Arboricultural report in support of a planning application, (BS:5837):

- Tree Survey
- Arboricultural Impact Assessment
- Tree Constraints Plan
- Tree Protections Plan

SITE LOCATION:

Oakhurst
West Chiltington Road
Pulborough
West Sussex
RH20 2EE



Date of Issue:
May 2024

Arboricultural Impact Assessment (BS:5837)

for…

Your Home Plans Ltd

Contents

1.0 Introduction / Background: 3
2.0 Planning Policy and Legislation 6
3.0 Site Assessment 7
4.0 Planning Proposal 8
5.0 Arboricultural Assessment 8
6.0 Impact Appraisal 9
7.0 Below Ground Constraints 10
8.0 Above Ground Constraints 12
9.0 Conclusions 13
10.0 Recommendations 14
11.0 Outline Arboricultural Method Statement 14
12.0 References 16
13.0 Appendices: 18

1.0 Introduction / Background:

1.1 Introduction

1.1.1 The principal author of this Arboricultural Impact Assessment, (AIA), is Nicholas Eddison BA, DipArb, Senior Arboricultural Consultant at The Sussex Tree Company. Nicholas is a Technician member of the Arboricultural Association and is LANTRA certified to undertake Professional Tree Inspections.

1.2 Instruction

1.2.1 We are instructed by Your Home Plans Ltd, ('the client'), to undertake an arboricultural report in support of a planning application, following guidance set out in the British Standard document number 5837 "Trees in relation to design, demolition and construction – recommendations" (2012), and publish our findings in a report document, for a fee.

1.2.2 This report is an Arboricultural Impact Assessment, ('AIA'); it contains a draft Arboricultural Method Statement, however, a further, more detailed arboricultural report, an Arboricultural Method Statement, ('AMS'), may be required by the Local Planning Authority, ('LPA'), Horsham District Council, as a condition of granting of planning permission.

1.2.3 The client is advised by the LPA's tree officer, Andy Clout, that:

"The proposed development is immediately adjacent to several mature roadside trees that make a positive contribution to the character of the street scene / public amenity.
In order to make a fair assessment of the foreseeable impact of development on these trees and their minimum recommended root protection areas (assessed recognising existing rooting constraints) please request a BS5837:2012: Trees in relation to design, demolition and construction – recommendations and associated Arboricultural Impact Assessment and Tree Protection Plan."

Commissioning this report enables the client to comply with the requirements of the LPA's Tree Officer.

1.3 Scope of project

1.3.1 The development site, ('the Site'), is part of the existing property at Oakhurst, West Chiltington Road, Pulborough, RH20 2EE, which is a residential property with extensive gardens to the front, side and rear, which include a number of pre-existing outbuildings and other hard landscaping features, and is shown on the plan, 'Approved Block Plan', (see Appendix 2).

1.3.2 The scope of this project is fourfold:

I. Undertake a survey of trees on the Site and within influencing distance of the Site to fulfil the requirements of BS5837:2012 *Trees in Relation to Design, Demolition and Construction: Recommendations.*
II. Provide a Tree Constraints Plan, ('TCP'), for the Site including root protection areas and canopy spreads.

III. Provide an Arboricultural Impact Assessment, ('AIA'), in relation to the design proposal, providing comment in relation to the building orientation. The AIA will assess the trees in relation to the proposals and the potential impacts the trees will have.

IV. Provide a draft AMS; the draft AMS will provide guidance on methodologies to ensure the implementation of the design plan does not negatively impact any trees, or if there is impact, it is minimal and is sufficiently mitigated.

1.3.3 The client proposes to build an extension onto the southern end of a triple garage which will be used as a tractor shed, (housing a tractor and other garden machinery). The triple garage is not yet constructed at the Site, but planning permission for it is granted. This report's comments and findings are limited to the proposed plan to build the extension to the triple garage. See Appendix 2 for the 'Block Plan', which shows the proposed extension and 'Garage' plan, (drawing number AG10 REVA), which shows detailed plans of the proposed extension.

