



## **TREE INSPECTION REPORT** **14 Eton Road, London, NW3 4SS**

**Report by Robert Toll**  
*HND Urban Forestry*

and

**Dr Martin Dobson**  
*BSc (Hons) Biol, DPhil, FArborA, MEWI*  
*Registered Consultant of the Arboricultural Association*

On the instructions of Mr Robert Leeming

*27<sup>th</sup> July 2018*

MDA reference K07



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## 1. Introduction

- 1.1 Martin Dobson Associates Ltd was instructed by Robert Leeming on 20<sup>th</sup> July 2018 to carry out a safety inspection of one False acacia tree at 14 Eton Road, London, NW3 4SS.
- 1.2 The purpose of a tree safety inspection is to determine whether a tree poses an unreasonable risk to people or property. Trees are not usually hazardous simply because of their size. But trees may be predisposed to failure as a result of recognisable hazardous features including, for example, root damage, cracks or cavities in the trunk, the presence of fungal fruiting bodies which may indicate internal decay, weak forks, break-out cavities and abrupt bends in branches. The industry standard tree inspection procedure is known as Visual Tree Assessment (VTA) and involves examining a tree from ground level to detect possible weaknesses. If necessary this may be supplemented by tapping the trunk or buttress roots with a sounding mallet to assess the possible presence of internal decay.
- 1.3 The principles of Visual Tree Assessment are discussed in *Principles of Tree Hazard Assessment and Management* by David Lonsdale (Research for Amenity Trees No. 7, Forestry Commission, 1999) and have been incorporated into a Practice Guide issued by the Forestry Commission in 2000 entitled *Hazards from Trees - A General Guide*. The National Tree Safety Group has issued guidance on tree management and inspections in their publication entitled *Common sense risk management of trees* (NTSG 2011). All of these publications have contributed to the procedure adopted by Martin Dobson Associates for VTA tree safety inspections. An extract from a Forestry Commission leaflet now out of print is provided at Appendix **MD1** and illustrates the features assessed which are indicative of a potential hazard.

## 2. Tree inspection

- 2.1 Robert Toll inspected the tree from ground level unaccompanied on 26<sup>th</sup> July 2018 and the details of the survey are appended at **MD2**. The site plan showing the tree is appended at **MD3**.
- 2.2 Tree diameter was measured using a diameter tape. Tree height was measured using an electronic height measurer. Where appropriate, a nylon mallet was used to 'sound' the tree stem for the presence of significant decay or patches of bark death. Similarly, binoculars were used where necessary to inspect features high in the tree crown and a probe was used to investigate the depth of any cracks. No samples were taken from the site.
- 2.3 The local planning authority (LPA) has not been contacted to ascertain whether the tree is protected by a Tree Preservation Order (TPO) or if it is within a Conservation Area.
- 2.4 The False Acacia T1 has been plotted on the site plan at **MD3**.

T1 viewed in a north-westerly direction from Eton Road.	T1 viewed in southerly direction from Eton Road. Heavily asymmetric form in south-westerly direction.
	

- 2.5 T1 was found to be a heavily asymmetric specimen which has a circa 30 degree lean in an easterly direction, which is over a busy residential street. The overall vitality of T1 was deemed to be low - moderate which was demonstrated by sparse foliage density and retrenchment of the canopy below about 7m. The loss of vitality may in part be due to the presence of Honey fungus (*Armillaria* spp.) which was identified by bootlace-like rhizomorphs growing up around the buttressing, lower stem and within an opening on the south-western side of the main stem. Honey fungus generally affects the roots and lower stem by killing the cambial layer thus reducing the host tree's ability to transport water and nutrients. If Honey fungus has been



affecting a host tree for some there is a high chance of wind throw due to decay within the roots and lower trunk.

T1 viewed from north-westerly direction. The retrenchment of the canopy can be seen centrally in the photo.	Bootlace like rhizomorphs on the lower stem of T1.
	

- 2.6 On the south-western side of the main stem there is an opening between ground level and about 900mm which has a brown rot decay cavity. Brown rot on False Acacia's can often be attributable to the fungus *Laetiporus sulphureus* however other brown decay fungi cannot be ruled out. I was unable to see any fungal fruiting bodies during my visit so it was not possible to identify which fungus is responsible for the decay.

Opening on lower main stem with brown rot decay fungus.	Probing of opening revealed a depth of circa 120mm.
	

