



TREE SURVEY, ARBORICULTURAL  
IMPLICATION ASSESSMENT &  
METHOD STATEMENT &  
TREE PROTECTION PLAN  
BS5837:2012

Title:	<b>Arboricultural Report</b>
Instructed by:	Mr Dave Hutchinson 83 Queen's Road, Buckhurst Hill, Essex IG9 5BW
Site Address:	83 Queen's Road, Buckhurst Hill, Essex IG9 5BW
Date of Site Visit:	Monday 6 <sup>th</sup> April 2020
Prepared by:	Andrew Phelps (Professional Member of the 'Consulting Arborist Society') Accredited by the 'Consulting Arborist Society' to carry out tree reports in accordance with BS5837:2012
Ref:	PS 1009
Date	Friday 17 <sup>th</sup> April 2020

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## **BRIEF**

- A Detailed tree survey of all standing trees on the site to the following specification
- Species name, Estimated height, Age Class, Condition key, General arboricultural comments and recommendations
  - Comments relating to the retention value of individual trees and tree groups within the delineated area to allow an assessment of development constraints
  - All information is to comply with BS 5837 – A guide to trees in relation to construction and BS 3998 – Tree works
- B Production of an accompanying tree constraints plan in PDF format / AutoCad (on supplied topographical drawing) detailing; tree numbers, protected areas, special measure areas and protective fencing requirements, in order to allow an assessment of relevant constraints.
- C Consideration of the quality of the tree stock, their contribution to public amenity and the suitability of the trees in the context of proposed development.

THE TREES REFERRED TO IN THIS REPORT ARE LIVING ENTITIES AND ARE THEREFORE SUBJECT TO NATURAL PROCESSES. THEY WILL ALSO BE SUBJECT TO CHANGES IN THEIR NATURAL ENVIRONMENT CAUSED BY HUMAN ACTIVITIES AND WEATHER CONDITIONS. THEREFORE WE CAN NOT WHOLLY GUARANTEE THE CONDITION AND SAFETY OF THE TREES COMMENTED UPON BEYOND WHAT CAN REASONABLY BE ASSESSED FROM THE PROCEDURE USED. TREES HAVE NOT BEEN AERIALY INSPECTED. WE RECOMMEND REGULAR INSPECTIONS AND ADVISE ON THE FREQUENCY AND TYPE OF INSPECTION. WE WOULD RECOMMEND THAT RE-INSPECTIONS ARE CARRIED OUT WITHIN ONE YEAR OR WITHIN SPECIFIC STIPULATED TIMESCALES. NO ASSESSMENT HAS BEEN MADE OF SOIL CONDITIONS AND THE IMPACT OF SOIL CONDITIONS ON TREE COVER / BUILT ENVIRONMENT. NO ASSESSMENT HAS BEEN MADE FOR UNDERGROUND SERVICES, PROPOSED OR EXISTING, UNLESS OTHERWISE STATED. THE CONTENTS OF THIS REPORT ARE VALID FOR ONE YEAR. THIS PERIOD OF VALIDITY MAY BE REDUCED IN CASE OF ANY CHANGE IN CONDITIONS TO, OR IN PROXIMITY TO, THE TREE. THE REPORT IS FOR THE SOLE USE OF THE CLIENT AND REFERS ONLY TO THOSE TREES REFERRED TO WITHIN, USE BY ANY OTHER PERSON(S) IN ATTEMPTING TO USE CONTENTS FOR ANY OTHER PURPOSE RENDERS THE REPORT INVALID FOR THAT PURPOSE.

