

# Arboricultural Impact Assessment

## BS5837:2012



**Site:** Inc. Of Alcester Rd and Gorsey Ln, Wythall,  
B47 6JH

**Ref:** EA-2021-053 (AIA)

**Date:** 5 July 2021

**Tel:** 01902 475 001

**E-mail:** [info@edentreesurveys.co.uk](mailto:info@edentreesurveys.co.uk)



Eden Arboriculture Ltd

## CONTACTS

---

Client Details		
<b>Highbury Design Ltd</b>	<b>Address:</b>	<b>94 Alcester Road Studley Warwickshire B80 7NX</b>
	<b>Contact Numbers:</b>	
	<b>E-mail:</b>	

Consultancy Details		
<b>Eden Arboriculture Ltd</b>	<b>Address:</b>	
	<b>Contact Numbers:</b>	<b>01902 475 001</b>
	<b>E-mail:</b>	<a href="mailto:info@edentreesurveys.co.uk">info@edentreesurveys.co.uk</a>

## Report Control Sheet

<b>General Report Information</b>	
Client	Highbury Design Ltd
Report Title	Arboricultural Impact Assessment
Location	Jnc. Of Alcester Rd and Gorsey Ln, Wythall, B47 6JH
Date of site visit	15 May 2021
Arboricultural Surveyor name	Christopher Garner. Dip Arb Level 6 (ABC), MArborA, Tech Cert ArborA, Lantra PTI
Date report issued	5 July 2021
Report approved by	Christopher Garner. Dip Arb Level 6 (ABC), MArborA, Tech Cert ArborA, Lantra PTI

## CONTENTS OF REPORT

---

1	Introduction .....	4
2	Site Description .....	7
3	Arboricultural Impact Assessment.....	8

### Appendices

1	Terms and Definitions .....	17
2	Authors Qualifications and Experience.....	19
3	Tree Survey .....	21
4	Tree Categorisation Table (BS5837:2012) .....	26
5	Specification for Tree Protection Barriers .....	27
6	References .....	28

# 1 INTRODUCTION

---

## 1.1 Instruction

- 1.1.1 The report is produced at the instruction of Gary Phillips of Highbury Design Ltd. The instruction was received by e-mail on the 14<sup>th</sup> of May 2021 after earlier discussions by e-mail.
- 1.1.2 The instruction is to produce a tree survey and arboricultural impact assessment as a formal report in accordance with BS5837:2012 to be submitted as part of an application for full planning consent.

## 1.2 Tree Survey

- 1.2.1 The tree survey is undertaken by a suitable qualified Arboriculturist and was produced independent of any proposed layout. The completed survey will be used to identify trees on the site and categorise those which are most suitable for retention in order to enhance the development. Detail on tree categorisation can be viewed in appendix 4.
- 1.2.2 The tree survey was carried out on the 14<sup>th</sup> of May 2021.
- 1.2.3 The tree survey collected relevant information in accordance with BS5837:2012 which are as follows:
  - a) Tree identification number (which is linked to the plan)
  - b) Species using common names. Scientific names will be identified in appendix 3
  - c) Height (Metres) measured with a laser distometer
  - d) Stem diameter (mm) at 1.5M above ground measured with a girthing tape.
  - e) Branch spread to the four cardinal points (Metres) measured with a laser distometer
  - f) Existing height above ground of first branch and direction. (Metres)
  - g) Existing height above ground of canopy. (Metres)
  - h) Life Stage. Young, Early Mature, Mature, Over Mature. See appendix 3 for definitions.
  - i) General observations
  - j) Estimated remaining contribution in years. <10, 10+, 20+, 40+
  - k) Grading category as per appendix 4.
  - l) RPA (expressed as a radius)
  - m) RPA (expressed in square metres)

- 1.2.4 Full detail of the tree survey which informs the quality and value of the trees can be found within appendix 3.

