Tree Survey and Impact Assessment

for land at 16-18 Oatlands Drive, Weybridge KT13 9 JI

Client

The Ridge (Oatlands) LLP Unit 17 Duchess Court Weybridge Surrey KT13 9HN

December 2022

 ${\bf 2044\text{-}KC\text{-}XX\text{-}YTREE\text{-}TreeSurvey-} and\text{-}ImpactAssessment\text{-}RevA$

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Document history

Revision	Issue Status	Details	Approved/ Date				
Rev0	Final	Initial combined Tree Survey and Impact Assessment	JK / 30 November 2022				
RevA	Final	Updated Tree Survey and Impact Assessment	JK / 09 December 2022				



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1.0 Introduction

- 1.1 This tree survey sets out the information about trees to inform the planning process about the quality of trees on site. Following the tree survey the information is extended to consider the impact to them from the proposed development and how construction may proceed whilst ensuring trees are successfully retained.
- 1.2 In this report we consider the proposals for development of the site. We consider those proposals in relation to the survey of trees we conducted as part of the site analysis.
- 1.3 The area subject to this survey consists of two detached properties situated at 16 and 18 Oatlands Drive, Weybridge.
- 1.4 Both properties are rectangular in outline containing detached dwelling and associated driveway.to the south eastern end of the plots
- 1.5 Both plots descend in level toward the north west and are laid out as formal gardens.
- 1.6 Each garden contains a number of trees with some mature trees set toward the north western end.
- 1.7 There are no trees of any particular quality upon the site and many of the mature, more visually significant trees, are ash that are showing signs of Ash Dieback and are therefore offering little long term contribution.
- 1.8 We have checked the online portals, including Elmbridge Borough Council for statutory protection of trees applicable to the site. Online portals are not always reliable so before works are undertaken to trees a direct enquiry with the Council should be made.
 - TREE PRESERVATION ORDERS details were available online and showed that there IS a Tree Preservation Order protecting trees upon the site. The Tree Preservation Order is included at Appendix 4.
 - CONSERVATION AREAS details were available online and confirmed that the site IS NOT within a Conservation Area.
 - The MAGIC information portal revealed that Ancient and Semi-Natural Woodland IS NOT located within/adjacent to the site. Land upon the site IS NOT listed on the Priority Habitat Inventory - Deciduous Woodland (England)
 - The online portal of the Woodland Trust, Ancient Tree Inventory, revealed that there are NO veteran trees recorded on site.



- 1.9 Nationally adopted guidance has been followed in the preparation of this report. BS5837:2012: Trees in relation to design, demolition and construction – Recommendations sets out a structure approach to considering trees during the development process. Guidance is given on the surveying of trees, the protected space that should be allocated to trees, what elements may give rise to harm to trees and what techniques can be deployed to minimise harm.
- 1.10 Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection. We recognise the need to integrate with other disciplines to achieve a balanced approach to development proposals.
- 1.11 We set out how our key elements interact with others at Appendix1 of this report. The appendix provides comprehensive information about the stages of providing tree information within the planning process.
- 1.12 Further explanatory notes about tree survey information are given in Appendix 2.

2.0 Tree survey

- 2.1 The objective of this tree survey is to assess the significant trees and woody vegetation on the site to obtain dimensions, assess their quality and evaluate their condition to provide sufficient information to enable decisions to be made on planning aspects of the site and its potential development.
- 2.2 The tree survey:
 - 2.2.1 was conducted on the 22 August 2022 by Jago Keen, MSc, Dip.Arb., MArborA, MICFor from ground level, in accordance with the guidance in British Standard BS5837:2012 Trees in relation to design, demolition and construction Recommendations;
 - 2.2.2 is intended for planning purposes only;
 - 2.2.3 is not intended for the detailed design of foundations (further information upon vegetation can be provided upon request);



- 2.2.4 is not a detailed health and safety condition survey of trees;
- 2.2.5 recommends only preliminary works. Tree works required to achieve the scheme of development will be considered as part of the Impact Assessment and detailed on the Tree Protection Plan:
- 2.2.6 places reliance on the topographical survey.
- 2.3 Details of each tree are recorded in the Schedule of Trees at Appendix3.
- 2.4 Site soil investigations have not been conducted. The (online) 'Geology of Britain Viewer' that contains British Geological Survey materials © NERC [2018] reveals the following soil information:
 - 2.4.1 Bedrock geology: Bagshot Formation Sand.
 - 2.4.2 Superficial deposits: Taplow Gravel Member Sand and gravel.
- 2.5 Survey information is used to prepare the constraints posed by trees on development. These constraints are shown on the Tree Constraints Plan. The Plan shows root protection areas prescribed by the guidance within BS5837 paragraph 4.6.2 and adjusted where appropriate as recommended in subsequent paragraph 4.6.3. The root protection area (RPA) is the minimum extent of rooting required to sustain the tree.
- 2.6 Trees change over time hence the contents of this survey can only be relied upon for a period of up to two years. The survey should be refreshed after two years or immediately prior to the design of detailed site layouts where they are phased.
- 3.0 Application of survey information
- 3.1 Trees place constraints on sites but they also provide opportunities in order to achieve optimum use of the site and location of built structures. This is set out below:

