



ARBORICULTURAL REPORT

To **BS5837:2012** at:

***Lynton Place,
Darton,
Barnsley,
South Yorkshire,
S75 5JU***

Prepared for:
White Agus Partnership.
*8 Morston Business Park,
Whaley Road,
Barugh Green,
Barnsley,
S75 1HQ*

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Reference: *AWA1760*



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We are instructed by Robert Agus of White Agus Partnership, to visit the site and prepare our 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 December 2016.
- 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.
- 1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.
- 1.2.4 The author’s qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. 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 refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

2. The Site

2.1 Location and Description

- 2.1.1 The site is located on Lynton Place in Darton, a large village in the metropolitan borough of Barnsley, South Yorkshire.
- 2.1.2 The site is an area of land to the rear of residential properties. It is currently used for car parking and as access to garages. There are residential properties to the north, south and west, with the M1 motorway running beyond the site's eastern boundary.

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 (unless such works are approved by planning permission). 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 Tree Survey Results

- 3.2.1 The tree survey revealed 17 items of woody vegetation, comprised of 13 individual trees and 4 groups of trees or hedge groups.
- 3.2.2 Of the surveyed trees: 2 trees are retention category 'B'; and 15 trees are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.3 The tree cover within the site consists mainly of linear tree groups and hedge groups situated along the site's boundaries.
- 3.2.4 Species diversity at the site is relatively poor. The dominant tree species Sycamore with several Hawthorn and Privet and occasional Willow and Cypress. The site's trees had a reasonable age diversity with a mix of young, semi-mature and early-mature trees.
- 3.2.5 The sites most significant trees are a linear group of Sycamore and Birch situated along or beyond the eastern boundary (trees T1 to T8). They are generally in good or fair condition and have reasonable prospects. While most of these trees are lower individual value, collectively the trees provide good visual amenity to the site, they form established screening and create a visual and acoustic barrier between the site and the adjacent motorway.
- 3.2.6 The Willow T9 is situated in a prominent position to the centre of the site, but it is in relatively poor condition with limited long term value and offers little visual amenity value to the site.
- 3.2.7 Two Cypress trees are situated in an adjacent garden by the site's access (T15 and T16). They are of good form and in overall good condition but have the potential to become much larger and may soon be considered unsuitably large for their garden location.
- 3.2.8 Other surveyed vegetation consists of boundary hedges. G11 and G17 are Privet hedges which run alongside two access roads at the site. They are in good condition, having been well maintained and have good future prospects. The site's north western corner is bordered by an informal hedge comprised of Hawthorn, Blackthorn and Elder (G12). The western section of the hedge has been well maintained with regular pruning, whereas the northern section is more overgrown and naturalistic.

- 3.2.9 Some trees were covered in dense Ivy or were inaccessible (as detailed in appendix 4) in such cases measurements were estimated and the condition values are indicative only.
- 3.2.10 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, is a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority. The RPA for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

3.3 Tree Development Advice

- 3.3.1 Much of the sites central area has no significant trees and so is free of any significant arboricultural impacts for any new development.
- 3.3.2 The higher value retention category 'B' trees and groups should be retained, where possible, and incorporated into any new development design.
- 3.3.3 Where suitable, those category 'C' trees and groups with reasonable future prospects (as detailed in Appendix 4) should be retained as part of any new development. However, care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal.
- 3.3.4 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, should be used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.
- 3.3.5 If construction of new buildings is required within the trees RPA it may be possible to employ special foundation design such as mini/micro pile and suspended beam or a cantilevered foundation.
- 3.3.6 Construction of hard surfaces, for drives and paths, within the RPA, can have negative impacts on tree roots. However, the potential negative impacts can often be overcome or minimised by employing a 'no-dig' type construction methods with a porous final surface.

- 3.3.7 The design of the new development should consider the trees crown position in relation to any new dwellings. While either shade or sunlight might be desirable, depending on the potential use of the area affected, the design should avoid unreasonable obstruction of light and should give adequate provision for future tree growth.

3.4 Protection of the Retained Trees

- 3.4.1 The retained trees may require protection by fencing in accordance with BS 5837: 2012, during the development phase.
- 3.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be provided.

4. Signature

I trust this report provides all the required information.

Signed



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

22nd December 2016

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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 Data

Appendix 5: Tree Constraints Plan

Appendix 1: Authors Qualifications & Experience

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

Adam is the company Director and Principle Consultant. He has a mix of the highest level academic qualifications and relevant work experience. Having worked within the tree care profession for over 20 years, and being awarded an MSc in Arboriculture and Urban Forestry, with distinction and the ICF top student award. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, and has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, from planning appeal hearings up to Crown Court.

Mr Guy Baxter *FdSc (Arb), ND Arb. TechArborA*

Guy joined AWA Tree Consultants at the start of 2015, after seven years work experience within the tree care profession. He has a Foundation Degree in Arboriculture and is in the final stages of a BSc (Hons) Degree in Arboriculture and Urban Forestry. He is a Technician Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters, working towards becoming a Chartered Arboriculturist. His work focuses on tree risk assessments and undertaking BS5837:2012 tree surveys for development projects; this involves tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and Tree Protection Schemes to BS 5837:2012.

