

# Tree Survey Report

6 Heckington Road, Great Hale

ATS-23-005



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We hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact us.

Any enquiries regarding this report should be addressed to:

Arborglyph Tree Services Ltd  
125 Station Road  
Branston  
Lincoln  
LN4 1LQ

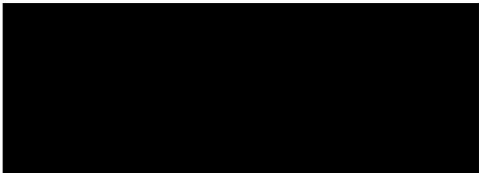


Tel: 01522 794 860

Email: [james@arborglyph.co.uk](mailto:james@arborglyph.co.uk)

Web: [www.arborglyph.co.uk](http://www.arborglyph.co.uk)

James Newbould (Director) Dip Arb L4, *TechArborA*



Membership No: TE9285

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## Introduction

### 1. Qualifications and experience

We have based this report on our site observations and any information provided. We have come to our conclusions in the light of our experience.

#### ***James Newbould – Director (Arborglyph Tree Services Ltd)***

Beginning in 2012, James transitioned from a career in archaeological consultancy and project management into arboriculture. In June 2014, following completion of his retraining, James set up Arborglyph Tree Services. For the past 8 years he has specialised in undertaking high quality tree work for private and commercial clients in Lincoln and the surrounding villages.

James combines his extensive experience in consultancy and project management with his knowledge and experience of arboriculture in order to provide his clients with advice that balances their requirements with those of the trees. James has continued his professional development by qualifying for a Diploma in Arboriculture in Summer 2022. James also holds Technician-level membership of the Arboricultural Association.

Trees are immensely important to our wellbeing and James is passionate about ensuring that we can live alongside them safely and respectfully.

### 2. Instruction and brief

Arborglyph Tree Services Ltd has been commissioned by Mr Stewart Camm (henceforth referred to as the client) to prepare an Arboricultural Survey in response to a request from North Kesteven District Council to provide information on the impact of construction upon trees of a proposed dwelling within the rear garden of 6 Heckington Road, Great Hale, NG34 9JU (henceforth referred to as the Proposed Development Area - PDA).

The resulting report includes the following information:

- A tree survey, undertaken in accordance with *British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations*.
- A Plan of the Tree Constraints which highlights the potential development limitations the trees pose on site.
- An Arboricultural Impact Assessment which evaluates any potential impact the proposal may have on surrounding trees.

This report is based on site observations and information provided. Conclusions have been made in light of the surveyor's experience and qualifications. A list of experience and qualifications in arboriculture are detailed above. The client may choose to accept or disregard the recommendations made in this report or seek additional advice.

This report is only concerned with trees in relation to construction. This report makes no attempt to provide a full safety inspection of the trees surveyed. It should not be seen as an alternative for a Tree Hazard Assessment which is specific to minimising the risk and liability associated with trees.

Climatic conditions including storms, drought and temperature-related factors can cause damage and failure in apparently healthy trees. It should be remembered that all trees do pose a risk and whilst every effort has been made to detect any major defects in inspected trees, no guarantee can be given as to their safety. Although the risk should be managed to an acceptable level, no tree can always be guaranteed as safe.

This report is based on Visual Tree Assessment (VTA) methodology, as devised by Mattheck (1991). VTA is a ground level visual assessment of a tree, which is carried out to identify obvious mechanical defects, signs of ill health, potential mechanical failure and the suitability of a tree to a site. The survey is compiled in accordance with *British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations* with Root Protection Areas (RPA's) based upon section 4.6 of that document.

### **3. Site visit**

This report is only concerned with the prominent trees within and adjacent to the PDA with the potential to be affected by any proposed development. It takes no account of any trees outside this remit or any building structural issues.

The survey was undertaken by James Newbould on 16 June 2023.

The weather conditions were dry and sunny with no cloud cover. Temperature was around 27 degrees Celsius.

Measurements were calculated using the necessary instruments or estimated where access could not be gained. No climbing inspections or decay detection analysis was undertaken. The observations made are based upon information that was available at the time of the survey. A glossary of relevant arboricultural terms can be found in Appendix A.

The tree survey data was recorded, and the trees were graded using Table 1 of BS5837. This information has been included within Appendix B. The tree survey data can be found in Appendix C.

This survey should be read in conjunction with the Plan of the Tree Constraints (PoTC - Appendix D-1-4) which have been prepared by overlaying tree survey data onto an Ordnance Survey base map with the footprint of the proposed development.

Appendix D comprises shows Root Protection Areas (RPAs) in red and crown spreads in blue (category B) and grey (category C). Tree shading areas are indicated by grey shaded polygons.

#### **4. Mapping**

Tree locations are based on architectural drawings provided by the client. The author has relied on the accuracy of the drawing in the production of this report.

