# Extension to dwelling and relocation of garage at 171 Burton Road Monk Bretton Barnsley

## Phase 2
## Pre-development Arboricultural Report

**Prepared at the request of**

**Peter Thompson Architect**

**29 November 2023**

**By**

**Ian Kennedy**

**Wharncliffe Trees and Woodland Consultancy**

## Summary

I have been instructed by Peter Thompson Architect to carry out a pre-development survey of the trees growing on a small piece of land to the west of 171 Burton Road, Monk Bretton.

The development proposes a side extension to the dwelling and relocation of the detached garage.

Table 1 records information about the trees, including their species, dimensions, age, life expectancy, retention category and root protection area. This information was collected, interpreted and recorded in accordance with BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*.

There are seven individual trees included in this report. These are the trees closest to the boundary with 171 Burton Road and most likely to be affected by development at the property.

The trees are only small and are not particularly important individually, but collectively they make up a reasonably prominent group of trees within the local area.

Plan 1 shows the existing layout and Plan 2 shows the proposed layout.

The impact of development on the trees is discussed in Section 4 of this report.

The crowns and RPAs of Trees 2 and 4 extend by several metres into the garden but there are well away from the proposed development area.

The two trees closest to the development area (Trees 6 and 7) are set back from the boundary. Their crowns and RPAs only extend very marginally into the property. The excavation for the new drive layout will extend very marginally into the RPA of Tree 7 but this will be so small that there will be no impact on the tree.

The development proposals will have no impact on the trees growing on the neighbouring land.

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# 1 INTRODUCTION

## 1.1 Instruction

I have been instructed by Peter Thompson, Architect to carry out a pre-development survey of the significant trees growing on an area of land to the west of 171 Burton Road, Monk Bretton, Barnsley where an extension to the existing dwelling and relocation of the garage are proposed.

The tree survey is intended to provide a structured, impartial assessment of the tree population that could be affected by proposed development.

The survey is intended to be informative to all stages of the development process and was carried out in accordance with *BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations.*

## 1.2 Documents and Provided Information

I was provided with the following plan:

Title: Proposed Disabled Extension; dated July 2023, Revision A.

## 1.3 Limitations

This report is concerned only with assessing the condition of the trees, their importance in the local landscape and any cultural and conservation values.

It takes no account of the affects the trees may have on the soil, such as heave where trees are removed or shrinkage where trees are retained.

Trees are dynamic organisms influenced by weather, pests and diseases. Therefore, this report can only remain valid for a period of 24 months.

Any works around the trees such as trenching, pruning, storage of materials and trafficking that has not first been approved by a suitably qualified arboriculturalist will invalidate this report.

This report has been prepared for pre-development purposes. Whilst the condition of the trees has been assessed this is primarily to attribute a retention category. It is not a tree condition and safety report and may not include the same level of detail on tree health and structural condition.

No decay detection equipment was used to gather information on the condition of the trees.

All survey and inspection was completed at ground level.

# 2 SITE VISIT AND OBSERVATIONS

## 2.1 Site visit

I visited the land and property on 28 November 2023 to complete the survey.

All dimensions were taken using recognised methodology and arboricultural measuring equipment, unless otherwise stated. The methodology used in the survey recognises the guidance set out in BS5837 for measuring trees:

Stems are measured at 1.5m above ground level.

Where a stem divides below 1.5m both stems are measured.

The crown spread is measured at the four main cardinal points of north, south, east and west as a minimum.

The principles of BS5837:2012 were applied to the assessment and evaluation of the trees.

The weather at the time of inspection was sunny with light winds. Visibility was good.

## 2.2 Brief Site description

171 Burton Road, Monk Bretton is located to the south of Burton Road, Monk Bretton at Ordnance Survey grid reference SE 36238 07279.

The property is a semi-detached dwelling on a corner plot with a detached garage. The land towards the western boundary is at a raised elevation relative to the rest of the property.

There are no trees growing within the property. The trees are growing on raised land to the west of the garden.

## 2.3 Development Proposals

The development proposes a side extension to the existing dwelling and repositioning of the garage closer to the south western corner.

## 2.4 Location of the Trees

The positions of the trees were plotted by me using existing features to measure from. Only a small number of trees needed to be plotted and these were close to known features such as the boundary and highway. I am not a surveyor but I believe the positions are sufficiently accurate for the purposes of this report. If more accuracy is required the services of a surveyor should be used.

