

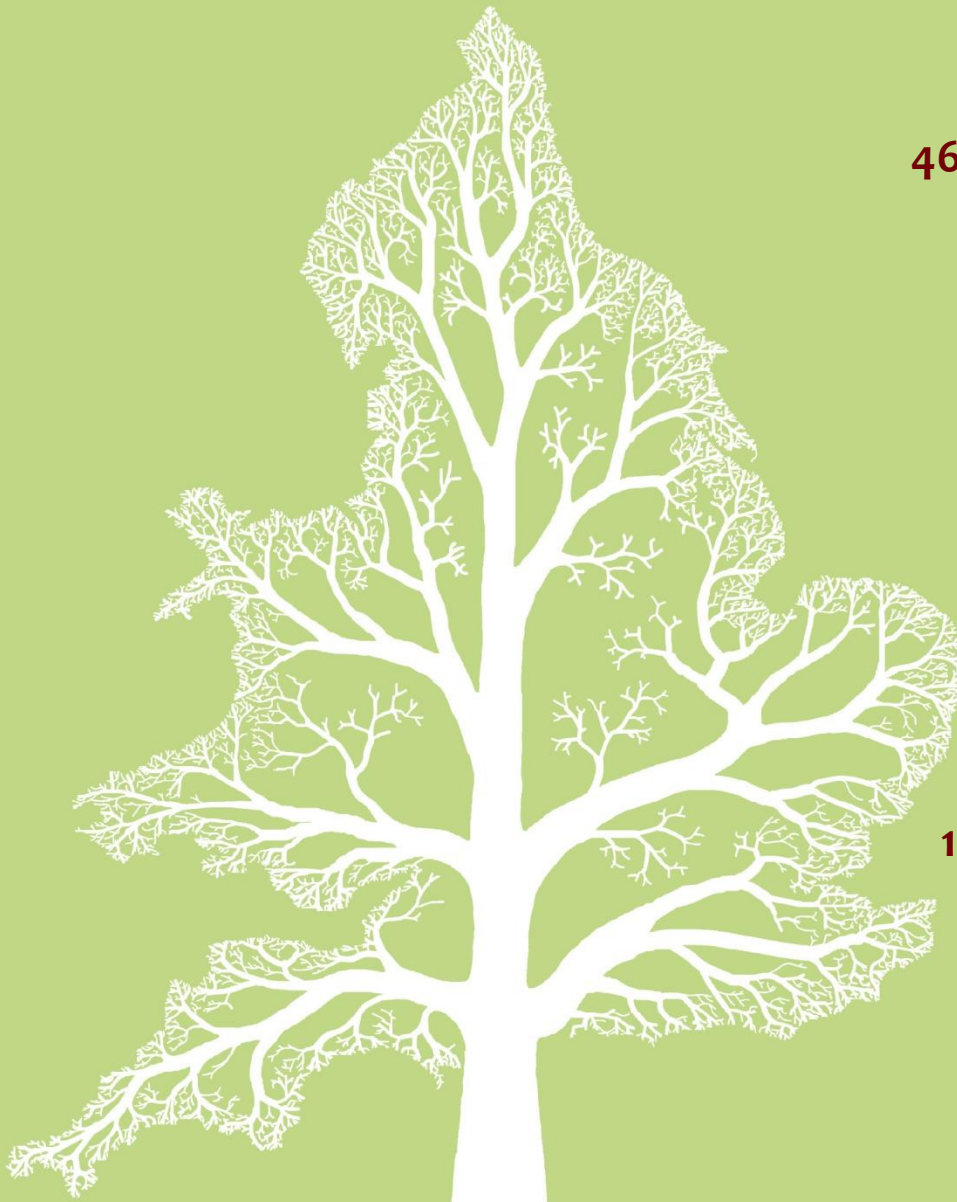
BS 5837 Arboricultural Report

& Impact Assessment



at
46 Priory Road
Hornsey
N8 7EX

Dated
13th May 2024



CROWN
Tree Consultancy

Branching out through England and Wales

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1. Introduction

1.1. Instruction

1.1.1. We are instructed by Jamie Cave of District Architects to:

- Undertake a Tree Survey to BS 5837 at 46 Priory Road and assess all trees potentially within influencing distance of proposed development within the site.
- Plot the trees on a Tree Constraints Plan and record the data in a Tree Data Schedule.
- Provide preliminary management recommendations for the tree stock (independent of development proposals).
- Assess the potential impact of the development proposals and provide guidance as to appropriate mitigation measures.
- Produce an Arboricultural Impact Assessment for submission to the local authority.