## 1 Scope of the Report / Instructions

- 1.1 My name is Andrew Phelps. I am an associate consultant with Phelps Associates., Arboricultural Consultants, 1 Church Street, Epsom, KT17 4PF. I am instructed by Mr Dave Hutchinson to determine a tree survey for future development of the site at the rear of 83 Queens Road, Buckhurst Hill, IG9 5BW.
- 1.2 The main concerns of this report are to assess the trees in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations. To establish tree conditions and suitability to the site and landscape. Both general and specific tree management requirements are presented along with a tree/construction works specification. I am also asked to assess the likely impact of the proposed development on the surrounding trees and have included details of the working methods to be employed before and during construction.
- 1.3 The site was visited on Monday 6<sup>th</sup> April 2020 and 6 trees and groups of trees growing on and off site were assessed visually in accordance with Visual Tree Assessment (VTA) and compiled in the following survey sheets as numbered individuals and groups. Trees have been inspected from ground level only, and no decay detection equipment has been used.
- 1.4 No tissue samples were taken nor was any internal investigations of the subject trees undertaken.
- 1.5 No soil samples were taken.
- 1.6 The crown spreads were estimated by pacing.
- 1.7 Each individual tree has been assessed with general regard to condition, health and amenity, development context, retention value and commented upon in the following manner:
  - Tree Number
  - Tree Species
  - Estimated height
  - Estimated crown spread
  - Diameter at breast height
  - Vigour
  - Retention value
  - Arboricultural condition and recommendations for remedial works
- 1.8 Comments relate to species content, retention and amenity value, and have been provided with recommendations.

- 1.9 The trees have been classified according to their “desirability to retain”. This rates the amenity conferred by each tree and is based on the assumption that development will occur on the site and having given consideration to the recommendations of this report and BS 5837: 2012 – Table One.  
For clarification – the grading system can be summarised as follows:  
A – high quality & value, effective for more than 40 years  
B – moderate quality & value, effective for more than 20 years  
C – low quality & value , effective for 10 years  
U – trees for removal (effective for less than 10 years)
- 1.10 To ascertain the overall condition of a given tree, the survey sheets should be used in conjunction with the condition key (4.1)
- 1.11 To ascertain the age class of a given tree, the survey sheets should be used in conjunction with the age class key (4.2)
- 1.12 The trees on the site are subject to a general re-inspection schedule of six months from which a requirement for further monitoring or assessments will be judged.
- 1.13 Any specified remedial work recommendation is regardless of development plans and is based on current tree condition. Therefore, the start date for the implementation of remedial works is as specified and from the date of survey.

## **2 Tree Works**

- 2.1 All tree pruning and felling identified within the pruning regime shall be carried out in accordance with BS 3998 2010 Recommendations for Tree Work.
- 2.2 All tree work should be undertaken by a suitably qualified Arboricultural Contractor. No works shall be carried out until permission has been granted by the relevant Local Planning Authority. The Forestry Authority should be contacted to check as to whether a Felling License is required.

## **3 Limitations**

- 3.1 No assessment has been made of soil conditions/implications of soil conditions and root extent is indeterminate from this survey. We would urge that soil type is ascertained and tree related implications are assessed such as foundation type/depth in accordance with N.H.B.C. guidelines.
- 3.2 The survey boundaries have been taken from the supplied drawing. Boundary clarification will be required at various locations as recommended by this report.

3.3 The site is not known to be within a Conservation Area and there are no known tree preservation orders in force nearby. These trees are shown on the tree plans at Appendix 2 of this document.

3.4 No liability can be assumed to rest with Phelps Associates should conditions alter following our inspection of the site. Therefore, we must be informed immediately of any alterations to plans upon which our assessments and conclusions/recommendations have been based.

#### 4 **CONDITION, AGE, VIGOUR, AMENITY & RETENTION VALUE KEYS**

##### **Condition Key**

4.1 For the purposes of ascertaining the general overall Arboricultural condition of the trees / compartments referred to in the survey sheets the following key should be used.

