

**Welcome To:
Open House #2**

**Route Study and Class Environmental
Assessment**

**Watermain Construction Project
from the Rosehill Pumping Station to the Bayview
Avenue and Eglinton Avenue Area**

Wednesday – March 21, 2007

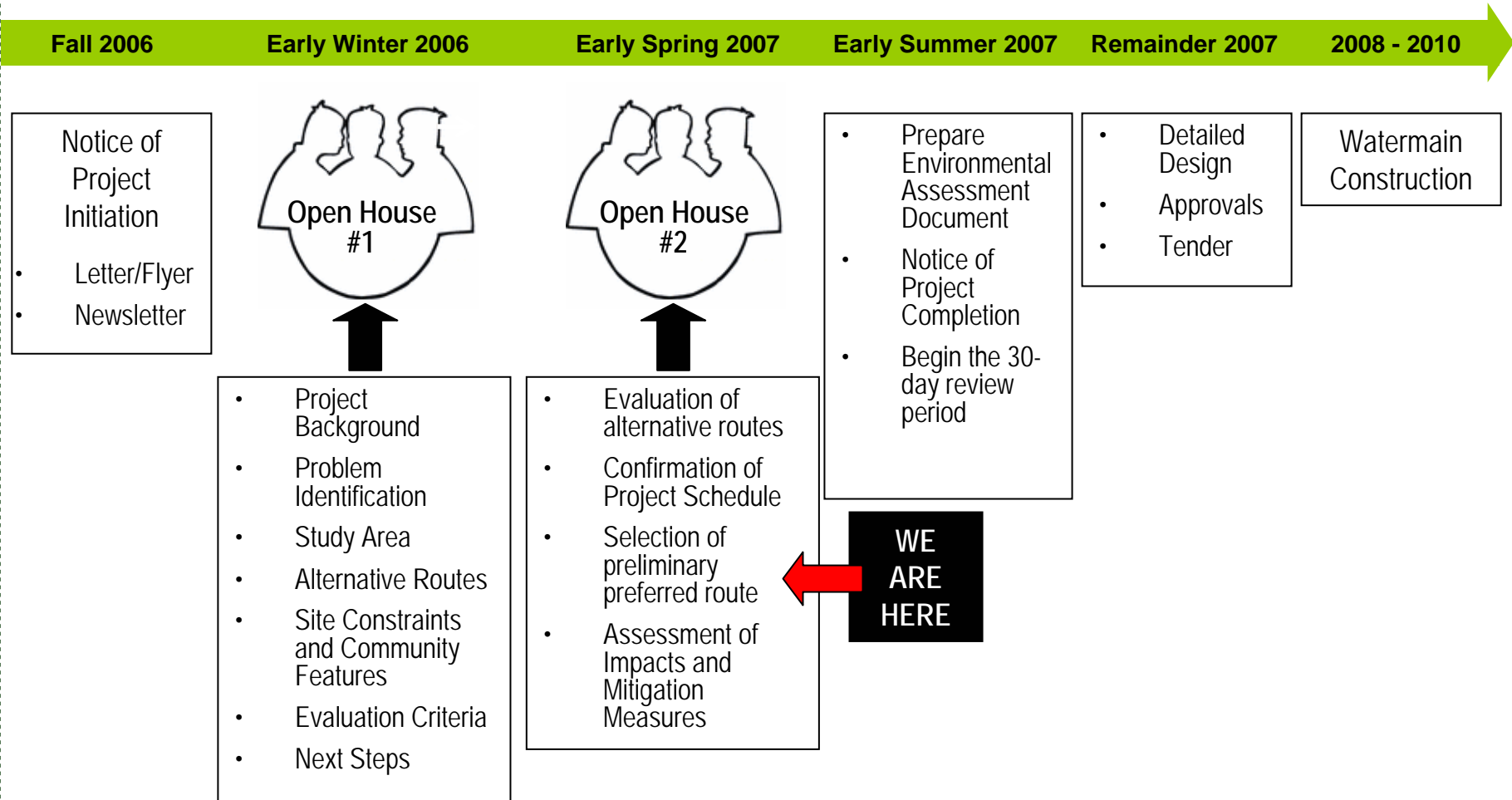
Why are we here?

