

June 25, 2019

CFN 60844.05

By Email Only (email: sarah.mowder@richmondhill.ca)

Ms. Sarah Mowder
City of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, ON L4B 3P4

Dear Ms. Mowder:

Re: D02-19004 (Zoning By-law Amendment – Submission 1)
52 Puccini Drive, City of Richmond Hill
Owner: King East Developments Inc.

Thank you for the opportunity to review above captioned application (received on May 13, 2019). Toronto and Region Conservation Authority (TRCA) staff have reviewed the submitted materials and our comments are provided herein.

Purpose of the Application

It is our understanding that the purpose of this application is to facilitate the creation of four single detached dwelling lots on the subject lands.

Applicable Regulations and Policies

The TRCA provides our technical review comments through a number of roles. This includes TRCA's commenting role under the *Planning Act*; the Conservation Authority's delegated responsibility of representing the provincial interest of natural hazards encompassed by Section 3.1 of the Provincial Policy Statement (2014); TRCA's Regulatory Authority under Ontario Regulation 166/06 (as amended), Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses; and our Memorandum of Understanding with the Region of York where we advise our municipal partners on matters related to provincial policies relevant to TRCA's jurisdiction.

Ontario Regulation 166/06 (as amended):

The *Conservation Authorities Act* provides the legal basis for TRCA's mandate to undertake watershed planning and management programs that prevent, eliminate, or reduce the risk to life and property from flood hazards and erosion hazards, as well as encourage the conservation and restoration of natural resources. Under the provisions of section 28 of the *Conservation Authorities Act*, TRCA administers Ontario Regulation 166/06 (Development, Interference with Wetlands and Alteration to Shorelines and Watercourses), as amended.

The subject property is located entirely within TRCA's Regulated Area as it is within the area of interference associated with a Provincially Significant Wetland (PSW) on the Oak Ridges Moraine (ORM). In accordance with Ontario Regulation 166/06, a permit is required from the TRCA prior to any of the following works taking place within the Regulated Area:

- a) a straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;
- b) development, if in the opinion of the Authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.

Development is defined as:

- i. The construction, reconstruction, erection or placing of a building or structure of any kind;
- ii. Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure;
- iii. Site grading, or;
- iv. The temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere

Living City Policies for Planning and Development in the Watersheds of the TRCA:

The Living City Policies for Planning and Development in the Watersheds of the TRCA (LCP) is a TRCA policy document that guides the implementation of TRCA's legislated and delegated roles and responsibilities in the planning and development approvals process. The LCP describes a "Natural System" of water resources, natural features and areas, natural hazards, potential natural cover and/or buffers. TRCA policies generally require that natural features within the "Natural System" be protected from development, site alteration and infrastructure. Notwithstanding additional setbacks prescribed by federal, provincial or municipal requirements, TRCA defines the limit of the "Natural System" as the greater of, but not limited to the following:

- Valley and Stream Corridors: 10 metre buffer from the greater of the long-term stable top of slope, stable toe of slope, Regulatory Floodplain, meander belt and any contiguous natural features or areas;
- Woodlands: 10 metre buffer from the dripline and any contiguous natural features or areas;
- Wetlands: 30 metre buffer from PSWs and a 10 metre buffer from all other wetlands and any contiguous natural features or areas.

Oak Ridges Moraine Conservation Plan

The subject property is located on the ORM, within the Settlement Area land use designation of the Oak Ridges Moraine Conservation Plan (ORMCP). Based on our review of available information, the property is located within the 120 metre Minimum Area of Influence (MAI) and the 30 metre Minimum Vegetation Protection Zone of Key Natural Heritage Features (KNHFs) and Key Hydrologic Features (KHF), including a PSW and a tributary of the East Humber River. Further, this application qualifies as 'major development' under the ORMCP.

