



# ARBORICULTURAL REPORT

to BS 5837:2012 at:

Land adjacent to

Mary Street,

Little Houghton,

Barnsley,

South Yorkshire.

For:

Karl Leatham

KSL Design

Thorpe Hesley

South Yorkshire

**September 2013**



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# 1. Introduction

## 1.1 Instructions and Brief

- 1.1.1 I am instructed by Karl Leatham of KSL Design, to visit the site 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 September 2013 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 located in the hamlet of Little Houghton in the Metropolitan Borough of Barnsley, South Yorkshire.

2.1.2 The tree survey was limited to the area within the red line, shown in the (2008) image below:



### 2.2 Site Description

2.2.1 The site currently consists of an unused area of rough ground.

2.2.2 The topography of the site is generally level, with the land to the south of the site dropping down slightly.

## 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 be used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998: 2010 *Tree Work - Recommendations*.

### 3.2 Vegetation Overview

- 3.2.1 Surrounding the site is a predominately rural area with a reasonable distribution of field boundary trees and properties situated to the north of the site with occasional garden trees.

### 3.3 Summary of Results

- 3.3.1 The tree survey revealed 11 trees or groups of trees.
- 3.3.2 All of the surveyed vegetation is retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.3.3 The trees are all situated along the southern boundary of the site. The trees all appear to have once been part of a managed hedge feature that has long been unmanaged which has allowed shrubby individual trees to form within the hedge feature.
- 3.3.4 The most visually prominent trees are formed by the group of Elm (G9), unfortunately it is very likely these trees will succumb to Dutch Elm disease which limits their long term value.
- 3.3.5 It would be beneficial to bring the tree groups under management by reinstating them as a more formal hedge feature and re-planting any gaps with suitable species.

### **3.4 Arboricultural Impact Assessment**

- 3.4.1 It is proposed to build new residential dwellings, with associated access drive and parking facilities.
- 3.4.2 It is likely that all of the surveyed vegetation could be retained. It would benefit the development if the trees were managed as part of a hedge feature, for improved screening value and to ensure long term tree cover that avoids nuisance issues to the residents.
- 3.4.3 All of the trees are lower value, retention category C trees, and if occasional trees required removal to aid the development, replacement planting will mitigate their loss.

### **3.5 Protection of the Retained Trees**

- 3.5.1 Most 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.

## 4. Signature

I trust this report provides all the required information.

Signed



.....

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

**16<sup>th</sup> September 2013**

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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**
- Appendix 6: Arboricultural Impacts Plan**

## Appendix 1: Authors Qualifications & Experience

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

### **Experience**

I have worked within the tree care profession for 16 years. I am a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters. My work ranges from individual expert tree inspections to managing trees on major multimillion pound housing and park developments and highway and infrastructure projects. My work often involves trees with Preservation Orders, insurance claims, subsidence claims and litigation. In 2010 I obtained an MSc in Arboriculture and Urban Forestry (with distinction), also gaining the top student award, and have had articles published in industry magazines and have original research published by the UK Forestry Commission.

### **Membership of Professional Bodies**

Professional Member and Registered Consultant 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 BSc dissertation on the theme of land management 2006

## 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 be 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.

## 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 years, 20-40 years, or more than 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 Appendix 5) = retention most desirable.** These trees are of very high quality and value with a good life expectancy.

