



*arboricultural consultancy*

38 Mead Road    **T** 01242 522051  
Cheltenham      **M** 07860 790024  
Gloucestershire    **E** info@treeking.co.uk  
GL53 7DT        **W** treeking.co.uk

## **Land at Milbury Heath, Buckover**

# **Arboricultural Survey, Impact Assessment and Method Statement**

**Client:**  
**Alder King LLP**

**August 2021**  
**TKC Ref: 40.36A**

## Report Structure

This document combines the three elements which provide comprehensive information to BS5837:2012 on:

- the quality and value of the trees on a development site.
- an assessment of how they may be affected, and
- how they will be protected during the development works.

The report is in accordance with British Standard BS 5837: 2012 *Trees in relation to Construction: Recommendations*.

### **Part A of this document is the Arboricultural Survey.**

The Arboricultural Survey provides the basic working data on the trees. The preamble (section A4 page 7) describes how the trees are measured, assessed and valued, and the survey data is at Appendix 2 at the end of the document. This appendix includes data relating to the Root Protection Areas around each tree.

### **Part B is the Arboricultural Impact Assessment**

The Impact Assessment outlines the likely impact which the proposed development may have on the trees.

### **Part C is the Arboricultural Method Statement**

The Method Statement proposes a methodology for tree protection during the development works, and the Tree Protection Plan indicates the locations of the various protection measures.

### **Tree surgery works and protected trees**

If this report is included in the documentation submitted to the Local Planning Authority as part of an application for planning permission and permission has been obtained, **only the tree works scheduled at Part C.1 page 15** may be undertaken without further reference to that Authority. Other works not scheduled at Section C.1 to the same trees, or any works to other protected trees, would require a separate permission if the trees are protected by a Tree Preservation Order, or 6 weeks' notice if within a Conservation Area.

## **CONTENTS**

### **Part A Arboricultural Survey**

<b>Section</b>	<b>Page No.</b>
<b>A1. Introduction</b>	<b>4</b>
<b>A2. Site description &amp; Discussion</b>	<b>4</b>
<b>A3. Arboricultural Constraints</b>	<b>6</b>
<b>A4. The tree survey</b>	<b>7</b>
<b>A5. The Tree Constraints Plan</b>	<b>9</b>
<b>A6. General Considerations</b>	<b>10</b>

### **Part B Arboricultural Impact Assessment 11**

### **Part C Arboricultural Method Statement**

<b>C1. Tree surgery requirements</b>	<b>15</b>
<b>C2. Tree protection</b>	<b>15</b>
Tree protection barriers	<b>16</b>
<b>C3. Materials storage and site offices</b>	<b>16</b>
<b>C4. Supervision of protective measures</b>	<b>17</b>
<b>C5. Sequence of construction &amp; tree protection</b>	<b>17</b>

### **APPENDIX 1: BS5837:2012**

Tree quality assessment chart	<b>19</b>
-------------------------------	-----------

### **APPENDIX 2: Tree Survey Data 21**

Schedule of data for tree groups	<b>22</b>
----------------------------------	-----------

## Part A: Arboricultural Survey

### A1. Introduction

- A1.1 Instructions were received from Alder King LLP to report on the condition and quality of trees on a site off Cutteheath Road at Milbury Heath. Residential development of part of the site is proposed and information on the nearby trees is required, to BS5837:2012,<sup>1</sup> to inform the design and the planning process.
- A1.2 This report supersedes a previous arboricultural survey undertaken in September 2017. The trees have been re-assessed.
- A1.3 I visited the site to survey the trees on 27th July 2021. I am an independent Arboricultural Consultant with 40 years experience in the industry, I hold the Professional Diploma of Arboriculture and I am a Fellow of the Arboricultural Association.
- A1.3 The accompanying Tree Constraints Plan (40.36.01) is based upon a topographical survey by A.D. Horner Ltd, drawing no. 5137.60Jul17-01. The site (red line area) occupies the northwest corner of the survey area.

### A2. Site Description & Discussion

- A2.1 The tree survey area lies on the north side of Cuttsheath Road near to its junction with the A38 and separated from it by the grounds of *Energy House*. The land slopes gently, roughly from east to west and 1:50,000 British Geological Survey map of the area indicates that the subsoils are derived from the *Mercia Mudstone* group.
- A2.2 Currently on this area of ground are various temporary buildings, and hard surfaces of road scrapings have been installed over much of the site. In the southwest corner of the site are trees and shrubs of decorative/cultivated species which suggest that the area was formerly the extended gardens of what is now Energy House.
- A2.3 A single large tree is present within the survey area (closely adjacent to the site), that being Red Oak T13 near the northwest corner of the site. Elsewhere the trees are of generally low value and ones which could might be replaced by new planting. Norway Maple T1 is a prominent trees adjacent to the Cuttsheath Road boundary, the condition of which has improved in the last few years. Although it has some potential structural problems in the form of weak forks, it should be possible to retain it into the mid to long-term with occasional tree surgery. Its structural condition should be assessed more fully at the time of the development or within two years.

---

<sup>1</sup> BS5937:2012 *Trees in relation to Design, Demolition and Construction: Recommendations*

- A2.4 To the west of Norway Maple T1 is English Oak T1a. This is a higher value tree by virtue of its suitability to the site, its good condition and its potential longevity and although it is a relatively small tree now, it has the greatest potential of all of the trees along this boundary and is worth cultivating. It is likely that it will need little more than making sure that it does not become suppressed by the branches of the surrounding trees, or that the ground around it is not disturbed or compacted (circle of minimum radius 10m) for it to become a high value tree in due course.
- A2.5 The remaining trees are a mixed lot including a number which are of low quality, such as T3 & T5 which are affected by Ash Dieback Disease. Although there are some less common exotic species amongst them (eg. Katsura Tree T2) none other than the Cut-Leaved Beech T10 are good specimens and this tree is a few metres inside the grounds of Energy House to the west.
- A2.6 None of the various coniferous trees within the site are of any significant value. The large Leyland Cypress T15 has enlarged considerably in recent years and is now more than 20m high. This, and all of the other Leyland Cypresses are in slow decline as a result of *Coryneum* Canker. They are also at risk of losing branches unexpectedly, usually in high winds or in snow storms.

### A3. Arboricultural Constraints

- A3.1 Where trees are to be retained, the principal arboricultural constraint upon the site is the need to minimise disturbance of their principal rooting areas, the Root Protection Areas, and/or compaction of the soil. Soil compaction is a frequent, and indirect, cause of root damage.
- A3.2 There could be some ground movements related to shrinkage and re-expansion of the subsoil (generally referred to as *subsidence* and *heave*, respectively) if a sufficient clay fraction is present in the soil. Precautions may be needed in respect of any foundations to avoid damage as a result of the continuing growth of any retained trees (subsidence), or re-expansion of the soil following their removal (damaging heave<sup>2</sup>). Trees of all species may cause significant soil desiccation which may take some years to recover even after the trees have been felled. Cypress trees are especially significant in this regard.
- A3.3 Ash Dieback Disease is now widespread within the south of the UK. The disease was first recognised in the UK in 2012 and was spread throughout the UK by uncontrolled plant imports, although it is likely to have arrived in eastern England also as wind-borne spores. There is nothing that can be done usefully to eliminate the disease or to delay its progress and it is therefore an unsafe strategy to rely on the long-term retention or planting of Ash trees.

---

<sup>2</sup> Tree Root Damage to Buildings. Dr. Giles Biddle. Willowmead Publishing. 1998.

## A4. Tree Survey

The survey was carried out by Graham King MRAC, Dip.Arb.(RFS), F.Arbor.A. Only those trees which are considered relevant to the purposes of the survey have been included, and no consideration was given to any development proposals in the collection of the data. The following data were collected and categories assigned:

### A4.1 Tree Number

The trees are identified by their Tree Numbers given in the appended schedule (Appendix 2), and on the accompanying Tree Constraints Plan.

### A4.2 Species

*SPECIES* is recorded giving the vernacular and scientific names.

### A4.3 Tree Height

*TREE HEIGHT* was estimated with a clinometer.

### A4.4 Stem Diameter

*STEM DIAMETER* is measured at 1.5m high and is rounded down, in centimetres.

### A4.5 Branch spread

The *BRANCH SPREAD* was estimated on the four compass points and is given in metres.

### A4.6 Lowest branches or Crown Height

The lowest branches or the *CROWN HEIGHT*, is assessed approximately, in metres. Where the lowest significant branch occurs on one side of the tree only, this is noted in the schedule in the column "Side". Where the orientation is specified as "All", the lowest branches are evenly arranged around the tree.

### A4.7 Age code

- |  |   |
|--|---|
| i. <b>Newly-planted</b> (NP)             | Planted within the last 5 years                                 |
| ii. <b>Young</b> (Y)                     | Well established trees which might be moved or easily replaced. |
| iii. <b>Semi-mature</b> (SM)             | Well established trees now growing strongly but not yet mature. |
| iii. <b>Early-mature</b> (EM)            | Mature trees less than one third life expectancy                |
| iv. <b>Mature</b> (M)                    | Trees between one third to two-thirds life expectancy.          |
| v. <b>Over-mature</b> (OM)               | Trees of greater than two-thirds of anticipated life            |
| vi. <b>Dead, dying or dangerous:</b> (D) |   |

**A4.8 Physiological condition** may be difficult to assess if trees are out of leaf in winter or in early leaf in the spring. The condition of the foliage in mid to late summer can be a good indicator of a tree's physiological condition, which is recorded as good, fair, poor or dead.

**A4.9 Structural condition** is recorded as good, fair or poor.

**A4.10 Life expectancy**

*LIFE EXPECTANCY* is recorded in years and is an approximate judgement of the likely useful life of the trees. The Standard suggests that 'A' class trees should have a minimum of 40 years safe useful life expectancy, 'B' class trees a minimum of 20 years safe useful life expectancy, and 'C' class trees a minimum of 10 years life.

**A4.11 Tree Quality Assessment**

**A4.11.1 The BS 5837:2012 tree quality assessment chart is included at Appendix 1 below and should be considered together with the following.** The

provisions of the chart may be summarised as:

**Class A:** Exceptionally good trees or arboricultural features with >40 years useful safe life.

**Class B:** Good trees with a minimum of 20 years useful safe life.

**Class C:** Unremarkable trees of limited merit. Minimum safe life of 10 years.

**Class U:** Unsuitable for retention. Likely to have <10 years useful safe life.

**A4.11.2** In addition to the provisions of the appended Chart **Intermediate classes** not given in the British Standard are used in this report as follows:

**A/B:** A good, or very good, tree. A-class trees are recognised as having particular and possibly indefinable qualities which make them special. These trees may or may not possess those qualities.

**B/C:** A good tree which is tending towards the average, or a good tree which might nonetheless be replaced within a reasonable number of years by new planting. These trees would normally not constrain the use of the site.

**C/U:** a tree which probably will attain 10 years useful safe life but one which is of such low value that it is barely worth retention, or the retention of which might have a negative landscape value.

**A4.12 Preliminary management requirements**

General guidance is given regarding tree surgery that may be required and the condition of the trees was assessed only to establish their status within the planning system. The safety and condition of trees were not assessed in detail.

**A4.13 Root Protection Area**

**A4.13.1** The Root Protection Areas are an estimation of the minimum area which a tree will require for continuing growth and is not a representation of the total extent of their roots.

**A4.13.2** The Root Protection Areas of trees classified A-C (Appendix 1) are given in the appended schedule (Appendix 2), and a circular RPA is shown on the Tree Constraints Plan which encompasses these areas.



## **A5. The Tree Constraints Plan**

A5.1 The British Standard BS 5837:2012 recommends that a plan showing the constraints upon development which the trees pose, are considered at the design stage. For this purpose the Tree Constraints Plan should show:

- the position of the trees.
- the shape of the crown of the trees, accurately represented and colour coded to show the category of the trees in accordance with the Tree Quality Assessment chart.
- the recommended Root Protection Areas, drawn initially as a circle, although subsequent variation of the shape of the area may be appropriate.
- a representation of the shade which the trees may cast.

### **A5.2 Tree Quality Assessment**

Details on Tree Quality Assessment can be found in the extract from BS5837: 2012 at Appendix 1.

### **A5.3 Root Protection Areas**

Details of the Root Protection Areas are given at section A4.13 above. The radii and area of the Root Protection Areas drawn as regular circles around the trees are given in the schedule of data at Appendix 2.

### **A5.4 Shadow patterns**

The shadows of the principal trees are included in this report. The British Standard recommends that the shadow of a tree is represented by shading equal to its height and/or mature height drawn from northwest to east. The shadows of trees which are 8m or more are shown at their existing heights.

## A6. General Considerations

- A6.1 Trees and shrubs are living organisms whose health and condition can change rapidly. The health condition and safety of trees should be checked regularly by a suitably qualified person, preferably at least once a year, and the conclusions and recommendations herein are valid for one year.
- A6.2 Tree work should be carried out by skilled specialist contractors who should be covered by at least £5 million of public liability insurance. Work should be carried out in accordance with BS 3998: 2010 Recommendations. When carrying out works, the Wildlife & Countryside Act 1981, the Countryside & Rights of Way Act 2000 (as amended) and all other legislation covering the protection of wildlife must be observed.
- A6.3 It is an offence to 'intentionally or recklessly disturb a bat' or 'damage, destroy or block access to the resting place of any bat' (Countryside and Rights of Way Act 2001 as amended). A scoping survey for bats in accordance with British Standard 8596:2015 should be undertaken before tree surgery works are undertaken.
- A6.4 Where tree surgery works are being carried out and bats are found to be present, or if the tree is a known roost, consultation must be made with the Statutory Nature Conservancy Organisation (Natural England 0845 600 3078 [www.naturalengland.org.uk](http://www.naturalengland.org.uk)). A *European Protected Species Habitat Regulations Licence* is required to handle or to undertake works which are known to affect bats. If breeding bats are thought to be present, work should be scheduled between late August and early October, or during March and April.
- A6.5 In order not to disturb nesting birds, clearance of undergrowth and bushes, or hedge cutting, should not be undertaken during the period from the beginning of March to the end of August unless a thorough inspection is undertaken which reveals that no birds' nests are present. Such an inspection should be carried out by a suitably qualified/experienced person.
- A6.6 Some of the trees may be covered by a Tree Preservation Order or the site may be within a Conservation Area. In the first instance the permission of the Local Planning Authority (LPA) must be obtained, or in the case of a Conservation Area, six weeks notice must be given in writing to the LPA for work to any trees of minimum 7.5cm diameter at 1.5m high. This includes ground works within the Root Protection Area of any tree. It is advisable that enquiries are made of the LPA to ascertain whether either of these controls exists before any works to trees are undertaken.

**Part B**

**Arboricultural Impact Assessment**

## Arboricultural Impact Assessment

The accompanying Tree Protection Plan (40.36.02) is based upon Southpoint drawing no. 281/PL10, *Full Site Plan - Proposed*.

- B1.** It is proposed that a single dwelling be constructed in the centre of the red line area of the site.
- B2.** It is not necessary for any trees be felled to facilitate the development, but it proposed that the following low value/defective trees will be felled:
- T3 Common Ash
  - T4 Indian Bean Tree
  - T5 Common Ash
  - T15 Leyland Cypress
- The very tall line of Leyland Cypresses which make-up G3 are defective, the tops of one or more have failed and several are being affected by *Coryneum Canker*. It is impractical that they should be retained unless they are heavily reduced in height. It is therefore proposed that they should be felled and replaced.
- B3.** The proposed boundary fence to the north of the new dwelling will be beneath the crown of Red Oak T15, and its Root Protection Area drawn as a regular circle around the tree will intersect with part of the site. A tree protection barrier will be constructed at the outer edge of the Root Protection Area to exclude its essential rooting area from all construction work.
- B4.** Prior to commencement, soil amelioration will be undertaken around Red Oak T13 to remove the upper 50mm of hardcore material. Following its removal, 100mm of woodchips will be spread over the area indicated on the Tree Protection Plan.
- B5.** This area will then be enclosed by a tree protection barrier and the woodchips will remain to decompose naturally. In this way it is to be anticipated that the soil conditions will improve and the vitality of the tree will improve.
- B6.** No service trenches will enter/exit the site other than by way of the main site exit onto Cuttsheath Road. Most of the remaining trees alongside Cuttsheath Road are of low value, and the higher value Norway Maple T1 is already partly protected by an existing timber fence which will be retained.

- B7.** During construction, protective barriers will be installed on either side of the new site access to protect the trees along the Cuttsheath Road boundary.
- B8.** By changing the use of the site to residential, it is likely that the existing pressures upon the trees will be relaxed, that more trees and shrubs will be planted and that there will be a resulting gains for landscape and ecology.

## **Part C.**

### **Arboricultural Method Statement**

## Part C: Arboricultural Method Statement

The Arboricultural Method Statement will be issued to the contractor as part of the tender documents, and a copy will be available at all times on the site.

### Part C. Section 1: Tree surgery & soil amelioration

C1.1 The following trees will be felled to facilitate the development:

- T3 Common Ash
- T4 Indian Bean Tree
- T5 Common Ash
- T15 Leyland Cypress
- G5 Line of Leyland Cypresses

#### C1.2 Soil amelioration

Following tree felling, soil amelioration will be undertaken around Red Oak T13 to remove the upper 50mm of hardcore material. Following its removal, 100mm of woodchips will be spread over the area indicated on the Tree Protection Plan.

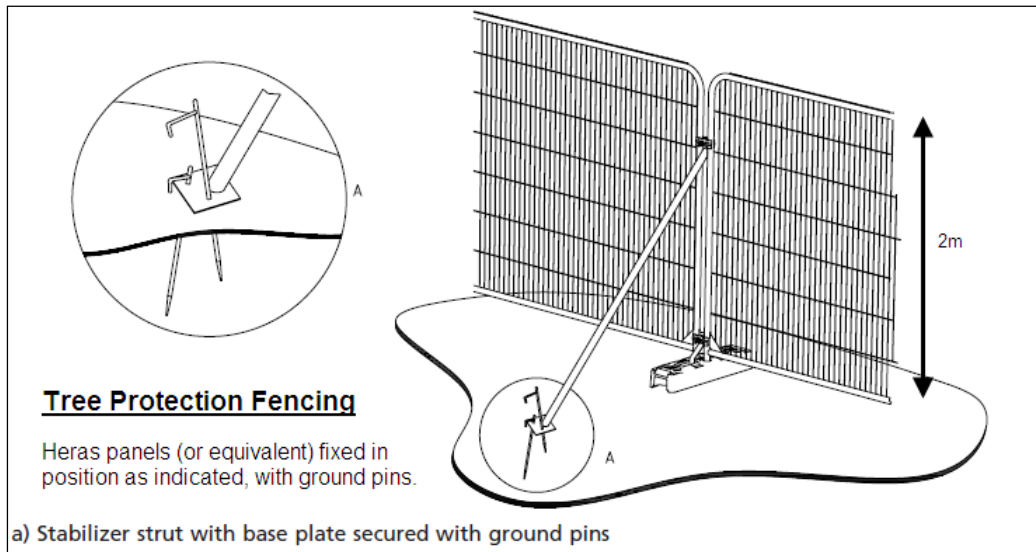
### Part C. Section 2: Tree Protection

Following the application of 100mm of woodchips, protective barriers will be erected to exclude construction activities from around Red Oak T13 and the two groups of trees adjacent to Cuttsheath Road..

