TOWN AND COUNTRY PLANNING ACT 1990

Land at Bondfield Lane,
Yoxall, Burton on Trent, Staffordshire

BS5837 Tree Survey & Arboricultural Impact

COMMISSIONED BY:

Walton Homes Ltd,
Charter House,
Sandford Street,
Lichfield,
WS13 6QA

SURVEYED BY:

Peter Jackson Ba Hons DipLA CMLI M.Arbor.A

DATED: 19th March 2015

Version 2
Tree Report In Support of a Planning Application

CONTENTS

1.00 Introduction
2.00 Background
3.00 Terms of reference and instructions
4.00 Definitions
5.00 Individual arboricultural survey sheets
6.00 Constraints posed by existing trees
7.00 Arboricultural Impact Assessment

Appendix 1

Site signage
Tree protection fencing

Appendix 2

Tree Survey Plan (2)
Tree Protection Plan (2)

DOCUMENT HISTORY

BS5837: 2012 Trees in relation to design, demolition and construction. Recommendations

This document has been issued and amended as follows:

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
<th>Created by</th>
<th>Verified by</th>
<th>Approved by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 2012</td>
<td>19/02/2015</td>
<td>V1</td>
<td>PEJ</td>
<td>PEJ</td>
<td>Mr S. Cassie</td>
</tr>
<tr>
<td>1.0 - 2012</td>
<td>19/03/2015</td>
<td>V2</td>
<td>PEJ</td>
<td>PEJ</td>
<td>Mr S. Cassie</td>
</tr>
</tbody>
</table>
1.00 INTRODUCTION

1.01 My name is Peter Jackson. I am presently the Director of Design Construction Management Services; a Development Consultancy based in Stoke-on-Trent where we specialise solely in planning applications, landscape design, tree surveys, tree related planning applications, appeals and Public Inquiries. Prior to this I was Landscape Officer for Newcastle-under-Lyme Borough Council and Landscape Architect for RPS Landscape and Ecology Consultants in both Chester and Birmingham.

1.02 I have a Bachelor of Arts Degree (with Honours) in Landscape Design and a Diploma in Landscape Architecture both from Manchester Metropolitan University (formerly Manchester Polytechnic). I became an Associate of the Landscape Institute in 1994 and a registered practice of the Landscape Institute in 2012. I have worked additionally as a consultant for 18 years.

1.03 I am also a Professional member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, an ISA Certified Arborist and a Trustmark Tree Consultant.

1.04 The BS 5837 arboricultural consultancy aims to provide a comprehensive, efficient and cost effective service incorporating all aspects of arboriculture and planning. We provide a consultancy service on all tree related issues involving a planning application for the private sector. We are committed to providing specialist expertise in BS 5837 arboriculture to meet our clients' requirements and where appropriate we will liaise with other professionals to provide structural engineering solutions to obtain planning permission.

1.05 We provide arboricultural advice to architects, planning consultants, developers and other professions associated with maximising land within a prospective development. Our surveyors are all Professional Members of the Arboricultural Association (M.Arbor.A) and therefore our reports are able to be given as proof of evidence in any appeal or Public Inquiry.

1.06 We specialise in BS 5837 arboricultural consultancy, rather than conducting any tree surgery work. However we can provide schedules of work and recommend suitably
competent and qualified tree surgeons that will carry out any work to a high standard for us.

1.07 We offer a service for planning applications to the following local authorities in the following counties:-

Cheshire East, Chester and Cheshire West, Cheshire, Newcastle under Lyme, Stafford, Lichfield & Cannock Chase, Staffordshire, Stoke on Trent, South Derbyshire, North West Leicestershire & Melton, Leicestershire, Telford and Wrekin, Shropshire, Rugby & Warwick, Warwickshire, Walsall, Sandwell, Birmingham, Bromsgrove & Solihull, West Midlands, Worcestershire and other areas by special arrangement.
2.00 BACKGROUND

2.01 I have been instructed by Walton Homes Ltd to comment upon 6 existing individual trees, 2 tree groups and 4 hedges within a proposed development site and to provide a plan of protection for any trees to be retained according to the guidance laid out in BS5837: 2012 - Trees in relation to design, demolition and construction - Recommendations.