1.4 Reference Documents

1.4.1 As background information, the following documentation has been referenced.

Table 1: Document and Plans Provided

Document Description	Reference Number	Prepared By	Date
Approved Block Plan	OAK-23 / 01 REVB	Your Home Plans Ltd	12/03/2024
Block Plan	OAK-24 / B01 REVA	Your Home Plans Ltd	26/03/2024
Garage	OAK-24 / AG101 REVA	Your Home Plans Ltd	02/04/2024
Screenshot of LPAs planning constraints map	n/a	n/a	05/2024
Oakhurst – Tree Constraints Plan	STC-OH-TCP-01Rev. 1	The Sussex Tree Company	05/2024
Oakhurst – Tree Protection Plan	STC-OH-TPP-01Rev. 1	The Sussex Tree Company	05/2024

1.1.5 The report publishes: research methodology, findings and recommendations in relation to all existing trees which may be impacted by the proposed development; quantifies these trees according to their estimated life expectancy and quality; whether any are to be removed in order to facilitate the development; offers mitigation strategies, with accompanying methodologies, for the protection of trees that are to be retained; and suggests appropriate mitigation for any trees to be removed. More detailed protection methodologies and mitigation strategies could be presented as a separate, detailed AMS document.

1.5 Report limitations

1.5.1 The contents are intended for the sole use of the client, his authorised agents and planners from the LPA, (Horsham District Council), in respect of this development project only. No liability is accepted for their use by any other parties to advance an argument or claim (including legal or financial) without prior consent.

(1.5 – 'Report Limitations' continues, and sections 1.5.2. – 1.5.13 can be found in Appendix 5)

1.6 Access conditions

1.4.1 Access to all parts of the property was unimpeded. Access to 3rd party land was not required. Access to public land required to complete the tree survey was unimpeded.

2.0 Planning Policy and Legislation

2.1.1 *National Planning Policy Framework (NPPF):* When determining planning applications, local planning authorities, (LPAs), should aim to conserve and enhance biodiversity. If significant harm resulting from a development cannot be avoided, (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused. Opportunities to incorporate biodiversity in and around developments should be encouraged (Paragraph 118).

2.1.2 When determining planning applications, LPAs aim to apply the following principles:

> *Planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland,* ***unless the need for, and benefits of, the development in that location clearly outweigh the loss (paragraph 118).***

2.1.3 As the only tree proposed for removal within this report is a dying, hazardous and in decline Silver Birch, and that its removal is not to enable the proposed development, but because of sound arboricultural advice, the principles for refusal within the NPPF would not be considered applicable.

2.2 Statutory Tree Protections

2.2.1 The LPA has been contacted to establish whether any trees contained within the survey are protected by either a Tree Preservation Order (TPO) or are located within a local Conservation Area.

2.2.2 Via the LPA's online TPO search facility, (map), a search for TPOs was initiated and it is established that the trees to which this report applies are not protected by a TPO, nor are they located within the boundary of a Conservation Area, (see Appendix 4 for a screenshot of the LPA's online TPO / Conservation Area checker).

2.2.3 It should be considered that any proposed tree works detailed in the tree schedule are also implemented as part of the planning decision consent.

2.3 Felling Licence

2.3.1 Tree felling is also restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence when referring *"to the felling of fruit trees or trees standing or growing on land comprised in an orchard,* ***garden****, churchyard or public open space."*

2.3.2 As the tree recommended for removal is located within a garden, felling licence restrictions do not apply.

2.4 Trees and Wildlife

2.4.1 The Wildlife and Countryside Act 1981, (as amended), the Countryside and Rights of Way Act 2000 and the Conservation of Species and Habitat Regulations 2010, (as amended) provides statutory protection of birds, bats and other species that can inhabit trees.

2.4.2 Great care is required to avoid disturbance to those species and consideration should be given to the timing of tree works in order to avoid disturbance. Where the presence of such species is suspected and proposed works to the tree may affect any protected species, (or their habitats), the project ecologist or Natural England should be contacted for advice.