#### C2.1 The protective barriers

- Will be constructed prior to the commencement of all works to establish Construction Exclusion Zones adjacent to T13.
- Will be of weldmesh panels of minimum 2.0m high, as shown on the Tree Protection Plan and incorporate stabiliser struts, and ground plates and pins. (Figure 1 below)
- Will be in accordance with the specifications outlined in Figure 1 below, without variation.
- Will be erected, and subsequently be subject to the inspection of the Local Planning Authority at a pre-commencement meeting between the Local Planning Authority tree officer and the main contractor. The barrier will be approved in writing by the Local Planning Authority before the commencement of construction works, including the arrival on site of any machinery or the delivery of materials.
- Will have all-weather notices affixed to each 10m run "Tree Protection Fencing – Construction Exclusion Zone – No access".

- C2.1.2 **The use of Heras panels on moveable feet is not sufficient and stabiliser struts, and ground plates and pins must be used to ensure that the barriers are sufficiently robust.**



**Figure 1: tree protection barriers**

### **Part C. Section 3: Materials storage, chemical contamination of the soil, trenching for services etc.**

- C3.1 Stored materials and any temporary site buildings or containers will be sited outside the Construction Exclusion Zone, as shown on the Tree Protection Plan.
- C3.2 No concrete/cement washings or other chemicals potentially harmful to plant roots will be discharged within 20m of any retained tree included in this report.
- C3.3 No trenching for services, soakaways etc. will be undertaken within the Root Protection Area of any retained tree. If trenching within the Root Protection Areas is unavoidable, the project arboriculturist will be consulted and a methodology will be drawn-up to minimise root damage. This will be subject to the approval of the Local Planning Authority before implementation.

#### **Part C. Section 4: Supervision of the tree protection measures**

- C4.1 The protective barriers will be installed and be subject to inspection and approval by the Local Planning Authority at a pre-commencement meeting between the Local Planning Authority tree officer and the main contractor. No construction works, including the delivery of materials or machinery, will commence until written agreement has been received from the Local Planning Authority that the protective barriers have been satisfactorily installed.
- C4.2 The protective barriers will remain in position until the written permission of the Local Planning Authority has been obtained for their removal at the end of the project.

#### **Part C. Section 5: Sequence of construction and tree protection**

- Tree felling.
- Removal of 50mm of hardcore around Red Oak T13 and application of 100mm of woodchips.
- Erection of the protective barriers.
- Pre-commencement meeting between the Local Planning Authority tree officer and the main contractor.
- Written notification received from the Local Planning Authority that the protective barriers have been satisfactorily installed.
- Construction and maintenance of the protective barriers.
- Completion of external works.
- Written permission of the Local Planning Authority for the removal of the tree protection barriers.



Graham King MRAC, Dip.Arb.(RFS), F.Arbor.A  
13<sup>th</sup> August 2021

© TKC Ltd



## **APPENDIX 1**

### **BS5837:2012 Tree Quality Assessment Chart**

**(extract from BS 5837:2012)**

## Cascade chart for tree quality assessment

### Category and definition      Criteria (including sub-categories where appropriate)

Trees unsuitable for retention (see Note)

#### Category U

Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)
- Trees that are dead or are showing signs of significant, immediate, irreversible decline
- Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality

**Note:** Category U trees can have existing or potential conservation value which it might be desirable to preserve.

See 4.5.7

#### 1. Mainly arboricultural values

#### 2. Mainly landscape values

#### 3. Mainly cultural values, including conservation

Trees to be considered for retention

#### Category A

Trees of high quality with an estimated remaining life expectancy of at least 40 years

Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. 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, commemoration or other value (e.g. veteran trees or wood-pasture)

#### Category B

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

Trees that might be included in category A, but are downgraded because of impaired condition such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the 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 value

#### Category C

Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories

Trees present in group 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

## **APPENDIX 2**

### **Tree Survey Data**

**Abbreviations:**

- # = estimated
- DBH = Stem diameter at 1.5m high
- RPA = Root Protection Area
- Ch = Crown height
- PC = Physiological condition
- SC = Structural condition
- Qual code = Tree quality code
- RPA rad. = radius of root protection area drawn as a regular circle