2.02 There are several trees on and adjacent to this site. Only 6 trees are shown individually on the plan. Other vegetation adjacent to the site will be in a Construction Exclusion Zone, and measurements have been taken from the trees closest to the area of proposed development to form a cell that complies with the British Standard. Works to the trees may be specified, but this report does not confirm that East Staffordshire Borough Council has given any form of consent to undertake any works. No works should be undertaken to any trees on or adjacent to the site until the contractor has confirmed that full planning permission has been granted and the relevant conditions relating to retained trees, tree works, tree protection measures and levels have been discharged.

2.03 The area contains a number of mature trees in an urban fringe location and as the trees have formed a natural association each individual tree is not debated on an individual basis. The purpose of this report is only to examine in detail the effect of a proposed future development of the land on the existing vegetation during the construction of the proposed development.

2.04 BS5837: 2012 gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with proposed structures. It follows, in sequence, the stages of planning and implementing the provisions, which are essential to allow development to be integrated with trees.

2.05 The standard recognises that there can be problems with development close to existing trees which are to be retained, and of planting trees close to existing and new structures. The standard sets out to assist Local Planning Authorities (LPAs) to form balanced judgements. Where proposed development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the
means of protecting these trees during development, including demolition, and on the means of incorporating new trees into the developed landscape.

2.06 Trees are a material consideration in the UK planning system and the British Standard is intended to provide consistency in decision-making with regard to existing and proposed trees in the context of design, demolition and construction. The standard therefore asks the local planning authority to consider the application in light of the following information.

<table>
<thead>
<tr>
<th>Stage of process</th>
<th>Minimum detail</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-application</td>
<td>Tree survey</td>
<td>Tree retention/removal plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(draft)</td>
</tr>
<tr>
<td>Planning application</td>
<td>Tree survey (in the absence of pre-application discussions)</td>
<td>Existing and proposed finished levels</td>
</tr>
<tr>
<td></td>
<td>Tree retention/removal plan (finalized)</td>
<td>Tree Protection Plan</td>
</tr>
<tr>
<td></td>
<td>Retained trees and RPAs shown on proposed layout</td>
<td>Arboricultural method statement – heads of terms</td>
</tr>
<tr>
<td></td>
<td>Strategic hard and soft landscape design, including species and location of new tree planting</td>
<td>Details for all special engineering within the RPA and other relevant construction details</td>
</tr>
<tr>
<td></td>
<td>Arboricultural Impact Assessment</td>
<td></td>
</tr>
<tr>
<td>Reserved matters/</td>
<td>Alignment of utility apparatus (including drainage), where outside the RPA or where</td>
<td>Arboricultural site monitoring schedule</td>
</tr>
<tr>
<td>planning conditions</td>
<td>installed using a trenchless method</td>
<td>Tree and landscape management plan</td>
</tr>
<tr>
<td></td>
<td>Dimensioned tree protection plan</td>
<td>Post-construction remedial works</td>
</tr>
<tr>
<td></td>
<td>Arboricultural method statement – Detailed Schedule of works to retained trees,</td>
<td>Landscape maintenance schedule</td>
</tr>
<tr>
<td></td>
<td>e.g. access facilitation pruning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Detailed hard and soft landscape design</td>
<td></td>
</tr>
</tbody>
</table>
3.00 TERMS OF REFERENCE & INSTRUCTIONS

3.01 An application has been submitted to East Staffordshire Borough Council for a residential development. I am instructed to provide information on tree condition and make recommendations for good arboricultural practice for the suitability of the trees to be retained within and adjacent to a proposed residential redevelopment of the site.

3.02 The study will identify, evaluate and possibly mitigate the extent of direct or indirect impacts on existing trees that may arise as a result of the implementation of the site layout proposal.

3.03 The production of this arboricultural survey and report will comply with the following specification as set out in BS5837 2012 as follows:

a) sequential reference number (to be recorded on the tree survey plan);
b) species listed by common name, with a key provided to scientific names;
c) height;
d) stem diameter

e) branch spread, taken as a minimum at the four cardinal points, to derive an accurate representation of the crown (to be plotted on the tree survey plan);
f) existing height above ground level of:
   1) first significant branch and direction of growth (e.g. 2.4-N);
   2) canopy,
   to inform on ground clearance, crown/stem ratio and shading;
g) life stage (e.g. young, semi-mature, early mature, mature, over-mature);
h) general observations, particularly of structural and/or physiological condition (e.g. the presence of any decay and physical defect), and/or preliminary management recommendations;
i) estimated remaining contribution, in years (<10, 10+, 20+, 40+);
  j) category U or A to C grading to be recorded on the tree survey plan.