3.0 Site Assessment

3.1 Site Visit

3.1.1 A Site visit was carried out by Nicholas Eddison *BA (Hons) DipArb*, on 15th May 2024, who surveyed all the significant trees throughout the site from ground level, (and other relevant areas), including those with a diameter at breast height, (DBH), of more than 15cm, (where possible, DBH is taken at 1.5m above ground level; where this is not possible, this is indicated in the survey sheet data). The owner of the site was informed of his presence on site and prior to undertaking the inspection of the trees.

3.2 Site Description

3.2.1 The Site is a section of a residential property, Oakhurst, situated on the southern side of West Chiltington Road, adjacent to the junction of West Chiltington Road and Mare Hill Road, (A283), which runs along the Site's western boundary. The Site is situated in the northwestern corner of Oakhurst and is presently occupied by an outbuilding and a combination of different hard surfacings: block paving, concrete plinth, concrete raft and foundations for brick walls. The Site and its location within Oakhurst can be seen on the drawings, Block Plan and Approved Block Plan, (Appendix 2).

3.2.2 Site topography:

- The Site is rectangular-shaped. It is approximately 6m wide and 10m long, with the 6m sides being orientated to the north and south and the 10m sides being orientated to the east and west.
- The Site is entirely located on existing hard surfacing, as detailed in section 3.2.1
- The hard surfacing extends sufficiently in all directions to enable the erection of scaffolding without any new incursion in the RPA of any retained tree
- Any additional construction activity, (including the storage of construction materials), is to occur outside the Site and on pre-existing hard standing.
- All of the Site will be affected by the proposed development works.

3.2.3 The site's underlying geology is predominantly Sandstone:

Superficial deposits: No superficial deposits recorded

Bedrock geology: Folkestone Formation – Sandstone. Sedimentary bedrock formed between 126.3 and 100.5 million years ago during the Cretaceous period.

4.0 Planning Proposal

4.1.1 The planning proposal is to utilise the pre-existing hard standing spaces to build a single-storey extension onto the southern end of a triple garage, (which is not as yet constructed but planning permission for its construction is granted). This extension is to be utilised as a tractor and garden machinery storage facility.

5.0 Arboricultural Assessment

5.1 Method of Data Collection

5.1.1 The trees on the site were originally surveyed without reference to the site layout as detailed in Clause 4.4.1.1 of BS5837:2012. However, for the purposes of this arboricultural assessment, the design proposal for the site has been considered.

5.1.2 The survey recorded trees either as individual specimens or as groups, where these trees were aerodynamically, culturally or visually important as groups. The tree numbers associated with each tree are cross-referenced within the schedule and plans at Appendix 1 and 2 respectively. The complete method of data collection for the tree survey is provided at Appendix 6.

5.2 Summary of Data

5.2.1 The overall survey includes records of 3no. individual trees. Two trees are classified as category A, a mature Hornbeam and an over-mature Oak; one tree is classified as U – an over-mature Silver Birch which is in decline and dying. The application considers all trees and groups of trees located on or within influencing distance of the proposed development area.

5.2.2 T1, (Hornbeam, *Carpinus betulus* – category A), is a mature specimen located just outside Oakhurst's boundary, on a verge of Mares Hill Road. It is, along with the larger Oak to the south of the Site, the dominant arboricultural feature of the property. T1 is a remarkable example of the species and has significant landscape value. T1 is scheduled for retention.

5.2.3 T2, (Silver Birch, *Betula pendula* – category U), is an over-mature specimen located on Oakhurst's western boundary. It has significant deadwood within its crown, displays 'witch's broom' shoots, which are all dead, and when surveyed in mid-May, only had 10-15% leaf cover – a time when a tree of this species should be at 100% leaf cover. All these are indicators that the tree is in terminal decline and is dying. T2 is a poor example of the species and does not have any landscape value. T2 is scheduled for removal, as it poses a future health and safety risk to persons and property at the Site / Oakhurst – not because the design plan requires its removal.