No topographical survey has been undertaken on the PDA. All relevant trees have been plotted using a combination of land features, manual measurements, laser measurements and GPS as required. It is estimated that the accuracy is within 0.5-1m.

#### **5. Site Description**

The PDA is the rear garden of a residential dwelling situated on the southern side of Heckington Road. The garden is located on flat ground and is surrounded on western, the southern and eastern sides by residential gardens.

#### **6. Tree Status**

No TPO trees are located within or adjacent to the PDA. The PDA does not lie within a Conservation Area. No other statutory designations are known to apply to the PDA.

#### **7. Soil Assessment**

No soil testing was undertaken, and no soil information was provided for the author. From studying the British Geological Survey 'Geology of Britain Viewer' the underlying superficial geology is recorded as Mid-Pleistocene glacio-fluvial sand and gravel deposits formed between 860 and 116 thousand years ago during the Quaternary period. This overlies bedrock deposits of the Oxford Clay Formation, sedimentary bedrock formed between 166.1 and 157.3 million years ago during the Jurassic period.

The precise soil type can only be confirmed with further soil investigation/analysis. However, there is some potential for the presence of shrinkable clay soil depending on the depth of the drift geology.

## 8. Design

The proposed development comprises a single storey dwelling located to south of the existing house. The proposed development is shown in Appendix D with the proposed building footprint in grey and driveway in yellow.

The proposals also include the demolition of the extant garage and carport and the erection of new fences on the western and southern boundaries of the PDA.

### Tree Quality Assessment

As highlighted in Appendix C below, the tree survey included 10x individual trees within the vicinity of the proposed development as well as 2x tree groups. Of these 4x trees were identified as a retention category 'B' and 7x trees were identified as retention category 'C'. A further 5x trees were identified as retention category 'U'. In addition, 1x hedge was identified and recorded.

Category	Category description	No. Trees present
<b>A</b>	Trees of high quality, with life expectancy in excess of 40 years	0
<b>B</b>	Trees of moderate quality, with life expectancy in excess of 20 years	4
<b>C</b>	Trees of low quality with life expectancy in excess of 10 years or young trees	7
<b>U</b>	Seriously defective trees that cannot be retained in present context for longer than 10 years	5
<b>Total</b>		<b>15</b>

Generally, the Local Planning Authority is likely to accept the removal of trees in a poor condition or those with a minimal, safe, useful life expectancy. This usually includes category 'U' and 'C' trees. This presumption is also viewed reasonable where it accords with accepted arboricultural objectives.

## Arboricultural Impact Assessment

The following section evaluates the proposed design layout in relation to trees on and off-site. Any tree and design conflicts are highlighted, and possible remedial action recommended. The assessment is based on the surveyor's findings and drawings provided by the project landscape architect.

The proposed development comprises a single storey 5m x 10m annexe located to south of the existing house. The proposed development is shown in Appendix D with the proposed building footprint in blue.

### 9. Trees to be removed to accommodate the proposal

The proposed development will require the removal of 6x trees (5x category 'U' and 1x category 'C'). Trees to be removed are summarised in the table below.

Category	Trees to be removed	Reason	No. Trees present
<b>C</b>	T6	Within footprint of proposed driveway and parking area	1
<b>U</b>	T11	Within footprint of proposed driveway	1
<b>U</b>	T2, T3, T4, T5	All are stumps in moribund or dead condition unsuitable for retention	4
<b>Total</b>			<b>6</b>

### 10. Below ground constraints

The area of roots that need to be protected around a tree to try to ensure it does not suffer damage during the construction process is called the Root Protection Area (RPA). As recommended in BS5837 we have plotted the RPAs (in red) onto the attached Tree Constraints Plan (Appendix C-1) taking full account of the surrounding topographical factors, tree condition and the overall likelihood of root disposition. The RPA of T11 has been modified to account for the foundations of the extant garage.

The proposed development has the potential to impact the RPAs of 5x trees, summarised in the table below.

#### **Root compaction**

The RPA of T12 extends within the footprint of the current driveway entrance which also serves as the access point for site construction traffic (including delivery vehicles and plant). There is potential for the root system to be damaged from compaction of the soil through heavy traffic movement during construction. To protect the root systems of T12, the following measures will be implemented. Root protection comprising a geo-textile membrane covered with a *minimum* 150mm



depth of wood-chip overtopped by interlocking weight spreading ground protection mats (i.e. GroudGuards Maxitrack ® or similar). These will be placed over the RPA of T12 trees (see green highlighted areas shown in Appendix C-5).

### **Direct root damage**

In order to reduce the potential for damage, no mechanical excavation will be undertaken within the RPA of TG1 (see blue highlighted area shown in Appendix C-5). Within this zone, any sub-surface excavation for the removal of existing fence posts will be carried out by hand only. New fence posts positions will be excavated by hand within the RPAs and the holes lined with a water tight barrier to prevent concrete poisoning to surrounding roots.

