



# **ARBORICULTURAL REPORT**

## **& Impact Assessment**

### **to BS 5837:2012 at:**

***West Green Recycling,  
West Green Way,  
Barnsley  
S71 5SN***

Prepared for: *E J Lidster Sales Ltd*

Date: *October 2023*

Reference: *AWA5685*



# Contents

<b>1. Introduction</b>	<b>3</b>
1.1 Instructions and Brief	3
1.2 Survey Details	3
<b>2. The Site</b>	<b>4</b>
2.1 Location and Description	4
<b>3. The Trees</b>	<b>5</b>
3.1 Legal	5
3.2 Tree Survey Results	6
3.3 Photographs	7
<b>4. Arboricultural Impact Assessment</b>	<b>8</b>
4.1 Proposed New Development	8
4.2 Direct Impacts	8
4.3 Indirect Impacts	8
<b>Appendix 1: Authors Qualifications &amp; Experience</b>	<b>11</b>
<b>Appendix 2: Survey Methodology and Limitations</b>	<b>12</b>
<b>Appendix 3: Explanation of Tree Descriptions</b>	<b>13</b>
<b>Appendix 4: Tree Data</b>	<b>14</b>
<b>Appendix 5: Tree Constraints Plan</b>	<b>15</b>
<b>Appendix 6: Tree Impacts Plan</b>	<b>16</b>

# 1. Introduction

## 1.1 Instructions and Brief

- 1.1.1 We have been instructed by E J Lidster Sales Ltd 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 October 2023.
- 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 We have been provided with a topographical survey with tree positions plotted. Where surveyed trees were not included on the topographical survey the tree positions were plotted using enhanced GPS technology (1-2m accuracy) and laser distance measurer.
- 1.2.5 This survey and report have been prepared by Mr Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principal and Director of AWA Tree Consultants Ltd.
- 1.2.6 Full 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**.
- 1.2.7 For tree locations please 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 off West Green Way, Barnsley.
- 2.1.2 The site comprises a recycling centre for the treatment and disposal of non-hazardous waste.
- 2.1.3 The approximate area of the survey is highlighted in the (2022 Google Earth) image below:



## 3. The Trees

### 3.1 Legal

- 3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.
- 3.1.2 An online search was undertaken with Barnsley Council on 20/10/23 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area.
- 3.1.3 As of this date no trees at the site are protected by a Tree Preservation Order or are within a Conservation Area.
- 3.1.4 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a further check should be made with the Local Planning Authority to confirm if any trees are covered by a Tree Preservation Order or are within a Conservation Area. If either applies, then statutory permission is required before any works can take place (unless such work is approved as part of full planning permission).
- 3.1.5 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2021).
- 3.1.6 It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.
- 3.1.7 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.
- 3.1.8 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.9 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 18 items of woody vegetation, comprised of 9 individual trees and 9 tree groups or hedges.
- 3.2.2 All of the surveyed trees, tree groups and hedges are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Full details of the surveyed trees, tree groups and hedges are provided in the attached tree data schedule at Appendix 4. General comments are provided below:
- 3.2.4 The most significant tree cover within the site consists mainly of a woodland type group situated on former railway banking, beyond the eastern boundary of the site (G2). The trees are generally young to semi-mature and are only of low individual value. Collectively however the group does provide fair landscape value and it does have good potential to provide a more valuable woodland feature as it matures.
- 3.2.5 Along the access road into the site are a group of semi-mature Oaks (G11). Individually these are lower value yet collectively they form a reasonable tree feature and they have good long term prospects.
- 3.2.6 There are several groups of trees situated beyond the north east of the site, some of which are overhanging slightly into the site (G4 to G10). These provide some arboricultural and ecological interest, yet are generally of low value.
- 3.2.7 There is an established former hedge along some of the east of the site (G16) and linear groups of small trees (G17 and G18). These provide some screening yet are of low value.
- 3.2.8 Many trees were inaccessible (as detailed in Appendix 4). In such cases measurements were estimated and the condition values are indicative only.
- 3.2.9 The tree Root Protection Area (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.
- 3.2.10 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

### 3.3 Photographs



Photo 1: T1 and G2, looking southeast



Photo 2: G2 looking east



Photo 3: G2 to G8, looking north



Photo 4: G9 and G10 looking east



Photo 5: G11 to T15, looking west



Photo 6: G18, looking north west

## 4. Arboricultural Impact Assessment

### 4.1 Proposed New Development

- 4.1.1 The development application is seeking retrospective permission for the installation of an aggregate wash plant, electricity substation and hard landscaping and then also proposing to clad a structure, a new substation and a water pump house.
- 4.1.2 We have been provided with the planning layout drawing by my client and this informs this arboricultural impact assessment and the Tree Impacts Plan at Appendix 6.

### 4.2 Direct Impacts

- 4.2.1 From assessing the new development proposals no trees or tree groups will require removal or pruning to facilitate the development.
- 4.2.2 As such, the development will have no direct arboricultural impact.

