

ARBORICULTURAL SURVEY
to BS 5837:2005
at
Oakwood Care Home
Oakwood Road
Royston
S71 4EZ

Client:

LNT Construction Ltd

Client Address:

Unit 2, Helios 47
Isabella Road
Garforth
Leeds
LS25 2DY

Client Telephone:

01133853858

My Ref:

8590/AW

Contents

Contents	2
1. Introduction	3
1.1 Purpose of the Report	3
1.2 Terms of Reference	3
1.3 Scope of the Report	3
1.4 Survey details	3
2. Site Description	4
2.1 Land Use	4
2.2 Topography	4
2.3 Treescape	4
2.4 Amenity Value	4
2.5 Age Class Mix	4
2.6 Species Diversity	4
3. Explanation of Tree Descriptions	5
3.1 Measurements	5
3.2 Evaluations	5
3.3 Retention Categories	5
4. Status of the Trees	7
5. Tree Descriptions and Recommendations	7
6. Discussion	8
6.1 Tree Condition & Recommended Works	8
6.1 Implications of the Development	8
7. Conclusion	10
Appendix 1: Tree Descriptions and Recommendations	11
Appendix 2: Glossary of Terms & Abbreviations	12
Appendix 3: The Author's Qualifications	13
Appendix 4: General Guidelines	14
Appendix 5: Site Plan	15

1. Introduction

1.1 Purpose of the Report

- 1.1.1 A report is needed at the above location to give detailed, independent, arboricultural advice on the trees present, in the particular context of potential development.

1.2 Terms of Reference

- 1.2.1 I am instructed by Graeme Booth of LNT Construction Ltd, to visit the site and prepare my findings in a report.
- 1.2.2 For this purpose I have been supplied with a plan of the site.

1.3 Scope of the Report

- 1.3.1 This report is compiled in accordance with *BS 5837:2005 Trees in relation to construction*. The specific design of any proposed development is not generally taken into account at this stage.
- 1.3.2 Preliminary recommendations are given with a view to safety and the long-term management of a sustainable tree cover.
- 1.3.3 All trees within the site boundary with a stem diameter above 75mm are included.
- 1.3.4 Where applicable smaller trees and significant shrub masses are included.
- 1.3.5 Where applicable trees outside the site boundary, but close enough to be affected by development, are included.

1.4 Survey details

- 1.4.1 The survey took place during the month of June 2008.
- 1.4.2 The survey was conducted by Adam Winson BSc (Hons) E Con, ND (Arboriculture).
- 1.4.3 Inspection was made at ground level. Further investigation, such as climbed inspections or decay detection surveys, may be recommended where appropriate.
- 1.4.4 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible measurements were estimated.
- 1.4.5 No digging or drilling was carried out on this occasion.

2. Site Description

2.1 Land Use

2.1.1 The site is currently an unused former old people's home.

2.2 Topography

2.2.1 The site is approximately level.

2.3 Treescape

2.3.1 The trees on this site have a moderate impact on the local treescape.

2.3.2 Surrounding the site is a predominantly residential area containing a reasonable mix and distribution of street and garden trees.

2.4 Amenity Value

2.4.1 The trees on site collectively provide a reasonable amenity to the surrounding area. Occasional specimens have a higher amenity value.

2.5 Age Class Mix

2.5.1 The trees surveyed were predominantly semi-mature and early-mature.

2.6 Species Diversity

2.6.1 The predominant species were Lime and Cherry. Other species being occasional or single specimens.

3. Explanation of Tree Descriptions

3.1 Measurements

- 3.1.1 *HEIGHT* of the tree is measured from the stem base. Where the ground has a significant slope the higher ground is selected.
- 3.1.2 *CROWN HEIGHT* is an indication of the average height at which the main crown begins
- 3.1.3 *STEM DIAMETER* is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level, just above the root buttress.
- 3.1.4 *CROWN SPREAD* is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

3.2 Evaluations

- 3.2.1 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, or over-mature.
- 3.2.2 *PHYSIOLOGICAL CONDITION* is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.
- 3.2.3 *STRUCTURAL CONDITION* is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.
- 3.2.4 *LIFE EXPECTANCY* is classed as; less than 10 years (<10), 10-20 years, 20-40 years, or more than 40 years (40+). This is an indication of the number of years before removal of the tree is likely to be required.

3.3 Retention Categories

- 3.3.1 *RETENTION CATEGORY* values for the trees are as follows:
- 3.3.2 *A (marked green on the plan) = retention most desirable*
These trees are of high quality and value with a good life expectancy. They may be further sub-divided as follows:
 - Ai) Particularly good examples; perhaps rare or unusual species, or forming an essential part of arboricultural features e.g. avenues;
 - Aii) Groups of trees having a significant landscape impact or with excellent

- screening properties, or those softening the effect of existing structures;
- Aiii) Those having significant conservation or historical value e.g. veteran trees.

