Tree Surveys

BS5837 – Pre Planning – Mortgage – Risk Management & Prediction

BS 5837:2012 TREE SURVEY
FOR
LAND AT REAR OF 26 WARGRAVE ROAD
TWYFORD



Prepared on behalf of:
Mr P Cooper
Killarney
Smithfield Road
Maidenhead
SL6 3NP

Ref: PB/5837-25/03.18

15 April 2025

Offices in Berkshire, Buckinghamshire and Worcestershire
Tel: 0118 976 2902

Bramley House
Newnham Bridge
Tenbury Wells
Worcestershire
WR15 8NX
Tel: 0118 976 2902

CONTENTS

Summary
1. Introduction
2. Scope
3. Site visit and the collection of data
4. Constraints
5. Tree protective measures
6. Survey key
7. Queries

APPENDICES

1. Tree survey schedule
2. Tree location drawing
3. Root protection area drawing
4. Shade constraints drawing
5. Figure 2, section 6, BS 5837:2012 (by permission)
6. Tree protection fence sign

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Summary

A total of ten individual trees were inspected on land at the rear of 26 Wargrave Road, Twyford, Reading, RG10 9PQ. The tree details are contained in the tree survey schedule included at Appendix 1. The trees were assessed in accordance with the cascade chart for tree quality (Table 1: Section 4) of British Standard (BS) 5837:2012. They are categorised as follows.

- Four trees are in Category 'B' - "Trees of moderate quality".
- Five trees are in Category 'C' - "Trees of low quality".
- One tree is in Category 'U' - "Trees unsuitable for retention".

Mitigation may be required to demonstrate how the retained trees' root protection areas (RPAs) will be protected during any development, including access to the proposed development area. The RPAs are shown on the drawing included at Appendix 3.

1. Introduction

1.1 Instructions

1.1.1 We are instructed by Mr P Cooper to visit the land at the rear of 26 Wargrave Road, Twyford, Reading, RG10 9PQ and survey the trees implicated in a forthcoming planning application.

1.1.2 The trees were surveyed in accordance with 'British Standard (BS) 5837:2012' a guide for 'Trees in relation to design, demolition and construction - Recommendations' (Section 4).

1.2 Validation

1.2.1 This report fulfils the recommended national listed criteria for tree survey information as set out in BS 5837:2012 and includes the following:

- A tree survey, undertaken by a qualified arboriculturist, and tree schedule, included at Appendix 1.
- A drawing at 1:200 scale with a north point, indicating the tree locations and colour coded, ref PB/5837-25/03.18 included as Appendix 2.
- The root protection areas drawn to scale on drawing, ref PB/RPA-25/03.18 included at Appendix 3.
- The shade constraints drawing, ref PB/SC-25/03.18 included at Appendix 4.
- Default tree protection fencing from BS 5837:2012 and tree protection barrier sign included at Appendices 5 and 6.

1.3 Legal status of the trees

On the 18 March 2025 a search of Wokingham Borough Council's online Protected Tree Map showed that trees within the application area are not protected by any Tree Preservation Orders (TPOs), nor is the property within a Conservation Area.

2. Scope of this report

2.1 The purpose of this report is to quantify the trees most likely to be impacted upon by the development proposal and to highlight how potential damage to them may be avoided.

2.2 The tree survey provides the basic data on the trees that may be implicated in any forthcoming planning application. It does not set out to put arguments for or against the development. It does set out how to decide upon the retention of the trees, means of protecting the retained trees during development and on means of incorporating the trees into the developed landscape, along with appropriate management and protective measures.

2.3 The primary purpose of this report is for the client and council to review the information provided and use it for the purpose of considering a planning application or engaging in further discussions towards the same end. The information is provided on the basis that it will be available to people other than arboriculturists i.e., those without specialist knowledge of the subject.

3. Site visit and the collection of data

3.1 Site visit

3.1.1 The trees were surveyed by Paul Billin, BSc, MICFor on 18 March 2025. The trees were inspected from ground level and without any form of detailed investigations; binoculars were used to aid the inspection process. The measurements we undertook on site were made with the aid of a rounded down diameter tape and TruPulse™ laser hypsometer. The trees were not tagged as they are easily identified on site and with reference to the attached tree location plan. The weather at the time of the inspections was sunny and clear.

