17 Beaumont Road

Kexbrough

Barnsley

Arboricultural Impact Assessment

Prepared at the request of Peter Thompson, Architect

22 February 2020

By

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Summary

I have been instructed by Peter Thompson, Architect on behalf of the owners of 17 Beaumont Road, Kexbrough to complete an arboricultural impact assessment for the proposed garden room in the rear garden of the property.

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*.

The location, crown spread and root protection areas (RPAs) of one group of ten trees and one individual tree are recorded on Plan 1 that shows the existing layout.

Plan 2 shows the proposed layout.

The group of ten trees is growing in a raised bed almost 1m above the main garden level. These are a mixture of young conifers and broadleaves. They have been included in the lowest retention category C principally because they are not significant in the local landscape and have no value to anyone other than the owners of the property.

The individual tree is a sycamore growing in the neighbouring garden. This has been included in the second highest retention category B due to its prominence and contribution to tree cover in the wider area.

None of the trees would be affected by the proposals because they are set too far from the proposed development and are growing at a raised elevation. Neither the crown spreads nor the root protection areas are within the proposed development area.

I do not believe that the proposals will have a detrimental impact on any of the trees in or around the garden.

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1.0 Introduction

1.1 Instruction

I have been instructed by Peter Thompson Architect to carry out an arboricultural impact assessment to support a planning application for a garden room in the rear garden of the property.

The survey and this report have been carried out in accordance with *BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations.*

1.2 Documents and Information Provided

I was provided with the following document:

A drawing of the proposed layout, by Peter Thompson Architect.

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.

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

All survey and inspection was completed at ground level.

2.0 Site Visit and Observations

2.1 Site Visit

The site visit took place on 18 February 2020. All dimensions were taken using recognised methodology and arboricultural measuring equipment, unless otherwise stated. The weather at the time of inspection was overcast with steady rain. Visibility was good. There was a blustery wind.

2.2 Brief Site Description

The property is a domestic dwelling on the west side of Beaumont Road, Kexbrough, Barnsley at Ordinance Survey grid reference SE 30424 09583.

The dwelling is a detached property with gardens to the front and rear. The rear garden where the development is proposed is roughly square, of moderate size with a raised bed along the western boundary.

The trees within the garden are growing in the raised bed. The other tree included in this report is growing within the large garden to the west owned by the care home.

2.3 Development Proposals

The development proposes a detached garden room in the southwest corner of the rear garden.

2.4 Tree Observations

The trees included in this report were inspected in detail and the information on their size, condition and retention categories is included in Table 1 below.

Table 1. The Tree Survey

Tree number	Species	Height (M)	Stem diameter (DBH in MM)	Branch spread (M)	Ht first branch above GL* (M)	Ht of canopy above GL (M)	Life stage	Vitality	General observations on the tree' s condition	Estimated life in years	Category
G1	Group: 7 x Lawson cypress 2 x silver birch 1 x eucalyptus	6.8 to 8.0m	<250	North – 1.1 South – 1.1 East – 1.1 West – 1.1	1.2m	1.2m (2.1m above the garden)	Juvenile mature	Normal	A group of healthy young trees growing in a raised bed almost 1m above the main garden level. The trees are too young to have accumulated any significant defects.	40+	C (1)
T1	Sycamore	18m #	700#	North–7.0# South–8.0# East – 5.0# West– 5.0#	3.0#	3.0	Mature	Normal	The tree is growing in the neighbouring garden approximately 15m from the boundary. Inspection was limited to the garden of 17 Beaumont Road. All dimensions were estimated. The tree appeared to have good form and good health but it was not possible to know whether the lower stem had any significant defects. The retention category given here assumes it had no significant defects.	20+	B (1)

- Estimated * GL - Ground Level

3.0 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*. My qualifications and experience in arboriculture are included in appendix 1.

3.1 BS5837:2012 Tree Retention Categories

All trees have been assessed and assigned a category in accordance with Table 1 of the standard. A copy of Table 1 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 'U' trees are those not suitable for retention because of impaired condition.

Generally category A and B trees should be given more consideration in layouts than category C trees as these are considered more valuable because of their condition, landscape value, future life expectancy or, on occasions because of their more favourable habitat value.

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. See Plan 1. 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.

