



Proposed Accessibility Legislation

The Accessibility for Ontarians with Disabilities Act, 2005



“The government enacted the Accessibility for Ontarians with Disabilities Act in 2005. This act lays the framework for the development of province-wide mandatory standards on accessibility in all areas of daily life.”



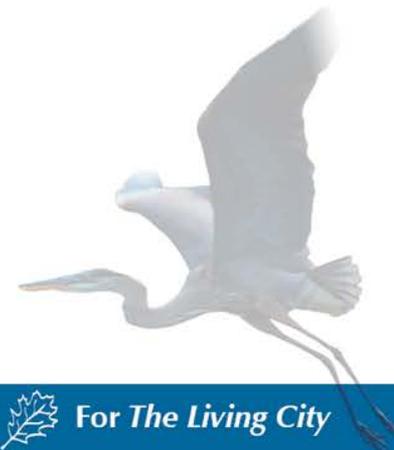


Accessibility for Ontarians with Disabilities Act

Accessibility Standards are the rules that businesses and organizations in Ontario will have to follow to identify, remove and prevent barriers to accessibility.

Accessibility standards will apply to five important areas. Four standards have already been made into law:

- Customer Service
- Employment
- Information and Communications
- Transportation

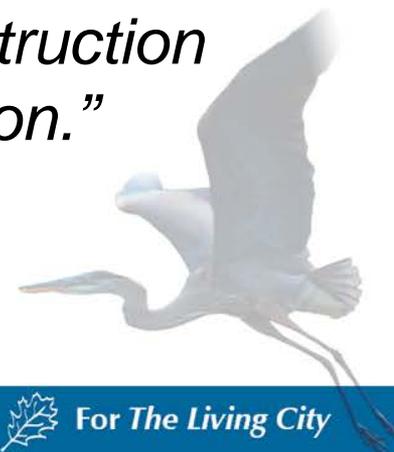
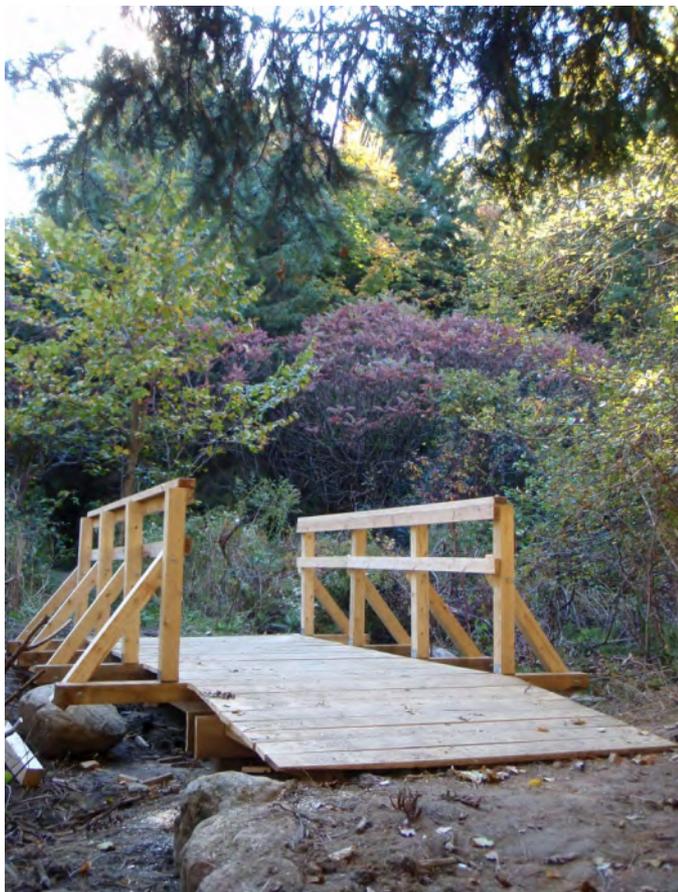




Accessibility Standards

Built Environment Standard

“The Accessibility Standard for the Built Environment will help remove barriers in buildings and outdoor spaces for people with disabilities. The standard will only apply to new construction and extensive renovation.”





Final Proposed Built Environment Standard



- 1.0 Introduction
- 2.0 Scope and Application
- 3.0 Common Access and Circulation
- 4.0 Interior Access Routes
- 5.0 Exterior Spaces
- 6.0 Communication Elements and Facilities
- 7.0 Plumbing Elements and Facilities
- 8.0 Building Performance and Maintenance
- 9.0 Special Rooms, Spaces, Other Elements
- 10.0 Transient Residential
- 11.0 Recreation Elements & Facilities**
- 12.0 Transportation Elements
- 13.0 Multi-unit Housing
- 14.0 Glossary and Units





Final Proposed Built Environment Standard

Technical Requirements

11.1.1 Criteria for Exception

11.1.1.1 Conditions

For recreation trails that are designated for pedestrian use, regardless of the surface material used (boardwalk, pavement, dirt, concrete, asphalt, etc.), the specifications of Clauses 11.1.2 through 11.1.16 shall be met on the trail and the connecting surfaces to the trail, except where the following criteria for exception would occur such that compliance would:

- a) cause substantial harm to cultural, historic, religious or significant natural features or characteristics (environmentally sensitive areas);

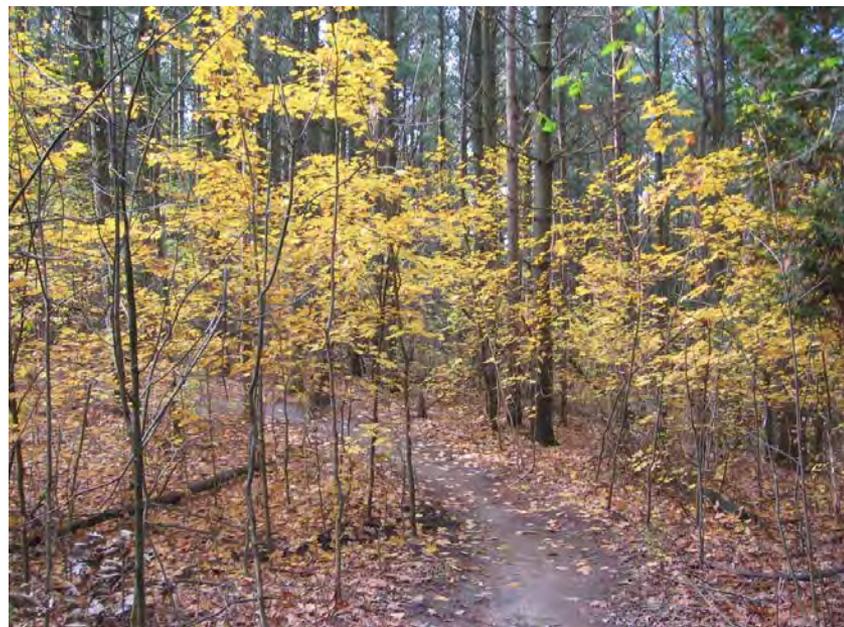




Final Proposed Built Environment Standard

11.1.1.1 Conditions continued...

- b) substantially change the intended experience provided by the facility;
- c) require construction methods or materials that are prohibited by federal, provincial, or local law, other than laws whose sole purpose is to prohibit use by persons with disabilities;
- d) be impractical due to physical terrain
- e) compromise volunteer activity.



TRCA's Trail Strategy and Accessibility

- Trail Assessment with the Universal Trail Assessment Program
 - HETAP
- Signage, brochures and web content
 - Trailhead kiosks
 - Hard-copy maps
- TRCA's Trail Strategy for Natural Areas
 - Policy Framework Research
 - Vision, Goals and Objectives
 - Planning and Design Guidelines
 - Trail Classification System





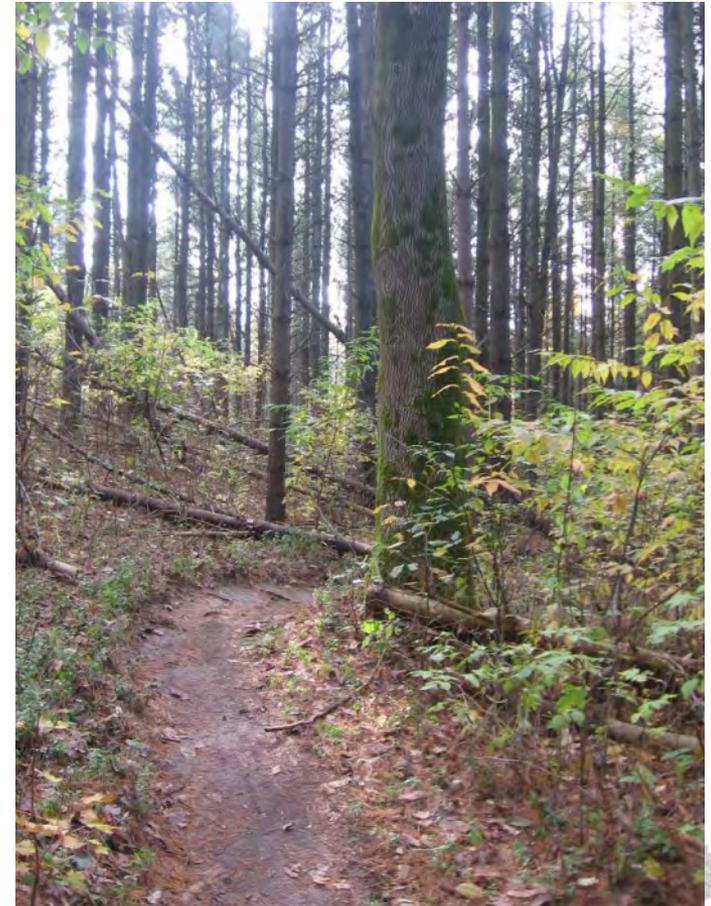
Trail Development Process

Valley and Stream Corridor Management Program (1994)

- Guiding document for development.

Goal

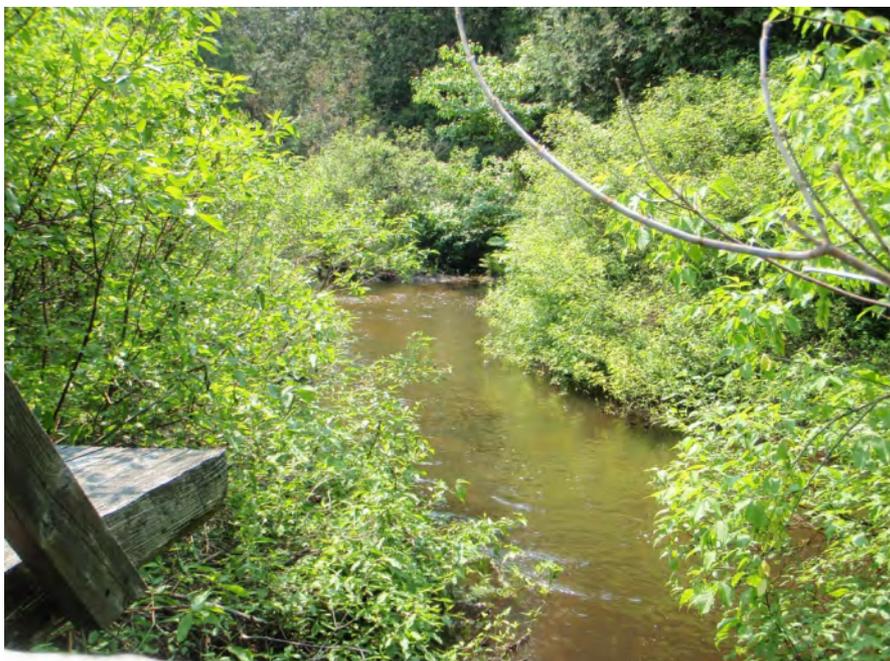
To undertake an integrated valley and stream corridor management program to prevent, eliminate or reduce the risk to life and property from flooding, from erosion of river banks, and from valley slope instability; to protect and regenerate the ecological health and integrity of these systems; **and to provide opportunities for compatible public use and enjoyment.**





Valley and Stream Corridor Management Program

Vision: “[...] **the establishment of an extensive interregional trail system linked through the valley and stream corridors.**”



“Principle 6 – Proposals affecting valley and stream corridors must contribute to the protection and rehabilitation of ecological health; prevention or reduction in risk from flooding, erosion and slope instability, and **should include opportunities for public use and enjoyment.**”





Valley and Stream Corridor Management Program

Program Objectives

- Planning and Operations
- Environmental Protection and Prevention of New Hazards
- Protective Measures and Corridor Regeneration
- Community Information and Emergency Response
- Public Access

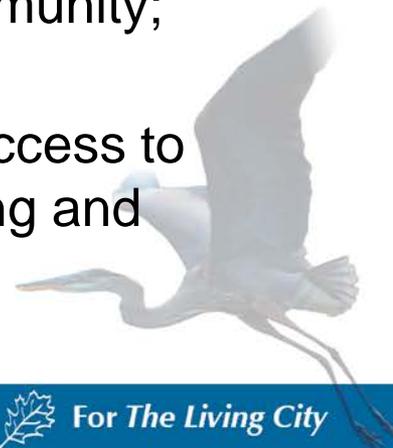




Valley and Stream Corridor Management Program

Public Access

- A) To encourage compatible resource based uses within the valley and stream corridors that foster public enjoyment, understanding and stewardship of these areas, and by doing so contribute to the quality of life within the Metropolitan Toronto Region;
- B) To establish public trails where compatible with the natural resource base in valley and stream corridors with connecting links to the Oak Ridges Moraine, the lake Ontario Waterfront, local greenspace, resources, larger habitat areas, and the community; and
- C) To encourage the protection and establishment of visual access to valley and stream corridors through local municipal planning and development processes.





Valley and Stream Corridor Management Program

Policies and Criteria for Land Use Planning and Development Projects

- New Development
- Existing Development
- Infrastructure and Servicing

New Development

- New Urban Development
- New Resource-based Uses





Valley and Stream Corridor Management Program

New Resource-based Uses

A) The Authority encourages the public and private use of valley and stream corridors for such uses that are compatible with their landform, features and functions such that:

- Existing topography is retained;
- Existing features and functions are protected and improved;
- Unacceptable risks to loss of life and/or property damage as a result of flooding, erosion and/or slope instability do not result; and
- The need for mitigative and/or remedial measures and management strategies is avoided or minimized.





Valley and Stream Corridor Management Program

Generally this includes such uses as:

- Passive (low intensity) outdoor recreation and education;
- Local and regional trail systems; and
- Pasture, agriculture, gardening, horticulture and silviculture.

Other types of more intensive uses may also be compatible, such as:

- Golf courses;
- Downhill skiing; and
- Sportsfields and playing fields



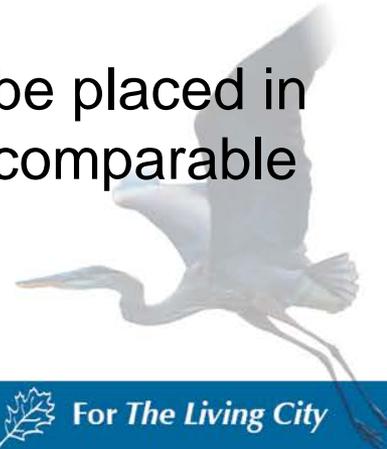


Valley and Stream Corridor Management Program

B) New resource-based uses may be permitted within valley and stream corridors subject to the following policies and criteria:

10) All resource-based uses should provide for an interregional or local public trail and/or access. In addition:

- i) trail planning should be consistent with the Trail Planning and Design Guidelines, MTRCA, 1991 and subsequent amendments and those of other applicable agencies;
- ii) the lands required for the trail should be placed in public ownership or reserved through a comparable mechanism.





Valley and Stream Corridor Management Program

12) Where a local or regional trail system is proposed as a new resource-based use, the preceding requirements of this Section shall apply in addition to the following:

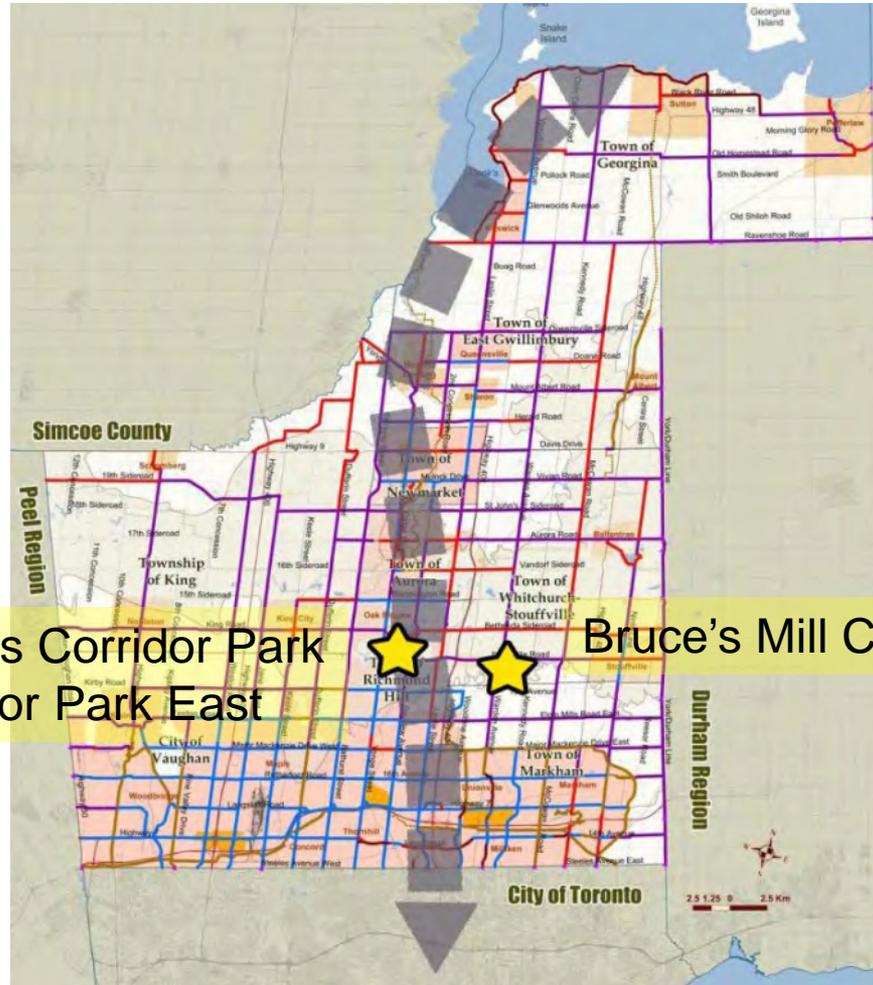


- i) pathways within the floodplain must be designed to be at or as close as possible to existing grades, and crossings should be perpendicular to stream flows; and/or
- ii) a trail may be located within the active erosion zone of a valley corridor (adjacent to top or toe of slope) or riverbank erosion zone where it can be demonstrated that there is no feasible alternative and the risks associated are acceptable to all agencies.





