



## **Care Home, Graven Hill, Bicester**

### Arboricultural Impact Assessment

November 2024

#### **Waterman Infrastructure & Environment Limited**

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**Client Name:** LNT Care Developments  
**Document Reference:** WIE11386-182-R-4-4-1-AIA  
**Project Number:** WIE11386

### Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
First	June 2024	Richard Harris Principal Consultant	Nick Jones-Hill Technical Director	Nick Jones-Hill Technical Director
Second	June 2024	Richard Harris Principal Consultant	Nick Jones-Hill Technical Director	Nick Jones-Hill Technical Director
Third	November 2024	Richard Harris Principal Consultant	Nick Jones-Hill Technical Director	Nick Jones-Hill Technical Director
Fourth	November 2024	Richard Harris Principal Consultant	Nick Jones-Hill Technical Director	Nick Jones-Hill Technical Director

### Comments

Second	Client's comments addressed
Third	Revised vegetation removal along northern boundary following amendments to BNG Baseline Assessment
Fourth	New Proposed Site Plan assessed



## Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

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## Contents

## Executive Summary

The Care Home site located in Graven Hill, Bicester is being considered for development. The development proposals are for the construction of a Care Home with associated parking and landscape.

The Site is approximately 1ha in area. The Site once comprised the Rodney House Complex which was subject to demolition works in 2016 and 2020.

A tree survey of the Site was undertaken in June 2024 and the results of that tree survey exercise have been used to guide the design process. That tree survey and the recommendations made in this report follow the principles of BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations<sup>1</sup> (BS5837) and relevant Cherwell District Council (CDC) planning policy.

A total of 1No. individual tree and 1No. group of dense scrub and trees were recorded as part of the tree survey (**Drawing 1**). Of these arboricultural features, the individual tree was awarded a moderate B grade, whilst the scrub and trees group was awarded a C (low) grade.

At the time of writing this report, none of the trees present on the Site were afforded protection through the provisions of a Tree Preservation Order and no part of the Site is located within a Conservation Area.

The purpose of this Arboricultural Impact Assessment (AIA) is to evaluate the direct and indirect effects of the proposed design on the tree stock present both on and adjacent to the Site. In line with Annex B of BS5837, it also contains sufficient information to be submitted in support of any planning application pertinent to the Site and the design layout shown on **Drawing 2**.

A section of the grouped arboricultural feature would be removed to facilitate the Development (**Drawing 3**).

Due to the living nature of trees and other site considerations, this report and any recommendations made within it are valid for a period of 18 months following the Site survey.

<sup>1</sup> British Standard Institution (2012) *BS5837 Trees in Relation to Design, Demolition and Construction - Recommendations*

## 1. Introduction

- 1.1. Waterman Infrastructure & Environment Limited (Waterman) was instructed by LNT Care Developments (hereafter referred to as the 'Applicant') to undertake an Arboricultural survey and Impact Assessment (AIA) of trees on land at the Care Home site in Graven Hill, Bicester ('the Site'). The Site is currently being considered for redevelopment to provide a new Care Home.
- 1.2. The current development proposals ('the Development') broadly comprise of a building with associated car parking and hard / soft landscape. A new access road will also be provided into the Site.
- 1.3. The purpose of this AIA is to evaluate the direct and indirect effects of the proposed design on the tree stock present both on and adjacent to the Site. It includes recommendations for an appropriate level of mitigation and/or compensation where necessary.
- 1.4. It documents the findings of a baseline survey of the arboricultural features on and immediately adjacent to the Site. The above and below ground constraints posed by the canopy shape and subterranean rooting area of the surveyed trees are described.
- 1.5. This report should be read in conjunction with the other documents, plans and technical studies submitted to support the proposed development of the Site.
- 1.6. Trees are a material consideration in the planning process and as such, the information within this report has been aligned where possible with the general policies and development objectives of the relevant planning policies outlined within **Appendix A** and the principles set out in BS5837.



## 2. Site Description

- 2.1. The Site is approximately 1 hectare (ha) in area and centred on Ordnance Survey Grid Reference SP 58905 21209. It is located to the north of the wider Graven Hill development which is currently under construction, on the southern side of Bicester, Oxfordshire.
- 2.2. The Site once comprised the Rodney House Complex which was demolished in 2016 and 2020.

**Photograph 1:** View looking south-west across the Site





### 3. Tree Survey Methodology

- 3.1. An initial tree survey of the Site was carried out by Waterman in 2016 as part of the survey of the wider development of Graven Hill. This survey was updated on 29 July 2020 and again in June 2024 for the purpose of this report. The tree survey methodology followed the recommendations set out in BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'<sup>2</sup> (BS5837).
- 3.2. The survey involved collecting the following information on all trees (both on and off-site) with a stem diameter over 75mm which have the potential to influence the proposed Development.

#### Tree Numbers

- 3.3. Individual trees surveyed were given the prefix 'T'. Trees have been grouped where they form cohesive aerodynamic (i.e. companion shelter), visual (i.e. screening) or cultural (i.e. parkland) arboreal features of similar quality, as identified by the prefix 'G'. Tree numbering followed that from the 2016 survey for consistency and as such, the numbers included in **Appendix B** are not contiguous.

#### Species

- 3.4. Species are listed by both their common name and Latin name in the schedule in **Appendix B** and by their common name in the body of the report.

#### Height

- 3.5. Tree heights are approximate and estimated in metres.

#### Stem Diameter

- 3.6. The stem diameter of single stemmed trees is measured at 1.5m above ground level and given in millimetres. The diameter measurement of multi-stemmed trees is shown as a measurement of each major stem present. Where stems fork or swell, the measurement is taken at the narrowest point below the fork or swelling. Where access to the trunk of a tree is not available, an estimation of the stem diameter is made and identified by "\*" on the accompanying tree survey table.

#### Crown Spread

- 3.7. Radial crown spread is measured in metres to the nearest 0.5m (rounded up). These are recorded for each of the four cardinal points where access allows. Where access is not available the crown spread is a visual estimate derived from site-based observations and identified by "\*" on the accompanying tree survey table. As such, the canopy shape for surveyed trees depicted on the accompanying plans accurately represents the canopy spread as measured on Site.

<sup>2</sup> BS5837:2012 Trees in relation to design, demolition and construction – Recommendations, 2012, British Standards Institution.