5.2.4 T3, (Oak, *Quercus robur* – category A), is an over-mature specimen located just outside Oakhurst's boundary, on a verge of Mare Hill Road. It is, along with the Hornbeam to the north of the Site, the dominant arboricultural feature of the property. T3 is a remarkable example of the species and has significant landscape value. T3 is scheduled for retention.

5.2.5 The location of each tree / group of trees and their associated constraints including canopy spread and root protection areas with and without the proposed development are illustrated on the Tree Constraints Plan at Appendix 2.

Table 2 Summary of Trees Surveyed

Retention Category	Individual Trees	Groups	Hedges	Totals
Category A (Trees of high quality with an estimated life expectancy of at least 40 years).	2	0	0	2
Category B (Trees of moderate quality with an estimated life expectancy of at least 20 years)	0	0	0	0
Category C (Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm).	0	0	0	0
Category U (Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years).	1	0	0	1
Totals	3	0	0	3

5.2.6 It should be noted that Table 1 of BS5837:2012 only gives recommendations in relation to remaining years. A tree may be considered to have a longer remaining life, however, still be considered to be of a lower category given its maturity, condition or overall impact to the application site.

5.2.7 In line with BS5837:2012, category A and B trees / groups of trees are considered as providing a substantial contribution to a site. Therefore, Category A and B trees should be retained and incorporated into the proposed development where possible and feasible.

5.2.8 Generally, category C and U trees / groups of trees are considered to be of low quality or are young specimens, which can be readily replaced, therefore, should not be considered a constraint to future development.

5.2.9 Retention of trees is considered desirable, wherever possible, as it ensures continuity of tree cover and provides a mature landscape to the proposed development.

6.0 Impact Appraisal

6.1 Tree Removal for Proposed Development

6.1.1 In order to implement the design proposal there is no requirement to remove any trees, however the loss of 1 tree is recommended for sound arboricultural reasons. As this tree is in terminal decline and dying there is no significant impact to amenity or landscape values.

6.2 Direct tree loss.

6.2.1 There is the loss of 1 category U tree, T2.

6.2.2 It is not considered that the loss of T2 is as a result of the proposed development – in theory T2 could be retained, and the proposed development constructed without impacting T2's RPA and its above ground features, (due to the fact that the proposed development makes no new incursions into any tree's RPA). The removal of T2 is recommended as part of the responsible management of the property's tree stock – it is dying and already poses risk to persons and property; this risk will only increase in severity as time progresses and the tree's decline accelerates.

7.0 Below Ground Constraints

7.1 Root Protection Area

7.1.1 The below ground constraints are generally summarised as the root protection areas (RPA). The RPA is an area equivalent to a circle with a radius of 12 times the diameter of the trees measured at 1.5 metres for single-stemmed trees. For trees with more than one stem, one of the two calculation methods below should be used where there are either 2 - 5 stems or 5 or more stems. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.

7.1.2 The RPA is an area in which no ground works should be undertaken without due care in relation to the retained tree(s) and this is to avoid direct damage to the underground sections of the tree, (its roots), soil compaction, changes in levels or soil contamination which could alter the trees condition and / or stability. The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions.

7.1.3 The RPA for the trees have been calculated as prescribed by BS5837:2012 and are shown as circles or polygons on the Tree Constraints Plan at Appendix 2. These plans illustrate the relationship between the RPAs associated with the trees and the proposed development.

7.1.4 In addition to the illustration of RPAs on the plans at Appendix 2, the numerical RPA values are provided within the Tree Schedule at Appendix 1. Within the schedule both RPA radius in metres from the main stem and total area for the RPA as square metres are shown.

7.2 Existing RPA Incursions

7.2.1 There are existing incursions into the RPA of all trees.

7.2.2 The existing incursions are comprised of existing outbuildings, block paving, garden walls and their foundational materials, concrete plinths and rafts, hard standing materials resultant from demolition of pre-existing out buildings and the tarmac roadway of Mare Hill Road, to the west of Oakhurst.

7.2.3 The existing RPA incursions occupy 100% of the Site.

7.3 Proposed extension to the triple garage

7.3.1 The intention to construct the extension to the triple garage requires working within the RPA of a retained tree, T3.

