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# ARBORICULTURAL REPORT

to BS 5837:2012 at:

Worsbrough Hall
Hall Close
Worsbrough Village
Barnsley
South Yorkshire

For:

Worsbrough Hall Design & Development Ltd
6 Hall Close
Worsbrough
Barnsley
S70 5LN

September 2012



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# 1. Introduction

#### 1.1 Instructions and Brief

- 1.1.1 I am instructed by Worsbrough Hall Design and Development Ltd, Barnsley, to visit the site at Worsbrough and prepare my findings in a report.
- 1.1.2 The report is required in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction* —*Recommendations,* to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

# 1.2 Survey Details

- 1.2.1 The survey took place during August 2012 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, AIEEM, (the author's qualifications and experience are included within **Appendix 1**).
- 1.2.2 The trees were surveyed visually from the ground using 'Visual Tree Assessment' techniques and in accordance with the guiding principles of British Standard 5837:2012 (explanatory details regarding the survey methodology are included within **Appendix 2**).
- 1.2.3 A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5**.



# 2. The Site

#### 2.1 Location

- 2.1.1 The site is to the east of Worsbrough Hall; grid reference SE 35112 02866.
- 2.1.2 The tree survey was limited to the area within the red line, shown in the (2009) image below:



# 2.2 Site Description

- 2.2.1 The site consists of rough grassland and trees on unused land to the east of Worsbrough Hall.
- 2.2.2 The topography of the site is generally level.



# 3. The Trees

## 3.1 Legal

- 3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place.
- 3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should used who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 recommendations for tree work.

#### 3.2 Vegetation Overview

3.2.1 Surrounding the site are woodland areas and agricultural fields with an excellent mix and distribution of mature trees.

# 3.3 Summary of Results & Discussion

- 3.3.1 The tree survey revealed 15 individual trees and 4 groups of trees; occasional small saplings and those trees beyond the developable area were noted on the plan yet were considered insignificant for the purpose and scope of this report.
- 3.3.2 The tree cover can be broadly grouped in to low value self-sown Sycamore, situated along the driveway into the Hall and within the central surveyed area, and higher value mature trees, to the south of the site adjacent to Worsbrough Road.
- 3.3.3 Four trees or tree groups are in a poor or dead condition and have been recommended for removal regardless of any new development, in order to prevent them from becoming hazardous.
- 3.3.4 Remedial tree works, in the form of removing deadwood and selective crown reduction is recommended for several of the mature trees adjacent to the roadside, for reasons of public safety.



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## 3.4 Arboricultural Impacts

- 3.4.1 It is recommended that, if possible, the retention category 'B' trees are retained throughout any development.
- 3.4.2 Several lower value category 'C' trees may require removal to facilitate any new development, yet this should not have a major impact on the surrounding treed landscape provided adequate replacement planting is undertaken.

#### 3.5 Protection of the Retained Trees

- 3.5.1 Any retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase. The protective fencing should protect the Root Protection Area (RPA) of the trees as highlighted on the plan at Appendix 5.
- 3.5.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and details of any necessary specialist construction methods can be provided.



# 4. Signature

I trust this report provides all the required information.

Signed

Adam Winson.

Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

4<sup>th</sup> September 2012

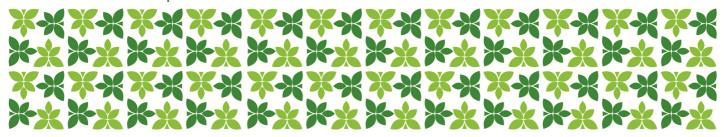
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# **Appendices**

Appendix 1: Authors Qualifications and Experience
Appendix 2: Survey Methodology and Limitations
Appendix 3: Explanation of Tree Descriptions
Appendix 4: Tree Descriptions and Recommendations
Appendix 5: Tree Constraints Plan



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# **Appendix 1: Authors Qualifications & Experience**

Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), ND, MICFor, AIEEM.

