



barrell
TREE CONSULTANCY

Arboricultural Impact Appraisal
Rear of 38 Regents Park Road, London

Prepared by
Mark Wadey MA Arb CUEW MA ArborA MICFor

Date: 15 February 2013
Ref: 089-AIA-Rear-MW

Validation statement

This report contains the supporting tree information relating to the development proposal to refurbish the existing dwelling and extend the basement and garden in the rear of the property at 38 Regents Park Road, London.

For Local Planning Authority (LPA) validation purposes, this report contains the following:

- A full tree survey compliant to the requirements of *BS5837: (2012 Trees in relation to design, demolition and construction – Recommendations* undertaken by a qualified arboriculturist
- A plan with a north point showing tree survey information, including BS 5837 categories
- An assessment of the arboricultural implications of development, detailing trees to be retained and removed, and the proposed protection measures (Section 1)

Summary

Purpose of this report

This is an arboricultural impact appraisal report describing the trees on and near the development area, what the impact of the development proposal on those trees will be and how any adverse impact will be mitigated. Its purpose is to provide sufficient tree information for the LPA to assess the impact of the proposal on local character as part of the process of determining the planning application.

Report contents

It includes:

- a **tree protection plan** showing the location of the trees, their categorisation, the location of the new development, the trees to be lost and the tree protection measures;
- an **arboricultural impact appraisal** in Section 1, which describes the impact of the development on trees; and
- a series of **appendices** in Section 2 providing relevant background information.

Background administrative information

Background information on our specific instructions and how we carried them out is included as Appendix 1. All the trees that could be affected were inspected and their details are listed in Appendix 2. Based on this information, guidance was provided to DEN Architects on the constraints these trees impose on the use of the site. This submission proposal is a result of these consultations and has evolved taking account of the tree constraints.

Summary of the impact on trees and local character

Only three trees will be lost as part of this proposal but they are all low category because of their small size and their loss will not have an adverse impact on amenity. The nearest trees are within the adjacent properties and the construction activity is outside their Root Protective Areas (RPAs) so it is unlikely to adversely affect them. Some issues may need clarification and consideration for direct reference in a planning condition, but in principal the development proposal will have no significant impact on the contribution of trees to local amenity or character.