The RPAs of T7 and T8 may extend within the footprint of the proposed driveway and parking area. However, the intrusion into the RPAs is minimal and is considered acceptable given the age and condition of the trees (both category C) and that the majority of the RPAs are to the east of the boundary fence.

The RPA of T10 may extend in to the footprint of the proposed dwelling. However, the intrusion into the RPA is minimal and is considered acceptable given the age, species and condition of the tree (category C).

The RPAs of T13 and T15 do not extend beyond the line of the western boundary fence, which acts as a natural root barrier and their will to be impacted by the excavation for the footings of the proposed building.

Category	Trees impacted	Nature of impact	No. Trees present
<b>B</b>	T12	RPA extents within footprint of proposed shared driveway entrance - potential damage from construction traffic	1
<b>C</b>	TG1	RPAs extend within path of proposed new fence line along souther boundary of site - potential damage from erection of new post and rail fence	1
<b>C</b>	T7, T8	RPAs potentially within footprint of proposed driveway and parking area - potential damage from excavation for driveway	2
<b>C</b>	T10	RPAs potentially within footprint of proposed dwelling - potential damage from excavation for footings	1
<b>Total</b>			<b>5</b>

## 11. Above ground constraints

Minor facilitation pruning may be required on the western canopy of T12 where its canopy overhangs the driveway to facilitate access. If pruning is required these works would be of a minor nature only requiring the shortening/removal of branches where cuts will not exceed a diameter of 100 mm and would conform with *BS3998:2010: Tree Work Recommendations* best practice.

T10 will be reduced to the height of the hedge either side in order to facilitate maintenance and to prevent suppression of the crown of T15 which is located immediately to the west. The scale of the reduction is considered appropriate to the species and will be to the long-term benefit of T15.

At its current height, TG1 casts only minimal shading upon the rear garden of the proposed development. TG1 will be maintained at its current height in order to reduce future shading. Shading caused by other trees in the vicinity is negligible.

## 12. Material storage

A protective fence will be erected prior to the commencement of any site works (before any materials are brought on site) immediately north of TG1 in order to protect its RPA from compaction during construction. The fence will have signs attached to it stating that this is a Construction Exclusion Zone (CEZ) and that **NO WORKS** are permitted within the CEZ and no materials will be stored within it. The only work permitted within the CEZ will be removal of the extant southern boundary fence and the erection of the new post and rail fence. This will further protect the RPAs of retained trees from root compaction during construction. The protective fence may only be removed following completion of all construction works. System used to be in line with BS5837: 2012, Figure 2.

None of the other RPAs identified are vulnerable to compaction damage from the storage of materials as they are either offsite (T7, T8, T9, T13, T14 and T15) in a location unsuitable for materials storage (T12) or will have been removed (T2, T3, T4, T5, T6, T11 and the hedge).

## 13. Services

No new services or soak-a-ways are known to be sited or constructed within the RPA of any tree. Should it become necessary these must be installed using techniques and methods described at section 4.1 of the current edition of the National Joint Utilities Group (NJUG) Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees ([www.njug.org.uk](http://www.njug.org.uk)) or if this is not practicable, trenches are to be opened by compressed air excavation tools and not mechanically dug.

## **14. Planting scheme**

A new hawthorn hedge will be planted along the new boundary separating the proposed and extant dwellings (Appendix C-5) in mitigation of the loss of T6.

## **Conclusion**

**From the tree survey findings, a total of 6x trees (T2, T3, T4, T5, T6 and T11) and a hedge will be removed as a consequence of the proposed development.**

**The erection of a CEZ fence around the RPA of TG1 will protect the RPA from compaction damage from materials storage and plant movement.**

**The imposition of hand-excavation only within the RPA of TG1 will minimise direct root damage arising from removal of the extant fence and the installation of new fences.**

**T10 will be reduced to match the height of the surrounding hedge in order to aid future maintenance and prevent suppression of the eastern crown of T15.**

**The RPA of T12 will be protected using ground protection matting to prevent compaction damage during the construction phase. T12 will also require minimal facilitation pruning in order to safeguard branches from damage during construction of the proposed annexe.**

**A new hawthorn hedge will be planted to separate the new and old properties in mitigation of the loss of the removed hedge.**

The protection of trees, their subsequent health and future potential is dependent upon all persons operating within the site. Communications are vitally important to ensure that all parties understand the reason for tree protection and its continued existence. Providing all necessary tree protection works are undertaken, retained trees and development alike will satisfactorily coexist.

It is hoped that this report and recommendations provides all necessary information, however, should there be any queries, or should clarification of any points be required, please contact the report author.

