

ARBORICULTURAL SURVEY
to BS 5837:2005
at
Church View
49 Lund Avenue
Burton Grange
Barnsley
South Yorkshire

Client:

Mr Marshall, Barnsley

Client Address:

Mr Marshall
Church View
49 Lund Avenue
Burton Grange
Barnsley
S71 5NW

Client Telephone:

01226 295863
Mob 07944 545276

My Ref:

8004AW

Contents

<i>Contents</i>	2
<i>1. Introduction</i>	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
<i>2. Site Description</i>	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
<i>3. Explanation of tree descriptions</i>	5
3.1 Measurements	5
3.2 Evaluations	5
3.3 Retention Categories	5
<i>4. Status of the Trees</i>	7
<i>5. Tree Descriptions and Recommendations</i>	7
<i>6. Discussion</i>	8
<i>7. Conclusion</i>	9
<i>Appendix 1: Tree Descriptions and Recommendations</i>	10
<i>Appendix 2: Glossary of Terms & Abbreviations</i>	11
<i>Appendix 3: The Author's Qualifications</i>	12
<i>Appendix 4: General Guidelines</i>	13
<i>Appendix 5: Site Plan</i>	14

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 Mr Marshall to visit the site and prepare my findings in a report.
- 1.2.2 For this purpose I have not been supplied with a topographical survey.

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 May 2007.
- 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 currently consists a residential building and extensive surrounding land.

2.2 Topography

2.2.1 The site slopes gently down to the south from Lund Avenue.

2.3 Treescape

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

2.3.2 Surrounding the site is a mix of rural and residential areas containing occasional street and garden trees, field boundary trees and a large woodland group to the east.

2.4 Amenity Value

2.4.1 The trees on site collectively provide a reasonable amenity to the surrounding area. However, the relatively isolated nature of the site diminishes their value somewhat.

2.5 Age Class Mix

2.5.1 The trees surveyed ranged in age from young to mature. However the trees were predominantly semi-mature and early-mature.

2.6 Species Diversity

2.6.1 Species surveyed on site were mainly limited to Oak, Sycamore, Birch, Hawthorn and Cypress. Other species being occasional, or even 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 22nd May 2007 with: Barnsley Metropolitan Borough Council.

We are informed that there is a Tree Preservation Order in force on this site; detailed as Area A1, TPO 2/2007.

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 In total 28 items or groups of vegetation were surveyed.
- 6.2 The majority of trees fall into retention category C and could be individually removed without a major adverse impact to the surrounding treescape.
- 6.3 Two attractive and healthy Oak specimens (T17 and T22) have been granted retention category B.
- 6.4 Many of the Birch trees on site are in decline and have no long term future; as such they have been recommended for removal in order to benefit adjacent trees or to prevent them becoming dangerous trees.
- 6.5 Some works are recommended for reasons of public safety and to ensure the long term health of the trees and the work is detailed in Appendix 1.
- 6.6 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.
- 6.7 The species and age diversity is relatively poor and any proposed development would benefit from a landscaping scheme which introduces younger trees of a variety of suitable species.
- 6.8 In general, the site provides ample space for development, with the majority of tree cover located along the site perimeters.
- 6.9 All development work carried out in close proximity to trees should be done so in a manner sympathetic to their needs. Otherwise the condition of the trees may deteriorate in the months and years following the development, leading to a loss of amenity and potentially hazardous trees.
- 6.10 A detailed Method Statement should be obtained from a qualified arboricultural consultant and strictly adhered to.

