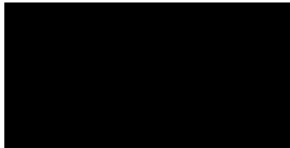


Oakhill Manor Arboricultural Inspection 2023

Client:



Site:

Oakhill Manor
Zion Hill
Oakhill
BA3 5AN
ST632474

Authors:

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1.0 Scope of The Report

- 1.1 *Instruction:* email instruction from Adrian Wilmott 15/7 to undertake a tree defect inspection for trees at Oakhill Manor to meet with the client's obligations under the Occupiers Liability Act 1981 (Duty of Care) and for their continued long term safe retention.
- 1.2 *Tree identification:* The trees will be identified by botanical and/or common name, and GIS mapped to aid with future location.
- 1.3 *Structural assessment:* External features of the trees will be assessed from ground level using visual observation methods (Mattheck & Breloer 1994) with the aid of a mallet and metal probe. No internal investigations will be made beneath the bark at this level of assessment, nor will any investigations be made below ground. Individual notes relating to each tree or group of trees will be recorded. Condition notes will be supplemented with a broad assessment of tree vigour and age class.
- 1.4 *Age classification:* The trees have been classified as young (Y), semi mature (SM), mature (M) and over mature/veteran (OM/V). This corresponds to the first, second and third (Y, SM, M) stages of life expectancy for the species followed by senescence (OM/V).
- 1.5 *Condition assessment* –an assessment of the trees' current health, looking at vigour and the presence of disease. These are categorised as follows:
- **Poor** - in decline, moribund or with significant faults/disease indicators.
 - **Fair** - some minor faults/disease indicators but otherwise of good vigour as might be expected of the age and species.
 - **Good** –no apparent faults, good vigour for age and species, significant life expectancy.
- 1.6 *Recommendations:* Informed by the above assessment of vigour, health and structural condition. Recommendations will take account of the landscape and habitat contribution of the trees. All works will be specified to BS3998:2010 Tree Works except end weight reduction.
- 1.7 *Priority:* Recommendations will identify Arboricultural works prioritised as either "**Desirable**" (D) - carried out for the long-term safe retention of the trees or

“**Essential**” (E) - immediately required for reasons of safety to people or property or to ensure the short-term retention or survival of the trees. All works are specified to BS3998:2010 Tree Works.

- **Essential** works should be carried out within six months of the survey unless otherwise stated.
- **Desirable** works should be carried out appropriately as part of the long-term management objectives.

1.8 *Hazards* - Trees are subject to the laws and forces of nature which dictate a natural failure rate even among trees that are healthy and structurally sound. By their very nature, therefore, trees cannot be considered entirely hazard free, though it is stressed that the risk posed is generally present at very low and acceptable levels. For this reason, it is considered important by most practitioners that trees are not managed in a risk-averse way (*BS8516 unpublished*).

This report can be used to guide your own risk assessment but cannot be used as a categorical statement of the trees' current or future condition or safety.

The information recorded refers to the circumstances found at the time of inspection any changes to the site (excavation, tree works, ground level changes etc.) will render the report invalid.

The report remains valid for one year only.

1.9 Inspection Schedules –regular monitoring and inspection may be carried out by laymen or others charged with management of the site reporting to the Arboriculturist. Inspections should be carried out by a suitably qualified and insured Arboriculturist.

Recommend (1) - regular visual inspection and following storm events by the tree owners reporting concerns and incidence of branch shed to the Arboriculturist immediately (E). Professional inspection every 2 years (D).

1.10 *Author(s)*: I.M Chedgy holds a BSc (Hons) in Arboriculture & Urban Forestry alongside the Arboricultural Association's Technicians Certificate (*Tech Arbor A*), the Advanced National Certificate in Horticulture (*ANCH*), the title Associate of the Institute of Horticulture (*AI Hort*) and has completed the Royal Forestry Society's Professional Diploma theory paper (*M Arbor A*). He has worked as an Arborist for 18 years both in private practice & for a local authority. I.M Chedgy is a member of the Arboriculture Association (AA) and Royal Forestry Society (*RFS*) Royal Forestry Society.

