ARBORICULTURAL REPORT
AND
ARBORICULTURAL IMPACT ASSESSMENT
to BS 5837:2012
at
43 Intake Lane
Barnsley
South Yorkshire
S75 2HX

Client:
Lynsey Rose

Client Address:
43 Intake Lane
Barnsley
South Yorkshire
S75 2HX

JCA Ref:
20437/LW



JCA Limited
Arboricultural & Ecological Consultants

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1. Introduction

1.1 Purpose of the Report

1.1.1 JCA Limited has been instructed by **Lynsey Rose** to survey the trees at **43 Intake Lane**, **S75 2HX** and prepare the findings in a report.

1.1.2 This report provides detailed, independent, arboricultural advice on the trees in the context of potential development, conducted in accordance with the guidelines contained within BS5837: 2012 *'Trees in relation to design, demolition and construction – Recommendations' (BS5837:2012).*

1.1.3 This report will categorise the trees in accordance with the British Standard, which will help guide the design of potential development in terms of constraints and opportunities related to trees, and provide details of which trees should be retained and which could be removed.

1.1.4 The specific design of the proposed development has been considered within the Arboricultural Impact Assessment in **Section 4** and is detailed on the Arboricultural Implications Plan at **Appendix 6**.

1.2 Terms of Reference

1.2.1 For this purpose, an Ordnance Survey based drawing has been used, which forms the basis for the Tree Constraints Plan at **Appendix 5**. Tree positions were not marked on the Ordnance Survey drawing and have therefore been plotted by the surveyor on site. Whilst not as accurate as a topographical survey, our drawing is considered to provide a fair representation of the positions of the trees surveyed. Tree positions should, however, be considered indicative on the Tree Constraints Plan.

1.3 Tree Survey Details and Methodology

1.3.1 The survey took place during March 2023 and was conducted by **Luke Wickham** *FdSc (Arboriculture and Urban Forestry).*

1.3.2 During this survey, all trees were inspected from ground level. Further investigations, such as a climbed inspection or a decay detection survey, have not been undertaken.

1.3.3 Only those trees within the site boundary with a stem diameter above 75mm have been included. Where applicable, trees outside the site boundary, but close enough to be affected by a proposed development, are also included.

1.3.4 Tree data was collected in accordance with **Section 4.4** and **Section 4.5** of BS5837: 2012. Full details of all trees surveyed are recorded in the tables at **Appendix 1** which can be cross referenced with the Tree Constraints Plan at **Appendix 5**. A full explanation of the tables can be found at **Appendix 2**.

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1.3.5 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible, due to restricted access or other mitigating circumstances, measurements were estimated to the best ability of the surveyor. Where measurements have been estimated, these are clearly highlighted at **Appendix 1** with a '#' symbol.

2. Status of the Trees

2.1 A check was made with **Barnsley Metropolitan Borough Council** on 20th March 2023 to determine whether any of the trees surveyed as part of this report are subject to any statutory controls.

2.2 We are informed that no trees within our survey are subject to any Tree Preservation Orders (TPO) and the site is not located within a Conservation Area.

2.3 However, prior to any works being undertaken to trees, those instructing and proposing to carry out the work should satisfy themselves that all appropriate consents are in place to prevent potential breach of legislation.

3. Tree Survey Details

3.1 Tree Retention Categories

3.1.1 Below is a summary of the surveyed vegetation with retention categories identified in accordance with BS5837: 2012. For a full explanation of the retention categories, please refer to **Appendix 2 (Section A2.3)**.

Retention Categories of the Surveyed Vegetation					
Retention Category	**Trees**	**Groups**	**Hedges**	**Woodlands**	**Totals**
A	0	0	0	0	**0**
B	5	0	0	0	**5**
C	0	0	0	0	**0**
U	0	0	0	0	**0**
Totals	**5**	**0**	**0**	**0**	**5**

3.1.2 As a general rule, those trees listed as retention category 'A' or retention category 'B' are the most valuable items of vegetation and as such the removal of these is likely to be met with resistance by the Local Planning Authority (LPA).

