

**Welcome To:**  
**Open House #1**

**Route Study and Class Environmental  
Assessment**

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

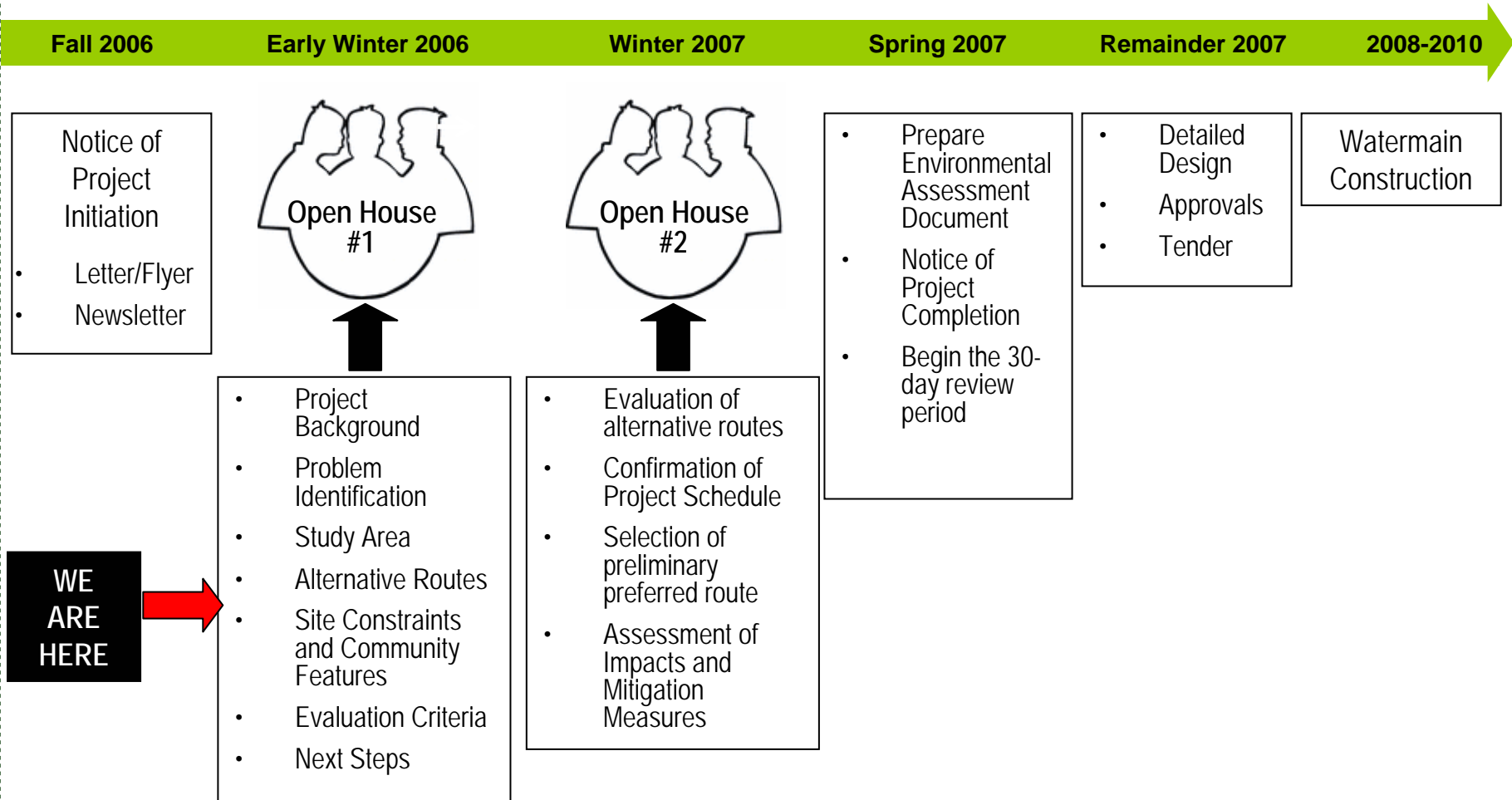
**Tuesday - December 5, 2006**

## Why are we here?

- The City of Toronto is undertaking a Municipal Class Environmental Assessment (EA) Study to determine the preferred route for a new watermain that needs to be constructed from the Rosehill Pumping Station to the Bayview Avenue and Eglinton Avenue Area.
- The main purpose of this Open House is to receive comments and suggestions from you on:
  - the alternative routes for the watermain;
  - the factors that should be considered during the routes evaluation; and,
  - the community features that should be considered into the study.

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ROSEHILL PUMPING STATION & BAYVIEW AVENUE WATERMAIN CONSTRUCTION

# Overview of the Class EA Process



## Project Background

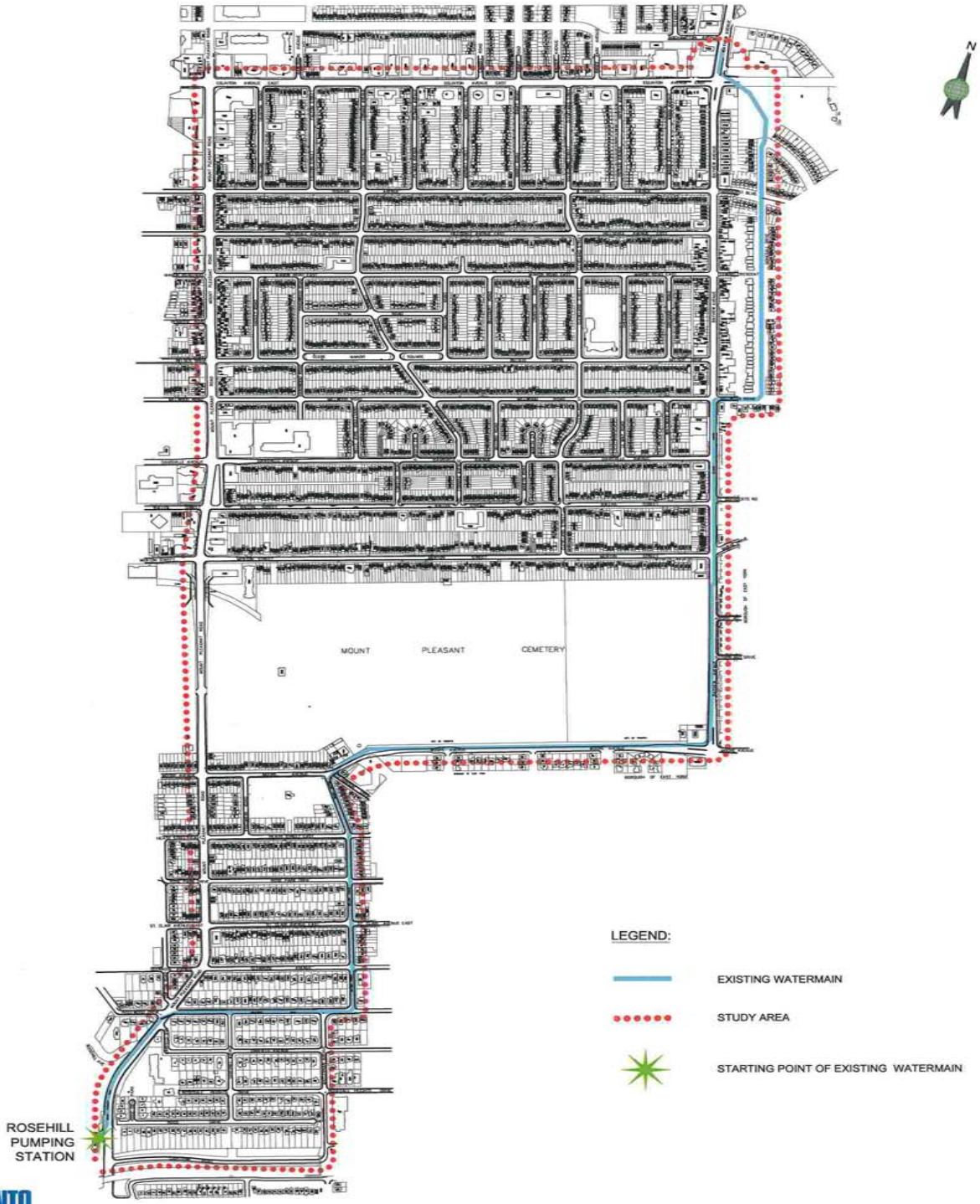
- The City of Toronto and the York Region have an agreement to supply water from Lake Ontario to service Toronto and parts of the York Region.
- In 2006, the Joint Optimization (JOS) Study for the City of Toronto and York Region was updated based on population projections. The main objective was to identify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

