AllAboutTrees

Arboricultural & Ecological Consultancy
Chartered Arboriculturalists &
Environmentalists

Arboricultural Assessment -

Inspection Of A Specified Ash Tree

At 18 Station Road, Benton

For

Mr P Bouchard

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Professional Member

Constructionline
Part of Capita plc

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Appendices

1. Introduction

1.1 We are instructed by Mr Bouchard to undertake a detailed Arboricultural Assessment and inspection of a specified ash tree located within the garden of 18 Station Road, Benton.

1.2 This assessment is concerned with recording the species, size and condition of the tree. Both structural integrity and physiological condition have been assessed. Recommendations are made where appropriate to establish acceptable levels of safety for the site and also to establish a higher level of arboricultural management.

1.3 The remaining contribution or safe useful life expectancy is estimated as an indication of the trees period of retention. All measurements are measured rather than estimated.

1.4 Trees are living organisms whose health and condition may change rapidly and all observations, recommendations and conclusions are based on the status of the tree at the time of inspection. The recommendations contained within this report are valid for a period of one year only.

1.4.1 Both abiotic and biotic factors can alter the health/structural integrity of trees rapidly. No liability can be accepted for any physiological or structural deterioration of the tree occurring after the date of our inspection or that was not evident on the day of inspection. Where this report is relied upon at a later date the reader should be aware that the physiological and structural condition of the surveyed trees may have changed; Re-inspection may lead to significantly different observations, recommendations and conclusions.

1.4.2 Any significant alteration to the site which may affect the trees (demolition activity, construction activity, alterations to infrastructure, level changes, hydrological changes, extreme climatic events, etc) will necessitate a re- assessment of the trees.

1.5 This report was prepared for use by our client in accordance with the terms of the contract and as an assessment of the trees physiological and structural health only. It is not a substitute for a planning, insurance, or mortgage service. Information provided by third parties used in the preparation of this report is assumed to be correct. The contents are copyright and may not be duplicated or used by third parties without the written consent of AllAboutTrees Ltd.

2. Protected Status Of Trees

2.1 Trees may be legally protected, this may either be in the form of a Tree Preservation Order (TPO) or that the trees are located within a Conservation area.

2.2 Potentially large penalties may be enforced for illegally carrying out works on protected trees. It is recommended that checks are made before any works are undertaken and no work should commence until permission has been granted.

2.3 The subject tree is located within a Conservation Area and 6 weeks' notice must be supplied to the Local Planning Authority (**LPA**) for any proposed tree work not otherwise approved by any existing relevant planning permission. It is an offence to carry out any tree work without giving the required notice.

2.3.1 It is understood the LPA are in the process of implementing a Tree Preservation Order on the tree though this has not yet been confirmed.

3. Site Visit & Description

Tree location – N 55° 00' 56.77 W 01° 34' 01.96
O/S Grid reference- NZ 277 691 GB Grid

