

Trees & Forests Advisory Committee

Tree Protection Guidelines – Feedback & Recommendations - DRAFT

Date: Dec. 17, 2014

Members Present: Amber Cantell, Chris Haindl, Craig Linton, Jack Winkler

Overall, the members of the TFAC working group are very supportive of the proposed revisions for the City's Tree Protection Guidelines, and would offer the following feedback in order to help ensure they can be effectively implemented while protecting as many trees as possible.

A balance needs to be struck between providing tree protection and being realistic about what can actually be achieved in practice. This is especially critical in reconstruction projects where you have the potential for large trees (and hence large theoretical TPZ's) immediately adjacent to existing infrastructure that is being replaced. Boulevard trees cannot have much fencing put around them if there is a curb on one side and a sidewalk on another.

Feedback on Specific Sections

Introduction Section (1.0):

- 1) The introduction section could be clearer concerning what projects it applies to and should stress the importance of safety.
- 2) The section makes reference to street trees being under "Boulevard Tree Protection By-Law" – is that in addition to this doc, or does it supersede this one? (Please specify the relationship).
- 3) The current wording says that having a RPF or certified arborist is only "recommended" to assess trees for retention, rather than required. It also sounds like the evaluation, while considered important, is voluntary, which seems at odds with later sections (e.g. 1.1) that indicates for many types of developments a Tree Protection Plan is required (and which in turn must be completed by a "qualified individual").

If assessing trees for retention is mandatory, it is strongly recommended that they be listed as such in the introduction, so someone reading through it won't go "Oh, it's only voluntary – I'm not going to do it, so there's no need to read further".

Similarly, on p. 3 it states "The following standards and guidelines have been produced so that adequate care *can* be taken to ensure the health of trees where is potential risk of damage..." (Emphasis added) – if the document is meant to be binding, "is" would be a more appropriate word. (Sec. 1.1 contains much stronger wording – "procedures that *shall* be followed" (emphasis added), and so perhaps would justify the use of stronger wording in the intro.)

- 4) It would be nice to have some of the City's goals for the Urban Forest (perhaps taken directly from the Urban Forest Strategy) reiterated here so that even if people haven't read the UFS, they understand what the City is trying to achieve (in part) with these guidelines. We would like the guidelines to communicate that trees are an investment, and that the goal is to keep them wherever possible (notwithstanding the need to remove trees which are unsafe).
- 5) In the second paragraph on p. 3, it goes from "the following standards and guidelines" to (later) "The requirements and measures" – this wording is a bit confusing, as it's not clear how "requirements and measures" fits in. A bit of extra text to say something like "the requirements and measures that will be set out by the City for your specific project..." or something along those lines would help provide a segue.

1.1 Scope

Overall, we found the wording and structure of this section to be the least clear in the document. It's unclear as to what type of trees are affected by the guidelines (just City-owned, or private as well?), and similarly unclear if 1.1.2-1.1.4 belong "under" 1.1.1 or at the same level as them (i.e., if they are listing specific scenarios for 1.1.1 (projects which may affect City trees), or additional situations where the guidelines would apply).

- 6) In terms of sec. 1.1.1, are all possible construction or demolition projects which may affect City trees actually covered off in the scenarios listed between 1.1.2 – 1.1.4 (Subdivision, Site Plan, and Capital Works)?
- 7) Everything in these sections (1.1.1. – 1.1.4) talks, at most, of a "Tree Protection Plan", but in the last paragraph of 1.0 ("Introduction") it speaks of many other potential requirements, such as an "arbicultural impact assessment", "installation of tree protection barriers", "pruning", etc. How do these concepts relate? Should Sec. 1.0 actually read something more along the lines of "Projects will be required to prepare a Tree Protection Plan, which may *include* an arbicultural impact assessment, identification of tree protection zones, installation of tree protection barriers... (etc.)"?
- 8) Having Sec. 1.1.1 first in this section, which says "This document outlines the tree protection procedures that shall be followed when a City tree of any size is present on, or adjacent to, a construction or demolition site" makes it sound like the document only applies to City-owned trees. Is that the intent?
- 9) For 1.1.2 ("All new subdivisions require a tree protection plan"), expand to say "which must be followed in order to _____" and thereby make it clear that more than just the preparation of a plan is required. (i.e., that it must be successfully executed and signed off on post-project completion).