1.2. Purpose of this Report

- 1.2.1. This report is produced according to the guidance and recommendations within BS 5837: 2012 - *Trees in Relation to Design, Demolition, and Construction*. It is tailored to accompany a planning application. It assesses the impact of all proposed construction works on the tree population. Tree removal, canopy pruning, and the impact upon roots from various groundworks are all considered in detail. Best practice mitigation is specified wherever appropriate.
- 1.2.2. Consideration is also given to the impact of the changed juxtaposition between trees and buildings and how that may influence future tree management.
- 1.2.3. This document should not be used to inform management decisions relating to liability or risk management. Such decisions should be based on a more detailed inspection of the trees than was carried out for this report.

1.3. Author

- 1.3.1. This report was compiled by Carl Lothian BSc (Hons) Arboriculture. Carl's resumé can be found in Appendix 3.

2. The Survey

A visual ground-level assessment of all trees was undertaken on the 14th of May 2023 by Ivan Button. No climbed inspections or specialist decay detection were undertaken.

2.1. Methodology

- 2.1.1. Structural condition was assessed by inspecting the stem and scaffold branches, looking for weak branch junctions, symptoms of decay, or other structural defects. Any recommended works were made to ensure the trees are in acceptable structural condition. The position of the tree and its potential targets were taken into account.
- 2.1.2. Physiological condition was assessed by inspecting the stem, branches and foliage for symptoms of disease. The vigour of the tree was also taken into account.
- 2.1.3. Key measurements were obtained using a diameter tape, clinometer, distometer and loggers tape. Where this was not practical, measurements were estimated.
- 2.1.4. Some trees may be surveyed as groups, though this is usually avoided close to areas likely to be developed.

The tree locations shown on the accompanying drawings are based on a measured drawing of the site supplied to Crown Tree Consultancy. This drawing had the tree positions already plotted. Where applicable, additional trees have been plotted by us according to measurements taken on-site.

- 2.1.5. Finally, a *Retention Category* is allocated as prescribed within BS5837 2012. The relevant cascade chart is duplicated below.

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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	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
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
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 with no material conservation or other cultural value
		See Table 2

- 2.1.6. Further guidance on interpreting BS 5837 and our survey methodology is given in Appendix 1.

2.2. Survey Extent

- 2.2.1. The area indicated below¹ shows the extent of the site. Our survey included all trees within the curtilage of the property and those adjacent to it.



2.3. Summary of Observations

- 2.3.1. Number 46 Priory Road is a residential property with gardens to front and rear.
- 2.3.2. Within the curtilage of the site we identified two Retention Category C trees.
- 2.3.3. Beyond the curtilage of the site we identified five Retention Category A trees and one Retention Category C tree.
- 2.3.4. The Tree Constraints Plan and Tree Data Schedule (see Appendix 4) should be referred to for descriptions and locations of all trees.

¹ Image taken from Google Earth and may not be current

3. Vegetation Overview (independent of proposals)

This section summarises all the recommendations within the Tree Data Schedule regardless of whether trees are to be retained, felled or pruned to facilitate the proposed development. It does not specify works that may be required to facilitate the development proposals.

3.1. Preliminary Management Recommendations

- 3.1.1. The trees were all deemed to be in an acceptable condition, and no significant defects were observed. Consequently, no remedial works have been recommended.

3.2. Future Inspections

- 3.2.1. The table below suggests a schedule of future inspections based on the condition and location of each tree:

Inspection Frequency (years)	Tree Number
0.5	None
1	None
1.5	T1, T2, T3, T4 and T5
3	T6, T7 and T8

- 3.2.2. The trees should be inspected sooner if there is a noticeable decline in their condition or following extreme weather events.

4. Arboricultural Impact Assessment

4.1. Overview

4.1.1. It is proposed to construct a new property as indicated on the drawings in Appendix 4.

4.1.2. The table below summarises the potential impact on trees due to various activities.

Activity	Trees Potentially Affected
Tree Removal: Retention Category A	None
Tree Removal: Retention Category B	None
Tree Removal: Retention Category C	None
Tree Removal: Retention Category U	T6 and T7.
Tree Pruning	T8.
RPA: House Foundations	T5 and T8.
RPA: Bike/Bin Store	T5
RPA: New Hard Surface	T5
RPA: Underground Services	Unknown – To be confirmed
RPA: Change of Ground Levels	None
RPA: Soil Compaction	Trees adjacent the construction area (preventable by installing tree protection measures)

4.1.1. Other potentially damaging activities often associated with construction sites include demolition or the careless use of plant machinery, hazardous materials, or fires. All the above potential impacts are considered in detail throughout this Section.

4.2. Tree Removal

4.2.1. To enable the development, it is proposed to remove two Retention Category C trees. The trees to be removed are specified in the above table.