Adam has extensive experience in arboriculture, having worked with trees for over 15 years. He initially worked as a climbing arborist, throughout Europe and Australia. After returning home, to study a BSc (Hons), he began working as a Consulting Arboriculturist. His work now ranges from individual expert tree inspections to managing trees on major multi-million pound housing and park developments and highway and infrastructure projects. In 2010 Adam obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award. Adam has had articles published in industry magazines and has original research published by the UK Forestry Commission.

## **Membership of Professional Bodies**

Professional Member of the Institute of Chartered Foresters Associate of the Institute of Ecology and Environmental Management

#### **Education and Qualifications**

**MSc Arboriculture and Urban Forestry (Distinction)** University of Central Lancashire - Myerscough College. 2006 -2009

**BSc (Hons) Environmental Conservation** 2:1. Sheffield Hallam University. 2002 2005 **National Diploma in Arboriculture** University of Lincoln/ Riseholme.1996-1998

#### **Previous Experience**

Consulting Arboriculturist at JCA Ltd. Halifax, Yorkshire 2005 to 2012

Freelance Arborist for various companies. Sheffield, South Yorkshire 2002 - 2005

Arborist for AAA Arbor /Sydney City Council Australia 2001- 2002

Arborist for The Tree Surgeon, Brisbane, Australia 2000- 2001

Groundsman/Climber at Lindsey Tree Services, Grimsby, Lincolnshire 1998 -2000

Groundsman/Climber at Freelance Baumpflege, Frankfurt, Germany 1998

Freelance Groundsman/Climber for various companies, Lincoln Area 1996-1998

# Training, Awards & Qualifications

MSc Top Student Award University of Central Lancashire 2010

Bats and Bat Surveys- a foundation course for ecological consultants. BCT 2007

Arboriculture & Bats: A Guide for Practitioners BCT and AA 2007

**CPRE Prize** for best dissertation on the theme of Countryside Management. Campaign to Protect Rural England Prize 2006

**Lady Hastings Prize**; awarded for the best performance whilst on work placement. Sheffield Hallam University 2005

Tree Climbing, Aerial Rescue & Use of Chainsaw from Rope and Harness (CS 38 & 39) N.P.T.C 1998



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# Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837 (2012) *Trees in relation to design, demolition and construction –Recommendations.* The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837 (2012). Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998: 2010 - 'Tree Work:Recommendations'.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author 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 these guidelines and terms.



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# **Appendix 3: Explanation of Tree Descriptions**

**HEIGHT** of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

**CROWN HEIGHT** is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

**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 or else a combined stem diameter is calculated.

**CROWN SPREAD** is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

**AGE CLASS** of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

**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.

**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.

**LIFE EXPECTANCY** is classed as; less than 10 years, 10+, 20+ or 40+ years. This is an indication of the number of years before removal of the tree is likely to be required.

#### **Retention Categories**

A (marked green on the plan) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

**B** (marked in blue on the plan) = retention desirable. These trees are of good quality and value with a significant life expectancy.

**C** (marked in grey on the plan) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

**U** (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.



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# **Appendix 4: Tree Descriptions and Recommendations**





