele-commuting Opportunities
- Proximity to the United States

- Since 1990, annual housing construction starts in NOTL have been growing, but few apartments have been constructed
- Since 2002 overall housing construction starts in St. Catharines have been growing even though ground related housing has been declining, half of all construction starts were apartments



Retail Market

- The Outlet Collection at Niagara is a major tourist draw, reporting annual visitation of approximately 5 million.
- However, there are virtually no retail outlets in Glendale to serve the local population.
- The current population must leave the Glendale Area for almost all of its daily and weekly shopping.
- Depending on the build-out population in Glendale, there will be a need for 1 to 2 grocery/food stores and about 250,000 to 350,000 square feet of daily and weekly serving retail space
- New retail space should be developed close to residential growth

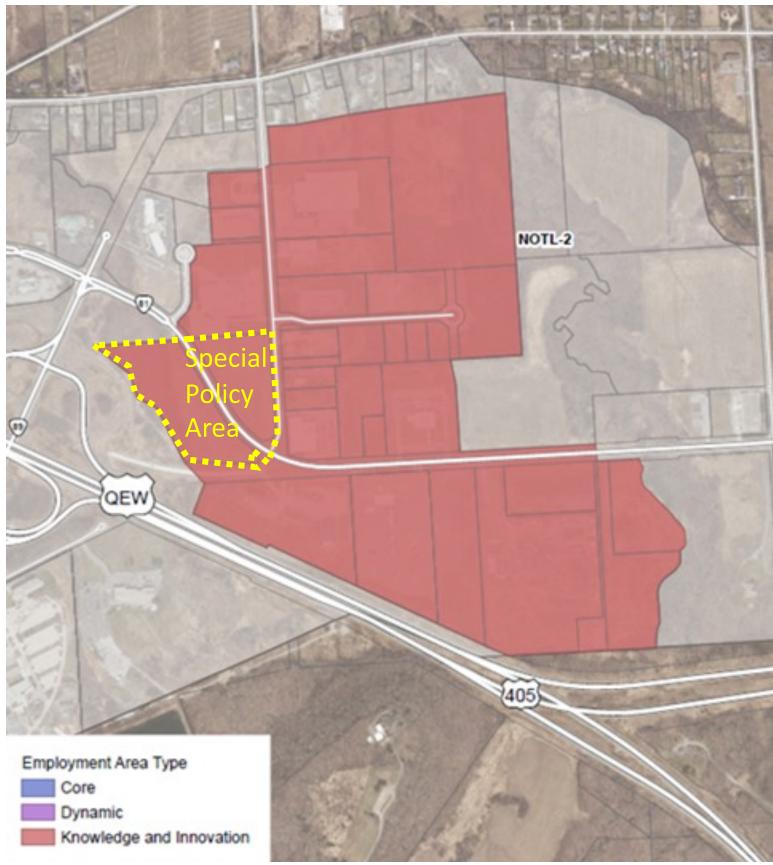


Employment Designations

Glendale has 3 types of Employment Designations in the Niagara Region Official Plan:

- Employment Area The Glendale Momentum District, which is intended for knowledge and innovation uses. Employment Areas are deemed to be of Regional significance
- Employment Lands Other Prestige Industrial lands and Industrial Parks identified in the NOTL Official Plan. These include several areas outside of the Glendale Momentum District.
- A Special Policy Area 4.5 hectares at York and Townline Roads that may be considered for other uses pending further study - any conversion is dependent on submission of necessary justification (technical studies) from the landowner, and review by Regional and Town staff.

Glendale Momentum District



Source: Regional Official Plan (Special Policy Area overlayed by urbanMetrics)

Employment Lands

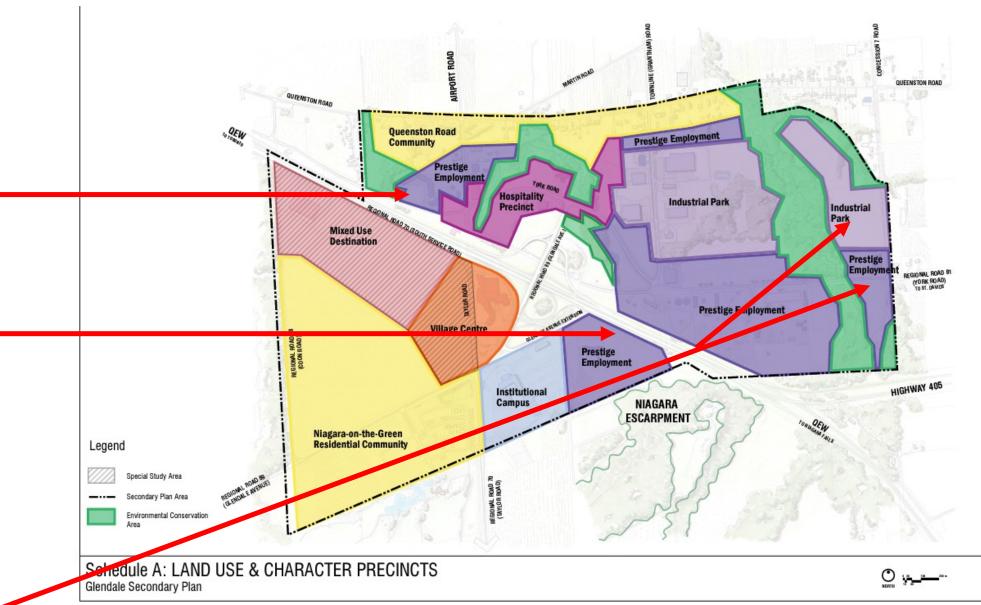
"Employment Lands" include locally significant lands outside of the Glendale Momentum District, including:

Partially occupied Prestige Employment lands on the north side of the QEW north of the Outlet Centre

Lands occupied by the Niagara Corporate Business Centre, which were acquired by Niagara College as part of their planned expansion.

Vacant lands designated Industrial Park and Prestige Employment on the eastern border of the Secondary Plan Area separated from the Momentum District by an environmental corridor. Owners are currently in the process of redesignating these lands for residential development

Current Glendale Secondary Plan Land Use and Character Precincts



These lands may be considered for conversion in the context of Regional Policies and Local and Regional conversion criteria, including the retention of a similar job potential.

Glendale Momentum District

The Glendale Momentum District is strategically located:

- Proximity to a major QEW interchange;
- Proximity to the US.
- Proximity to the Niagara District Airport
- Shortage of employment lands in St. Catharines and Niagara Falls

Opportunities for a wide range of general and prestige industrial uses seeking small to mid-sized parcels.

Parcels too small to accommodate major logistics and warehouse uses.

Suffers from very low current employment densities owing to under-utilized sites and outdoor storage uses.

Approximately 25 hectares is vacant.

Some 39 occupied hectares has considerable potential to intensify employment.

Glendale Momentum District Existing Uses



Base Map Source: Google Earth

Market Summary

- Strong residential growth potential including higher density housing formats;
- Outlet Collection at Niagara plays a key tourism generating role for the Town and the Region
- New population growth will need a new local commercial uses including 1 or 2 new grocery/food stores
- Good opportunities for employment growth and employment intensification within the Glendale Momentum District
- Opportunities for mixed use development on Special Policy Area and employment lands outside of the Momentum District are being considered as part of the Glendale Secondary Plan process.

Natural Heritage and Subwatershed Assessment

Glendale Secondary Plan Update

12

Subwatershed Study Status Update

- The Subwatershed Study was initiated in 2022, and fieldwork commenced late summer 2022.
- A draft Interim Report was submitted to provide a study area characterization based upon the findings from the 2022 fieldwork and information review.
- Spring and early summer fieldwork was initiated in March 2023 and is nearing completion.
- The findings from the spring and early summer fieldwork will be incorporated into the draft Phase 2 Impact Assessment report under completion.

