



Report to: Development Services Committee

Date of Meeting: March 6, 2012

---

<b>SUBJECT:</b>	York Region 16 <sup>th</sup> Avenue Trunk Sewer Enhancement Projects - Robinson Creek North Project
<b>PREPARED BY:</b>	Elizabeth Wimmer, Senior Environmental Planner, Planning and Development, extension 2750
<b>REVIEWED BY:</b>	Lilli Duoba, Senior Project Coordinator, Environmental Planning & Rouge Park, extension 7925

---

**RECOMMENDATION:**

1. That the report entitled “York Region, 16<sup>th</sup> Avenue Trunk Sewer Enhancement Projects - Robinson Creek North Project” dated March 6, 2012, be received;
2. And that Council endorse the Robinson Creek North Restoration Project subject to the following:
  - i) That staff continue to work with the Toronto and Region Conservation Authority and the Region of York to finalize the design for the channel restoration and the multi-use pathway, to the satisfaction of the Town; and,
  - ii) That the Commissioner of Development Services and the Town Solicitor be authorized to execute an agreement with the TRCA and the Region of York, for the works to be done on the Town owned lands at no expense to the Town.
3. That staff be authorized and directed to do all things necessary to give effect to this resolution.

**EXECUTIVE SUMMARY**

The Robinson Creek North Restoration Project is a partnership project for watercourse restoration, tree planting and wetland creation and trail construction on Town owned lands located south of Major Mackenzie Drive, west of McCowan Road. These lands were conveyed as open space as part of the subdivision approval for the Berczy Community. This enhancement project will provide aquatic and terrestrial improvements to the Rouge River watershed along with the provision of a multi-use trail as identified in the “Cycling, Pathways and Trails Plan”. The Robinson Creek North Restoration Project has been identified by the Town, Toronto and Region Conservation Authority (TRCA) and the Region of York as meeting the funding requirements of the 16<sup>th</sup> Avenue Trunk Sewer Enhancement Program. The watercourse restoration and natural heritage restoration component will be funded by the Region of York through the 16<sup>th</sup> Avenue Trunk Sewer Enhancement Fund and the trail construction will be funded through a contribution provided by the developers of the adjoining subdivision for trail construction.

## **PURPOSE**

The purpose of this report is to bring forward recommendations which would permit the implementation of terrestrial, aquatic and recreational infrastructure improvements in the form of watercourse realignment and restoration, wetland creation, tree planting and trails to the Robinson Creek North community and to request authorization from Council for staff to finalize the design in collaboration with the Region of York and the Toronto and Region Conservation Authority and execute the necessary agreements.

## **BACKGROUND**

### **16<sup>th</sup> Avenue Trunk Sewer**

As part of the approval for the 16<sup>th</sup> Avenue Trunk Sewer, the Ministry of the Environment required approximately \$2,000,000 in funding for environmental projects in the Rouge River watershed in Markham. Throughout 2007 and 2008, the Region consulted with numerous stakeholders including Markham and identified a number of projects for funding based on criteria established by the Region. This process resulted in the following 3 major projects now being implemented by the Town of Markham:

1. Tannery Wetland Project (Bullock Avenue and Main Street Markham)
2. Aitken Circle Stormwater Pond at Carlton Village
3. Thermal Cooling Project at Wismer Commons.

Approximately 4 other projects were also allocated funding through other organizations including the TRCA and Ontario Streams with several of these projects located in the Rouge Park:

4. Ontario Streams - Habitat Enhancement in Robinson Creek (North of 16<sup>th</sup> Ave. to Roy Rainy Ave.)
5. Ontario Streams - Habitat Enhancement in Robinson Creek (South of 16<sup>th</sup> Ave. to Raymerville Drive)
6. Rouge Park – Habitat Enhancement projects in and adjacent to the northern portions of Rouge Park.
7. TRCA/Markham – Restoration plan for Robinson Creek. (South of Major Mackenzie to Castlemore Ave.)

This project is being brought forward now due to additional funding being made available through project efficiencies and the cancellation of a project that could not be implemented.

### **Robinson Creek North Site Context**

The new proposed project is located in a section of valleyland south of Major Mackenzie Drive, extending to south of Castlemore Avenue, west of McCowan Road and east of Stonebridge Drive (Figure 1). The project lands are owned by the Town of Markham, regulated by the Toronto and Region Conservation Authority and are of interest to the Rouge Park and the Ministry of Natural Resources relative to the protection of Red Side Dace (Endangered Species).

