BS5837 2012 Trees in relation to Design, Demolition and Construction

At

203 Bulford Road
Durrington
Salisbury
Wiltshire
SP4 8HB

Date of report
26th January 2024

Revision 1

Report by

Michael Clements
Bawden Contracting Services T/a
Bawden Tree Care

Reference: RCB-007

Summary

The report has been written following the recommendations and guidance given within British Standard 5837 (2012), Trees in relation to design, demolition, and construction. To provide a reasoned assessment of the potential impact to trees by the proposed development at 203 Bulford Road, Durrington, Salisbury, Wiltshire, SP4 8HB.

No trees to be retained have been identified which may be adversely affected by the development, as long as reasonable care is taken to protect the trees and their rooting systems.

One small tree has been identified for removal to facilitate the development.

Glossary

Term	Meaning
RPA	Root Protection Area
CEZ	Construction Exclusion Zone
BS5837:2012	British Standard for trees in relation to demolition, design, and construction
BS3998:2010	British Standard: tree work recommendations
AIA	Arboricultural Impact Assessment
AMS	Arboricultural Method Statement
TPP	Tree Protection Plan

Contents

1 Introduction 3
Methodology 3
Caveats and limitations 4

2 Arboricultural survey summary 5
Tree Preservation Orders and other legal restrictions 6
Arboricultural survey 7

3 The proposal 8

4 Tree impact assessment 8
Impact Appraisal 8

5 Arboricultural Method Statement 9

APPENDIX A – TREE INVENTORY

APPENDIX B – SITE PLAN SHOWING RPAs, APPROXIMATE CROWN SPREAD & CONSTRAINTS PLAN

APPENDIX C – TREE PROTECTION PLAN

1 Introduction

1.1 On instructions received from Mr James Bawden, homeowner, Michael Clements, Arboricultural Surveyor for Bawden Tree Care, undertook a ground level, visual assessment of the trees that could be affected by the development proposal in accordance with BS5837 2012, and best practice, and to prepare the following to accompany a planning submission: -

- A schedule of the relevant trees to include survey data and a condition assessment.
- An appraisal of the constraints imposed by the trees and the potential consequences for the local amenity.
- An Arboricultural Method Statement setting out appropriate protective measures and management for trees to be retained.

1.2 Each tree has been given a class rating and Root Protection Area (RPA) measurement worked out using the recognised method detailed within BS5837 2012. BS5837 2012 Tree Quality Assessment Definitions are given in section 2.6 of this report.

1.3 For the purposes of this survey, a drawing of the site, adapted from drawing no.P1-2073-Planning1.dwg, supplied by Mr Mark Clifford, of PKA Architects, has been included to show tree locations, IDs, categories, and locations of required protective measures, (see Appendix B).

1.4 All trees of material consideration within and immediately adjacent to the proposed development site have been inspected. These trees are listed at Appendix A and annotated on the Tree Plan at Appendix B.

Methodology

1.5 The Arboricultural site survey was carried out on the 25th of January 2024. Weather conditions at time of inspection were cloudy but dry, with good visibility.

1.6 All observations were carried out from ground level without detailed investigations. Tree stem diameters, tree height and crown spread have been measured unless otherwise indicated.

1.7 This report is prepared in line with the British Standard: BS5837:2012 - Trees in Relation to Demolition, Design and Construction. The purpose of the report is to provide Arboricultural information and recommendations for the support of the proposed development at 203 Bulford Road, Durrington, Salisbury, Wiltshire, SP4 8HB.

1.8 The British Standard makes provision for trees to be categorised for both quality (A, B, C or U) and a sub-category for each of 1, 2 or 3. Details of these categories are included in paragraphs 2.7.

1.9 A full description of the trees found, and their categories, is included in the tree survey data provided in Appendix A. The data table includes stem diameter measured from 1.5m above ground level for single stemmed trees, stem diameter measured above root flare for multi-stemmed trees, height, crown spread, age class, and physiological and structural condition. A tree quality assessment using the data is then formulated to categorise trees for removal or retention.

1.10 Stem diameters are used to calculate the root protection areas (RPAs), which have been plotted and adjusted for site features, (see Appendix B). The RPA is the area in which most tree roots are anticipated to be growing. As root damage is a common cause of tree loss, the RPA is an area of provisional exclusion for construction activity.

1.11 Trees are a material consideration in the planning process and, as such, must be included as part of the decision-making process.

