



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

***Barnsley Hospital Education Centre,
Gawber Road,
Barnsley
S75 2EP***

Prepared for:
JTP Architects

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 Institute of
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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We were instructed by JTP Architects 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 November 2024.
- 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, Principal and Director of AWA Tree Consultants Ltd.
- 1.2.6 The tree survey data collection was carried out by Mr James Brown, BSc (Hons) Arboriculture, MArborA, Arboriculturist at AWA Tree Consultants Ltd.
- 1.2.7 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 please 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 the Barnsley Hospital Education Centre building and associated greenspace located within the larger Barnsley Hospital complex, Gawber Road, Barnsley, South Yorkshire.
- 2.1.2 The approximate area of the survey is highlighted in the (2023 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 Barnsley Metropolitan Borough Council on 07/11/24 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. As of this date no trees at the site are protected by a Tree Preservation Order or are within a Conservation Area.
- 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 confirm if any trees are covered by a Tree Preservation Order or are within a Conservation Area. If either applies, then statutory permission is required before any works can take place (unless such work is approved as part of full planning permission).
- 3.1.4 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2024), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2024).
- 3.1.5 It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.
- 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 is essential that appropriate care is taken to ensure 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 3 items of woody vegetation, comprised of 3 individual trees.
- 3.2.2 Of the surveyed trees: 1 tree is retention category 'B' and 2 trees are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).
- 3.2.3 Full details of the surveyed trees are provided in the attached tree data schedule at Appendix 4. General comments are provided below:
- 3.2.4 T1 is an early mature Cherry tree. It is situated in a small planting area with hard surfacing on three sides. T1 has had historic pruning works. One of the resulting pruning wounds has some decay.
- 3.2.5 T2 is a large early mature Cherry tree. T2 has exposed roots which show historic damage that is healing well. The roots of T2 have some bleeds and suckers. The largest of the suckers has established itself as a small shrub off the main stem. The lower crown of T2 has several tight unions between the main branches. The branches of T2 are close to coming in contact with the building to the south.
- 3.2.6 T3 is an early mature Silver Birch adjacent to the site's northwest corner. T3 leans slightly northwest. T3 is coming into contact with a lamppost to the northeast. T3 is in good condition and provides moderate arboricultural value.
- 3.2.7 The tree Root Protection Area (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.
- 3.2.8 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

3.3 Photographs



Photo 1: T1 from northwest



Photo 2: T2 from north



Photo 3: T2 from southwest

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build an extension to the existing building. 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 1 tree will require removal to facilitate the development as it is situated in the footprint of the development.

4.2.2 The tree that requires removal to facilitate the development is T1.

4.2.3 The tree to be removed is of lower value, retention category 'C'. T1 is an early-mature Cherry. Due to the low value of the tree to be removed the removal will have only a negligible negative arboricultural impact.

4.2.4 The proposed new tree planting at the site will help mitigate for the removal of T1.

4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 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 All the retained trees have been assessed as suitable for retention in terms of BS 5837:2012 section 5 "Proximity of structures to trees." The retained trees will not cause unreasonable inconvenience or nuisance issues, leading to associated pressures for felling or excessive pruning. The layout allows sufficient space to enable the retained trees to grow to maturity without significantly adversely affecting the amenity of the new development.

4.4 Protection of the Retained Trees

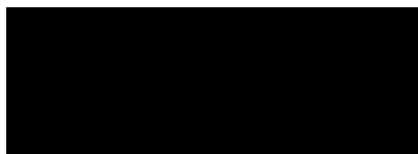
4.4.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.4.2 An associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees has been provided (Ref: AWA6328AMS).

5. Signature

I trust this report provides all the required information.

Signed



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

2nd January 2025

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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

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 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 also regularly undertakes locum Tree Officer work for several Local Planning Authorities.

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

James is a highly experienced and qualified Arboricultural Consultant. He 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 many 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.

James Godfrey, BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered

James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

Joe Thomas, MSci Biology, Award L4 Arboriculture, TechArborA, PTI (Lantra), QTRA Registered

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 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.

