



ARBORICULTURAL REPORT & Impact Assessment to BS 5837:2012 at:

***Former St Luke's Hospital Site.
Blackmoorfoot Road,
Crosland Moor,
Huddersfield
HD4 5RA***

Prepared for:
FDA Landscape

Date: *April 2023*

Reference: *AWA4012*



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We were instructed by FDA Landscape 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 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 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, 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 is situated on Blackmoorfoot Road in Huddersfield, West Yorkshire and comprises a vacant plot of land bordered by Blackmoorfoot Road to the north, an access road to the north east, a new residential development to the south east and south west, and existing residential properties at the site's north western corner.

2.1.2 The approximate area of the survey is highlighted in the (2021 Google Earth) image below:



3. The Trees

3.1 Legal

- 3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.
- 3.1.2 An online search was undertaken with Kirklees Council on the 30th of November 2021 to check if trees at the site are protected by Tree Preservation Orders or are within a Conservation Area. Trees at the site are protected by Tree Preservation Orders.
- 3.1.3 Before carrying out any works to the protected trees the permission of the local planning authority must be given. There are large potential penalties for illegally carrying out work to protected trees.
- 3.1.4 The accessed map image from mapping.kirklees.gov.uk is detailed below:



- 3.1.5 It is likely that the trees within this report which are protected by Tree Preservation Orders are Sycamore T1 and Horse Chestnut T7.
- 3.1.6 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It must be ensured that this legislation is not contravened.

- 3.1.7 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.
- 3.1.8 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 7 items of woody vegetation, comprised of 7 individual trees.
- 3.2.2 Of the surveyed trees: 1 tree is retention category 'U', 1 tree is retention category 'A' and 6 trees are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.1 Full details of the surveyed trees and tree groups are provided in the attached tree data schedule at Appendix 4. General comments are provided below:
- 3.2.2 The site's most significant and highest value tree is Sycamore T1, a large mature tree in good condition situated in a prominent position to the centre of the site, visible from the road to the north west.
- 3.2.3 Cypress T2 is situated in an adjacent garden and so was only given a cursory inspection with measurements estimated and condition values indicative only. The tree is situated on higher ground than the site, with a retaining wall situated between the tree and the site. There are pruning wounds in the tree's lower crown and the tree's crown appears to have been recently lifted over the site.
- 3.2.4 Crab Apples T3 and T4, Cherry T5 and Elder T6 border an access road at the site's north western corner. The trees are of low value but provide some screening between the site and the adjacent residential property. Access to T3, T4 and T5 was limited due to dense undergrowth.
- 3.2.5 Horse Chestnut T7 is situated in a grass verge at the site's north western roadside boundary. The tree is in poor condition with symptoms of Bleeding Canker of Horse Chestnut; there is extensive bark damage, cracked bark bleeds, decay and occasional cavities to its stem, and significant dieback, lots of minor to moderate deadwood, snapouts, bark damage, decay and bleeds throughout its crown. While suitable for retention in the current context of the site, the tree has limited future prospects regardless of development at the site and would be unsuitable to retain close to a new development at the site.
- 3.2.6 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.

- 3.2.7 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.

3.3 Photographs



Photo 1: T1 from south



Photo 2: T2 from south west



Photo 3: T3 from north east



Photo 4: T4, T5 and T6 from north east



Photo 5: T7 from north west

4. Arboricultural Impact Assessment

4.1 Proposed New Development

- 4.1.1 Erection of a foodstore (Use Class E) with associated access, parking, servicing area and landscaping.
- 4.1.2 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, 6 trees will require removal to facilitate the development 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 to facilitate the development are T1 and T3 to T7.
- 4.2.3 Sycamore T1 is high value retention category 'A'.
- 4.2.4 Crab Apples T3 and T4, Cherry T5 and Elder T6 are lower value retention category 'C'.
- 4.2.5 Horse Chestnut T7 is retention category 'U' and has limited future prospects regardless of development at the site.

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 on the retained trees have been identified.

4.4 Protection of the Retained Trees

- 4.4.1 The retained trees may require protection by fencing in accordance with BS 5837: 2012, during the development phase. 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.

Signed



.....

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

24th April 2023

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Appendices

- Appendix 1: Authors Qualifications and Experience**
- Appendix 2: Survey Methodology and Limitations of Report**
- 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 Principal 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 he 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. Adam has also undertaken locum Tree Officer work for several local authorities.