Subwatershed Study Land Use Input

- To facilitate the timing for developing the land use concept, the Subwatershed Study Team has provided input and comments based upon the information presented in the draft Interim Report and the findings from the 2023 fieldwork.
- The guidance provided is subject to revision, pending the outcome of the Phase 2 Impact Assessment, and the management recommendations will be incorporated into the draft Phase 2 report accordingly.
- Guidance for future studies will be included with the Phase 3 report (draft reporting anticipated Q4 2023).

Subwatershed Study Land Use Input

Key Comments:

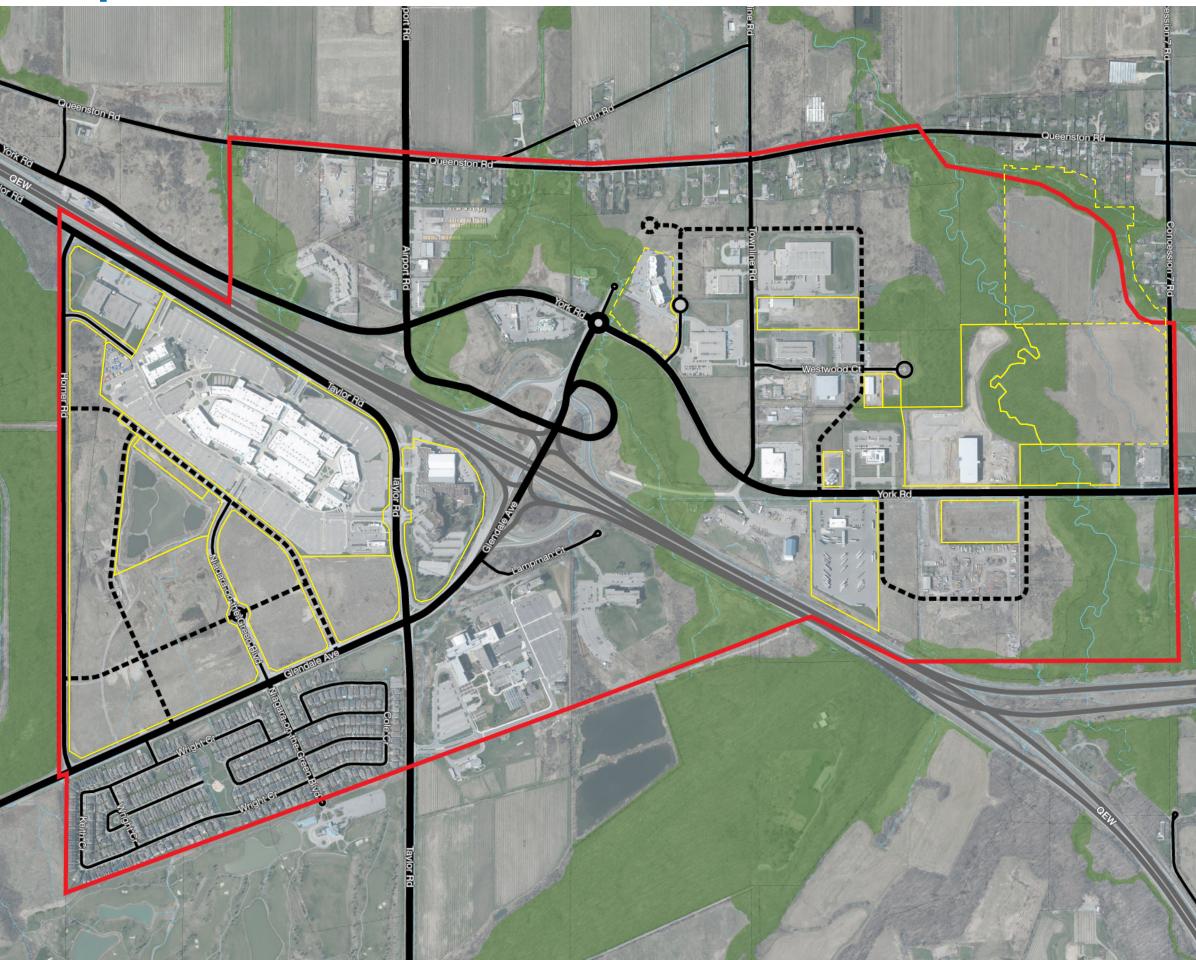
- The Environmental Protection Area (EPA) should include buffers (conceptually 30 m), and should encompass natural hazards (flooding, erosion, and long term stable top of slope) with applicable regulatory allowance as defined by Niagara Peninsula Conservation Authority (NPCA).
- Supporting Features and Areas (i.e. enhancement areas) and linkages) are to be determined through Phase 2 of the Subwatershed Study.
- Where the Natural Heritage System (NHS) features fall within properties for which development applications are approved or supporting studies are substantially completed, expansions to the NHS features through application of buffers or Supporting Features/Areas are not proposed.

Subwatershed Study Land Use Input

Key Comments (cont'd.):

- The protection Headwater Drainage Feature (HDF) along Niagara College should be incorporated into the EPA.
- Proposed development within identified Significant Groundwater Recharge Areas (SGRAs) and Highly Vulnerable Aquifers (HVAs) should take steps to mitigate potential threats that could impact the groundwater quality in these areas, and should promote and maintain the magnitude of pre-development recharge.
- Stormwater management requirements and management of HDFs are not anticipated to present a constraint to the land use concept.