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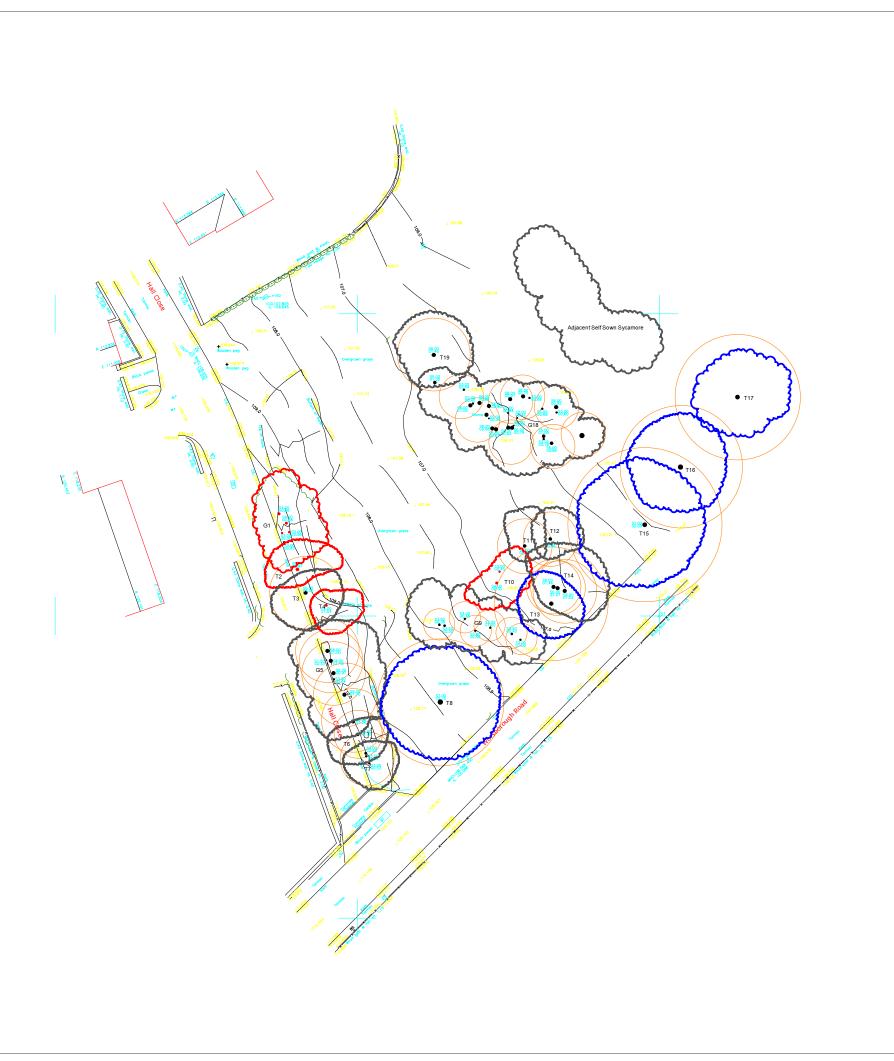
# **Appendix 5: Tree Constraints Plan**





Tree Ref.	Age Species Latin Name	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
G 1	Semi-mature Sycamore Acer pseudoplatanus	10	3	3 E	20	See Plan	Multiple-stemmed at base. Self sown trees with poor form. Major bark loss and dieback throughout. Overhanging drive. No long term value.	Remove	POOR	POOR	LOW	<10	U
Т2	Semi-mature Ash Fraxinus excelsior	11	4	4 E	29	4 4 6	Single-stemmed. Dead tree overhanging drive. Cavity at 4m.	Remove	DEAD	DEAD	DEAD	<10	U
Т3	Semi-mature Sycamore Acer pseudoplatanus	12	4	4 N	40	3 5 5 5	Twin-stemmed at base with tight union. Significant dieback and bark loss. Overhanging drive. Limited long term value.	No action required yet consider removal.	POOR	FAIR	LOW	10-20	С
T 4	Semi-mature Ash Fraxinus excelsior	11	5	4 S	32	2 2 5 4	Single-stemmed. Major bark loss and dieback. No long term value.	Remove	POOR	POOR	LOW	<10	U
G 5	Semi-mature Sycamore  Acer pseudoplatanus	12	4	4 W	35	See Plan	Even aged group of 6 stems forming one crown. Ivy on stems. Tight union. Minor dieback. Limited long term value.	No action required	FAIR	FAIR	LOW	10-20	С
Т6	Semi-mature Ash Fraxinus excelsior	12	4	4 W	31	2 4 4 4	Single-stemmed. Ivy and deadwood throughout. Tight union at 5m. Overhanging drive.	No action required	GOOD	FAIR	LOW	20-40	С
Т7	Semi-mature Sycamore Acer pseudoplatanus	10	5	4 E	30	2 3 4 4	Three stems with tight union. Tight unions. Discoloured foliage. Limited long term value.	No action required	POOR	FAIR	LOW	20-40	С
Т8	Mature Sycamore  Acer pseudoplatanus	15	4	3 E	75 (ivy)	7 7 7 7	Single-stemmed with dense lvy that prevented detailed inspection. Well developed crown overhanging road. No major visible defects.	lift branches		GOOD	HIGH	40+	В
G 9	Semi-mature Sycamore Acer pseudoplatanus	6	2	2 N	10	See Plan	6 self sown trees. No major visible defects yet limited value.	No action required	GOOD	FAIR	LOW	20-40	С
T 10	Semi-mature Sycamore Acer pseudoplatanus	8	3	3 W	30	0 5 5 4	Multiple-stemmed at base. Recently failed and leaning in adjacent trees. No long term value	Remove	FAIR	POOR	LOW	<10	U