2.0 General

2.1 The trees surveyed, making 31 records in all, are within the boundaries of the site.

2.2 Ivy –while ivy has no direct effect on tree health, extensive ivy in the upper canopy can be an added wind load particularly during winter months and may reduce the trees' photosynthetic area. Ivy provides an excellent late nectar source for insects, in turn providing a late autumn food source for insectivores such as bats (Patch 1989).

Recommend (2) –sever ivy when it reaches canopy level, remove ivy from fork unions to prevent inclusion, retain ivy on lower stems as habitat where safe and practicable (D).

2.3 Summer limb shed - some trees are predisposed to shedding limbs during the summer, apparently with little warning or external loading. The cause is not always clear. Careful pruning of extended lateral growing limbs can help to reduce the possibility of limb drop but is not a guarantee of prevention (ref: Section 1.10 Inspection Schedules).

Recommend (3) –regular inspection of Sycamore, Horse chestnut and Cedar looking for evidence of canopy separation and branch subsidence. Report concerns and incidence of limb shed to the Arboriculturist (E).

2.4 Chalara die back of ash disease (ADB) –Ash dieback is a highly destructive disease of ash, especially the United Kingdom's native ash species (*Fraxinus excelsior*). The Forestry Commission has compiled updated advice for ash tree owners and managers in its leaflet, [Managing ash dieback in England](#). The leaflet provides an introduction to the disease, summarises current advice, and signposts to more detailed guidance produced by Defra, the Forestry Commission and others ([Forest Research 2020](#)).

This report assesses the impact of ADB on tree vitality using the nationally recommended Suffolk System (Stokes 2019), method of assessing tree health and crown vitality. Ash trees are categorised into one of four Ash Health Classes (AHC) based on foliage density:

- AHC1: 100%–76% remaining canopy
- AHC2: 75%–51% remaining canopy
- AHC3: 50%–26% remaining canopy
- AHC4: 25%–0% remaining canopy

All trees without observable ADB symptoms at the time of surveying are classified as AHC1.

As with other emerging pathogens, disease progression may develop quickly, lack of ADB symptoms in a tree at the time of survey does not confidently indicate the absence of disease or that trees may not become infected in the near future.

3.0 Habitat and Environmental Considerations:

3.1 *Bats*: All bats & their roost sites are a protected species under the Wildlife & Countryside Act 1981. It is highly likely that bats will be using the site for both resting & foraging [UK Bats - Bat Conservation Trust](#).

3.2 *Birds*: All birds & their nest sites are protected under the aforementioned act. Where practicable works should take place outside of nesting season (March –August).

3.3 *Wildflowers*: All wildflowers are protected under the 1981 act. Between the early 1960's and the late 1980's English wildflowers lost significant amounts of territory. Widespread losses of grassland plants, particularly in unimproved grassland, have led to significant losses of species diversity www.habitat.org.uk

3.4 Non-lichenised fungi: Fungi are not covered under the same blanket protection offered by the Wildlife & Countryside Act 1981. However, 5 species are covered under schedule 8 of the aforementioned act. It can be stated with high confidence that the occurrence of these species at this site is highly unlikely due to habitat constraints.

3.5 Dead wood –canopy level dead wood is an excellent resource for wildlife, providing critically important habitats for many species (plant, animal and fungi) often at different stages of their life cycle. 1700 species of UK invertebrates depend on decaying wood habitat, 6% of the total British Fauna, 40% of which are either British Red Data Book Species or described as nationally scarce. The conservation of deadwood both on the ground and as standing branches or stems is a principal component of veteran tree management.

Recommend (4) –retain dead wood where safe to do so, cut back dead wood <50mm diameter to short stubs (450–600mm) where it overhangs paths in order to retain essential saproxylic habitats as far as practically possible while reducing the risk of falling debris (E). Retain felled stems and removed branches as habitat stacks within the woodland (D).