Avoid

The starting point of site layout design should be to avoid the RPA. Ideally, structures should be outside the root protection area to provide working space for construction however protection measures can be taken if such clearance, in isolated cases, is not achievable.



Mitigate

Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

- a) Foundations that avoid trenching e.g. screw piles, suspended floor slabs or casting at ground level for lightweight structures such as bin and cycle stores.
- b) Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist. Cellular confinement systems that enable hard surfaces to be built above existing soil levels are acceptable methods.
- c) Service runs that cannot be routed outside the root protection area(s) can be installed by, for example, thrust boring, directional drilling, air excavation or hand digging. These operations often require supervision by the project arboriculturist.

Compensate

Replacement planting can ensure the continuity of tree cover where tree removal is unavoidable. Offsite provision may be considered in some circumstances but this will require negotiation with the local planning authority.

4.0 Assessment of impact upon trees

4.1 This assessment will consider the impact upon trees of implementing the proposals shown on the drawings listed below:

Table 1 -List of drawings referred to in the impact assessment

Originator	Drg No	Title		
MAYD Architecture	MA212 252 Rev P3	Proposed Site Ground		
Keen Consultants	2044-KC-XX-YTREE- TCP01RevC	Tree Constraints Plan		
Keen Consultants	2044-KC-XX-YTREE- TPP01RevA	Tree Protection Plan		
Keen Consultants	2044-KC-XX-YTREE- LMP01RevA	Landscape Masterplan		



- 4.2 Site proposals considered in this application include:
 - 4.2.1 Residential dwellings
 - 4.2.2 Access, parking and other hard surfaces
 - 4.2.3 Utilities and services
 - 4.2.4 New and replacement tree planting
- 4.3 The proposals are considered with reference to the following guidance documents referred to in this report:

Table 2 -List of documents used to inform the impact assessment

Originator	Title/Reference					
British Standards Institute	BS5837:2012 Trees in relation to design, demolition and construction – Recommendations					
Trees and Design Action Group	Trees in the townscape: A guide for decision makers					
Ministry of Housing, Communities and Local Government	National Planning Policy Framework (NPPF)					

- 4.4 National planning policy (paragraph 131 of the NPPF refers) makes clear the important contribution made by trees to the character and quality of built environments. Trees help to mitigate and adapt to climate change. The application proposals are respectful of the benefits trees provide and have been developed to ensure the retention of trees and the incorporation of new trees within the layout.
- In summary, the proposals seek to retain all significant trees, removing those of low quality and value. Proposals are located remote from root protection areas and seek to provide a new cohort of trees to sustain tree cover in the area.



Impact of application proposals

- The layout of development has been mindful of the presence of trees and sought to retain the better specimens within the layout.
- 4.7 Most of the trees proposed for removal are of diminutive form, being mostly ornamental trees planted as part of the garden layout.
- 4.8 Tree 22 is an alder of reasonable proportions. It is protected as T23 of the tree preservation order. It is, however, decayed at the base. This species is poor at resisting the spread of decay and its useful lifespan is foreshortened. It is proposed to be removed and will be replaced by new tree planting within the garden spaces.
- 4.9 Tree 26 is an ash. Again, it is of reasonable proportions and is protected as part of G2 of the tree preservation order. It is showing signs of advanced Ash Dieback, a disease common in this country and that leads to the demise of ash trees. Its removal, subject to replacement planting as if offered with this scheme, to allow the development is normally acceptable.
- 4.10 Tree 27 is a Lawson cypress that has been compromised in its development by tree 26. It is not protected by the tree preservation order. Its loss does not materially detract from the tree cover of the site or surrounding area.
- 4.11 Trees 20 and 21 are also ash and show signs of Ash Dieback. They will be lost to the disease in the near future but they are retained in the short term whilst new trees establish. They are protected by tree preservation order and that will ensure replacements are planted to continue the tree cover. By that time the trees proposed to be planted as part of this development may well be established and making a material contribution to the local tree cover.
- 4.12 All proposed hard surfaces are remote from root protection areas so no specialist measures are required

Impact of drainage and services

4.13 The proposed drainage and services are not shown on the proposed layout however there is ample scope to locate them outside of root protection areas and require no specialist measures for their installation.



