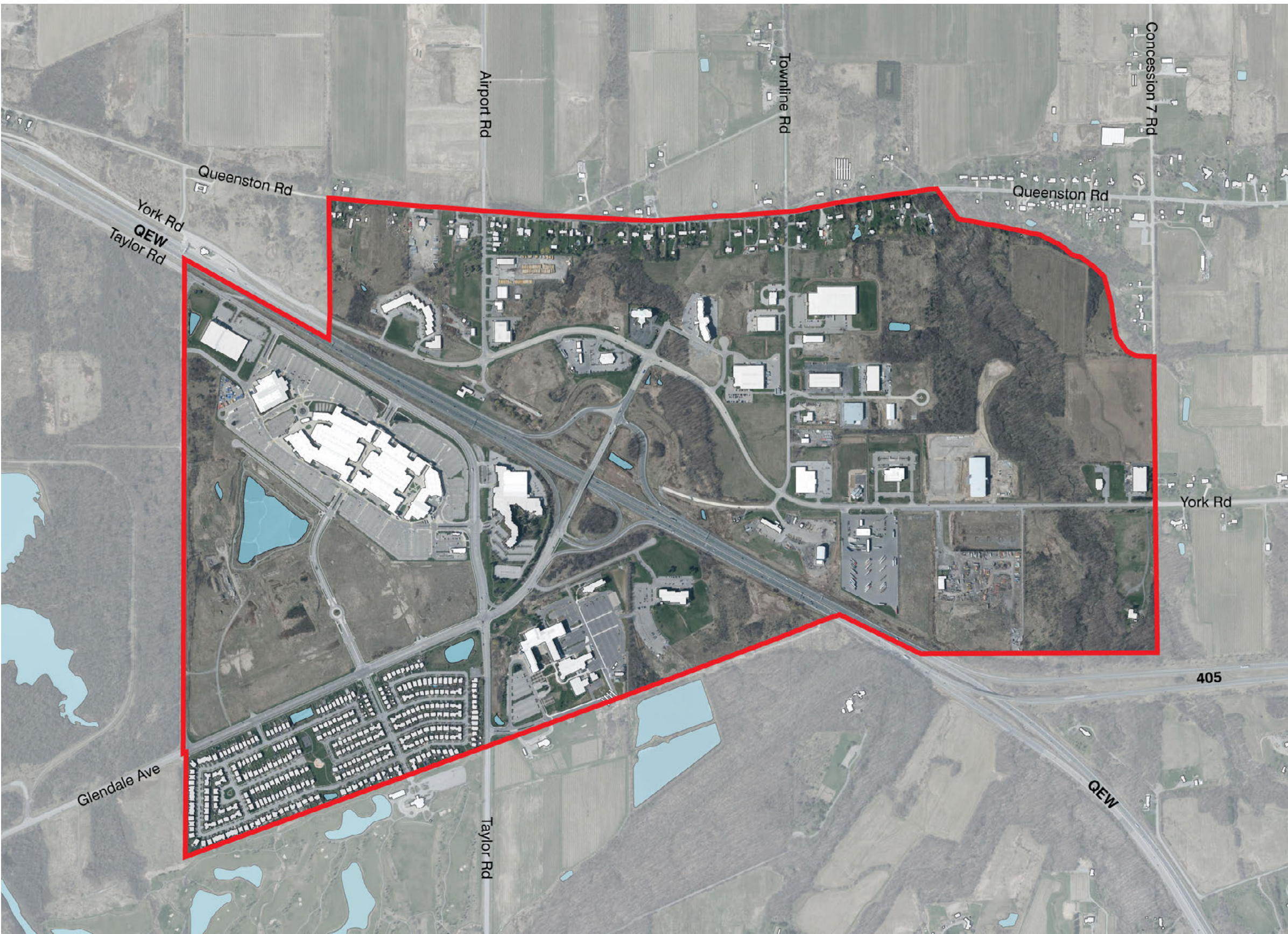


Glendale Secondary Plan Update

Public Information
Session
June 20, 2023



June, 2023

The Planning
Partnership

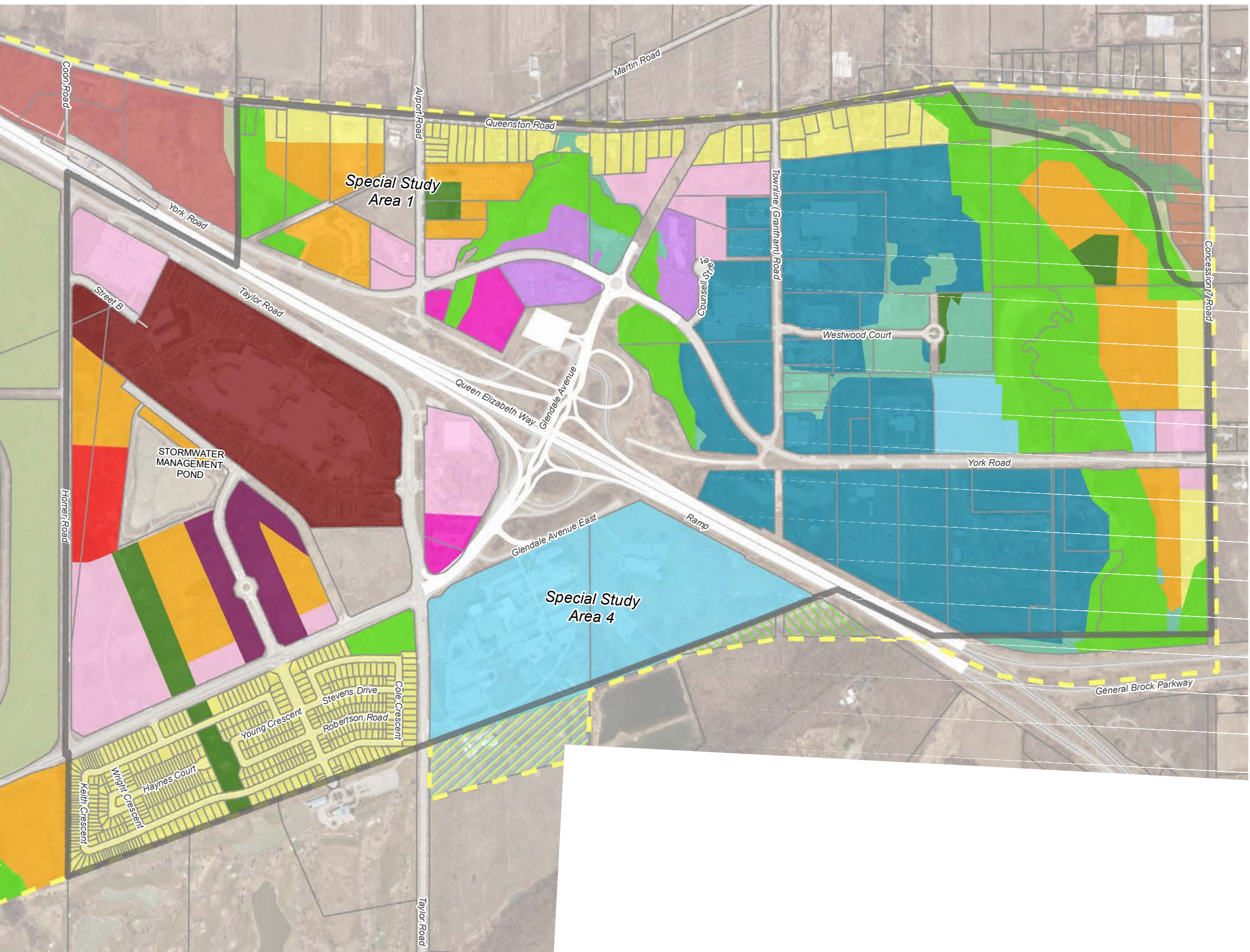
urbanMetrics
GM Blue Plan
LEA
HDR
NCSI
Matrix

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

Glendale Niagara District Plan Land Use Concept



- 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

- 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 2023.

Landowners

- Committed to collaborating with landowners throughout.