### Height of Crown Clearance and Canopy

- 3.8. The height of crown clearance is the height above ground in metres of the first significant branch and the direction of growth. The height of canopy is the average height above ground in metres of the main canopy. These are measured to the nearest half metre (rounded up) for dimensions up to 10m and the nearest whole metre for dimensions over 10m.

### Age Class

- 3.9. The age of each tree is defined as follows:
- Young (Y): Within the first 1/4 of useful life expectancy.
  - Semi-mature (SM): Within the second 1/4 of useful life expectancy.
  - Early Mature (EM): Within the third 1/4 of useful life expectancy.
  - Mature (M): Within the fourth 1/4 of useful life expectancy.
  - Over Mature (OM): Tree has exceeded normal life expectancy.
  - Veteran (V) Tree displaying veteran characteristics <sup>3</sup>.

### Physiological and Structural Condition

- 3.10. The physiological or structural condition of each tree, tree group, hedgerow and woodland is described, highlighting specific features. The survey involved ground level examination of the external features of the trees. The structural condition for each tree is described as being Good, Fair or Poor and the physiological condition is described as Good, Fair, Poor, Moribund or Dead.
- 3.11. Where appropriate, notes on the structural integrity are provided on form, taper, forking habit, storm damage, decay, fungi, pests, etc. Where identified, signs of substantial defects or debility have been recorded. Where access to a tree was not possible, an estimation of physiological and structural condition has been made.

### Estimated Remaining Contribution (ERC) in Years

- 3.12. The Estimated Remaining Contribution (ERC) for each tree is based on species and the existing physiological and structural condition of the tree. The ERC may affect proposed development layout because the longer the tree is likely to live, the greater the contribution it will make and the greater the need for retention.

### Category Grading

- 3.13. Each individual tree was given a Category Grading in accordance with BS5837 to reflect their overall quality and value. Further details of the tree categorisation method can be found in **Appendix C** and Section 7 of this report.

<sup>3</sup> <http://www.ancienttreeforum.co.uk/ancient-trees/what-are-ancient-veteran-trees/>

### Preliminary Management Recommendations

- 3.14. Any recommendations made for management of the trees (for example, tree surgery) prior to development are not a 'specification' for tree work. These recommendations are proposed on the basis that they are undertaken by a qualified arboricultural contractor, such as those listed in the Arboricultural Association's Approved Contractors Directory ([www.trees.org.uk](http://www.trees.org.uk)). Any work undertaken by the contractor should be in accordance with best practice, such as the European Tree Pruning Guide<sup>4</sup>, or required by BS3998: 2010 'Tree work – recommendations'<sup>5</sup>.
- 3.15. Where management recommendations are made, they are accompanied by a recommended timeframe in which they should be undertaken.

<sup>4</sup> European Tree Pruning Guide, 2001, Arboricultural Association

<sup>5</sup> BS3998:2010 'Tree work - recommendations', 2010, BSI

## 4. Root Protection Area

- 4.1. The Root Protection Area (RPA) of a tree is defined in BS5837 as a “*layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability and where the protection of the roots and soil structure is treated as a priority*”. For single stemmed trees it is equivalent to a circle with a radius 12 times the stem diameter when measured at 1.5m above ground level. BS5837 outlines the calculation of RPA as follows:

$$\text{RPA(m}^2\text{)} = \left( \frac{\text{stem diameter (mm) @ 1.5 m} \times 12}{1\ 000} \right)^2 \times \pi \text{ (3.142)}$$

- 4.2. Trees with more than one stem originating below 1.5m above ground level are given an aggregate stem diameter using either of the following two calculations as outlined in BS5837. This diameter is then used in the above calculation to estimate RPA:

- a) For trees with two to five stems:

$$\sqrt{(\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 \dots + (\text{stem diameter } 5)^2}$$

- b) For trees with more than five stems:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

- 4.3. The RPA of existing tree stock is an important material consideration when considering site constraints and planning development activities.
- 4.4. Unless there is an overriding justification for them, construction activities, materials storage or changes in level should be avoided within the RPA of a retained tree. This is because these operations have the potential to damage or kill the tree, the safe retention of which may be a condition of planning permission. If operations are proposed within the RPA of a retained tree, it may be necessary to prove to CDC that:
- All other alternative solutions have been explored and proven unviable;
  - That the tree can remain viable and that the area lost to encroachment can be compensated for elsewhere, contiguous with its RPA;
  - That mitigation measures can be put in place to improve the soil environment that is used by the tree (if necessary).

## 5. Limitations

- 5.1. This report is intended to assist with the planning and management of construction, refurbishment and/or demolition operations under current best practice guidance. It focuses on measures which will need to be implemented to ensure the protection of retained trees. It is the responsibility of the design team and site manager to ensure that any recommendations made also comply with all relevant health, safety and construction guidance and legislation.
- 5.2. This report is concerned with the arboricultural features of the Site only. Ground condition/history information has not been consulted as part of this assessment (such as history of ground disturbance, root damage, changes in soil levels, previous utility installations or changes in site conditions) unless otherwise stated.
- 5.3. All trees were visually inspected from ground level with no climbing, boring or core sampling undertaken. All measurements are metric and approximate. The comments made are based on observable factors present at the time of inspection.
- 5.4. Trees that were not directly accessible at the time of survey have been denoted with a '\*' and detailed in the comments section within **Appendix B**.
- 5.5. The tree survey was based upon existing topographical information relating to the Site, produced by MK Surveys (drawing ref. 20338\_R8). For the purposes of this report, it is assumed that the detail of the topographical survey is accurate and correct.
- 5.6. The design and construction of foundations on Site should be informed by appropriate soil sampling and laboratory testing in accordance with Chapter 4.2 of 'Building Near Trees' of the National House Building Council's Standards 2019. This report does not specifically relate to risks associated with subsidence, heave or other forms of disturbance associated with tree root growth or tree removal.
- 5.7. This report is not intended to confirm the safety (or otherwise) of surveyed trees or tree groups. References to defects or potential safety issues are not exhaustive and are intended as a guide only to inform the provision of further resources / more detailed investigations. The persons(s) responsible for the management of trees surveyed as part of this report are recommended to commission a separate Tree Condition Survey by a suitably qualified and experienced person in order to manage the health and safety aspects of trees under their control and discharge their reasonable 'Duty of Care' owed under the Occupiers' Liability Act 1984<sup>6</sup>.
- 5.8. Owing to the changing nature of trees as living, dynamic features and other Site circumstances, the baseline survey results are representative of the arboricultural features on the date of survey only and are subject to change. The impact assessment is based on development proposals as provided to Waterman IE and contained in **Drawing 2**. Any alteration to the application Site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

