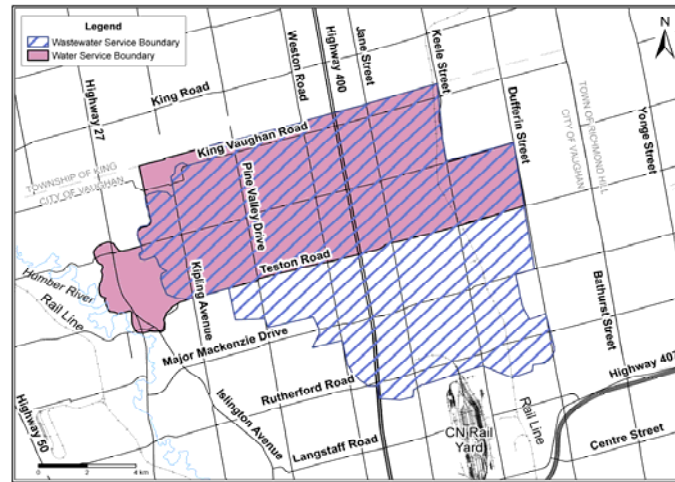


Northeast Vaughan Water and Wastewater Servicing

Class Environmental Assessment

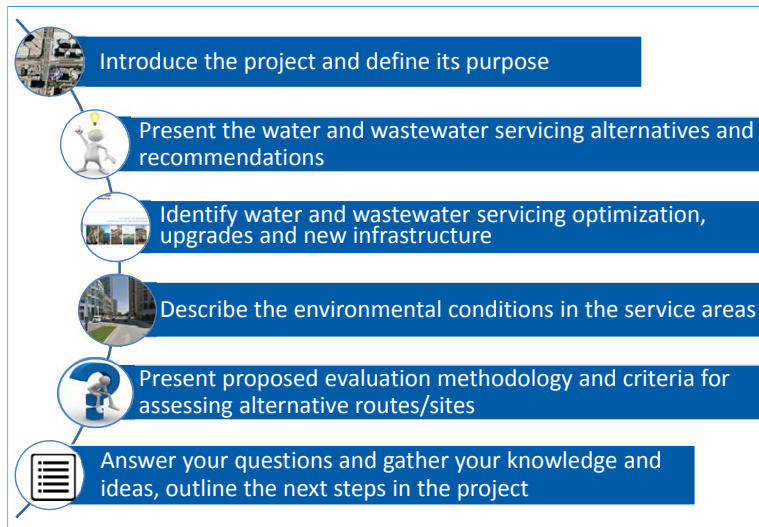
Public Consultation Centre No.1



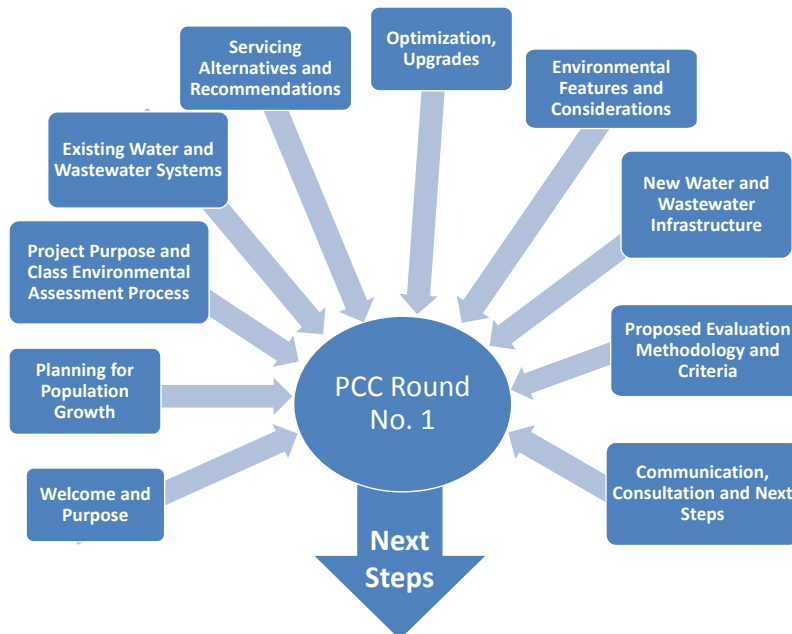
Welcome to the first Public Consultation Centre for the *Northeast Vaughan Water and Wastewater Class Environmental Assessment*

- Please sign-in at the registration table on arrival
- Feel free to approach a project team member to discuss the project
- Please share your thoughts with us by completing a comment form

The purpose of today's Public Consultation Centre is to:



The Public Consultation Centre displays cover the following topics:



