Arboricultural Impact Assessment

WC-509.1a

2, Branksome Avenue, Barnsley S70 6HX

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Site address	2, Branksome Avenue, Barnsley S70 6HX
Grid reference:	SE 33169 06299
Report prepared by:	Jack Delaney MICFor MArborA
Date:	23rd March 2026

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Contents

Executive Summary

Woodsage Consulting Ltd have been instructed by Mr. Chris Barton to prepare an Arboricultural Impact Assessment for the land at 2, Branksome Avenue, Barnsley S70 6HX, in relation to the proposed development of the site.

The proposed development comprises the retrofit of the existing dwelling together with associated external landscaping works.

According to information which is available on the website of the Barnsley Metropolitan Borough Council, none of the trees located on or immediately adjacent to the site are subject to tree preservation orders and the site is not located within a conservation area.

The site survey identified a total of 10 individual trees and one group of trees with the potential to be impacted by the development proposals. These include:

- six category B trees of moderate quality; and,
- four category C trees and one group of low quality.

The proposed development will not require the removal of trees.

Two category B trees will require facilitation pruning.

The RPAs of the retained trees are to be suitably protected throughout the development process by temporary tree protection fencing and ground protection.

Providing the recommendations made within this report are followed, the development is considered achievable with minimal impact in arboricultural terms to the site and surrounding area.

1. Introduction

1.1. Instruction and Scope of Report

1.1.1. Woodsage Consulting Ltd have been instructed by Mr. Chris Barton to prepare an Arboricultural Impact Assessment for the land at 2, Branksome Avenue, Barnsley S70 6HX, in relation to the proposed development of the site.

1.1.2. The purpose of this report is to allow the local planning authority (LPA) to assess information regarding trees at the site as part of the planning submission and to demonstrate to the LPA that appropriate consideration has been given to the subject of trees as part of the development.

1.1.3. In accordance with *BS 5837:2012*[1] this report sets out to:

- assess the quality and value of the trees on and immediately adjacent to the site;
- identify trees for removal and/or retention in relation to the development proposals;
- prescribe tree protection measures, which will ensure the successful retention of the retained trees at the site (these measures will be further detailed in an outline Arboricultural Method Statement (AMS)); and,
- where necessary, provide preliminary recommendations for replacement tree planting.

1.1.4. The contents of this report are concerned with arboricultural issues alone. Although other disciplines such as engineering and ecology may be referenced, it is important to gain advice from an appropriate expert on these matters.

1.2. Site Details

1.2.1. 2, Branksome Avenue - hereafter referred to as 'the site' and shown in ***Fig. 1.1***, below - is located approximately 0.8 miles to the west of Barnsley town centre. The site is accessed north off Branksome Avenue.

Figure 1.1: *Aerial imagery showing the approximate site boundaries, outlined in red*[2].

[1] British Standards (2012). *BS 5837:2012 - Trees in Relation to Design, Demolition and Construction: Recommendations*. London, British Standards Institute.

[2] Microsoft Corporation (2026). *Bing Maps* [online]. Available at: > https://www.bing.com/maps/?cp=53.552333%7E-1.500604&lvl=18.8&style=h < [accessed 23rd March 2026].

1.2.2. The site is centred on OS Grid Reference SE 33169 06299 and covers approximately 434 m^2.

1.2.3. The site is bound by public open space (POS) to the north, by Grosvenor Drive to the east, by Branksome Avenue to the south, and by residential property to the west.

1.3. Site Topography and Elevation

1.3.1. The site lies at an elevation ranging between 137-140 m above ordnance datum (AOD).

1.3.2. Although the surrounding topography falls away from the south to north, the site is predominantly level.

1.4. Desk Based Study and Planning Context

1.4.1. According to the Cranfield Soil and Agrifood Institute[3], the soils in the surrounding area consist of *Soilscape 17.* These are acidic, loamy, and clayey soils, that are slowly permeable and seasonally wet. No further detailed soil analysis was carried out as part of the survey.

1.4.2. According to information which is available on the website of the Barnsley Metropolitan Borough Council (BMBC)[4], none of the trees located on or immediately adjacent to the site are subject to tree preservation orders (TPOs) and the site is not located within a conservation area.

1.5. Development Proposals

1.5.1. The proposed development comprises the retrofit of the existing dwelling together with associated external landscaping works.

[3] Cranfield University (2026). *Land Information System (LandIS) - Soilscapes Viewer* [online]. Available at: > www.landis.org.uk/soilscapes < [accessed 23rd March 2026].

[4] BMBC (2026). *TPO/Conservation Area Map* [online]. Available at: > https://www.barnsley.gov.uk/services/parks-and-open-spaces/tree-preservation-orders/ < [accessed 23rd March 2026].

2. Methods

2.1. Survey Details

2.1.1. The site survey was carried out on Tuesday the 10th of March 2026.

2.1.2. The weather at the time of the survey was fine and dry; visibility of the trees was not impeded.

2.2. Survey Personnel

2.2.1. The survey was carried out by Jack Delaney. Jack is a Chartered Arboriculturalist (Member of the Institute of Chartered Foresters), and has worked in the arboricultural sector for over 15 years. Jack holds an FdSc in Arboriculture with distinction and is a Professional Member of the Arboricultural Association. Jack is also a LANTRA qualified Professional Tree Inspector and is a trained and registered user of Quantified Tree Risk Assessment (QTRA).

2.3. Survey Methodology

2.3.1. Only substantial trees with a stem diameter of 75 mm or above were included as part of the survey, as is recommended in *BS 5837:2012*.

2.3.2. The trees were inspected from ground level using the Visual Tree Assessment (VTA)[5]. Although notable defects of trees were recorded, the site survey did not constitute a full tree safety assessment. No specialist decay detection equipment was used as part of the survey, though sounding and probing tools were used where necessary.