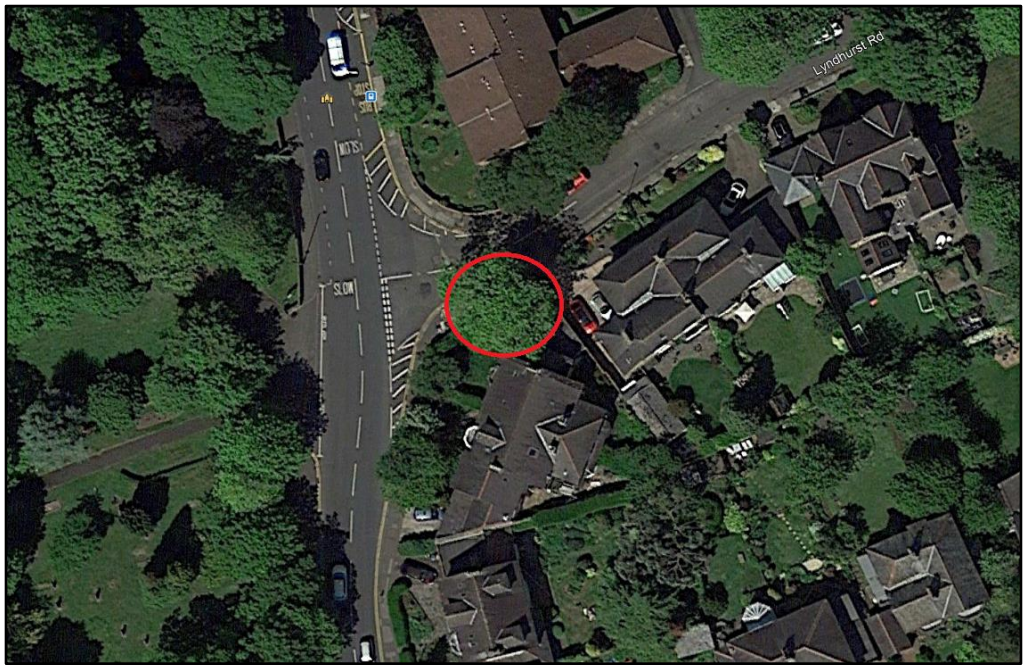

Figure 1 - The approximate position of the tree is indicated by the red circle on the image above.

3.1 A site visit was undertaken on Monday 20th September 2021 by Tim Archment.

3.2 The subject tree is located within the front garden of 18 Station Road, oversailing the property driveway and adjacent to Lyndhurst Road.

4. Appraisal

4.1 Common ash – *Fraxinus excelsior*

Height (M)	Crown Spread (M)				Height Of Crown Clearance (M)	Trunk Diameter (MM)	Age	Physiological Condition	Structural Condition
	N	S	E	W					
15.0	5.0	4.0	6.0	6.5	2.0	710	Mature	Poor	Fair

The tree has been identified for inspection due to the suspected presence of ash dieback (*Hymenoscyphus fraxineus*) and the implications this may have for the tree, particularly when considered in conjunction with the works to be conducted in the immediate vicinity of the tree in relation to planning application 20/01150/FULH.

Woodsman Arboricultural Consultancy (**WAC**) have previously considered the tree in detail and recommended its removal due to the presence of ash dieback. This has been rebutted by the LPA who indicate further evidence is required to justify the removal of the tree.

The tree is a mature and prominent individual located at the junction of Station Road and Lyndhurst Road. The tree sits atop a small, raised mound of soil between the host property driveway and boundary wall, beyond which a public footpath and Lyndhurst Road lie.

The tree has been pollarded at around 8.0m, in the past, detracting from its natural form and providing an aesthetically poor alternative. Previously host to significant ivy growth, the ivy has been severed though much of the dead growth remains in the canopy.

The subject tree is suffering with the fungal pathogen *H. fraxineus*, commonly referred to as ash dieback. The Forestry Commission indicate this pathogen was first recorded in this area in 2015. Experience tells us the pathogen was likely here prior to this though not recorded. The recommendation report associated with planning reference 20/01150/FULH states ‘Ash dieback has been relatively uncommon in the borough so far’ though this statement is somewhat surprising. Ash dieback is well established around Newcastle and North Tyneside: numerous examples can be found with little effort.

Symptoms of ash dieback range from tree to tree and may include the following:

- Leaf necrosis
- Wilting shoots and leaves, eventually turning black but remaining attached to the host tree
- Diamond shaped lesions can develop on the stem and branches

- Dieback of branches
- Stress related flushing of dormant buds

Some trees display all symptoms while others may only show a smaller selection of the above.

Inspection of the canopy reveals a number of clusters of blackened withered leaves which remain in situ (see photos 1-3 in appendix 1 of this document). Some of the examples are difficult to see in the photos due to light quality and their location in the canopy though they are easier to see on site.

Dieback of terminal shoots is well documented within the photographic record provided by WAC on pages 17 & 18 of '18 Station Road Ash Tree Arboricultural Management Report July 2021'. This was evident during the site visit though to a lesser degree due to this year's growth. Trees under stress will use their energy reserves to put on new growth and maintain photosynthetic function. This gives the impression of a full canopy and a healthy tree to the untrained eye. Unfortunately, this illusion is a thin veneer which will be lost as the pathogen progresses through the tree and the assimilate transport system is further degraded. See photos 4 and 5 in appendix 1.

