

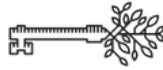
Arboricultural Constraints Appraisal & Impact Assessment

Site
Address: **53 Keresforth Hall
Barnsley
S70 6NL**

Report
Ref: **KFHB01-26**

Client: **S75 Design
F.A.O. Chris Race**

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Arb, M Arbor A**



Non-Technical Summary

This report presents the findings of an arboricultural survey and impact assessment undertaken to consider the relationship between the existing trees on and around the site and the proposed development.

A total of 18 arboricultural features were recorded during the survey, comprising individual trees, tree groups, hedgerows and shrub beds. The majority of these features are relatively young or modest in stature and have therefore been categorised as Category C in accordance with BS5837:2012, indicating trees of limited individual arboricultural value. One tree, T18 (Sycamore), located adjacent to the site entrance along the highway, has been classified as Category A due to its size, maturity and contribution to the wider landscape. In addition, a row of Red Oak trees (G5) within the rear garden has been classified as Category B, representing trees of moderate quality that contribute positively to the character of the garden.

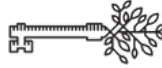
The proposed development comprises alterations and extensions to the existing dwelling together with associated external works, including the formation of a patio area. The design has been assessed against the arboricultural constraints presented by the existing trees. Most trees will be retained, with removals limited to a small number of lower-category trees and shrub groups that are in direct conflict with the development footprint.

The most notable arboricultural consideration relates to a minor incursion within the Root Protection Area of Group G5 associated with the development of the proposed patio. However, the removal of an existing area of hardstanding within this Root Protection Area will reinstate permeable soil and result in a small net increase in available rooting area, meaning that the overall impact on the retained trees is expected to be negligible.

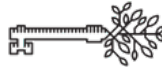
Where vegetation loss is unavoidable, mitigation will be provided through replacement landscaping and the introduction of two green roof areas, which will contribute to the site's overall landscape quality and biodiversity value.

The site is not located within a Conservation Area and no Tree Preservation Orders (TPOs) affect the surveyed trees. However, the southern extent of the garden lies within a Green Belt designation, as shown on the accompanying plans.

Overall, the proposed development results in limited arboricultural impact and is considered capable of being implemented in a manner that retains the most significant trees on and adjacent to the site. Subject to the implementation of the recommended mitigation measures and appropriate tree protection during construction, the development is considered compliant with the principles of BS5837:2012 and should not give rise to arboricultural constraints that would prevent the proposal from proceeding.



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1. Introduction

1.1 Arboricultural Report

This report comprises an Arboricultural Survey and Arboricultural Impact Assessment (AIA) prepared in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

The report identifies, categorises and evaluates trees within and immediately adjacent to the site that may influence or be influenced by the proposed development. It also assesses the potential impacts of the development on these arboricultural features and provides recommendations for mitigation where required.

These impacts are illustrated on the Arboricultural Impact Plan (AIP) in Appendix D, which visually demonstrates the relationship between the development proposals and the surveyed trees.

1.2 Limitations

The survey is not intended to provide a comprehensive tree risk assessment, although any obvious hazards observed during the inspection have been noted.

Trees are living organisms subject to natural variation and external pressures such as weather, pests and disease. Their condition may therefore change over time, and the findings within this report represent a snapshot of conditions at the time of inspection.

No invasive investigation techniques were undertaken, and all trees were assessed from ground level using Visual Tree Assessment (VTA) principles.

1.3 Standards and Guidance

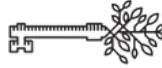
This report has been prepared in accordance with the principles of BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

The standard provides a framework for integrating trees into the planning and design process and establishes how trees should be surveyed, assessed and considered in relation to development proposals.

1.4 Report Rationale

The central purpose of this report is to identify which trees are most suitable for retention within the context of future development. Trees vary in their quality and contribution to the wider environment, and informed design must distinguish between those that are essential to retain and those that can reasonably be removed.

Retained trees provide shade, shelter, biodiversity, and amenity value, but they can also present challenges where their size, rooting patterns, or physical presence conflict with proposed buildings or infrastructure. Good design should balance these opportunities and constraints.



It is important to avoid two common pitfalls. Retaining too many unsuitable trees can result in long-term management conflicts or post-construction demands for removal. Conversely, treating the site as a blank canvas risks the unnecessary loss of valuable arboricultural features. The objective is to integrate the best trees into the design in a way that supports both the development and the long-term health of the tree population.

Biodiversity Net Gain

Consideration should be given to Biodiversity Net Gain (BNG), which is now a legal requirement for qualifying developments in England. BNG mandates that schemes deliver at least a 10% measurable increase in biodiversity value compared to the pre-development baseline. Existing trees and hedgerows make a significant contribution to that baseline, and their retention will often be the most effective and cost-efficient way of achieving or exceeding the required uplift. Where losses are unavoidable, replacement planting and habitat creation should be designed to ensure compliance with BNG requirements while also enhancing the site's long-term landscape and ecological character. This report does not include a full BNG metric calculation but identifies arboricultural factors that will influence BNG delivery.

2. Arboricultural Survey

2.1 Scope of the Works

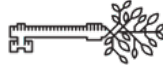
The scope of works included:

- A survey of arboricultural features potentially affected by the proposed development
- Assessment and categorisation of trees in accordance with BS5837:2012
- Identification of statutory tree protection designations
- Preparation of an **Arboricultural Constraints Plan (ACP)**
- Assessment of development impacts through an **Arboricultural Impact Assessment (AIA)**
- Preparation of an **Arboricultural Impact Plan (AIP)**
- Provision of preliminary **Tree Protection Plan (TPP)** and mitigation recommendations

2.2 Quality and Value of Existing Trees

Trees have been categorised in accordance with BS5837:2012, which groups trees into four categories based on their condition, longevity and landscape value.

- **Category A** trees are of the highest quality and should be prioritised for retention wherever possible.
- **Category B** trees are of moderate quality and generally desirable to retain as part of a balanced layout.
- **Category C** trees are of lower quality or value. Retention may be beneficial where space allows, but their removal may be acceptable if appropriate mitigation (e.g. replacement planting) is provided.
- **Category U** trees are unsuitable for retention due to serious defects, disease, or very limited safe life expectancy.



Root Protection Areas (RPAs) are not shown for Category U trees on the constraints plan, as they are not expected to influence development design. However, RPAs are still listed within the tree survey schedule, in recognition that, in some circumstances, such as where a declining tree provides biodiversity or habitat value in a low-risk area, a case for retention may still be made.