## 2.5 Discussion of the Trees

There are seven trees include in this report. These are the trees closest to the boundary and most likely to be impacted by development at 171 Burton Road. They form part of a slightly larger group of trees.

None of the trees are important individually but as a cohesive group they are prominent within the local area, particularly as they are growing on elevated land.

## 2.6 Tree observations

**Table 1. The Tree Survey**

| Tree number | Species | Height (M) | Stem diameter in MM at 1.5m | Branch spread (M) | Ht of canopy above Ground Level (M) | Life stage | Health | General observations on the tree's condition | Estimated life in years | Amenity value | Habitat value | Category*1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T1 | Field maple | 7.0 | 200 & 170 | North – 3.0<br>South – 2.0<br>East – 2.5<br>West – 0.5 | 0.5 | Young mature | Normal | A small, healthy, young tree with no defects. | 20+ | Medium | Low | B 2 |
| T2 | Ash | 7.0 | 210 | North – 3.0<br>South – 3.0<br>East – 3.3<br>West – 0.5 | 2.0 | Juvenile mature | Normal | A small, healthy, young tree.<br>The crown is heavily weight biased over garden. The crown is high above the garden given the difference in levels. | 20+ | Medium | Low | B 2 |
| T3 | Field maple | 7.0 | 100, 120, 160 | North – 2.5<br>South – 2.6<br>East – 1.0<br>West – 0.5 | 0.2 | Young mature | Normal | A small, healthy, young tree with no defects. | 20+ | Medium | Low | B 2 |
| T4 | Elder | 5.0 | 200 | North – 2.5<br>South – 2.0<br>East – 3.0<br>West – 1.0 | 2.0 | Mature | Normal | A healthy, small tree/large shrub.<br>The crown is weight biased over the garden but is high above the garden level. | 10+ | Low | Low | B 2 |

| Tree number | Species | Height (M) | Stem diameter in MM at 1.5m | Branch spread (M) | Ht of canopy above Ground Level (M) | Life stage | Health | General observations on the tree's condition | Estimated life in years | Amenity value | Habitat value | Category*1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T5 | Field maple | 6.0 | 200 | North – 1.8<br>South – 1.8<br>East – 3.0<br>West – 0.5 | 2.0 | Young mature | Normal | A small, healthy, young tree with no defects.<br>The crown is weight biased over the garden. The crown is high above the garden level. | 20+ | Medium | Low | B 2 |
| T6 | Field maple | 7.0 | 80. 150, 150 | North – 1.8<br>South – 1.8<br>East – 3.0<br>West – 0.5 | 1.0 | Young mature | Normal | A small, healthy, young tree with no defects. | 20+ | Medium | Low | B 2 |
| T7 | Field maple | 7.0 | 280 | North – 1.0<br>South – 4.0<br>East – 4.0<br>West – 1.5 | 1.0 | Young mature | Normal | A small, healthy, young tree with no defects. | 20+ | Medium | Low | B 2 |

*1 Please see appendix 2 below for sub category definitions. # - Estimated measurement

# 3 Interpretation of Information and References

My interpretation and appraisal of information gathered from the survey is based on experience of tree species, visual risk hazard assessment and the guidance set out in BS5837:2012 *Trees in Relation to Design, Demolition, Construction – Recommendations*.

## 3.1 BS5837:2012 Tree Retention Categories

All trees have been assessed and assigned a retention category in accordance with Table 1 of the standard. A copy of Table 1 from BS5837: 2012 is included as Appendix 2.

This categorisation is intended to rank trees according to their importance in terms of quality, health, life expectancy, amenity and landscape value, together with wildlife and cultural importance. This ranking assists in determining the suitability and appropriateness of trees for retention in any development. Categories A to C are those considered for retention, 'A' being highest.

Category A and B trees tend to be considered more valuable for retention than category C trees.

Category 'U' trees are those not suitable for retention because of impaired condition.

## 3.2 Below Ground Constraints; Root Protection Areas (RPAs)

The root protection area is the area of land considered necessary for trees should they be retained as part of any development. This is calculated using the stem diameter measured at 1.5 metres from ground level. This protection area is shown diagrammatically as a circle centred on the base of the tree where it is expected that rooting has not been impeded in any one direction and where disturbance has not taken place. Where rooting has been impeded or disturbance taken place then the shape and size of the root protection area is modified according to an assessment of where rooting is likely to take place.