Proposed Environmental Protection Area



Glendale Secondary Plan Update



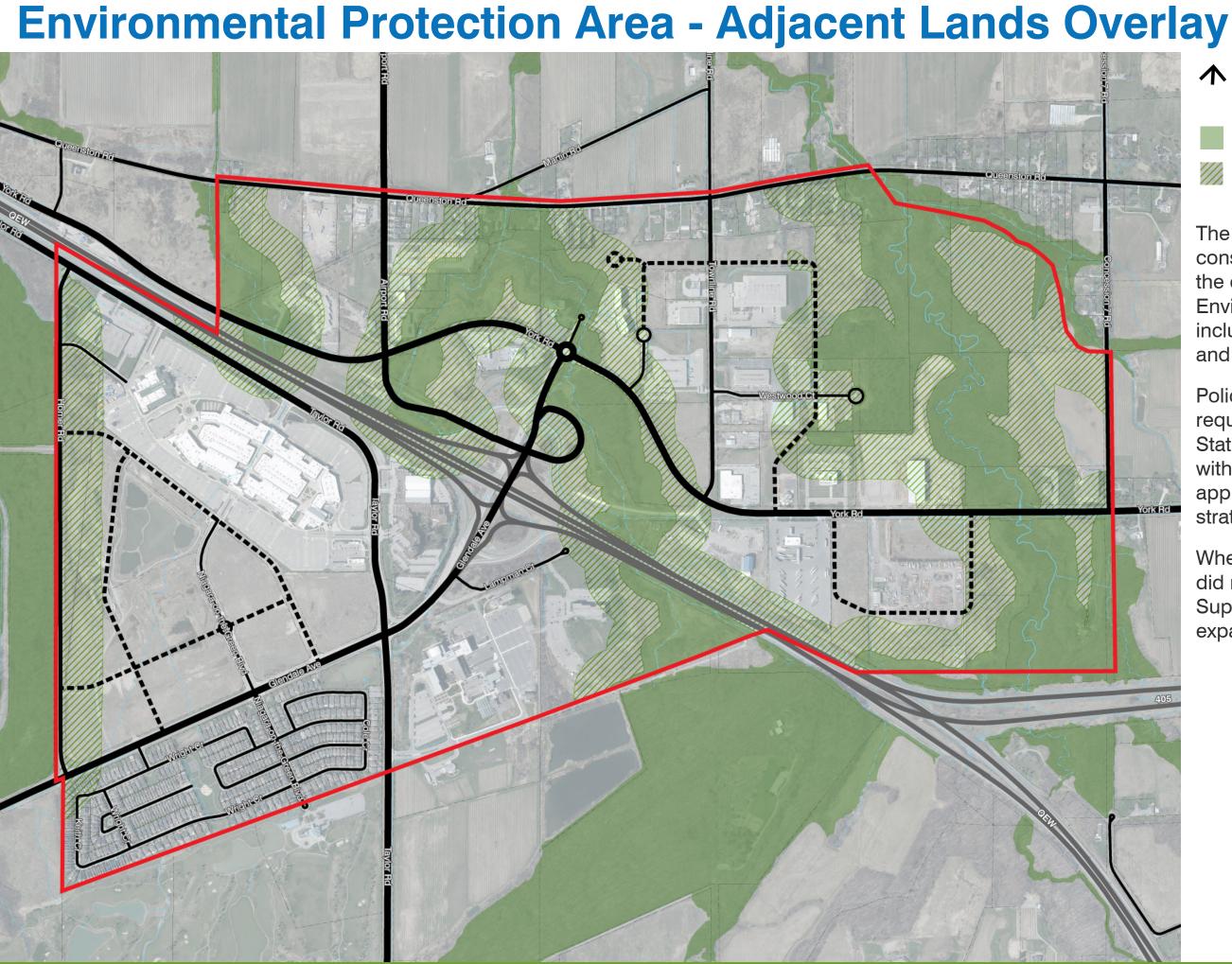
0 50 100 150 200 250m

Env

Environmental Protection Area

Development Application Approved

Application Submitted But Not Yet Approved



50 100 150 200 250m



Environmental Protection Area

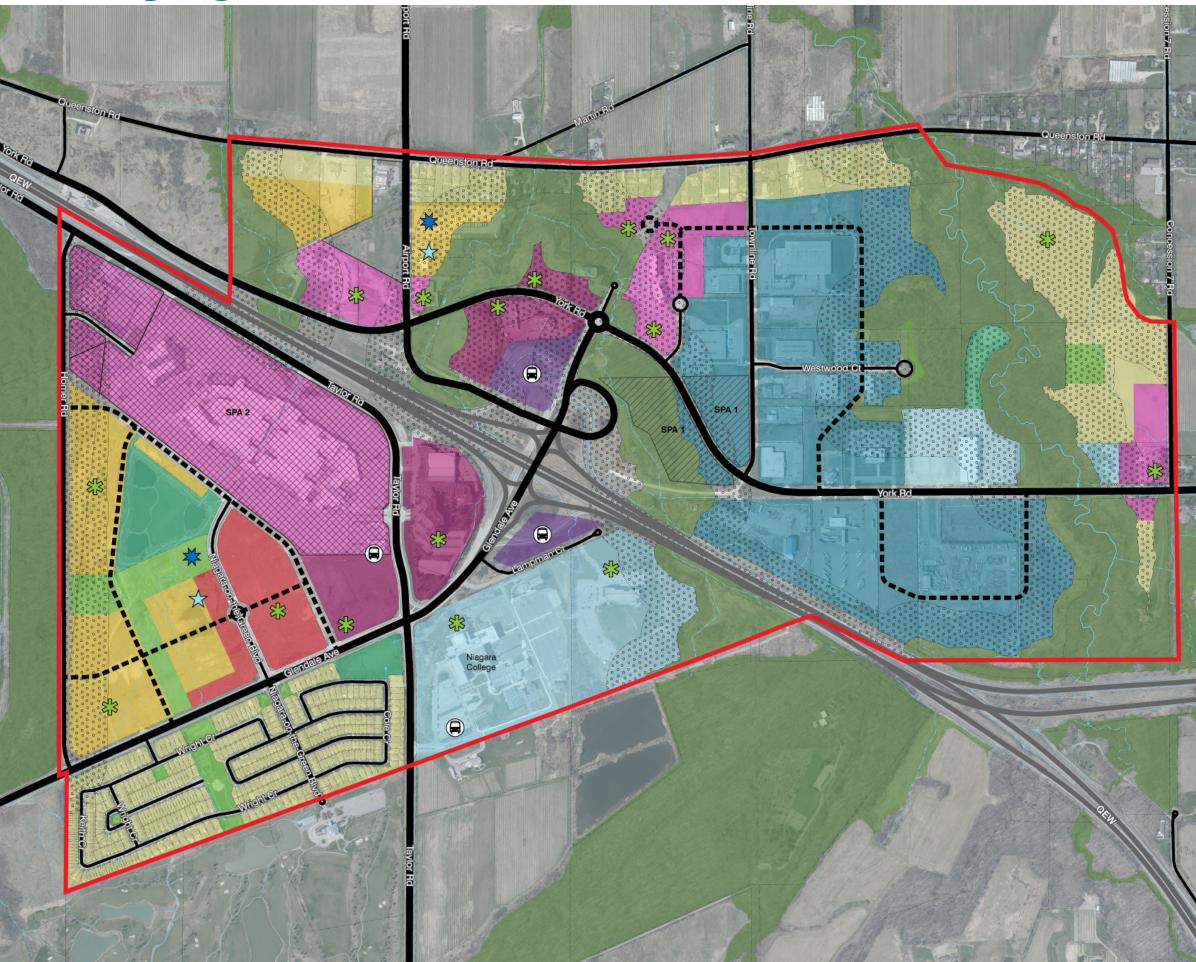
Adjacent Lands Overlay

The Adjacent Lands Overlay constitutes a 120m offset from the edge of key features of the Environmental Protection Area, including the NHS Core and flood and erosion hazard areas.

Policies in the Secondary Plan will require an Environmental Impact Statement (EIS) for any development within the overlay to determine the appropriate buffers or mitigation strategies.

Where the Adjacent Lands Overlay did not completely cover the NHS Supporting Features, it has been expanded to cover them.

Emerging Preferred Land Use Plan



Glendale Secondary Plan Update



100 150 200 250m

Residential - Low Rise/Density

Residential - Mid Rise/Density

Mixed Use - Mid Rise/Density

Mixed Use - High Rise/Density

Mixed Use - Mid Rise/Density Street Related

Employment - Mid Rise/Density

Institutional - Mid Rise/Density

Transportation Facilities

Environmental Protection Area

Parks

Stormwater Management



Urban Parks (location to be determined)



Transportation Facilities/ Potential Transit Hub Locations



Potential School Locations



Potential Community Facility



Adjacent Lands Overlay



SPA 1 (Conversion Pending Further Study)



SPA 2 (Future Master Plan/Tertiary Plan)

Note: building heights will be dependent in part on the outcome of a review of Transport Canada's Canadian Aviation Regulations for the Niagara District Airport

Assumes the review of airport regulations permits high rises

Land Uses

Residential - Low Rise/Density

- Singles/semis/townhouses
- 3 storeys or less







Residential - Mid Rise/Density

- Apartments, Townhouses
- 3 to 6 storeys







Mixed Use - Mid Rise/Density • Apartments, Townhouses, Commercial • 3 to 6 storeys











Land Uses

Mixed Use - Mid Rise/Density Street Related

- Apartments, Townhouses, Main **Street Commercial**
- 3 to 6 storeys







Mixed Use - High Rise/ **Density (if permitted by** airport regulatory review)

- Apartments, Townhouses, Commercial
- Over 6 storeys (based on direction re: Airport regs)