3.2 The trees

3.2.1 We surveyed ten individual trees with stem diameters of 75 millimetres and above. The tree details have been entered into a tree survey schedule included at Appendix 1.

3.2.2 For ease of identification the trees are shown on the tree location drawing ref PB/5837-25/03.18 and have been allocated numbers. These numbers are cross-referenced within the BS 5837:2012 survey schedule.

3.2.3 In making the assessment, consideration has been given to:

- The health, vigour and condition of the trees.
- Any structural defects and safe life expectancy.
- The size and form of the trees.
- The rare, unusual or component part of a formal feature.
- Groups or individual trees that provide definite screening or softening effect.
- Trees forming distinct landscape features.

4. Constraints

4.1 Ecological constraints

4.1.1 The Conservation of Habitats and Species Regulations 2017 (as amended), and The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, provides statutory protection to birds, bats, and other tree dwelling species. They could impose significant constraints on the use and timing of any tree matters considered in this report.

4.2 Root protection areas (RPAs)

4.2.1 Using BS 5837:2012 the RPAs have been calculated for the trees by reference to section 4.6.1 (a) and/or (b). The RPA is frequently described as a circle with a radius of prescribed distance within which no unspecified activity should occur and a high level of care is needed during any activities that are authorised within them, if they are to be successfully retained.

4.2.2 Specified intrusions into the RPAs can take place only where the ground is adequately protected in accordance with the requirements of section 6 (6.2.3.3) of the BS or as may be agreed with the Local Planning Authority (LPA). The RPAs have been plotted as dodecagons or polygons taking account of the site constraints on drawing PB/RPA-25/03.18.

4.2.3 The shape and position of the RPA may only be modified by an arboriculturist to meet the pre-existing site conditions or other factors that indicate that rooting has occurred asymmetrically. In all cases, we have considered the adjacent constraints including such things as the existing highway, site topography and existing buildings.

4.3 Shade constraints

4.3.1 Large trees that cast dense shade may result in pressure to prune or remove them. Whilst either shade or sunlight might be desirable depending on the potential use; the design should avoid unreasonable obstruction of light. The shade constraints posed by the trees are plotted onto drawing ref PB/SC-25/03.18.

5. Tree protective measures

5.1 To protect retained trees from construction activities, notwithstanding the need for an Arboricultural Method Statement (AMS) in specific instances, the retained trees must be protected by suitable protection barriers and ground protection, the accompanying root protection area drawing shows the RPAs and specific tree protection locations required prior to and during the construction activities.

5.2 The tree protection barrier is designed to provide construction exclusion zones around the RPAs of all trees to be retained.

5.3 The tree protection fencing should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees. The default specification for protective barriers is that specified in BS 5837:2012 Figure 2, section 6. A copy of Figure 2 is reproduced at Appendix 5. All weather signs must be attached by cable ties to each Heras panel as set out in Appendix 6.

6. Tree survey key

No: Tree number on survey drawing

Species: Common/English and or Latin name

Height: Height in metres above ground level

Number of stems: Single stem, or number of stems if more than one

Canopy spread: In metres taken at the four cardinal points (N.E.S.W.)

Diameter: In millimetres measured in accordance with BS 5837 2012

Height & direction of 1st branch: In metres and by cardinal compass points. This can be found on the detailed tree assessment

Age class:
Young
Semi-mature
Early-mature
Mature
Over-mature

Root protection area: In square metres and the nominal radius of a circle required to achieve this in metres

Health - Physiological Condition (Phy Con):
Good
Fair
Poor
Decline
Dead

Structural Condition: Crown, Stem, Basal Area:
Good
Fair
Poor
Ivy

Survey Comment:
i.e. Further investigation, aerial inspection, decay detection, wildlife study

Estimated Remaining Contribution (ERC) in years:
i.e. less than 10, 10 to 20, 20 to 40, 40+

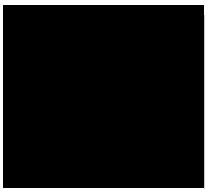
Category Grading:			
	Code U	Trees unsuitable for retention	RED
	Code A	High quality category	GREEN
	Code B	Moderate category	BLUE
	Code C	Low category	GREY

7. Queries

Any queries regarding this tree report should be addressed in the first instance to Tree Surveys:

Tree Surveys
Bramley House
Newnham Bridge
Tenbury Wells
Worcestershire
WR15 8NX

Telephone: 0118 976 2902
Email: info@tree-surveys.com



Paul Billin, BSc, MICFor
Chartered Arboriculturist
Tree Surveys

APPENDIX 1

BS5837:2012 Tree Survey

Client: Mr P Cooper
Project: Land at Rear 26 Wargrave Road
Survey Date: 18/03/2025
Surveyor: Paul Billin

Tree Surveys
Bramley House
Newnham Bridge
Tenbury Wells
Worcestershire
WR15 8NX
Phone: 0118 9762 902

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
1										Estimated Measurements	
Downy Birch	6.5	1	249	N 2.5	2.5	M	A: 28.1	Fair	C: Poor	No action :: Unspecified	C
Betula pubescens				E 2.5	3		R: 2.99		S: Poor		
				S 3	3				B: Fair	Neighbour's tree. Poor form. Top stem snapped out, wound with decay	10 to 20 yrs
				W 3.5	3						
2										Estimated Measurements	
Austrian Pine	28	1	1079	N 6.5	8	M	A: 526.8	Fair	C: Fair	No action :: Unspecified	B.2
Pinus nigra ssp. Nigra				E 6	8		R: 12.94		S: Ivy		
				S 6	9				B: Fair	Neighbour's tree. No access.	20 to 40 yrs
				W 5	10						
3										Estimated Measurements	
Austrian Pine	21.5	1	1049	N 6	9	M	A: 497.9	Fair	C: Fair	No action :: Unspecified	B.2
Pinus nigra ssp. Nigra				E 7	8		R: 12.58		S: Ivy		
				S 7	7				B: Fair	Neighbour's tree. No access. Bifurcates 1.9m AGL	20 to 40 yrs
				W 5	10						
4											
Common Holly	6.5	3	234 (Eq)	N 1.5	2	Y	A: 24.8	Fair	C: Fair		C
Ilex aquifolium				E 2	2		R: 2.8		S: Fair		
				S 2	2				B: Fair	Two stems fused together at 1.4m AGL. Including union	20 to 40 yrs
				W 2	2						

Age Classifications: N Newly planted; EM Early Mature; Y Young; M Mature; SM Semi-mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
6										Estimated Measurements	
Common Horse Chestnut *Aesculus hippocastanum*	17.5	1	849	N 4.5 4 E 3 4 S 3.5 4.5 W 5.5 3.5		M	A: 326.1 R: 10.18	Fair	C: Fair S: Fair B: Fair	Ivy :: Sever only Neighbours tree. Bifurcated 2.2m AGL co-dominant stems Previously pruned and pollarded 11.5-12.0m AGL. Dense regrowth from heads; points of weakness Ivy obscuring stems. Future management; repollard	B.2 20 to 40 yrs
7										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	17.5	1	649	N 2.5 7 E 2 7 S 4.2 5 W 7 5		M	A: 190.6 R: 7.78	Fair	C: Poor S: Poor B: Fair	No action :: Unspecified Neighbours tree. Bifurcates 2.4 & south stem at 3.7m AGL co-dominant stems Previously pollarded 10.5-12.0m AGL. Heads have decay; prolific secondary regrowth; heads are points of weakness	C.2 20 to 40 yrs
8										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	5.5	1	500	N 0 5 E 0 5 S 0 5 W 0 5		Dead	A: 113.1 R: 6	Dead	C: S: B:	No action :: Unspecified Neighbours tree. Dead totem, severe decay at top.	U <10 yrs
9										Estimated Measurements	
Lawson Cypress *Chamaecyparis lawsoniana*	11	3	197 (Eq)	N 1.5 0 E 1.5 0 S 2 0 W 1.5 0		Y	A: 17.6 R: 2.36	Fair	C: Fair S: Fair B: Fair	Neighbour's tree	C 20 to 40 yrs
10										Estimated Measurements	
Common Horse Chestnut *Aesculus hippocastanum*	15	1	670	N 6.5 4 E 7 4 S 6 4 W 5.5 3		M	A: 203.1 R: 8.04	Fair	C: Fair S: Ivy B: Fair	No action :: Unspecified Small stub wounds with cavities, typical of species	B >40 yrs
11										Estimated Measurements	
Mountain Ash *Sorbus aucuparia*	8	4	267 (Eq)	N 1.25 2.5 E 3 2 S 2.5 3 W 2 3		SM	A: 32.3 R: 3.2	Fair	C: Fair S: Fair B: Fair	No action :: Unspecified Remnant of row of trees	C 10 to 20 yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contributio

Report selection criteria.