4.0 References

Arboricultural Association –Tree Surveys, a guide to good practice (Note 7)

BS3998:2010 Tree work –Recommendations

Calix, M., et al. (2018). European Red List of Saproxyllic Beetles. Brussels: IUCN. Available at:
<https://portals.iucn.org/library/node/47296>

Forest Enterprise (2002) –Life in the dead wood

[http://www.forestry.gov.uk/pdf/lifeinthedeadwood.pdf/\\$FILE/lifeinthedeadwood.pdf](http://www.forestry.gov.uk/pdf/lifeinthedeadwood.pdf/$FILE/lifeinthedeadwood.pdf)

Forest Research 2020 – <https://www.forestresearch.gov.uk/tools-and-resources/pest-and-disease-resources/ash-dieback-hymenoscyphus-fraxineus/>

Hultberg *et al.* 2020. Ash dieback risks an extinction cascade. *Biological conservation*. 244:

Jacobs *et al.* (2009). Pollination biology of fruit-bearing hedgerow plants and the role of flower-visiting insects in fruit-set. *Annals of Botany* 104: 1397-1404

Lonsdale (1999) –Principles of Tree Hazard Assessment & Management

Mattheck & Breloer (1994) –The Body Language of Trees

Mitchell *et al.* (2014). The potential ecological impact of ash dieback in the UK. JNCC report:

National Tree Safety Group & HSE Publications (2011) Common Sense Risk Management of Trees

Patch D (2004) –Ivy Boon or Bane AAIS ARN81/90

Stokes (2019). Ash Dieback: An Action Plan Toolkit. Tree Council Publication. Tree Council, London

Stokland, J. N., Siitonen, J., Jonsson, B. G. (2012). Biodiversity in Dead Wood. Cambridge: Cambridge University Press

6.0 Woodland Trees

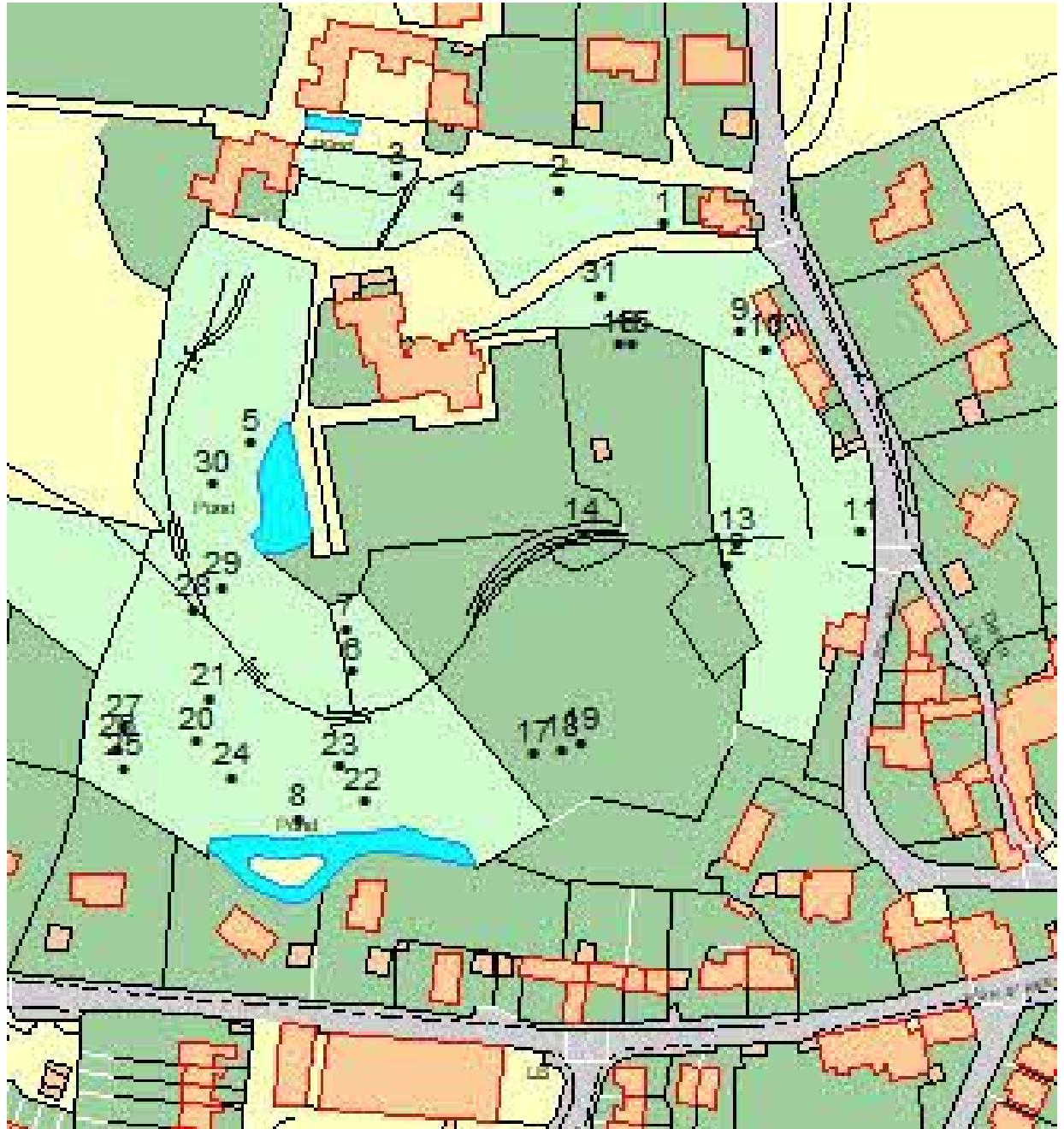
Tree No.	Species	Age Class	Condition	Field Notes	Management Recommendations	Priority
1	Lawson Cypress	M	Poor	Historic windblown. Tree supported by neighbour	FTGL	D
2 (G)	Conifer group	OM	Poor	Group of conifers. Excessively slender with numerous compression forks with included bark. Within felling distance of neighbouring property and overhead power lines	Annual inspection & following storm events report concerns to the Arboriculturalist	E
3 (G)	Conifer group	OM	Fair	Ivy extending into canopy, historic root damage	Sever ivy	D
4	Cotoneaster	M	Fair	Dead wood >50mm diameter	Remove dead wood over car park	E
5	Beech	M	Poor	Tag no 942, weak fork at principal branch union	Install cable brace above weak fork union. Lower stem decay colonised by honey fungus.	
6	Oak	M	Dangerous	Extensive lower stem decay Kretzchmaria infection. Roots decayed away. High likelihood of imminent failure. Recommend immediate. Refer to James Pinder's report (Appendix 1)	FTGL	E
7	Oak	M	Fair	Refer to James Pinder's report (Appendix 1)	Holistic canopy reduction of up to 2.4m to sound pruning points	D
8 (G)	A Group	SM	dead	Dead/moribund trees, phototropic lean to neighbouring property	Remove dead stems adjacent to neighbours' pond	E
9	Beech	M	Fair	Branches extending over neighbouring property	Raise low canopy over roof by 1.8m	D
10	Yew	M	Poor	Wind blown tree supported by adj. stem	Reduce upper canopy by 6m to reduce wind load	D
11	Copper beech	V	Poor	Extensive root decay	Reduce upper canopy by 3.6m as practicable	E

