

LANDSCAPE ASSET PROTECTION NOTES

General

- As per Clause 6.2 in AA-REF-04 proposed service excavation on public land needs to be identified on the LMPP.
 - No works shall be undertaken without first undertaking detailed survey of services to ensure any infrastructure is identified and protected during the works, e.g. Dial Before You Dig <https://www.1100.com.au/>
 - No work, that includes but is not limited to, excavation (e.g. for services including gas, water, sewer, stormwater, electricity, telecommunications, footings and irrigation) or modification of existing ground levels and placement of site sheds, building materials, equipment, fill or vehicles shall occur within the fenced off tree protection zone (dripline + 2 metres) without prior permission from TCCS Urban Treescapes.
- Prior to commencement of any demolition/construction works that impact the TPZ of Territory Trees the site manager/superintendent of works shall contact TCCS UTS at TCCS.UrbanTreesDDCoord@act.gov.au to arrange an on-site meeting with officers to confirm installed protection measures.
 - Any wash down of tools or chemicals including concrete wash is not permitted within the TPZ or to run off into Territory Land.
 - Any construction activities additional to those documented on plan are prohibited without further approvals.
 - Any damage to the Territory tree, tree roots and surrounding soil which causes the tree to decline, will require replacement of tree and tree surrounds to TCCS standard street tree details at the proponent's expense.

Access around Territory Trees

- Any vehicle access within the TPZ or SRZ of a Territory tree must be approved by UTS.
- An access easement must be installed and include either;
 - a layer of 100mm, non-compaction rock aggregate (100mm or larger) or,
 - mulch with non-compaction boards (rumble boards) installed.
 - Timber battens shall be wrapped around the tree trunks to protect them from accidental strike harm
 - Tree canopy must be tied up to avoid damage from construction vehicles

Tree Protection Fencing & additional Tree protection measures

- Tree protection fencing (TPF) shall be installed prior to any works commencing, including demolition and remains in place until construction works are completed and shall be;
 - continuous 1800 mm high chain wire protective fence, with concrete bases
 - 1.2m from back from the kerb and
 - 600mm inset from driveway /path access, OR
 - around the TPZ (canopy +2m) of any trees or groups of trees which may be impacted by the construction works unless otherwise agreed to in writing by TCCS Urban Trees,

Demolition of old driveway

- All construction work is to be completed prior to excavation and removal of the existing driveway. This is to ensure the tree roots do not dry out before work is completed.
- The canopy area underneath the tree (excluding the footprint of the new driveway) is to be irrigated for a minimum of 6 weeks prior to excavation to encourage new absorbing roots which would reduce the level of stress during root loss.
- To ensure no root damage occurs, the removal of the existing driveway shall be carefully done in small sections and only to the depth of the existing material, so as to not cause damage to tree roots.
- No machinery is to be allowed within the verge and must always stay on the hardscape or road surface during the removal of the old concrete.
- Protect exposed roots from desiccation by lightly watering or covering with hessian which must be kept moist with a watering regime adjusted to seasonal changes.
- Any damage to the tree/ tree roots which causes the tree to decline, will require tree replacement at the developer's expense.

New Driveway excavation within TPZ (Canopy+2m).

- Excavation works within the TPZ of Territory trees is to be carried out in accordance with section 7.6.2 of TCCS AA-REF-04
- The new driveway must be engineered so that excavation does not exceed 175mm.
- The new driveway shall be of 100mm (32Mpa) concrete OR Asphalt over a 75mm sub base as per the **ACT TCCS Municipal Infrastructure Standards MIS 07 - Driveways, Rev 1, Sep 2021 (A26618866).pdf**
- All other construction work is to be completed prior to the removal of the existing driveway and excavation for a new driveway within the TPZ. This is to ensure the tree roots do not dry out before work is completed.
- The canopy area underneath the tree (excluding the footprint of the new driveway) is to be irrigated for a minimum of 6 weeks prior to excavation to encourage new absorbing roots which reduce the level of stress during root loss.
- As most tree roots are in the top 300mm of the soil profile, exploratory works to identify roots

within proposed construction zone must be done by hand trenching or Hydro vac to a depth no more than 150mm in depth on both edges of the proposed verge crossing.