2.3 Arboricultural Constraints

Potential constraints associated with trees may include:

- The physical presence of trees and their canopies
- Root Protection Areas (RPAs) restricting ground disturbance
- The presence of statutory tree protections
- Trees located outside the site boundary but influencing development
- Future pressure for pruning or removal where buildings are located close to trees
- Potential shading and leaf fall concerns

These constraints should be considered during the design process to ensure that retained trees can be successfully integrated into the development.

2.4 Proposed Development

The proposed development comprises the partial demolition of the northern section of the existing building, together with the removal of areas of hardstanding to the rear of the property.

These works will facilitate an extension of the building footprint toward the south-west of the site. The proposal also includes the formation of a roof terrace and a ground-level patio area extending into the area currently occupied by the garden.

The development layout has been assessed against the Arboricultural Constraints Plan to determine potential impacts on existing trees.

3. Existing Site Conditions

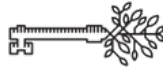
3.1 Existing Land Use

The site currently comprises a residential dwelling with a driveway extending across the front of the property. A modest strip of garden separates the dwelling from Keresforth Hall Road.

To the rear, the garden extends southwards away from the building, forming a triangular-shaped plot that gradually narrows towards the rear boundary.

3.2 Existing Trees

A total of 18 arboricultural features were recorded during the survey, comprising individual trees, tree groups, shrub groups and hedgerows of varying age classes and species composition. The



surveyed vegetation includes a mixture of ornamental garden species and native boundary vegetation typical of residential settings.

The most prominent tree within the vicinity of the site is T18, a mature Sycamore located adjacent to the highway near the main access point. This tree is categorised as Category A and represents the highest quality arboricultural feature associated with the site, providing significant visual amenity and landscape value.

Several other trees and groups are located in proximity to the site entrance, including G1, T2, T3 and G4, which form a cluster of vegetation around the access and boundary wall. These trees are generally of Category C quality, providing a modest contribution to local amenity and softening the site entrance, although their proximity to boundary structures may present minor long-term management considerations.

T5 is situated in the eastern corner of the plot, beneath overhead utility lines, where historic pruning has previously been undertaken to manage the clearance.

The majority of the remaining arboricultural features are located within the rear garden, where they are predominantly arranged around the site perimeter in the form of tree rows, hedgerows and mixed shrub groups. These features provide enclosure to the garden and contribute to screening between neighbouring properties.

An exception to this perimeter arrangement is G10, which is located toward the narrowing southern end of the garden. This group forms a vegetated backdrop to the existing pond and provides a degree of visual screening within the lower part of the garden.

Overall, the tree population is dominated by Category C specimens, with one Category B group (G5) and a single Category A tree (T18) providing the most significant arboricultural constraints. The majority of trees appear to be in normal physiological condition, with expected remaining contributions generally exceeding 10 years, indicating that the tree stock provides a moderate arboricultural resource typical of a residential garden setting.

Full survey details are provided within the Tree Survey Schedule in Appendix A.

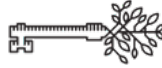
3.3 Site Topography

The site has a gradual fall in height from north to south.

3.4 Soil Assessment

No soil assessment was carried out on site by the Arboriculturist. However, baseline data from the British Geological Survey states that the area's underlying bedrock is considered part of the Pennine Middle Coal Measures Formation, comprised of mudstone, siltstone and sandstone. Further information collected from the Cranfield Soil and Agrifood Institute shows that the site is considered to have "Freely draining slightly acid loamy soils".

Where clay-based soils are present, the ground may be susceptible to volumetric changes resulting from the uptake and release of moisture by tree roots, which may influence any potential foundation development.



3.5 Statutory Protection

Local Planning Authorities (LPAs) have the power to preserve selected trees and woodlands by making Tree Preservation Orders (TPOs). Similarly, special provision is provided to trees located within a Conservation Area (CA) which are not the subject of a TPO. The LPA's powers to do this are provided by the following Act of Parliament and its associated regulations:

- Town and Country Planning Act 1990
- Town and Country Planning (Determination of Appeals by Appointed Persons) (Prescribed Classes) (Amendment) (England) Regulations 2008
- Town and Country Planning (Trees) (Amendment) (England) Regulations 2012

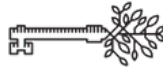
The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without first obtaining the consent of the relevant local authority. Where works to trees within a CA are proposed, the relevant LPA must first give six weeks' notification. Unauthorised works on trees protected by a TPO or those within a CA could result in an unlimited fine.

The interactive map on the Barnsley Metropolitan Borough Council's website, visited on the 10th of March 2026, does not show the presence of any TPO designations within the site or 15m of its boundary. In addition, the site is not located within a conservation area. However, much of the site is surrounded by a Green Belt designation, which covers a large part of the rear garden. This Green Belt boundary has been illustrated within the site drawings in Appendix D.

Trees should be checked for protected species before work is undertaken where tree works are necessary. While it is outside of the scope of this tree survey to comment on the actual or likely presence of protected animal species, it is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations (2010). Likewise, nesting birds are protected by the Wildlife and Countryside Act (1981) (as amended) and Badgers by the Protection of Badgers Act (1992). If protected species are discovered, work should cease immediately, and Natural England should be contacted for advice.

Alongside these animal protections, landscape features may also be protected under the following acts and regulations.

- The Hedgerow Regulations 1997
- Countryside and Rights of Way Act 2000
- Natural Environment and Rural Communities Act 2006 & Environment (Wales) Act 2016



4. Arboricultural Impact Assessment

4.1 General

This report considers the trees adjacent to the proposed works and assesses their condition and suitability for retention. The report is supplemented by the AIP (Appendix D of this report), which presents in graphic form the trees recorded as part of the survey, their specific reference numbers and any impact the proposed development will have upon them.

The arboricultural data sheets within Appendix B of this report cover all the trees recorded as part of this assessment in line with the *BS 5837:2012* guidance.

4.2 Root Protection Areas (RPAs)

The Root Protection Area (RPA) is a notional design tool, calculated to represent the minimum volume of soil that should be retained undisturbed in order to support the long-term health and stability of a tree. It does not depict the full extent of the tree's rooting system, which is typically irregular, asymmetrical, and influenced by local site conditions.

In some cases, such as where rooting is constrained by a building, highway, or other impermeable surface, adjustments to the default circular RPA may be made. These modifications are intended to reflect a more realistic likely rooting pattern while maintaining the same total area of protected soil. Where adjustments have been applied, they are illustrated on the Tree Constraints Plan, in line with the approach set out in *BS5837:2012*.