Mark Wadey NDArb CUEW MArborA MICFor

Explanatory notes for the tree protection plan

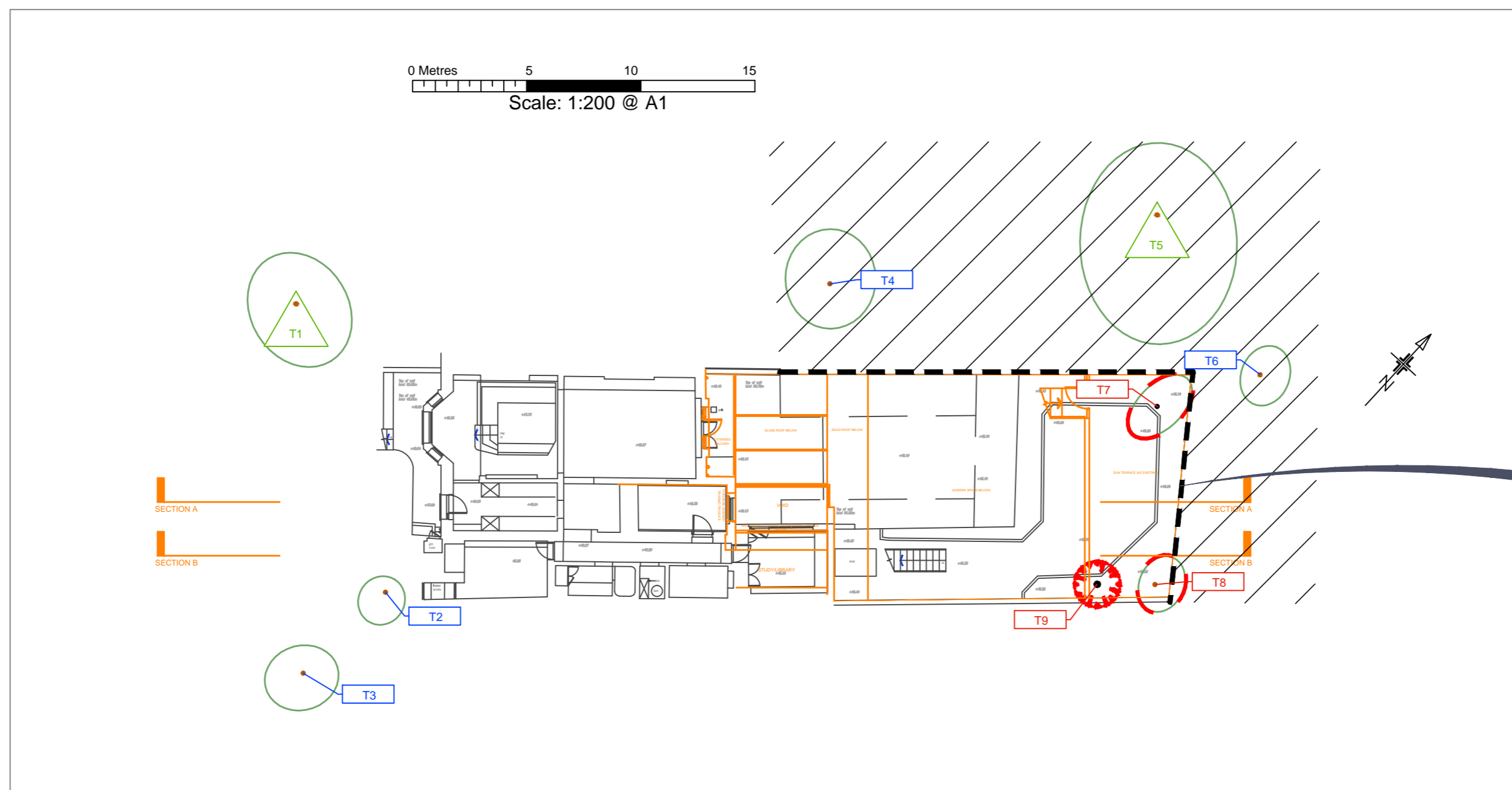
The tree protection plan (our reference 12389-BT2) is based on the provided information. It should only be used for dealing with the tree issues and all scaled measurements must be checked against the original submission documents. The precise location of all protective measures should be confirmed at the pre-commencement meeting before any construction activity starts. Its base is the existing land survey with the proposed layout superimposed, so the two can be easily compared. It shows:

- the existing trees numbered, with high categories (A & B) highlighted in green triangles and low categories (C & U) highlighted in blue rectangles (note that these colours are used to assist colour blind people in differentiating the categories);
- the trees to be removed indicated by a red dashed crown outline; and
- the location of the construction exclusion zone (CEZ) to be protected by barriers formed by the existing boundary wall.