## Appendix 2 Tree Survey data

No.	Species	Ht (m)	DBH (mm)	Branch radius (m)				Low branch (m)		Age	PC:	SC:	Life: (yrs)	Qual Code	RPA	
				N	S	E	W		side						rad.	area
T1	<b>Norway Maple</b> <i>(Acer platanoides)</i>	14	750	6	9	9	3	3	all	M	F	F	20-40	<b>B1/C1</b>	9.0 m	255 sq.m
<b>Description:</b> Wide-spreading crown. Some dieback of the upper branches.				▪ <b>Preliminary works:</b> None												
T1a	<b>English Oak</b> <i>(Quercus robur)</i>	#12	#280	3	5	5	3.5	3	all	EM	G	G	40+	<b>B1/C1</b>	3.4 m	35 sq.m
<b>Description:</b> A relatively small tree, it has the greatest potential of all of the trees within the site and is worth cultivating. It is likely that it will need little more than making sure that it does not become suppressed by the surrounding trees, and that the ground around it (circle of 10m radius) is not disturbed has plenty of light, for it to become a high value tree in due course.				▪ <b>Preliminary works:</b> None												
T2	<b>Katsura Tree</b> <i>(Cercidiphyllum japonicum)</i>	10	240+330=4 10	4	5	4	1	3	all	EM/ M	F	F	>10	<b>C</b>	4.9 m	76 sq.m.
<b>Description:</b> Goods species but over-crowded and unremarkable form.				▪ <b>Preliminary works:</b> None												
T3	<b>Common Ash</b> <i>(Fraxinus excelsior)</i>	13.5	#300	6	6	3	6	5	all	EM	P	P	10-20	<b>U</b>	na	na
<b>Description:</b> Of little consequence.				▪ <b>Preliminary works:</b> None												

Arboricultural Survey, Impact Assessment and Method Statement  
 Land at Milbury Heath, Buckover, South Gloucestershire  
 August 2021

No.	Species	Ht (m)	DBH (mm)	Branch radius (m)				Low branch (m)		Age	PC:	SC:	Life: (yrs)	Qual Code	RPA	
				N	S	E	W	(m)	side						rad.	area
T4	<b>Indian Bean Tree</b> ( <i>Catalpa bignoniodes</i> )												U	na	na	
<b>Description:</b> Unsuitable for retention.				▪ <b>Preliminary works:</b> None												
T5	<b>Common Ash</b> ( <i>Fraxinus excelsior</i> )	14	410	6	5	7	5	5	over site	EM	P	P	10-20	U	na	na
<b>Description:</b> Of little consequence.				▪ <b>Preliminary works:</b> None												
T6	<b>Nootka Cypress</b> ( <i>Chamaecyparis nootkatensis</i> )	#16	#700	5	5	5	5	0	all	M	P	F	20-40	U	na	na
<b>Description:</b> Poor condition. Foliage is browning in some areas of the crown, foliage density reduced.				▪ <b>Preliminary works:</b> None												
T7	<b>Persian Ironwood Tree</b> ( <i>Parrotia persica</i> )	#7	#550	7	8	7	8	1	all	M	G	G	20-40	B1	6.6 m	137 sq.m
<b>Description:</b> A wide-spreading large shrub/small tree, typical of the species, and of good quality. Could be usefully retained as screening in this corner of the survey area.				▪ <b>Preliminary works:</b> None												
T8	<b>Wild Cherry (or similar)</b> ( <i>Prunus avium</i> )	#12	210+220=310	3	4	4	0	2	all	M	F	F	10-20	C1	3.7 m	43 sq.m.
<b>Description:</b> Unsuitable for retention.				▪ <b>Preliminary works:</b> None												
T9	<b>Whitebeam</b> ( <i>Sorbus aria</i> )	#13	#420	4	4	7.5	4	2	over site	M	F	F	10-20	C1	5.0 m	80 sq.m
<b>Description:</b> Good smaller tree. Outside the survey area.				▪ <b>Preliminary works:</b> None												
T10	<b>Cut-leaved Beech</b> ( <i>Fagus sylvatica</i> 'Asplenifolia')	#16	#600	9	9	9	9	3	over site	M	G	G	40+	B1	7.2 m	163 sq.m
<b>Description:</b> Good tree. Outside the survey area.				▪ <b>Preliminary works:</b> None												

Arboricultural Survey, Impact Assessment and Method Statement  
 Land at Milbury Heath, Buckover, South Gloucestershire  
 August 2021