<sup>6</sup> Occupiers' Liability Act 1957 and 1984. HMSO

- 5.9. Unless otherwise stated, trees should be inspected regularly to satisfy the 'Duty of Care' owed under the Occupiers' Liability Act 1984<sup>7</sup>, or directly after heavy storms (i.e. force 6-7 and above on the Beaufort scale). It is recommended that advice from an ecologist is sought prior to carrying out any works to trees, in order to ensure these are carried out in accordance with (in particular) the protection afforded to wild birds and bats under The Wildlife and Countryside Act<sup>8</sup> and The Conservation of Habitats and Species Regulations<sup>9</sup>.

<sup>7</sup> Occupiers' Liability Acts 1957 and 1984. HMSO

<sup>8</sup> The Wildlife and Countryside Act 1981 (as amended), OPSI

<sup>9</sup> The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, OPSI

## 6. Tree Preservation Orders and Conservation Areas

- 6.1. Under Part VII of the *Town and Country Planning Act 1990* and as amended in the *Town and Country Planning (Tree Preservation) (England) Regulations 2012*, local planning authorities are given the powers to protect trees, groups of trees and woodlands through the provisions of a Tree Preservation Order (TPO). TPOs prohibit:
- cutting down;
  - topping;
  - lopping;
  - uprooting;
  - wilful damage; and
  - wilful destruction
- without the local planning authority's written consent.
- 6.2. All trees with a stem diameter above 75mm in diameter when measured at 1.5m above ground level are also afforded protection if they are located within a Conservation Area.
- 6.3. A check carried out on the 11 January 2021 of the CDC on-line mapping portal<sup>10</sup> has indicated that none of the trees present on the Site were afforded protection through the provisions of a TPO and no part of the Site is located within a Conservation Area.
- 6.4. Further details on TPOs and Conservation Areas can be found in **Appendix A**.

<sup>10</sup> [Cherwell Conservation Public \(arcgis.com\)](https://www.arcgis.com) Accessed 11/01/2021



## 7. Existing Tree Stock

- 7.1. Existing tree stock present on the Site consists of a mature pedunculate oak (T1) to the south and an unmanaged scrubby group of trees to the north (G2)
- 7.2. Further details relating to the existing tree stock on or adjacent to the Site can be found in **Appendix B** and on **Drawing 1**.

### Quality Category Grading

- 7.3. Each arboricultural feature was given a Category Grading in accordance with the principles of BS5837. The Category Gradings are defined according to the following criteria, which are further divided into sub-categories based on arboriculture, landscape and/or historic/cultural value, as defined within BS5837 and contained at **Appendix C**. Table 1 summarises the arboricultural features by category.
- **Category Grading A:** Trees of high quality and value (with an estimated remaining life expectancy of at least 40 years) (none present).
  - **Category Grading B:** Trees of moderate quality and value (with an estimated remaining life expectancy of at least 20 years) (coloured blue on **Drawing 1**).
  - **Category Grading C:** Trees of low quality and value (with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter less than 150mm) (coloured grey on **Drawing 1**).
  - **Category Grading U:** Trees which are 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 (none present).

Table 1 Summary of tree features by category

	Tree Numbers & BS5837 Categories				Total
	Cat A	Cat B	Cat C	Cat U	
<b>Trees</b>	N/A	T1	N/A	N/A	<b>1</b>
<b>Groups</b>	N/A	N/A	G2	N/A	<b>1</b>
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>

## 8. Arboricultural Impact Assessment

- 8.1. The Development proposals as shown on the Tree Protection and Removal Plan (TPRP) which is contained as **Drawing 3** comprise the construction of a new Care Home building with associated parking, access and hard/soft landscape.
- 8.2. The proposed layout shown on **Drawing 3** was taken from the Proposed Site Plan (Drawing ref. no. ref) which is contained as **Drawing 2**.
- 8.3. The relationship between the proposed Development and the existing tree stock has been assessed taking into account existing site-specific factors such as topography, ditches and existing built form.
- 8.4. **Table 2** identifies the impact of the proposed layout on those trees under the following headings:
  - i. **Trees to be removed:** Trees will need to be removed if they are directly under proposed structures; if they are so close to proposed works that the impact of the works on the roots or crowns of the tree will render the retention of the tree unviable; if they create an unacceptable constraint on occupants of the site post construction (shading, nuisance etc.); for reasons of sound arboricultural management. The location of the trees and groups to be removed is shown on **Drawing 3**
  - ii. **Trees to be retained but requiring additional protection:** Trees fall into this category where the assessment has identified that they can be retained, but additional protection measures may be required to ensure their continued health and structural integrity. This is usually where works are proposed within their RPA or below their crowns; and
  - iii. **Trees unaffected by the development proposals:** These are trees which are unaffected by the works and can therefore safely be retained. These trees are still likely to require protection through the placement of Tree Protection Barriers.

Table 2 Arboricultural Impact Assessment

	Tree Numbers				Total
	Cat A	Cat B	Cat C	Cat U	
Trees unaffected by the development proposals	N/A	T1	N/A	N/A	1
Trees to be retained but requiring additional protection	N/A	N/A	N/A	N/A	0
Trees to be removed	N/A	N/A	G2 (in part)	N/A	1
				<b>Total</b>	<b>2</b>

## 9. Arboricultural Method Statement (Heads of Terms)

### Site Monitoring

- 9.1. A retained Arboricultural Consultant will be appointed prior to the commencement of any works on Site. Their purpose will be to ensure compliance with all agreed tree protection measures. As a minimum, a pre-commencement site meeting should be held with a representative of the appointed contractor(s), the retained Arboricultural Consultant and a representative of CDC. The purpose of this meeting will be to agree the location and design of any tree protection barriers, as well as to agree the need for / frequency of any on-going arboricultural clerk-of-works visits.