<b>Good</b>	Generally classed as having good overall structural and physiological condition. Specimens in good/excellent condition. They generally have few and less significant arboricultural defects than those trees classed as “B” or “C”. Usually contribute significantly to the local or site amenity.
<b>Moderate</b>	Generally classed as having reasonable structural and physiological condition. They may contain smaller areas of included bark within either major or minor fork junctions. They may be subject to single or multiple fungal invasions, bacteria or virus. In the case of fungal invasion or bacteria the Latin name of the species has been stated. They may be subject to minor crown dieback, unusually pale or smaller foliage or have been subjected to outside influences such as restriction of rooting spread, vandalism or mechanical damage, but should be viewed as in generally good overall condition.
<b>Poor</b>	Generally classed as having poor overall structural or physiological condition. They may contain large areas of included bark either within major or minor fork junctions. They may be subject to single or multiple fungal invasions, bacteria or virus. In the case of fungal invasion or bacteria the Latin name has been stated. They may contain splits or cracks throughout the branching structure. They may be subject to significant crown dieback or exhibit unusually pale or small foliage, be defoliated or dead. They may be subject to outside influences such as restriction of rooting spread, vandalism or mechanical damage and costly to retain.

#### 4.2 Age Class Key

<b>NP</b>	Newly planted
<b>Y</b>	Young - Tree/shrub in first third of life expectancy
<b>MM</b>	Middle Mature – Tree in 2 <sup>nd</sup> third of life expectancy
<b>M</b>	Mature - In final third of life expectancy
<b>OM</b>	Over Mature – Declining in physiological functions

#### 4.3 Amenity Value Classifications

<b>High (A)</b>	Significant contribution to either local landscape, landscape within site or both. Tree cover in this category should be carefully managed to ensure that the contribution played by the tree within the landscape is not compromised.
<b>Moderate (B)</b>	Indicates that the tree provides some contribution to the local landscape or landscape within site. Consideration should be given to enhancing the landscape with planting if required and management should aim to further enhance the local landscape.
<b>Low (C)</b>	Indicates little, no or a negative contribution to the local landscape.

#### 4.4 Growth Vitality Key

<b>N</b>	Normal
<b>M</b>	Moderate (below normal)
<b>P</b>	Poor (sparse, weak)
<b>D</b>	Dead

#### 4.5 Retention Value Key

The trees have been classified according to a desirability to retain. This rates the amenity conferred on each tree / tree group and is based on the assumption that development will occur and given consideration to the main report findings. The categories are contained in the table - Table 1: Retention Value Key found in Appendix 3 of this report.

### 5 General Description of Site and Proposed Development

5.1 The site is located behind existing flats at 83 Queens Road just off Buckhurst Hill. The proposal sets out to build a new single storey property with basement as shown on the tree plan provided at Appendix 2. Full details of which can be provided by Burston Architects the project Architects.

## 6 Arboricultural Survey – Tree Details & Observations

- 6.1 The attached Tree Survey Schedule (see Appendix 1) details the significant trees in respect of their dimensions and quality in accordance with the methodology set out in the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations. Appropriate and relevant comments are also provided. The removal of dead, dying and dangerous trees is considered to be appropriate tree management irrespective of development. The proposed tree works are to be considered in conjunction with the development application.
- 6.2 In the following paragraphs I have provided further information relating to a specific trees and their management in the context of any proposed development.
- 6.3 T.1 Oak. A mature tree standing at approximately 16m in height with a crown spread of about 6m NSEW. This tree has been recorded as being a **Category 'B'** tree of moderate quality and value, being in good overall condition, however I could not inspect the base of the tree and therefore cannot be sure defects in this area are not present. The tree is also growing in a poor position and cannot be seen from outside the site. Having been regularly reshaped in the past, these works may be seen as having reduced its overall long term landscape and amenity value.
- 6.4 T.2 Fir. Growing off site and recorded as being **Category 'B'** tree of moderate quality and value. Standing at a height of about 11m and with a crown spread of 3.5m, this tree is in moderate condition and appeared to be free from visual defects.
- 6.5 T.3 Pear. Growing off site and recorded as being **Category 'C'** tree of low quality and value.
- 6.6 T.4 Pine. Growing off site and a relatively young tree, standing at about 10m tall with a crown spread of 3.5m. Recorded as being a **Category 'B'** value tree of moderate quality and value.
- 6.7 T.5 Pine. An off-site tree approximately 11m in height and recorded as being a **Category 'B'** value tree.
- 6.8 T.6G Various Species. Low value **Category 'C'** value trees.