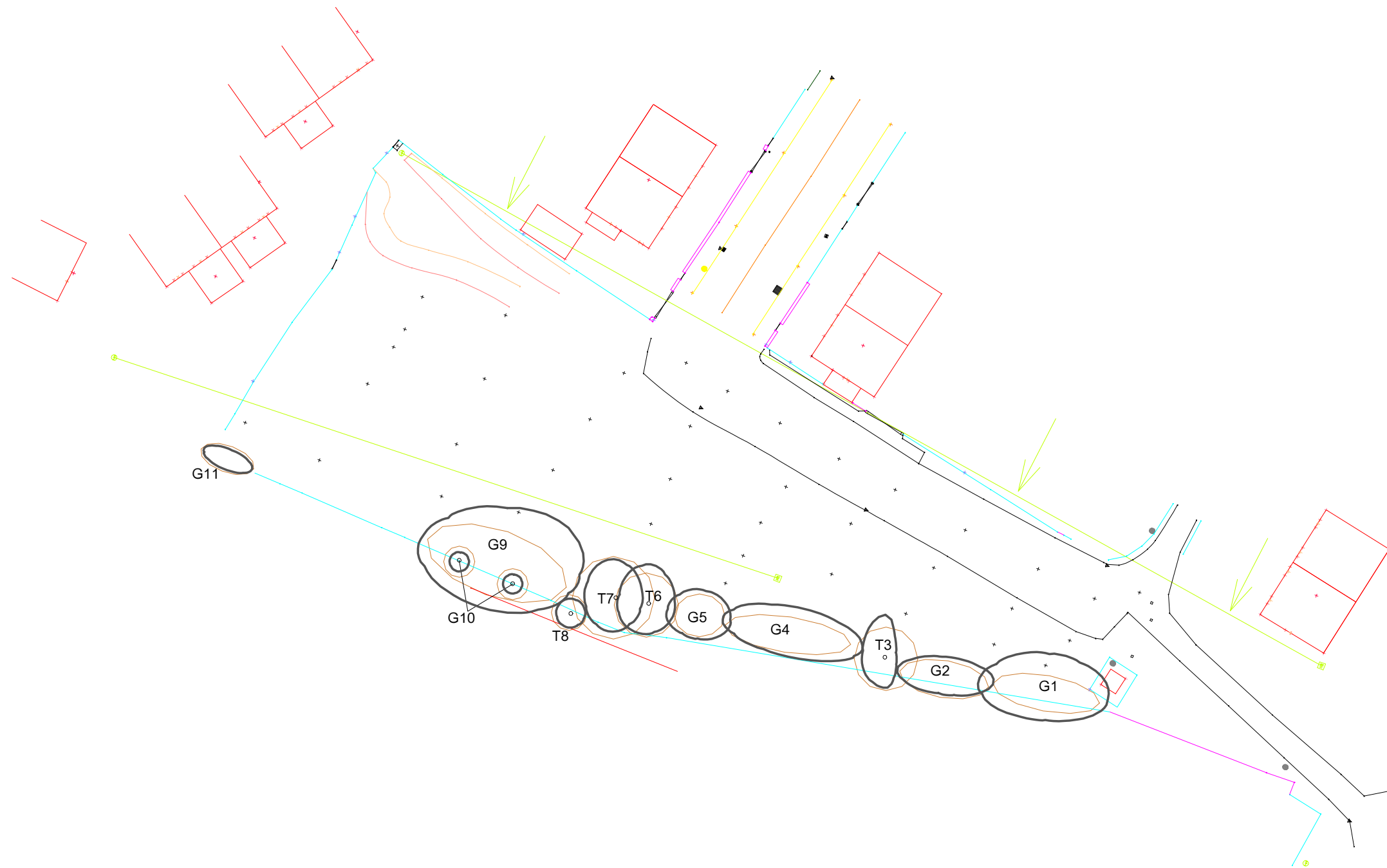
**B (marked in blue on Appendix 5) = retention desirable.** These trees are of good quality and value with a significant life expectancy.


**C (marked in grey on Appendix 5) = 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 Appendix 5) = trees for removal.** These trees are in such a condition that any existing value would be lost within 10 years.

