



ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

***Kexborough Farms,
Churchfield Lane,
Kexborough
Barnsley,
South Yorkshire
S75 5DU***

Prepared for:

A+DP

*The Old Police Station,
16 Bridge Lane,
Holmfirth,
West Yorkshire
HD9 7AN*

Date: *April 2020*

Reference: AWA2903



Contents

1. Introduction	3
1.1 Instructions and Brief.....	3
1.2 Survey Details.....	3
2. The Site	4
2.1 Location and Description	4
3. The Trees.....	5
3.1 Legal	5
3.2 Tree Survey Results	6
4. Arboricultural Impact Assessment.....	8
4.1 Proposed New Development	8
4.2 Direct Impacts.....	8
4.3 Indirect Impacts.....	8
4.4 Protection of the Retained Trees	9
5. Signature	10
Appendix 1: Authors Qualifications & Experience	12
Appendix 2: Survey Methodology and Limitations of Report	13
Appendix 3: Explanation of Tree Descriptions.....	14
Appendix 4: Tree Data	15
Appendix 5: Tree Constraints Plan	16
Appendix 6: Tree Impacts Plan.....	17

1. Introduction

1.1 Instructions and Brief

- 1.1.1 We were instructed by Jake Scargill of A+DP 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 2019.
- 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 report has been prepared by Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by Mr James Brown BSc (Hons) Arboriculture, MArborA, Arboriculturist at 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**. For tree locations refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

2. The Site

2.1 Location and Description

- 2.1.1 The site is located on Churchfield Lane in Kexborough, a village in the Metropolitan Borough of Barnsley, South Yorkshire.
- 2.1.2 The site comprises two farms with associated farm buildings, residential buildings, yards and access roads.
- 2.1.3 The approximate area of the survey is highlighted in the (2019 Google Earth) image below:



3. The Trees

3.1 Legal

3.1.1 An online check was made with Barnsley Metropolitan Borough Council on the 21st of October 2019. This showed the trees on site are not protected by a Tree Preservation Order (TPO) and the site is not within a Conservation Area. The accessed map image from <http://barnsley.gov.uk> is detailed below:



3.1.2 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 see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area (unless such works are approved by planning permission). If either applies, then statutory permission is required before any works can take place.

3.1.3 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998:2010 *Tree Work - Recommendations*.

3.2 Tree Survey Results

- 3.2.1 The tree survey revealed 75 items of woody vegetation, comprised of 65 individual trees and 10 groups of trees or hedges.
- 3.2.2 Of the surveyed trees: 7 trees are retention category 'U', 2 trees are retention category 'A', 5 trees are retention category 'B', and 61 trees or groups are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.3 The most significant individual trees within site boundaries are the Yew T32 and Sycamores T39, T40 and T53. These are large prominent early mature to mature trees in good condition with good future prospects which provide moderate to high amenity value to the site and the surrounding area.
- 3.2.4 Trees G8, G14, T15, T33 to T38, T45, T46, T47, T62 and T64 to T75 are situated in adjacent inaccessible land and so were only given cursory inspections with measurements estimated and condition values indicative only. The most significant of these adjacent trees are the Walnut T33, Cedar T45 and Oak T62, with T62 of particularly high value.
- 3.2.5 Adjacent trees T68 to T75 bordering Cawthorne Lane are in poor condition with considerable dieback and deadwood in their crowns. T68, T72, T74 and T75 are in particularly poor condition and are recommended for removal regardless of development at the site. It is recommended to undertake formal risk surveys on trees T69, T70, T71 and T73 regardless of development at the site; the dense ivy covering the trees' stems and crowns should be severed at 0m and 1.5m from ground level so that detailed inspections of the trees can be undertaken.
- 3.2.6 Boundary hedges G6, G41, G43, G44, G61 and G63 provide some screening between the site and the adjacent land and would provide amenity boundary features if retained as part of a new development at the site, but they are only of low arboricultural value.
- 3.2.7 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, 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.
- 3.2.8 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of the low value groups, in

conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

- 3.2.9 The RPA for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new residential development with associated access, landscaping and facilities. The development proposals have been provided by my client and inform 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, 24 trees, tree groups or hedges will require removal as they are situated in the footprint of the development or their retention and protection throughout the development is not suitable.