2.3.3. In circumstances where trees form a cohesive feature, they have been recorded, assessed and plotted as groups, hedgerows, or woodlands. Whilst not every tree within a group, hedgerow, or woodland has been surveyed, a representative sample has been measured in order to calculate the crown spread and root protection area (RPA).

2.3.4. Tree information was recorded in accordance with *Section 4.4* of *BS 5837: 2012*, and includes tree species, height, stem diameter at breast height (DBH), crown spread, crown clearance, life stage, condition (physiological and structural), and safe useful life expectancy (SULE).

2.3.5. Trees were allocated to one of four categories (U, A, B or C) as defined in ***Tab. 2.1***, below, to reflect amenity value and suitability for retention, in consideration of the development proposals.

Table 2.1: BS 5837: 2012 *cascade chart*[1].

BS 5837: 2012 Category	Definition	Retention	Colour code
Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years; trees that are particularly good examples of their species, especially if rare or unusual.	Highly desirable	Light green
Category B	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years; trees lacking the special quality to merit category A designation.	Desirable	Dark blue
Category C	Trees of low quality with an estimated remaining contribution of at least 10 years, or trees with a stem diameter below 150 mm; unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Feasible, but may be removed if posing a constraint to development	Grey

[5] Mattheck, C., Breloer, H. (1994). *The Body Language of Trees, a Handbook for Failure Analysis*. Her Majesty's Stationary, London.

BS 5837: 2012 Category	Definition	Retention	Colour code
Category U	Trees that have serious, irremediable, structural and/or physiological defects, including those that will become unviable after removal of other category U trees.	Potentially unfeasible	Red

2.3.6. Subcategories 1, 2 and 3 have also been applied to the trees, to reflect arboricultural (1) and landscape (2) qualities, and cultural values (3), respectively.

2.3.7. Tree dimensions were determined using the following methods[6]:

- Tree heights were measured from the base of the main stem to the top of the crown, using an electric clinometer
- Crown spreads were measured at each cardinal point, using a laser distometer
- Crown clearances were measured from the base of the main stem to the first significant branch, using an electric clinometer

2.3.8. The DBH of trees was measured at 1.5 m above ground level using a diameter tape measure, employing the methods detailed in *Annex C* of *BS 5837:2012*. DBHs were then used to calculate tree RPAs using the following equations:

1. For single stem trees, the RPA was calculated as a circle with a radius 12 times the DBH
2. For trees with 2-5 stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\textbf{Stem 1 DBH})^2 + (\textbf{ Stem 2 DBH})^2 + \dots (\textbf{Stem 5 DBH})^2}$$

3. For trees with 6 or more stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\mu\, \boldsymbol{DBH})^2 \textbf{ x number of stems}}$$

2.3.9. For tree groups, hedgerows, and woodlands, the calculated RPAs are based on an offset from the canopy edge. This offset is determined with reference to the trees with the largest stem diameters and crown spreads located at the edge of the group, hedgerow or woodland.

2.3.10. Where access to trees was obstructed or obscured, DBH, height, and crown spread measurements may have instead been estimated

2.4. Constraints

2.4.1. The survey was constrained by the season in which it took place; certain tree pathogens and/or defects, for example, the fructifications of decay fungi are only visible at specific times of the year.

2.4.2. The locations of the trees shown in the ***Tree Constraints Plan*** in ***Appendix 4*** have been plotted using a combination of GPS, site features, and manual measurements. Aerial imagery has also been utilised to plot tree group canopy spreads. Although these methods provide a good representation of the surveyed trees, it should be noted that the GPS used is not sub-metre accurate and aerial imagery may not reflect the exact current dimensions of the trees.

[6] Height, crown spread and crown clearance have been recorded to the nearest half metre for dimensions up to 10 m, and the nearest whole metre for dimensions over 10 m.

2.4.3. There are trees at the site which have epiphytic plants established upon them. Whilst such trees were surveyed insofar as was reasonably practicable, the accuracy of this data cannot be guaranteed.

3. Survey Results

3.1. Arboricultural Observations

3.1.1. The site survey identified a total of 10 individual trees and one group of trees with the potential to be impacted by the proposed development.

3.1.2. The surveyed trees comprise a total of eight species, seven genera, and five families.

Table 3.1: *Botanical families by species and genera richness.*

Family	No. of Species	No. of Genera
Rosaceae	3	3
Sapindaceae	2	1
Betulaceae	1	1
Malvaceae	1	1
Fagaceae	1	1

3.1.3. ***Tab. 3.1***, above, indicates that there is limited diversity in terms of the range of botanical families, genera, and species at the site.

3.1.4. Tree stock diversity is important for a range of ecological reasons and contributes to:

- increased resilience to pests and diseases;
- improved adaptability to climate change;
- enhanced biodiversity through the support of a wider range of invertebrates, birds, fungi, and mammals; and,
- greater structural continuity and long-term canopy stability.

3.1.5. The tree species recorded at the site include Norway maple *Acer platanoides*, sycamore *Acer pseudoplatanus*, silver birch *Betula pendula,* common hawthorn *Crataegus monogyna*, European beech *Fagus sylvatica*, wild cherry *Prunus avium*, rowan *Sorbus aucuparia*, and broad-leaved lime *Tilia platyphyllos*.

3.1.6. T001, T002, T003, T004, T005, T006, T007, and T008 comprise a mix of semi-mature, early-mature, and mature trees, which are located on POS. Positioned prominently alongside an arterial road, these trees make a significant contribution to local amenity. T001, T002, T003, T004, T005, T006, T007, and T008 are therefore anticipated to present the main arboricultural constraint to the proposed development.

3.1.7. T009, T010, and H001 comprise young and semi-mature garden trees that are not visible from outside the site and therefore make a negligible contribution to local amenity.

3.2. Tree Categorisation

3.2.1. The surveyed trees include:

- six category B trees of moderate quality; and,
- four category C trees and one group of low quality.