### Construction Exclusion Zone

- 9.2. Trees T1 and Group G2 (partial) are to be retained in proximity to construction work, and therefore tree protection will be required to mitigate for potential above and below ground impacts and ensure these trees are retained successfully. The factors which most commonly result in below ground damage affecting oxygen diffusion (and therefore must be avoided) include:
- Compaction of the ground;
  - Any change in soil levels (even if temporary), including ground excavation and soil stripping;
  - Covering the root zone with impervious surfaces;
  - Changes in the water table level or ground saturation; and
  - Damage by the direct toxicity of phytotoxic materials, dust and runoff.
- 9.3. A **Construction Exclusion Zone (CEZ)** will be established around these trees where no unauthorised access or construction operations (including Site compounds / facilities / storage of materials) are permitted to protect the ground from compaction or excavation and canopies from physical damage. This will be secured by means of temporary protective fencing with weatherproof signage.
- 9.4. Following the principles set out in section 6.2.2 of BS5837, these barriers should be “fit for the purpose of excluding construction activity and appropriate to the degree and proximity of the work taking place around the retained trees”. Examples of this fencing are contained in **Appendix D**.
- 9.5. All weather notices should be secured to the barrier, examples of which are contained in **Appendix E**.

### Soft Landscaping

- 9.6. Where soft landscaping is proposed within the CEZs of retained trees, this will be undertaken as the last construction activity on Site. Prior to implementation, the temporary protective fencing will be removed and all landscape operations within the RPAs of retained trees will be undertaken using hand tools.
- 9.7. Excavations required for planting pits will be positioned to avoid large structural roots (those greater than 25mm in diameter) within the RPAs for retained trees.
- 9.8. Where there is a risk of soil compaction during the landscape operations, suitable ground protection measures will be used.

### **Utility Connections**

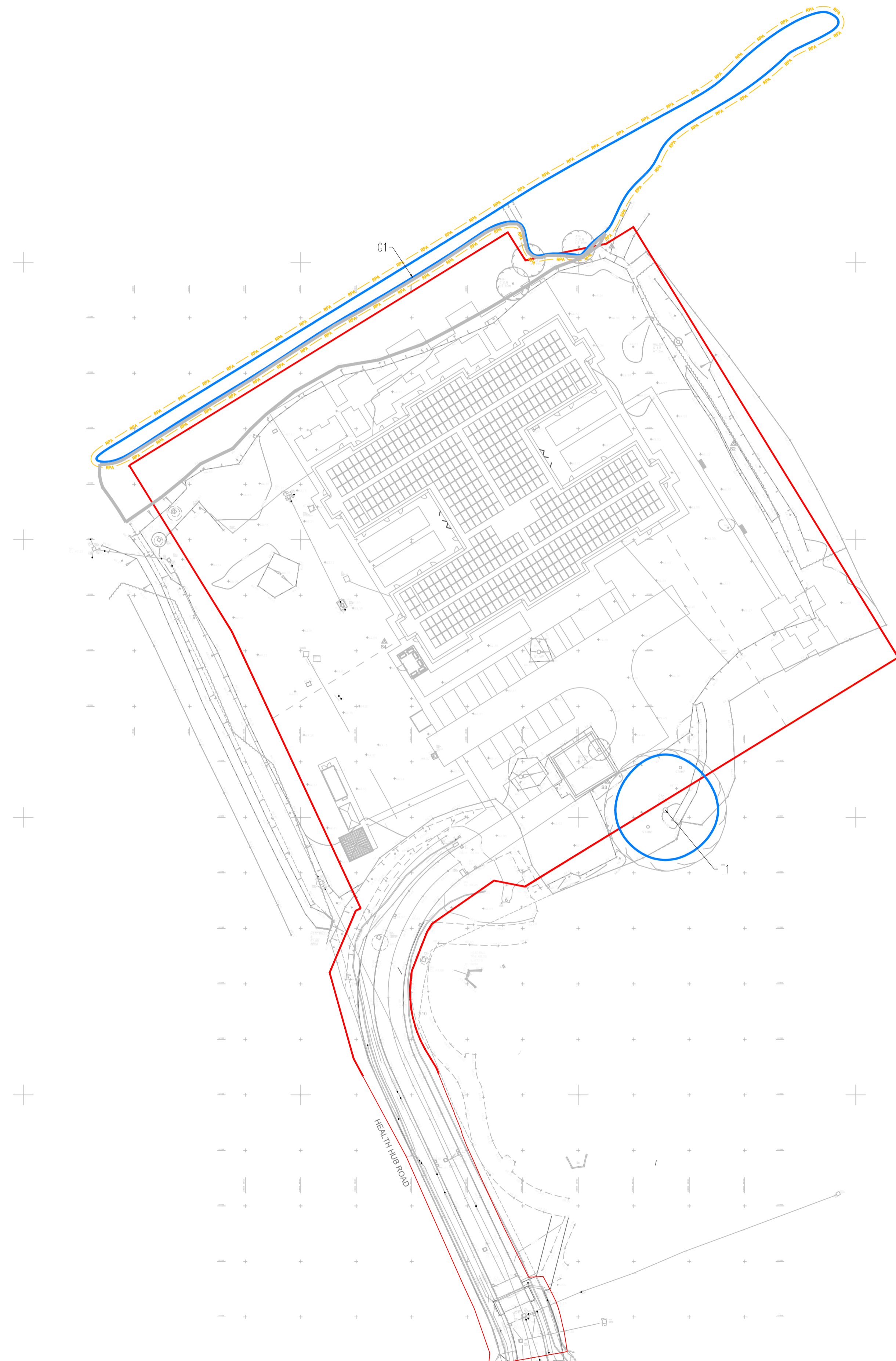
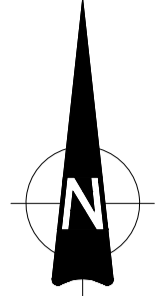
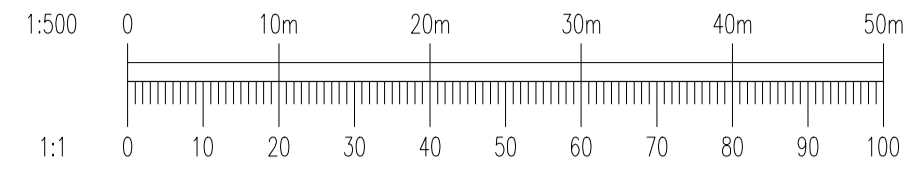
9.9. At the time of writing this report, the locations of proposed service runs are not known. If for any reason services are required to be located within the RPAs of the retained trees, the following precautions will be followed:

- Mechanical trenching will not be permitted within the RPA.
- To limit the extent of any excavations, and where possible, any services will be located within shared ducts.
- The preference will be to install the services using trenchless technology, but where this isn't viable, the trenches will be dug using hand tools and under the supervision of the retained arboricultural consultant. Roots over 25mm in diameter will be retained. Where this is not possible, they will only be severed if approved by the retained arboricultural consultant.
- Any trenches within RPAs will be backfilled using the native material or another inert granular material.







