

Arboricultural impact analysis

TREES

at and adjacent to

**132 Fellows Road
London
NW3 3JH**

for

Dr J Reneby

Skerratt

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1. Introduction

- 1.1 This report contains a detailed appraisal of 3 trees or tree groups standing within or adjacent to the property boundary of 132 Fellows Road, London NW3 3JH in relation to the erection of a proposed free-standing, single storey garden room.
- 1.2 The report considers the health and safety of the trees under their current growing conditions and sets out the constraints that should be observed in planning and implementing the proposed development, measured against the advice and guidance set out in *BS5837 2012: Trees in relation to design, demolition and construction – Recommendations*.
- 1.3 The site inspection for the tree survey on which this report is based took place on the afternoon of Wednesday 08 July 2015 in dry, sunny conditions.
- 1.4 This report was commissioned by the client in an email dated 01 July 2015
- 1.5 I have been provided with the following drawings in digital (dwg) format:
 - Jimeno Pillado Drawing No. FR/1 – Site Plan as existing and proposed
- 1.6 The **Tree constraints plan** in **Appendix a** is based on this drawing, and on additional measurements on site.

2. Background information

2.1 Site layout, boundaries and topography

- 2.1.1 132 Fellows Road stands in a narrow rectangular plot with its longer axis running roughly north to south.
- 2.1.2 The rear garden, in which it is proposed to erect the garden room referred to in 1.1 above, is level and at one level except at its northern end where a roughly 5000mm deep and 250mm high terrace has recently been constructed, across the full width of the garden.
- 2.1.3 The terrace has been formed of uncompacted soil with quite a high proportion of larger aggregate size material (small stones and wood fragments) retained by railway sleepers laid on edge, and is the proposed location of the garden room.
- 2.1.4 Before the terrace was constructed the ground sloped gently upwards towards the rear garden boundary wall. The general level at the base of the rear boundary wall is unchanged.
- 2.1.5 Brick walls of varying heights (between 1200 and 1600mm) run along the rear and side boundaries of the rear garden.
- 2.1.6 The **Tree constraints plan** in **Appendix a** shows the existing layout in the immediate vicinity of the proposed development.

2.2 Geology and soils

- 2.2.1 According to British Geological Survey (BGS) open-source data, the plot is located on deep Palaeogene London Clay bedrock.
- 2.2.2 No soil sampling was carried out on site

2.3 Planning constraints

- 2.3.1 The site is within the London Borough of Camden Belsize Conservation Area.
- 2.3.2 At time of writing it is not known if any of the trees that are the subject of this report are covered by a Tree Preservation Order (TPO)

2.4 The trees

- 2.4.1 The **Tree survey schedule** in **Appendix a** describes the 3 trees or tree groups referred to in this report, in detail.

2.5 The proposed development

- 2.5.1 The principal elements of the proposed development referred to in this report are:
- The construction of a single storey garden room from prefabricated panels on pad foundations

3. Analysis

3.1 General

3.1.1 The **Tree constraints plan** in **Appendix a** shows the RPA for Elm group T001 and Sycamore T002 arranged symmetrically around each stem or group of stems and highlights the primary potential area of conflict between proposed development and retention of existing trees, namely conflicting demands for space at and below ground level.

3.2 Trees to be removed

3.2.1 No trees are to be removed to enable the development to be carried out.

3.3 Trees to be retained

3.3.1 Leyland Cypress trees T003 are unlikely to be significantly affected by the proposed development and it would be prudent to reduce the height of each one and clip its foliage to a vertical face on a regular basis in order to maintain the low-level screen that, together, they provide. In view of their age and size and the partial barrier effect of the rear garden boundary wall, I have given them no further consideration in this analysis.

3.3.2 With regard to Elm group T001 and Sycamore T002, the footprint of the proposed garden room is partly within the RPA of the former and wholly within that of the latter.

3.3.3 The building will, however, be founded on 250mm deep, 250x250mm square pad foundations arranged in a grid at approximately 1200mm centres. There is some flexibility in the exact locations of individual pads, which may be pre-cast or cast in-situ.

3.3.4 Bearing in mind that the level of the recently constructed terrace on which it is proposed to erect the garden room, is 250mm above the general level of the garden, most of the proposed pad foundations will be located entirely within the (root-free) fill referred to in 2.1.3 above.

3.3.5 With regard to the likely impact of the construction of the terrace itself, I do not consider that this is likely to have a significant adverse effect upon any of the trees referred to in this report. In making this judgement I have taken into account the species, age and capacity for suckering (producing new shoots from the root system) of Elm group T001, the physical composition of the fill that has been used to create the terrace, its depth in relation to the previous ground profile at the northern end of the rear garden and the partial barrier effect of the rear garden boundary wall.

3.3.6 It is possible that excavation below original ground level may be required to construct some pads but, if roots are encountered, it will be possible to move individual pad locations to avoid damaging them.