3.04 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 cannot wholly guarantee the safety of the trees commented upon beyond what can reasonably be assessed from the
procedure used. Trees have not been aerially inspected. We recommend regular inspections and advise on the frequency and type of inspection. We would recommend that re inspections be carried out within one year or within specific stipulated timescales indicated in the survey.

3.05 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 maybe reduced in case of any change in conditions to, or in proximity to, the trees.

3.06 This 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 the contents for any other purpose renders the report invalid for that purpose. The report has been written in accordance with BS5837, which is designed to allow planning officers to agree the juxtaposition of new development to existing trees. It should not however be used to design proposed foundations, as trees outside of the scope of a planning application (commonly up to 15 metres from the site boundary), may influence foundation design, depending on species, up to 30 metres from the site. These trees are often in third party ownership and will not be included in this report.
4.00 DEFINITIONS

4.01 Trees unsuitable for retention

Category U

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

- Trees that have a serious, irremediable, structural defect, such that their early loss
  is expected due to collapse, including those that will become unviable after
  removal of other category U trees (e.g. where, for whatever reason, the loss of
  companion shelter cannot be mitigated by pruning)

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

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

Trees in this category will be shown Dark Red on the Tree Survey Plan.

4.02 Trees to be considered for retention

Category A

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

- Trees that are particularly good examples of their species, especially if rare or
  unusual; or those that are essential components of groups or formal or semi-
  formal arboricultural features (e.g. 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)
Trees in this category will be shown Light Green on the Tree Survey Plan.

Category B

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

- Trees that might be included in category A, but are downgraded because of impaired condition (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

Trees in this category will be shown Mid Blue on the Tree Survey Plan.

Category C

Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 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
Trees in this category will be shown Grey on the Tree Survey Plan.

4.03 Life stage

- Y – Young; Newly planted or early established tree less than 150mm
- SM – Semi Mature; tree in first third of life expectancy
- EM – Early mature; tree in second third of life expectancy
- M – Mature; tree in final third of life expectancy
- OM – Over Mature; tree in decline

4.04 Physiological condition

Good

- Those trees marked ‘Good’ can generally be classed as having good overall structural and physiological condition. Most usually specimens are 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.

Fair

- Those trees marked ‘Fair’ can generally be 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, bacterial 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 fair overall condition.

Poor

- Those trees marked ‘Poor’ can generally be classed as having poor overall structural or physiological condition. They may contain large areas of included bark either within major for 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. They may be subject to outside influences such as restriction of rooting spread, vandalism or mechanical damage and costly to retain.

**Dead**

- Those trees marked ‘Dead’ have no visible foliage, brown cell structure under young bark.

### 4.05 Use of categorisation

The purpose of the tree categorisation method which has been applied by the surveyor, is to identify the quality and value of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained should development occur.

For a tree to qualify under any given category it should fall within the scope of the category’s definition (U, A, B, C) and, for a tree in categories A – C, it should qualify under one or more of the three subcategories.

In the categories A, B, C, which together deal with trees that should be a material consideration in the development process, the subcategories are intended to reflect arboricultural, landscape and cultural values respectively. Category U trees are those which would be lost in the short term for reasons connected with their physiological or structural condition. For this reason, they should not be a consideration in the planning process.
### 5.00 INDIVIDUAL ARBORICULTURAL SURVEY SHEETS

<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
<th>Physiological and Structural Condition and Comments</th>
<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 T1</td>
<td>Oak</td>
<td>16</td>
<td>N=7 E =8 S =8 W=8</td>
<td>5</td>
<td>1200</td>
<td>O M</td>
<td>• Poor overall condition</td>
<td>• Fell</td>
<td>0-10</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Additional Comments**