No.	Species	Ht (m)	DBH (mm)	Branch radius (m)				Low branch		Age	PC:	SC:	Life: (yrs)	Qual Code	RPA	
				N	S	E	W	(m)	side						rad.	area
T11	Magnolia sp.	#7	300+230=430	0	8	10	0	1.5	over site	M	G	G	20-40	C1	5.2 m	84 sq.m
<b>Description:</b> Highly eccentric crown. Outside the survey area.				▪ <b>Preliminary works:</b> None												
T12	Tree of Heaven ( <i>Ailanthus altissima</i> )													U	na	na
<b>Description:</b> Inaccessible. Appears to be dying.				▪ <b>Preliminary works:</b> None												
T13	Red Oak ( <i>Quercus rubra</i> )	17	#830	12	12	12	12	3.5	all	M	G	G	20-40	B1	10.0 m	312 sq.m
<b>Description:</b> Inaccessible at time of site visit. Appears to remain in good condition. Soil amelioration is required to reverse the hard surfaces which are present around it. Appears to retain sufficient vitality to respond.								▪ <b>Preliminary works:</b> None								
T14	Silver Birch ( <i>Betula pendula</i> )	#13.5	#320	5	5	5	5	5	all	M	F	G	10-20	C1	3.8 m	46 sq.m
<b>Description:</b> Inaccessible at time of site visit. Unremarkable tree.				▪ <b>Preliminary works:</b> None												
T15	Leyland Cypress ( <i>X Cupressus leylandii</i> )	#23	#700	6	6	6	6	2	all	M	F/P	F	10-20	U	na	na
<b>Description:</b> Becoming adversely affected by Coryneum Canker ( <i>Seridium cardinale</i> ). Inaccessible at time of site visit. May be a single large tree, or a group of two or three.								▪ <b>Preliminary works:</b> None								

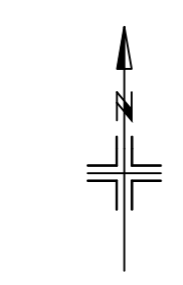
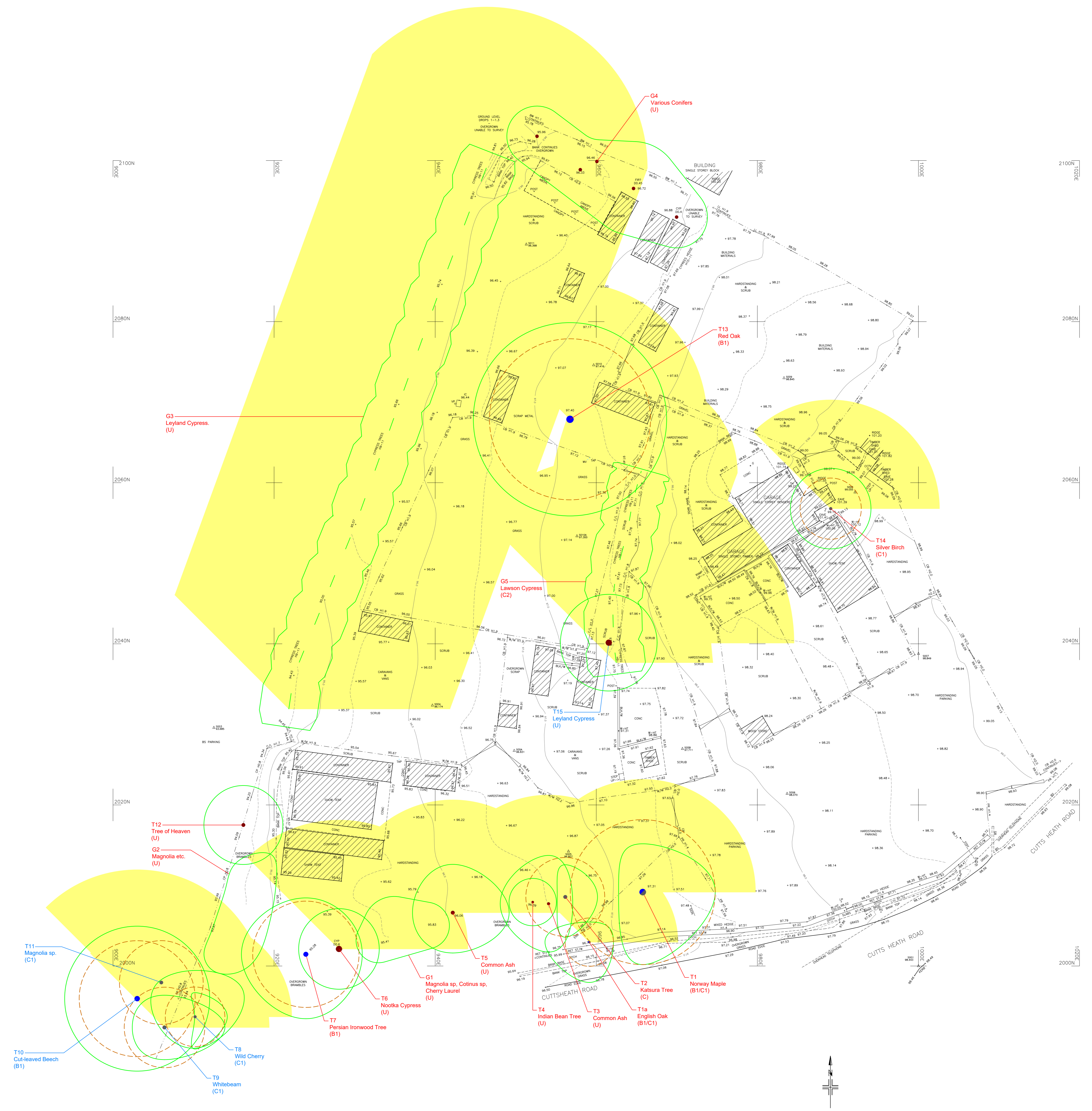
### Schedule of data: tree groups