James Newbould, L4 Dip Arb, *TechArborA*

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## Appendix A - Glossary of Arboricultural Terms

**Banana Cracks** – These usually form on the underside of leaning trees and are vertical. These can lead to colonisation by decay fungi.

**Bleeding** - Flow of sap from wounds and/or other injuries.

**Bole** - The central stem of the tree.

**Bough** - The gradual curve of a branch or stem

**Bracket** - Fruiting or spore producing body of wood decay fungi, forming on the external surface of the stem or trunk.

**Branch** - A secondary shoot or stem arising from the main stem of trunk.

**Branch Bark Ridge** - A ridge of bark in a branch crotch that marks where branch and trunk tissue meet and often extends down the trunk.

**Branch Collar** - Wood that forms around a branch attachment, frequently more pronounced below the branch. The branch collar is used to identify the correct location of all thinning cuts.

**Brown Rot** - Form of decay where cellulose is digested. The result of brown rot is brittle wood with no tensile strength.

**Buttress** - Support branch, stem, or root; usually associated with exaggerated growth.

**Cavity** - An open wound, characterised by the presence of decay and resulting in a hollow structure.

**Callus** - Undifferentiated tissue initially formed by the cambium around and over a wound.

**CODIT** – Compartmentalisation Of Decay In Trees is the term used to describe how trees deal with decay.

**Co-dominant** - A situation where a tree has two or more stems which are of equal diameter and relative amounts of leaf area. Trees with co-dominant primary scaffolding stems are inherently weaker than stems, which are of unequal diameter and size.

**Compression Union** – This is where the wood fibres at a branch or stem union have not knitted together. This can result in union failure due to the continued radial growth of the tree pushing the union apart.

**Compression Wood** - Type of reaction wood that develops on the underside of branches and leaning trunks in coniferous trees; tends to maintain branch angle of growth or straighten the trunk.

**Coppicing** - The cutting down of a tree within 300mm (12in) of the ground at regular intervals, traditionally applied to certain species such as Hazel and Sweet Chestnut to provide stakes etc.

**Crown** - The area of the tree that bares foliage.

**Crown Lifting** – the raising of clearance between the ground and the lowest branch of a tree.

**Crown spread** – the distance the crown extends from the main stem at cardinal points i.e. N, E, S, W.

**Diameter Breast Height (DBH)** - Diameter at Breast Height (measured at 1.5m Ground level). DBH is required for determining tree value. Multi stemmed trees require diameters for each stem. In addition, the stem diameter must be factored by the relative crown ratio of the stem.

**Deadwood** – woody tissue that is no longer functional, usually branches and graded by size; Minor – diameter less than 50mm and Major – diameter greater than 50mm. Decay- The process of degradation of woody tissues by fungi and bacteria through decomposition of cellulose and lignin.

**Decline** - When a tree exhibits signs of a lack of vitality such as reduced leaf size, colour or density.

**Defect** - A fault or weakness in a tree support system.

**Ears** - This is the term given to the type of reaction wood that occurs either side of a compression union. These help to strengthen compression unions by knitting together wood fibres either side of the union.

**Epicormic Growth** - Shoot that arises from latent or adventitious buds that occur on stems and branches and on suckers produced from the base of trees.

**Fibre Buckling** - Visible enlargement of tissue on the down side of a tree stem. Represents the reaction of a stem to a heavy loading. It is normally safe except when coupled with bark defoliation from the top (tensile) part of the loaded stem.

**Fungi** - Simple plants that lack a photosynthetic pigment. The individual cells have a nucleus surrounded by a membrane, and they may be linked together in long filaments called hyphae. The fruit of which (mushrooms) are often referred to as 'Fruiting Body'.

**Gall** - A localised swelling of branch or stem generally caused by fungi, bacteria, insects or a physiological disorder.

**Hazard Beam** – This is where the end weight of a branch is too much and partially failed, causing a horizontal split to form through the middle of a branch.

**Included Bark** - Included bark occurs when bark is included into the attachment between two stems, preventing the joining of wood tissue in the area between the stems. Included bark attachments always have an extremely narrow angle between the stems, resembling the letter “V” (rather than the letter “U” or “L” typical in strong attachments). As stems having included bark increase in size, pressure is exerted from the stem expansion and a crack often develops in the crotch between the stems. Included bark attachments have a higher potential for failure in later years.

**Lateral** - A branch or twig growing from a parent branch or stem in a horizontal direction from the parent stem.

**Leader** - A dominant upright stem, usually the main trunk.

**Lean** - Departure from vertical of the stem, beginning at or near the base of the trunk.

**Limb** - Same as branch, but usually larger and more prominent.

**Physiological Condition** - an overall assessment of a tree's health graded Good – no significant health issues, Fair – minor symptoms of ill health and Poor – significant ill health.