3.3.3 ***B (marked in blue on the plan) = retention desirable***

These trees are of moderate quality and value with a significant life expectancy. They may be further sub-divided as follows:

- Bi) Trees that might be included in the high category but because of their numbers or slightly impaired condition, are downgraded in favour of the better individuals;
- Bii) Groups of trees forming distinct landscape features, thereby attracting a higher collective rating than they might as individuals;
- Biii) Trees with clearly identifiable conservation or other cultural benefits.

3.3.4 ***C (marked in grey on the plan) = trees which could be retained***

These trees are of low quality and value, and are in adequate condition to remain until new planting could be established. They may be further sub-divided as follows:

- Ci) Trees not qualifying in higher categories;
- Cii) Groups of trees which do not form a distinct landscape feature;
- Ciii) Trees with very limited conservation or other cultural benefits.

3.3.5 ***R (marked in red on the plan) = trees for removal***

These trees are in such a condition that any existing value would be lost within 10 years. This may be due to any of the following:

- i) Failure is likely due to serious, irredeemable, structural defects;
- ii) Removal of other category R trees will render them exposed and unstable;
- iii) They are in serious, overall decline or are dead;
- iv) They are of low quality and suppressing adjacent trees of better quality;
- v) Diseases are present which may affect the health of adjacent trees.

These trees should be removed or treated in such a way as to make them safe where they have high ecological value, such as in a woodland setting.

4. Status of the Trees

- 4.1 A check was made on 29th of May 2008 with: Barnsley Council.

We are informed that there is a Tree Preservation Order in force on this site. It is understood to cover trees labelled T2, T3, T4, T6, T7, T8 and T9 in our report.

Before any work is organised, all the necessary steps to get the permission of the Local Planning Authority should be taken.

No work should be done to any trees until this permission has been granted.

- 4.2 Due to the large potential penalties for illegally carrying out work to protected trees, JCA recommend that a further check is carried out prior to any works being undertaken. We are able to arrange this and to organise and supervise professional contractors.

5. Tree Descriptions and Recommendations

- 5.1 Full details of all individual trees surveyed are recorded in the tables at Appendix 1. Please refer also to the attached plan at Appendix 5 and section 3 above, for a full explanation of the tables and plan.

6. Discussion

6.1 Tree Condition & Recommended Works

- 6.1.1 In total 15 items of vegetation were surveyed.
- 6.1.2 In general, the trees can be divided into high value trees to the east of the site, along Oakwood Crescent, and lower value trees situated around the rest of the site.
- 6.1.3 In particular, the trees T2, T3, T4, T7, T8 and T9 are all in good condition, have high amenity value and long term prospects. These trees have been classed as retention category “B”, and should, if possible, be retained throughout any development.
- 6.1.4 Category “C” trees could individually be removed with no major impact on the surrounding treescape.
- 6.1.5 Some works are recommended for reasons of public safety and to ensure the long term health of the trees. This work is detailed in Appendix 1.
- 6.1.6 Inspection of some trees was inhibited by the presence of ivy or by restricted access.. These should be inspected for defects once the ivy has been removed or access made available.
- 6.1.7 Those trees which overhang public footpaths and public highways, as described in Appendix 1, shall require future maintenance in order to maintain clearance heights for vehicular and pedestrian traffic. These heights should be 5.6m above a road and 2.5m above a footpath.
- 6.1.8 The development of this site offers a good opportunity to undertake a suitable tree planting scheme that will ensure sustainable tree cover and improve age and species diversity.

6.1 Implications of the Development

- 6.1.1 It is proposed to construct a building along the general footprint of the existing building. The plan at Appendix 5 outlines this proposed development.
- 6.1.2 It should be possible to retain all of the higher value category “B” trees. They all should be unaffected by the development, but shall require protection by fencing to BS 5837: 2005 during the development phase.
- 6.1.3 A number of the lower value category “C” trees shall require removal to facilitate the new development, however due to the low value of these trees, this is considered acceptable.

- 6.1.4 The proposed new car parking area encroaches into root protection area of T8; conventional construction methods are likely to sever roots and compact soils which will be detrimental to the tree's health. As such, construction techniques sympathetic to tree roots should be employed in this area.
- 6.1.5 The introduction of underground services needs to be considered so that damage to tree roots is minimised.
- 6.1.6 The demolition of the existing structures needs to be done in a manner such that trees are not damaged.
- 6.1.7 In order to ensure the long term well being of the trees, a detailed Method Statement should be obtained which is specific to this site. This should consider all the points above, and detail the protection measures necessary for each tree.
- 6.1.8 Providing the above factors are taken into consideration the proposed development should harmonise with the existing trees and there is no arboricultural reason why it should not proceed.

7. Conclusion

- 7.1 The trees surveyed were generally found to be in good condition.
- 7.2 The site has 6 retention category “B” trees that should be retained throughout the development.
- 7.3 All other trees on site are retention category “C” and could be individually removed without a major negative impact to the surrounding treescape.
- 7.4 Some works were recommended for reasons of public safety and to ensure the long term health of the trees. These are summarised in Section 6 and detailed in Appendix 1.
- 7.5 It is recommended JCA provide a comprehensive Method Statement in order to ensure the continued health of trees throughout the proposed development. JCA are also able to provide planting schemes, organise and supervise tree works, and if necessary undertake climbed inspections and decay detection analysis.

Appendix 1: Tree Descriptions and Recommendations

Appendix 2: Glossary of Terms & Abbreviations

Arboriculture	The cultivation of trees in order to produce individual specimens of the greatest ornament, for shelter or any primary purpose other than the production of timber.
Canker	Disease damaged area of a tree, usually caused by fungus or bacteria.
Co-dominant Stem	A stem which has grown in direct competition to the main stem and which has formed a substantial size influencing the appearance of the tree.
Crown Lift	The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.
Crown reduce	The reduction of a tree's height or spread while preserving its natural shape.
Crown thin	The removal of some of the density of a tree's crown, usually 5-25% allowing more light through its canopy and reducing wind resistance.
Deadwood	Either dead branches, or a procedure involving the removal of dead, dying and diseased branches.
Dieback	Where branches are beginning to show signs of death usually at the tips in the crown.
Epicormic shoots	Small branches that grow in uncharacteristic clusters around the base or the stem of a tree, usually as a result of bad pruning or some other stress factor.
Formative pruning	The trimming of a tree to remove weaknesses and irregularities which may lead to problems. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown.
Included bark	Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.
Pollarding	A method of tree management in which the main trunk of the tree is cut at about 4m, and the resulting branches are then cropped on a regular basis.
Remedial pruning	The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.
Topping	Topping is a form of pruning that removes terminal growth leaving a 'stub' cut end. Topping causes serious health problems to a tree.

Appendix 3: The Author's Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *FRES PDipArb(RFS) FArborA CBiol MIBiol.* Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 28 years experience in the arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. He has since developed JCA's portfolio of services and its extensive client base. Jonathan is a Chartered Biologist and an expert witness with much experience of litigation work.

Consulting Arboriculturists

Toby Thwaites *BSc (Hons) HND (Arboriculture).* Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Lancashire. Toby is a JCA team leader and manages an office of consulting arborists.

Andrew Bagshaw *FD (Arboriculture).* Andrew joined JCA in 2005 having gained several years experience in tree surgery and landscaping. He is trained in aerial rescue and is JCA's principal first aid person. He is currently working towards a degree in arboriculture at the University of Lancashire.

Adam Winson *BSc (Hons) E Con, ND (Arboriculture).* Prior to working at JCA Adam has worked as a tree surgeon for eight years for a range of private companies and Sydney City Council. Adam achieved a national award for best Dissertation on the subject of Urban Greenspace Management at Sheffield Hallam University. Adam is currently working towards an MSc in Arboriculture at the University of Lancashire.

Robert Godwin *BA (Hons) Landscape Planning, ISA Certified Arborist.* Robert joined JCA having spent several years as an arboricultural consultant particularly in relation to subsidence. He also has considerable experience in landscape and arboricultural contracting. Robert is currently working towards an MSc in Arboriculture at the University of Lancashire.

Graham King *Dip Arb (RFS) FArborA MRAC.* Graham covers the Midlands for JCA. He ran his own arboricultural business from 1980 before gaining his Diploma in 1992 and is a Fellow of the Arboricultural Association.

Arboricultural Technician

Victoria Black. Victoria has been with JCA for over 5 years building her knowledge of the arboricultural business. She is currently working towards a degree in arboriculture at the University of Lancashire.

Andrew Bussey. Andrew joined JCA having spent 12 years doing tree surgery for various private companies and a local authority. He has various NPTC qualifications and is currently studying for his Arboricultural Technicians Certificate.

Lee Major. Lee recently joined JCA having gained his RFS Certificate in Arboriculture. Lee also has two years climbing experience, working for a local tree surgeon. He is currently working towards his degree in arboriculture at the University of Lancashire.

Edward Jowett. Edward has achieved his BSc (Hons) Arboriculture at the University of Lancashire. He has had temporary appointments as Tree Officer with local authorities in the Manchester area, joining JCA to further his commercial knowledge and experience.

Administrative Staff

Andrew C Parker, GM, BA (Hons), PGCE, Practice Manager

Catherine Cocking, Accounts Manager

Sue Guest, Administrative Officer

Yasmin Hussain, Administrative Assistant

Simeon Haigh, BSc (Hons), IT Officer

Alec Fielden, CAD Technician

Appendix 4: General Guidelines

- A4.1 All work must be to BS 3998:1989 - '*Recommendations for tree work*'.
- A4.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and should be covered by adequate public liability insurance.
- A4.3 This report is based upon a visual inspection. The consultant shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- A4.4 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.
- A4.5 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this report are carried out under his supervision and within his timescale.
- A4.6 It is advisable to have trees inspected by an arboricultural consultant regularly. In this instance it is recommended that these inspections are made every year.

Appendix 5: Site Plan

I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

.....
Adam Winson BSc (Hons) E Con, ND (Arboriculture).

10th June 2008

For and on behalf of *JCA Ltd*

Registered Office:

**Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 OAD**

**Tel. 01422 376335
Fax. 01422 376232
Email: jon@jcaac.com**

www.jcaac.com

Report printed on recycled paper