Employment - Mid Rise/Density • Office, Industrial • 3 to 6 storeys





Glendale Secondary Plan Update

Institutional - Mid Rise/Density • Schools, Educational, Religious • 3 to 6 storeys

Two Population Projection Scenarios

Current population is approximately 3,700 District Plan projected a population of 15,000 with 7,500 jobs

Scenario 1 (Lower Density) 8,500 people 4,600 jobs 13,100 people+jobs

Scenario 2 (Higher Density) 19,400 people 6,800 jobs 26,200 people+jobs

Urban Design Guidelines - draft Table of Contents

Character Areas

The Public Realm

Streetscape Elements Roads Cross Sections Transit Hub **Green Space** Gateways

The Private Realm

- **General Guidelines**
- Site Design
- Infill Development
- Residential
- Mixed Use
- Commercial
- Employment
- Institutional and Educational Facilities

Sustainable Buildings + Infrastructure

Implementation

Height & Massing

Building heights play an important role and can impact the character and quality of the street experience. Consistent height and mass of experience. Consistent neight and mass of buildings along the street edge ensures visual continuity and maintains the pedestrian scale a the street, but it is also important to reduce the visual mass of large, single buildings.

New buildings should consider and respect the scale and massing of adjacent buildings, providing setbacks, stepbacks, and transition as appropriate to prevent adverse impacts on

The street wall of buildings should generally be continuous along their frontages.

Street Wall

The street wall is one of the most significant

cing the adjacent public street, above w ere is a stepback. Stepbacks above the

cter of the stree

elements of a street and collectively shapes the character of the community, creating occurs the building edges that define streets and public spaces. The street wall is the first 2 to 4 storeys

nunity, creating continuity i

b) Building height at the street wall should b) Divide up larger building masses through and articulation, varying setbacks an generally be between 2 and 4 storeys

Buildings taller than the street wall should provide a minimum 2 metre stepback above the street wall unless a stricter limit is defined in the individual Character Area guidelines.





2nd to 4th storey





Lansdowne Street Lansdowne Street is the busiest street that Inscore of the full backward of the backward o onal for Lans t-of-way is for a 36 metre width. Space f ould be negotiated on private lan

whe Street passes through the Centr trea, it should be designed to more carefully palance different modes and support future nent opportunities. It is a gateway ntral Area from the south and the on with George Street is a key locati dering special treatment.

trees will play an important role in ing Lansdowne Street's character e opportunities to increase the nur t trees, especially where there is nal space within the right of way, nt private property when the build

ock Street and the Otonabee Rive ig. at Sherburne Street) as it is currently 800 etween signalized pedestrian t Lock Street and River Road.

Consider higher visibility per ons with Park Stree

 Set back new development so that it will work with a future 36 metre right-of-way widt

nsider burying hydro poles on north side

Central Area Urban Design Guideline



multi-use path and sidewalk set back from the road edge, with a green boulevard.

nsider planning for the connection of the posed multi-use path on the south side

I water as long as there is protection fr

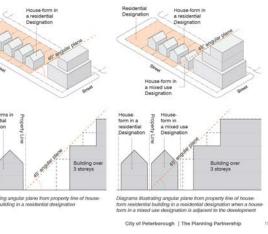
George Street and Lock Street

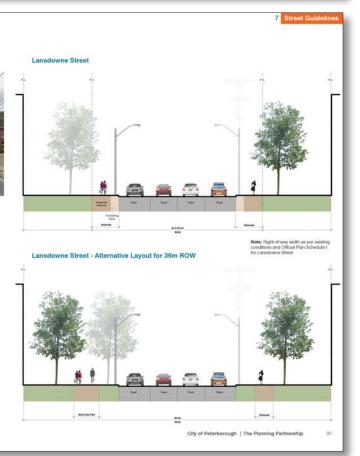




Building scale and height should tra ownies residential areas to avoid abrupt changes of height, limit shadow and overview impacts, and ensure adequate sky view for the existing uses.

Buildings over 3 storeys in height should under a 45 degree angular plane from the side or rear property line of existing house