Projects.

Land at Rear 26 Wargrave Road

Date Range.

Any Date

Work types.

----> Ivy :: Sever only
----> No action :: Unspecified
----> -No Selection made-

Latest Survey.

All surveys for the selected trees.
---> Last survey for each selected tree.

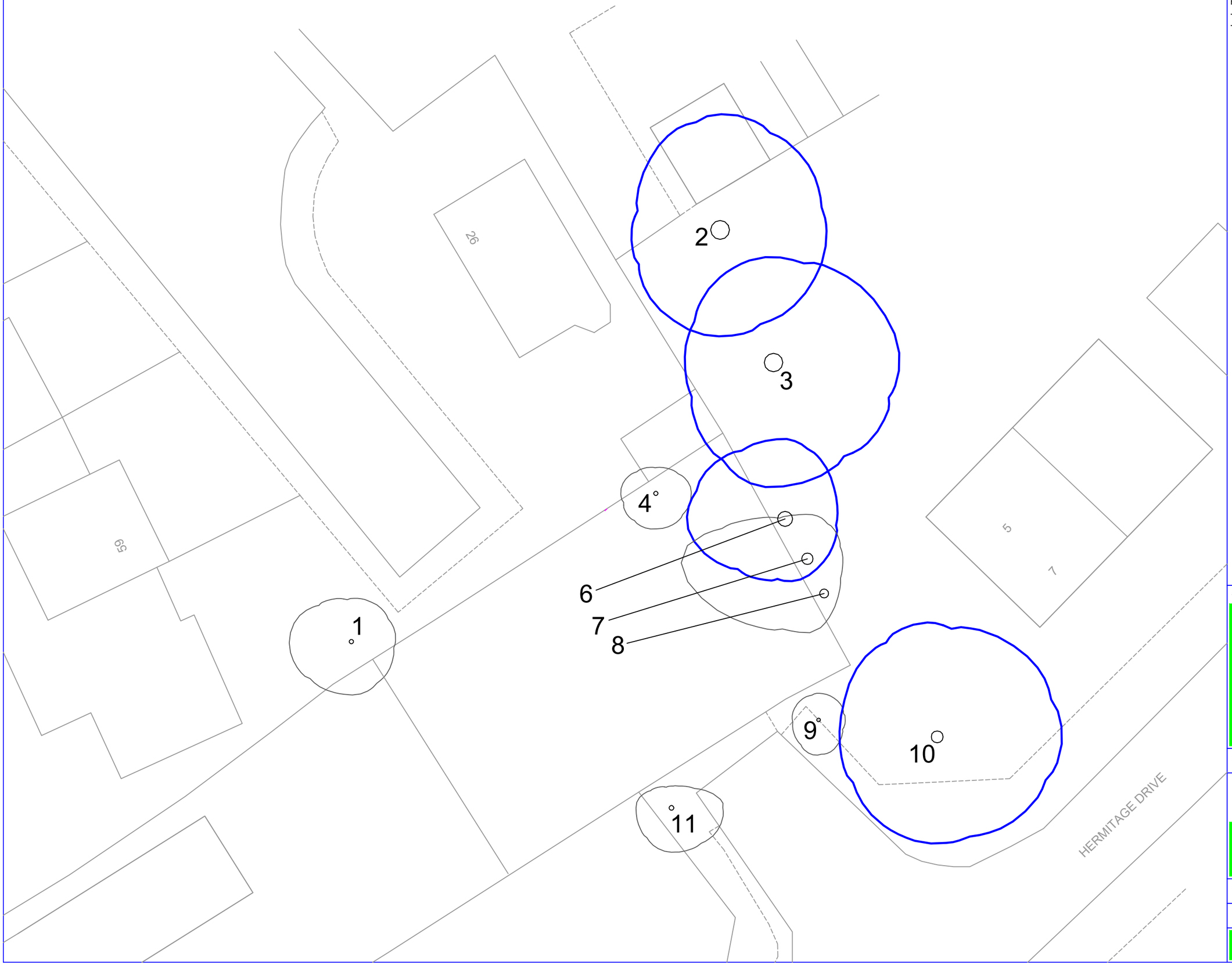
Work Completed.