## **7 Assessment of Proposed Development – Implications for Roots Throughout Construction Works**

- 7.1 The British standard recommends a minimum area around retained trees which should be protected from disturbance “in order to avoid damage to the roots or rooting environment.” This ‘Root Protection Area’ (RPA) is calculated, using Table 2 of the British Standard, as an area equivalent to that of a circle with a radius 12 times the stem diameter for single-stemmed trees, and for trees with more than one stem, one of the two calculations methods should be used as at 4.6 of the BS5837:2012.
- 7.2 Paragraph 4.6.3 of the British Standard states that any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:
- a) The morphology and disposition of the roots, when influenced by past or existing site conditions.
  - b) Topography and drainage.
  - c) The soil type and drainage.
- The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.
- 7.3 T.1 Oak. The tree plan at Appendix 2 shows us that the nearest elevation of the proposed new single storey development is 4.8m from the tree. The plan also shows us that the trees root protection radius, which was calculated to be 7.2m falls into the building footprint and equates to about 5% of the trees root protection area. I feel this incursion could be offset in order to allow development to proceed as in my view it will have little adverse effect on the tree’s health.
- 7.4 ‘Tree Plan 2’ at Appendix 2 shows us that all the remaining trees and their protection areas are located outside the footprint set out for development. Therefore, if the existing boundary fencing is removed to allow construction works to take place then protective fencing will be erected as shown on ‘Tree Plan 2’ in order to protect trees and their underlying roots.
- 7.5 The hard-standing drive area near T.1 Oak will be retained where possible, and only a small section of ground excavated within the trees RPA in order to insert foundations along the front elevation for the new building. Protective fencing can be erected near T.1 Oak as a precautionary measure primarily to protect the trees crown as shown on the plans provided.
- 7.6 All the existing vegetation and scrub growing on site will be removed prior to any works taking place on site.

## **8 On Site Storage of Spoil and Building Materials**

- 8.1 Prior to and during all construction works on site, no spoil or construction materials will be stored within the RPA of any tree on, or adjacent to the site, even if the proposed development is to be within the RPA. This is to reduce to a minimum the compaction of the roots of the trees. All building material will be stored on the front garden/drive area. Material can then be moved by hand for construction works.
- 8.2 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there is a multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe work shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.
- 8.3 All material storage facilities and work areas must consider the effects of sloping ground on the movement of potentially harmful liquid spillages towards or into protected areas.