**Pollard** - Pruning technique by which young trees or branches are initially headed and then re-headed on an annual basis without disturbing the callus knuckle.

**Reduction** - Pruning to decrease height or spread on entire tree or one section; also referred to as reduction or reduced pruning.

**Reaction Wood** - Specialised secondary xylem that develops in response to lean or similar mechanical stress, to restore the stem to the vertical. Occurs as compression wood in conifers and tension wood in angiosperms.

**Retrenchment** – This is where the tree turns the upper most crown into deadwood which often looks like a stag's antlers. This can happen for a number of reasons.

**Retrenchment pruning** - A form of reduction intended to encourage development of lower shoots and emulate the natural process of tree ageing.

**Root** - An organ of a tree that serves to maintain mechanical support, to provide water and essential elements from the soil through absorption, and to store energy reserves.

**Root Collar** - The junction between the root of a plant and its stem, often indicated by the trunk flare.

**Sapwood** – The outer portion of the wood that has living cells and transports water and nutrients and stores carbohydrates.

**Scaffold** - A large limb that is or will be part of the permanent branch structure of a tree.

**Simultaneous Rot** – This is where both Brown and White rot occurs at the same time, eventually this results in ceramic failure of the tree.

**Species** - A group of plants that resemble each other closely and that interbreed freely. Displayed as common name first and taxonomic name in brackets.

**Stem** - A woody structure bearing foliage and buds that gives rise to other stems.

**Structural Condition** - An overall assessment of a trees structural condition graded; Good – minimal defect, Fair – defects of low significance and Poor – major defects or dead.

**Suckers** - Adventitious stems arising from the lower trunk or roots.

**Tension Wood** - Type of reaction wood in angiosperms that forms on the upper side of branch and stems, acting to pull the member back to a vertical orientation or a genetically programmed angle of growth.

**Tension Union** - This is where the wood fibres at the union have knitted well and form a strong U-shaped union.

**Torsional Twist** - Often caused by prevailing winds effect on a growing tree over time. The main stem appears twisted, this can sometimes be a species characteristic.

**Union** - The junction between stem and branch or between stems.

**White Rot** - A form of decay where the lignin in the cells is broken down leaving white spongy wood tissue with no compressive strength.

**Wound** - An opening that is created when the tree's protective bark covering is penetrated, cut, or removed, injuring or destroying tissue. Pruning a live branch creates a wound, even when the cut is properly made.

**Wound-wood** - Differentiated woody tissue that forms after initial callus has formed around margins of a wound. Wounds are closed primarily by wound-wood.



Appendix B

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Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<b>Trees unsuitable for retention</b> (see Note)				
<b>Category U</b> 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	<ul style="list-style-type: none"> <li>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)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>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</li> </ul> <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>			See Table 2
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>	
<b>Trees to be considered for retention</b>				
<b>Category A</b> <b>Trees of high quality</b> 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
<b>Category B</b> <b>Trees of moderate quality</b> 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
<b>Category C</b> <b>Trees of low quality</b> 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