12	Oak	M	Fair	Lean to pool, steel planting band restricting growth	Remove steel band	E
13	Leyland Hedge	OM	Fair	High hedge providing shelter from westerly winds, extended scaffold limbs likely to fail under wind load	Annual inspection & following storm events report concerns to the Arboriculturalist Reduce upper canopy by 6m.	E D
14	Beech	M	Fair	Steel bench around lower stem beginning to restrict growth	Relocate bench	E
15(G)	Conifer group (x3)	M	Poor	Defoliated by <i>Seridium cardinale</i> infection	Fell to ground level and replace with suitable species	E
16	Gum	M	Fair	Unsuitable species for location. Severe lean to lawn	FTGL	D
17	Western red cedar	M	Fair	Tag no 00327. Visible canopy separation caused by branch subsidence.	Remove apical leader retaining smaller stem	D
18	Copper beech	M	Fair	Copper beech suppressed by adjacent conifer.	Selective removal of Thuja stem (W) to release canopy	D
19	Beech	M	Fair	Suppressed by adjacent conifers	Cut back competing vegetation to release Beech canopy	D
20	Beech	OM	Poor	Tag no 00370. Collapsed tree	Fell to safe height	E
21	Beech/Young trees	Y	Fair		Remove post and tie	E
22	Ash	M	Poor	AHC3	FTGL	D
23	Pine	M	Poor	Excessively slender. Leaning towards neighbours	Annual inspection & following storm events report concerns to the Arboriculturalist	D
24	Thuja	M	Fair	Dead/damaged stem	Remove marked stem	D
25	Beech	M	Varied	Recent branch shed, cavity at 8m, partially occluded	Recommend upper canopy inspection with Residrill to assess extent of decay	D