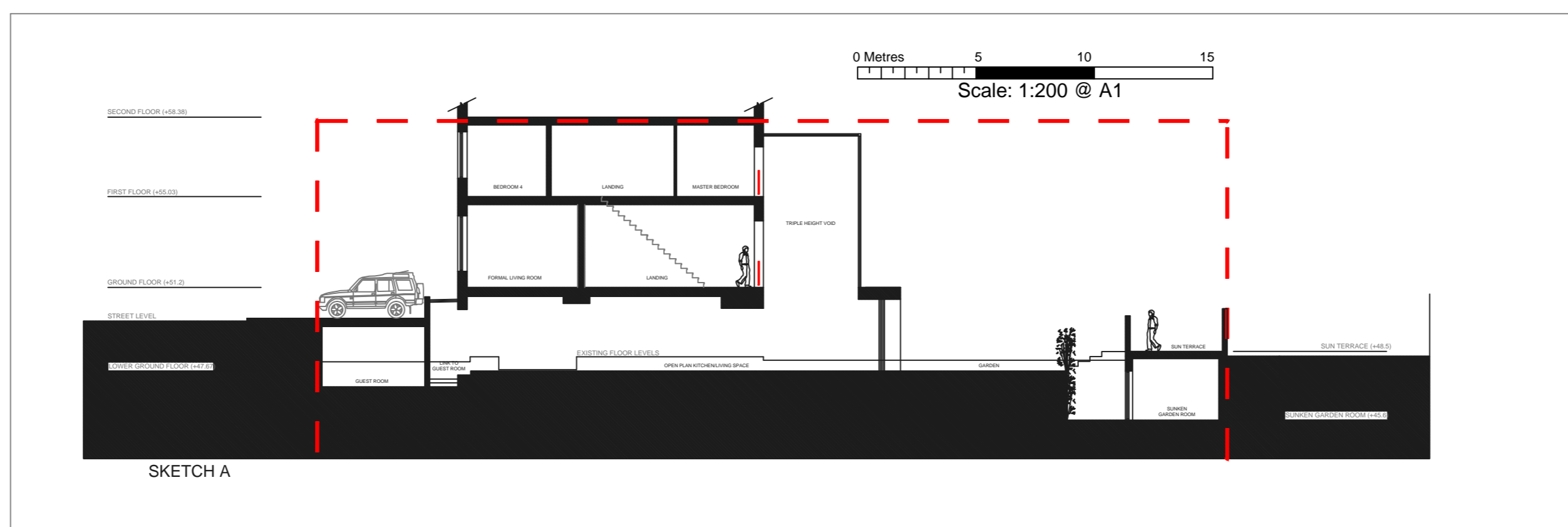
Tree protection plan

Location of trees, categorisation and protection/management proposals at rear of 38 Regents Park Road, London

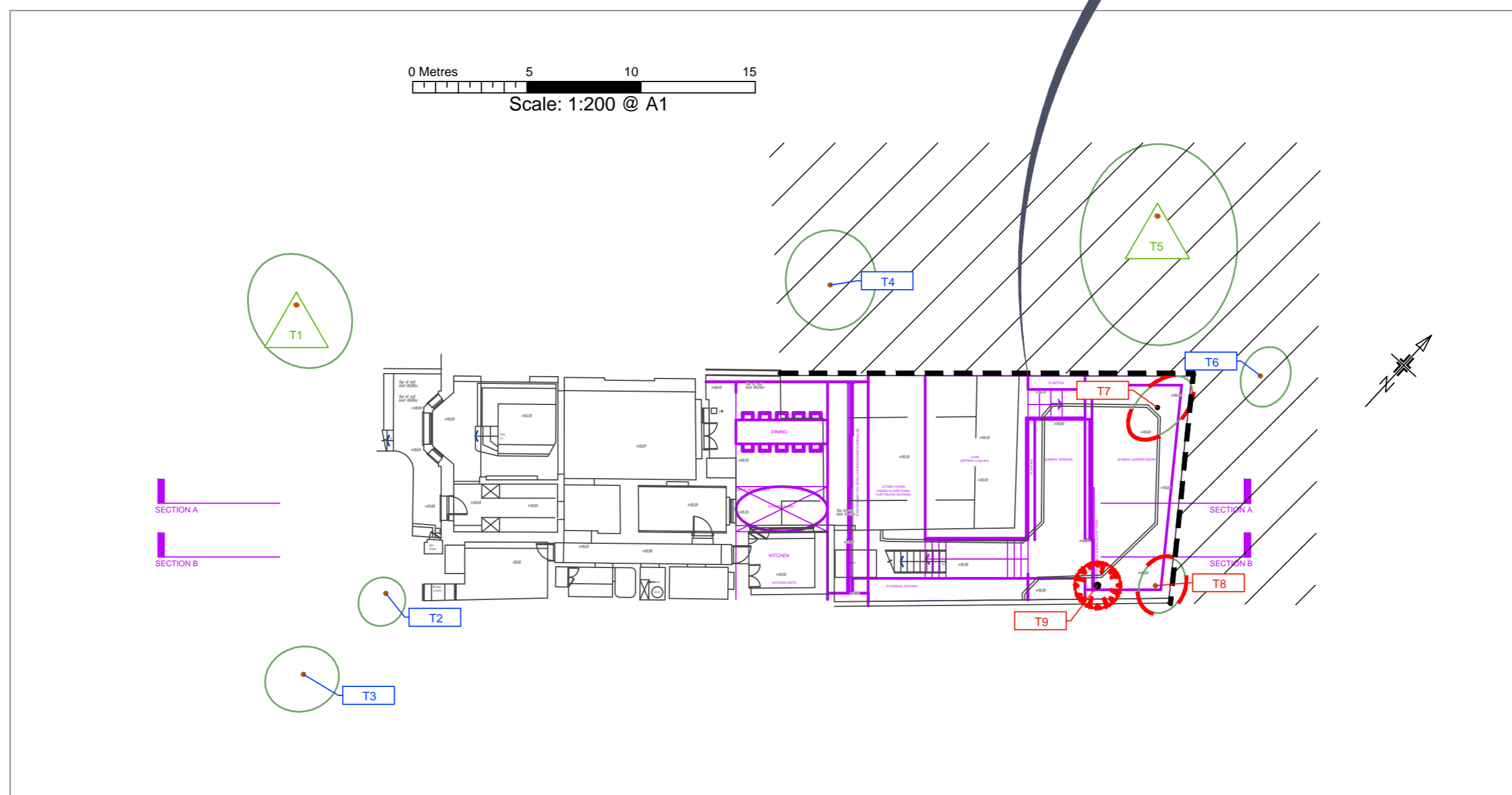
Proposed ground floor layout



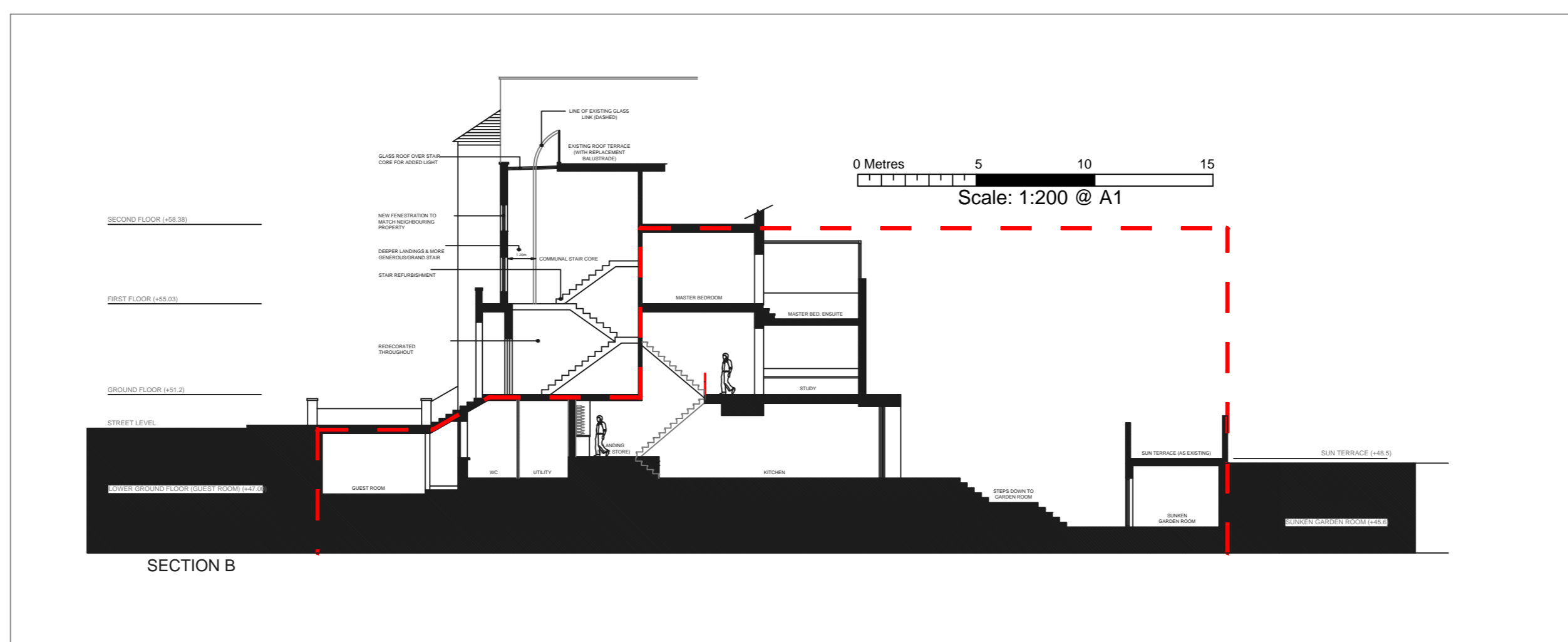
The existing boundary wall protects the Construction Exclusion Zone (CEZ) for the trees in the adjacent property.