Gp No.	Species	Avg. height (m)	Avg. stem dia. (mm)	RPA (m)	Life	Qual code	Condition Management recommendations
G1	Magnolia sp, Cotinus sp, Cherry Laurel	6-7		na	10-20	U	Unremarkable shrubs, tangled and overgrown.
G2	Magnolia etc.	6-7		na	10-20	U	
G3	Leyland Cypress ( <i>X Cuprocyparis leylandii</i> )	20		na	10-20	U	Overgrown hedge which may be at risk of failing branches. <b>Reduce height by at least 5m.</b> <b>Works priority: before development.</b>
G4	Various conifers			na	20+	U	Branches removed on north side adjacent to 3-phase electricity lines.
G5	Lawson Cypress	12	unknown	na	10-20	C2	Inaccessible at time of site visit. Line of unremarkable conifers.



**Key:**

- Category A (Green circle)
- Category B (Blue circle)
- Category C (Red circle)
- Category U (Black circle)
- Tree Shadow (Yellow area)
- Category (Line)
- Root Spread Area (Dashed line)
- Root Protection Area (Dotted line)
- T3 (Tree Number)
- Birch (Species)
- (B2) (Category)
- T3 (Tree not on Topo Survey)
- Birch (B1/C1)



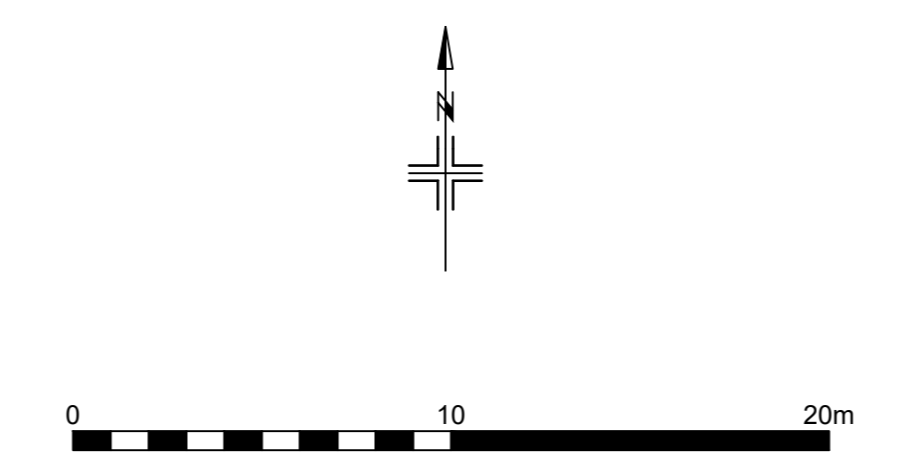
Revision	Date
 <b>TREE KING</b> CONSULTING Cheltenham Email - <a href="mailto:info@trecking.co.uk">info@trecking.co.uk</a> Tel - 07860 790024	
Client	
Project: MILBURY HEATH BUCKOVER SOUTH GLOUCESTERSHIRE GL12 8DN	
Title: TREE CONSTRAINTS PLAN	
Drawn: GK	Checked: SKDS
Scale: 1:200 @ A0	Date: 29-07-21
DO NOT SCALE FROM THIS DRAWING CHECK ALL DIMENSIONS ON SITE THIS DRAWING IS COPYRIGHT	
Drawing No: 40.36.01	Revision: 0



**Key:**

- Category A (Green dot)
- Category B (Blue dot)
- Category C (Grey dot)
- Category U (Red dot)

- Crown Spread (dashed line)
   
 - Root Protection Area (dotted line)
   
 - Tree Number (T3)
   
 - Species (Birch)
   
 - Category (B2)
   
 - Tree not on Topo Survey (T3 Birch (B1/C1))
   
 - Tree to be removed (dashed circle)
   
 - Tree Protection Fencing (blue line)



Revision	Date

**TREE KING**  
 CONSULTING  
 Cheltenham  
 Email - [Info@trecking.co.uk](mailto:Info@trecking.co.uk)  
 Tel - 07860 790024

Client

Project MILBURY HEATH  
BUCKOVER  
SOUTH GLOUCESTERSHIRE  
GL12 8DN

Title TREE PROTECTION PLAN

Drawn	Checked	Scale
GK	SKDS	1:200 @ A0
Date	DO NOT SCALE FROM THIS DRAWING CHECK ALL DIMENSIONS ON SITE THIS DRAWING IS COPYRIGHT	
29-07-21		
Drawing No.		
40.36.02		