Appeal By

Mr K Thevarajah

at

2 Arlington Drive
Ruislip

Local Planning Authority
Ref: 74323/APP/2021/2509

Statement of
Jago Keen

Subject Matter

TREES

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1 Introduction

1.1 This statement sets out the evidence of Jago Trevelyan Keen, Chartered Arboriculturist, MSc, Dip.Arb., MICFor, MArborA in respect of tree matters in relation to the application for development of the site at 2 Arlington Drive, Ruislip.

1.2 The evidence which I have prepared and provide for this appeal reference is true and I confirm that the opinions expressed are my true and professional opinions.

1.3 This evidence addresses the arboricultural impacts of the scheme, in particular reason for refusal 3.

1.4 I am familiar with the site having undertaken a tree survey on the 16th November 2021. The information gained during the tree survey is used as the basis for assessing the effect upon trees at the site.

2. Arboricultural information

2.1 A tree survey was undertaken in accordance with the guidance contained in *British Standard 5837:2012: Trees in relation to demolition, design and construction – Recommendations* ("BS5837"). This document sets out the parameters for the tree survey and the means of categorising the quality of trees encountered. It is the nationally recognised means for providing sufficient and reliable information for the determination of the effects of a scheme of development upon trees.

2.2 The tree survey was supplemented with an Arboricultural Impact Assessment that considers the impact of the application proposals upon the trees. This document is provided at Appendix JK1 of this statement.

2.3 The tree survey information is shown pictorially on the Tree Constraints Plan at Appendix JK2.

2.3 The application proposals have been overlaid on the tree survey information to produce a Tree Protection Plan. This plan (at Appendix JK3) also shows the proposed tree removal, pruning and protection measures to be taken during construction.

2.4 Details of the protection measures are then set out in the Arboricultural Method Statement at Appendix JK4.

3. Impact of scheme upon trees.

3.1 The detailed consideration of the impact on trees is set out in the Arboricultural Impact Assessment (Appendix JK1). In this statement I provide a summary of that impact.

3.2 The proposals require the loss of mostly conifer trees that are of low quality and value. These are ubiquitous species with no exceptional merit. None of the trees being removed have any statutory protection (Tree Preservation Order or Conservation Area).

3.3 The loss of the trees is proposed to be mitigated by the planting of five native trees as shown on the Tree Planting Plan (Appendix JK4). These proposed trees will complement the existing tree cover, provide amenity and aid the support of biodiversity, all in accordance with latest policy and guidance.

3.4 The technicalities of protecting the retained trees and working methods are all contained in the Arboricultural Method Statement (see Appendix JK5) ensuring the retained trees can be protected during the construction works. This will ensure the trees remain viable and continue to offer amenity to the local area.

4. Consideration against planning policy

4.1 None of these trees being lost is of exceptional value and they are certainly not at the quality and value threshold set out in the NPPF as worthy of retention. None are veteran or ancient trees (see definition in the Glossary of the NPPF) that are specifically mentioned in the National Planning Policy Framework as warranting special protection. The loss of these trees is therefore typically considered to be acceptable allied to the benefits the application proposals bring, including new and replacement tree planting.

4.2 The reason for refusal is centred on the lack of information submitted but goes on to suggest that unless trees are unaffected by the proposal it will be contrary to planning policy. The reason for refusal cites policies the Council considers the proposals are contrary to. Looking at the tree-related parts of those policies, my opinion is:

4.2.1 Local Plan Policy BE1 – The few trees being removed do not materially contribute to the landscape of this area. They are not significant trees (not deemed worthy of protection by a Tree Preservation Order) and the character of the area is not deemed of sufficient merit to warrant Conservation Area status that would also safeguard the key landscape components, the trees. In this respect the loss of the trees does not materially impact landscape character and therefore does not conflict with policy.

4.2.2 Local Plan Policy DMHB 11 – seeks landscape and tree planting as part of “good design”. The scheme delivers a high quality landscape, including new tree planting, to ensure the amenity of the area, as part of the green infrastructure network that supports, amongst other things, biodiversity. The proposals therefore meet the tree-related parts of this policy.

4.2.3 Local Plan Policy DMHB 12 – the landscape treatment within the site is suitable for the location and appearance of the area. The proposals do not therefore conflict with this policy.

4.2.4 Local Plan Policy DMHB 14 – The expectation of the policy is to retain trees of merit. The trees proposed for removal are not of merit. They are ubiquitous conifers, common in urban and suburban areas. They have no special amenity (not protected by tree preservation order). The information provided with this statement demonstrates that there are no trees of merit but does show trees will be retained and protected. The proposals therefore accord with this policy.

4.2.5 London Plan Policy D1 – This policy seems to place a requirement on Boroughs to undertake area assessments and is not a policy against which to evaluate the application proposals. The proposals cannot therefore be contrary to this policy.

4.2.6 London Plan Policy D3 – The tree-related aspects of this policy seem to fall under the policy requirement to maximise opportunities for urban greening. In so far as any scheme of development for residential accommodation in an urban area can provide urban greening this scheme maximises those opportunities. The scheme replicates the pattern of urban greening in which it is set and therefore accords with policy.

4.2.7 London Plan Policy G1 – The first three elements of this policy are aimed at Boroughs to shape their area-based strategies. The final part requires appropriate elements of green infrastructure to be integrated in the wider network. Again, in the context of a small residential scheme in an existing residential area the “appropriate elements” on this site are retained, in keeping with the grain of the surrounding area. The scheme therefore accords with this policy.

4.2.8 The NPPF – In the July 2021 edition paragraph 131 sought tree-lined streets, parks and community orchards. Whilst the scale of this scheme cannot deliver all such components it does ensure street trees are conserved, retains trees where possible and seeks to deliver new trees to sustain the tree cover of the area. Paragraph 180 is not triggered as the trees on this site are not ancient or veteran. Therefore, the scheme accords with the tree-related policies in the NPPF.