City of Vaughan

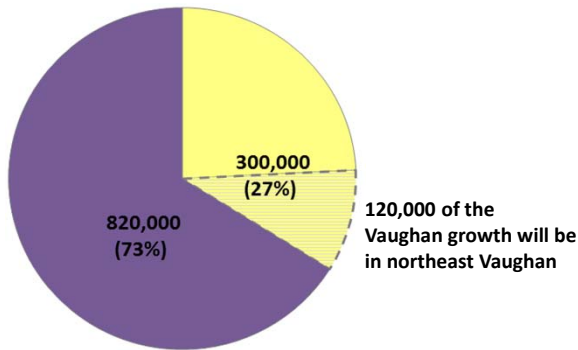


Source: Traffic Analysis Zone Population Projections, York Region, 2011

York Region

Growth Projections for 2051 (Residential + Employment)

- Projected Growth in the City of Vaughan
- Projected Growth in other York Region Municipalities



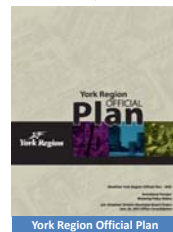
Source: Traffic Analysis Zone Population Projections, York Region, 2011

Ontario



Ontario Growth Plan

Ontario's Growth Plan for the Greater Golden Horseshoe has forecasted York Region to grow to 1.6 million people by 2031 (and 1.8 million people by 2041)



York Region Official Plan



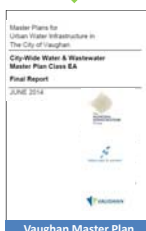
York Region Master Plan

York Region's 2009 Water and Wastewater Master Plan Update:

- Provided framework for long-term water and wastewater servicing
- Recommended Regional infrastructure for servicing anticipated growth



City of Vaughan Official Plan



Vaughan Master Plan

City of Vaughan's 2014 Water and Wastewater Master Plan Update:

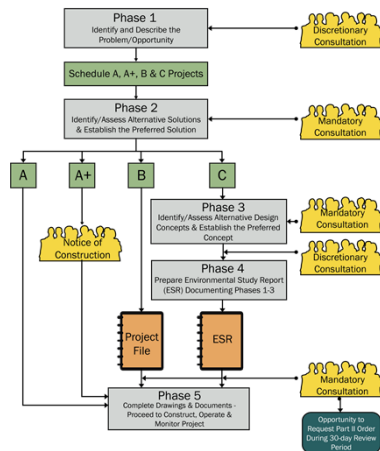
- Recommended the local infrastructure for servicing anticipated growth

Project Purpose

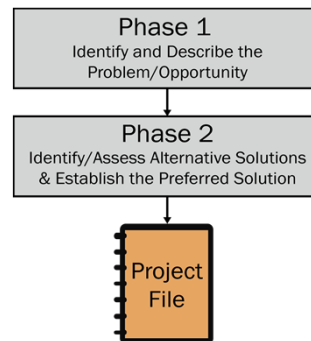
To develop a water and wastewater solution for anticipated growth in northeast Vaughan to the year 2051 reflecting York Region's *Sustainability Strategy* and in accordance with applicable environmental statutes.

These statutes include but are not limited to the *Environmental Assessment Act, 1990*, *Oak Ridges Moraine Conservation Act, 2001*, and the *Greenbelt Act, 2005*.

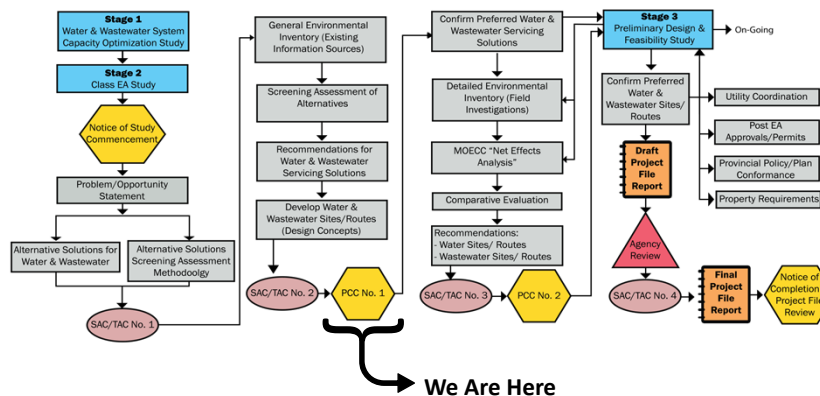
The Class Environmental Assessment Process



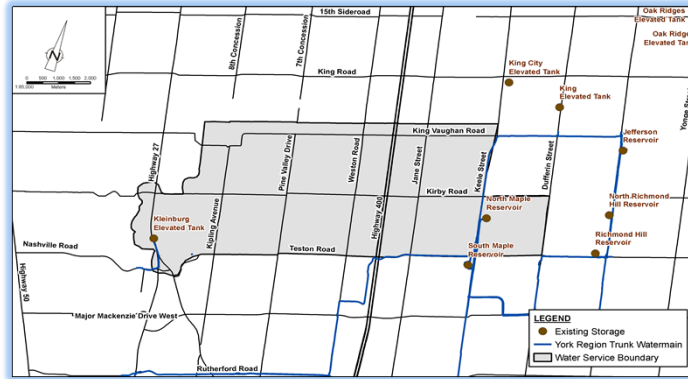
York Region is carrying out this study in accordance with **Schedule B** of the Municipal Class Environmental Assessment process approved under the *Environmental Assessment Act*