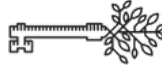
It should be noted that any modification to an RPA is based on professional judgment and best-guess assumptions informed by site context. The actual rooting pattern of an individual tree cannot be determined without invasive investigation or Ground Penetrating Radar (GPR), and adjustments may therefore not always reflect the true distribution of roots. As such, they should be treated as a practical design tool rather than a precise representation.

Where RPAs are especially constrained or significantly modified, early consultation with the Local Authority Tree Officer is recommended to agree on an acceptable approach.

BS5837:2012 advises that development should avoid any incursion into RPAs. In practice, however, planning authorities and industry professionals recognise that this is not always feasible, particularly on constrained sites. Where unavoidable conflicts arise, limited incursions may sometimes be tolerated if supported by robust arboricultural justification and mitigation measures, such as the use of "no-dig" construction techniques.

Based on current industry practice, rather than the British Standard itself:

- Up to circa 15% of the RPA may sometimes be accepted for "no-dig" construction.
- Up to circa 5% of the RPA may sometimes be accepted for excavation.



The acceptability of such incursions will depend on factors such as tree quality, condition, and the availability of rooting volume elsewhere, and ultimately rests with the Local Authority Tree Officer.

Early consultation is strongly recommended where RPA constraints are likely to affect design feasibility.

In addition to building footprints, RPAs also constrain the alignment of subsurface utilities, drainage, and service corridors. As a general principle, these should be located outside RPAs. Where incursions are unavoidable, trenchless methods such as directional drilling or moling should be employed to minimise disturbance. Open-cut trenching within RPAs is rarely acceptable and should only be considered as a last resort with arboricultural supervision and Local Authority agreement.

4.3 Utilities and services

No information has currently been made available regarding the location of existing drainage or underground utility runs. However, as the proposed development principally comprises an extension to the existing building, it is assumed that any new services will connect to the existing infrastructure within or immediately adjacent to the proposed development footprint.

Where possible, subsurface services should be routed outside Root Protection Areas (RPAs).

Where this is not feasible, trenchless installation techniques such as directional drilling or moling should be employed in order to minimise disturbance to tree roots and the surrounding soil structure.

4.4 Scheme Details

The proposed works are illustrated on the AIP and are as described in Section 2.4.

4.5 Arboricultural Impacts and Mitigation

The proposal's impacts are listed in Table 1, along with recommendations for mitigation.

Mitigation measures may include:

- Replacement tree planting
- No-dig construction methods
- Service routing outside RPAs
- Tree protection fencing

Further details will typically be provided within an Arboricultural Method Statement (AMS).

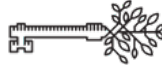
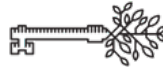


Table 1.

Group / Tree No.	Age & Species	Cat.	Removal due to:		Mitigation required for		Details of how proposed build layout affects trees and recommendations for mitigation.
			Cons.	Cond.	Canopy	RPA	
G5	Semi Mature Red Oak (<i>Quercus</i>)	B2				✓	<p>Removal of existing greenhouse hardstanding (4.35 m²) within the RPA of G5 and a minor patio incursion of 1.15 m² (circa 4% of the RPA area associated with one stem).</p> <p>Existing hardstanding to be removed carefully to minimise soil disturbance. Patio construction to utilise shallow excavation where practicable, retaining roots where possible and pruning only where unavoidable in accordance with arboricultural best practice. Soil beneath the removed hardstanding should be loosened and improved.</p> <p>Although a minor RPA incursion will occur, the removal of the hardstanding will reinstate approximately 2 m² of rooting area, resulting in an overall net gain of approximately 0.85 m² of permeable soil within the RPA of the affected stem.</p>
H11	Semi Mature Privet (<i>Ligustrum</i>)	C2	✓				<p>Removal of approximately 10 m of hedgerow from the north-eastern extent of the feature to facilitate the development.</p> <p>The loss of part of this feature will be partially mitigated through the provision of two green roof spaces, which will contribute to the overall soft landscape and biodiversity value of the site.</p>
T15	Young Cherry (<i>Prunus</i>)	C1	✓				<p>The tree is in conflict with the proposed development footprint.</p> <p>Given the young age and limited size of the tree, it may be feasibly excavated and transplanted elsewhere within the garden, subject to suitable ground conditions and aftercare.</p>

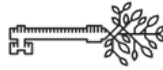


Group / Tree No.	Age & Species	Cat.	Removal due to:		Mitigation required for		Details of how proposed build layout affects trees and recommendations for mitigation.
			Cons.	Cond.	Canopy	RPA	
SG16	Mixed Shrubs	C2	✓				Woody shrub border in conflict with the development proposal. The loss of this border will be partially mitigated through the provision of the two proposed green roof areas , which will contribute to replacement vegetation and biodiversity value.
T17	Early Mature Japanese Maple (<i>Acer palmatum</i>)	C2	✓				Tree in direct conflict with the proposed development footprint. The loss of this tree will be mitigated through replacement planting within the landscape design and the provision of two green roof areas which contribute to biodiversity enhancement.
<p>Group / Tree No. - ID referenced within the arboricultural survey. Age & Species - Age classification and common name for specimen. Cat - BS 5837 category rating. Removal due to - 'Cons' = Construction. 'Cond' = Condition. Mitigation required for - Canopy or for RPA (Root Protection Area).</p>							

The table above summarises the potential impacts of the proposed development on the existing arboricultural features within the site. The majority of trees will be retained, with only a small number of lower category specimens requiring removal where they are in direct conflict with the proposed development footprint.

The most notable impact on retained trees relates to a minor incursion within the Root Protection Area (RPA) of Group G5. However, this impact is limited in extent and is offset by the removal of existing hardstanding, which will reinstate areas of permeable soil within the RPA and result in a small net increase in available rooting area.

Overall, the proposal results in limited arboricultural impacts, primarily affecting trees and shrub groups of lower quality or limited longevity (Category C). With the implementation of the mitigation measures described above and appropriate landscape replacement planting, the development can be accommodated without causing significant harm to the retained arboricultural features.



4.6 Preliminary Management Recommendations

The arboricultural data sheets (see Appendix B) show management recommendations for those trees that were identified as requiring management intervention at the time of the survey.

As part of a duty of care, the property owner is responsible for ensuring the health, safety and management of all trees within the boundary. As such, monitoring should be an ongoing process with periodical inspections by a qualified arborist where applicable.

4.7 Protection For Retained Trees

Trees identified for retention will require protective measures during the development process. This will typically involve the installation of temporary protective fencing positioned around the Root Protection Areas (RPAs) of retained trees and securely anchored to the ground in accordance with Figure 2 of BS5837:2012.