- 2.7 A core sample was taken from the southern side of the main stem at circa 600mm above ground level. Whilst extraction of the core proved difficult, it was possible to determine that there is a cavity within the centre of the main stem at a depth of circa 300mm. The wood within the outer ring appeared to be sound for about 300mm. This suggests that the threshold for tree safety has not been breached (trees are generally regarded as posing no unreasonable hazard provided that decay does not exceed two-thirds of the trunk diameter). In this case decay is considerably below that threshold (stem diameter 662 mm).

Remnants of core sample which indicated that there was sound wood of up to 300mm on the southern side of the main stem at circa 600mm above ground level.



- 2.8 I have been informed that the tree owner does not wish to see T1 removed unless it is absolutely necessary.
- 2.9 Taking into account the location of T1, within falling distance of a busy residential road, and its overall structural and physiological condition, I am of the opinion that it is a potential danger but that it can be retained as long as remedial works are carried out. The works would aim to reduce the overall size of the tree to minimise the 'sail area' and risk of failure which, in my opinion is high due to the asymmetric form, coupled with the presence of decay. As such I recommend that T1 is reduced in height by about 4m and the south-eastern radial spread reduced by 3m. These works will result in a final height of circa 9m and a south-eastern radial spread of circa 4m.
- 2.10 It is recommended in the interests of good arboricultural practice that trees are inspected regularly enough to detect any recent changes in health or structural stability that have taken place and that the interval of those inspections does not exceed 3 years.
- 2.11 The observations and recommendations contained in this report remain valid for one year.

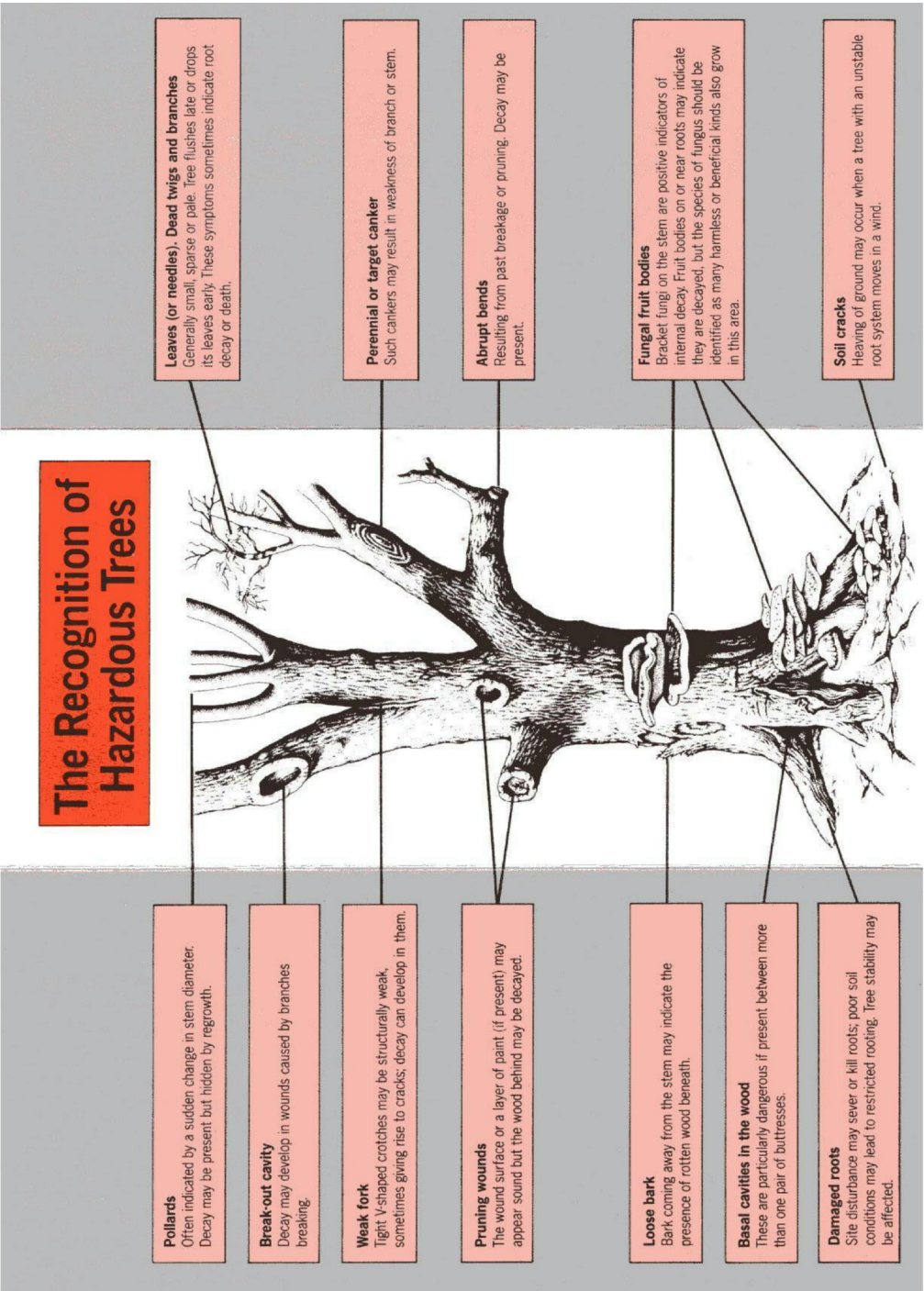
### **3. Conclusions and recommendations**