4.2.2 The trees that require removal are T18, T19, T25 to T30, G41 to G44, G48 to T52 and T54 to G60.

4.2.3 The trees, tree groups and hedges that require removal are all of low value retention category 'C' and while their collective removal will have some loss of amenity in the short term, the removals can be easily mitigated in the longer term with new tree plantings as part of a soft landscaping scheme.

4.2.4 Trees T9, T31, T47, T68, T72, T74 and T75 are also recommended for removal regardless of development at the site.

4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, 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.

4.3.2 Potentially damaging activities are proposed in the vicinity of retained trees. A proposed new house encroaches into the RPA of the retained Sycamore T39, however, the encroachment is minor and the retained tree should remain largely unaffected by the works provided care is taken during construction.

- 4.3.3 A proposed new driveway encroaches into the edge of the RPA of the retained adjacent Oak T62. Construction of hard surfaces within the RPA of retained trees can have negative impacts on tree roots, however, the potential negative impacts could be overcome or minimised by employing a 'no-dig' type construction method with a porous final surface.
- 4.3.4 New boundary dry stone walls are proposed within the RPA of several retained trees at the site. The proposed new walls shouldn't have a significant negative impact on the retained trees provided care is taken not to damage tree roots during construction and provided the exposed RPA of the retained trees is protected using ground protection boards or similar during their construction.
- 4.3.5 Several existing buildings to be demolished are situated within the RPA of retained trees. The demolition should not have a negative impact on the retained trees provided the demolition is undertaken outside of the retained trees' RPAs where possible, using "top down, pull back" methods inwards from the footprints of the existing buildings and structures and care is taken during demolition.
- 4.3.6 Existing hard surfaces are to be removed within the RPA of a number of retained trees. The removal of the existing hard surfaces should not have a significant negative impact on the retained trees provided care is taken not to disturb tree roots that might be present beneath them, with hand-held tools used where possible, with no machinery moving over the exposed ground.
- 4.3.7 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.

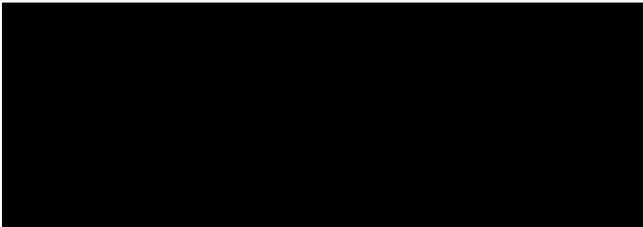
4.4 Protection of the Retained Trees

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

5. Signature

I trust this report provides all the required information.

...



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

23rd April 2020

**AWA Tree Consultants Limited
Union Forge
27 Mowbray Street
Sheffield
S3 8EN**

www.awatrees.com



Institute of
Chartered Foresters
Registered Consultant

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

Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered.

Adam is the company Director and Principle 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 has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the Crown Court.

Mr James Brown BSc (Hons) Arboriculture, MArborA, PTI (Lantra).

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. James previously worked in Europe's largest tree nursery and has experience of Local Authority tree officer work. His main work consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

Mr Dave Farmer FdSc (Arb), MArborA, PTI (Lantra).

Dave has a Foundation Degree in Arboriculture (with Distinction) and is qualified in Professional Tree Inspection. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. Dave has many years of experience within the tree care profession, including lecturing in arboriculture. His work focuses on diagnosing potential tree risk problems, and recommending appropriate treatments and work programmes.

Dr Felicity Stout Ph.D, MA, BA (Hons), Cert Ed (Forestry), TechArborA, PTI (Lantra).

Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced Social Forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and has published in The Arboricultural Journal on this subject.

Mr Patrick Rowntree Cert Arb L3, TechArborA, PTI (Lantra).

Patrick is a trained arborist with 5 years of experience in both the private and commercial sectors and is a technician member of the Arboricultural Association. Having travelled the world, both working as an arborist and playing professional rugby, Patrick was awarded a Distinction in the Extended Diploma in Forestry & Arboriculture and is qualified in Professional Tree Inspection. Patrick now uses his work and education experience at AWA, focusing on accurate tree data collection for tree surveys for development projects and assisting the team in the preparation of tree reports and tree plans to BS 5837:2012.

Mr Drew Leeper Cert Arb L3, TechArborA.