Lucy Garbutt, MSc Animal Behaviour, BSc (Hons) Biology, PTI (Lantra), TechArborA, QTRA Registered

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.

Sophie Beckerman, BA (Hons), Dip Arboriculture Level 4, PTI (Lantra), TechArborA, QTRA Registered

Sophie has more than 10 years' experience as an arborist, working for a variety of private companies as well as undertaking tree management with Sheffield City Council Ranger Service and The Wildlife Trust. Her expertise in arboriculture is demonstrated in the practical NPTC qualifications gained, and her excellent knowledge is reflected in the L4 diploma in Arboriculture, which she completed while working. Her roles as a climbing arborist and team leader included estimating for jobs and project management, supervising tree contracting teams - ensuring that work is carried out safely and efficiently and that health and safety standards are adhered to, and risk assessments are carried out.

Ross Lane, FdSc Environmental Conservation, Diploma Arboriculture, TechArborA, PTI (Lantra), QTRA Registered

Ross has a diverse background spanning horticulture, arboriculture, and ecology. Ross has extensive experience conducting surveys throughout the UK and has worked on projects of all sizes, including major infrastructure projects such as HS2. In his previous role as a Tree Inspector at Derbyshire County Council, projects involved managing the county wide tree stock in relation to the ash dieback response and contributing to ambitious County Council targets of planting a million trees. Possessing technician-level membership with the Arboricultural Association, coupled with a comprehensive range of qualifications from tree risk assessment to habitat management, underscores Ross' dedication in professional arboriculture.

Appendix 2: Survey Methodology and Limitations

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.

Appendix 4: Tree Data

Tree ID	Tree Species		Maturity	Measurements				Crown (m)				Tree Condition				Value			Management			
	Common Name	Latin Name		Height (m)	Stems	Stem Diameter (mm)	Estimated	Crown height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T1	Cherry	<i>Prunus sp.</i>	Early-mature	7	5	120	No	2	2.5	2.5	3	2.5	No visual defects	Multiple stemmed at 1m, Slight lean, Old pruning wounds, Minor decay	Minor deadwood, Old pruning wounds	Surrounded by hard standing to south, east and west. Leaning south. Multiple pruning wounds. Previous reduction works to crown.	Good	Good	20 to 40 yrs	Moderate	C	Removal required to facilitate development
T2	Cherry	<i>Prunus sp.</i>	Early-mature	8	1	450	No	2	4	4.5	5.5	6	Exposed roots, Girdled roots, Bark damage, Bleeds, Suckers	Single stemmed, Vertical, Epicormic growths, Tight unions	Minor deadwood, Old pruning wounds	Large, exposed roots with historic bark damage. Suckers. Tight unions within crown. Included bark. Pruning wounds throughout crown. On slight banking which slopes down south to north. Bleeds. Close to contact with building.	Good	Good	10 to 20 yrs	Moderate	C	No works required
T3	Birch	<i>Betula pendula</i>	Semi-mature	13	1	340	No	3	3	4	1	3	Exposed roots, Bark damage	Single stemmed, Slight lean, Old pruning wounds, Epicormic growths	Minor deadwood	Slight lean to northwest. Crown in contact with lamppost to northeast.	Good	Good	20 to 40 yrs	Moderate	B	No works required