4.3 Following the above analysis it is my opinion that the loss of those few low quality and value trees, that this scheme requires, does not constitute valid arboricultural grounds to substantiate the refusal of consent on local, regional or national planning policy grounds.

5. Summary

5.1 Reason for refusal number 3 put forward that the proposal would be detrimental on the basis that trees would be lost from the site.

5.2 In my opinion, based on an analysis of the tree stock on the site and comparison with local, regional and national planning policy sufficient weight cannot be accorded those trees being removed to warrant that refusal. No trees of merit are being removed, retained trees can be protected and new trees can be planted.

5.3 In summary, the loss of trees is at a normally acceptable level, methods can be deployed to safeguard the retained trees and new trees can be planted to secure tree cover, as part of the area's green infrastructure.

5.4 Analysis of the tree-related parts of the planning policies cited in the reason for refusal reveals to me that the policy requirements are met. Certainly there appears to me to be no arboricultural justification for refusal of planning consent.

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Appendices to

Statement
of
Jago Keen

Subject Matter

TREES

APPENDIX JK1

Tree Survey and Impact Assessment

Tree Survey and Impact Assessment

for land at

2 Arlington Drive,
Ruislip,
Hillingdon
HA4 7RL

Client

Mr K Thevarajah

January 2022

1781-KC-XX-YTREE-TreeSurvey-and-ImpactAssessment-Rev0

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Document history

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Rev0	Final	Tree Survey and Impact Assessment	JK / 09 January 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 of this survey consists of a section of garden at 2 Arlington Drive, Ruislip.

1.4 The section of garden is laid mostly to lawn with trees around the boundaries.

1.5 Along the western boundary is a row of predominantly Lawson cypress. A section of that row has been removed where it abuts the dwelling at 8 Arlington Drive. These trees were removed at the request of the occupiers of number 8 to enable them to extend their dwelling.

1.6 Along the northern boundary with Arlington Drive is a row of Lawson cypress of varying varieties. Most of these trees have been reduced in the past and subsequently regrown. None is of any particular merit.

1.7 Within the lawn adjoining Little Manor Farm is an apple tree. Also within the grounds of Little Manor Farm, south of the two proposed plots, is a large dead willow.

1.8 Within the verge against Arlington Drive is a row of small young street trees. Two of these have been damaged by strimmers. One is very recently planted.

1.9 We have checked the online portals, including London Borough of Hillingdon 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 are NO Tree Preservation Orders protecting trees upon the site.
- 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.

1.10 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.

1.11 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.

1.12 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.

1.13 Further explanatory notes about tree survey information are given in Appendix2.

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 16 November 2021 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: London Clay Formation - Clay, Silt And Sand.

2.4.2 Superficial deposits: None recorded.

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
RS2 Ltd	2020-003/PL003	Proposed Site Plan
Keen Consultants	1781-KC-XX-YTREE-TCP01Rev0	Tree Constraints Plan
Keen Consultants	1781-KC-XX-YTREE-TPP01RevA	Tree Protection Plan
Keen Consultants	1781-KC-XX-YTREE-TP01Rev0	Tree Planting Plan

4.2 Site proposals considered in this application include:

4.2.1 Residential dwelling

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*
Department for 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 urban environments. Trees help to mitigate and adapt to climates 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.

4.5 In summary, the proposals seek to retain the better quality trees but remove those of a lesser quality. Replacement tree planting can be secured to ensure tree cover in the long term.

Impact of application proposals

4.6 The layout of the dwelling and hard surfaces has been carefully conceived to ensure the significant trees at or around the site are retained without material harm.

4.7 It is necessary to remove a group of conifers (number 3 of the tree survey) from the Arlington Road frontage. These trees are of low quality and value with most having been cut back in the past to control their height. The conifers are ubiquitous in the urban and suburban environment and have little merit. Their loss does not detract from the local landscape and can be offset by new tree planting within the frontage of the proposed dwelling.

4.8 The crossover to serve the new plot has been carefully located to avoid impact on trees within the verge alongside Arlington Drive.

4.9 The application plans show the removal of a row of conifers along the boundary with 8 Arlington Drive. However, since the time of the application, these trees have been removed at the request of the occupier of no. 8. The occupier wished to extend their dwelling and removal of these trees afforded them room for that construction and alleviated any concerns about long term impact on their property as a result of their presence. The loss of those trees has not materially detracted from the local landscape.

4.10 All of the proposed dwelling and its associated hard surfaces are remote from the root protection area of all retained trees.

Impact of drainage and services

4.11 The proposed drainage and services are not shown on the proposed site layout. There is ample scope to accommodate those utility installations remote from root protection areas and require no specialist measures for their installation.

4.12 Where 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.

5.0 New and replacement tree planting

5.1 The application proposals bring forward opportunity to plant a selection of trees to replace the small group of conifers being removed. The replacement trees are shown on the Keen Consultants' Tree Planting Plan listed in Table 1 above. Rather than replant the ubiquitous conifers often seen in suburban locations the new planting will consist of native tree species. The species selected, field maple and hawthorn, will have visual interest through their flower and autumn colour whilst also supporting a wide array of biodiversity.

5.2 The trees have been selected at a semi-mature size to ensure that when they are planted they make an instant impact in the landscape. As they mature so they will be compatible with their surroundings and make a substantial contribution to the landscape setting of the proposed building and the retained building of Little Manor Farm.

5.3 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.

5.4 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.

6.2 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 An Arboricultural Method Statement has been prepared to set out the requirements necessary to safeguard the retained trees. Part of that method statement is the provision of a scheme of monitoring and supervision by an arboriculturist.