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3.1.3 Those items listed as retention category 'C' are of lesser value and the removal of these is generally less likely to be met with resistance by the LPA.

3.1.4 The above information should guide the design in terms of which trees could be removed and which trees should be retained. However, due to changing attitudes with regards to environmental awareness, it should be noted that all trees are considered to have value. As such, it is advised that as many trees as possible be retained, regardless of their BS5837: 2012 retention category status. The retention of trees is further advised to avoid the need to plant replacement specimens, which are usually required to be planted on a 2:1 or 3:1 ratio, and due to their ecological value, which will be assessed as linear habitat units within Biodiversity Metric 3.1.

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4. Arboricultural Impact Assessment (AIA)

4.1 Proposed Development

4.1.1 The proposed development will consist of the construction of a garage.

4.1.2 We have been supplied with Drawing No. **Sheet - A105 - Proposed Site Plan**, which details the proposed development. The tree data has been overlaid onto the proposed designs to create the Arboricultural Implications Plan, which can be found at **Appendix 6.** This provides the basis for which this Arboricultural Impact Assessment has been prepared.

4.1.3 All tree works required to accommodate the proposals are detailed in *italics* in the recommendation columns of the tables at **Appendix 1.** Please note that any required Arboricultural works recommended during the initial survey are also listed in these tables in non-italics.

4.2 Tree Removals for Development

4.2.1 No trees are required to be removed to accommodate the proposed scheme.

4.3 Pruning for Development

4.3.1 To accommodate the proposals, it will be necessary to prune one of the trees in order to provide suitable access and working distances, and to afford reasonable clearances from the garage. Also known as 'access facilitation pruning' this is relevant to **T5**.

4.3.2 Although the footprint of the garage passes over the RPA of T5, it should be noted that the garage will be built utilising a floating foundation, and therefore root pruning will not be necessary.

4.4 Temporary Protection Measures

4.4.1 The Protective Barrier

4.4.1.1 In order to ensure the effective protection of retained trees during development, a protective barrier will be installed, in accordance with BS5837: 2012 and may comprise of protective fencing and ground protection. This will be the first job on site following the tree removal and pruning works. The fencing should ideally be positioned to protect the entire **Root Protection Area** (**RPA**) of the retained trees, in order to create a **Construction Exclusion Zone** (**CEZ**).

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4.4.1.2 Routes for pedestrian and site traffic will be located outside, and diverted away from, the RPAs of the retained trees wherever possible. Where this is not practicable, temporary protective surfaces (ground protection) must be laid over the exposed RPAs to reduce/limit soil compaction. The ground protection must therefore distribute the weight of site vehicles, machinery or pedestrians whilst allowing moisture to reach the tree rooting area beneath. Such surfaces must be constructed in accordance with BS5837: 2012.

4.5 Implications for Retained Trees

4.5.1 Works within the RPA

4.5.1.1 Where the proposals require work to be undertaken within the RPA of a tree which is to be retained, specialist measures must be adopted during the construction phase to avoid ground compaction and minimise root damage.

4.5.1.2 Such areas are highlighted in **magenta** on the Arboricultural Implications Plan at **Appendix 6** and are addressed in the following sections.

4.5.2 Demolition

4.5.2.1 In this case, no significant demolition activities are required adjacent to retained trees and as such, no mitigation measures are considered necessary.

4.5.3 Access/Construction of Hard Surfacing

4.5.3.1 The proposed development entails the construction of hard surfacing within the RPA of **5** of the retained trees. This takes the form of a driveway. In order to prevent foreseeable damage to tree roots, a 'no-dig' method of construction will be utilised.