The existing floodplain is very shallow and not well defined. Historical photographs indicate that this portion of valleyland was actively farmed. The site is predominately an open field and is characterized by small clusters of vegetation. The creek over time has become channelized and has evolved into a shallow, narrow grassy waterway. The gradient of the waterway is very flat and frequent flooding occurs. The creek has been identified as having good potential for “Red Side Dace” habitat in the Rouge Watershed Fisheries Plan.

The Town approved a subdivision development in 2010 on the eastern portion of the Robinson Creek watershed, north of Castlemore Avenue (see Figure 2) comprising of lane based townhouses. The project lands are intended to provide valleyland protection and passive open space for the new community and is a shared amenity for the residential community. The north-south perimeter street is designed to follow the top of bank and townhouse units are oriented to overlook the valley. As part of the approval of the adjacent subdivision, the Town secured \$50,000 towards the development of the pathway, which will be combined with the Region’s funding to deliver an integrated trails and restoration project.

The Town’s Cycling, Pathways & Trails Master Plan identifies a multi-use pathway in this section of valley. In the north, the pathway is proposed to connect to the existing boulevard multi-use pathway along Major Mackenzie Drive and in the south east it will connect to the Wismer Community, ultimately linking to existing trails in the Markville/Raymerville Neighbourhoods (See Figure 3).

### **Project Funding**

The funding for this project is an allocation through the 16<sup>th</sup> Avenue Trunk Sewer Enhancement Fund. Through this funding, the Toronto and Region Conservation Authority is working with the Region to undertake the technical site analysis and prepare detailed design plans for the trail implementation and tree planting. The final budget for the restoration works has not been finalized but the preliminary budget suggests that adequate funding will be available for the restoration component of the project. The \$50,000 developer contribution for the pathway will be directed to the pathway section between Major Mackenzie Drive and Castlemore Avenue. Should additional funding become available through the “Multi-Use Pathway Environmental Assessment (MUP EA)” currently underway by the Town, the pathway section between Castlemore Avenue and McCowan Road will also be completed as this pathway is identified in the 5 Year Implementation Plan. The Region, the TRCA and the Town propose to enter into a agreement to document the project requirements, funding, Insurance and Liability requirements related to this project.

## **OPTIONS/DISCUSSION:**

### **Robinson Creek North Project Site Description**

The Robinson Creek North project is made up of the following components:

- 1) The restoration of the watercourse (Figure 5):
  - Including the approximation of natural meanders so that the creek will become a major feature of the site as well as supporting existing water conveyance capacity.
- 2) Improved aquatic habitat:
  - The waterway will include deeper, larger pools to support Redside Dace preferences for habitat.

3) Restoration of forest features:

- The restoration of small wooded nodes through tree planting and riparian planting along the watercourse to be finalized upon completion of the technical watercourse design.

4) The creation of small wetland areas :

- The TRCA is also proposing small wetland areas as part of the project which will be confirmed upon completion of the technical watercourse design.

5) A multi-use pathway (Figure 4): A new interface with the valley lands will be created through the implementation of a multi-use pathway which will eventually link to pathway systems throughout the Town and will provide a recreational amenity for the community. The pathway will be designed as per the requirements of the “Cycling, Pathways & Trails 5 Year Implementation Plan”.

The proposed restoration project will improve the watercourse function, provide improved fish habitat and naturalize the landscape associated with the watercourse. Public access to the valley land will be facilitated through the provision of a multi-use pathway.

### **NEXT STEPS FOR PROJECT COMPLETION**

The channel design work and budget confirmation is proposed to be completed by the TRCA in March 2012. Once this is done, the Region will confirm the overall budget for the project and the necessary agreements can be executed to implement the project. The TRCA will secure any necessary permits and clearance letters from Ministry of Natural Resources for any proposed in-stream disturbances.

### **FINANCIAL CONSIDERATIONS**

There are no direct financial impacts to the Town. The 16<sup>th</sup> Avenue Trunk Sewer Enhancements Program is funded by the Region of York and would result in a net benefit to the Town. The trail construction is funded through a developer contribution through the Lasseter Subdivision development.

### **ENVIRONMENTAL CONSIDERATIONS**

The 16<sup>th</sup> Avenue Enhancements Program supports the Town’s environmental protection goals and is consistent with the Rouge River Watershed Plan 2007 and the Markham’s Greenprint Sustainability Plan.