- This tree is in poor condition and will need to be removed to allow the development.
- This tree does merit retention due to the fact that it does attain categorization of class A or B.
- Category U trees will usually not be retained where they would impose a significant constraint on development.
- An oak tree infected with Ganoderma root rot may live as long as 10 years. Dying branches with small yellow leaves appear in the crown of the tree and eventually the tree dies. Trees infected with Ganoderma root rot have weakened structures and are liable to fall during periods of strong winds or extreme rainfall. Remove infected trees located near structures, roads or pathways to prevent damage or injury.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
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<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>H2</td>
<td>3</td>
<td>N=1</td>
<td>E =1</td>
<td>N/A</td>
<td>M</td>
<td>• Poor overall condition</td>
<td>• No preliminary work required</td>
<td>10-20</td>
<td>C</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Hawthorn**

**Additional Comments**

- This hedge is in poor condition and will need to be removed to allow the development.
- This hedge does not merit retention due to the fact that it does not attain categorization of class A or B.
- Category C hedges will usually not be retained where they would impose a significant constraint on development.
- This hedge will not form a constraint to the site as it is intended that it will be removed prior to the commencement of development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
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<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3 G3 Oak</td>
<td>8</td>
<td>Ave 200</td>
<td>EM</td>
<td>Poor overall condition</td>
<td>Low amenity value</td>
<td>EM</td>
<td>No preliminary work required</td>
<td>Fell to allow development</td>
<td>10-20</td>
<td>C</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Additional Comments

- This tree group is in poor condition and will need to be removed to allow the development.
- This tree group does not merit retention due to the fact that it does not attain categorization of class A or B.
- Category C trees will usually not be retained where they would impose a significant constraint on development.
- This tree group will not form a constraint to the site as it is intended that it will be removed prior to the commencement of development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No.</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
<th>Physiological and Structural Condition and Comments</th>
<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
</table>
| H4                      | Hawthorn| 2           | N=1                | 0                          | N/A                         | M        | • Good overall condition  
                          |         |              | E =1                |                            |                |          | • High amenity value               | • No work required                  |                                      | A           | 1m                               |

**Additional Comments**

- This hedge is in good condition and will not need to be removed to allow the development.
- This hedge does merit retention due to the fact that it does attain categorization of class A.
- This hedge will form a constraint to the site as it is intended that it will be retained prior to the commencement of development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
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<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5 G5</td>
<td>Ash</td>
<td>6</td>
<td>2</td>
<td>Ave 200</td>
<td>EM</td>
<td>4</td>
<td>• Poor overall condition</td>
<td>• No work required</td>
<td>10-20</td>
<td>C</td>
<td>2.4m</td>
</tr>
</tbody>
</table>

**Additional Comments**

- This tree group is in poor condition but will not need to be removed to allow the development.
- This tree group does not merit retention due to the fact that it does attain categorization of class A or B.
- Category C trees will usually not be retained where they would impose a significant constraint on development; however,
- This tree group will form a constraint to the site as it is intended that it will be retained prior to the commencement of development to provide some initial screening until landscaping has established.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
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<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
</table>
| T6                            | Oak     | 5.6         | 17                | N=7 E=7 S=7 W=8            | 1200                        | M         | • Good overall condition  
|                               |         |              |                   |                             |                             |           | • High amenity value                                     | • No work required                       | 40+                   | A           | 14.4m                              |

Additional Comments

- This tree is in good condition and will not need to be removed to allow the development.
- This tree does merit retention due to the fact that it does attain categorization of class A.
- This tree will form a constraint to the site as it is intended that it will be retained prior to the commencement of development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
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<th>Protective fence distance in m from stem</th>
</tr>
</thead>
</table>
| 5.7 T7                        | Ash     | 9           | N=4 E=4 S=4 W=4   | 3                           | 400                       | M         | • Fair overall condition  
• Fair amenity value                               | • No work required                         | 10-20                             | ☐           | 4.8m                                           |

Additional Comments

- This tree is in fair condition and will not need to be removed to allow the development.
- This tree does not merit retention due to the fact that it does not attain categorization of class A or B.
- Category C trees will usually not be retained where they would impose a significant constraint on development; however,
- This tree will form a constraint to the site as it is intended that it will be retained prior to the commencement of development to provide some initial screening until landscaping has established.
<table>
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<th>Protective fence distance in m from stem</th>
</tr>
</thead>
</table>
| T8                            | Ash     | 5.8         | 9                  | N=4 E=4 S=4 W=4             | 3                           | 400 M    | • Fair overall condition  
  • Fair amenity value | • No work required | 10-20              | C              | 4.8m                                      |

