

## **COMMITTEE OF THE WHOLE JUNE 5, 2012**

### **2012 CYCLE FACILITY STAKEHOLDER CONSULTATION WARDS 1, 2, 4, 5**

#### **Recommendations**

The Commissioner of Engineering and Public Works recommends that staff proceed with stakeholder consultation for the proposed cycle facilities on Confederation Parkway, McNaughton Road, Napa Valley Avenue, New Westminster Drive, North Rivermede Road and Staffern Drive as per the Pedestrian and Bicycle Master Plan, and potential network refinements in Blocks 11, 12 and 18, and report back to Council on the implementation plans.

#### **Contribution to Sustainability**

Increased cycling in the City of Vaughan will reduce automobile dependency, traffic congestion and transportation related greenhouse gas emissions. The proposed cycle facilities will create a safer environment for cyclists, which will attract new cyclists. Increasing cycling supports many of the goals and objectives of Green Directions Vaughan, in particular Objectives 3.1 and 3.3:

**Objective 3.1** *To develop and sustain a network of sidewalks, paths and trails that supports all modes of non-vehicular transportation*

**Objective 3.3** *Reduce single occupant vehicle (SOV) trips by supporting active transportation, car pooling and public transit*

#### **Economic Impact**

Stakeholder consultation will be funded from the approved Capital Budget (DT-7040-10) for implementation of the Pedestrian and Bicycle Master Plan, which includes a public education component in conjunction with the design process. It is expected that each consultation will cost approximately \$3,000. Local developers have committed funding to contribute to the cycle network in Blocks 11, 12 and 18.

Staff will report back to Council with implementation plans following stakeholder consultation for all cycle facilities. The plans will outline cost estimates for each cycle facility, and funding source.

#### **Communications Plan**

Staff recommend a separate stakeholder consultation for each geographic area. Consultation will consist of Public Open Houses. Notification of the public meetings will be advertised in local newspapers, posted on the City's website, and flyers will be distributed to residents in the surrounding area. The Public Open Houses will be an opportunity to provide information on the proposed cycle facilities, respond to queries, and receive input from stakeholders. Questionnaires will be available at the open house, and on the City's website. Staff will report back to Council with a recommended cycle facility together with implementation plans.

#### **Purpose**

The purpose of this report is to seek Council approval to proceed with stakeholder consultation on certain elements of the approved Pedestrian and Bicycle Master Plan, and refinements to the cycle network in Blocks 11, 12, and 18.

## **Background - Analysis and Options**

The existing on-road cycle network in Vaughan consists of signed bicycle routes, boulevard pathways, shared roadways, bike lanes and paved shoulders (see Attachment No. 1). This network is complimented by off-road multi-use greenways and pathways. With the aim to provide increased connectivity between existing cycle facilities, staff are looking to proceed with design and consultation on new cycle facilities that will bridge gaps, and provide a better connected cycle network.

### **The Vaughan Cycling Forum provided valuable feedback on the needs of the cycling community, particularly the need to create a better connected cycle network**

The inaugural meeting of the Vaughan Cycling Forum was held in April 2012. The Forum provided an opportunity for citizens and cyclists to help shape and provide input into future cycling initiatives. Based on the discussion and comments received at the Forum, the highest priority amongst the participants was the need for a better connected cycle network, and cycle facilities such as bike lanes, as a means of encouraging cycling. In addition, there was support for dedicated cycle facilities on Collector Roads.

### **Staff propose stakeholder consultation on approved cycle facilities**

Three corridors for new cycle facilities have been selected from the Pedestrian and Bicycle Master Plan (PBMP), and approved by York Region's Pedestrian and Cycling Municipal Partnership Program, to provide connections to the existing cycle network (as shown in Attachment No. 2):

- McNaughton Road East, Peter Rupert Avenue, Confederation Parkway, Staffern Drive and North Rivermede Road (Ward 4 – Concord/Thornhill North, Ward 1 – Maple/Kleinburg)
- Napa Valley Avenue (Ward 2 – Woodbridge West)
- New Westminster Drive (Ward 5 – Thornhill)

The corridors consist of Collector Roads. Each corridor travels through a variety of land uses, which will require a context sensitive approach to provide the most appropriate solutions while maintaining safety and mobility. The PBMP proposes neighbourhood bike lanes for these corridors. However, staff recommend progressing with stakeholder consultation to help determine the most appropriate cycle facility (i.e. bike lanes, shared roadways or signed bicycle routes).