---> Work Completed
---> Work Not Completed

Number of trees in selected Project(s)	**10**
Number of trees in Report selection	**10**

Age Classifications:	N	Newly planted	EM	Early Mature	**Condition:**	C	Crown	**Stems:**	Ø	Diameter
	Y	Young	M	Mature		S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition
	SM	Semi-mature	OM	Over Mature		B	Basal area	**ERC:**		Estimated Remaining Contributio

APPENDIX 2



NOTES

- All dimensions must be checked on site and not scaled from this drawing.
- The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
- Read drawings in conjunction with arboricultural report.
- Topo based on OS data, Licence No. 100022432.

N

INDICATIVE

Key:

- Tree Category A 1,2 or 3 - trees of high quality
- Tree Category B 1,2 or 3 - trees of moderate quality
- Tree Category C 1,2 or 3 - trees of low quality
- Tree Category U - trees that cannot realistically be retained
- Tree number - refer to report for information
- Existing site features

0 5m 10m 20m

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Tree Surveys
Bramley House,
Newnham Bridge,
Tenbury Wells,
Worcestershire, WR15 8NX
Tel: 0118 762902
e-mail: info@tree-surveys.com

Client: Paul Cooper

Job Title: Land at Rear 26 Wargrave Road, Twyford

Drawing Title: TREE LOCATION PLAN

Scale: 1:200 @ A3

Date: April 2025 Drawn: MJE Checked: PB

Drg. No. PB/5837-25/03.18 Rev.

APPENDIX 3



NOTES

- All dimensions must be checked on site and not scaled from this drawing.
- The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
- Read drawings in conjunction with arboricultural report.
- Topo based on OS data, Licence No. 100022432.

N

INDICATIVE

Key:

- Tree Category A 1,2 or 3 - trees of high quality
- Tree Category B 1,2 or 3 - trees of moderate quality
- Tree Category C 1,2 or 3 - trees of low quality
- Tree Category U - trees that cannot realistically be retained
- Tree number - refer to report for information
- Existing site features
- Root protection area (RPA)

0 5m 10m 20m

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Tree Surveys
Bramley House,
Newnham Bridge,
Tenbury Wells,
Worcestershire, WR15 8NX
Tel: 0118 762902
e-mail: info@tree-surveys.com

Client: Paul Cooper

Job Title: Land at Rear 26 Wargrave Road, Twyford

Drawing Title: ROOT PROTECTION AREA PLAN

Scale: 1:200 @ A3

Date: April 2025 Drawn: MJE Checked: PB

Drg. No. PB/RPA-25/03.18 Rev.

APPENDIX 4

NOTES

- All dimensions must be checked on site and not scaled from this drawing.
- The original of this drawing was produced in colour, a monochrome copy should not be relied upon.
- Read drawings in conjunction with arboricultural report.
- Topo based on OS data, Licence No. 100022432.

N

INDICATIVE

Key:

- Tree Category A 1,2 or 3 - trees of high quality
- Tree Category B 1,2 or 3 - trees of moderate quality
- Tree Category C 1,2 or 3 - trees of low quality
- Tree Category U - trees that cannot realistically be retained
- Tree number - refer to report for information
- Existing site features
- Area of shade

0 5m 10m 20m

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Tree Surveys
Bramley House,
Newnham Bridge,
Tenbury Wells,
Worcestershire, WR15 8NX
Tel: 0118 762902
e-mail: info@tree-surveys.com

Client: Paul Cooper

Job Title: Land at Rear 26 Wargrave Road, Twyford

Drawing Title: SHADE CONSTRAINTS PLAN

Scale: 1:200 @ A3

Date: April 2025 Drawn: MJE Checked: PB

Drg. No. PB/SC-25/03.18 Rev.

