MARK WELBY
CONSULTING ARBORISTS

Arboricultural Report

Including a tree survey, impact assessment and method statement for park homes at

31 Barkham Ride, Finchampstead, RG40 4EX

Reference: MW.2301.BRF.SK02.AIA
Client: Mr T Roberts
Date: 10 December 2024
Revision: -

Mark Welby DipArb(RFS), TechCert(ArborA), FArborA
01730 239 492 | mark@mwelby.com | www.mwelby.com
M Welby Ltd, trading as Mark Welby Consulting Arborists
Hampshire, UK

AA Registered CONSULTANT trees.org.uk

Arboricultural ASSOCIATION Fellow Member

Executive Summary

Trees are a consideration in this planning application for park homes. Therefore, this report has been drafted to provide the information required to enable the local planning authority to meet the duty placed upon them by section 197 of the Town and Country Planning Act (as amended, 2021).

Included are a BS5837:2012 compliant tree survey, arboricultural impact assessment, and tree protection strategy that includes a method statement and tree protection plan.

There is recent consent for this site, Wokingham Borough Council reference 230791. This proposal retains more trees and requires less impact on root protection areas. Therefore, in arboricultural terms, it must be deemed acceptable.

Table of Contents

1. Instructions and Terms of Reference

1.1. In November 2024, I was instructed by Mr T Roberts to produce this report to accompany a planning application for a number of park homes at 31 Barkham Ride, Finchampstead, RG40 4EX.

1.2. On 28th June 2024, Wokingham Borough Council approved an application for residential dwellings on the site (ref: 230791).

1.3. Following the recommendations of the British Standard[1], this report includes the necessary information to enable the local planning authority to meet the duty placed upon them by section 197 of the Town and Country Planning Act (as amended, 2021).

1.4. It demonstrates that the proposal's impact, both direct and indirect, has been assessed, and mitigation, compensation, and tree protection have been proposed where appropriate.

1.5. Correctly implementing the tree protection specified in this report is critical for ensuring the retained trees are successfully protected throughout construction.

1.6. The assessment considers the proposal's impact on the constraints of trees retained within the site and those on adjacent land. Such impact can be caused directly through construction damage and indirectly from post-development resentment and pressure to detrimentally prune or remove the trees. The latter is often due to a poor juxtaposition between the proposal and the trees.

1.7. A tree's root protection area (RPA) represents a minimum area in m^2 that shall be left undisturbed around it. This is initially represented by a circle but is fundamentally an area of rooting volume. It is often adjusted to account for constraints to root growth within the site (primarily highways and buildings). The British Standard provides recommendations regarding the protection of existing trees during the construction process. This is achieved by ensuring a tree protection strategy is implemented before any demolition or construction on site.

Documents Supplied

- Proposed: 2680-03SK.pdf by Paul Edwards Architecture, dated November 2024
- Site survey: 7759.dwg
- Decision notice for the residential approval (ref: 230791)

[1]BS5837:2012 Trees in relation to design, demolition and construction

2. Statutory & Other Relevant Constraints

2.1. According to Wokingham District Council's online service[2], there are no tree preservation orders on the site (checked at the time of writing), nor is the site within a conservation area.

3. Survey Scope & Methodology

3.1. Tree survey data can be found on the appended plan.

3.2. The tree survey has been carried out following the recommendations of The British Standard and the trees are assessed objectively and without reference to any site layout proposals. Categories are based on each tree's health and condition, together with an assessment of its life expectancy if its surroundings were to be unchanged.

3.3. The reference numbers of surveyed trees and groups of trees are shown on the tree reference plan, which is appended to this report and based on the supplied survey drawing. Stem locations within groups may be estimated, and indicative of canopy only.

3.4. The tree survey was carried out from ground level only, with the aid of binoculars as necessary, following the Visual Tree Assessment[3] (VTA) method.

3.5. Where trees are located on neighbouring land, an estimated appraisal of their quality and dimensions has been made.

3.6. Where stems or branches are obscured by ivy or other materials a full assessment of those parts will not be possible.

3.7. Tree heights were measured with a clinometer or estimated in relation to those measured.

3.8. Trunk diameters are measured at 1.5m above ground level, where this is not possible, then Figure C.1 of the British Standard is followed.

3.9. Tree canopies were markedly asymmetrical, and were measured (or estimated by pacing) in four directions using a laser measure. Symmetrical canopies are measured in one direction only, with dimensions in the remaining directions assumed to be similar. For the canopies of groups of trees, the maximum radius for each compass point is measured (more complicated groups will have further notes taken and an accurate representation will be shown on the plan).

3.10. All estimated dimensions are noted in the data.

[2] https://wokingham.maps.arcgis.com

[3] Mattheck, C. & Breloer, H., 1998. The Body Language of Trees: A Handbook for Failure Analysis. London:H.M.S.O.

4. Arboricultural Impact Assessment

Proposal

4.1. It is proposed to place a number of park homes on the site, the layout of which can be seen on the appended plan.

Tree Removals

4.2. Twenty-four trees are to be removed to facilitate this proposal. They are listed on the appended plan and comprise five of poor quality (category U), which would be removed regardless of this application, and nine of low quality (category C). All of these trees have been approved for removal within the extant consent for the site.