### **1.3 Scope of the Report**

- 1.3.1 The aim of the report is to give guidance and recommendations on the relationship between trees, design, demolition and construction activities with the purpose of creating a harmonious and sustainable situation in which trees and built structures can co-exist.
- 1.3.2 The report will aim to identify the value and quality of woody vegetation on and around the site. The data gathered during the survey will be used to identify the impact that the vegetation will have on the proposed development and vice versa.
- 1.3.3 As a result, the information gained will be used to make recommendations to ensure the protection of all existing vegetation which is to be retained.
- 1.3.4 It will also give an indication of which trees are to be removed and provide a suitable justification and make recommendations for mitigation planting where appropriate.
- 1.3.5 Subsequent to, and depending on the results of the report, there may be a requirement to produce an Arboricultural Method Statement in order to secure the protection of the trees through the construction phase and into the future.

### **1.4 Limitations and Copyright**

- 1.4.1 The content of the tree survey is intended to inform the most appropriate way forward in terms of development. It is not intended to be used as a detailed tree risk management survey. All observations were made from ground level only and are visual in nature. Should trees with significant defects which present an imminent danger be identified during the survey, this will be brought to the attention of the client immediately and as a separate matter. Should trees require a more detailed inspection (e.g. aerial inspection or decay detection) but the condition is not considered to be imminently dangerous, then this will be identified within the survey and addressed through preliminary management recommendations.
- 1.4.2 The report does not make reference to protected species (e.g. Bats) and the investigation of the presence of such species remains the responsibility of the client. The disturbance of such species may carry heavy penalties and the client is advised to seek professional advice before implementing any of the recommendations contained within the report (or Arboricultural Method Statement) if their presence is suspected.
- 1.4.3 No samples were taken from site for lab analysis or for any other purpose.
- 1.4.4 Copyright – all rights to the report are reserved by the author. No parts of the report are to be sold, lent or hired to any third party not directly involved with the site or the planning application without the written consent of the author.
- 1.4.5 Comments made in relation to tree health are reflective of their physical condition at the time of the survey. Changes in condition may occur due to external influences (e.g. construction

activities, pathogens, climatic events, etc.) and the author cannot take responsibility for changes in condition once the site visit has been completed.

1.4.6 The report is valid for a period of 1 year.

1.4.7 I have not checked with the local planning authority for the existence of any TPO's or the presence of a designated conservation area. Written consent may therefore be required from the LPA before implementing any of the works contained within the report, if either of these planning restrictions are in place. This remains the responsibility of the client.

1.4.8 Disclaimer. Should any part of the report be altered or tampered with in any way, then this will invalidate the entire document.

## 1.5 Documents Provided

1.5.1 I was provided with the following documents by the client Mr Phillips via e-mail:

Drawing Number	Drawing Title	Date
3630_010 A	Survey Area	12/03/21
3620_011 A	Proposed Site Plan	04/05/21

## 1.6 Plans Supplied Supporting this Report

The following plans were produced and supplied to accompany this report:

Drawing Number	Drawing Title	Date
EA-2021-053 (TCA)	Tree Constraints Plan	14/06/21
EA-2021-053 (TIP)	Tree Impact Plan	17/06/21
EA-2021-053 (TShP)	Tree Shading Plan	17/06/21
EA-2021-053 (TPP)	Tree Protection Plan	05/07/21

## 2 SITE DESCRIPTION

---

### 2.1 Location and Surroundings

The site is situated at the corner of Alcester Road and Gorsey Lane at the western edge of the village of Wythall.

### 2.2 Current Use

The site is currently occupied by a detached bungalow which has fallen into disrepair. The garden areas are overgrown and dense with self-set and unmanaged vegetation.

### 2.3 Access

Access to the site is from the south-east corner via the existing driveway.

### 2.4 Levels

I have not been provided with any information on levels but in general the site appears to slope downward gently from south to north.

### 2.5 Geology

I have not been provided with any information on soil type or modified plasticity index at this time.

### 2.6 The Proposal

The proposal is to move the incoming access to the south-west corner and renovate the existing bungalow. Within the garden to the north there will be a pair of semi-detached properties and two detached properties. All will benefit from off-road parking and private garden areas.