## **DRAWINGS**

Drawing 1: Arboricultural Constraints Plan (Drawing ref. WIE111386-182-AA-77-001)



This drawing should not be scaled. Dimensions to be verified on site.  
Any discrepancies should be referred to the Engineer prior to work being put in hand.  
This drawing is the property of Waterman Infrastructure & Environment Limited, and the drawing is issued on the condition that it is not copied, reproduced, related or disclosed to any unauthorised person, either wholly or in part without the consent in writing of Waterman Infrastructure & Environment Limited  
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-  SITE BOUNDARY
-  CATEGORY GRADE B  
Trees of moderate quality
-  CATEGORY GRADE C  
Trees of low quality
-  ROOT PROTECTION AREAS (RPA)

**NOTES:**

**ROOT PROTECTION AREA**  
Root Protection Areas are calculated in accordance with BS5837: 2012. The precise morphology and disposition of roots may not be fully reflected by these areas, particularly where there are hard standings, however they provide a good indication of potential root constraint.

**THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH WATERMAN ARBORICULTURAL IMPACT ASSESSMENT**

TOPOGRAPHICAL SURVEY PRODUCED BY MK SURVEYS,  
FILE NAME '33902-30'.

Rev	Date	Description	By
P01	10.06.24	PRELIMINARY ISSUE	MC

Amendments

Project  
**Care Home, Graven Hill, Bicester**

Title  
**ARBORICULTURAL CONSTRAINTS PLAN**

Client  
**LNT Care Developments**



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Drawing Status  
**PLANNING**

Designed by	RA	Checked by	RH	Project No	WIE11386
Drawn by	MC	Date	JUNE 2024	Computer File No	182
Scales @ A1		1:500		work to figured dimensions only	

**WIE AA 72 001 P01**



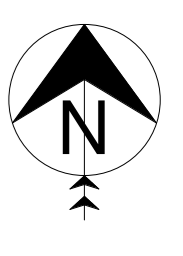
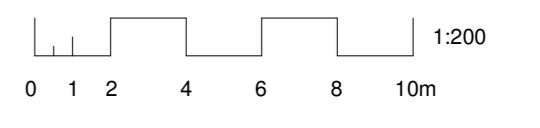


Drawing 2: Proposed Site Plan (Drawing ref. No ref.)

**Drawings**

Care Home, Graven Hill, Bicester  
Arboricultural Impact Assessment  
WIE11386-182-R-4-4-1-AIA





PROPOSED 66 BED CARE HOME  
 SITE AREA 9951m<sup>2</sup> ( 2.45 acres)  
 BUILDING FOOTPRINT 1787m<sup>2</sup>  
 AMENITY SPACE 7197m<sup>2</sup>  
 25 No PARKING SPACES (INC. 6  
 No ELECTRIC VEHICLE  
 CHARGING POINTS & 2 No  
 DISABLED SPACES)  
 1 x 10 SPACE CYCLE STORE.  
 3 x SHEFFIELD HOOPS.

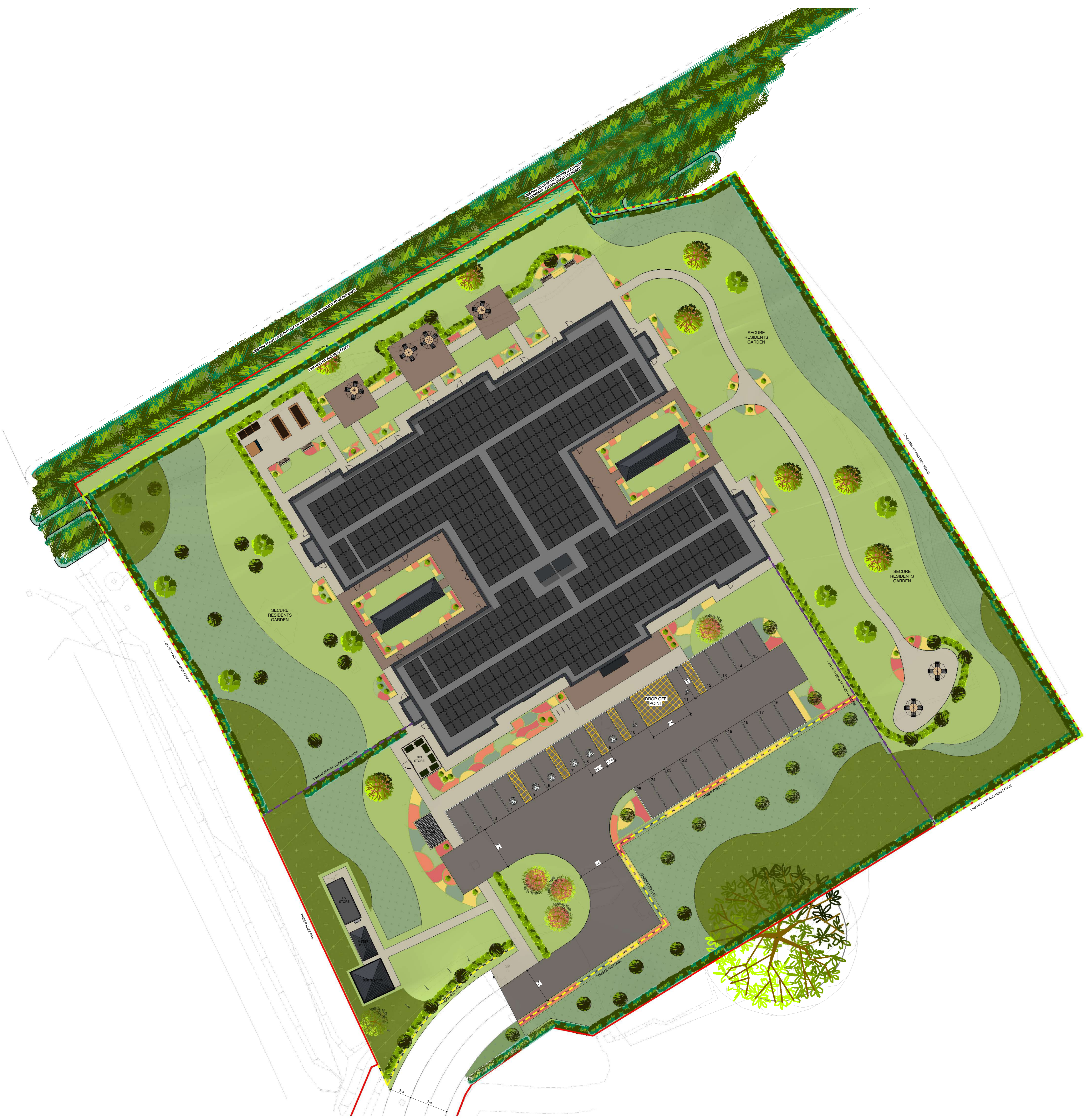
LEGEND

ROADS

- ROADWAY
- PAVEMENT
- GRAVEL DRIVE

BOUNDARIES

- BOUNDARY
- BOUNDARY
- BOUNDARY



REV	DATE	DETAILS OF AMENDMENTS	DRAWN
B	19/11/2024	PARKING LAYOUT AMENDED IN LINE WITH PLANNING CONDITIONS. BOUNDARY TREATMENT LOCATION ON THE NORTH WESTERN BOUNDARY HAS BEEN AMENDED TO PROTECT EXISTING WATERCOURSE. LANDSCAPING UPDATED ACCORDINGLY. SITE LAYOUT UPDATED TO INCLUDE ADDITIONAL CYCLE SPACES. DIMENSIONS NOTING THE RADIUS OF THE CAR PARK KERBING & EXISTING ROADFOOTPATH WIDTH ADDED.	L-JL
A	1/10/2024		L-JL

**LNT Construction**

LNT CONSTRUCTION LTD  
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CLIENT  
 LNT CARE DEVELOPMENTS

SITE  
 GRAVEN HILL  
 BICESTER  
 OX25 2BF

TITLE  
 PROPOSED SITE PLAN

SCALE @A0	As indicated	DATE	19/11/2024 11:49:33
DRAWN	L-JL	DWG NO.	OX25 2BF A-03-B

FOR PLANNING APPROVAL

CHECKED BY		DATE	
APPROVED BY		DATE	

PROPOSED SITE PLAN  
 1 : 200

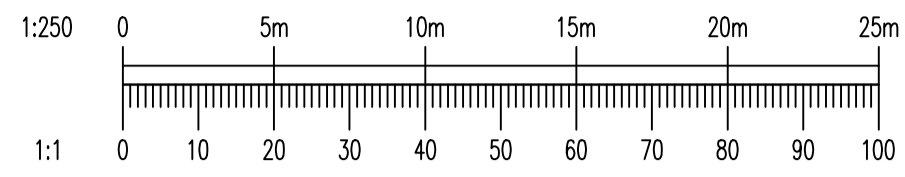




Drawing 3: Tree Protection and Removal Plan (Drawing ref. WIE16470-100-AA-77-002 P03)

**Drawings**

Care Home, Graven Hill, Bicester  
Arboricultural Impact Assessment  
WIE11386-182-R-4-4-1-AIA



This drawing should not be scaled. Dimensions to be verified on site. Any discrepancies should be referred to the Engineer prior to work being put in hand.

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- LEGEND**
- TREES, GROUPS OR HEDGES TO BE RETAINED
  - TREES, GROUPS OR HEDGES TO BE REMOVED
  - ROOT PROTECTION AREAS (RPA)
  - TREE PROTECTION Refer to Arboricultural Impact Assessment.
  - INDICATIVE EXTENT OF GROUPED FEATURE

**NOTES:**

**ROOT PROTECTION AREA**  
 Root Protection Areas are calculated in accordance with BS5837: 2012. The precise morphology and disposition of roots may not be fully reflected by these areas, particularly where there are hard standings, however they provide a good indication of potential root constraint.

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH WATERMAN TREE SURVEY REPORT

TOPOGRAPHICAL SURVEY PRODUCED BY MK SURVEYS, FILE NAME '33902-30'.

Rev	Date	Description	By
P04	20.11.24	UPDATED DESIGN LAYOUT	BM
P03	08.11.24	AMENDED GROUP AND RPA	BM
P02	21.06.24	RPA AND BOUNDARY AMENDED	NYP
P01	10.06.24	PLANNING ISSUE	MC

**Amendments**

Project: Care Home, Graven Hill, Bicester

Title: TREE PROTECTION AND REMOVAL PLAN

Client: LNT Care Developments



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Drawing Status				
<b>PLANNING</b>				
Designed by	RH	Checked by	RH	Project No
Drawn by	MC	Date	JUNE 2024	WIE11386
Scales @ A1	1:250	Computer File No	182	
work to figured dimensions only				
Publisher	Zone	Category	Number	Revision
WIE	AA	72	002	P04



## APPENDICES

## A. Relevant Planning Policy and Legislation

### National Planning Policy

The National Planning Policy Framework (NPPF 2023)<sup>[1]</sup> sets out the government’s planning policies for England and how these are expected to be applied. Under the NPPF, Local Planning Authorities (LPAs, including borough, district or unitary councils or nation park authorities), have a statutory duty to consider the protection and planting of trees when granting planning permission for a proposed development. The potential effect of a development on trees, whether statutorily protected or not (see below), is a material consideration within a planning application. The following paragraphs are of relevance to trees;

*Paragraph 136: Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.*

*Paragraph 186: When determining planning applications, local planning authorities should apply the following principles;*

- (a) If significant harm resulting from a development cannot be avoided (through locating on an alternative Site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.*
- (b) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.*

### Local Planning Policy

Cherwell District Council’s Local Plan<sup>11</sup> includes the following policies of relevance to trees;

Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment, which states “*protection and enhancement of biodiversity and the natural environment will be achieved, inter alia, by the following:*

*The protection of trees will be encouraged, with an aim to increase the number of trees in the District; and*

Policy ESD 13: Local Landscape Protection and Enhancement, which states “*Opportunities will be sought to secure the enhancement of the character and appearance of the landscape, particularly in urban fringe locations, through the restoration, management or enhancement of*

<sup>[1]</sup> <https://www.gov.uk/guidance/national-planning-policy-framework>

<sup>11</sup> [Adopted Cherwell Local Plan 2011-2031 Part 1 \(incorporating Policy Bicester 13 re-adopted on 19 December 2016\) | Cherwell District Council](#)

## Appendices

*existing landscapes, features or habitats and where appropriate the creation of new ones, including the planting of woodlands, trees and hedgerows.”*

## Tree Preservation Orders (TPOs)

TPOs are administered by Local Planning Authorities (LPA) and are made to protect trees which bring significant amenity benefit to the local area. All types of tree, tree species and sizes can be protected and a TPO can protect a single tree, tree groups, all trees within a defined area (Area TPO) or a woodland (Woodland TPO).

A TPO is a written order which makes it a criminal offence without the Authority's permission (liable to an unlimited fine) to;

- Cut down, top, lop, uproot, wilfully damage or wilfully destroy a tree protected by that order; or
- Cause or permit such actions.

In the Secretary of State's view, cutting roots is also a prohibited activity which requires the authority's consent. Applications to carry out works to trees covered by TPOs need to be submitted to the LPA for approval, via forms which can be found on the Planning Portal, however LPA consent is not required for carrying out work on trees subject to a TPO so far as such work is necessary to implement a full planning permission. Where full planning permission has been granted showing the loss of (or work to) TPO trees is required to implement the permitted scheme, the Order is overwritten.

## Conservation Areas (CA)

Normal TPO procedures apply if a tree within a CA is protected by a TPO. If a tree within a CA is not protected by a TPO and is above 75mm in trunk diameter when measured at 1.5m height, written notice must be given to the LPA for any proposed work, describing what work is proposed, at least six weeks before the proposed work date. This is called a 'section 211 notice' which gives the LPA an opportunity to consider whether the tree should be subject to a TPO.

## Felling Licences

To fell trees, a felling licence from the Forestry Commission is required. It is an offence to fell trees, including in advance of a planning application, without a licence if an exemption does not apply. Exemptions include;

- locations (gardens, orchards, churchyards or designated open spaces);
- type of tree work (lopping, topping, pruning and pollarding);
- volume and diameter of trees to be felled (less than 5 cubic meters in one calendar quarter, trees of a girth at 1.3m height of less than 80mm, 100mm if thinning and 150mm if coppicing);
- other permissions (such as having planning permission granted); and
- statutory/legal requirements (there is a real or immediate threat of danger or abatement of nuisance, to prevent the spread of a pest/disease, to comply with an Act of Parliament or undertake your duties as a statutory service provider (gas, water, electric)).

## Appendices



## B. Schedule of Existing Trees

Ref. No	Species	Est. Height (m)	Stem Dia. (mm)	Canopy Spread (m)				Direction of First sig. branch (m)	Canopy Clearance (m)	Physiological / Structural Condition	Age	Comments	Preliminary Management Recommendations	Est. Remaining Contribution (yrs)	Cat.
				N	S	E	W								
T1	English Oak <i>Quercus robur</i>	15	420	10	9	9.5	9	1.5 (S)	1.0	P – Good S – Good	M	Located in landscaping. Minor deadwood within canopy. Good buttress root development, some exposed shallow surface roots. Overshadowing T14.	None required at time of survey.	40+	B2
G2	Ash <i>Fraxinus excelsior</i> with Goat Willow <i>Salix caprea</i> , rose <i>Rosa</i> sp., elder <i>Sambucus nigra</i> and bramble <i>Rubus fruticosus</i> scrub	To 10	Av. 350 (Ash)	Av. 5				Var.	0	P – Fair S – Fair	SM	Boundary group comprising Ash with scrubby understory. Ditch present on south side of group. Some decaying and broken limbs present.	None required at time of survey.	20+	C2

## Notes

- Any management recommendations in this report subject to presence of nesting birds or protected species (e.g. Bats) checks.
- Any tree surgery recommendations contained within this report to be undertaken in accordance with BS3998(2010) 'Tree work – Recommendations' (BS3998)
- Fieldwork survey information provided within this table is subject to seasonal/access constraints.
- N/A - measurement not accessible/applicable.
- '\*' - estimated position of tree (not indicated on topographical survey);
- '^' – average value based upon average of remaining measurements or visual estimate.
- Unless otherwise stated, all group dimensions are an estimated average.
- This schedule should be read in conjunction with **Drawing 1**.

## Appendices

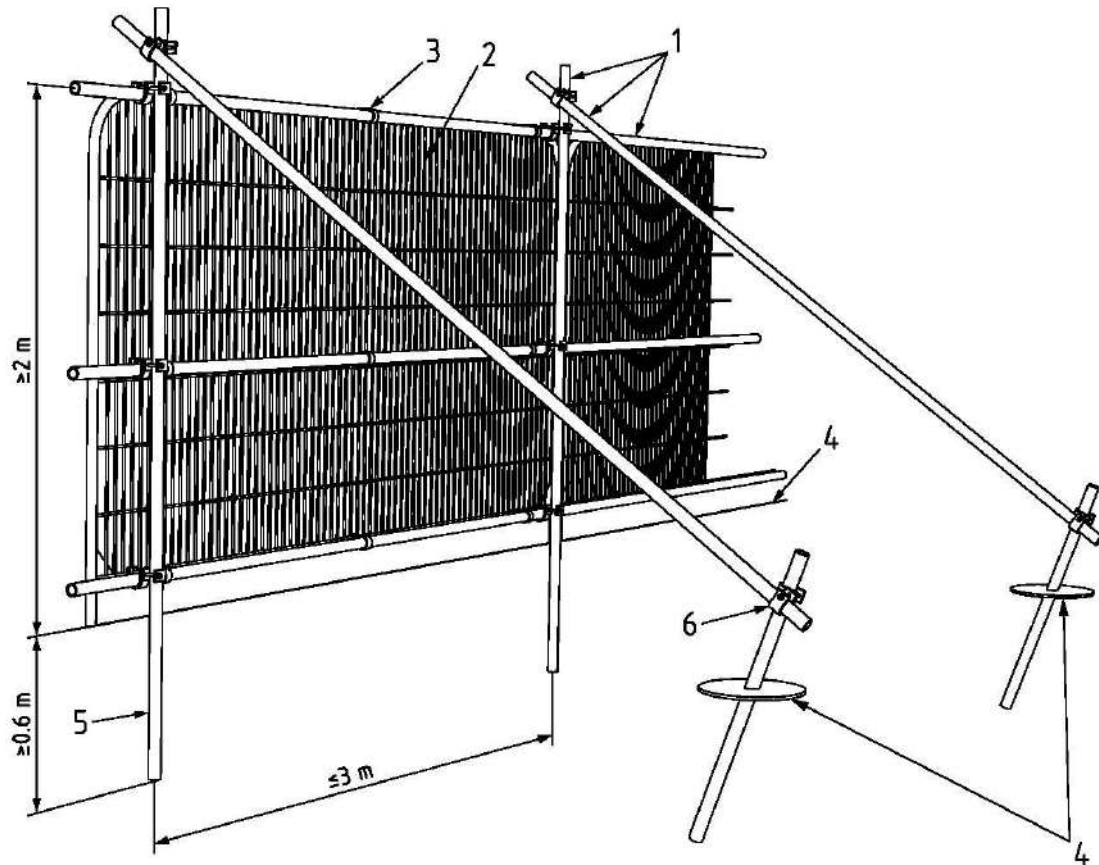
## C. Cascade Chart for Tree Quality Assessment (extract from BS5837)