4.3. In addition to the above, the remaining line of nine trees in group #55 is now proposed for removal. These are comparatively small and inconsequential within the wider landscape.

Tree Surgery

4.4. There are no plans for any tree surgery work at this stage.

Construction Impact

4.5. All proposed construction occurs outside the RPAs of retired trees. This is an improvement from the approved consent.

Barrier Type

4.6. As the proposed construction work is comparatively 'low impact', the default British Standard tree protection specification seems somewhat onerous. Therefore, it is my opinion that an adequate level of protection can be provided with a lesser specification.

4.7. Alternative specifications can be found in Appendix i. TPF 2 or TPF 3 are proposed.

Service & Utility Provisions

4.8. There is adequate space to service the site whilst avoiding all RPAs.

Summary

4.9. Provided the tree protection strategy is implemented as outlined in the following method statement, this application has a low arboricultural impact and is thus acceptable.

5. Arboricultural Method Statement

5.1. The tree protection on this site is subject to implementation as detailed in the following sections.

5.2. The recommendations of the British Standard have been applied where viable. Where deviations from the preferred approach are required, the impact on any retained trees is minimised through a combination of supervision from an arboriculturist and adherence to the associated method statement.

5.3. Once permission is granted, the strategy must be followed to avoid impacting the trees and adhere to any planning conditions.

5.4. The information within this section must be passed to the site foreman and cascaded to all relevant personnel involved in the project.

5.5. Any questions about the content or its implementation shall be directed to **Mark Welby Consulting Arborists at 01730 239492** before action is taken.

5.6. A tree protection plan showing the types of tree protection and their locations is appended. It includes the tree survey data, existing site features and the approved construction. The plan must be read in conjunction with this method statement.

Phasing

5.7. It is essential that the following phasing is followed if trees are to be effectively protected throughout construction.

1	Tree removals
2	Installation of protection barriers (Appendix i: TPF 2 or 3)
3	Confirmation that tree protection barriers are installed to be sent to LPA
4	Demolition & site clearance phase
5	Construction Phase
6	Removal of tree protection barriers upon completion of work

Table 1: Timing of operations in relation to trees

5.9. The above has been drafted at the planning stage. Shall any of the protection measures prove incompatible with elements of the build program, contact the project arboriculturist to discuss options.

Pre-start Confirmation

5.10. The most important step in the tree protection process: confirmation that the tree protection barriers are in place must be forwarded to the LPA before any external work starts. This may be a photographic record sent via email.

Construction Exclusion Zone (CEZ)

5.11. The CEZ is a root-sensitive area where construction activities are to be excluded. The default method of doing so is through the installation of tree protection barriers. If construction access is required in the CEZ then ground protection can be used to facilitate this.

5.12. Everyone engaged in the construction process is responsible for respecting the tree protection measures and observing the necessary precautions within and adjacent to them.

5.13. Inside the exclusion zone, the following shall apply:

- No mechanical excavation whatsoever;
- No excavation by any other means without arboricultural site supervision;
- No hand digging without a written method statement having first been approved by the project arboriculturist;
- No lowering of levels for any purpose (except removal of grass sward using hand tools);
- No storage of plant or materials;
- No storage or handling of any chemical including cement washings;
- No vehicular access (unless ground protection is installed);
- No fire lighting.

5.14. In addition to the above, further precautions are necessary adjacent to trees:

- No substances injurious to tree health, including fuels, oil, bitumen, cement (including cement washings), builder's sand, concrete mixing and other chemicals shall be stored or used within or directly adjacent to the protection area of retained trees;
- No fire shall be lit such that flames come within 5m of tree foliage.

5.15. Variations from the above may be specified in the following sections of this method statement. This is only acceptable where detailed and will typically be subject to supervision by the arboriculturist.

Protection Barriers

5.16. Barriers must be fit to exclude construction activity and appropriate to the degree and proximity of work around the retained tree(s). Barriers shall be maintained to ensure that they remain rigid and complete.

5.17. See Appendix *i* for barrier specifications.

5.18. On this project, types TPF 2 or TPF 3 are to be used.

Ground Protection

5.19. If required to facilitate access within the CEZ (or as shown on the appended tree protection plan), ground protection is to be installed. If not already included on the tree protection plan, it must be approved in writing by the local planning authority before implementation. The ground protection must be capable of supporting the expected loads and avoiding rutting, compaction and damage to the soil: as advised in section 6.2.3 of the British Standard.

GP1: Tree protection barriers and scaffold ground protection

GP2: Tree protection barriers & trackmat ground protection

5.20. Stages of ground protection installation:

1. If required, dismantle barriers and re-erect them to protect any newly exposed CEZ not to be covered by ground protection;
2. Any shrubs, saplings or trees to be removed, are to be cut or ground out to just below ground level rather than grubbed or winched out, which can damage the roots of retained trees;
3. Lay woven geotextile over the existing ground surface by hand;
4. Cover the area with a compressible layer (200mm of woodchip, for example), using hand tools only;
5. Cover compressible layer with side butting scaffold boards, plywood boards of proprietary trackway/trackmats;
6. Confirm surface is acceptable for use with the project arboriculturist;
7. Area ready for construction access;
8. Any scaffolding required within the area will be erected with the uprights placed on spreader boards;
9. The boarding will be left in place until the construction works are finished.