- Hydro excavation works must be carried out with no greater than 1500psi using a fan shaped nozzle and not by direct jet spray activities as these works must not remove the bark from the roots.
- Where tree roots > 30mm are uncovered approval to cut them must be given by UTS.
 - This is a **HOLD POINT** where Urban Treescapes would inspect the site prior to works commencement. Contact TCCS UTS at TCCS.UrbanTreesDDCoord@act.gov.au
 - These large roots are considered structural and must be cut cleanly with equipment specifically designed for this purpose by suitably qualified arborist as per AS4373.
 - Alternative construction methodology may be proposed by UTS, such as bridging over, or under-boring under a large root that would compromise ongoing tree health.
- Exposed tree roots shall be covered immediately with geotextile or hessian fabric and watered regularly to ensure they don't dry out.
- A layer of geotextile fabric must be placed over tree roots and underneath new pavement
- Where root damage has occurred, the canopy area underneath the tree shall be watered post-construction for a minimum of six months, adjusted according to the seasonal conditions.

Infrastructure works within the Structural Root zone (SRZ)& Tree Protection zone (TPZ).

- Service alignments within the TPZ shall be by under-boring to the block boundary unless otherwise agreed in writing by UTS.
- No further excavation within the dripline is supported without consultation with TCCS Urban Treescapes.
- No cut or fill is allowed within the Structural Root Zone (SRZ) as outlined in AS4970. The SRZ is generally (min) 3m radius from trunk.
- The Tree Protection zone (TPZ) (excluding the footprint of the excavation / works area) is to be irrigated prior to excavation to encourage new absorbing roots which would reduce the level of stress during root loss.
- As most tree roots are in the top 300mm of the soil profile, exploratory works may be approved to identify roots within proposed construction zone.
 - Exploratory excavation works are to be carried out by hand-digging or hydro-vac and in accordance with section 7.6.2 of TCCS AA-REF-04.
 - Hand- digging shall be in a radial manner from the trunk outward.
 - Hydro-vac may be used to excavate a narrow trench (10cm wide) on the closest edge of the works to the tree, and only to 300mm depth over the length of the required works.
 - Hydro-vac works must be carried out with no greater than 1500psi using a fan shaped nozzle and not by direct jet spray to ensure works do not remove the bark from the roots.
- Any uncovered tree roots shall be covered immediately with geotextile or hessian fabric and watered regularly to ensure they don't dry out.
- Any uncovered tree roots <30mm which require pruning must be cut cleanly with a sharp instrument and not pulled, ripped or torn out.
- Where tree roots > 30mm are uncovered, approval to cut them must be given by UTS.
 - This is a HOLD POINT where Urban Treescapes would inspect the site prior to works commencement. Contact TCCS UTS at TCCS.UrbanTreesDDCoord@act.gov.au
 - These large roots are considered structural and must be cut cleanly with equipment specifically designed for this purpose by suitably qualified arborist as per AS4373.
 - Alternative construction methodology may be proposed by UTS, such as bridging over, or under-boring under a large root that would compromise ongoing tree health.
- Where works come in contact with tree roots, a layer of geotextile fabric must be placed over roots and underneath any new pavement or infrastructure.
- Where root impact has occurred, the canopy area underneath the tree shall be watered post-construction and adjusted according to the season for a minimum 6mths prior to handover to TCCS UTS.
- Backfill around tree roots will be in accordance with AS 4970 to match finished levels. Where site soil is unable to be re-used, soil to meet MITS-09A Soil Type 4 should be used unless otherwise approved.

Pruning of Territory Trees

Any Tree branch pruning requires prior TCCS Urban Trees approval and must be done by a suitably qualified arborist as per AS4373-2007 'Pruning of amenity trees'.

- The contact person is required to notify UTS TCCS officer email TCCS.UrbanTreesDDCoord@act.gov.au prior to pruning.
- Where practicable, UTS preference is for branches to be tied back by a suitably qualified Arborist during the works for release on completion.
- Maintain the good health of the trees that have had disturbance in their root zone by continual watering, at no time shall the disturbed area be allowed to dry out to the detriment of the trees health.
- Any uncovered tree roots shall be covered immediately with geotextile or hessian fabric and watered regularly to ensure roots don't dry out.

Territory Tree Removal approval

- TCCS UTS do not approve the removal of healthy trees except in extreme circumstances where a well-considered rationale which has explored all alternative options is submitted for approval.
- Any TCCS UTS approval for the removal of a Territory tree will be at the proponent's own cost and

will be replaced with two new trees as per TCCS Offsite works plan Tree planting standards, specification and details at developers own cost.

- Any tree approved for removal requires a public notification period of is sign-posting for a period of 21-days before removal.
- The removal of a tree is a hazardous activity and that dangers may arise that are not readily foreseeable. The Territory recommends that you engage a skilled tree surgeon with appropriate expertise and insurances, and tools (**at minimum a Cert 3 Arborist**)
- Service clearance must be obtained prior to any works within the verge. The Territory will not accept responsibility for any costs arising from the removal of trees by a non-certified person or business engaged by the proponent.
- You will indemnify and undertake at all times to keep indemnified the Territory, its officers, servants and agents against all actions, proceedings, claims and demands which may be brought, made or prosecuted against them for any injury, loss or damage arising out of the tree removals and against all costs, damages and expenses which may be incurred by the Territory, its officers, servants or agents in defending or settling such actions, proceedings, claims and demands.
- The area must be left in a clean and tidy state when work is complete and the stump & sawdust must be removed and surrounding ground to match existing levels
- Any damage to footpaths, kerbs or gutters, other trees and shrubs or any other installations or services contained within open space is to be fully restored to the complete satisfaction of any authorised officer of the Directorate and at no expense to the Territory.
- Please note that where, any damage is suffered to these Territory Tree Assets, UTS assessment is required and potential replacement of trees at like (or agreed) size if removal is recommended.

Verge Reinstatement around Territory Trees

- Verge must be decompacted prior to reinstatement
- Any excavation around tree root zones must be done by hand in a radial manner from the trunk outward to a MAX depth of 25mm
- Reinstate verge soil with a 50/50 mix of Type 2 & Type 3 TOPSOIL as per [MITS-09A-Topsoil-1-0 \(A28771472\).pdf](#) to match finished levels.
- Mulch may be recommended by the arborist and irrigation is to be undertaken for a minimum of six months following any root damage.

Replanting Conditions for Territory Trees

- No works shall be undertaken without first undertaking Dial Before You Digs <https://www.1100.com.au/> to ensure any infrastructure is identified and protected during the works.
- The new tree must be the approved designated street tree species or as agreed with UTS.
- Tree stock that meets the criteria of AS 2303:2018, Tree Stock for Landscape use are to be used.
- The new tree must be planted in accordance with TCCS Standard Planting details as agreed with UTS, as follows;
 - TCCS Standard Street Tree planting detail or,
 - TCCS Cellular /vaulted system planting detail
- The ground surrounding where the new tree is to be planted is to be de-compacted prior to planting.
- There is a 52-week consolidation period prior to the tree being handover to the Territory.
- The developer must contact TCCS via TCCS.UrbanTreesDDCoord@act.gov.au and advise who will be responsible for maintaining the tree during the consolidation period.
- The developer will need to provide a contact name and phone number of the responsible person within the organisation.
- The contact person is required to notify a TCCS at TCCS.UrbanTreesDDCoord@act.gov.au when the tree has been planted to arrange an inspection for acceptance. If TCCS staff are satisfied the tree has been planted in accordance with tree planting details provided, the consolidation period will commence.
- If the tree is in poor condition or dies during the consolidation period, it must be replaced with an advanced tree of the same species.
- The contact person must notify a TCCS officer at the end of the consolidation period to meet on site and ensure the tree is in a healthy condition and all planting conditions are suitable to be handed over to the Territory for ongoing maintenance.

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REV	DESCRIPTION	DATE	DWN	CHK
A	FOR APPROVAL	08.04.22	MD	SK

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CONSULTANT
Place Logic

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LANDSCAPE MANAGEMENT PROTECTION PLAN NOTES

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ISSUE
DEVELOPMENT APPLICATION

REV.
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