### 3 ARBORICULTURAL IMPACT ASSESSMENT

#### 4.1 The Impact of the Development on the Trees

##### 4.1.1 Tree removals

The implementation of the development would require the removal of the following trees:

Tree No.	Species	Retention Category	Reason for Removal	Impact
H5	Lawsons Cypress Hedge	C2	To improve outdoor amenity space	Low – low quality and located internally with no impact on street scene
T6	Apple	C2	To improve outdoor amenity space	Low – low quality and located internally with no impact on street scene
H7	Leyland Cypress Hedge	C2	Conflicts with footprint of house and paving	Low – low quality and located internally with no impact on street scene
T8	Leyland Cypress	C1	Conflicts with footprint of house	Low – low quality and located internally with no impact on street scene
T9	Cherry	C1	Conflicts with footprint of house	Low – low quality and located internally with no impact on street scene
T10	Maple	U	Conflicts with footprint of paving	Low – very low quality with fire damage and located internally with no impact on street scene

Tree No.	Species	Retention Category	Reason for Removal	Impact
T12	Larch	U	Dead tree	Low – tree is dead and needs to be felled irrespective of the development. Very low quality.
T14	Rowan	U	Dying tree	Low – tree is dead and needs to be felled irrespective of the development. Very low quality.
H15	Lawsons Cypress Hedge	C2	Conflicts with driveway footprint	Low – low quality hedge located internally with little impact on the street.
T16	Yew	C1	Conflicts with driveway footprint	Low – low quality tree located internally with little impact on the street.
T17	Lawsons Cypress	C1	Conflicts with driveway footprint	Low – low quality tree located internally with little impact on the street.
T21	Lawsons Cypress	C1	Conflicts with driveway footprint	Low – low quality tree located internally with little impact on the street.
T22	Lawsons Cypress	C1	Conflicts with driveway footprint	Low – low quality tree located internally with little impact on the street.

Tree No.	Species	Retention Category	Reason for Removal	Impact
T23	Atlas Cedar	U	Conflicts with driveway footprint. Significant dieback from needle blight disease	Low – low quality tree located internally with little impact on the street. Should be felled irrespective of the development.
T24	Lawsons Cypress	C1	Conflicts with driveway footprint	Low – low quality tree located internally with no impact on the street.
T25	Larch	C1	Conflicts with driveway footprint	Low – Although the tree forms part of the green boundary it is low quality. It is recommended that a small tree is planted within the front garden of 383 to replace the green boundary internally when viewed through the new driveway opening.
T26	Larch	C1	Conflicts with driveway footprint	Low – Although the tree forms part of the green boundary it is low quality. It is recommended that a small tree is planted within the front garden of 383 to replace the green boundary internally when viewed through the new driveway opening.

Tree No.	Species	Retention Category	Reason for Removal	Impact
T27	Apple	B1	Conflicts with proposed garage footprint	Moderate – This is the only tree that needs to be removed that isn't low quality. The impact of its removal will be significantly mitigated as it is screened by the retention of T29 and T30.
T28	Apple	C1	Removal required to improve outdoor amenity space	Low – low quality tree located internally with no impact on the street.

The majority of the trees that are to be removed are considered to be low or very low quality. Only T27 is considered to be of moderate quality (Cat. B) but its removal will have little impact on the street as it is hidden back within the site. All of the remaining Cat. B trees are to be retained most of which are situated around the boundary screening the development from the street scene.

#### 4.1.2 Foundations

The installation of foundations for the proposed building will impact on the RPAs of the trees as follows:

- Plot 1. No impact as building does not conflict with RPAs of any of the trees.
- Plot 2. The installation of the foundations will conflict with the RPA of T4 occupying 1.3m<sup>2</sup> (i.e. 0.95%) of the RPA.
- Plot 3. No impact as building does not conflict with RPAs of any of the trees.
- Plot 4. The installation of the foundations will conflict with the RPA of T34 occupying 1.5m<sup>2</sup> (i.e. 0.59%) of the RPA.

The incursion of buildings into the RPAs of the trees does not exceed 1% and when it is considered that the RPAs can be extended in the opposite direction to compensate, such a small impact should not negatively affect the trees. To mitigate further it is

recommended that the excavation of foundations within RPAs are carried out strictly by hands with exposed roots pruned back carefully with sharp secateurs.