5.21. A single thickness of boarding laid on the soil surface will provide sufficient protection for pedestrian loads. However, for wheeled or tracked construction traffic movements within the RPA, ground protection will involve the use of temporary geocell/cellular confinement systems, reinforced concrete slabs or track-board systems details of which are to be specified by the project engineer and approved for use by the project arboriculturist and local authority before construction commences.

5.22. Track-boards can be sourced from Trakmats, 0800 622 6838, www.trakmats.co.uk, or GroundGuards, 0113 209 3685, www.ground-guards.co.uk.

5.23. There is to be no excavation within the ground protection area whatsoever. This includes the installation of services and associated utilities, without prior approval.

Site Induction

5.24. All site staff are to be briefed on the tree protection strategy for the site as part of the general site induction procedure. This can be carried out by the site manager once he has been briefed by the project arboriculturist.

5.25. In general, this will include the following:

1. Explanation of the purpose of the tree protection barriers and any ground protection
2. Explanation of the demolition procedures near trees
3. Explanation of the sensitive/supervised excavation areas
4. What to do if access is needed within a protected area for any reason
5. What to do if damage occurs to any tree protection barriers and how to contact the project arboriculturist if necessary.

Tree Surgery

5.26. Should any pruning work be required, the following must be adhered to once any requisite permissions are obtained.

5.27. All work will be carried out under BS3998[4] industry best practice and in line with any works already agreed upon with the council.

5.28. The statutory protection[5] [6] will be adhered to. If further advice is required, particularly if bats are discovered during tree work, it will be obtained from Natural England or other competent persons and recommendations adhered to.

[4] *BS3998:2010- Recommendations for Tree Work.* London: British Standards Institute

[5] *Wildlife and Countryside Act.* (1981) London: HMSO.

[6] *Conservation of Habitats and Species Regulations (2017)* London: HMSO.

5.29. The stumps of any trees removed from within the Construction Exclusion Zone or the RPAs of retained trees will be either cut flush to ground level and left in situ or ground out using a stump grinder. They will not be winched out.

5.30. All operations shall be carefully carried out to avoid damage to the trees being treated or neighbouring trees. No trees to be retained shall be used for anchorage or winching purposes.

Installation of Underground Services

5.31. Mechanical trenching for the installation of underground apparatus and drainage severs any roots present and can change the local soil hydrology in a way that adversely affects the health of the tree. For this reason, particular care must be taken in the routeing and methods of installation of all underground apparatus. Wherever possible, apparatus must be routed outside RPAs. Where this is not possible, it is preferable to keep the apparatus together in common ducts. Inspection chambers shall be sited outside the RPA.

5.32. Where underground apparatus is to pass within the RPA, detailed plans showing the proposed routeing must be drawn up in conjunction with the project arboriculturist. In such cases, trenchless insertion methods shall be used: Microtunnelling, Surface-launched directional drilling, Pipe ramming or Impact moling (see BS5837:2012 Table 3), with entry and retrieval pits being sited outside the RPA. Provided that roots can be retained and protected, excavation using hand-held tools might be acceptable for shallow service runs. If this is the case, the following methodology must be followed:

5.33. Stages for installing services:

1. Contact project arboriculturist to hold pre-start site meeting and 'toolbox' talk before starting work.
2. Remove just enough tree protection fencing to allow access to the area and facilitate trenching.
3. Remove any surface vegetation or existing hard surfaces using hand tools.
4. Using an air-pick excavate the trench, keeping to the minimum dimensions required.
5. Roots occurring in clumps of 25 mm diameter and over are encountered they will be retained and kept damp by covering with hessian (re-wetted as required). If required, these shall be severed only following consultation with an arboriculturist; as such roots might be essential to the tree's health and stability.
6. Feed in services.
7. Backfill the trench with 200-300mm depth of excavated soil, or a mixture of excavated and imported topsoil to BS3882: 2015, firming down with heels.
8. Repeat step 7 until the trench is filled.

9. Re-erect tree protection fencing as per the approved plan.

5.34. The method of excavation above, for trenching within RPAs, is using air excavation. This tool utilises compressed air to remove soil from around tree roots causing minimal damage and can be run off a typical site compressor. I can provide details of contractors supplying air excavation services if required.

5.35. Alternatively, trenchless technology, such as thrust boring can be used in some instances and is particularly effective as it can pass directly under the tree, at a depth which is likely to avoid almost all impact on the roots of the subject tree. As no access/thrust pits will be located within the RPAs of the subject trees, the need for arboricultural supervision is limited.

5.36. Reference can be made to NJUG Vol 4[7] for guidance, but any approach must be approved by the project arboriculturist and brought to the attention of the local authority tree officer.