7.3.2 The design plan is to use a concrete raft-type foundation. The installation of this raft will not require making any new incursions into the RPA of T3. The existing incursions will be removed according to methodologies described in the draft AMS and the foundational concrete raft will be laid in situ where the existing incursions once were – there is no requirement to excavate deeper than the depth of the existing incursions.

7.3.3 As there are no new proposed incursions, there is no conflict with the RPA of the retained tree, T3. Section 7.4.2.3 of BS5837:2012 states that *new permanent hard surfacing should not exceed 20% of any existing unsurfaced ground within the RPA.* This guidance is met under the design proposals.

7.3.4 The remainder of the RPA of T3, (the only tree affected by the design proposals for the new garage extension), will be protected by the erection of tree protection fencing placed at the edge of the existing hard standing at the western side of the Site's boundary. Additional tree protection fencing will be installed at the edge of the existing hard standing at the at western side of the Site's boundary in the RPA of T1, as a precautionary measure.

7.3.5 Tree protection fencing creates an impermeable barrier for the duration of the demolition and construction phases of the development. The areas inside the tree protection fencing are known as the Construction Exclusion Zones, (CEZs) No incursions into the CEZs are permitted.

7.3.6 Tree protection fencing must be erected prior to the commencement of active works and remain in situ until completion of the proposed development project.

7.3.7 Specifications for the design of tree protection fencing and precautionary signage to be attached to this fencing can be found in Appendix 3.

7.3.8 In order to construct the garage extension some demolition to existing hard standing will occur. The methodologies described in the draft AMS will be followed, thereby removing any harm from occurring to the rooting structures of retained trees.

7.4 Proposed construction of the proposed garage extension & level changes within the RPAs

7.4.1 In order to facilitate the construction of the proposed garage extension it is not necessary to create changes in levels to the topography of the Site.

7.4.2 For all excavation / construction works, any plant and machinery, if used will be either be sited on existing hard standing or outside the RPA of the retained tree.

7.4.4 Any spoil created by excavation works will not be stored within the RPA of the retained tree; ideally, spoil created will be removed from the site contemporaneously as created.

7.5 Construction scaffolding

7.5.1 In order to construct the proposed garage extension, there is a requirement to position construction scaffolding, (by up to 1.5m from the elevation), within the RPA of a retained tree, T3. This scaffolding will be sited on existing hard standing and therefore will not impact the RPA of T3.

7.5.2 A Tree Protection Plan will be prepared prior to commencement of works on-site, which will provide details in relation to the demolition and construction access, tree protective fencing, construction processes and site storage. This is prepared as part of an outline Arboricultural Method Statement, (see section 11 and Appendix 2).

7.6 Infrastructure

7.6.1 Due to the details provided for this application there is insufficient information relating to below ground infrastructure available at present to comment. If services need to enter RPAs the use of hand digging as detailed in the National Joint Utilities Group publication 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' (NJUG 10, Volume 4, 2007) will be undertaken to minimise the impact on the tree roots.

8.0 Above Ground Constraints

8.1.1 The above ground constraints predominantly refer to the impact of the canopy of any retained tree on the Site either by size and form, shadowing and nuisance factors. As a result, it is sometimes required that a canopy protection zone is established to ensure it is not harmed during construction.

8.1.2 In order to implement the design proposals there is no requirement to prune any retained tree / group of trees. The canopy of T3 is sufficiently elevated for there to be no conflict.

8.1.3 There are work tasks in the 'recommendations' column of the tree survey schedule for the retained tree, T1, which would benefit its long-term retention. Implementation of these recommendations contemporaneously with the tree removal works would be beneficial for the overall amenity and landscape value of the site.

8.1.4 Where the current and / or ultimate height of a Category A, B or C tree will cause an obstruction to the proposed development, this must be considered as a constraint. This is usually considered in terms of issues relating to shade and light. There are no above ground constraints posed by retained trees on the proposed development in this regard as the new garage building is a storage facility and shading and light are not considerations.