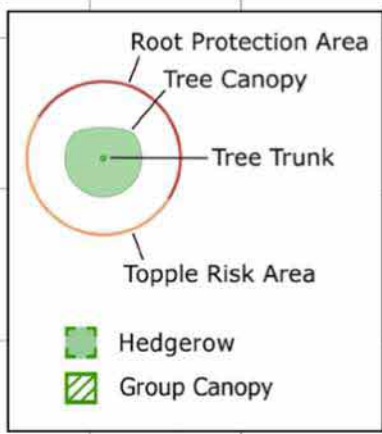
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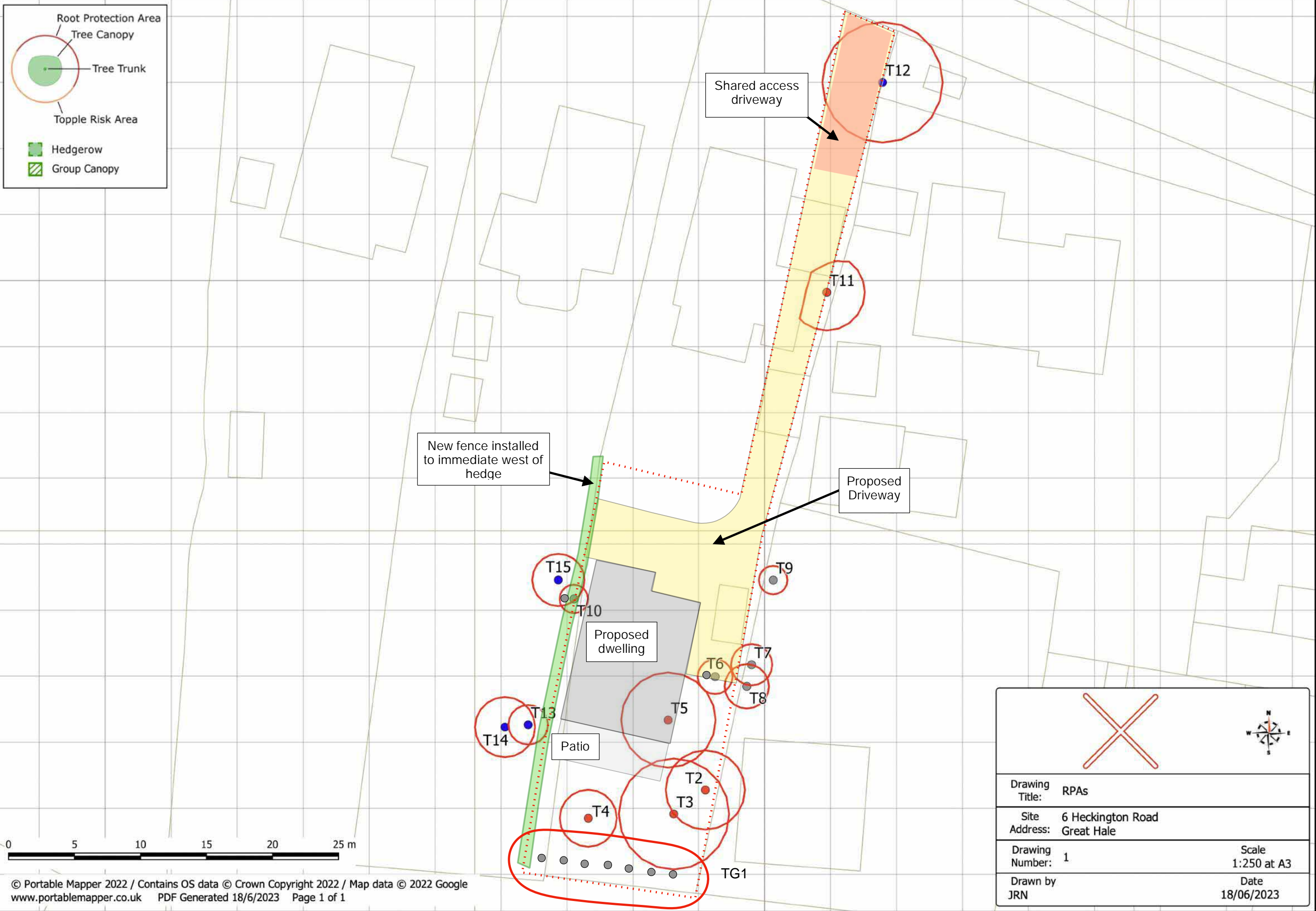
## Appendix C - Tree Survey Data

Tree No.	Species name		Height (m)	Stem diameter at 1.5m (mm)	RPA (m) - 12x Stem dia.	Crown spread (m)				Height and direction of 1st limb	Physiological condition	Structural condition	Life stage	Observations	Remaining contribution (years)	Retention Category
	Common	Taxonomic				N	E	S	W							
1	Leylandii	<i>Cupressocyparis leylandii</i>	3.8	260	3.1	1	N/A	1	N/A	0.5m N	Poor	Fair	SM	Tree group forming hedge along southern boundary. Trees have been topped previously. Significant dieback throughout and heavily colonised by ivy and some elder.	<10	C1
2	Cherry	<i>Prunus avium</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Poor	Poor	M	Topped at 0.5m previously. Only stump remains with weak basal regrowth.	<10	U
3	Plum	<i>Prunus domestica</i>	1.5	350	4.2	N/A	N/A	N/A	N/A	N/A	Poor	Poor	M	Topped at 1.5m previously. Only stump remains with weak basal regrowth. Moribund.	<10	U
4	Sycamore	<i>Acer pseudoplatanus</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Poor	Poor	EM	Topped at 0.5m previously. Weak regrowth.	<10	U
5	Plum	<i>Prunus domestica</i>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dead	Dead	N/A	Dead.	N/A	U
6	Apple	<i>Malus domestica</i>	3.3	110	1.3	1.4	1.8	1.6	1.6	1.6m E	Good	Fair	EM	Historic pruning wounds throughout. Minor pest damage to foliage.	20	C1
7	Plum	<i>Prunus domestica</i>	5.5	130	1.6	3.1	3	3	1.7	2m W	Good	Fair	EM	Are group composed of self-set, multi-stemmed, tree with associated suckers. Historic pruning wounds west side. Sparse foliage in upper crown.	15	C1
8	Cherry	<i>Prunus avium</i>	5.8	140	1.7	1.5	1.2	2	1.4	2.7m W	Fair	Fair	Y	Probably self set. Co-dominant stems from 2m. Sparse crown and poor overall foliage cover (approx. 50%)	15	C1
9	Pear	<i>Pyrus communis</i>	3.1	90	1.1	1.4	1.3	1	1	2m W	Good	Good	Y	Multi-stemmed.	<10	C1
10	Laurel	<i>Prunus laurocerasus</i>	4.5	90	1.1	1.5	0.75	1.5	0.75	N/A	Good	Good	SM	Multi-stemmed. Shaped and made part of boundary hedge.	<10	C1
11	Bay	<i>Laurus nobilis</i>	2.7	240	2.9	0.6	0.9	1.3	0.3	N/A	Fair	Poor	M	Has been topped at 2.5m and maintained as a shaped box.	<10	U
12	Horse Chestnut	<i>Aesculus hippocastanum</i>	9.5	380	4.6	3.6	5.6	4.5	2.8	2.5m NE	Good	Fair	SM	Ivy clad. Historic pruning wounds W over driveway. Estimated stem diameter due to ivy. Tangled phone-lines in northern crown.	20	B1
13	Rowan	<i>Sorbus acuparia</i>	7	125	1.5	1.4	2	2.2	0.3	2.4m E	Good	Fair	EM	Crown bias E. Suppressed by T16	20	B1
14	Rowan	<i>Sorbus acuparia</i>	7.5	190	2.3	2.6	2	2.9	2.9	1.6m SW	Good	Good	SM	Minor deadwood throughout.	20	B1
15	Whitebeam	<i>Sorbus aria</i>	6.8	165	2.0	2.9	1.8	3.3	2.7	1m NW	Good	Fair	M	Heavily reduced historically. Eastern crown suppressed by T11. Minor deadwood throughout.	20	B1
Hedge	Leylandii	<i>Cupressocyparis leylandii</i>	2	100	1.2	N/A	0.5	N/A	0.5	N/A	Good	Good	M	Western boundary hedge of plot.	>10	C2