We note that an Oak Ridges Moraine Conformity Statement prepared by Groundwater Environmental Management Services dated January 22, 2019 has been submitted in support of this application. Based on our review, TRCA staff do not have any significant ecological concerns with this application; however, this letter contains several comments to ensure that ecological impacts are minimized to the greatest extent possible.

As a technical service provider to the City, the TRCA is reviewing this application for conformity with the ORMCP and other policies related to TRCA's jurisdiction; however, as the City is the

Planning Approval Authority the City must also ensure that this application conforms with the ORMCP.

Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Plan:

The Source Protection Plan (SPP) under the *Clean Water Act, 2006*, developed for the Credit Valley, Toronto and Region and Central Lake Ontario (CTC) Source Protection Region came into effect on December 31, 2015 and was amended in 2019. The CTC SPP contains policies to ensure that existing activities occurring when the Plan took effect cease to be significant drinking water threats, and to prevent future activities from becoming significant threats to drinking water.

The subject lands are located within Vulnerable Areas pursuant to the CTC SPP, including a Wellhead Protection Area-Q (WHPA-Q) and a Significant Groundwater Recharge Area. Certain types of development applications within WHPA-Q areas must conform to Policy REC-1 of the CTC SPP which requires a water balance. Although Zoning By-law Amendment applications are not currently subject to Policy REC-1, we note that any related Plan of Subdivision or Site Plan application may be required to conform to Policy REC-1 of the CTC SPP.

Application-Specific Comments

TRCA Planning, Water Resources Engineering, Hydrogeology and Ecology staff have reviewed the submitted materials and our comments to be addressed by the applicant are listed below.

Quality and Quantity Control

1. The Functional Servicing and Stormwater Management Report, prepared by Aplin & Martin Consultants Ltd., dated April 15, 2019 indicates that flows from the subject property are controlled through the existing stormwater management (swm) pond located north of Vitlor Drive; however, it appears that two swm ponds exist in that area. Please clarify which pond will be accommodating the proposed development and whether it has capacity to accommodate flows from the proposed development based on its current condition and function.
2. It is unclear whether the existing swm pond is a level 1 enhanced swm pond. Please provide page excerpts to support the design parameters of the built swm pond. Design parameters should include the runoff coefficient used for contributing drainage areas for the design of the built swm pond.
3. It does not appear that there are any quantity controls. Please confirm if quantity control is provided by the swm pond to meet unit release rates. If this is the case, please provide page extracts from the pond design report that show the 2-100 year peak outflows. Otherwise, please provide quantity control as part of this development.
4. TRCA recommends assessing the capacity of the existing and proposed culverts and ditch. Please ensure the flows from the contributing areas and upstream developments can be accommodate by the existing and proposed infrastructure.
5. Please ensure that the bottom of the proposed infiltration trench is at minimum 1 m above the seasonally high groundwater level. Furthermore, please provide the seasonal high groundwater level.
6. Drawing No. C02, General Notes & Details, prepared by Aplin & Martin Consultants Ltd., dated April 15, 2019 - The depth of the infiltration trench on the Subdrain Detail and Typical Infiltration Trench Detail do not match the value provided in the Functional Servicing and Stormwater Management Report, prepared by Aplin & Martin Consultants Ltd., dated April 15, 2019. Please ensure the correct infiltration trench depth is shown on the details.
7. Please provide in-situ infiltration testing as per Appendix C2 of TRCA's Stormwater Management Criteria document. The infiltration rate should be divided by the minimum

safety factor of 2.5 for drawdown calculations, and a drawdown of 24-48 hours is acceptable. TRCA's Stormwater Management Criteria document is available online at <https://trca.ca/planning-permits/procedural-manual-and-technical-guidelines/#stormwater-management>.

8. It has been noted that an infiltration rate of 12 mm/hr is low. Further, TRCA suggests investigating other options that also include evapotranspiration components such as a rain garden. You may wish to refer to the following link for more information: <http://sustainabletechnologies.ca/wp/wp-content/uploads/2013/01/SWM-Criteria-2012.pdf>.

Erosion and Sediment Control

9. In order to preserve the infiltration capability of the areas in which the low impact development (LIDs) measures are proposed to be installed and to avoid unnecessary compaction, the areas specified for LID measures must be protected. TRCA staff suggests that these areas are protected with sediment fencing and all surface runoff be directed away during construction. The sediment fencing will prevent entrance of construction activity as well as sediment transfer into the area (therefore ensuring the sediment generated during the construction will not clog the native soil).
10. TRCA recommends the use of non-woven geotextile filter fabric, Terrafix 270R or equivalent for the sediment fence and the catch basin sediment trap detail.
11. Please provide the following additional erosion and sediment control notes on all applicable drawings:
 - a. Sediment and erosion control measures will be implemented prior to, and maintained during the construction phases, to prevent entry of sediment into the water.
 - b. The erosion and sediment control strategies outlined on the plans are not static and may need to be upgraded/amended as site conditions change to prevent sediment releases to the natural environment. The TRCA Enforcement Officer should be immediately contacted should the erosion and sediment control plans change from the approved plans.
 - c. All erosion and sediment control measures should be inspected weekly, after every rainfall and significant snow melt event, and daily during periods of extended rain or snow melt.
 - d. All damaged erosion and sediment control measures should be repaired and/or replaced within 48 hours of the inspection.
 - e. All activities, including maintenance procedures, will be controlled to prevent the entry of petroleum products, debris, rubble, concrete or other deleterious substances into the water. Vehicular refueling and maintenance will be conducted 30 metres from the water.
 - f. All topsoil stockpiles shall be surrounded with sediment control fence. Stockpiles to be seeded immediately following completion of earth moving activities, or if area is left inactive for 30 days.
 - g. Once sediment accumulation has reached half the exposed height of the silt fence or silt sock it should be removed and disposed to an appropriate facility.
 - h. All disturbed areas will be stabilized and restored with native/non-invasive species upon completion of work.
12. TRCA recommends placing rock check dams in the swale. It is ideal to place rock flow check dams at specified intervals within the swale in the attempt to reduce the velocity of the flow. The rock check dams should be placed such that the height of the subsequent check dams must be equal to the elevation of the base of the previous

dam. Please clearly show the proposed locations of the rock check dam and provide supporting calculations.

13. TRCA staff are concerned about sediment laden water leaving the site. TRCA recommends adding a sediment trap with the outer edge surrounded by Silt Soxx at the downstream end of the swale on the subject property. Please note the minimum sizing for sediment traps is 125 m³/ha. Criteria and sizing for sediment traps can be found in the *Erosion and Sediment Control Guideline for Urban Construction, December 2006*. The most up-to-date guideline can be found at www.sustainabletechnologies.ca.

Permitting

Please be advised that a TRCA permit pursuant to Ontario Regulation 166/06, as amended, will be required prior to any works occurring on the subject property. The permit application should be submitted to our office once all necessary planning approvals have been obtained.

Fees

By way of this letter, the applicant is advised that this Zoning By-law Amendment application is subject to a TRCA review fee in the amount of \$8,950.00 (Zoning By-law Amendment/Rezoning - Standard). The applicant is responsible for fee payment and should forward the applicable fee to this office as soon as possible.

Recommendation

On the basis of the comments noted above, it is our opinion that this application is premature as revisions are required and our review fee is outstanding. By way of this letter the TRCA requests that the next submission associated with this application be accompanied by a cover letter describing how each comment has been addressed.

Furthermore, the TRCA requests to be notified of any decisions made by the City on this application or any appeals made by any party in respect of this application.

We thank you for the opportunity to review the subject application and provide our comments as per our commenting and regulatory role. Should you have any questions, please do not hesitate to contact me at 416-661-6600 extension 5618 or michelle.bates@trca.ca.

Sincerely,

Michelle Bates
Planner I
Development Planning and Permits
Extension 5618

MB/lb