- 3.1 An inspection of a False acacia tree at 14 Eton Road, London, NW3 4SS has been carried out.
- 3.2 The False acacia T1 requires reduction works to be carried out its height and south-eastern radial spread in order to minimise the risk of failure. The tree should also be deadwooded.
- 3.3 Prior to any works being undertaken the local planning authority should be contacted to ensure that T1 is not covered by any statutory protection (Tree Preservation Order or Conservation Area).
- 3.4 T1 should be inspected regularly enough to detect any changes in health or condition (usually annually) and at an interval not exceeding three years.
- 3.5 This report, its observations and recommendations, remains valid for one year.



APPENDIX MD1

Recognition of Hazardous Trees. Published by Forestry Commission but now out of print.

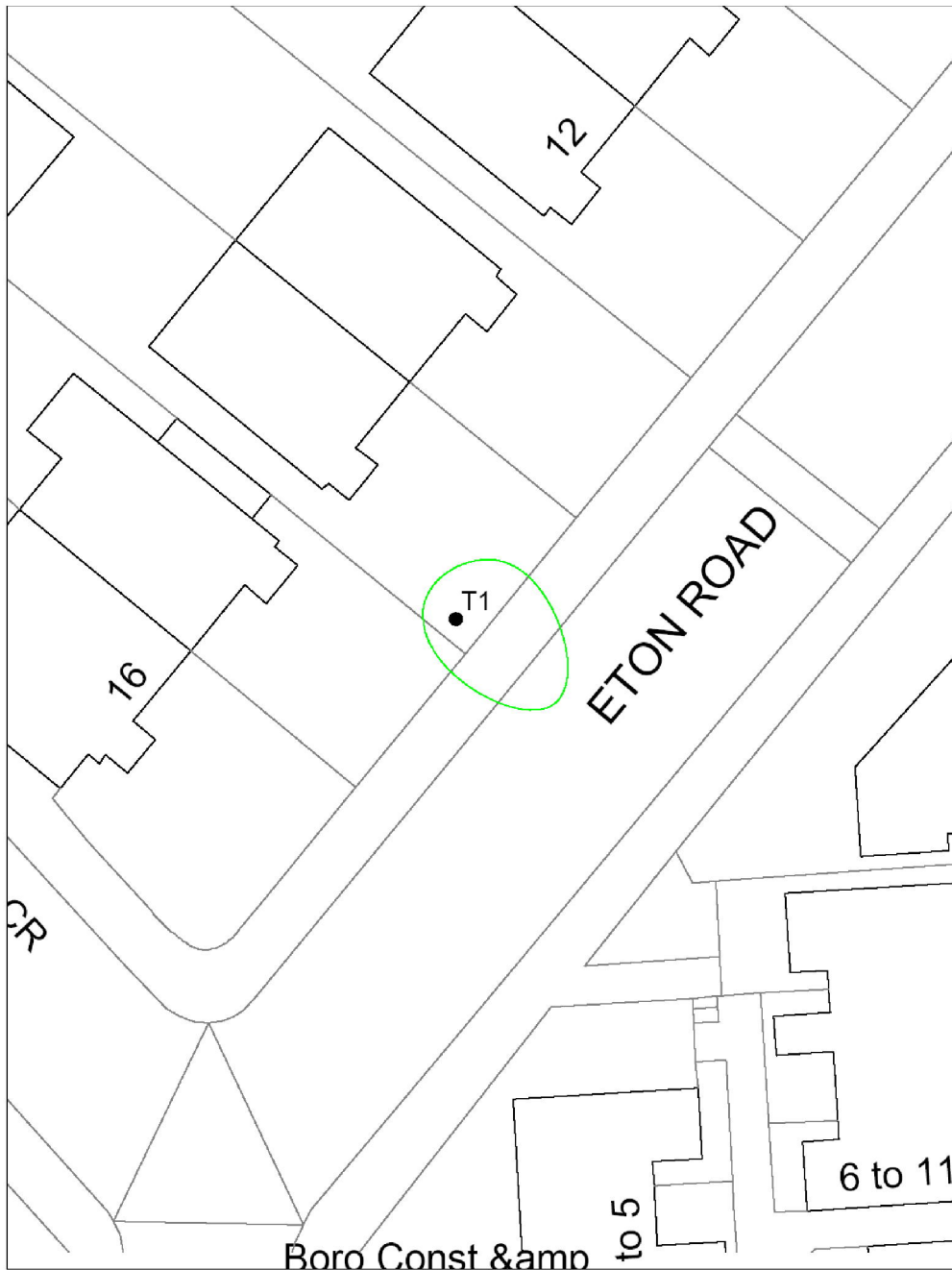


**APPENDIX MD2**  
**Schedule of tree inspected**

No.	Species	Height (m)	DBH (mm)	Crown Spread				Age Class
				N	E	S	W	
T1	False Acacia ( <i>Robinia pseudoacacia</i> )	c13	662	4	7	2	2	M
Weather:	Sunny, calm		Surveyed by:			Robert Toll		
Observations/Findings								
<p><b>General observations of Form and Vitality</b></p> <ul style="list-style-type: none"><li>• Heavily asymmetric canopy form in an easterly direction.</li><li>• Low-moderate vitality demonstrated by distal dieback and less than normal leaf density throughout canopy.</li></ul> <p><b>Canopy</b></p> <ul style="list-style-type: none"><li>• Reduced leaf density above c7m and apparent canopy retrenchment happening below c7m.</li><li>• Typical moderate sized deadwood 25 to 100mm throughout canopy.</li></ul> <p><b>Main Stem(s)</b></p> <ul style="list-style-type: none"><li>• Spiralling wound visible on southern side of main stem at c7m to c1m on the eastern side with no decay present – width &lt;125mm.</li><li>• Lower stem between ground level and c1.5m bulges in a manner consistent with bottle butt which is likely due to decay in the centre of the lower main stem.</li><li>• Opening with moderate brown rot decay on the south-western side of the main stem between ground level and c900mm – width c125mm.</li><li>• Probing indicates that the depth of the decay cavity is c120mm.</li><li>• No visual evidence of fungal fruiting bodies such as <i>Laetiporus sulphureus</i> which is commonly found on False Acacia.</li><li>• Bootlace like rhizomorphs observed on the lower stem and within the above opening which indicates the presence of Honey Fungus (<i>Armillaria</i> spp).