4.3. Tree Pruning

4.3.1. The table below specifies the proposed pruning works:

Tree No	Recommendation	Reason
T8	Crown lift to a height of 5m where the canopy overhangs the proposal.	To enable adequate clearance between the proposal and the tree canopy.

4.3.2. The proposed pruning shall not have a significant impact on tree health or local levels of visual amenity. Hence it these works are not considered to be a material planning consideration.

4.3.3. All other tree canopies shall be unaffected by the proposals.

4.4. Impact of Foundations

4.4.1. The table below assesses the impact of proposed surfacing in Root Protection Areas:

Tree No	Nature of Foundation	Portion of RPA	Proposed Mitigation
T5 and T6	Deep (House)	Approximately 13% and 7%	<u>Hand-Dig Method</u> - In the direction of the trees, excavation not to exceed 250mm beyond the build-line. - Hand tools to be used to a depth of 750mm. - Plant machinery may be used at deeper depths. - Operation to be supervised by the project arborist. - Exposed roots over 25mm diameter shall be retained and protected with damp hessian if practicable, else pruned by the arborist.
T5	Shallow (Bin Store)	<1%	<u>Ground Bearing Slab</u> - No excavation shall occur except that required to remove existing vegetation and loose topsoil. - Only hand tools shall be used. - Deeper piles (not exceeding 250mm diameter) may be used to support a slab. - Trial pits will be excavated to ensure all piles are located to avoid severing any roots in excess of 25mm diameter.
T5 and T8	Basement	<5%	<u>Pinning or Piling</u> - Excavation to be limited to the footprint of the basement. - Soil beyond this to remain undisturbed. - Methodology to be specified by engineers and approved by the local authority.

4.4.2. These measures accord with industry best-practice² and shall ensure minimal impact on roots.

4.5. Impact of Surfacing

4.5.1. The table below assesses the impact of proposed surfacing in Root Protection Areas:

Tree No	Nature of Surfacing	Portion of RPA	Proposed Mitigation
T5	Soft surface replaced with hard surface	<6%	<u>No-Dig Technique</u> - Surface and sub-base to be entirely above ground (turf or loose topsoil may be removed to a maximum depth of 100mm so long as no roots over 25mm are encountered). - Hand tools to be used. - New surface to be highly porous. - Sub-base to be porous (MOT type 3). 3D Cellular system to retain the sub-base. - Ground to be protected against compaction. - Operation to be supervised by the project arborist.

4.5.2. These measures accord with industry best-practice³ and shall ensure minimal impact on roots. foundation

² BS 5837 (2012 section 7.5 and 7.6)

³ BS 5837(2012 section 7.4) and Arboricultural Association Guidance Note 12: The Use of Cellular Confinement Systems near Trees

4.6. Underground Services:

- 4.6.1. The location of any underground services is yet to be determined. Wherever possible, these should be located outside of Root Protection Areas. Otherwise, the project arborist must be consulted, and approval obtained from the local authority.

4.7. Changes in Ground Levels:

- 4.7.1. No changes to ground levels are proposed over Root Protection Areas.
- 4.7.2. Arboricultural advice and approval from the local authority should be sought before changing any ground levels within the Root Protection Area of any retained tree. Even very shallow excavation can have detrimental impacts on tree health.

Soil Compaction:

- 4.7.3. The majority of tree roots lie within the upper soil horizons. This is because the availability of oxygen decreases with depth, and roots need to breathe to stay alive. In addition, nutrients are more readily available in the form of organic matter close to the soil surface.
- 4.7.4. Healthy soils contain about 25% air space between solid particles. Increased loading of the soil caused by construction activity causes air to be squeezed out as the soil becomes compacted, preventing roots from breathing. Even an increase in pedestrian activity may cause some soil compaction.
- 4.7.5. It is important therefore that ground compaction and soil disturbance over Root Protection Areas should be avoided during the construction phase. Where access is required over Root Protection Areas, suitable ground protection measures must be installed.



4.8. Demolition Activities

- 4.8.1. Care is required to avoid damaging trees when removing adjacent surfaces or structures. Surfaces must be lifted using hand tools or a carefully marshalled mechanical excavator. Walls must be demolished away from stems, and in a manner that doesn't damage branches. Removal of underground foundations requires extra special care to avoid root damage. During the implementation of this project, the following activities require special care:
- Partial demolition of boundary wall to facilitate proposed gateway adjacent to T5.

4.9. Waste and Materials Storage

- 4.9.1. All hazardous materials (including cement and petrochemical products) will need to be controlled according to COSHH regulations in order to ensure there is no detrimental impact on tree health. Provision shall need to be made to ensure that cement spillage avoids all Root Protection Areas.
- 4.9.2. Areas designated for the storage of building materials and waste products will need to be approved by the local authority. Root Protection Areas should be avoided. Where this is not possible, suitable ground protection measures will need to be installed.