- 4.14 If services do need to be installed within root protection areas then specialist techniques for their installation will be needed. Such specialist techniques include moling, thrust-boring, broken trench or excavation by AirSpade.
- 4.15 No other installations, including mechanical and electrical equipment, are proposed in an area that would be of detriment to trees.

5.0 New and replacement tree planting

- 5.1 The development proposals bring forward opportunity to plant a selection of trees throughout the development. The landscape masterplan demonstrates that there is ample scope for new tree planting and that it can provide a material contribution to local tree cover and landscape.
- 5.2 Retaining existing trees and introducing new trees ensures a resource of trees in places where residents and visitors alike will enjoy multiple benefits provided by the tree stock. In so doing the tree stock will be able to withstand climate change, protecting and enhancing the resources of soil, air, water, landscape, amenity value, culture and biodiversity, and increasing the contribution that trees make to the quality of life. In that respect the proposals are in line with the very latest guidance, in terms of integrating trees with built form, contained in *Trees in the townscape: A guide for decision makers* produced by the Trees and Design Action Group and the requirement of paragraph 131 of the National Planning Policy Framework.
- 5.3 Those multiple benefits of this new tree planting, as part of the site's green infrastructure, include contribution to open space, enhancement of sustainable drainage systems, and enhancement of biodiversity. In addition, as those new trees develop, so they will further contribute to local climatic regulation and, where they stand within the sun path of proposed buildings or surfaces within the re-development, they will minimise solar gain during summer months, and provide an accessible choice of shade and shelter.

6.0 Protection of trees during construction

- 6.1 To ensure the retained trees are safeguarded a tree protection plan has been prepared to show the location of protective measures. These measures need to be implemented in advance of construction and maintained until such time as soft landscape proposals require their removal.
- In some instances specialist construction techniques or approaches are indicated on the protection plan. These shall be implemented in accordance with site progress.



- 6.3 In order to ensure the protective and specialist measures are understood, implemented and maintained a scheme of monitoring and supervision shall be put in place.
- 6.4 A scheme of supervision/monitoring shall typically include:
 - a pre-commencement meeting;
 - a site visit by an arboriculturist at no more than one month intervals;
 - a report to be prepared after each site visit and presented to the Council within 7 days
 of the visit.

7.0 Summary of impact assessment

- 7.1 The proposed development results in the loss of very few trees, all of which are low quality and value.
- 7.2 Proposed hard surfaces are remote from root protection areas.
- 7.3 Services and utility installation can be sited remote from trees but if they do need to be located within root protection areas specialist measures can be deployed for their installation to minimise harm to retained trees.
- 7.4 New and replacement tree planting can be provided as part of these development proposals. This new cohort of trees can provide a diverse portfolio of tree cover to ensure sustainability of green infrastructure in the future.
- 7.5 The application proposals recognise the important contribution trees make to the character and quality of built environments, and the role they play to help mitigate and adapt to climate change. The proposals seek to retain existing trees and integrate new trees in accordance with the requirement of local and national planning policy.



Appendix 1

Introduction to key elements of tree information



Sustainable development requires the coordination between disciplines throughout the project, accordingly the package of arboricultural information supports the design process and follows through to construction ensuring effective tree protection.

Keen Consultants break the process down to coordinate with the key elements within both the RIBA Plan of Work (2013) and 'British Standard 5837:2012 Trees in relation to design, demolition and construction – Recommendations', this is set out in the table and explained below.

Figure 1 -Keen Consultants co ordinated approach with cross references to key guidance.

Keen Consultants Tree Information	RIBA Stage	BS5837
Tree Survey	Concept	Feasibility
Impact Assessment	Developed design	Proposals
Method Statement	Technical design	Technical Design
Site Monitoring	Construction	Demolition and construction

This cross referenced approach ensures trees are a material consideration and those to be retained will be safeguarded.

Tree Survey and Tree Constraints Plan

To inform the design and layout of the proposed development a tree survey has been undertaken to identify the size and quality of trees both within the site and immediately offsite. We have then used this information to prepare the Tree Constraints Plan drawing that shows the location of each tree, its size and the area around each tree that needs to be considered during the design process. Once prepared this information has been provided to the design team so that they know what constraints the trees pose.