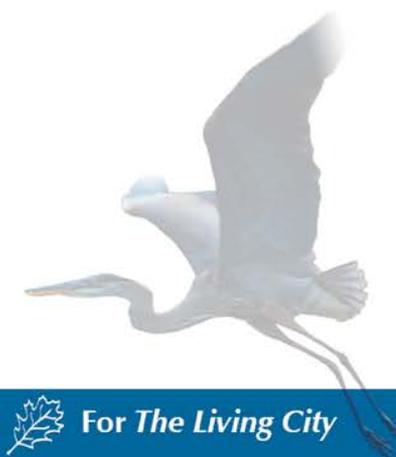
York Region Lake to Lake Cycling Route



Oak Ridges Corridor Park
and Corridor Park East



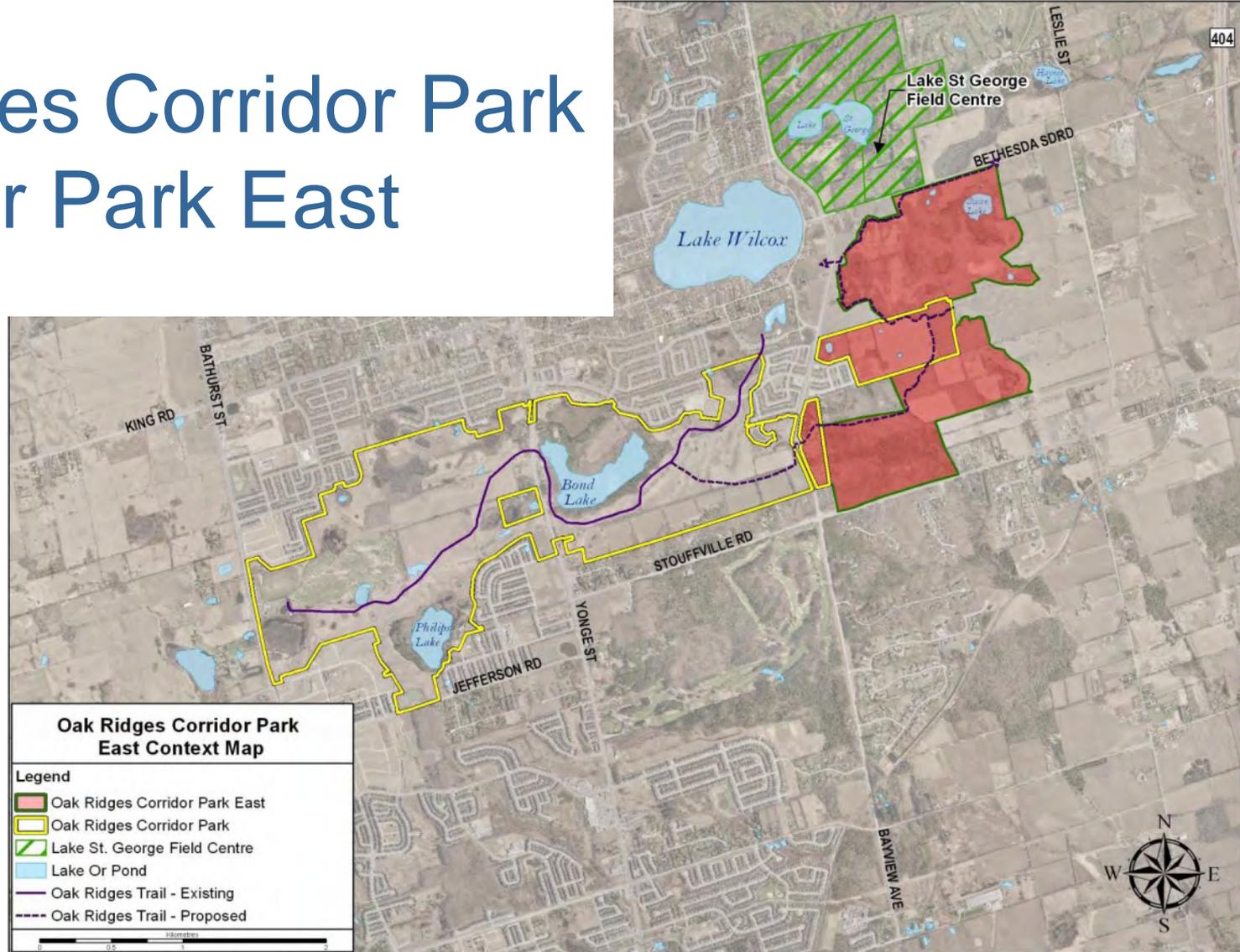
Bruce's Mill CA





Oak Ridges Corridor Park & Corridor Park East

Corridor Park
Area: 428ha
Trails: 5km



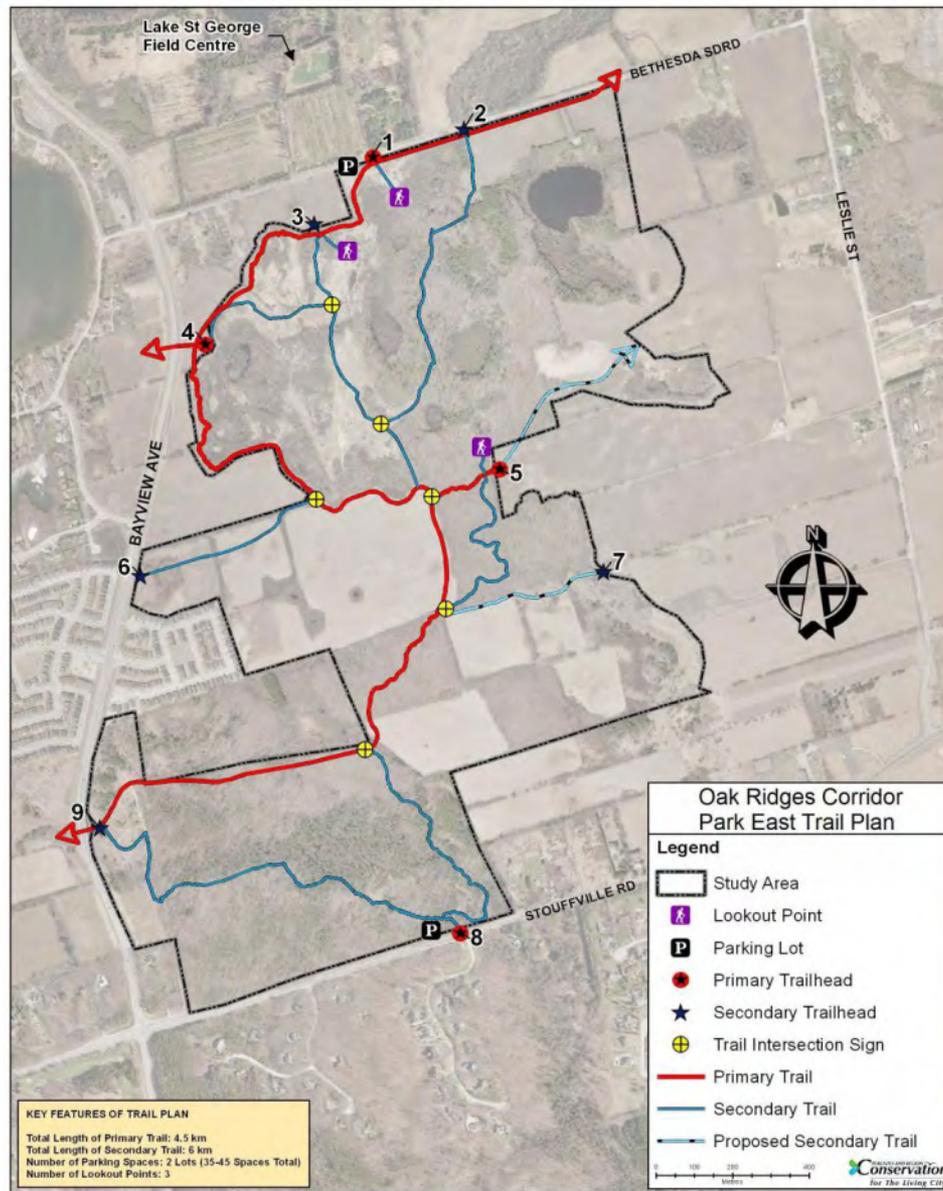


Oak Ridges Corridor Park East

Corridor Park East

Area: 175ha

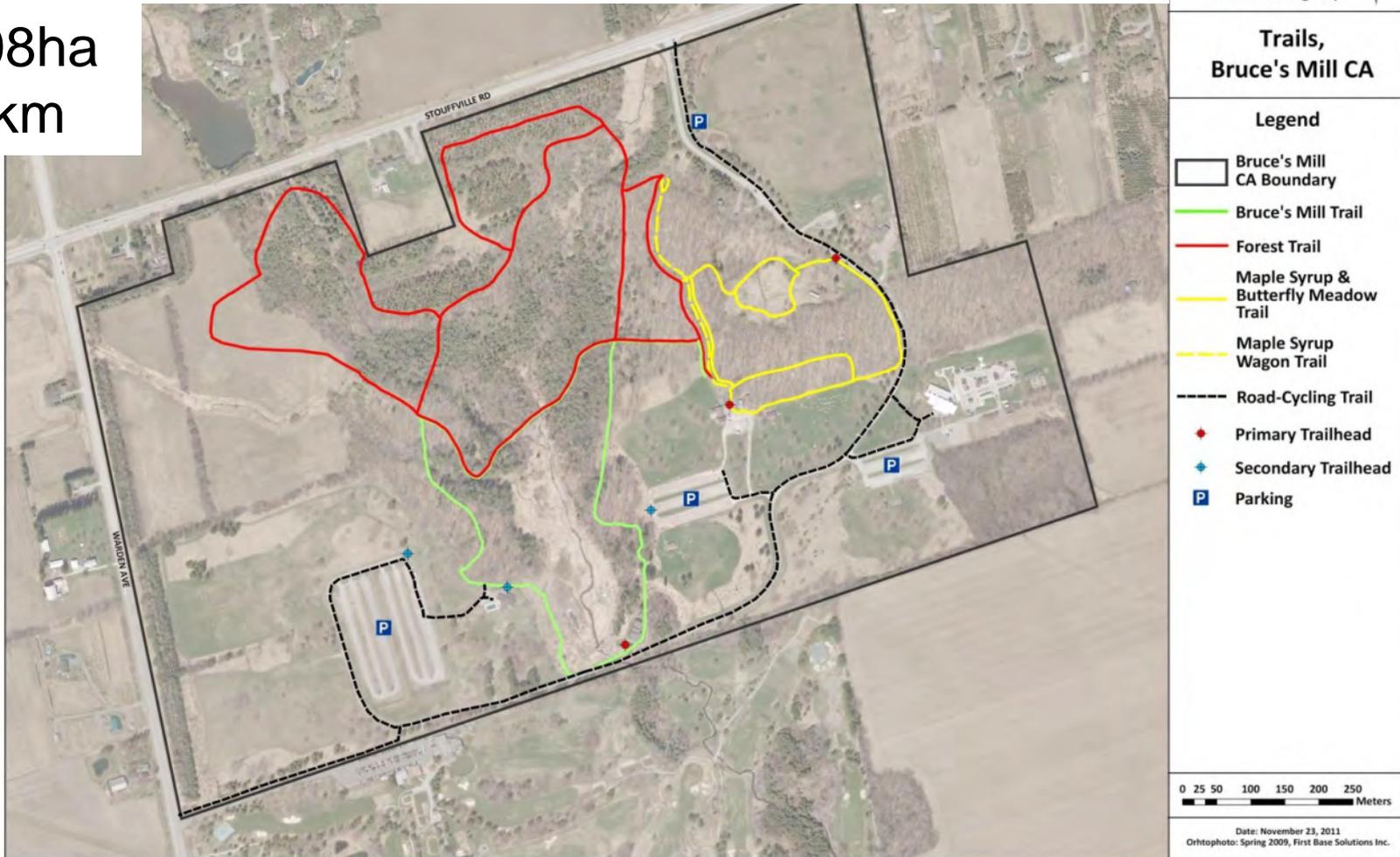
Trails: 10.5km





Bruce's Mill Conservation Area

Area: 108ha
Trails: 7km





Questions or Comments?



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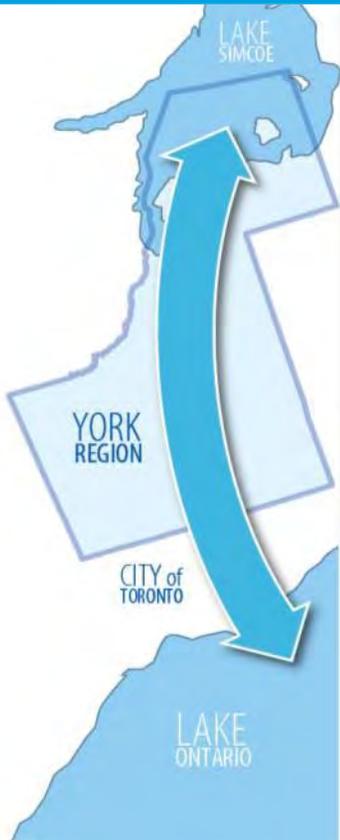
breid@trca.on.ca

416-661-6600 ext 5932



Lake to Lake

CYCLING ROUTE and WALKING TRAIL



TYPICAL FACILITY DESIGN

JAY CRANSTONE | PRESENTATION | APRIL 27, 2012

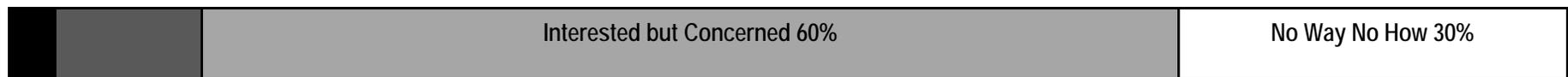
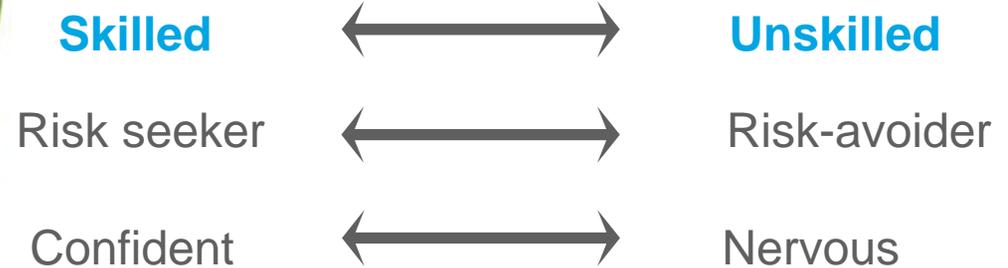


PRESENTATION OUTLINE

- What is Active Transportation & Who are Cyclists?
- Design Guideline References
- Facility Design & Selection
- Typical Design Types (Cycling Routes & Walking Trails)
 - Multi-use Trails outside of the Road ROW
 - Main Spine
 - Secondary
 - In-Boulevard Multi-use Trails
 - Cycle Tracks
 - Bike Lanes
 - Paved Shoulders
 - Signed-only Cycling Routes & Sharrow Markings
- Trail Crossings
- Trail Signage
- Working Group Session



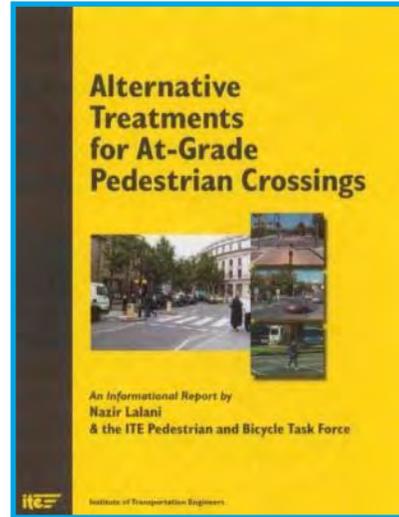
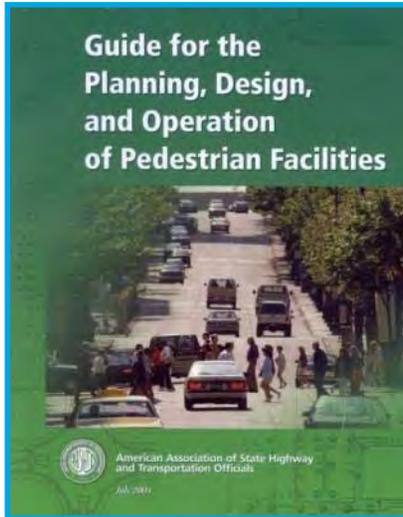
WHAT IS ACTIVE TRANSPORTATION?



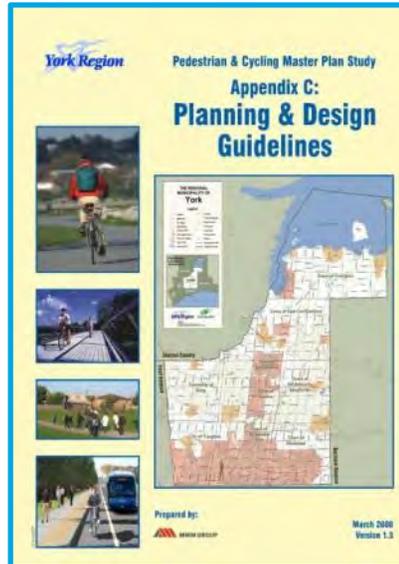
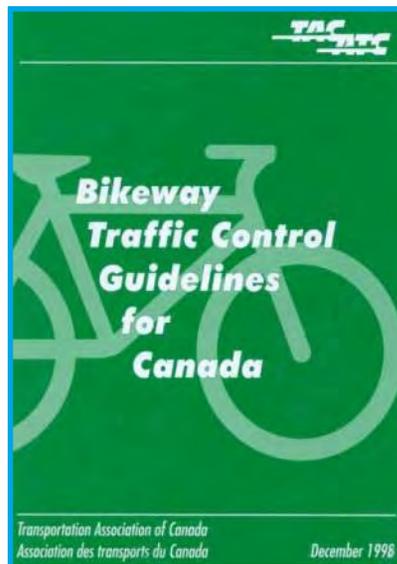
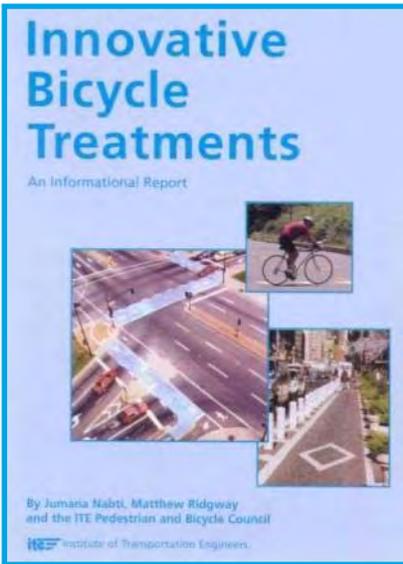
Strong and Fearless < 1% Enthused & Confident 5 10 10%



DESIGN GUIDELINE REFERENCES



- Guidelines Currently Being Updated:**
- OTM Book 18 Bicycle Design; and
 - MTO Bikeway Design Guidelines.



- Additional References:**
- AASHTO Guide for the Planning, Design and Operation of Bicycle Facilities (2010)
 - NACTO Urban Bikeway Design Guidelines (2010)
 - OTM Book 15 – Pedestrian Crossing Facilities, 2011
 - Crow Design Manual for Bicycle Traffic (2007)
 - TAC Bikeway Signal Guidelines (Draft 2004)



FACILITY DESIGN & SELECTION

Separated Facilities

- Multi-use Trails Outside the Road Right-of-Way
- In-Boulevard Multi-use Trails Within the Road Right-of-Way
- Cycle Tracks
- Buffered Bike Lanes

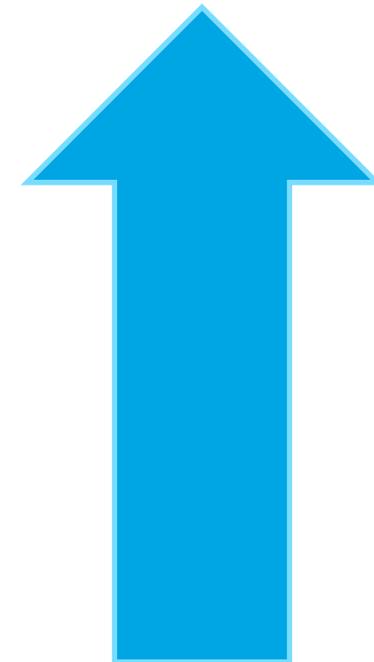
Dedicated Space

- Bike Lanes

Shared Space

- Paved Shoulders
- Sharrow Markings
- Signed-only Cycling Routes

**Generally Higher Motor Vehicle Volume and/or Speed
= Greater Facility Separation**

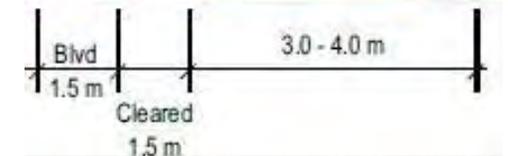


**Generally Lower Motor Vehicle Volume and Lower Speed
= Less Facility Separation**



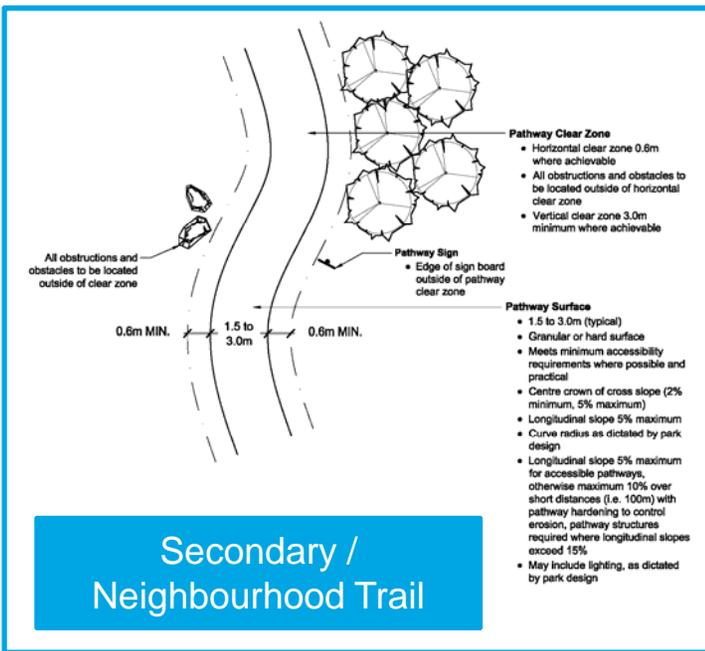
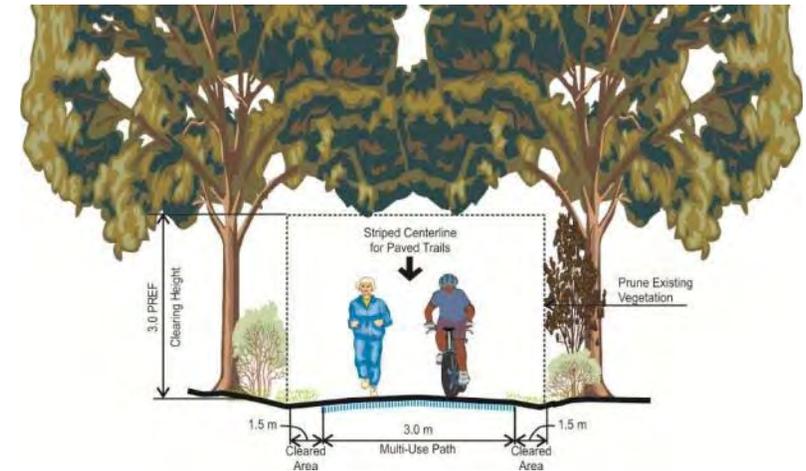
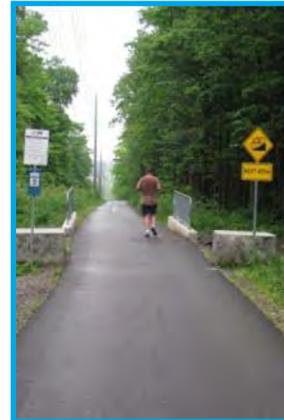
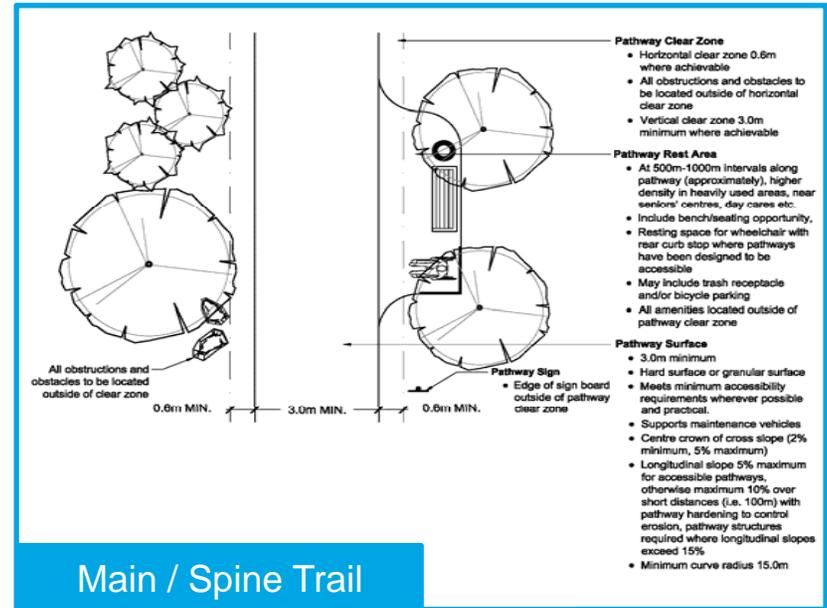
TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Multi-use Trails outside of Road ROW

- In parks, greenway corridors and other linear corridors (hydro, gas, light rail and low volume rail), these provide critical connections for recreational, novice and child cyclists.



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Multi-use Trails (Main / Spine Trail & Secondary / Neighbourhood Trail

- Width and surface type differs depending on location and uses;
- Design and surface can determine uses



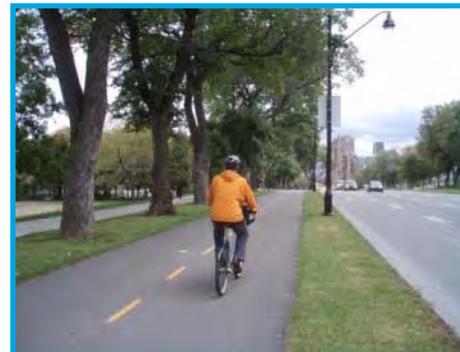
TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)-

In-Boulevard Multi-use Trails

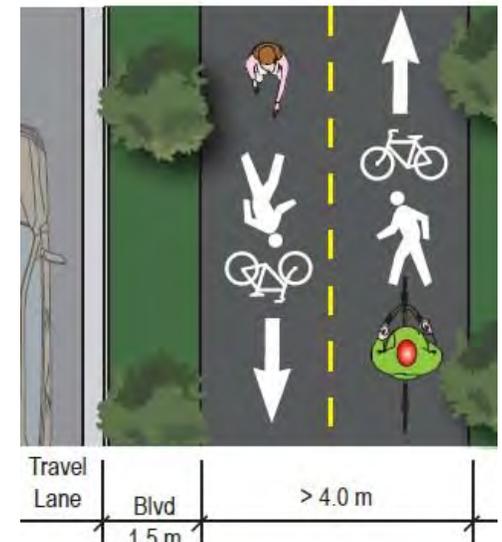
- In-boulevard multi-use trails (within road rights-of-way) are useful for both pedestrians and cyclists along popular commuter routes. They can be used in place of a sidewalk.
- A good facility type where there is ample right-of-way, a low frequency of intersections and driveways, and adjacent land use or lotting pattern that minimizes the potential for conflict with pedestrians.
- Not a good choice for high density development with narrow frontages.



Multi-Use Boulevard Trail
Aurora, ON



Multi-Use Boulevard Trail
Toronto, ON



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Cycle Tracks



- A bicycle facility that combines the user experience of a separated path with the on-road infrastructure of a conventional bike lane.
- Cycle tracks provide space that is intended to be exclusively or primarily for bicycles, and are separated from motor vehicle travel lanes using different design techniques such as parking lanes, bollards, curbs, medians or a combination of separation details.



Painted buffer and flexible/removable bollards create separation



Painted buffer and planter boxes creates separation



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)-

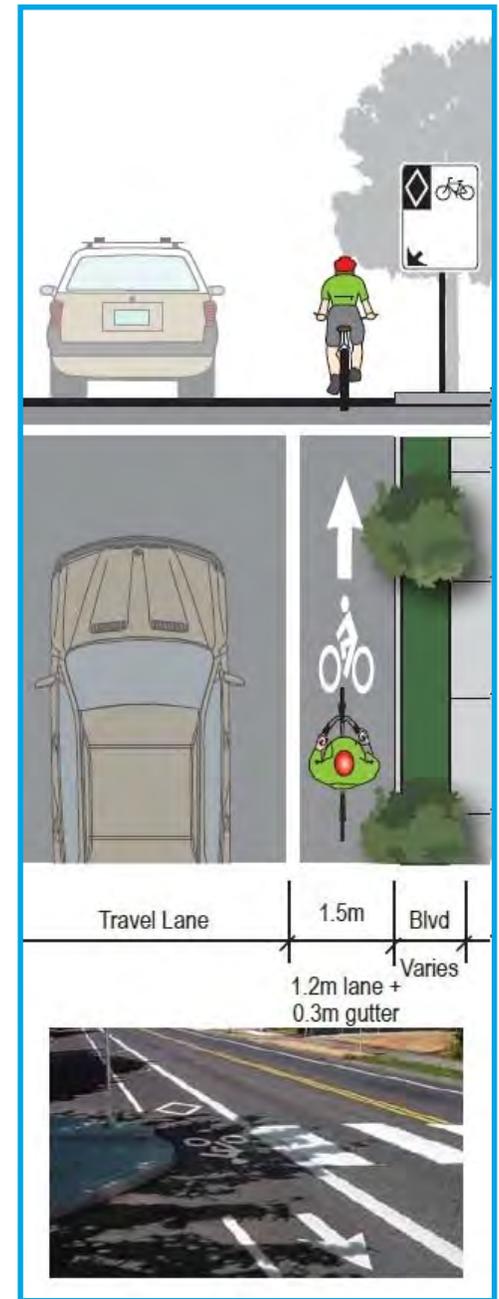
Buffered Bike Lanes & Bike Lanes

Bike Lanes

- A dedicated facility located in the travelled portion of the roadway for one-way cyclist traffic.
- Motor vehicles are not typically allowed to drive, park or stand in a bike lane, but right turning motor vehicles can enter the lane at intersections to complete their turn.
- Ensuring consistency in the design and signing of bike lanes and other bikeway facilities is crucial to educate and inform cyclists and motorists on their proper use.



A wider bike lane is needed beside parked cars



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)-

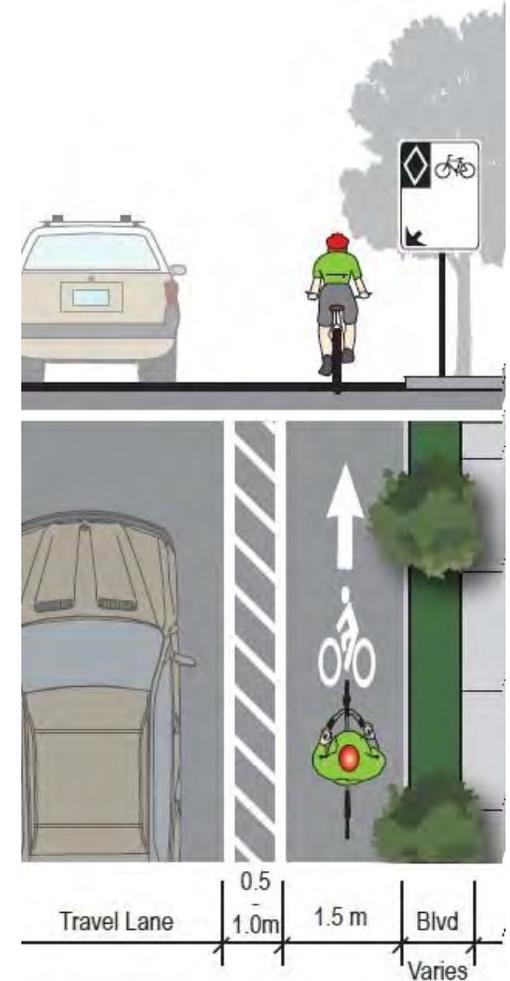
Buffered Bike Lanes & Bike Lanes

Buffered Bike Lanes

- Buffered bike lanes provide additional space/separation between the cyclist and motor vehicles.
- They should be considered on high volume, higher speed roads.



