8 Bowsell Close
Royston
Barnsley

Phase 2
Pre-development Arboricultural Report
For Proposed Extension

Prepared at the request of

Peter Thompson Architect

On behalf of

Mr and Mrs Nevin

07 February 2024

By

Ian Kennedy

Wharncliffe Trees and Woodland Consultancy

Summary

I have been instructed to carry out a pre-development survey of the trees growing in the rear garden of 8 Boswell Close, Royston, Barnsley. The development proposes replacing the existing conservatory with an extension on a slightly larger footprint.

There are two trees included in this report. Both are mature sycamores growing along the southern boundary of the property.

The approximate locations of the trees are recorded on Plan 1 that shows the existing site layout.

Table 1 records their species, dimensions, age, life expectancy, any defects, their amenity value and habitat potential. This information was collected, interpreted and recorded in accordance with BS5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. The information is used to attribute retention categories to the trees; A, B, C and U. These retention categories are described in Appendix 2.

The trees are in good health with no serious defects. They have been included in retention category B.

Plan 2 shows the trees within the context of the proposed layout.

Section 4 of the report is the arboricultural impact assessment.

The RPA of Tree 1 has been modified to take account of the existing dwelling and conservatory. The footprint of the proposed extension extends only marginally further to the south than the conservatory. The impact of the proposed development on the tree is therefore believed to be negligible.

There would be no impact on Tree 2.

The method statement for protecting the trees during development is included in Section 5 and Plan 3.

I would recommend some pruning to the lower crowns of both trees to provide increased clearance of the telephone wires and telegraph pole. This recommendation is made irrespective of development proposals.

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1 INTRODUCTION

1.1 Instruction

I have been instructed by Peter Thompson Architect on behalf of Mr and Mrs Nevin, the applicants, to carry out a pre-development survey of the two trees growing within the rear garden of 8 Bowsell Close, Royston where an extension is proposed to replace an existing conservatory.

The tree survey is intended to provide a structured, impartial assessment of the tree population that could be affected by a 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 a plan from Peter Thompson Architect that shows the proposed layout. This is 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 property on 02 February 2024 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 overcast but dry with good visibility. Winds were light.

2.2 Brief Site description

The property is immediately to the north of High Street in the southwestern corner of Bowsell Close in Royston, Barnsley at Ordnance Survey grid reference: SE 35698 11521.

The dwelling is detached with gardens to the front and rear. There are trees in both the front and rear gardens along the boundary with High Street. Only the trees in the rear garden are included in this report.

2.3 Development Proposals

The development proposes replacement of the existing conservatory on the rear elevation with an extension to the property in a similar, but slightly larger footprint.

2.4 Locations of the Trees

The positions of the trees were plotted by me using fixed known points such and the existing dwelling and boundary features.

2.5 Tree observations

Table 1. The Trees

Tree number	Species	Height (M)	Stem diameter in MM at 1.5m	Branch spread (M)	Ht first branch above GL*1 (M)	Life stage	Health	General observations on the tree's condition	Estimated life in years	Amenity value	Habitat value	Category*1
T1	Sycamore	16.0	550	North – 2.7 South – 4.5# East – 4.5 West – 3.0	3.5 to N	Mature	Normal	A healthy and prominent tree growing along the southern boundary with High Street. The tree has been topped in the past at 10m. There are a number of pruning wounds up to 20cm diameter with some decay but they are also occluding. These are minor defects. It is a healthy tree. Some of the lower branches are growing into the telephone lines and touching the telegraph pole. Some pruning to provide clearance of the lines is advisable.	20+	Medium	Low	B 1

Tree number	Species	Height (M)	Stem diameter in MM at 1.5m	Branch spread (M)	Ht first branch above GL*1 (M)	Life stage	Health	General observations on the tree's condition	Estimated life in years	Amenity value	Habitat value	Category*1
T2	Sycamore	16.0	480	North – 4.8 South – 4.5# East – 3.3 West – 4.2	3.5 to N	Mature	Normal	A healthy and prominent tree growing along the southern boundary with High Street. The tree has been topped in the past at 10m. There are a number of very small pruning wounds up to 10cm diameter which are also occluding. These are minor defects. It is a healthy tree. Some of the lower branches are growing into the telephone lines and stretching them. Some pruning to provide clearance of the lines is advisable.	20+	Medium	Low	**B 1**

*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 often 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.

The RPA of Tree 1 has been modified to take account to the existing dwelling.

The RPAs of both trees are shown growing into the highway. Whilst the highway is not an idea rooting environment I believe that some rooting under the highway will be taking 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. Some pruning can be possible to increase clearance between trees and development. Pruning cuts should be kept to as small a diameter as possible. Large diameter pruning cuts can be difficult for the tree to repair, particularly in older and less vigorous trees.

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.*

4.1 Impact of Proposed Development on the Trees

Tree 1

The RPA of this tree has been modified to take account of the existing dwelling, including the conservatory. The proposed extension will sit on a similar footprint to the conservatory. The footprint for the proposed extension will sit slightly further south than the conservatory but this will result in very minimal encroachment into the RPA.

Provided that the RPA around the working area is protected during the development work I believe that there will be minimal impact on this tree.

Tree 2

The footprint of the extension will remain outside the RPA and crown spread of the tree. The tree will be unaffected provided it is adequately protected during development.

4.2 Tree Work Recommendations

The lower branches of the trees are touching and stretching the adjacent telephone wires. The lower branches of Tree 1 are also touching the telegraph pole. I would recommend some pruning work to the trees irrespective of development proposals.

Tree No.	Work Recommendation
Tree 1	Remove the low branch that is touching the telegraph pole. Remove two low branches to the east that are growing through the lines. Remove one low branch to the south that is growing through the lines.
Tree 2	Remove the branches from the lower crown that are touching and stretching the line.

5 ARBORICULTURAL METHOD STATEMENT

It is important that a method statement appropriate to the scale of development around retained trees is prepared, particularly where development or access is necessary within the RPAs and crown spreads of retained trees. This should address any eventuality that may involve working within the RPAs or crown spreads of existing trees. This will include temporary workings during construction as well as permanent incursion for surfacing.

5.1 Specific Tree Protection Measures

Tree protective fencing should be erected around the edge of the RPA of each tree to protect the rooting area during development.

Given the confined working space in the rear garden the fencing will not need to be as robust as in larger building sites where vehicles are operating. The confined working space in the rear garden will mean that protection will only be necessary from storage of materials and lighter equipment and pedestrians. Temporary wooden post and rail fencing will be adequate to prevent access and storage.

In addition, some temporary ground protection will be necessary around Tree 1 to prevent the ground becoming compacted during the demolition and building works.

The temporary ground protection should be boards such as scaffolding boards laid on a scaffold frame or interlocking boards suitable for lightweight use.

The tree protective fencing and ground protection should be in place before any other works take place and remain in place until all construction work has been completed.

Plan 3, Tree Protection Plan indicates where tree protection measures should be positioned.

5.2 General Tree Protection Measures

To avoid damage to retained trees where no construction or access within RPAs and crown spreads is necessary the following general precautions should be followed during the construction phase.

- No dumping or storing materials or waste, whether in a skip or on the ground.
- No temporary buildings, sheds, or offices without prior discussion with an arboriculturalist and agreement of the LPA.
- No storage of materials, equipment, plant, fuel or cement.
- No bonfires within 10m of the outer edge of the crown or RPA.
- No refuelling mechanical equipment or mixing of cement.
- No washing cement mixers within or uphill of the RPA.
- No vehicles and plant unless the soil is suitably protected as recommended an arboriculturalist and agreed by the LPA.
- No raising the soil level without prior discussion with an arboriculturalist and agreement of the Local Planning Authority (LPA).
- No excavations without prior discussion with an arboriculturalist and agreement of the LPA.
- No redirection of surface water runoff into or out of the RPA.
- Follow the guidance contained within the National Joint Utilities Group Volume 4 (Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2, 2007); www.njug.org.uk) when installing underground services within the RPA of a retained tree.

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) (2021) 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 reports submitted with planning applications. Appendices 2 and 3 contain relevant extracts from BS 5837 (2012).

6.3 Barnsley Borough Council

Barnsley Local Plan. Adopted January 2019

17. Green Infrastructure and Green Space

7 LEGAL CONSIDERATIONS

7.1 Protected trees

According to Barnsley Council's online records of Tree Preservation Orders (TPOs) and Conservation Areas, which were checked on 07 February 2024, the two trees included in this report are protected by TPO Ref. 10. The trees are included in G1 of the TPO.

This means that any work to the trees, with some very limited exemptions, will require the consent of the local planning authority.