Impact Assessment and Tree Protection Plan

During the design process the design team has consulted with the arboriculturist to ascertain if constraints may be breached, consider options emerging from the design and what spaces for new trees are needed.

Once the design was finalised an impact assessment has been prepared to accompany the planning application. The impact assessment demonstrates the proposals meet national and local planning policy and guidance. It demonstrates the benefits of the retained trees and incorporates new tree planting.

Another essential element of any application is the Tree Protection Plan.



Method Statement

This statement sets out in words how each element of work is undertaken in relation to the trees. It dictates when activities occur and the method that will be used to achieve them. It will also set out a scheme of monitoring and supervision.

Site Monitoring

Following the receipt of planning consent, it is a requirement that the installation of the protective barriers and ground protection are supervised, together with operations such as excavations or surfacing close to trees.

This varies according to the intensity of development near trees, the process is set out to ensure what is planned for in the Tree Protection Plan and method statement is delivered.



Appendix 2

Tree Survey Explanatory Notes



The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of *British Standard 5837:2012 Trees in relation to design, demolition and construction Recommendations* (BS5837). The survey has been undertaken by the qualified and experienced arboriculturist detailed at Table 1 of this report and they recorded information relating to all those trees within the site and those immediately adjacent to the site which may be of influence to any proposals.

The results are recorded in the Schedule of Trees at Appendix 3.

Schedule of trees

Appendix 3 presents details of the individual trees, groups and hedgerows including heights, diameters at breast height, crown spread (given as a radial measurement of cardinal points from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention, and the root protection area information.

General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

Details of the individual trees, groups and hedgerows

All trees were assessed for their quality and benefits within the context of proposed development in a transparent, understandable and systematic way.

Individuals

The default position is to record each tree as an individual for its unique contribution to the landscape

Groups and woodlands

Trees have been assessed as groups where it has been determined appropriate by the surveyor. The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally.

Hedges and shrub masses

We consider a hedgerow to typically comprise a line of trees or shrubs that currently is subject to, or has undergone, a pruning regime to contain its dimensions.

For the tree survey hedgerows and substantial internal or boundary hedges (including evergreen screens) have either been recorded in the Tree Schedule, including lateral spread, height and stem diameter(s), or indicated on the Tree Constraints Plan.

A tree survey in accordance with BS5837 does not assess hedgerows against *The Hedgerow Regulations 1997* or specifically from an ecological perspective, as such would be outside the scope of the British Standard assessment.

Shrub masses are collectives of woody plants, rather than trees, and are recorded where they are a significant feature of the site. They have either been recorded in the Tree Schedule or indicated on the Tree Constraints Plan.



Individual trees within groups, woodlands and hedges

An assessment of individual trees within the groups has been made where there has been a clear need to differentiate between them for example, in order to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

BS5837 Categorisation

Trees have been divided into one of four categories based on Table 1 of BS5837, 'Cascade chart for tree quality assessment'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds. Categories A, B & C are applied to trees that should be of material considerations in the development process. Each category also having one of three further subcategories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

Please note that the estimated remaining life expectancy figures are taken for BS5837 and relate to their categorisation. The life expectancy figures are therefore arbitrary and may vary in reality.

Category (U)

Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.

Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.

Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.

Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

Category (A)

Shown green on Tree Constraints Plan: Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years and with potential to make a lasting contribution. Such trees may comprise:

Sub categories

- trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- 2) 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 for example veteran or wood pasture.



Category (B)

Shown blue on Tree Constraints Plan: Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years and with potential to make a significant contribution. Such trees may comprise:

Sub categories

- trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- 2) 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.
- 3) trees with material conservation or other cultural value.

Category (C)

Shown grey on Tree Constraints Plan: Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

Sub categories

- 1) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- 2) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary/transient screening benefits.
- 3) trees with no material conservation or other cultural value.

Devising BS5837 root protection areas

Default situation

The root protection area is a function of the stem diameter, it is multiplied by 12 to give a radius. For multi-stemmed trees the stems are combined to provide an effective diameter figure which is then multiplied.

Initially the root protection area should be plotted as a circle, and in many situation it remains a circle.

Influenced situation

Adjustments to the root protection area are made where pre-existing site conditions that would influence root distribution are present. Typically this will be buildings and retaining walls, lighter structures such as hard surfacing, sheds and garages generally do not have the same influence.

Ponds, rivers and watercourses will also influence root distribution as waterlogged soils are not conducive to root growth. Rainwater attenuation and ditches are likely to have a lesser impact if they are dry for significant periods.



Veteran trees

Natural England have introduced Standing Guidance that requires the allocation of buffer zones to veteran (including ancient) trees. They have prescribed that a buffer zone of 15 times the stem diameter of the tree is allocated. This will result in a buffer zone of larger diameter than the root protection area. Where veteran trees are identified during the tree survey they are allocated a Natural England buffer zone on the Tree Constraints Plan.

The Guidance is silent on what can and cannot be done within the buffer zone but it is reasonable to assume that it is prescribed to avoid material harm to the tree. It is also silent on what can and cannot be done when the land within the buffer zone is previously developed.

With this added layer of protection it is important to establish if a tree is veteran or not. The Guidance was not intended to be applied to all mature trees but to the sub-set of trees that are of great age. This is analogous with the NPPF requirement to safeguard trees that have attained an age where they are worthy of veteran or ancient status.

It is therefore important to establish a basis for defining trees as veteran as opposed to those trees that may have veteran characteristics or those trees that are mature.

Stem size is a useful guide and, in combination with size, so are characteristics of the tree. If we consider the guidance on stem size being a suitable guide to classifying trees as veteran we see:

- a) The most up to date (2013) guidance is that in ¹*Ancient and other veteran trees: further guidance on management* edited by David Lonsdale and published by The Tree Council in conjunction with The Ancient Tree Forum. Lonsdale considers that many trees may have veteran characteristics at any age however proposes, at a species level, size thresholds when a tree may be considered a veteran. A chart (see Figure 1 below) lists, species by species, the size criteria for trees reaching veteran status and then moving on to the later, ancient stage of life. Of those species listed in the chart we only need consider oak. We see that until trees attain a stem girth of around 4.6m (equivalent stem diameter of 1.46m) then an oak is only considered to be 'Locally notable'
- b) A somewhat older (1999) publication, ² Veteran Trees: A guide to good management edited by Helen Read and published by English Nature et al, is very similar in its definition by setting out three distinct bands for oak trees:
 - i) those with a diameter of more than 1.0m are potentially interesting
 - ii) those with a diameter of more than 1.5m are valuable in terms of conservation
 - iii) those over 2.0m in diameter are truly ancient
- c) English Nature's own ³ Development of a veteran tree site assessment protocol (Report Number 628) of 2005 sought to give more structure to grading sites where veteran trees were present. It considered that trees over 1.0m diameter could be classed as veteran.

Ancient and other veteran trees: further guidance on management edited by David Lonsdale and published by The Tree Council in conjunction with The Ancient Tree Forum

² Veteran Trees: A guide to good management edited by Helen Read and published by English Nature et al

³ Development of a veteran tree site assessment protocol (Report Number 628) of 2005



In summary, a tree may enter its veteran stage at 1.0m diameter but a more reliable size threshold, as held out by the latest guidance on the matter, is 1.5m diameter.

The other factor, tree characteristics, is also worth considering as veteran tree characteristics can be found on even young trees. Of course, if we count every tree with veteran tree characteristics as veteran we do a disservice to those truly veteran trees that warrant protection.

Read (1999), as set out above, considers veteran tree characteristics as:

- large girth for species
- major trunk cavities or progressive hollowing
- naturally forming water pools
- · decay hollows
- physical damage to trunk
- bark loss
- large quantities of deadwood within the crown
- sap runs
- crevices in the bark, under branches or on the root plate sheltered from direct rainfall
- fungal fruiting bodies
- high number of interdependent wildlife species
- epiphytic plants
- an 'old' look
- high aesthetic interest

Lonsdale (2013) adds to this list:

- progressive narrowing of successive annual increments in the stem
- changes in crown architecture
- progressive or episodic reduction in post-mature crown size, often known as retrenchment

Lonsdale also states that "In order to qualify as a veteran, the tree should show signs of crown retrenchment and signs of decay in the trunk, branches or roots, such as exposed deadwood or fungal fruit bodies".

The English Nature Report Number 628 refers to Read (1999) for a list of veteran features but does add that in addition a tree may also:

- have a pollard form or show indications of past management
- have a cultural/historic value
- be in a prominent position in the landscape

These three criteria, when examined, are not truly indicative of a veteran tree on their own as these criteria could be applied to street trees in peri-urban locations that date from the mid-20th century - many of those are of pollard form, have cultural and historic value and a prominent position in the landscape.



In summary, it is important to consider the size of the tree and its characteristics. Just because a tree is mature does not mean it is veteran neither does the presence of veteran characteristics alone.

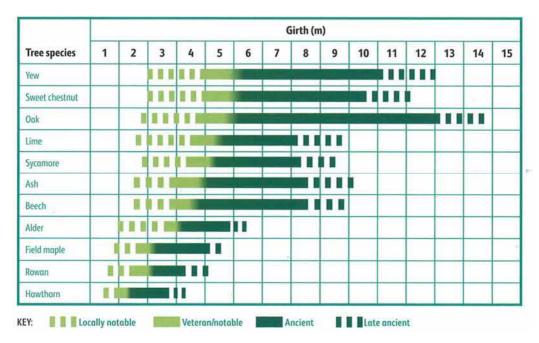


Figure 1- Chart of girth in relation to age and developmental classification of trees



Appendix 3

Schedule of Trees

for land at 16 -18 Oatlands Drive, Weybridge KT13 9JL



Key to Tree Schedule

Column Heading	Explanation
Tree No.	Unique number corresponding with number on plan
Species	English names
Ht (m)	Height in metres
Branch Spread	Crown radius in metres to cardinal points of the compass
Stem diameters (cm)	All measurements conform to Annex C of BS 5837:2012
	Single stem - Stem diameter in centimetres measured at 1.5m above
	ground level.
	Multi-stemmed tree with 2 to 5 stems -Diameter of each stem
	Multi-stemmed tree with more than 5 stems –Average stem diameter and
	number of stems
Height of crown clearance	Height in metres between the ground and underside of canopy
Height of first major branch and	Height from ground level to base of first major branch and the
direction of growth	approximate direction of growth
Abbreviations as suffix to a	Suffix 'e' denotes an estimated dimension.
dimension	Suffix 'av' denotes an average dimension
Age class	Age Class definitions:
	Y = Young
	S = Semi-mature
	E = Early mature
	M = Mature
	O = Over mature
Category grading (see Appendix	Summary of BS 5837: 2012 categorisation:
A2 for detailed explanation) and	Trees that do not warrant consideration for retention:
Estimated remaining contribution	U = those in such a condition that any existing value would be lost
(yrs)	within 10 years and which should, in the current context, be removed
	for reasons of sound arboricultural management.
	2. Trees to be considered for retention:
	A1, 2 or 3 = trees of high quality and value (substantial
	contribution >40 yrs)
	B1, 2 or 3 = trees of moderate quality and value (significant
	Contribution >20 yrs)
	C1, 2 or 3 = trees of low quality and value (but adequate, ie
Fotimated remaining contribution	>10 yrs or young trees –until new planting can be established)
Estimated remaining contribution	Useful estimated remaining contribution of the tree or tree group
Condition Proliminary management	Brief description including physiological and structural defects
Preliminary management recommendations	Describes current arboricultural requirement for the tree in its current context and should be undertaken as soon as reasonably practicable.
Root protection radius	Radius of minimum root protection area in metres calculated from section 4.6
Root protection radius	and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root
Root protection area	protection radius
	protostor radias