Pole pruners were used to remove a small diameter section of deadwood from the lower canopy. The shoot was arising from one of the historic pruning wounds adjacent to the primary fork union. A characteristic diamond shaped lesion was found on this branch (photo 6, appendix 1). Removal of the bark in the affected area revealed the presence of tiny black lines which are pseudosclerotial plate formation (photo 7, appendix 1). Commonly referred to as spalting, this as a clear indication of the presence of fungal pathogens within the wood structure. Coupled with the blackened withered leaves, the diamond shaped lesion, and dieback of terminal shoots, the presence of ash dieback is obvious and undeniable.

The presence of ash dieback has implications for tree retention though there are a number of other factors which also need to be considered.

Flooding Of The Existing Property

It is understood the lower levels of the property become flooded during adverse weather with up to 25cm of water pooling in the house. A bilge pump is used to aid removal this though this is obviously undesirable and a more appropriate solution is required. For this reason, the homeowner wishes to install a French drain around the perimeter of the property to aid in removal of water. This is considered a reasonable and proportionate response to repetitive flooding. This work is likely to result in a degree of disturbance to the root system of the tree. Damage is unavoidable given the requirement for excavation.

Damage To The Existing Property

The boundary wall directly adjacent to the tree has a large crack present (photo 8, appendix 1) which is directly attributed to the tree. Works required to make the wall good will further disturb the root system, within 1m of the stem. Given the proximity of the tree to the wall, it is likely that the works will require repeating in the future due to incremental growth of the stem and root system.

The existing garage is also in a state of disrepair. The concrete pad visible beneath the brick work is cracked and fragmented (photo 9, appendix 1). Additionally, cracking is present from the lintel above the door to the roofline (photo 10, appendix 1) – this is directly above the fragmented concrete pad. This damage is around 4m from the tree stem. It is understood an underground drainage route is located in this area and may have collapsed leading to subsidence of the garage. Relevant professionals have been contacted to conduct investigations but have been unable to do so. The section of underground pipe to be investigated is connected to a T-junction at either end, within third party properties, which prevents remote assessment. It is understood direct excavation into the affected area is required to assess the problem though this has not been undertaken due to potential for damage to the root system. This work is being held in temporary abeyance until is resolution is found, though will become increasingly urgent as the approved planning permission is implemented. Ultimately, following investigation of the underground services, the homeowner would like to locate an access chamber between the tree and building to allow future maintenance. Again, this represents further disturbance to the root system of a mature tree – a degree of damage is unavoidable.

Proposed Extension

The proposed extension, within the Root Protection Area (RPA) of the tree, presents further disturbance to the root system. Specialist methodologies can be used to construct within the RPA though these are usually reserved for trees of particular merit due to cost implications. In this case, it would be necessary to consider the use of pile foundations to prevent significant damage to the root system caused by traditional foundations such as trench and fill. This is considered cost prohibitive and excessive for this tree, an individual infected with ash dieback which will be lost in the coming years regardless.

‘British Standard 5837–2012 Trees in relation to design, demolition & construction – Recommendations’ provides relevant guidance for tree retention, removal and protection on development sites. When considering trees on development sites, the trees are given a category rating which relates to the quality of the tree. These categories are A (high value trees), B (moderate value), C (low value) and U, which stands for ‘Unsuitable for retention’. BS5837 provides a clear framework to categorise the trees. The following text is taken from the document and relates to category U.

Category U

Those 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.

- *Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g., where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)*
- *Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline*
- *Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality*

The subject tree is suffering with the fungal pathogen *H. fraxineus* - It is extremely unlikely the tree will be able to be retained for more than 10 years in a safe condition.

Risk of structural failure is not a concern at the present time though this pathogen causes a vascular wilt. Affected parts become dry, brittle and liable to failure. Potential for structural failure will increase with time if the tree were to be retained.

H. fraxineus is not a treatable pathogen and will continue weaken the tree, as such it is considered this tree is in irreversible overall decline.