3.2.2. There are no category A trees of high quality or category U trees with SULEs of less than 10 years at the site.

3.2.3. A summary of the *BS 5837:2012* categories of trees at the site is provided in ***Tab. 3.2***, on the next page.

Table 3.2: *Summary of* BS 5837:2012 *tree categories.*

BS 5837:2012 Category	Description	Tree/Group Ref.	Line Totals
A	High-quality trees, which should be retained throughout the proposed development.	-	-
B	Moderate-quality trees, which should where possible be retained throughout the proposed development.	T002, T003, T004, T006, T007, T008	6 Trees
C	Low-quality trees, which, if removed to facilitate the development, can be readily mitigated.	T001, T005, T009, T010 H001	4 Trees 1 Group
U	Trees of such a condition that they cannot realistically be retained in the context of the current land use for longer than 10 years	-	-
		Totals:	**10 Trees** **1 Group**

3.2.4. The full results of the survey can be viewed in the ***Tree Survey Schedule*** in ***Appendix 1***. Images of the trees can be viewed in ***Appendix 2***. Tree locations, and the above and below ground constraints posed by trees, can be viewed in the ***Tree Constraints Plans*** in ***Appendix 4***.

4. Impact Assessment

4.1. Tree Removals

4.1.1. The proposed development will not require the removal of any trees.

4.2. Facilitation Pruning

4.2.1. Branches extending south from T002 and T004 would extend over a proposed timber outbuilding and timber decked area. T002 and T004 have clearances of approximately 0.5 m and 3.5 m from ground level, respectively. To facilitate the proposals and to avoid damage to the trees during construction, it is recommended that these branches be reduced by approximately 2 m

4.3. Tree Root Protection Areas (RPAs)

4.3.1. Due to the ground levels falling away from the rear of the house, a timber-framed structure will be erected within the rear garden to support decking and accommodate a shed. The timber frame structure will encroach into the RPAs of T002 and T004. Although the proposed concrete pad footings for the timber frame supporting uprights are considered a minor feature in respect of the potential impacts to tree roots, their installation should adhere to the guidelines detailed in ***Section A3.8*** of the ***Outline AMS*** in ***Appendix 3.***

4.3.2. H001 will be impacted by proposals to widen the existing driveway, with approximately 2.3 m^2 of new permanent hard surfacing located within the RPA. This aspect of the proposals is considered feasible with minimal impact on H001, due to the limited extent of the proposed incursion (approx. 6% of the total RPA) and the likely tolerance of managed hedge species to minor root disturbance. While specialist construction methods (e.g. geo-cellular confinement systems) are available which can minimise root disturbance, their use is considered disproportionate given the category C value of H001.

4.3.3. The temporary tree protection fencing and ground protection - which are detailed in ***Sections A3.5*** and ***A3.7*** of the ***Outline AMS*** in ***Appendix 3***, and which are shown in the ***Tree Protection Plan*** in ***Appendix 6 -*** will help to ensure that the RPAs of the retained trees are suitably protected from development activities.

4.4. Shade Analysis

4.4.1. Since the trees are all located along the northern boundary of the site, the impacts of shading by the trees at the site are anticipated to be minimal.

4.4.2. A ***Shade Analysis Plan*** illustrating the daily shading patterns of the trees is provided in ***Appendix 5***.

4.5. Underground Utilities

4.5.1. At the time of writing, details of proposed underground utilities have not been provided by the client; however, it is assumed that the existing utilities at the site will be utilised.

4.5.2. If there are any alterations to the existing utilities which conflict with tree RPAs however, these should first be reported to the Project Arboriculturalist, so that appropriate measures may be taken.

5. Recommendations

5.1. Tree Works

5.1.1. Prior to development works commencing, branches extending south from T002 and T004 should be reduced by approximately 2 m.

5.2. Legal Constraints

5.2.1. According to information which is available on the website of BMBC[4], none of the trees at the site are subject to TPOs or conservation area status. However, as the allocation of TPOs can be subject to change, it is recommended that the proposed tree works are only carried out once planning permission has been granted. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.

5.2.2. All tree works, including tree removals, should be carried out by a fully insured and suitably qualified arboricultural contractor who is able to comply with *BS 3998: 2010*[7].

5.2.3. Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should be suitably assessed before the recommendations within this report are completed.

5.2.4. Under the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* and the *Wildlife and Countryside Act 1981 (as amended*):

- it is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or in, on or near a nest containing eggs or young, or to disturb the dependent young of such a bird; and
- it is an offence to deliberately damage or destroy a bat roost (breeding site or resting place), even if the roost is not occupied at the time.

5.3. Tree Protection

5.3.1. Construction, and any other works involving excavations, can cause irreversible damage to trees - particularly those which have reached maturity - which are far less capable of adapting to alterations in their surrounding environment. Whilst above-ground injuries are usually obvious, root damage is often concealed, though can have equally devastating impacts to tree health.

5.3.2. Direct root damage includes root severance, which can be caused by digging of trenches and ditches, and the stripping of topsoil. Indirect damage may involve the raising of soil levels, alterations in drainage patterns, the laying of impervious surfaces, and soil compaction.

5.3.3. Compaction of soils is a common cause of death or damage to retained trees on development sites. Soil compaction reduces soil pore space, which in turn reduces soil air, the passage of water and available nutrients. These anaerobic conditions prevent root growth and the proliferation of soil microbes essential to tree health. Symptoms in trees may include crown die-back, sparse and small foliage, and poor extension growth; however, these are usually not evident until well after the occurrence of compaction. Even one pass of a vehicle in wet conditions can cause irreparable soil compaction.

5.3.4. To avoid both direct and indirect damage to the roots of the retained trees, temporary tree protection fencing and ground protection should be installed prior to development works

[7] British Standards (2010). *BS 3998:2010 - Tree Works: Recommendations.* British Standards Institute: London.

commencing, in the locations shown in the ***Tree Protection Plan***, which can be viewed in ***Appendix 6***.

