Arboricultural Constraints Appraisal

in Relation to Proposed Construction of Extension to Existing Property at

1 Willow Avenue, Whalley, Lancashire, BB7 9SH

Prepared by:

April 2019
ARBORICULTURAL CONSTRAINTS APPRAISAL
1 WILLOW AVENUE, WHALLEY

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ARBORICULTURAL CONSTRAINTS APPRAISAL
1 WILLOW AVENUE, WHALLEY

Control sheet

Project No.: BTC1778

Site: 1 Willow Avenue, Whalley, Lancashire, BB7 9SH

Agent for Client: Peter Hitchen Architects

Council: Ribble Valley Borough Council

Survey Date: 25 April 2019

Surveyed by: Joseph Lambert FdSc ND MArborA

Prepared by: Joseph Lambert FdSc ND MArborA

Checked by: Phill Harris MSc BSc(Hons) MArborA CEnv MICFor

Date of Issue: 30 April 2019

Version No: 1
DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. The disclosure of hidden crown and stem defects, in particular where they may be above a reachable height or where trees are ivy clad or in areas of ground vegetation, cannot therefore be expected. All obvious defects, however, are reported. Detailed tree safety appraisals are only carried out under specific written instructions. Comments upon evident tree safety relate to the condition of said tree at the time of the survey only.

Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity and physiological condition. It should, however, be recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regards tree structural integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and our inspection is therefore restricted to what can reasonably be seen from within the site. Stem diameters of trees located on such land are estimated. Any subsequent comments and judgments made in respect of such trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring third-party trees are only made where a potentially unacceptable risk to persons and/or property has been identified during our survey. Where significant structural defects of third-party trees are identified and associated management works are considered essential to negate any risk of harm and/or damage then we will first attempt to inform the site occupier of the issues and, if not possible, then inform the relevant Council. Where a more detailed assessment is considered necessary then appropriate recommendations are set out in the Tree Survey Schedule.

Where tree stem locations are not included on the plan(s) provided then they are plotted at the time of the survey using, where appropriate an electronic survey device. Where tree stem locations are no longer visible due to the effects of disease, decay, high winds, development works, etc. Changes in land use or site conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant considerations with regards tree structural integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals relative to identified and varying site conditions and associated risks.

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The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development only. As such, the potential influence of trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from shrinkable load-bearing soils is not considered herein. The tree survey information in its current form should not therefore be considered sufficient to determine appropriate foundation depths for new buildings. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must therefore be prepared for the specific purpose of informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer must also be sought with regard to appropriate foundation depths for new buildings.

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Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures, such as the site's location within a Conservation Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to scheduling or carrying out any tree works. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to scheduling or carrying out any tree works. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such statutory protection exists.
BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

<table>
<thead>
<tr>
<th>Category and definition</th>
<th>Criteria (including subcategories where appropriate)</th>
<th>Identification on plan</th>
</tr>
</thead>
</table>
| Trees unsuitable for retention (see Note) | · 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  
*Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see BS5837:2012 paragraph 4.5.7.* | Red |

<table>
<thead>
<tr>
<th>Trees to be considered for retention</th>
<th>1. Mainly arboricultural qualities</th>
<th>2. Mainly landscape qualities</th>
<th>3. Mainly cultural values, including conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category A</strong></td>
<td>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)</td>
<td>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</td>
<td>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or woodland pasture)</td>
</tr>
<tr>
<td><strong>Category B</strong></td>
<td>Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage</td>
<td>Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality</td>
<td>Trees with clearly identifiable conservation or other cultural benefits</td>
</tr>
<tr>
<td><strong>Category C</strong></td>
<td>Trees not qualifying in higher categories</td>
<td>Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit</td>
<td>Trees with very limited conservation or other cultural benefits</td>
</tr>
</tbody>
</table>

Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.
### TREE SURVEY SCHEDULE FOR ARBORICULTURAL CONSTRAINTS APPRAISAL

**Site:** 1 Willow Avenue, Whalley, Lancashire, BB7 9SH  
**Agent for Client:** Peter Hitchen Architects  
**Surveyor:** Joseph Lambert  
**Survey Date:** 25 April 2019  
**Job Reference:** BTC1778

<table>
<thead>
<tr>
<th>No.</th>
<th>Species</th>
<th>Height</th>
<th>Stem Diam.</th>
<th>Branch Spread</th>
<th>Branch &amp; Canopy Clearances</th>
<th>Life Stage</th>
<th>PC</th>
<th>General Observations and Comments</th>
<th>Management Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Common Oak</td>
<td>22.5</td>
<td>650#</td>
<td>N, E, S, W</td>
<td>7, 8, 8, 7</td>
<td>5-N, 5</td>
<td>EM</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tree located in neighbouring garden to south-east of property, and therefore not inspected in detail.</td>
</tr>
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<td></td>
<td></td>
<td>Stem approximately 300mm from wooden panel boundary fence, with subsequent potential to cause damage on future incremental growth.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Main stem bifurcates at a height of approximately 5m.</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Crown showing signs of a reduction in vitality with small amount of deadwood up to approximately 120mm diameter and moderate amount of twig dieback.</td>
</tr>
<tr>
<td>G1</td>
<td>Leyland Cypress 'Green Spire'</td>
<td>≤ 8</td>
<td>≤ 200#</td>
<td>N, E, S, W</td>
<td>≤ 1, ≤ 2.5, ≤ 2.5</td>
<td>N/A, 1</td>
<td>SM</td>
<td>G</td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
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<td></td>
<td>Closely spaced group located in neighbouring garden to east of property.</td>
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<tr>
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<td></td>
<td>Evidently planted as a boundary hedge running parallel to Willow Avenue, but has not been managed as such.</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Stem of end tree to west of group within approximately 300mm of wooden panel boundary fence, with subsequent potential to cause damage on future incremental growth.</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>Group growing under canopy of tree T1</td>
</tr>
</tbody>
</table>

**Heating and Abbreviations:**

- **No.** Allocated sequential reference number - Tree (‘T’), Group (‘G’), Woodland (‘W’) or Hedge (‘H’) reference number - refer to plan and to numbered tags where applicable
- **Species:** Common name
- **Height:** In metres, to half nearest metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree
- **Stem Diam.:** Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
- **Branch Spread:** Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
- **Branch & Canopy Clearances:** Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.
- **Life Stage:** Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature
- **PC:** Physiological Condition - a measure of the tree’s overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good
- **Management Recommendations:** Arboricultural Impact Assessment and Method Statement related

**Survey Date:** 25 April 2019

**Job Reference:** BTC1778
Construction Exclusion Zones (CEZs), enclosed by Temporary Protective Fencing, as detailed below and to be agreed with the Local Planning Authority (LPA), shall:

1. be retained in place throughout the development process, as specified in the ‘Temporary Protective Fencing Construction’ section below and detailed in BS5837:2012 Figure 2 (overleaf);
2. be sited in the area(s) defined by the Root Protection Areas or, if applicable, the Construction Exclusion Zones, as detailed on the associated Tree Plan;
3. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
4. preclude any delivery of site accommodation and/or materials and/or plant machinery;
5. preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties; and
6. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance.

Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Temporary Protective Fencing Construction

1. Temporary protective fencing panels shall be weldmesh “Heras” panels of at least 2.0 metres in height.
2. The panels shall butt together and be securely fixed to a scaffold framework, as per 3 to 5 below.
3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per 4 to 5 below.
4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45º angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading “TREE PROTECTION AREA KEEP OUT” (see Figure 1, below) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the LPA shall inspect and approve the Temporary Protective Fencing.

Figure 1: CEZ Warning Sign

– TREE PROTECTION AREA –
KEEP OUT!
(TOWN & COUNTRY PLANNING ACT 1990)
THE TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR SUBJECTS OF A ‘TREE PRESERVATION ORDER’, THE CONTRAVENTION OF WHICH MAY LEAD TO CRIMINAL PROSECUTION
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONNEL:
- THE PROTECTIVE FENCING MUST NOT BE MOVED
- NO PERSON SHALL ENTER THE CONSTRUCTION EXCLUSION ZONE
- NO MACHINE, PLANT OR VEHICLES SHALL ENTER THE EXCLUSION ZONE
- NO MATERIALS SHALL BE STORED IN THE EXCLUSION ZONE
- NO SpoIL SHALL BE DEPOSITED IN THE EXCLUSION ZONE
- NO EXCAVATION SHALL OCCUR IN THE EXCLUSION ZONE
- NO FIRES SHALL BE LIT IN THE EXCLUSION ZONE
ANY INCURSION INTO THE EXCLUSION ZONE MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY
Figure 2: BS5837:2012 Default specification for protective barrier

Key
1. Standard scaffold poles.
2. Heavy gauge 2 metre tall galvanised tube and welded mesh infill panels
3. Panels secured to uprights and cross members with wires ties
4. Ground level
5. Uprights driven into the ground until secure (minimum depth 0.6 metres)
6. Standard scaffold clamps
Temporary Ground Protection

1. Any necessary Temporary Ground Protection areas shall conform to Figure 3, below, unless otherwise agreed with the LPA.
2. The Ground Protection Area shall be left undisturbed and covered by a semi-permeable geotextile membrane which shall, in turn, be covered by a compressible layer consisting of a material such as woodchip.
3. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
4. On completion of installation, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Ground Protection.
5. The Temporary Ground Protection shall remain in place until completion of the project and only removed following receipt of written permission from the LPA.

Figure 3: Temporary Ground Protection – Recommended Construction
Important: The original version of this plan was produced in colour, which is essential to the plan's interpretation and usability. As such, a monochrome copy should not be relied upon.

Tree Categorisations:

- **Category A Tree/Group**: Those of a High Quality with an Estimated Remaining Life Expectancy of at Least 40 Years
- **Category B Tree/Group**: Those of a Moderate Quality with an Estimated Remaining Life Expectancy of at Least 20 Years
- **Category C Tree/Group**: Those of Low Quality with an Estimated Remaining Life Expectancy of at Least 10 Years, or Young Trees
- **Category U Tree/Group**: 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

Root Protection Areas (RPAs):

- **RPAs Area(s) of Ground Around Trees that Should be Protected Throughout Development Works with Protective Fencing to form a Construction Exclusion Zone** - see Appended Temporary Protective Fencing Specification

Note: The tree locations were not included on the base plan provided, and were subsequently plotted by the arboricultural surveyor at the time of the survey using GPS siting or, where possible, measurement from site features, and estimation where not. As such, the plotted locations of the trees cannot be considered to be wholly accurate.

Agent For Client:
PETER HITCHEN ARCHITECTS

Project:
1 WILLOW AVENUE
WHALLEY
LANCASHIRE
BB7 9SH

Title:
TREE CONSTRAINTS PLAN

Scale: 1:200
Date: April 2019

Ref: BTC1778-TCF