



## STAFF REPORT INFORMATION ONLY

### Drainage Issues on Former Scarborough Expressway Corridor (4331 Lawrence Avenue East) and Surrounding Lands

<b>Date:</b>	December 6, 2007
<b>To:</b>	Scarborough Community Council
<b>From:</b>	Acting Director, Development Engineering, Technical Services
<b>Wards:</b>	<b>Ward 44 – Scarborough East</b>
<b>Reference Number:</b>	05 112043 ESC 44 SB

#### **SUMMARY**

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This report is in response to a request by Scarborough Community Council to report on the results and action of investigations of drainage on lands in the vicinity of the former Scarborough Expressway Corridor (4331 Lawrence Avenue East) now being developed by WRP Neighbourhood Housing.

Originally the 8 hectare property was reserved for the Scarborough Expressway Corridor but more recently has been developed into a Police and Ambulance Station and approved for a 60 unit residential subdivision (WRP Neighbourhood Housing). Over the past year detailed engineering design and studies in support of the subdivision have been submitted and reviewed.

The current design calls for regrading the lands to create positive drainage of the site and the introduction of a conveyance system through the use of swales, sewers, roads, and a pond. These improvements will provide adequate drainage for the subdivision lands and be beneficial to adjacent properties. Furthermore the stormwater management scheme does not heavily rely on the removal of water through infiltration into the ground. As such a groundwater study is not warranted in this situation.

#### **Financial Impact**

There are no financial implications of this report.

#### **DECISION HISTORY**

Scarborough Community Council at its September 13, 2006 meeting deferred three reports related to drainage issues within and surrounding the subject lands. Two of these

reports originally sent to the July 11, 2006 meeting but were deferred to the September 13, 2006 meeting. Council further directed Technical Services staff to review and report back on Stormwater Management and drainage in the WRP lands.

Scarborough Community Council Minutes

<http://www.toronto.ca/legdocs/2006/minutes/committees/sc/sc060711.pdf>  
<http://www.toronto.ca/legdocs/2006/minutes/committees/sc/sc060913.pdf>

Staff Reports received by Scarborough Community Council on September 13, 2006.

<http://www.toronto.ca/legdocs/2006/agendas/committees/sc/sc060913/it003.pdf>  
<http://www.toronto.ca/legdocs/2006/agendas/committees/sc/sc060711/it002a.pdf>  
<http://www.toronto.ca/legdocs/2006/agendas/committees/sc/sc060913/it003c.pdf>

## **ISSUE BACKGROUND**

Residents of Melchior Drive and Woodgarden Crescent have experienced backyard flooding and were concerned that the WRP development may create further drainage problems. Previous staff reports have dealt with issues related to existing drainage problems and the recent construction of the Police and Ambulance Station.

Cases of backyard flooding were assessed by the Technical Services and Municipal Licensing and Standards staff and their findings submitted in a report last year. In general, any future reported flooding on private property can be dealt with on an individual basis according to the requirements in the Property Standards By-law.

Operational difficulties of the stormwater management facilities in the Police and Ambulance Station have been reviewed and will be rectified by Facilities and Real Estate Division.

The most recent report received by Scarborough Community Council on the subject of groundwater concluded that Technical Services and Toronto Water would review engineering drawings and reports for the WRP subdivisions and determine if further studies or peer review are required.

## **COMMENTS**

### Engineering Design and Stormwater Management Reports

An engineering submission consisting of a stormwater management report, drawings showing road, servicing, and grading design have been reviewed by staff. Initial comments to the applicant's consultants focused on clarifying that the proposed design conformed to applicable City standards, policies and guidelines. One of the requirements of the applicant is to address how the water balance of the area will be affected and outlining what measures can be implemented to attempt to maintain it.

Water balance consists of 3 components that are used to quantify how rainfall is dispersed as either runoff, being evaporated or absorbed into the local area to potentially recharge groundwater supply or help sustain plants and trees.

The results of the water balance analysis shows that development of the site will reduce the amount of water infiltrating into the ground. This in combination with the addition of rear lot catchbasins and road catchbasins will improve overall drainage in the area.

Furthermore the stormwater management scheme does not heavily rely on the removal of water through infiltration into the ground. As such a groundwater study is not warranted in this situation.

Current stormwater management practices in conformance with the City's Wet Weather Flow Management Plan and TRCA guidelines have been incorporated in the design of the development of the land. Surface drainage will be directed to Danzig Creek by storm sewers and major storm flows are detained in a stormwater management pond to be located at the southeast corner of the site. Runoff from roofs will be directed to the surrounding yard areas of each unit to allow for some infiltration into the ground. Any rear yard runoff unable to be absorbed into the ground will be intercepted by rear yard catchbasins and similarly conveyed to Danzig Creek.

Overall, a combination of regrading of the lands to introduce positive drainage to the site and creation of a conveyance system will provide adequate drainage for the subdivision lands and improve drainage to adjacent properties.

## **CONTACT**

Ashraf Hanna, P.Eng.  
Manager, Development Engineering  
Scarborough District  
Phone: 416-396-7353  
Fax: 416-396-5681  
Email: [ahanna@toronto.ca](mailto:ahanna@toronto.ca)

Lawrence Shintani, P.Eng.  
Senior Engineer, Development Engineering  
Scarborough District  
Phone: 416-396-7390  
Fax: 416-396-5681  
Email: [lshinta@toronto.ca](mailto:lshinta@toronto.ca)

## **SIGNATURE**

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Raffi Bedrosyan, P.Eng.  
Acting Director, Development Engineering