### **Staff also propose refinements to the approved cycle network in Blocks 11, 12 and 18, which is consistent with the Pedestrian and Bicycle Master Plan**

In addition to the approved cycle facilities above, the City is also working with local developers on proposed refinements to the cycle network in Blocks 11, 12 and 18 (see Attachment No. 3). The Block Plans were approved in 2003. In 2007, Council approved the PBMP, which identified a City-wide cycle network. After approval of the PBMP, the City began requiring developers to incorporate the approved cycle network into their developments. This would apply to the City of Vaughan's agreements with the developers for later phases of Blocks 11, 12 and 18.

The approved cycle network designates on- and off-road cycle facilities. The on-road cycle facilities consist of bike lanes on Peter Rupert Avenue and signed bicycle routes. The off-road facilities consist of boulevard pathways, which are separated from the traveled portion of a road and designed to support pedestrians and cyclists. The local developers are prepared to install all approved cycle facilities on City roads as per the PBMP.

## **The objectives of the new Vaughan Official Plan and Transportation Master Plan support more cycle-friendly streets**

Since adoption of the PBMP in 2007, the City approved the new Vaughan Official Plan (VOP 2010) and a City-wide Transportation Master Plan, both of which emphasize the need to enhance the street network to support alternatives to the automobile, including cycle-friendly streets. The VOP 2010 states, “it is policy of Council to support the provision of dedicated bicycle lanes, where feasible, on collector streets” (Policy 4.2.1.25).

The Transportation Master Plan sets out a vision to ensure future growth will balance new, more reliable ways to travel, including cycling. Sustainability Principle 2 of the Transportation Master Plan proposes to “Make Vaughan’s neighbourhoods pedestrian and bicycle friendly” by enhancing opportunities to walk and cycle.

## **Bike lanes provide numerous benefits and the appropriate corridors were selected according to acceptable criteria**

The cycle facilities consultation for Blocks 11, 12 and 18 will include bike lanes, shared roadways and signed bicycle routes, depending on the characteristics of each street. Bike lanes are the preferred cycle facility as they provide safety for cyclists with the provision of a dedicated lane for bicycle use only. Bike lanes separate cyclists from traffic and parking by solid white lines. However, most streets do not have sufficient width for bike lanes and on-street parking. Therefore, partial or full parking prohibitions are required if bike lanes are implemented. Finally, bike lanes contribute to ‘Complete Streets’, by providing for all road users. The benefits and disadvantages of bike lanes are outlined in Attachment No. 4, and a typical bike lane cross-section is provided in Attachment No. 5.

In regard to bike lanes, staff will use the following considerations for the selection of acceptable corridors in Blocks 11, 12 and 18:

- **Street Type** – The corridor provides a direct route that consists of Collector Road(s) long enough to connect neighbourhoods between two arterial roads (or cycle facilities on intersecting roads)
- **Spacing** – There is no more than two parallel bike lane corridors proposed within a block

A number of other considerations will be used to select the appropriate cycle facility, including:

- **Destinations** – The street provides connectivity to key origins or local destinations (e.g. schools, community centres, libraries, parks, institutions, commercial)
- **Parking** – Where on-street parking demand is low, residential street frontage is less frequent, or parking can be accommodated on only one side of the street
- **Continuity** – The street provides continuity to the cycle network
- **Transit** – The street has (or has been designated for) a transit route
- **Density** – The street serves higher density land uses

If, during detailed design or stakeholder consultation, it is determined that bike lanes are not appropriate for a particular street, another cycle facility will be proposed (i.e. shared roadway or signed bicycle route). A comparison of each cycle facility is provided in Attachment No. 4.