#### 4.1.3 Drives, parking areas and pathways

Proposed access drive and parking. The proposed access and parking will sit within the RPAs of T18, T19, T20, T31, T32, T33 and T34 by varying amounts. Installation of the driveways by conventional means would lead to root severance and damage to the trees and so an engineering solution will need to be devised.

It is recommended that the drive is graded up from the street so that when into the site the drive forms a flat surface installed using a no-dig system. The no-dig system will be installed above the existing ground level and will utilise a 3D load-spreader infilled with a no fines aggregate and be finished with a porous wearing course. As the crossover does not conflict with RPAs this can be installed by conventional means and simply be graded up to meet the new drive.

Patio areas. With the exception of Plot 1 and No. 383 all patios will also conflict with the RPAs of retained trees. As such, the patio areas for plots 2 – 4 should again be installed using a no dig system.

A full specification for no dig surfaces could be provided within the arboricultural method statement (AMS) to be agreed by the project engineer. It respectfully suggested that the AMS should be secured through an appropriately worded planning condition to be discharged pre-commencement.

#### 4.1.4 Services

I have not been provided with any information on the installation of services for the buildings at this time but there is more than sufficient space to install service trenches around the site without impacting on any of the retained trees. To be clear, under no circumstances should service trenches, soak-aways or other drainage features be positioned within the RPAs of any of the retained trees.

#### 4.1.5 Tree pruning

The east canopy of T34 will need to be reduced by 2m to provide clearance for the scaffold. These works will be relatively minor and not to the detriment of the tree. The works will also be on the opposite side of the tree to the public highway and so the tree will not be impacted visually.

#### 4.1.6 Damage to root systems

The trees will be protected by the installation of tree protection barriers in positions as detailed on the Tree Protection Plan. Installation of the foundations and hard surfaces within RPAs will be as discussed within 4.1.2 and 4.1.3 with a detailed specification to be supplied pre-commencement. Barriers in this area shall be offset to allow for works with temporary ground protection installed to protect the tree's roots.

#### 4.1.7 Damage to above ground parts of the tree

The trees will be protected by the installation of tree protection barriers in positions as detailed on the Tree Protection Plan.

#### 4.1.8 Pressure for future tree removal

T4 and T34 will need some periodic pruning to maintain clearance from the buildings and reduce the impact. The garden to the east of plot 3 will be significantly shaded by T4 but there will be a second garden section to the north where the tree will be much less imposing. All properties have good garden space where the trees will be sufficiently distant so as to minimise the pressure for tree removal.

#### 4.1.9 Storage and mixing of heavy and toxic materials

There is sufficient space for the storage and mixing of materials as identified on the Tree Protection Plan.

#### 4.1.10 Space for future tree development

As previously stated, the interior side of the canopies of T4 and T34 will need some periodic light pruning to maintain clearance. These works will be minor and not to the detriment of the trees.

#### 4.1.11 Demolition

No demolition works are required.

## **4.2 The Impact of the Trees on the Development**

### **4.2.1 Potential for direct damage**

All buildings should be sufficiently distant from retained trees to make direct damage unlikely as long as they are engineered appropriately.

Any new tree planting will need to be positioned so as to avoid direct damage to any of the new structures.

### **4.2.2 Potential for indirect damage**

I have not been provided with any detail on soil type or modified plasticity index.

### **4.2.3 Shading**

The site has a woodland feel which will be immediately obvious to potential buyers. Plot 4 in particular will be shaded during the afternoon but should receive good levels of sunlight during the morning. All other plots will receive higher levels of sunlight for more of the day. The newly published 'England Trees Action Plan 2021-2024' sets a target to increase canopy cover from current 10% to 12% as a minimum by 2050 to mitigate climate change. No doubt over time this target will increase and so shade within residential areas will become an accepted reality.

### **4.2.4 Seasonal nuisance**

There will be some leaf fall onto site during the autumn which will need to be considered as part of the properties garden maintenance. Gutters and downpipes should be fitted with leaf guards to mitigate the impact.

### **4.2.5 Privacy and screening**

The majority of the vegetative screening around the boundary will be retained and there may be some scope for additional tree planting if the council desires it.