Where trees are to be retained, it is optimal to locate structures and services outside the RPA. However, where incursion becomes necessary, technical solutions may be possible to limit damage, areas lost can be compensated elsewhere, or the soil environment can be improved. In these circumstances an arboricultural method statement will be necessary to ensure that works are undertaken sympathetically and do not damage the below ground parts of the trees.

## 3.3 Above Ground Constraints; Crown Spreads

Ideally, working areas will be out with the crown spreads of trees to be retained.

Any permanent development proposed within the canopy spread of a tree should be assessed to determine whether the level of pruning necessary to accommodate the layout would be acceptable. However, the effects of shade and other perceived inconveniences of trees this close to property should also be considered, together with the future growth potential of the trees and the maintenance obligation this will bring.

Where temporary access by high sided vehicles and machinery for construction or erection of scaffolding is necessary within the crown spreads of trees to facilitate development an arboricultural method statement will be necessary to ensure pruning works are carried out sympathetically prior to demolition or construction works commencing.

## 3.4 Conception and Design

The constraints imposed by trees should assist with site design and layout, together with the other competing needs of development.

The provisions of services and the access space required for construction itself should be considered.

# 4 ARBORICULTURAL IMPACT ASSESSMENT

This section of the report considers the impact that the proposed layout could have on the trees that are included in Table 1 and shown on Plan 1; *Tree Constraints Plan showing the existing layout.*

This section discusses the engineering solutions that may be available to retain trees where development is proposed within their RPAs or the pruning options available where development might affect crown spreads.

Where there is no option but to remove a tree to accommodate the proposed layout this section will discuss the impact on amenity and ecology and any mitigation that could be offered such as opportunities for replacement planting.

## 4.1 Arboricultural Impact Assessment

The crowns and RPAs of Trees 2 and 4 extend up to 3m into the garden. These trees are growing close to the boundary. The proposed development does not affect this area of the garden.

All of the other trees are set back from the boundary by between 1.5 and 2.5m. This is enough to keep most of their crowns and RPAs out of the garden.

There is some encroachment of the crowns and RPAs of Trees 6 and 7 into the garden. The excavations required for the drive modification will encroach marginally into the RPA of Tree 7. This will be so limited that there will be no impact on the tree's health.

# 5 ARBORICULTURAL METHOD STATEMENT

Ordinarily a method statement is necessary to protect trees being retained close to development. However, these trees are growing on neighbouring land behind a substantial fence and on elevated land. These negate the need for temporary tree protection measures.

# 6 REFERENCES, PLANNING POLICY AND GUIDANCE

## 6.1 National policy

Section 197 in the Town and Country Planning Act 1990 makes it the duty of Local Planning Authorities (LPAs), '*in the interests of amenity*,' to protect trees, when granting planning permission, either by the imposition of conditions or serving Tree Preservation Orders (TPOs).

The National Planning Policy Framework (NPPF) mentions trees and should be taken into account.

> ***131.*** *Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.*
>
> ***174.*** *Planning policies and decisions should contribute to and enhance the natural and local environment by:*
> *(b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;*
>
> ***180.*** *When determining planning applications, local planning authorities should apply the following principles:*
> *(a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
>
> *(b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
>
> *(c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be*

*refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; …*

*(d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Annex 2: Glossary

*Ancient or veteran tree: A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.*

*Ancient woodland: An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS).*

*Irreplaceable habitat: Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen.*

## 6.2 British Standard: Trees in relation to design, demolition and construction – Recommendations (BS 5837, 2012)

The British Standard: *Trees in relation to design, demolition and construction – Recommendations* (BS 5837, 2012) contains guidance on how to assess trees in or close to proposed development and information to include in pre-development arboricultural reportssubmitted with planning applications. Appendices 2 and 3 contain relevant extracts from BS 5837 (2012).

## 6.3 Barnsley Metropolitan Borough Council

Barnsley Local Plan. Adopted January 2019

17. Green Infrastructure and Green Space

# 7 CONCLUSIONS

The proposed development would have no impact on trees in the local area.

