



ARBORICULTURAL REPORT

& Impact Assessment

to BS 5837:2012 at:

***6 Wath Road,
Elsecar,
Barnsley,
South Yorkshire
S74 8HJ***

Date: *April 2021*

Reference: AWA3730



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 Matt Clarke 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 April 2021.
- 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 The tree positions were plotted on an Ordnance Survey map base-layer 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, PTI (Lantra) 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 comprises a semi-detached residential property located on Wath Road in Elsecar, a village in the Metropolitan Borough of Barnsley, South Yorkshire.
- 2.1.2 The approximate area of the survey is highlighted in the (2020 Google Earth) image below:

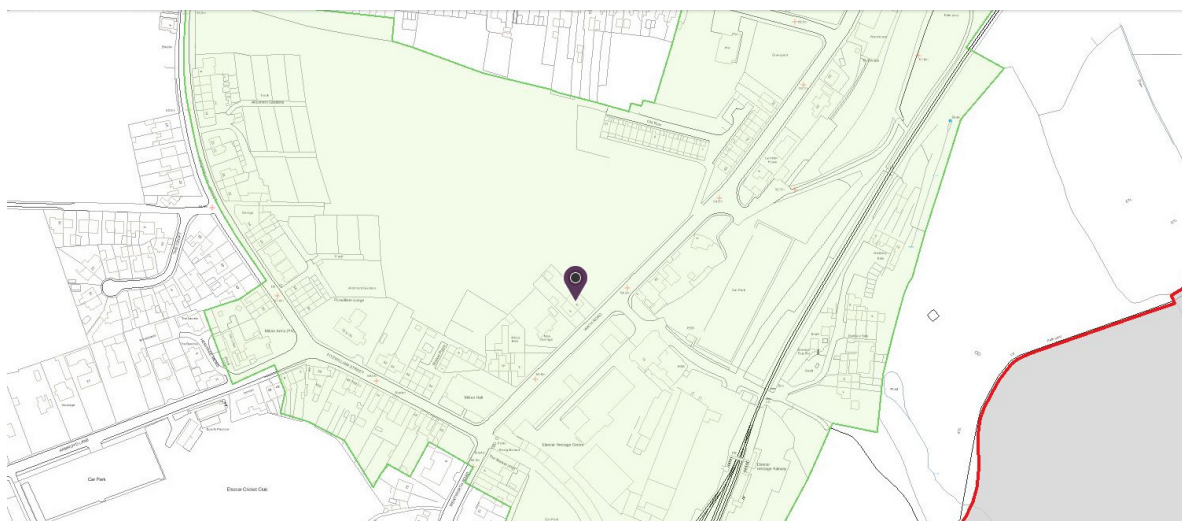


3. The Trees

3.1 Legal

3.1.1 An online search was undertaken with Barnsley Metropolitan Borough Council on the 6th of April 2021 to check whether any trees at the site are protected by a Tree Preservation Order (TPO) or whether the site is located within a Conservation Area. This showed that the site is located within a Conservation Area. As such, 6 weeks notification must be given to the local authority before any tree removals or pruning works can take place (unless such works are approved by planning permission).

3.1.2 The accessed map image from [barnsley.gov.uk](https://www.barnsley.gov.uk) is detailed below:



3.1.3 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. If either applies, then statutory permission is required before any works can take place (unless such works are approved by planning permission).