It is respectfully suggested that if additional tree planting is required then this should be secured through an appropriately worded planning condition.

### **4.3 Issues to be addressed by the Arboricultural Method Statement**

4.3.1 It may be possible to secure tree protection through conditioning the draft TPP but if additional information is required in the form of an Arboricultural Method Statement then it is respectfully suggested that this should be secured through an appropriately worded planning condition. The following issues shall be addressed:

- i. Site construction access
- ii. Contractor's car parking
- iii. Phasing of on-site operations
- iv. Welfare facilities (requirement and siting)
- v. Storage and mixing areas
- vi. Tree Protection (barriers and ground protection specification)
- vii. Tree Protection Plan (final version – if amendment is required)
- viii. Installation of foundations within the RPA
- ix. Installation of no-dig surfaces
- x. Removal of materials, facilities, and protective measures for the final phase
- xi. Post construction tree works and landscaping
- xii. Monitoring



# Appendices

# 1 TERMS AND DEFINITIONS

---

## **Access facilitation pruning**

A one-off tree pruning operation, the nature and effects of which are without significant adverse impact on the tree(s) physiology or amenity value, which is directly necessary to provide access for operations on site.

## **Arboricultural Method Statement**

A methodology for the implementation of any aspect of development that is in the RPA, or has the potential to result in loss or damage to a tree to be retained.

## **Arboriculturist**

A person who has through relevant education, training and experience, gained expertise in the field of trees in relation to construction.

## **Competent Person**

A person who has had training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached.

## **Construction**

A site-based operation with the potential to affect existing trees.

## **Construction Exclusion Zone**

An area based on the RPA from which access is prohibited for the duration of the project.

## **Root Protection Area (RPA)**

A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

## **Service**

Any above- or below- ground structure or apparatus required for utility provision.

## **Stem**

The principal above-ground structural component(s) of a tree that supports its branches.

## **Structure**

Manufactured objects, such as a building, carriageway, path, wall, service run and built or excavated earthworks.

### **Tree Protection Plan**

A scale drawing, informed by descriptive text where necessary, based upon the finalised proposals, showing trees for retention and illustrating the tree and landscape protection measures.

## 2 AUTHORS QUALIFICATIONS AND EXPERIENCE

---

### Qualifications:

Level 6 Diploma in Arboriculture (ABC)	2014
Technicians Certificate in Arboriculture (Merit)	2009
Lantra Accredited – Professional Tree Inspector	2006
NCH Arboriculture (Merit)	1998
City and Guilds (Phase 2) Amenity and Landscape Horticulture	1992
City and Guilds (Phase 1) Amenity Horticulture	1991

### Experience:

Arboricultural Consultant. (Eden Arboriculture Ltd)	2013 – present
Local Authority Tree Officer. (Planning / Tree Preservation)	2010 – present
Local Authority Tree Officer. (Risk Management / Asset Management)	2005 – 2010
Chargehand Arborist	2002 – 2005
Arborist (Tree Surgeon)	1998 – 2002
Horticulturalist	1992 – 1997
Trainee Horticulturalist	1990 – 1992

### Continuing Professional Development:

Tree risk and climate change seminar (MTOA)	2020
RootBridge™ CPD Event	2020
Excellence in Report Writing (Day 1 of CUBS Cert) Bond Solon	2019
Witness Box Training (Day 2 of CUBS Cert) Bond Solon	2019
Picus – Advanced Assessment Day – Sorbus	2019
A New Universal Understanding of Design in Nature and VTA Update (Claus Mattheck - Loughborough University)	2018
Day for Aspiring Registered Consultants (Arb Association)	2018
Risk Management Training (Arb Association)	2017
Assessment of Tree Forks (Arb Association)	2017
Investigative Procedures (Daniel Training Services)	2017
Trees People and the Built Environment (ICF)	2017
Quantified Tree Risk Assessment (QTRA)	2016
Visual Tree Assessment (QTRA)	2016
Tree Bracing (MTOA)	2015
Trees in Crisis (MTOA)	2014
Consulting Arborist Society – TPO Expert	2014
Mortgage report writing – Tree Life Training	2014
Consulting Arborist Society – Mortgage and Insurance Expert (AMIUG)	2013