## **9 Levels**

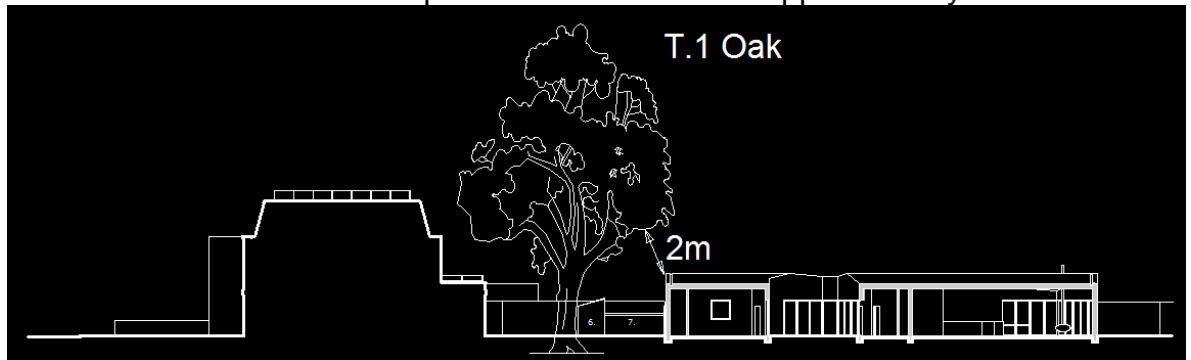
- 9.1 There will be no level changes within the RPA of retained trees on or off site. However, if it were necessary for these to occur, appropriate measures must be taken to prevent or minimise any detrimental effects on the affected root systems as detailed in 9.2 and 9.3 below.
- 9.2 If it is necessary to excavate so close to trees that roots greater than 50mm diameter are likely to be encountered, particular care will be taken to avoid damage. Excavation in these areas will be undertaken by hand or using an air spade, avoiding any damage to the bark. The roots will be surrounded with sharp sand prior to the replacing of any soil or other material in the vicinity.
- 9.3 If it is necessary to raise levels, it is essential that adequate supplies of water and oxygen through the soil to the trees' roots. Therefore, where necessary, a granular material will be used which will not inhibit gaseous diffusion. Possible options are no-fines gravel, cobbles or, Type 2 road-stone. All hard surfaces will be of suitable specification to allow such gaseous diffusion, e.g. brick pavers.

## 10 Services

- 10.1 All piped and ducted services (drainage) which include mains water, electricity, gas and telecommunications will run from the existing building and therefore will not enter the root protection area of any tree during construction, all details of service runs can be provided by the project Architect. Drainage will be installed in accordance with the recommendations of NJUG Volume 4: 'Guidelines for the planning, instillation and maintenance of utility apparatus in proximity to trees'.
- 10.2 It is therefore proposed that all underground service runs will be placed outside the RPA of the trees on or adjacent to the site.
- 10.3 All routes for overhead services will aim to avoid the trees. Where this is unavoidable any tree work will be agreed prior to commencement with the Arboricultural Officer.
- 10.4 All service providers (Statutory Authorities) will be consulted prior to commencement of works with the aim of minimising the number of service runs on the site.

## 11 Assessment of Proposed Development – Implications for Crown.

- 11.1 T.1 Oak. The plan below shows us that there is a satisfactory clearance between the trees canopy and the single storey building. The tree has a crown ground clearance of about 5m which provides a clearance of approximately 2m.



## 12 Tree Maintenance

- 12.1 There is adequate working space and clearance for all construction to be carried out during the development. Pruning works (if required) are included below. 'Recommended Schedule of Tree work' and would be undertaken in accordance with the recommendations of BS3998:2010 'British Standard Recommendations for Tree Work'. All tree pruning would reflect the character of the species and would not reduce the amenity value of retained trees.

<b>13 Recommended Schedule of Tree works (Initial Tree Works)</b>	
13.1	<ul style="list-style-type: none"><li>• No tree works currently recommended.</li></ul>

## 14 Conclusions

- 14.1 T.1 Oak. It is proposed to retain the hardstanding drive near T.1 which will ensure the protection of underlying roots. A small section of the existing hardstanding will be lifted and excavated for construction of the front elevation of the single storey building. Therefore, if fencing is erected directly on top of the hardstanding drive and 1m outside the proposed building footprint then this will provide adequate space for construction works whilst protecting the tree and its underlying roots. This tree was not inspected at close quarters, therefore I was unable to confirm that the tree was in good visual condition.
- 14.2 Logical Sequence of Events:
- Remove all vegetation and scrub on site to ground level
  - Remove site fencing where necessary
  - Erect tree protective fencing as shown on Tree Plan 2 at Appendix 2
  - Construct new building
  - Remove all protective fencing
- 14.3 The recommended tree root protection areas of trees marked on the 'Tree Protection Plan' should be seen as the broad limiting factors to the use of the site.
- 14.4 The design of the scheme accords with the relevant BS for trees and development (5837:2012) and for the vast bulk of the proposal exceeds the guidelines produced in this document.
- 14.5 Subject to proper and normal tree protection measures, the proposed development will not impinge adversely on the effects of the trees in the landscape.