26	A Group	SM	Dead	Dead trees	FTGL	D
27	Holly	M	Moribund		Coppice to 0.9m	E
28	Beech	V	Dead	Fallen tree (2022)		
29	Beech	M	Poor	Small/sparse foliage, stem swellings	Reinspect Autumn 2023 for evidence of root decay	D
30	Beech	M	Fair	Hanging branch	Remove hanging branch	E
31	Cedar	V	Fair	Decline/defoliation	Root environment treatment carried out 2021 & 2023	D

Key: AHC – Ash Health Class, AGL- Above ground level, D – Desirable, D/W – dead wood, E – Essential, FTGL – fell to ground level, G – group, N, S, E, W – cardinal points, PBU – Principal branch union

7.0 Tree Location Plan:



Appendix 1 – JPTC T6 Turkey Oak Picus Assessment

Project: Byrland Bridge Oakhill Manor

Client: SAC

Tree Species: Turkey Oak

Location: South Rise, The Clades, NP23 2DU Redbush, Newport, UK

Date: 13/07/2023 10:08:00 AM

Tree species:	Turkey oak	Tree height [m]	18
1:	Byrland Bridge	North of measuring point	1
2:	Oakhill Manor	South spread [m]	17
3:	Oakhill	Position of measuring point T	0
4:		Trunk circumference (120cm height) [cm]	205
5:		Topography level at height [cm]	28

Observations:

Small canopy
Blue and white a good sound bark/leaves - advanced decay/damage. Black/white normal sound bark/leaves - wood decay/damage a wood being degraded/damaged. No sap & TR (DB).

Some scattered canopy
Tree grows on sloping ridge
Canopy weighted to the east
West side shows substantial horizontal decay (90 degree sector)
Poor resistance to wind
Visible wood decay in west/south, cavity formation
Bleeding/staining around dark wood sections
Foliage wood formation at wound edges

Cross reflecting the scan image with PICTOZ color coding showed that at 180° the surface is more degraded than the scan shows. Hole - hole is at a higher level due to the degradation to the west not allowing suitable set up of the sensor therefore, in reality, this radial structural defect structure are present from 180° a 360° clockwise through to 180° or the 180 degree section. This would not be able to provide any compression or tensile support to the tree. The radial decay and can support the tree to steady crown shape and size in order to reducing wind and weight loading on the tree.

Recommendations:

Remove dead wood
Reduce upper crown density by up to 40% at suitable lateral branches.
Reduce loss exposed but over standing low fork by up to 30% at suitable lateral branches.
Within 60 days crown shape for photography and
Full body scan of the canopy 2023.

JPTC T7 Turkey Oak Picus Assessment

Project: Oakhill Manor Byrland Bridge

Client: SAC

Tree Species: Turkey Oak

Location: South Rise, The Clades, NP23 2DU Redbush, Newport, UK

Date: 13/07/2023 12:02:00 PM

Tree species:	Turkey oak	Tree height [m]	24
1:	Byrland Bridge	North of measuring point	1
2:	Oakhill Manor	South spread [m]	18
3:	Oakhill	Position of measuring point T	0
4:		Trunk circumference (120cm height) [cm]	204
5:		Topography level at height [cm]	16

Observations:

Blue and white a good sound bark/leaves - advanced decay/damage. Black/white normal sound bark/leaves - wood decay/damage a wood being degraded/damaged. No sap & TR (DB). Some loss of canopy density to ground canopy/damage/damage.

Small scattered canopy
Tree over at canopy
Along structure but in isolation
No TR in canopy, some degradation in tree stem
Along with surface canopy full decay
Standing in place around 1.1m height
A large number of dead wood
A normal structural weakness in canopy area

Flawless surface with a large canopy (structural) also in pattern area. Scan for large structural, surface radial wound suggests that there is cavity formation in the stem above canopy area. It is also highly likely that a horizontal surface wound is present between 1.1m and 1.2m height. The structural weakness is located in the stem above canopy area. The scan image shows that the tree has an internal defect in the stem above canopy area. The scan image shows that the tree has an internal defect in the stem above canopy area. The scan image shows that the tree has an internal defect in the stem above canopy area.

Recommendations:

Remove all dead wood
Reduce crown exposure to canopy density in the stem to up to 40% at suitable lateral branches
Remove all internal crown shape up to 40% at suitable lateral branches to reduce risk of crown weight
Within 60 days crown shape for photography and
Full body scan of the canopy 2023.