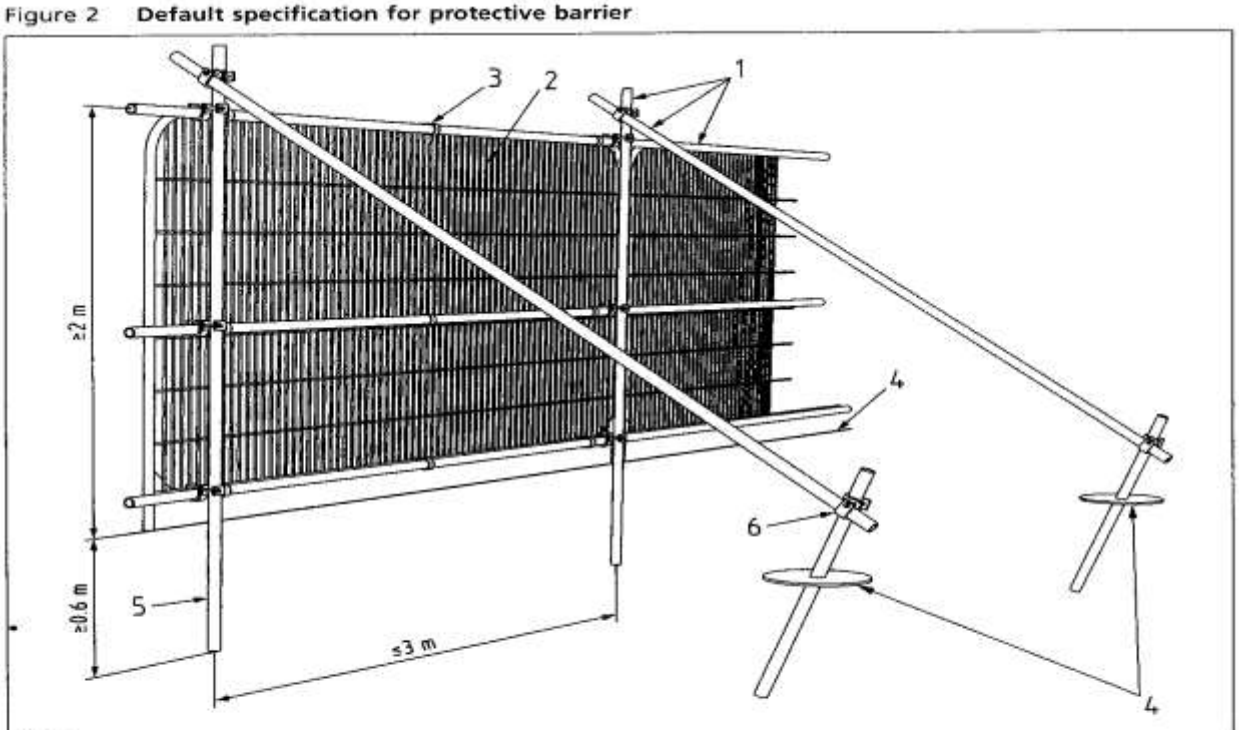
APPENDIX 5

BS 5837 FIGURE 2
TREE PROTECTION

Root Protection Areas (RPAs), enclosed by Default Temporary Protective Fencing, as detailed below and to be agreed with the Local Planning Authority (LPA), shall:

1. Be protected throughout the development process, as specified and detailed in BS 5837:2012 Section 6.2, Fig 2
2. Be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project.
3. Preclude any delivery of site accommodation and or materials and or plant machinery.
4. Preclude all construction related activity, with the sole exception of specified arboricultural works and any other works carried out under supervision that has been agreed by all parties, and:
5. Preclude the storage of all development related materials and substances including fuel, oils, additives, cement and or any other deleterious substances.
6. Any incursions into RPAs must be by prior arrangement, following consultation with the LPA.

Figure 2 **Default specification for protective barrier**



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

APPENDIX 6

TREE PROTECTION ZONE

KEEP OUT!

NO DIGGING OR TRENCHING
NO STORAGE OF PLANT OR MATERIALS
NO VEHICLE ACCESS
NO FIRE LIGHTING
NO CHEMICAL HANDLING
AVOID PLANT CONTACT WITH TREE CANOPY
REPORT ANY DAMAGE
TO TREES OR FENCING IMMEDIATELY