- To present the alternative route alignments considered for the construction of the watermain
- To review the criteria under which the alternative routes were evaluated
- To identify preliminary preferred route for the construction of the watermain through the Class Environmental Assessment (Class EA) process
- To receive input from interested agencies and the public

Public participation is an integral part of the process. We encourage you to provide us with comments or concerns which you may have.

ROUTE STUDY AND CLASS ENVIRONMENTAL ASSESSMENT
ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION

Overview of the Class EA Process



Project Background

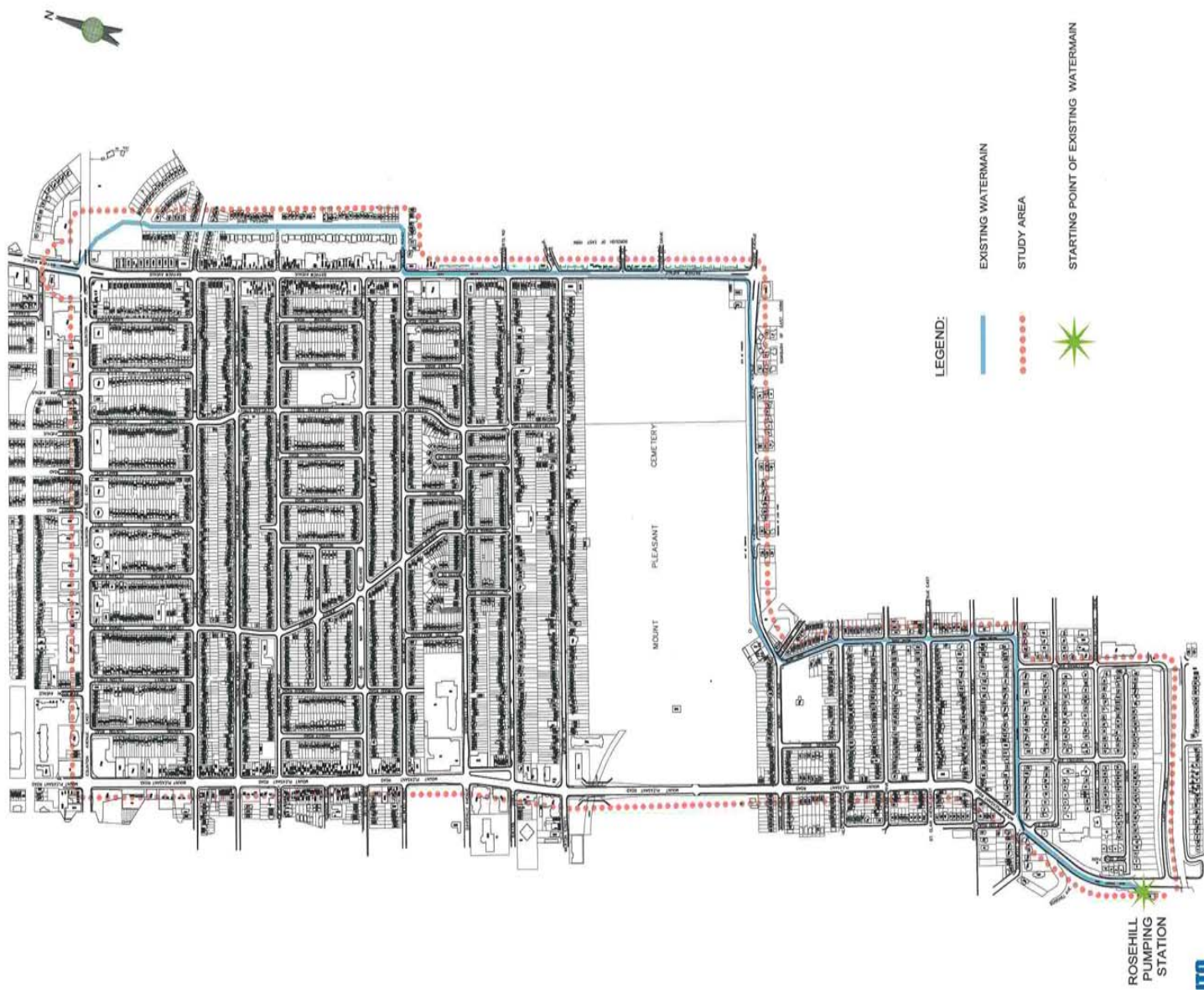
- The City of Toronto and York Region have an agreement to supply water from Lake Ontario to service Toronto and parts of York Region.
- In 2006, the Joint Optimization (JOS) Study for the City of Toronto and York Region was updated based on population projections. The main objective was to identify the optimal infrastructure program that will satisfy water demands from 2011 through 2031.

Problem Identification

- In order to satisfy the projected water demands in developing areas in North Toronto and York Region, a new watermain needs to be constructed from the Rosehill Pumping Station to the Bayview Avenue and Eglinton Avenue area.
- The new watermain will reinforce the existing system capacity and increase the output of the Rosehill Pumping Station.

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Study Area Map and Existing Watermain

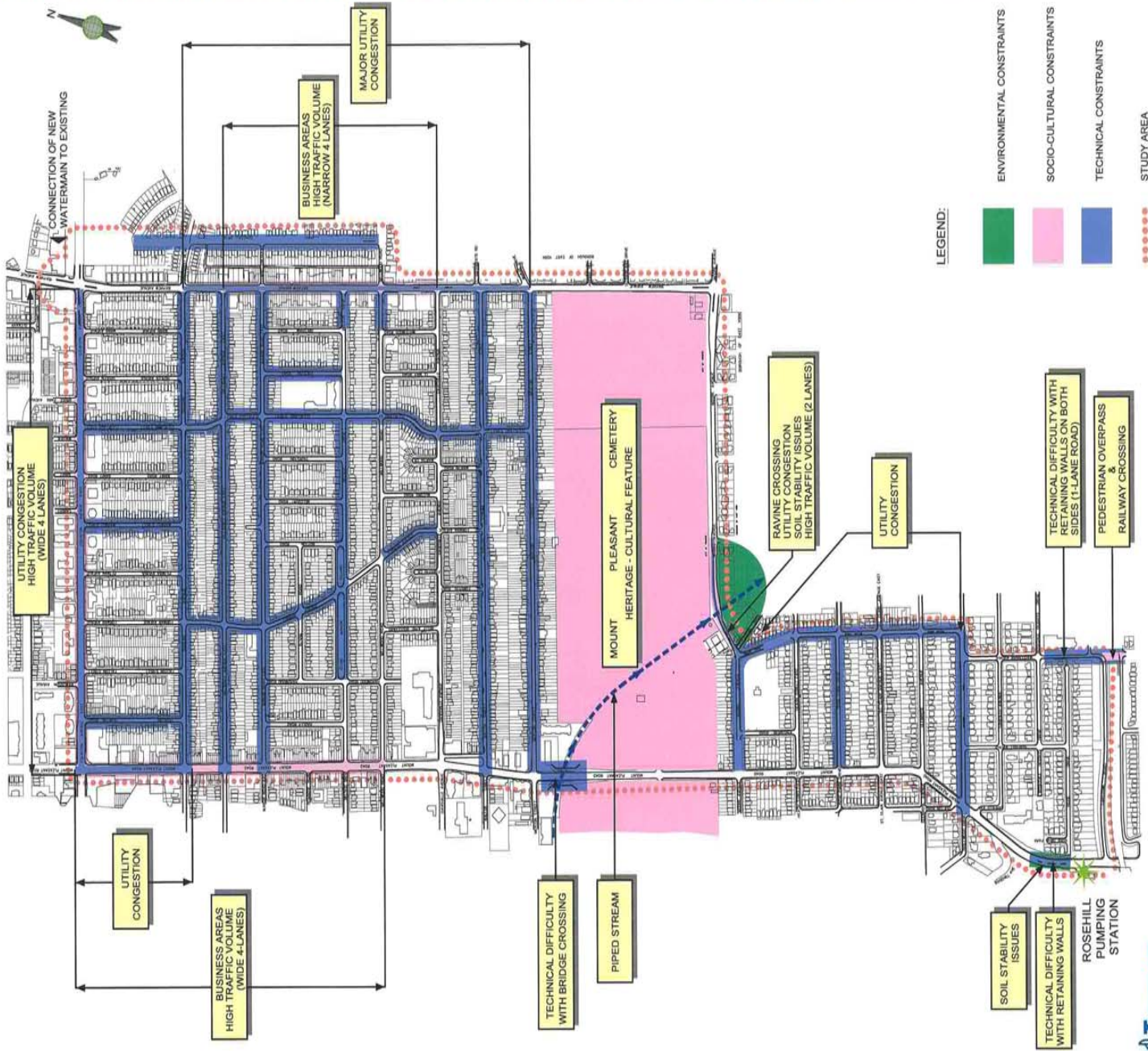


Selection of Alternative Routes

- The alternative routes for the watermain were selected based on:
 - Feasibility to construct given the existing underground utilities (gas mains, sewers, cables, etc)
 - Natural environmental features Heritage features (i.e., Mount Pleasant Cemetery)
 - Soil/Hydrogeotechnical conditions
 - Traffic
 - Construction limitations on roads that have recently been resurfaced or reconstructed.
- The preferred watermain route should have the least impacts on the natural environment, residents and businesses, and construction costs.

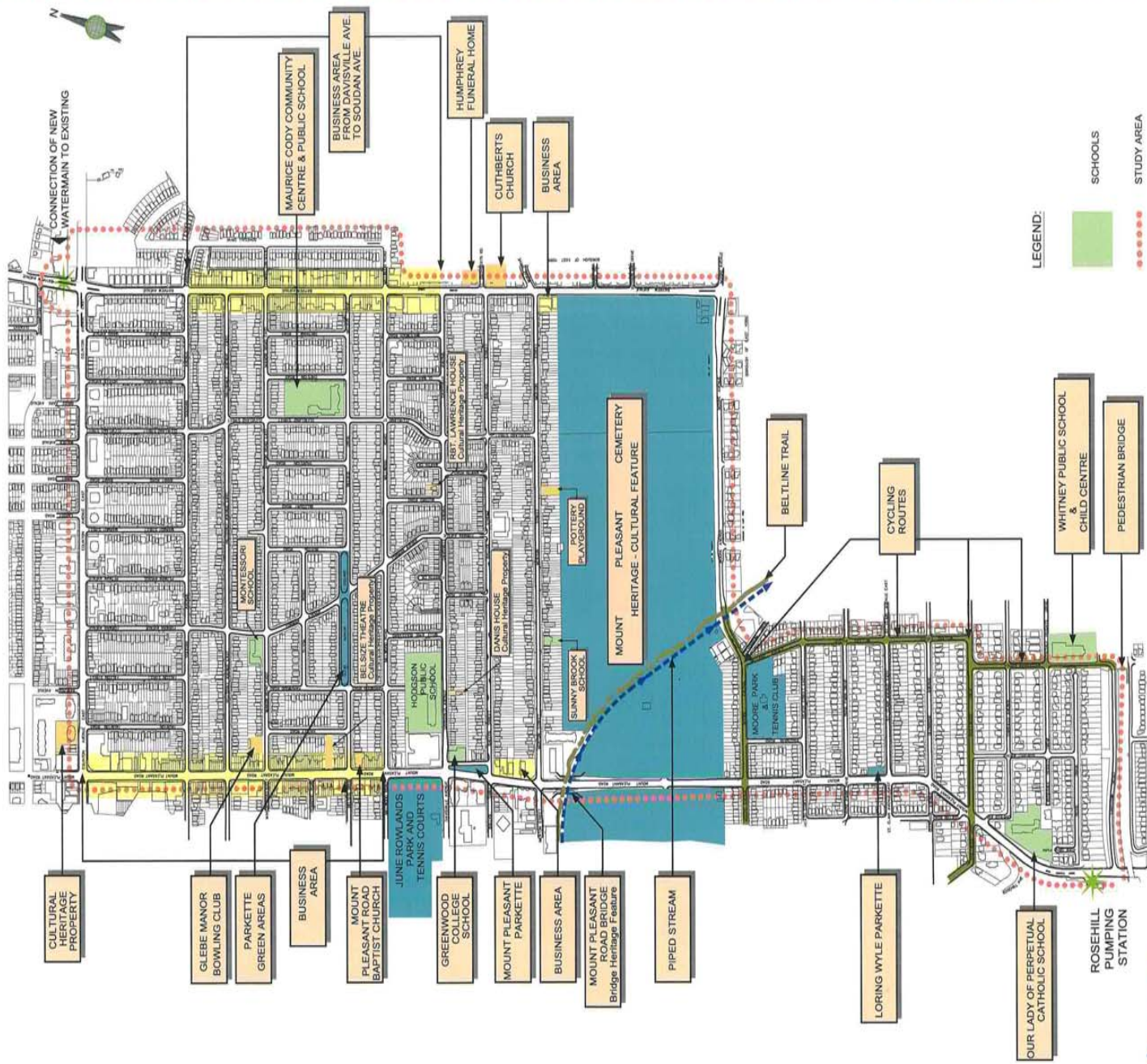
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 ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION

Constraints

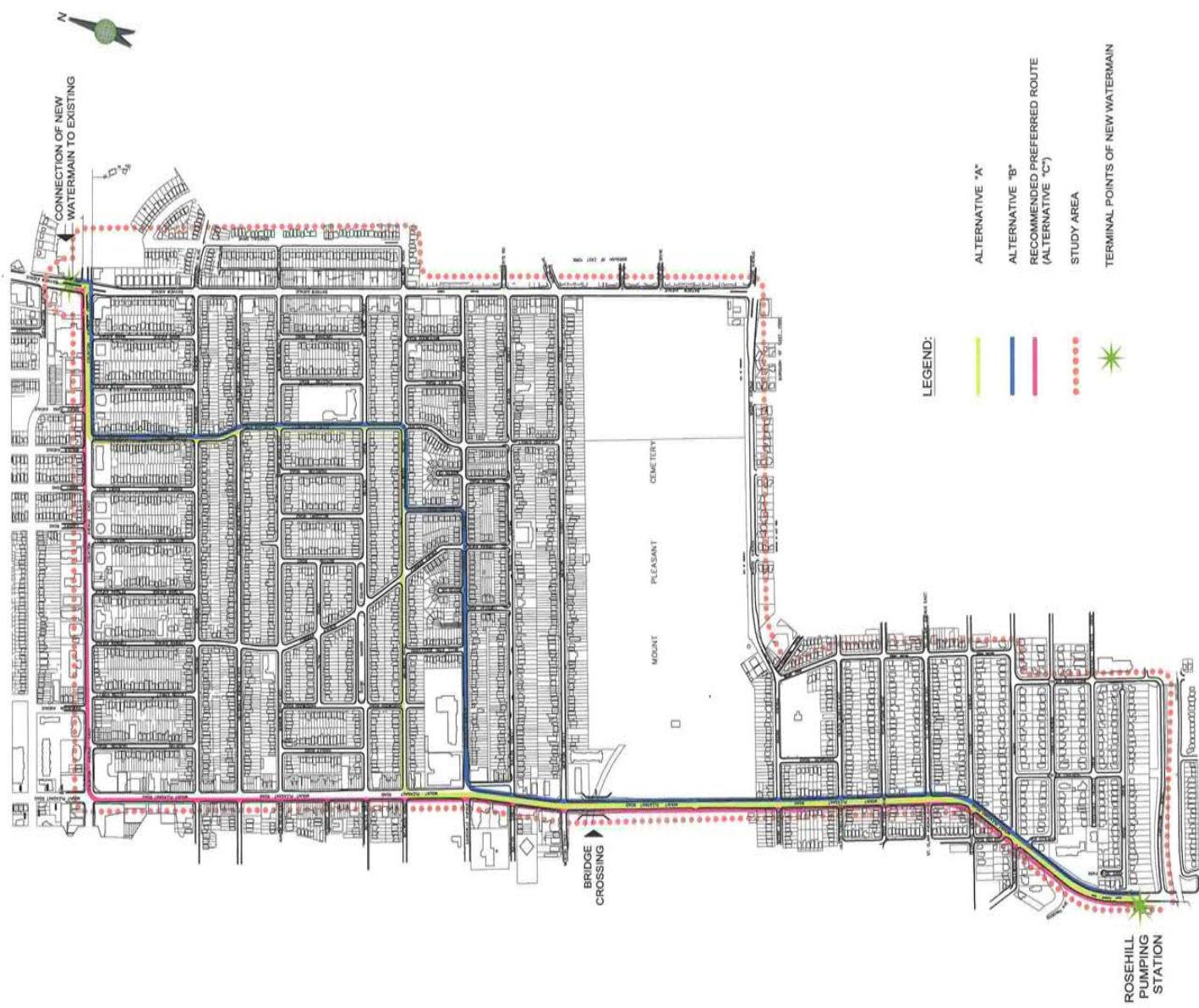


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Community Features



ROUTE STUDY AND CLASS ENVIRONMENTAL ASSESSMENT
ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION
Alternative Routes



Evaluation Criteria

The following criteria has been considered in evaluating each of the watermain alternative routes:

Natural Environment

- Vegetation and trees
- Streetscaping and landscaping

Social and Cultural Environment

- Archaeological, cultural and heritage features
- Disruption to residents and businesses during construction
- Recreational areas
- Traffic on local and arterial roads

Economic

- Capital costs
- Operating and maintenance costs

Technical

- Method of construction (open cut vs. tunneling)
- Existing utilities
- Hydraulic considerations (i.e., friction losses, pumping energy, operational complexity, etc)
- Existing moratoriums (roads recently reconstructed or resurfaced)

Additional Criteria

- As identified by the public, interested parties and agencies.

ROUTE STUDY AND CLASS ENVIRONMENTAL ASSESSMENT



1650 MM WATERMAIN FROM ROSEHILL PUMPING STATION TO BAYVIEW AVENUE AND PARKHURST BOULEVARD

CRITERIA

Route A

Route B

Route C

| Natural Environment | | | |
|---|--|--|--|
| Long Term Impacts to Tree Canopy on City Streets | | | |
| Subtotal Natural Environment | | | |
| Social and Cultural Environment | | | |
| Archaeological, Culture and Heritage features | | | |
| Construction Impact to Residents including Access | | | |
| Construction Impact to Businesses | | | |
| Construction Impact to Recreational areas and Schools | | | |
| Traffic on local and arterial roads | | | |
| Subtotal Social and Cultural Environment | | | |
| Economic | | | |
| Capital costs | | | |
| Operating and maintenance costs | | | |
| Subtotal Economic and Cultural Environment | | | |
| Technical | | | |
| Method of construction (open cut vs. tunnelling) | | | |
| Existing utilities | | | |
| Hydraulic considerations (i.e., friction losses, pumping energy, operational complexity, etc. | | | |
| Existing moratoriums (roads recently reconstructed or resurfaced) | | | |
| Subtotal Technical | | | |
| Additional Criteria | | | |
| Comments from Open House No. 2 | | | |
| Subtotal Additional Criteria | | | |
| Overall Ranking (Excluding Additional Criteria) | | | |
| LEGEND: | | | |
| | | | |
| | | | |

ROUTE STUDY AND CLASS ENVIRONMENTAL ASSESSMENT
ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION
Preliminary Preferred Alternative