Tree Ref.	Age Species Latin Name	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E	Observations	Recommendations	Physiological Condition	Structural Condition	Amenity Value	Life Expectancy (yrs)	Retention Category
T 11	Semi-mature Sycamore Acer pseudoplatanus	13	2	2 N	30	5 2 3 2	Single-stemmed with slightly unbalanced crown. No major visible defects.	No action required	GOOD	FAIR	LOW	40+	С
T 12	Semi-mature Sycamore Acer pseudoplatanus	12	2	2 N	29	4 2 4 2	Single-stemmed with slightly unbalanced crown. No major visible defects.	No action required	GOOD	FAIR	LOW	40+	С
T 13	Mature Lime Tilia x europaea	15	4	2 N	65 #	4 4 4	Single-stemmed but with dense mature suckers at base which prevented detailed inspection. No major visible defects. Good future potential.	Clear suckers from around base.	GOOD	FAIR	HIGH	40+	В
T 14	Early-mature Sycamore Acer pseudoplatanus	17	3	3 E	21, 30, 35	6 3 7 6	Multiple-stemmed with 3 stems. Unbalanced crown. Tree will no doubt suppress T13.	No action required yet consider removal to benefit T13.	GOOD	FAIR	MOD	40+	С
T 15	Mature Oak  Quercus robur	16	5	4 E	85	9 10 8 9	Slight stem lean. Large significant tree. Cavity at 5m. Occasional deadwood. Crown overhanging road. Large stem wound near base to east of stem.	Selective crown reduction by 3m of crown overhanging road.	FAIR	FAIR	HIGH	20-40	В
T 16	Mature Oak  Quercus robur	16	5	4 W	67	7 7 7 6	Single-stemmed and vertical. Occasional dieback and deadwood. Crown overhanging road.	Crown lift branches overhanging road, and remove overhanging deadwood.	FAIR	FAIR	HIGH	40+	В
T 17	Mature Oak  Quercus robur	13	4	4 E	70 #	6 6 8 5	Multiple-stemmed at 4m. Moderate dieback in crown with occasional significant deadwood. Dense vegetation prevented detailed inspection of base.	Crown reduce by 2m, remove deadwood overhanging road.	FAIR	FAIR	HIGH	20-40	В
G 18	Semi-mature Sycamore  Acer pseudoplatanus	12	4	3 N	25	See Plan	Group of even aged self sown natural regeneration. Occasional goat willow. Twin-stemmed and multiple-stemmed. Nearly all with poor form and limited long term value. Probable damage to base from level increases. Limited long term value.	No action required. Remove poorer trees.	FAIR	POOR	LOW	10-20	С
T 19	Early-mature Sycamore Acer pseudoplatanus	13	3	2 W	40, 45	5 4 5 4	Multiple-stemmed near base with tight union. Natural regeneration no major visible defects yet with only limited long term value.	No action required.	GOOD	FAIR	LOW	20-40	С





# Appendix 5: Tree Constraints Plan Worsbrough Hall Ref: AWA1031

BRITISH STANDARD 5837:2012 RETENTION CATEGORIES Definitions of these catagories can be found in Appendix 2 of the report.

SCALE :1:50	00 PAPER: A3
	CATEGORY A: RETENTION MOST DESIRABLE
O	CATEGORY B: RETENTION DESIRABLE
0	CATEGORY C: COULD BE RETAINED
O	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
•	TREE STEM
•	TREE STEM TO BE REMOVED