Proposed lower ground floor layout



The existing boundary wall protects the Construction Exclusion Zone (CEZ) for the trees in the adjacent property.



- BS category B Trees of moderate quality
- BS category C Trees of low quality
- Trees to be removed
- Proposed ground floor layout
- Proposed lower ground floor layout
- Estimated tree positions not included on original land survey and/or adjusted crown spreads
- Construction exclusion zone (CEZ) to be protected by fencing and/or ground protection

Section 1

Arboricultural impact appraisal

This arboricultural impact appraisal describes our assessment of how the proposal will affect trees and any impact this will have on local amenity and character. The impact on trees is summarised at the beginning in 1.1, more detailed explanation of this analysis is set out in 1.2 and the proposed mitigation measures are described in 1.3.

Section 1: Arboricultural impact appraisal

1.1 IMPACT ON TREES

From the provided layout, none of the trees on the adjacent properties will be affected by the development proposal. The existing boundary wall will provide adequate protection for the Construction Exclusion Zone (CEZ), which will be retained to provide the necessary protection. Three trees (7, 8 and 9) are shown for removal but they are low category and their loss will not have a significant impact on local amenity. They should not be a constraint to the development proposal.

1.2 PROTECTION OF RETAINED TREES

1.2.1 Protection of retained trees

The successful retention of trees depends on the quality of the protection and the administrative procedures to ensure those protective measures remain in place whilst there is an unacceptable risk of damage. An effective means of doing this is through an arboricultural method statement that can be specifically referred to in a planning condition. However, on this site the retained trees are located on the adjacent properties and are unlikely to be adversely affected if the existing boundaries are maintained.

1.2.2 Issues that may require further clarification

From this appraisal, issues that may need clarification and consideration for direct reference in a planning condition includes:

1. Pre-commencement meeting
2. Preliminary tree felling
3. Installation of CEZ barriers (retention of boundary walls)
4. Installation of new services or upgrading of existing services
5. General landscaping

1.3 SUMMARY OF THE IMPACT ON LOCAL AMENITY

Only three trees will be lost as part of this proposal but they are all low category because of their small size and their loss will not have an adverse impact on amenity. The nearest trees are within the adjacent properties and the construction activity is outside their Root Protective Areas (RPAs) so it is unlikely to adversely affect them. Some issues may need clarification and consideration for direct reference in a planning condition, but in principal the development proposal will have no significant impact on the contribution of trees to local amenity or character.