## **The proposed refinements to Blocks 11, 12, and 18 will improve the cycle network and better serve the community**

The proposed refinements to the cycle network in Blocks 11, 12 and 18 will better serve the community and encourage cycling. Since the area is still under development, an opportunity exists to improve the cycle network in keeping with the objectives of the VOP 2010 and Transportation Master Plan.

Additional bike lanes in Blocks 11, 12 and 18 would provide a more connected, convenient and safe cycle network. The merits of each cycle facility are discussed in Attachment No. 4. Stakeholders will be consulted on various options for the proposed cycle network, which responds to the objectives of VOP 2010, including bike lanes on more Collector Roads.

**Stakeholder consultation will consist of Public Open Houses starting in Summer 2012, and implementation will take place in Fall 2012 and Spring 2013**

Stakeholder consultation will consist of Public Open Houses, taking place in Summer and Fall 2012, for each of the geographic areas where cycle facilities are proposed. The Public Open Houses will be an opportunity to provide information on the proposed cycle facilities, respond to queries, and receive input from stakeholders.

Staff will consult on the following cycle facilities located in (or bordering) Wards 1 and 4:

- Proposed cycle facilities on McNaughton Road, Peter Rupert Avenue, Confederation Parkway, Staffern Drive and North Rivermede Road
- Proposed refinements to cycle network in Blocks 11, 12 and 18 (all streets being considered for cycle facilities are shown in Attachment No. 3)

Staff will also consult on cycle facilities for the following streets in separate consultations:

- Napa Valley Avenue in Ward 2 (Woodbridge West)
- New Westminster Drive in Ward 5 (Thornhill)

**Following consultation staff will report back to Council with implementation plans**

Following consultation, staff will analyze feedback and report back to Council on the final recommendations and financial implications, including implementation plans for each of the proposed cycle facilities. If bike lanes are approved by Council, amendments to the Traffic and Parking By-laws will be required to designate specific lanes for the use of bicycles only, and prohibit parking.

**Relationship to Vaughan Vision 2020/Strategic Plan**

In consideration of Vaughan Vision 2020, this report relates to the following Strategic Initiatives:

- Pursue Excellence in Service Delivery
- Enhance and Ensure Community Safety, Health and Wellness
- Plan and Manage Growth & Economic Vitality

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

**Regional Implications**

There are no direct regional implications. However, staff will consult with the Region as part of stakeholder consultation. The Region of York will also be implementing complementary cycle facilities on Regional Roads in conjunction with the Region's 10-Year Roads Construction Program.

**Conclusion**

Staff wish to proceed with the next phase of the PBMP by consulting on approved cycle facilities that will provide connections to the City's existing cycle network. The proposed corridors travel through a variety of land uses, which will require a context sensitive approach to provide the most appropriate solutions. Staff also propose refinements to Blocks 11, 12 and 18 to improve the cycle network and better serve the community.

Stakeholder consultation will include Public Open Houses and involve all stakeholders to develop cycle facilities and cycle network refinements that fit their physical setting, while maintaining safety and mobility. Staff will report back to Council on recommended cycle facilities together with implementation plans.

**Attachments**

1. Existing On- and Off-Road Cycle Facilities
2. Approved On-Road Cycle Facilities (2012-13)
3. Refinements to the Cycle Network in Blocks 11, 12 and 18
4. Benefits and Disadvantages of Proposed Cycle Facilities
5. Typical Collector Road Cross-Section Including Bike Lanes