7.0 Summary of impact assessment

7.1 The application proposals result in the loss of very few trees, all of which are low quality and value. None of these trees are of any particular merit. None are protected by tree preservation order.

7.2 Services and utility installation can be sited remote from trees but where they do need to be located within root protection areas specialist measures can be deployed for their installation to minimise harm to retained trees.

7.3 New and replacement tree planting is provided as part of these development proposals. This new cohort of trees can provide a selection of native tree species to enhance the landscape setting, support biodiversity and ensure sustainability of green infrastructure in the future. A planning condition can secure the provision of new tree planting.

7.4 The application proposals recognise the important contribution trees make to the character and quality of urban 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 sub-categories (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

1) 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.

3) 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

1) 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.

---

[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

[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.

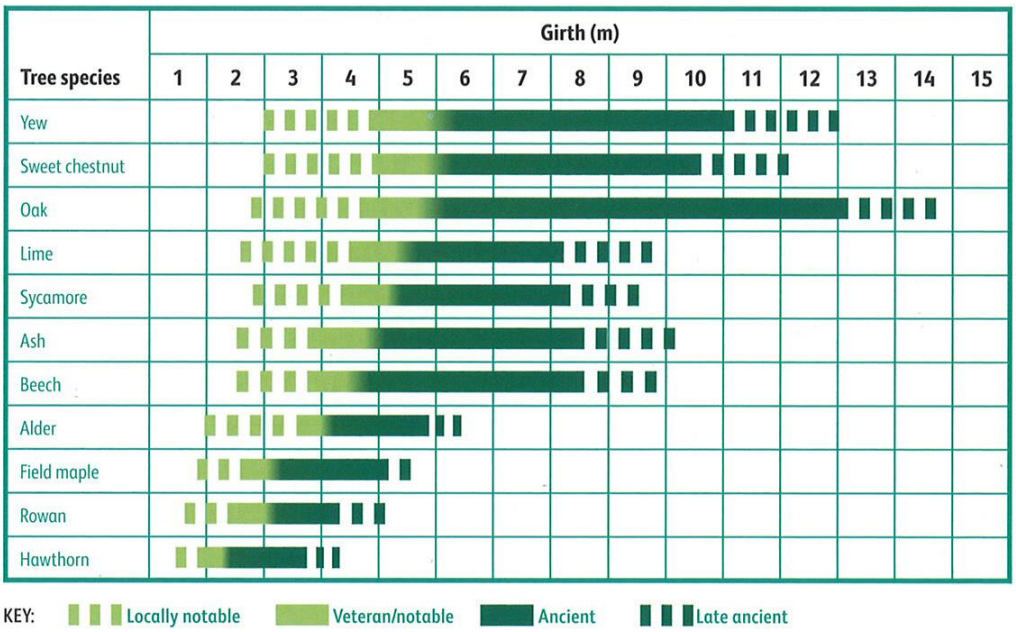

Figure 1- Chart of girth in relation to age and developmental classification of trees

Appendix 3

Schedule of Trees

for land at

2 Arlington Drive,
Ruislip,
Hillingdon
HA4 7RL

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 direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	*Suffix 'e' denotes an estimated 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 A2 for detailed explanation) and Estimated remaining contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees that do not warrant consideration for retention: U = those in such a condition that any existing value would be lost 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 >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	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 and Annex D of BS5837:2012
Root protection area	Total area of minimum root protection area extrapolated from root protection radius

Trees at 2 Arlington Drive, Ruislip, Hillingdon HA4 7RL

Tree No.	Species	Ht (m)	Branch Spread (m)				Stem diameters (cm)								Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m
			N	E	S	W	Single Stem	2-5 stems					More than 5 stems										
								Stem 1	Stem 2	Stem 3	Stem 4	Stem 5	Mean dia	No. stems									
1	Row of Lawson cypress	9av	2av				25av								0	-	S	C2	>10	Row of outgrown conifers along boundary. Interspersed with occasional holly and blackthorn.		3.00	28
2	Apple	9	6	6	6	6		46	31						2	2S	M	C1	>10	Reasonably well formed and large example growing within lawn.		6.66	139
3	Group of Lawson cypress	11av	3av				30av								3	3S	S	C2	>10	Row of outgrown conifers along site frontage. Have been crown reduced in the past. All stems covered in ivy.		3.60	41
4	Pair of Lawson cypress	10av	3av				30av								2	2N	S	C2	>10	Pair of close growing conifers adjoining terrace. Both stems partially smothered in ivy.		3.60	41
5	False acacia	4	2	2	2	2	13								2	2N	Y	C1	>10	Established tree growing within grass verge. Extensive strimmer damage at base.		1.56	8
6	Field maple	3	1	1	1	1	4								1.5	1.5S	Y	C1	>10	Small recently planted tree within grass verge.		0.48	1
7	False acacia	4	2	2	2	2	14								2	2S	Y	C1	>10	Small tree growing in verge. Strimmer damage at base.		1.68	9