Tree protection fencing should be installed prior to the commencement of any site works, including demolition, ground clearance, or the delivery of materials.

Where the installation of fencing is not practicable, appropriate ground protection measures may be implemented to prevent soil compaction, with the specification of such protection dependent on the anticipated loading from construction vehicles and machinery.

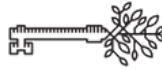
During key construction operations within or in proximity to RPAs, arboricultural supervision may be required to ensure that works are undertaken in accordance with good arboricultural practice.

No storage of materials, spoil, fuels, chemicals, equipment, or plant should occur within the RPAs of retained trees unless expressly approved by the project arboriculturist.

The exact specification and positioning of tree protection measures should be detailed within the Arboricultural Method Statement (AMS). However, indicative guidance has been provided within the Tree Protection Plan (TPP) accompanying this report.

The location of any site compound, including offices, welfare facilities, storage areas, and plant parking, should be carefully planned and, where possible, located outside the RPAs of retained trees to avoid accidental damage to roots and soil structure.

Once installed, the protected areas should be treated as Construction Exclusion Zones. No excavation, changes in soil levels, storage of materials, vehicle movements, or other construction-related activities should occur within these zones unless specifically authorised and supervised by the project arboriculturist.



4.8 Arboricultural Method Statement

If planning permission is granted, the preparation of an Arboricultural Method Statement (AMS) may be required depending on the complexity of the proposed development and the proximity of construction activities to retained trees.

An AMS would typically include:

- Detailed tree protection measures
- Construction methodologies for works within or adjacent to Root Protection Areas (RPAs)
- Arboricultural supervision requirements
- Phasing of development works
- Monitoring and inspection procedures

The AMS ensures that development is carried out in accordance with BS5837:2012 and demonstrates how retained trees will be protected throughout the construction process.

Where required, the AMS would be prepared prior to the commencement of development and agreed with the Local Planning Authority.

5. Conclusions

The arboricultural survey identified a range of trees, groups, hedgerows and shrub beds within and immediately adjacent to the site, representing a typical mix of ornamental garden planting and boundary vegetation associated with residential properties. The majority of the surveyed trees are of Category C quality, reflecting their relatively young age or limited individual landscape contribution. One tree, T18, was categorised as Category A and represents the most significant arboricultural feature associated with the site due to its size, maturity and visual prominence.

The proposed development has been designed with consideration of the existing arboricultural constraints. Most trees will be retained, with removals limited to a small number of lower-category specimens that are in direct conflict with the development footprint. The most notable impact on retained trees relates to a minor incursion within the Root Protection Area of Group G5, associated with the development of the patio area. However, the removal of existing hardstanding within the RPA will reinstate areas of permeable soil and result in a net gain of available rooting area, meaning that the overall impact on the retained trees is expected to be minimal.

Where vegetation loss is unavoidable, mitigation will be provided through replacement planting and the introduction of green roof areas, which will contribute to the site's overall landscaping and biodiversity value.

Subject to the implementation of the mitigation measures outlined within this report, together with the installation of appropriate tree protection fencing and the preparation of an Arboricultural Method Statement where required, the proposed development is considered



capable of being implemented without causing significant harm to the retained arboricultural features and in a manner consistent with the principles of BS5837:2012.



Appendix A: Key & British Standard BS5837:2012 Survey Table

A1. Survey Key

Column Heading	Description
ID	Each surveyed element has been given a unique reference number as shown on the survey drawings. Each number is prefixed with a letter to represent the element type. (T) Tree, (G) Group, (H) Hedge, (W) Woodland.
Age Class	The tree is described as Young, Semi Mature, Early Mature, Mature, Over Mature, Veteran or Dead.
Species	The English common name has been used. In some instances the botanical name is also given in <i>italics</i> .
Height (m)	An indication of the tree's height measured in metres.
Stem Diameter (mm)	The diameter of the tree stem when measured at 1.5 metres from ground level.
Crown Spread (m) N E S W	The distance the live crown extends in each fo the four cardinal directions.
First Main Branch Height (m) / Direction	The height given in meters that the first significant branch extends from the stem, and the direction it points towards.
Canopy Height (m)	Height given in metres of the lowest part of the canopy.
Vitality	<p>A quick reference guide to the tree's overall health and condition. Given as Good, Fair, Poor or Dead. This is primarily a visual and physiological assessment, not a definitive structural risk assessment</p> <p>Normal – a tree with little or no obvious physiological defects; leaf density and colour are typical for the species, bud, flower and fruit production are good, and there are no signs of dieback at any point throughout the crown.</p> <p>Fair – a tree with moderate physiological defects may have some or all of the following factors: leaf density is less than typical for the species, leaf cover is chlorotic, bud, flower or fruit production is deficient, there are signs of minor dieback within the crown, or there is a moderate degree of deadwood within the crown.</p> <p>Poor – a tree with major or multiple physiological defects; evidence of extensive crown thinning, bud, flower or fruit production is poor or missing, there are signs of advanced dieback throughout the crown, or there is extensive or major deadwood throughout the crown.</p> <p>Dead – a tree that has died due to either old age, drought, disease, pest infestation, physical damage to the main stem or rooting system, or a combination of these factors.</p>
General Observations	Narrative comment on the general condition, including significant defects and overall appearance.
Preliminary Management Recommendations	Any works recommended in order to minimise risk, improve form or maintain a high value.
Estimated Remaining Contribution	An estimation of how long the feature will contribute to its surroundings in the current landscape context. Recorded in bands of either <10 years, >10 years, >20 years and >40 years.
Category Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C). These letters are suffixed with a number, which gives an indication of how the tree sits within the landscape. More information on these values is given in the cascade chart in A2.
Root Protection Area Radius (m)	The minimum area around a tree is deemed to contain sufficient roots and rooting volume to maintain the tree's viability. Any modifications to the RPA due to constraints are annotated separately on the Tree Constraints Plan.