### 4.3 Indirect Impacts

- 4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 5 and 6, has been 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. As such, no significant negative indirect impacts have been identified.
- 4.3.2 Potentially damaging activities are proposed in the vicinity of retained hedge group G16. The new concrete block wall encroaches close to and into the edge of the RPA of the hedge. Construction within the RPA can have negative impacts on tree roots. However, the encroachment is very minor. As such, it is unlikely that significant roots will be within these areas and the retained tree should remain largely unaffected by the works, provided care is taken during construction.
- 4.3.3 Elsewhere on the site, due to the presence of existing roads, structures, and topography the RPAs of the surveyed trees will not be impacted.
- 4.3.4 The design of the new development has considered the trees crown position in relation to the development. The proposals avoid excessive shading and give adequate provision for future tree growth.
- 4.3.5 The buildability of the proposed development has been assessed in terms of access, adequate working space and provision for the storage of materials, including topsoil, in relation to the trees.

## Signature

I trust this report provides all the required information.

Signed



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

**20<sup>th</sup> October 2023**

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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 6: Tree Impacts Plan**

## Appendix 1: Authors Qualifications & Experience

### **Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered**

Adam is the company Director and Principal Consultant. He has a mix of the highest-level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and he has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the crown court. Adam also regularly undertakes locum Tree Officer work for several Local Planning Authorities.

### **James Brown, BSc (Hons) Arboriculture, MArborA, PTI (Lantra), QTRA Registered**

James is a highly experienced and qualified Arboricultural Consultant. He has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has many years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

### **James Godfrey, BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered**

James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

### **Joe Thomas, MSci Biology, Award L4 Arboriculture, TechArborA, QTRA Registered**

Joe achieved a first class degree in Biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

### **James Boyle, HND Level 5 Arboriculture and Urban Forestry, QTRA Registered**

Jim joined AWA after having worked within the tree care profession for several years, alongside studying at college and university. During this time he gained a wealth of experience and achieved a variety of practical qualifications within the tree care industry. Jim has studied Arboriculture and Urban Forestry at Merrist Wood College in Surrey, Plumpton College in Sussex and University of Highlands and Islands in the Scottish Highlands, where he achieved a distinction in the Higher National Diploma Level 5.

### **Lucy Garbutt, MSc Animal Behaviour, BSc (Hons) Biology, CIEEM membership**

Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

### **Sophie Beckerman, BA (Hons), Dip Arboriculture Level 4, TechArborA**

Sophie has more than 10 years' experience as an arborist, working for a variety of private companies as well as undertaking tree management with Sheffield City Council Ranger Service and The Wildlife Trust. Her expertise in arboriculture is demonstrated in the practical NPTC qualifications gained, and her excellent knowledge is reflected in the L4 diploma in Arboriculture, which she completed while working. Her roles as a climbing arborist and team leader included estimating for jobs and project management, supervising tree contracting teams - ensuring that work is carried out safely and efficiently and that health and safety standards are adhered to, and risk assessments are carried out.

## Appendix 2: Survey Methodology and Limitations

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 BS 5837:2012 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.

**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 in 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 unsuitable for retention.** These trees are in such a condition that any existing value would be lost within 10 years.

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Comments	Physiological	Structural	Life Expectancy	Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Crown height	N	E	S	W					Amenity	Category	
T1	Oak	<i>Quercus robur</i>	Semi-mature	10	1	250	3	4	4	4	4	Single-stemmed and vertical. Adjacent tree on adjacent banking, closer to site than most of adjacent woodland. Overhanging into site by around 1m.	Good	Good	>40	Moderate	C	No works required
G2	Birch	<i>Betula pendula</i>	Semi-mature	12	1	150	2	2	2	2	2	Dense woodland type group situated in adjacent land on banking. Occasional goat willow and other species but Birch very dominant. Dense spacing at around 1x1m. Generally clear of the development site, with concrete structures and fencing separating the trees and the site.	Good	Good	>40	Moderate	B	No works required
T3	Birch	<i>Betula pendula</i>	Semi-mature	14	2	200, 200	2	4	4	4	4	More established/ larger tree in group G2, growing very close to the fencing.	Good	Fair	20 to 40 yrs	Low	C	No works required
G4	Willow, Alder, Sycamore	<i>Salix sp, Alnus, Acer pseudoplatanus</i>	Young	6	1	100	3	2	2	2	2	Small area of scrub type vegetation	Good	Fair	20 to 40 yrs	Low	C	No works required
T5	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	13	1	350	4	4	4	4	4	Single more established tree, overhanging into the site	Good	Fair	20 to 40 yrs	Low	C	No works required

