

Trunk Protection

Protective trunk Wrapping:
To be attached to the trunks of retained trees prior to the commencement of all works on site, and retained in place throughout construction. To comprise of a minimum of three wrappings of clean dry hessian around the trunk from ground level up to 2.3m high and held in place using sisal. Onto the hessian a minimum of three wraps of chestnut piling and is to be held in place by 2.50mm mild steel galvanized wire in three locations and fixed into place using fencing staples fixed into the chestnut piling.

Protective hoarding:
To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise of 2.4m wooden site hoarding constructed upon a timber frame work situated around the outside of the planting pit. Where the timber frame is constructed around the tree trunk a minimum of 4 layers of clean dry hessian is to be wrapped around the trunk to protect the bark. All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

Ground boarding

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

Note The ground protection might comprise one of the following:

- for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

For situations other than those described in a) or b), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be able to support the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root function remains unimpaired.

Foundations within RPAs

The use of traditional strip foundations can result in excessive root loss and as such should be avoided. Designs for foundations that would minimize the adverse impact upon trees soil include particular attention to the existing levels, proposed finished levels and cross sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist.

Root damage can be minimized by using:

- Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm;
- Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

Where a slab for minor structures (e.g. shed base) is to be formed within the RPA, it should bear on the existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced ground.

Larger structures (greater than 20% of the total area of the un-surfaced RPA) should be designed and constructed with a ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface. In such cases, a specialist irrigation system should be employed (e.g. roof run-off redirected under the slab). The design of the foundation (pads, rafts) should take into account the effect on the load bearing properties of the underlying soil from the redirected roof run-off. Approval in principle for a foundation that relies on topsoil retention and roof run-off under the slab should be sought from building control authority prior to the approach being relied upon.

Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. sleeve bored piles or screw piles.

Supervised Excavation

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be cleanly severed by the project arboriculturist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth of the excavation may be sheet piled, regular piled or have individual piles installed.

Manual excavation:
Excavations within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturist), whether its for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and or air-spade and then cleared with a shovel and or the aid of an air-spade and air-vac.

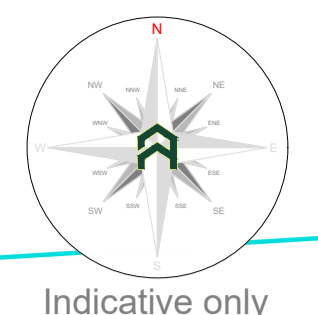
Mechanical excavation:
Excavation within the RPAs will consist of a mixture of mechanical and manual excavation. Where an excavator is used it will be fitted with a suitably sized toothless grading bucket, using a grading / scrapping motion rather than digging. During each motion the excavator will not be permitted to remove no more than 10 - 20mm deep of soil in any one pass. If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue. Any excavator or other machinery that is to be used will be situated outside of the RPAs of all retained trees or on top of a suitable ground protection.

Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

Tree Protection Area
KEEP OUT
Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION.
ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

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Tree Work Schedule

No.	Species	Works	Category
2	Tree of heaven	Fell to ground level; remove stump	U
3	Sycamore	Fell to ground level; grind out stump	C
6	Sycamore	Fell to ground level; remove stump	B

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.
All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

Arboricultural Supervision

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

- Pre-commencement site meeting.
- Location of protective measures.
- Supervised excavations for site investigations and foundations for garden room within and adjacent to the RPAs of tree number 6, including foundations, hard surfacing or underground services (a non-exhaustive list).
- Arboricultural sign off and removal of protective measures.

Arboricultural Method Statement

Please refer to Arbtech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the development may be implemented without detriment to retained trees.

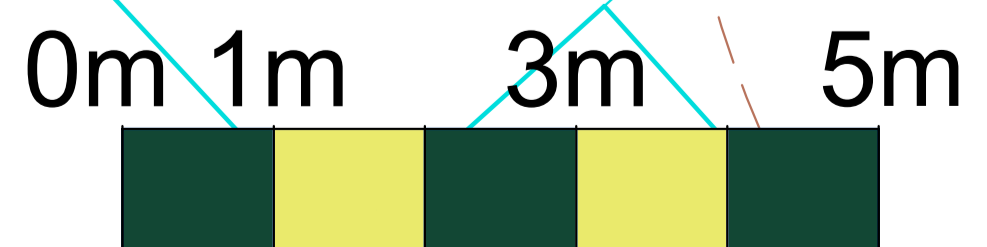
Arboricultural Supervision
Any and all excavations for the proposed foundations (piles, pads, etc.) within and adjacent to the RPA of tree number 6 are to be undertaken under direct on-site arboricultural supervision. The locations of all foundations are to be conformed with arboricultural site investigations prior to the installation.

Ground boarding

Trunk protection

Ground boarding

Note: Larger structures (greater than 20% of the total area of the un-surfaced RPA) should be designed and constructed with a ventilated air space between the underside of the slab and the existing soil surface. A specialist irrigation system is to be installed underneath the slab e.g. rain water runoff from the roof. There are to be no changes of the existing soil levels within RPAs



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Project: 21 Mornington Crescent, London, SW17 7RG.

Client: Mornington Property Investments Ltd.

Drawing: Tree Protection Plan

Based on: 105-GF-DR-200

Drawing No: Arbtech TPP 01 Rev: 1

Date: Mar 2022 Scale: 1:100 @ A1 Drawn: MGM

Key:

Tree Nos. 1	Tree Canopies	Trunks	
RPAs: Category 'U' trees	Category 'C' trees	Category 'B' trees	Category 'A' trees
Category 'C' trees	Category 'C' groups	Trees to be removed	
Existing Site (OS file)	Trunk protection	Ground boarding	Arboricultural Supervision
Excavations			

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing on which this plan is based. This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees. This drawing is not to be read as a definitive part of the engineering or construction design or method statement, or as a substitute for structural engineering or any matters of construction, detailing or specification, and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services. This drawing was produced in colour - a monochrome copy should not be relied upon. © Arbtech Consulting Ltd. 2022