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

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has several years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

Dr Felicity Stout, PhD, 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 she has work published in The Arboricultural Journal on this subject. As well as working at AWA Felicity is the Tree Conservation Officer for the Peak District National Park Authority.

Mr James Godfrey, BA (Hons), Dip Forestry and Arboriculture Level 4, Cert Arb L3, TechArborA, QTRA Registered

James has extensive arboricultural experience working as a team leader within the public and private sector. By achieving a Distinction Star in the Extended Diploma in Forestry and Arboriculture, James was able to use his knowledge to inform and carry out appropriate maintenance that ensured the long term wellbeing of trees across the UK. During his time at Darlington Borough Council, James provided on site assessment and the management of the remedial works required to ensure safe and suitable retention of trees that provide a multitude of benefits to the urban environment. Currently, James is completing a Foundation Degree in Arboriculture and Tree Management, while working at AWA.

Mr Joe Thomas, MSci Biology, Award L4 Arboriculture, TechArborA

Joe achieved a first class degree in biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA in 2022 after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

Mr James Boyle, HND Level 5 Arboriculture and Urban Forestry, Dip Arboriculture Level 4, TechArborA

Jim joined AWA in 2022, after having worked within the tree care profession for several years, alongside studying at college and university. During this time, he gained a wealth of experience and several professional and practical NPTC qualifications in the tree care industry. Jim has studied Arboriculture and Urban Forestry at Merrist Wood College in Surrey, Plumpton College in Sussex and University of Highlands and Islands in the Scottish Highlands, where he achieved a distinction in the Higher National Diploma Level 5.

Miss Lucy Garbutt, MSc Animal Behaviour, BSc (Hons) Biology, CIEEM membership

Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

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.

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.

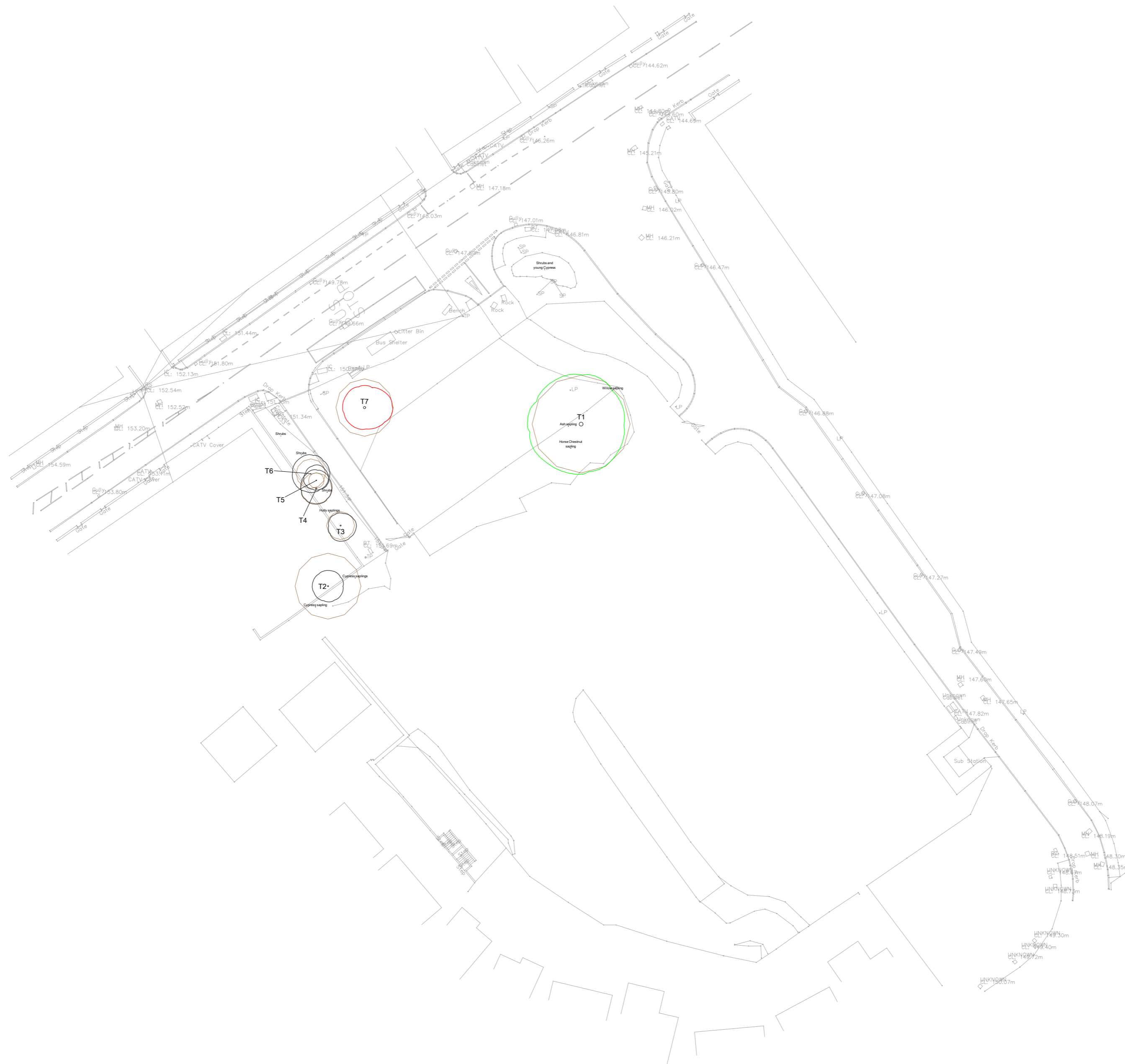
B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