4.10. Cabins and Site Facilities

- 4.10.1. Any cabins and welfare facilities should be located outside of Root Protection Areas wherever possible. Otherwise, the project arborist should be consulted, and approval obtained from the local authority.

4.11. Boundary Treatments

- 4.11.1. Along the southern boundary it is proposed to install post-hole foundations for the proposed boundary fence. Because the foundations are within a Root Protection Area of T5, the following methodology is recommended:
- Post holes should be narrow as possible and should not exceed 300mm x 300mm.
 - Excavation for the post holes should be undertaken using hand tools.
 - Roots in excess of 25mm should be retained, and the post hole relocated.
 - A flexible fencing system that permits panel widths of various sizes will therefore be necessary.
 - All exposed roots over 25mm diameter shall be sleeved to prevent contact with fence posts and cement products.
- 4.11.2. Where it is proposed to install a new gate within the existing boundary wall adjacent to T5, the following mitigation is proposed:
- Excavation for the gateposts / wall to be limited to the removal of existing foundations.
 - Excavation to be undertaken using hand tools.
- 4.11.3. By adopting such a sympathetic installation method, it will be possible to retain all significant roots and ensure that the root system will be able to supply the canopy with the required water and nutrients. Hence it is considered that the proposed fence and gate shall not result in any long-term detrimental impact on the health of T5.
- 4.11.4. Any further proposals to amend boundary features close to trees shall be agreed upon and approved by the local authority after consultation with the project arborist.

4.12. Impact of Retained Trees on the Development

- 4.12.1. Some occasional trimming of the canopies of T5 and T8 will be required in the future to maintain an appropriate distance from the proposed buildings. However, T5 is already maintained by cyclical pollarding. All other retained trees are located at sufficient distances from any proposed buildings and shall have ample room for future growth.
- 4.12.2. The foundations and any new surfaces should be designed to accommodate all potential impacts due to future tree rooting activity. These include potential vegetation-related subsidence, vegetation-related heave, and lifting of surfaces / light structures due to direct root pressure.

4.13. Arboricultural Method Statement

- 4.13.1. BS 5837 recommends that a detailed methodology is agreed in the form of an Arboricultural Method Statement, which shall ensure that trees are well protected during the construction phase. This should detail all tree protection measures and limitations on construction activity. All of the issues raised within this Impact Assessment should be covered by the Method Statement.

Appendix 1: BS 5837: 2012 – Interpretation Guide

This Standard prescribes the principles to be applied to achieve a satisfactory juxtaposition of trees and structures. It sets out to assist those concerned with planning applications to form balanced judgments.

Stage 1: Survey Details and Notes

A ground-level visual survey is undertaken. Only trees with a stem diameter over 75mm, which lie within the site boundary or relatively close to it, are included.

Where applicable, trees with significant defects are highlighted and appropriate remedial works are recommended.

Wherever practicable dimensions are obtained using diameter tapes, logger's tapes, distometers and clinometers. Where obstacles prevent accurate measurement, dimensions are estimated. Trees on privately owned third-party land are surveyed from the best available vantage point and observations relating to the condition of these trees should be treated accordingly. All height measurements should be regarded as approximate.

Data is recorded for each tree and is presented in a Tree Data Schedule. Each tree is allocated a **Retention Category** according to its size, amenity value, condition, and safe useful life expectancy. The categories are allocated independently of development proposals. Our interpretation of the Retention Categories is explained below:

Retention Categories

A Category: Trees of high quality and amenity value. Usually, mature trees with a significant life expectancy which would enhance any development. Retention of these trees is strongly encouraged.

B Category: Trees of moderate quality and amenity value. Usually these are maturing trees or younger trees with exceptional form. Retention of these trees is desirable though the removal of occasional specimens may be acceptable.

C Category: Trees of low quality or small specimens with a relatively low amenity value. These trees are not considered to be a material planning constraint and their removal will generally be seen as acceptable in order to facilitate development.

U Category: Trees of such low quality that their removal is recommended regardless of development proposals.

Occasionally trees are borderline and do not fall neatly into one of these categories. In such cases we apply a superscript (+/-) such that:

C+ Indicates borderline C/B, though Category C is deemed to be most appropriate.

B- Indicates borderline C/B, though Category B is deemed to be most appropriate.

The British Standard suggests that each of the A, B and C categories may be further subdivided (A1, A2, A3, B1, B2, B3 etc) such that subcategory 1 denotes mainly arboricultural values, subcategory 2 denotes mainly landscape values and subcategory 3 denotes mainly cultural values (including conservation). Multiple subcategories may be used.

