

City of Melbourne

Tree Retention and Removal Policy 2012

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1. Context

- 1.1. City of Melbourne’s urban forest is critical infrastructure and an asset that provides innumerable environmental and health benefits to the municipality. The protection of trees is vital to retaining our city’s character and environment.
- 1.2. All construction and development works near public trees must abide by the protection and retention requirements outlined in this document.

2. Scope

- 2.1. This policy applies to all trees in the municipality that are either owned or managed by the City of Melbourne; such trees shall be referred to as public trees. (A public tree includes any tree which has any part of its trunk growing from Council managed land.)
- 2.2. Council currently manages over 70,000 public trees.
- 2.3. The practices listed in this policy are to be implemented by the property owner, project/planning permit applicant, contractor or designee and are minimum standards by which the care of a public tree is to be administered.
- 2.4. The practices and procedures detailed in this policy are consistent with best management practices in the arboricultural industry and are intended to promote healthy, structurally sound trees.
- 2.5. In all cases, Council’s arborist shall, within the parameters of best practice and meeting the community’s expectations, have the discretion to modify or add to any condition, practice or standard outlined within the policy.

3. Policy Objectives

- 3.1. To recognise the value and importance of public trees that comprise the City of Melbourne's urban forest and to provide adequate protection for those trees.
- 3.2. To ensure and promote preservation of the existing tree canopy cover within the City's public urban forest.
- 3.3. To increase the long-term viability of public trees during and after construction events by ensuring that appropriate protection standards and best management practices are implemented.
- 3.4. To define the circumstances under which public trees may be removed or pruned.

4. Policy Statement

- 4.1. In recognition of the vital role of the urban forest, all public trees within the municipality, unless hazardous, will be:
 - a. Protected from any activity, including development, that threatens their health and/or longevity.
 - b. Protected from infrastructure conflict, where possible, with priority given to the relocation of infrastructure away from trees to reduce the potential for immediate or future damage.
 - c. Given a priority status when considering applications for new developments such that potential conflicts with trees will be addressed before the approval of applications for planning, construction management plans and building and road opening permits.

5. Tree Protection Requirements

- 5.1. Trees grow in a delicate balance with their environment and any changes to that balance must be minimized if the tree is to remain in a healthy state and fulfil its useful life potential. It is rarely possible to repair stressed and injured trees, so damage needs to be avoided during all stages of development and construction. Root systems are opportunistic and often extend far beyond the drip-line of the tree canopy. Disturbance of the root system can result in severe injury to the tree.
- 5.2. Tree protection begins in the planning and design stages of a project. Decisions made in the early stages of a project can limit the amount of damage that trees sustain throughout the development and construction process. The most important consideration for the successful retention of trees is to allow appropriate above and below ground space for the trees to continue

to grow. This requires the allocation of Tree Protection Zones for retained trees.

5.3. To ensure that public trees in the municipality are fully protected at all times, the following requirements must be complied with:

- 5.3.1. Removals of trees will not occur unless approved by Council.
- 5.3.2. An authorised agent of Council will undertake any tree removals that are required.
- 5.3.3. Trees will not be pruned in any form and branches and roots will be removed only by an authorised agent of Council unless Council's arborist advises otherwise.
- 5.3.4. Pruning of roots and branches will be in accordance with the Australian Standard AS 4970-2009 *Protection of trees on development sites* (Australian Standard) or any more recent relevant Standard.
- 5.3.5. A Tree Protection Zone (TPZ) shall be established for the duration of any works near a tree. A TPZ preserves roots and soil and keeps branches clear of contact with construction equipment and materials.
- 5.3.6. The tree protection distance method outlined in the Australian Standard will be used for the allocation of tree protection zones (TPZ) for trees. The TPZ for individual trees is calculated based on trunk (stem) diameter (DBH), measured at 1.4 metres up from ground level. The radius of the TPZ is calculated by multiplying the trees DBH by 12. Example; Tree with 40cm DBH requires a TPZ of 4.8 metres. The method provides a TPZ that addresses both the stability and growing requirements of a tree. TPZ distances are measured as a radius from the centre of the trunk at (or near) ground level. There is scope within AS 4970 to modify TPZs with certain provisos. Council's arborist must approve any modification to a TPZ.
- 5.3.7. Mechanical excavation on the road, footpath or any public space within the defined TPZ of a tree is not permitted without the approval of Council's arborist.
- 5.3.8. Stockpiling of building materials, debris or soil is not permitted within the TPZ of a tree except on existing hard surfaces.
- 5.3.9. The extent or length of boring in the vicinity of trees will be determined by the TPZ. The entry and exit pits for boring will be positioned outside the designated TPZ for each tree. This requirement should apply unless root sympathetic exploratory investigations have been undertaken and it has been determined that access within the TPZ will not significantly affect the tree. A minimum boring depth of 800mm - 1100mm from natural grade to the TOP should apply under all TPZs. The depth of the boring tunnel should be increased according to the size of the tree trunk. Table 1 indicates the recommended boring depths for trees based on their trunk diameter.