Section 2

Appendices

Appendix 1: Administrative information, site visit and data collection

Administrative information

1. Instruction

We are instructed by Shay O'Brien to inspect the significant trees that could be affected by the development proposal at the rear of 38 Regents Park Road, London, and to prepare the following information to accompany the planning submission:

- a schedule of the relevant trees to include basic data and a condition assessment
- an appraisal of the impact of the proposal on trees and any resulting impact that has on local amenity

2. Documents provided

The tree protection plan is derived from the following provided information:

- Land survey, drawing number 6131-01, received by email on 8 January 2013
- Layout back, drawing number 6051-003-D, received by email on 24 January 2013
- Diagram, drawing number 6051-007, received by email on 24 January 2013

3. Limitations of this report

The following limitations apply to this report:

- **Statutory protection:** The existence of tree preservation order or conservation area protection does not automatically mean trees are worthy of being a material constraint in a planning context. Trees can be formally protected, but be in poor structural condition or in declining health, which means that they are unsuitable for retention or influencing the future use of the site. Furthermore, a planning consent automatically takes precedent over these forms of protection, which makes them of secondary importance. For these reasons, we do not check statutory protection as a matter of course in the process of preparing this report. However, if any tree works are proposed before a planning consent is given, then the existence of any statutory protection must be checked with the LPA.
- **Ecology and archaeology:** Although trees can be valuable ecological habitat and can grow in archeologically sensitive locations, we have no specialist expertise in these disciplines and this report does not consider those aspects.
- **Tree assessment and management advice:** Our inspection of the trees for the purposes of assessing their condition and work requirements is made on the basis that they will be annually inspected in the future to identify any changes in condition and review the original recommendations. For these reasons, the tree assessment advice only remains valid for one year from the date that the trees were last inspected.

Appendix 1: Administrative information, site visit and data collection

4. Technical references

This arboricultural method statement is based on the following primary technical references:

- British Standards Institution (2012) BS 5837: *Trees in relation to design, demolition and construction – Recommendations*
- National Joint Utilities Group (2007) Volume 4, Issue 2: *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*

5. Qualifications and experience

This report is based on my site observations and the provided information, interpreted in the context of my experience. I have experience and qualifications in arboriculture that can be reviewed at www.barrelltreecare.co.uk/about-us.php.

Site visit and data collection

6. Site visit

I visited the site on 14 December 2012. All my observations were from ground level without detailed investigations and I estimated all dimensions unless otherwise indicated. I did not have access to trees on other private properties and have confined observations of them to what was visible from within the property. The weather at the time of inspection was dull and raining, with average visibility. During my visit, I took photographs to illustrate specific points in this report.

7. Brief site description

Regents Park Road is located in the residential suburbs of London. Number 38 is on the eastern side of the road and surrounded by similar residential development. The property consists of a moderately sized terraced house set to the front of a long narrow rear garden. In the rear garden there are some small trees and shrubs but these are not easily visible from outside the site. There are some larger trees growing on the adjacent properties but these are set back from the property boundaries.

8. Collection of basic data and compliance with BS 5837

Each tree was inspected and the numbering scheme is indicated on the tree protection plan. For each tree, information was collected on species, height, diameter, maturity and potential for contribution to amenity in a development context. As advocated in BS 5837, each tree was then allocated to one of four categories (A, B, C or U), which reflected its suitability as a material constraint on development. Each category A, B and C tree was automatically assigned BS sub-category 1 unless otherwise stated. When collecting this information, specific consideration was given to any low branches that may influence future use, age class, physiological condition, structural condition and remaining contribution. Where appropriate, crown spreads were also noted where they differed from those shown on the provided land survey. This data with explanatory notes is set out in the tree schedule included as Appendix 2 and the supporting plan information. Each tree inspection was of a preliminary nature and did not involve any climbing or detailed investigation beyond what was visible from accessible points at ground level. BS 5837 (4.4.2) sets out recommendations for the collection of data and this report is fully compliant with that advice in the context of the BS 5837 Foreword, which states: "Any user claiming compliance

Appendix 1: Administrative information, site visit and data collection

with this British Standard is expected to be able to justify any course of action that deviates from its recommendations." In that context, we will justify any deviation in this report from the strict BS 5837 recommendations on request.