Transportation Assessment

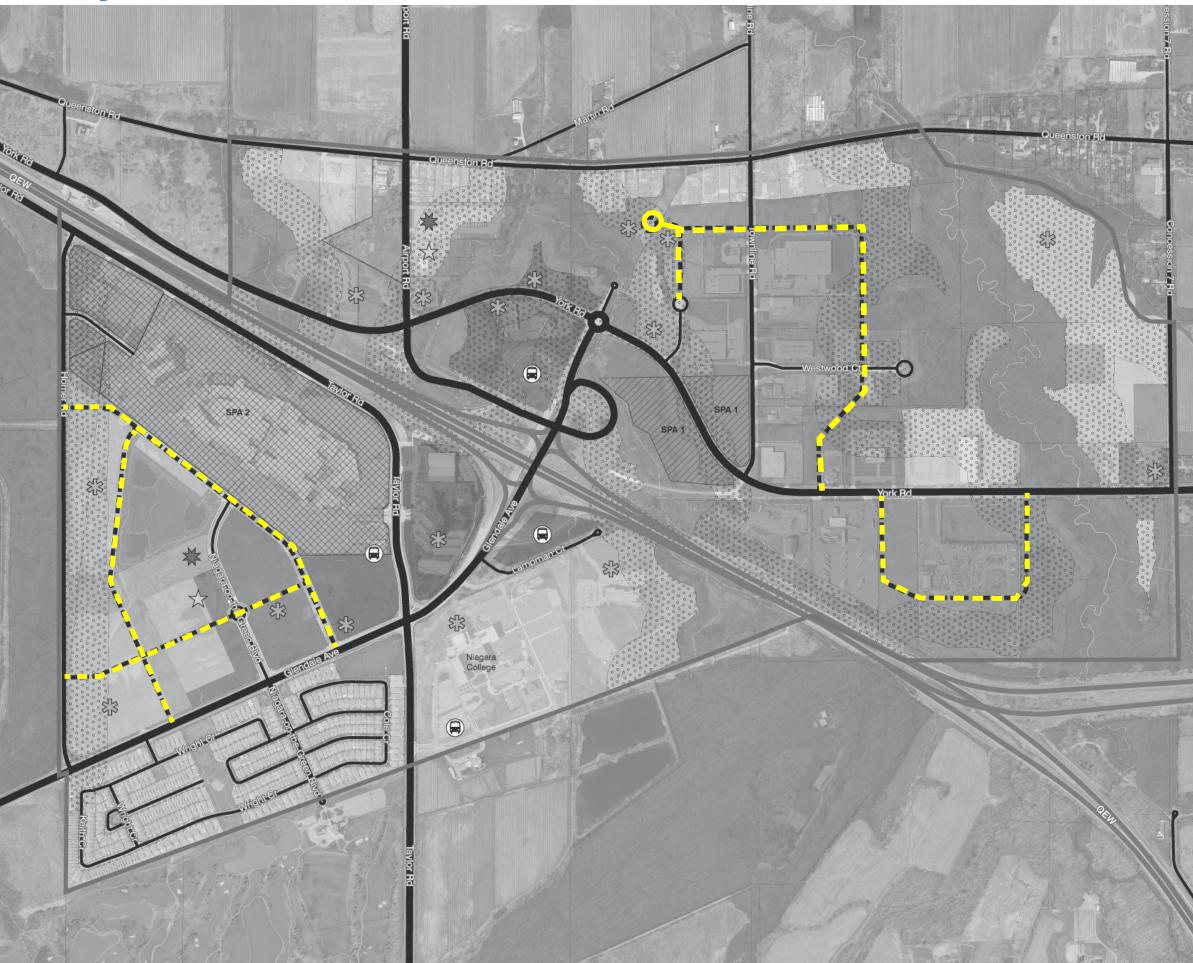
Glendale Secondary Plan Update

24

Transportation Assessment - To do

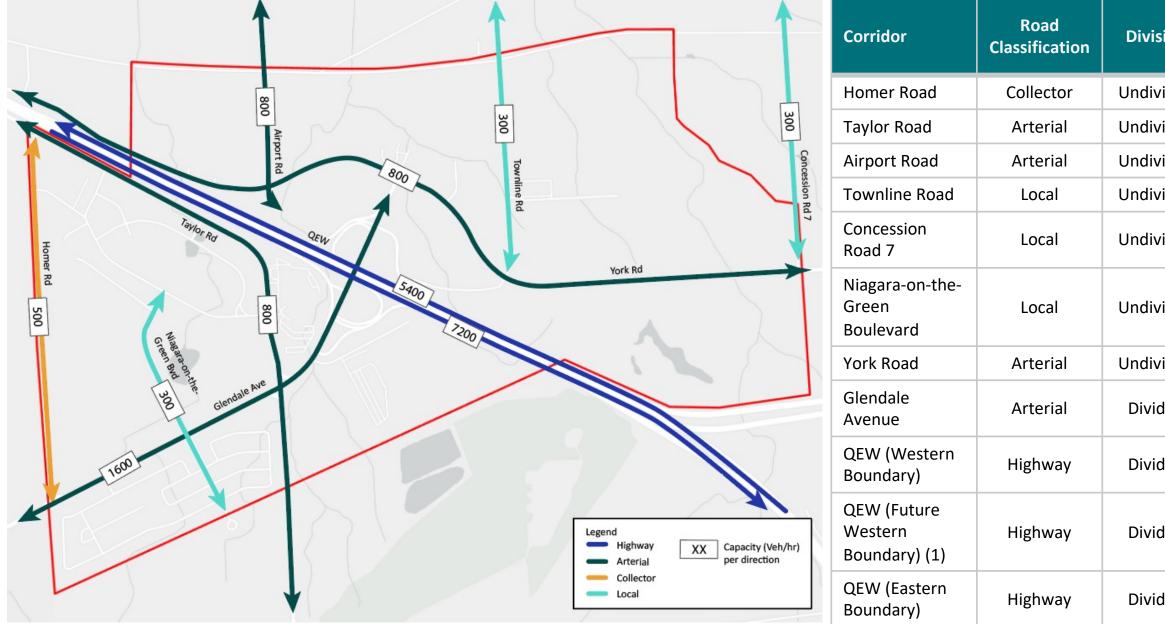
- Determine the capacity of the transportation network to accommodate growth
- Itemize the triggers that will required improvement to the transportation network to accommodate growth and the anticipated inbound and outbound traffic
- Itemize the assumptions for improvements to the transportation network

Proposed Road Network



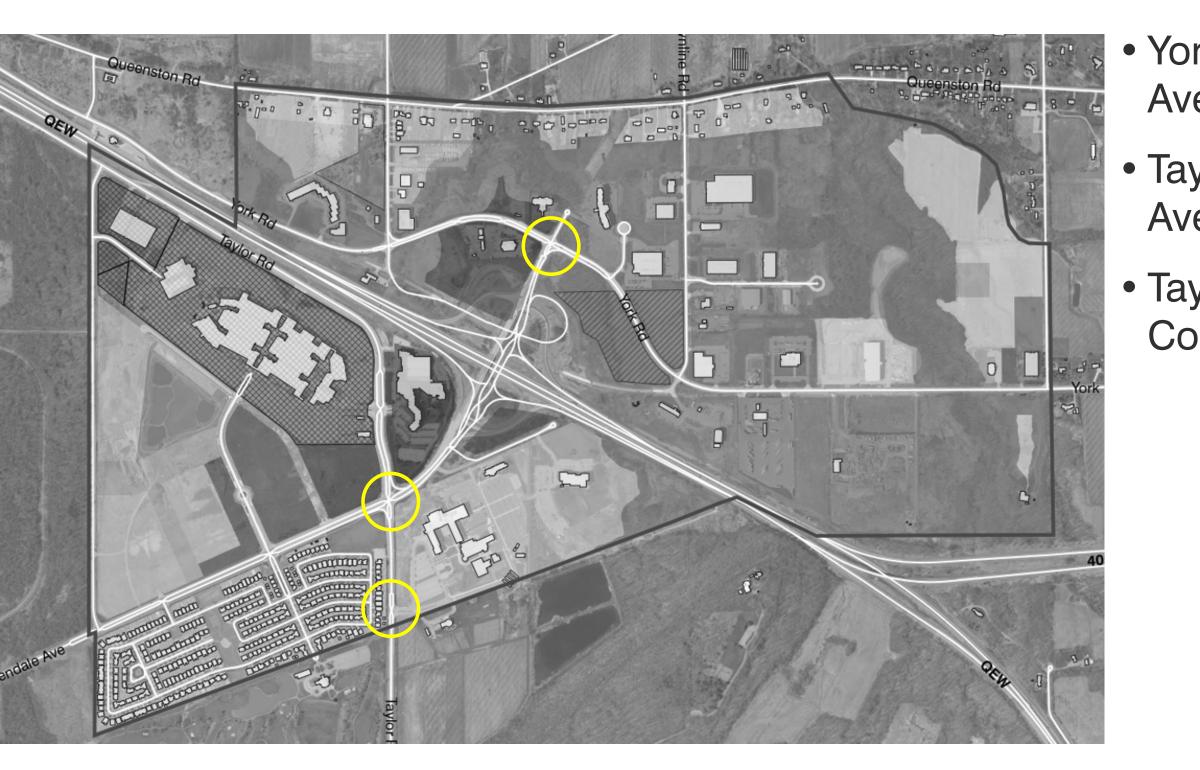


Screenline Analysis – Classification + Capacities



sion	Lanes (per direction)	Typical Capacity (Veh/hr/lane)	Capacity (Veh/hr)
vided	1	500	500
vided	1	800	800
vided	1	800	800
vided	1	300	300
vided	1	300	300
vided	1	300	300
vided	1	800	800
ded	2	800	1600
ded	3	1800	5400
ded	4	1800	7200
ded	4	1800	7200