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 ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition				Value			Management			
	Common Name	Latin Name		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	Sycamore	<i>Acer pseudoplatanus</i>	Mature	15	1	630	No	0.5	8	7	8	8.5	No visual defects	Single stemmed. Vertical. Epicormic growths. Bark damage	Minor deadwood. Minor snapouts	Likely protected by Tree Preservation Order. Tree tag 0776. Minor bark damage to buttress roots but with no visible decay. Epicormic growths at base to east. Two com-dominant main stems at 2.5m approx. Lamppost through crown to north west. Fence at base to north west.	Good	Good	>40 yrs	Moderate	A	Removal required to facilitate development
T2	Lawson Cypress	<i>Chamaecyparis lawsoniana</i>	Semi-mature	13	8	150	Yes	3	2.5	2.5	2.5	2.5	Limited access around base	Multiple stemmed at base. Vertical. Old pruning wounds. Stubs. Tight unions. Partially included bark	Minor deadwood. Old pruning wounds	Adjacent, no access. Situated on higher ground than site with retaining wall situated between tree and site. Pruning wounds in lower crown. Crown appears to have been recently lifted over site to south east.	Fair	Fair	10 to 20 yrs	Low	C	No works required
T3	Crab Apple	<i>Malus sp.</i>	Semi-mature	5	1	180	No	1.5	2	2.5	2.5	2	Limited access around base	Single stemmed. Vertical. Bark damage	Minor deadwood. Minor snapouts	Limited access at base due to dense undergrowth	Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T4	Crab Apple	<i>Malus sp.</i>	Semi-mature	6	1	200	Yes	2	3	2.5	2.5	2.5	Limited access around base	Single stemmed. Slight lean south west	Old pruning wounds. Minor deadwood	No access due to dense undergrowth	Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T5	Cherry	<i>Prunus sp.</i>	Young	7	1	100	Yes	5	2.5	2	1.5	2	Limited access around base	Single stemmed. Slight lean north. Rubbing stems	Normal	No access due to dense undergrowth. Stems rub and intertwine at 2m approx.	Good	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition				Value		Management				
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T6	Elder	<i>Sambucus nigra</i>	Semi-mature	6.5	10	60	No	0.5	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Tight unions. Minor cavities. Minor decay	Minor deadwood	Rubble around base	Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T7	Horse Chestnut	<i>Aesculus x carnea</i>	Early-mature	8.5	1	370	No	1.5	3.5	4.5	3.5	3.5	No visual defects	Single stemmed. Vertical. Bark damage. Bleeds. Minor cavities. Moderate decay. Cracked bark. Epicormic growths. Old pruning wounds	Moderate dieback. Minor deadwood. Moderate deadwood. Bark damage. Minor decay. Minor snapouts. Moderate snapouts. Bleeds. Old pruning wounds.	Likely protected by Tree Preservation Order. Tree tag 0775. Situated in grass verge. symptoms of Bleeding Canker of Horse Chestnut. Extensive bark damage and cracked bark, bleeds, decay and occasional cavities to stem. Significant dieback in crown with lots of minor to moderate deadwood and snapouts and lots of bark damage, decay and bleeds.	Poor	Poor	<10 yrs	Moderate	U	Removal required to facilitate development