3.1.4 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

3.1.5 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 10 items of woody vegetation, comprised of 10 individual trees.
- 3.2.2 All 10 of the surveyed trees are low value retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 All of the surveyed trees are situated in adjacent land, with no trees within site boundaries.
- 3.2.4 Trees T1 and T10 are shrubby semi mature Elder, T2 to T6 and T10 are shrubby semi mature Hawthorn, and T7, T8 and T9 are young Cherries.
- 3.2.5 Trees T1, T3, T8 and T10 are vertical, while T2, T4, T5, T7 and T9 lean slightly and T6 leans significantly.
- 3.2.6 Hawthorn T5 has bark damage and minor decay to its stems which may limit its long term value.
- 3.2.7 Hawthorn T6 was previously twin stemmed, but the trees' southern stem has snapped out at around 2m from ground level, leaving a single stem which leans significantly to the north east. T6 likely has limited future prospects regardless of development at the site.
- 3.2.8 Cherries T7, T8 and T9 are growing from the base of the property's boundary fence and may impact the fence in future. T7 was likely previously twin stemmed, but the tree's eastern stem appears to have snapped out at around 2m from ground level.
- 3.2.9 Cherries T7, T8 and T9 and Elder T10 were inaccessible due to dense undergrowth and so were only given cursory inspections with measurements estimated and condition values indicative only.
- 3.2.10 Hawthorns T2 to T6 were covered in dense Ivy and this prevented detailed inspections and accurate stem measurements of the trees being undertaken.
- 3.2.11 It is recommended to sever the Ivy covering the stems and crowns of Hawthorns T2 to T6 at the base and at 1.5m regardless of the development, to prevent the Ivy from suppressing the trees' crowns and to allow for detailed future inspections of the trees.
- 3.2.12 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.

3.2.13 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 an extension to the north eastern side of the existing residential property. 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, no trees will require removal to facilitate the proposed development, with all trees able to be retained and protected throughout the development.
- 4.2.2 While no pruning works are required to facilitate the proposed development, it is recommended to sever the Ivy covering the stems and crowns of trees Hawthorns T2 to T6 at the base and at 1.5m regardless of the development.

4.3 Indirect Impacts

- 4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendix 5 and 6, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.
- 4.3.2 No significant negative indirect impacts have been identified.
- 4.3.1 The design of the new development has considered the tree crown positions and future growth of the trees in relation to the proposed new extension. The design proposals give adequate provision for future tree growth, with the retained trees unlikely to impact the proposed new extension in future.
- 4.3.2 The design of the new development has considered shading from the retained trees in relation to the proposed new extension. Some shade from trees may be beneficial, in particular, deciduous trees give shade in summer but allow access to sunlight in winter, however, the design proposals avoid excessive shading.
- 4.3.3 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 Provided construction access is within site boundaries, the existing boundary fence will provide adequate protection to the retained trees.
- 4.4.2 If construction access is required outside of site boundaries, within the RPA of the retained trees, interlinked ground protection boards capable of supporting the traffic without being distorted or causing compaction of underlying soil should be used so that tree root functions remain unimpaired.

5. Signature

I trust this report provides all the required information.

Signed



.....

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

7th April 2021

**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.

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 Tom Readman *Cert Arb L3, Level 4 Forestry and Arboriculture, TechArborA*

Tom joined AWA from his previous role as a tree risk surveyor with Harrogate Borough Council, where he undertook tree risk surveys at a range of sites and prescribed suitable works. Tom also has extensive previous experience as a climbing arborist. Tom achieved at Distinction Star, and was recognised as the student of the year, in the Extended Diploma in Forestry and Arboriculture and is now completing a Foundation Degree in Arboriculture, while working at AWA. Tom's work focuses on tree risk surveys and accurate tree data collection for development projects 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 BS 5837:2012 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - '*Tree Work: Recommendations*'.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins 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 in green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