Fencepost/Hoarding Installation in RPA

5.37. Stages for installing wooden posts:

No plant machinery is to be used in the area for whatever reason

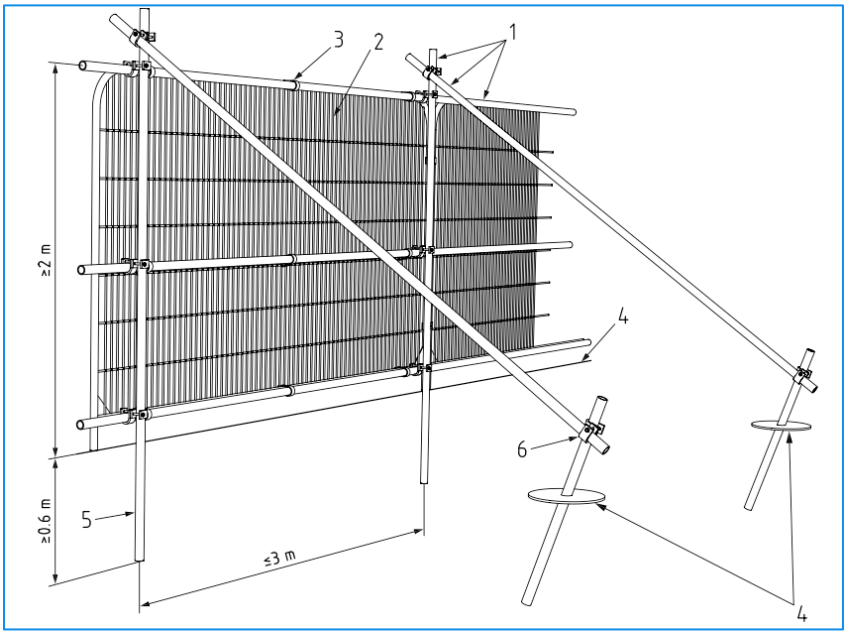
1. Remove TPF to allow access to the area. If working inside the tree's RPA, ground protection boarding must be used to avoid compaction and contamination of the root zone.
2. Dig postholes using hand tools, avoiding damage to the protective bark covering larger roots. Roots smaller than 25mm in diameter may be pruned back using either secateurs or a hand saw, leaving a clean cut.
3. Damage or severance of roots above 25mm diameter must be avoided. If roots of this size are discovered, the hole shall be relocated. If there are a large number of such roots it may be necessary to relocate the hole by half a fence panels length and adjust the fence panels accordingly.
4. Line holes with non-porous lining, for example, a durable polyethene bag.
5. Insert post and fill post-hole with concrete to just below ground level.
6. Trim polyethene to ground level and fill with clean topsoil.
7. Reinstall TPF as approved.

7 National Joint Utilities Group. (2010). Volume 4: NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook. NJUG.

6. Limitations of Use and Copyright.

Appendix

i. Tree Protection Barriers



1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanised tube and welded mesh infill panels
3 panels secured to up rights and cross members with wire-ties
4 ground level
5 uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

TPF1: Default specification for protective barrier (Fig 2 from BS5837:2012)

TPF 2: Alternative fencing option: scaffold uprights with backstay

TPF 3:Alternative fencing option: on boots with backstay

TPF 4: Plastic barrier for low intensity areas of construction

TPF 5: Chain-link for low intensity areas on large projects

ii. Tree Categories Explained

BS5837:2012 Table 1 -**Cascade chart for tree quality assessment**			
Category and definition	**Criteria (including subcategories where appropriate)**		
Trees unsuitable for retention (see Note)			
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 *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see **4.5.7.***		
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**
Trees to be considered for retention			
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