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# ATTACHMENT NO. 1 EXISTING ON- AND OFF-ROAD CYCLE FACILITIES



## LEGEND

— On-Road Cycle Facilities

- - - Off-Road Cycle Facilities

NB. Some pathways may not be shown on the map

NB. Not all off-road facilities support cycling

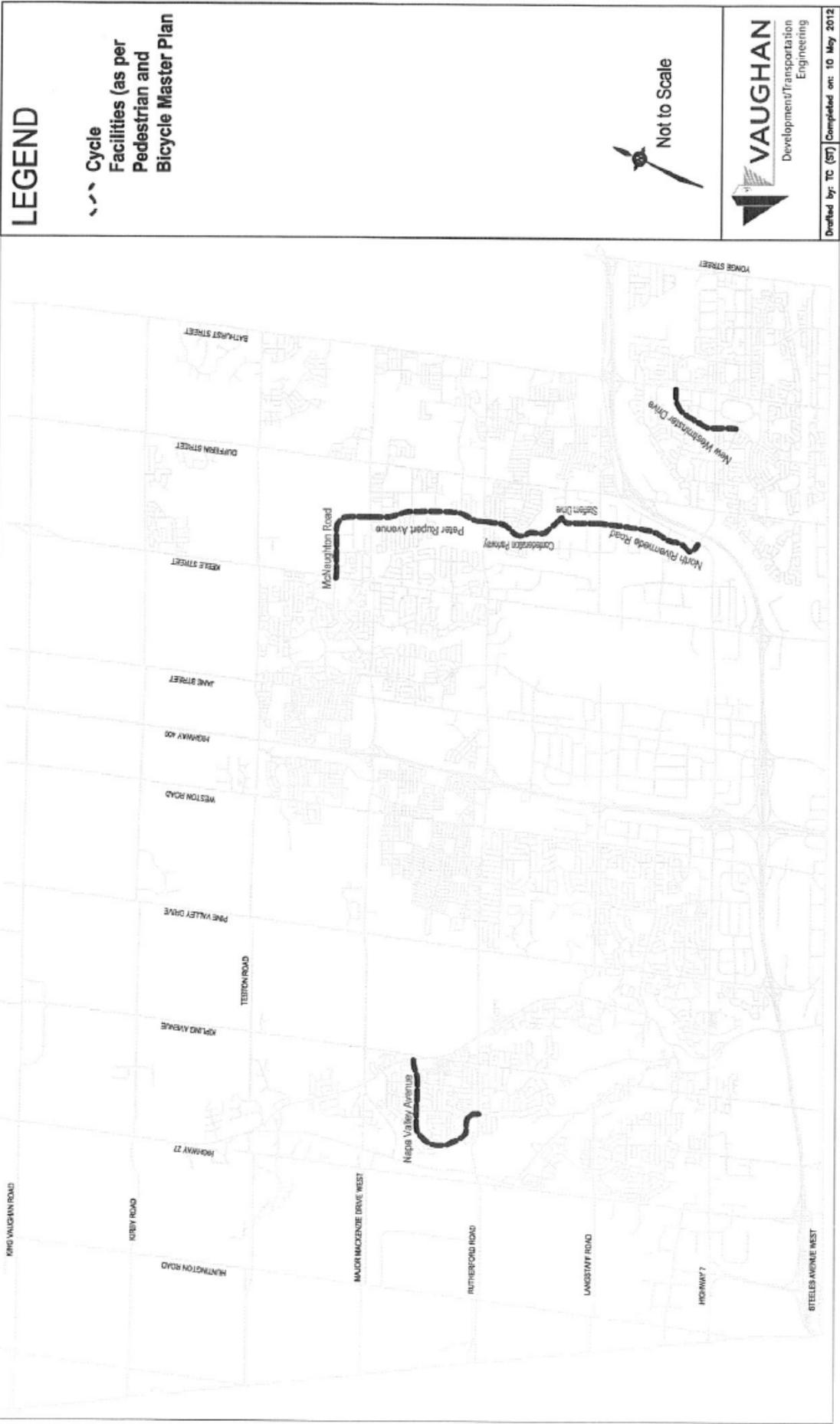


Not to Scale

**VAUGHAN**  
Development/Transportation  
Engineering

Drafted by: TC (ST) Completed on: 15 May 2012

ATTACHMENT NO. 2  
 APPROVED ON-ROAD CYCLE FACILITIES (2012-13)