Market Assessment

Residential Market

- 465 single family homes in the Niagara-on-the-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

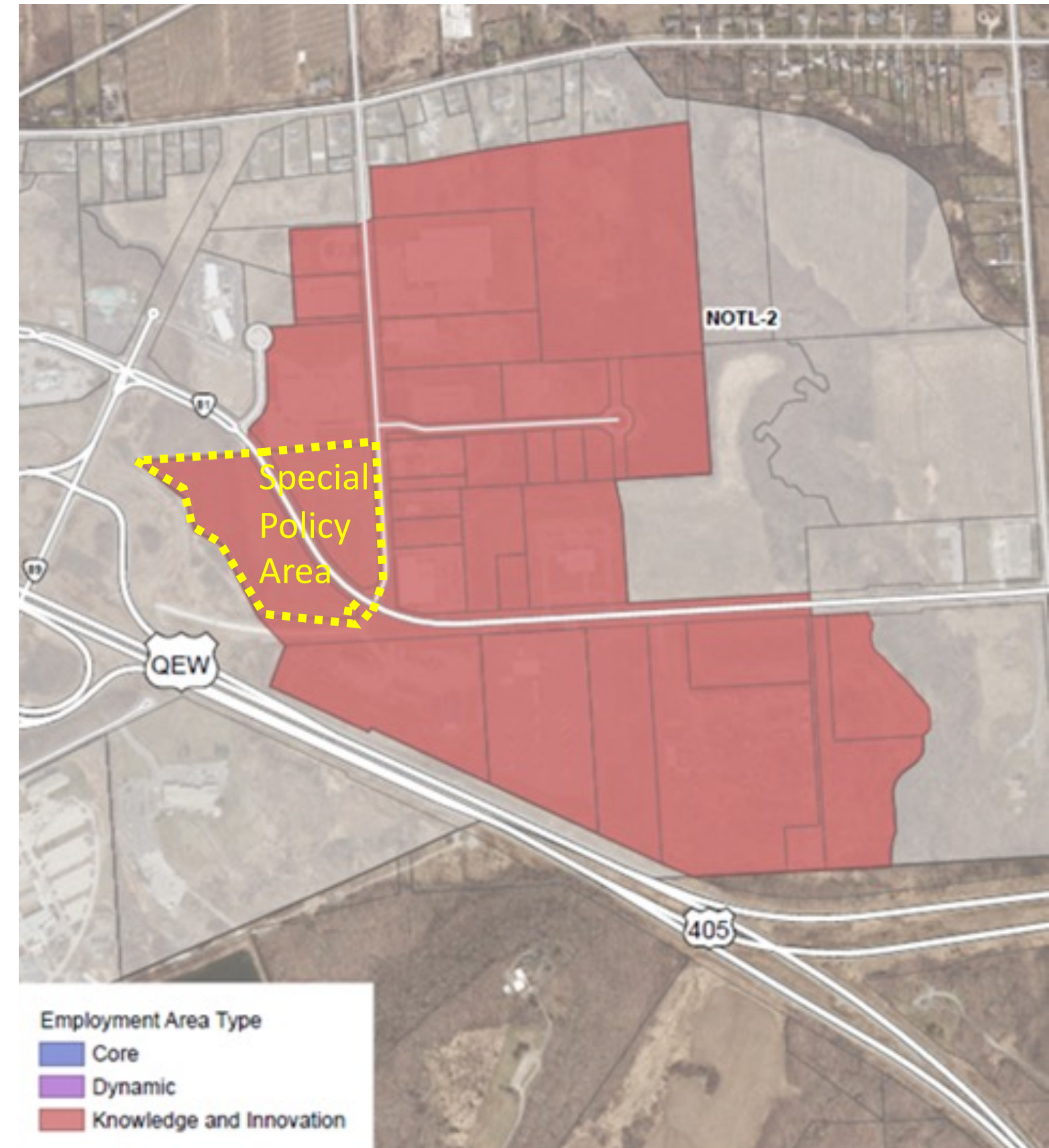


Employment Designations

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 overlaid by urbanMetrics)

Employment Lands

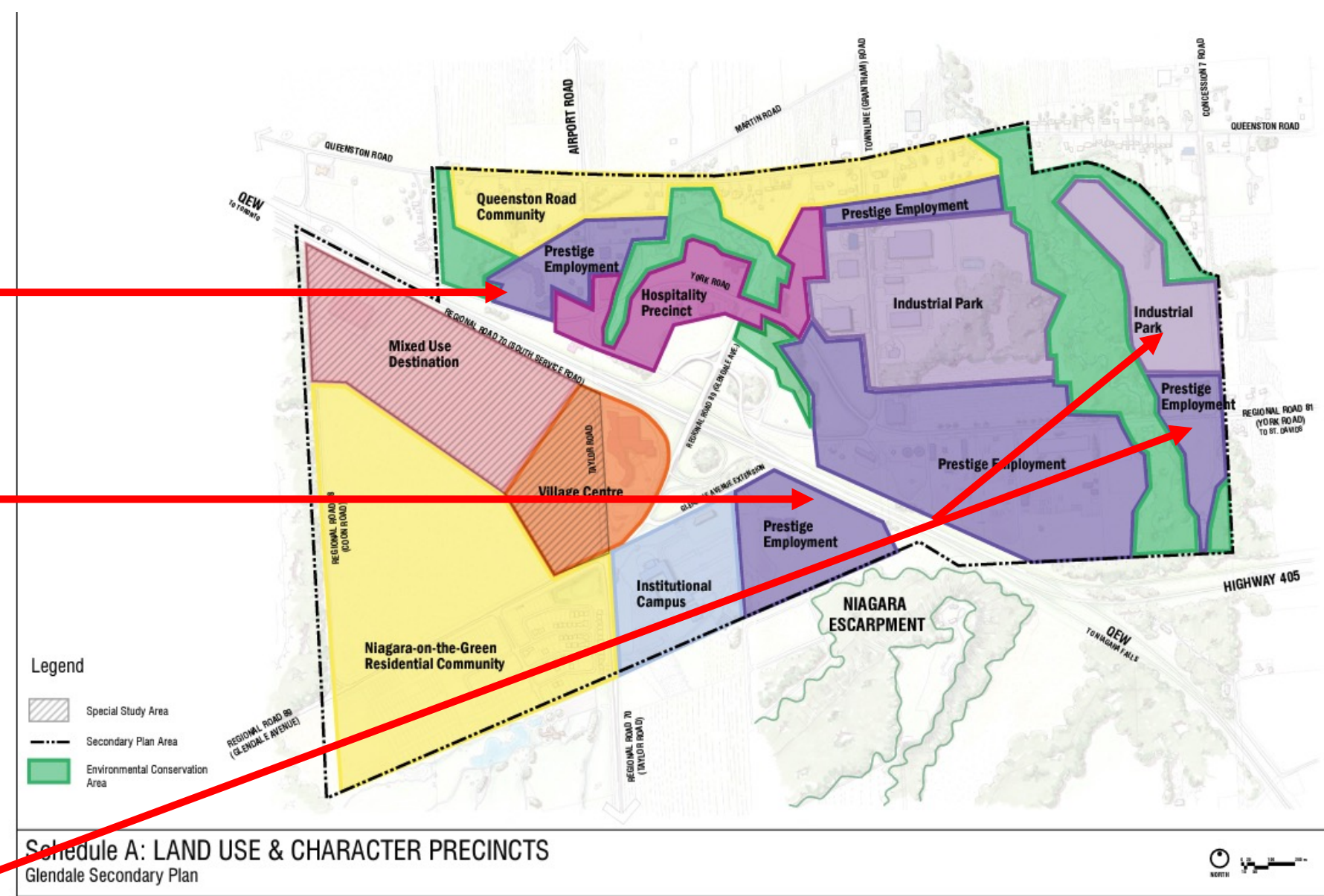
“Employment Lands” include locally significant lands outside of the Glendale Momentum District, including:

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

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:

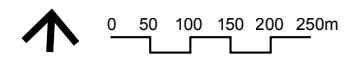
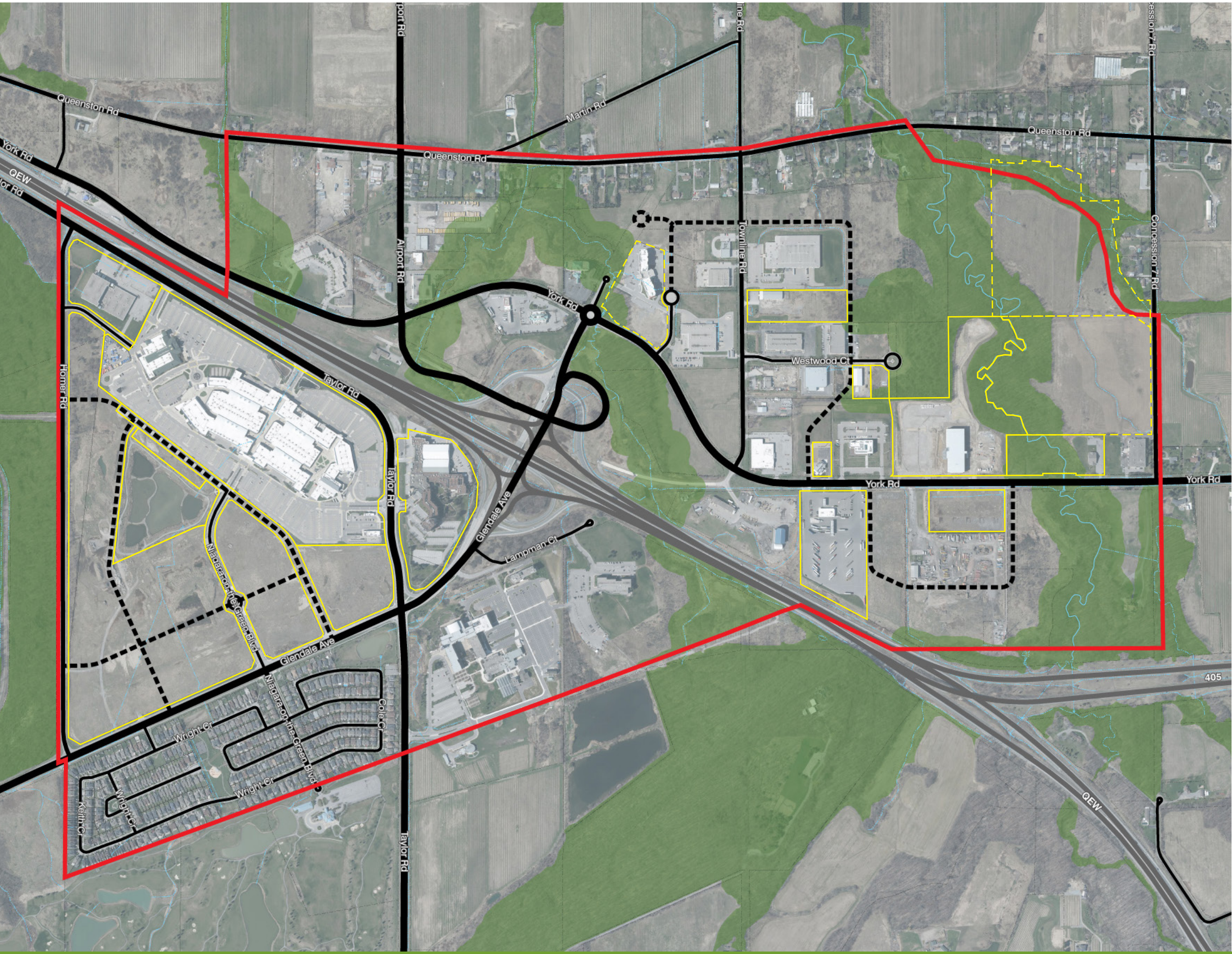
- The Environmental Protection Area (EPA) should include buffers (conceptually 30 m), and should encompass natural hazards (flooding, erosion, and long term stable top of slope) with applicable regulatory allowance as defined by Niagara Peninsula Conservation Authority (NPCA).
- Supporting Features and 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.):

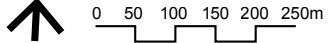
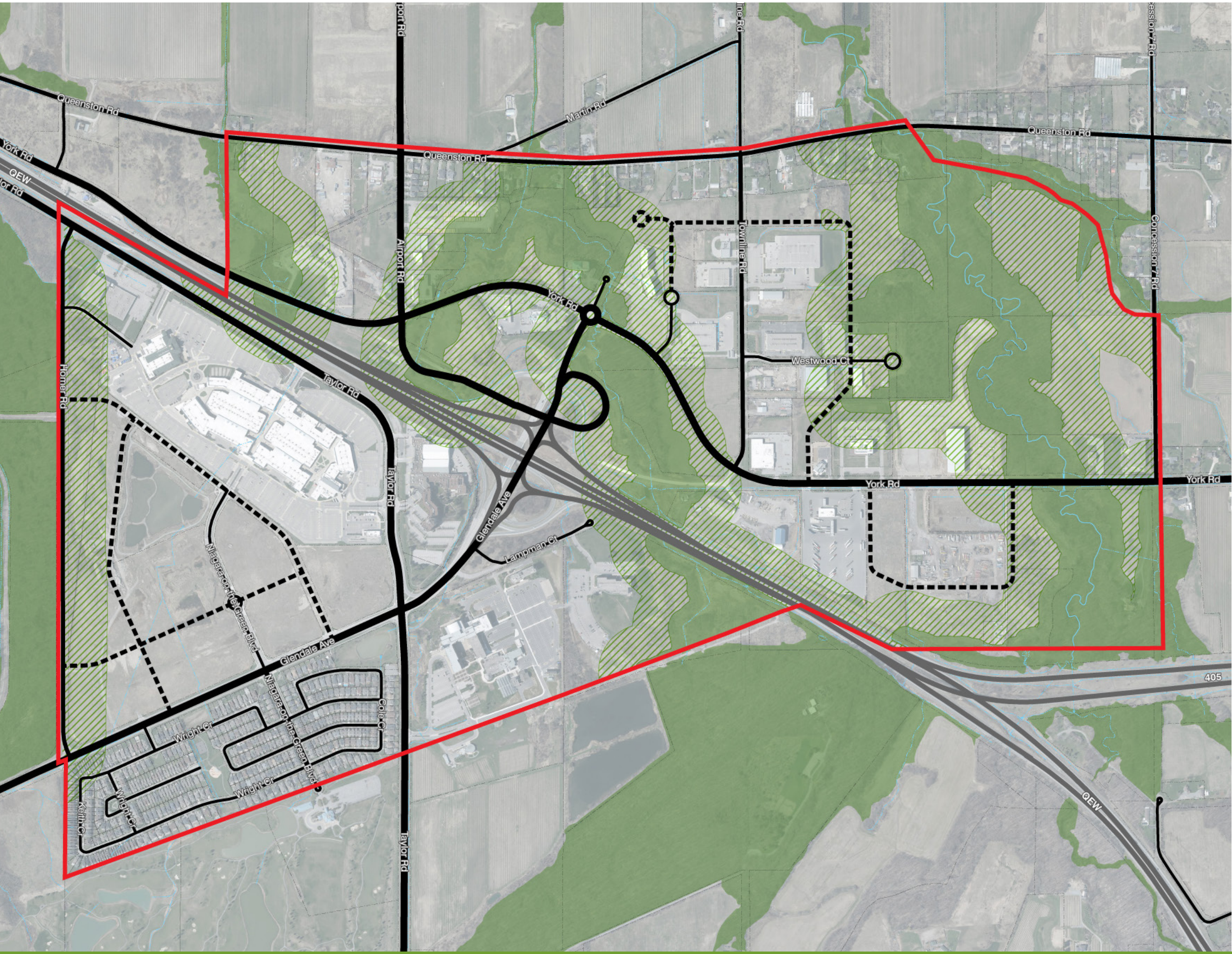
- The protection Headwater Drainage Feature (HDF) along Niagara College should be incorporated into the EPA.
- Proposed development within identified Significant Groundwater Recharge Areas (SGRAs) and Highly Vulnerable Aquifers (HVAs) should take steps to mitigate potential threats that could impact 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



-  Environmental Protection Area
-  Development Application Approved
-  Application Submitted But Not Yet Approved

Environmental Protection Area - Adjacent Lands Overlay



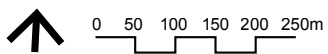
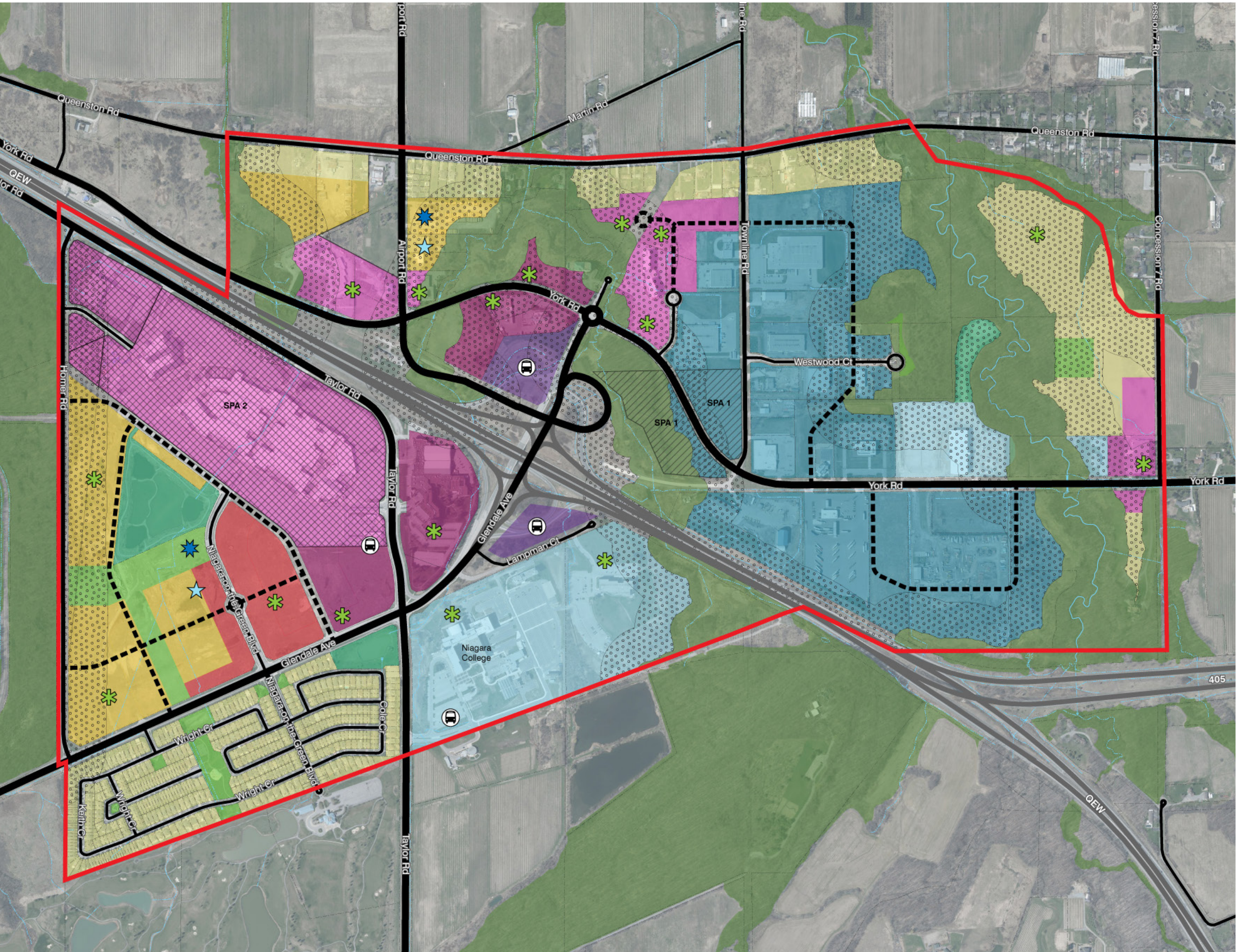
- Environmental Protection Area
- Adjacent Lands Overlay

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



- 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

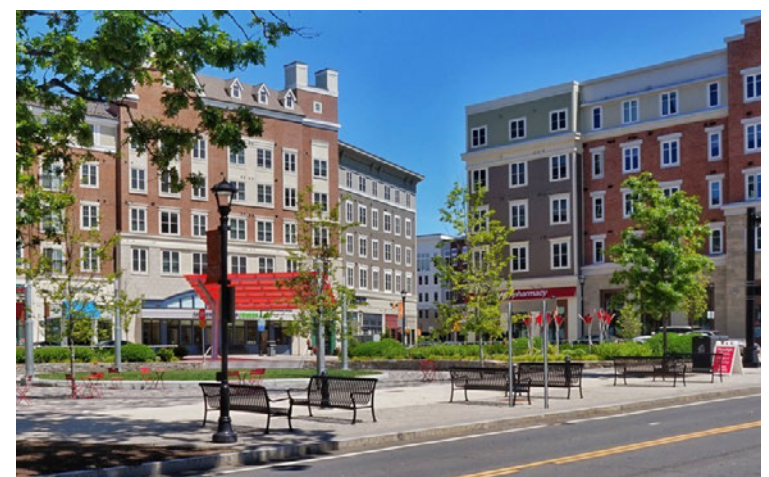
- Apartments, Townhouses, Commercial
- 3 to 6 storeys



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



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

4 Private Realm Guidelines

Height & Massing

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

Guidelines

- New buildings should consider and respect the scale and massing of adjacent buildings, providing setbacks, stepbacks, and transitions, as appropriate to prevent adverse impacts on neighbours.
- Divide up larger building masses through architectural articulation, varying setbacks and roof lines.



Varying form, material and massing to divide up a building's mass

Street Wall

The street wall is one of the most significant elements of a street and collectively shapes the character of the community, creating continuity in the building edges that define streets and public spaces. The street wall is the first 2 to 4 storeys facing the adjacent public street, above which there is a setback. Stepbacks above the street wall ensure pedestrians have access to light and sky views from sidewalks and enhance the character of the street.

Guidelines

- The street wall of buildings should generally be continuous along their frontages.
- Building height at the street wall should 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.



Diagram illustrating street wall height and setback



New construction contributing to the existing street wall

Transitions

Building scale and height should transition to low-rise residential areas to avoid abrupt changes of height, limit shadow and overlook impacts, and ensure adequate sky view for the existing uses. Angular planes are used for the transition to low-rise residential areas.

Guidelines

- Buildings over 3 storeys in height should fit under a 45 degree angular plane from the side or rear property line of existing house-form residential buildings within Downtown Neighbourhood Designations or other Residential Land Use Designations.



Building showing application of 45 degree angular plane



Diagrams illustrating angular plane from property line of house-form residential building in a residential designation

Diagrams illustrating angular plane from property line of house-form residential building in a residential designation when a house-form in a mixed use designation is adjacent to the development

7 Street Guidelines


Lansdowne Street

Lansdowne Street is the busiest street that passes through Peterborough's Central Area and is classified as a High Capacity Arterial Street. Despite carrying two lanes of traffic in each direction, Lansdowne's right-of-way is primarily only 20 metre wide, leaving very little space for other modes, street furnishings or tree planting. The Official Plan's goal for Lansdowne Street's right-of-way is for a 36 metre width. Space for tree planting should be negotiated on private land during any applications for redevelopment.

As Lansdowne Street passes through the Central Area, it should be designed to more carefully balance different modes and support future development opportunities. It is a gateway to the Central Area from the south and the intersection with George Street is a key location for considering special treatment.


Guidelines

- Street trees will play an important role in improving Lansdowne Street's character. Explore opportunities to increase the number of street trees, especially where there is additional space within the right-of-way, or on adjacent private property when the building is set back.
- Plant trees in open planting beds or softscape wherever feasible. Open planting beds are better for trees, ensuring adequate aeration and water as long as there is protection for roots from compaction.
- Consider installing a pedestrian crossover between Lock Street and the Otonabee River (eg. at Sherburne Street) as it is currently 800m between signalized pedestrian crossing points at Lock Street and River Road.
- Consider higher visibility pedestrian crossing markings at intersections with Park Street, George Street and Lock Street.
- Set back new development so that it will work with a future 36 metre right-of-way width.
- Consider burying hydro poles on north side of Lansdowne Street.




Existing conditions on Lansdowne Street

- Plan for a future 36 metre right-of-way with the multi-use path and sidewalk set back from the road edge, with a green boulevard.
- Consider planning for the connection of the proposed multi-use path on the south side of Lansdowne Street to continue between Lock Street and River Road, creating a continuous multi-use path.



Lansdowne Street



Lansdowne Street - Alternative Layout for 36m ROW

Note: Right-of-way width as per existing conditions and Official Plan Schedule I for Lansdowne Street

Transportation Assessment

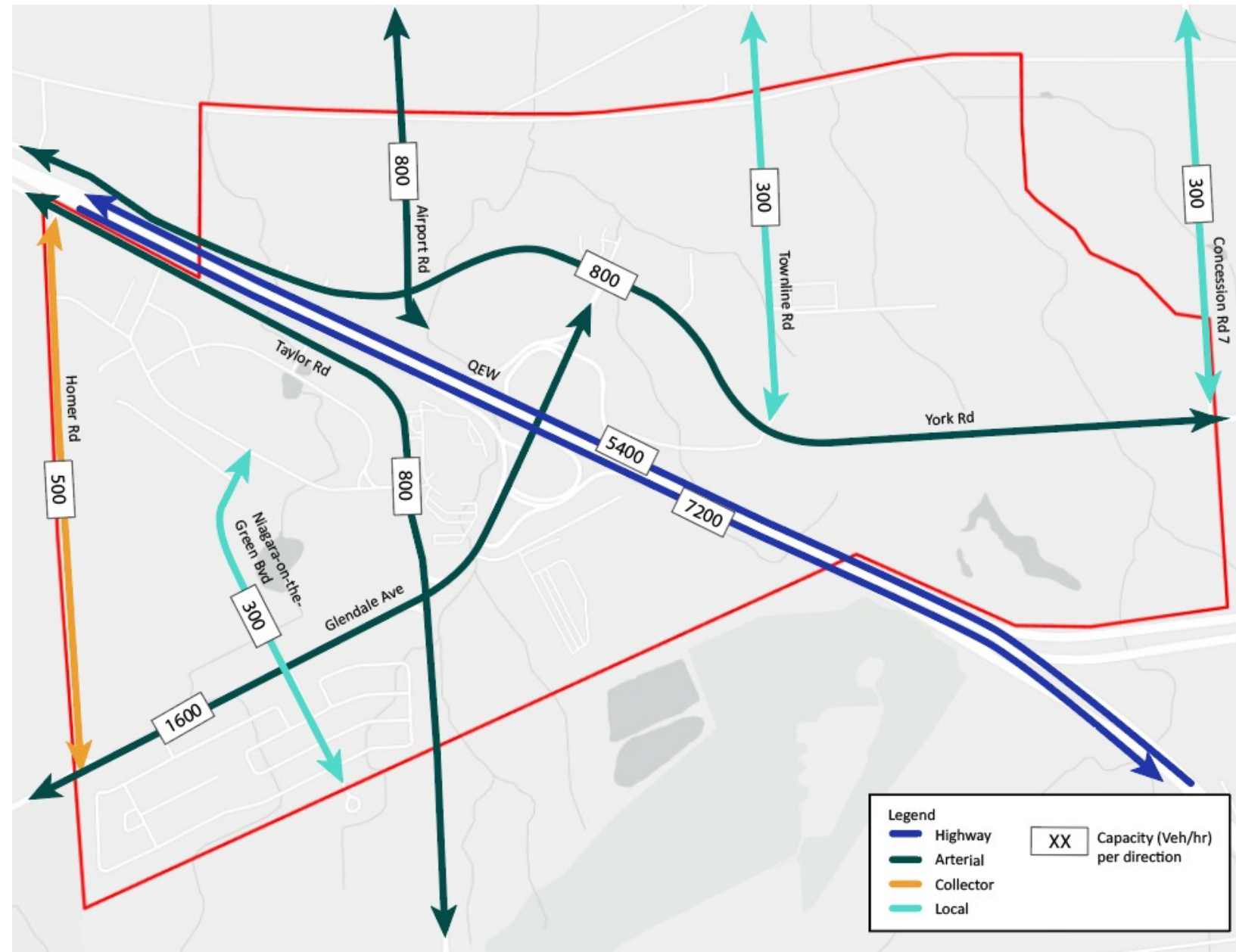
Transportation Assessment - To do

- 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



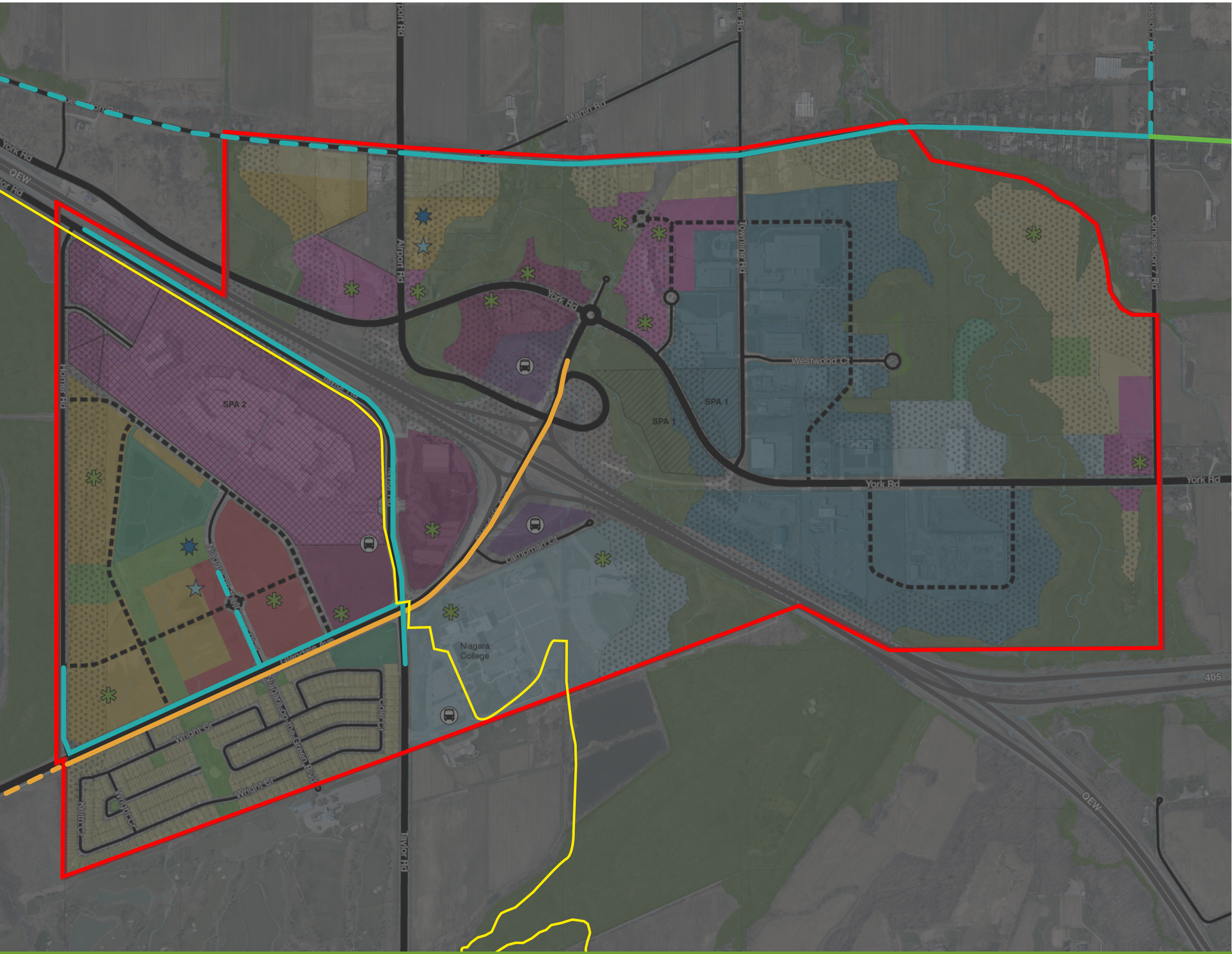
Corridor	Road Classification	Division	Lanes (per direction)	Typical Capacity (Veh/hr/lane)	Capacity (Veh/hr)
Homer Road	Collector	Undivided	1	500	500
Taylor Road	Arterial	Undivided	1	800	800
Airport Road	Arterial	Undivided	1	800	800
Townline Road	Local	Undivided	1	300	300
Concession Road 7	Local	Undivided	1	300	300
Niagara-on-the-Green Boulevard	Local	Undivided	1	300	300
York Road	Arterial	Undivided	1	800	800
Glendale Avenue	Arterial	Divided	2	800	1600
QEW (Western Boundary)	Highway	Divided	3	1800	5400
QEW (Future Western Boundary) (1)	Highway	Divided	4	1800	7200
QEW (Eastern Boundary)	Highway	Divided	4	1800	7200

Intersections of Interest



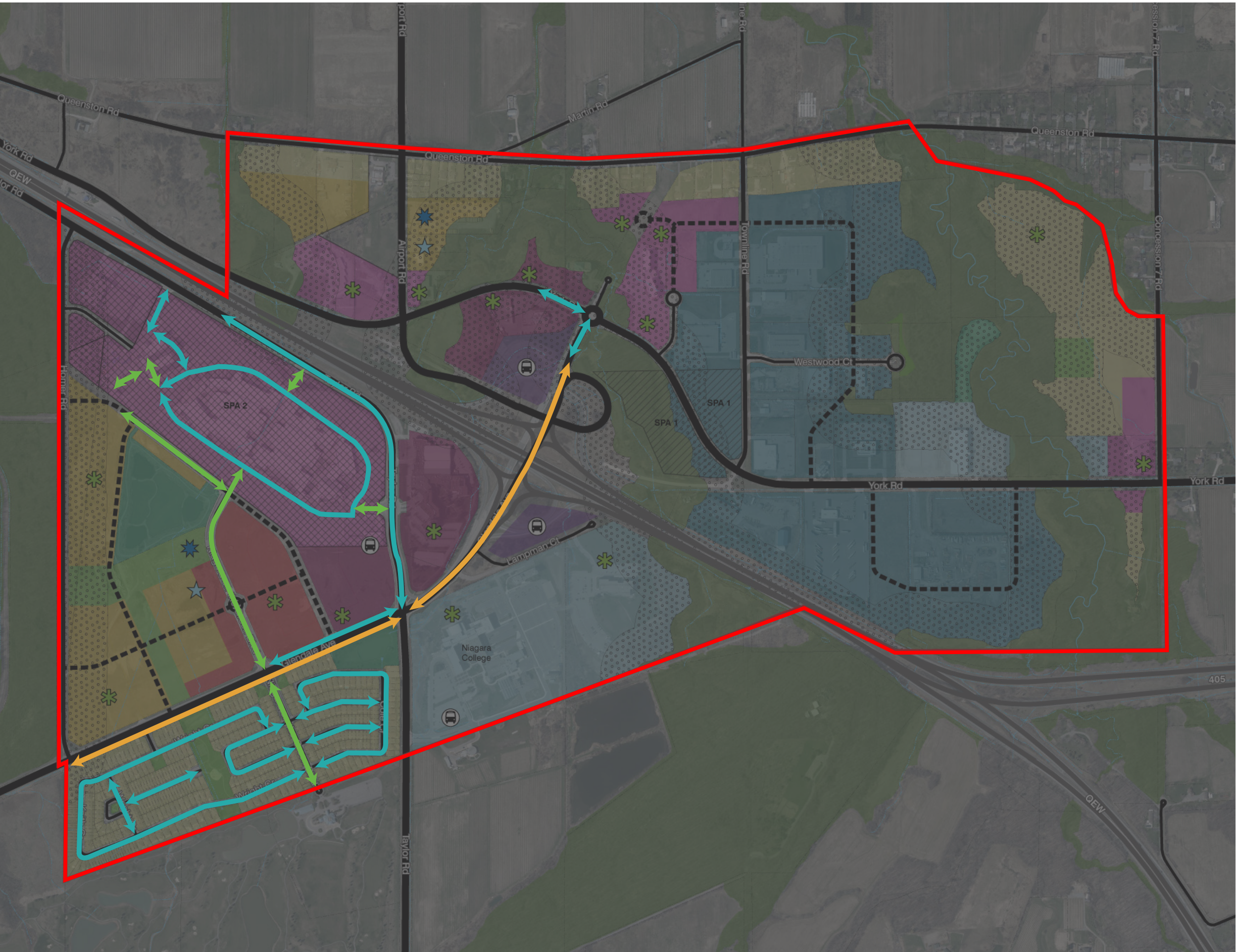
- York Road at Glendale Avenue
- Taylor Road at Glendale Avenue
- Taylor Road at Niagara College

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

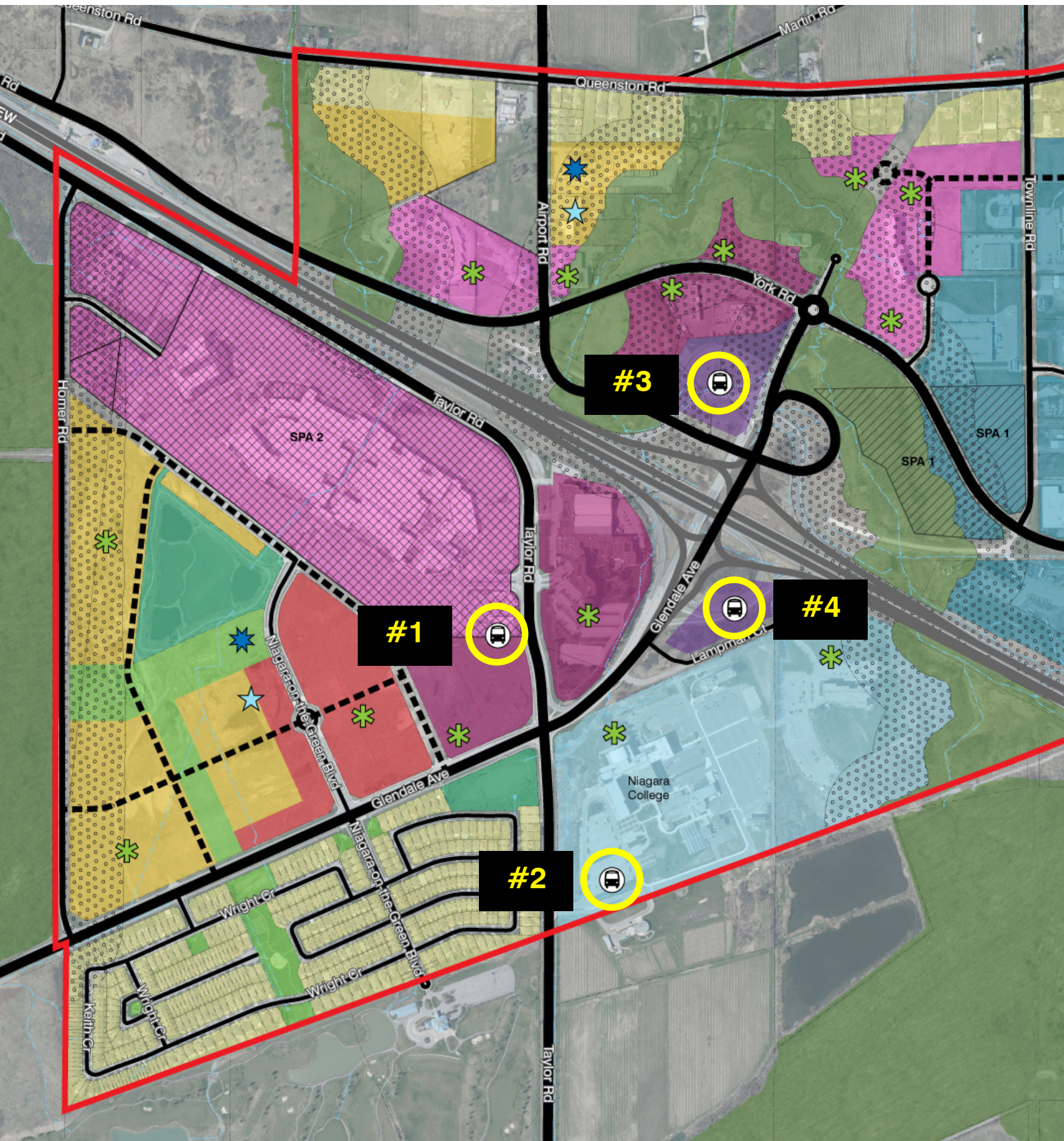
Existing Sidewalk Inventory



Legend

-  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

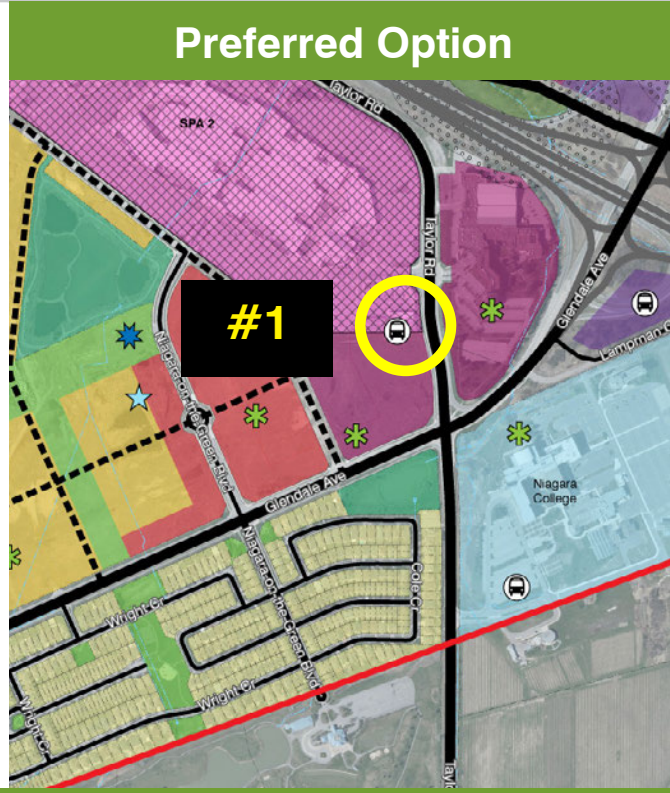
- Connectivity + integration with other modes
- Access/circulation
- Compatibility with planned land uses
- Room for expansion

Transit Hub Site Selection Summary

Transportation Consideration	Glendale Ave/Taylor Rd (#1)		Niagara College (#2)		Glendale Ave/Airport Rd (#3)		Glendale Ave/Lampman Ct (#4)	
Connectivity + integration with other modes	<ul style="list-style-type: none"> Opportunities for integration with active modes 		<ul style="list-style-type: none"> Limited pedestrian facilities and absence of nearby bicycle facilities 		<ul style="list-style-type: none"> Limited opportunities for integration with existing active transportation facilities 		<ul style="list-style-type: none"> Opportunities for integration with existing active transportation facilities 	
Connectivity to residential + mixed-use land uses	<ul style="list-style-type: none"> Future mixed-use mid to high-rise areas accessible within a 5-minute walk 		<ul style="list-style-type: none"> Future mixed-use mid to high-rise areas at Glendale Ave/Taylor Rd accessible within a 10-minute walk 		<ul style="list-style-type: none"> Future high-rise mixed-use area adjacent to site; Glendale Ave/Taylor Rd within a 10-minute walk 		<ul style="list-style-type: none"> Niagara College, future mixed-use mid/high-rise areas accessible within 5-10-minute walk 	
Connectivity to employment land uses	<ul style="list-style-type: none"> Limited connectivity/access to employment uses north of QEW 		<ul style="list-style-type: none"> Limited connectivity/access to employment uses north of QEW 		<ul style="list-style-type: none"> Accessible to employment uses north of QEW within a 10-minute walk 		<ul style="list-style-type: none"> Limited access for employment uses north of QEW 	
Access/Circulation	<ul style="list-style-type: none"> Opportunity for unimpeded ingress and egress flow of buses 		<ul style="list-style-type: none"> Limited access given singular access point that also serves Niagara College 		<ul style="list-style-type: none"> Opportunity for unimpeded ingress and egress flow of buses 		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Supports planned mixed-use land uses and transit-oriented development 	<ul style="list-style-type: none"> Supports institutional uses and higher density lands at Glendale Ave/Taylor Rd 	<ul style="list-style-type: none"> Supports transit-oriented development and institutional uses; 5-minute walkshed limited due to QEW 	<ul style="list-style-type: none"> Supports adjacent institutional uses and higher-density lands at Glendale Ave/Taylor Rd 
Room for expansion	<ul style="list-style-type: none"> Opportunity for future expansion given undeveloped lands 	<ul style="list-style-type: none"> Potentially limited by existing development and the Niagara College lands 	<ul style="list-style-type: none"> Potentially limited by QEW, Airport Rd, future development MTO-owned could lead to easier implementation 	<ul style="list-style-type: none"> No abutting land uses MTO-owned could lead to easier implementation 

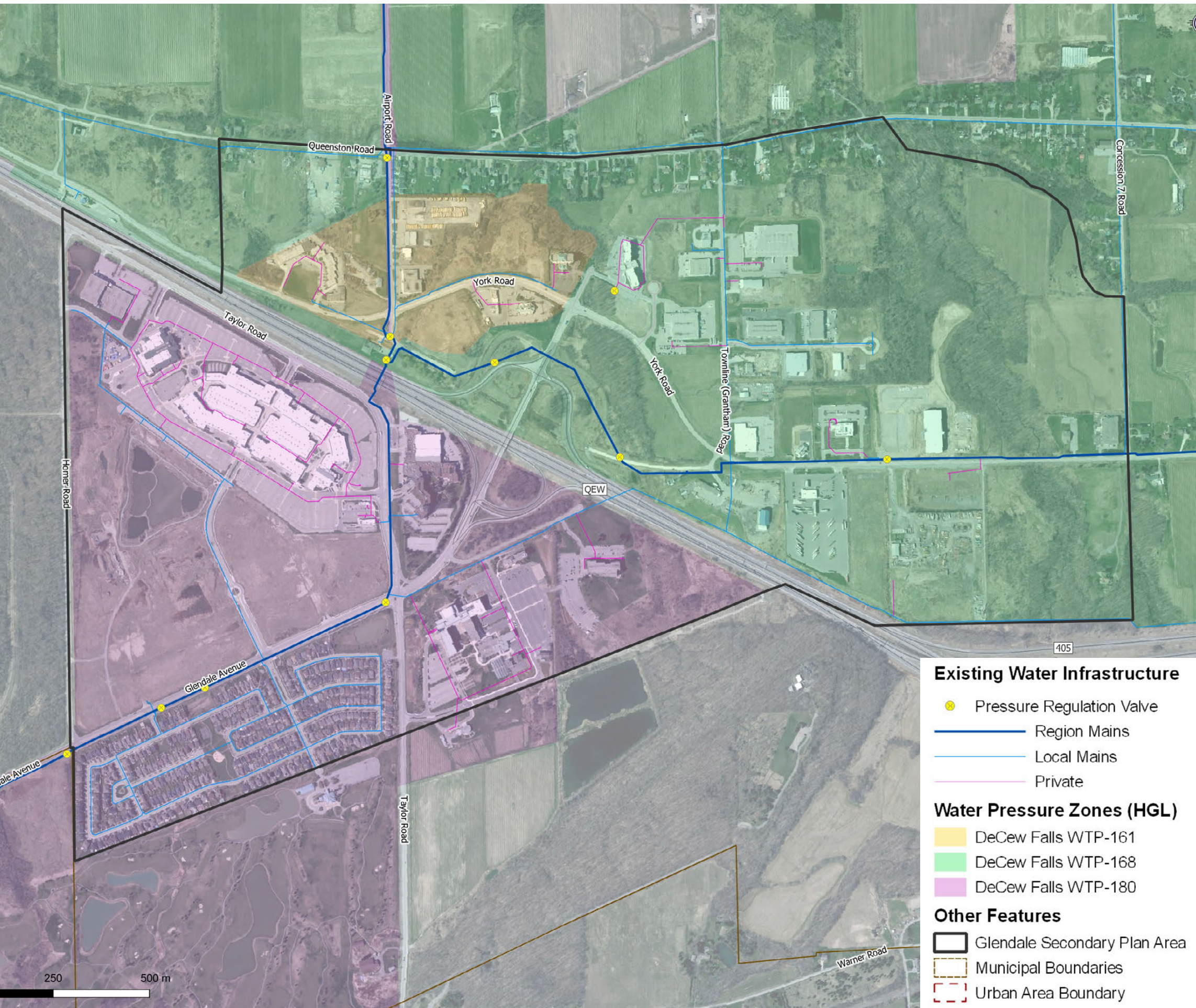


Preferred Option

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

Servicing Assessment

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. Catharines service areas should be reviewed and updated based on the Secondary Plan (as part of future Region-wide Water Master Plan Updates).

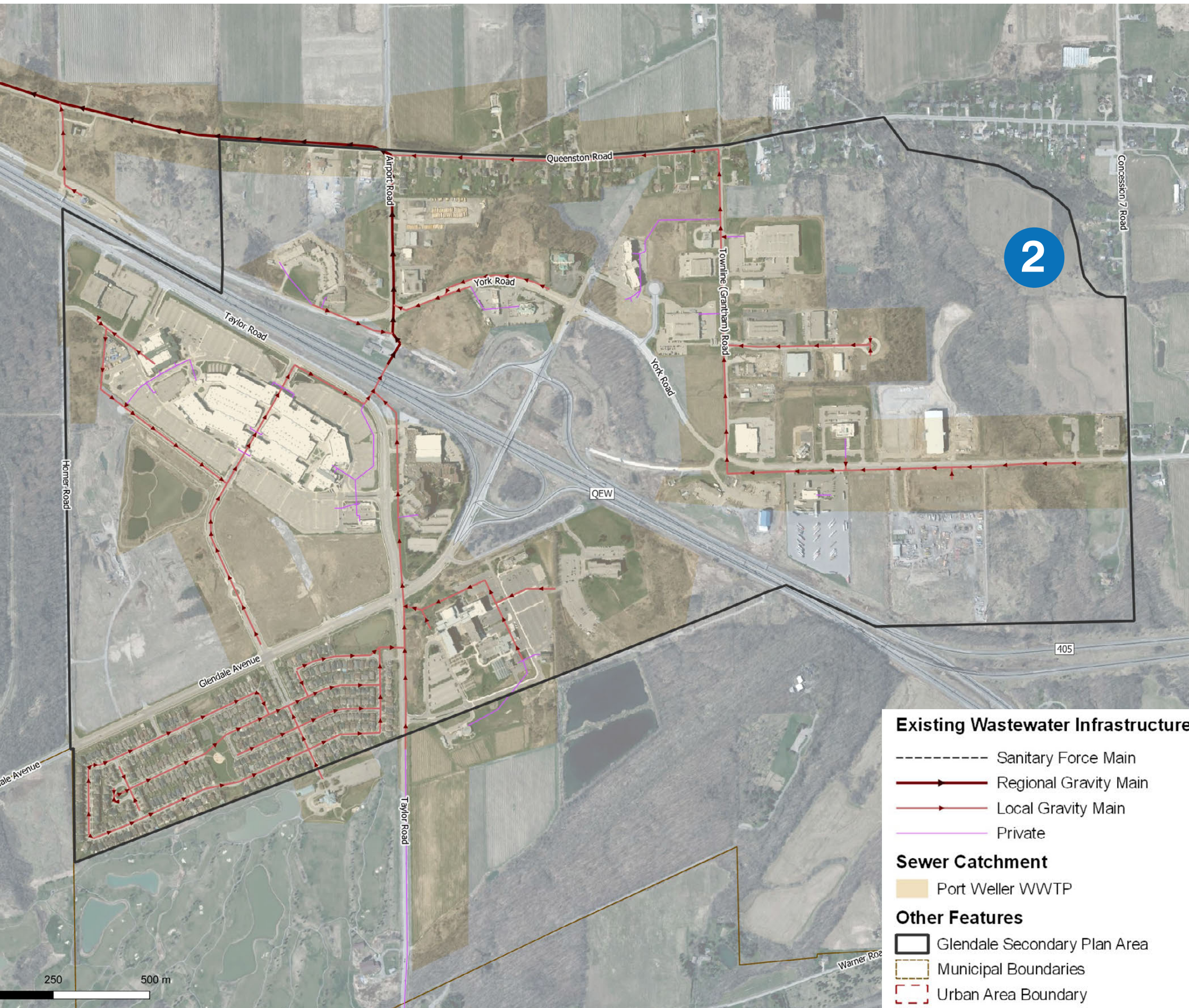
(HGL = Hydraulic Grade Line)

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

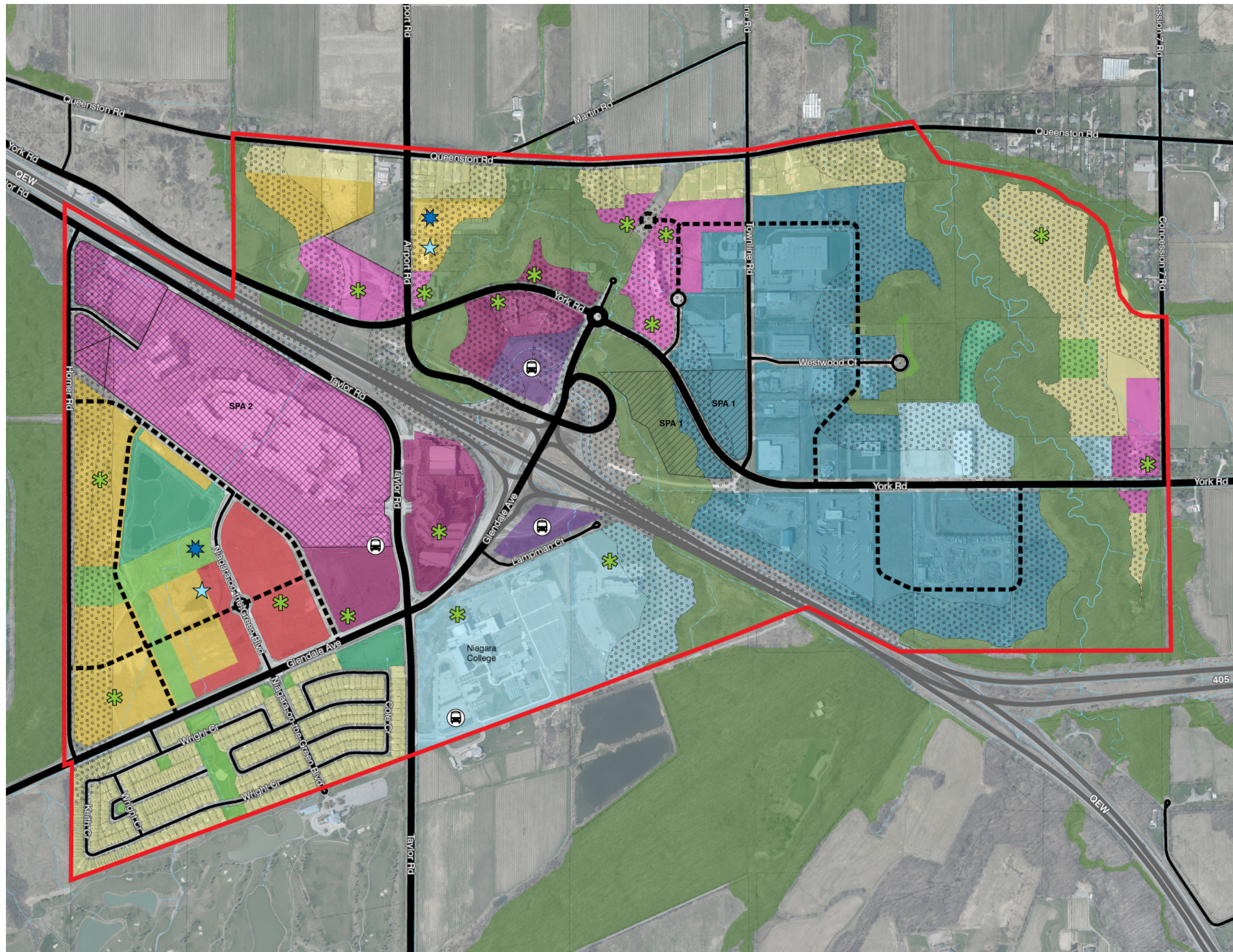
Prepare Urban Design Guidelines

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 Rel
- 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 Stu
- 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