5.3.5. It is recommended that development works follow the ***Outline AMS*** provided in ***Appendix 3***. This includes the specifications for temporary tree protection fencing, temporary ground protection, and other protective measures to be adhered to throughout the development.

5.3.6. As aspects of the development may be subject to change, the ***Outline AMS*** should be reviewed by the Project Arboriculturalist prior to the commencement of development works.

5.4. Replacement Tree Planting

5.4.1. The proposals do not require the removal of any trees from the site; therefore, replacement planting is not considered necessary in the context of the development. However, additional tree and hedge planting could be incorporated to enhance amenity and/or biodiversity value

5.5. Additional Information

5.5.1. All visual observations and recommendations specified within this document relate to the condition of the trees and surroundings at the time of the survey. As such, any subsequent changes to landform in the proximity of the trees could invalidate the advice given.

5.5.2. Trees are dynamic living organisms, and their condition can change rapidly; the information given in this report is therefore valid for a period of 12 months. This period may be reduced if significant changes occur to the trees, or the ground conditions, which surround them.

Appendices

Appendix 1: Tree Survey Schedule

Table Key			
Tree/Group Ref: Reference numbers, as illustrated in the ***Tree Constraints Plan*** in ***Appendix 4***			**DBH:** Diameter at breast height (1.5 m), in millimetres
Height (Ht.): Overall height of tree, measured to the nearest metre			**SULE:** Safe useful estimated life expectancy of the tree, in years
Crown Spread (CS): Radius of crown, measured at each cardinal point, to the nearest metre			**Crown Clearance (CC):** Clearance from ground level of lowest branch, measured to the nearest metre
Structural Condition (SC): An assessment of structural condition. **G** = Good; **F =** Fair; **D =** Decaying; **C** = Collapsing; **PD** = Physical Defect			**Physiological Condition (PC)**: An assessment of vitality and vigour **F =** Fair; **P =** Poor; **D =** Dead
Species: Common (and *binomial name*)			**#:** Denotes estimated value
Age	**Young (Y):** Newly planted or self-seeded tree	**Early-mature (EM):** Trees in second-third of life expectancy for species type	**Over-mature (OM):** Mature trees which have entered stages of natural decline
	Semi-mature (SM): Trees in within first-third of life expectancy for species type	**Mature (M):** Trees in final-third of life expectancy for species type	**Veteran/Ancient (V/A):** Trees of any age with veteran characteristics or which are remarkably old for the species type
BS 5837: 2012 **Categories**	**Category A:** Trees of high-quality with an estimated remaining life expectancy of at least 40 years, and that are particularly good examples of their species type		**Category C:** Unremarkable trees of low-quality offering limited arboricultural merit and/or of such impaired condition that they do not warrant in higher categorisation
	Category B: Trees of moderate-quality with an estimated remaining life expectancy of at least 20 years, though lacking the necessary qualities to warrant Category A designation		**Category U:** Trees which display serious, irremediable, structural and/or physiological defects

Individual Trees

Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	*BS 5837: 2012* Category	Recommendations
						N	E	S	W						
T001	Wild cherry *Prunus avium*	Y	20-40	7	110	2	2	0.5	0.5	4	Located off site on an adjacent public open space (POS). No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher *BS 5837* categorisation.	G	F	C1	No works recommended
T002	Wild cherry *Prunus avium*	M	20-40	17	680	6	6.5	7.5	3.5	0.5	Major deadwood > 100 mm in diameter scattered throughout the crown. Damage apparent on main stem and first order branches likely caused by cherry bark tortrix *Enarmonia formosana* larvae.	F	F	B2	Reduce branches extending south by approx. 2 m
T003	Silver birch *Betula pendula*	EM	20-40	18	350	8	4	3.5	1	2	Asymmetrical form due to proximity with adjacent trees. Dense ivy Hedera helix established on main stem up to 3 m, which obscures tree features and	F	F	B2	No works recommended

Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	*BS 5837: 2012* Category	Recommendations
						N	E	S	W						
											potential defects. Minor deadwood < 100 mm in diameter scattered throughout the crown.				
T004	Sycamore *Acer pseudoplatanus*	M	40-80	19	690	6	4	7.5	6.5	3.5	Located off site on an adjacent POS. Bifurcates between 5-6 m into multiple co-dominant stems; the angles of these branch unions are all < 25°, and therefore, these potentially may contain included bark. Minor deadwood < 100 mm in diameter scattered throughout the crown. Dense ivy *Hedera helix* established on main stem up to 3 m, which obscures tree features and potential defects.	F	F	B2	Reduce branches extending south by approx. 2 m
T005	Wild cherry *Prunus avium*	SM	20-40	11	190	3.5	2	2.5	2	2	Located off site on an adjacent POS. Asymmetrical form due to proximity with adjacent trees. Bifurcates at 2 m into multiple co-dominant stems; the angles of these branch unions are all < 25°, and therefore, these potentially may contain included bark. Minor deadwood < 100 mm in diameter scattered throughout the crown	F	F	C2	No works recommended
T006	Norway maple *Acer platanoides*	EM	40-80	16	380	5	2.5	4	2.5	2	Located off site on an adjacent POS. Asymmetrical form due to proximity with adjacent trees. Minor deadwood < 100 mm in diameter scattered throughout the crown.	F	F	B2	No works recommended
T007	Norway maple *Acer platanoides*	EM	40-80	16	410	5.5	3	4.5	5.5	2	Located off site on an adjacent POS. Asymmetrical form due to proximity with adjacent trees. Minor deadwood < 100 mm in diameter scattered throughout the crown.	F	F	B2	No works recommended
T008	Broad-leaved lime *Tilia platyphyllos*	EM	40-80	17	390	3.5	3	4	4	2	Located off site on an adjacent POS. Bifurcates between 4-5 m into multiple co-dominant stems; the angles of these branch unions are all < 25°, and therefore, these potentially may contain included bark.	G	F	B2	No works recommended

Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	*BS 5837: 2012* Category	Recommendations
						N	E	S	W						
T009	Rowan *Sorbus aucuparia*	SM	10-20	11	190	0.5	3	4.5	2	2	Asymmetrical form due to proximity with adjacent trees. Limited arboricultural merit and lacks the necessary qualities for higher *BS 5837* categorisation.	F	F	C1	No works recommended
T010	Rowan *Sorbus aucuparia*	SM	10-20	4.5	120	1.5	2	1.5	1.5	3	Located off site on an adjacent POS. Multiple pruning wounds on the main stem up to 2 m, sustained from historic crown lifting works, some of which are forming branch cavities.	F	F	C1	No works recommended

Groups of Trees

Group Ref:	Species Composition	Age	SULE	Mx. Ht.	Mx. DBH	Approx. No. of Stems	CC	Comments	PC	SC	*BS 5837*:2012 Category	Recommendations
H001	European beech *Fagus sylvatica* Common hawthorn *Crataegus monogyna*	SM	40-80	3	130	18	0	Linear group of trees forming hedge. No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher *BS 5837* categorisation.	F	F	C1	No works recommended

Appendix 2: Images of Trees

Plate 1: *T001, T002, T003, & T004 (left to right)*

Plate 2: *T002 (right) & T003 (left)*

Plate 3: *T002*

Plate 4: *T002, T003, T004, & T005 (left to right)*

Plate 5: *T006, T007, & T008 (left to right)*

Plate 6: *T010*

Plate 7: *H001*

Appendix 3: Outline Arboricultural Method Statement (AMS)

A3.1 Introduction

A3.1.1 Woodsage Consulting Ltd have been instructed by Mr. Chris Barton to prepare an Outline AMS in relation to the proposed development of the land at 2, Branksome Avenue, Barnsley S70 6HX.

A3.1.2 The proposed development comprises the retrofit of the existing dwelling together with associated external landscaping works.

A3.1.3 This Outline AMS should be read in conjunction with the Arboricultural Impact Assessment (Ref: WC-509.1a).

A3.2 Timing of Works

A3.2.1 It is not the Project Arboriculturist's role to determine the timing and implementation of works on site however, an input into the process can avoid issues once work is underway.

A3.2.2 The phasing of works should be carried out in accordance with ***Tab. A3.1***, below.

Table A3.1: *Development Sequence and Tree Protection Measures.*

Stage	Description
1	Site induction
2	Carry out the tree works which are detailed in ***Section A3.4*** of this ***AMS***.
3	Install the temporary tree protection fencing and ground protection, to the specification detailed in ***Sections A3.5*** and ***A3.7*** of this ***AMS***, in the locations shown in ***Tree Protection Plan***.
4	Inspection of tree protection measures by the Project Arboriculturalist.
5	Carry out development works: • Precautionary measures detailed in ***Section A3.6*** of this ***AMS*** to be followed throughout the development • Installation of timber frame supporting structure in rear garden to follow the method statement provided in ***Section A3.8*** of this ***AMS***
6	Remove the temporary tree protection fencing and ground protection once development works are completed.
7	Final inspection by the Project Arboriculturalist.

A3.3 Site Supervision

A3.3.1 Prior to works commencing, it is the responsibility of the main contractor, or assigned agent, to ensure that details regarding tree protection are understood and adhered to by all site personnel.

A3.3.2 During the site induction, the final AMS and a copy of the ***Tree Protection Plan*** - which can be viewed in ***Appendix 6*** - should be made available to all contractors attending the site.

A3.4 Tree Works

A3.4.1 Prior to development works commencing, branches extending south from T002 and T004 should be reduced by approximately 2 m.

A3.4.2 According to information which is available on the website of Barnsley Metropolitan Borough Council, none of the trees at the site are subject to TPOs and the site is not located within a conservation area. However, the as the allocation of TPOs can be subject to change, it is recommended that the proposed tree works are only carried out once planning permission has been granted. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.

A3.4.3 All tree works, including removals, should be carried out by a fully insured and suitably qualified arboricultural contractor, who is able to comply with *BS 3998: 2010 - Tree Works: Recommendations*.

A3.4.4 Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should therefore be suitably assessed before the recommendations within this AMS are completed.

A3.5 Temporary Tree Protection Fencing

A3.5.1 The temporary tree protection fencing shall be installed prior to the commencement of development works, and should be fit for the purpose of excluding site personnel and machinery. The default specification should be in accordance with *BS 5837: 2012 - Trees in Relation to Design, Demolition and Construction: Recommendations.*

A3.5.2 **Specification:** Barriers shall be a minimum 2 m high, and should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in ***Fig. A3.1***, below, and ***Fig. A3.2***, on the next page.