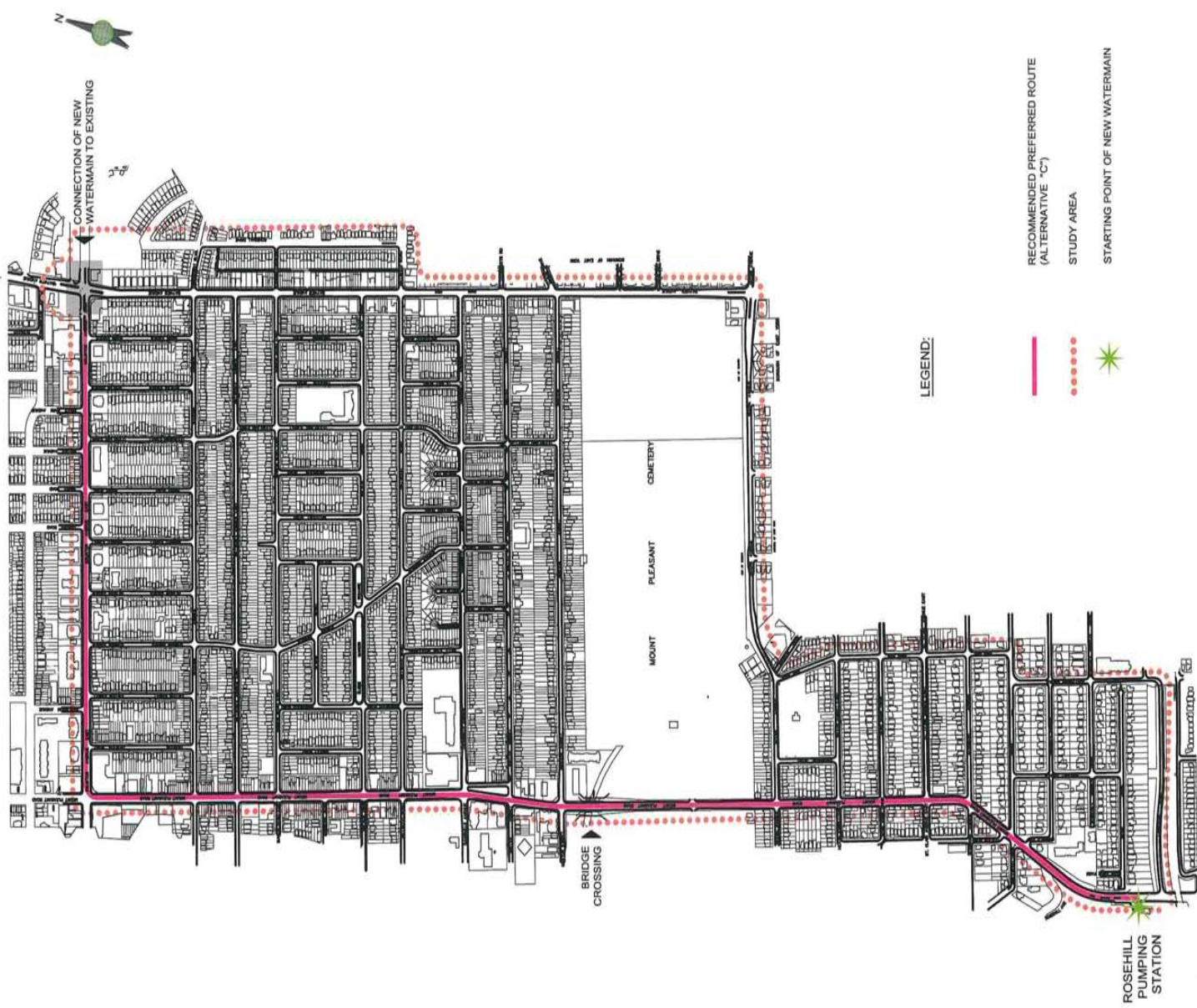
Route C – Mount Peasant Road – Eglinton Avenue East

Advantages of Route C

- Least impact on natural environment (landscaping / streetscaping and trees)
- Minimum conflict with existing utilities
- Least impact to residents and recreational activities during construction
- Lowest construction / operating and maintenance costs

ROUTE STUDY AND CLASS ENVIRONMENTAL ASSESSMENT
ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION

Recommended Preferred Alternative Route



Images of a Typical Watermain Construction Site – Open Cut Method –

- Short (100-200m) and moving sections through road surface



Large Diameter Pipe



Shoring of Watermain Trench



Typical On-site Backhoe

Images of a Typical Watermain Construction Site – Tunnel Method –

- **Static construction at ground level. Entrance shaft to underground tunnel remains fixed**



Pipe section pushed into tunnel



Entrance Shaft to the Tunnel Underground



Pushing the watermain into the tunnel section

Next Steps

- Early Spring 2007 Receive comments from this Open House.
- Spring 2007 Confirm preferred route.
- Early Summer 2007 Prepare Environmental Assessment Document and beginning of 30 day review period.