A2. BS5837: 2012 Cascade Chart

Trees to be considered for retention	(1) Mainly arboricultural qualities	(2) Mainly landscape qualities	(3) Mainly cultural values, including conservation.	Identification on plan
<p>Category A</p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>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)</p>	<p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p>	<p>Light Green</p>
<p>Category B</p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	<p>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</p>	<p>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</p>	<p>Trees with material conservation or other cultural value</p>	<p>Mid Blue</p>
<p>Category C</p> <p>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</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p>	<p>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</p>	<p>Trees with no material conservation or other cultural value</p>	<p>Grey</p>
<p>Trees unsuitable for retention</p>				
<p>Category U</p> <p>Those in such a condition that they cannot realistically be retained as living trees in the contact of the current land use for longer than 10 years.</p>	<ul style="list-style-type: none"> • 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. • Tree infected with pathogens of significant to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve.</p>			<p>Red</p>

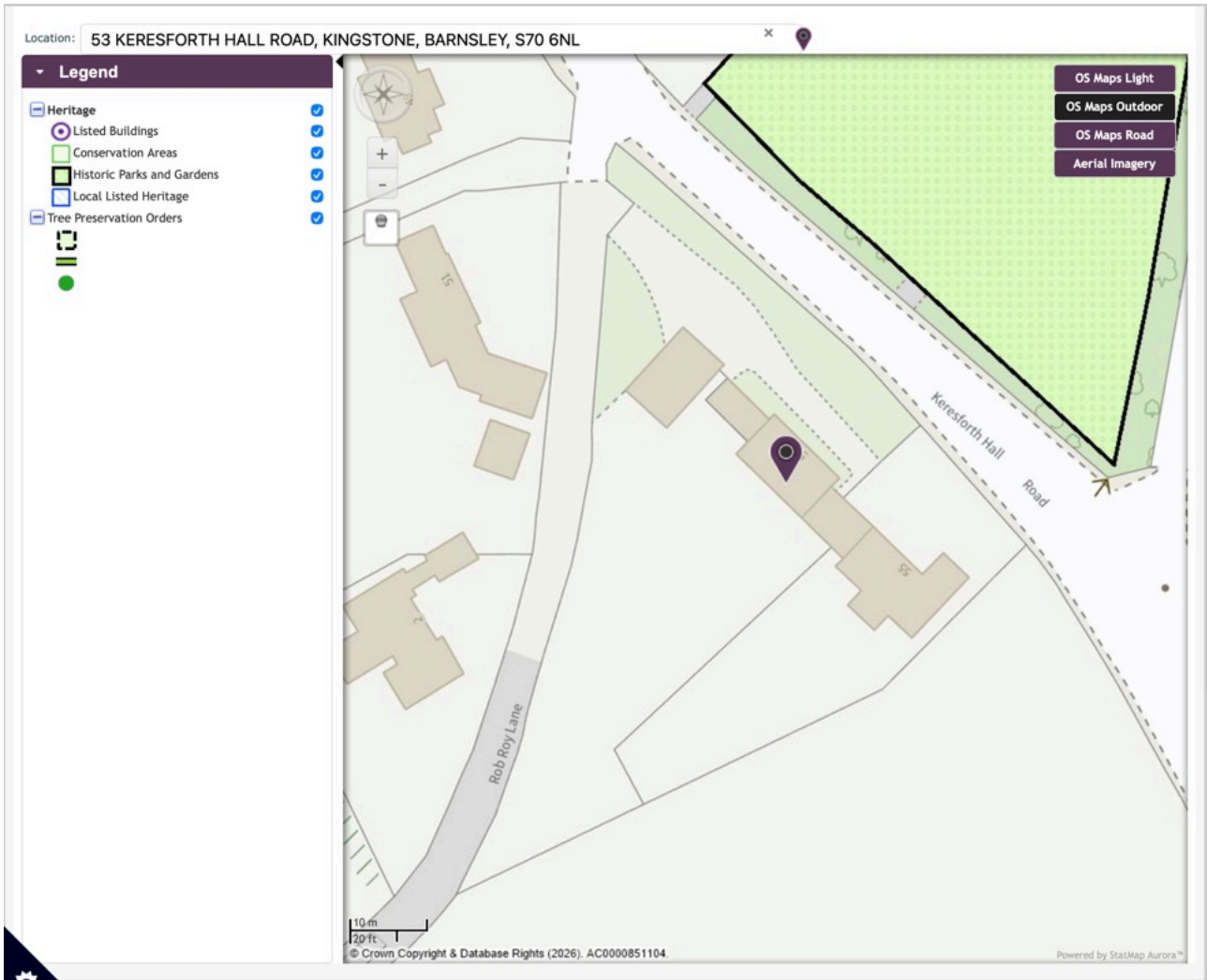
Appendix B: Arboricultural Survey Data

ID	Age Class	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m) N E S W	First Main Branch Height (m) / Direction	Canopy Height (m)	Vitality	General Observations	Preliminary Management Recommendations	Estimated Remaining Contribution	Category Grading	Root Protection Area Radius (m)
G1	Semi Mature	Norway Maple (<i>Acer platanoides</i>)	9	210	3, 3, 3.5, 3.5	2.5 E	3	Normal	A row of three trees has been planted along the inside of the site boundary wall at the entrance to the property. Trees have been canopy lifted to approximately 3 m over the driveway. Stems are located less than 500 mm away from the boundary wall and could become problematic in future as the stems develop.	-	10>	C2	2.5
T2	Mature	Viburnum (<i>Viburnum</i>)	2.5	<75	2, 0, 2, 2	-	0	Poor	Approximately 12 Young shoots less than 75 mm in diameter are growing from an old stump at 0.5 m in height. The young stems appear relatively healthy and provide some garden greening.	-	10>	C1	1
T3	Semi Mature	Cherry (<i>Prunus</i>)	8.5	230	4.5, 4, 4.5, 4.5	3	2.5	Fair	The tree stem is located next to the main entrance pillar and partially within the boundary hedgerow. Ivy is becoming established on the lower part of the stem, with the tree displaying overall good health and structure.	Sever and remove Ivy	10>	C1	2.8
G4	Semi Mature	Mixed	3	100	1.5, 1.5, 1.5, 1.5	-	0	Normal	A mixed Cypress and Cedar group, which also includes one Laurel and one Holly. Trees are relatively young and in reasonable condition, forming a cohesive group with some trees height managed at approximately 3 m.	-	10>	C2	1.2
T5	Early Mature	Cherry (<i>Prunus</i>)	7	150, 150	3, 3, 3, 3	3	1.5	Normal	The tree is located under the utility lines and appears to have been historically managed at approximately 4 m. Regrowth from pruning cuts appears vigorous suggesting the tree is in good health.	Potential to prune back to historic pruning points to ensure clearance from the utility lines.	10>	C1	2.1
G5	Semi Mature	Red Oak (<i>Quercus rubra</i>)	9.5	260	4, 4, 4, 4	3	3.5	Normal	A row of seven trees of roughly equal age, size and health characteristics. All trees within the row have historically been reduced to 5 m and are now displaying young, vigorous, upright shoots extending from the pruning points. Given the young age of the trees, they are free from any age-related defect, although they have multiple pruning wounds on the lower 2 m of the stems. Pollard points are likely to have been entrance points for decay, which will make ongoing height management important.	-	20>	B2	3.1
T6	Early Mature	Rowan (<i>Sorbus aucuparia</i>)	4	210	2, 2, 2, 2	1.5	1.5	Normal	The tree has been cyclically pruned to form a compact domed canopy.	-	10>	C2	2.5