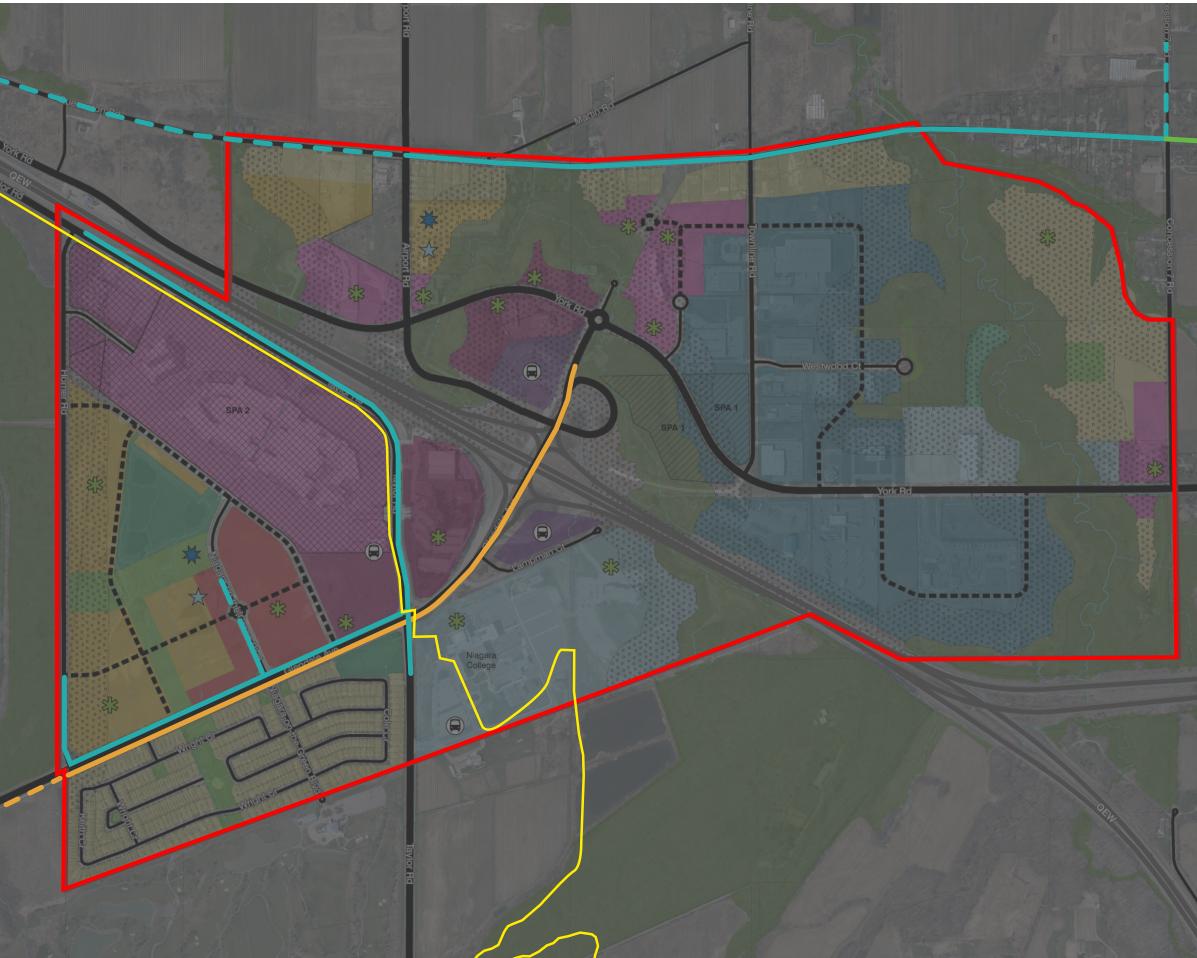
Intersections of Interest



Glendale Secondary Plan Update

- York Road at Glendale
 Avenue
- Taylor Road at Glendale
 Avenue
- Taylor Road at Niagara College

Existing & Future Cycling Network



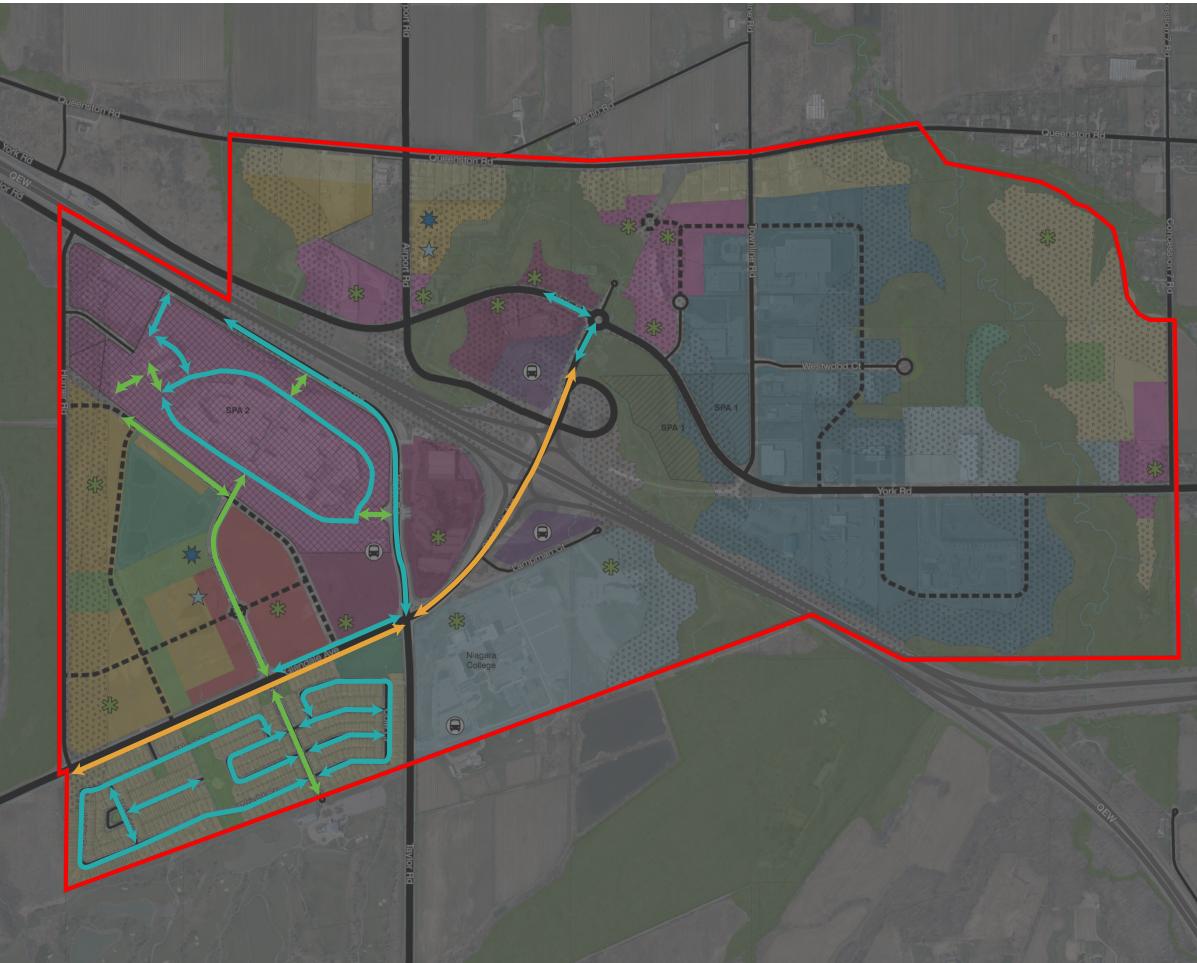


Legend

Existing On-Road Cycling Existing Multi-Use Trails Existing Designated Bike Lanes Future On-Road Cycling Future Multi-Use Trails Laura Secord Trail