2044-KC-XX-YTREE-Schedule-RevC

Date of survey: 22nd August 2022

Trees at 16-18 Oatlands Drive, Weybridge KT13 9JL

									St	tem d	iame	ters	(cm)				£			<u>6</u>			sn	a
TP0 EL:12/25	Tree No.	Species	Ht	Ві		Spre m)	ad	Stem		2-5	ster	ns		th	ore an ems	Height of crown clearance (m)	eight of first brand (m) and direction (compass point)	Age class	Category grading	stimated remainin contribution (yrs)	Condition	Preliminary management	ection radi (m)	Root protection area sq.m
TP0 EI	Tre		(m)	N	Е	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height cleara	Height of first branch (m) and direction (compass point)	Age	Categor	Estimated remaining contribution (yrs)	Physiological / Structural	recommendations	Root protection radius (m)	Root prote
	1	Group of mixed conifers	6av		2	2av		10av								0	-	S	C2	>10	Row of small conifers on frontage.		1.20	5
	2	Purple plum	6	1	2	1	2							5	6	2	2E	S	C1	>10	Small tree growing on frontage.		1.47	7
	3	Cherry	7	2	3	3	3		27	29						2	2S	S	C1	>10	Small tree growing on road frontage. Some decay in lower stem.		4.75	71
	4	Olive	6	2	2	2	2							5	9	2	2S	S	C1		Small ornamental tree growing along road frontage.		1.80	10
	5	Purple plum	8	1.5	4	3	4	45e								3	3N	E	C2	>10	Growing amidst hedgerow. Has been harshly pruned in the past.		5.40	92
	6	Aspen	17	5.5	7	7	7	55e								4	4N	E	B2	>20	Established tree growing outside of property.		6.60	137
	7	Aspen																	U	<10	Recently collapsed.			
	8	Bay laurel	8	3	3	3	3		11	13	17					2	2W	S	C1	>10	Small tree growing along hedge line.		2.89	26
	9	Plum	4	1	2	2	1	14e								0	-	S	C1	>10	Small fruit tree growing on bank.		1.68	9
	10	Pear	11	3	2	3	2	35e								0	-	S	C1	>10	Established fruit tree growing on boundary between properties. Smothered in ivy.		4.20	55
	11	Ginkgo	11	1	2	2	2	14								1	1S	S	C1	>10	Small tree growing in shrub bed.		1.68	9
		Paper Bark Maple	9	1	3	2	2		15	14						1.2	1.2S	S	C1	>10	Small tree growing within raised planter. Lacking vitality.		2.46	19
	13	Sycamore	4	1	1	1	1	13								1.2	1.2SE	S	C1	>10	Small tree growing along side driveway.		1.56	8
	14	Row of mixed conifers	6av		2	2av		20av								0	-	S	C2	>10	Row of small conifers between properties. Varieties of lawson cypress.		2.40	18
	15	Evergreen magnolia	7	1	1	1	1	10								1	1E	S	C1	>10	Small ornamental tree growing in shrub bed.		1.20	5
	16	Lawson cypress	6	2	2	2	2	15e								0	-	S	C1	>10	Small conifer growing adjoining shed. Dense lower branch.		1.80	10
	17	Alder	15	3	7	7	9							30	8	0	-	E	B2	>20	Established multi stemmed tree growing beyond body of water.		10.18	326
	18	Group of mixed broadleaves	12av		3	Bav	•	15av								2	2S	S	C2	>10	Group of small trees growing beyond body of water.		1.80	10
	19	Lawson cypress	7	1	1	1	1	17								2	2E	S	C1	>10	Small conifer of poor shape and form.		2.04	13
T24	20	Ash	17	7	3	6	9	48								5	5S	E	U	<10	Advanced Ash Dieback. Unsuited to long term retention. Some broken branches in lower crown.		5.76	104

2044-KC-XX-YTREE-Schedule-RevC

Date of survey: 22nd August 2022

Trees at 16-18 Oatlands Drive, Weybridge KT13 9JL

									Si	tem c	liame	eters	(cm)				등			βι			sn	ä
TPO EL:12/25	Tree No.	Species	Ht	Ві		Spre m)	ad	stem		2-	5 ste	ms		th	ore ian ems	of crown ince (m)	ight of first branch m) and direction (compass point)	class	Category grading	stimated remaining contribution (yrs)	Condition	Preliminary management	protection radius (m)	otection are sq.m
TP0 EL	Tree	Openes	(m)	N	Ε	S	W	Single Stem	Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems	Height of cr clearance	Height of first branch (m) and direction (compass point)	Age	Category	Estimated contribut	Physiological / Structural	recommendations	Root prote	Root protection area sq.m
T22	21	Ash	18	5	8	7	7	63								10	10E	Е	U	<10	Advanced Ash Dieback. Unsuited to long term retention. Extensive decay in lower stem.		7.56	180
T23	22	Alder	16	2	5	7	6		36	39	43					2	2S	E	C1	>10	Reasonably well formed triple stemmed tree although crown development compromised by adjoining ash. Extensive decay in lower stem.		8.20	211
T20 T21	23	Pair of alder	18av		8	Bav	1	55av								4	4SE	E	B2	>20	Established pair of trees on adjoining property.		6.60	137
	24	Row of yew and holly	9av		2	2av		15av								0	-	S	C2	>10	Row of small trees growing along fence line.		1.80	10
G2	25	Silver birch	15	2	3	2	2		16	36						2	2S	S	C1	>10	Crown development compromised by adjoining ash. Some decay between buttresses.		4.73	70
G2	26	Ash	17	6	8	7	7		53	63						7	7W	Е	U	<10	Showing signs of advanced Ash Dieback.		9.88	307
	27	Lawson cypress	12	3	3	2	2	44								4	4S	S	C1	>10	Development compromised by adjoining ash.		5.28	88
	28	Lawson cypress	13	1	1	1	1	31								4	4S	S	C1	>10	Small tree growing adjoining out building.		3.72	43
	29	Row of lawson cypress	10av		2	2av	<u> </u>	15av								0	-	S	C2	>10	Row of conifers growing in adjoining property. All have been crown reduced.		1.80	10
	30	Golden lawson cypress	11	2	2	3	2	46								2	2S	S	C1	>10	Decay at base of main stem. Tight union between stems at circa 1.8 metres above ground level. Highly susceptible to failure in future years.		5.52	96
	31	Holly	9	2	3	2	1		20e	20e						0	-	S	C2	>10	Forms part of boundary vegetation.		3.39	36