# ATTACHMENT NO. 3

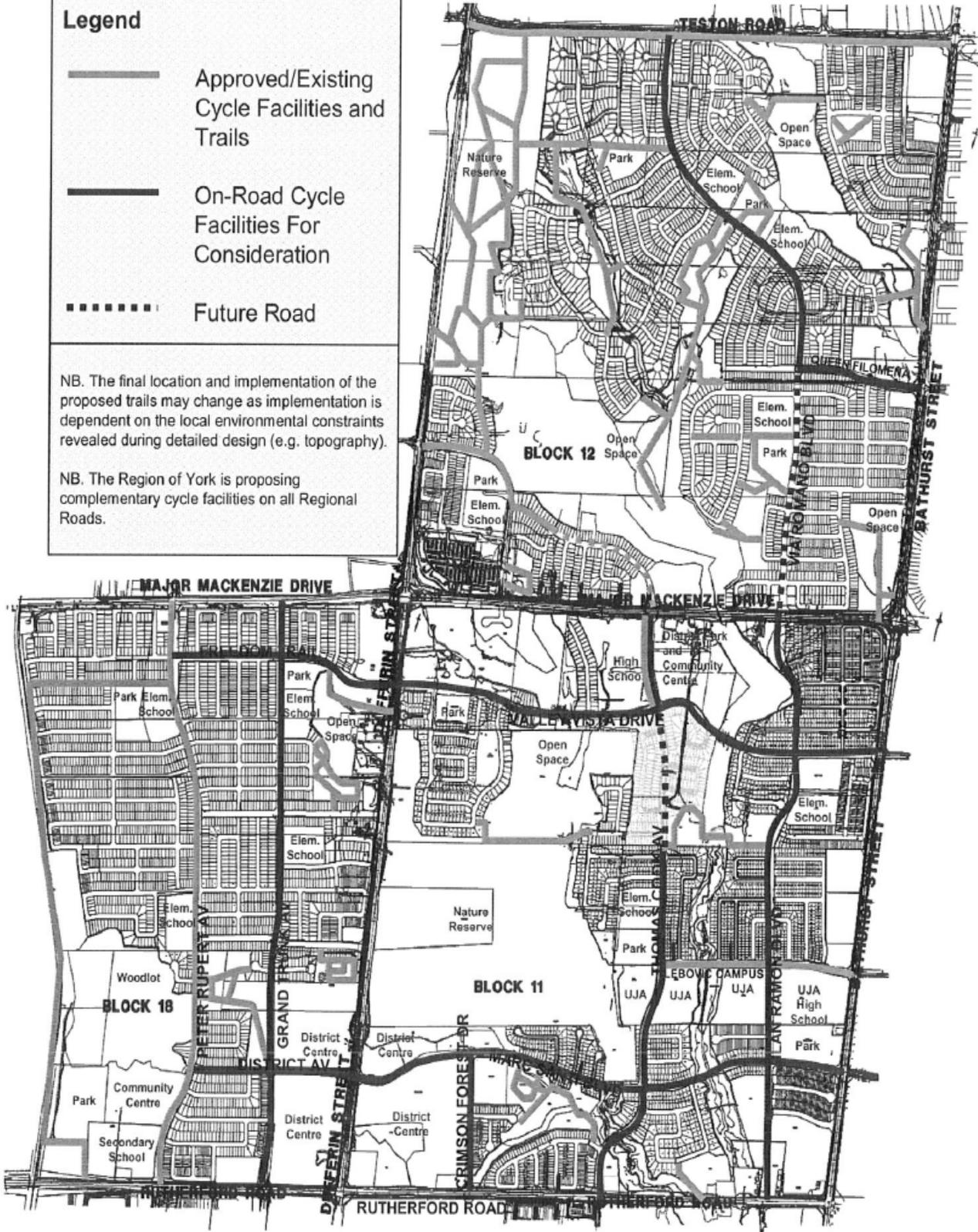
## REFINEMENTS TO CYCLE NETWORK IN BLOCKS 11, 12 and 18

**Legend**

-  Approved/Existing Cycle Facilities and Trails
-  On-Road Cycle Facilities For Consideration
-  Future Road

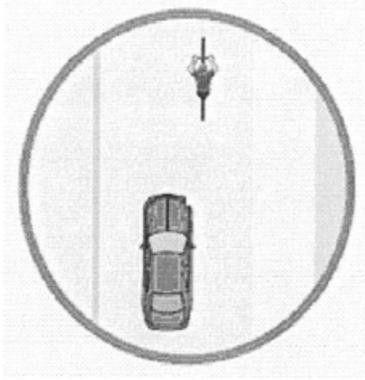
NB. The final location and implementation of the proposed trails may change as implementation is dependent on the local environmental constraints revealed during detailed design (e.g. topography).

NB. The Region of York is proposing complementary cycle facilities on all Regional Roads.



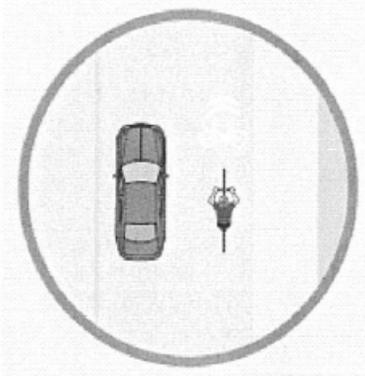
## ATTACHMENT NO. 4 BENEFITS AND DISADVANTAGES OF PROPOSED CYCLE FACILITIES

### Signed Bicycle Route



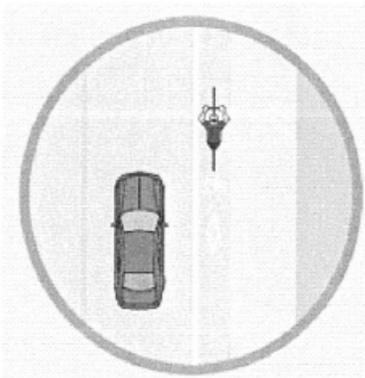
Bicycle routes are typically located on local roads in Vaughan and can safely accommodate both vehicles and cyclists. Bicycle routes provide connections to various destinations and other cycling facilities. Bicycle routes are proven to be safer for cyclists as they raise awareness. Signage is installed on both sides of the road in either direction, and there is no loss of parking.

### Shared Roadway



Shared roadways are bicycle routes with added pavement markings called 'Sharrows', or shared use lane markings. Shared roadways do not require as much pavement width as roads with bike lanes, and they can be accompanied with on-street parking. No physical changes are required to the roadway, and no traffic by-law or parking prohibitions are required. The sharrow pavement markings reinforce the legitimacy of cycle traffic on the roadway, and indicate the ideal cyclist position in the lane. Sharrows are also a visual reminder for motorists to share the road, and motorists are less likely to pass cyclists.

### Bike Lanes



Bike lanes are a dedicated space for cyclists located in the traveled portion of the roadway for one-way cyclist traffic where motorists are not allowed to park, stand or drive. Bike lanes are typically located on urban streets.

## **Bike Lanes (continued)**

### ***Benefits to cyclists***

- Dedicated space is provided for cyclists and motorists, and both feel more comfortable.
- Improved safety for cyclists as bike lanes reduce the likelihood of collisions.
- Enhanced acceptance of cyclists on the road.
- Increased attraction for new cyclists, particularly inexperienced people who feel safer and would be more inclined to cycle if dedicated space were to be provided.

### ***Benefits to motorists***

- Improved road capacity.
- Improved space for cyclists and motorists, and both feel more comfortable.
- Improved sight distance and turning space, both for users traveling along the roadway with bike lanes, as well as for users entering the roadway from a side street or driveway.

### ***Benefits to the community***

- Enhanced road function making streets safer for the community.
- Reduced vehicle speeds and cut-through traffic through reduced lane widths. Bike lanes visually narrow roadway width, and slows traffic.
- Improved, more comfortable and convenient connections to destinations (e.g. schools, open spaces, parks, community centres, other cycling facilities, etc).
- Increased transportation choices, including bicycles, which are a cost effective alternative to vehicles.
- Improved air quality due to fewer vehicles on the road, including less pollution, greenhouse gas emissions, and noise.
- Increased physical activity leading to healthier lifestyles.
- Increased social cohesion and a more livable community.
- Reduced crime as a result of more cyclists using the road with time, which in turn creates more vibrant and safer streets.

### ***Disadvantages***

- Reduced or removed on-street parking.

**ATTACHMENT NO. 5**  
**TYPICAL COLLECTOR ROAD CROSS-SECTION INCLUDING BIKE LANES**