Our experience suggests that these subdivisions lack clarity and can be confusing. Within this report subcategories are **not** denoted. Where appropriate, the use of phrases such as 'Part of a formal group', or 'Has a high ecological value', or 'Offers good screening to the site' are incorporated into the observation section of the Tree Data Schedule. We believe this conveys all relevant landscape and cultural information without any confusion.

Tree Constraints Plan (TCP). This indicates the position, crown spread, Retention Category and Root Protection Area of each tree. It is used to inform where development may proceed without causing damage to trees.

Root Protection Area (RPA). This is the area around each tree likely to contain the majority of roots. It should ideally remain undisturbed to avoid a detrimental impact on tree health. For single stemmed trees it is calculated according to the formula "radius of RPA" = "12 x stem diameter". Where a tree has more than one stem, the equivalent-single-stem diameter is usually recorded. This is calculated by adding the squares of the stems and then finding the square root of this total. The radius of the Root Protection Area is then calculated by multiplying the equivalent-stem-diameter by 12.

Stage 2: Arboricultural Impact Assessment

After the initial survey and the production of the Tree Constraints Plan, arborists and designers are encouraged to work together to establish a design proposal with minimal impact on the high-quality trees. An assessment should be made of all possible impacts including the impact that the trees may have on the proposal. The arborist may recommend mitigation strategies to minimise these impacts and help achieve a more harmonious juxtaposition between buildings and trees.

Stage 3: Arboricultural Method Statement

This type of report specifies the measures necessary to protect trees against damage from construction activity. The Method Statement should be written in a manner that it may be conditioned and enforced by the local authority upon granting of planning permission. The site manager should be familiar with all aspects of the Method Statement and should ensure that all persons working on the site are aware of those aspects which appertain to their work. This includes service installation engineers and operators of plant machinery.

Appendix 2: Glossary of Tree Data

This section explains the terms used in the **Tree Data Schedule**.

A2.1 General Observations

Numbering System:	Each item of vegetation has its own unique number prefixed by a letter such that T1=Tree 1, G2=Group 2, H3=Hedge 3 and W4=Woodland 4, S5=Shrub 5.
Age Categories:	
Young	Usually less than 10 years old.
Semi-Mature	Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy).
Early-Mature	Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy).
Mature	Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy).
Veteran	A level of maturity whereby significant management may be required in order to keep the tree in a safe condition.
Over Mature	As for veteran except management is not considered worthwhile.
Species:	Common names and Latin names are given.
Height:	Measured from ground level to the top of the crown.
Stem Diameter:	Taken at 1.5m above ground level where possible. On multi-stemmed trees this measurement may be taken at ground level, though usually an indication of the number of stems and average diameter is given, e.g. 3 x 30cm.
Crown Height:	Measured from ground level to the height at which the main crown begins. Where the crown is unbalanced it is measured on the side deemed to be most relevant. This is usually the side facing the area of anticipated development.
Tree Diagram:	This scaled drawing is computer generated based on measurements taken for stem diameter, crown height and spread, and overall height. It is designed to help the reader rapidly assess the data. It is not an accurate representation of the form of the tree.
Crown Spread:	Measured N, E, S & W, taken from the centre of the stem and usually rounded up to the nearest metre.
Observations:	If a tree's position is considered to be relevant it will be commented upon (e.g. overhanging a children's play area). Tree form and pruning history are also recorded along with an account of any significant defects. Defects and descriptive terms are dealt with in more detail at the end of this section.
Recommendations:	Usually based on any defects observed and intended to ensure that the tree is in an acceptable condition.
Priority Scale:	Depending upon the threat posed by the tree, and the likelihood of failure, recommendations should be carried out according to the following priority scale:
Urgent	To be carried out as soon as possible.
Very High	To be carried out within 1 month.
High	To be carried out within 3 months.
Moderate	To be carried out within 1 year.
Low	To be carried out within 3 years.
Inspection Frequency:	An interval of 6 months, 1 year, 1.5 years or 3 years is allocated before the next inspection is due. Wherever practical, consideration should be given to seasonal changes so that deciduous trees are not always surveyed in winter when they have no leaves, or in summer when leaves may obscure branches within the upper crown.
Vigour:	An indication of growth rate and the tree's ability to cope with stresses:
High	Having above average vigour.
Moderate	Having average vigour.
Low	Having below average vigour.
Very Low	Tree is struggling to survive and may be dying.
Physiological Condition:	
Good	Healthy and with no symptoms of significant disease.
Fair	Disease present or vigour is impaired.
Poor	Significant disease present or vigour is extremely low.
Very Poor	Tree is dying.
Structural Condition:	
Good	Having no significant structural defects.
Fair	Some defects observed though no high priority works are required.
Poor	Significant defects found. Tree requires monitoring or remedial works.
Very Poor	Major defects which will usually require significant remedial works or tree removal.
Amenity Value:	
Very High	Exceptional specimen, observable by a large number of people.
High	Attractive specimen, observable by a significant number of people.
Moderate	One of the above factors is not applicable.
Low	Unattractive specimen or largely hidden from view.
Life Expectancy:	The estimated number of years before the tree may require removal. Classified as (<10), (10 – 20), (20 – 40), or (40+).
Retention Category:	These are explained in detail in Appendix 1.

A2.2 Evaluation of Defects

Cavities, wounds, deadwood etc are all evaluated as follows:

Major	Such that structural integrity is, or will become, compromised and the tree is, or will inevitably become, hazardous.
Significant	A defect that may over time become a major defect, though not necessarily so. This will depend on the vigour of the tree and its ability to deal with decay etc.
Minor	A defect that is unlikely to develop into a major defect.

Appendix 3: Author's Qualifications

Qualifications & Experience of Carl Lothian – BSc (Hons) (Arboriculture).

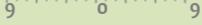
Carl began his career undertaking a Level 3 extended diploma in arboriculture and forestry at Merrist Wood College in 2015. Upon completion of his diploma, Carl worked with several tree surgery firms completing a range of arboricultural works. In 2018 Carl began his BSc (Hons) in arboriculture and urban forestry, graduating with a first-class degree and attaining the Institute of Chartered Foresters student of the year award.

After graduating, Carl worked as a TreeRadar technician where he carried out tree root and decay surveys with specialist ground-penetrating radar equipment. During this time Carl was fortunate enough to work at prestigious sites, such as the Palace of Westminster and the National Maritime Museum.

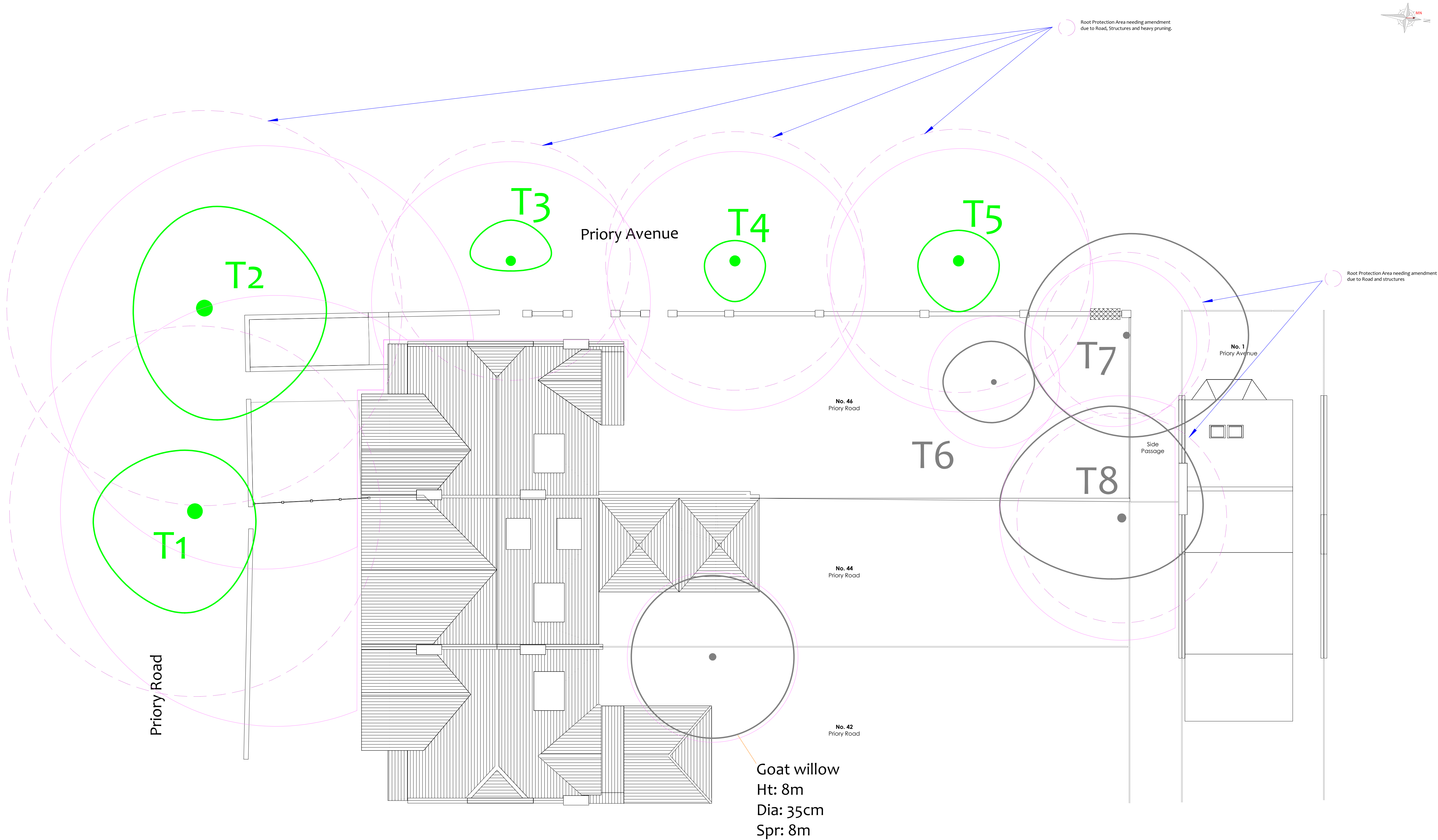
Whilst working at Crown, Carl has undertaken a range of tree surveys and written reports relating to development, safety, subsidence, and decay detection. Carl is a professional member of the Consulting Arborist Society and an associate member of the Institute of Chartered Foresters.

Appendix 4: Tree Data Schedule and Drawings

The Tree Data Schedule and any drawings accompanying this report follow this page. They are also provided as separate documents for ease of printing and screen viewing.

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
										Physiological Condition	Life Expectancy (yrs)
								Priority	Inspect Freq (yrs)	Structural Condition	Retention Category
T1	Mature London Plane Platanus x hispanica.	14	6	76	3 3 5 5		Position: Street tree. Form: Single stemmed and vertical with a well-formed crown. History: Managed by cyclical pruning.	No action required.		Moderate Good Good	High 40+ A
								n/a	1.5		
T2	Mature London Plane Platanus x hispanica.	14	5	81	6 5 5.5 3.5		Position: Street tree. Form: Single stemmed and vertical with a well-formed crown. History: Managed by cyclical pruning.	No action required.		Moderate Good Good	High 40+ A
								n/a	1.5		
T3	Mature London Plane Platanus x hispanica.	6.5	4	49	2 2 0.5 2		Position: Street tree. Form: Single stemmed and vertical with a well-formed crown. History: Managed by cyclical pruning.	No action required.		Moderate Good Good	High 40+ A
								n/a	1.5		
T4	Mature London Plane Platanus x hispanica.	5.5	3.5	53	1.5 1 2 1.5		Position: Street tree. Form: Single stemmed and vertical with a well-formed crown. History: Managed by cyclical pruning.	No action required.		Moderate Good Good	High 40+ A
								n/a	1.5		
T5	Mature London Plane Platanus x hispanica.	6	4	54	2 1.5 2.5 2		Position: Street tree. Form: Single stemmed and vertical with a well-formed crown. History: Managed by cyclical pruning.	No action required.		Moderate Good Good	High 40+ A
								n/a	1.5		
T6	Semi-Mature Lawson Cypress Chamaecyparis lawsoniana.	6	1.5	27	2 2 2.5		Position: Situated within the rear garden. Form: Single stemmed and vertical with a balanced crown. History: No evidence of significant pruning. Defects: No significant defects.	No action required.		Low Fair Good	Low 40+ C
								n/a	3		
T7	Semi-Mature Ash Fraxinus excelsior.	8	2	34	6 5 5		Position: Situated within the rear garden. Form: Single stemmed and leaning with a balanced crown. History: No evidence of significant pruning. Defects: No significant defects.	No action required.		Moderate Fair Good	Low <10 C
								n/a	3		

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
										Physiological Condition	Life Expectancy (yrs)
								Priority	Inspect Freq (yrs)	Structural Condition	Retention Category
T8	Semi-Mature Sycamore Acer pseudoplatanus.	9	4	43	5.5 4 3 6	25 9 0 9 	Position: Situated on third party land. Form: Twin-stemmed at ground level with an unbalanced crown. Other: Limited inspection, dimensions estimated. Recorded stem diameter is equivalent for two stems (32cm, 28cm).	No action required.		Moderate Fair Fair	Low 20-40 C
								n/a	3		



Tree Retention Categories	
Stems & canopies shown	
	Category A tree
	Category B tree
	Category C tree
	Category U tree

Trees of high quality with an estimated life expectancy of 40+ years. Usually large trees with significant presence or smaller trees with excellent form. Retention of these trees is highly desirable.

Trees of moderate quality with a life expectancy of 20+ years. Usually maturing trees, or younger trees with good form. Retention of these trees is desirable though less than Category A trees.

Unremarkable trees of low quality and merit. Individual specimens are not considered to be a material planning consideration.

Trees unsuitable for retention due to their very poor condition.