- 3.3.6 The roots of Sycamore T002 will have had to pass beneath the foundations of the rear garden boundary wall to enter the area of the proposed footprint and it is probable therefore that in its (the wall's) proximity, larger diameter roots will be at a deeper level than might otherwise be the case if the tree were within the property boundary of 132 Fellows Road.
- 3.3.7 With regard to the garden rooms's superstructure all the sections will be brought in by hand as there is no vehicular access to the rear garden of 132 Fellows Road.

4. Conclusions.

- 4.1 Taking into account the factors discussed above, I consider that, as long as unnecessary disruption is avoided, the proposed development referred to in this report can be achieved without material adverse impact upon nearby trees.
- 4.2 Appropriate tree protection measures and working practices are set out in the Arboricultural Method Statement (AMS) accompanying this report and this must form part of the construction contract.

Appendix a
Tree survey schedule
Tree constraints plan

Explanatory notes

For general information on any entry in the detailed survey text, refer to the notes below which are organised on a column by column basis.

Tree number

All trees have been numbered in the survey text to correspond to the location numbers shown on the accompanying Tree Survey Plan. No trees have been marked on site.

Species

Common English names have been used wherever possible and Latin names are listed (in brackets in *italics*) in all cases.

Dimensions

Height - are recorded in m.

Stem diameter – recorded in mm at breast height (1.5m) wherever possible. Where measurement at 1.5m is not possible, one of the alternative methods set out in *Annex C of BS5837:2012* has been used.

If the diameter has been measured at a different height, this has been recorded, e.g. 60 @ 1m = 60mm diameter at 1m height.

Other abbreviations used:

av - average

est/e - estimated

ms - multi-stemmed

max – maximum

gl - ground level

Crown spread - radial crown spreads in metres have been recorded at four points on the circumference of the crown (north, east, south and west). The accompanying Tree survey plan shows approximate crown shapes based on these measurements

Crown height - the height of the first major branch and the height of the lowest point of the crown are recorded in metres eg 3/3

Explanatory notes

Age

Y	Young	SM	Semi-mature
EM	Early mature	M	Mature
OM	Over-mature		

Where the precise age of a tree is known, it has been recorded in brackets adjacent to the general classification i.e. M(7).

Condition

Physiological condition

Gives a measure of biological vigour and of the presence or absence of disease, insect attack or other debilitating factors.

G	Good
F	Fair
P	Poor

Structural condition

Gives a measure of each tree's physical form and mechanical stability.

G	Good
F	Fair
P	Poor

Comments

See also **discussion** and **conclusions** in the accompanying report.

Explanatory notes

Recommendations

Preliminary management recommendations under existing conditions

Life expectancy

An approximate estimate for each tree's anticipated future safe life in the following ranges:

- <10 years
- 10-20 years
- 20-40 years
- 40+ years

Retention category

This grading is based on the recommendations set out in BS 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. The categories are summarised in the standard as follows:

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

In addition the British Standard requires one or more subcategories to be applied to the main Retention Category. In summary these are as follows:

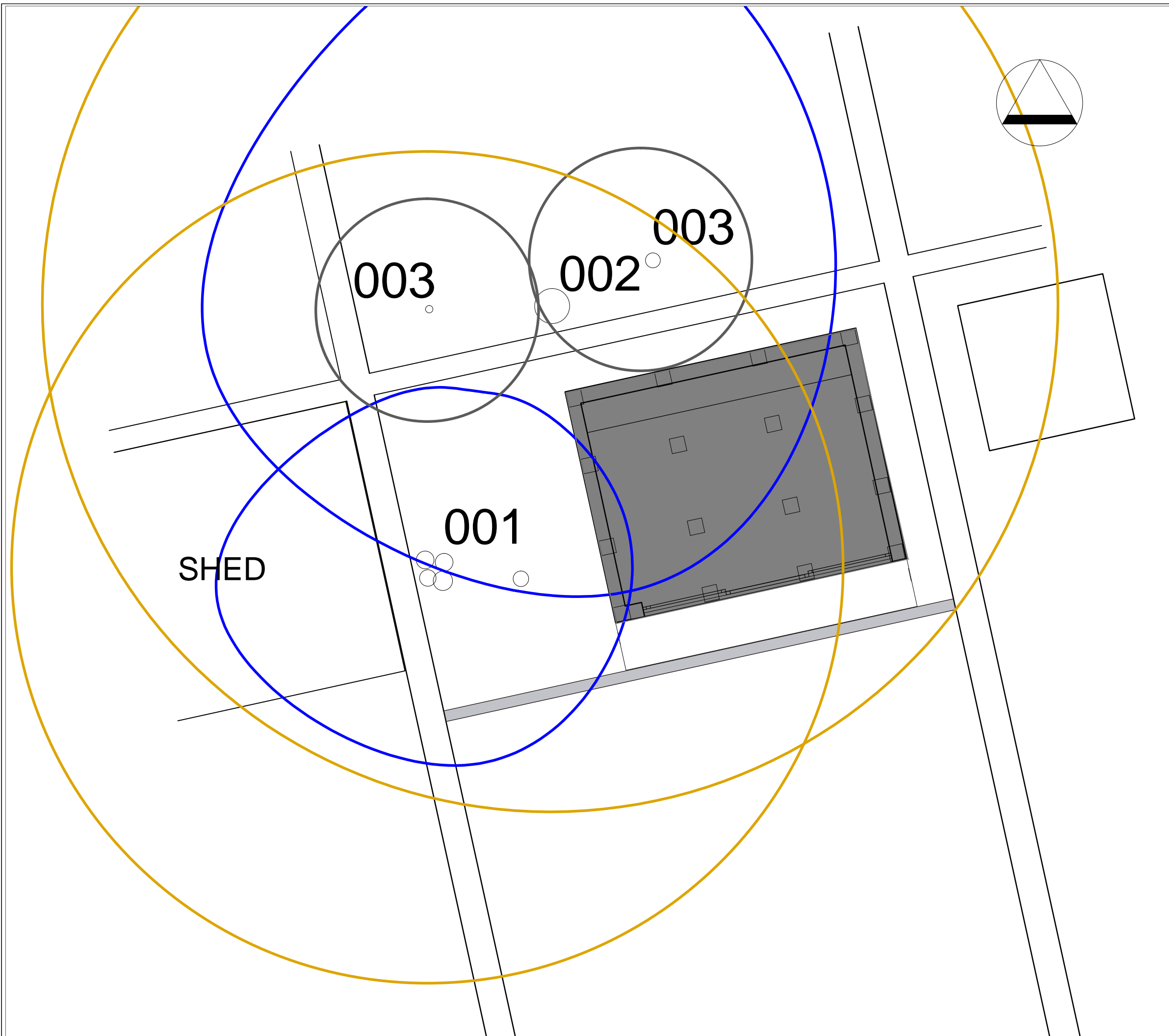
1. Mainly arboricultural qualities (that is individual aesthetic characteristics)
2. Mainly landscape qualities
3. Mainly cultural values, including conservation

Tree survey schedule

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Tree No.	Species	Height (m)	Diam (mm)	Crown Spread (m)				Crown Height (m)	Age	Physiological Condition	Structural Condition	Comments	Recommendations	Life Expectancy	Retention Category	Retention Sub-category
				N	E	S	W									
001	English Elm (<i>Ulmus procera</i>)	13	210/ 220/ 240/ 240/ 260	3	2	3	3	4/5	SM	G	G	A clump of 5 stems on a common root system: well balanced crown	No action required	20-40	B	1
002	Sycamore (<i>Acer pseudoplatanus</i>)	19	570	3	4	4	4	5/6	M	G	G	Single upright stem: high quite well balanced crown: stands close to a brick boundary wall in an adjacent garden	No action required	40+	B	1
003	2 x Leyland Cypress (<i>X Cupressocyparis leylandii</i>)	7	100/ 200	2	2	2	2	2/2	Y	G	F	Two young single stemmed trees, the remnants of an overgrown hedge: stands close to the boundary wall in an adjacent garden	No action required	20-40	C	2

Client: Mr J Reneby
 Location: 132 Fellows Road NW3 3JH
 Date: 25.06.15
 Job No.: 377

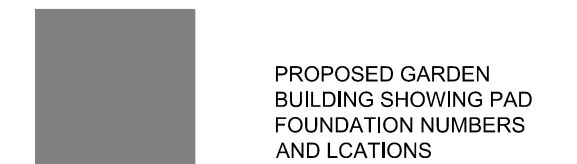
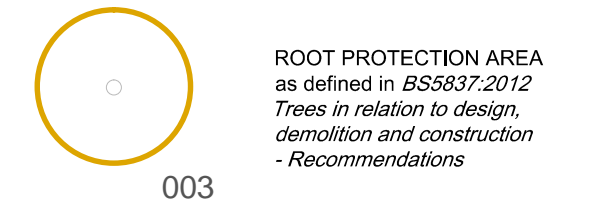


KEY



Trees are coloured on plan to correspond to the Retention Categories specified in:
BS5837:20 12 Trees in relation to design, demolition and construction - Recommendations as follows:

- Category A - GREEN
- Category B - BLUE
- Category C - GREY
- Category U - RED



REVISION	CHK'D	APP'D	DATE
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Client:
MR J RENEBY

Job Title:
**132 FELLOWS ROAD
 LONDON
 NW3 3JH**

Drawing Title:
TREE CONSTRAINTS PLAN

Drawing Number: 384.01.00	Scale: 1:50 (A3)
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Date: 15.07.15	Drawn by: RS
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 arboricultural advice

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