Getting to Grips with Subsidence – Arboricultural Association	2013
Engaging Arboricultural Contractors	2006
Bats and Arboriculture – A Guide for Practitioners	2004
Location and Avoidance of Underground Apparatus	2003

**Memberships:**

In order to stay up to date with current issues, Chris is a member of the following organisations:

1. The Arboricultural Association – Professional Member.
2. The Consulting Arborists Society – Professional Member.
  - Accredited Tree Inspection Expert.
  - Accredited Mortgage and Insurance Expert. (AMIUG)
  - Accredited TPO Expert
3. The Institute of Chartered Foresters.
4. The Subsidence Forum

### 3 TREE SURVEY

---

**Key to scientific names:**

Common Names	Scientific Names
Apple	<i>Malus domestica</i>
Ash	<i>Fraxinus excelsior</i>
Atlas Cedar	<i>Cedrus atlantica</i>
Birch	<i>Betula pendula</i>
Cherry	<i>Prunus avium</i>
Douglas fir	<i>Pseudotsuga menziesii</i>
Hawthorn	<i>Crataegus monogyna</i>
Holly	<i>Ilex aquifolium</i>
Larch	<i>Larix decidua</i>
Lawsons Cypress	<i>Chamaecyparis lawsoniana</i>
Leyland Cypress	<i>XCuprocyparis leylandii</i>
Norway Maple	<i>Acer platanoides</i>
Oak	<i>Quercus robur</i>
Rowan	<i>Sorbus aucuparia</i>
Sycamore	<i>Acer pseudoplatanus</i>
Yew	<i>Taxus baccata</i>

**Key to Life Stage description:**

Young	Newly planted
Semi Mature	Large nursery stock which can be newly planted or still in the stages of establishment
Early Mature	Tree in the first third of its life cycle, growing quickly
Mature	Tree in the second third of its life cycle, maintaining its ultimate size with minimal annual growth
Over Mature	Tree in the final third of its life cycle, starting to show signs of decline

Tree No.	Species (Common Name)	Height (m)	Stem Dia. @ 1.5m (mm)	Branch Spread (m) N-E-S-W				Height of First Branch (m) and Direction	Canopy Height (m)	Life Stage. Y, SM, EM, M, OM	General Observations. Condition and Management Recommendations	Estimated remaining Contribution (Yrs) <10, 10+, 20+, 40+	Retention Category	RPA - radius (m)	RPA (m2)
T1	Larch	16	420	4.5	4	4#	3	N/A	4	M	The inspection of this tree was restricted by ivy - no visible defects - strip the ivy if retained	20+	B1	5.1	81
T2	Sycamore	15	400,550,550#	1.5	8	8.5	8.5	2-S	2	M	The inspection of this tree was restricted by ivy - minor deadwood is present, there are compression forks with no visible separation - strip the ivy and re-inspect if retained - there is a large pruning wound with some decay - there is a lapsed pollard	20+	B1	10.5	346
T3	Holly	6	120,120	2	2	2.5	2	N/A	2.5	SM	A low-quality tree with no significant defects	20+	C1	2.1	14
T4	Norway Maple	15	540	6	6.5	6	6	1.4 - E	4	EM	This tree has Compression forks at 1.8 metres with no separation - there are pruning wounds with no decay	20+	B1	6.6	137
H5	Lawsons Cypress Hedge	6	200	2	2	2	2	N/A	2	EM	A low-quality hedge with no significant defects	40+	C2	2.4	18
T6	Apple	9	90,110,150	1#	2.5	4	4#	N/A	2	EM	This low-quality tree has a compression fork at the base with no separation	40+	C2	2.4	18
H7	Leyland Hedge	5	150	2	2	2	2	N/A	0	EM	A low-quality hedge with no significant defects	40+	C2	1.8	10
T8	Leyland Cypress	5	120	2	2	2	2	N/A	1	EM	A low-quality tree with no significant defects	40+	C1	1.5	7
T9	Cherry	6	70	2	3	2	1.5	N/A	1	SM	A low-quality tree with no significant defects	40+	C1	0.9	3
T10	Maple	6	100	2.5	3	2.5	2.5	N/A	1	SM	This low-quality tree has fire damage on the west side, there is a Compression fork at 2 metres - squirrel damage is evident	<10	U	1.2	5
H11	Hawthorn Hedge	2 to 5	150	2	2	2	2	N/A	1	M	This hedge sits offsite	40+	C2	1.8	10



Tree No.	Species (Common Name)	Height (m)	Stem Dia. @ 1.5m (mm)	Branch Spread (m) N-E-S-W				Height of First Branch (m) and Direction	Canopy Height (m)	Life Stage. Y, SM, EM, M, OM	General Observations. Condition and Management Recommendations	Estimated remaining Contribution (Yrs) <10, 10+, 20+, 40+	Retention Category	RPA - radius (m)	RPA (m2)
T12	Larch	9	250	2	2	2	2	N/A	2	M	This tree is ivy clad and dead - fell	<10	U	3	28
T13	Douglas Fir	18	370	4	3.5	3.5	3.5	N/A	8	EM	There is bark damage at the base with slight decay - there is an occluded crack at the base - fell	10+	C1	4.5	64
T14	Rowan	10	210	2	4	2	0	N/A	5	EM	This tree has significant dieback with significant deadwood and nectria canker - fell	<10	U	2.4	18
H15	Lawsons Cypress Hedge	13	400	3	3	3	3	N/A	1	EM	A low-quality hedge with no significant defects	40+	C2	4.8	72
T16	Yew	8	330	4.5	4.5	2	2	N/A	1	EM	A low-quality tree with no significant defects	40+	C1	3.9	48
T17	Lawsons Cypress	7	120,200	2	2	2	2	N/A	2	EM	A low-quality tree with no significant defects	40+	C1	2.7	23
T18	Oak	14	400,410,450	8	4	8#	8#	S-4	4	M	This tree has compression forks at the base with no integration, reduce the height by 3 metres and reshape	20+	B1	8.7	238
T19	Ash	14	140,230,340	6	8	8#	3#	N/A	2	M	This low-quality tree has compression forks at the base with no separation	10+	C1	5.1	81
T20	Birch	15	440	4.5	4.5	4.5#	4.5#	N/A	7	M	The inspection of the base of this tree was restricted by the fence - No visible defects	20+	B1	5.4	92
T21	Lawsons Cypress	10	330	3	3	3	3	N/A	4	M	This low-quality tree has split limbs growing east	20+	C1	3.9	48
T22	Lawsons Cypress	10	200,110,310	2	2	1.5	2	N/A	2	M	This low-quality tree is ivy clad	20+	C1	4.5	64
T23	Atlas Cedar	11	530	7	5.5	3.5	3.5	4-N	4	M	This tree has large pruning wounds and needle blight	<10	U	6.3	124
T24	Lawsons Cypress	11	430	2	2	2	2	N/A	1	M	The inspection of the base of this low-quality tree was restricted by dense shrubbery - No visible defects	20+	C1	5.1	81
T25	Larch	11	300#	2.5	7.5	4#	3	2-N	2	EM	The inspection of the base of this low-quality tree was restricted by dense shrubbery - No visible defects	20+	C1	3.6	41