7. Conclusion

- 7.1 The trees surveyed were generally found to be in fair condition.
- 7.2 Some trees have been recommended for removal. These are discussed in Section 6 and detailed in Appendix 1.
- 7.3 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.
- 7.4 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 1 – Tree Descriptions and Recommendations

1

Ref No	Age & Species & Latin name	Height (m)	Crown Height (m)	Stem diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical condition & Structural condition	Amenity value	Life expectancy (yrs)	Retention category
T1	Early Mature Oak <i>Quercus robur</i>	10	4	60	5 6 4 3	Multiple-stemmed at ground level. Scrappy form + poor unions at base. Limited long term value.	No action required	GOOD FAIR	L O W	20-40	C
T2	Early Mature Oak x 2 <i>Quercus robur</i>	12	3	60 x 2	3 6 6 5	Close growing stems forming one crown. Some tight union at 2 metres. No evidence of significant pruning.	Remedial prune – crown lift	GOOD FAIR	M O D	20-40	C
T3	Early Mature Birch <i>Betula sp</i>	8	3	18	1 1 3 1	Multiple-stemmed at 2 metres. Major cavity at 2 metres. Poor vigour. No long term future.	Remove	POOR POOR	L O W	<10	R
G4	Semi Mature Birch & Hawthorn <i>Betula sp</i> + <i>Crataegus sp</i>	7	2	Avg. 15	See plan	Row of boundary trees. Birch all in decline. Hawthorn has no major visible defects.	Remove Birch. Remedial prune Hawthorn	FAIR FAIR	L O W	10-20	C
T5	Semi Mature Oak <i>Quercus robur</i>	6	2	20	2 3 3 2	Single stemmed and vertical. No evidence of significant pruning.	No action required	GOOD GOOD	L O W	40+	C
T6	Early Mature Oak <i>Quercus robur</i>	12	4	44	5 6 5 3	Single stemmed and vertical. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
T7	Over Mature Birch <i>Betula sp</i>	5	2	18	1 1 3 1	Single stemmed with significant lean. Dead tree.	Remove	POOR DEAD	D E A D	<10	R
T8	Early Mature Oak <i>Quercus robur</i>	10	3	40	2 2 4 5	Single stemmed and vertical.	No action required	GOOD GOOD	L O W	20-40	C
T9	Semi Mature Oak <i>Quercus robur</i>	8	3	29	0 2 4 3	Single stemmed with significant lean.	No action required	GOOD POOR	L O W	10-20	C
G10	Semi Mature & Over Mature Birch & Cypress <i>Betula sp</i> + <i>Cupressus sp</i>	To 11	2	Avg. 10	See plan	Situated on boundary. Line of trees. Cypress – all with no major visible defects yet Birch all in poor condition and in decline.	Remove Poorer Birch	FAIR FAIR	L O W	10-20	C

Appendix 1 – Tree Descriptions and Recommendations

2

Ref No	Age & Species & Latin name	Height (m)	Crown Height (m)	Stem diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physiological condition & Structural condition	Amenity value	Life expectancy (yrs)	Retention category
T11	Early Mature Oak <i>Quercus robur</i>	12	2	47	4 3 4 4	Overhanging Boundary. Twin-stemmed at 1 metre. No major visible defects.	Remedial prune	GOOD FAIR	L O W	20-40	C
G12	Semi Mature Birch & Oak <i>Betula sp + Quercus sp</i>	To 8	2	Avg. 15	See Plan	Situated on Boundary. Line of trees. Small Oaks with no major visible defects yet Birch in decline.	Remedial prune –Oak. Remove – Birch	GOOD FAIR	L O W	10-20	C
T13	Early Mature Sycamore & Cypress <i>Acer sp + Cupressus sp</i>	9	2	Avg. 20	See Plan	Boundary trees. No major visible defects.	Remedial prune	FAIR FAIR	L O W	10-20	C
T14	Early Mature Sycamore & Oak <i>Acer sp + Quercus sp</i>	11	2	40	4 8 8 5	Close growing stems forming one crown. Cavity at 1 metre on Sycamore.	Remedial prune	GOOD FAIR	L O W	20-40	C
T15	Young Cedar <i>Cedrus sp</i>	4	0	10	1 1 1 1	Single stemmed. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
T16	Semi Mature Cherry <i>Prunus sp</i>	5	1	16	3 2 2 3	Single stemmed. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
T17	Early Mature Oak <i>Quercus robur</i>	10	2	50	6 6 7 6	Overhanging Boundary. Single stemmed and vertical. Fence wire occluded to stem. No evidence of significant pruning. No major visible defects.	Remove wire and Remedial prune	GOOD GOOD	M O D	40+	B
T18	Early Mature Oak <i>Quercus robur</i>	10	2	70	4 5 5 4	Multiple-stemmed at ground level. Tight union and partially included bark at base limiting the trees long term prospects.	Remedial prune	FAIR FAIR	M O D	20-40	C
T19	Early Mature Oak <i>Quercus robur</i>	8	2	43	5 5 3 5	Twin-stemmed. Tight unions and cavity at base. Co dominant stem at base.	Remedial prune	GOOD FAIR	L O W	20-40	C
T20	Semi Mature Elder & Cherry <i>Sambucus nigra + Prunus sp</i>	5	1	15	See Plan	Scrappy boundary trees.	No action required	FAIR FAIR	L O W	10-20	C

