

Appendix	"C"
SRPRS	19.027
File(s)	D02-18014 + D03-18007



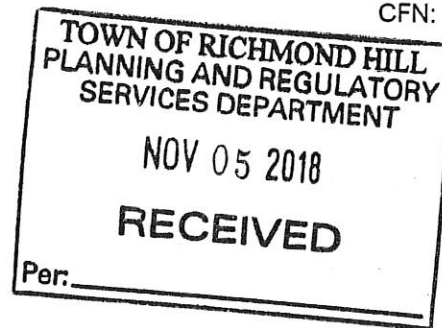
**Toronto and Region
Conservation
Authority**

September 6, 2018

CFN: 59936

BY EMAIL ONLY

Mr. Jeff Healey
Town of Richmond Hill
225 East Beaver Creek Road
Richmond Hill, ON L4B 3P4



Dear Mr. Jeff Healey:

Re: D02-18014 (Zoning By-law Amendment)
D03-18007 (Subdivision)
Jefferson Heights Estates Ltd.
12, 24 & 36 Beech Avenue & 319 Harris Avenue, Richmond Hill

This letter will acknowledge that the above noted applications have been reviewed by Toronto and Region Conservation Authority (TRCA) staff. We offer the following comments. For a list of the materials reviewed, please see Appendix A. We offer the following comments.

PURPOSE OF THE APPLICATION

It is our understanding that the purpose of the subject applications is to permit the creation of 12 semi-detached lots and one medium density development block to accommodate 38 townhouse units. The total area of this new subdivision is 1.92 hectares.

APPLICABLE TRCA REGULATIONS AND POLICIES

Ontario Regulation 166/06

The subject properties are partially located within a TRCA Regulated Area of the Rouge River Watershed. The Significant Woodland partially located on the subject properties is considered a part of the overall valley system of a tributary of the Rouge River. As such, a permit is required from the TRCA pursuant to Ontario Regulation 166/06, as amended, for the any works conducted on proposed Blocks 8, 9 and 7.

Living City Policies for Planning and Development in the Watersheds of the TRCA (LCP)

The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (LCP) describes a "Natural System" made up of water resources, natural features and areas, natural hazards, potential natural cover and/or buffers. The LCP recommends that development, infrastructure and site alteration not be permitted within the Natural System and that it be conveyed into public ownership for its long term protection and enhancement.

Oak Ridges Moraine Conservation Plan & Buffer Requirements

The subject property is designated as Settlement Area under the Oak Ridges Moraine Conservation Plan (ORMCP). Under the ORMCP, Minimum Vegetative Protection Zones (MVPZ), typically of 30 metres, and Minimum Areas of Influence (120 metres) are applied to Key Natural Heritage Features and Hydrologically Sensitive Features on or in close proximity to the subject property

The TRCA has objectives related to the maintenance, restoration and enhancement of the ORMCP area. As technical advisors to the Town of Richmond Hill, the TRCA must be satisfied that there will be no negative impacts on the natural features resulting from the approval of the subject application. However, given that municipalities are the designated approval authority under the Oak Ridges Moraine Conservation Act, we recommend that the Town of Richmond Hill ensure that this application conforms to the provisions of the ORCMP.

Source Protection Plan: CTC Source Protection Region

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 took effect on December 31, 2015. The CTC SPP contains policies to ensure that existing activities occurring when the Plan takes effect cease to be significant drinking water threats, and to prevent future activities from becoming significant threats to drinking water.

Vulnerable Areas referred to as Wellhead Protection Area-Q2 (WHPA-Q2) have been delineated by the CTC SPP in accordance with Technical Rules developed by the Ministry of the Environment under O. Reg. 287/07. This WHPA-Q2 area was identified to help manage activities that may reduce recharge to an aquifer (Prescribed Threat No. 20 under the Clean Water Act, 2006). Certain types of applications within the WHPA-Q2 area are subject to CTC SPP Policy REC-1 parts 2 a) and b) and require the submission of a site-specific water balance assessment to mitigate development related impacts to recharge reduction.

As a technical service provider to the municipality for the REC-1 2 a) and b) policies of the CTC SPP, TRCA's role is to review water balance assessments to ensure they comply with standard practices outlined in guidance to proponents and make recommendations to the Planning Approval Authority as to whether pre-development recharge will be maintained. However, as municipalities are the Planning Approval Authority responsible for implementing the REC-1 Policy, the Town of Richmond Hill is required to ensure this application conforms to the CTC SPP.

We note the Harris-Beech MESP is applicable to this area and has specifications for Water Balance targets. As such, for sites such as this one, TRCA staff are supportive of a best-efforts approach to meeting CTC SPP REC-1 2 a) and b) requirements.