</li><li>• Honey Fungus toadstools usually appear in autumn.</li><li>• Dysfunctional bark on the southern side of the main stem between ground level and 650mm – width 125mm with bootlace like rhizomorphs which indicates the presence and effects of Honey Fungus species (<i>Armillaria</i> spp).</li><li>• Sound-testing with a nylon hammer indicated tonal change around the two areas detailed above indicating both dysfunctional bark and decay.</li><li>• Using an Increment Borer a core sample was taken from the southern side of the stem at c600mm above ground level and c500mm in an easterly direction from the area of dysfunctional bark.</li><li>• The increment borer would not screw into the tree beyond c300mm which indicates that there is likely to be a central cavity within the centre of the main stem.</li><li>• Due to a difficult extraction of the core from the increment borer the core was not whole when examined.</li><li>• The remnants of the core were examined and it was considered that the first 300mm was sound wood.</li><li>• Taking into account the location of the tree it cannot be regarded as safe without some crown reduction.</li></ul> <p><b>Buttressing</b></p> <ul style="list-style-type: none"><li>• Bootlace like rhizomorphs were observed around the buttressing which indicates the presence and effects of Honey Fungus species (<i>Armillaria</i> spp.)</li></ul> <p><b>Rooting Area and Root-plate</b></p> <ul style="list-style-type: none"><li>• No defects observed.</li></ul>								

<b>Considerations</b>
<ul style="list-style-type: none"><li>• The tree owner wishes to retain the tree if at all possible.</li><li>• Busy residential street to the east is within falling distance of T1.</li><li>• Residential properties to the north, south and west are within falling distance of T1.</li></ul>
<b>Recommendations</b>
<ul style="list-style-type: none"><li>• Reduce height by 4m to final height of circa 9m</li><li>• Reduce the south-eastern spread by circa 3m to the final branch length of circa 3m.</li><li>• Remove deadwood &gt;25mm</li></ul>

**APPENDIX MD3**  
**Site plan showing tree number and location.**





## APPENDIX MD4

### Qualifications and Experience

Dr Martin Dobson has been engaged in research and advisory work on trees since graduating in 1986 with a BSc (Hons) Degree in Biology. Subsequent postgraduate research led to the award of a Doctor of Philosophy (DPhil) Degree in Tree Physiology in 1990.