Figure A3.1*: Examples of scaffold framework temporary tree protection fencing.*

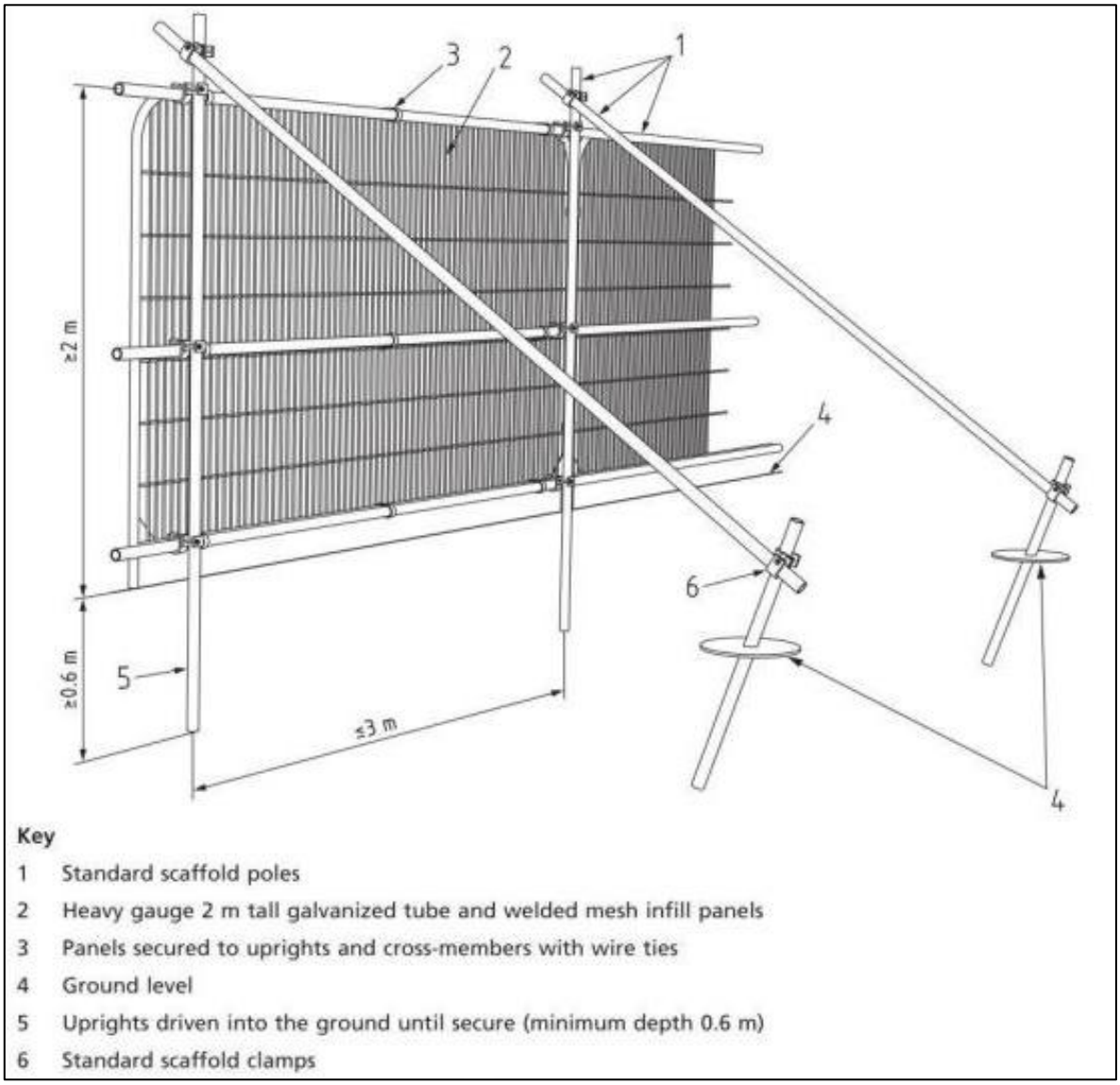
A3.5.3 The vertical tubes shall be spaced at a minimum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.

A3.5.4 All-weather notices shall be attached to the barriers at 9 m intervals with the words 'TREE PROTECTION ZONE - NO ACCESS' clearly visible.

A3.5.5 **Location:** The temporary tree protection fencing should be installed in prior to the development commencing, in the locations shown in the ***Tree Protection Plan***.

A3.5.6 The protected areas should be regarded as sacrosanct, and once installed, tree protection fencing should not be removed or altered without prior consultation with the Project Arboriculturist.

A3.5.7 If any breach in the tree protection fencing occurs, it is the Site Manager's responsibility to report this to the Project Arboriculturalist, so that appropriate measures may be taken. Any breach which results in death or damage to the trees could result in a criminal offence being committed.



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

***Figure A3.2**:* BS 5837: 2012 *default specifications for temporary tree protection fencing.*

A3.6 Precautionary Measures

A3.6.1 No materials hazardous to tree health, such as oil, bitumen or cement should be stored within the temporary protective fencing. Where possible, this area should be extended to 10 m away from the fencing.

A3.6.2 Where there is a risk of polluted water runoff into root protection areas (RPAs), heavy duty plastic sheeting and sandbags must be used to contain any spillages and prevent contamination. No fires should be lit within 20 m of the protective fencing.

A3.6.3 In favourable conditions, tree roots are typically concentrated within the top 60 cm of soil; therefore, the existing levels within tree RPAs should be observed and maintained.

A3.6.4 Any unavoidable excavations into the soil within tree RPAs should be carried out using compressed air soil displacement or hand-operated tools, and only under prior approval of the Project Arboriculturalist. If roots are encountered which occur in clumps or which are greater than 25 mm in diameter, these should not be severed without first consulting the Project Arboriculturalist.

A3.7 Temporary Ground Protection

A3.7.1 Due to site constraints, and to allow for suitable working space during construction, the temporary tree protection fencing adjacent to T002, T003, T004, and H001 will be setback from the default *BS 5837:2012* positioning. As a result, uncovered ground within RPAs will be exposed to development activities.

***Figure A3.3**: Temporary ground protection panels suitable for pedestrian-operated plant with a gross weight of up to 2 t.*

A3.7.2 Temporary ground protection should therefore be installed in the locations shown in the ***Tree Protection Plan*** - and shall remain in place until construction of the dwelling is completed.

A3.7.3 The temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil, and will comprise one of the following:

- For pedestrian movements, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane
- For pedestrian-operated plant with a gross weight of up to 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane
- For wheeled or tracked plant exceeding a gross weight of 2 t, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected

A3.7.4 Any vehicles, plant, or machinery operating within the RPA of T002, T003, T004, and H001 must ensure that it does so upon adequate ground protection at all times.

A3.8 Installation Method Statement for Permanent Fencing within Tree RPAs

A3.8.1 The RPAs of T002 and T004 will be impacted by proposals to install a timber-framed structure within the rear garden which will support decking and accommodate a shed.

A3.8.2 Installation of the concrete pad footings for the supporting uprights within tree RPAs should adhere to the following method statement:

1. Access onto uncovered ground within tree RPAs will be by pedestrian movements only. No heavy machinery, vehicles, or plant will be operated on uncovered ground within tree RPAs.

