

## FURTHER INVESTIGATION REPORT:

42 Avenue Road

London

NW8 6HS

# **REPORT PREPARED FOR:**

Greenmantle Woodfield Nurseries Cool Oak Lane London NW9 7NB

# **REPORT PREPARED BY**

Adam Hollis

MSc ARB MICFor FArbor A MRICS C Env

Ref: GMT\_42AVR\_PCS\_01a Date: 12<sup>th</sup> September 2016

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# Site Details:

Site Address: 42 Avenue Road, London, NW8 6HS

Client: Greenmantle

Surveyor: Kim Dear

Date of Inspection: 20th June 2016

#### Instruction:

Carry out Resistograph Decay detection on the main stem of various species at the above address.

#### Tree 1 . Species: Common Ash (*Fraxinus excelsior*)

Height: 19m Diameter at 1.5m above ground level (agl) 610mm

#### **General Observations:**

The Tree is situated in a raised bed in the front garden of the property. The building is 2 metres to the northeast, with the property boundary 1 metre to the west. A new driveway was laid within 1 metre of the tree 5 years ago, and the soil levels were changed at the same time. There is some apical dieback, and sparseness in the crown, most likely caused by the disruption to the root system. The stem of the tree appears structurally sound, with no sign of fungal brackets.



Picture 1.

## **Resistograph Tests:**

The Resistograph is a Drilling instrument that probes the tree with a micro drill with a 3mm tip and a 1.5mm x 400mm shaft; this can penetrate to a depth of 40cm. As the probe advances it measures the resistance encountered. Good healthy wood gives a high reading and poor dysfunctional wood or cavity gives a lower reading. The readings are shown in appendix 1 below.

1 Resistograph readings were taken:

Direction	Height of Test	Result
Tree 1. Ash	20cm east	Good wood
Tree 2. Silver Birch	30cm north	Good wood
Tree 3. Cedar	Not tested	
Tree 4. Sycamore	45cm north	Good wood
Tree 5. Ash	Not tested	
Tree 6. Lime	10cm north	Good wood

## **Conclusion:**

The structural integrity of the ash tree (T1) is fine, although the recent excavations may affect its long-term viability. There are currently no signs of overwhelming decline.

#### **Recommendations:**

Re-inspect annually for next 3, or if the tree shows signs of progressive deterioration. Review inspection period after 3 years, if no recommendation to fell.

Tree 2. Species. Downy Birch (Betula pubescens). Height 15m, Diameter at 1.5m agl 300mm.

This tree is identified as T12, on an original 2005 survey (see Appendix).

<u>General observations</u>: The tree is situated in the back garden of the property. There is deadwood in the crown, with some apical dieback. There are two galls at 2 metres above ground on the main stem, occupying more than 75% of the circumference, with substantial decay: a c. 10cm diameter column running down the stem (offset slightly north of centre) through the northern gall. There are further bark wounds and decay at ground level. The roots have been cut by excavation works to create subterranean accommodation 1 metre from the tree.

<u>Conclusion</u>. Although the decay in the gall does not necessarily exceed safety thresholds (max. 70% of radius), the overall picture is one of multiple dysfunction: substantive decay in stem and roots: the latter evinced in the crown dieback. Galls can also cause structural problems when occupying more than 75% of the tree's girth. Root disturbance so close to the base has caused the tree to rapidly decline, and undermined its stability. The tree is a relative short-lived, pioneer species with little investment in defence mechanisms.

**Recommendation.** Fell, and plant a replacement in a more suitable (boundary) position.



Tree 2.

Tree 3. Species. Cedar Deodar (Cedrus deodara) Height 9m. Diameter at 1.5m agl 285mm.

This tree is identified as T6 on the original survey.

<u>General Observations</u>: This is a semi-mature tree that shows no signs of distress, apart from being suppressed by the adjacent sycamore, which has made the crown unbalanced.

**Recommendation:** This still young tree is not really suitable for the location, and so might be felled and replaced with a more suitable species / specimen in an appropriate position. Alternatively, the dominant sycamore T4 (see below), suppressing its crown could be felled to favour the cedar, but this would entail felling a more mature tree, which might attract local opposition. Were the cedar kept, it would lend itself more than the sycamore to progressive lifting of the canopy (removal of lower branches) to avoid plunging the immediate garden into gloom.



Tree 3 and 4 (left & right, respectively).

Tree 4. Species. Sycamore. (Acer pseudoplatanus). Height 15m. Diameter at 1.5m agl 500mm.

This tree is identified as T8 on the original survey.

**General Observations:** This tree has a large bark wound at ground level, with some signs of decay. There are numerous old pruning wounds on the stem. The crown appears fine, with leaf and bud as expected for the species. As stated above, it is suppressing the younger cedar (T3) and lawn.

**Recommendation:** This tree is again not ideal for the location, and though in this case mature, could be felled and replaced with a more suitable / ornamental species to allow more light into the garden, and so promote the cedar and lawn. The local authority and freeholders are likely to require more concrete reasons for allowing the felling of a mature tree, and due consideration of pruning / thinning the canopy may be a more realistic expectation.

<u>**Tree 5. Species.**</u> Common Ash. (*Fraxinus excelsior*). Height 23m. Diameter at 1.5m agl 2x 500, 1x 400mm. This tree is identified as T10 in the original survey.

<u>General Observations</u>: This is a large mature tree, trifurcated at 0.5metre. There is substantial deadwood throughout the crown, and a large limb over the neighbouring property. There is also a substantial limb in contact with the building. The stems have no signs of fungal brackets. The excavations for the property extension are 4 metres from the stem, and could have caused the dieback.

**<u>Recommendation</u>**: Remove all deadwood throughout the crown, and reduce the crown from the building and over the adjoining property by 2-3m.



Tree 5.

Tree 6. Species Common Lime (*Tilia europea*). Height 5m. Diameter at 1.5m agl. 250-400mm.

These trees are identified as T16-19 on the original survey.

<u>General Observations</u>: These comprise a line of 4 pollarded Lime trees, planted in the very narrow passageway between number 42 and the neighbouring house. T17 and T18 have been reported to us (by Modern Arrboriculture) as having cinder fungus (*Kretzschmaria deusta*) on their lower stems, and certainly have a consistent residue at the base (see photo below), though no fungus apparent at the time of our visit.



Tree 6.



Tree 6 contd..

**Recommendation.** The Resistograph reading indicates that the stems (if not roots) are currently sound. However in the light of their unsuitable location, reports of the cinder fungus suggest that removal and replacement with a more suitable species in a more suitable location should be considered. If a new landscape proposal is being put forward and there is to be a clear out of unsuitable trees, then it would make sense to tackle everything at one stroke.

All work to be carried out to BS3998(2010), tree work, by a fully qualified and insured arborist.

#### Note on Readings

Both the birch and lime Resistograph traces below, show an apparent cavity at 30-35cm, this is not the case, as the drill had actually passed right through both stems.

Appendix



NORTH
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07818 033000 - 07748 651912
Email — sallie.tillett@btopenworld.com — fran_walton@yahoo.co.uk
Rev D 04/05/05 AMC outline of proposed basment development reduced and layout of protective fence amended in accordance with aborologists comments
Rev C 02/03/05 AMC Tree locations coordinated with Architects drawings Rev B 20/1/05 AMC outline of proposed basment development and centres of all trees shown in accordance with planners comments
Client: Citicorp Trustee Co Ltd
Project: 42 Avenue Road London NW8 6HS
Drawing Existing Tree and Shrub Survey
date 2nd March 2005 Scale 1:100 (A1)
drg. no. AV42L/01 Rev. D drawn by SAT

Measurement no.	: 17	Needle speed	: 2500 r/min	Diameter	:
ID number	: 42 AVENUE BIRCH30N	Needle state	:	Level	: 30,0 cm
Drilling depth	: 40,00 cm	Tilt	:	Direction	: North
Date	: 20.06.2016	Offset	: 87/289	Species	: Birch
Time	: 14:32:44	Avg. curve	: off	Location	: 42 Avenue
Feed speed	: 100 cm/min			Name	: Kim Dear



#### Assessment

From	0,1 cm	to	2,7 cm	Bark
From	2,7 cm	to	30,8 cm	Good wood
From From From From	0,0 cm 0,0 cm 0,0 cm 0,0 cm	to to to	0,0 cm 0,0 cm 0,0 cm	Cavity

Comment





# Assessment From 0,1 cm to 1,6 cm : Bark From 1,6 cm to 18,9 cm : Good wood From 18,9 cm to 20,2 cm : Crack From 20,2 cm to 39,9 cm : Good wood From 0,0 cm to 0,0 cm : Arboi From 0,0 cm to 0,0 cm :

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#### Comment





#### Assessment

Arbo	From From From From From From From	0,0 cm 2,9 cm 37,5 cm 0,0 cm 0,0 cm 0,0 cm	to to to to to	2,9 cm 37,5 cm 39,9 cm 0,0 cm 0,0 cm 0,0 cm	Bark Good wood Decay
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Comment



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Measurement no.         : 20         N           ID number         : 42 AVENUE ASH20E         N           Drilling depth         : 40,00 cm         T           Date         : 20.06.2016         O           Time         : 14:52:18         A           Feed speed         : 100 cm/min         A	Needle speed : 2500 r/minNeedle state :Tilt :Offset : 69/266Avg. curve : off	Diameter : Level : 20,0 cm Direction : East Species : Ash Location : 42 Avenue Name : Kim Dear
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From	0,0 cm	to	2,9 cm : Bark
From	2,9 cm	to	39,8 cm : Good wood
From	0,0 cm	to	0,0 cm :
From	0,0 cm	to	0,0 cm :
From	0,0 cm	to	0,0 cm :
From	0,0 cm	to	0,0 cm :

Arbo Prep

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