



Report to: General Committee

Meeting Date: November 1, 2021

SUBJECT: Information Report: York Region 2021 Water and Wastewater Master Plan Presentation

PREPARED BY: Shumin Gao, Manager, System Engineering, Ext 6230
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Development & Environmental Engineering

RECOMMENDATION:

- 1) That the Information report entitled “York Region 2021 Water and Wastewater Master Plan Presentation ” be received;
- 2) That the Region’s final 2021 Water and Wastewater Master Plan include the necessary regional water and sewer infrastructure projects to provide uninterrupted water supply to support developments in North Markham;
- 3) That, prior to the finalization of the Region’s 2021 Water and Wastewater Master Plan Update, Region staff share their modelling data and related information with Markham staff, for review and reconcile differences in design assumptions and demand projections to ensure that the growth and development expected in North Markham can be appropriately serviced;
- 4) That the proposed timeframe for implementing key water and wastewater projects, as identified in the Region’s draft 2021 Water and Wastewater Master Plan, be revised to coincide with forecasted growth anticipated for North Markham by 2031;
- 5) That the Region and the City work together in developing innovative solutions which may include interim servicing options as required when long term solutions are not available to service development at the time of the request;
- 6) That the Region expedite the necessary Environmental Assessments for the regional sewer and water infrastructure projects, to ensure their timely implementation to provide uninterrupted water supply for developments in North Markham;
- 7) That the Region provide the City of Markham with a list of all planned water and wastewater projects included in its 2021 Water and Wastewater Master Plan, their respective construction value and implementation timeframe;
- 8) That the Region be advised accordingly; and further; and
- 9) That staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

n/a

PURPOSE:

The purpose of this report is to provide Council with an overview of water supply servicing for developments of lands in North Markham, including the Highway 404 North (404N) Secondary Plan and the Future Urban Area, and the importance of ensuring the Region's 2021 Water and Wastewater Plan include the necessary regional infrastructure to support growth in North Markham.

BACKGROUND:**Regional water infrastructure needs to keep up with pace of development in North Markham**

The lands comprising the 404N Secondary Plan and the employment block of the Future Urban Area (FUA) are located in water pressure district 7 (PD7). Water to PD7 is currently supplied by a single 600mm regional transmission watermain on Elgin Mills Road East that terminates just west of Victoria Square Blvd.

In reviewing the Region's 2021 Water and Wastewater Master Plan Update presented at the October 18, 2021 General Committee meeting, staff noted that only one key project has been identified in Markham (W14 – North Markham Water Servicing) and another one located in Richmond Hill (W15 – York Water East Supply) that could benefit Markham if a connection can be extended to Markham boundary (see attachment A). Both projects are in the 2031-2040 horizon and the implementation timeframe for the two water projects does not align with the 2031 development timeframe for the 404N Secondary Plan and FUA.

DISCUSSION:

Engineering and Environmental Services staff retained a consultant in 2019 to complete water modelling work to better understand the operation and limitations of the water system. This modelling work was completed in July 2020 in consultation with the City of Richmond Hill and the Region of York. Based on the growth and water supply demand projected by the City of Markham and the Town of Richmond Hill, the consultant has identified water supply constraints when the lands in the PD7 are fully developed by 2031.

There is an apparent inconsistency on the design assumptions and demand projections used for modelling exercises between Region and lower-tier municipalities. As a result there is a need to reconcile the assumptions and projections used by all parties to correctly assess the adequacy of the water system at the regional and local levels. In order to be able to reconcile the assumptions and projections, the Region will need to

share their modeling information and work with the lower-tier municipalities to identify and accelerate key projects to provide adequate uninterrupted water supply to support growth, especially in North Markham.

FINANCIAL CONSIDERATIONS

Not Applicable

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

The recommendations and content of this report are consistent with the City's goal of providing safe, sustainable and complete community.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Engineering and Environmental Services department have prepared this report jointly.

RECOMMENDED BY:

Eddy Wu, CMM III, P.Eng.
Director, Environmental Services

Frank Clarizio, P.Eng.
Director, Engineering

Arvin Prasad
Commissioner, Development Services

Morgan Jones
Commissioner, Community Services

Andy Taylor
CAO

ATTACHMENTS:

Information Report: York Region 2021 Water and Wastewater Master Plan Presentation
Attachment "A"