9. Calculation of RPAs

Following the recommendations in Table D1 of BS 5837, the diameter of each tree was rounded up to the next 2.5cm increment, with the radius of a nominal circle and the resultant RPA taken directly from that table. This information is listed for each tree in the tree schedule in Appendix 2.

10. Plan updates

During the site visit trees (1, 2, 3, 4, 5, 6 and 8) were noted that were not shown on the original site survey. Their approximate locations have been illustrated on the tree protection plan, but these positions have not been accurately surveyed. It is unlikely that this has affected the report conclusions, but if their locations are considered important, they should be accurately surveyed. Additionally, the crown spreads were estimated on site and the tree protection plan has been annotated to more accurately reflect the present situation.

11. The use of the tree information in layout design

Following the inspection of the trees, the information listed in Appendix 2 was used to provide constraints guidance to the architect based on the locations of all the category A and B trees. All the category C and U trees were discounted because they were not considered worthy of being a material constraint. This guidance identified the estimated developable footprint of the site and was considered by the architect to arrive at the submitted design. For conciseness, and because it is not a BS recommendation, this detailed constraints advice has not been included in this report.

Appendix 2: Tree schedule and explanatory notes

NOTE: Colour annotation is A & B trees with green background; C & U trees with blue background; trees to be removed in red text.

Tree No	Species	Height (m)	Diameter (cm) @ 1.5m	Maturity	Low Branches	Category	Notes	Tree Works	RPA radius (m)	RPA area (m ²)
All retained trees							Carry out safety check			
T1	Honey locust	16	60	Mature	-	B	Reduced in past at about 15m	-	7.2	163
T2	Sumach	4	20	Maturing	-	C	-	-	2.4	18
T3	Birch	6	25	Maturing	-	C	-	-	3.0	28
T4	Goat willow	7	25	Maturing	-	C	-	-	3.0	28
T5	Honey locust	18	65	Mature	-	B	Some stem defects visible	-	7.8	191
T6	Willow	8	25	Maturing	-	C	-	-	3.0	28
T7	Fern	6	25	Young/maturing	-	C	-	Fell	3.0	28
T8	Cherry	4	20	Maturing	-	C	Topped in past	Fell	2.4	18
T9	Thorn sp	4	20	Maturing	-	C	-	Fell	2.4	18

Appendix 2: Tree schedule and explanatory notes

Explanatory notes for schedule

- **Abbreviations:**

RPA : Root protection area

- **Botanical tree names:**

Birch : *Betula pendula*
 Cherry : *Prunus* sp
 Fern : *Trachy carpus* sp
 Honey locust : *Gleditsia triacanthos*
 Goat willow : *Salix caprea*
 Sumach : *Rhus Typhina*
 Thorn : *Crataegus monogyna*
 Willow : *Salix* sp