iii. Protection Plan

See the following page

BS5837 Tree Survey: Trees & Groups to be Retained

Retained Trees / Groups

Ref	Species	Common Name	Height	Stem Diameter	Canopy NESW	Crown Clearance	Age Class	Observations	Tree Surgery	Est. Remaining Contribution	Date Surveyed	No.	BS Cat
01	Cupressocyparis leylandi X	Leyland Cypress	7m	200#mm			Mature	Boundary screen		10 Years	18/1/2023	1	C2
02	Various species	Woodland	18m	600#mm		2m	Mature	Mixed off-site woodland. Comprising birch, oak, sycamore	Cut back southern canopy overhang as required	40 Years	18/1/2023	1	A2
03	Quercus robur	Pedunculate Oak	16#m	700#mm	6# N 6# E 6# S 6# W	4m	Mature	Off-site and inaccessible. Estimated location.Fair overall physiological and structural condition.		40 Years	18/1/2023	1	A2
06	Quercus robur	Pedunculate Oak	21m	700mm		2.5m	Mature	Boundary group. Valued as a group landscape feature. Individual tree quality is lower. Scattered dead wood.	Remove poorly attached deadwood.	40 Years	18/1/2023	1	A2
07	Quercus robur	Pedunculate Oak	15m	500mm; 400mm	5.5 N 4 E 5.5 S 5.5 W	2m	Mature	Asymmetric crown. Ivy. Scattered dead wood.	Remove poorly attached deadwood.	20 Years	18/1/2023	1	B1
08	Quercus cerris	Turkey Oak	22m	600mm; 700mm	11 N 7 E 7 S 9 W	2m	Mature	Good overall physiological and structural condition. Scattered dead wood	Remove poorly attached deadwood.	40 Years	18/1/2023	1	A1
09	Quercus cerris	Turkey Oak	20m	500mm	4 N 4 E 5 S 4 W	2m	Mature	Scattered dead wood. Some bark necrosis at 10 m	Remove poorly attached deadwood.	20 Years	18/1/2023	1	B1
10	Quercus cerris	Turkey Oak	22m	500#mm	2 N 3 E 6 S 5 W	13m	Mature	Fair overall physiological and structural condition. Ivy clad. Stem inaccessible.	Sever ivy at base	20 Years	18/1/2023	1	B1
11	Quercus robur	Pedunculate Oak	15m	500#mm	3 N 2 E 5 S 5 W	3m	Mature	Off-site and inaccessible. Ivy on stem. Fair condition		20 Years	18/1/2023	1	B2
12	Quercus robur	Pedunculate Oak	10m	400#mm	4 N 4 E 4 S 4 W	2m	Early-Mature	Fair overall physiological and structural condition.Off-site and inaccessible- dimensions estimated. Ivy.		20 Years	18/1/2023	1	B1
15	Malus sp.	Apple	4.5m	400#mm	2 N 3.5 E 3 S 1 W	1m	Mature	Small fruit tree. No wider landscape value		10 Years	18/1/2023	1	C1
16	Pyrus sp.	Pear	3m	200#mm	2.5 N 2.5 E 2.5 S 2.5 W	1m	Mature	Small fruit tree. No wider landscape value		10 Years	18/1/2023	1	C1
17	Quercus robur	Pedunculate Oak	14m	600#mm	6 N 6 E 6 S 6 W	2m	Mature	Off site and inaccessible. Competing with adjacent poplar. Fair condition		20 Years	18/1/2023	1	B1
18	Acer pseudoplatanus	Sycamore	9m	200mm	4 N 4 E 4 S 4 W	2m	Semi-Mature	Seedling becoming established		10 Years	18/1/2023	1	C1
19	Acer pseudoplatanus	Sycamore	9m	200mm	3 N 3 E 3 S 3 W	2m	Semi-Mature	Seedling becoming established		10 Years	18/1/2023	1	C1
20	Populus nigra italica	Lombardy Poplar	20m	600#mm	2.5 N 2.5 E 2.5 S 2.5 W	3m	Mature	Group of six stems. Previously topped at about 6 m. Ivy clad. off-site and inaccessible		20 Years	18/1/2023	6	B2
21	Quercus robur	Pedunculate Oak	16m	500#mm		1m	Mature	Group of boundary oak trees. Ivy clad. Graded as a group for their landscape value. Individual quality is lower.	Sever ivy at base	40 Years	18/1/2023	1	A2
24	Salix caprea	Goat Willow	8m	300mm	5 N 5 E 5 S 5 W	2m	Early-Mature	Fair overall physiological and structural condition.		10 Years	18/1/2023	1	C1
25	Salix caprea	Goat Willow	6m	400mm	2.5 N 2.5 E 2.5 S 2.5 W	2m	Early-Mature	Fair overall physiological and structural condition.		10 Years	18/1/2023	1	C1
26	Salix caprea	Goat Willow	6m	100mm; 100mm; 100mm	3 N 3 E 3 S 3 W	2m	Early-Mature	Fair overall physiological and structural condition.		10 Years	18/1/2023	1	C1
27	Chamaecyparis lawsoniana	Lawson Cypress	3m	200#mm	1 N 1 E 1 S 1 W	1m	Early-Mature	Small ornamental of limited value		10 Years	18/1/2023	1	C1
28	Prunus sp.	Prunus	4m	200#mm	2 N 2 E 2 S 2 W	1m	Mature	Group of three trees of limited quality and value.		10 Years	18/1/2023	3	C2
31	Pyrus sp.	Pear	4.5m	200#mm	3 N 4 E 2 S 1 W	2.5m	Mature	Growing between conifers and lean to. Limited long-term value		10 Years	18/1/2023	1	C1
32	Cupressocyparis leylandi X	Leyland Cypress	6m	200mm	3 N 3 E 3 S 3 W	2m	Semi-Mature	Boundary screen. Limited value. Two main stems, with three smaller two north		10 Years	18/1/2023	1	C2
33	Quercus robur	Pedunculate Oak	6m	400mm	3 N 5 E 3 S 2 W	1m	Early-Mature	Contorted due to competition with adjacent popular. Ivy on stem.		10 Years	18/1/2023	1	C1
34	Populus nigra italica	Lombardy Poplar	19m	500mm; 500mm	6 N 8 E 4 S 3 W	2m	Mature	Twin stems. Leaning heavily over sight. Poor form.	Consider cutting back to boundary	10 Years	18/1/2023	1	C1
35	Populus nigra italica	Lombardy Poplar	19m	500#mm	1.5 N 1.5 E 1.5 S 1.5 W	4m	Mature	Offsite tree. Inaccessible. Historically topped, now regrown.		20 Years	18/1/2023	1	B2
36	Populus nigra italica	Lombardy Poplar	19m	500#mm	2.5 N 2.5 E 2.5 S 2.5 W	4m	Mature	Offsite tree. Inaccessible. Historically topped, now regrown.		20 Years	18/1/2023	1	B2
37	Populus nigra italica	Lombardy Poplar	19m	500#mm	2.5 N 2.5 E 2.5 S 2.5 W	4m	Mature	Offsite tree. Inaccessible. Historically topped, now regrown.		20 Years	18/1/2023	1	B2
38	Prunus cerasifera	Cherry Plum	4m	100#mm	4 N 6 E 4 S 1 W		Mature	Limited wider value. Ivy clad. Off site and inaccessible		10 Years	18/1/2023	1	C1
39	Quercus robur	Pedunculate Oak	15m	700#mm	6 N 8 E 5 S 3 W	1m	Mature	Heavily ivy clad. Competing with adjacent poplar. Stem measurement estimated due to Ivy	Sever ivy at base	20 Years	18/1/2023	1	B2
40	Populus nigra italica	Lombardy Poplar	20m	300#mm	4 N 4 E 2 S 1 W	8m	Mature	Offsite and inaccessible. Leaning over fence. Competing with and congesting the crown of adjacent oak.	Consider removing tree over boundary	10 Years	18/1/2023	1	C1
41	Prunus cerasifera	Cherry Plum	4m	100#mm	4 N 4 E 4 S 4 W		Mature	Limited wider value. Ivy clad. Off site and inaccessible		10 Years	18/1/2023	1	C1
42	Populus nigra italica	Lombardy Poplar	19m	400#mm	2.5 N 2.5 E 2.5 S 2.5 W	5m	Mature	Off-site and inaccessible. Ivy clad. Historically reduced, now regrown		20 Years	18/1/2023	1	B2
43	Quercus robur	Pedunculate Oak	15m	400#mm	4 N 7 E 4 S 5 W	1m	Mature	Off-site and inaccessible. Ivy clad. Fair quality and condition		20 Years	18/1/2023	1	B2
44	Quercus robur	Pedunculate Oak	22m	800#mm	9 N 9 E 9 S 9 W	6m	Mature	Off-site and inaccessible. Good quality and condition.		40 Years	18/1/2023	1	A1
45	Ulmus sp.	Elm	13m	100#mm		2m	Early-Mature	Dead and declining elm stems. Group straddles the boundary fence.	Remove dead stems	0 Years	18/1/2023	1	U
46	Ulmus sp.	Elm	6m	200mm	3 N 1 E 3 S 5 W	2m	Mature	Entire crown weighted off site. Limited life expectancy.	Remove tree prior to development.	0 Years	18/1/2023	1	U
47	Quercus robur	Pedunculate Oak	25m	1100mm	11 N 11 E 11 S 11 W	2m	Mature	Large mature roadside specimen. Heavily ivy clad. Some scattered dead wood.	Remove poorly attached dead wood and sever ivy at base	40 Years	18/1/2023	1	A1
48	Quercus robur	Pedunculate Oak	10m	400mm	5 N 5 E 5 S 2 W	3m	Early-Mature	Somewhat stunted due to pressure from adjacent larger tree.		20 Years	18/1/2023	3	B2
49	Quercus robur	Pedunculate Oak	12m	400mm	5 N 5 E 5 S 4 W	3m	Early-Mature	Fair overall physiological and structural condition.		20 Years	18/1/2023	1	B2
50	Quercus robur	Pedunculate Oak	16m	600mm	7 N 7 E 7 S 7 W	4m	Early-Mature	Middle aged specimen with good vigour and vitality		40 Years	18/1/2023	1	A1
51	Fraxinus excelsior	Common Ash	17m	500#mm	7 N 7 E 7 S 7 W	3m	Mature	Group of stems with ivy. Limited signs of ash dieback.	Server ivy at base if it retained	10 Years	18/1/2023	1	C1
52	Acer pseudoplatanus	Sycamore	15m	400mm	4.5 N 5 E 5 S 5 W	3m	Early-Mature	Fair overall physiological and structural condition.		20 Years	18/1/2023	1	B1
53	Corylus avellana	Hazel	4m	300#mm	3 N 3 E 3 S 3 W	2m	Mature	Typical coppice form. Growing in hedgerow		10 Years	18/1/2023	1	C1
56	Mixed group	Mixed group	6m	300#mm			Mature	Boundary screen. Comprising laurel and bramble		10 Years	18/1/2023	4	C2
57	Mixed group	Mixed group	6m	300#mm			Mature	Boundary screen. Very patchy at southern end. Comprisingmostly mature unclipped laurel		10 Years	18/1/2023	2	C2
												Total :60	