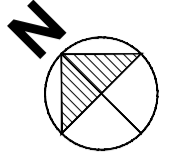
ID	Age Class	Species	Height (m)	Stem Diameter (mm)	Branch Spread (m) N E S W	First Main Branch Height (m) / Direction	Canopy Height (m)	Vitality	General Observations	Preliminary Management Recommendations	Estimated Remaining Contribution	Category Grading	Root Protection Area Radius (m)
T7	Mature	Hawthorn (<i>Crataegus monogyna</i>)	6.5	190	2, 2, 2, 2	-	2	Normal	Historically, cyclically managed as a tight domed canopy at around 3 m, however, management has not recently been undertaken, and as such, multiple long, slim, upright stems are extending from the pruning points.	Potential to cut back to original managed form.	10>	C2	2.3
SG8	Semi Mature	Mixed	3	<75	See Plan	-	0	Normal	Mixed shrub group, including Buddleia and barberries alongside the lower level species	-	10<	C2	1
H9	Semi Mature	Mixed	2	<75	See Plan	-	0	Fair	A mixed species hedgerow, including Holly, Laurel, and Hawthorne, along the site boundary. Multiple aspects of the hedgerow are becoming clad in Ivy, outcompeting some of the more Woody species.	Remove Ivy.	10>	C2	1
G10	Young	Mixed	3	<75	See Plan	-	0	Normal	A mixed species group, including two Cypress trees and several shrubs forming a small Woody bed behind the pond	-	10>	C2	1
H11	Semi Mature	Privet and Beech (<i>Ligustrum</i> and <i>Fagus</i>)	2.5	<75	See Plan	-	0	Normal	A managed the hedgerow feature, including Privet towards the northern end of the garden and Beech in the southern.	-	10>	C2	1
T12	Semi Mature	Blackthorn (<i>Prunus spinosa</i>)	3	<75	1, 1, 1, 1	-	0.5	Normal	Approximately 20 Young stems are developing from ground level, forming a tight, domed canopy due to heavy formative pruning.	-	10>	C1	1
T13	Young	Oak (<i>Quercus robur</i>)	9	210 est.	3, 3, 3, 3	-	3	Normal	A tree located off-site with observation obscured by a privet hedgerow. From what can be observed, the tree appears to be in good condition. All data points estimated.	-	10>	C1	2.5
T14	Young	Maple (<i>Acer</i>)	9	210 est.	3, 3, 3, 3	3 E	3	Normal	A tree located off-site with observation obscured by a privet hedgerow. From what can be observed, the tree appears to be in good condition. All data points estimated.	-	10>	C2	2.5
T15	Young	Cherry (<i>Prunus</i>)	4	75	1.5, 1.5, 1.5, 1.5	-	1	Normal	Recently established tree in good condition.	-	10>	C1	1
SG16	Semi Mature	Mixed	1.5	<75	See Plan	-	0	Normal	Mixed species shrubs growing in a wide border between the garden and the property. Although some woody species are present, their DBH is no larger than 75 mm.	-	10>	C2	1
T17	Early Mature	Japanese Maple (<i>Acer palmatum</i>)	3	60 x 5	2, 1, 3, 3.5	-	0.5	Normal	An asymmetrical canopy biased to the south. Relatively slow-growing woody species in reasonable condition.	-	10>	C2	1.3
T18	Mature	Sycamore (<i>Acer pseudoplatanus</i>)	17	780 est.	7, 6.5, 7, 6.5	6	5	Normal	Large feature tree set along the main highway in a private garden. From what could be observed, the tree is well-formed and in good health.	-	40>	A1	9.5