Appendix 1 – Tree Descriptions and Recommendations

3

Ref No	Age & Species & Latin name	Height (m)	Crown Height (m)	Stem diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physio-logical condition & Structural condition	Amenity value	Life expectancy (yrs)	Retention category
T21	Early Mature Hawthorn x 4 <i>Crataegus monogyna</i>	7	1	Avg. 30	See Plan	Row of boundary trees. No major visible defects.	Remedial prune	FAIR FAIR	M O D	20-40	C
T22	Early Mature Oak <i>Quercus robur</i>	10	3	62	6 6 6 7	Single stemmed and vertical. Minor cavity at 1 metre – healing well. No evidence of significant pruning. No major visible defects.	Remedial prune	GOOD GOOD	M O D	40+	B
T23	Semi Mature Birch & Hawthorn <i>Betula sp + Crataegus sp</i>	To 9	3	To 15	See Plan	Row of boundary trees. No major visible defects.	Remedial prune	GOOD GOOD	L O W	20-40	C
T24	Semi Mature Elder & Hawthorn <i>Sambucus nigra + Crataegus sp</i>	6	1	10	See Plan	Boundary – shrubby trees. Limited value yet no major visible defects.	Remedial prune	FAIR FAIR	L O W	10-20	C
T25	Over-mature Oak <i>Quercus robur</i>	9	4	30	2 3 3 4	Single stemmed and vertical. Dead.	Remove	DEAD DEAD	D E A D	<10	R
T26	Early Mature Leylandii <i>X Cupressocyparis leylandii</i>	12	0	30	2 2 2 2	Single stemmed and vertical. No major visible defects.	No action required	GOOD GOOD	L O W	20-40	C
G27	Semi Mature Birch, Elder & Oak <i>Betula sp, Sambucus sp, Quercus sp,</i>	8	2	Avg. 18	See plan	Boundary trees. Line of Oaks with no major visible defects yet Birch in decline.	Thin Birch – Remedial prune	FAIR FAIR	L O W	10-20	C
T28	Early Mature Rowan <i>Sorbus aucuparia</i>	7	2	30	3 3 3 3	Single stemmed with epicormic shoots noted at base. No major visible defects.	Remedial prune	GOOD GOOD	L O W	20-40	C

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 25 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 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. He has recently completed a HND in Arboriculture at the University of Lancashire.

Ivan Button *NCH (Arboriculture) BSc (Hons) PGCE*. Ivan joined JCA in 2005 after nine years having managed his own landscaping and tree surgery business. He has studied at the Universities of Leeds, Lincoln and Wales and is currently working towards a degree in arboriculture at the University of Lancashire.

Andrew Bagshaw *HND*. 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.

Robert Godwin *BA (Hons) Landscape Planning, ISA Certified Arborist*. Robert has recently 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.

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.

Administrative Staff

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

Catherine Cocking, Accounts Manager

Deborah Petterson, Administrative Officer

Yasmin Hussain, Administrative Assistant

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).

29th May 2007

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