I hope that you find this report satisfactory, please do not hesitate to contact me if I can be of further assistance.

Signed



Date.....17/04/2020

## Appendix 1 – Tree Survey Schedule

## 4.1 Tree Survey Schedule

<b>Site:</b>	83 Queen's Road, Buckhurst Hill, 5BW		<b>Andrew Phelps</b>
<b>Date of Survey:</b>	Monday 6 <sup>th</sup> April 2020	<b>Ref:</b>	PS 1009

Tree No	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter (mm)	No of Stems	Protection Radius	Vigour (Growth Vitality)	Structural Condition	Amenity Landscape Contribution	B.S Cat Ret Value	Sub Cat	Useful Life	Structural Condition/Observations
T.1	Oak	16	6	5	Mature	600 est	1	<b>7.2</b>	Normal	Good	Moderate	B	1/2	40	No visible defects
T.2	Fir	11	3.5	2	Mature	350 est	1	<b>4.2</b>	Normal	Good	Moderate	B	1	40	Cannot be widely seen.
T.3	Pear	8.5	4.5	2	Mature	300 est	1	<b>3.6</b>	Moderate	Good	Moderate	C	2	<40	In slow decline
T.4	Pine	10	3.5	3	Mature	200 est	1	<b>2.4</b>	Normal	Good	Moderate	B	1	40	No visible defects
T.5	Pin Oak	11	3.5	3.5	Mature	270 est	1	<b>3.2</b>	Normal	Good	Moderate	B	1	40	No visible defects
T.6G	Various Species	Up to 8	3	3	Mature	200 est	1	<b>2.4</b>	Normal	Good	Moderate	C	1	-	Low value trees

- Height describes the approx. height of the tree in metres from ground level.
- Crown spread refers to the crown radius in metres from the stem centre and is expressed as an average of NESW if symmetrical
- Ground Clearance is the height in metres of crown clearance above adjacent ground level.
- Diameter Breast Height (DBH) is the diameter of the stem measured in mm at 1.5m from ground level for single stemmed trees or at ground level for multi-stemmed trees. DBH may be estimated where access is restricted.
- Age Class is the tree's relative age to its species and is expressed as Newly planted (NP) Young (Y), Middle Mature (MM), Mature (M) and Over Mature (OM).
- Protection Multiplier is 12 for single stemmed trees and for trees with more than one stem diameter(s) should be measured in accordance with Annex C, and the RPA should be determined from Annex D of the BS5837:2012.
- Protection Radius is a radial distance in metres measured from the trunk centre.
- Growth Vitality - Normal; Moderate (below normal); Poor (sparse, weak); Dead (dead or dying tree)
- Structural/Arboricultural Condition – Good (no or only minor defects); Moderate (remediable defects); Poor (major defects present). See Condition Key (4.1) for detail
- Landscape Contribution – High (prominent landscape feature); Medium (visible in landscape); Low (secluded/among other trees)
- B.S Cat refers to (BS 5837:2012 Table 1) and refers to tree/group quality and value; 'A' – High; 'B' – Moderate; 'C' – Low; 'U' – Remove. **See Table 1 – Cascade chart for tree quality assessment**
- Sub Cat refers to the retention criteria values where 1 is arboricultural, 2 is landscape and 3 mainly cultural values, including conservation.
- Useful Life is the tree's estimated remaining contribution in years.