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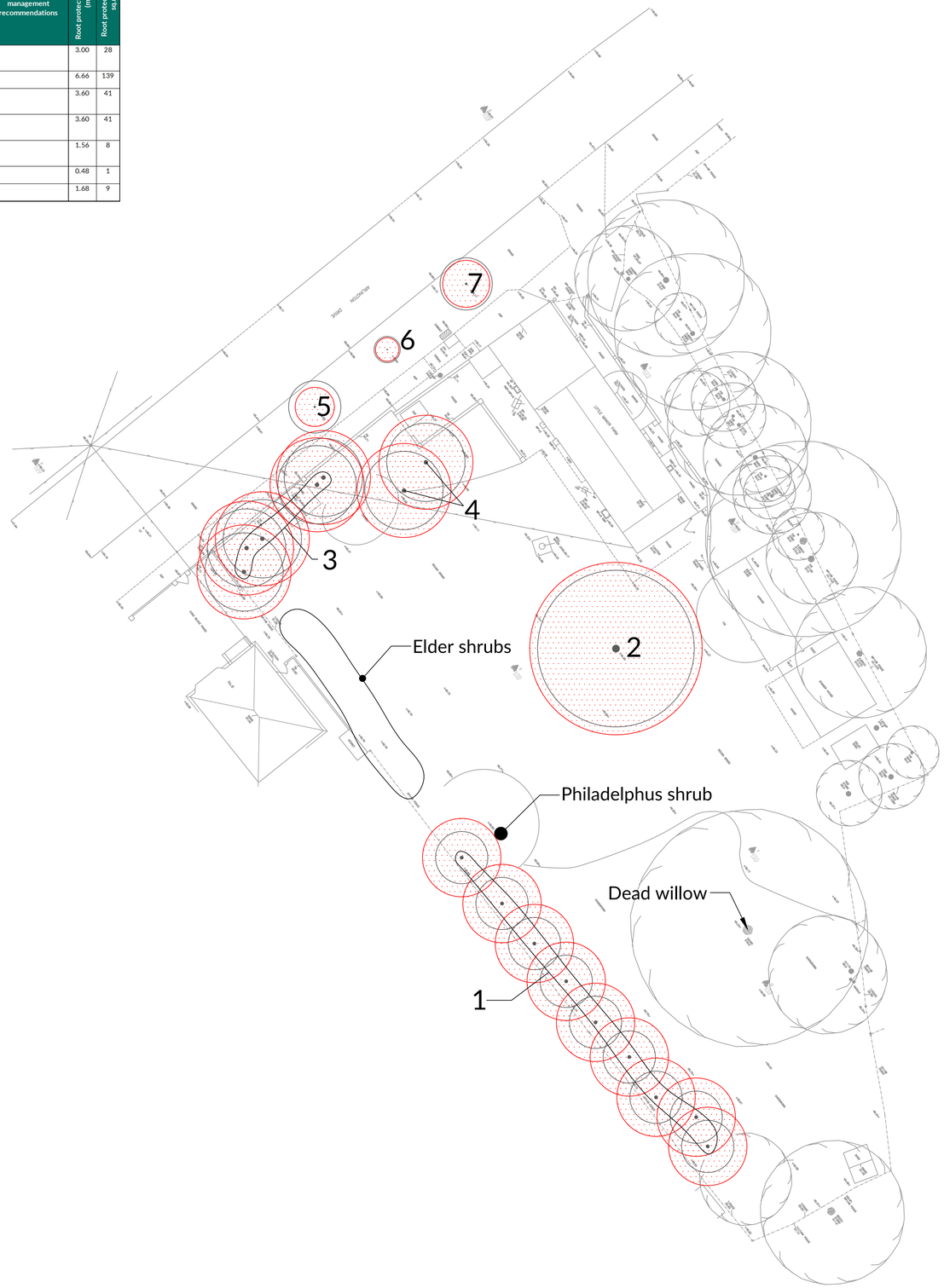
APPENDIX JK2

Tree Constraints Plan

Trees at 2 Arlington Drive, Ruislip, Hillingdon HA4 7RL

Tree No.	Species	Ht (m)	Branch Spread (m) N	Branch Spread (m) E	Branch Spread (m) S	Branch Spread (m) W	Stem diameters (cm) Single Stem	2-5 stems Stem 1	2-5 stems Stem 2	2-5 stems Stem 3	2-5 stems Stem 4	2-5 stems Stem 5	More than 5 stems Mean dia	More than 5 stems No. stems	Height of crown clearance (m)	Height of first branch and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Preliminary management recommendations	Root protection radius (m)	Root protection area sq.m
1	Row of Lawson cypress	9av	2av				25av								0	-	S	C2	>10	Row of outgrown conifers along boundary. Interspersed with occasional holly and blackthorn.		3.00	28
2	Apple	9	6	6	6	6		46	31						2	2S	M	C1	>10	Reasonably well formed and large example growing within lawn.		6.66	139
3	Group of Lawson cypress	11av	3av				30av								3	3S	S	C2	>10	Row of outgrown conifers along site frontage. Have been crown reduced in the past. All stems covered in ivy.		3.60	41
4	Pair of Lawson cypress	10av	3av				30av								2	2N	S	C2	>10	Pair of close growing conifers adjoining terrace. Both stems partially smothered in ivy.		3.60	41
5	False acacia	4	2	2	2	2	13								2	2N	Y	C1	>10	Established tree growing within grass verge. Extensive strimmer damage at base.		1.56	8
6	Field maple	3	1	1	1	1	4								1.5	1.5S	Y	C1	>10	Small recently planted tree within grass verge.		0.48	1
7	False acacia	4	2	2	2	2	14								2	2S	Y	C1	>10	Small tree growing in verge. Strimmer damage at base.		1.68	9



NORTH

0 5m 10m 20m

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6. Check if Tree Preservation Order or Conservation Area protection applies to trees before undertaking tree works.
7. Topographical survey based on W.P.G. Surveys job number 5296.
8. Where trees were not identified on the topographical survey they have been plotted by eye.