### **TOWN PARTICIPATION**

Staff from the Development Services and Community Services Commissions have been actively involved in the 16<sup>th</sup> Avenue Enhancements Program process and will continue to be engaged in the management and implementation of the Robinson Creek North Project.

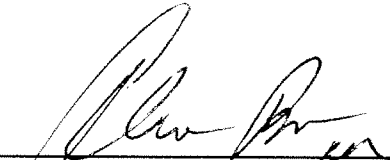
### **BUSINESS UNITS CONSULTED AND AFFECTED**

This report has been reviewed by the Engineering Group in Development Services and Community Services.

**RECOMMENDED BY:**



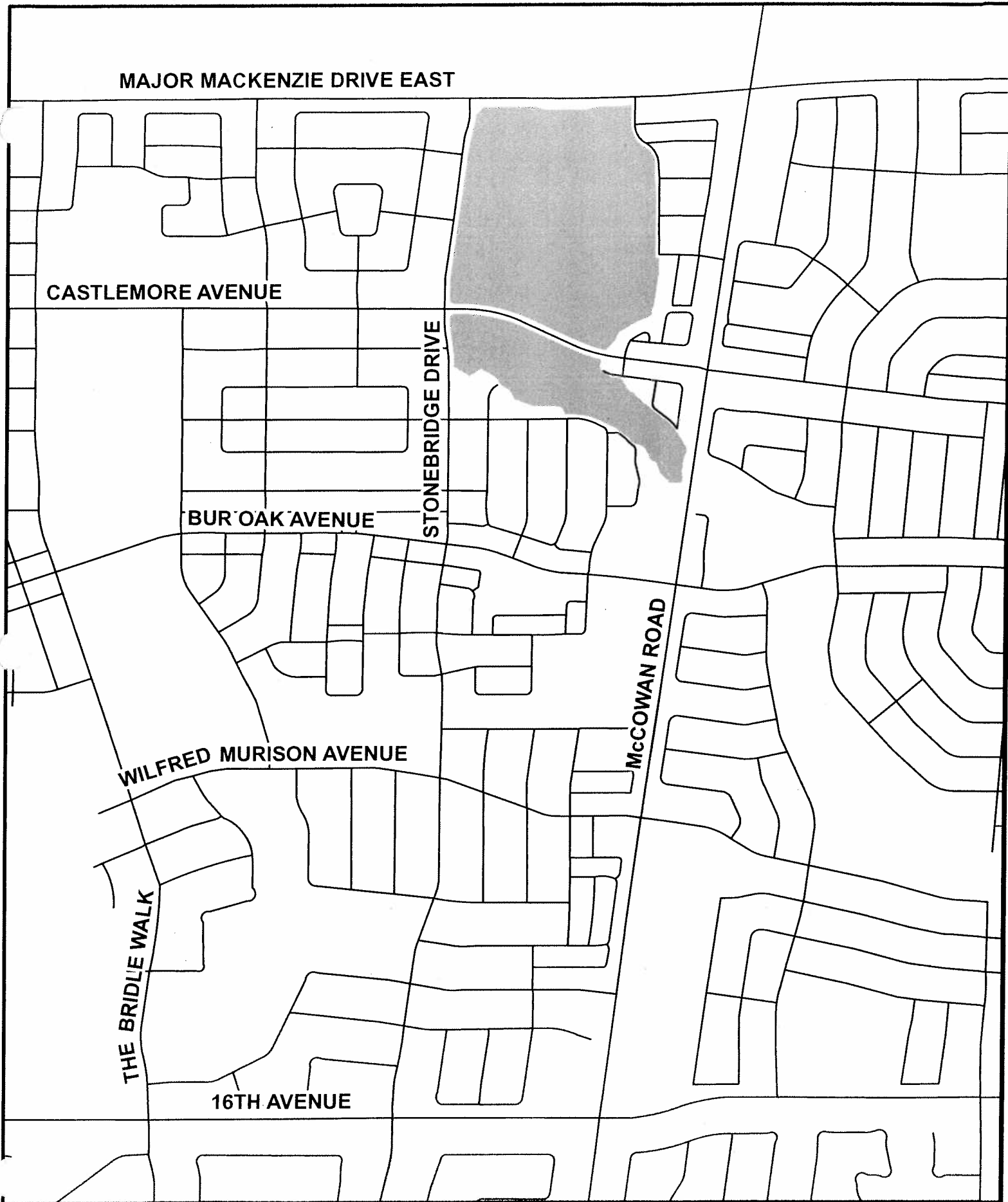
Rino Mostacci, M.C.I.P., R.P.P.  
Director of Planning and Urban Design