TREES FOR REMOVAL				
Category and Definition	Criteria			Identification on Drawing / Within Tree Schedule
<p><b>Category U</b></p> <p>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</p>	<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 trees (i.e. 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; and</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>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve.</p>			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria - Subcategories			Identification on Drawing / Within Tree Schedule
	1 Mainly Arboricultural Values	2 Mainly Landscape Values	3 Mainly Cultural Values, including Conservation	
<p><b>Category A</b></p> <p><b>Trees of high quality</b> with an estimated remaining life expectancy minimum of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of 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)	LIGHT GREEN
<p><b>Category B</b></p> <p><b>Trees of moderate quality</b> with an estimated remaining life expectancy of at least 20 years</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	Trees present in numbers, usually 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	MID BLUE
<p><b>Category C</b></p> <p><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 150mm</p>	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	GREY

### Appendices

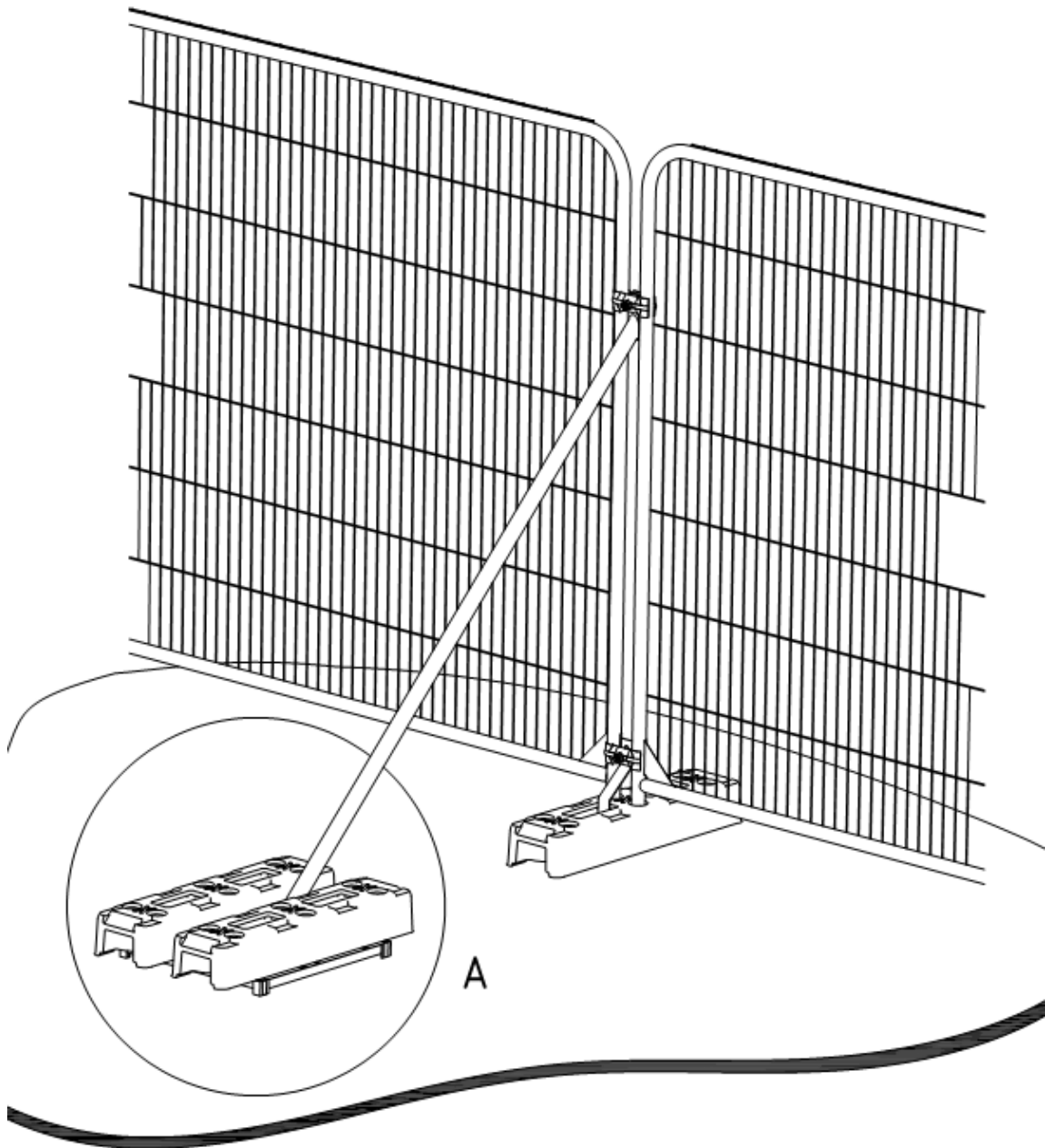


#### D. Example Specification for Tree Protection Barrier.



#### Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps



### E. Tree Protection Signage (Example)



### Appendices



## UK and Ireland Office Locations