Buffered Bike Lane
Toronto, ON

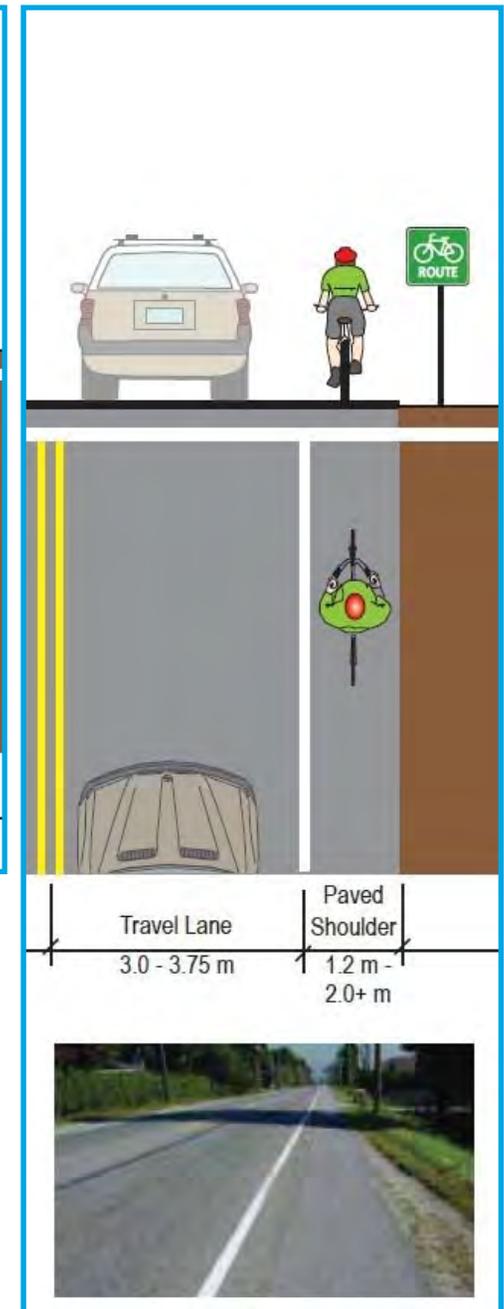


TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Paved Shoulder

- Provide a space for cyclists on rural cross-section roads (with shoulders, no curb and gutter).
- Where motor vehicle speeds or volumes are high, a wider shoulder and/or painted buffer enables more separation between the cyclist and motor vehicle, and also reduces the impact of wind-shear on the cyclist.
- Rumble strips can be added to the painted buffer as an additional cue, provided that there are clearly marked breaks at regular intervals, allowing cyclists to move in or out of the paved shoulder area to overtake slower moving cyclists or to make a left turn.



Painted buffer where motor vehicle speed and/or volume are high.



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Signed-Only Cycling Routes on a Wide Outside / Curb Lane

- Facility provides shared space for cyclists and motor vehicles.
- Can often be retro-fitted on a 4-lane cross-section by narrowing the inside travel lanes.
- Consider “Share the Road” signs and/or sharrow markings at pinch points to make both cyclists and motorists aware of narrow zones.

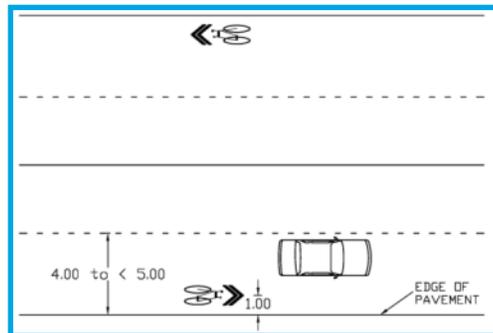


Shared space on a wide lane
Elora, ON



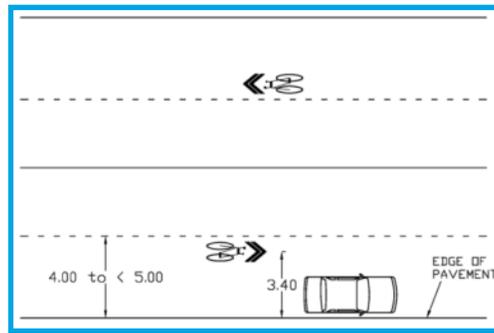
TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- “Sharrows”

- Clear pavement markings and signs illustrate the concept of “share the road”.
- Pavement markings indicate appropriate positioning for cyclists. Cyclists align their front wheel with the point on the chevron.
- Especially useful in congested areas where traffic is generally moving slowly (e.g. a “downtown” street).



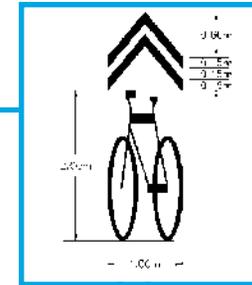
Without On-street Parking

Offset encourages cyclists to maintain an appropriate distance from the curb.



With On-street Parking

Offset encourages cyclists to maintain a clear distance from open doors of parked cars.

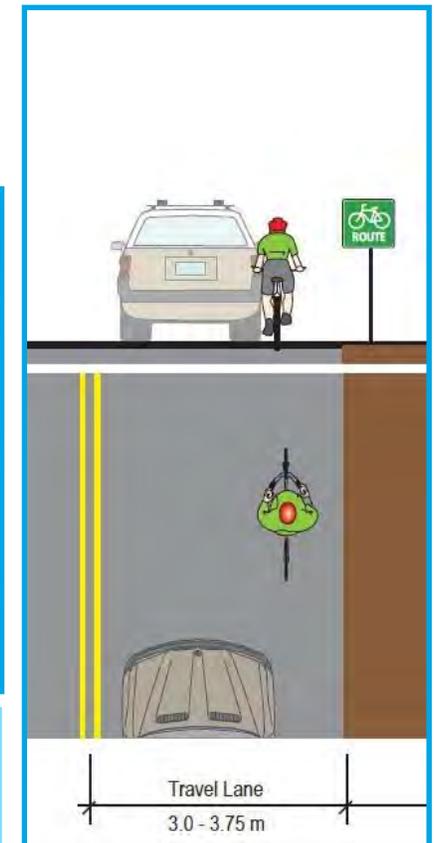



TYPICAL DESIGN TYPES (CYCLING ROUTES & WALKING TRAILS)- Signed-Only Cycling Routes on Local Roads

- Facility should be supported by education programming for both cyclists and motorists.
- Routes should use appropriate and consistent designation bicycle route sign types, supplemented by “Share the Road” signs.



Shared Space on a
Local Road
Elora, ON



TRAIL CROSSINGS-AT GRADE

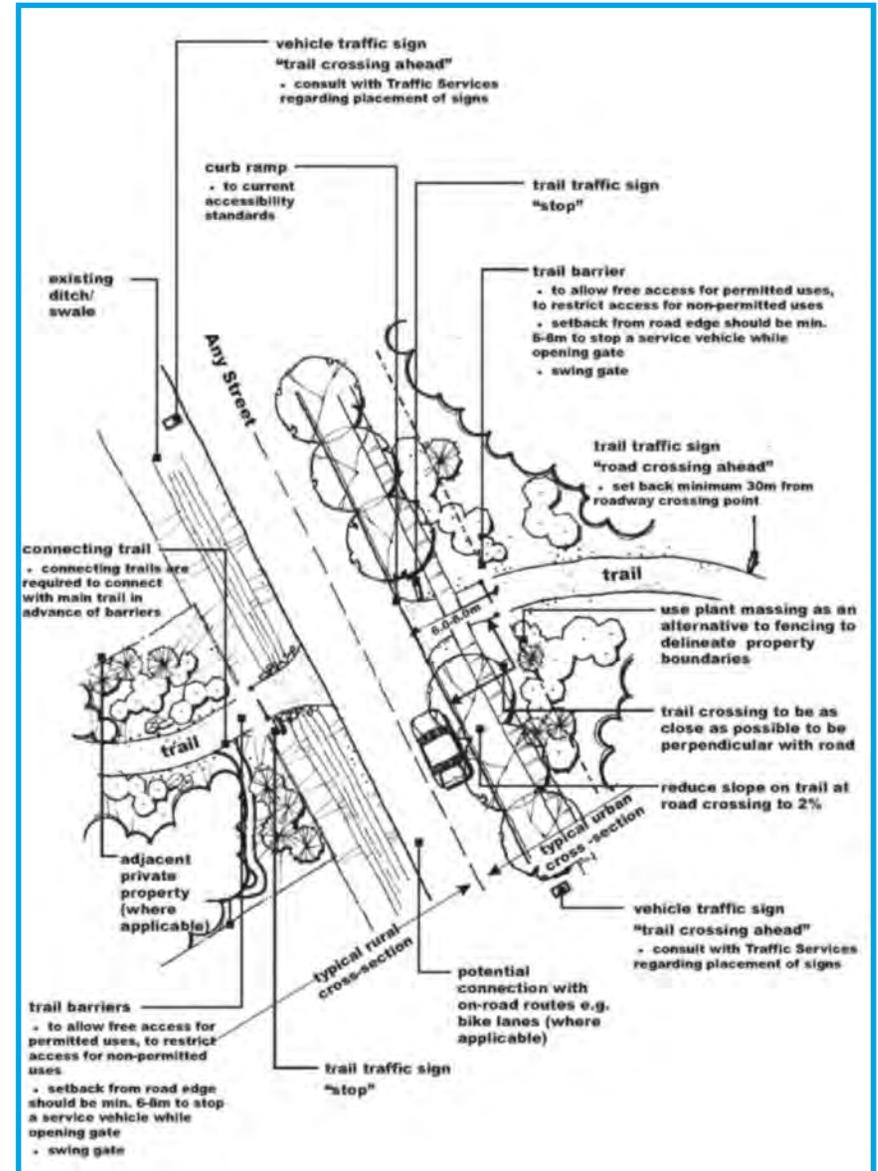
Trail Crossing: Minor Road
(Guelph, ON)



Trail Crossing: Collector Road
(Guelph, ON)

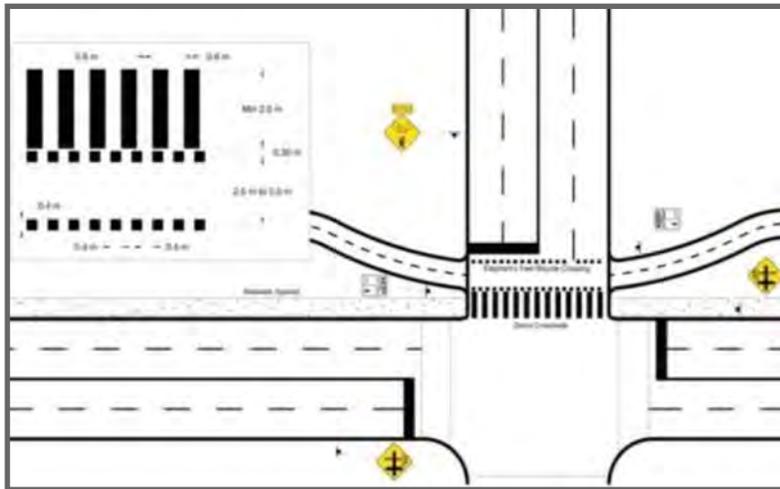


Trail Crossing: Arterial Road
(Guelph, ON)



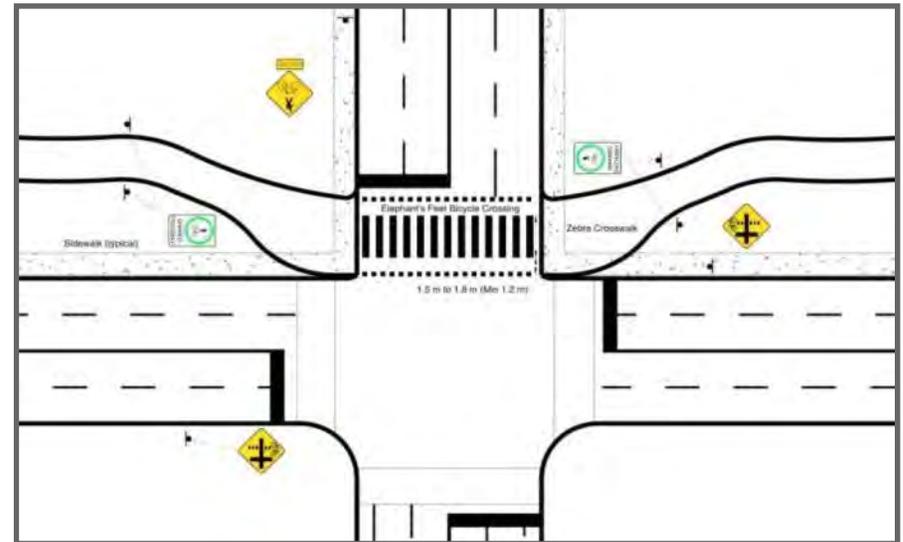
TRAIL CROSSINGS- CROSS RIDE

Separate Crossings (Cross-rides and Cross-walks)



Separate Bike Crossing at an **Unsignalized** Intersection (“Cross-Ride”) Credit: TAC Bikeway Traffic Control Guidelines, 2012

Combined Crossing



Combined Multi-use Trail Crossing at an **Unsignalized** Intersection



Photo Credits: MMM Group, 2011 – City of Mississauga Cross-ride (Multi-Use Path)



Photo Credits: MMM Group, 2011 – City of Mississauga Cross-ride (Multi-Use Path)



Photo Credits: John Luton, 2008 (Flickr) - Vancouver, BC (Cycle Track)



TRAIL CROSSINGS-RAILWAYS AT GRADE

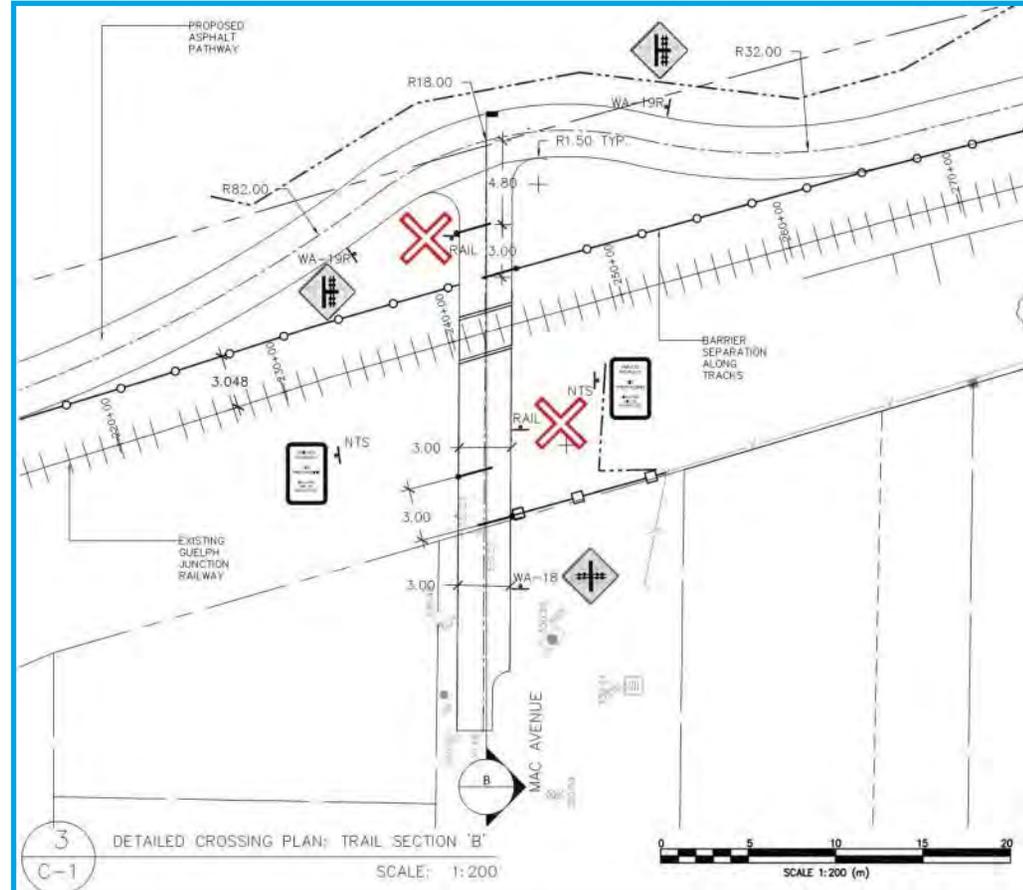
Trail Crossing: Railway
(Newmarket, ON)



Trail Crossing: Railway (Guelph, ON)

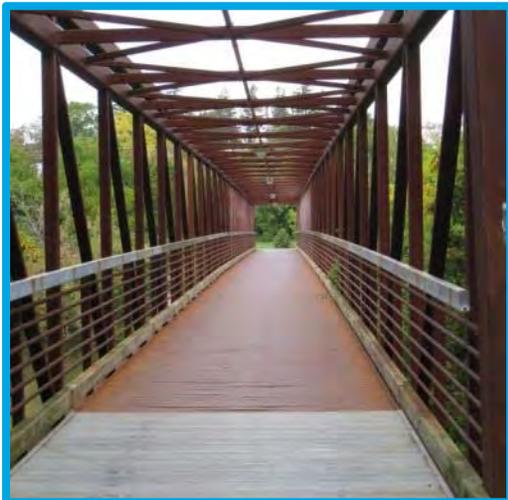


Trail Crossing: Railway
(Guelph, ON)



TRAIL CROSSINGS – GRADE SEPARATED

Trail Bridge
(Elora, ON)



**Trail Bridge: Caledon
Trailway/Trans Canada Trail**
(Inglewood, ON)



Trail Crossing Below Hwy 401
(Etobicoke Creek Trail, Mississauga, ON)



**Trail Bridge: Trans Canada
Trail over Hwy 401.**
(Cambridge, ON)



Tunnel Crossing Below Railway
(Georgetown, ON)



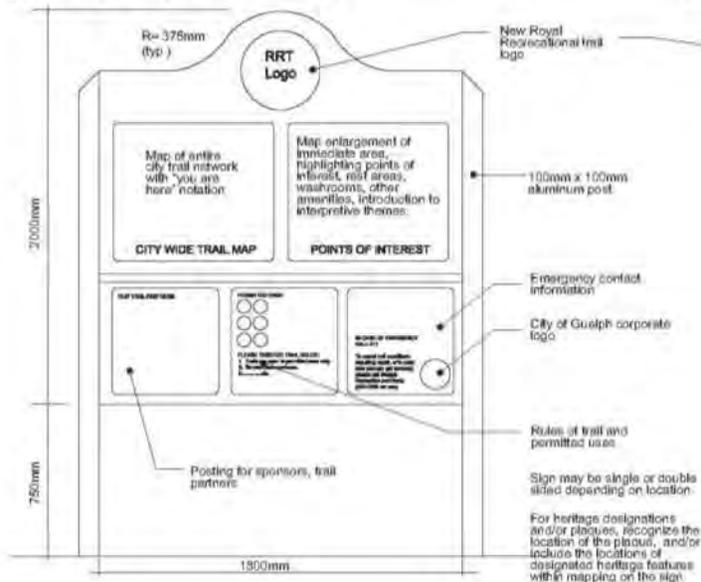
TRAIL SIGNAGE

- An important element of the overall design;
- Develop a “Family of Signs” by creating a design theme and characteristics that can be reflected in the different types of signs (materials, colours, graphics, fonts, etc.);
- Gives the signs a consistent and finished look that helps to unify the system and can be essential in branding the trail system as a whole;
- Careful balance between providing enough information for users and avoiding over-signing / sign clutter; and
- Trail signs can be grouped into:
 - Trail head Signs
 - Directional / Marker Signs
 - Interpretive Signs
 - Regulatory / Safety / Information Signs.

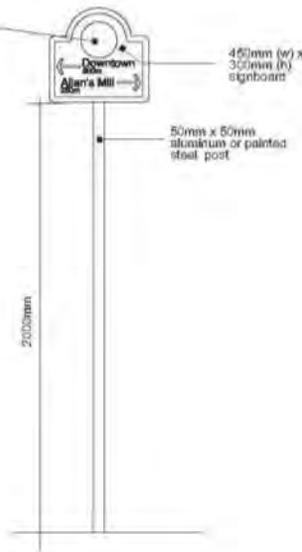


FAMILY OF SIGNS- EXAMPLE GUELPH

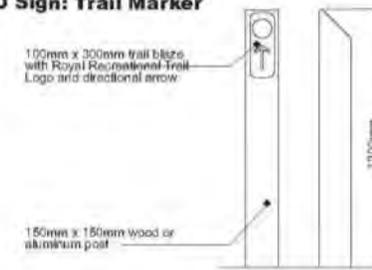
Type A Sign: Major Trailhead Sign



Type C Sign: Directional Sign



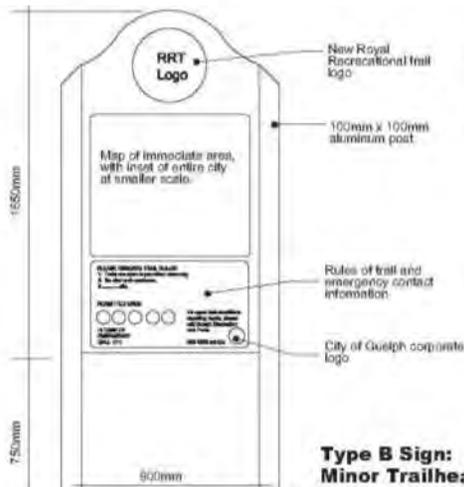
Type D Sign: Trail Marker



Sign Placement

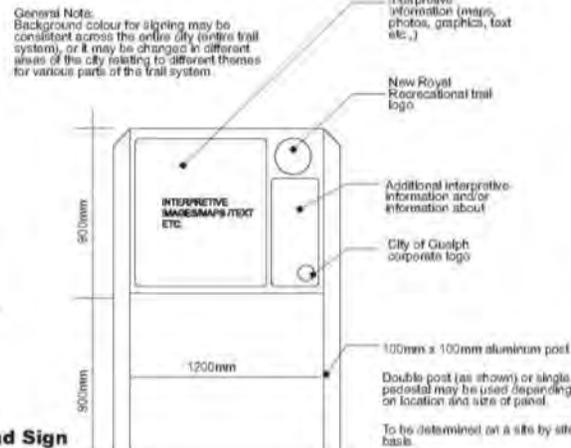
The following chart provides some guidance regarding the frequency with which each sign type should be placed throughout the trail system. It is important to note that this chart is intended as guidelines only and that signage must be considered on a site-specific basis.

Sign Type	Frequency / Typical Location	Other Comments
General Sign Types		
Type A Sign (Major Trailhead Sign)	At every major trailhead. (Refer to network map for suggested locations of major staging areas/trailheads).	Must be considered as part of an integrated design for the trailhead/staging area.
Type B Sign (Minor Trailhead Sign)	At every minor trailhead/staging area. (Refer to network map for suggested locations of major staging areas/trailheads).	Must be considered as part of an integrated design for the trailhead/staging area.
Type C Sign (Directional Sign)	Where main trails intersect with other main trails, where main trails intersect with minor trails, at connecting links to nearby communities.	
Type D Sign (Trail Marker)	At regular intervals along the trail system (50m for rural trails with motorized uses, 25m for urban/town trails where walkers are a major user group) At trail directional change points.	
Type E Sign (Interpretive Sign)	Located within view of features to be interpreted.	Frequency dependent upon number of features to be interpreted and anticipated major trail user mode. Consider 1 sign for every 20 minutes of active trail use (20-minute walk, 20-minute ride) for a dedicated interpretive trail. For trails where sporadic features are to be interpreted, signs should be located at feature sites.
Other Signs		
Regulatory sign	As required throughout the system to inform users of maximum rate of travel, hazards etc.	Use sign types recognized by Ministry of Transportation and Transportation Association of Canada. To be placed in advance of feature/point. Distance from sign to feature is determined by design speed of trail to allow users sufficient reaction time (minimum 30m is recommended).
Trail Etiquette	At each trailhead, access point or roadway crossing.	Can be stand alone sign or can be incorporated into trailhead signs.



