

**ARBORICULTURAL IMPACT ASSESSMENT
to BS 5837:2012
at
Bleachcroft Way
Barnsley
South Yorkshire
S70 3NS**

Client:

Harron Homes Ltd

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JCA Ref:

16747-C/AJB

JCA Limited

Arboricultural & Ecological Consultants

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1. Introduction

1.1 Purpose of the Report

- 1.1.1 This Arboricultural Impact Assessment has been prepared for the proposed development at **Bleachcroft Way, Barnsley**.
- 1.1.2 The purpose of this report is to assess the impact of the proposed development on the existing tree stock and outline mitigation actions, where appropriate, to minimise any potential damage to retained trees.

1.2 Terms of Reference

- 1.2.1 JCA Limited has been instructed by **Harron Homes Ltd** to prepare an Arboricultural Impact Assessment, based on our Arboricultural Report dated 11th February 2022 (JCA Ref: **16747-A/AJB**). The arboricultural survey and report conform to the most recent specifications outlined in BS 5837: 2012 Trees in relation to design, demolition and construction - Recommendations.
- 1.2.2 We have been supplied with **Drawing Ref. 498-PL-001-V-Bleachcroft Site Layout (Bound)**, 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 7**. This provides the basis for which this Arboricultural Impact Assessment has been prepared.

1.3 Scope of the Report

- 1.3.1 This report is compiled in accordance with *BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'* and is based on an objective assessment of the existing vegetation.
- 1.3.2 The specific design of the proposed development has been considered within the Arboricultural Implication Assessment in **Section 3** and is detailed on the Arboricultural Implications Plan at **Appendix 7**.

1.4 Survey Details

- 1.4.1 The original tree survey took place during February 2022 and was conducted by **Andrew Bussey LANTRA Accredited PTI**.

2. Tree Descriptions and Recommendations

- 2.1 The tree information recorded during the original survey is detailed in the tables at **Appendix 1**. A full explanation of the tables can be found at **Appendix 2**. Please refer also to the Tree Constraints Plan at **Appendix 6** for tree locations.

3. Arboricultural Implications Assessment (AIA)

3.1 Proposed Development

- 3.1.1 The proposed development will consist of the construction of a residential housing estate.
- 3.1.2 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.

3.2 Tree Removals for Development

- 3.2.1 To facilitate the proposed development, it will be necessary to remove a section of **G1**, seven trees within **G2**, **G5**, **G6**, a section of **G7**, two trees within **G9**, **G11**, four trees within **G12**, seven trees within **G14** and **G15** (five trees).
- 3.2.2 The removal of trees for development can often be mitigated (either partially or entirely) by the planting of suitable specimens within a landscaping scheme. Whilst not always necessary, the planting of trees can improve the aesthetic value of the surrounding area and may be conditioned in the usual manner.

3.3 Pruning for Development

- 3.3.1 No pruning works are required to accommodate the proposed layout.

3.4 Temporary Protection Measures

3.4.1 The Protective Barrier

- 3.4.1.1 To ensure the effective protection of retained trees during development, protective fencing will be installed in accordance with BS5837: 2012. 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, to create a **Construction Exclusion Zone (CEZ)**.

3.5 Implications for Retained Trees

3.5.1 Works within the RPA

- 3.5.1.1 To the knowledge of JCA, no construction activities are required within the rooting zone of trees to be retained on this site.

3.5.2 Utilities

- 3.5.2.1 Details on service routes have not been provided to JCA 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.
- 3.5.2.2 All service providers should be consulted prior to commencement of works with the aim of minimising the number of service runs on the site. Any foreseeable incursions to RPAs should be communicated to the appointed arboricultural consultant and the LPA at the earliest possible time to prevent breach of planning conditions and damage to retained trees.

3.5.3 Site Compound

- 3.5.3.1 The site compound, which typically includes the site office, mess facilities, toilets, storage of materials and parking, must be located away from all the trees and outside their RPAs. Care should also be taken to prevent soil contamination from chemical spillages, including petrol, diesel, and oils.