View 3

View 1

New planting to mitigate removal of T1



View 2

T3

T2

T1

New extension



Appendix 6: Tree Impacts Plan

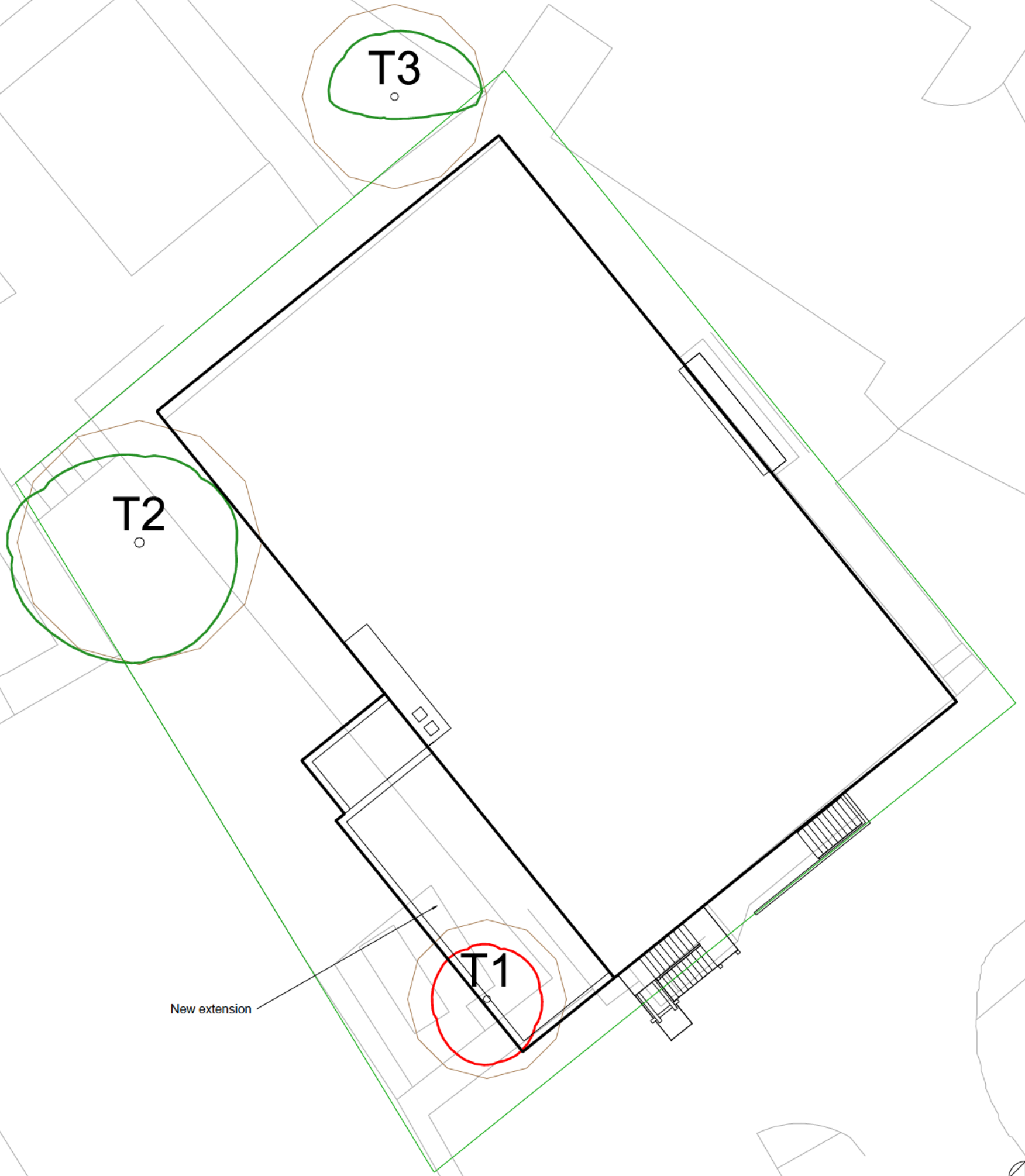
Barnsley Hospital Education Centre, Gawber Road, Barnsley
Ref: AW6328

BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A1

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

View 2



New extension



AWA
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**Appendix 6:
Tree Impacts Plan**

Barnsley Hospital Education Centre, Gawber Road, Barnsley
Ref: AW6326

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

View 3

New planting to mitigate removal of T1







Appendix 6: Tree Impacts Plan

Bamsley Hospital Education Centre, Gawber Road, Bamsley
Ref: AWA6328

BRITISH STANDARD 5837:2012

SCALE: 1:200

PAPER: A4

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