## Appendix 2 – Tree Protection Plans (Pdf)

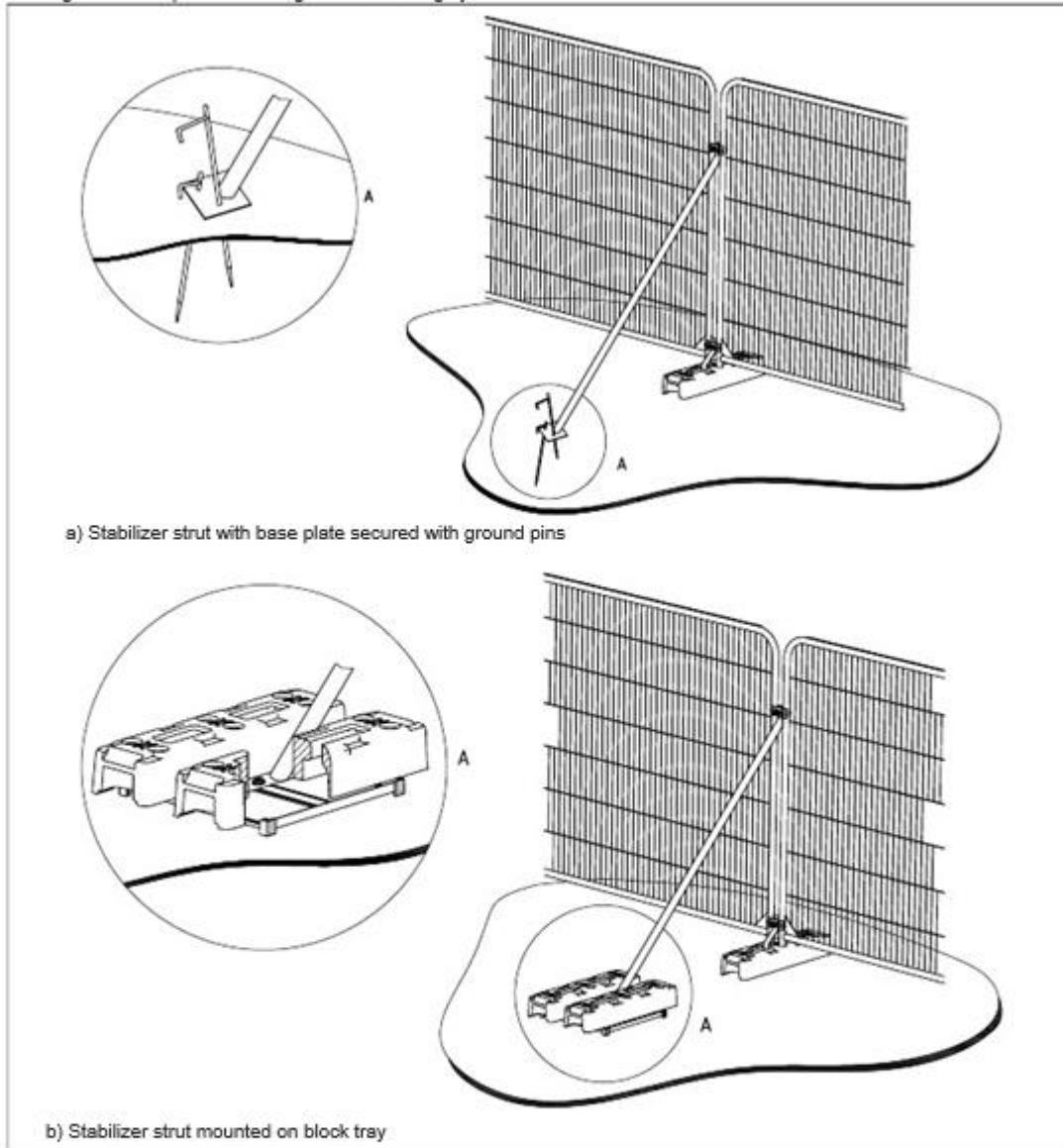
## Appendix 3 – Retention Value Key



<b>TREES FOR REMOVAL</b>				
<b>Category and definition</b>	<b>Criteria (including subcategories where appropriate)</b>			<b>Identification on Plan</b>
<p><b>Category U</b> 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</p>	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch Elm Disease) or very low-quality trees suppressing adjacent trees of better quality</li> </ul> <p><b>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</b></p>			<p><b>Dark Red</b></p> <p><b>0</b></p>
<b>TREES TO BE CONSIDERED FOR RETENTION</b>				
<b>Criteria – Subcategories</b>				
<b>Category and definition</b>	<b>1. Mainly arboricultural values</b>	<b>2. Mainly landscape values</b>	<b>3. Mainly cultural values (including conservation)</b>	
<p><b>Category A</b> <b>Trees of high quality with</b> an estimated remaining life expectancy of at least 40 years</p>	Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal Arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as Arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	<p><b>Light Green</b></p> <p><b>0</b></p>
<p><b>Category B</b> <b>Trees of moderate value</b> with an estimated remaining life expectancy of at least 20 years</p>	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little contribution to the wider locality	Trees with material conservation or other culture value	<p><b>Mid Blue</b></p> <p><b>4</b></p>
<p><b>Category C</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</p>	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	<p><b>Grey</b></p> <p><b>Up to 5</b></p>

## Appendix 4 – Protective Fencing

Figure 3 Examples of above-ground stabilizing systems



### 6.2.3 Ground protection during demolition and construction

Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

## Appendix 5 – Tree Protection Induction Forms

# TREE PROTECTION INDUCTION FORM

**NAME:** .....

**COMPANY:** .....

The trees growing on and off site at 83 Queen's Road, Buckhurst Hill, IG9 5BW provide some amenity to this immediate area. Therefore they will be retained and must not be damaged in any way. The retention of these trees is important and they must not be damaged in any way. To protect these trees, fencing will be constructed and this needs to remain in good condition and in situ until the construction is completed.