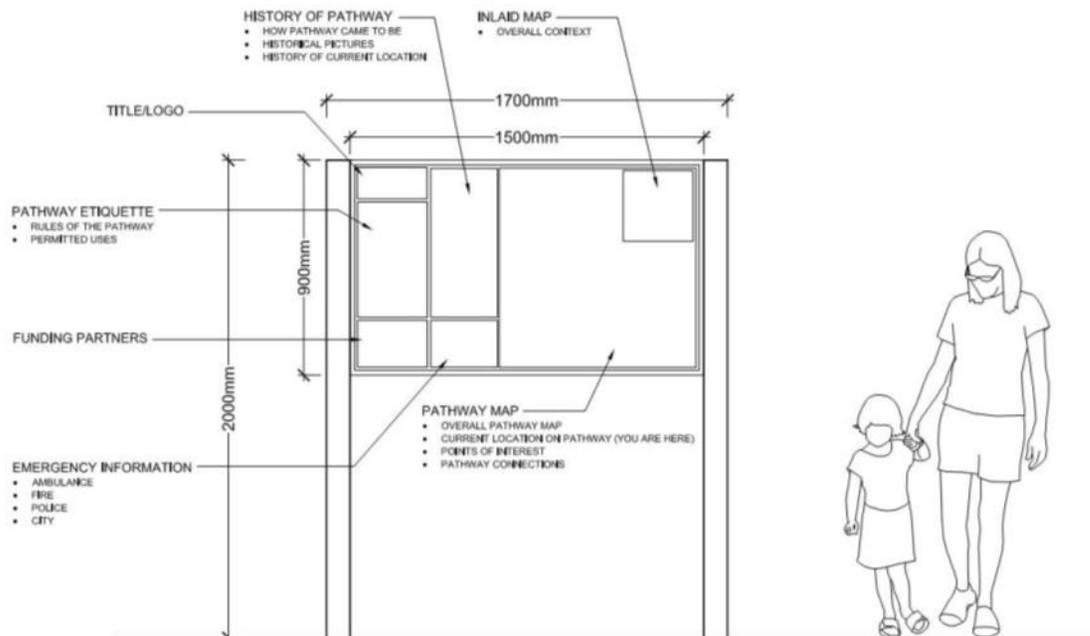
Type B Sign: Minor Trailhead Sign

Type E Sign: Interpretive Sign

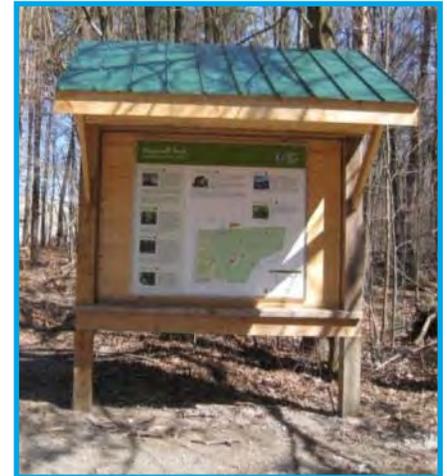


TRAILHEAD SIGNS

- Largest of the trail signs in the “family of signs”
- Located at main parking areas
- Provide overview of the trail route/network in the form of map(s)
- Communicate level of accessibility so users can make an informed decision about whether to proceed on the trail or not
- Also typically provide emergency contact information, an introduction to interpretive themes, and trail etiquette



Sheppards Bush
(Aurora, ON)



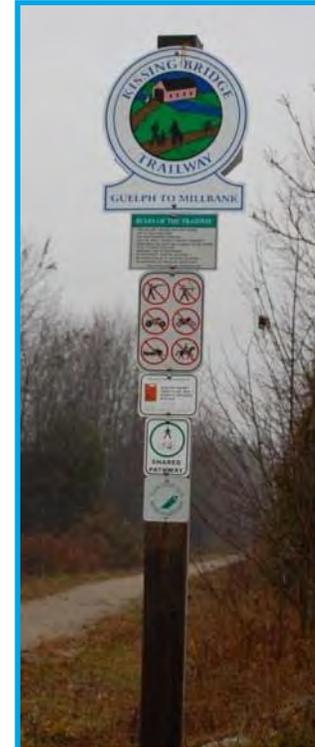
TRAILHEAD SIGNS



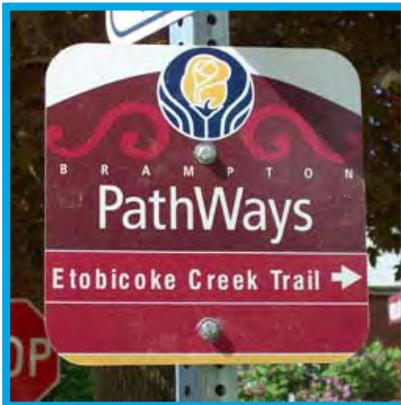
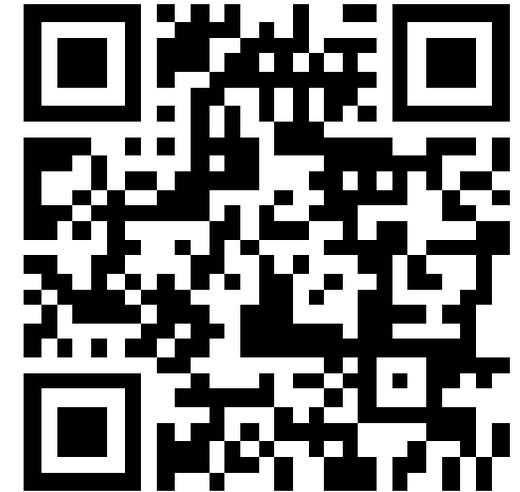
LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL

TRAIL DIRECTIONAL SIGNS

- Located at trail intersection points and at regular intervals on long uninterrupted sections of trail
- Assure users they are on the main route
- Contain directional arrows, distance to key destinations along or nearby the trail, can include GPS information to assist with Emergency Response
- Can use Quick Response Codes (QR)



TRAIL DIRECTIONAL SIGNS



INTERPRETIVE SIGNS

- Located at points of interest along the trail (natural heritage, cultural heritage, cultural history, significant views);
- Located where there is a learning opportunity;
- Can be incorporated into rest area along the trail;
- Excellent opportunity for partnership (e.g. have local naturalist groups develop the theme and information for the sign); and
- In contrast to other types of trail signs, interpretive signs can be “information intensive” with lots of graphics and text.



INTERPRETIVE SIGNS: RECOGNIZING CONTRIBUTORS



TRAIL SIGNS

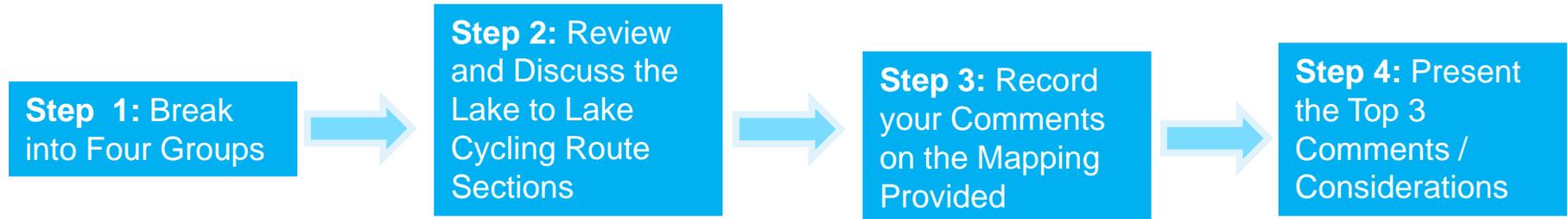
- Provide important messages regarding safety (e.g. stop for road crossings, shared trail, narrow trail, steep descent ahead etc.);
- Use recognizable symbols and sign character that is consistent with roadway signing;
- Sign size is smaller than roadway signing; and
- User behaviour-positive reinforcement.



TRAIL SIGNS: ??? YIKES!!



WORKING GROUP SESSION



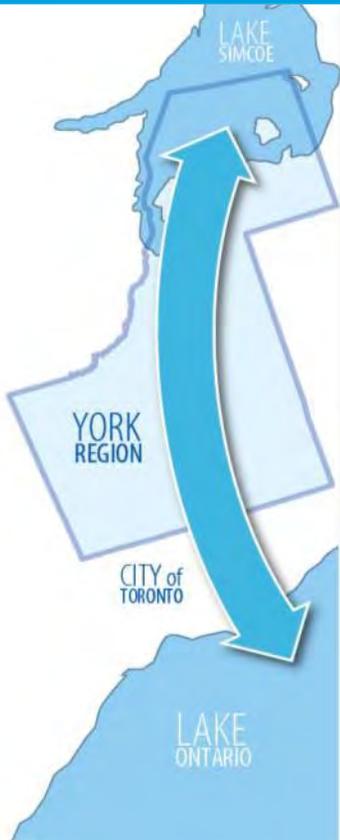
Questions to be Discussed:

- What are your thoughts on the proposed Lake to Lake Cycling Route and Walking Trail alignment?
- What are some potential opportunities and constraints with this trail alignment?
- Identify some key destinations and points of interest that you think the Lake to Lake Cycling Route and Walking Trail should connect to.
- The current design concept may include off and on-road in-boulevard multi-use trails, bike lanes, paved shoulder and signed routes on rural roads and sidewalks on urban roads. Do you have any comments on the use of some or all of these facility types?
- What kind of branding or marketing strategies should be explored to help best promote the Lake to Lake cycling route and walking trail?



Lake to Lake

CYCLING ROUTE and WALKING TRAIL



OVERVIEW OF THE PRIMARY CORRIDOR, KEY DESTINATIONS & ATTRACTIONS & DRAFT ROUTE SELECTION CRITERIA

JAY CRANSTONE | PRESENTATION | APRIL 27, 2012



OUTLINE

- Background-The Lake to Lake Connection
- Route Selection Process
- Route Selection Criteria
- Description of Corridor – Opportunities, Constraints, Route Alignments for Consideration
 - Section 1: *Town of Georgina*
 - Section 2: *Town of East Gwillimbury*
 - Section 3: *Town of Newmarket, Town of Aurora & Town of Whitchurch-Stouffville*
 - Section 4: *Town of Richmond Hill*
 - Section 5: *Town of Markham*



THE LAKE TO LAKE CONNECTION

As outlined in the Region's ***Pedestrian and Cycling Master Plan (2008)***, the Regional Municipality of York identified a cycling route and walking trail that will span from Lake Simcoe to Lake Ontario promoting alternate forms of travel, such as combining walking and cycling with public transit.

2006 York Region PCMP
Proposed Lake to Lake Alignment



Updated Lake to Lake Route
Alignment (2012)

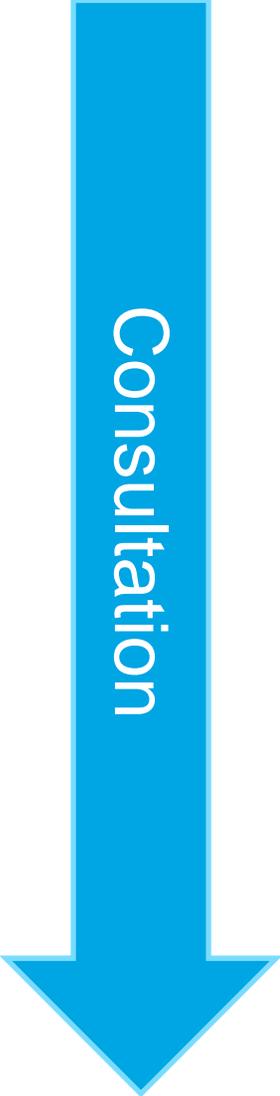


Primary Study Area: the lake to lake corridor conceptually identified in the Pedestrian and Cycling Master Plan which connects Lake Simcoe to the north with the City of Toronto at the East Don Parklands near Leslie Street and makes use of the City's cycling facilities to Lake Ontario.



ROUTE SELECTION PROCESS

1. Prepare Base Mapping
 - Existing on and off-road facilities (York Region Cycling Map and Database)
 - Known planned on and off-road facilities (Local municipal Cycling, Trail and Active Transportation Master Plans)
2. Develop Route Selection Principles
3. Select Candidate Routes/Route Alignments
4. Field Reviews
5. Prepare Draft Routing
 - Select alignments
 - Differentiate between on and off-road facilities
6. Determine Draft Facility Types
 - Multi-use Trail, Signed Route, Paved Shoulder, Bike Lane etc.
7. Determine Priorities (Implementation Plan)
8. Apply Unit Costing to arrive at Opinion of Cost for Network Implementation
9. Finalize 5, 6, 7, 8



Consultation

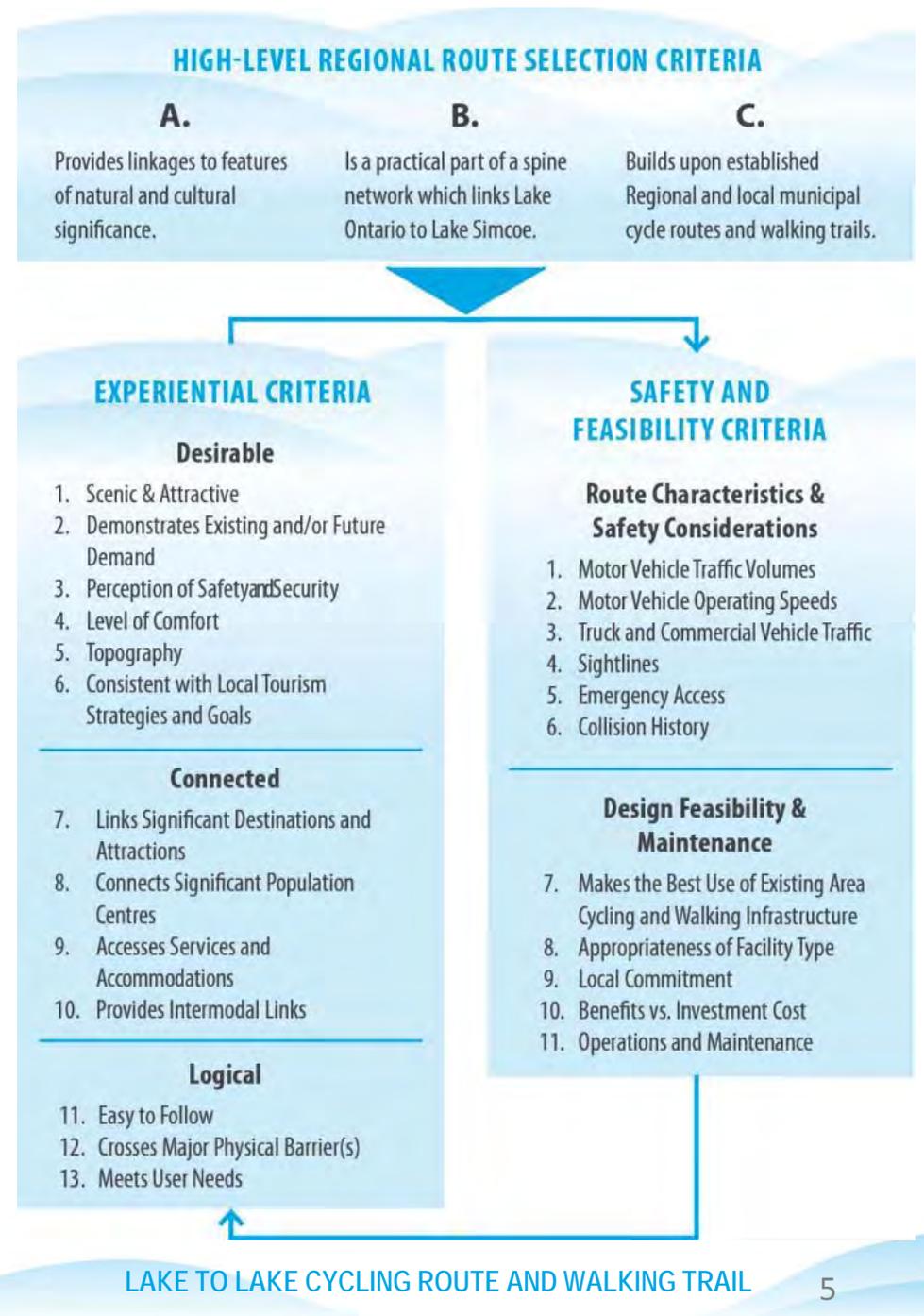


LAKE TO LAKE ROUTE SELECTION PROCESS

Route Selection Criteria are used to help inform the development of the Lake-to-Lake Cycling Route and Walking Trail.

- **Step 1:** provides the region with high-level route selection criteria which reflects the overall goals and objectives of the lake-to-lake cycling route and walking trail.
- **Step 2:** Experiential Criteria including features associated with a desirable, connected & logical route.
- **Step 3:** Safety and Feasibility criteria including features associated with safety, design feasibility and maintenance.

Steps 2 and 3 are used to refine the routes and identify the preferred alternative.



LAKE TO LAKE ROUTE SELECTION CRITERIA

Step 1: High-Level Criteria

- **A:** Provides linkages to features of natural and cultural significance
- **B:** Is a practical part of a spine network which links Lake Ontario to Lake Simcoe
- **C:** Builds upon established Regional and local municipal cycling routes and walking trails.



LAKE TO LAKE ROUTE SELECTION CRITERIA CONT'D.

Step 2: Experiential Criteria

- **Desirable**
 - Scenic & Attractive
 - Demonstrates Existing and / or Future Demand
 - Perception of Safety and Security
 - Level of Comfort
 - Topography
 - Consistent with Local Tourism Strategies and Goals

- **Connected**
 - Links Significant Destinations and Attractions
 - Connects Significant Population Centres
 - Accesses Services and Accommodations
 - Provides Intermodal Links

- **Logical**
 - Easy to Follow
 - Crosses Major Physical Barriers
 - Meets User Needs



LAKE TO LAKE ROUTE SELECTION CRITERIA CONT'D.

Step 3: Safety & Feasibility Criteria

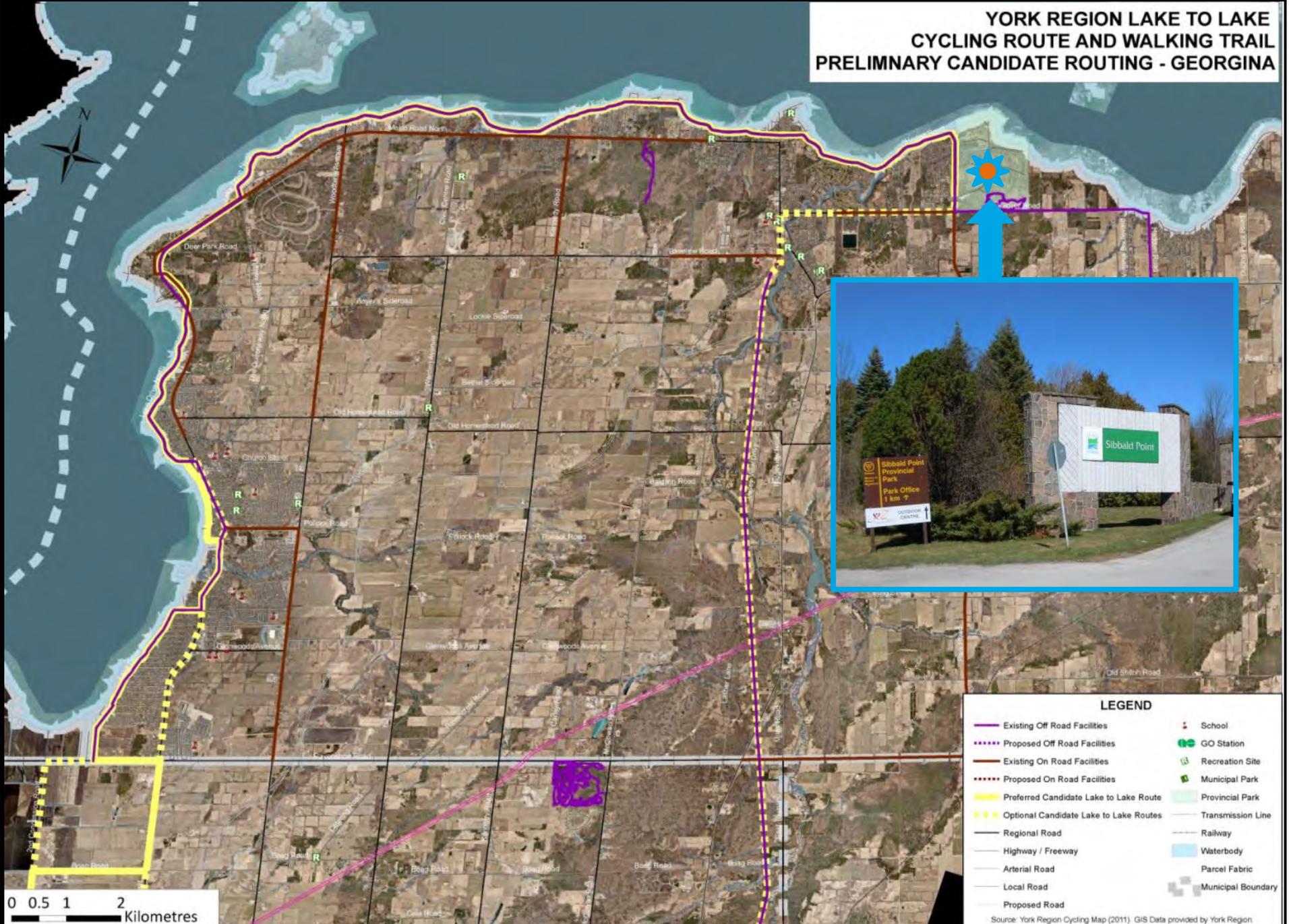
- **Route Characteristics & Safety Considerations**
 - Motor Vehicle Traffic Volumes
 - Motor Vehicle Operating Speeds
 - Truck and Commercial Vehicle Traffic
 - Sightlines
 - Emergency Access
 - Collision History

- **Design Feasibility & Maintenance**
 - Makes the Best Use of Existing Area Cycling and Walking Infrastructure
 - Appropriateness of Facility Type
 - Local Commitment
 - Benefits vs. Investment Cost
 - Operations and Maintenance



SECTION 1: TOWN OF GEORGINA

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING - GEORGINA



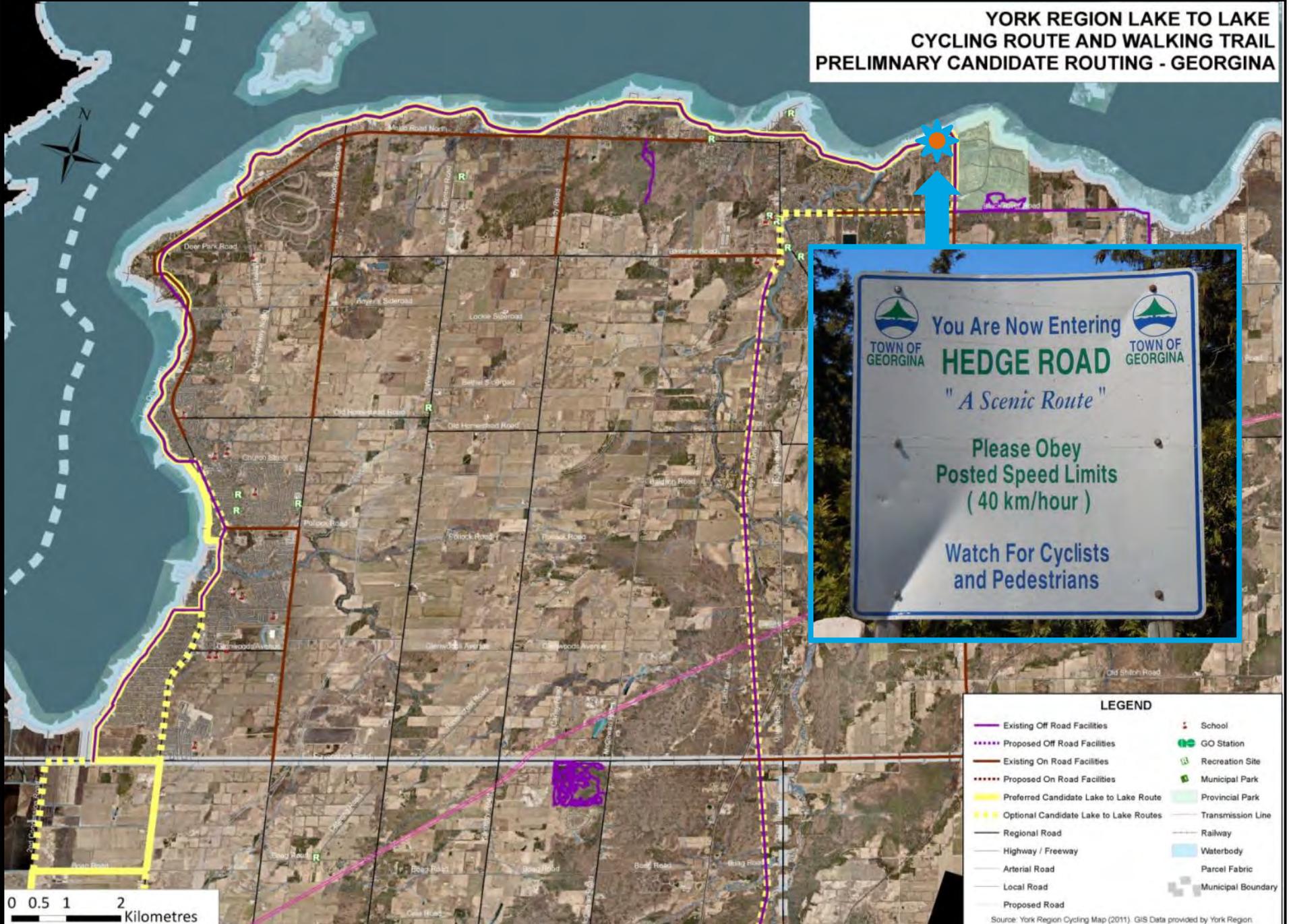
LEGEND			
	Existing Off Road Facilities		School
	Proposed Off Road Facilities		GO Station
	Existing On Road Facilities		Recreation Site
	Proposed On Road Facilities		Municipal Park
	Preferred Candidate Lake to Lake Route		Provincial Park
	Optional Candidate Lake to Lake Routes		Transmission Line
	Regional Road		Railway
	Highway / Freeway		Waterbody
	Arterial Road		Parcel Fabric
	Local Road		Municipal Boundary
	Proposed Road		

0 0.5 1 2 Kilometres

Source: York Region Cycling Map (2011). GIS Data provided by York Region.

SECTION 1: TOWN OF GEORGINA

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING - GEORGINA

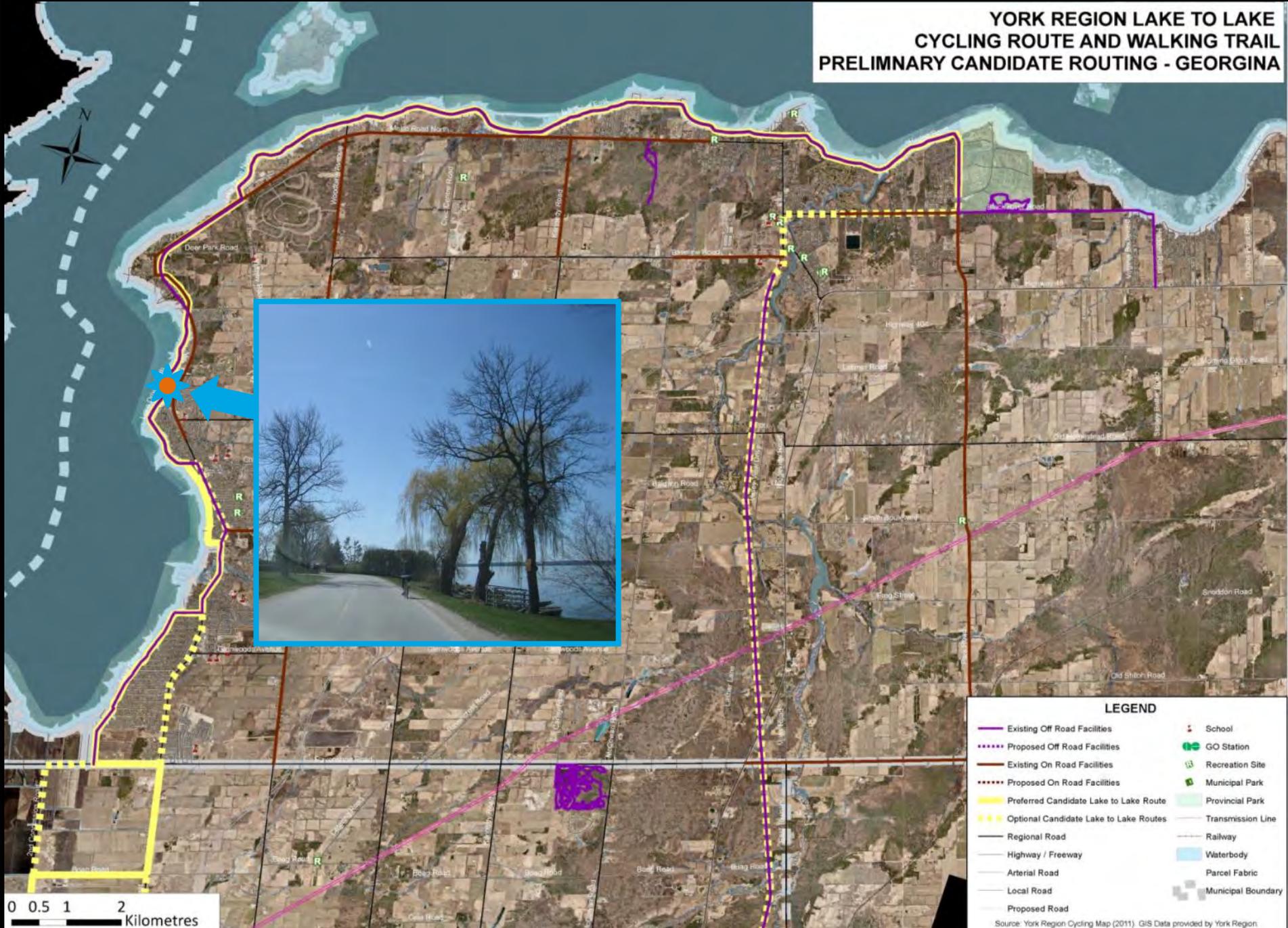


LEGEND			
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	Proposed Road		

Source: York Region Cycling Map (2011). GIS Data provided by York Region.

SECTION 1: TOWN OF GEORGINA

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING - GEORGINA



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YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING - GEORGINA



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	Proposed Road		

Source: York Region Cycling Map (2011). GIS Data provided by York Region.

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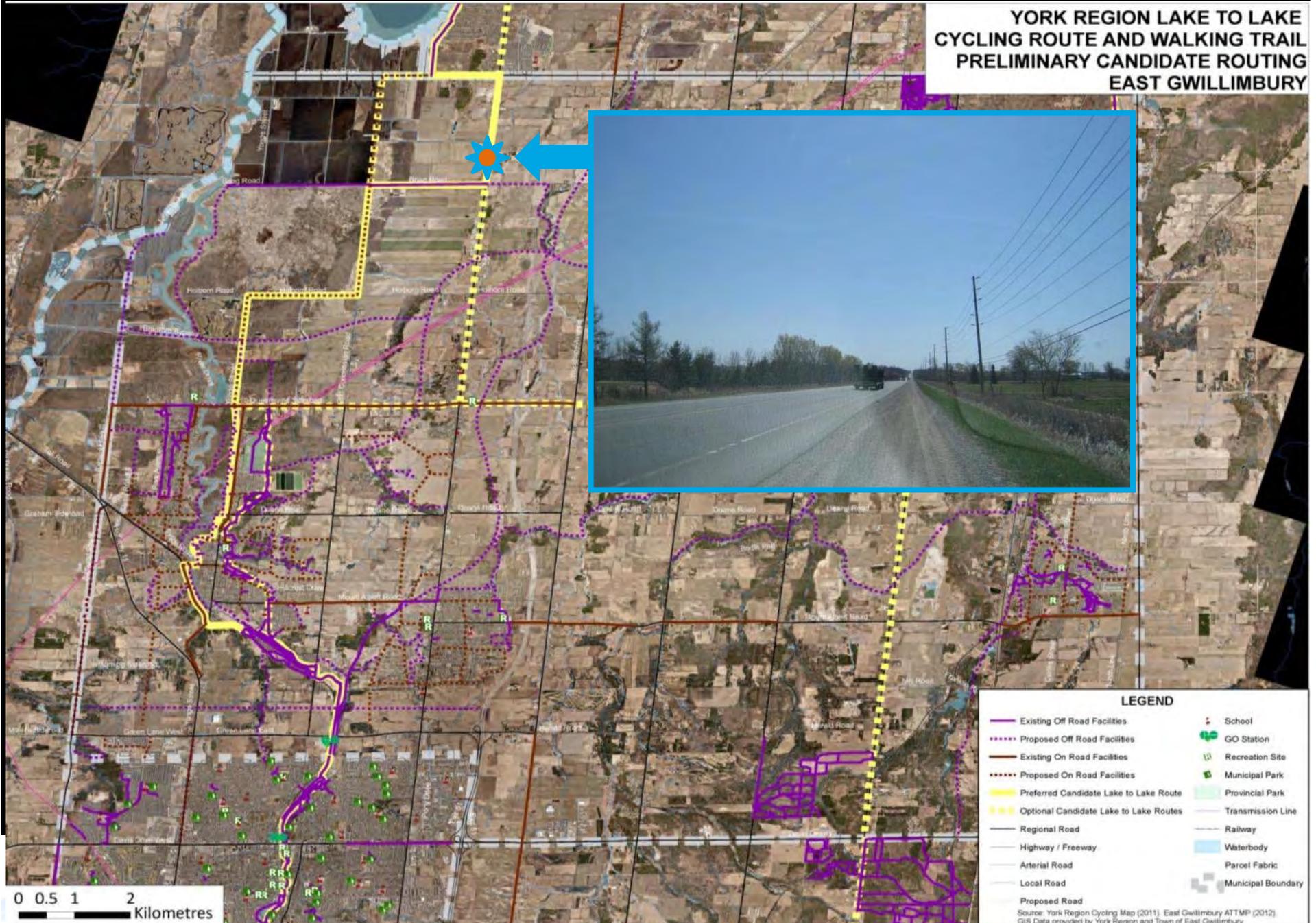
LEGEND

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Highway / Freeway	Waterbody
Arterial Road	Parcel Fabric
Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011). GIS Data provided by York Region.

SECTION 2: EAST GWILLIMBURY

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING EAST GWILLIMBURY



LEGEND

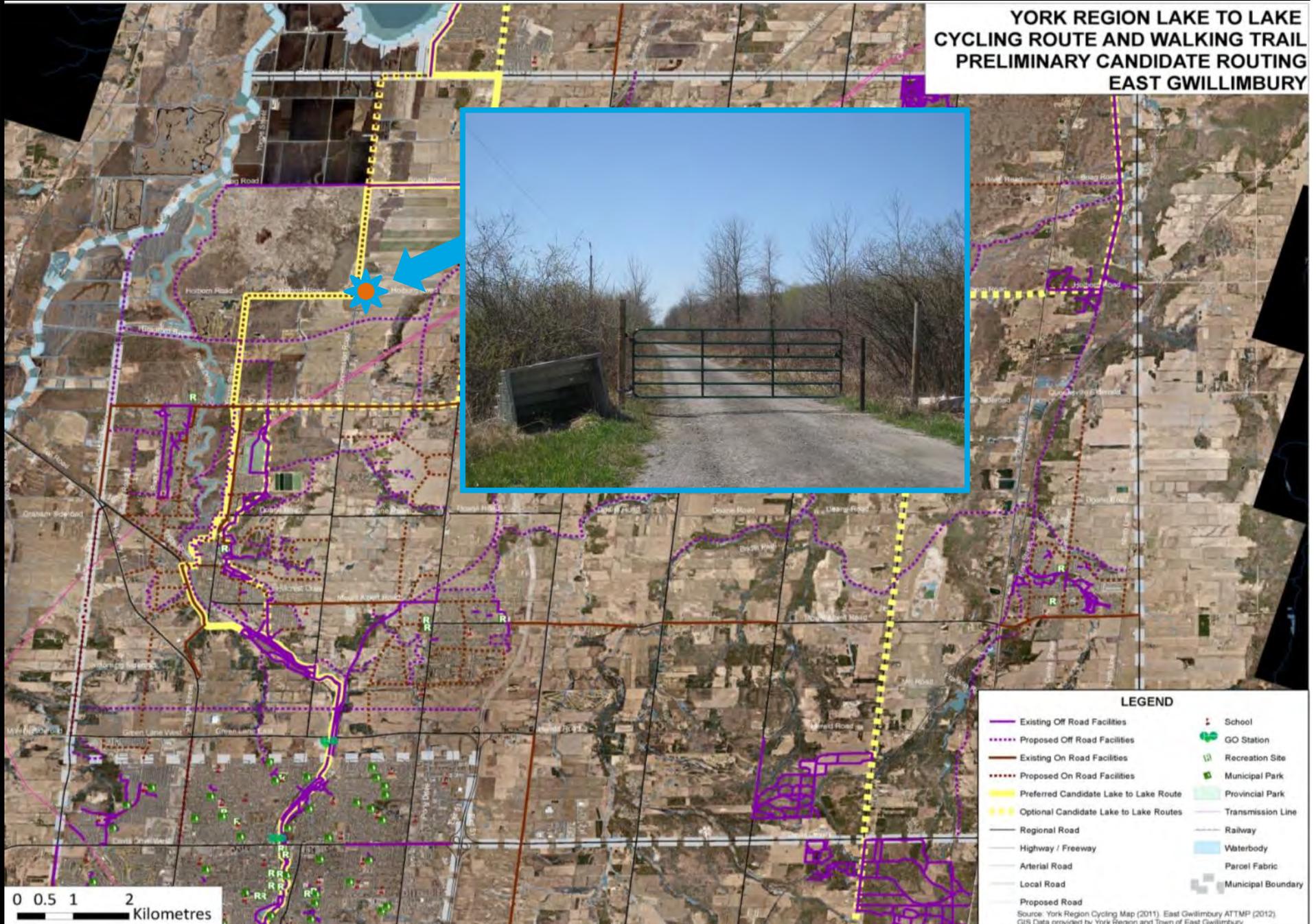
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Regional Road	Railway
Highway / Freeway	Waterbody
Arterial Road	Parcel Fabric
Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011), East Gwillimbury ATMP (2012)
GIS Data provided by York Region and Town of East Gwillimbury.



SECTION 2: EAST GWILLIMBURY

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING EAST GWILLIMBURY



0 0.5 1 2
Kilometres

LEGEND

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Proposed Off Road Facilities	GO Station
Existing On Road Facilities	Recreation Site
Proposed On Road Facilities	Municipal Park
Preferred Candidate Lake to Lake Route	Provincial Park
Optional Candidate Lake to Lake Routes	Transmission Line
Regional Road	Railway
Highway / Freeway	Waterbody
Arterial Road	Parcel Fabric
Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011), East Gwillimbury ATMP (2012); GIS Data provided by York Region and Town of East Gwillimbury.

SECTION 2: EAST GWILLIMBURY

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING EAST GWILLIMBURY



NOKIIDAA TRAIL PROJECT

 ESTIMATED COMPLETION NOVEMBER 2011

MAYOR: VIRGINIA HACKSON

 CATHY MORTON • MARLENE JOHNSTON • TARA ROY-D'ACLEMENTE • JOHN EATON

LEGEND

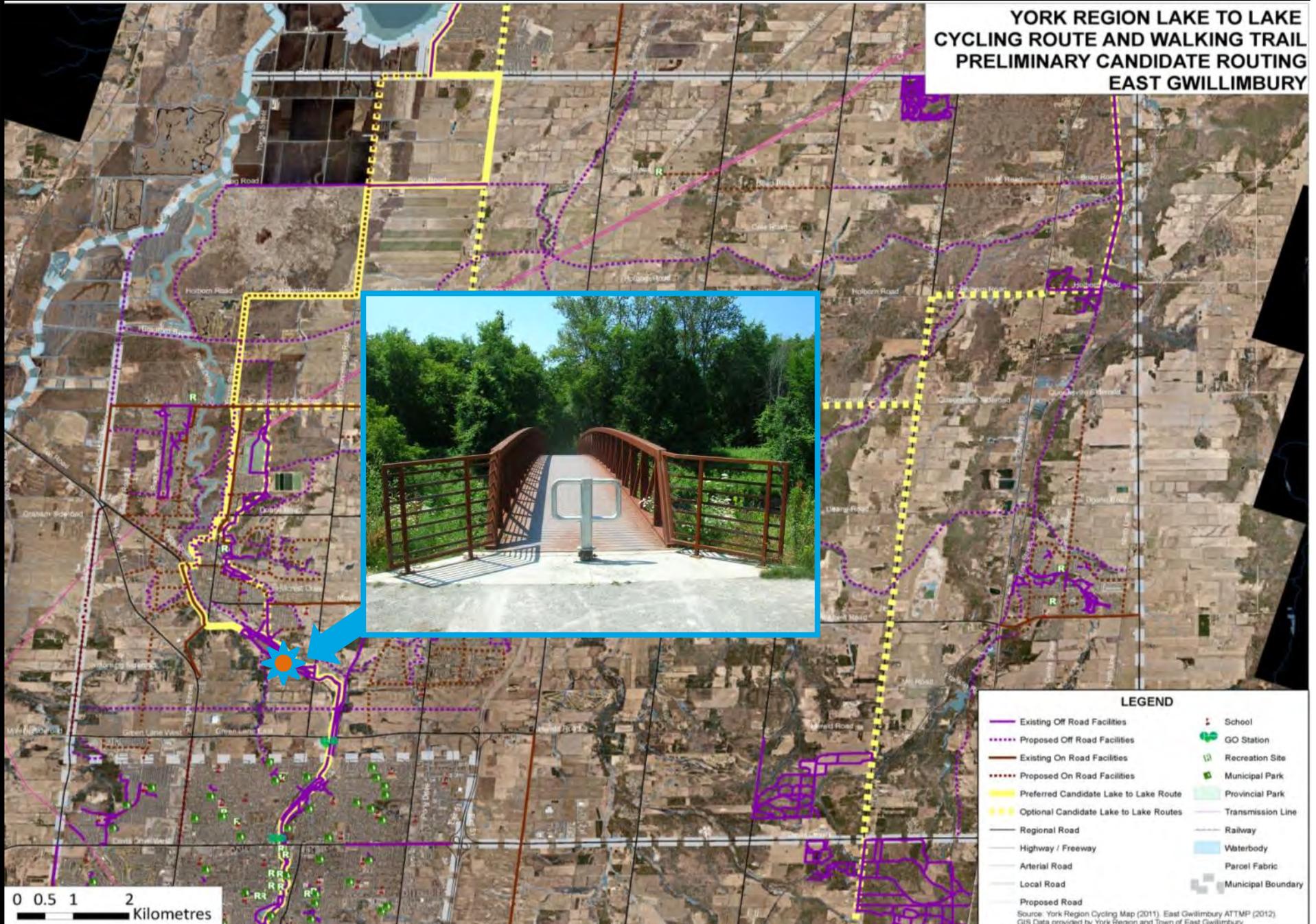
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Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011), East Gwillimbury ATMP (2012), GIS Data provided by York Region and Town of East Gwillimbury.

0 0.5 1 2 Kilometres

SECTION 2: EAST GWILLIMBURY

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING EAST GWILLIMBURY



LEGEND

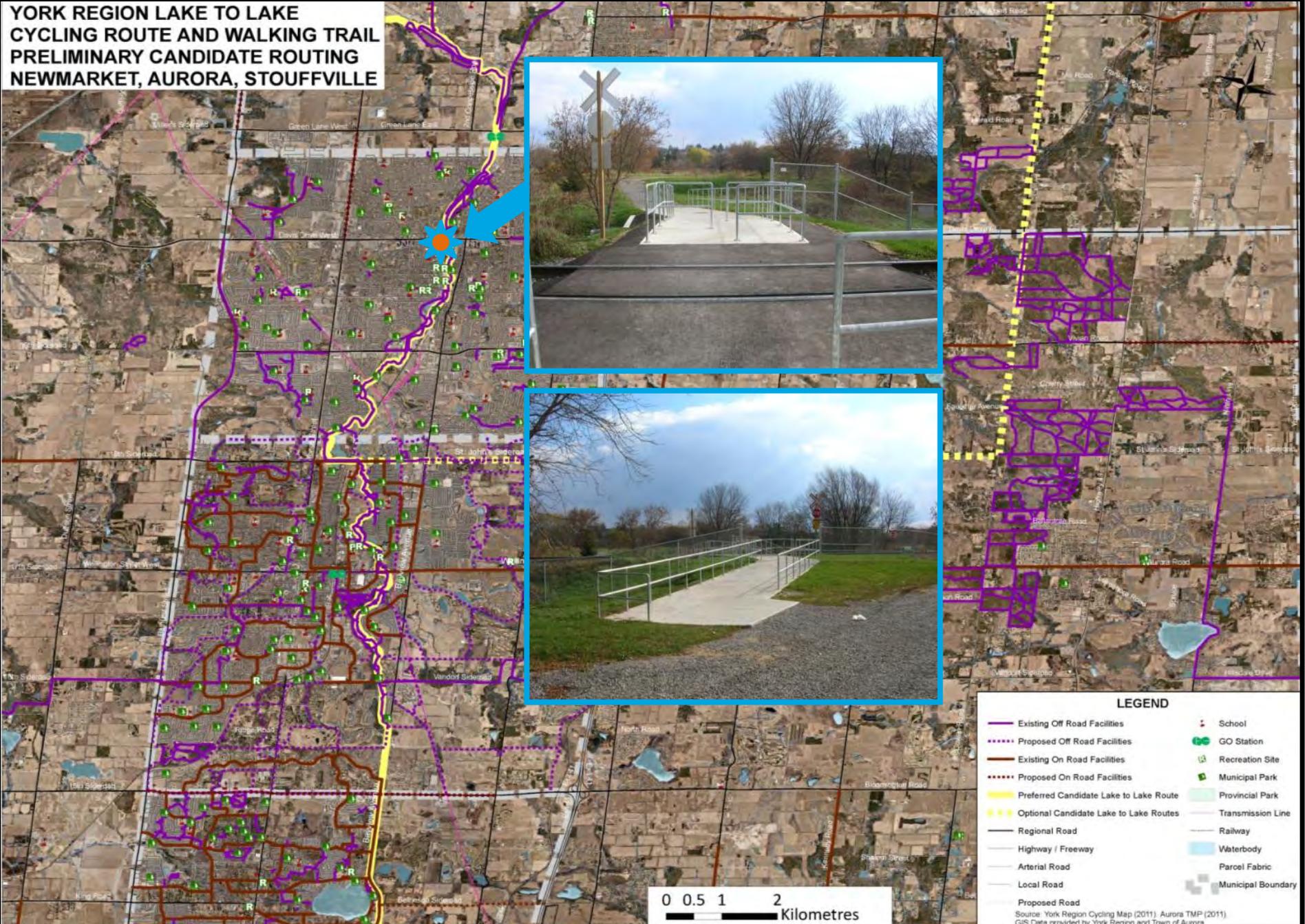
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Highway / Freeway	Waterbody
Arterial Road	Parcel Fabric
Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011), East Gwillimbury ATMP (2012); GIS Data provided by York Region and Town of East Gwillimbury.



SECTION 3: NEWMARKET, AURORA, WHITCHURCH –STOUFFVILLE

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING NEWMARKET, AURORA, STOUFFVILLE



LEGEND

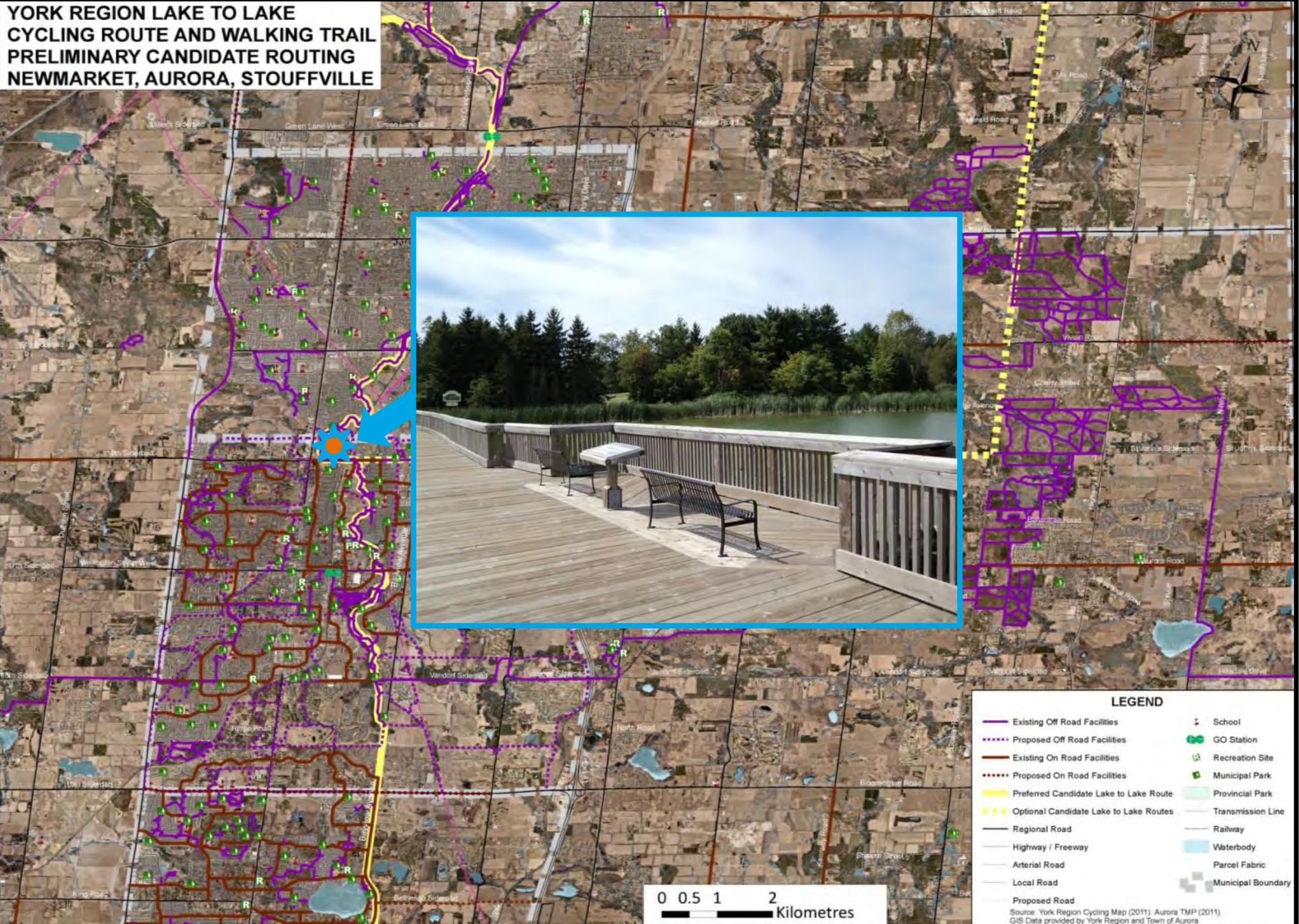
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Proposed Off Road Facilities	GO Station
Existing On Road Facilities	Recreation Site
Proposed On Road Facilities	Municipal Park
Preferred Candidate Lake to Lake Route	Provincial Park
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Regional Road	Waterbody
Highway / Freeway	Parcel Fabric
Arterial Road	Municipal Boundary
Local Road	
Proposed Road	

Source: York Region Cycling Map (2011), Aurora TMP (2011)
GIS Data provided by York Region and Town of Aurora

0 0.5 1 2
Kilometres

SECTION 3: NEWMARKET, AURORA, WHITCHURCH –STOUFFVILLE

**YORK REGION LAKE TO LAKE
CYCLING ROUTE AND WALKING TRAIL
PRELIMINARY CANDIDATE ROUTING
NEWMARKET, AURORA, STOUFFVILLE**