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

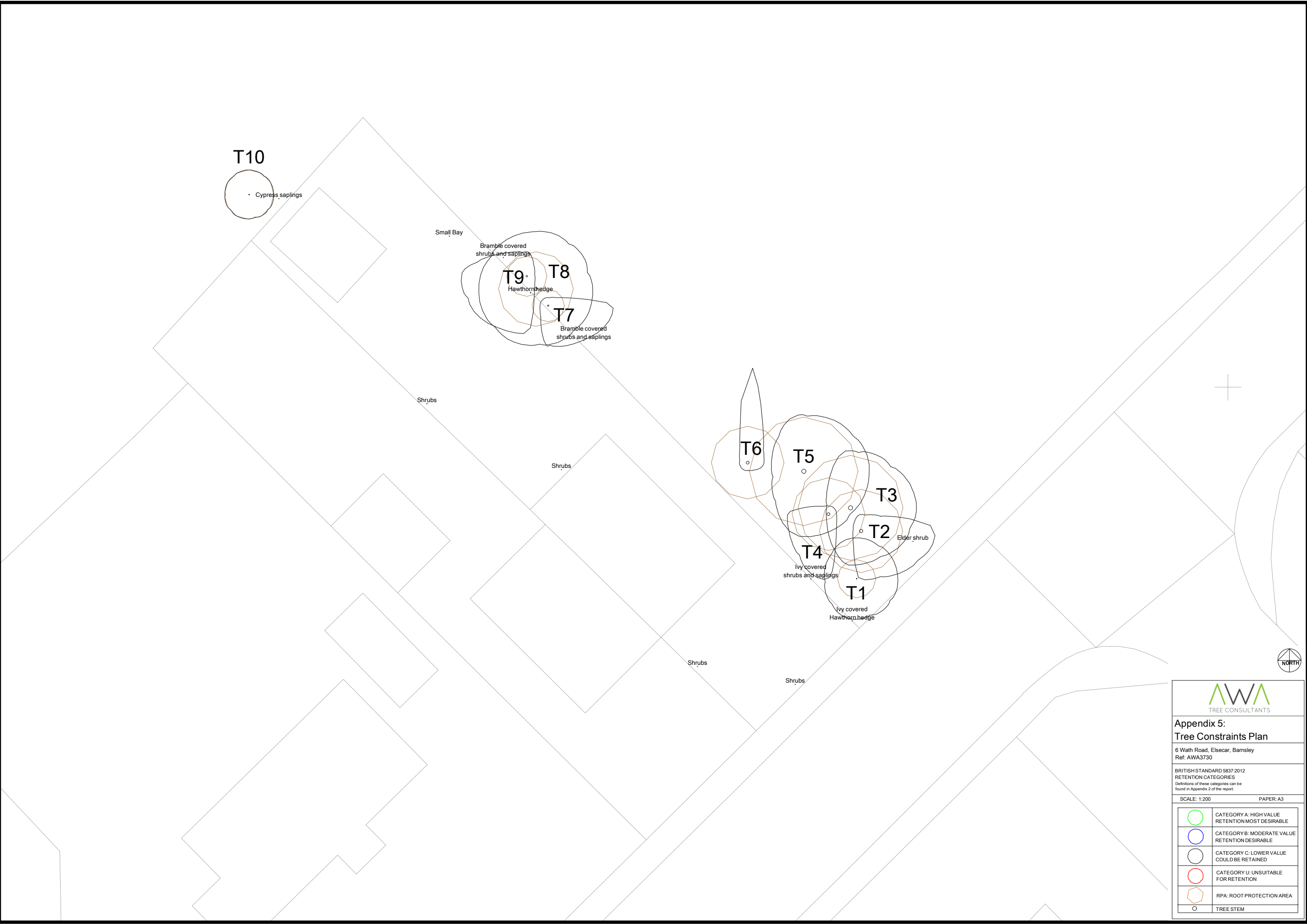
C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

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

Tree Species				Measurements				Crown (m)					Tree Condition							Value		Management	
Tree ID	Common Name	Latin Name		Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
	T1	Elder	<i>Sambucus nigra</i>	Semi-mature	5	10	30	No	1.5	2.5	2.5	2.5	2	Ivy covered	Multiple stemmed at base. Vertical. Tight unions. Mower damage	Minor deadwood. Minor snapouts	Adjacent but accessible	Good	Fair	10 to 20 yrs	Low	C	No works required
	T2	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5.5	2	180, 100	No	2	1	4.5	3	0.5	Ivy covered	Twin stemmed at 1m. Slight lean south east. Ivy covered. Stubs. Old pruning wounds	Minor deadwood. Ivy covered. Minor snapouts	Adjacent but accessible. Slight lean to south east. Roots, stem and crown very Ivy covered. Ivy prevented detailed inspection and accurate stem measurement.	Good	Fair	20 to 40 yrs	Low	C	No works required to facilitate development. Recommended to sever Ivy at base and 1.5m regardless of development.
	T3	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	9.5	3	150, 150, 150	No	1	3.5	4	3.5	1.5	Ivy covered	Single stemmed. Vertical. Ivy covered. Tight unions	Minor deadwood. Ivy covered. Minor snapouts	Adjacent but accessible. Roots, stem and crown very Ivy covered. Ivy prevented detailed inspection and accurate stem measurement.	Good	Fair	20 to 40 yrs	Low	C	No works required to facilitate development. Recommended to sever Ivy at base and 1.5m regardless of development.
	T4	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	7.5	1	180	No	2	0.5	0.5	4	2.5	Ivy covered	Single stemmed. Slight lean south west. Ivy covered	Minor deadwood. Ivy covered. Minor snapouts	Adjacent but accessible. Slight lean to south west. Roots, stem and crown very Ivy covered. Ivy prevented detailed inspection and accurate stem measurement.	Good	Fair	20 to 40 yrs	Low	C	No works required to facilitate development. Recommended to sever Ivy at base and 1.5m regardless of development.