# 8 LEGAL CONSIDERATIONS

## 8.1 Protected trees

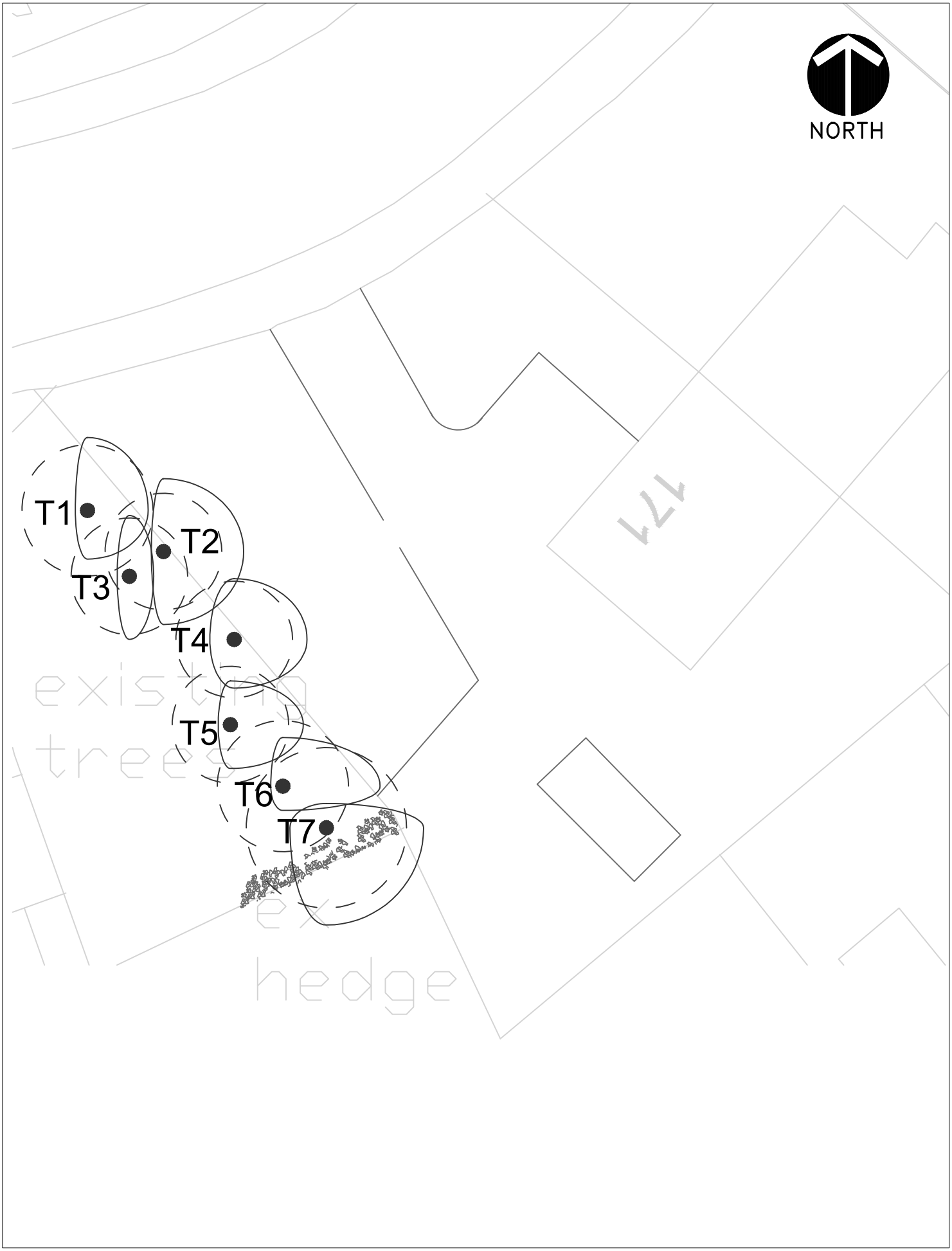
According to Barnsley Metropolitan Borough Council's online records which were checked on 29 November 2023 none of the trees included in this report are protected by a Tree Preservation Order (TPO) and the area is not within a Conservation Area.

## 8.2 Wildlife conservation legislation

Breeding birds are protected, together with bats and their roosts are, whether their roosts are in use or not.

Consideration should be given to the presence of protected species prior to any proposed tree removal or maintenance. This will include breeding birds, principally between March and August, and bats at any time of year.