- 10) We take it “Site plan” (sec. 1.1.3) is just for individual construction projects rather than subdivisions. How does the City decide whether a tree protection plan is warranted? We would recommend there being some clear, written standards for that (still allowing room for staff discretion in special cases).

1.2 Terms Defined for the Use of This Document

- 11) Please add a definition for “Tree Protection Plan”, “Site Plan” “Capital Works” and “Plan of Subdivision”. (A question came up among our members as to whether or not someone making an addition to their own home, or a pool, would have to do a site plan and therefore also conform to this policy – Craig has noted he believes they would be exempt, but we’d like the wording to make this explicit if so). Would a maintenance or repair type project on a street count as a “Capital Works” project?

2.1 Requirements for Approved Tree Protection Plan

- 12) From sec. 2.1, it sounds like the tree protection plans only need to discuss City trees, not private trees? (There seems to be some overlap with this item and the “Scope” section, too – want to make sure they are consistent with one another, if repetition is required).

But then in 2.1.4 A) it says that a TPP shall include “A complete inventory of **all** trees on site, on the boulevard in front of the site,” (emphasis added). More clarity is needed. It seems odd that the scope section could say there are four types of projects or instances that may require a TPP (Street Trees, Subdivision, Site Plan, Capital Works) and then only one of these to be mentioned at the start of 2.1.

- 13) A template for a Tree Protection Plan (sec. 2.1.2) is recommended, if one does not already exist. A suggested sample Openoffice (compatible free version of Excel) spreadsheet Table 1 is included. It is in three parts: Part a briefly describes the existing conditions of each tree. Part b briefly describes the proposed actions. Part c would be completed by the consultant after each field inspection. There could be more than one Part c. Columns 1 to 9 are automatically repeated on all pages.

- 14) We strongly support the line “a detailed explanation including photographs, must be included” in 2.1.4 A. We would recommend that the photos ought to include “when/where they were taken”.

- 15) The wording around tree replacement in sec. 2.2.4 is too open-ended and vague, and makes it sound like the document itself gives approval for replacing trees (“If the tree is of no particular significance, replacement is also a viable option”), rather than determining whether or not replacement is viable after a review of the Tree Protection Plan. If replacement is a regular part

of tree protection plans, then we would like to see some clear standards for how that will be applied. (I.e., one tree for every 1" of DBH, etc.)

- 16) Sec. 2.2.5 lists watering as a maintenance task that may need to be completed prior to construction or demolition: while this makes sense for the other activities listed (e.g. pruning, fertilization), it seems like watering should be something ongoing during the construction/demolition process.

2.4 Tree Protection Barriers

- 17) 2.4.3.i says for barriers that their "Height *can* be 1.2 m" (emphasis added) - is there a minimum height? Is there a problem if it's higher? "Can" is an unusual choice of word. Maybe use "shall", with an appropriate height range.
- 18) Tree Protection Zone Sign (fig. 2): needs a spot for the contractor to put in an identifier in permanent marker (Like "Project Code # - Tree #" or something like that) for referencing (for example, if specifying which tree needs its fence changed, roots better pruned, photo taking, etc.)

3.0 During Construction

- 19) The current wording in 3.1.1 – (Site monitoring) that says "Random checks may be done by City staff at any time and without notice" could be changed to "Random checks *will* be done by City staff, and can be done at any time and without notice".
- 20) For Sec. 3.1.2 ("A weekly photograph will be taken by the developer..."), is it supposed to be a photo of just one intact barrier with signs posted, or one of each barrier? Who at the City will be checking these photos? Craig notes for photos, weekly photos over a 4 year plan might be a bit much. (Or might be better to do daily during grading, and then monthly when you're in a different stage).
Perhaps photos could be kept on file by the consultant or developer and available on demand to the City if there is a problem.

Our team is also in agreement that weekly data on watering is probably more valuable than a weekly photo of the fencing. (Especially as poor fencing practices could be caught during a random spot check, but poor watering practices normally could not). We would also strongly suggest requiring receipts for watering and the provision of a watering schedule as a part of the process, as this will improve the likelihood of watering actually taking place.

- 21) We strongly support sec. 3.3.3, that trees with exposed roots should be watered twice a day or as needed. However, how will this be enforced? And images showing what constitutes “a situation in which watering must occur” (i.e., the condition of the roots in such a situation) may be beneficial in terms of driving the message home.

As a bare minimum, information on who will be responsible for watering (and to confirm the equipment or sub-contractor that will be used) should be included in the Tree Protection Plan.

Post Construction (Sec. 4.0):

- 22) We would recommend that the documentation associated with the final closing of a TPP file be included in a specific schedule (i.e. a specific form to complete as a part of the subdivision agreement, site plan agreement, etc.)
- 23) Sec. 4.4 states that a qualified person (certified arborist, RPF, etc.) will confirm all protocols were met, but does not go on to explain what the City will then do to confirm that the project has received final approval / the file is closed. We would recommend this process be made much clearer.
- 24) There needs to be a standard procedure (for the post-project assessment and approval) – Jack has noted it seems that often people who are required to submit a TPP are not being informed of project completion.

When the best time would be for a TPP to be prepared and afterwards signed off on is a complex problem, and we would submit the following comments for consideration:

Currently, in terms of the order of activities, developers must do a tree preservation plan before grading is completed, which can make things difficult. (In that, for example, the TPP could say a tree is to be saved, and then the grading says the grading must changed so much that the tree could not possibly survive). We would recommend more discussion with the development community and (appropriate city department involved with grading standards) to improve this process.

The timing of “final approval” is also a bit of a challenge. If timed so that the TPP doesn’t get closed until “time of assumption”, then the developer (that would have been involved in the creation of the TPP) has already sold the lots, the builders have already built the buildings, and at least 70% of homes are already occupied. At this point, it is very possible a home owner may have chosen to remove a tree: should the developer still be on the hook for it?

Developers receive “Conditional Clearance” once all the services are installed (manholes, catchbasin, sewers, grading issues, etc.), and the road has to be at least to the gravel base. They

check to see if anything is not to engineering specs, which includes (or could include?) tree protection fencing. So perhaps that might be a good time (for a developer and TPP author) to close the file, but that's still before the houses get built (and responsibility for the construction transfers from the developer to the home builder).

The Development Agreement / Subdivision Agreement / etc. goes with the title of the land, so once it's sold, the next owner has to stick to it as well – is there an opportunity there? Alternately, could it somehow get connected to the Occupancy Permit that must be obtained before the house is sold to a homeowner? (To ensure that the builders have also followed the TPP?)

General Recommendations:

- 1) That tree protection plans for any projects affect City owned trees be made public (online) so residents can let City staff know if they are not being followed. (This also lets citizens know that the works are planned and trees have been taken into consideration).
- 2) There is currently nothing about safety in the guidelines – we would recommend this be included. This could extend to both a mention of human safety (perhaps a reference to another part of the guidelines document that deals with this for construction projects in general, if it exists?) and also the issue of “is the tree safe?”

We would suggest the use of “major defects” in the Ontario Tree Marking Guide (published by the Ontario Ministry of Natural Resources) as one possible standard to assume that a tree needs to come down or not. While a “major defect” refers to timber quality, the decline in timber quality is usually a sign of a decline in safeness. The TPP author still makes the final recommendations. In many cases, it is probably easier and safer to take these trees down when they are still in a field (esp. since you're only going to be developing in areas where you're planning on increasing foot traffic).

By extension, we would also recommend a clear policy on the need for replanting where trees need to be removed for safety reasons.

Formatting Suggestions:

- 1) We would suggest using some bold in the “types of tree damage” paragraphs in the “1.0 Introduction” section – for the title as well as “physical tree damage” “root damage” and “soil compaction” for readability. (Alternately, bullet points could be used).
- 2) There is inconsistent capitalization in definitions section, and inconsistent use of periods at the end of definitions.

- 3) Misplaced “ in 1.2.9
- 4) At the end of 2.1.4 A, “therein” should be one word

Questions for City Staff

- 1) There was no burlap on the trees on Alexandra St. during road construction in 2013 and on Fairview in 2014 (see sec 2.3.3.) - should there have been? How does the City ensure burlapping is complete, watering is done, and roots are cut properly?
- 2) What proportion of construction projects with Tree Protection Plans were subjected to random checks to ensure compliance, as per sec. 3.1.1, in 2014?
- 3) Has there been any previous assessment of whether or not roots are getting watered on project sites under the old guidelines? (Or has there been any monitoring of this?) It seems very likely that if a business were to choose to cut corners, it would be by dropping the watering component. (Because while fencing and things must constantly be in place if a random check by City staff were done, they can always just say watering was done “yesterday”).

Perhaps combining the requirement for photographing site fencing with the time of watering would help –then you would be confirming that some watering has been done, and that they have the necessary equipment available to do so (and aware that this is something the City will be checking on).