RJ Tree Services

Arboricultural Survey & Report

The Brocklesby Ox Public House, Ulceby, Lincolnshire

Produced for:
M F Strawson LTD
Pyewipe Farm, Alyesby
Nr Great Coates
N E Lincolnshire
DN37 9NU

Produced by:
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Chartered Arboriculturist
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Date: December 2014 Ref: Brocklesby Ox/001

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Arboricultural Consultancy & Advice

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1. Introduction & Purpose

1.1 Written instructions were received from Mr. Tom Strawson on the 27 November 2014 on behalf of M F Strawson LTD (the client) to appraise one weeping willow tree growing in the grounds of the Brocklesby Ox Public House, Ulceby in Lincolnshire (the site).

1.2 A scheme is proposed to acquire planning consent for a residential development at the site.

1.3 The purpose of this report is therefore:

- To provide an objective arboricultural assessment in terms of the guidelines in BS5837 (2012) Trees in Relation to Design, Demolition and Construction-recommendations
- To provide sufficient data to calculate the Root Protection Area
- To assess the impact of the proposed development on the tree and vice versa

1.4 I visited the site on the 03 December 2014 when I assessed the tree from ground level according to the data collection methodology described in appendix 1. The weather conditions were generally clear with adequate visibility for viewing trees in relation to development. The tree is shown on the survey plan as T1=Tree 1 in appendix 2.

1.5 This survey is intended as an arboricultural assessment for planning guidance purposes only.

2. Limitations & Conditions

2.1 Trees should be assessed by a competent and qualified person on a regular basis. It is my recommendation that the trees discussed in this survey be assessed every one to two years in line with the guidelines in the International Society of Arboriculture Evaluation of Hazard Trees in Urban Areas publication (1994); or more often where stated.

2.2 While every effort has been made to identify defects within the trees inspected, no absolute guarantee can be given or is intended to the safety or otherwise of any tree or trees discussed in this survey or report. Extreme climatic conditions can on occasions cause damage to what appear to be healthy trees.

2.3 Trees are living organisms whose health, condition and structure can change quickly and without warning. Therefore the contents of this survey are valid for a period of one year only from the date printed on the title page.

2.4 The period of validity of this survey may be reduced if work is undertaken upon or if the conditions directly adjacent or in proximity to the tree/s or groups discussed herein are changed without prior consultation.

2.5 On undertaking the recommended works, the arborist/tree surgeon must without delay report any defects that become apparent while climbing or working on the tree/s in question. Those defects must be reported immediately to the relevant project manager, landowner and or the author of this survey to enable the appropriate remedial action.

2.6 This report in no way comments on or discusses tree-related subsidence or heave. Neither does it infer or attempt a subsidence or heave risk assessment.

3. Qualifications & Indemnity

3.1 I am a Chartered Arboriculturist and Institute of Chartered Foresters Registered Consultant. I hold the International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ), a Higher National Diploma (HND) and National Certificate (NC) in Arboriculture and a City and Guilds in Amenity Horticulture. I have in excess of 20 years craft and managerial experience in the arboricultural and landscape management industries including six years as a local authority tree officer and 11 years as a consultant working for various public, commercial and domestic clients.

3.2 I am a Fellow of the Arboricultural Association (F Arbor A) and a Professional Member of the Institute of Chartered Foresters (MICFor). I am also a Professional Member of the International Society of Arboriculture. I am committed to professional development and regularly attend relevant seminars and courses.

3.3 I hold professional indemnity and public liability insurance which is limited to £1000000. Please contact me should you require any more information relating to this matter.

4. Statutory Protection

4.1 I gather that the tree is subject to a Tree Preservation Order (TPO) 1984 Ulceby St Nicholas. Written consent from the Local Planning Authority (LPA) must be obtained before any work can take place on protected/TPO trees. Failure to acquire written consent from the LPA may result in prosecution and a substantial fine.

4.2 Full planning consent that requires the loss of a tree for it to be properly executed will override a TPO.

4.3 Your LPA in this case is North Lincolnshire Council.

5. Information Provided

5.1 The agent for the client provided no additional data.

6. The Tree

6.1 Tree 1

Species	Age	Min life expectancy	Height est	Mat H't	Crown Spread est	Crown Height est	Stem diameter	Ret Cat
Weeping willow (*Salix Xchrysocoma)*	Mature	20 yrs	18m	22m	**N.**10m **E.** 10m **S.** 10m **W.**10m	6m	1000mm	B1

6.2 The weeping willow tree 1 has a single stem, which forms the basis for an open typically pendulous crown (photograph 1). It is growing as an individual tree situated on the edge of a hard surface parking area.

Photograph 1

6.3 There is dead wood in the canopy and ripped stubs as a result of historical branch failure. A closed longitudinal crack is evident in the end heavy limb growing over the parking area.

6.4 The weeping willow tree 1 is an unremarkable tree typical of its type. It is my view that it meets the standard for just a Moderate (B) Classification in terms of the guidelines in BS5837 (2012) Table 1-see appendix 1.

6.5 Maintenance Recommendation

6.5.1 Irrespective of the development proposals, it is my recommendation that the crown of the weeping willow tree 1 be reduced in height by approximately 2.5m and proportionately in width by 1.5m to lessen the leverage on the branch framework. The dead limbs should also be removed.

7. Site Description & Location

7.1 The Brocklesby Ox public house is a large detached structure with outbuildings situated in substantial grounds. The grounds are generally flat and consist of an established grassed area, a drive and a parking area.

Arboricultural Impact Assessment

1. The Trees & Development

1.1 Trees over time achieve a balance with their environment and any impact on that equilibrium can be damaging to their health. As a result, BS5837 (2012) recommends that development should take place outside what it terms as a tree's Root Protection Area (RPA) to avert, as far as reasonably possible, harm to their root environment, crown and structure. The British Standard states that A, B and C Category trees should be a material consideration in any site layout plan.

2. Calculating Root Protection Areas

2.1 Section 4.6 of the BS5837 (2012) suggests that the RPA for single stemmed trees is calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For trees with more than one stem, one of the two calculation methods below should be used.

- For trees with two to five stems, the combined stem diameter should be calculated as follows:
  (stem diameter 1)2 + (stem diameter 2)2 ... + (stem diameter 5)2
- For trees with more than five stems, the combined stem diameter should be calculated as follows:

  (mean stem diameter)2 × number of stems

2.2 BS5837 (2012) recommends that the RPA should be capped a 15m. In this case the weeping willow tree 1 has a RPA radius of 12m and an area of 452m².

3. The Proposed New Development & the Tree 1

3.1 In April 2010, I carried out an assessment of the weeping willow tree 1 and identified it as "*prominent within the site*" with "*merit in terms of general public amenity*". I went on to say, however, that "*weeping willow trees are not a particularly long lived species in comparison to for example oak or common beech as they are of an inherently more fragile structural makeup with a propensity to shed boughs; which is born out in this case by the existing lateral limb fracture and the multiple ripped branch stubs*".

3.2 I still agree with this supposition and would therefore urge caution with regard to retaining the weeping willow tree 1 as it does not have sufficient longevity to co-exist safely with a dense residential development; particularly given the further risk of limbs breaking due to the end heavy nature of the branch framework and the resulting leverage on the longitudinal limbs.

3.3 BS5837 (2012) gives prudent advice regarding the retention of older trees on development sites. It suggests that care should be taken not to enclose large trees by development as old trees may be less resilient and more likely to die or become potentially unsafe as a result of the pressures associated with development. This advice is most appropriate in this situation given the predisposition of weeping willow trees to break up and shed limbs.

3.4 A crown reduction would, to a certain extent, mitigate the risk of the branches failing. However, pruning works of this type would inevitably detract from the natural appearance of the tree and its merit as a visual amenity; the basis for a TPO.

4. Conclusion

4.1 It is apparent to me that the relationship between the weeping willow tree 1 and a residential development at the site would not be sustainable in the long term. The competing needs to make the site viable for the developer and provide local residential accommodation would leave the tree constrained by housing with limited room for it to grow safely.

4.2 The BS5837 (2012) urges caution against the misplaced retention of older trees, which could result in excessive pressure to fell or over-prune them. As such, it is my recommendation that the most sustainable approach would be to remove the weeping willow tree 1 and replace it with a species of greater longevity that is more suited to what is likely to be a busy residential environment.

5. Replacement Tree/s

5.1 It is likely that the LPA would place a condition on any consent to remove this tree as part of the development proposal. I would recommend a prudent approach given the proposed limited site dimensions. As such, I would suggest the following types: silver birch (*Betula pendula*), fastigiate beech (*Fagus sylvatica 'Fastigiata'*) or small leaf lime (*Tilia cordata 'Greenspire'*).

5.2 New trees should be planted as standards from containers at approximately 2-3m in height. They should be planted in suitably sized pits in quality suitable soil and supported by wood stakes and tree ties at a height of no greater than 0.5m from ground level. The area around the trees should be mulched with well composted woodchip to a radius of 0.5m.

5.3 The supporting stakes should be removed after 2-3 years or as and when necessary and the new trees watered in dry periods.

5.4 New trees should be planted in areas where there is room to grow.

References

BS5837 (2012) Trees in Relation to Demolition, Design and Construction-Recommendations, BSI

Appendix 1 Data Collection Methodology

The tree is identified by its common and botanical names. The identification is based on visual observations and the common name is listed first, with the botanical name in brackets. Common names are sometimes regional and may therefore vary in terms of the locality.

A retention category (Ret Cat) is given as follows to correspond with table 1 of BS5837 (2012):

Ret Cat

A- *Trees of a high quality and value with greater than 40 years estimated life expectancy*
(sub category 1: mainly arboricultural qualities, 2: mainly collective landscape qualities, 3: mainly conservation & or cultural values)

B- *Trees of moderate quality and value with 20 to 40 years estimated life*
(sub category 1: mainly arboricultural qualities, 2: mainly collective landscape qualities, 3: mainly conservation & or cultural values)

C- *Trees of low quality and value with 10 to 20 years estimated life expectancy*
Trees below 150mm diameter, which may be considered for transplanting
(sub category 1: mainly arboricultural qualities, 2: mainly collective landscape qualities, 3: Mainly conservation & or cultural values)

U- *Trees 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

Trunk diameters are recorded in millimetres at 1.5m from ground level and at the narrowest point below any out of the ordinary swelling as recommended in BS5837 (2012).

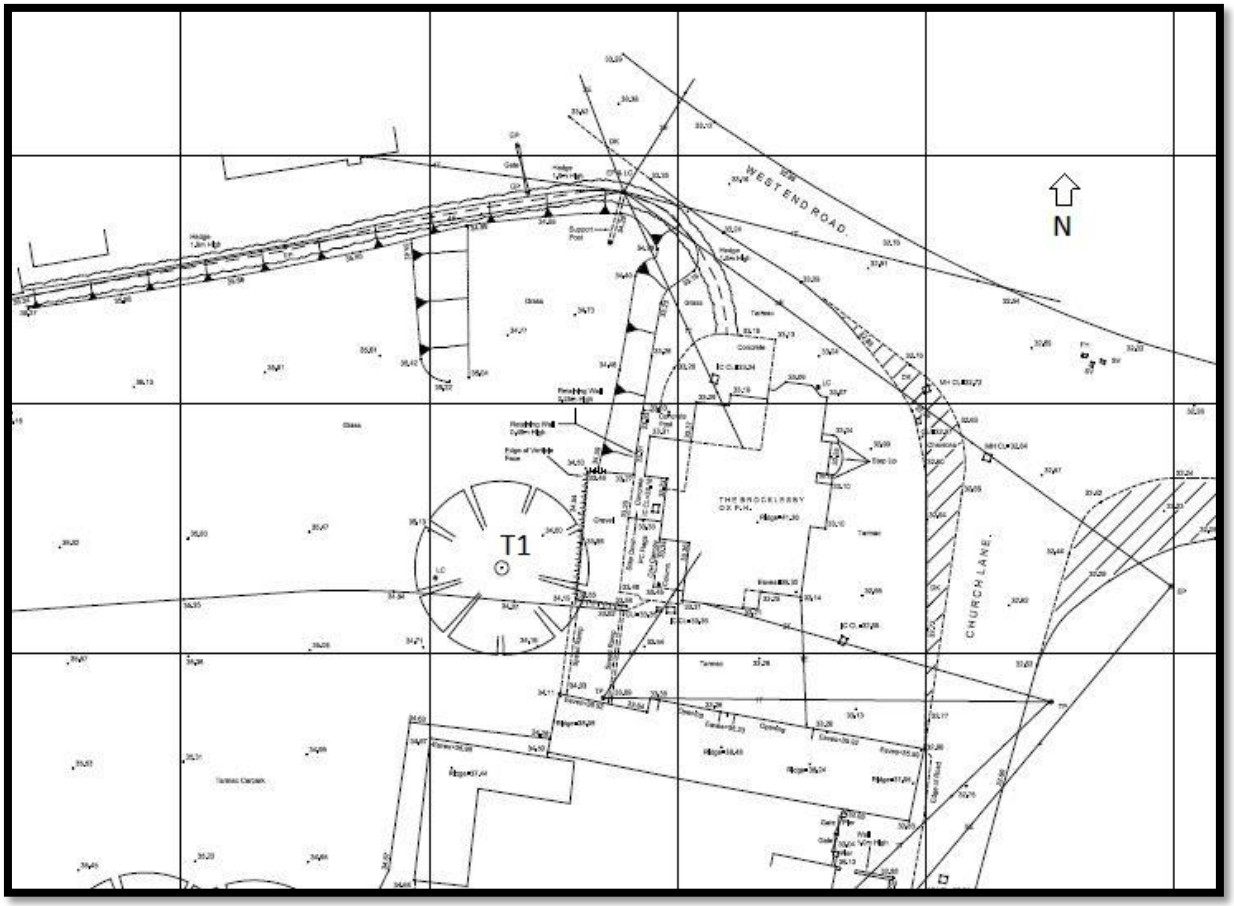
Tree heights are estimated in metres and a mature height (H't) is given according to my experience and the guidelines shown in the NHBC Standards April 2006 Chapter 4.2, Table 12.

Appendix 1 Data Collection Methodology

As recommended in BS5837 (2012) **Crown radius** (Spread) is measured at the four cardinal points in meters: *N-North, E-East, S-South, W-West* and a lowest crown clearance from ground level is given at the lowest of the four cardinal points or all four when the crown clearance is level. The crown radius and level measurements are as accurate as possible, but in some instances are estimated (est) due to difficult ground conditions or restricted access.

Brief comments are made on the overall health and condition of the tree in question and recommendations are given for any management works considered appropriate on the date of inspection in relation to the current site conditions.

Appendix 2 **Survey Plan (Not to Scale)**



Site: Brocklesby Ox PH, Ulceby, Lincs
Date: December 2014