Comments on the Design Specifications and Requirements Manual Update 2024
Prepared by the Environmental Stewardship and Action Community Advisory Committee

Thank you for the opportunity to provide comments on the Design Specifications and Requirements Manual (DSRM) update. The Environmental Stewardship and Action Community Advisory Committee (ESACAC) [mandate](#) includes water and energy conservation measures, climate change mitigation, the development and monitoring of London's Urban Forest Strategy and Climate Emergency Action Plan and the maximization of the retention of trees and natural areas. The committee's feedback on the DSRM therefore focuses on these topics. Some of the comments may extend beyond the scope of the DSRM but are included here for information purposes. Please note that our advisory committee consists of representatives from the community who are interested in tree planting and retention, but generally lack familiarity with technical design specifications for applications in engineering contexts. We would welcome any feedback from staff on the comments and questions. Responses may be circulated at a future ESACAC meeting and/or sent to the Chair through the committee secretary.

1. In general, we believe the DSRM needs better guidance about trees with considerations for the full life of the tree and minimum specifications required to limit risks and future maintenance requirements.

2. Can an analysis be done to compare the current DSRM, especially Chapter 12, with alignment to the London Plan? ESACAC believes there may be significant discrepancies.

3. There are many chapters of the DSRM that must be applied together. The sequence or prioritization of requirements provided in different chapters is unclear. Are the chapters meant to be reviewed and applied in consecutive order? For example, when exactly in the process of a consultant applying the DSRM to design a subdivision would they consider trees? Are trees considered while requirements from other chapters are being applied, or only following those applications once the consultant reaches Chapter 12? We are concerned that requirements given in other chapters may constrain the ability to create conditions to support healthy plantings and ultimately mature trees. An additional explanatory note in Chapter 1: Introduction about how the DSRM is used, and in what order the chapters are meant to be read and their specifications applied, might be beneficial. Could this be represented as a flow chart? The linkages between tree and soil specifications given in Chapter 12 and other chapters could also be represented in a flow chart given in Chapter 12. Are changes made in a previous DSRM update related to trees and soil being implemented consistently in new developments? If not, are there challenges associated with implementing those changes?

4. Could necessary soil amendments happen earlier in site preparation in anticipation of trees being planted? This would require locations of plantings to be marked early. In theory it could help to reduce the need for the city to amend soil at planting stage and charge the developer an extra fee per tree.

5. Many plantings of street trees ultimately fail. We encourage the city to explore alternative strategies for plantings that could reduce mortality and improve stewardship of trees (e.g., watering) by homeowners and neighborhood groups. For instance, could the city plant more, smaller trees in higher densities as street trees, instead of single large trees? Smaller trees may have better adaptability to soil conditions as compared to larger trees, by establishing their root systems based on the local environment, with roots spreading into the surrounding soil instead of being inserted in one concentrated root ball. A greater density of smaller trees could support survival by limiting damage due to exposure (e.g., wind). Smaller trees are less expensive to plant and if certain plantings fail there is a backup already in-place. If too many trees are growing close together as they reach maturity, they can be pruned back.

6. The city would benefit from developing a program to ensure more regular, consistent watering of trees. It is not good to rely solely on homeowners to do the watering, as many residents are unaware of this responsibility and do not want to interfere with municipal property. Is there another way to ensure trees are being watered? (e.g., community-led initiatives subsidized by the city and/or developers). Could trees be marked somehow to remind residents to water them? (e.g., tags that say "water me" and show correct applications of mulch) What about subsidizing rainwater collection devices connected to downspouts on adjacent buildings, and an attachable irrigation line, at least for the first 2 years while plantings are being established?

7. Large minimum tree protection zones (TPZ) around trees may create conflicts and limit the number of trees that will fit on a lot. In London, the general amount of space required for larger tree trunks is 5 meters, which is relatively high compared to other jurisdictions (e.g., we heard that in Kitchener, the minimum distance from the building foundation where digging for trees can occur is 3 meters, which allows for more mature trees to become part of a single family lot. Kitchener's tree preservation plan specifications take the species of tree into account). Could the minimum buffer around the tree be made more flexible and determined based on the size and species of the tree as well as the nature of the activity around the tree / risk of damaging the tree? The critical root zones may vary by species, as would risks to adjacent infrastructure. An adaptive standard for the TPZ could use criteria based on the species and on the activity (e.g., is heavy equipment involved, or are there imminent risks to the soil?)

8. Tree preservation is stated as a priority in various policies and guidelines of the city that apply to development, but the requirements are vague. Could the city provide clearer guidance to developers about how to identify which existing trees to retain, based on specified criteria? For instance, if a tree in question checks off certain boxes, that can build a stronger case for that tree to be retained. It should be simpler to identify priority trees. Grading standards for parkland in the DSRM generally do not facilitate retention of trees in parkland. The city's staff are apparently often unwilling to accept certain trees being kept in parkland due to conflicts with grading, stormwater, etc., for reasons that aren't always clear. How can justification for tree removals be made more explicit and objective? e.g., developing rating systems of risks per tree and considering the potential for mitigation of risks (such as adaptive minimum TPZs).

9. How can the DSRM be used in combination with other policy tools and incentives to encourage planting more trees in backyards, not just street trees?

10. How can the DRSM account for risk of overheating in extreme weather? For example, could there be shade standards for parking lots? Prioritizing shade could involve consideration of tree species in terms of time-to-maturity and the size of the canopy, as well as tree placement relative to high-risk façades on buildings, parking lots, etc. and the orientation of the sun during summer.

11. Does the process of replacing tree plantings that failed (e.g., under warranty) consider the cause of mortality? Is there a mechanism to assess, document, and remediate the cause(s) of planting failure prior to a replacement?

12. There needs to be a mechanism to remove any tree protection devices (e.g., tree rings) after the planting has matured to prevent damage to its tissues.

13. How do the DSRM requirements for grading, slopes, sewers, catchment areas, etc. pose barriers to retaining existing trees? How can the DSRM be made more flexible to allow for exemptions where they are reasonable and make sense, such as to retain heritage trees? Is there a process to request exemptions and design mitigation or compensation?