The RPA of Tree 3 has been modified in shape to take account of the nearby buildings that are likely to be a similar age to the tree.

3.3 Above Ground Constraints; Crown Spreads

Ideally, working areas and construction will be out with the crown spreads of trees to be retained. However, where 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 construction works commencing.

Any permanent development within the canopy spread of a tree will also require a method statement. 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.

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. Generally the trees in the higher categories (A and B) should be given greater consideration in any layout than the lowest retention category (C).

As well as the footprint of buildings, the provisions of services, infrastructure layout and the access space required for construction itself should be considered.

4.0 Arboricultural Impact Assessment

4.1 Arboricultural Impact Assessment

Group 1

This group of trees is growing in a raised bed almost 1m above the main garden level where the development is proposed. The root protection area (RPA) for these trees will end at the edge of the raised bed. The crowns of the trees currently extent to the edge of the raised bed.

The photograph below shows the height difference between the development area and the ground that the trees are growing in.



Tree 1

This tree is growing in the neighbouring garden approximately 15m from the boundary of 17 Beaumont Road. The land that this tree is growing on is approximately 1m above the development area at 17 Beaumont Road. Plan 2 shows that the RPA and crown spread of this tree is well outside the redline boundary of the development.

For these reasons I do not believe that the proposed development will have any impact on the existing trees in the area.

4.2 Arboricultural Method Statement

Method statements are produced to avoid damage to the above and below ground parts of existing trees that are to be retained during development operations.

Because the trees are growing in a raised bed it will not be possible to access them during the development. Provided the general precautions in 4.4 below are followed I do not believe that there will be any requirement for a method statement for this development.

4.3 Relevant Industry Standards and Codes of Practice

The main arboricultural industry standards and codes of best practice relevant to the planning and execution of this project are:

- BS 5837 (2012) – Trees in relation to construction – Recommendations;
- BS 3998 (2010) – Tree Work – Recommendations; and
- National Joint Utilities Guidelines, Volume 4 – NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) (www.njug.org.uk)

4.4 General Precautions

The following general precautions should ensure the health and longevity of the retained tree. They should be enforced during the construction phase within the RPAs of the retained tree and under its canopy.

- All work will be carried out in accordance with a current risk assessment.
- All proprietary materials will be installed in accordance with their manufacturer's instructions and a current risk assessment.
- All equipment and tools will be used in accordance with their manufacturer's instructions and a current risk assessment.
- No storage of materials or fuel.
- No bonfires within 10m of the outer edge of the crown or RPA of a tree.
- No refuelling of mechanical equipment.
- No mixing of cement.
- No washing of cement mixers.
- No raising the soil level without the agreement of the Local Planning Authority (LPA).
- No excavations without the agreement of the LPA.
- Only operate or park vehicles and plant if the soil is suitably protected, as agreed by the LPA.
- 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); http://www.njug.org.uk/) will be followed when installing underground services within the rooting areas of retained trees. To minimise potential damage to tree roots excavations will be carried out by a pneumatic excavation lance.
- No materials will be dumped or stored within the RPA of a tree or under its canopy, whether in a skip or directly on the ground, unless the ground is suitably protected against contamination and compaction.

5.0 Legal Considerations

Protected trees

I have checked Barnsley Borough Council's website for tree preservations orders. There is an area order covering the grounds of the care home and the western parts of the gardens of 9 to 21 Beaumont Road. This includes the edge of 17 Beaumont Road where Group 1 is growing. The order is referenced as A1 of TPO 14.

Tree preservation orders have different classifications; these are individual trees, groups of trees, woodlands and areas.

This is an area order. Area orders protect trees that were present when the tree preservation order was made but not anything that has grown or been planted since then. Unfortunately, the link on the council's website that provides details of when the order was made was not working.

The description of the trees included in this order is "horse chestnut, sycamore, weeping willow, silver birch, holly, laburnum, thorn and acacia". There is no reference to any conifer species. On that basis the sycamore in this report is highly likely to be protected but the conifers and eucalyptus in Group 1 are probably not. However, I would strongly advise that this is confirmed with Barnsley Council before doing any work to the trees.

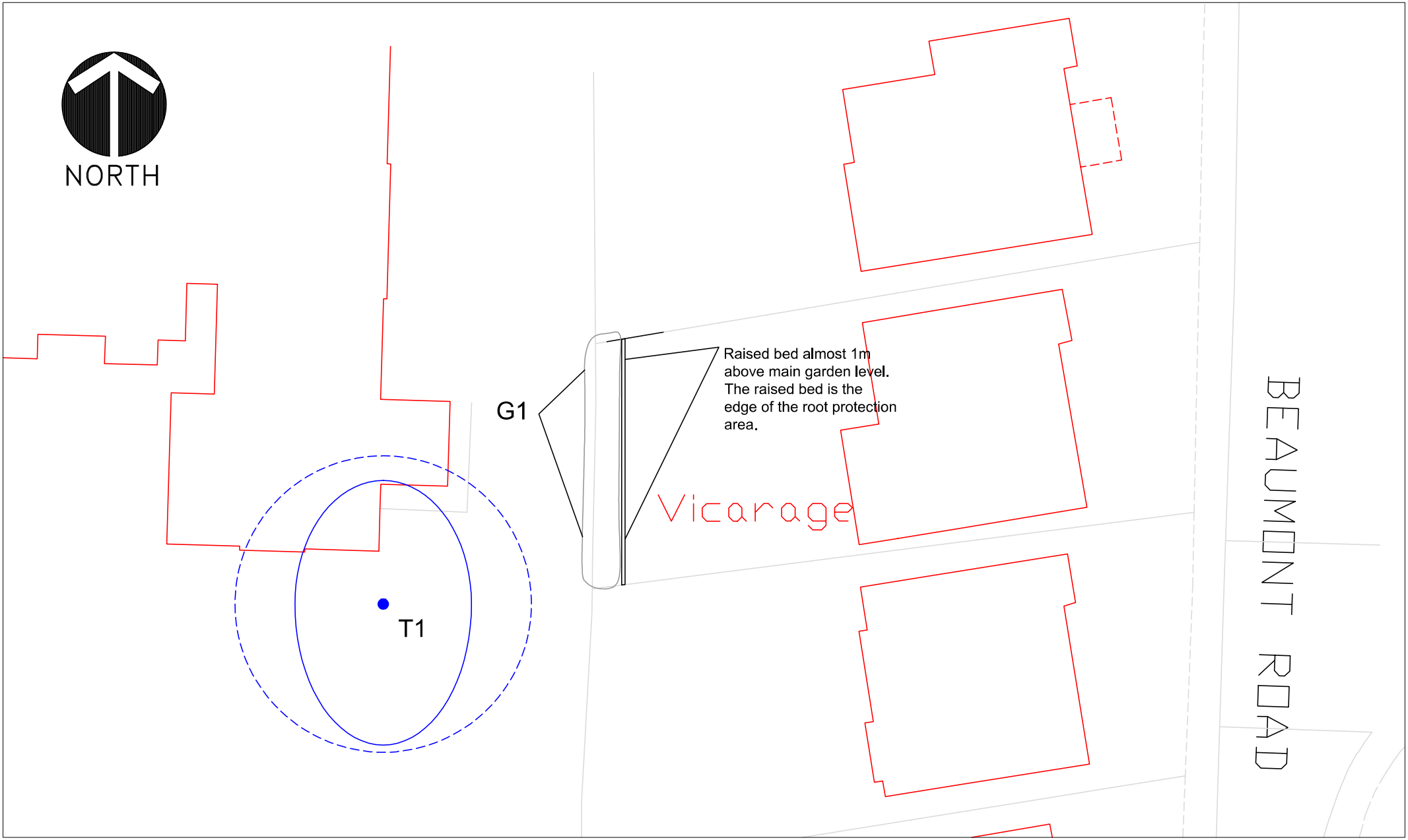
No work will be necessary to the trees to implement the development.

Wildlife conservation legislation

Breeding birds are protected, together with bats and their roosts, 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.

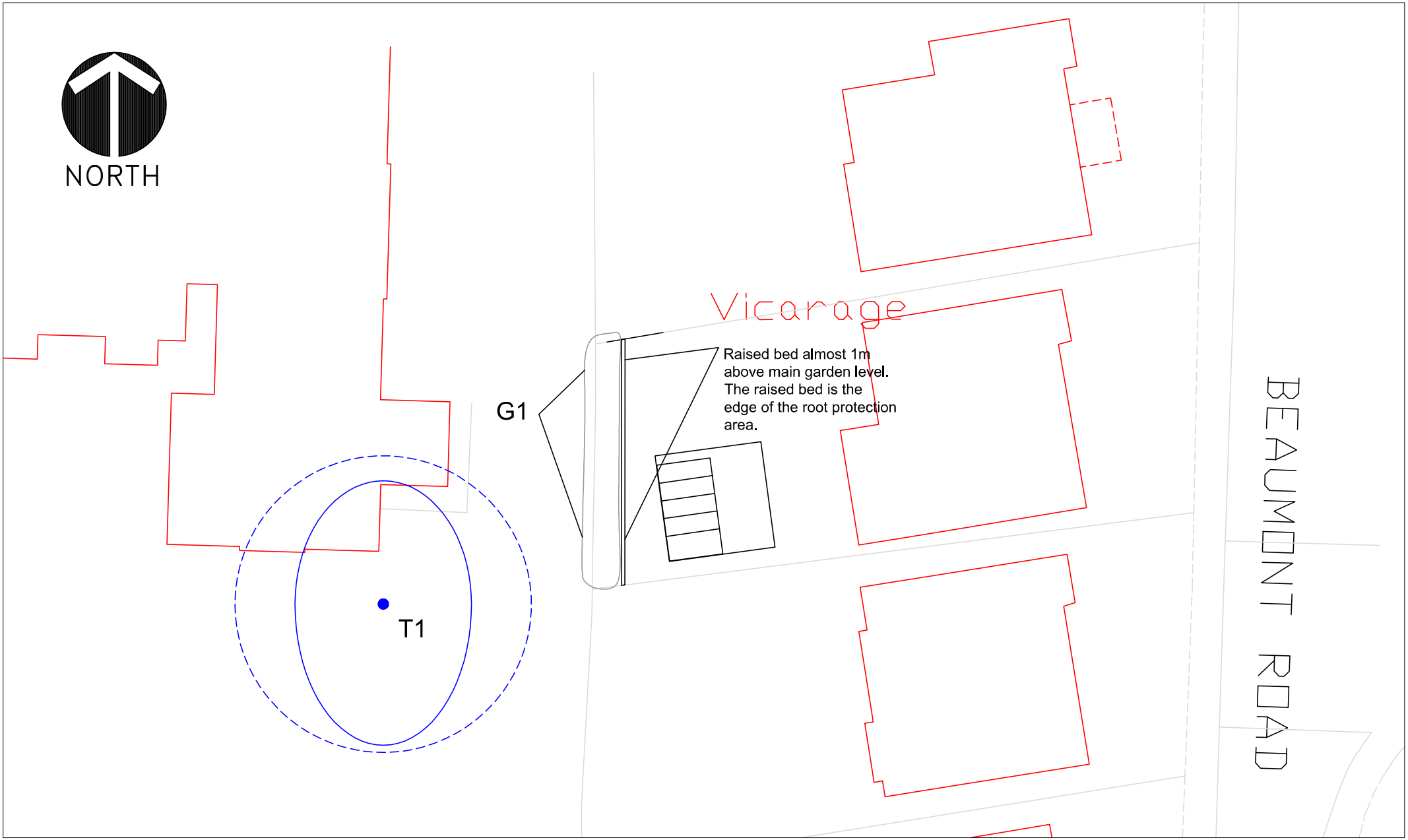
Tree surgeons should also be aware of their duties under legislation to protect wildlife and carry out their site assessment and work accordingly.



Plan 1 Tree Constraints Plan showing the existing layout

Scale 1:200 @ A3





Plan 2 Tree Constraints Plan showing the propsed layout

Scale 1:200 @ A3

Category C Crown
Category C Stem
Category C RPA

Category B Crown
Category B Stem
Category B RPA

Appendix 1. Qualifications and Experience 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 20 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

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Appendix 3. Explanatory notes for terms used in this report

- **Compass Bearing:** N = north; S = south; E = east; W = west;
- **Age Class:** Assessed as either:
    - Young = a size which could be easily transplanted;
    - Semi-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;
- **Trunk Diameter:** These figures relate to the diameter of the trunk at a given distance above ground level and are recorded in centimetres measured with a diameter tape.
- **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.

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