Caveats and limitations

1.12 The purpose of this report is to determine any constraints that need to be considered in relation to trees – both above and below ground – during the development design, to assess the potential impact of the development to the amenity value of trees, and to provide an Arboricultural Method statement with Tree Protection Plan in order to minimise, as far as is practical, damage to trees and their rooting systems.

1.13 Only trees with diameters greater than 75mm diameter and woodland groups with stems of 150mm or greater are included in the survey.

1.14 Root protection areas are calculated in line with BS5837:2012 and are adjusted to reflect topographical constraints on site. This is based on professional experience and has not been confirmed by trial pitting. There is a level of unpredictability in calculating exact tree root locations and therefore, where there is a possibility of obstruction or damage to roots, trial holes are recommended prior to construction.

1.15 The Arboricultural Method Statement outlined in section 5 of this report must be agreed with planning before the commencement of any works.

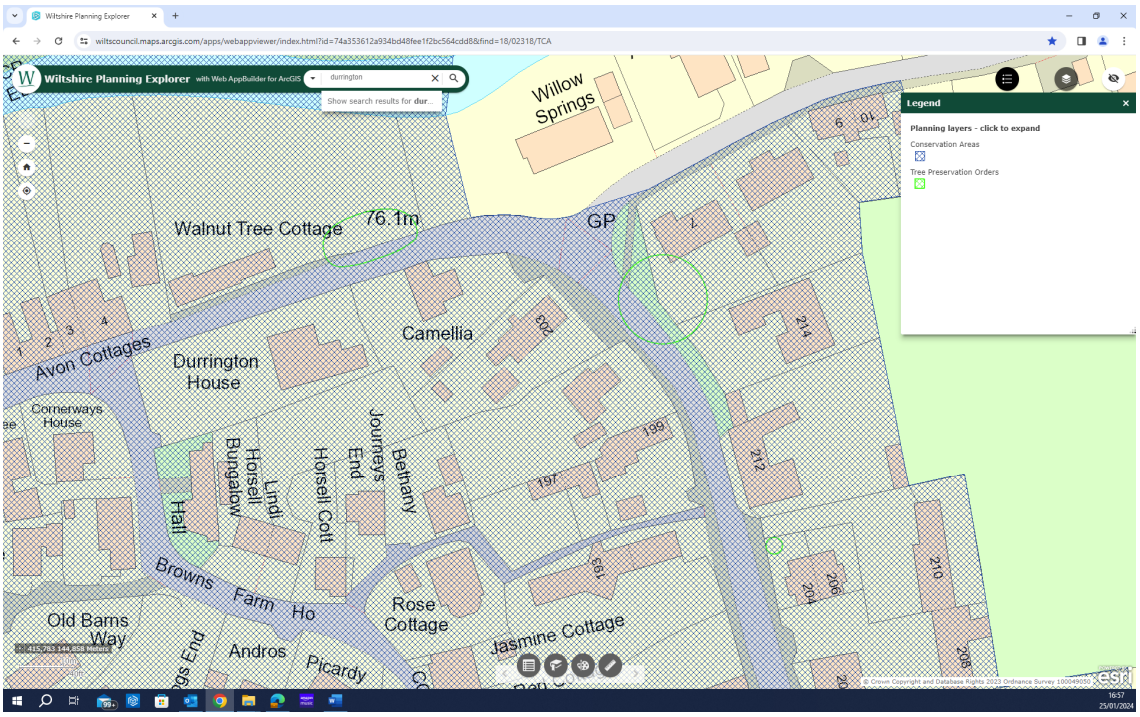
1.16 Trees are living organisms whose health and overall condition can change rapidly. The conclusions and recommendations contained within this report are valid for a period of twelve months. The period of validity may be reduced if significant changes occur to either the trees or to the landscape within the immediate proximity of the trees.

2 Arboricultural survey summary

2.1 The location of the proposed development is within a residential area, with other private properties adjoining the site. There is high banking that runs along the southern boundary and wraps around the far end of the rear garden. See below image showing overview of property and approximate site boundary.



Tree Preservation Orders and other legal restrictions



2.2 There are no TPO's on site however, the site is located within the Durrington conservation area. Confirmation via the Wiltshire Council online map.

2.3 Reasonable care should always be taken not to damage trees to be retained.

Arboricultural survey

2.4 For tree survey information, see the Tree Survey Data in Appendix A.

2.5 Smaller trees and understory vegetation adjacent to the site have not been included as part of this Arboricultural report.