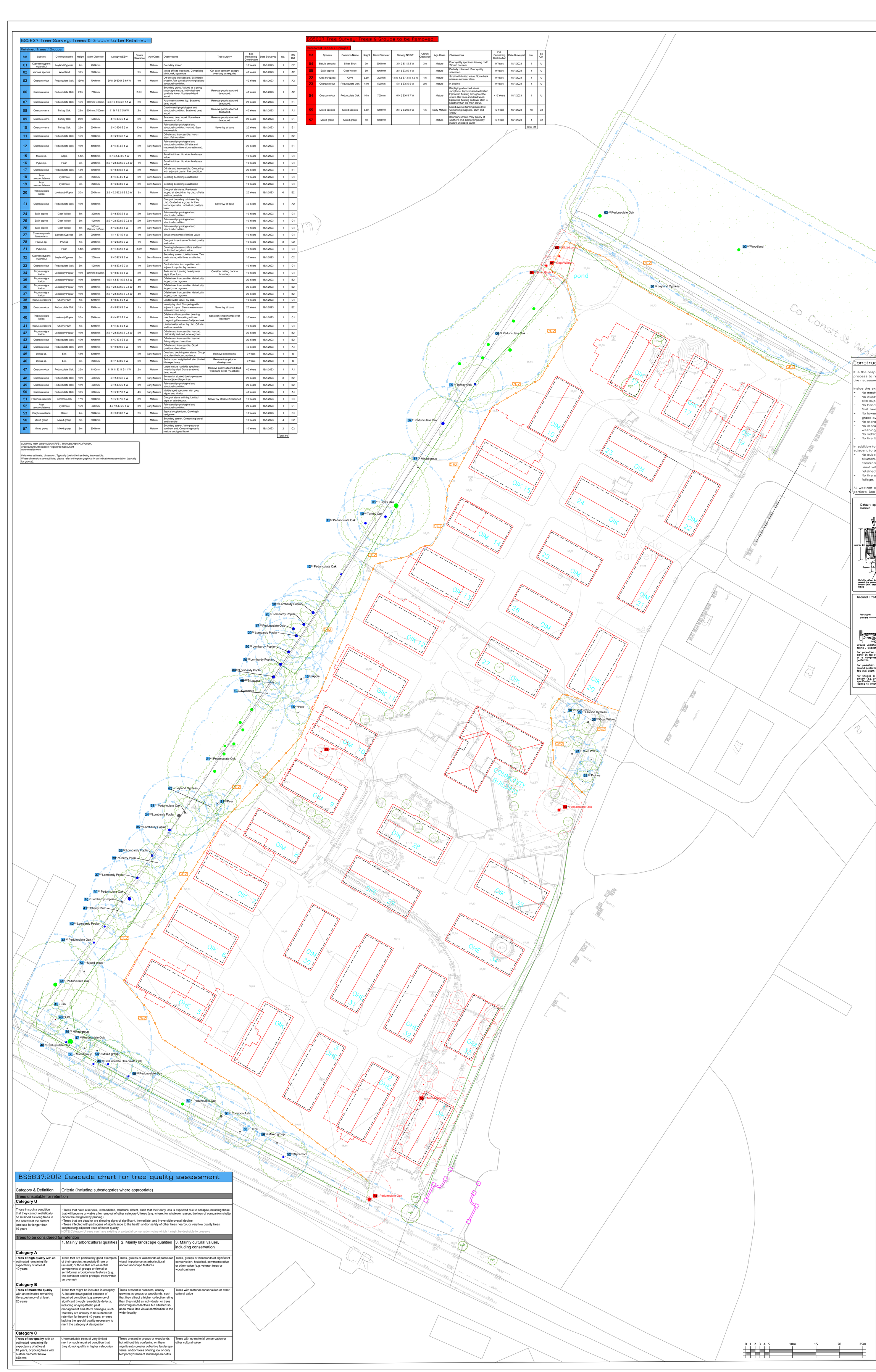
Survey by Mark Welby DipArb(RFS), TechCert(ArboriA), FArborA
Arboricultural Association Registered Consultant
www.mwelby.com