7.2 Wildlife conservation legislation

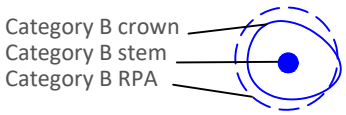
Breeding birds are protected, together with bats and their roosts are, whether their roosts are in use or not.

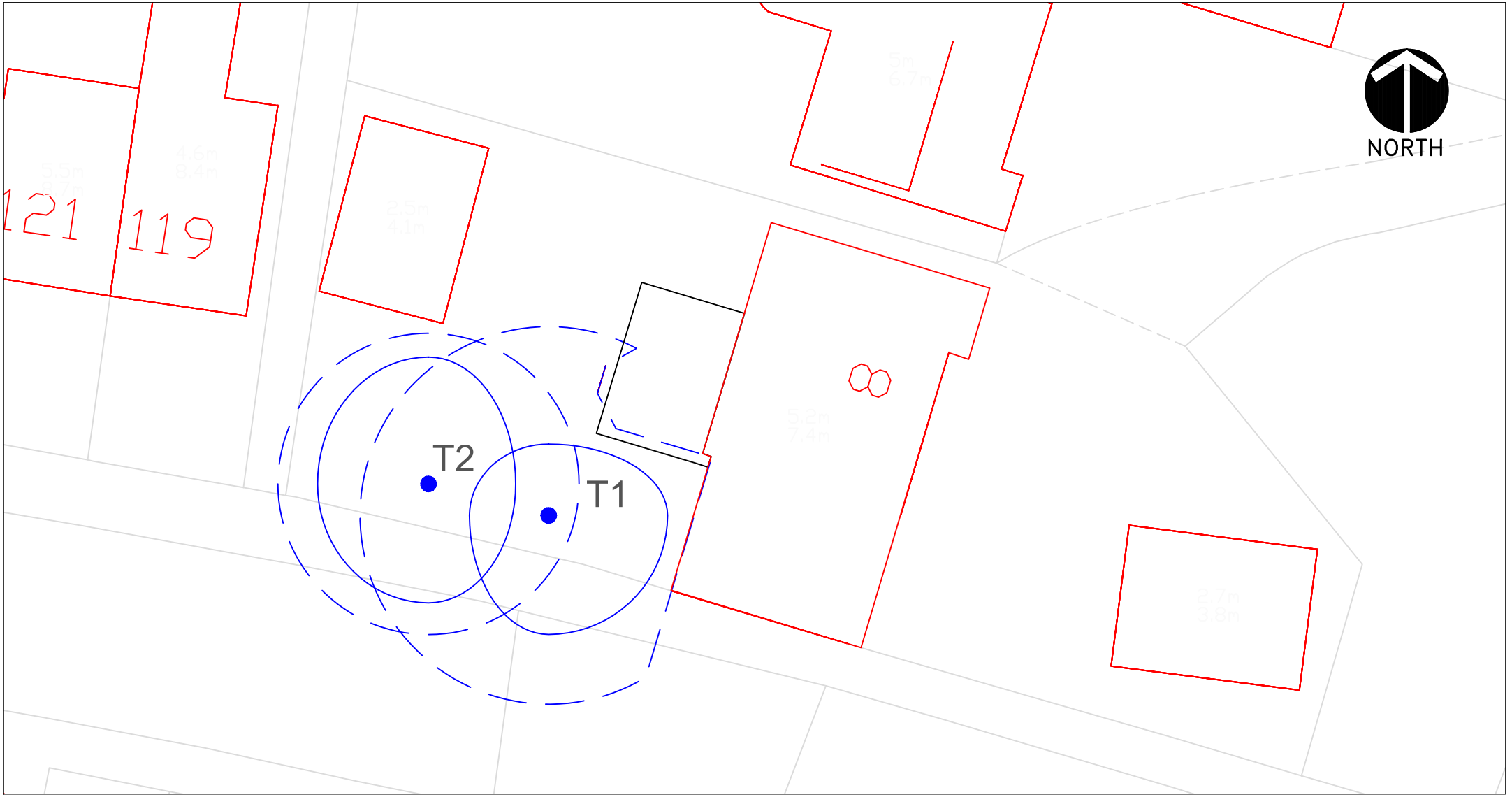
Consideration should be given to the presence of protected species prior to any proposed tree removal or maintenance. This will include breeding birds, principally between March and August, and bats at any time of year.

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

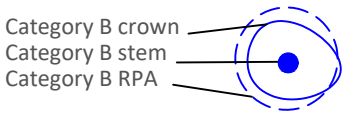
Scale 1:200 @ A4

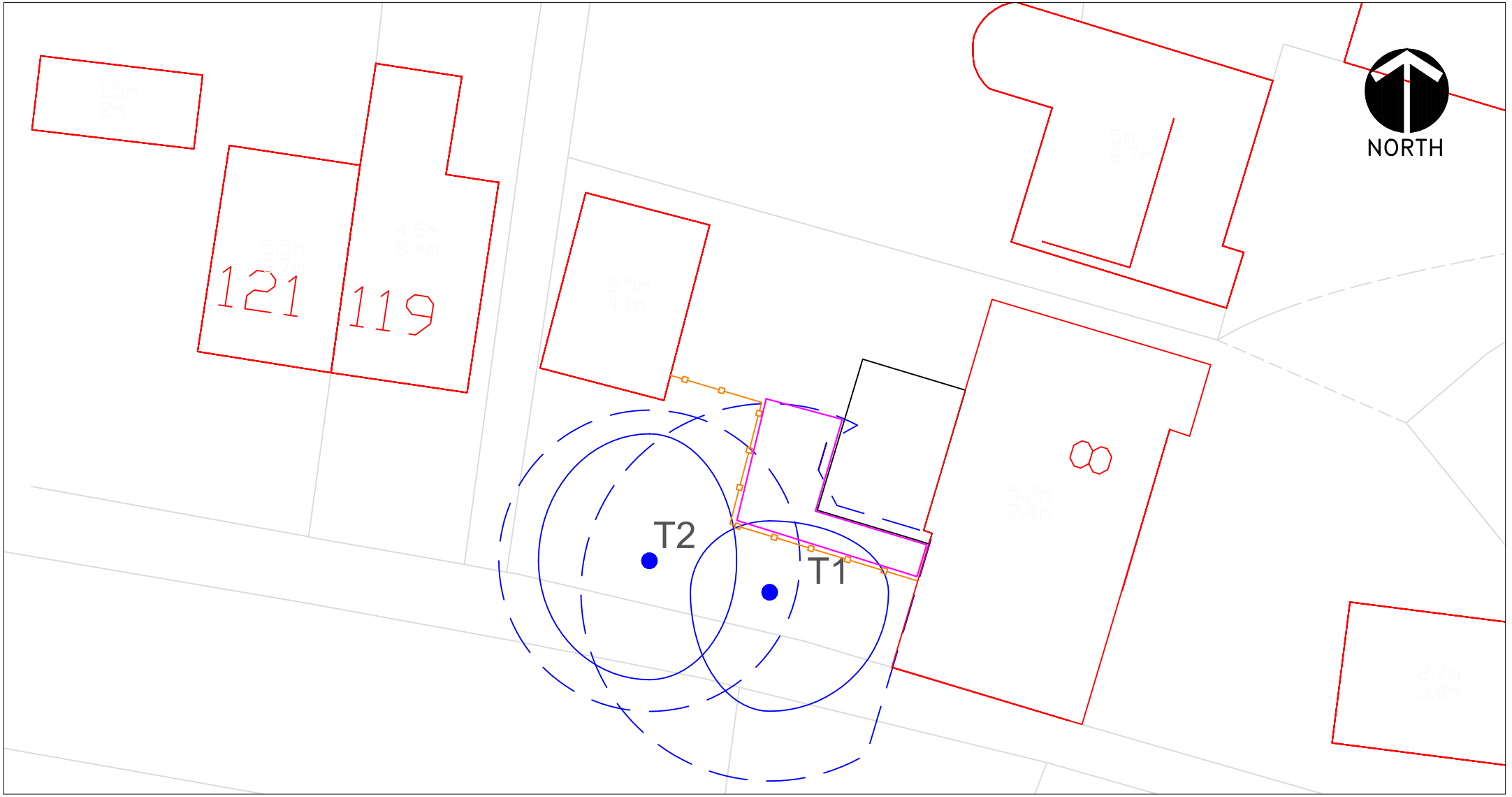




Plan 2 Tree Constraints Plan showing the proposed layout

Scale 1:200 @ A4





Plan 3 Tree Protection Plan showing the proposed layout

Scale 1:200 @ A4

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 24 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 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.*			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 **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 **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 **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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