Table 1: Depth of boring

Trunk diameter	Minimum Depth to TOP
<100cm	800mm
100-150cm	950mm
>150cm	1100mm

- 5.3.10. Boring depth should also consider soil topography. Boring within the 'A' soil horizon (topsoil) will impact on the root system of the tree, as this area is the most conducive soil environment for root growth. Boring below this area in the 'B' horizon or sub-soil layer will reduce the impact on the root system of the tree by avoiding most of the lateral and absorbing roots as well as avoiding root damage to services.
- 5.3.11. Soil levels and structure must not be altered within TPZ of a tree without permission from Council's arborist.
- 5.3.12. Care shall be taken to ensure that no damage is caused to tree trunks, roots, canopy or branches during construction.
- 5.3.13. Where a gantry or hoarding is to be constructed over a footpath the placement of the footings and gantry structure must not adversely impact trees.
- 5.3.14. If a tree is enclosed within a hoarding or gantry space, the owner and/or builder are responsible for implementing a maintenance program for affected trees as approved by Council.
- 5.3.15. A protection zone should be established for the duration of any development or construction project according to the measures detailed in this Section 5.
- 5.3.16. No service pit or hatch is permitted on a nature strip within the TPZ of a tree without permission from Council's arborist.
- 5.3.17. A vehicular crossing is not permitted within the TPZ of a tree without permission from Council's arborist.

6. Tree Protection Management Plans

- 6.1. Prior to commencement of a development project, a property owner or representative shall prepare a *Tree Protection Management Plan* if any activity is within the tree protection zone of a public tree defined in accordance with the Australian Standard.
- 6.2. The Tree Protection Management Plan will be prepared by a certified arborist to assess impacts to public trees, recommend mitigation to reduce impacts to a less than significant level and identify construction guidelines to be followed through all phases of a construction project.
- 6.3. Tree Protection Management Plans will be developed in accordance with the Australian Standard or any more recent Standard, on development sites, as identified by Council's arborist.
- 6.4. The Tree Protection Management Plan should be submitted to Council's arborist for endorsement during the planning phase of a development, and prior to works commencing.
- 6.5. The Tree Protection Management Plan will include provision that the property owner or representative will be liable for any damage caused to public trees during the development process, including damage caused by contractors engaged by the property owner in carrying out the development works.

7. Tree Removal Criteria

- 7.1. Council will manage its public trees by monitoring the condition of all public trees and by removing and replacing them where appropriate.
- 7.2. All management options of public trees will be explored and exhausted before tree removal is recommended.
- 7.3. Future street tree planting and greening opportunities within the municipality will be explored when considering planning applications.
- 7.4. Instances when public tree removals will not be considered include:
 - 7.4.1. If there is a safe and practical means for tree retention.
 - 7.4.2. To minimise obstruction of views, advertising or signage.
 - 7.4.3. To reduce leaf and fruit litter debris.
 - 7.4.4. For solar access.
 - 7.4.5. For unjustified property damage claims.
 - 7.4.6. For causing minor allergenic or irritant responses.
- 7.5. Public tree removals may be permitted in the following instances:
 - 7.5.1. All hazardous trees will be removed immediately.
 - 7.5.2. Trees that are dead, dying or in severe decline from natural causes or irreversibly diseased unless it is defined that they must remain in the landscape for habitat provision or other purposes.
 - 7.5.3. Trees identified as being an inappropriate tree species for a location, in consultation with the community.
 - 7.5.4. In the case of development, only if all possible design solutions have been considered to retain the tree and have been deemed by Council's arborist to be exhausted.
 - 7.5.5. Trees causing damage to private infrastructure or causing conflicts to utilities and services only when the appropriate investigations have been made and all feasible interventions to retain the tree have been considered and deemed to be exhausted.
 - 7.5.6. Trees recognized as inducing severe allergenic or health responses based on assessment on a case by case basis.
 - 7.5.7. If the tree is defined by Council's arborist to be a poor arboricultural specimen and contributes little amenity or ecological services.
 - 7.5.8. If the development project results in an improvement to green space/infrastructure that would not be possible without the removal of existing trees.