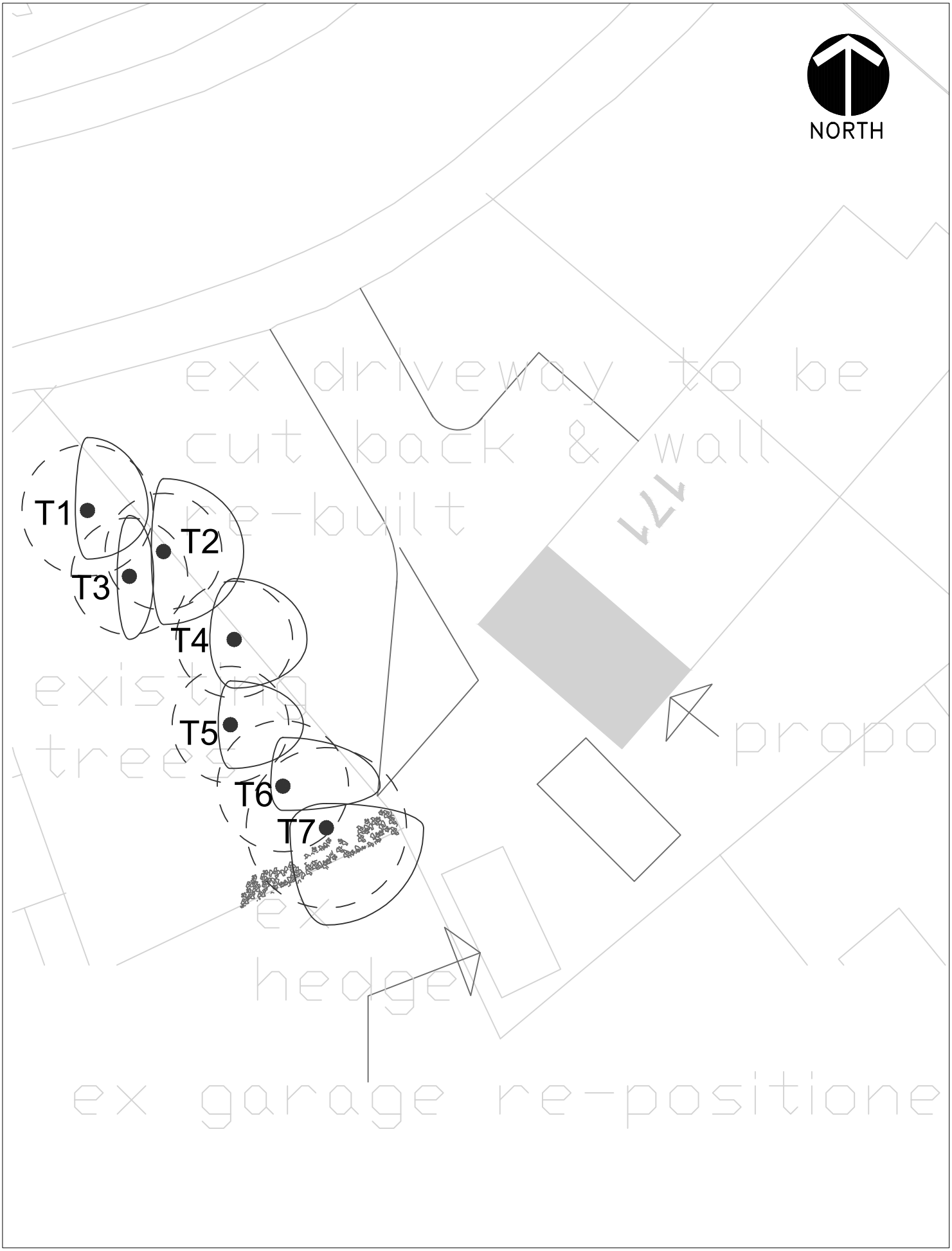
Tree surgeons should also be aware of their duties under legislation to protect wildlife and carry out their site assessment and work accordingly.




Plan 1 Tree Constraints Plan showing the existing layout

Scale 1:200 @ A4

Category B crown
Category B stem
Category B RPA




Plan 2 Tree Constraints Plan showing the proposed layout

Scale 1:200 @ A4

Category B crown
Category B stem
Category B RPA

## Appendix 1

## The Experience and Qualifications of Ian Kennedy

### 1. Qualifications

Ian graduated from the Scottish Agricultural College in August 1995 with a Higher National Diploma in Horticulture (HND) with Distinction.

In 1998 Ian graduated from the University of Aberdeen with a BSc (Hons) Upper second class in Forestry with Arboriculture and Amenity Forestry.

He passed the LANTRA Professional Tree Inspection examination in (2006).

In 2009 his application to become a professional member of the Arboricultural Association was assessed to fulfil all the necessary requirements and he became a professional member of the Association that year.

In 2011 he passed the final examination of the Institute of Chartered Foresters and become a member of that institute in January 2012.

### 2. Practical experience

Presently Ian is working in private practice as an independent arboricultural and woodland management consultant undertaking tree conditions surveys, pre-development tree surveys to the BS5837:2012 standard, mortgage reports and woodland management planning works. Clients range from home owners and farmers to architects, building companies, local authorities, schools and larger development companies.

Prior to private practice Ian held a number of positions in local government. Firstly, he was the arboriculturalist within a planning office in Essex. Ian gained considerable experience regarding trees in relation to development, in particular BS 5837.

Development work formed the core of his duties and applications ranged from small back garden developments to major schemes such as the redevelopment of Ministry of Defence land for private residential development. Ian also undertook all functions associated with Tree Preservation Orders (TPOs), including the making of new TPOs, assessing suitability of applications to work on protected trees and trees in conservation areas.

Ian went on to manage a 500 hectare woodland estate for a local authority in South Yorkshire that included a mix of urban and rural woodlands. This included preparation and implementation of detailed management plans for multiple use woodlands. He undertook all aspects of silvicultural management from marking to contract tendering and monitoring. He also managed the access, conservation, landscape and archaeological requirements of the estate.

Ian was directly involved in the estate achieving Forest Stewardship Council certification in 2003 and personally ensured continued certification.

Ian has worked extensively with Forestry Commission to obtain the necessary licences for management works and ensured the estate benefited fully from the full range of grants available.

Latterly at the same authority Ian went on to manage the trees and woodlands unit, having overall responsibility for management of the authority's tree and woodland stock and associated staff, together with delivery of other tree related services such as those associated with the Town and Country Planning Acts.

## 3. Continuing professional development

Ian regularly attends meetings, seminars and training events hosted by The Arboricultural Association. Institute of Chartered Foresters, Royal Forestry Society and Forestry Commission and benefits from the respective journals, briefings and newsletters available to members of the first three of the organisations listed.

## 4. Relevant experience

Ian Kennedy has spent 23 years working with trees, including as the arboricultural advisor to planning officers for a Local Planning Authority and manager of a trees and woodlands unit for another local authority with overall responsibility for trees, including in relation to the Town and Country Planning Acts.