Additional Comments

- This tree is in fair condition and will not need to be removed to allow the development.
- This tree does not merit retention due to the fact that it does not attain categorization of class A or B.
- Category C trees will usually not be retained where they would impose a significant constraint on development; however,
- This tree will form a constraint to the site as it is intended that it will be retained prior to the commencement of development to provide some initial screening until landscaping has established.
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</table>
| 5.9    H9                        | Hawthorn | 1.5         | N=1                | E =1                        | S =1                        | W=1      | ![Image of hedge](image) | • Good overall condition  
• Low amenity value | • No work required | 40+   | A              | 1 m |
| Additional Comments             |         |             |                    |                             |                             |          | ![Image of hedge](image) | • This hedge is in good condition and will not need to be removed to allow the development.  
• This hedge does merit retention due to the fact that it does attain categorization of class A.  
• This hedge will form a constraint to the site as it is intended that it will be retained prior to the commencement of development. | | | | | | |
<table>
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<tr>
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<th>Height in m</th>
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<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
<th>Physiological and Structural Condition and Comments</th>
<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.10 T10 Ash</td>
<td></td>
<td>12</td>
<td>N=5 E =5 S =5 W=5</td>
<td>4</td>
<td>800</td>
<td>M</td>
<td>• Poor overall condition</td>
<td>• No preliminary work required</td>
<td>10-20</td>
<td>C</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Additional Comments**

- This tree is in poor condition and will need to be removed to allow the development.
- This tree does not merit retention due to the fact that it does not attain categorization of class A or B.
- Category C trees will usually not be retained where they would impose a significant constraint on development; however,
- This tree will not form a constraint to the site as it is intended that it will be removed prior to the commencement of development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
<th>Physiological and Structural Condition and Comments</th>
<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
</table>
| T11                             | Ash     | 18          | N=7 E=9 S=8 W=6    | 4                           | 900                         | M        | • Poor overall condition  
• Low amenity value  
• Central stem broken out | • Fell                                           | 0-10                                  | □           | N/A                                                  |

Additional Comments

- This tree is in poor condition and will need to be removed to allow the development.
- This tree does merit retention due to the fact that it does attain categorization of class A or B.
- Category U trees will usually not be retained where they would impose a significant constraint on development.
<table>
<thead>
<tr>
<th>Tree/Group Reference No. on Plan</th>
<th>Species</th>
<th>Height in m</th>
<th>Branch Spread in m</th>
<th>Height in m crown clearance</th>
<th>Stem diameter at 1.5m in mm</th>
<th>Age Class</th>
<th>Physiological and Structural Condition and Comments</th>
<th>Preliminary Management Recommendations</th>
<th>Estimated remaining contribution Years</th>
<th>Retention Key</th>
<th>Protective fence distance in m from stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.12 H12</td>
<td>Hawthorn</td>
<td>1.5</td>
<td>N=1 E=1 S=1 W=1</td>
<td>0</td>
<td>N/A</td>
<td>M</td>
<td>• Good overall condition</td>
<td>• No work required</td>
<td>40+</td>
<td>A</td>
<td>1 m</td>
</tr>
</tbody>
</table>

**Additional Comments**

- This hedge is in good condition and will not need to be removed to allow the development.
- This hedge does merit retention due to the fact that it does attain categorization of class A.
- This hedge will form a constraint to the site as it is intended that it will be retained prior to the commencement of development.
6.00 CONSTRAINTS POSED BY EXISTING TREES

6.01 Following categorisation of trees on the development site, the influence that the trees will have on the layout has been plotted on a plan indicating the Root Protection Areas (RPAs). In order to avoid damage to the rooting environment of retained trees the RPAs have been plotted around each of the category A, B, C trees. The radius of the RPA is calculated as 12 times the stem diameter for single stem trees and adjusted for trees with more than one, but less than 6 stems.

6.02 The RPA, for each tree has been plotted on the proposals plan taking full account of the following factors, which may change its shape but not reduce its area whilst still providing adequate protection for the root system.

(a) The likely tolerance of the tree to the root disturbance or damage based on factors such as species, age and condition and presence of other trees.

(b) The morphology and disposition of the roots, when known to be influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services).