LEGEND

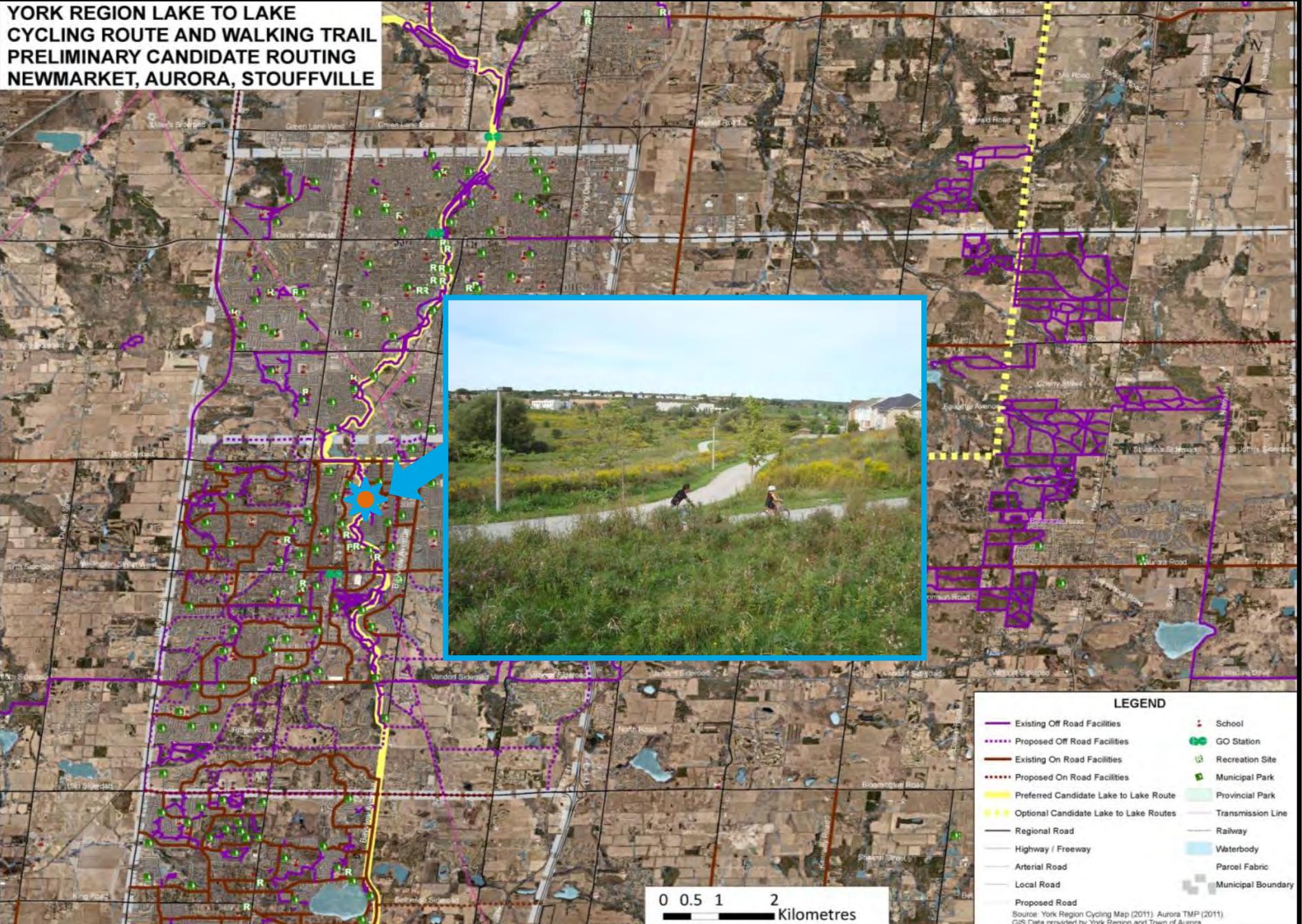
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Regional Road	Waterbody
Highway / Freeway	Parcel Fabric
Arterial Road	Municipal Boundary
Local Road	
Proposed Road	

Source: York Region Cycling Map (2011), Aurora TMP (2011)
GIS Data provided by York Region and Town of Aurora



SECTION 3: NEWMARKET, AURORA, WHITCHURCH –STOUFFVILLE

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING NEWMARKET, AURORA, STOUFFVILLE



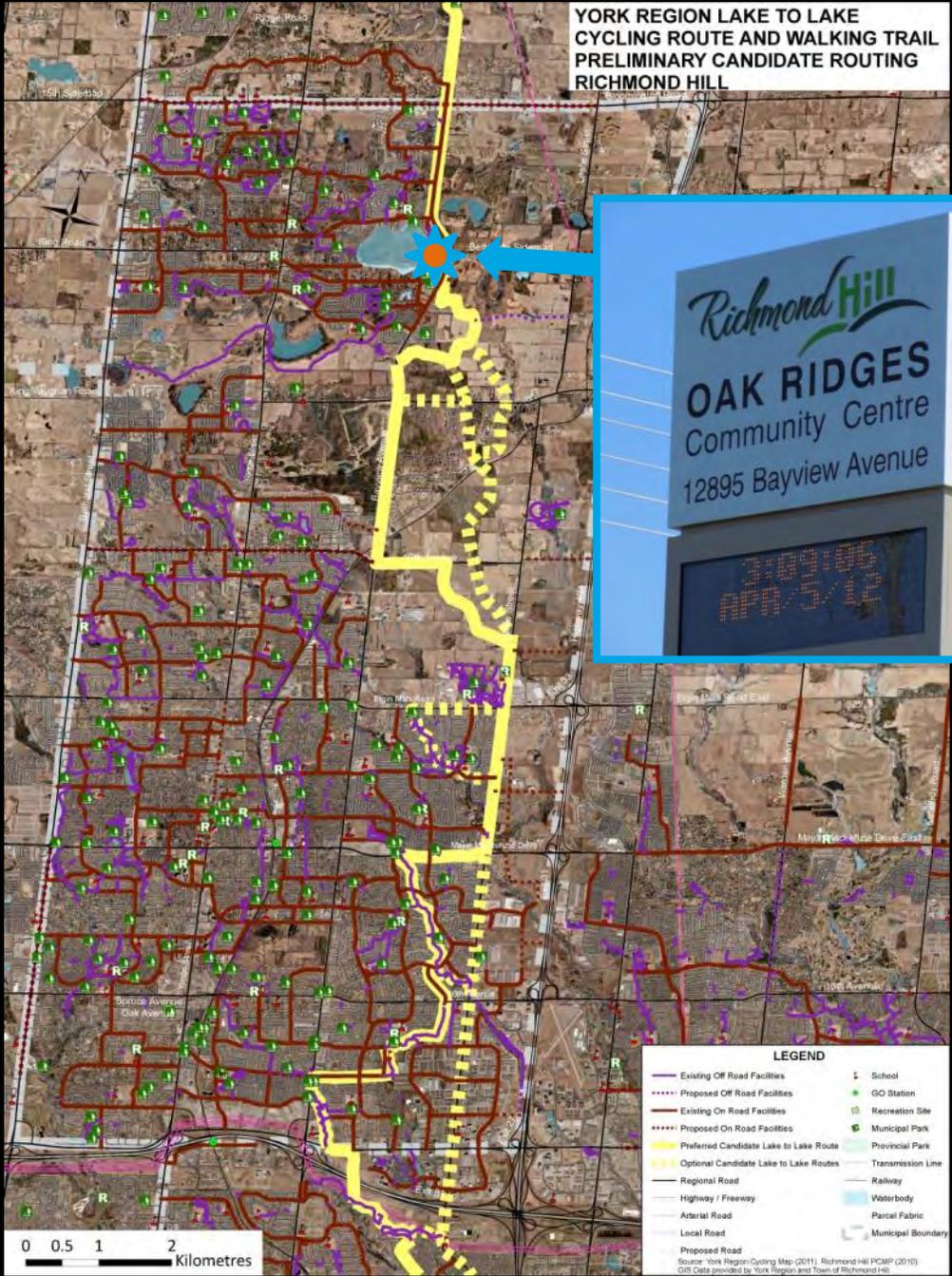
LEGEND

- Existing Off Road Facilities
- ⋯ Proposed Off Road Facilities
- Existing On Road Facilities
- ⋯ Proposed On Road Facilities
- Preferred Candidate Lake to Lake Route
- ⋯ Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Arterial Road
- Local Road
- Proposed Road
- 🏫 School
- 🚶 GO Station
- 🌳 Recreation Site
- 🌳 Municipal Park
- 🌳 Provincial Park
- Transmission Line
- Railway
- 💧 Waterbody
- ▭ Parcel Fabric
- ▭ Municipal Boundary

Source: York Region Cycling Map (2011), Aurora TMP (2011)
GIS Data provided by York Region and Town of Aurora

0 0.5 1 2 Kilometres

SECTION 4: RICHMOND HILL



YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING RICHMOND HILL

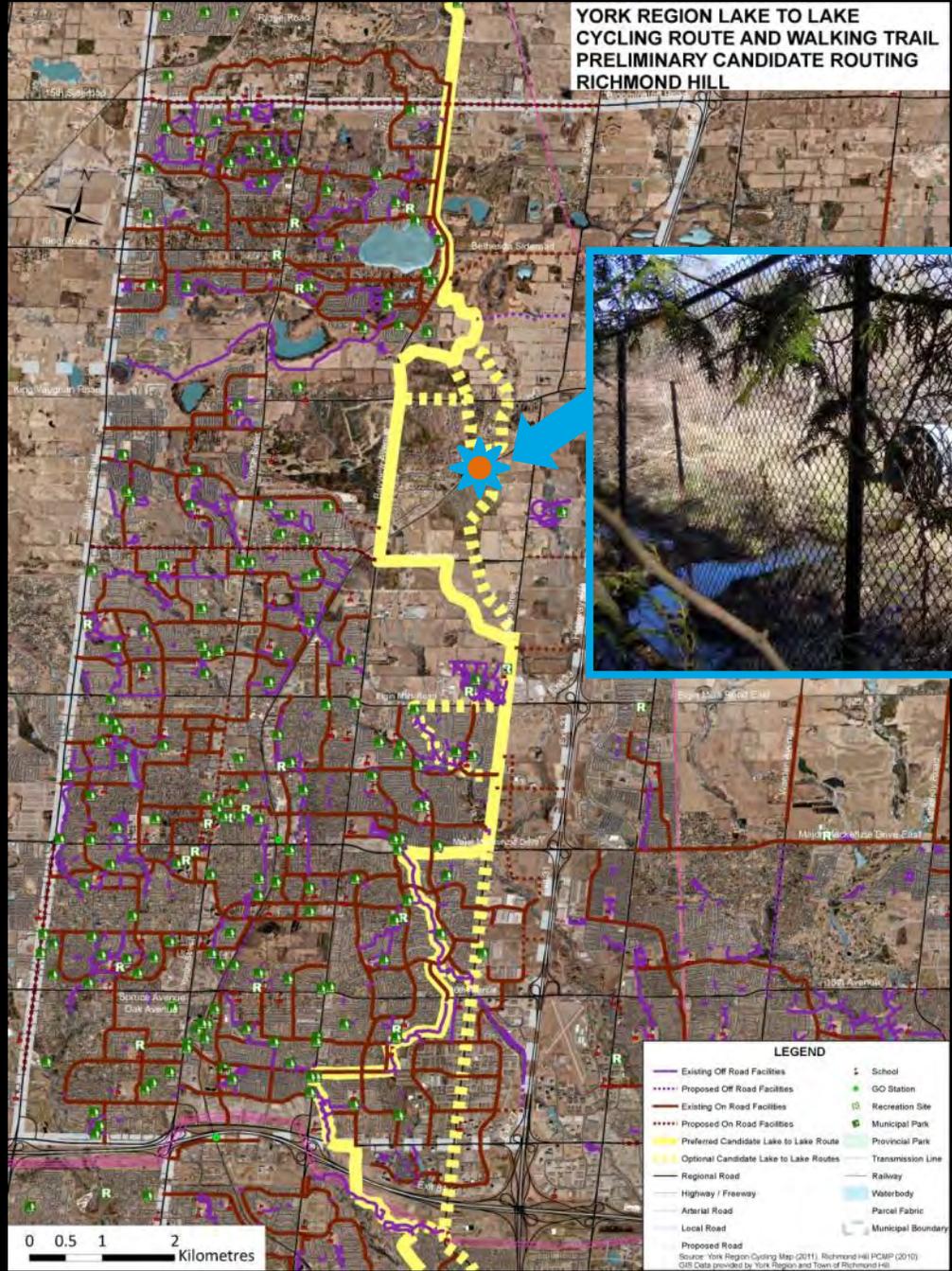


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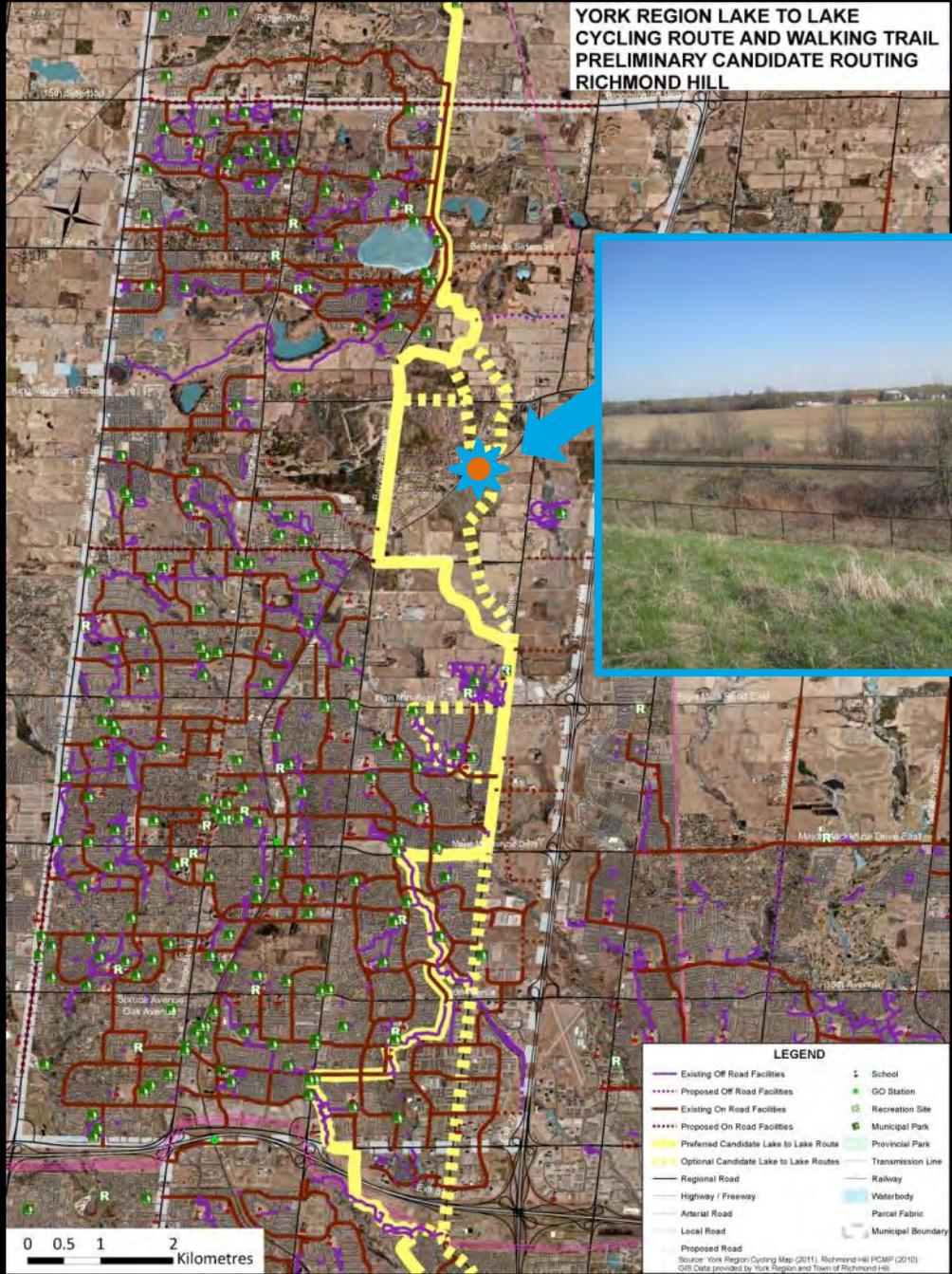
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Highway / Freeway	Waterbody
Arterial Road	Parcel Fabric
Local Road	Municipal Boundary
Proposed Road	

Source: York Region Cycling Map (2011), Richmond Hill PCMP (2010); GIS Data provided by York Region and Town of Richmond Hill.