2.6 Trees are categorised in line with BS5837:2010 Trees in Relation to Design, Demolition and Construction as follows:

Table 1:Tree categories in line with BS5837:2010

A	Trees of high arboricultural value that should be retained and protected throughout the development. Veteran trees are automatically awarded 'A' status.
B	Retention preferable. Trees of good condition and character which are appropriate for the location and in good physiological and structural condition. These trees should be retained unless they will be a severe impediment to the proposal or there is an overriding public interest that warrants their removal.
C	Trees of generally lower arboricultural value by dint of character or condition. 'C' trees should not be a constraint on development.
U	Trees that should be removed on arboricultural grounds. Often trees in poor condition can be left 'in situ' until a proposal means the potential target increases, making their removal more urgent or necessary.

Trees are further categorised into sub-categories, using a numerical suffix to denote the following perceived values:

Table 2 Tree sub-categories in line with BS5837:2010

1.	Trees of primarily arboricultural qualities. High value trees might be because they are particularly good examples of their species, because they are rare of unusual or because they are important components of a group feature such as an avenue.
2.	Trees of landscape importance – for example, trees of particular visible importance in a setting or view.
3.	Trees of cultural value. This may be due to historic links or conservation value – such as veteran trees or commemorative trees.

For example, a veteran tree of landscape importance would be categorised as A2.

An overview of details of the trees surveyed is included in Appendix A – Tree Survey Data.

3 The proposal

3.1 Demolition of existing and construction of replacement dwelling and garage.

4 Tree impact assessment

4.1 Trees to be retained adjacent to the development area, are unlikely to be adversely affected, provided that adequate precautions to protect the trees are implemented through the Arboricultural Method Statement outlined in section 5 of this report.

4.2 The proposal has the potential to damage the following trees and groups:

Impact	Reason	High value A class Trees	Moderate Value B class Trees	Low Value C Class Trees	Trees for Removal / U class trees
Trees to be removed	To facilitate development	-	-	T02	-
Retained trees that may be damaged through disturbance to RPAs	Removal of existing surfacing/ structures/ Landscaping/ Installation of new surfacing/ structures/ landscaping	-	-	-	-
Retained trees to be pruned	Crown raising away from proposed building	-	-	-	-

Impact Appraisal

4.3 There is minimal trees on site, all of which are located to the extremities of the site, providing a good amount of clearance for demolition and construction activities.

4.4 The proposed replacement dwelling, has a similar footprint to the existing and therefore shall note encroach on any of the existing trees and hedges.

4.5 The replacement garage has a longer footprint then existing, subsequently overlapping the small Elder located behind the existing garage, the removal of which will have an insignificant impact on the site and surrounding area.

4.6 The proposed development shall not have a detrimental effect on trees to be retained as long as the method statement in section five of this report is adhered to.

5 Arboricultural Method Statement

5.1 Summary of recommendations

5.1.1 The site is relatively compact with only a few small trees along the boundaries. Protective fencing has not been recommended for this particular project as it would be somewhat inappropriate and has not been deemed necessary. Completing the works with an appropriate level of diligence will be sufficient to ensure the trees and hedging on site are unaffected by the works.

5.1.2 T02, the small Elder, is to be removed before any construction activities may commence on site.

5.1.3 The demolition of the existing dwelling must be undertaken with suitable care, particularly on the Northwest side, to avoided the risk of arisings falling into the adjacent hedge, working from the south side pulling arisings away form the adjacent hedge is recommended.

5.1.4 All arisings from the demolition works are to be removed from site. No arisings are to be disposed of or temporarily stored within any RPA's.

5.1.5 There is to be no alterations of ground levels within RPA's. Care will need to be taken when excavating and installing the retaining wall for the new garage, to ensure excavation does not overrun into the RPA of the adjacent T03 and no spoils are added into this area either.

5.1.6 Care should be taken when carrying out any excavations to ensure no significant roots are damaged. This includes by direct mechanical damage, or through compaction caused by plant movement, storage of materials, or contamination from spillages etc. during the building process.

5.1.7 In the unlikely event that tree roots (of trees to be retained) are damaged by the development, exposed roots should be treated at once to avoid desiccation. Any roots smaller than 25mm in diameter, can be pruned back, preferably to a side branch, with suitable sharp pruning tools.

5.1.8 If significant roots are uncovered that cannot be pruned without detrimental effect to the tree, works in this area should cease and a new design and method statement should be agreed with planning before works may continue in this area.

5.1.9 The extents of any site storage and mixing areas must not be near any Root Protection Area to prevent the risk of tree roots being damaged from the storage of materials, runoff/spillages etc. during the building process.