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition					Value		Management				
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority
G1	Common Hawthorn	<i>Crataegus monogyna</i>	Early-mature	4	1	150	No	1n	1	4	6	3	6	No visual defects	Single stemmed & Multiple stemmed at base	Normal; Overhanging adjacent land; Minor dieback	Situated along boundary; former unmanaged hedge feature now shrubby trees. Occasional Laurel shrub with dieback. Land drops down to south. Consider cutting back to form managed hedge feature.	Fair	Fair	20 to 40 yrs	Low	C	No action	N/A
G2	Leyland Cypress	<i>X Cupressocyparis leylandii</i>	Semi-mature	5.5	1	180	No	1n	1	2	3	2	3	No visual defects	Single stemmed & Twin stemmed at base; Vertical; Old pruning wounds	Normal	4 trees forming one crown. Situated on boundary. Could be reduced down to 3.5m and managed as hedge feature.	Fair	Fair	10 to 20 yrs	Low	C	No action	N/A
T3	Field Maple	<i>Acer campestre</i>	Semi-mature	5	2	150, 220	Yes	2n	2	5	1	3	3	No visual defects; Soil compaction	Twin stemmed at base with co-dominant stem	Slightly unbalanced; Overhanging adjacent land	Situated on boundary in dense shrubs. Formerly part of hedge feature, now shrubby trees. Smaller co dominant stem overhanging site could be removed.	Fair	Fair	20 to 40 yrs	Low	C	No action	N/A
G4	Common Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	2.5	1	150	Yes	1.5n	1	3	2	2	2	Minor exposed roots; No significant visual defects	Multiple stemmed at base; Bark damage	Normal; Overhanging adjacent land	Situated along boundary; former hedge feature now shrubby trees. Growing near adjacent brick structure. Consider cutting back to form managed hedge feature.	Good	Fair	20 to 40 yrs	Low	C	No action	N/A
G5	Common Hazel	<i>Corylus avellana</i>	Semi-mature	3	1	180	Yes	1.5n	1.5	3	3	2	3	No visual defects	Multiple stemmed at base	Normal; Overhanging adjacent land	Situated along boundary; former hedge feature now shrubby tree. Consider cutting back to form managed hedge feature.	Good	Fair	20 to 40 yrs	Low	C	No action	N/A

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition						Value		Management			
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	First branch	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works	Priority
T6	Common Hawthorn	<i>Crataegus monogyna</i>	Early-mature	4	2	180, 200	No	2n	2	4	3	3	3	No visual defects; Soil erosion	Twin stemmed at base; Old pruning wounds; Minor cavity at 1m	Slightly unbalanced; Overhanging adjacent land	Situated along boundary; former hedge feature now shrubby tree. Consider cutting back to form managed hedge feature.	Good	Fair	20 to 40 yrs	Low	C	No action	N/A
T7	Field Maple	<i>Acer campestre</i>	Early-mature	5	4	90, 200, 220, 150	Yes	2n	2	4	3	4	3	No visual defects	Multiple stemmed at base; Old pruning wounds; Bark damage	Normal	Situated on boundary. Formerly part of hedge feature, now shrubby trees. Smaller co dominant stem overhanging site could be removed.	Good	Fair	>40 yrs	Low	C	No action	N/A
T8	Common Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	3	1	150	No	1.5n	2	2	2	2	2	No visual defects	Multiple stemmed at base	Normal	Situated along boundary; former hedge feature now shrubby tree. Consider cutting back to form managed hedge feature.	Fair	Fair	20 to 40 yrs	Low	C	No action	N/A
G9	Wych Elm	<i>Ulmus glabra</i>	Early-mature	10	1	280	Yes	2n	1	7	3	5	4	No visual defects	Single stemmed; Multiple stemmed; at base; Slight lean; Tight union; Partially included bark	Small / sparse; Overhanging adjacent land	Situated along boundary; former hedge feature now forming tree group. Likely to die fro Dutch Elm Disease. Consider cutting back to form managed hedge feature.	Fair	Fair	10 to 20 yrs	Mod	C	No action	N/A
G10	Silver Birch	<i>Betula pendula</i>	Semi-mature	4	1	130	No	2s	3	1	1	1	1	No visual defects; Soil compaction	Single stemmed; Old pruning wounds	25% dead / absent; Overhanging adjacent land	Occasional stem within Elm group. Overhanging branches have been cut back to boundary line.	Fair	Fair	10 to 20 yrs	Low	C	No action	N/A
G11	Common Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	2	1	120	Yes	0	1	1	1	1	1	No visual defects	Single stemmed & Multiple stemmed	Normal	Situated beyond boundary,	Good	Fair	20 to 40 yrs	Low	C	No action	N/A













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**Appendix 5:  
Tree Constraints Plan**  
Little Houghton  
Ref: AWA1114

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

SCALE :1:500      PAPER: A3

	CATEGORY A: RETENTION MOST DESIRABLE
	CATEGORY B: RETENTION DESIRABLE
	CATEGORY C: COULD BE RETAINED
	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM