

**Tree Categories**

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2005 'Trees in relation to 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 of 15m x 15m.

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

V@: (The RPA is 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.)

**Arboricultural Impacts**

Impacts	Nos. of trees
Trees to be removed	0
Groups to be removed	0
Trees with proposed incursions into RPAs	3
Groups with proposed incursions into RPAs	0
Trees that will require pruning	0
Groups that will require pruning	0

**Arboricultural Impacts**

No.	Species	Proposed structure	Incursion
1	Common Lime	Extension	5.3% of RPA
5	Horse Chestnut	Extension	3.2% of RPA
7	Common Ash	Extension	2.7% of RPA

**No. of Trees to be Removed**

U	A	B	C
0	0	0	0

**Arboricultural Method Statement**

All tree work is to be undertaken in accordance with British Standard BS 5837:2012. Please refer to Arbtech Consulting Ltd. Tree Schedule, Arboricultural Method Statement and Tree Protection Plan, for full details on all surveyed trees and how all aspects of the development may be implemented without detriment to retained trees.

**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 should 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 determine 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 piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of sinking 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. sleeved bored piles or screw piles.

The information is compliant with British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations', section 7.5 'Special engineering for foundations within the RPA'.



Project:  
13 Regents Park Road,  
Camden,  
London,  
NW1 7TL

Client:  
Mr Anthony Parsons

Drawing:  
Arboricultural Impact Assessment

Based on:  
Planning Proposal

Drawing No:  
Arbtech AIA 01

Date: Nov 2014    Scale: 1:50 @ A1    Drawn: AST

Key:

Tree Nos.:	1	Tree Canopies:	(Green outline)	Trunks:	(Black circle)
RPAs:	(Red dashed line)	Category 'B' trees:	(Blue circle)	Category 'C' trees:	(Grey circle)
Incursions:	(Purple hatched area)				

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please verify all dimensions before construction. 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 used as a definitive part of the engineering or construction design or method statement. An architect or structural engineer should be consulted over any matters of construction, detailing or specification and any standards or regulatory requirements relating to proposed structures, load carrying or underground services.

This drawing was produced in colour - a monochrome copy should not be relied upon.

Arbtech Consulting Ltd. 2014

**Issue:** Proposed new build extension is partially situated within the RPA's of trees nos. 1, 5 & 7.  
**Solution:** Foundations are to be designed to an engineering specification in conjunction with arboricultural advice

**Issue:** Section of existing building to be demolished is partially located within the RPA's of trees nos. 1, 5 & 7.  
**Solution:** Demolition of foundations is to be carried out under arboricultural supervision.