Tree Species		Maturity	Measurements				Crown (m)				Comments	Physiological	Structural	Life Expectancy	Value		Management
Tree ID	Common Name		Latin Name	Height (m)	Stems	Stem Diameter (mm)	Crown height	N	E	S					W	Amenity	Category
T6	Alder	<i>Alnus sp.</i>	9	1	250	3	3	3	3	3	Adjacent tree, significant crown dieback	Fair	Poor	10 to 20	Low	C	No works required
T7	Willow	<i>Salix alba</i>	16	1	450	3	6	6	6	6	Single more established tree, overhanging into the site	Good	Fair	20 to 40 yrs	Low	C	No works required
G8	Willow, Alder, Sycamore	<i>Salix sp., Alnus, Acer pseudoplatanus</i>	9	1	200	2	3	3	3	3	Adjacent group, beyond fencing, Mostly single-stemmed with no major visible defects yet some failed stems	Fair	Fair	20 to 40 yrs	Low	C	No works required
G9	Birch	<i>Betula pendula</i>	14	1	350	3	4	4	4	4	Group of more established trees, situated in adjacent land, beyond fence, overhanging into the site	Good	Good	20 to 40 yrs	Moderate	C	No works required
G10	Willow	<i>Salix alba</i>	15	1	300	3	4	4	4	4	Group of more established trees, situated in adjacent land, beyond fence, overhanging into the site	Good	Good	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Maturity	Measurements			Crown (m)				Comments	Physiological	Structural	Life Expectancy	Value		Management	
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Crown height	N	E	S					W	Amenity		Category
G11	Oak	<i>Quercus robur</i>	Semi-mature	12	1	250	2	4	4	4	4	Line of trees situated by access drive. Reasonable collective value and prospects.	Good	Good	> 40 yrs	Moderate	B	No works required
T12	Lime	<i>Tilia sp.</i>	Semi-mature	11	1	260	2	3	3	3	3	Single tree situated by access drive. Reasonable collective value and prospects.	Good	Good	> 40 yrs	Moderate	C	No works required
T13	Birch	<i>Betula pendula</i>	Semi-mature	6	1	150	2	2	2	2	2	Single tree situated by access drive. Reasonable collective value and prospects.	Good	Fair	20 to 40 yrs	Low	C	No works required
T14	Lime	<i>Tilia sp.</i>	Semi-mature	9	1	230	2	3	3	3	3	Single tree situated by access drive. Reasonable collective value and prospects.	Good	Good	> 40 yrs	Moderate	C	No works required
T15	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	13	3	300, 200, 150	2	4	4	4	4	Single tree situated by access drive. Reasonable collective value and prospects.	Good	Good	> 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Comments	Physiological	Structural	Life Expectancy	Value		Management
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Crown height	N	E	S	W					Amenity	Category	Works
G16	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	3	1	100	2	2	2	2	2	Unmanaged former hedge, some ground disturbance to northern edge.	Good	Good	> 40 yrs	Low	C	No works required
G17	Field Maple, Hawthorn Cherry	<i>Acer campestre</i> , <i>Crataegus monogyna</i> , <i>Prunus sp.</i>	Young	6	1	120	2	2	2	2	2	Adjacent liner group of small trees. Clear from development area	Good	Good	> 40 yrs	Low	C	No works required
G18	Birch, Field Maple, Hawthorn	<i>Betula pendula</i> , <i>Acer campestre</i> , <i>Crataegus monogyna</i> ,	Young	7	1	130	2	2	2	2	2	Adjacent liner group of small trees. Clear from development area	Good	Good	> 40 yrs	Low	C	No works required



**Appendix 5:**  
**Tree Constraints Plan**  
West Green Recycling, Barnsley  
Ref: AWA5685

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

SCALE: 1:500 PAPER: A1

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: UNSUITABLE FOR RETENTION
	RPA: ROOT PROTECTION AREA
	TREE STEM





### Appendix 6: Tree Impacts Plan

Sandford Grange, Dudlow Lane, Mossley Hill, Liverpool  
Ref: AWA5162AMS

BRITISH STANDARD 5837:2012

SCALE: 1:200

PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	TREE STEM
	RPA: ROOT PROTECTION AREA



**WASHING SYSTEM**  
As shown on Dwg No.1  
B02\_C210088\_00\_02\_4-Washing system

**SUBSTATION 2**  
As shown on Dwg No.  
2963D - STANDARD NPG SPEC ENCLOSURE (Substation 2)

**STORAGE TANKS**  
As shown on Dwg No.  
B02\_C210088\_00\_04\_4-PP - Plan View  
B02\_C210088\_00\_05\_4-PP - Lateral View

**FILTER PRESS SYSTEM**  
As shown on Dwg No.  
001 Proposed Plans (Filter Press System)  
002 Proposed Elevations (Filter Press System)  
B02\_C210088\_00\_04\_4-PP - Plan View  
B02\_C210088\_00\_05\_4-PP - Lateral View

**STORAGE TANK**  
As shown on Dwg No.  
172260-300001-Vertical Tank

**PUMPHOUSE**  
As shown on Dwg No.  
004 Proposed Plan and Elevations  
(Pumphouse)

**SUBSTATION 1**  
As shown on Dwg No.  
003 Proposed Plan and Elevations  
(Substation 1)