HARRIS-BEECH INFILL STUDY & MASTER ENVIRONMENTAL SERVICING PLAN

Through the Master Environmental Servicing Plan and Harris Beech Infill Study, a 10 metre buffer was established from the significant woodlot partially located on the subject lands. This feature was subsequently staked by TRCA and Town of Richmond Hill staff through a previous application (D02-14028 & D03-14011 – Pearl View Land Developers Inc.).

Please note that, Key Natural Heritage Features under the Oak Ridges Moraine Conservation Plan (ORMCP) typically require a 30 metre Minimum Vegetative Protection Zone (MVPZ). However, under the Harris-Beech MESP, a 10 metre buffer to this woodlot was determined to be appropriate.

TRCA staff note that the proposal has provided a 10 metre buffer (Block 9) and it is our expectation that this block along with the woodlot block (Block 8) will be conveyed into public ownership.

APPLICATION SPECIFIC COMMENTS

General Comment – Site Plan Drawing

1. Please include the staked woodlot limit and identify the 10 metre buffer.

Geotechnical Engineering

2. Due to configuration of the slope (approximately 4 horizontal : 1 vertical) and its location relative to the watercourse, TRCA geotechnical staff are generally satisfied the grading works are adequately setback from the top-of-bank (roughly 10 metres). However, we note that an approximate 2 metre tall retaining wall has been proposed at the 10 metre buffer along the southwest corner of the site. This wall is required to be properly engineered with backfill and drainage details shown in cross-sections, elevation and plan view drawings. All drawings are required to be stamped and signed by an appropriate engineer.

Water Resources Engineering – Quality & Quantity Control

TRCA staff have reviewed the Preliminary Functional Servicing and Stormwater Management Report prepared by Masongsong Associates Engineering Limited dated May 2018 and offer the following comments.

3. We note site drainage patterns are not in accordance with the Harris Beech MESP's (June 2014) conceptual storm servicing schemes, as the intersection of Harris Avenue and Beech Avenue show sewers external to the proposed site directing flow east instead of south toward existing SWM Pond SW3W. If alternative documents or agreements have been established, please provide this information to TRCA.

Please ensure the stormwater management control strategy is as per the configuration provided in the Harris Beech MESP (by providing relevant excerpts, calculations, analysis, and supporting documentation). TRCA withholds further comments on stormwater management for future submissions.

Please ensure the FS/SWM Report is signed and sealed by a licensed professional engineer.

4. As the overland flow route (based on the site grading shown) for the south west corner of the site appears to be directing flow towards the area designated "Open Space," please provide supporting calculations demonstrating sufficient inlet capacity and sewer capacity to convey the 100 year storm event to an approved outlet.

Water Resources Engineering / Hydrogeology – Water Balance

5. The Hydrogeological & Water Balance Assessment indicates that directing the rooftop runoff from 46 townhouses to the rear yards and the rooftop runoff of 6 townhouses to infiltration trenches will be sufficient to achieve post development infiltration target. This mitigation is not considered best efforts. The CTC SSP requires Water Balance for the average annual condition, not just the 5 mm storm target.
6. Please provide calculations/figures to demonstrate the percent imperviousness for the site is as per the allowance noted in the Harris Beech MESP.
7. Please revise the tables in Section 5.4 of the Preliminary Functional Servicing and Stormwater Management Report (Masongsong, May 2018) to be consistent with the results of the water balance analysis.
8. The total site area and the impervious/pervious site area are inconsistent between the Preliminary Functional Servicing and Stormwater Management Report (Masongsong, May 2018) and the Hydrogeology & Water Balance Assessment (WSP, May 2018). Please review and revise for consistency.
9. Please provide sizing calculations for the infiltration trench as per equations 4.2 (Maximum Allowable Soakaway Pit Depth) and 4.3 (Infiltration Trench Bottom Area) provided within the SWM Planning and Design Manual (MOECC, 2003) including a site-specific percolation rate to

ensure an acceptable drawdown time of the infiltration gallery. Please also verify that the bottom of the proposed infiltration trench is vertically separated at least 1 m from the top of bedrock and the seasonally high ground water table.

10. Please provide the contributing drainage area to each of the proposed infiltration trenches.
11. Please illustrate the proposed LID measures on a drawing with location information and accompanying details, demonstrating volumetric sizing and spatial requirements.
12. TRCA staff have concerns with the effectiveness allotted to the roof runoff infiltrating into the adjacent landscaped areas already receiving direct rainfall. Please provide additional/alternate LID mitigation measures to address the infiltration deficit resulting from the proposed works.
13. There appears to be a typographic error for the heading of Table A-5, the headings should be Water Budget – Post Development with Mitigation not without Mitigation. Please correct.

Ecology – Natural Heritage Evaluation (NHE)

Please revise the Natural Heritage Evaluation (prepared by Beacon Environmental) to include the following:

14. Details of the site Water Balance measures proposed within the WSP Hydrogeology & Water Balance Assessment and the Harris Beech Infill Area Master Environmental Servicing Plan (MESP) to achieve infiltration targets, including how and where specific measures will be implemented on site to meet that target.
15. Detailed recommendations for a multi-barrier Erosion and Sediment Control Plan consistent with the Erosion and Sediment Control Guideline for Urban Construction (2006) as outlined in Section 2.4.4 of the MESP for this area. This should include site specific information on sensitivities and the approach to ESC installation and maintenance. Please include a detailed description of water management during construction (drainage patterns, outlet during construction, treatment of runoff prior to release, treating and minimizing sediment laden runoff from leaving the site, staging, etc.).
16. Detailed requirements (species, planting/seeding rates, timing, monitoring, etc.) to be incorporated into a Buffer Restoration Plan for augmentation of vegetated buffer to further insulate the woodland feature from potential impacts of the proposed development. The buffer should be fully planted with naturalized self-sustaining vegetation consistent with the TRCA Post-Construction Restoration Guidelines (2004).
17. Please provide a Buffer Restoration Plan with the requirements listed above as well as the planting of a minimum of 420 native trees as required by the Tree Inventory and Preservation Plan (this number may be adjusted based on request for updated TIPP information in comment 19 below).
18. Please ensure all MNRF Species at Risk survey recommendations are complete, including appropriate bat surveys.

Ecology - Tree Inventory and Preservation Plan (TIPP)

19. Please update the TIPP to include a plan clearly identifying the TRCA staked woodland dripline and minimum 10 metre buffer in relation to trees proposed for retention and removal.
20. Any trees within the 10m buffer should be identified for preservation, and replanting rates adjusted in the updated TIPP to reflect this.

21. Please provide a large scale version of a revised "Proposed Infill Housing" Plan (drawing L-00) as provided in the TIPP that reflects updates resulting from TRCA comments.

Erosion & Sediment Control

22. Section 6.0 of the Preliminary Functional Servicing and Stormwater Management Report (Masongsong, May 2018) notes straw bales (among other methods) as sediment traps. Please note that TRCA does not approve of the use of straw bale check dams, and would recommend removing the reference to straw bales in the report.
23. Please provide an Erosion and Sediment Control Plan consistent with Section 2.4.4 of the MESP for this area. Details should include a multi-barrier approach to the control of erosion and sediment, construction staging, any dewatering requirements, general water management during construction (drainage patterns, outlet during construction, treatment of runoff prior to release, treating and minimizing sediment laden runoff from leaving the site, etc.) and any recommendations of the updated NHE.
24. Please ensure that an erosion and sediment control plan be included for each phase of construction during the detailed design stage.

FEES

By copy of this letter, the applicant is advised that the TRCA has implemented a fee schedule for our planning application review services. In accordance with our February 1, 2018 TRCA Planning Services Fee Schedule, this application is subject to a **\$21,000** Draft Plan of Subdivision (Standard) review fee payable to the TRCA, which at this time remains outstanding. We request that the applicant submit this fee to our office at their earliest convenience. Please note that an additional Subdivision Clearance fee of \$6,025 will be due at the time of request to clear our conditions of Draft Plan Approval.

RECOMMENDATION

In light of the above, TRCA staff have **no objections** to the Zoning By-law Amendment Application; however, prior to supporting or providing conditions for the approval of the Draft Plan of Subdivision Application we request that our comments above (1 through 24) be addressed to our satisfaction.

As part of the next submission, TRCA staff request that the applicant's consultant(s) provide a response letter outlining how each of our comments have been addressed.

We recommend that the Town ensure that the application satisfies the Water Balance requirements of the *Source Protection Plan: CTC Source Protection Region*. TRCA staff would be happy to continue our review of the Water Balance measures at the request of the Town.

We trust this is of assistance. Should you have any further questions or comments, do not hesitate to contact the undersigned.

Yours truly,



Anthony Sun, B.E.S.
Planner II
Planning and Development
Tel: (416) 661-6600, Ext. 5724

APPENDIX A: Material Reviewed

- Draft Plan of Subdivision, prepared by Evans Planning, dated May 2, 2018;
- Site Plan, drawing SP-100, prepared by RN Design Ltd., dated April 26, 2018;
- Preliminary Site Servicing and Grading Plan, prepared by Masongsong Associates Engineering Limited, dated May 2018;
- Preliminary Functional Servicing and Stormwater Management Report, prepared by Masongsong Associates Engineering Limited, dated May 2018;
- Natural Heritage Evaluation, prepared by Beacon Environmental, dated July 2017;
- Tree Inventory and Preservation Plan, prepared by Kelly's Tree Care Ltd., dated July 17, 2017;
- Hydrogeology & Water Balance Assessment, prepared by WSP, dated May 28, 2018.