Tree Species				Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T5	Hawthorn	Crataegus monogyna	Semi-mature	10	2	180, 200	No	1	3.5	4	4	2	Ivy covered	Twin stemmed at 0.5m. Slight lean east. Tight unions. Bark damage. Minor decay	Minor deadwood. Ivy covered. Minor snapouts	Adjacent but accessible. Slight lean to east. Roots, stem and crown very Ivy covered. Ivy prevented detailed inspection and accurate stem measurement. Bark damage and minor decay to stems.	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate development. Recommended to sever Ivy at base and 1.5m regardless of development.
T6	Hawthorn	Crataegus monogyna	Semi-mature	4.5	1	180	No	0.5	6	1	0.5	0.5	No visual defects	Single stemmed. Significant lean north east. Ivy covered. Epicormic growths	Minor deadwood. Ivy covered. Minor snapouts	Adjacent but accessible. Significant lean to north east. Previously twin stemmed, but southern stem snapped out at 2m. Stem and crown very Ivy covered. Ivy prevented detailed inspection and accurate stem measurement.	Good	Fair	10 to 20 yrs	Low	C	No works required to facilitate development. Recommended to sever Ivy at base and 1.5m regardless of development.

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T7	Cherry	Prunus sp.	Young	9	1	80	No	0.5	0.5	4	2.5	0.5	Limited access around base	Single stemmed. Slight lean north east. Old pruning wounds	Normal	Adjacent. Limited access around base due to dense undergrowth. Slight lean to north east. Stem measurement estimated. Previously twin stemmed but eastern stem snapped out at 2m.	Good	Good	20 to 40 yrs	Low	C	No works required
T8	Cherry	Prunus sp.	Young	11	3	100, 120, 100	No	1	3.5	3.5	3.5	3.5	Limited access around base	Multiple stemmed at base. Vertical. Tight unions. Ivy covered	Normal	Adjacent. Limited access around base due to dense undergrowth. Stem measurements estimated.	Good	Fair	20 to 40 yrs	Low	C	No works required
T9	Cherry	Prunus sp.	Young	9	3	80, 50, 30	No	1	1.5	0.5	3.5	4	Limited access around base	Single stemmed. Slight lean west. Tight unions	Normal	Adjacent. Limited access around base due to dense undergrowth. Slight lean to west. Stem measurements estimated.	Good	Fair	20 to 40 yrs	Low	C	No works required
T10	Elder	Sambucus nigra	Semi-mature	5.5	6	50	Yes	0.5	1.5	1.5	1.5	1.5	Limited access around base	Multiple stemmed at base. Vertical. Tight unions	Minor deadwood. Minor snapouts	Adjacent. Limited access around base due to dense undergrowth.	Good	Fair	10 to 20 yrs	Low	C	No works required