8.1.5 To ensure the crowns of retained trees are not damaged during the demolition and construction phases of the proposed development, tree protection fencing is to be erected at positions as indicated in section 7.3.4.

8.2 Impact on Amenity

8.2.1 Although there is the loss of 1 tree, T2, this tree is in terminal decline and its removal is due to sound arboricultural advice, not because of the impact of the design proposals. It is classified as U and therefore there is little or no impact on the Site's amenity or that of the wider landscape.

8.3 Future Growth

8.3.1 The future growth of the trees may have an impact on proposed new developments. The future growth of none of the retained trees / group of trees impacts on the proposed new development.

8.3.2 As T1 and T3 located at Oakhurst are classified as 'mature' and 'over-mature' it is expected that any future growth will be minimal. In truth, for T3, retrenchment is a more likely scenario than significant future growth.

8.4 Leaves, Fruit and Honeydew

8.4.1 T3 is an over-mature Oak and will shed debris throughout the annual life cycle, including significant leaf loss during late autumn. This is a pre-existing situation which the residents of Oakhurst are managing year on year. The same conditions apply to T1, though T1 does not affect the proposed new garage extension, as it does not overshadow it. Both the new garage, (for which permission is already granted), and the proposed garage extension, are non-residential buildings, so any leaf drop will have a lesser effect on the residents of Oakhurst,

8.4.2 Honeydew is most likely to be a significant problem from lime and maple trees of which there are none – therefore there is no impact on the site or its users.

9.0 Conclusions

9.1.1 This tree assessment and AIA is prepared in relation to the full planning application and includes trees, T1 – T3.

9.1.2 Wherever possible trees / groups of trees should be retained. In terms of the current site layout plan, there is conflict with trees.

9.1.3 In order to implement the design proposal there is no loss of trees. However, due to sound arboricultural advice, it is recommended that T2 be removed, as it is in terminal decline and will become increasingly hazardous as time progresses.

9.1.4 In order to implement the design proposals there are no new incursions into the RPA of retained trees. .

9.1.5 The demolition of sections of the existing incursions within the RPA of T3 is necessary. A suitable methodology to minimise and potential impact to T3 of these incursions is detailed in the draft AMS, below.

10.0 Recommendations

10.1.1 The installation of tree protective fencing must occur prior to commencement of operations. This will ensure conflict with retained trees does not occur.

10.1.2 Any unplanned incursions into the RPAs of retained trees must be immediately reported to the Project Arboriculturalist, who will attend the site to assess the potential impact of the unplanned incursion and decide whether to notify the Local Authority's specialist / Arboriculturalist.

10.1.3 No plant or machinery is to be used within 5m of any retained tree's root / stem junction.

10.1.4 Any excavations within the RPAs of retained trees must either utilise suitably sized machinery sited on existing incursions and use a 'reach in, drag out' work methodology or be undertaken with hand tools only and / or under the direct supervision / guidance of the Project Arboriculturalist or to the approval of the Local Authority's specialist / Arboriculturalist.

10.1.5 The successful retention of those trees that will remain on the site will be dependent upon the quality and maintenance of any protection system that is put in place. A detailed Arboricultural Method Statement may be required to detail how the necessary tree protection will be implemented.

10.1.6 An indicative draft Tree Protection Plan ('TPP', at Appendix 2) is provided; however, this is subject to alteration following a final decision notice and, if deemed necessary by the LPA, a detailed method statement.

10.1.7 It is critical that all protective fencing is installed and erected, and the Construction Exclusion Zone, (CEZ), enforced prior to the commencement of any works on-site. Following installation of tree protection, a site meeting may be considered necessary with the Tree Officer may be considered necessary to ensure satisfaction of all parties prior to any on-site works commencing.

10.1.8 It is recommended that a suitable competent arboriculturist, undertakes the site supervision and monitoring works – and be recognised as the Project Arboriculturalist.

10.1.9 In order for tree and root protection measures to work effectively all personnel associated with any demolition and construction processes must be familiar with the Tree Protection Plan.