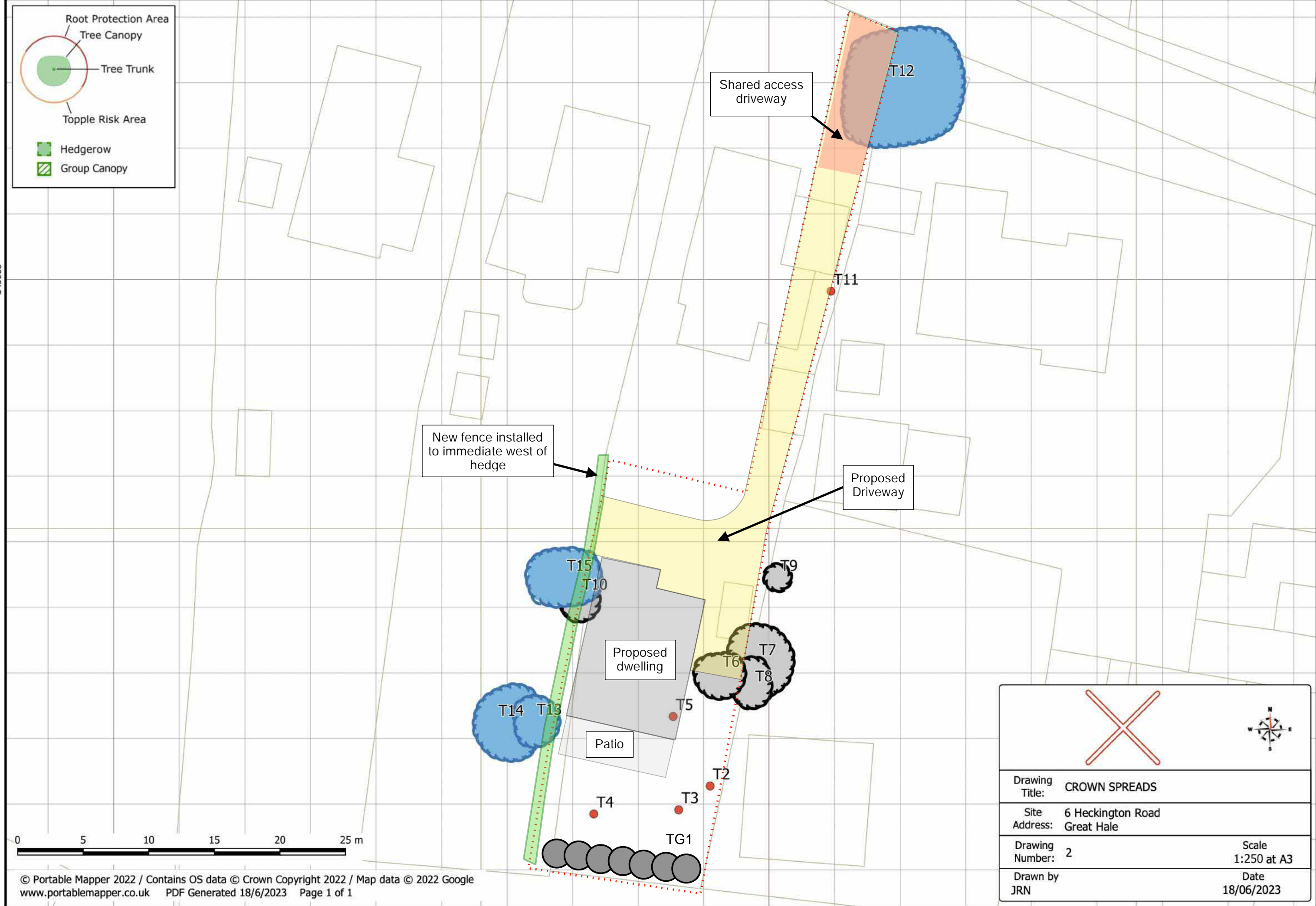
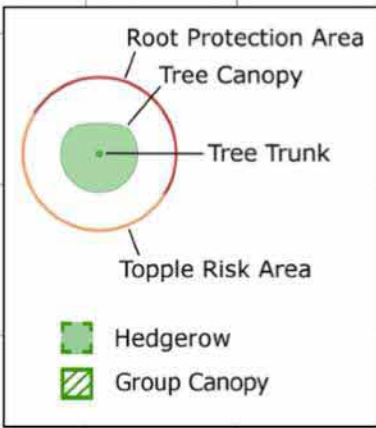