Tree No.	Species (Common Name)	Height (m)	Stem Dia. @ 1.5m (mm)	Branch Spread (m) N-E-S-W				Height of First Branch (m) and Direction	Canopy Height (m)	Life Stage. Y, SM, EM, M, OM	General Observations. Condition and Management Recommendations	Estimated remaining Contribution (Yrs) <10, 10+, 20+, 40+	Retention Category	RPA - radius (m)	RPA (m2)
T26	Larch	11	300#	3	3	5	3	N/A	3	EM	The inspection of the base of this low-quality tree was restricted by dense shrubbery - No visible defects	20+	C1	3.6	41
T27	Apple	11	400 below fork	5.5	4	4#	5.5	1.5-W	2	M	There are forks at 1.5 metres - deadwood is present	20+	B1	4.8	72
T28	Apple	8	220	3	2.5	2.5#	2.5	N/A	2	M	The inspection of the base of this low-quality tree was restricted by shrubbery - deadwood is present - too close to the wall	10+	C1	2.7	23
T29	Ash	12	340	4	5#	5	4	N/A	3	EM	This low-quality tree has ivy on the trunk - sits offsite	20+	C1	4.2	55
T30	Norway Maple	12	280,290,310	6	6	5.5	5	N/A	1	EM	This tree sits offsite with minor deadwood present, compression forks at 1.2 metres with no separation	20+	B1	6	113
T31	Cherry	8	130,190	0	2	7	4.5	N/A	1	EM	This low-quality tree sits offsite, it is suppressed	20+	C1	2.7	23
T32	Oak	14	390	0	2	7	7	3.5-S	2	EM	This low-quality tree sits offsite, it is suppressed and significantly unbalanced	20+	C1	4.8	72
T33	Norway Maple	14	420	5.5	5#	6	6.5	N/A	2	EM	The inspection of the base of this tree was restricted by dense shrubbery - No visible defects - This tree sits offsite	40+	B1	5.1	81
T34	Oak	14	750	8.5	9	10	10#	2-W	2	M	The inspection of this tree was restricted by ivy - there are large pruning wounds - This tree sits offsite	40+	B1	9	255
T35	Ash	13	400	7#	5#	7	6.5	N/A	2	EM	The inspection of this tree was restricted by ivy - there are large pruning wounds - This tree sits offsite	20+	B1	4.8	72

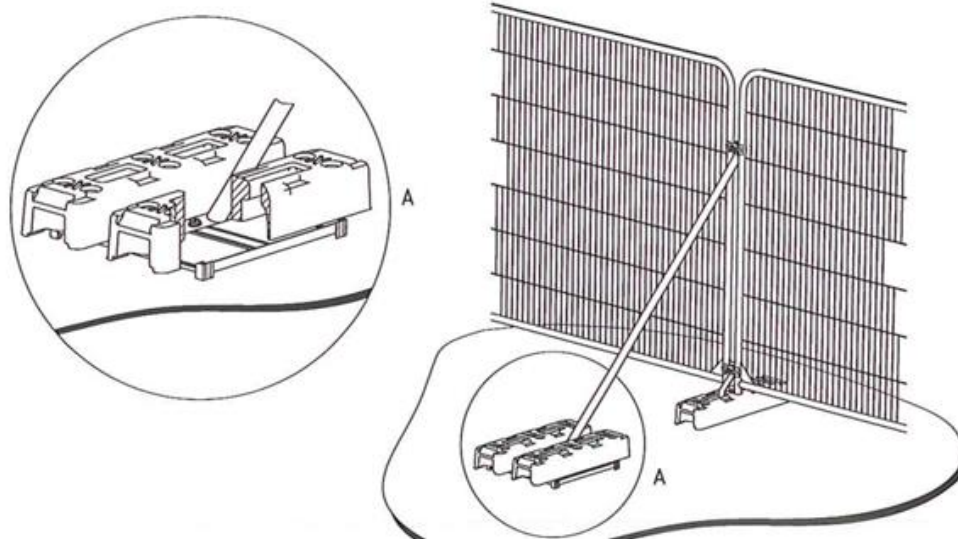
## 4 TREE CATEGORISATION TABLE (BS5837:2012)

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<b>Trees unsuitable for retention (see Note)</b>				
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<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 (e.g. 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, or very low quality trees suppressing adjacent trees of better quality</li> </ul> <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>			See Table 2
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>	
<b>Trees to be considered for retention</b>				
<b>Category A</b> Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. 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)	See Table 2
<b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
<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 150 mm	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	See Table 2

## 5 SPECIFICATION FOR TREE PROTECTION BARRIERS

---



### Specification:

1. Two metre tall weld mesh panels secured on rubber or concrete feet.
2. Panels joined together using and minimum of two anti-tamper couplers secured in a way that they can only be removed from the inside.
3. Distance between the couplers should be at least 1m and uniform throughout fence.
4. Panels to be supported on the inside by stabiliser struts.

## 6 REFERENCES

---

1. Anon. (2012) *BS5837:2012. Trees in relation to design, demolition, and construction – recommendations*. British Standard Institute. London, UK.