Project Road Map



Existing Water Distribution System

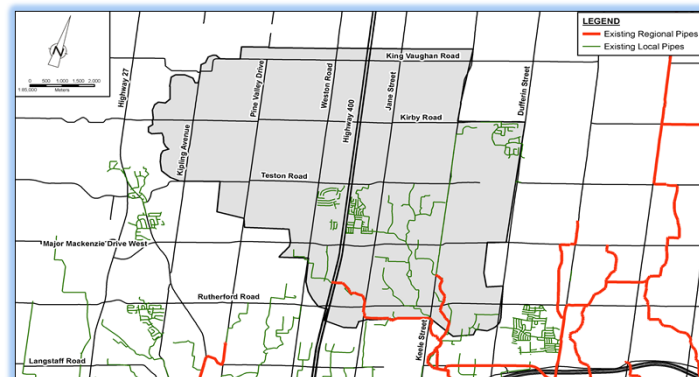


York Region supplies bulk water to its area municipalities. In the City of Vaughan, York Region supplies bulk water through the following:

- York Water System, which gets water from the City of Toronto and Region of Peel
- Well-based groundwater supply system for the community of Kleinburg-Nashville

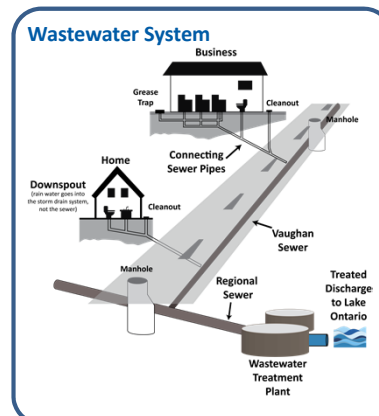
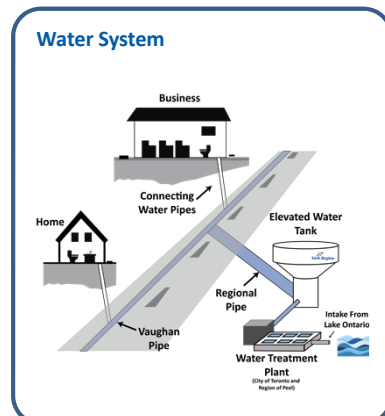
The City of Vaughan is responsible for providing water from York Region watermains to homes and businesses

Existing Wastewater Collection System



York Region sends wastewater from its area municipalities to treatment facilities via major sewers and pumping stations

The City of Vaughan is responsible for wastewater collection from individual homes and businesses and moving it to Regional sewers for treatment



How can we service growth?

Water and Wastewater servicing alternatives considered...

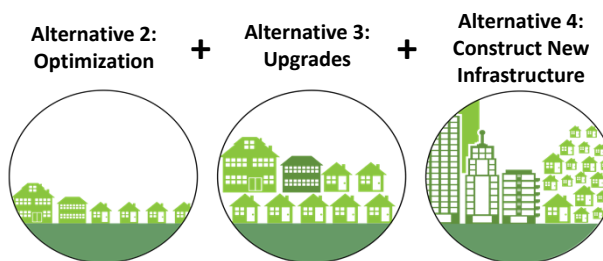
	Water Alternatives	Wastewater Alternatives
	Do Nothing	Do Nothing
	Optimize Existing Water System Performance	Optimize Existing Wastewater System Performance
	Upgrade Existing Water Infrastructure	Upgrade Existing Wastewater Infrastructure
	Construct New Water Infrastructure	Construct New Wastewater Infrastructure

Results of Evaluating Water and Wastewater Servicing Alternatives

		Alternative No. 1: Do Nothing	Alternative No. 2: Optimize Existing System Performance	Alternative No. 3: Upgrade Existing Infrastructure	Alternative No. 4: Construct New Infrastructure
Category	Meets the Problem / Opportunity Statement				
	Aligns with Provincial Growth, Environmental Policies and Legislation				
	Aligns with Regional / Municipal Plans, Strategies and Programs				
	Demonstrates Proven Technology / Technical Feasibility	N/A			
	Demonstrates Financial Viability / Ability to Implement				

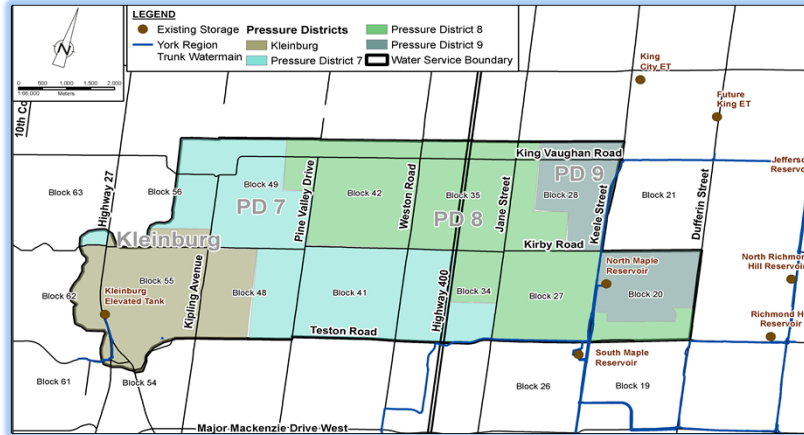
Recommended Water and Wastewater Solutions

To meet expected growth in northeast Vaughan to 2051, the recommended servicing solution is a combination of the following:





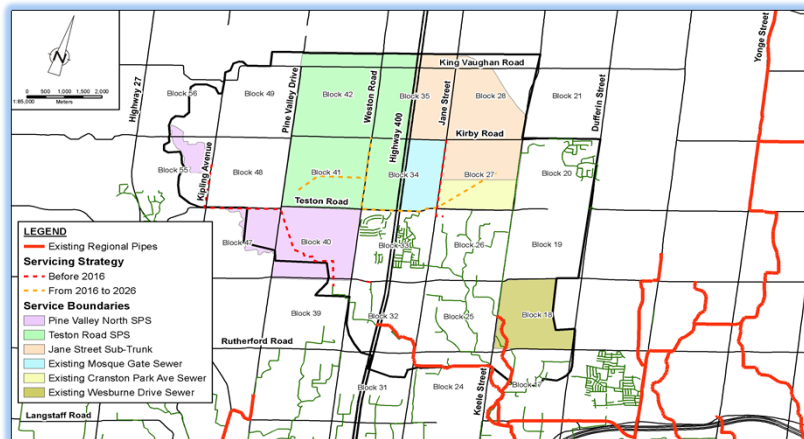
Optimization and Upgrades



PD = Pressure District

Water System Optimization: Adjust operational controls in the system to allow for interim “borrowing” of water storage from one area of the system to another.

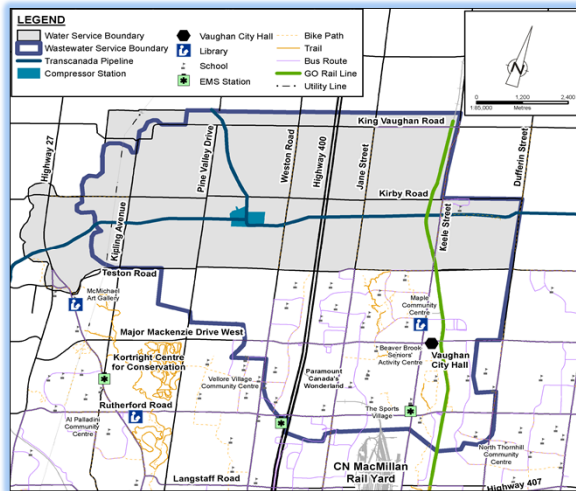
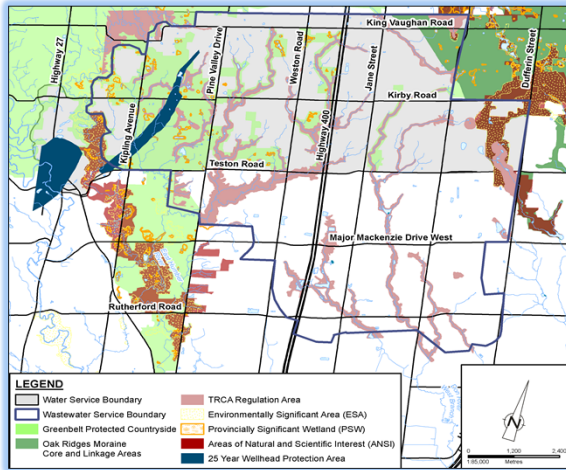
Water System Upgrades: Minor facility upgrades and installation of a new pump at Maple Pumping Station may be possible.



Wastewater System Optimization and Upgrades:

York Region has ongoing programs to maximize the use of the existing system. York Region is working with the City of Vaughan to explore additional opportunities to maximize the use of the local system.

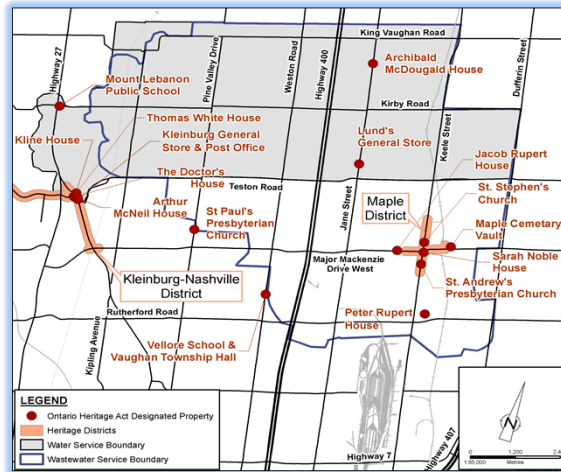
Natural Heritage Features



Built Environment

Cultural Heritage and Archaeology

The area north of Teston Road in Vaughan has archaeological potential.



Field investigations and site visits are planned in 2015 to further detail environmental conditions

***Are there other environmental features or considerations we should include?
(please indicate on the comment sheet provided)***

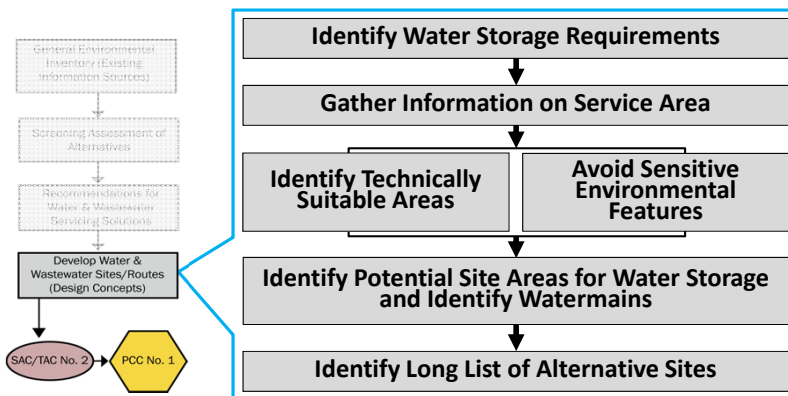


How does York Region provide drinking water to a new growth area?

A combination of watermain, water storage facilities and pumping stations is needed to bring water to a new growth area

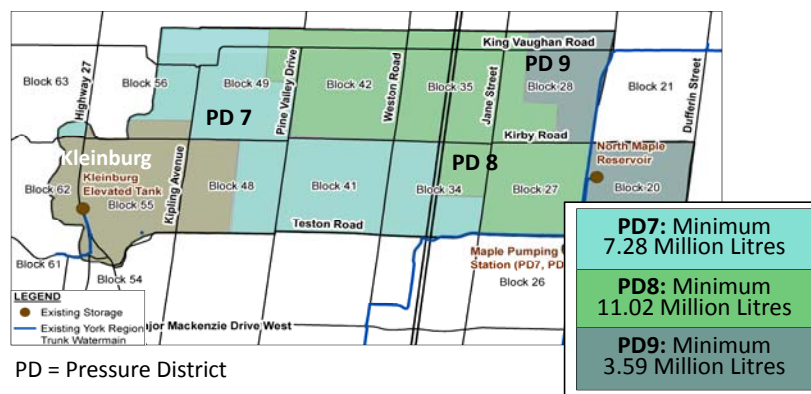
- Water storage facilities are needed to provide volumes of water for times of peak water usage and to help fight fires
- Watermain routes are needed to move water from the water storage facilities into the existing water system
- Pumping stations are used to pump the stored water into the water system

Approach for Developing Water Storage Sites and Watermain Routes



Water Storage Requirements in Northeast Vaughan

New water storage requirements in northeast Vaughan were identified for pressure districts PD7, PD8 and PD9



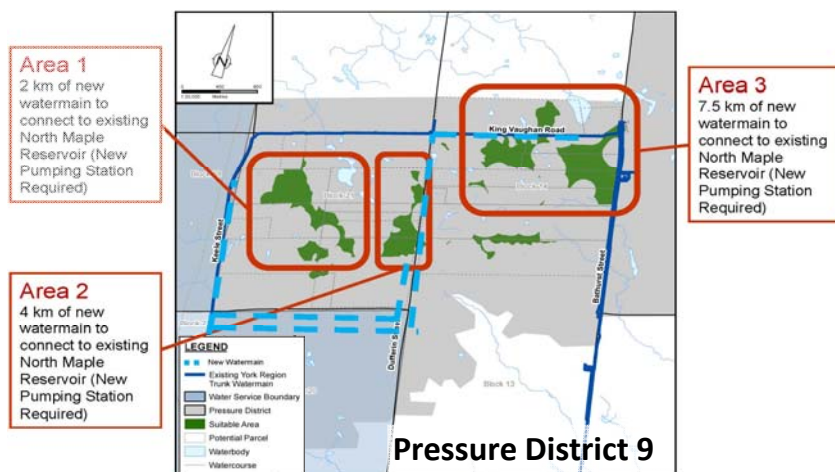
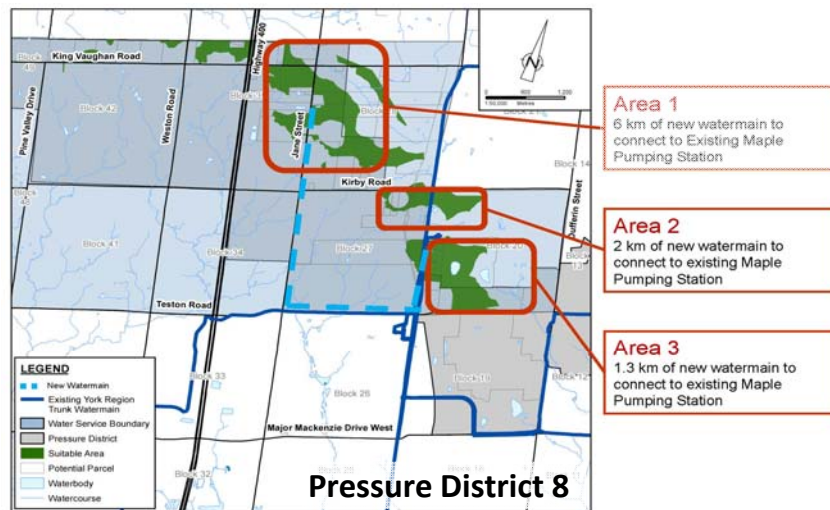
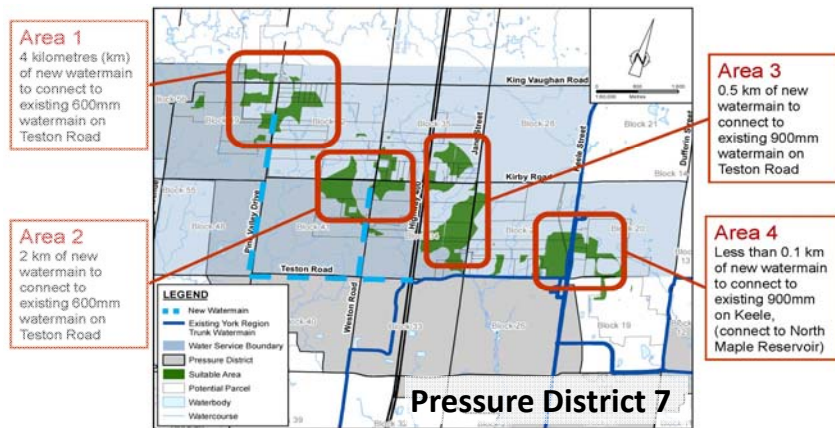
PD = Pressure District

What is a water pressure district?

- York Region needs to ensure that homes and businesses have adequate water pressure at their taps.
- Each home and business has a pressure requirement based on how high the land is in that area.
- Homes and businesses with similar water pressure requirements are grouped into a pressure district.

How did we develop the long list of water storage sites?

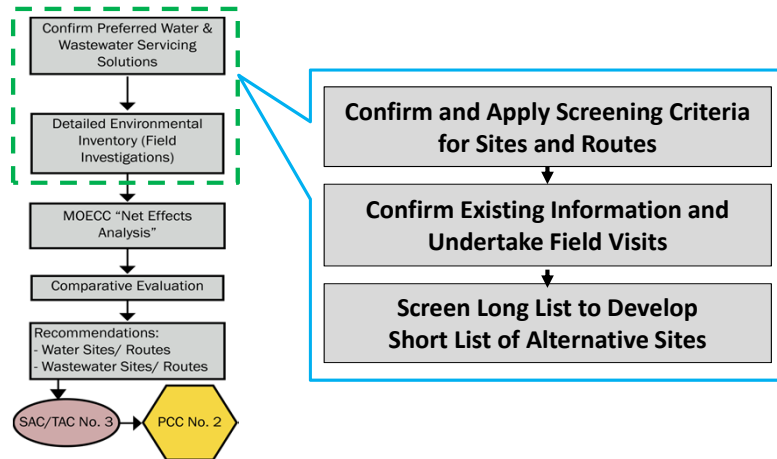
- The green shaded parts of the map consist of individual land parcels that are suitable for a new elevated water storage tank
 - The green shaded parts meet technical requirements and avoid sensitive environmental features
- Suitable land parcels were grouped into areas
- A proposed watermain route was developed connecting each of the areas to York Region’s existing water supply system
- Areas with the longest proposed watermain routes were eliminated from further consideration
- The remaining areas consist of the long list of water storage sites



Going from a long list to short list of water storage sites

- Since the remaining areas contain a large number of potential water storage sites, they will need to be screened to a smaller number of sites before undertaking detailed investigations and field work

Approach for Screening the Long List of Water Storage Sites and Watermains



Preliminary Screening Criteria for Developing a Short List of Water Storage Sites and Watermains