KEY

1. Trees to be considered for retention:
   (Coloured line indicated extent of canopy)
   - Tree Category A 1,2 or 3 - Trees of high quality
   - Tree Category B 1,2 or 3 - Trees of moderate quality
   - Tree Category C 1,2 or 3 - Trees of low quality
2. Trees unsuitable for retention:
   (Coloured line indicated extent of canopy)
   - Tree Category U - Trees that cannot realistically be retained due to their condition
3. Protection Areas:
   - Root Protection Area (RPA)
4. Tree/Hedge numbering:
   - 2 Tree number - refer to schedule for information

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 Dia	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 direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	Suffix 'e' denotes an estimated 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 and Estimated remaining Contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees unsuitable for retention: 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 that 10 years 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality (significant contribution >20 yrs) C1, 2 or 3 = trees of low quality (but adequate, ie >10 yrs or young trees - until new planting can be established)
Estimated remaining contribution	Note: Useful estimated remaining contribution of the tree or tree group based on figures stated in BS5837:2012
Condition	Brief description including physiological and structural defects
Preliminary management recommendations	Describes current arboricultural requirement for the tree in its current context
Root Protection Radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of B55837:2012
Root Protection Area	Total area of minimum root protection area extrapolated from root protection radius

Rev	Description	Date
0	Preliminary issue	24.11.21

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Client
KANTHAN THEVARAJAH

Project
2 ARLINGTON DRIVE,
RUISLIP

Title
TREE CONSTRAINTS PLAN

Date
NOV 2021

Scale
1:200@A1

Drawn by
ML

Checked by
JTK

Drawing Number
1781-KC-XX-YTREE-TCP01Rev0

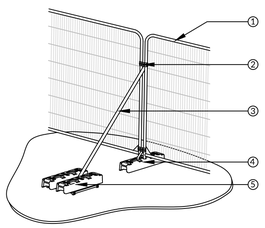
APPENDIX JK3

Tree Protection Plan

Trees at 2 Arlington Drive, Ruislip, Hillingdon HA4 7RL

Tree No.	Species	Ht (m)	Branch Spread (m) N	Branch Spread (m) E	Branch Spread (m) S	Branch Spread (m) W	Stem diameters (cm) Single Stem	Stem diameters (cm) 2-5 stems Stem 1	Stem diameters (cm) 2-5 stems Stem 2	Stem diameters (cm) 2-5 stems Stem 3	Stem diameters (cm) 2-5 stems Stem 4	Stem diameters (cm) 2-5 stems Stem 5	Stem diameters (cm) More than 5 stems Mean dia	Stem diameters (cm) More than 5 stems No. stems	Height of crown clearance (m)	Height of first branch (m) and direction (compass point)	Age class	Category grading	Estimated remaining contribution (yrs)	Condition Physiological / Structural	Tree Works to BS3998	Root protection radius (m)	Root protection area sq.m
1	Row of Lawson cypress	9av	2av				25av								0	-	S	C2	>10	Row of outgrown conifers along boundary. Interspersed with occasional holly and blackthorn.		3.00	28
2	Apple	9	6	6	6	6		46	31						2	2S	M	C1	>10	Reasonably well formed and large example growing within lawn.		6.66	139
3	Group of Lawson cypress	11av	3av				30av								3	3S	S	C2	>10	Row of outgrown conifers along site frontage. Have been crown reduced in the past. All stems covered in ivy.	Remove.	3.60	41
4	Pair of Lawson cypress	10av	3av				30av								2	2N	S	C2	>10	Pair of close growing conifers adjoining terrace. Both stems partially smothered in ivy.		3.60	41
5	False acacia	4	2	2	2	2	13								2	2N	Y	C1	>10	Established tree growing within grass verge. Extensive strimmer damage at base.		1.56	8
6	Field maple	3	1	1	1	1	4								1.5	1.5S	Y	C1	>10	Small recently planted tree within grass verge.		0.48	1
7	False acacia	4	2	2	2	2	14								2	2S	Y	C1	>10	Small tree growing in verge. Strimmer damage at base.		1.68	9

Figure 1: Example of a protective barrier



1. Steel mesh panel
2. Connectors fitted to secure panels
3. Diagonal strut
4. Block feet to avoid driven scaffold poles
5. Block tray weighted with blocks

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NORTH

0 5m 10m 20m

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6. Check if Tree Preservation Order or Conservation Area protection applies to trees before undertaking tree works.
7. Topographical survey based on W.P.G. Surveys job number 5296.
8. Where trees were not identified on the topographical survey they have been plotted by eye.
9. Proposed Footprint Layout based on RS2 Ltd job/drawing number 2020-003/PL003.

KEY

Existing site features

Proposed structures

Trees retained
(Coloured line indicated extent of canopy)

Trees for removal
(Coloured line indicated extent of canopy)

2.0m high barrier as detail in Figure 1

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 Dia	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 direction of growth	Height from ground level to base of first major branch and the approximate direction of growth
Abbreviations as suffix to a dimension	Suffix 'e' denotes an estimated 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 and Estimated remaining Contribution (yrs)	Summary of BS 5837: 2012 categorisation: 1. Trees unsuitable for retention: 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 that 10 years 2. Trees to be considered for retention: A1, 2 or 3 = trees of high quality (substantial contribution >40 yrs) B1, 2 or 3 = trees of moderate quality (significant contribution >20 yrs) C1, 2 or 3 = trees of low quality (but adequate, ie >10 yrs or young trees - until new planting can be established)
Estimated remaining contribution	Note: Useful estimated remaining contribution of the tree or tree group based on figures stated in BS5837:2012
Condition	Brief description including physiological and structural defects
Tree Works	Works required to be undertaken to the trees to facilitate the construction of remediate a defect encountered during the survey
Root Protection Radius	Radius of minimum root protection area in metres calculated from section 4.6 and Annex D of BS5837:2012
Root Protection Area	Total area of minimum root protection area extrapolated from root protection radius

Rev	Description	Date
A	Latest layout overlay	16.12.21
0	Preliminary issue	02.12.21

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Client
KANTHAN THEVARAJAH

Project
2 ARLINGTON DRIVE,
RUISLIP

Title
TREE PROTECTION PLAN

Date
DEC 2021

Scale
1:200@A1

Drawn by
ML

Checked by
JTK

Drawing Number
1781-KC-XX-YTREE-TPP01RevA

APPENDIX JK4

Tree Planting Plan

PLANTING SPECIFICATION

General requirements

All plant handling to be in accordance with the HTA 'Handling and establishing landscape plants' Part I, Part II and Part III (obtainable from the Horticultural Trades Association) and the CPSE publication: 'Plant Handling'.