8. Bonds and payments

- 8.1. Where construction activities have the potential to impact public trees, a bond for the protection of the tree will be held by Council. The amount of the bond shall amount to the combined tree amenity and ecological value determined in accordance with this policy. A bond will be held for the duration of the works, subject to an approved Tree Protection Management Plan.
- 8.2. Where a public tree removal is approved by Council's arborist in relation to a development, the associated cost of the tree and its removal shall be paid by the property owner, or representative prior to the removal.
- 8.3. The costs associated with removal of a public tree include:
- A – **Removal Costs:** amounting to the fees incurred by Council for physically removing the tree.
 - B – **Amenity Value:** calculated in accordance with Council's Amenity Formula.
 - C – **Ecological Services Value:** calculated in accordance with the i-Tree valuation tool.
 - D – **Reinstatement Greening Costs:** calculated in accordance with the greening required to replace the loss to the landscape incurred by the removal. The level of reinstatement greening required will be determined by Council and will take into consideration the location, the significance, the biodiversity provision and the amenity of the tree. Reinstatement greening costs will also include a 24-month maintenance fee and any treatment or Water Sensitive Urban Design (WSUD) measure deemed to be required to establish replacement growth.

9. Tree Roots and Infrastructure

- 9.1. Trees growth is strongly influenced by below-ground conditions. Tree root growth is opportunistic and will proliferate wherever moisture, aeration, nutrition and soil structure are favourable. Tree root growth in the urban environment is highly modified and is not governed by property boundaries.
- 9.2. There are a number of common conflicts with tree roots in the built environment:
- A) Direct Damage**
Direct damage is the distortion of built structures as the growing tree root exerts pressure. Direct damage by tree roots is usually limited to light built structures such as pavements and low walls and can also be witnessed in buildings of sub-standard footings.

B) Indirect Damage

Indirect damage is the distortion of built structures as the growing tree root takes up soil moisture. Often there are multiple factors contributing to foundation movement and are seldom associated with tree root growth alone. For this reason, claims of indirect tree root damage must be accurately investigated.

- 9.3. Leaking pipes (as a result of poor construction, old earthenware, cracked and faulty joints and degradation) can create a moisture gradient that encourages tree root growth in the direction of the pipe.
- 9.4. The property owner is responsible for the maintenance, repair and replacement from the legal point of discharge, usually near the property boundary kerb. Council should always be given the opportunity to inspect the pipes and offending tree roots prior to the property owner undertaking repair works.
- 9.5. Council will seek to resolve tree root conflicts in the following manner:
 - 9.5.1. All claims of direct tree root damage from public trees will be investigated.
 - 9.5.2. Council will seek practical solutions to reduce the risk of damage to infrastructure from public trees.
 - 9.5.3. Tree removal will only be considered if no practical arboricultural solution can be found.
 - 9.5.4. Every effort will be taken to ensure that replacement and future public trees will not themselves result in similar damage to built structures.
 - 9.5.5. Claims of indirect tree root damage to built structures will be investigated if a geotechnical or structural engineering report implicates tree root damage.
 - 9.5.6. Should tree root growth cause foundation movement the Council will seek a viable arboricultural solution to rectify the situation and to retain the public tree.
 - 9.5.7. The removal of public trees for indirect property damage will only be considered if a geotechnical or structural engineer's report attributes the damage to tree root growth and if no practical alternative arboricultural solution can be obtained. Potential for soil heave as a result of tree removal must also be considered.
 - 9.5.8. Claims of property damage from tree roots must comply with Council guidelines for submitting a claim.
 - 9.5.9. The Council will not remove public trees for unjustified claims of pipe or sewer damage from tree root activity.

10. Community Consultation and Involvement

- 10.1. The community is passionate about its trees and relies on Council to ensure the maintenance and preservation of public trees for the long-term benefit of the city.
- 10.2. The Council will endeavour to inform the community of scheduled public tree removals prior to removal occurring.
- 10.3. The Council values its community's opinion and will provide the community an opportunity to comment on proposed tree removals.
- 10.4. Notification of public tree removal can include direct contact, site meetings, letters to residents in the immediate vicinity, signage on site and a published list on the City of Melbourne website. Methods and periods of notification will be determined in accordance with a number of factors including; the prominence of the location, the significance of the tree, the size of the tree, the number of trees and impact of removal.
- 10.5. In circumstances where major public tree removals are proposed to occur, such as avenue removals, and in particular major removals of trees significantly valued by the community, Council will seek to ensure that the community engagement period for such proposals is of a reasonable period and that the community reach of the consultation is as broad as possible.
- 10.6. The Council will provide the community with reasons for public tree removal if prior notification cannot be undertaken.
- 10.7. Removals that occur due to the public tree being deemed hazardous will be undertaken immediately and may not necessarily provide a period of notification and community consultation.