Study Area

Existing Sidewalk Inventory



Legend

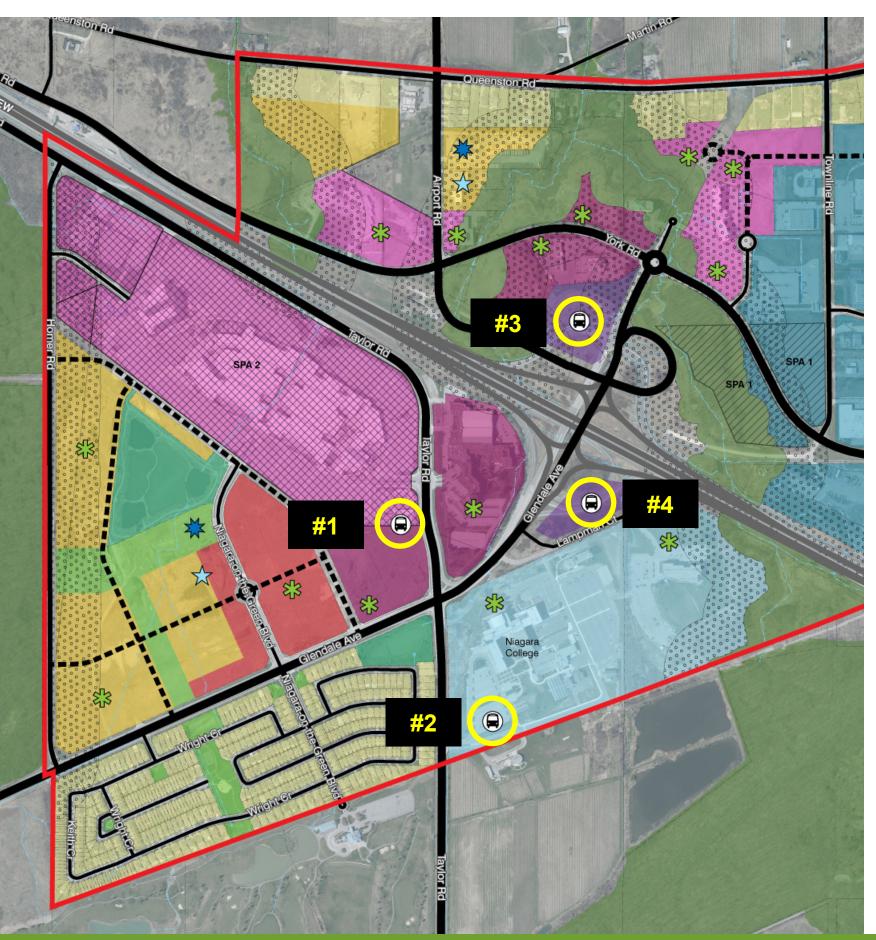
 $\underset{\leftarrow}{\overset{\leftarrow}{}}$

Sidewalks on one side of the street

Sidewalks on both sides of the street

Multi-use path on one side of the street
 Study Area

Transit Hub Site Selection Considerations



Transportation Considerations

- Access/circulation
- Compatibility with planned land uses
- Room for expansion

Glendale Secondary Plan Update

• Connectivity + integration with other modes

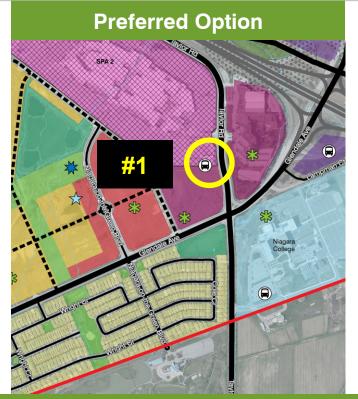
Transit Hub Site Selection Summary

Transportation Consideration	Glendale Ave/Taylor Rd (#	#1)	Niagara College (#2)		Glendale Ave/Airport Rd (
Connectivity + integration with other modes	 Opportunities for integration with active modes 	1	 Limited pedestrian facilities and absence of nearby bicycle facilities 	₽	 Limited opportunities for integration with existing active transportation facilities
Connectivity to residential + mixed- use land uses	 Future mixed-use mid to high-rise areas accessible within a 5- minute walk 	1	 Future mixed-use mid to high-rise areas at Glendale Ave/Taylor Rd accessible within a 10-minute walk 		 Future high-rise mixed-use area adjacent to site; Glendale Ave/Taylor Rd within a 10- minute walk
Connectivity to employment land uses	 Limited connectivity/access to employment uses north of QEW 	➡	 Limited connectivity/access to employment uses north of QEW 	➡	 Accessible to employment uses north of QEW within a 10-minute walk
Access/Circulation	 Opportunity for unimpeded ingress and egress flow of buses 		 Limited access given singular access point that also serves Niagara College 	₽	 Opportunity for unimpeded ingress and egress flow of buses

(#3)	Glendale Ave/Lampman C	t (#4)
	 Opportunities for integration with existing active transportation facilities 	
	 Niagara College, future mixed-use mid/high-rise areas accessible within 5- 10-minute walk 	
	 Limited access for employment uses north of QEW 	➡
	 Limited access given singular dead-end access point that also serves Niagara College 	

Transit Hub Site Selection Summary (cont'd.)

Transportation Consideration	Glendale Ave/Taylor Rd (#1)	Niagara College (#2)	Glendale Ave/Airport Rd (#3)	Glendale Ave/Lampman Ct (#4)
Compatibility with institutional and mixed land uses	 Supports planned mixed-use land uses and transit-oriented development 	 Supports institutional uses and higher density lands at Glendale Ave/Taylor Rd 	 Supports transit- oriented development and institutional uses; 5- minute walkshed limited due to QEW 	 Supports adjacent institutional uses and higher-density lands at Glendale Ave/Taylor Rd
Room for expansion	 Opportunity for future expansion given undeveloped lands 	 Potentially limited by existing development and the Niagara College lands 	 Potentially limited by QEW, Airport Rd, future development MTO-owned could lead to easier implementation 	 No abutting land uses MTO-owned could lead to easier implementation



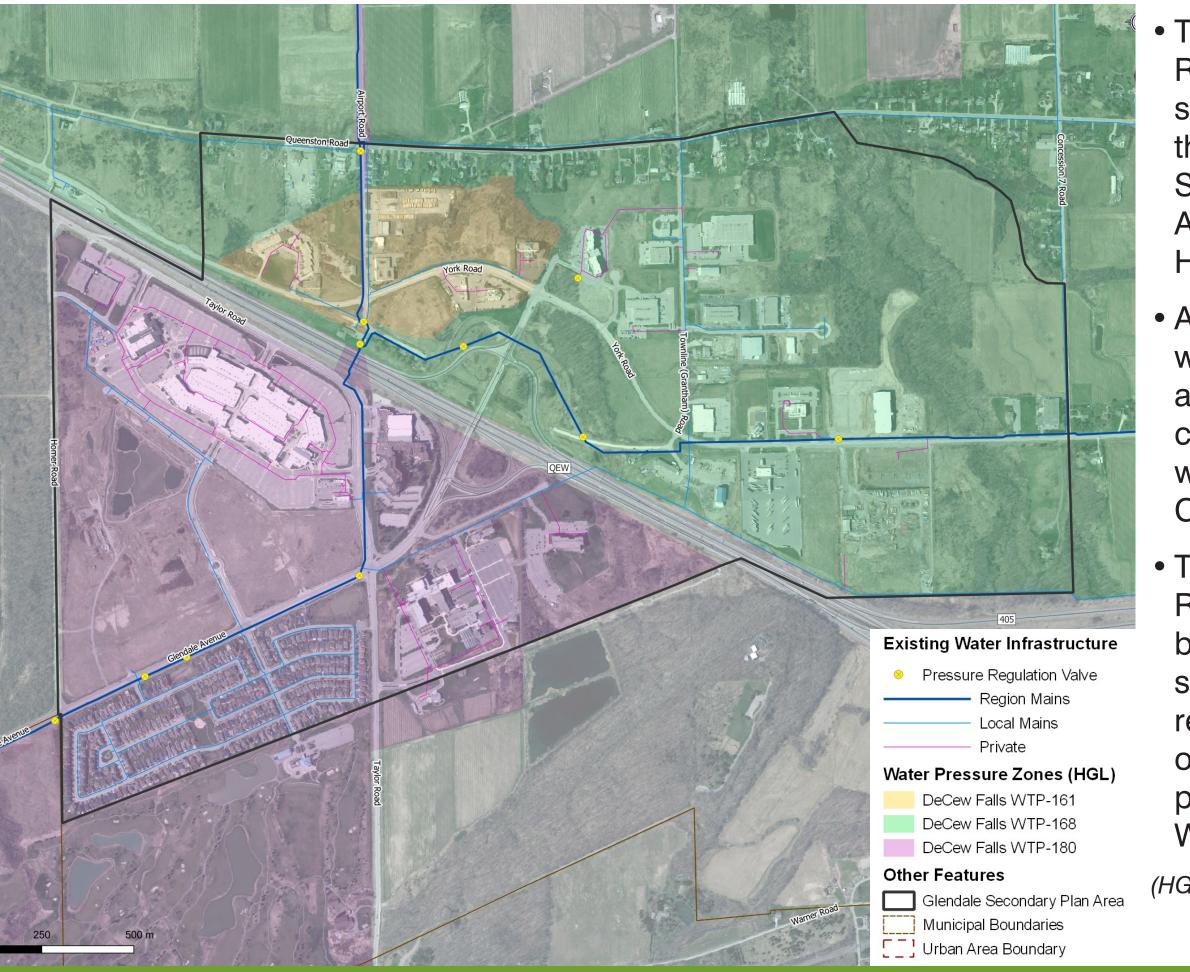
There will be ongoing conversations about how the Transit Hub options are articulated in the Secondary Plan