It could be argued that removal of this tree also fulfils the third bullet point '*Trees infected with pathogens of significance to the health and/or safety of other trees nearby'* and removal may aid in preventing transference of the pathogen to unaffected ash trees in the locality. However, as ash dieback is well established in the locality, removal of this tree will make little difference to any nearby trees not yet affected.

Section 4.5.8 of BS5837 recognises a tree can have value, even when classified as being 'Unsuitable for Retention': *"If disease is likely to be fatal or irremediable, or likely to require sanitation for the protection of other trees, it might be appropriate for the trees concerned to be categorised as U, even if they otherwise have considerable value."*

Mature trees, generally speaking, have reduced ability to tolerate disturbance when compared to their younger counter-parts. The construction of a new extension, investigative works to the drainage system (and any resulting works), repairs to the boundary wall and installation of a French drain would put a fair strain on a healthy tree. Conducting these works to a tree which is affected with a fungal pathogen of such significance as ash dieback, is inadvisable. Given all of the reasons listed above, removal and replacement of this individual is the prudent course of action.

Recommendations

- Fell the tree due to ground level and replace with suitable individual.

4.2 Wildlife Habitats

Bats

All UK bats and their roosts are protected by law. The legislation protecting bats are:

- The Wildlife & Countryside Act 1981 (WCA)
- Conservation of Habitats and Species Regulations 2017

For all countries of the UK, the legal protection for bats and their roosts may be summarised as follows:

You will be committing a criminal offence if you:

1. Deliberately* capture, injure or kill a bat
2. Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats
3. Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time)
4. Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat
5. Intentionally or recklessly obstruct access to a bat roost

**In a court, 'deliberately' will probably be interpreted as someone who, although not intending to capture/injure or kill a bat, performed the relevant action, being sufficiently informed and aware of the consequence his/her action will most likely have.)*

Penalties on conviction - the maximum fine is £5,000 per incident or per bat (some roosts contain several hundred bats), up to six months in prison, and forfeiture of items used to commit the offence, e.g., vehicles, plant, machinery.

When carrying out tree works it is essential that the contractor or other competent person carriers out a specific 'bats in trees risk assessment' which can be obtained from the 'Arboricultural Association' or the 'Bat Conservation Trust' (BCT). If evidence of bats is found work must stop immediately and Natural England Batline contacted (0845 1300 228). A further inspection may well be required by a licensed bat handler or roost visitor.

Birds

In the UK, all wild birds, their nests and their eggs are protected by law.

In England, Scotland and Wales the legislation that protects wild birds is:

- The Wildlife and Countryside Act 1981
- The Countryside (or CRoW) Act 2000

As with bats the contractor has an obligation to carry out visual checks prior to works. Where possible tree works should be carried out in the period from August to the end of February in order to avoid the bird nesting season.

5. Conclusion

5.1 Following the inspection it is apparent that the tree is affected with the fungal pathogen *Hymenoscyphus fraxineus.* When considered against the criteria specified in BS5837, against the context of the upcoming development works and likelihood of disturbance to the root system, it is evident that the tree in not suited for retention and the prudent course of action is removal and replacement.

5.2 All tree works must conform rigorously to BS 3998 (2010) 'Tree Work - Recommendations'. The contractors undertaking tree work must comply with the legal obligations to wildlife as outlined in section 4.2.

For and on behalf of
AllAboutTrees Ltd

Andrew Watson FLS MICFor CBiol MRSB FArborA CEnv LCGI
-Chartered Arboriculturalist & Registered Consultant

Appendix 1(1)