- **BS 5837 (2012) compliance:** All data has been collected based on the recommendations set out in subsection 4.4 of BS 5837.
- **Future tree safety inspections:** Our assessment of the trees was carried out on the basis that a re-inspection would be carried out within a year of the assessment visit and our advice on tree condition must be reviewed annually from the date of that visit.
- **Site limitations:** Where there is restricted access to the base of a tree, its attributes are assessed from the nearest point of access. Climbing inspections are not carried out during a walkover tree survey and, if heavy ivy is present, tree condition is assessed from what can be seen from the ground. A separate note is recorded if further investigation may be required to clarify its status.
- **Crown spreads:** Crown spread dimensions are not listed in the tree schedule because they are illustrated on the land survey base to all the plans in this document. Where crown spreads of significant trees on site are found to deviate from those shown on the provided land survey, we have noted it in the text of the report and annotated it on our plans.
- **Dimensions:** All dimensions are estimated unless annotated with a '*'.
- **Species:** Species identification is based on visual observations. Where there is some doubt over tree identity, sp is noted after the genus name in the botanical names section above to indicate that the species cannot be reliably identified at the time of the survey. Where there is more than one species in a group, only the most frequent are noted and not all the species present may be listed.
- **Height:** Height is estimated to provide an indication of the size of the tree.
- **Trunk diameter:** Trunk diameter is estimated or measured and recorded in 2.5cm increments as advised in BS 5837 Table D1. It is measured with a diameter tape unless access is restricted, direct measurement is not possible because of ivy on the trunk or the tree is assessed as poor quality. The point of measurement and the adjustments for stem variations are as advised in Figure C1 of BS 5837.
- **Maturity:** In a planning context, maturity provides a simplistic indication of a tree's ability to cope with change and its potential for further growth. For the purposes of this report, young indicates a potential to significantly increase in size and a high ability to cope with change, maturing indicates some potential to increase in size and some ability to cope with change, and mature indicates little potential to increase in size and limited ability to cope with change.

Appendix 2: Tree schedule and explanatory notes

- **Low branches:** Any low branches that would not be feasible for removal during normal management and should be considered as a design constraint are noted here and explained in the notes.
- **Category:** Our assessment automatically considered tree physiological/structural condition (BS 5837, 4.4.2.5h), and so these are not listed separately in the schedule. Additionally, the category accounts for the remaining contribution (BS 5837, 4.4.2.5i) as greater than 40 years for A trees, greater than 20 years for B trees, at least 10 years for C trees and less than 10 years for U trees, so this is also not listed separately in the schedule. Category A, B and C trees are automatically listed as sub-category 1 unless otherwise stated.
- **Notes:** Only relevant features relating to physiological or structural condition and low branches that may help clarify the categorisation are recorded. If there are no notes, then the presumption should be that no relevant features were observed.
- **Tree works:** The inspection of all trees was of a preliminary nature and only defects visible from the ground have been identified. Each individual tree may not have been inspected closely because of access difficulties and only defects visible from the inspection point have been noted. In addition to tree removals for development and management reasons, further works are listed to reduce the threats from retained trees. All trees on the site should be checked by the contractor at the time of carrying out the main tree works to deal with any emerging safety issues in the context of the consented development. Additionally, where appropriate to facilitate access, all crowns should be lifted to 3–4m above the site. Only works in excess of this have been listed for individual trees. The following points should also be noted before carrying out any works:
 1. **Reporting during work operations:** In the context of the preliminary nature of the tree inspection, any defects that may affect tree safety discovered by the contractor when carrying out the work recommendations should be reported to the supervising officer. Modification to the schedule of works may be required because of these reports. The contractor should be specifically instructed on this point.
 2. **Implementation of works:** All tree works should be carried out to BS 3998 *Recommendations for Tree Work* as modified by more recent research. It is advisable to select a contractor from the local authority list and preferably one approved by the Arboricultural Association. Their Register of Contractors is available free from The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL; phone 01242 522152; website www.trees.org.uk.
 3. **Statutory wildlife obligations:** 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 species that inhabit trees. All tree work operations are covered by these provisions and advice from an ecologist must be obtained before undertaking any works that might constitute an offence.
 4. **Stumps:** Stumps to be removed within the RPAs of retained trees should be ground out with a stump grinder to minimise any disturbance unless otherwise authorised by the supervising officer.
 5. **Future tree inspections:** Due to the time that may elapse between the original survey and the start of development, all trees should be re-inspected as part of the standard risk management process before any works start on site.



barrell
TREE CONSULTANCY

Field House, Fordingbridge Business Park, Ashford Road, Fordingbridge, Hampshire SP6 1BY

T: 01425 651470 E: info@barrelltreecare.co.uk

www.barrelltreecare.co.uk