4. Conclusions

- 4.1 The trees surveyed were generally found to be in a good condition.
- 4.2 The trees are not protected by a Tree Preservation Order or by virtue of them being in a Conservation Area.
- 4.3 No tree works are required under the current context of the site.
- 4.4 The proposed development will consist of the construction of a residential housing estate.
- 4.5 The arboricultural implications of the development have been considered and are discussed in **Section 3**.
- 4.6 **G1**, seven trees within **G2, G5, G6**, a section of **G7**, two trees within **G9, G11**, four trees within **G12**, six trees within **G14** and **G15 (five trees)**. require removal to facilitate the proposed development. Tree works required to accommodate the proposals are detailed in *italics* in the tables at **Appendix 1**. Those trees requiring removal are shown in red on the Arboricultural Implications Plan at **Appendix 7**, where the proposals can also be viewed.
- 4.7 All development work carried out near trees should be done so in a manner sympathetic to their needs. Otherwise, the condition of the trees may deteriorate in the months and years following the development, leading to a loss of amenity and potentially hazardous trees.
- 4.8 The protection of retained trees can be achieved by the creation of a Construction Exclusion Zone based on the Root Protection Area of a tree. The Root Protection Area of each tree or group is marked on the Tree Constraints Plan at **Appendix 6**.
- 4.9 The proposed development will be accompanied by an Arboricultural Method Statement (AMS) detailing the specific protection measures necessary for each tree. This will specify the required fencing standard and positions (the creation of the Construction Exclusion Zone), acceptable construction techniques and necessary tree works.
- 4.10 The data gained during the original 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, the 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.

Appendices

Tree Ref.	Age Common Name <i>Botanical Name</i>	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
G 1	Young to early-mature Mixed species <i>Details in observations</i>	To 12	0+	0+ n/a	To 30	See plan	A dense group of Sycamore, Downy Birch, Goat Willow, Hawthorn and Crack Willow. Not fully inspected due to vegetation.	No action required. <i>Remove the section shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	MOD	LOW TO HIGH	40+	B 2
G 2	Semi-mature Mixed species <i>Details in observations</i>	To 6	0+	0+ n/a	To 25	See plan	Scattered Hawthorn and Goat Willow of a reasonable form.	No action required. <i>Remove the seven trees shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	HIGH	20+	C 2
G 3	Young to early-mature Hawthorn <i>Crataegus monogyna</i>	To 8	0+	0+ n/a	To 25	See plan	A long, linear group of Hawthorn. Not fully inspected due to vegetation.	No action required. n/a	GOOD	GOOD	LOW	HIGH	40+	C 2
G 4	Early-mature to mature Mixed species <i>Details in observations</i>	To 16	0+	0+ n/a	To 70	See plan	For trees (Common Ash and Sycamore) of a good form. Not fully inspected due to vegetation and Ivy.	No action required. n/a	GOOD	GOOD	MOD	MOD	40+	B 2
G 5	Young to early-mature Mixed species <i>Details in observations</i>	To 13	0+	0+ n/a	To 25	See plan	Dense groups of Downy Birch, Hawthorn, Goat Willow and Crack Willow. Not fully inspected due to vegetation.	No action required. <i>Remove to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	LOW TO HIGH	20+	C 2
G 6	Young to early-mature Mixed species <i>Details in observations</i>	To 7	0+	0+ n/a	To 22	See plan	A dense group of Goat Willow and Hawthorn. Not fully inspected due to vegetation.	No action required. <i>Remove to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	HIGH	20+	C 2
G 7	Young to mature Mixed species <i>Details in observations</i>	To 14	0+	0+ n/a	To 50	See plan	Located adjacent to a stream. A long, linear group consisting of Hawthorn, Goat Willow, Sycamore and Hazel. Recent tree works/removals have left many of the trees flat faced. Additionally the works have resulted in many trees left with snapped out branches and large pruning stubs. Not fully inspected due to vegetation.	No action required. <i>Remove the section shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	MOD	LOW TO HIGH	40+	1 B 2
G 8	Semi to early-mature Mixed species <i>Details in observations</i>	To 10	0+	0+ n/a	To 50	See plan	Boundary trees comprised of Hawthorn and English Oak. Not fully inspected due to vegetation.	No action required. n/a	GOOD	GOOD	LOW	HIGH	40+	B 2

Tree Ref.	Age Common Name <i>Botanical Name</i>	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
G 9	Semi to early-mature Mixed species <i>Details in observations</i>	To 8	0+	0+ n/a	To 20	See plan	Multiple scattered trees comprised of Goat Willow, Hawthorn and English Oak. Not fully inspected due to vegetation.	No action required. <i>Remove the two trees shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	HIGH	40+	C 2
T 10	Early-mature English Oak <i>Quercus robur</i>	13	1	1 n/a	48	6 6 6 6	Multi-stemmed at 1.5m with a balanced crown. Not fully inspected due to vegetation.	No action required. n/a	GOOD	GOOD	LOW	HIGH	40+	B 1
G 11	Young Downy Birch <i>Betula pubescens</i>	To 6	0+	0+ n/a	To 70	See plan	A mass of self-seeded trees.	No action required. <i>Remove to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	LOW	20+	C 2
G 12	Semi to early-mature Mixed species <i>Details in observations</i>	To 10	0+	0+ n/a	To 25	See plan	Scattered trees (Silver Birch, Downy Birch, Hawthorn and English Oak) of a good form. Not fully inspected due to vegetation.	No action required. <i>Remove the four trees shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	LOW TO HIGH	40+	B 2
T 13	Early-mature English Oak <i>Quercus robur</i>	12	1	1 n/a	40	5 4 5 4	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	No action required. n/a	GOOD	GOOD	LOW	HIGH	40+	B 1
G 14	Young to early-mature Mixed species <i>Details in observations</i>	To 10	0+	0+ n/a	To 25	See plan	Scattered trees (Hawthorn, Elder, Downy Birch and English Oak) of a reasonable form. Not fully inspected due to vegetation.	No action required. <i>Remove the seven trees shown in red on the plan at Appendix 7 to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	LOW TO HIGH	40+	C 2
G 15	Early-mature Goat Willow <i>Salix caprea</i>	To 10	0+	0+ n/a	To 48	See plan	A dense group of trees. Snapped out branches, deadwood and bark wounds noted. Not fully inspected due to vegetation.	No action required. <i>Remove to facilitate the proposed development.</i> n/a	GOOD	GOOD	LOW	HIGH	20+	C 2

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.

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.

Appendix 3: General Guidelines

- A3.1 All tree work should 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 therein.
- 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 on a regular basis.

Appendix 4: Glossary of Terms & Abbreviations

Arboriculture	The cultivation of trees in order to produce individual specimens of the greatest ornament, for shelter or any primary purpose other than the production of timber or fruit.
Canker	Disease damaged area of a tree, usually caused by fungus or bacteria affecting the bark.
Co-dominant stem	A stem which has grown in direct competition to the main stem and which has formed a substantial size influencing the appearance of the tree.
Crown lift	The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.
Crown reduction	The reduction of a tree's height and spread while preserving its natural shape.
Crown thin	The removal of some of the density of a tree's crown, usually 5-15% allowing more light through its canopy and reducing wind resistance.
Deadwood	Either dead branches, or a procedure involving the removal of dead, dying and diseased branches.
Dieback	Where branches are beginning to show signs of death usually at the tips in the crown.
Epicormic shoots	Small branches that grow in clusters around the base of the stem of a tree or within the crown. This is usually as a result of bad pruning or some other stress factor, although can be a natural growth pattern for some species of tree (eg Lime species).
Included bark	Where the bark on two adjoining branches or stems is growing tight together, forming a joint with limited physical strength.
Pollarding	A method of tree management in which the main trunk and principle branches of the tree are cut to the same height, and the resulting branches are then cropped on a regular basis.
Remedial pruning	The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown. Sometimes referred to as crown cleaning.
RPA	Root Protection Area – Theoretical rooting area of a tree as defined in BS5837:2012 <i>Trees in relation to construction</i> .
Topping	Topping is a form of pruning that removes terminal growth leaving a 'stub' cut end. Topping can cause serious health problems to a tree.