Postgraduate studies began in 1986 at the University of Ulster and continued in 1987 at the Forestry Commission's Research Station in Hampshire and focussed on the influence of air pollution on trees. Upon completion of this research in 1989 Dr Dobson was employed by the Forestry Commission and worked in both the Tree Pathology and Environmental Research Branches. During the next six years he was responsible for Department of Environment research contracts focussing on air pollution, climate change, de-icing salt damage to trees, woodland establishment on landfills and tree root research. He has authored two books: *De-icing Salt Damage to Trees and Shrubs* and *The Potential for Woodland Establishment on Landfill Sites*. He concluded his time at the Forestry Commission as Project Manager for research into the interaction between trees, roots and clay soils which included laboratory investigations, testing of root barriers and a three-year field-scale monitoring programme investigating the influence of woodland and grassland on the moisture status of clay soils.

In 1995 Martin joined the Arboricultural Advisory and Information Service as a senior Arboricultural Advisor. The AAIS advised the (then) Department of the Environment on matters concerning amenity trees and was the principal source of technical advice and information to the arboricultural profession as well as landscape architects, engineers, the horticultural industry and private individuals. A large proportion of advisory work focussed on issues relating to tree diseases and interactions between trees and buildings.

In 1997 Martin started an arboricultural consultancy practice specialising in subsidence and tree root claims, planning and development, tree safety and disease diagnosis. He was a local authority retained consultant providing expertise on tree protection practice and legislation from 1999 - 2006 and has dealt with several thousand Tree Preservation Order and Conservation Area applications.

He has extensive experience as an Expert Witness in the High Court, County Court and Magistrates Court. Notable recent cases he has been involved in include *Robbins v London Borough of Bexley* and *Khan v London Borough of Harrow* and Kane.

From 1995 to 2011 he was an examiner for the Professional Diploma in Arboriculture for the Royal Forestry Society/ABC Awards and he is currently an assessor for the Arboricultural Association Registered Consultant scheme. He has been a guest lecturer for the Middlesex University Countryside Management MSc course and for Portsmouth University. Together with Dr Giles Biddle he has devised and teaches introductory and advanced courses on trees and subsidence and co-presents seminars on trees and climate change with Professor Andy Moffat for the Arboricultural Association.

In addition to over 30 publications in scientific and technical journals he is the author of Arboriculture Research and Information Note 130/95/ARB *Tree Root Systems*, and leading author of:

*Driveways Close to Trees*. Arboricultural Practice Note 1. AAIS, Farnham.

*Trees in Dispute*. Arboricultural Practice Note 3. AAIS, Farnham.

*Root Barriers and Building Subsidence*. Arboricultural Practice Note 4. AAIS, Farnham.

He is a Fellow and Registered Consultant of the Arboricultural Association and is a Member by examination of the Expert Witness Institute.

## **Qualifications and Experience**

### **Robert Toll**

Robert Toll has been working with trees since 2004 when he completed his studies.

In 2000 he began his studies at Riseholme College, Lincoln where achieved a pass with merit in Forestry at National Diploma level. In 2002 he attended Moulton College in Northampton where he gained a Level Five Higher National Diploma in Urban Forestry with merit.

In 2004 Robert began work as a temporary tree inspector at Northampton Borough Council, undertaking inspections of trees in response to enquiries from the public. After 4 months Robert took up a permanent tree inspector role at Coventry City Council which predominantly involved undertaking safety inspections of trees on school sites.

In 2006 Robert moved to Warwick District Council to take up a temporary post of Tree Protection Officer which involved reviewing old area tree preservation orders and identifying those trees which were considered worthy of protection under new specific orders. He also streamlined the council procedure for making new tree preservation orders, cutting the time from making to serving from up to 2 weeks to within 2 hours.

In 2008 Robert moved to Hart District Council, Hampshire to take up the role of Tree Officer within the planning department. This role included determining works trees applications, commenting on planning proposals, liaising with the public and providing arboricultural advice to other departments within the Council.

Between 2013 and 2016 Robert took up the role of Tree Officer at Elmbridge Borough Council, Surrey, once again carrying out tasks such as determining works trees applications, commenting on planning proposals and liaising with the public. While at Elmbridge Borough Council he passed the Arboricultural Association's Professional Tree Inspection course.

Robert is a professional member of the Arboricultural Association.