Tree Constraints Plan

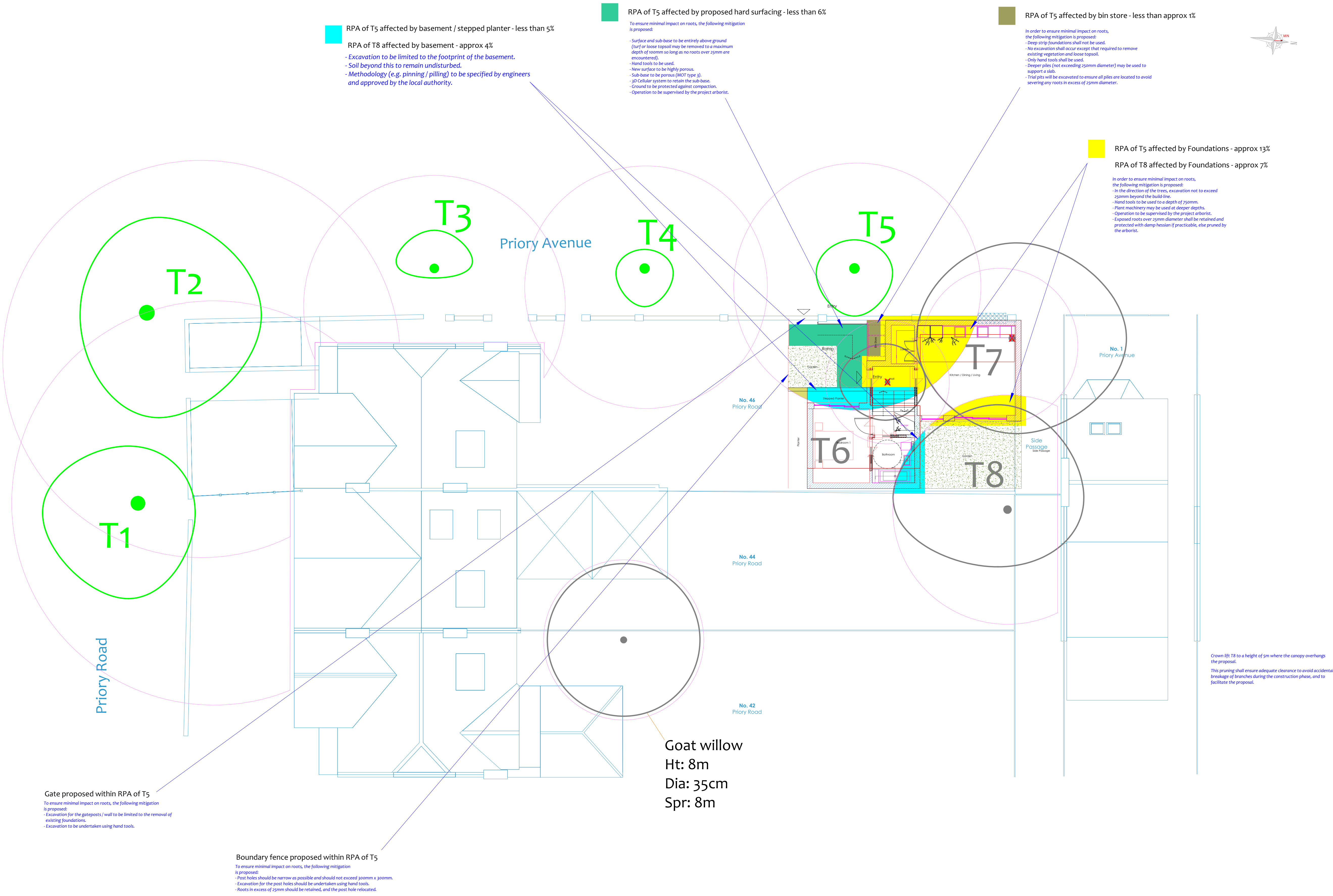
Status: Final

	BS s537 Root Protection Area (radius = 1xstem diameter)
	Root Protection Area needing amendment due to site conditions, e.g. presence of existing road or building.
	Root Protection Area having been amended to account for site conditions
T1 = Tree No 1 G2 = Group No 2 H3 = Hedge No 3	

MN = Measured North

Canopy spreads are sometimes measured to an approximate N defined by site features. Often more accurate, especially where rows of trees are not aligned N-S or E-W.

Tree Ref.	Species	Height (m)	Root Protection Area		
			Radius (m)	m ²	Square (m)
T1	London Plane	14	9.1	261	16.2
T2	London Plane	14	9.7	297	17.2
T3	London Plane	6.5	5.9	109	10.4
T4	London Plane	5.5	6.4	127	11.3
T5	London Plane	6	6.5	132	11.5
T6	Lawson Cypress	6	3.2	33	5.7
T7	Ash	8	4.1	52	7.2
T8	Sycamore	9	5.2	84	9.1



Impact Assessment Plan

Status: Final - for submission