# denotes estimated dimension. Typically due to the tree being inaccessible.
Where dimensions are not listed please refer to the plan graphics for an indicative representation (typically for groups).

BS5837 Tree Survey: Trees & Groups to be Removed

Removed Trees / Groups

Ref	Species	Common Name	Height	Stem Diameter	Canopy NESW	Crown Clearance	Age Class	Observations	Est. Remaining Contribution	Date Surveyed	No.	BS Cat
04	Betula pendula	Silver Birch	9m	200#mm	3 N 2 E 1 S 2 W	3m	Mature	Poor quality specimen leaning north. Wound on stem.	0 Years	18/1/2023	1	U
05	Salix caprea	Goat Willow	5m	400#mm	2 N 6 E 3 S 1 W		Mature	Partially collapsed. Poor quality specimen.	0 Years	18/1/2023	1	U
22	Olea europaea	Olive	3.5m	200mm	1.5 N 1.5 E 1.5 S 1.5 W	1m	Mature	Small with limited value. Some bark necrosis on lower stem.	0 Years	18/1/2023	1	U
23	Quercus robur	Pedunculate Oak	13m	500mm	5 N 5 E 5 S 5 W	2m	Mature	In decline	0 Years	18/1/2023	1	U
54	Quercus robur	Pedunculate Oak	16m	700mm	6 N 5 E 6 S 7 W		Mature	Displaying advanced stress symptoms. Impoverished reiteration. Epicormic flushing throughout the crown. Die back and dead wood. Epicormic flushing on lower stem is healthier than the main crown.	<10 Years	18/1/2023	1	U
55	Mixed species	Mixed species	3.5m	100#mm	2 N 2 E 2 S 2 W	1m	Early-Mature	Mixed avenue flanking main drive. Comprising magnolia, plum and cherry	10 Years	18/1/2023	18	C2
57	Mixed group	Mixed group	6m	300#mm			Mature	Boundary screen. Very patchy at southern end. Comprisingmostly mature unclipped laurel	10 Years	18/1/2023	1	C2
											Total :24	