Appendix 5: 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.

Ryan Bateman *BSc (Hons), FdSc (Arboriculture), TechArborA.* Ryan joined JCA in 2020 after working as a Lecturer on the Foundation Degree in Arboriculture at Askham Bryan College in York. Ryan has both practical skills, NPTC qualifications and theoretical knowledge and owned his own contracting business prior to, and whilst working as a lecturer.

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 Landschaftsbau. He brings a strong understanding of the practical sides of the industry and holds various NPTC qualifications.

Consulting Staff: Ecology

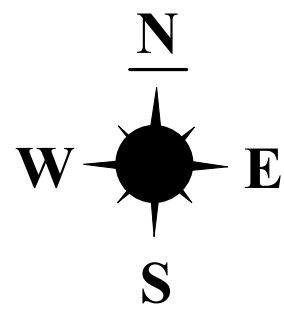
Adam West, Principal Ecologist *BSc (Hons) Animal and Wildlife Management*. Adam joined JCA to lead the expanding ecology department. Having returned to education as a mature student, Adam studied Countryside Management for two years before undertaking a Bachelor's degree, for which he was awarded First 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.

Administrative Staff

Catherine Cocking Accounts Manager.
Kelly Saunders Accounts Assistant.

Lorraine Spink Administrative Assistant.
Lisa Beedham Marketing Manager.

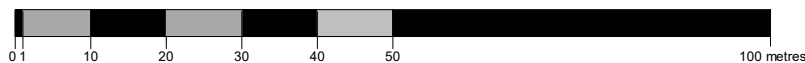


Root Protection Area: RPA

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.



THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 16747-C/AJB)

Appendix 6: Tree Constraints Plan

ADDRESS: Bleachcroft Way, Barnsley,
South Yorkshire, S70 3NS.
JCA REF: 16747-C/AJB

SCALE : 1:1000

PAPER SIZE : A1

SURVEYED BY: AJB

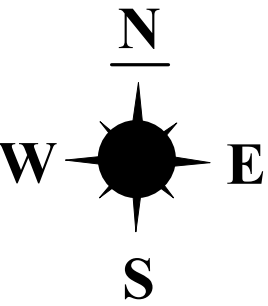
DRAWN BY: AJB

APPROVED BY: CC

BRITISH STANDARD 5837:2012: 4.5
RETENTION CATEGORIES
Detailed definitions of these categories 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

JCA Limited
Arboricultural & Ecological Consultants



Appendix 7: Arboricultural Implications Plan

ADDRESS: Bleachcroft Way, Barnsley,
South Yorkshire, S70 3NS.
JCA REF: 16747-C/AJB

SCALE : 1:2000 PAPER SIZE : A2

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	STEM OF TREE TO BE RETAINED
	STEM OF TREE TO BE REMOVED
	ROOT PROTECTION AREA



THIS PLAN IS TO BE PRINTED IN COLOUR
AND READ IN CONJUNCTION WITH THE
JCA ARBORICULTURAL REPORT
(JCA REF: 16747-C/AJB)



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



.....

Andrew Bussey *LANTRA Accredited PTI.*

24th February 2023

For and on behalf of **JCA Ltd**

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- Tree Surveys for Subsidence
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- Tree Root Identification

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Advice for Local Authorities and Social Housing

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

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:

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