Mr James Brown *BSc (Hons) Arboriculture*

James recently joined AWA after seven years work experience, including working in Europe's largest tree nursery and Local Authority tree officer work, while a Horticultural Apprentice for Tameside Metropolitan Borough Council. James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. His main work consists of tree surveys for development projects, involving tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and Tree Protection Schemes to BS 5837:2012.

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, laser 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.

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.

Appendix 4: Tree Data

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works
T1	Birch	<i>Betula pendula</i>	Semi-mature	10	1	250	No	3	3	3	3	3	No visual defects	Single stemmed. Vertical.	Normal. Minor deadwood.		Good	Good	>40 yrs	Moderate	C	No action required
T2	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	12	4	260, 240, 440, 300	No	3	5	5	4	5	No visual defects	Multiple stemmed at base. Vertical. Ivy covered. Tight union.	Normal. Minor deadwood. Overhanging adjacent land.		Good	Good	>40 yrs	Moderate	B	No action required
T3	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	11	1	350	No	3	5	1	4	5	No visual defects	Single stemmed. Vertical. Epicormic growths. Ivy covered.	Normal. Unbalanced. Minor deadwood.		Good	Fair	20 to 40 yrs	Low	C	No action required
T4	Birch	<i>Betula pendula</i>	Semi-mature	10	1	280	No	3	5	2	3	5	No visual defects	Single stemmed. Vertical.	Normal. Minor deadwood.		Good	Fair	20 to 40 yrs	Low	C	No action required
T5	Whitebeam	<i>Sorbus aria</i>	Young	6	2	170, 90	No	1	2	4	1	3	No visual defects	Twin stemmed at base. Slight lean. Stubs. Old pruning wounds. Bark damage.	Small/ sparse. Minor deadwood.	Growing through wire fence	Fair	Fair	10 to 20 yrs	Low	C	No action required
T6	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	14	3	330, 250, 270	No	4	3	5	2	6	No visual defects	Multiple stemmed at base. Vertical. Tight union. Ivy covered.	Normal. Minor deadwood. Overhanging adjacent land.		Good	Good	>40 yrs	Moderate	C	No action required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works
T7	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	14	2	370, 450	No	3	4	5	3	5	No visual defects	Twin stemmed at 1m. Vertical. Ivy covered. Bark damage. Minor cavity. Tight union. Partially included bark.	Normal. Minor deadwood. Overhanging adjacent land. Slightly unbalanced.		Fair	Fair	>40 yrs	Moderate	C	No action required
T8	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	15	1	550	No	2	2	5	4	5	No visual defects	Single stemmed. Vertical. Ivy covered.	Normal. Minor deadwood. Overhanging adjacent land.		Good	Good	>40 yrs	Moderate	B	No action required
T9	Willow	<i>Salix caprea</i>	Early-mature	9	7	250	No	2	4	5	7	5	No visual defects	Multiple stemmed at base. Tight unions. Old pruning wounds. Bark damage. Ivy covered. Minor cavities.	Slight unbalanced crown. Minor deadwood.	Limited long term value	Fair	Fair	20 to 40 yrs	Low	C	No action required
G10	Leyland Cypress	<i>x Cupressocyparis leylandii</i>	Semi-mature	3	1	80	No	0	See plan				Cypress hedge running along boundary fence line. Has a gap for access into drive and garage.				Good	Fair	20 to 40 yrs	Low	C	No action required
G11	Privet	<i>Ligustrum ovalifolium</i>	Semi-mature	2	1	40	No	0	See plan				Well maintained Privet hedge running along driveway.				Good	Good	20 to 40 yrs	Low	C	No action required
G12	Hawthorn. Blackthorn. Elder.	<i>Crataegus monogyna. Prunus spinosa. Sambucus nigra.</i>	Semi-mature	3	1	60	No	0	See plan				Mixed species hedge line. Some parts are well managed by cutting other parts are unmanaged and overgrown.				Fair	Good	>40 yrs	Low	C	No action required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiology	Structural	Life Expectancy	Amenity	Category	Works
T13	Willow	<i>Salix fragilis</i>	Young	6	10	50	No	1	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths.	Previously topped.	Multiple stemmed shrubby tree within hedge line.	Fair	Fair	>40 yrs	Low	C	No action required
T14	Prunus	<i>Prunus sp.</i>	Semi-mature	10	1	220	Yes	3	3	3	3	3	No visual defects	Single stemmed. Vertical.	Normal. Minor deadwood. Overhanging adjacent land.	Cherry within hedge line. No access.	Good	Good	>40 yrs	Low	C	No action required
T15	Cypress	<i>Cupressus sp.</i>	Early-mature	11	1	350	Yes	2	3	1	4	3	No visual defects	Single stemmed. Vertical. Tight union.	Normal. Overhanging adjacent land	Adjacent garden tree. No access. Overhanging site.	Good	Good	>40 yrs	Low	C	No action required
T16	Cypress	<i>Cupressus sp.</i>	Early-mature	11	1	350	Yes	2	3	3	3	1	No visual defects	Single stemmed. Vertical. Tight union.	Normal. Overhanging adjacent land	Adjacent garden tree. No access. Overhanging site.	Good	Good	>40 yrs	Low	C	No action required
G17	Privet	<i>Ligustrum ovalifolium</i>	Semi-mature	1	10	40	No	0	See plan				Well maintained Privet hedge running along access road				Good	Good	>40 yrs	Low	C	No action required