AWA
TREE CONSULTANTS

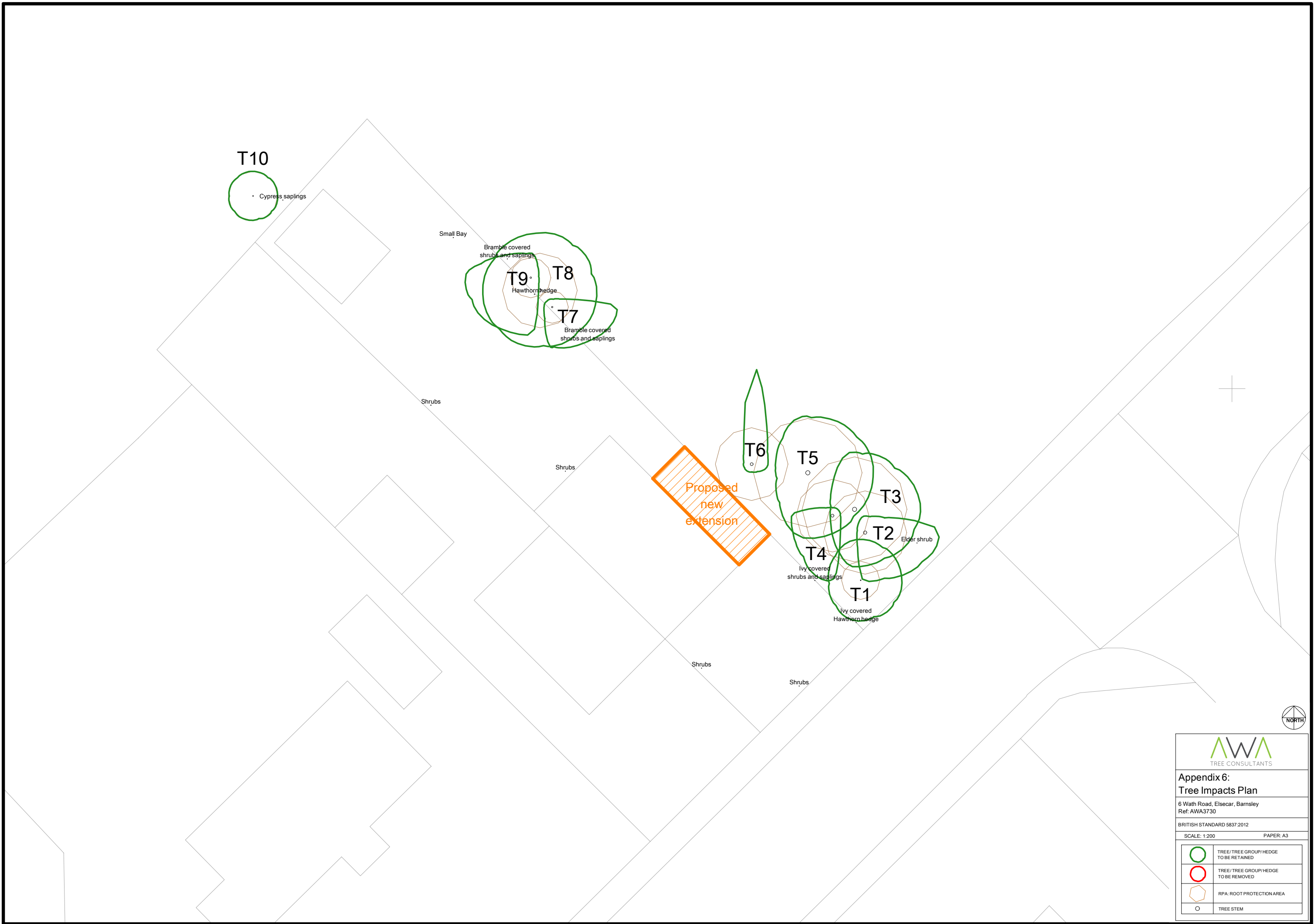
Appendix 5:
Tree Constraints Plan

6 Wath Road, Elsecar, Barnsley
Ref: AWA3730

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

SCALE: 1:200 PAPER: A3

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





TREE CONSULTANTS

Appendix 6:
Tree Impacts Plan

6 Wath Road, Elsecar, Barnsley
Ref: AWA3730

BRITISH STANDARD 5837:2012

SCALE: 1:200

PAPER: A3

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