(c) The soil type and structure.

(d) Topography and drainage.

(e) Where any significant part of a tree’s crown overhangs the provisional position of the tree protection area, these parts may sustain damage during the construction period. In such cases, it may be necessary to increase the extent of tree protection barriers to contain and thereby protect the spread of the crown. Protection may also be achieved by access facilitation pruning. The need for such measures, including the precise extent of pruning is described in the individual arboricultural survey sheets under preliminary management recommendations, where necessary.
**ARBORICULTURAL IMPACT ASSESSMENT**

**7.01** The Arboricultural Impact Assessment (AIA) is a type of tree survey that considers how a proposed development and its associated trees will co-exist and interact in the present, during construction and in the future. AIA is a document that many Local Planning Authorities (LPA’s) are now requesting as part of a planning application; as they need to satisfy themselves that factors such as root protection, changes in levels, access, cranes, installation of services, material storage, etc have been considered during the development layout and that these items will not prove detrimental to important trees. They also need to ensure that future issues, such as the long term effects of changing a surface level or the future need to prune or remove trees because they cast excessive shade or encroach upon property, are addressed and avoided.

**7.02** Items considered are as follows:

- Tree root protection (distances, area, RPA)
- Tree crown protection (access facilitation pruning)
- Tree protection measures during construction (BS5837 Figure 2 & Figure 3)
- Changes in levels in the RPA
- Changes in surfaces in the RPA
- Installation and layout of services in the RPA
- Demolition of existing buildings, removal of previous surfaces
- Exposure due to tree removal, wind throw
- Sunlight and shading
- Construction site access
- Construction site layout (compounds, offices, parking)
- Construction site materials storage (wash off)
- Planting (species selection e.g. thorns near footpaths)

### 7.03 Status of arboricultural implications

This statement can be included and issued as an induction to the principal contractor to undertake the works and can form part of the contract.

### 7.04 Root Protection Area. RPA

The Root Protection Area (RPA) is the area surrounding the tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m².

In order to avoid damage to the roots or the rooting environment of retained trees the RPA should be plotted around each tree. The RPA is calculated as an area equivalent to 12 times the stem diameter for single stem trees, shown initially as a radius on Greenfield sites.

This information has been plotted on the site and a single line drawn outside of the RPA to demonstrate the position of the tree protection fencing which should be erected in accordance with BS5837 Figure 2 in a continuous line.

Barriers should protect all trees, which are being retained on site. Barriers should be erected before any machinery or materials are bought to site and before any demolition commences. Once erected, barriers should be regarded as sacrosanct and should not be removed without the prior approval of the Local Planning Authority. Signs should be erected to indicate why the barriers have been installed.

Chestnut pale and orange mesh is no longer acceptable under the British Standard.

### 7.05 Crown Protection
Tree felling needs to be undertaken to complete the proposed works. Recommendations have been made to improve the trees adjacent to the site and allow development. The work should be carried out by an Arboricultural Association Approved Contractor to BS3998 2010. Under the UK planning system, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications. Where trees are statutorily protected, it is important to contact the local planning authority and follow the appropriate procedures before undertaking any works that might affect the protected trees.

7.06 Tree Protection Measures

Tree protection should be undertaken in accordance with BS5837. Trees in relation to construction 2012 Figure 2. Posters should be laminated and secured to the heras fencing. Below is an example of what the site should look like prior to the commencement of development.
7.07 Changes in Levels in the RPA

There are changes in levels in the RPA, and specialist construction is required. Planning condition No Dig.

7.08 Changes in surface in the RPA

There are alterations in the surface of the RPA, and specialist construction is required. Planning condition No Dig.

7.09 Installation of services

There are no new services to be installed through the RPA to complete the proposed works.

7.10 Demolition of existing buildings and structures

N/A

7.11 Exposure

N/A

7.12 Shading

N/A

7.13 Construction Site Access

The proposed access is via a new road from Bondfield Lane. This will not result in the need to pass the retained trees adjacent to the site with plant and machinery.

7.14 Construction site Layout
There should be a dedicated construction compound on the site that should not be located within the RPA of the trees surrounding the site.

7.15 **Construction Site Materials**

Additionally avoid washing out mixers within 10 metres around the edge of the RPA limit, where there is sloping ground towards the retained trees.

7.16 **Planting**

New tree planting will be undertaken in the form of a landscape scheme.

7.17 **Design change advise**

We have surveyed the trees on the site and recommended where individuals should be removed to avoid the issue of misplaced tree retention.

7.18 **Tree Protection plan**

A Tree Protection Plan is enclosed at Appendix 2.

7.19 **Assessment of special surfacing**

3D Cellular Confinement. Planning condition

7.20 **Assessment of supervisory requirements**

It is recommended that the first site visit is made to inspect and to ensure that the tree protection fencing position and specification has been adhered to. After the felling/pruning/remedial works have been undertaken and the tree protection has been approved construction work can begin. It is not considered that periodic monitoring will be required, as the new standard requires permanent protection to be installed.
Appendix 1

Site signage
Tree protection fencing
PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY TREE PROTECTION AREA PROTECTIVE FENCING. 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.

(TOWN & COUNTRY PLANNING ACT 1990)
ArbNet can combine your tree surgery and fencing requirements into one operation saving time and money.

Development constraints cost you time and money. The aim is to manage them efficiently to reach completion as quickly as possible.

Planning conditions are unavoidable. It is how you manage them that counts!

Where trees are concerned we can provide fast effective solutions that meet Local Authority requirements. Backed by years of experience ArbNet can find the quickest and most cost effective way to discharge planning conditions on your behalf.

We can supply and erect your tree protection fencing, implement tree surgery works, or even combine them both into one slick operation saving you time, money and the hassle of coordinating a number of contractors.

Our extensive experience in dealing with Trees in the Planning process means we can also liaise with the Local Authority to ensure they are in complete agreement with the proposed measures. We specialise in negotiating reduced specifications for your fencing to ensure they are site specific and proportionate while meeting the planner’s requirements.

Tree Protection Fencing. Designed to discharge Planning Conditions and save you money! British Standard 5837 gives guidance on the principles required to allow construction to take place while conserving existing trees. The standard recognises and provides scope for a balanced judgement when made by a competent person with sound reasoning. Arbnet is able to apply expert knowledge where it counts to achieve a solution that’s right for your site.

The full fencing specification detailed within BS5837 is costly and is often disproportionate to site requirements. Our negotiations with local authorities achieve a balanced judgement to tree protection by utilizing our own custom specifications rather than that found in BS 5837. Experience has shown us that we can typically reduce costs by up to 34%. Our specification combines the flexibility and the value of modular fencing with the required rigidity of an immovable steel framework pinned to the ground.

Our One Call Hotline
Your Fencing and Tree Surgery Solution
08702 416180 ext 212 or 223
See what our team can do for you today

E: enquiries@arbnet.co.uk
W: www.arbnet.co.uk
T: 08702 416180

Marishal Thompson Group
By instructing an arboricultural company to design, install and maintain the tree protection measures around the root zone you are sending out a clear statement to the Local Planning Authority and the Tree Officer that you care about the trees and the environment surrounding the site. This is a fantastic way to build relations with the planners which will last throughout the project.

Once the dust has settled and the project is completed, the site will benefit from the improved amenity value of the tree stock you have protected and preserved. The financial value of a completed development can be substantially increased by the presence of established trees and of course we will ensure that your Planning Condition is fully discharged.

Please call us to discuss any current or upcoming projects to talk things through and find out how we can help.
6.2.3 Ground protection during demolition and construction

6.2.3.1 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.
Welcome to Design Construction Management Services Ltd

We are an Arboricultural (Tree survey), Landscape Architecture and Landscape Planning practice operating out of Staffordshire but covering the whole of Cheshire also.
Certified arborist

It is run and operated by Peter Jackson Ba(Hons) DipLA CMLI M.Arbor.A, a Chartered Landscape Architect and Tree Consultant. DCMS offers specialist service in Arboriculture, Landscape Architecture and Planning.

Tree reports

We specialise in the less traditional areas of Landscape Architecture that are related to the Planning System, including BS5837 tree reports, Landscape and Visual Impact Assessment and Environmental Statements.

Throughout Cheshire:

- Crewe
- Macclesfield
- Knutsford
- Wilsndow
- Ellesmere Port
- Northwich, and their surrounds.
Appendix 2

Tree Survey Plan
Tree Protection Plan