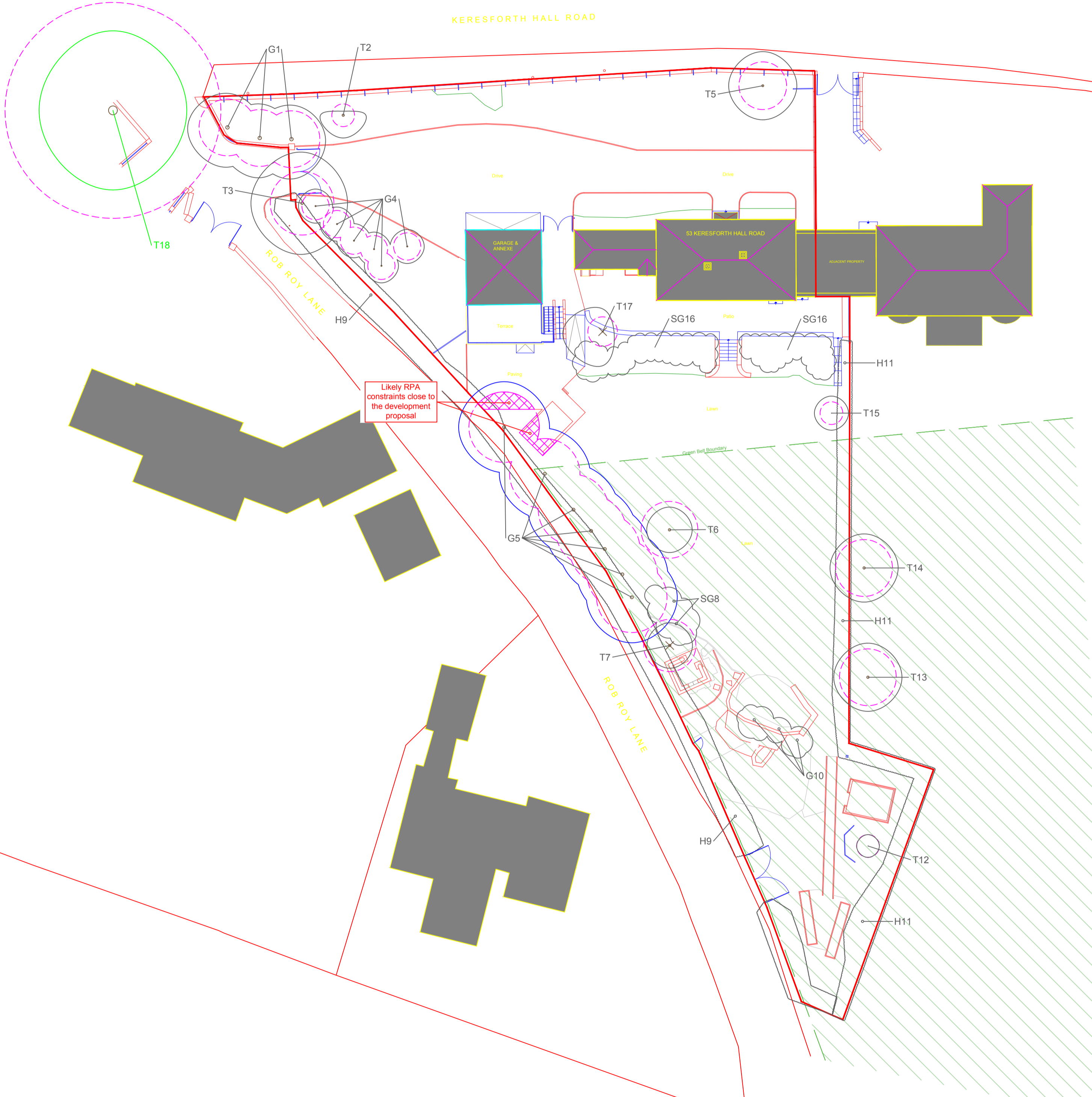
Appendix C: Statutory Protection



Screenshot 1. A screenshot of the interactive map located on the Barnsley Metropolitan Borough Council's website, visited on the 10th of March 2026, showing the lack of any TPO designations within the site or 15m of its boundary.



KERESFORTH HALL ROAD



Likely RPA constraints close to the development proposal

Site Location 53 Keresforth Hall Barnsley S70 6NL		Key Tree Solutions Rolys Cottage, YO61 2QY Tel. 07716 638 613 www.KeyTreeSolutions.co.uk	
Job Arboricultural Constraints Appraisal & Impact Assessment			
Title Appendix D: Arboricultural Locations Plan			
Drawn by L Smith	Date Mar 2026	Scale @ A2 1:250	Drg. no. 1/3

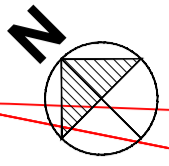
KEY- Arboricultural Survey and Constraints Plan
 (to be read in conjunction with report ref. KFHB01-26)

- Tree surveyed by Key Tree Solutions - location of tree centre from topographic survey
- Tree surveyed by Key Tree Solutions - tree location approximated by surveyor
- Potential constraints on existing RPA extents

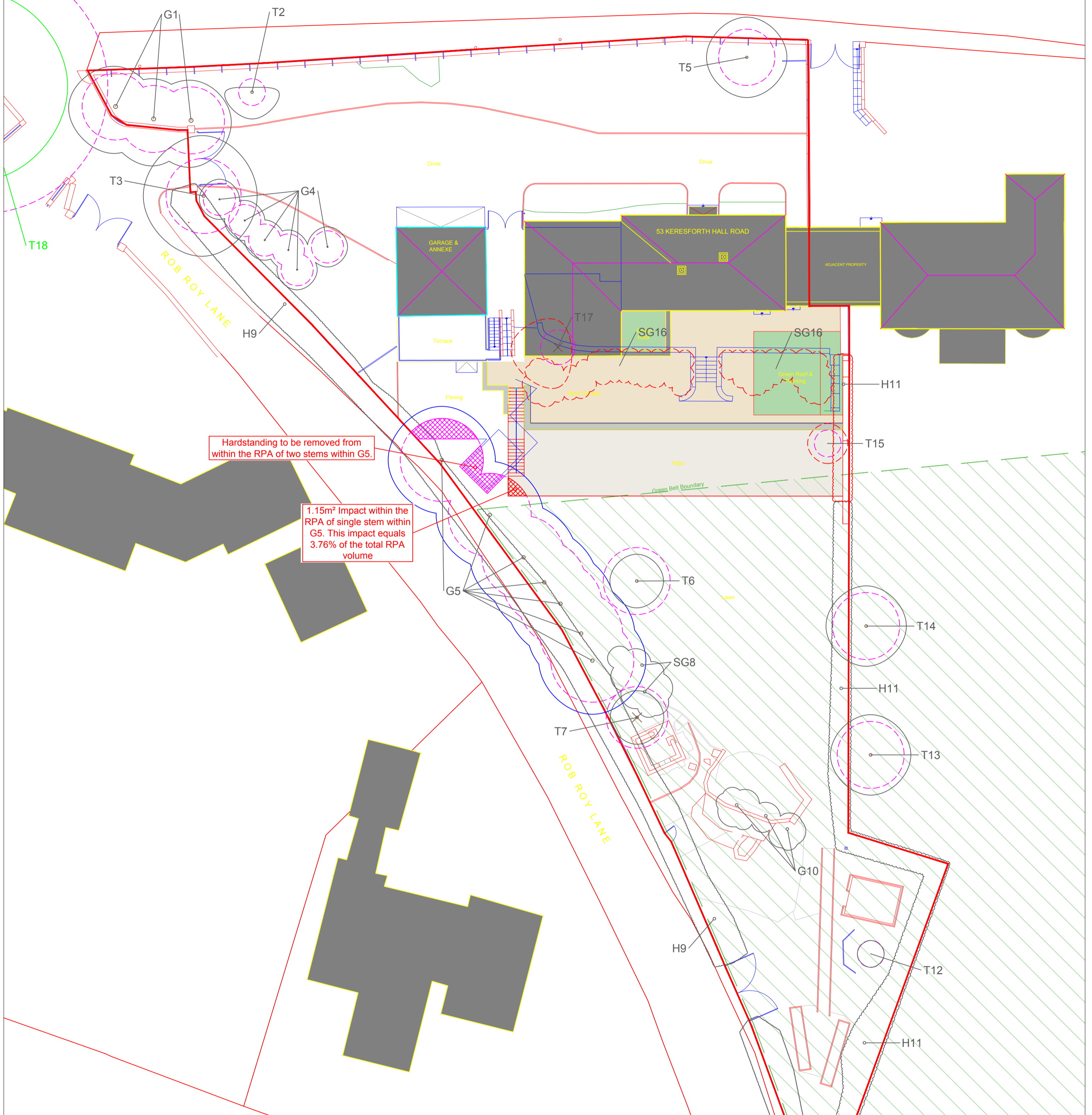
Tree categories (BS 5837:2012)

- Category A Trees
- Category B Trees
- Category C Trees
- Root Protection Area (RPA)
- Shrub groups and hedgerows





KERESFORTH HALL ROAD



Hardstanding to be removed from within the RPA of two stems within G5.