Jim Baird, M.C.I.P., R.P.P.  
Commissioner of Development Services

- Figure 1- Site Context
- Figure 2- Lasseter Subdivision Lands
- Figure 3- Cycling, Pathways and Trails Master Plan
- Figure 4- Multi-Use Pathway/Site Features
- Figure 5 - Watercourse Restoration Plan

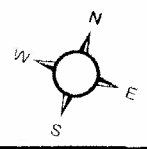
File Path:Q:\Development\Planning\MISC\MI 536 16th Avenue Enhancement Projects\Robinson Creek North  
Restoration Site\Staff Report\Final Report.docx



**Figure No. 1 - Site Context**



**SUBJECT LANDS**



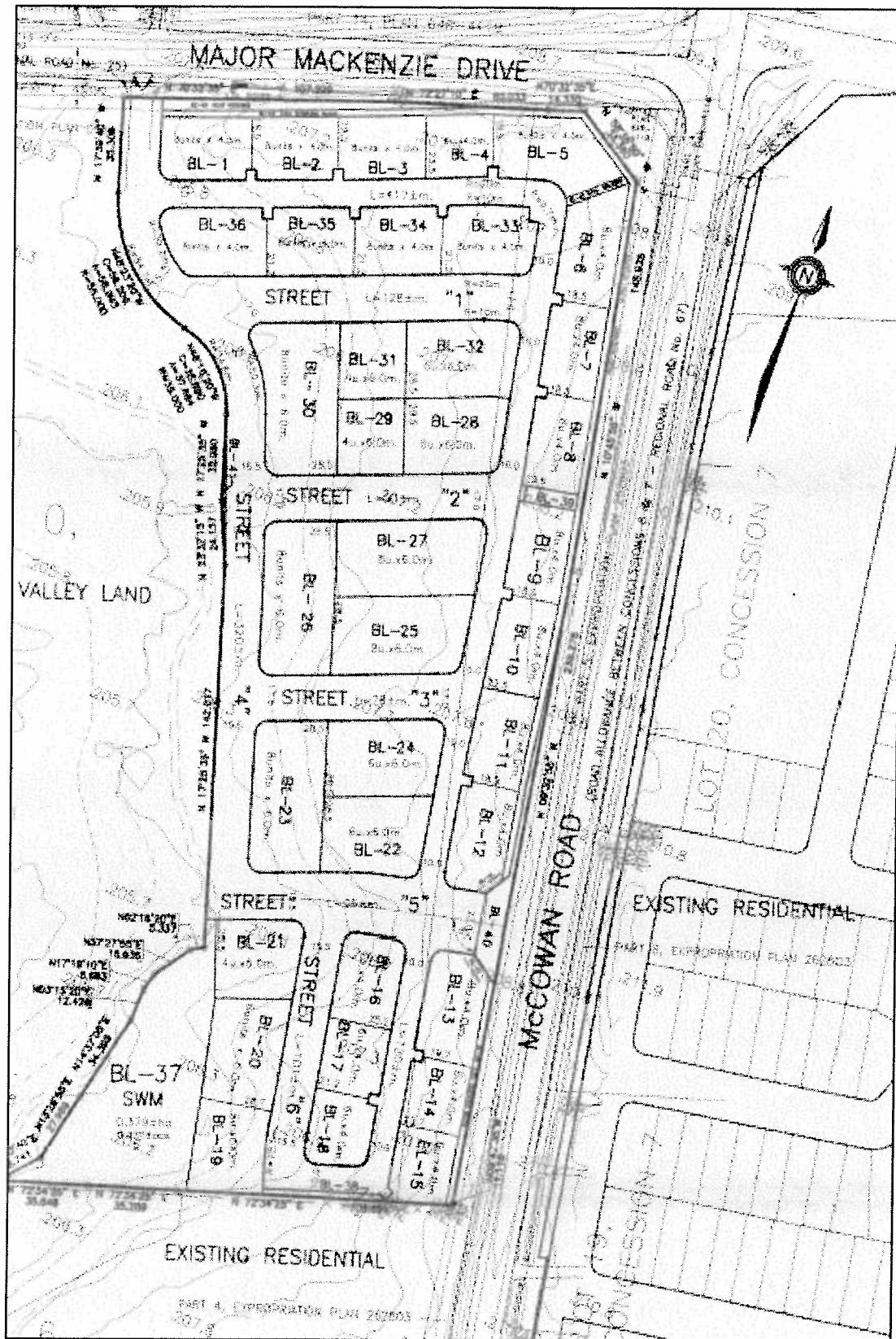


Figure No. 2 – Lasseter Subdivision

# **MARKHAM** Pathways and Trails 5-Year (2010 - 2015) Implementation Program **PROJECT 18 - IMPLEMENTATION** Trail System (North Unionville) SHEET D-1 DRAFT

**NOTE**

A - Trail alignments as illustrated are based on the Cycling Master Plan (2007), the Draft Pathway and Trails Master Plan (2008), the York Region Pedestrian and Cycling Master Plan (2009) and additional field investigation.