Glossary of Terms

1	**Reference number:**	An individual identifying number
2	**Species:**	Species identification is based on visual field observations and lists the common name. In some cases the botanical name will be used where there is no common alternative. On in-depth surveys the botanical name only may be used
3	**Height:**	Height is estimated to the nearest metre. On computerised surveys this may be within a range of heights. When measured height is required, a clinometer is used to measure to the nearest metre
4	**Diameter:**	Trunk diameter measured at 1.5 metres from ground level to the nearest centimetre. In some surveys this is indicated as a range
5	**Spread:**	Measurement of canopy from the trunk to the nearest metre in four directions, North, South, East, and West in metres
6	**Lower crown Clearance:**	Height in metres of crown clearance above adjacent ground level
7	**Age:**	Either an estimate (or statement if accurately known) of the age of the tree, classified as:
	Y	= Young tree, established tree usually up to one third of expected ultimate height & spread
	MA	= middle aged, usually between one third and two thirds of ultimate height & spread
	M	= Mature, more or less at full height but still increasing in girth & spread
	OM	= Over mature, grown to full size and becoming senescent,
	V	= Veteran tree, individuals surviving beyond the typical age range for the species
8	**Physiological Condition:**	Good = Healthy tree with good vitality, Fair = Moderate health and vitality normal or slightly less for species and age Poor = Poor shape or form - signs of decline in crown, may have structural weakness. Dead = dead or dying tree
9	**Structural Condition:**	Good = No visible structural defects Fair = Only minor structural defects Poor = Defects which may need to be rectified or regularly monitored Remove = Severe defects which may result in immanent failure or collapse
10	**Management Recommendations:**	General comments on the condition of the tree or group and any action required. potential for wildlife habitats
11	**Estimated Remaining Contribution:**	Safe Useful Life Expectancy (SULE): in some cases the age ranges are modified Short: 0 – 10years Medium: 10– 20 Years Intermediate: 20-40 Long: 40 + years
12	**Tree Quality:**	Assessment of tree quality see following cascade chart for details
13	**Priority:**	A - Works to achieve an acceptable level of safety or required to facilitate the development B - Works to achieve higher levels of arboricultural management. C - To improve the aesthetic appearance.
12	**Ultimate Size:**	Taken from Arboriculture Research Note 8490ARB or NHBC Standards Chapter 4.2 as appropriate The Normal Ultimate Height in an Urban Situation in metres**.** Ultimate spread of the Crown in metres.
13	**Root Protection Area:**	The distance at which the protective barrier should be erected measured in a radii from the centre of the trunk in metres.
14	**Pruning:**	Pruning shall be defined as the removal of living or dead parts of a plant by the Contractor. Such parts may be soft growth, twigs, branches, limbs or sections of the tree trunk. The cut material may vary from small to large in size.

15 Crown Cleaning: Cleaning out is defined as the removal of dead, dying or diseased branchwood, broken branches or stubs left from previous tree surgery operations (see also 16 Deadwooding) together with all unwanted objects, which may include ivy (if specified) and/or other climbing plants, nails, redundant cable bracing, rope swings, tree houses and windblown rubbish from the tree, and any such debris from any cavities within the tree.

16 Deadwood Removal: Dead-wooding shall be defined as the removal of all dead and dying branches and limbs from the tree.

17 Crown Lifting: Crown lifting shall be defined as the removal of all soft growth and branches or parts thereof which are below or which extend below the height specified in the tender documents. It is recognised that the resultant canopy base might not be one single level but might be stepped to allow for different clearances, for example where a tree overhangs both the footway and the road where different height clearances are required.

18 Crown Reduction: Crown reduction shall be defined as the reduction of the complete outline dimension of the canopy, from the tips of limbs and branches to the main trunk, by pruning growth to an acceptable branch, twig or but to leave a flowing silhouette.

2 – Photographs

Photo 1 – Blackened withered leaves hanging in the canopy

Photo 2 – Blackened withered leaves hanging in the canopy

Photo 3 – Blackened withered leaves hanging in the canopy

Photos 4 & 5 – Dieback of shoots in canopy. Displayed more clearly in WAC report of July 2021.

Photo 6 – Characteristic diamond shaped lesion found on trees suffering with ash dieback

Photo 7 – Exposure of underlying wood structure shows discolouration associated with ash dieback. Delicate black lines are pseudosclerotial plates which confirm presence of fungal pathogen within wood structure.

Photo 8 – Severe cracking in boundary wall attributed to tree

Photo 9 – Cracking & fragmentation of concrete pad

Photo 10 – Cracking adjacent to lintel on garage

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