## Appendix 2

## Tree Retention Categories

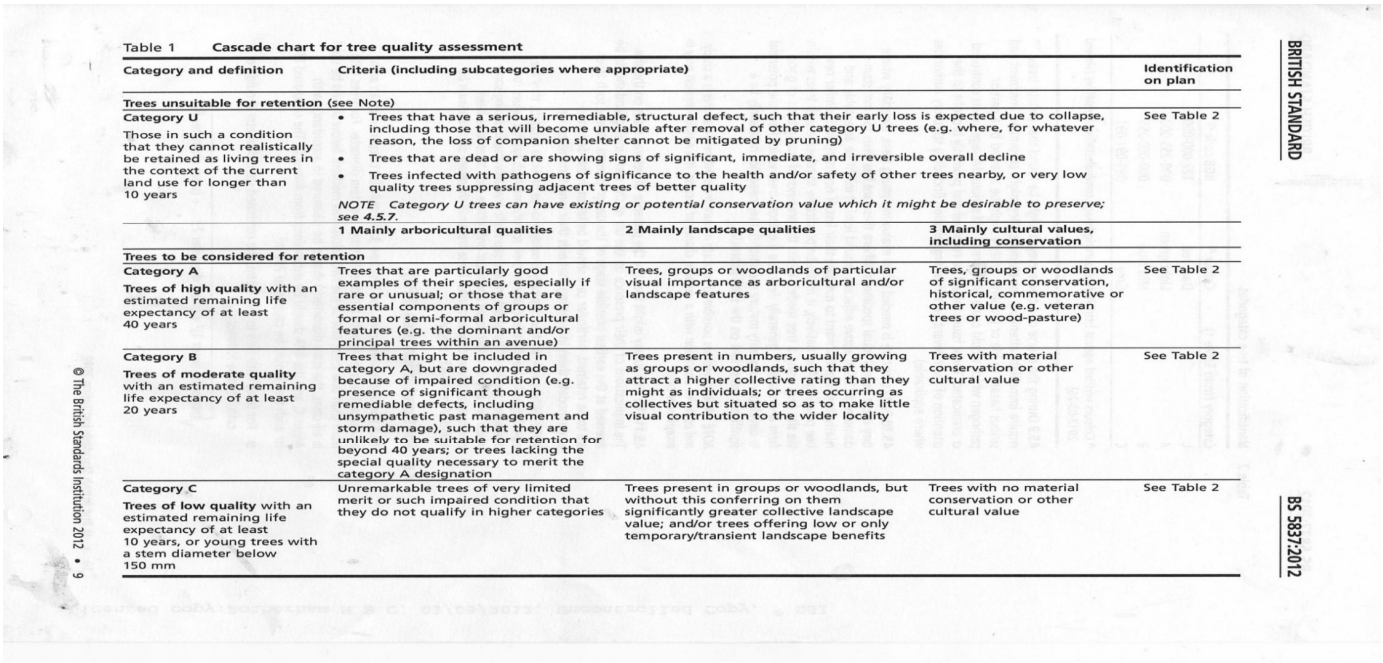


Table 1 **Cascade chart for tree quality assessment**

| Category and definition | Criteria (including subcategories where appropriate) | | | Identification on plan |
|---|---|---|---|---|
| **Trees unsuitable for retention** (see Note) | | | | |
| **Category U**<br>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)<br>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>• 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<br>*NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.* | | | See Table 2 |
| | **1 Mainly arboricultural qualities** | **2 Mainly landscape qualities** | **3 Mainly cultural values, including conservation** | |
| **Trees to be considered for retention** | | | | |
| **Category A**<br>**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) | See Table 2 |
| **Category B**<br>**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 | See Table 2 |
| **Category C**<br>**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 | See Table 2 |

## Appendix 3

## Explanatory notes for some of the terms used in this report

- **Stem Diameter:** The diameter of the trunk at 1.5m above ground level and recorded in millimetres measured with a diameter tape.
- **Compass Bearing:** N = north; S = south; E = east; W = west;
- **Life Stage:** Assessed as either:
    - Semi-mature = a size which could be easily transplanted;
    - Juvenile mature = prior to seed bearing age and could be transplanted with care;
    - Young Mature = early maturity, not fully grown but of seed bearing age and may have achieved mature height;
    - Mature = fully grown, annual growth is much reduced;
    - Old Mature = old for the species, possibly starting to decline;
    - Veteran = Beyond maturity for the species. This can be characterised by larger than average stem diameters, scaffold branches or crown spreads. Often still growing with full crowns.
    - Ancient = Well beyond normal mature age. It will have special characteristics associated with its age, including biological, cultural. Growth rates will significantly reduced and the tree may be declining is size.
- **Estimated size:** #
- **Health:**
    - Normal Vitality = normal growth and twig extension;
    - Moderate Vitality = reduced twig extension but other than that few signs of ill-health;
    - Early Decline = reduced twig extension and some dead twigs in the outer canopy;
    - Mid-decline = small internodes, the canopy may be thinning and contain dead twigs and/or branches in the outer canopy, older branch wounds that haven't occluded may be decaying and forming cavities;
    - Severe Decline = sparse crown, numerous dead twigs and branches in the outer canopy, older branch wounds likely to be decaying and forming cavities;
    - Dead.
- **Structural Condition**
    - Acute stem union = a weak union between two or more stems at the main forking point caused by the formation of reaction wood. Mechanical pressure at the forking point increases as secondary thickening occurs increasing the risk of failure at that point.

    - Acute branch union = the same principle as acute stem unions but between a stem and a branch or two branches rather than 2 main stems.

- **Estimated life**
    - The life expectance brackets of <10 years, 10+ years, 20+ years and 40+ years accord with the guidance in BS5837:2012 and should be considered as the useful life expectancy in the location the trees are growing in. For example, a tree with significant defects growing in a quiet area could be retained for longer than a tree growing next to a busy highway or a residential building.
- **Amenity**
    - High = Growing in a place that is very publicly visible such as a next to a busy road or places where people gather. The tree is also likely to be large or very large.
    - Medium = A smaller tree growing is a very publicly visible place or a large tree growing in a place with reduced public access.
    - Low = A small to medium sized tree growing in a quiet location where it is barely or not visible to anyone other than the landowner.

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