Drew has over 10 years experience within the arboricultural sector and was awarded Distinction in the Extended Diploma in Forestry & Arboriculture. From working abroad in Canada as a climbing arborist and returning home to running his own tree care firm. Drew has also been fortunate enough to gain valuable experience working at the Royal Botanical Gardens of Kew. He now uses his work and education experience at AWA, focusing on accurate tree data collection for tree surveys for development projects and assisting the team in the preparation of tree reports and tree plans to BS 5837:2012.

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not 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 and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

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

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

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

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T1	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	4	10+	30	Yes	0.5	1	2	2	1.5	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths. Stubs. Bark damage. Tight unions	Normal	Limited access	Good	Fair	20 to 40 yrs	Low	C	No works required
T2	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5	10+	40	Yes	0.5	1.5	2	2	1.5	No visual defects	Multiple stemmed at base. Vertical. Stubs. Bark damage. Tight unions	Normal	Limited access	Good	Fair	20 to 40 yrs	Low	C	No works required
T3	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	3	10+	40	Yes	0.5	1.5	1.5	1.5	1.5	No visual defects	Multiple stemmed at base. Vertical. Stubs. Bark damage. Tight unions	Normal	Limited access	Good	Fair	20 to 40 yrs	Low	C	No works required
T4	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	3.5	10+	40	Yes	0.5	1.5	1.5	1.5	1.5	No visual defects	Multiple stemmed at base. Vertical. Stubs. Bark damage. Tight unions	Normal	Limited access	Good	Fair	20 to 40 yrs	Low	C	No works required
T5	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5	10+	60	Yes	0.5	2	2	2	2	No visual defects	Multiple stemmed at base. Vertical. Stubs. Bark damage. Tight unions	Normal	Limited access	Good	Fair	20 to 40 yrs	Low	C	No works required
G6	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	1.5	10+	20	No	0	See plan				Managed Hawthorn hedge. Some screening value.				Fair	Fair	>40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition							Value		Management	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T7	Walnut	<i>Juglans regia</i>	Young	5	2	80, 90	No	1	2	1.5	2	2.5	Soil compaction	Twin stemmed at 1m. Slight lean west	Minor deadwood	Debris around base	Fair	Fair	10 to 20 yrs	Low	C	No works required
G8	Hawthorn. Elder. Holly. Sycamore.	<i>Crataegus sp.</i> <i>Sambucus sp. Ilex sp.</i> <i>Acer sp.</i>	Early-mature	8	10+	150	Yes	0.5	See plan				Linear group of sporadic Hawthorn and Elder shrubs with occasional Holly and Sycamore sapling. Situated on boundary. Limited access. Heavily pruned. Dead standing throughout. Some screening value.				Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T9	Elder	<i>Sambucus nigra</i>	Semi-mature	5	6	60	No	1.5	2	1.5	2.5	3	Soil compaction	Multiple stemmed at base. Vertical. Stubs. Bark damage. Minor cavities. Minor decay. Ivy covered	Major dieback. Moderate deadwood	Situated on boundary. Building materials stored on rootplate.	Poor	Poor	<10 yrs	Low	U	Removal recommended regardless of development
T10	Horse Chestnut	<i>Aesculus hippocastanum</i>	Semi-mature	9	4	100, 170, 150, 130	No	0.5	3.5	2	3	2	Soil compaction	Multiple stemmed at base. Vertical. Bark damage. Stubs. Old pruning wounds. Minor cavities. Minor decay	Minor deadwood. Horse Chestnut Leaf Miner	Situated on boundary. Building materials stored on rootplate.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T11	Horse Chestnut	<i>Aesculus hippocastanum</i>	Semi-mature	9	4	180, 130, 180, 80	No	1	3.5	2	4	3	Soil compaction	Multiple stemmed at 1m. Vertical. Stubs. Old pruning wounds. Bark damage. Tight unions	Minor deadwood. Horse Chestnut Leaf Miner	Situated on boundary. Building materials stored on rootplate.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T12	Horse Chestnut	<i>Aesculus hippocastanum</i>	Semi-mature	9	2	170, 160	No	1.5	3	1.5	3.5	3.5	Soil compaction. Exposed roots. Damage to buttress roots	Twin stemmed at 1m. Slight lean south. Stubs. Old pruning wounds. Bark damage. Minor cavities	Minor deadwood. Horse Chestnut Leaf Miner	Situated on boundary. Building materials stored on rootplate. Stones piled against stem.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T13	Elder	<i>Sambucus nigra</i>	Early-mature	6	2	160, 120	No	1.5	2	2.5	1.5	1.5	Exposed roots. Damage to buttress roots	Twin stemmed at base. Vertical. Stubs. Bark damage. Minor cavities. Minor decay	Major dieback. Major deadwood. Snapped/ hanging branches	Situated on boundary. Growing out of wall.	Poor	Poor	<10 yrs	Low	C	No works required
G14	Plum	<i>Prunus sp.</i>	Semi-mature	3.5	10+	60	Yes	1.5	See plan				Adjacent linear group of Plums. No access. Situated behind stone wall.				Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T15	Elder	<i>Sambucus nigra</i>	Early-mature	7	1	200	Yes	3	2	2	2	2	Limited access around base	Single stemmed. Vertical	Moderate dieback. Moderate deadwood	Adjacent, no access	Fair	Fair	10 to 20 yrs	Low	C	No works required
T16	Gum	<i>Eucalyptus gunnii</i>	Young	5.5	2	60, 60	Yes	1	1	1.5	1	1.5	Limited access around base	Twin stemmed at base. Slight lean east. Bark damage. Tight unions	Normal	Adjacent, no access	Good	Fair	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition							Value		Management	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T17	Plum	<i>Prunus sp.</i>	Mature	7	1	260	No	1.5	3	3.5	3.5	3	No visual defects	Single stemmed. Vertical. Stubs. Ivy covered. Bark damage. Old pruning wounds. Minor cavities. Minor decay. Bleeds. Epicormic growths	Minor dieback. Minor deadwood. Snapped/ hanging branches. Old pruning wounds	Crown in contact with building to east and telegraph pole to north. Previously reduced from north. Significant bleeding to main stem. Ivy prevented detailed inspection. Occasional snapout in crown.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T18	Cherry	<i>Prunus sp.</i>	Semi-mature	6	7	70	No	1.5	3	3	3	2	No visual defects	Multiple stemmed at 0.5m. Vertical. Mower damage	Minor dieback. Minor deadwood. Old pruning wounds	Situated in pit in driveway. Roots cracking tarmac.	Fair	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T19	Cherry	<i>Prunus sp.</i>	Semi-mature	7	5	60, 80, 130, 110, 40	No	1.5	3.5	3.5	4	2	No visual defects	Multiple stemmed at 0.5m. Vertical. Old pruning wounds. Stubs. Tight unions	Minor deadwood. Old pruning wounds	Situated in pit in driveway. Roots cracking tarmac.	Fair	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T20	Whitebeam	<i>Sorbus aria</i>	Early-mature	8	1	230	No	1.5	3	3	3.5	2	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Tight unions	Old pruning wounds. Minor deadwood	Graft bulge at base	Good	Good	>40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T21	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5	7	40	No	0.5	1.5	2.5	1	1	No visual defects	Multiple stemmed at base. Slight lean east. Stubs. Bark damage. Tight unions	Normal		Good	Good	10 to 20 yrs	Moderate	C	No works required
T22	Rowan	<i>Sorbus aucuparia</i>	Semi-mature	7.5	3	90, 100, 120	No	1.5	3	3.5	2.5	0.5	No visual defects	Multiple stemmed at 0.5m. Slight lean east. Stubs. Old pruning wounds	Minor deadwood		Good	Good	20 to 40 yrs	Moderate	C	No works required
T23	Pear	<i>Pyrus communis</i>	Semi-mature	5	1	80	No	1	1.5	1.5	2	1	No visual defects	Single stemmed. Slight lean east. Old pruning wounds. Stubs. Epicormic growths	Minor deadwood. Old pruning wounds		Good	Good	>40 yrs	Moderate	C	No works required
T24	Apple	<i>Malus domestica</i>	Semi-mature	5	1	110	No	1.5	2.5	3	2.5	1.5	No visual defects	Single stemmed. Significant lean east. Old pruning wounds. Stubs. Bark damage. Ivy covered	Minor deadwood. Old pruning wounds	Stake embedded in base to west	Good	Good	>40 yrs	Moderate	C	No works required
T25	Lawson Cypress/ Chamaecyparis	<i>Chamaecyparis lawsoniana</i>	Semi-mature	10	1	240	No	0.5	2	2	1.5	2	Exposed roots	Single stemmed. Vertical	Old pruning wounds. Minor deadwood		Good	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development

Tree Species		Measurements						Crown (m)					Tree Condition						Value		Management	
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T26	Lawson Cypress/ Chamaecyparis	<i>Chamaecyparis lawsoniana</i>	Semi-mature	10	1	330	No	0.5	1.5	2	2.5	2.5	Exposed roots	Single stemmed. Twin stemmed at 1.5m. Vertical. Tight unions. Partially included bark	Minor deadwood. Old pruning wounds	Two co-dominant main stems at 1.5m with poor included bark union	Good	Fair	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T27	Monkey Puzzle	<i>Araucaria araucana</i>	Semi-mature	6	1	150	No	0.5	1.5	1.5	1.5	1.5	No visual defects	Single stemmed. Vertical	Normal		Good	Good	>40 yrs	Moderate	C	Removal required to facilitate development
T28	Cherry Laurel	<i>Prunus laurocerasus</i>	Semi-mature	4.5	10+	30	No	0	1.5	1.5	1.5	1.5	No visual defects	Multiple stemmed at base. Vertical	Normal		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T29	Privet	<i>Ligustrum sp.</i>	Semi-mature	4	10+	30	No	0	1.5	1.5	1.5	1.5	No visual defects	Multiple stemmed at base. Vertical	Normal		Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T30	Holly	<i>Ilex aquifolium</i>	Early-mature	6.5	1	280	No	1.5	2	2	2.5	2.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Tight unions. Minor cavities. Minor decay	Normal	Variegated	Good	Fair	>40 yrs	Moderate	C	Removal required to facilitate development

Tree Species		Measurements						Crown (m)				Tree Condition						Value		Management		
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T31	Pear	<i>Pyrus sp.</i>	Mature	10	1	380	No	2	2	2.5	3.5	3.5	No visual defects	Single stemmed. Slight lean west. Old pruning wounds. Stubs. Bark damage. Minor cavities. Minor decay	75% dead/ absent. Major dieback. Major deadwood. Snapped/ hanging branches	Growing from base of building. Crown mostly dead.	Poor	Fair	<10 yrs	Moderate	U	Removal recommended regardless of development
T32	Yew	<i>Taxus baccata</i>	Mature	12	2	700, 700	No	1.5	5.5	5.5	5.5	6	No visual defects	Twin stemmed. at base. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight unions	Old pruning wounds. Minor deadwood	Twin stemmed at base hen multiple stemmed at 1.5m. Tight unions prevented accurate stem measurement. Numeorus tight unions. Dense epicormic growths to western side of stem. Old pruning wounds and stubs in lower crown. Eastern crown in contact wi h farm building to east.	Good	Good	>40 yrs	Moderate	A	No works required
T33	Walnut	<i>Juglans regia</i>	Early-mature	13	1	500	Yes	2.5	5	5	6	6	Limited access around base	Single stemmed. Slight lean west. Old pruning wounds. Tight unions	Minor deadwood	Adjacent, no access. Occasional old pruning wounds to main stem.	Good	Good	>40 yrs	Moderate	B	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T34	Plum	<i>Prunus sp.</i>	Semi-mature	9	3	80, 90, 150	Yes	3	2.5	2.5	1	2.5	Limited access around base	Multiple stemmed at base. Slight lean north. Old pruning wounds. Stubs. Bark damage	Minor deadwood	Adjacent, no access	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T35	Plum	<i>Prunus sp.</i>	Semi-mature	8	1	150	No	2.5	1	4.5	1.5	0.5	Limited access around base	Single stemmed. Significant lean east. Bark damage. Ivy covered	Minor deadwood	Adjacent, no access. Significantly overhangs site. Leaning on boundary wall. Covered in dead ivy.	Fair	Poor	10 to 20 yrs	Moderate	C	No works required
T36	Ash	<i>Fraxinus excelsior</i>	Semi-mature	12	1	300	Yes	3	3	5	4.5	2.5	Limited access around base	Single stemmed. Slight lean south east. Bark damage. Old pruning wounds. Stubs	Minor dieback. Minor deadwood. Old pruning wounds	Adjacent, no access. Chicken wire embedded in stem. Old pruning wounds and stubs in lower crown.	Fair	Good	20 to 40 yrs	Moderate	C	No works required
T37	Poplar	<i>Populus nigra</i>	Early-mature	10	1	600	Yes	2	3	2.5	1.5	1.5	Limited access around base	Single stemmed. Slight lean north. Ivy covered	Previously topped with regrowth forming crown	Adjacent, no access. Poplar monolith topped at 4m approx. Very ivy covered.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T38	Poplar	<i>Populus nigra</i>	Early-mature	11	1	600	Yes	1.5	1.5	2	2.5	2.5	Limited access around base	Single stemmed. Vertical. Ivy covered	Previously topped with regrowth forming crown	Adjacent, no access. Poplar monolith topped at 4m approx. Very ivy covered.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T39	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	13	1	700	No	4	5	5	4	6.5	No visual defects	Single stemmed. Vertical. Ivy covered. Epicormic growths	Minor dieback. Minor deadwood	Ivy prevented detailed inspection and accurate stem measurement. Streetlight through north western crown.	Fair	Fair	>40 yrs	Moderate	B	No works required
T40	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	11	1	350	No	2.5	2.5	5	4	5	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs	Minor deadwood	Growing against dry stone wall to east	Good	Good	>40 yrs	Moderate	B	No works required
G41	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	1	10+	20	No	0	See plan				Managed low Hawthorn hedge. Some screening value.				Fair	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T42	Cherry	<i>Prunus sp.</i>	Semi-mature	4	1	170	No	0.5	2.5	3	2.5	2.5	No visual defects	Single stemmed. Slight lean south. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Moderate	C	Removal required to facilitate development
G43	Leyland Cypress	<i>x Cupressocyparis leylandii</i>	Semi-mature	2	10+	60	No	1	See plan				Managed boundary hedge. Good screening value.				Good	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G44	Hawthorn. Holly. Cherry.	<i>Crataegus sp. Ilex sp. Prunus sp.</i>	Semi-mature	1.5	10+	30	No	0	See plan				Managed Hawthorn hedge. Occasional Holly and Cherry sapling. Good screening value.				Fair	Fair	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T45	Cedar	<i>Cedrus atlantica 'Glauca'</i>	Mature	15	1	750	Yes	1.5	6	5	4	4	Limited access around base	Single stemmed. Vertical	Minor deadwood. Ivy covered	Adjacent, no access	Good	Good	>40 yrs	Moderate	B	No works required
T46	Cherry	<i>Prunus sp.</i>	Semi-mature	6	1	200	Yes	1	1.5	3.5	2	2	Limited access around base	Single stemmed. Vertical. Bark damage	Small/ sparse. Minor dieback. Minor deadwood	Adjacent, no access	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T47	Cherry	<i>Prunus sp.</i>	Dead	9	1	250	Yes	2.5	2.5	3	3.5	2.5	Limited access around base	Single stemmed. Vertical. Ivy covered	All dead/ absent. Major dieback. Major deadwood	Adjacent, no access. Dead.	Dead	Dead	n/a	Dead	U	Removal recommended regardless of development
G48	Hawthorn. Holly. Plum.	<i>Crataegus sp. Ilex sp. Prunus sp.</i>	Semi-mature	4	10+	60	No	0	See plan				Unmanaged linear Hawthorn group. Occasional Holly and Plum sapling.				Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T49	Pear	<i>Pyrus communis</i>	Semi-mature	5	1	120	No	1	2	2	2	2	Soil compaction	Single stemmed. Vertical. Bark damage	Minor dieback. Minor deadwood		Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T50	Apple	<i>Malus domestica</i>	Young	4.5	2	70, 50	No	0.5	2	2.5	1.5	1.5	Soil compaction	Twin stemmed. at base. Slight lean east. Bark damage	Minor dieback. Minor deadwood		Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T51	Ash	<i>Fraxinus excelsior</i>	Semi-mature	14	1	200	Yes	1	3.5	3.5	2	2.5	Limited access around base. Soil compaction	Single stemmed. Vertical. Ivy covered	Minor deadwood	No access	Fair	Fair	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T52	Fir	<i>Abies sp.</i>	Semi-mature	9	1	200	Yes	1	1	1.5	0.5	0.5	Limited access around base. Exposed roots. Soil compaction	Single stemmed. Vertical. Old pruning wounds. Stubs. Ivy covered	Small/ sparse. Moderate dieback. Minor deadwood. Ivy covered	No access. Suppressed and very Ivy covered.	Fair	Fair	<10 yrs	Low	C	Removal required to facilitate development
T53	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	14	1	350	Yes	1.5	3.5	4	4	3.5	Limited access around base. Soil compaction	Single stemmed. Vertical. Ivy covered	Minor deadwood. Ivy covered	No access	Fair	Fair	>40 yrs	Moderate	B	No works required
T54	Apple	<i>Malus domestica</i>	Early-mature	6	3	190, 190, 130	No	1.5	4	5	3	2	No visual defects	Multiple stemmed at 0.5m. Slight lean east. Stubs. Old pruning wounds. Bark damage. Ivy covered. Minor decay	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T55	Lawson Cypress/ Chamaecyparis	<i>Chamaecyparis lawsoniana</i>	Semi-mature	8	1	140	No	0	1.5	1.5	1.5	1	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T56	Cypress	<i>Cupressus sp.</i>	Semi-mature	6	5	40, 50, 60, 120, 60	No	1	2	2.5	1	1	No visual defects	Multiple stemmed at 0.5m. Slight lean north east. Stubs. Tight unions	Minor deadwood		Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T57	Elder	<i>Sambucus nigra</i>	Semi-mature	6	6	50	Yes	1.5	2	2	1	2	Limited access around base	Multiple stemmed at base. Vertical. Bark damage	Minor dieback. Minor deadwood	Limited access. Rubbing on fence.	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T58	Plum	<i>Prunus sp.</i>	Semi-mature	7	1	120	Yes	2	1	1	1	1	Limited access around base	Single stemmed. Vertical. Ivy covered	Minor deadwood	No access. Very ivy covered.	Fair	Fair	<10 yrs	Low	C	Removal required to facilitate development