2. The locations of the concrete pad footings, which are shown in the ***Tree Protection Plan***, will be clearly marked on site prior to the commencement of works.
3. The concrete pad footings will be a maximum of 200 mm x 200 mm.
4. The post holes will be excavated using hand tools only (e.g. spade, trowel, hand auger) to a depth of 600 mm.
5. If tree roots are encountered at the position of a footing which are greater than 25 mm in diameter, then the footing will be relocated. If roots under this diameter are present, they may be pruned using an appropriate sharp pruning tool, such as pruning saw or secateurs. No roots greater than 25 mm in diameter are to be severed without the prior approval of the Project Arboriculturalist.
6. If tree roots are temporarily exposed, these shall be covered with sharp sand or dampened hessian sacks to prevent desiccation.
7. The concrete will be mixed outside of tree RPAs and transported to site.
8. Due to the highly alkaline leachate produced during the curing of wet concrete, the holes for footings within tree RPAs should be lined with an impermeable liner before the concrete is poured.
9. All excavated soil will be replaced and gently compacted by hand.

A3.9 Responsibility and Site Management

A3.9.1 It is the responsibility of the main contractor or assigned agent to ensure that details regarding tree protection are understood and followed by all site personnel.

A3.9.2 Inspections by the Project Arboriculturalist are to be undertaken at the following stages of the development:

1. Once the temporary tree protection fencing has been installed - in the locations shown in the ***Tree Protection Plan*** - and prior to development works commencing.
2. Upon completion of the development works.

A3.9.3 After each inspection, a letter should be submitted by the Project Arboriculturalist to the LPA Arboricultural Officer, to confirm if the method statement has been followed correctly, and if trees have not been adversely affected by development works.

A3.10 Project Arboriculturalist Contact Details

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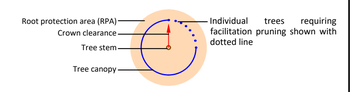
Appendix 4:
Tree Constraints Plan

Project:	2 Branksome Avenue, Barnsley S70 6HX
Drawn by:	Jack Delaney
Date:	23rd March 2026
Scale:	1:100 @ A1
Drawing Number:	WC-509.1a.4

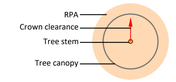
Do not scale off this drawing - to be reproduced in colour only

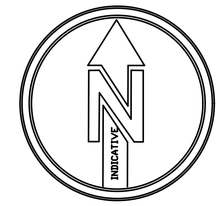
Map Key:

Category B trees of moderate quality



Category C trees/groups of low quality





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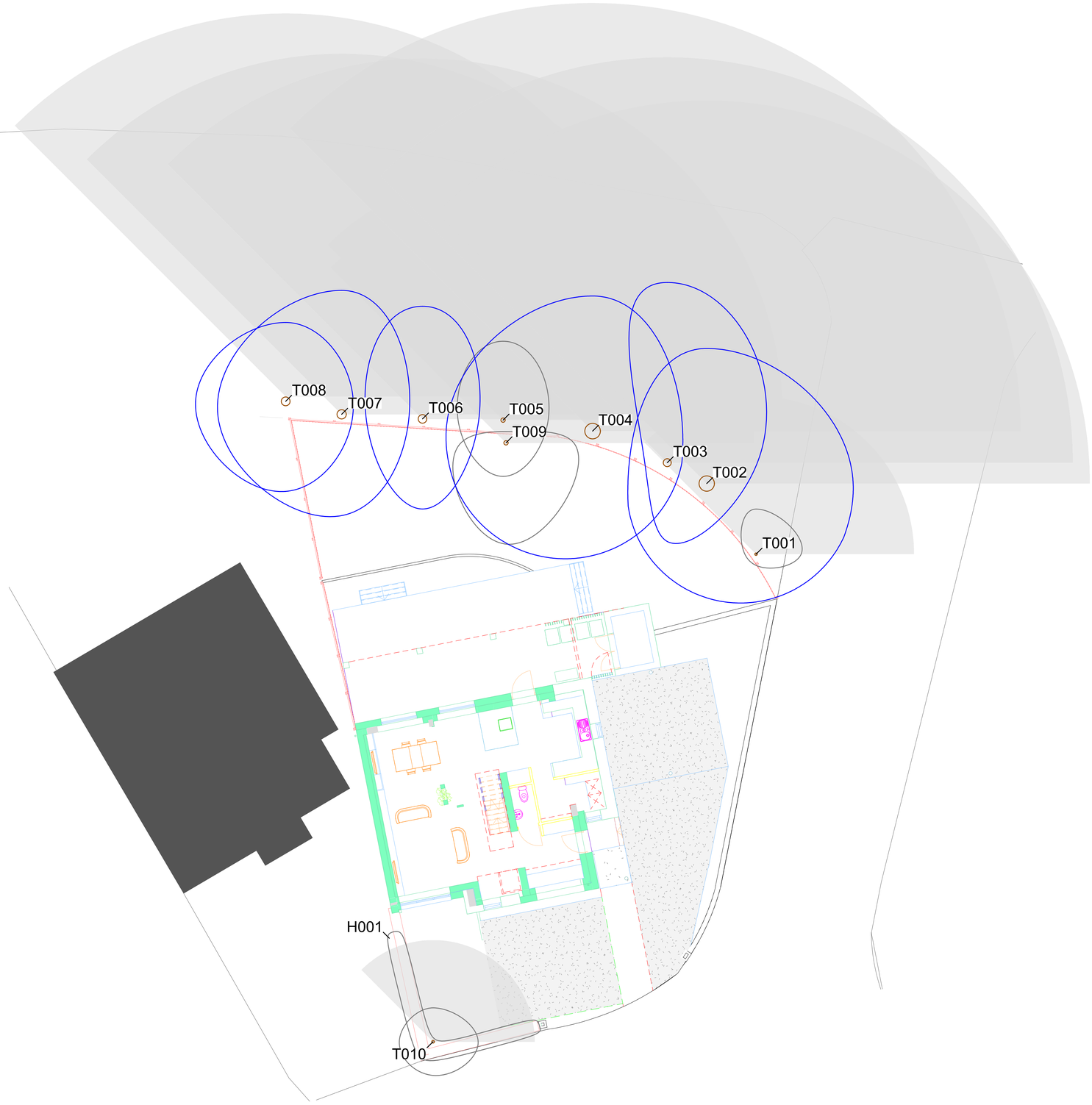


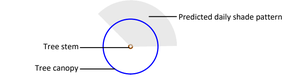
Appendix 5: Shade Analysis Plan

Project:	2 Branksome Avenue, Barnsley S70 6HX
Drawn by:	Jack Delaney
Date:	23rd March 2026
Scale:	1:100 @ A1
Drawing Number:	WC-509.1a.5

Do not scale off this drawing - to be reproduced in colour only

Key:

Category B trees of moderate quality



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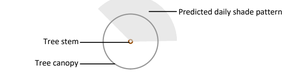

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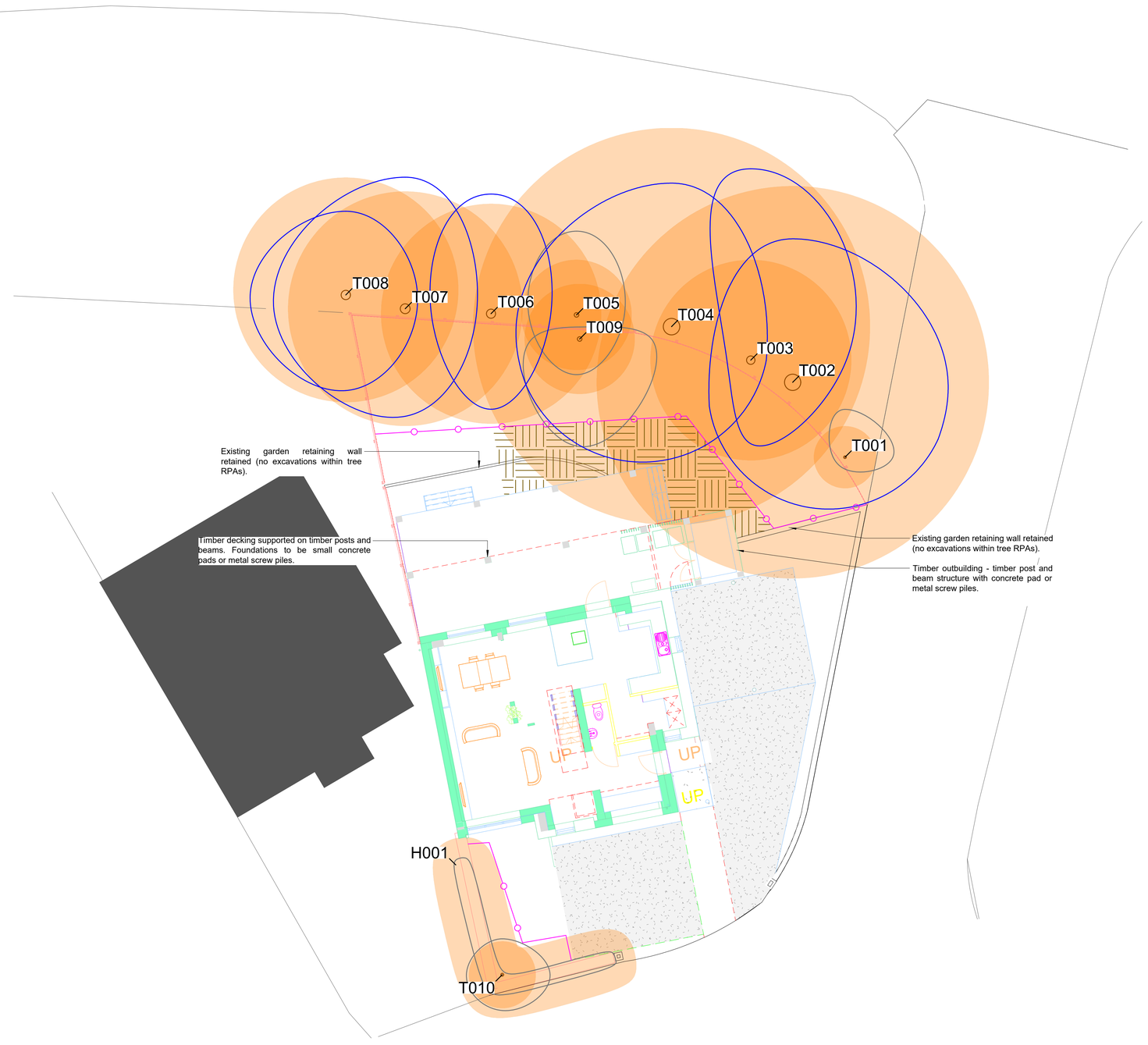


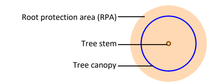
Appendix 6: Tree Protection Plan

Project:	2 Branksome Avenue, Barnsley S70 6HX
Drawn by:	Jack Delaney
Date:	23rd March 2026
Scale:	1:100 @ A1
Drawing Number:	WC-509.1a.6

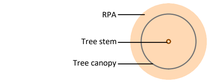
Do not scale off this drawing - to be reproduced in colour only

Map Key:

Category B trees of moderate quality



Category C trees/groups of low quality



Temporary tree protection fencing, to *BS 5837: 2012* specification, as detailed in ***Section A3.5*** of the ***Outline Arboricultural Method Statement (AMS)***.

Temporary ground protection, to *BS 5837: 2012* specification, as detailed in Section ***A3.7*** of the ***Outline AMS***.

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