4.5.3.2 The chosen system must be fit for purpose and of suitable construction to dissipate compaction damage to tree roots, allow gaseous diffusion to/from the soil and the percolation of water to the soil surface. This may require the use of specialist materials and sensitive edging systems to prevent damage to tree roots. It is recommended that this surfacing be constructed as an initial phase of construction, in order to afford the maximum protection throughout development.

4.5.3.3 Design principles must be confirmed by an appropriately qualified engineer and should be included in an Arboricultural Method Statement.

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4.5.4 Construction / Foundation Design

4.5.4.1 The footprint of the proposed garage incurs the RPA of **T5**. Due to this, a specialist foundation design will be implemented to reduce excavation and the detrimental impact this can have on tree roots. In this instance a cantilever/floating foundation has been suggested, which must be supported outside of the RPA's of the trees surveyed

4.5.4.2 This method will minimise foreseeable damage and will allow the retention of **T5**, whilst accommodating the proposed development. Full details of these works should be included in an associated Arboricultural Method Statement, along with any phasing of protection methods and arboricultural supervision which may be necessary.

4.5.4.3 Advice should always be sought from a suitably qualified Structural Engineer. In some cases, the water demand of trees can be an important consideration when determining the appropriate foundation design. Because of this, water demands for the trees identified on this site are included at **Appendix 1**, in accordance with **NHBC chapter 4.2**, for the use of the appointed structural expert.

4.5.5 Utilities

4.5.5.1 Details on service routes are not available at this time. Where utilities need to be brought onto the site, these should be routed away from the RPAs of retained trees. Where this is not possible, methodologies on the installation of underground services without damage to tree roots should be considered.

4.5.6 Site Compound

4.5.6.1 The site compound, which typically includes the site office, mess facilities, toilets, storage of materials and parking, must be located away from the trees and outside the RPAs.

4.5.6.2 Care should also be taken to prevent soil contamination with chemical spillages, including petrol, diesel and oils.

4.5.7 Landscaping

4.5.7.1 Proposed fence lines may be constructed within the RPA of a tree if necessary, providing that appropriate considerations are taken with regards to the well-being of the effected tree. As such, no continual trenching is to be undertaken within the RPA (e.g. for small walls onto which panel fencing is installed). Excavations must be kept to a minimum and therefore only fence designs requiring intermittent posts will be acceptable within the RPA. Fences should also be kept as far away from the main stems of the trees as is reasonably possible.

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4.5.7.2 Any patios, garden paths or other hard surfaces within RPAs which may not be shown on the projected layout (**Appendix 6),** and in addition to those mentioned in **Section 4.5 (hard surfaces)** may be constructed using no-dig techniques, providing that they do not cover more than 20% of the RPA and are implemented in accordance with BS5837: 2012. Such surfaces are to be kept as far away from the main stems of the trees as is reasonably practicable. If there is any concern of damaging retained trees, further advice should be sought from a qualified Arboriculturalist.

4.5.7.3 No ground level changes are to be undertaken within the RPAs of retained trees, unless otherwise stated or agreed with the appointed Arboricultural Consultant or the LPA. The requirement to raise/lower ground levels within RPAs must be communicated to these parties at the earliest practical convenience.

4.6 Remedial Measures

4.6.1 Protective fencing specifications and on-site positioning, along with details of any necessary specialist construction methods, can be provided in an Arboricultural Method Statement (AMS).

4.6.2 The site offers scope for landscaping and tree planting. All areas identified for the new planting should also be protected by fencing during the construction phase to prevent the compaction of the soil.

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5. Summary

5.1 The arboricultural implications of the development have been considered and discussed in **Section 4**.

5.2 All development work carried out in close proximity to trees must be executed in a manner sympathetic to their needs. Otherwise, the condition of the trees may deteriorate in the months and years following development, leading to a loss of amenity and resulting in potentially hazardous trees. Care must therefore be taken to ensure that the retained trees are suitably protected.

5.3 In accordance with **Section 6.1** of **BS 5837: 2012**, the next stage on this site should be the preparation of an **Arboricultural Method Statement (AMS)**, to ensure that all the retained trees survive the development process. An **AMS** details which trees are to be removed, which trees are to be retained and any other tree works which are required to facilitate development. The **AMS** will also advise on temporary protective barriers, temporary ground protection, site supervision, location of services and it will detail specialist construction techniques.

5.4 It is advised that in accordance with **Section 5.6** of **BS 5837: 2012** that a **Tree Planting Scheme** is prepared which will help to ensure that the site retains a sustainable tree cover. A carefully designed **Tree Planting Scheme** will incorporate tree species in harmony with the development whilst seeking to improve the overall age range and species diversity.

5.5 In accordance with **Section 6.3** of **BS 5837: 2012**, site supervision at key stages of the development is likely to be advisable.

5.6 The data gained during the survey provides an indication of the health of the trees. However, it does not enable a comprehensive assessment of their condition over time. Trees are living organisms which are affected by many factors including weather conditions, diseases/disorders, light levels and human activities. Due to this, this report is only valid for a period of 1 year from the date of issuing. Should an update or revision of this report be required outside of this time period, JCA may require a further site visit to ensure that the condition of the trees has not significantly changed. It is advised that the trees are inspected regularly, in the interests of risk management.

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Appendices

Tree Ref.	Age Common Name *Botanical Name*	Height (m)	Crown Height (m)	Height (m) and Direction of the Lowest Branch	Diameter (cm)	Crown Spread N W E S	Observations	Recommendations Priority	Physiological Condition	Structural Condition	Amenity Value	NHBC Water Demand	Life Expectancy (yrs)	Retention Category
T 1	Semi-Mature Sycamore *Acer pseudoplatanus*	12	4	4 S	41	3 4 3 5	Slightly leaning to the north-east, the crown is based to the south-east. Historically pruned to four metres over the driveway. No major visual defects.	No action required *Access facilitation pruning required.* n/a	GOOD	GOOD	MOD	MOD	20-40	B1
T 2	Semi-Mature Sycamore *Acer pseudoplatanus*	12	4	5 n/a	42	3 5 4 4	Slightly leaning to the north-east. Historically managed over the pavement and road. Leaning to the north-east. No major visual defects.	No action required *'no-dig' technique to be utilised.* n/a	GOOD	GOOD	MOD	MOD	20-40	B1
T 3	Semi-Mature Sycamore *Acer pseudoplatanus*	12	4	5 n/a	41	2 5 1 4	Single-stemmed and vertical with a balanced crown. Historically maintained over the pavement and road. Unbalanced crown bias to the west. No major visual defects.	No action required *'no-dig' technique to be utilised.* n/a	GOOD	GOOD	MOD	MOD	20-40	B1
T 4	Early-Mature Sycamore *Acer pseudoplatanus*	13	3	5 n/a	36	3 2 5 2	Slightly drawn form due to neighbouring vegetation. Historically managed away from the road and pavement. Slightly leaning to the north-east. No major visual defects.	No action required *'no-dig' technique to be utilised.* n/a	GOOD	GOOD	MOD	MOD	20-40	B1
T 5	Early-Mature Lime *Tilia sp.*	13	3	5 n/a	72	5 5 8 4	Twin-stemmed from 1.75 metres with an open union. Leaning to the north-east, the crown hangs into the site at 2m. Historically maintained away from the road and pavement. Established epicormic growth with some dense suckers at the base. No major visual defects.	No action required *'no-dig' technique to be utilised.* n/a	GOOD	GOOD	MOD	MOD	20-40	B1

Appendix 2: Explanation of Tree Descriptions

A2.1 Measurements/ Reference Information

A2.1.1 *REF NUMBER.* All items surveyed are allocated a reference number preceded with a letter, identifying the type of vegetation surveyed: T = an individual tree, G = a group of trees or an area of vegetation, W = woodland, H = a hedgerow.

A2.1.2 *SPECIES: COMMON AND BOTANICAL NAME*. The common and botanical names of the species present are noted. If the species is not clear or identifiable, then a general common name and genus will be noted.

A2.1.3 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, over-mature, veteran or dead.

A2.1.4 *HEIGHT* of the tree is measured in metres from the stem base to the top of the crown.

A2.1.5 *CROWN HEIGHT* is an indication of the height above ground level at which the crown begins.

A2.1.6 *STEM DIAMETER* is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; diameter measurements are taken for each stem. If more than five stems are present, an average stem diameter is taken. If for whatever reason it is not practical to measure multiple-stemmed trees in this way, the diameter is measured close to ground level, just above the root buttress.

A2.1.7 *CROWN SPREAD* is measured from the centre of the stem base to the tips of the branches to all four cardinal points.

A2.1.8 *HEIGHT AND DIRECTION OF LOWEST BRANCH.* The height and direction of the lowest significant branch is noted because of potential issues relating to clearances and the need for tree pruning.

A2.1.9 *NHBC WATER DEMAND.* The water demand of each tree, as listed in NHBC Standards 2010 Chapter 4.2 ‘Building near trees’. This is included to aid structural engineers, architects and other members of the design team as it determines foundation depth and other considerations with regard to trees.

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A2.2 Evaluations

A2.2.1 *PHYSIOLOGICAL CONDITION* is classed as good, fair, poor, or dead. This is an indication of the health and vitality of the tree and takes into account vigour, presence of disease and dieback.

A2.2.2 *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.

A2.2.3 *LIFE EXPECTANCY* is classed as; 0, less than 10 years, 10+ years, 20+ years, or 40 + years. This is an indication of the minimum number of years before removal of the tree is likely to be required.

A2.2.4 *AMENITY VALUE.* A general indication is given in respect to the amenity/landscape value of the tree/group within the surrounding area.

A2.2.5 *PRIORITIES.* A priority rating is given concerning the time periods in which the recommended works should be undertaken. LOW priority works should be undertaken within 12 months of the survey, MOD (moderate) priority works should be undertaken within 6 months and HIGH priority works should be completed as soon as practically possible. If no works are recommended, N/A (not applicable) will be used.

A2.3 Retention Categories

A2.3.1 ***A (marked green on the Tree Constraints Plan) = Trees of high quality.***

These trees are of high quality and value with a good life expectancy (usually with an estimated remaining life expectancy of 40 years).

A2.3.2 ***B (marked in blue on the Tree Constraints Plan) = Trees of moderate quality.***

These trees are of moderate quality and value with a reasonable life expectancy (usually with an estimated life expectancy of at least 20 years).

A2.3.3 ***C (marked in grey on the Tree Constraints Plan) = Trees of low quality.***

These trees are of low quality and value but which are in adequate condition to remain or are young trees with a stem diameter below 15cm (usually with an estimated life expectancy of at least 10 years).

A2.3.4 Trees categorised as retention category ‘A’, ‘B’ or ‘C’ are then justified by being further divided into 3 subcategories:

1 = Mainly arboricultural qualities.

2 = Mainly landscape qualities.

3 = Mainly cultural values, including conservation value.

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A2.3.5 ***U (marked in red on the Tree Constraints Plan) = Trees usually unsuitable for retention due to poor condition.***

These trees are in such a condition that they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. This may be due to any of the following:

1) Failure is likely due to serious, irredeemable, structural defects.
2) Removal of other category U trees will render them exposed and unstable.
3) They are in serious, overall decline or are dead.
4) They are of low quality and suppressing adjacent trees of better quality.
5) Diseases are present which may affect the health of adjacent trees.

These trees are to be removed or managed in a way which reduces their risk of failure, where they have high ecological value, such as in a woodland setting.

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Appendix 3: General Guidelines

A3.1 All tree work must be undertaken to BS 3998: 2010 '*Recommendations for tree work'* or other recognised industry practice.

A3.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors. They should be covered by adequate public liability insurance.

A3.3 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.

A3.4 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.

A3.5 No liability can be accepted by JCA in respect of the trees unless the recommendations of this report are carried out under the supervision of JCA and within JCA's timescale.

A3.6 It is advisable to have trees inspected by an arboricultural consultant regularly.

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Appendix 4: Author Qualifications

Principal Consultant and Managing Director

Jonathan Cocking *F.R.E.S., Tech. Cert. (Arbor.A), PDipArb (RFS) FArborA CBiol MSB. MICFor.* Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 31 years' experience in the Arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. Jonathan has since developed JCA's portfolio of services and its extensive client base. He is a Chartered Biologist, a Chartered Arboriculturalist and an Expert Witness with much experience of litigation work.

Technical Director

Toby Thwaites *BSc (Hons), HND (Arboriculture), MArborA.*. Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Central Lancashire. A former JCA team leader and Consulting Arboriculturist, Toby is now Technical Director and oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Operations Director

Charles Cocking *FdSc (Arboriculture), MArborA.* Charles joined JCA in January 2014 having previously worked for the company on a part time basis during 2013. Charles obtained his Foundation Degree in Arboriculture at Askham Bryan College, York, and is a Professional Member of the Arboricultural Association. Charles now oversees all internal operations for the company.

Consulting Staff: Arboriculture

Andrew Bussey. Andrew started working in consultancy at JCA in 2006 having spent 12 years working as an arborist for various private companies before joining a Local Authority forestry team. He has various NPTC qualifications, is QTRA qualified and is a LANTRA Accredited Professional Tree Inspector.

Emily Wilde *FdSc (Arboriculture).* Emily joined JCA having previously worked for various private tree surgery and consultancy companies over the past 8 years. She initially obtained a ND in Forestry & Arboriculture, followed by a FdSc in Arboriculture at Askham Bryan College, York. Emily has various NPTC certificates and is QTRA qualified.

Mick Eltringham *ND (Forestry).* Mick joined JCA after spending 12 years working in the industry for various private companies in the north and south of England. He has also spent the last five years working as a consultant for two canopy research projects in the Amazon Rainforest, working with Oxford University and the University of Arizona. He has various NPTC Qualifications.

Dan Kemp *FdSc (Arboriculture).* Dan joined JCA with nearly 30 years' experience in arboriculture. He worked as a London Tree Officer for 12 years and in several arboricultural and horticultural management posts, specialising particularly in tree risk assessments and tree related subsidence.

Luke Wickham *FdSc (Arboriculture and Urban Forestry).* Luke joined JCA in 2021 after obtaining his Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. Having previously worked within the industry for the past 4 years, running his own small business and sub-contracting for local firms, Luke brings a sound knowledge and understanding of the practical and academic sides of the industry.

Andrew McPhaden *BSc (Hons).* Andrew joined JCA in 2022 having spent 5 years working as an Arborist for various private companies in both the UK and Germany. During his time abroad he obtained the European Tree Worker Certification along with a tree inspector certification from the Forschungsgesellschaft Landschaftsentwicklung Ladschaftsbau. He brings a strong understanding of the practical sides of the industry and holds various NPTC qualifications.

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Consulting Staff: Ecology

Adam West, Principal Ecologist *BSc (Hons) Animal and Wildlife Management*. Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Batchelor's degree, for which he was awarded First Class Honours. Adam has many years' experience in ecological consultancy, working on projects ranging from individual planning applications to national infrastructure projects. Adam holds a Natural England Level 1 great crested newt survey class licence, a Natural England Level 2 bat survey class licence (and the Scottish and Welsh equivalents) and a CSCS card.

Audrey Bourdais Paull, Graduate Ecologist *BSc (Hons) Zoology*. Audrey joined JCA in 2022 after graduating in Zoology from the University of Leeds. Audrey volunteered for many years with various wildlife conservation and rescue organisations, as well as working on various projects to develop a variety of field survey techniques, report writing and data analysis skills. Audrey is looking forward to developing her ecology consultancy experience with JCA, as well as combining her previous dog training and detection work with ecology to expand into ecology detection dogs.

Helen Chambers, Seasonal Ecologist *MSc by Research in Environmental Studies, BSc (Hons) Wildlife Conservation with Zoo Biology*. Helen joined JCA in 2022 after completing her master's by research degree at the University of Salford. In 2019 Helen graduated with First Class Honours BSc Wildlife Conservation with Zoo Biology, where she gained theoretical knowledge of, and practical experience with, wildlife monitoring and wildlife legislation. She is hoping to further develop her ecological surveying and report writing skills at JCA.

Administrative Staff

Catherine Cocking Accounts Manager.
Kelly Saunders Accounts Assistant.
Lorraine Spink Administrative Assistant.
Lisa Beedham Marketing Manager.

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Root Protection Area: RPA

THE ROOT PROTECTION AREA SHOULD IDEALLY REMAIN UNDISTURBED IF THE TREE IS TO BE RETAINED.

THE DEVELOPMENT PROPOSALS SHOULD THEREFORE BE DESIGNED TO AVOID THE RPA OF ANY TREE WHICH IS TO BE RETAINED.

IF IT IS NECESSARY FOR THE DEVELOPMENT TO ENCROACH INTO THE RPA OF A TREE WHICH IS TO BE RETAINED THEN SPECIALIST CONSTRUCTION TECHNIQUES AND MATERIALS MUST BE CONSIDERED.