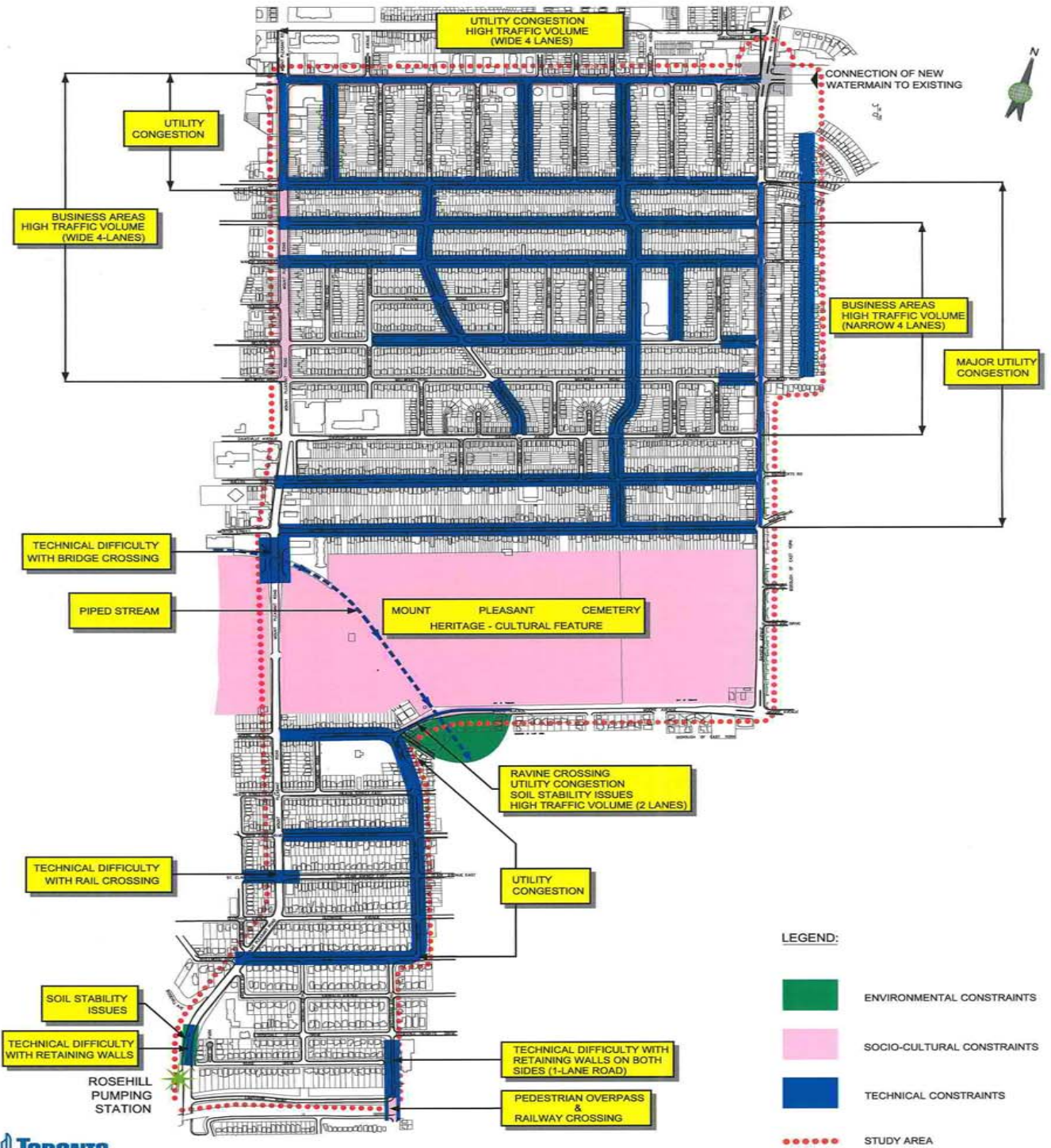


## Selection of Alternative Routes

- 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 such as ravine and watercourse crossings
  - 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.

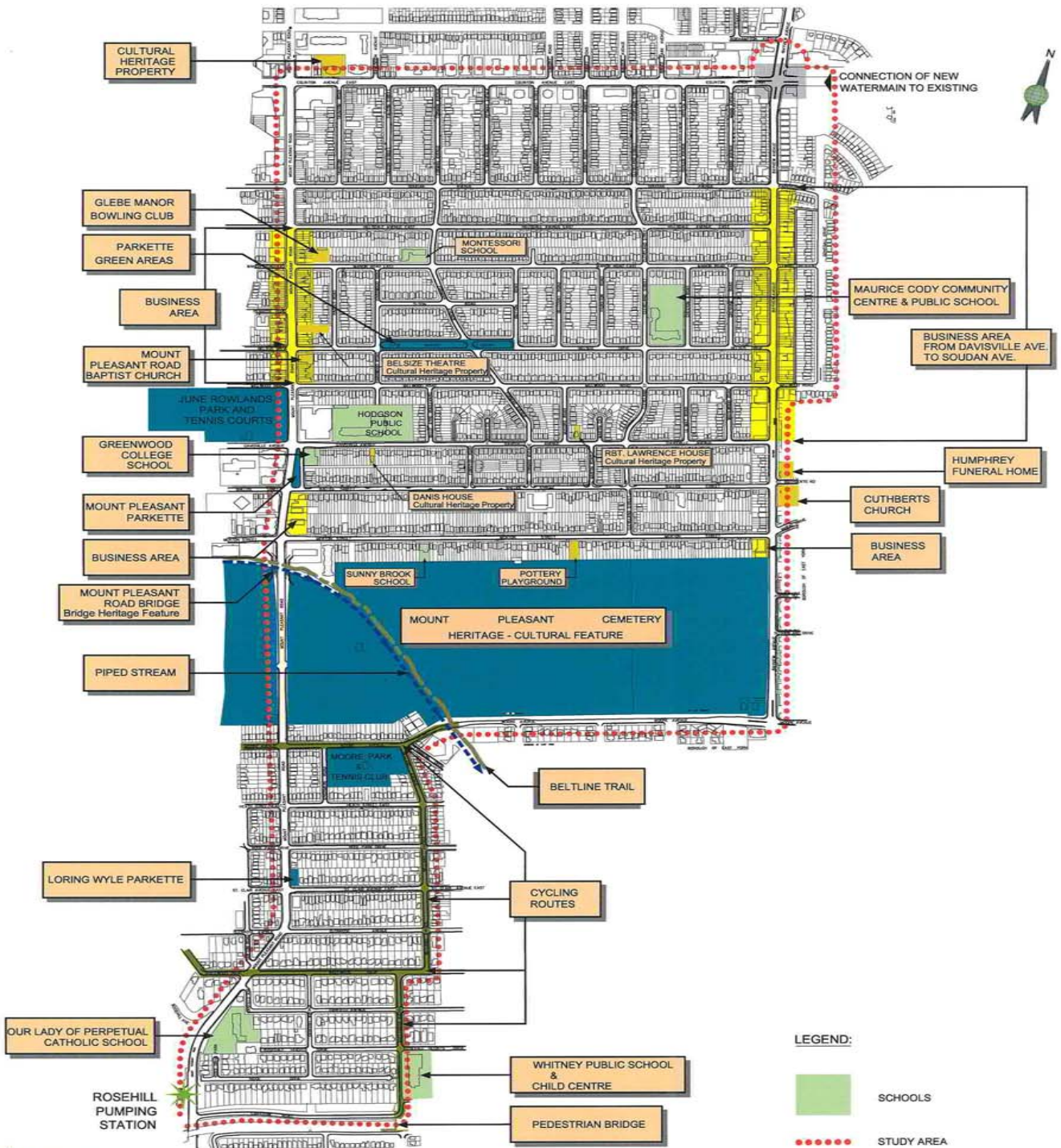
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# Constraints



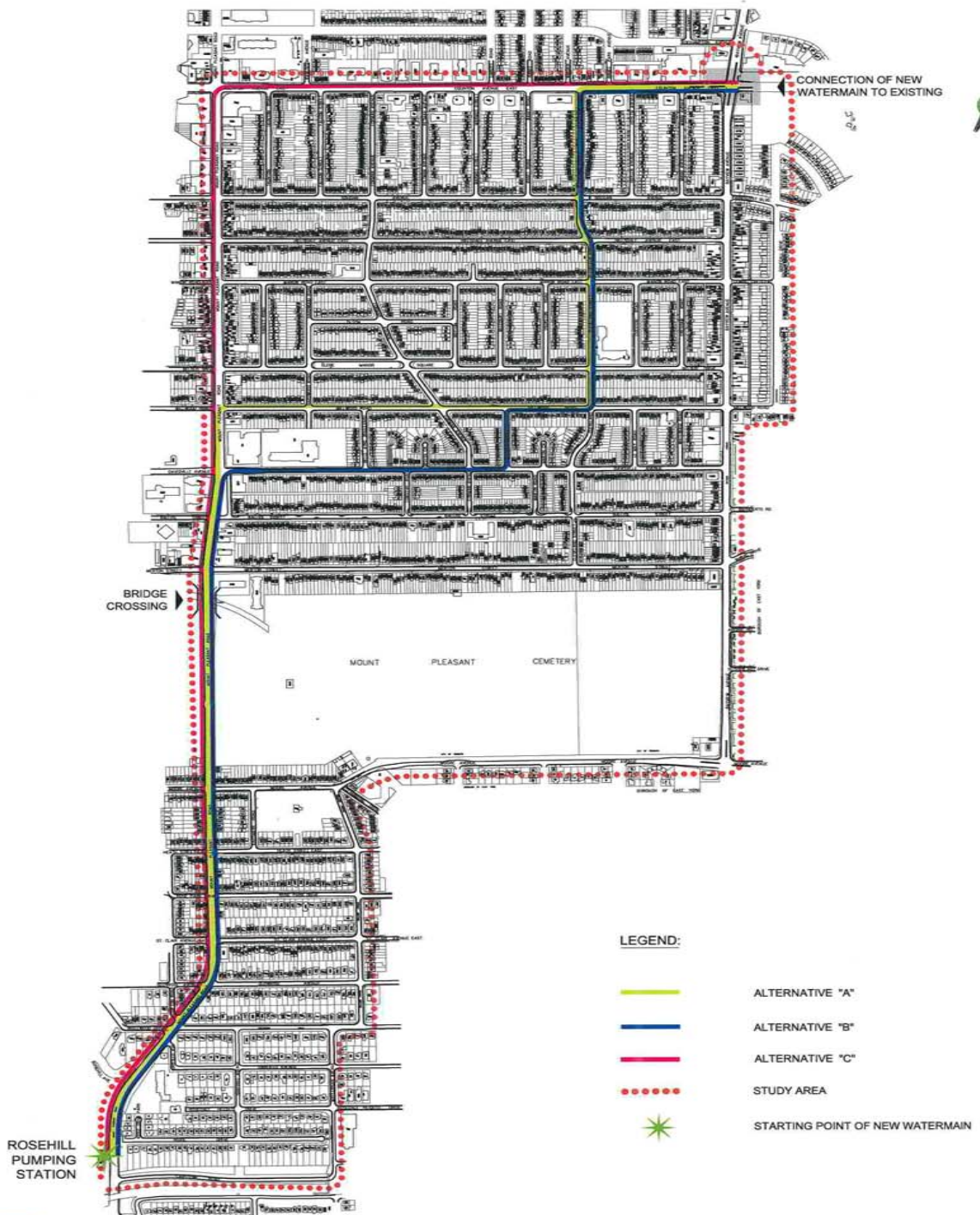
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## Community Features



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## Alternative Routes



## Evaluation Criteria

The following criteria will be considered when evaluating each of the watermain alternative routes:

### Natural Environment

- Vegetation and trees
- Watercourses
- 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.

## 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

- Winter 2006  
Receive comments from this Open House. Confirm route alternatives considering public input.
- Winter 2007  
Detailed evaluation of alternative routes. Review impacts of alternative routes and mitigation measures. Selection of preliminary preferred route.  
**Open House #2 to obtain input on preliminary preferred route.**
- Early Spring 2007  
Confirm preferred route, considering comments from second Open House.
- Spring 2007  
Prepare Environmental Assessment Document and beginning of 30 day review period.