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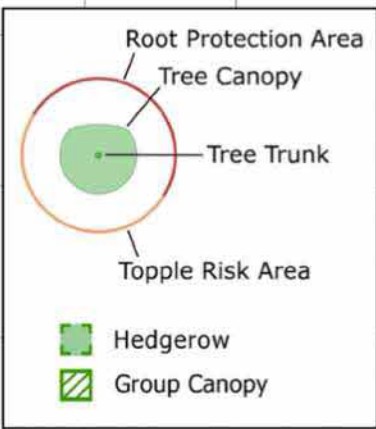
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Drawing Title:	RPAs		
Site Address:	6 Heckington Road Great Hale		
Drawing Number:	1	Scale:	1:250 at A3
Drawn by:	JRN	Date:	18/06/2023



			
Drawing Title:	CROWN SPREADS		
Site Address:	6 Heckington Road Great Hale		
Drawing Number:	2	Scale:	1:250 at A3
Drawn by:	JRN	Date:	18/06/2023



New fence installed to immediate west of hedge

Shared access driveway

Proposed Driveway

Proposed dwelling

Patio

T15  
T10

T14  
T13

T4

T2  
T3

T5

T6  
T7  
T8

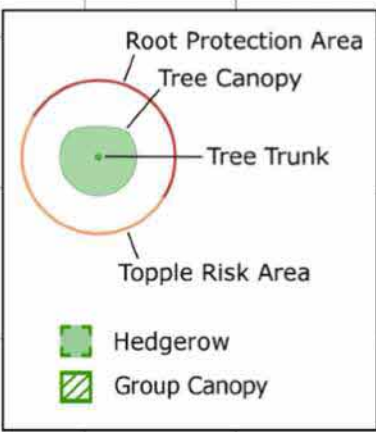
T9

T11

T12

TG1

Drawing Title: SHADING ZONES	
Site Address: 6 Heckington Road, Great Hale	
Drawing Number: 3	Scale: 1:250 at A3
Drawn by: JRN	Date: 18/06/2023

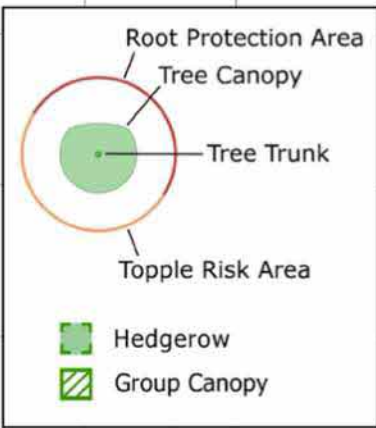


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Drawing Title:	ALL ATTRIBUTES		
Site Address:	6 Heckington Road Great Hale		
Drawing Number:	4	Scale	1:250 at A3
Drawn by	JRN	Date	18/06/2023



With RPA ground to be recovered with geo-textile membrane covered with a *minimum* 150mm depth of wood-chip overlapped by interlocking weight spreading ground protection mats.

Proposed hawthorn hedge

Access maintained for work on fence.

No mechanical sub-surface exception within RPAs. Hand excavation only from removal of extant fence and installation of new.

CEZ



Drawing Title:	RPAs		
Site Address:	6 Heckington Road Great Hale		
Drawing Number:	5	Scale	1:250 at A3
Drawn by:	JRN	Date	18/06/2023