T59	Cypress	<i>Cupressus sp.</i>	Semi-mature	8	2	120, 120	Yes	0.5	1	1.5	1.5	1	No visual defects	Twin stemmed at base. Vertical. Bark damage	Minor deadwood	No access	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
G60	Cypress	<i>Cupressus sp.</i>	Semi-mature	8	10+	80	Yes	1.5	See plan				Linear boundary group of Cypress. Limited access.				Fair	Fair	10 to 20 yrs	Moderate	C	Removal required to facilitate development
G61	Hawthorn. Holly.	<i>Crataegus sp. Ilex sp.</i>	Semi-mature	2	10+	40	Yes	0	See plan				Adjacent managed boundary group of Hawthorn and Holly shrubs. Some screening value.				Fair	Fair	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T62	Oak	<i>Quercus robur</i>	Early-mature	12	1	800	Yes	4	6	5	6	5	Limited access around base	Single stemmed. Vertical. Old pruning wounds. Ivy covered	Minor deadwood. Epicormic growths	Adjacent, no access. Very Ivy covered.	Good	Good	>40 yrs	Moderate	A	No works required
G63	Hawthorn. Holly.	<i>Crataegus sp. Ilex sp.</i>	Semi-mature	1.5	10+	30	Yes	0.5	See plan				Managed Hawthorn and Holly hedge. Some screening value.				Good	Good	20 to 40 yrs	Moderate	C	No works required
T64	Ash	<i>Fraxinus sp.</i>	Mature	8	1	900	Yes	2	2.5	2.5	2.5	2.5	Limited access around base	Single stemmed. Vertical. Bark damage. Major decay	Previously topped with regrowth forming crown	Adjacent, no access. Regrowth from Ash stump.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T65	Elder	<i>Sambucus nigra</i>	Early-mature	6	1	200	Yes	3	2.5	1.5	2	1.5	Limited access around base	Single stemmed. Slight lean. Stubs. Bark damage. Ivy covered. Minor cavities. Moderate decay	75% dead/ absent. Major dieback. Major deadwood. Snapped/ hanging branches	Adjacent, no access. Nearly dead. Very Ivy covered.	Poor	Poor	<10 yrs	Low	C	No works required
T66	Elm	<i>Ulmus sp.</i>	Semi-mature	9	8	150	Yes	2	5	5	5	5	Limited access around base	Multiple stemmed at base. Slight lean. Bark damage. Ivy covered	Minor deadwood. Minor dieback	Adjacent, no access. Very Ivy covered.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)				Tree Condition						Value		Management		
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T67	Elm	<i>Ulmus sp.</i>	Early-mature	9	8	150	Yes	2	4.5	6	3	4	Limited access around base	Multiple stemmed at base. Ivy covered. Significant lean east	Moderate dieback. Minor deadwood	Adjacent, no access	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T68	Ash	<i>Fraxinus excelsior</i>	Semi-mature	8	1	300	Yes	3	3	2	2	3.5	Limited access around base	Single stemmed. Slight lean east. Ivy covered	75% dead/absent. Small/sparse. Major dieback. Major deadwood. Snapped/ hanging branches. Ivy covered	Adjacent, no access. Very Ivy covered.	Poor	Poor	<10 yrs	Low	U	Removal recommended regardless of development
T69	Ash	<i>Fraxinus excelsior</i>	Semi-mature	10	1	350	Yes	2	4	4	5	5	Limited access around base	Twin stemmed at base. Slight lean. Ivy covered	Moderate dieback. Moderate deadwood. Small/sparse. Ivy covered	Adjacent, no access. Very Ivy covered.	Poor	Fair	10 to 20 yrs	Moderate	C	Sever Ivy at 0m and 1.5m. Formal risk assessment recommended.
T70	Field Maple	<i>Acer campestre</i>	Semi-mature	9	1	200	Yes	3	3	1	1	3.5	Limited access around base	Ivy covered	Minor dieback. Minor deadwood. Ivy covered	Adjacent, no access	Fair	Fair	10 to 20 yrs	Moderate	C	Sever Ivy at 0m and 1.5m. Formal risk assessment recommended.
T71	Field Maple	<i>Acer campestre</i>	Semi-mature	10	6	120	Yes	2	4	3	3	3	Limited access around base	Multiple stemmed at base. Ivy covered	Minor dieback. Minor deadwood. Ivy covered	Adjacent, no access. Very Ivy covered.	Fair	Fair	10 to 20 yrs	Moderate	C	Sever Ivy at 0m and 1.5m. Formal risk assessment recommended.

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition						Value		Management	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amerity	Category	Works
T72	Ash	<i>Fraxinus excelsior</i>	Semi-mature	8	1	300	Yes	2.5	3	3	3	4	Limited access around base	Single stemmed. Vertical. Ivy covered	Small/ sparse. Major dieback. Major deadwood. Snapped/ hanging branches. Ivy covered	Adjacent, no access. Very Ivy covered. Nearly dead.	Poor	Fair	<10 yrs	Moderate	U	Removal recommended regardless of development
T73	Ash	<i>Fraxinus excelsior</i>	Semi-mature	11	1	300	Yes	1.5	3.5	4	5	6	Limited access around base	Single stemmed. Slight lean east. Ivy covered	Moderate dieback. Moderate deadwood. Snapped/ hanging branches. Ivy covered	Adjacent, no access. Very Ivy covered.	Fair	Fair	10 to 20 yrs	Moderate	C	Sever Ivy at 0m and 1.5m. Formal risk assessment recommended.
T74	Ash	<i>Fraxinus excelsior</i>	Semi-mature	10	6	120	Yes	3	3	3.5	3.5	3.5	Limited access around base	Multiple stemmed at base. Vertical. Bark damage. Minor cavities. Minor decay. Ivy covered	95% dead/ absent. Major deadwood. Major dieback. Snapped/ hanging branches. Ivy covered	Adjacent, no access. Very Ivy covered. Nearly dead.	Poor	Poor	<10 yrs	Moderate	U	Removal recommended regardless of development
T75	Ash	<i>Fraxinus excelsior</i>	Semi-mature	10	2	250, 150	Yes	3	5	3	0.5	2.5	Limited access around base	Twin stemmed at base. Significant lean north. Ivy covered	Major dieback. Major deadwood. Snapped/ hanging branches. Ivy covered	Adjacent, no access. Crown touching building to north.	Poor	Poor	<10 yrs	Moderate	U	Removal recommended regardless of development







Appendix 5:
Tree Constraints Plan
 Kexborough Farms, Churchfield Lane, Kexborough
 Ref: AWA2903

BRITISH STANDARD BS372012
 RETENTION CATEGORIES
 Decisions 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: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM




AWA
 TREE CONSULTANTS

Appendix 6:
Tree Impacts Plan
 Kexborough Farms, Churchfield Lane, Kexborough
 Ref: AWA2903

BRITISH STANDARD BS372012
 SCALE: 1:500 PAPER: A1

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