B - In addition, routes illustrated do not represent the entire proposed route network but rather represent existing and proposed routes that were identified for implementation in the first five years by the Master Plan (see Note A).

C - The final alignment of the individual routes will be confirmed in a detailed design process.

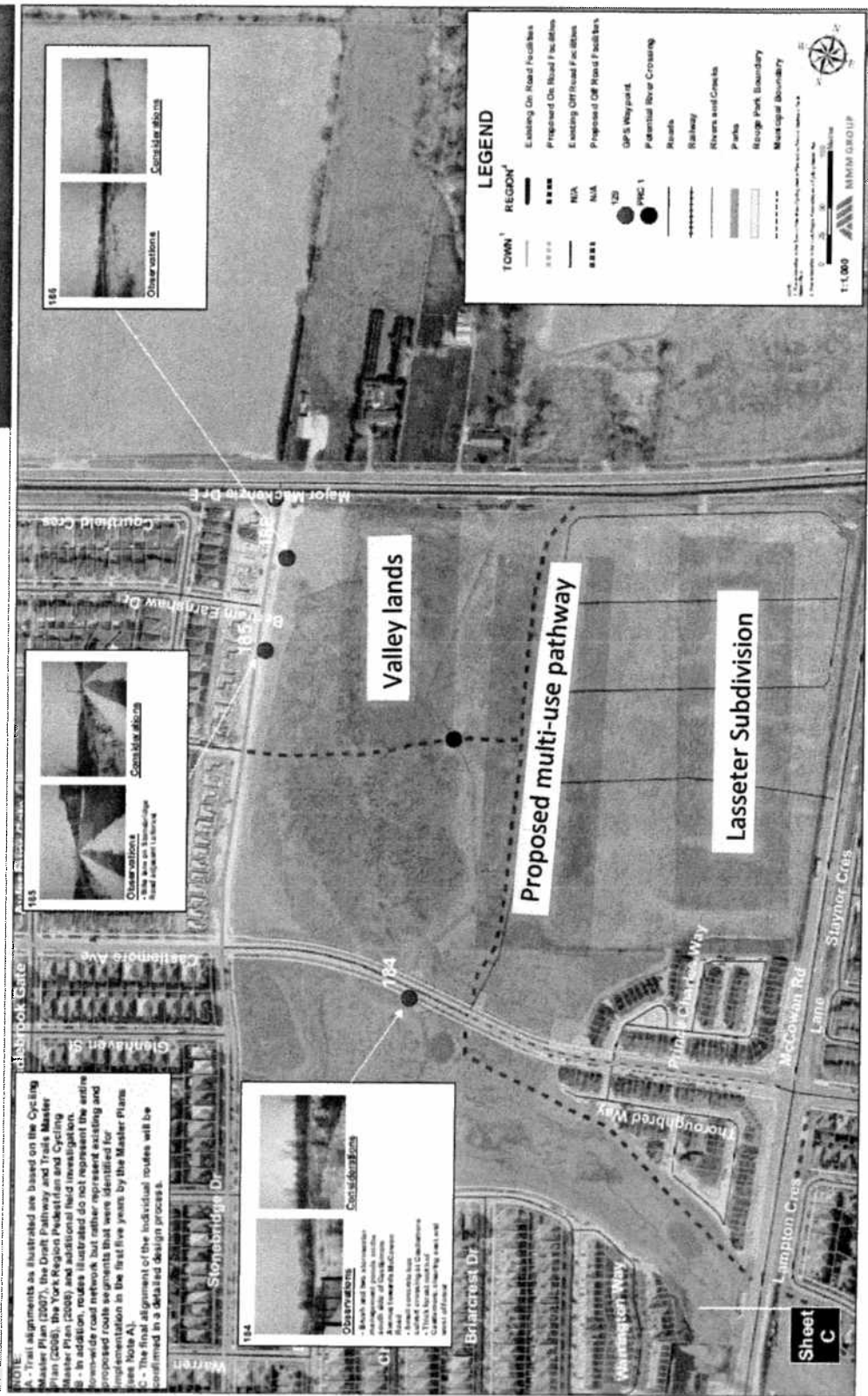


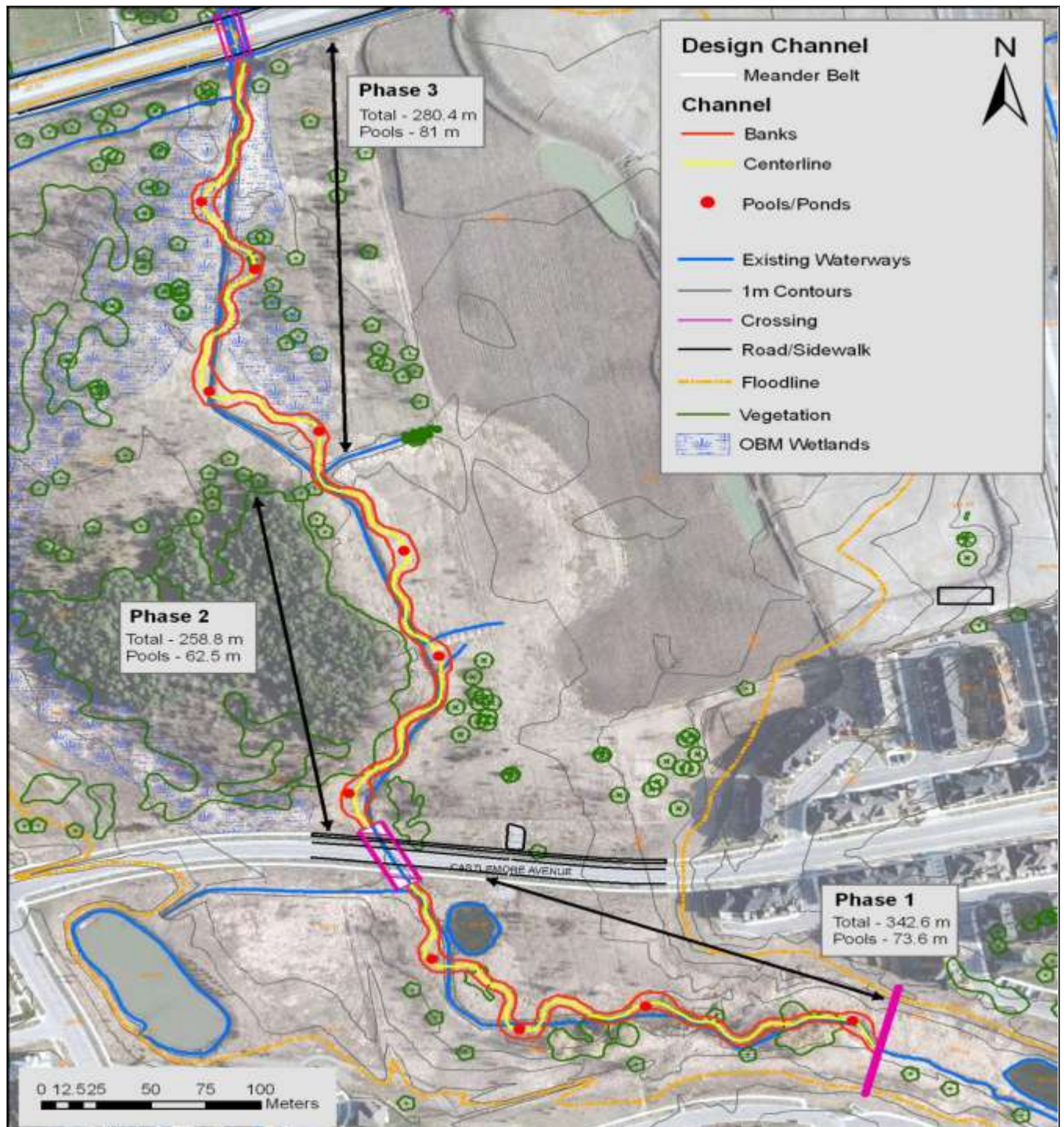
Figure No. 3 – Cycling, Pathways and Trails Master Plan – Project 18



Figure No. 4 - Multi-Use Pathway / Site Features







**Figure 5 – Watercourse Restoration Plan**