All planting to confirm to National Planting Specification Guidelines.

The individual setting out of the plants on site shall be the responsibility of the contractor and should follow closely the locations shown on the detailed planting plan opposite. Contractor to ensure that plants are equally spaced within individual planting groups.

Contractor shall maintain existing levels around the base of existing trees and shall undertake all planting works occurring within tree protection zones in accordance with BS5837:2012.

Contractor to check the locations of all underground services, existing and proposed, prior to the excavation of any tree pits or shrub beds and identify any potential conflicts to the client.

All arisings shall be removed from site and the contractor shall at all times, keep the site free from rubbish and debris.

For the duration of the works the contractor shall keep the site free from injurious weeds as listed in the Weeds Act 1959.

All plants should be supplied at the same size and of the same species as specified in the planting schedule opposite. Any proposed replacement species or deviation from the planting schedules should be highlighted to and agreed with the client prior to installation.

The Contractor shall carry out the work while soil and weather conditions are suitable. Planting is not to take place during periods of frost or strong winds.

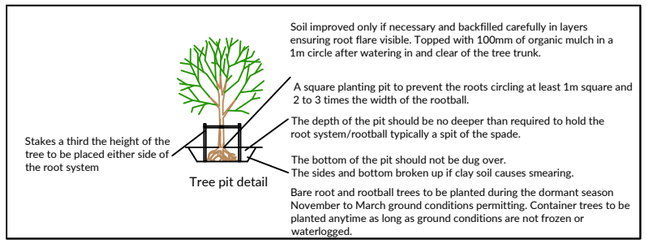
Do not use peat or peat based products.

Prior to planting, planting areas shall be cleared of grass and weed growth physically and/or chemically with a proprietary translocated herbicide and a period of time shall be allowed to elapse as recommended by the manufacturer before commencement of soil preparation for planting.

All plants are to be watered thoroughly before planting stage to ensure rootball is thoroughly soaked prior to final backfilling.

Tree Planting : November to March for bare root or rootball tree

Please refer to tree pit detail below.



Tree shall be staked and supported with a low, double stake consisting of 2No. 75mm diameter rounded timber posts driven into the ground, a third of the tree height above ground level and fixed to the tree by a proprietary rubber tree tie / horizontal cross support.

MAINTENANCE

For period of 5 years post planting the planting shall be maintained as follows

Replacement planting

Replacement of failed plants shall occur to achieve 90% stocking of original planting scheme after a period of 5 years. Species shall be replaced like-for like.

Firming in

Frost or drought can loosen the soil around each plant and each plant should be checked and the soil firmed as necessary.

Weeding

A weed free area of at least 1 metre diameter shall be maintained around each plant. Chemical treatments are most appropriate to achieve this and must be applied in accordance with manufacturers instructions.

Watering

During the growing season newly planted trees and shrubs should be watered to ensure that the soil is kept constantly moist, although this will vary with local climate and soil types.

Watering is essential to sustain the new trees. Insufficient watering is the main cause of decline of newly planted trees.