1.15m² Impact within the RPA of single stem within G5. This impact equals 3.76% of the total RPA volume

Site Location 53 Keresforth Hall Barnsley S70 6NL		Key Tree Solutions Roly's Cottage, YO61 2QY Tel. 07716 638 613 www.KeyTreeSolutions.co.uk	
Job Arboricultural Constraints Appraisal & Impact Assessment			
Title Appendix D: Arboricultural Impacts Plan (AIP)			
Drawn by L Smith	Date Mar 2026	Scale @ A2 1:200	Drg. no. 2/3

KEY- Arboricultural Survey and Constraints Plan
(to be read in conjunction with report ref. KFHB01-26)

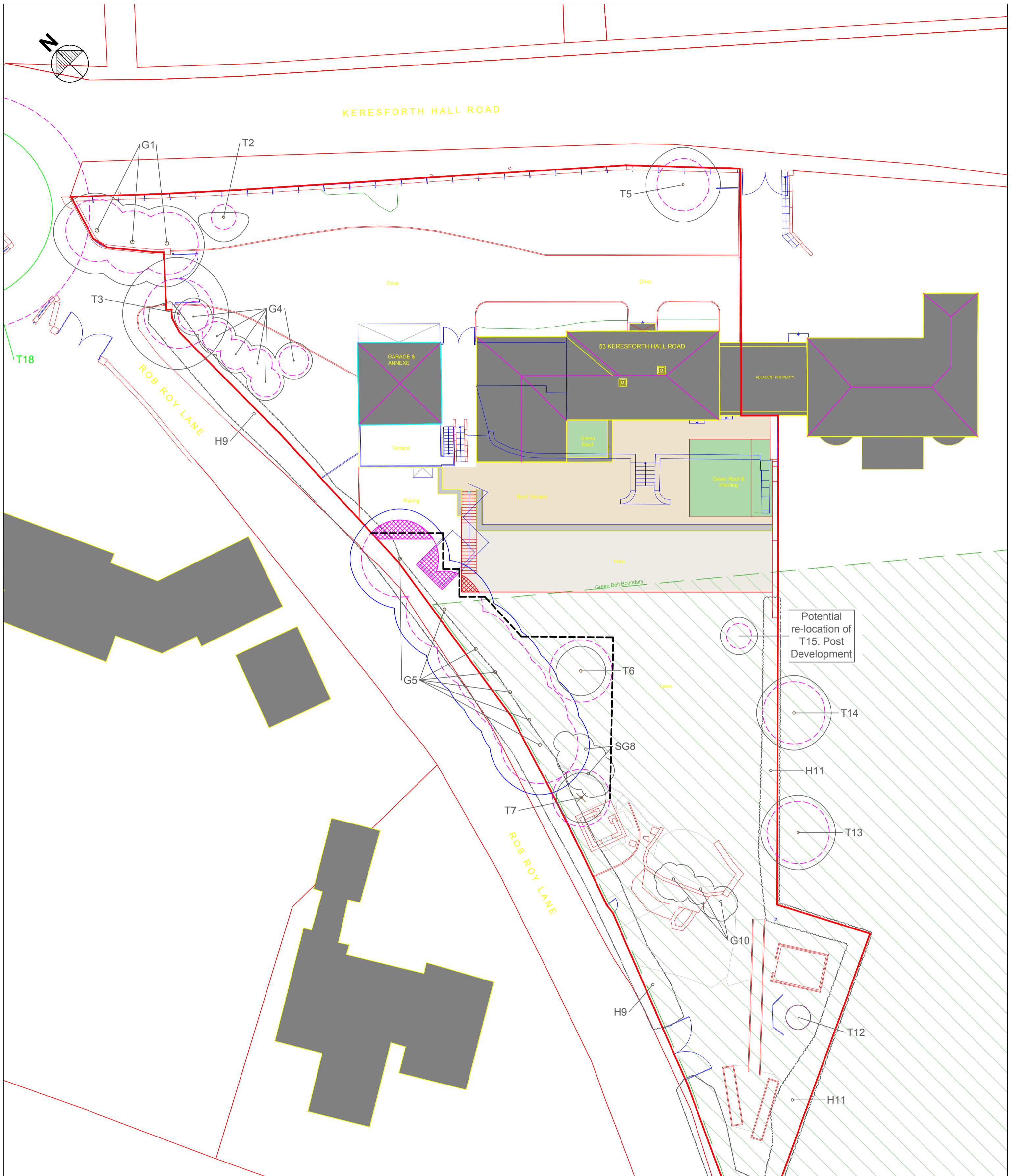
- Tree surveyed by Key Tree Solutions - location of tree centre from topographic survey
- Tree surveyed by Key Tree Solutions - tree location approximated by surveyor
- Potential constraints on existing RPA extents

Tree categories (BS 5837:2012)

- Category A Trees
- Category B Trees
- Category C Trees
- Root Protection Area (RPA)
- Shrub groups and hedgerows

- Impacts within the RPA of retained trees
- Features to be removed / Re-located





Site Location		Key Tree Solutions Roly's Cottage, YO61 2QY Tel. 07716 638 613 www.KeyTreeSolutions.co.uk	
Job Arboricultural Constraints Appraisal & Impact Assessment			
Title Appendix D: Tree Protection Plan (TPP)			
Drawn by L Smith	Date Mar 2026	Scale @ A2 1:200	Drg. no. 3/3

KEY- Arboricultural Survey and Constraints Plan
(to be read in conjunction with report ref. KFHB01-26)

	Tree surveyed by Key Tree Solutions - location of tree centre from topographic survey		Category A Trees
	Tree surveyed by Key Tree Solutions - tree location approximated by surveyor		Category B Trees
	Potential constraints on existing RPA extents		Category C Trees
	Tree Protection Fencing		Root Protection Area (RPA)
			Shrug groups and hedgerows





Appendix E: Images



Figure 1. G1 with T18 in the background.



Figure 2. T2.



Figure 3. T3 with part of G4 and H9 below.



Figure 4. G4 with H9 behind.

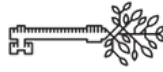


Figure 5. T5.



Figure 6. G5 with H9 below and T6 in the foreground.



Figure 7. T7 is to the right of the stone building, with aspects of SG8 to the right of the image.



Figure 8. G10 behind the pond.

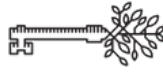


Figure 9. T12 with H11 behind.



Figure 10. T14 (left) and T13 (right) behind the boundary feature (H11).

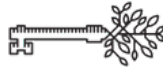


Figure 12. T15 with part of SG16 in the background and H11 to the right of the image.



Figure 13. An additional part of SG16.



Figure 14. T17 with SG16 behind.