Construction Exclusion Zone

It is the responsibility of everyone engaged in the construction process to respect the tree protection measures and observe the necessary precautions within and adjacent to them.

Inside the exclusion zone, the following shall apply:

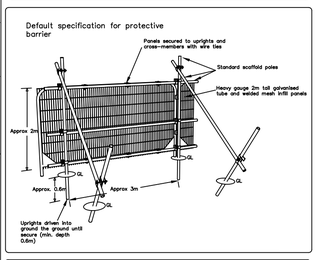
- No mechanical excavation whatsoever;
- No excavation by any other means without arboricultural site supervision;
- No hand digging without a written method statement having first been approved by the project arboriculturist;
- No lowering of levels for any purpose (except removal of grass sward using hand tools);
- No storage of plant or materials;
- No storage or handling of any chemical including cement washings;
- No vehicular access;
- No fire lighting.

In addition to the above, further precautions are necessary adjacent to trees:

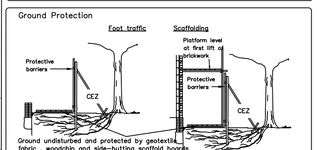
- No substances injurious to tree health, including fuels, oil, bitumen, cement (including cement washings), builder's sand, concrete mixing and other chemicals shall be stored or used within or directly adjacent to the protection area of retained trees;
- No fire shall be lit such that flames come within 5m of tree foliage.

All weather signs shall be erected at reasonable intervals on the barriers. See example inset

Default specification for protective barrier



Ground Protection



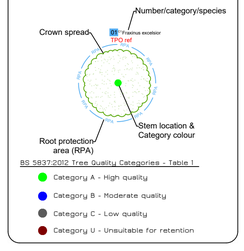
Ground undisturbed and protected by geotextile fabric , woodchip and side-butting scaffold boards

For pedestrian movements only, a single thickness of scaffold boards should be placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile.

For pedestrian operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards should be placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile.

For wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. pre-cast reinforced concrete slabs) should be employed to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely loading to which it will be subjected.

Key



BS 5837:2012 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category U - Unsuitable for retention

CEZ — Construction Exclusion Zone (CEZ)

CEZ extent. To be protected with temporary protective barriers or ground protection to allow construction access. See insets and method statement for details.

Tree to be removed

NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best practice.

- The reference numbers of surveyed trees and groups of trees are shown. Stem locations within groups may be estimated, and indicative of canopy only
- The tree survey was carried out from ground level only, with the aid of binoculars as necessary, following the Visual Tree Assessment (VTA) method.
- Where trees are located on neighbouring land an estimated appraisal has been made of their quality and dimensions.
- Where stems or branches are obscured by ivy or other materials a full assessment of those parts will not be possible.
- Height dimensions are estimated and are given in metres.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, unless otherwise stated. Where this is not possible, then Figure C.1 of the British Standard is followed.
- Tree canopies, where markedly asymmetrical, were measured (or estimated by pacing) in four directions using a laser measure. Symmetrical canopies are measured in one direction only, with dimensions in the remaining directions assumed to be similar. For the canopies of groups of trees, the maximum radius for each compass point is measured (more complicated groups will have further notes taken and an accurate representation will be shown on the plan).

Base plan/site survey reference: 7759.dwg

Statutory Tree Protection
Tree Protection Orders: none found with online LPA search

Conservation Area: NO

Felling licence: Garden areas are exempt.

Guidance on the implementation and use of this information, along with its limitations and more can be downloaded here: http://bit.ly/BSGuidance

This plan has been drafted in colour. A monochrome version must not be relied upon

BS5837:2012 Cascade chart for tree quality assessment

Category & Definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention			
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 NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve		
Trees to be considered for retention			
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation
Category A			
Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B			
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
Category C			
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Date/Notes/Rev

Tree Protection

31 Barkham Ride,
Finchampstead, RG40 4EX

Date: 10/12/2024
Scale: 1:250 @A1

DWG Ref: MW.2301.BRF.SK02.TPP

0 1 2 3 4 5 10m 15 20 25m

MARK WELBY CONSULTING ARBORISTS
Mark Welby
DipArb(RFS), TechCert(ArboriA), FArborA
Arboricultural Association Registered Consultant
07730 239 492 | mark@mwelby.com
www.mwelby.com
M Welby Ltd. | Hampshire | UK