To reduce the chances of damaging trees on the site, please observe the following:

- **DO NOT** use trees as a support for electricity wires, telephone lines or signs
- **DO NOT** use the area within the protective fencing to store or mix materials
- **DO NOT** light bonfires anywhere near trees – use a designated bonfire area
- **DO NOT** attempt any excavation works within the protective area  
(Except where works approved by LPA)

If any trees become damaged during construction, please report this immediately to the Site Manager.

I have read and understand the above:

.....  
(Print)

.....  
(Signed)

.....  
(Date)

# TREE DAMAGE PROCEDURE

<b>CONSTRUCTION MATERIAL SPILLAGE</b>	<b>DIRECT DAMAGE TO TREES</b>	<b>ROOT DAMAGE TO TREES</b>
<ul style="list-style-type: none"> <li>• Materials include fuel, Chemicals, paint, Cement, etc.</li> <li>• Contain spillage Immediately.</li> <li>• Remove top layer of Contaminated soil if possible without damaging the rooting system.</li> <li>• Contact LPA Tree Officer and seek Further advice.</li> </ul>	<p><b>Bark Damage:</b></p> <ul style="list-style-type: none"> <li>• Replace area of damaged bark and cover with polythene</li> <li>• Contact LPA Tree Officer and seek further advice</li> </ul> <p><b>Branch Damage:</b></p> <ul style="list-style-type: none"> <li>• Remove damaged section of branch using a clean sharp pruning saw if it is safe to do so.</li> <li>• Contact LPA Tree Officer and seek further advice.</li> </ul>	<ul style="list-style-type: none"> <li>• Backfill damaged area using good quality topsoil.</li> <li>• Apply woodchip to a depth of approximately 150 millimetres to retain soil moisture.</li> <li>• Contact LPA Tree Officer and seek further advice.</li> </ul>

Any queries regarding this Method Statement should be addressed, in the first instance, to **Phelps Associates Arboricultural Consultancy:**

- Telephone: 07877 822976
- E-mail: info@treeconsult.co.uk

## Appendix 6 – Construction Exclusion Zone Notice



**PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.**



**TREE PROTECTION AREA  
KEEP OUT !**  
**(TOWN & COUNTRY PLANNING ACT 1990)**  
**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.**  
**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION**  
**ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY**