ARBORICULTURAL IMPACT ASSESSMENT
to BS 5837:2012
at
Swallow Lane (Phase 2)
Golcar
Huddersfield
West Yorkshire
HD7 4NB

Client:
Jones Homes
(Yorkshire) Limited

Client Address:
Green Bank House
Green Bank
Cleckheaton
West Yorkshire
BD19 5LQ

Client Telephone:
01274 852700

JCA Ref:
15543/AJB

JCA Limited
Arboricultural & Ecological Consultants

Contents

1. Introduction

1.1 Purpose of the Report

1.1.1 This Arboricultural Impact Assessment is required in relation to the proposed development at **Swallow Lane (Phase 2)**, **Golcar**, **Huddersfield**.

1.1.2 The purpose of this report is to assess the impact of the proposals on the existing tree stock and outline mitigation actions, where appropriate, to minimise potential damage to retained trees.

1.2 Terms of Reference

1.2.1 JCA Ltd has been instructed by **Jones Homes (Yorkshire) Limited** to prepare an Arboricultural Impact Assessment, based on our Arboricultural Report dated 3rd December 2019 (JCA Ref: **15543/AJB**). The arboricultural survey and report conforms to the most recent specifications outlined in BS 5837: 2012 Trees in relation to design, demolition and construction - Recommendations.

1.2.2 I have been supplied with **Drawing Ref. Planning Layout phase 2 04.08.20**, 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 survey took place during the month of November 2019 and was conducted by Andrew Bussey *LANTRA Accredited PTI*.

2. Tree Descriptions and Recommendations

2.1 Full details of all individual trees surveyed are recorded 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**.

3.2 Tree Removals for Development

3.2.1 In order to facilitate the proposed development, it will be necessary to remove **T1, G2, T3, H4, G5, T7, G8, T9, G10, G11, G12, G13, G14, G15, G16, G17** and **G18**, each of which are considered to be of a low value, provide little to the local amenity and as such, fall into retention category 'C'.

3.3 Potential Mitigation Measures

3.3.1 The removal of trees for development can often be mitigated (either partially or entirely) by the replacement of suitable specimens within a planting 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.

3.4 Implications for Retained Trees

3.4.1 Tree Protection Measures

3.4.1.1 **H6**, an off-site garden boundary hedge, is located beyond an existing boundary wall which will provide adequate protection to this hedge during the construction phase.

4. Conclusions

4.1 There are no Tree Preservation Orders in force and the site is not within a Conservation Area.

4.2 The proposed development will consist of the construction of a residential housing estate.

4.3 All trees within the site boundary are to be removed in order to facilitate the development. These are discussed in **Section 3.2** and their locations are shown on the Arboricultural Implications Plan at **Appendix 7**.

4.4 All trees within the site boundary require removal in order to facilitate the proposed development. All tree works are included at **Appendix 1**.

4.5 All development work carried out in close proximity to 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.

4.6 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**.

4.7 An Arboricultural Method Statement (AMS) is not deemed necessary for this development.

4.8 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 *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 Wild Cherry *Prunus avium*	6	1.5	1.5 n/a	29 x 2	4 4.3 4.5# 4.3	Twin-stemmed at ground level with a balanced crown. Not fully inspected due to limited access.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	20+	C 1
G 2	Semi-mature Mixed species *Details in observations*	To 12	0+	0+ n/a	To 35#	See plan	A dense group of Cypress and Sycamore of reasonable form.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD TO HIGH	20+	C 2
T 3	Early-mature Silver Birch *Betula pendula*	15	2	2 n/a	43 & 40	4.8# 4.8# 4.8# 4.8#	Twin-stemmed at ground level with a balanced crown. Occasional pruning wounds. No major visible defects. Not fully inspected due to limited access.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	LOW	20+	C 1
H 4	Semi-mature Leylandii *X Cupressocyparis leylandii*	To 2.5	0+	0+ n/a	To 12	See plan	A maintained boundary hedge.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	HIGH	20+	C 2
G 5	Young to semi-mature Mixed species *Details in observations*	To 4.5	0+	0+ n/a	To 12	See plan	A dense group of Cypress and Wild Cherry.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD TO HIGH	20+	C 2
H 6	Semi-mature Leylandii *X Cupressocyparis leylandii*	To 2.2	0+	0+ n/a	To 12	See plan	Situated on adjacent land. A maintained hedge.	No action required. n/a	GOOD	GOOD	LOW	HIGH	20+	C 2
T 7	Semi-mature Holly *Ilex aquifolium*	6	0	0 n/a	23	3 2 3 3	Twin-stemmed at 1m with a balanced crown.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	LOW	20+	C 2
G 8	Young to semi-mature Apple *Malus sp.*	To 4.5	0+	0+ n/a	To 24	See plan	Three orchard trees. Occasional pruning wounds.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	20+	C 2
T 9	Semi-mature Sycamore *Acer pseudoplatanus*	6	1	1 n/a	15 x 3	2.8 2.8 2.8 2.8	Multi-stemmed at 0.5m with a balanced crown.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	10+	C 1

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
G 10	Early-mature Goat Willow *Salix caprea*	To 9	0+	0+ n/a	To 60	See plan	Seven coppiced stems with significant regrowth growing on weak unions.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	FAIR	LOW	HIGH	10+	C 2
G 11	Semi-mature Wild Cherry *Prunus avium*	To 10	0+	0+ n/a	To 45	See plan	Four trees of poor form. Included bark noted.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	20+	C 2
G 12	Young to semi-mature Mixed species *Details in observations*	To 4.5	0+	0+ n/a	To 15	See plan	Elder and Wild Cherry of poor individual form.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	LOW TO MOD	20+	C 2
G 13	Semi-mature Leylandii *X Cupressocyparis leylandii*	To 10	0+	0 n/a	To 29	See plan	A line of trees with some screening value.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	HIGH	20+	C 2
G 14	Semi-mature Elder *Sambucus nigra*	To 3	0+	0+ n/a	To 15	See plan	A group of trees of poor form.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	LOW	20+	C 2
G 15	Semi-mature Goat Willow *Salix caprea*	To 9	0+	0+ n/a	To 40	See plan	A row of trees of poor individual form. Included bark, deadwood and decay cavities noted.	Monitor biennially. *Remove to facilitate the proposed development.* Low	GOOD	FAIR	LOW	HIGH	10+	C 2
G 16	Semi-mature Cherry Laurel *Prunus laurocerasus*	To 5	0+	0+ n/a	To 20	See plan	A liner group of trees of poor form.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	20+	C 2
G 17	Young Wild Cherry *Prunus avium*	To 6	0+	0+ n/a	To 20	See plan	Self-seeded trees of low value.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD	20+	C 2
G 18	Semi to early-mature Mixed species *Details in observations*	To 8	0+	0+ n/a	To 35	See plan	A boundary group of Wild Cherry and Goat Willow of poor individual form.	No action required. *Remove to facilitate the proposed development.* n/a	GOOD	GOOD	LOW	MOD TO 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.

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 should be removed or treated in such a way as to make them safe where they have high ecological value, such as in a woodland setting.

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 *Trees in relation to construction.*

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.

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.

Phil Humeniuk *FdSc (Arboriculture).* Phil joined JCA having spent 3 years working for various tree surgery companies and as a Tree Officer for a Local Authority. He also has several years' experience working as a consultant both for JCA and for another consultancy. Phil obtained his foundation degree in Arboriculture at the University of Central Lancashire and has various NPTC's and is LANTRA certified in Professional Tree Inspection.

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.

Charles Cocking *FdSc (Arboriculture), MArborA.* Charles joined JCA in January 2014 as an Apprentice 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.

Robert Hickey *FdSc (Arboriculture), TechArborA.* Robert joined JCA in January 2019 having obtained his foundation degree in Arboriculture at the University of Central Lancashire. He has various NPTC's qualifications and has previously worked for several Arboricultural contractors.

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.

Consulting Staff: Ecology

Amanda Beck, Ecological Officer *Cert/He in Field Ecology, Diploma Field and Conservation Ecology, CIEEM member.* Amanda joined JCA's ecology department in 2018, previously working as a freelance Ecological Consultant in North Wales and as a trainee Ecologist in South Wales. She has a background surveying for botanical, amphibians, birds, terrestrial and marine mammals along with small mammal trapping and invertebrate research work on SSSI sites. She has practical experience in habitat management and creation while working as a volunteer for North Wales Wildlife Trust and currently volunteers with Yorkshire Wildlife Trust. She is a member of the Butterfly Conservation Trust, Bat Conservation Trust, Clwyd Bat Group and the British Hedgehog Preservation Society. Amanda is DBS checked and holds a Natural England level 1 bat licence.

Joe Earnshaw, Graduate Ecologist *BSc (Hons), MSc Biodiversity and Conservation, Qualifying CIEEM Member.* Joe joined the ecology department of JCA in 2018 after taking part in JCA's student training programme. He initially obtained a bachelor degree in Animal Management from Askham Bryan College, York. He has since furthered his education and brings to the company an MSc in Biodiversity and Conservation from the University of Leeds. Joe has expertise in aquatic invasive species identification and control.

Administrative Staff

Sue Guest Administrative Team Leader.
Catherine Cocking Accounts Manager.
Kelly Saunders Accounts Assistant.
Simeon Haigh *BSc (Hons).* IT Director.
Lorraine Spink Administrative Assistant.
Lisa Hampson Marketing Manager.

N
W E
S

H4
T3
G2
G5
H6
T1
ESTIMATED
TREE LOCATION
ESTIMATED
TREE LOCATION
T7
G10
G8
T9
G18
G11
ESTIMATED
TREE LOCATION
G12
G17
G16
G13
G15
G14
ESTIMATED
TREE LOCATION

Appendix 6:
Tree Constraints Plan

ADDRESS: Swallow Lane (Phase 2), Golcar, Huddersfield, West Yorkshire, HD7 4NB.
JCA REF: 15543-A/AJB.

SCALE : 1:500	PAPER SIZE : A3

SURVEYED BY: AJB	DRAWN BY: AJB	APPROVED BY: PaH

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

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THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 15543-A/AJB)

0 1 5 10 15 20 30 40 50 metres

Root Protection Area: RPA

THE ROOT PROTECTION AREA (RPA) INDICATES THE LIKELY ROOTING ZONE OF A TREE.

THIS 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.

N
W E
S

SWALLOW LANE

H4
H6
G10
G5
G2
T3
T1
T7
T9
G8
G18
G11
G12
G17
G16
G13
G14
G15
SG
BEN Op
BEN As
BAN Op
BAN As
BAY Op
BAY As
BAYC Op
BAYC As
BAR Op
BAR As
Underground Storage Tank

Appendix 7: Arboricultural Implications Plan

ADDRESS: Swallow Lane (Phase 2), Golcar, Huddersfield, West Yorkshire, HD7 4NB.
JCA REF: 15543-A/AJB.

SCALE : 1:500	PAPER SIZE : A3

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

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Arboricultural & Ecological Consultants

THIS PLAN IS TO BE PRINTED IN COLOUR AND READ IN CONJUNCTION WITH THE JCA ARBORICULTURAL REPORT (JCA REF: 15543-A/AJB)

0 1 5 10 15 20 30 40 50 metres

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*.

3rd September 2020

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

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Professional Tree and Ecology Advice nationwide

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- Ancient Woodland Management
- Veteran Tree Management

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- 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)

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