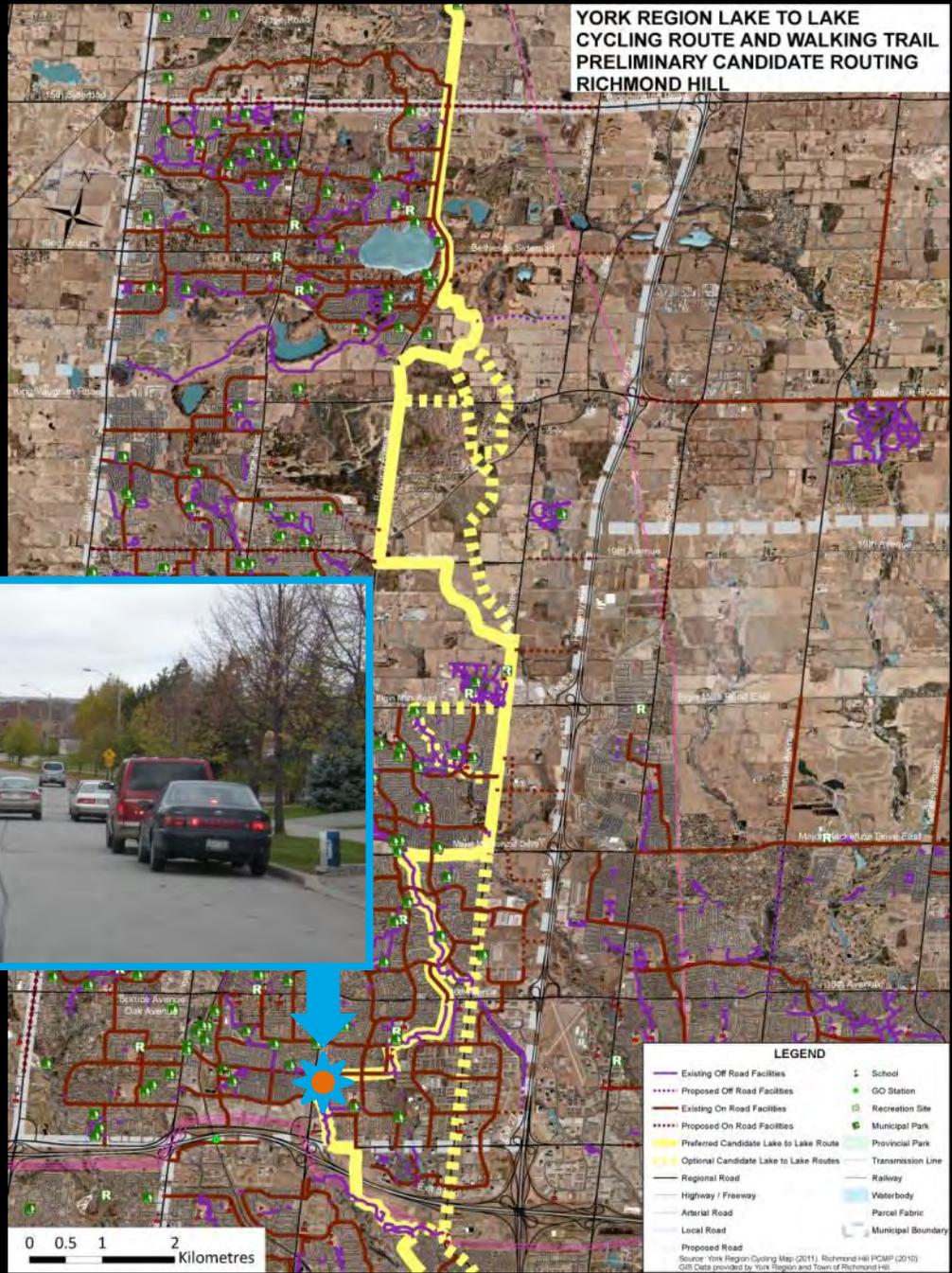
SECTION 4: RICHMOND HILL



SECTION 4: RICHMOND HILL

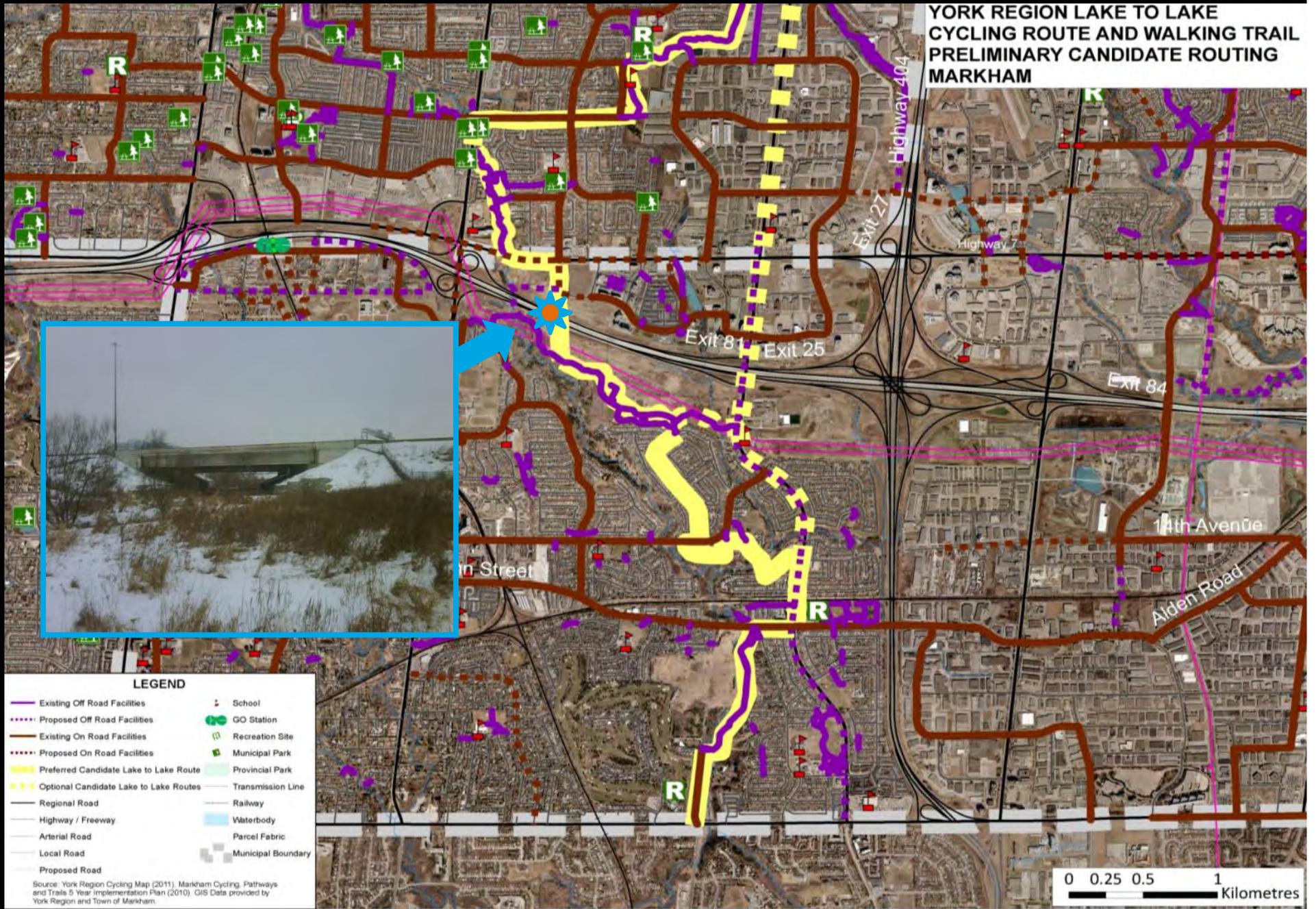


SECTION 4: RICHMOND HILL



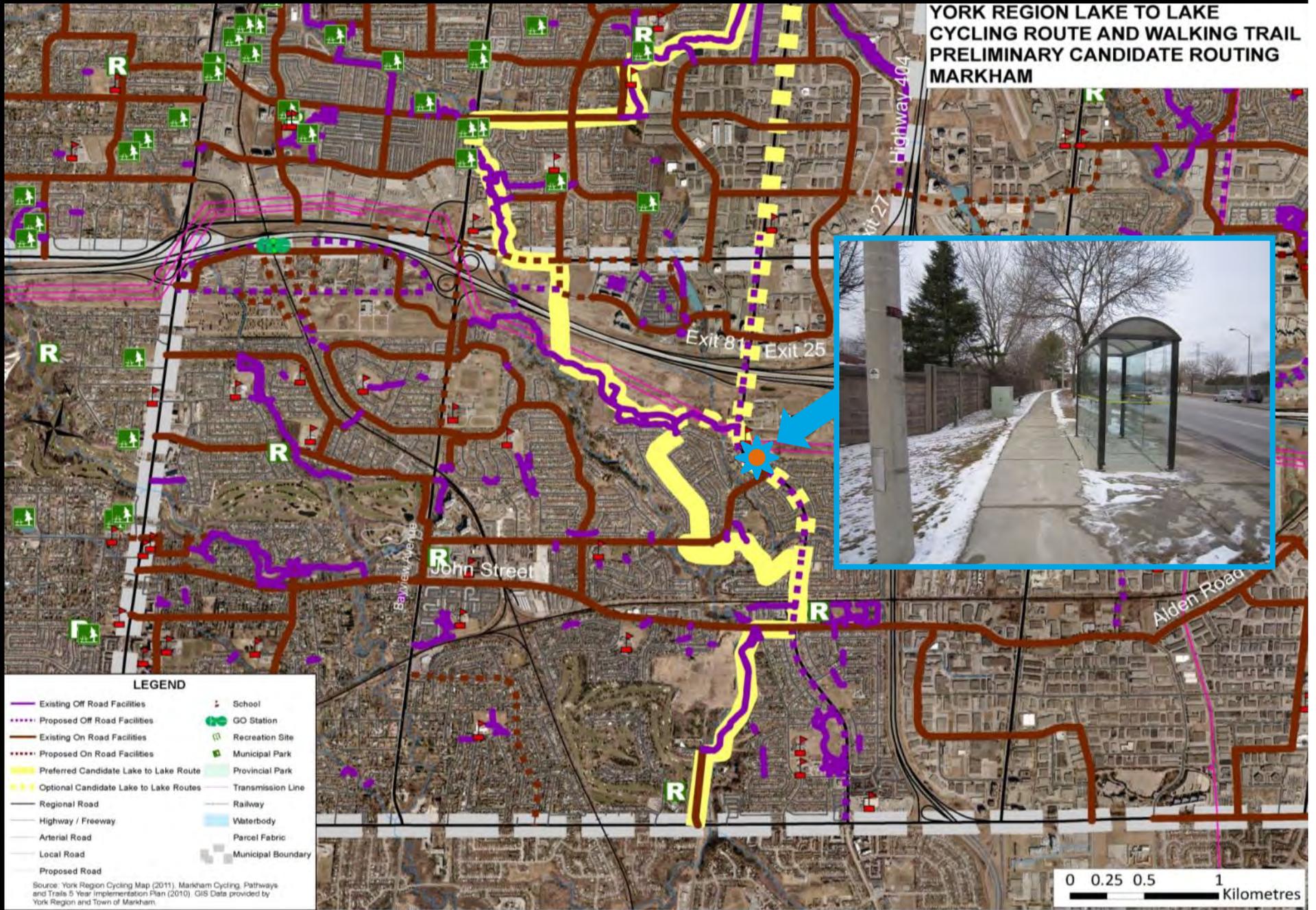
SECTION 5: MARKHAM

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING MARKHAM



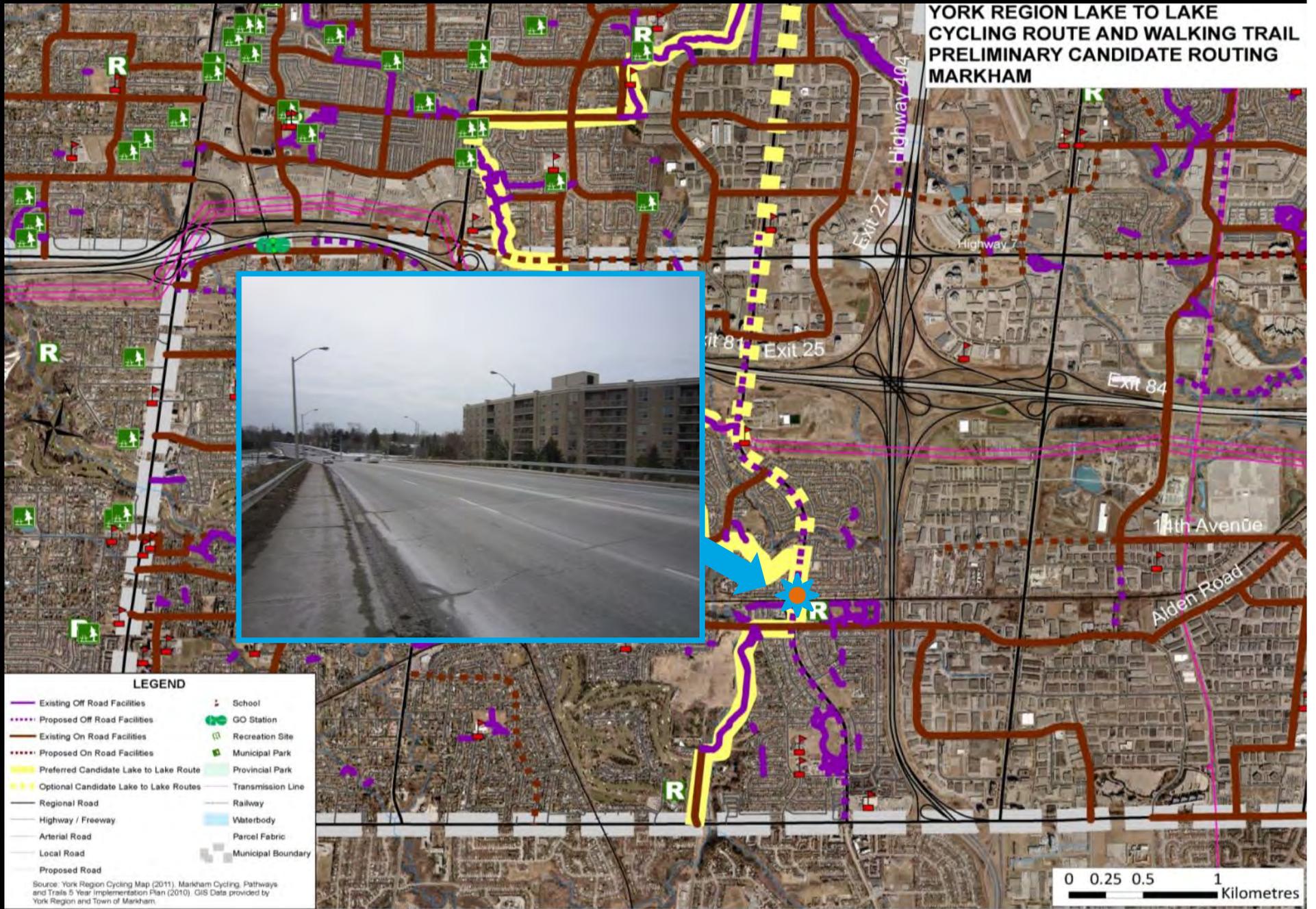
SECTION 5: MARKHAM

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING MARKHAM



SECTION 5: MARKHAM

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING MARKHAM



LEGEND

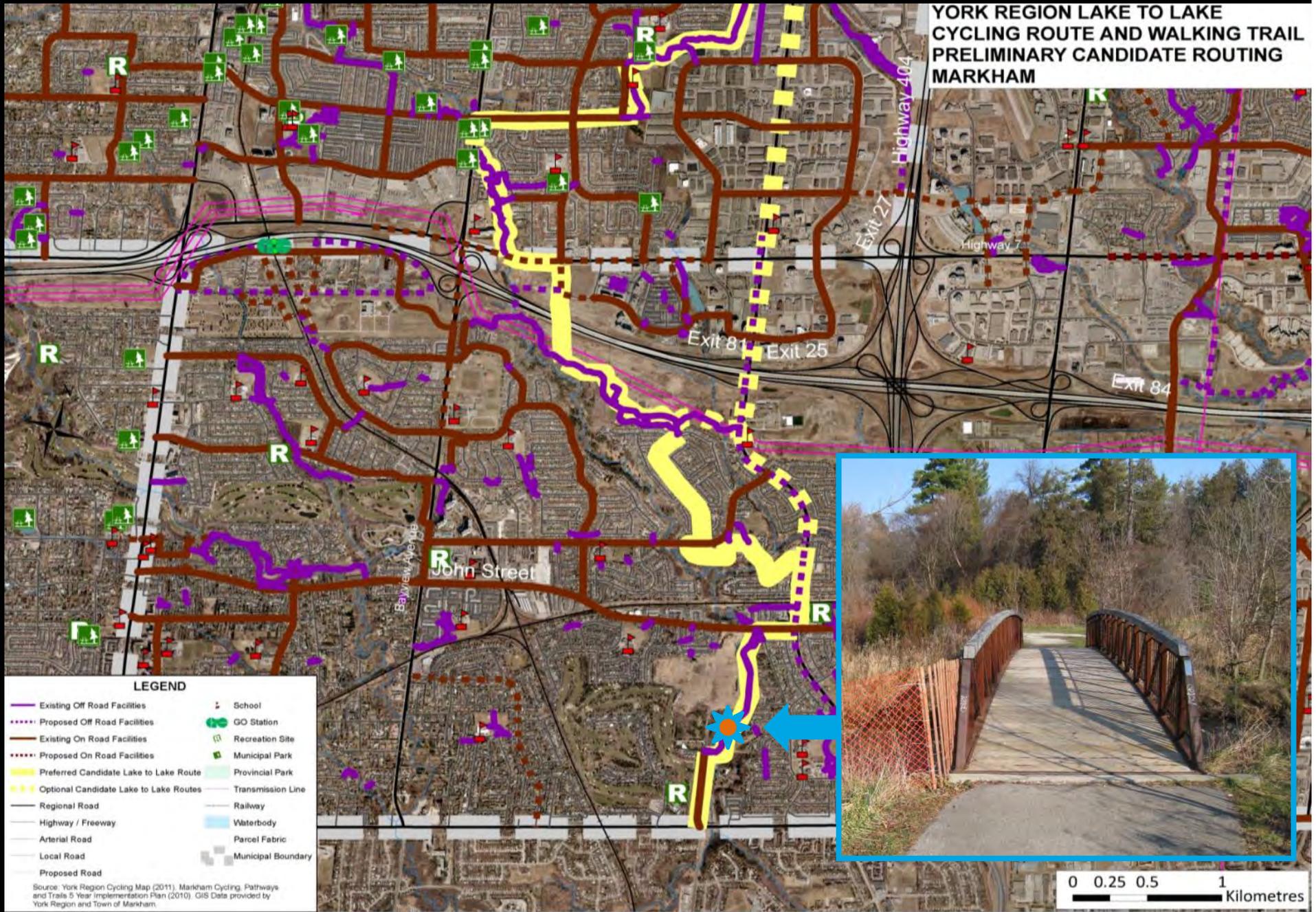
- Existing Off Road Facilities
- - - Proposed Off Road Facilities
- Existing On Road Facilities
- - - Proposed On Road Facilities
- Preferred Candidate Lake to Lake Route
- - - Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Arterial Road
- Local Road
- Proposed Road
- ⚡ School
- 🚶 GO Station
- 🌳 Recreation Site
- 🏡 Municipal Park
- 🌲 Provincial Park
- Transmission Line
- Railway
- 💧 Waterbody
- Parcel Fabric
- ▭ Municipal Boundary

Source: York Region Cycling Map (2011), Markham Cycling Pathways and Trails 5 Year Implementation Plan (2010), GIS Data provided by York Region and Town of Markham.



SECTION 5: MARKHAM

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING MARKHAM



LEGEND

Existing Off Road Facilities	School
Proposed Off Road Facilities	GO Station
Existing On Road Facilities	Recreation Site
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Proposed Road	

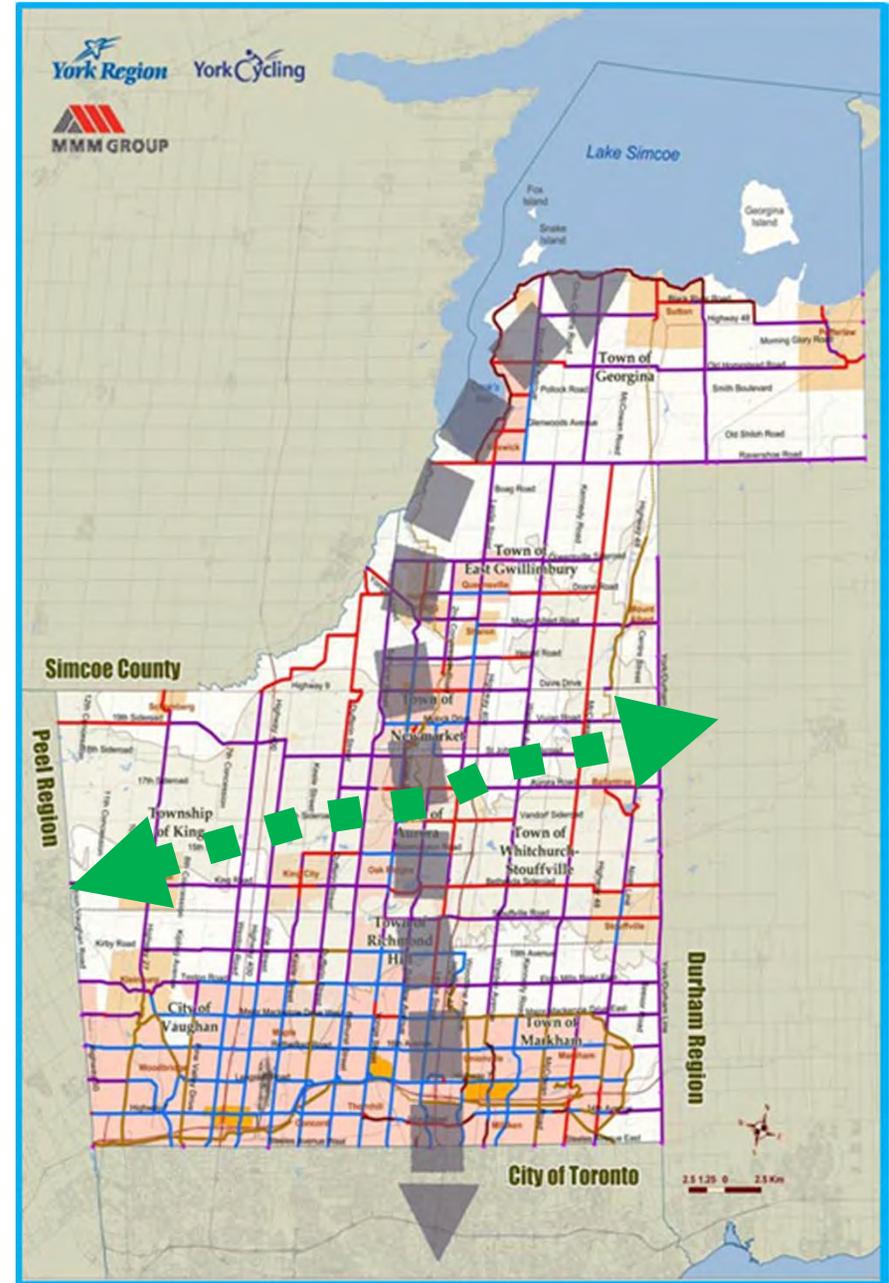
Source: York Region Cycling Map (2011), Markham Cycling Pathways and Trails 5 Year Implementation Plan (2010), GIS Data provided by York Region and Town of Markham.



CONNECTIONS TO OTHER REGIONAL ROUTES

How does the Lake to Lake Cycling Route and Walking Trail alignment connect other Regional Trail and Cycling Routes?

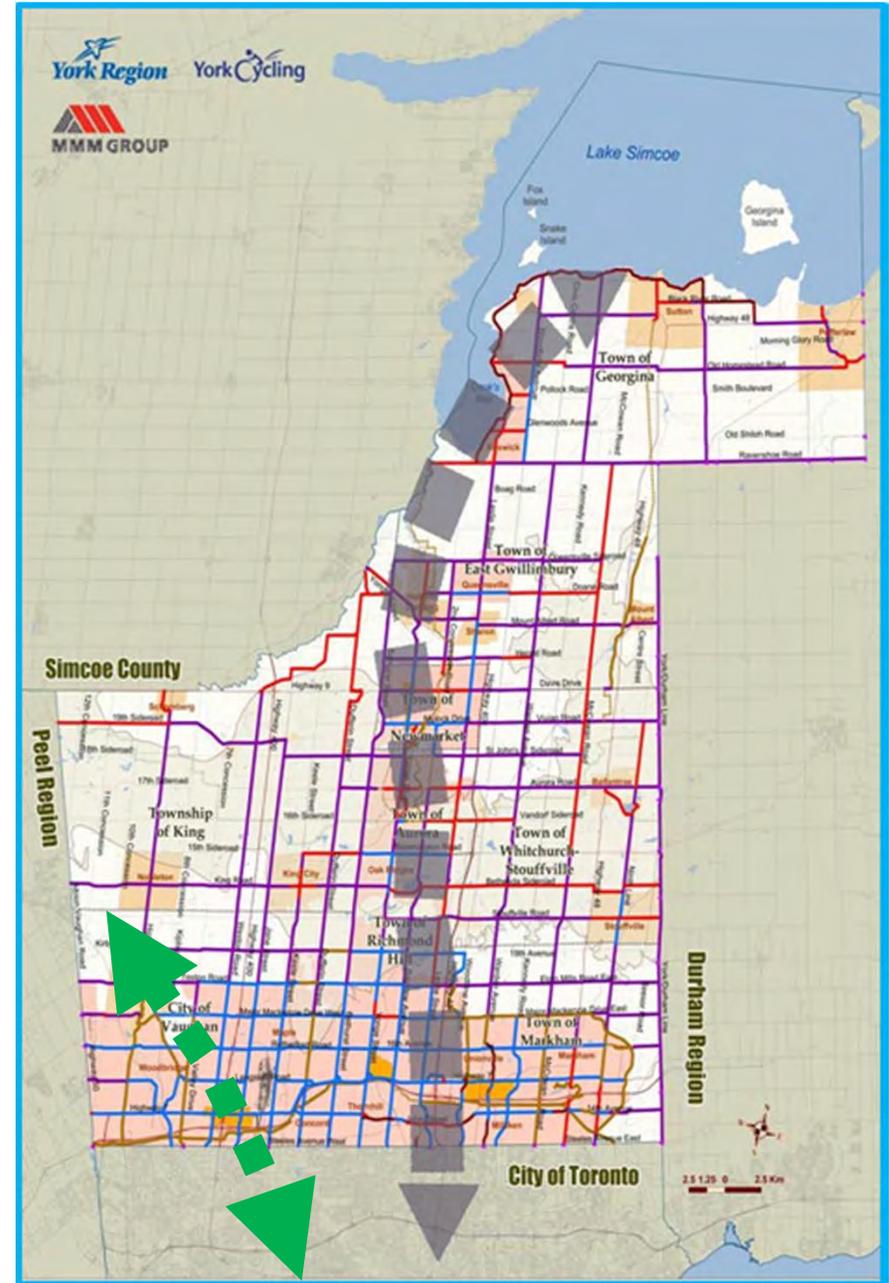
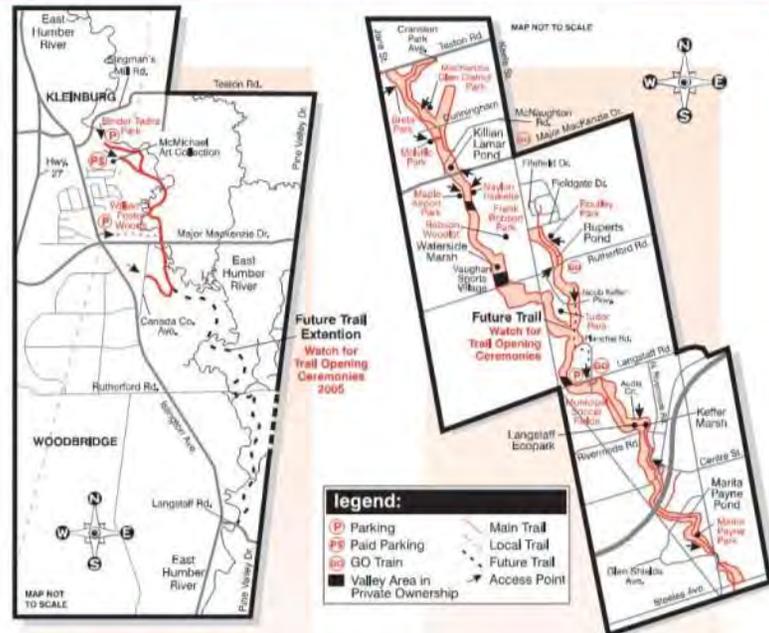
- *Oak Ridges Moraine Trail*



CONNECTIONS TO OTHER REGIONAL ROUTES

How does the Lake to Lake Cycling Route and Walking Trail alignment connect other Regional Trail and Cycling Routes?

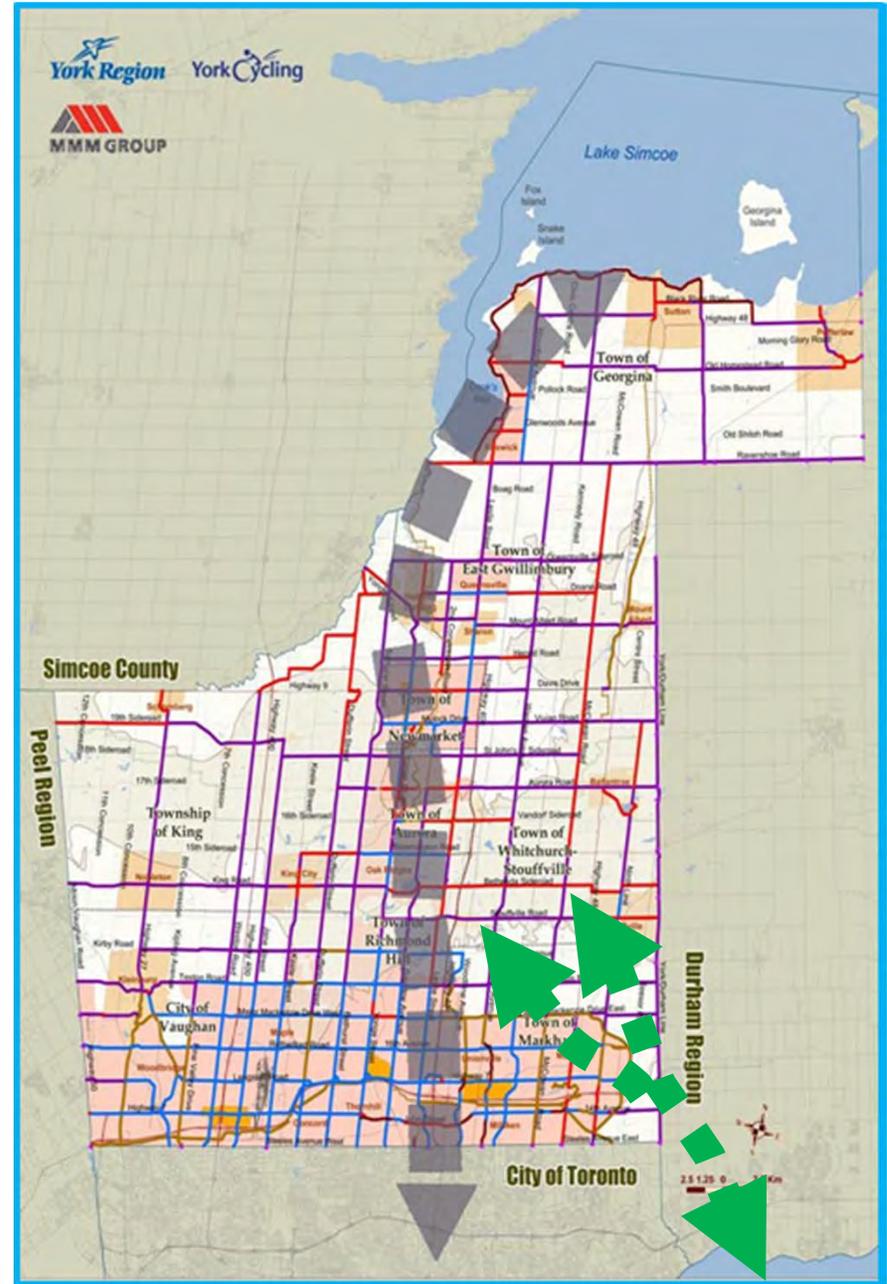
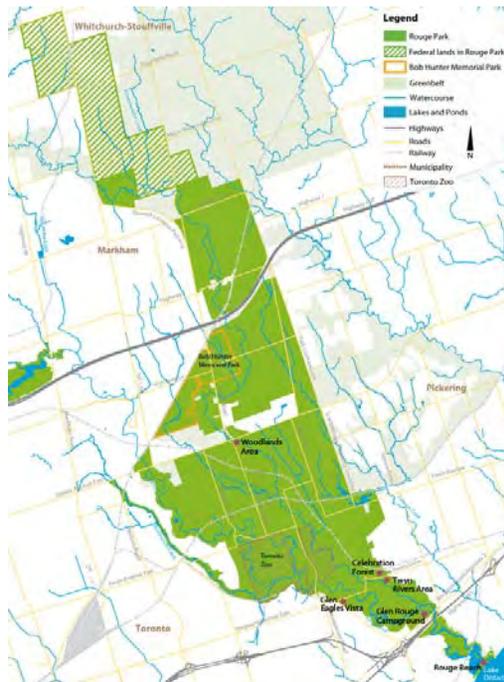
- *Humber River Trail*



CONNECTIONS TO OTHER REGIONAL ROUTES

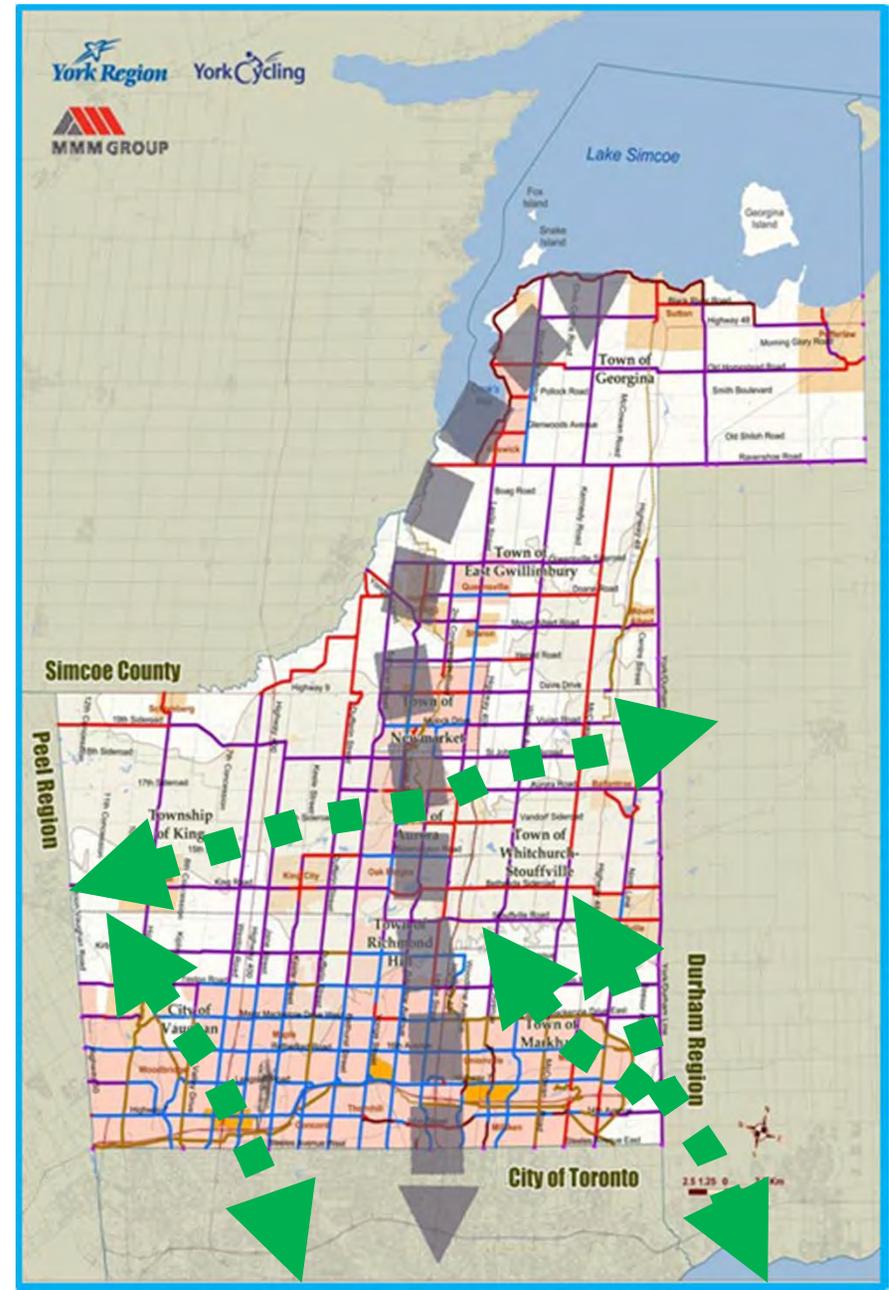
How does the Lake to Lake Cycling Route and Walking Trail alignment connect other Regional Trail and Cycling Routes?

- *Rouge Valley Trails*

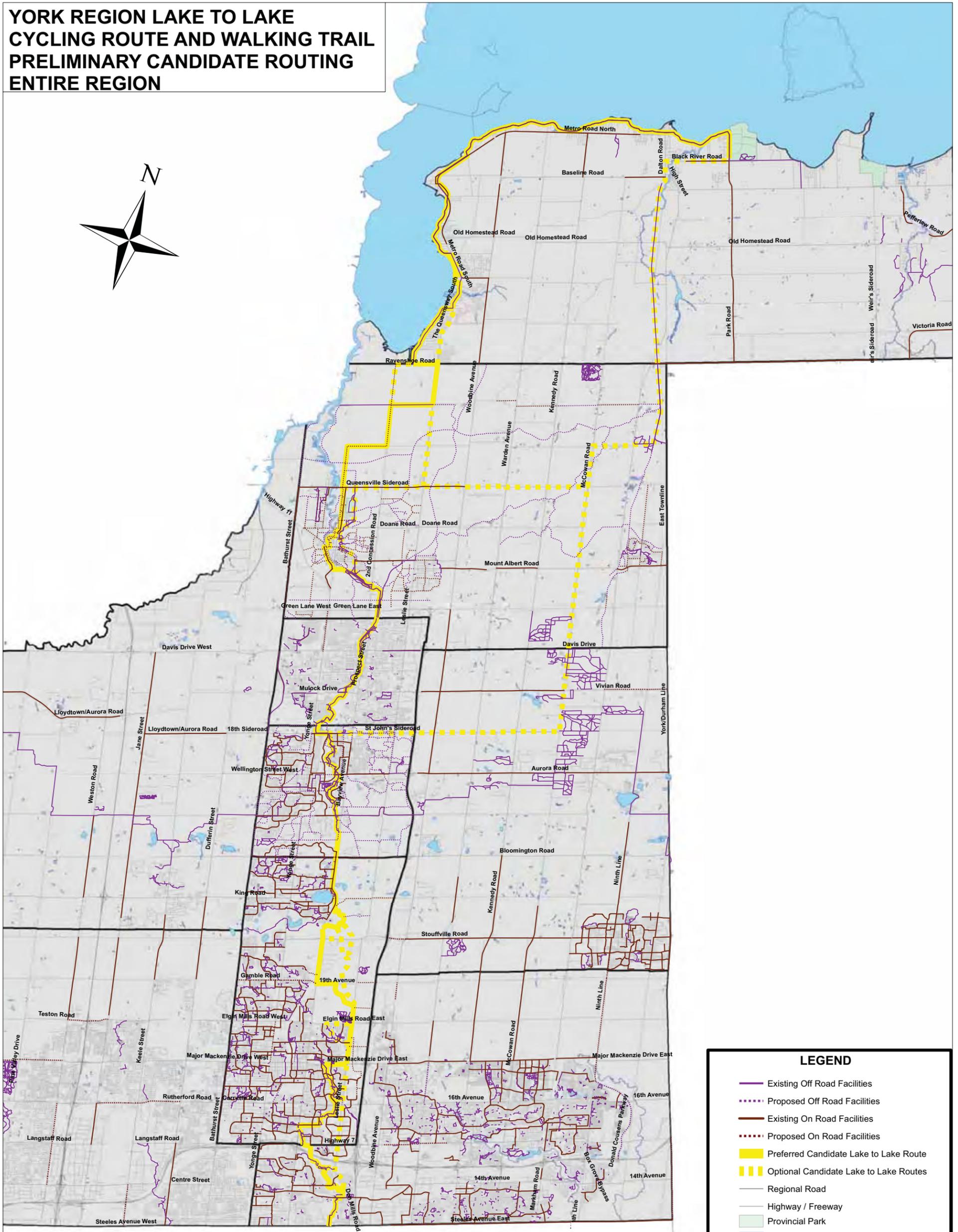


CONNECTIONS TO OTHER REGIONAL ROUTES

How does the Lake to Lake Cycling Route and Walking Trail alignment connect other Regional Trail and Cycling Routes?



YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING ENTIRE REGION



LEGEND

- Existing Off Road Facilities
- - - Proposed Off Road Facilities
- Existing On Road Facilities
- - - Proposed On Road Facilities
- Preferred Candidate Lake to Lake Route
- - - Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Provincial Park
- Waterbody
- Municipal Boundary

Source: York Region Cycling Map (2011), East Gwillimbury ATMP (2012), Aurora TMP (2011), Richmond Hill PCMP (2010), Markham Cycling Pathways and Trails 5 Year Implementation Plan (2010), GIS Data provided by York Region and Towns of East Gwillimbury, Aurora, Markham and Richmond Hill.

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING - GEORGINA



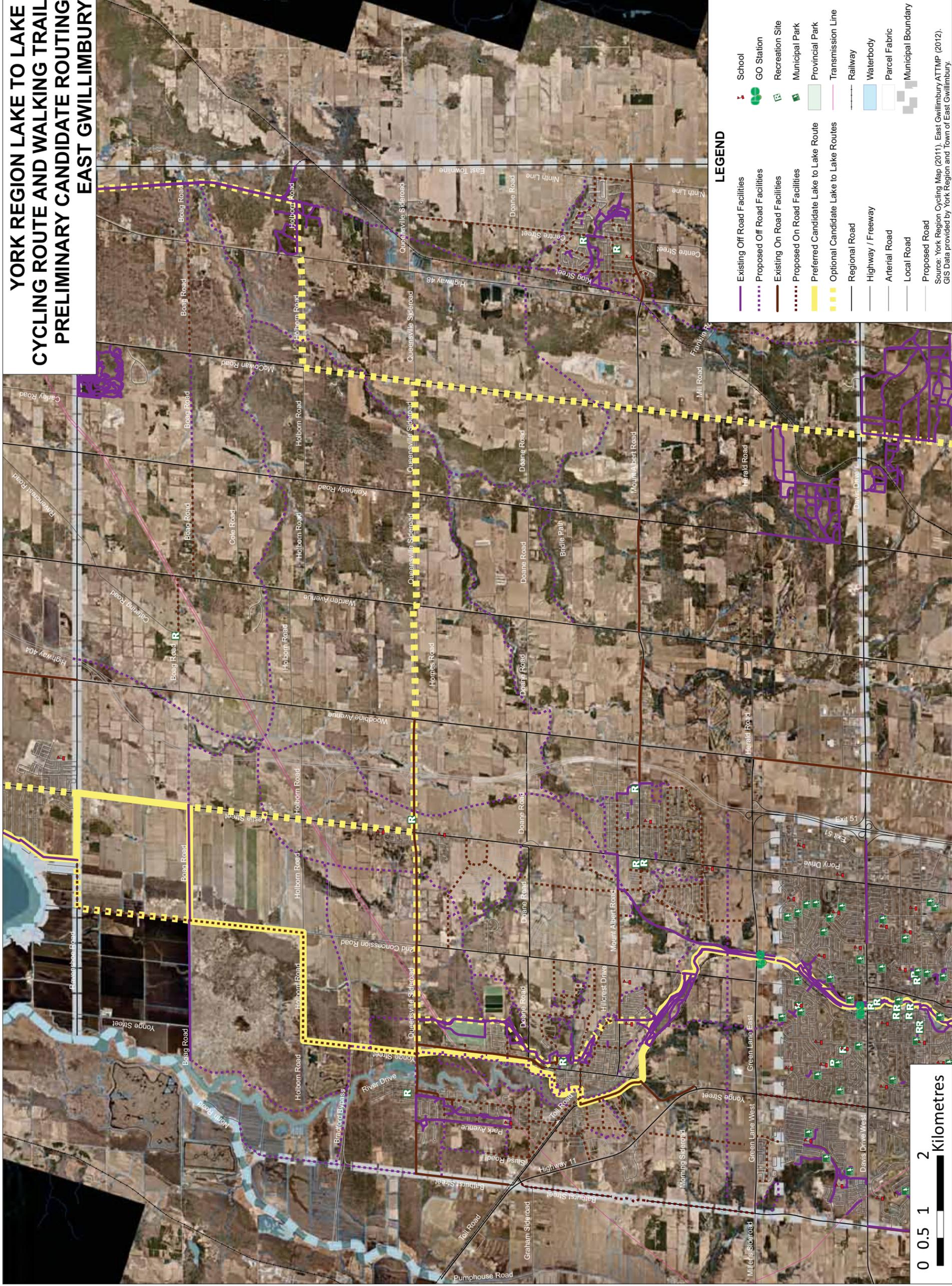
LEGEND

- Existing Off Road Facilities
- Proposed Off Road Facilities
- Existing On Road Facilities
- Proposed On Road Facilities
- Preferred Candidate Lake to Lake Route
- Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Arterial Road
- Local Road
- Proposed Road
- School
- GO Station
- Recreation Site
- Municipal Park
- Provincial Park
- Transmission Line
- Railway
- Waterbody
- Parcel Fabric
- Municipal Boundary

Source: York Region Cycling Map (2011). GIS Data provided by York Region.



YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING EAST GWILLIMBURY



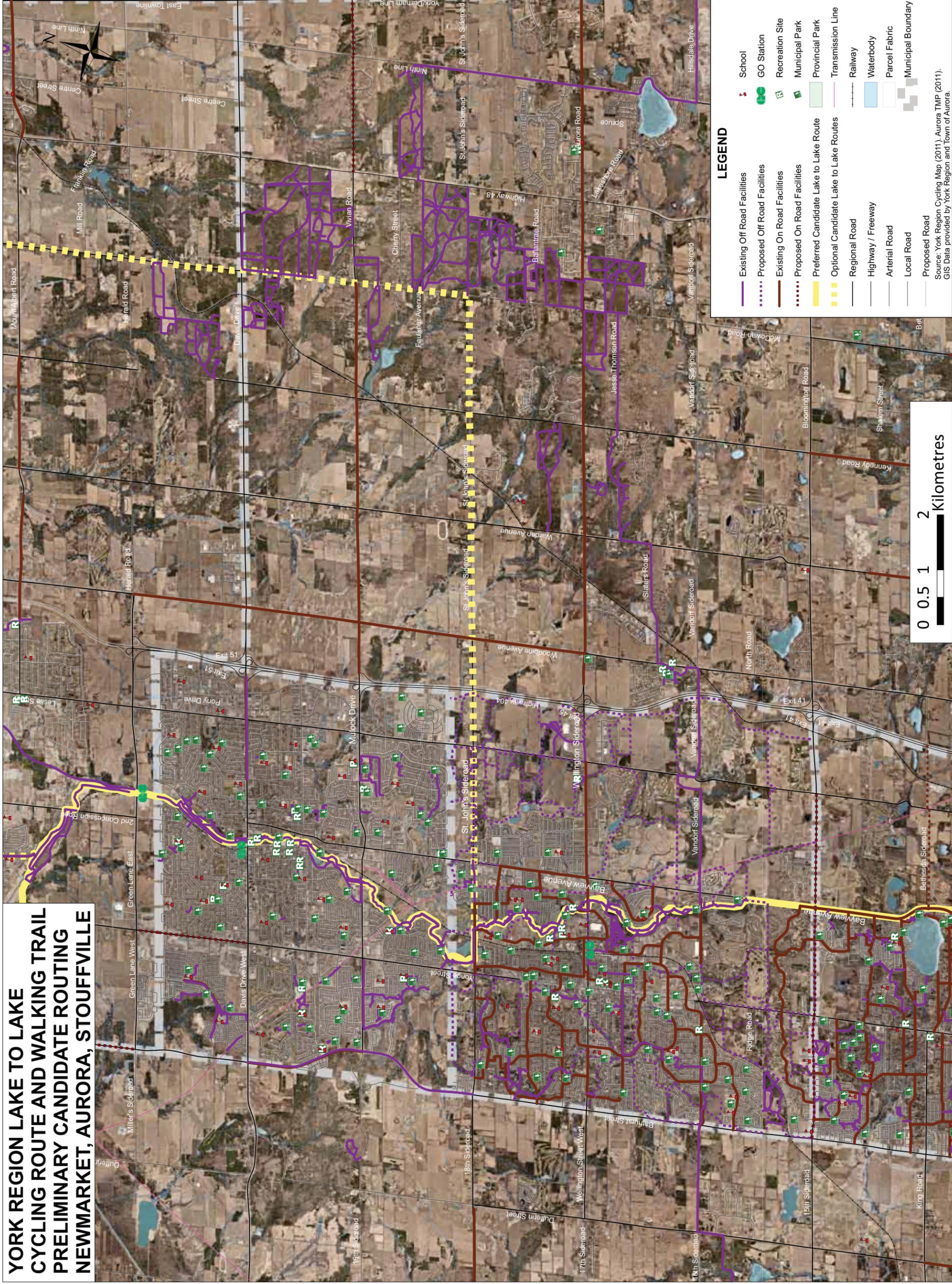
LEGEND

- Existing Off Road Facilities
- Proposed Off Road Facilities
- Existing On Road Facilities
- Proposed On Road Facilities
- Preferred Candidate Lake to Lake Route
- Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Arterial Road
- Local Road
- Proposed Road
- School
- GO Station
- Recreation Site
- Municipal Park
- Provincial Park
- Transmission Line
- Railway
- Waterbody
- Parcel Fabric
- Municipal Boundary

0 0.5 1 2 Kilometres

Source: York Region Cycling Map (2011), East Gwillimbury ATTMP (2012).
GIS Data provided by York Region and Town of East Gwillimbury.

YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING NEWMARKET, AURORA, STOUFFVILLE



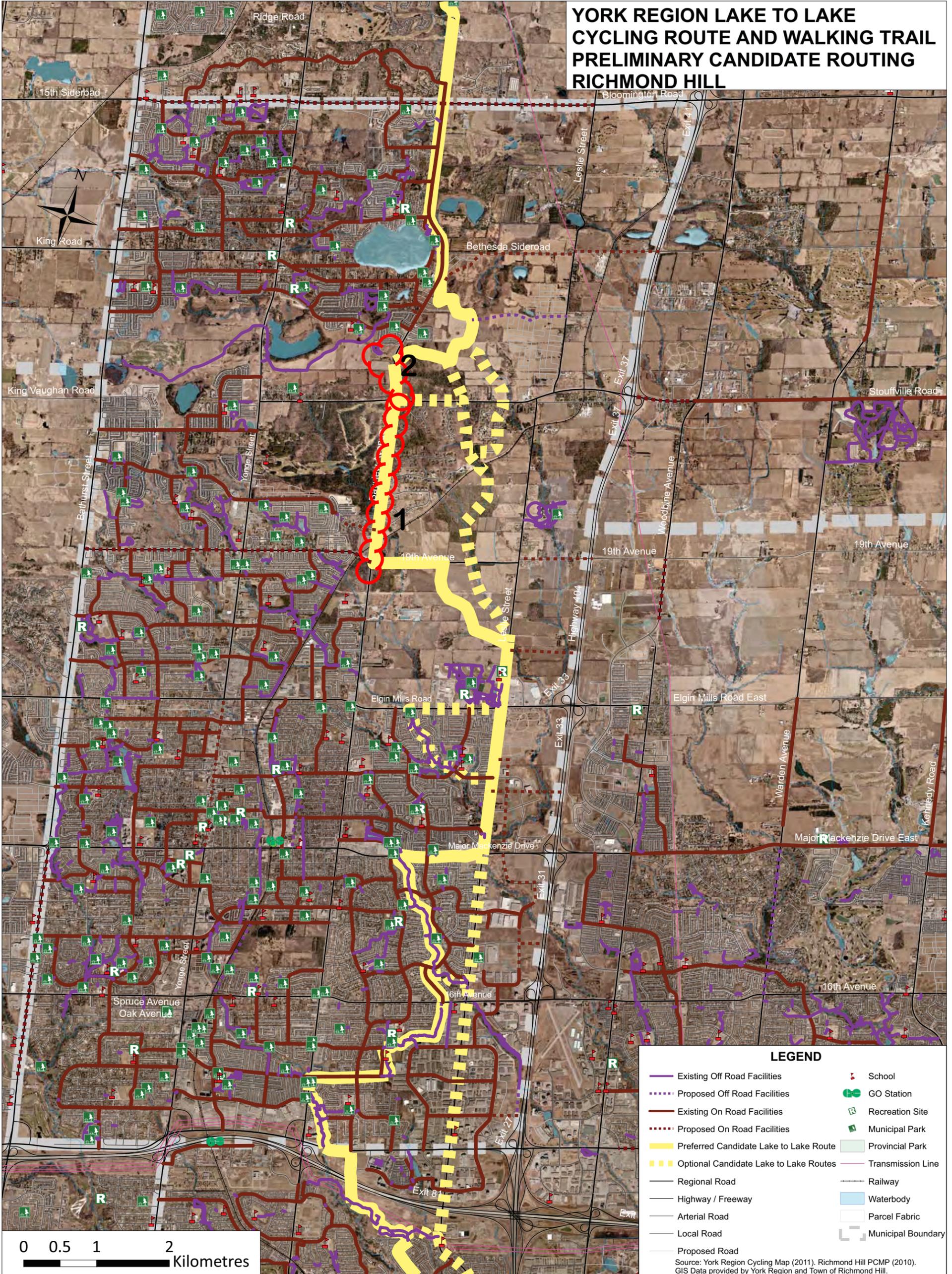
LEGEND

- Existing Off Road Facilities
- - - Proposed Off Road Facilities
- Existing On Road Facilities
- - - Proposed On Road Facilities
- - - Preferred Candidate Lake to Lake Route
- - - Optional Candidate Lake to Lake Routes
- Regional Road
- Highway / Freeway
- Arterial Road
- Local Road
- Proposed Road
- ▲ School
- GO Station
- Recreation Site
- Municipal Park
- Provincial Park
- Transmission Line
- Railway
- Waterbody
- Parcel Fabric
- Municipal Boundary



Source: York Region Cycling Map (2011), Aurora TMP (2011).
GIS Data provided by York Region and Town of Aurora.

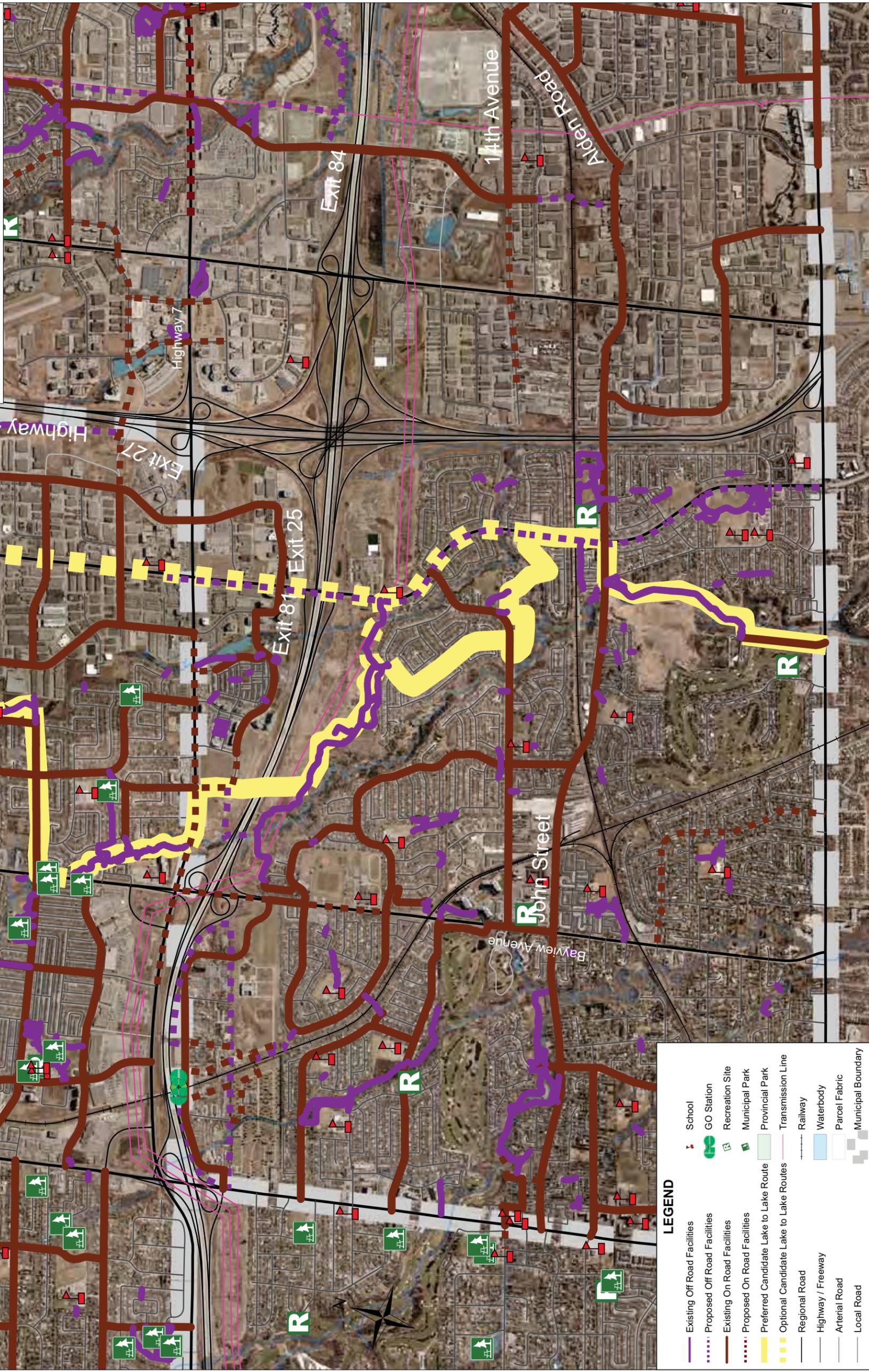
YORK REGION LAKE TO LAKE CYCLING ROUTE AND WALKING TRAIL PRELIMINARY CANDIDATE ROUTING RICHMOND HILL



LEGEND

- Existing Off Road Facilities
 - - - Proposed Off Road Facilities
 - Existing On Road Facilities
 - - - Proposed On Road Facilities
 - Preferred Candidate Lake to Lake Route
 - - - Optional Candidate Lake to Lake Routes
 - Regional Road
 - Highway / Freeway
 - Arterial Road
 - Local Road
 - Proposed Road
 - ▲ School
 - GO Station
 - Recreation Site
 - Municipal Park
 - Provincial Park
 - Transmission Line
 - Railway
 - Waterbody
 - Parcel Fabric
 - Municipal Boundary
- Source: York Region Cycling Map (2011), Richmond Hill PCMP (2010).
GIS Data provided by York Region and Town of Richmond Hill.

**YORK REGION LAKE TO LAKE
CYCLING ROUTE AND WALKING TRAIL
PRELIMINARY CANDIDATE ROUTING
MARKHAM**



- LEGEND**
- Existing Off Road Facilities
 - Proposed Off Road Facilities
 - Existing On Road Facilities
 - Proposed On Road Facilities
 - Preferred Candidate Lake to Lake Route
 - Optional Candidate Lake to Lake Routes
 - Regional Road
 - Highway / Freeway
 - Arterial Road
 - Local Road
 - Proposed Road
 - School
 - GO Station
 - Recreation Site
 - Municipal Park
 - Provincial Park
 - Transmission Line
 - Railway
 - Waterbody
 - Parcel Fabric
 - Municipal Boundary

Source: York Region Cycling Map (2011), Markham Cycling, Pathways and Trails 5 Year Implementation Plan (2010), GIS Data provided by York Region and Town of Markham.