Appendix 4

Tree Preservation Order

Tree Preservation Order EL:12/25 (2012)

The Elmbridge Borough Council, in exercise of the powers conferred on them by section 198 of the Town and Country Planning Act 1990 make the following Order on LAND AT 4-16

OATLANDS DRIVE, WEYBRIDGE, SURREY, KT13 9JL:

Citation

1. This Order may be cited as Tree Preservation Order EL:12/25

Interpretation

(1) In this Order "the authority" means the Elmbridge Borough Council.(2) In this Order any reference to a numbered section is a reference to the section so numbered in the Town and Country Planning Act 1990 and any reference to a numbered

regulation is a reference to the regulation so numbered in the Town and Country Planning (Tree Preservation)(England) Regulations 2012.

Effect

- 3. (1) Subject to article 4, this Order takes effect provisionally on the date on which it is made.
 - (2) Without prejudice to subsection (7) of section 198 (power to make tree preservation orders) or subsection (1) of section 200 (tree preservation orders: Forestry Commissioners) and, subject to the exceptions in regulation 14, no person shall—
 - (a) cut down, top, lop, uproot, wilfully damage, or wilfully destroy; or
 - (b) cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of, any tree specified in the Schedule to this Order except with the written consent of the authority in accordance with regulations 16 and 17, or of the Secretary of State in accordance with regulation 23, and, where such consent is given subject to conditions, in accordance with those conditions.

Application to trees to be planted pursuant to a condition

4. In relation to any tree identified in the first column of the Schedule by the letter "C", being a tree to be planted pursuant to a condition imposed under paragraph (a) of section 197 (planning permission to include appropriate provision for preservation and planting of trees), this Order takes effect as from the time when the tree is planted.

Dated 20 December 2012 Signed on behalf of the Elmbridge Borough Council

Strategic Director
Authorised by the Council to sign in that behalf

CONFIRMATION OF ORDER

	This Order was confirmed by Elmbridge Borough Council without modification on the OR, This Order was confirmed by the Elmbridge Borough Council subject to the modifications shown in red thereon, on the
	Signed on behalf of the Elmbridge Borough Council
/	Strategic Director Authorised by the Council to sign in that behalf
	DECISION NOT TO CONFIRM ORDER
	A decision not to confirm this Order was taken by the Elmbridge Borough Council on the
	Signed on behalf of the Elmbridge Borough Council
	Strategic Director Authorised by the Council to sign in that behalf
	VARIATION OF ORDER
	This Order was varied by the Elmbridge Borough Council on the by a variation order under reference number a copy of which is attached.
	Signed on behalf of the Elmbridge Borough Council
	Strategic Director Authorised by the Council to sign in that behalf
	REVOCATION OF ORDER
	This Order was revoked by the Elmbridge Borough Council on the
	Signed on behalf of the Elmbridge Borough Council
	Strategic Director Authorised by the Council to sign in that behalf

SCHEDULE

Specification of trees
Trees specified individually (encircled in black on the map)

Reference on map	Description	Situation
T1	CRIMSON LEAF NORWAY MAPLE	
T2	NORWAY MAPLE	
T3	HORNBEAM	
T4	ASH	
T5	ASH	
T6	BEECH	
T7	ASH (2 STEM)	
T8	NORWAY SPRUCE	
T9	TREE OF HEAVEN	
T10	BIRCH	LAND AT 4-16
T11	ALDER (5 STEM)	OATLANDS
T12	ALDER	DRIVE,
T13	ALDER (5 STEM)	WEYBRIDGE,
T14	ASH	SURREY, KT13
T15	ASH	9JL (see TPO map
T16	ASH	TP3665 for greater
T17	BLUE SPRUCE	detail)
T18	LAWSON CYPRESS	
T19	OAK	
T20	ALDER	
T21	ALDER	
T22	ASH	
T23	ALDER (4 STEM)	
T24	ASH	

Trees specified by reference to an area (within a dotted black line on the map)

Reference on map	Description	Situation	
NONE			

Groups of trees (within a broken black line on the map)

Reference on map	Description	Situation
G1	1x HORSE CHESTNUT, 1x ASH	LAND AT 4-16
		OATLANDS DRIVE,
G2	1x BIRCH, 1x ASH (2 STEM)	WEYBRIDGE, SURREY,
		KT13 9JL (see TPO map
		TP3665 for greater detail)

Woodlands (within a continuous black line on the map)

Reference on map	Description	Situation	
NONE			