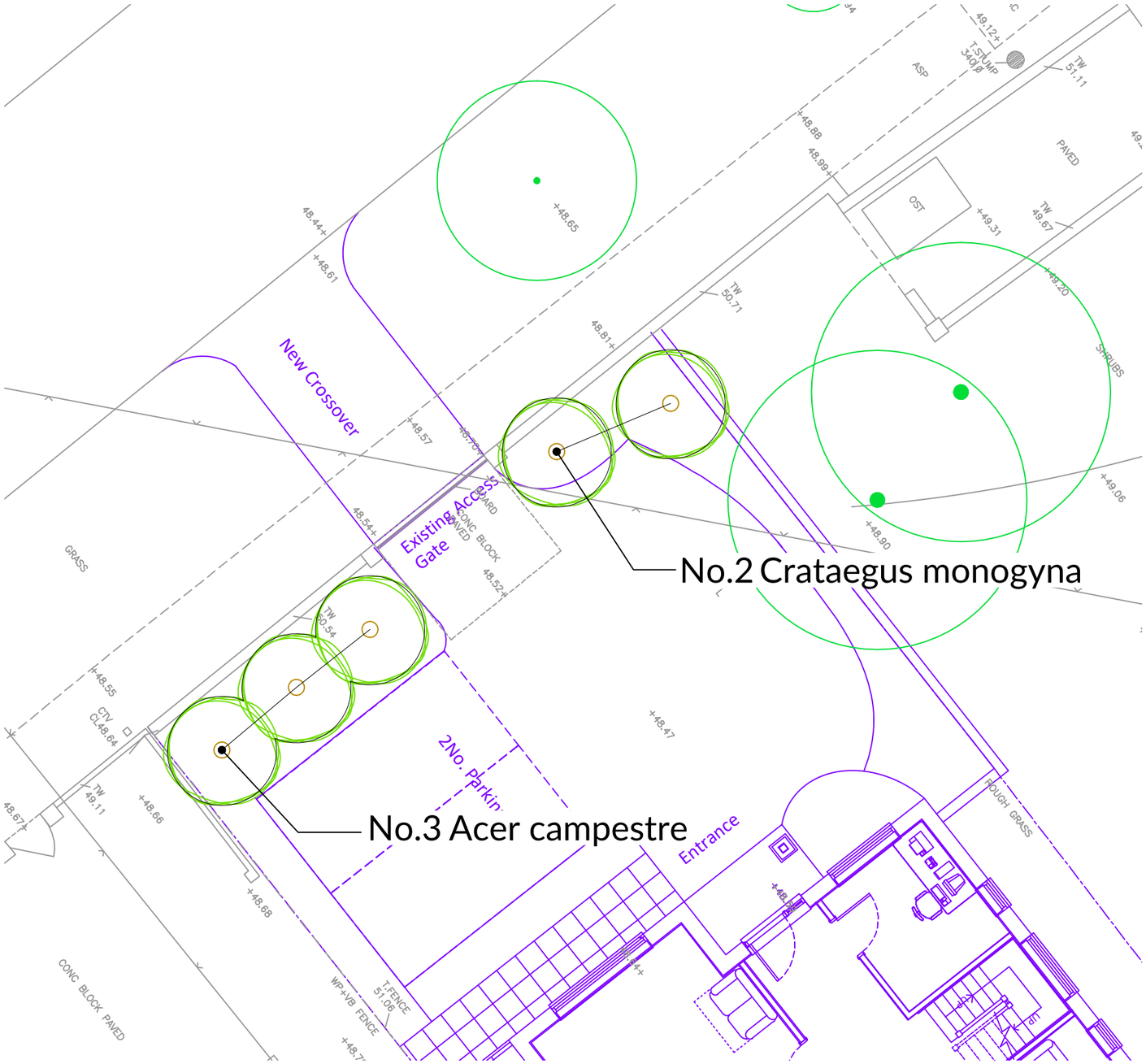
Grass

Shall be maintained in accordance with that on adjoining existing grassed areas to be in keeping.

Tree Sepcification

Trees

Number	Species	Common Name	Girth
3	*Acer campestre*	Common Maple	20-25cm
2	*Crataegus monogyna*	Common Hawthorn	20-25cm



NORTH

0 5m

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7. Topographical survey based on W.P.G. Surveys job number 5296.
8. Where trees were not identified on the topographical survey they have been plotted by eye.
9. Proposed Footprint Layout based on RS2 Ltd job/drawing number 2020-003/PL003.

KEY

- Existing site features
- Proposed structures
- Existing trees
- Proposed trees

Rev	Description	Date
0	Preliminary issue	12.01.22

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Client
KANTHAN THEVARAJAH

Project
2 ARLINGTON DRIVE,
RUISLIP

Title
TREE PLANTING PLAN

Date
JAN 2022

Scale
1:100@A3

Drawn by
ML

Checked by
JTK

Drawing Number
1781-KC-XX-YTREE-TP01Rev0

APPENDIX JK5

Arboricultural Method Statement

Arboricultural Method Statement

relating to development at
2 Arlington Drive,
Ruislip,
Hillingdon
HA4 7RL

Client
Mr K Thevarajah

January 2022

1781-KC-XX-YTREE-MethodStatement-Rev0

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Document history

Revision	Issue Status	Details	Approved/Date
Rev0	Final	Initial report	JK / 09 January 2022

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4.0 Facilitation tree works 6
5.0 General site care 6
6.0 Sequencing of works 7
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8.0 Treatment of existing hard surfaces 8
9.0 Creation of new hard surfacing within root protection areas 8
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Appendices

Appendix 1
Typical detail of no-dig construction

Appendix 2
List of contacts

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Table 1: Documents referred to 5
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ABSTRACT

Protective barriers are required throughout the construction process to protect the retained trees on the site.

Tree removal is required.

1.0 Statement of purpose

1.1 The purpose of this method statement is to demonstrate how works will be undertaken at 2 Arlington Drive, Ruislip, to avoid unacceptable arboricultural impact and provide an adequate level of protection for those trees that are to be retained.

1.2 This method statement has been produced for Mr K Thevarajah in order to inform the construction team and satisfy the requirements of the Local Planning Authority (LPA), London Borough of Hillingdon. The works are the subject of a planning refusal (application reference 74323/APP/2021/2509) and this arboricultural method statement has been prepared to support the appeal of that decision.

1.3 This method statement merely considers the systems of work in relation to the health and safety of retained trees. It does not address requirements of the Health and Safety Executive that should be considered in detail by those parties involved.

2.0 Related documents and drawings

2.1 This method statement should be read in conjunction with the documents in Table 1 below.

Table 1: Documents referred to

Originator	Title/Reference
British Standards Institute	*BS5837:2012 Trees in relation to design, demolition and construction – Recommendations*

and the following drawings in Table 2

Table 2: Drawings referred to

Originator	Drg No	Title
RS2 Ltd	2020-003/PL003	Proposed Site Plan
Keen Consultants	1781-KC-XX-YTREE-TCP01Rev0	Tree Constraints Plan
Keen Consultants	1781-KC-XX-YTREE-TPP01Rev0	Tree Protection Plan
Keen Consultants	1781-KC-XX-YTREE-TP01Rev0	Tree Planting Plan

3.0 Arboricultural issues & implications

3.1 Detail of the trees and their protection are discussed and detailed in the documents, and shown on the drawings, listed above and should be read in conjunction with this method statement.

3.2 The buildings are located remote from retained trees hence no special construction techniques are required to protect the trees and their rooting environment.

3.3 Tree removal is required.

3.4 Utility provision is needed but that can be located outside the root protection area of retained trees.

3.5 No monitoring of works is required.

4.0 Facilitation tree works

4.1 Tree removal is required to accommodate the proposed development.

4.2 Details of the tree work are given in the schedule on the Tree Protection Plan referred to in Table 2 above.

4.3 All tree work shall be undertaken in accordance with *BS3998:2010:Tree Work – Recommendations*.

5.0 General site care

5.1 To ensure that the trees to be retained are afforded an adequate degree of protection during the works, the following general precautions will be observed:

5.1.1 No fires will be lit on site

5.1.2 No access will be permitted within the temporarily barriered areas, unless and only where otherwise approved herein. Ground levels will not be changed within them and existing vegetation and topsoil will be left undisturbed but may be treated with approved herbicides if eradication is required.

5.1.3 No materials, equipment or debris will be stored within any of the barriered areas and no chemicals, petrol or diesel will be allowed to spill where they may contaminate the root protection areas of retained trees.

5.1.4 All heavy plant, machinery, cranes and delivery vehicles shall be excluded from the areas demarcated for protection on the Tree Protection Plan.

6.0 Sequencing of works

6.1 A logical sequence of events is to be observed as follows:

Stage 1 Pre-commencement site meeting (See Section 12).

Stage 2 Undertake tree works.

Stage 3 Erect protective barriers as shown on the drawing in Table 2 (specifications given in Section 7).

Stage 4 Implement development construction.

Stage 5 Take down protective barriers and complete soft landscape works.

7.0 Protective barriers and ground protection

7.1 Temporary barriers will be erected as indicated on the Tree Protection Plan listed in Table 2. The specification for this barriers will be in accordance with the recommendations given in *BS5837:2012 Trees in relation to design, demolition and construction – Recommendations* Section 6.2 and will comprise 2.0m mesh barriers (Heras type panels are a simple, readily available solution) attached to a scaffold framework. Support scaffolds will be attached to the scaffold framework as necessary at an angle of 45 degrees on the side of the trees and anchored by further scaffold poles carefully firmed into the ground. Alternatively, the alternative specification of Heras type panels, fitted with stabiliser struts as per Figure 3 of BS5837, may be used. Clear signs will be attached at 6 metre intervals along the line of barriers stating 'Tree Protection Area – No Access'.

7.2 The barriers shall remain in place until soft landscape operations require its full or partial removal (see section 11). No other construction activity will take place within those areas formerly protected by the fence (see Section 5).

8.0 Treatment of existing hard surfaces

8.1 Where existing hard surfaces are present within the root protection area they shall be broken up and removed by hand.

8.2 Roots often exist in the substrate below hard surfaces and extreme care must be taken to avoid damage to them.

8.3 Immediately after, the void left as a consequence of their removal shall be filled with good quality topsoil as a prelude to soft landscape unless a replacement hard surface is proposed whereupon it shall be completed in accordance with the instruction contained herein.

9.0 Creation of new hard surfacing within root protection areas

9.1 No new areas of hard surface are proposed within the root protection area of retained trees.

10.0 Excavations within root protection areas

10.1 No excavations are proposed within the root protection area of retained trees.

11.0 Reinstatement and landscaping

11.1 Final grading to marry in new levels with existing ground will be achieved by importing topsoil and spreading by hand equipment only. The newly graded areas will be grass seeded or turfed by hand.

11.2 All tree and shrub planting pits will be dug by hand within the root protection areas of existing trees.

12.0 Planning, communication and supervision

12.1 A list of useful contacts is attached at Appendix 1.

12.2 Given the small scale of the project and the remoteness of works from the retained trees there is no need to undertake supervision and monitoring by an arboricultural consultant.

12.3 It shall be the duty of the building contractor to ensure the requirements of this method statement are adhered to.

12.4 The site manager will brief all site personnel on the implications of the arboricultural method statement. A copy of this method statement will be available on site at all times.

13.0 Transgression

13.1 Failure to adhere to the requirements in this method statement may result in a Stop Notice being issued by the local authority. This will bring all operations at the site to a halt until the local authority permits resumption.

13.2 The following measures will be required, but do not absolve the perpetrator from action, if the identified transgression occurs:

a) Breakage of branches – the damaged shall be assessed by an arboriculturist, they shall advise on requirements and any pruning shall be undertaken in accordance with BS3998:2010 to remove the damaged section.

b) Damage to bark – the damage shall be assessed by an arboriculturist and they shall advise on the measures that can be taken to optimise the reparation of the damage. Some paring back of damage may be required.

c) Damage to roots – the damage shall be assessed by an arboriculturist and they shall advise on the pruning or reparation required.

d) Compaction of soil – where machinery operates outside of ground protection and hard surfaces, leading to the compaction of soil, the compaction shall be alleviated by using compressed air injected to circa 1m deep to create fissures in the ground and lift the compacted areas. The compaction shall be assessed by an arboriculturist. A specialist company (for example Terrain Aeration Ltd) shall be appointed by the contractor to undertake the work.

13.3 All items of transgression shall be reported to the Local Authority tree officer to consider if action should be taken.

14.0 Conclusion

14.1 If the provisions of this arboricultural method statement are complied with in full, the proposed works will be able to proceed without detrimental impact to retained trees.

Appendix 1

List of contacts

List of contacts

Site Address:	2 Arlington Drive Ruislip	
Site Manager:	To be decided (TBD)	Tele No:
Builder:	TBD	
Address:	TBD	
Contact Name:	TBD	
Arboricultural Consultant:	Jago Keen	
Address:	Keen Consultants The Studio Timbers Gables Road Church Crookham Fleet Hampshire GU52 6QY	
Tele No:	01252 850096 (office)	(mobile) 07836 279935
Local Authority Tree Officer	Sophie Coughlan scoughlan@hillingdon.gov.uk	
Local authority:	London Borough of Hillingdon	
Telephone No.:	01895 556000	