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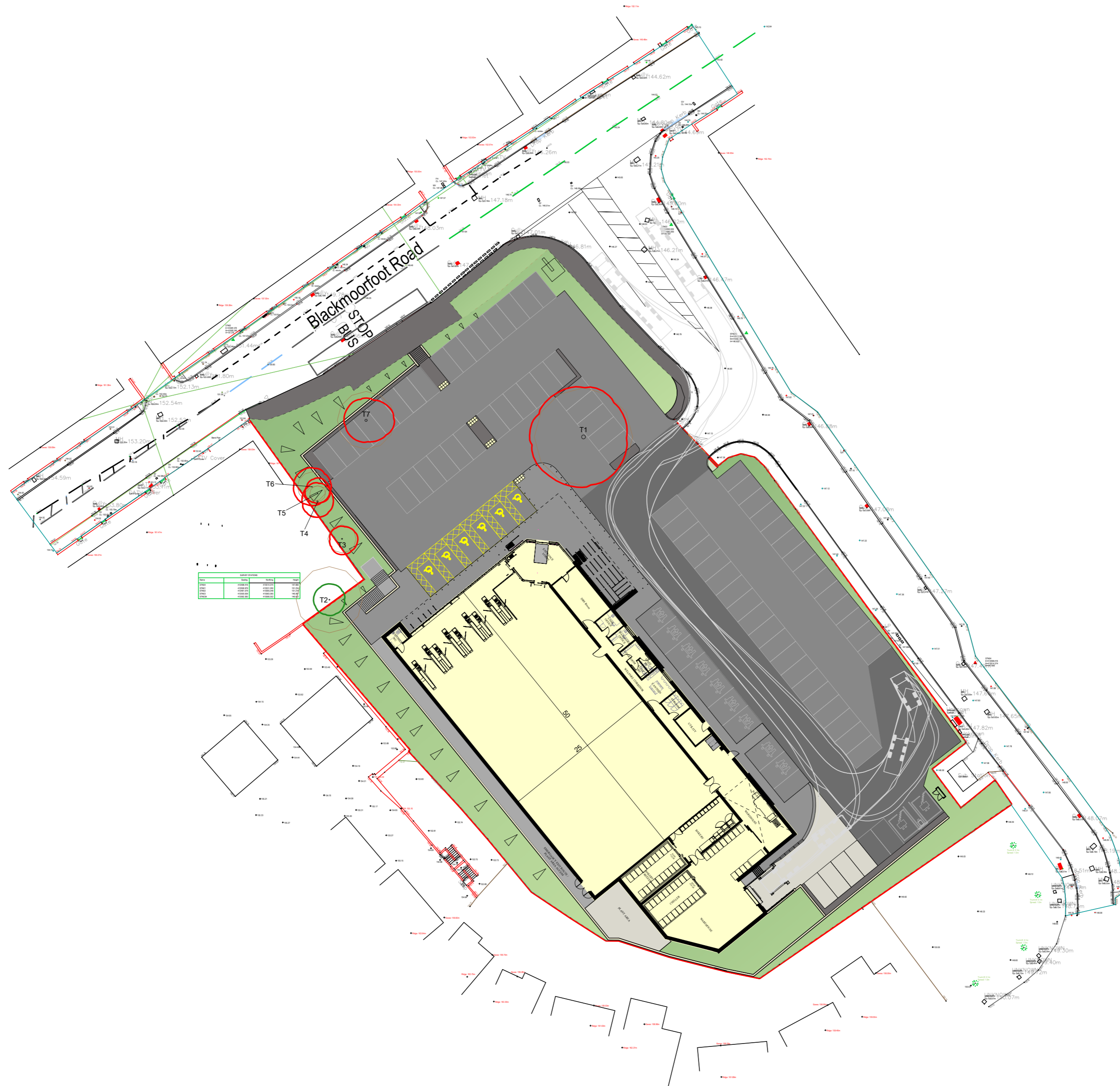
**Appendix 5:
Tree Constraints Plan**

Former St Luke's Hospital Site, Blackmoorfoot Road, Croxall Moor
Ref: AWA012

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

SCALE: 1:500 PAPER: A2

	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



**Appendix 6:
Tree Impacts Plan**

Former St Luke's Hospital Site, Blackmoorfoot Road, Croxall Moor
Ref: AWA012

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

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