

Tree Categories

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

- Category 'U' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.
- Category 'A' - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
- Category 'B' - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- Category 'C' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category A, B and C trees. This is a minimum area in m<sup>2</sup> which should be left undisturbed around each retained tree.

The RPA is calculated using the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

The calculated RPA is capped to 707m<sup>2</sup>, which is the equivalent to a circle with a radius of 15m. Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction.

**Specification:** To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, which should be attached to a base plate and secured with ground pins.

All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

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

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:

- a) 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;
- b) 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 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.

'No Dig' Surfacing

New hard surfacing to be situated within the RPAs of tree nos. 1, 14 & group G4 is to be designed in conjunction with arboricultural advice to ensure that the construction will be situated entirely above the existing soil level and will not require excavation into the RPAs of the trees. The wearing course should be permeable. The kerb stones will be set above ground level and should be secured with either haunching or steel pins driven into the ground. The outer edge of the supports may be banked up with clean topsoil.

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.

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 / scraping motion rather than digging. During each motion the excavator will not be permitted to removing 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.

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:

1. Pre-commencement site meeting & location of protective measures.
2. Supervised excavations for foundations within the RPAs of tree nos. T4 and T5.
3. Installation of 'No Dig' hard surfacing within the RPAs of tree nos. T1 and T3.
4. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).

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 the development maybe implemented without detriment to retained trees.

**arbtech**

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Project: 43 Higher Road, Liverpool, L25 0QG

Client: Dean Miller

Drawing: Tree Protection Plan

Based on: GBA-HIG-PL-DR-SP-01 Rev A

Drawing No: Arbtech TPP 01

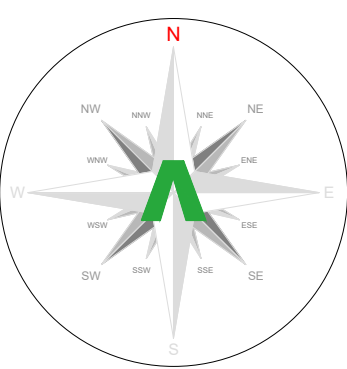
Date: Mar 2023

Scale: 1:100 @ A1

Drawn: AST

|                                           |    |                                           |  |                      |  |
|-------------------------------------------|----|-------------------------------------------|--|----------------------|--|
| Tree Nos.:                                | T1 | Tree Canopies:                            |  | Trunks:              |  |
| RPAs:                                     |    | Category 'B' trees:                       |  | Category 'B' groups: |  |
| Category 'C' trees:                       |    | Category 'U' trees:                       |  | Ground boarding:     |  |
| Arboricultural supervision - Excavations: |    | Arboricultural supervision - 'No Dig' HS: |  | Protective fencing:  |  |

All dimensions should be checked on site. No responsibility is to be taken from this drawing. 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 designs or method statement. An architect or structural engineer should be consulted over 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, 2023



Indicative only

**Note:** No unauthorised excavations are to be carried out within the RPAs of any retained trees. Any level changes must form part of a construction method statement & must protect the rooting environments of all retained trees.

G1

Ground boarding

T1

Protective fencing

43a

'No Dig' surfacing

T2

T3

'No Dig' surfacing

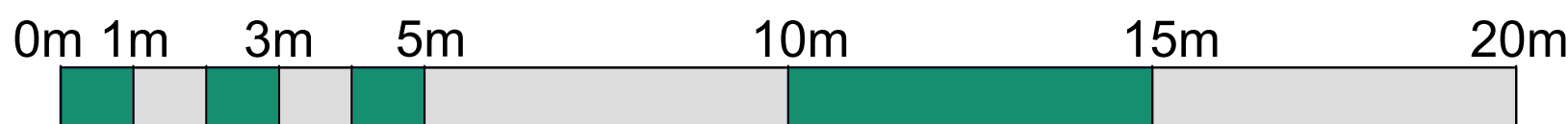
T4

T5

T6

Excavation for access road and wall under arboricultural supervision.

G2



HIGHER ROAD