**Proximity to
sensitive land uses**



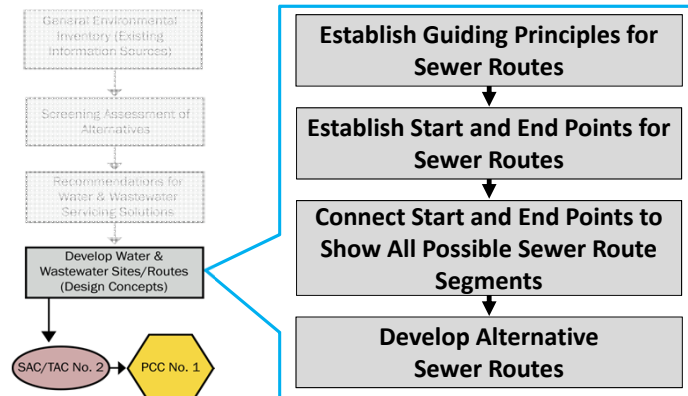
**Presence of
development**



**Presence of local
environmental
features**



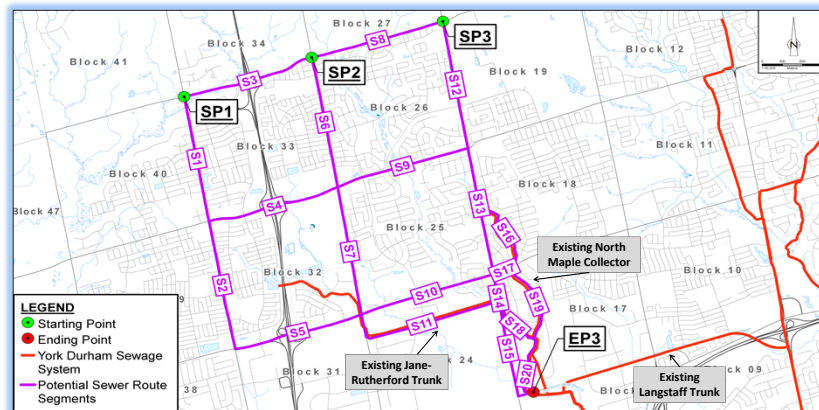
Approach for Developing Sewer Routes



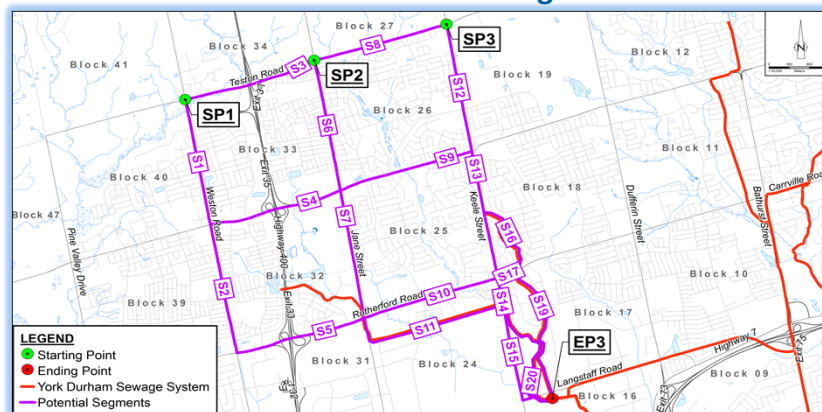
Guiding Principles for the Sewer Routes

1. The new sewer will use gravity to direct the flow of sewage
2. The sewage collected will be directed from northwest to southeast
3. The starting point for conveying sewage flow will be on Teston Road
4. Connection from the new sewer into the York Durham Sewage System will be at the first available point downstream with sufficient capacity to service approved growth to 2051 or beyond

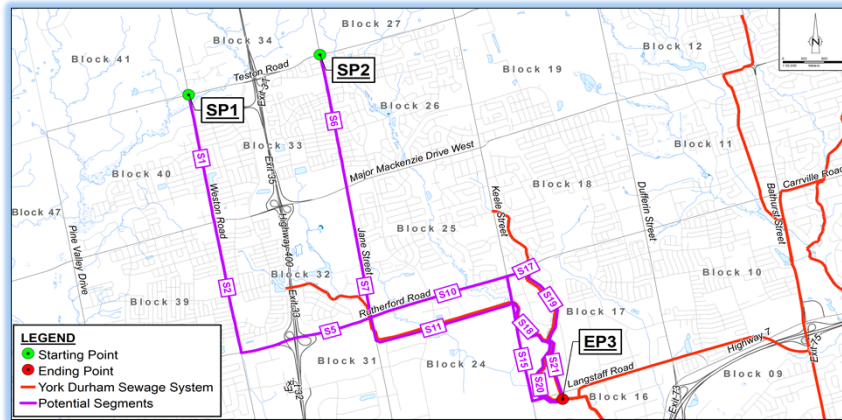
Establish Start and End Points for Sewer Routes



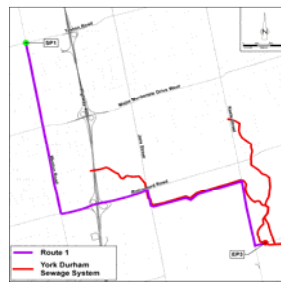
Connect Start and End Points to Show All Possible Sewer Route Segments



Identify Preferred Sewer Segments and Develop Alternative Sewer Routes



Alternative Routes from Starting Point 1



Route 1



Route 2



Route 3



Route 4



Route 5

Alternative Routes from Starting Point 2



Route 6



Route 7



Route 8



Route 9

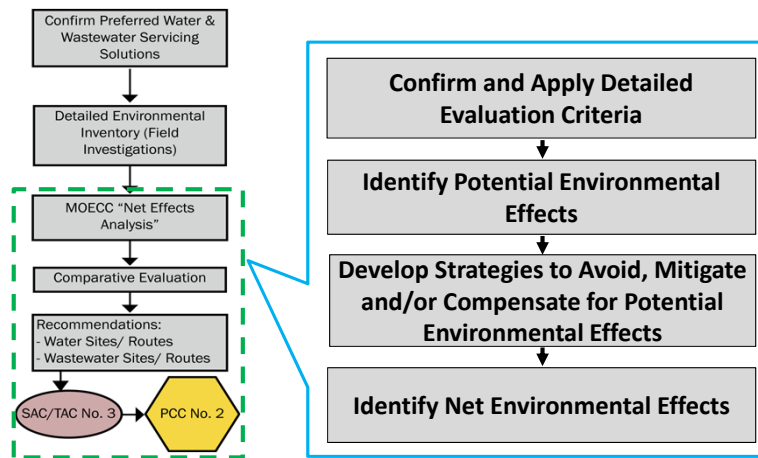


Route 10


Coming up with the recommended sites and routes

- The short list of water storage sites, watermains and sewer routes will be evaluated against a set of detailed criteria
- On-site investigations and visits will be carried out
- The most suitable sites for an elevated water storage tank and the most suitable sewer route will be presented at Public Consultation Centre No. 2

Approach for Evaluating the Short List of Water Storage Sites and Routes

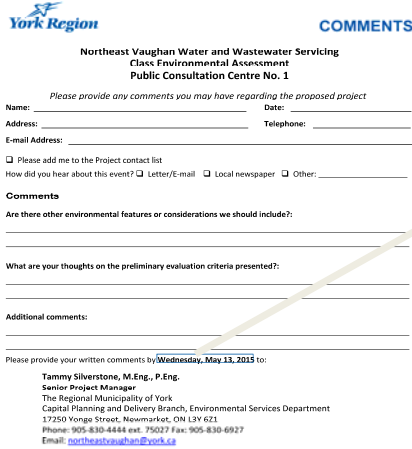


Preliminary Criteria for Evaluating Short List of Sites and Routes

Technical and Financial	Natural	Built	Social, Economic, and Cultural
 <ul style="list-style-type: none"> • Constructability • Lifecycle costs (property acquisition, construction, operation, and maintenance costs) 	 <ul style="list-style-type: none"> • Groundwater • Surface water • Aquatic habitat and species (i.e. fish) • Stream geomorphology • Forests, wetlands, and wildlife (i.e. birds) 	 <ul style="list-style-type: none"> • Agriculture • Residences, businesses • Community, institutional, recreational facilities • Property • Roads and utilities • Traffic 	 <ul style="list-style-type: none"> • Wells • Construction noise and vibration • Odour • Existing views • Future land uses • Archaeological resources • Built heritage resources and cultural landscapes

Comments

If you would like more information and/or to provide written comments after today, please contact York Region's Project Manager using the comment forms provided.



York Region COMMENTS

**Northeast Vaughan Water and Wastewater Servicing
Class Environmental Assessment
Public Consultation Centre No. 1**

Please provide any comments you may have regarding the proposed project

Name: _____ Date: _____
Address: _____ Telephone: _____
E-mail Address: _____

Please add me to the Project contact list
How did you hear about this event? Letter/E-mail Local newspaper Other: _____

Comments

Are there other environmental features or considerations we should include?

What are your thoughts on the preliminary evaluation criteria presented?

Additional comments:

Please provide your written comments by **Wednesday, May 13, 2015** to:
Tammy Silverstone, M.Eng., P.Eng.
Senior Project Manager
The Regional Municipality of York
Capital Planning and Delivery Branch, Environmental Services Department
17250 Yonge Street, Newmarket, ON L3Y 6Z1
Phone: 905-830-4444 ext. 75027 Fax: 905-830-6927
Email: northeastvaughan@york.ca

To ensure your views are considered, please submit your comments by:

May 13, 2015

You can review these display panels on our website:

york.ca/ea

Key Upcoming Dates



• Public Consultation Centre No. 2



• Notice of Study Completion

Thank you for your interest!
Your input and ideas are encouraged and welcome!