Appendix 5: Tree Constraints Plan

ADDRESS: 43 Intake Lane, Barnsley, South Yorkshire, S75 2HX.
JCA REF: 20437/LW

SCALE 1:200	PAPER SIZE A3

SURVEYED BY: LW	DRAWN BY: LW	APPROVED BY: DK

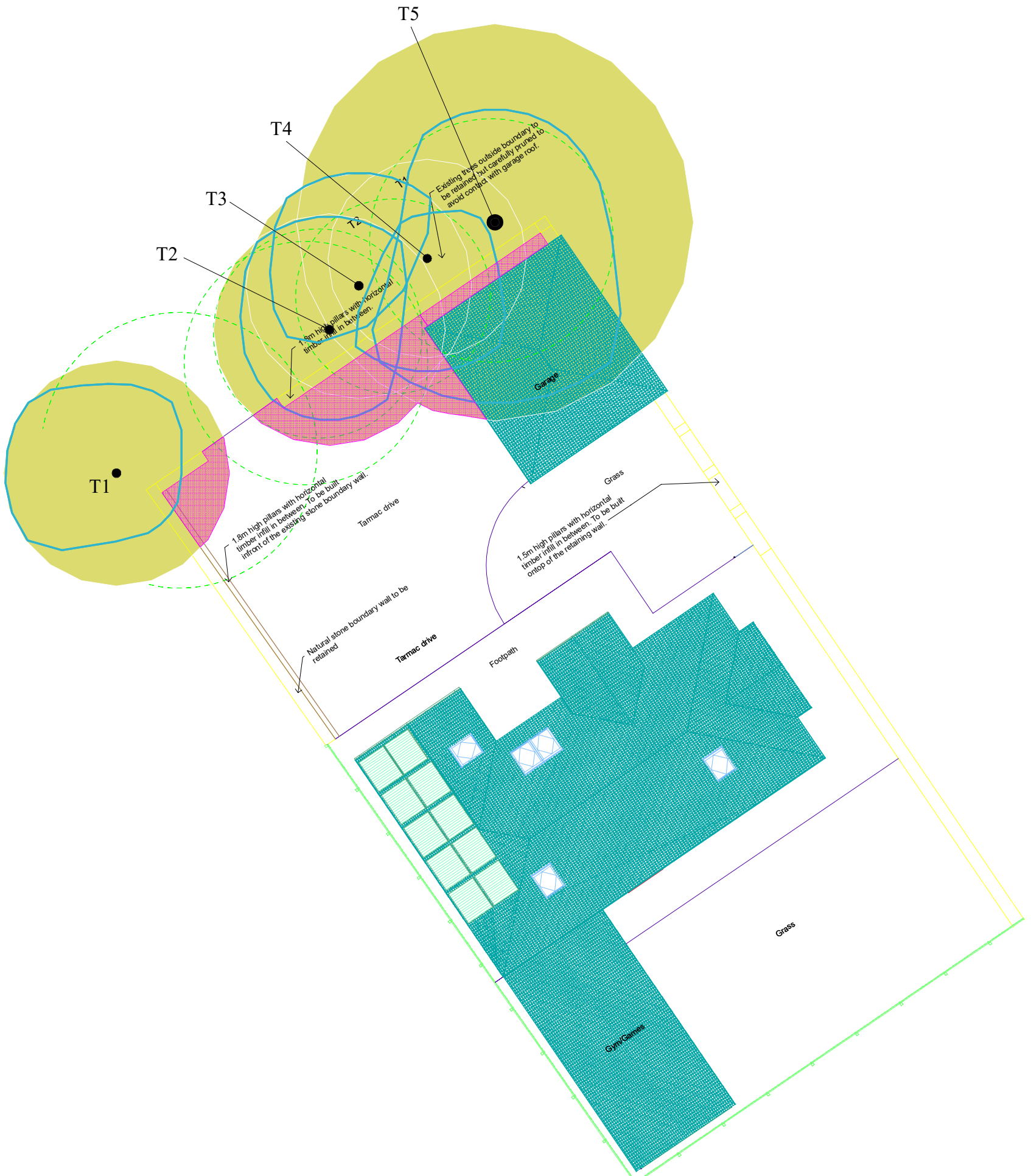
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BRITISH STANDARD 5837:2012: 4.5 RETENTION CATEGORIES

Detailed definitions of these catagories are at Appendix 2 of our report. N.B. These categories do not necessarily represent or correspond to recommendations for action made in this report.

	CATEGORY A: 'RETENTION MOST DESIRABLE'
	CATEGORY B: 'RETENTION DESIRABLE'
	CATEGORY C: 'TREE WHICH COULD BE RETAINED'
	CATEGORY U: 'TREE FOR REMOVAL'
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA



0 1 2 3 4 5 10 15 20 metres

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Appendix 6: Arboricultural Implications Plan

ADDRESS: 43 Intake Lane, Barnsley, South Yorkshire, S75 2HX.
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SCALE 1:200 | **PAPER SIZE A3**

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	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA
	ROOT PROTECTION AREA ENCROACHED BY THE PROPOSED DEVELOPMENT
	PROPOSED DEVELOPMENT

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



.....

Luke Wickham *FdSc (Arboriculture and Urban Forestry).*

23rd March 2023

For and on behalf of ***JCA Ltd***

Registered Office:

Unit 80
Bowers Mill
Branch Road
Barkisland
Halifax
HX4 0AD

Tel. 01422 376335
Fax. 01422 376232
Email: jon@jcaac.com

www.jcaac.com

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JCA Ltd. Arboricultural and Ecological Consultants
Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)



HEAD QUARTERS:

Unit 80 Bowers Mill,
Branch Road,
Barkisland,
Halifax, HX4 0AD.

Tel: 01422 376335
Mobile: 07778 391986
Email: jon@jcaac.com
Website: www.jcaac.com

Company Reg No. 05005041
VAT No. 686 4674 78