

Tree and Tree Root Protection

REFER TO THE NJUG GUIDELINES ON TREE PROTECTION ZONES BELOW

The contractor shall protect, uphold and maintain all pipes, ducts, sewers, service mains, overhead cables, etc. during the execution of the Works. Particular attention must be paid to ensure that no pollutants enter drains as all surface waters drain to the lake. The contractor will be liable for any damage due to any cause within their control and is to pay any charge for making good.

Trees:

Unless instructed otherwise, do not, with regard to existing trees:

- dump soil, spoil, rubbish or materials within 3 metres of the base or beneath the canopy of any tree;
- excavate or disturb the topsoil within 3 metres of the base or beneath the canopy of any tree;
- change the level of the ground within 3 metres of the base or beneath the canopy of any tree;
- mix cement within 10 metres of any tree or shrub;
- attach anything to trees or shrubs;
- store materials or plant within 3m of the base or beneath the canopy of any tree unless suitable protection has been provided to the satisfaction of TRP;
- allow oil spills or other pollutants within 3m of the base or beneath the canopy of any tree.

Particular care must be taken to ensure that no tracked or wheeled vehicles traverse or stand on the roots or under tree canopies; no materials are stored on the roots or under tree canopies without adequate provision as described above; no oil or similar pollutants are spilled onto the roots or under tree canopies; no cranes, lorries or similar plant damage the tree canopy.

Other conditions relating to trees:

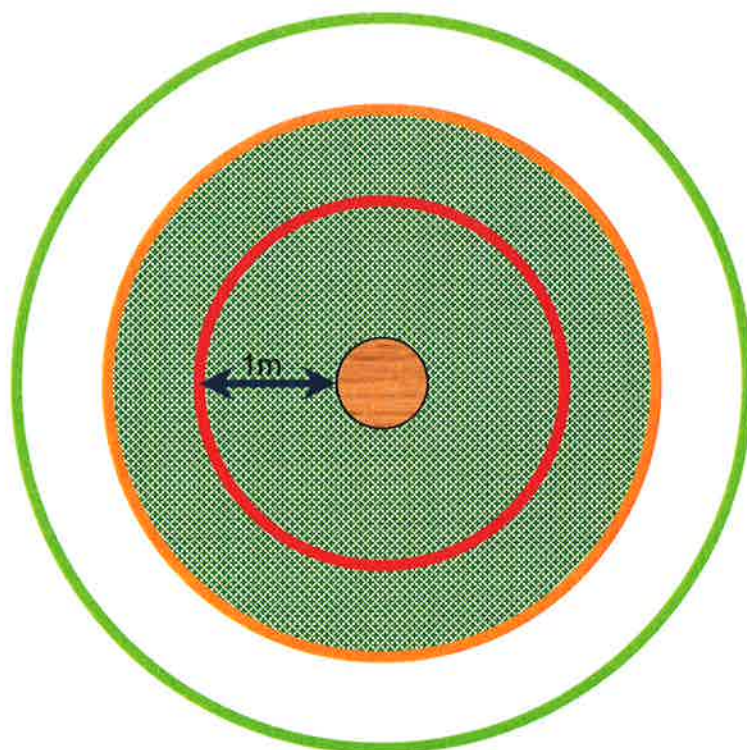
- all excavations and relaying of material beneath the canopy of any tree should be carried out by hand tools only;
- all machinery should be excluded from within 3m of the base or beneath the canopy of any tree unless suitable protection has been provided to the satisfaction of TRP;
- trees within the work site should be fenced off to a distance and with materials specified by TRP;

- all vehicles and machinery, other than necessary consolidation equipment, to be prevented from travelling on any exposed lower surface;
- allowance should be made for the slope of the ground so that materials cannot be washed towards trees. Drainage should be directed away from trees.

Where any tree/shrub has been damaged, the contractor shall provide replacements of suitable approved species and size. Where directed by the Client., the contractor, instead of replacing a damaged tree/shrub, shall arrange suitable remedial surgery to be carried out by an approved tree surgeon in accordance with BS 3998. The contractor shall:

- Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- Take all precautions to prevent pollution of the site, the works and the general environment.
- Take all precautions necessary to protect all existing trees, shrubs, plants, etc. (including the roots) from damage of any nature. No existing tree, shrubs or other plants are to be removed or cut, including roots unless instructed by the Client. All protective precautions must be fully detailed in the contractor's Method Statement and must be agreed with the Client prior to implementation.
- Erect protective fencing around trees, site features or topsoil, maintain in effective condition and remove on completion of the works.

NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 1



TREE PROTECTION ZONE

Key to Diagram



Trunk of Tree



Spread of canopy or branches



PROHIBITED ZONE – 1m from trunk. Excavations of any kind must not be undertaken within this zone unless you have consulted with **The Royal Parks Arboriculturist or Park Manager**. Materials, plant and spoil must not be stored within this zone.



PRECAUTIONARY ZONE – beneath canopy or branch spread. Where excavations must be undertaken within this zone the use of mechanical excavation plant should be prohibited. Precautions should be undertaken to protect any exposed roots. Materials, plant and spoil should not be stored within this zone. Consult **with The Royal Parks Arboriculturist or Park Manager** if in any doubt.



PERMITTED ZONE – outside of precautionary zone. Excavation works may be undertaken within this zone however caution must be applied and the use of mechanical plant limited. Any exposed roots should be protected.

NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 1

DAMAGE TO TREES

Tree roots keep a tree healthy and upright. Most roots are found in the top 600mm of soil and often grow out further than the tree's height. The majority of these roots are very fine; even close to a tree few will be thicker than a pencil. Most street tree roots grow under the footway but may also extend under the carriageway. If roots are damaged the tree may suffer irreversible harm and eventually die.

PROTECTING ROOTS - DO'S and DON'TS

There are three designated zones around a tree each of which has its own criteria for working practices.

THE PROHIBITED ZONE

- Don't** excavate within this zone.
- Don't** use any form of mechanical plant within this zone
- Don't** store materials, plant or equipment within this zone.
- Don't** move plant or vehicles within this zone.
- Don't** lean materials against, or chain plant to, the trunk.
- Do** contact the owner of the tree if excavation within this zone is unavoidable.
- Do** protect any exposed roots uncovered within this zone with dry sacking.
- Do** backfill with a suitable inert granular and top soil material mix as soon as possible on completion of works.
- Do** notify The Royal Parks Arboriculturist or the tree's owner of any damage of any damage.

THE PRECAUTIONARY ZONE

- Don't** excavate with machinery. Where excavation is unavoidable within this zone excavate only by hand or use trenchless techniques.
- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
- Don't** repeatedly move / use heavy mechanical plant except on hard standing.
- Don't** store spoil or building material, including chemicals and fuels, within this zone.
- Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
- Do** backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non highway sites backfill only with excavated soil.
- Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.
- Do** notify The Royal Parks Arboriculturist or the tree's owner of any damage.

THE PERMITTED ZONE

- Don't** cut roots over 25mm in diameter, unless advice has been sought from the local authority tree officer.
- Do** use caution if it is absolutely necessary to operate mechanical plant within this zone.
- Do** prune roots which have to be removed using a sharp tool (e.g. secateurs or handsaw). Make a clean cut and leave as small a wound as possible.
- Do** protect any exposed roots with dry sacking ensuring this is removed before backfilling.



NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees – Issue 1

Do notify the The Royal Parks Arboriculturist or the tree's owner of any damage.