Servicing Assessment

Glendale Secondary Plan Update

34

Water System



 The existing and planned Region water network can supply phased buildout of the Secondary Plan Area Scenario 1 – Lower Density Assumptions and Scenario 2 – Higher Density Assumptions.

 Allocation of water demand within the Secondary Plan area will be required to be considered in combination with the broader NOTL and St. Catharines service areas.

 The phasing/timing of planned Region water projects for the broader NOTL / St. Catherines service areas should be reviewed and updated based on the Secondary Plan (as part of future Region-wide Water Master Plan Updates).

(HGL=Hydraulic Grade Line)

Wastewater System



Downstream Trunk Sewer (including Siphon under Welland Canal) are to be monitored for available capacity as the Secondary Plan Area is built out.

Preliminary Hydraulic Model Analysis shows that the sewer has capacity to convey buildout flows under Scenario 1 – Lower Density Assumptions.

Planned wastewater flows conveyed under Scenario 2 -Higher Density Assumptions may trigger a downstream sewer upgrade (only at full buildout of the Secondary Plan area).

The potential for downstream sewer upgrades can be reviewed as part of future Region-wide Wastewater Master Plan Updates.

 Wet weather flows are significant contributor to the capacity issues within the existing (1980s-construction) downstream sewers – there is opportunity to align sewer upgrades/replacements with infrastructure's current lifecycle.

Wastewater System



Localized pumping solution required to service lands east of Six Mile Creek Tributary.

The Developer of the lands at Concession 7/York Road (Modero) has proposed a different servicing solution to service lands east of the Six Mile Creek Tributary.

Pumping Solution to consider:

- Evaluation of alternative solutions that meet Town and Region requirements.
- Low amount of flows that will be required to be pumped from Modero development area.
- The impacts of Niagara Region
 Sewage Pumping Station
 and Forcemain Policy and
 associated requirements for
 smaller sanitary catchment
 areas.

Next Steps

Collect comments on: the Emerging Preferred Land Use Concept

- market
- natural heritage and subwatershed
- transportation
- servicing

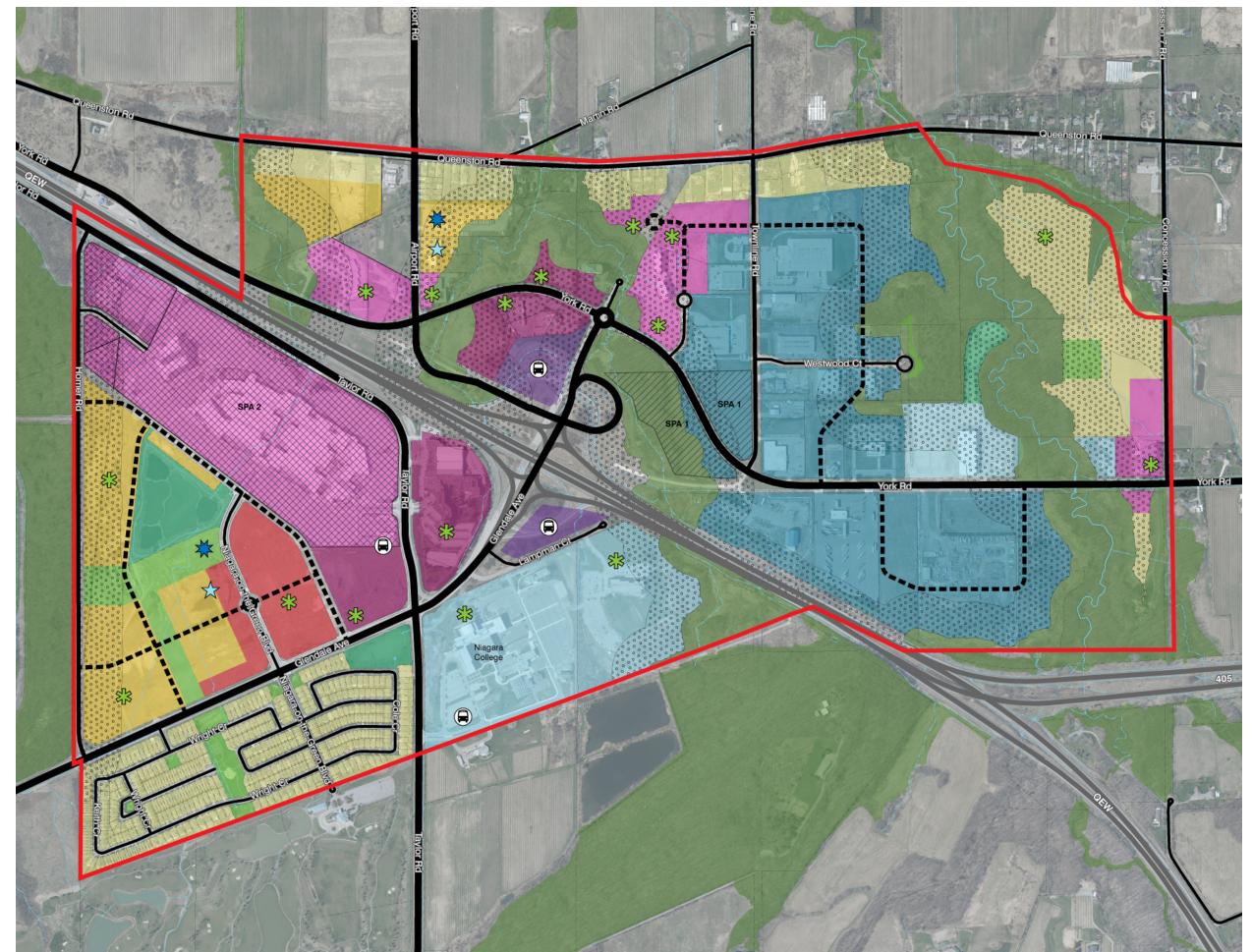
Prepare Urban Design Guidelines

Prepare Secondary Plan policy

Continued consultation including:

School Boards

Niagara-on-the-Lake Council workshop - date to be confirmed



- Residential Low Rise/Density
- Residential Mid Rise/Density
- Mixed Use Mid Rise/Density
- Mixed Use High Rise/Density
- Mixed Use Mid Rise/Density Street Re
- Employment Mid Rise/Density
- Institutional Mid Rise/Density
- Transportation Facilities
- **Environmental Protection Area**



Stormwater Management



Urban Parks (location to be determined



Transportation Facilities/ Potential Transit Hub Locations



Potential School Locations



Potential Community Facility





SPA 1 (Conversion Pending Further Stu



Note: building heights will be dependent in part on the outcome of a review of Transport Canada's Canadian Aviation Regulations fo the Niagara District Airport

Assumes the review of airport regulations permits high rises