11.0 Outline Arboricultural Method Statement

11.1 Scope of works

11.1.1 Installation of Tree Protection Fencing –

I. Tree Protection Fencing is to be installed along the blue dashed line, as shown of the Tree Protection Plan, (see Appendix 2).

II. Tree removal works are to occur prior to the installation of Tree Protection Fencing.

III. Tree Protection Fencing is to be installed before any materials or machinery are brought onto the site, and before any excavation and development occurs. Once installed tree protection fencing is not be removed or altered without prior recommendation by the project arboriculturist and, where necessary, approval from the local planning authority.

IV. Tree Protection Fencing is to be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree. Barriers are to be maintained to ensure that they remain rigid and complete – for compliant specification of tree protection fencing, see Appendix 3.

V. Signs indicating the purpose of the fencing must be fixed to it and remain in situ for the duration of the proposed development.

VI. The areas within or beyond the tree protection fencing are designated as a Construction Exclusion Zone, (CEZ), where all demolition and construction activity is excluded, including storage of materials harmful chemicals, spoil or aggregates.

11.2 Phasing of works

11.2.1 Trees works associated with this mitigation project shall occur in the following order:

Table 2 Phasing of works

Timescale	Task	Responsibility
Pre-development	Tree / stump removal by suitably qualified / experienced Arborists to BS:3998 standards	To be arranged by developer, with suitable contractors
Pre-development	Erection of protective barriers as agreed and approved	To be arranged by developer, with sign of from project arboriculturalist
Pre-development	Carry out supervisory visit or remote inspection, (and report findings and recommendations if necessary / required)	To be arranged by developer, with sign off from project arboriculturalist
During excavation and construction phases of development	Carry out supervisory visits or remote inspections as agreed, (and report findings and recommendations if necessary / required)	To be arranged by developer, with project arboriculturalist
Post development	Phased removal of protective barriers	To be arranged by developer, with sign off from project arboriculturalist
Post development	Inspect retained trees and carry out remedial tree work, (if necessary)	To be arranged by developer, with sign off from project arboriculturalist and operations undertaken by arboricultural contractor, if required.

11.3 Arboricultural supervision

11.3.1 A pre-commencement meeting, (either in person or remotely, via suitable digital media), is to be held between the contractors and the project arboriculturist. The local authority arboricultural officer is to be given reasonable notice of the pre-commencement meeting so they may also attend. The purpose of the pre-commencement meeting shall be:

- To clarify the tree protection methodology with the site manager.
- To sign off that the tree protection barriers have been installed in the correct locations and to the agreed specification.

11.3.2 The Project Arboriculturalist must have opportunities to supervise the removal of the existing incursions into the RPA of T3.

11.3.3 If significant root growth is disturbed during excavation / construction activities that are not within the scope of this report, the work must cease until the project arboriculturist is consulted. Roots greater than 25mm in diameter or dense / matted fibrous roots are considered significant root growth. It must be remembered that whilst RPAs are part of industry best practice, tree root growth is influenced by a number of factors and may not conform to expected ideals.

11.3.4 All excavation works within the RPA of T3 is to be completed either by siting appropriately sized machinery either on existing hard standing or outside T3's RPA, using a 'reach in, drag out' methodology, or by using hand tools only.

11.3.5 No machinery, materials or temporary site buildings are to be stored within the RPAs of T1 and T3, unless it is on the pre-existing hard surfacing.

11.3.6 No corrosive materials or chemicals which dissolve in water are to be stored within the RPAs of T1 and of T3 or on any pre-existing hard surfacing at Oakhurst, as it may be permeable surfacing, (Due to cracks in concrete or joins between blocks in block paving), and there is a potential for leaching, which will cause damage to T1 and T3 and any other trees or vegetation located at Oakhurst.

11.3.7 If at any time during the construction process, damage is inadvertently caused to a tree, the project arboriculturist must be notified to assess the likely implications and to prescribe potential remedial measures. Damage can be in the form of chemical or fuel spillage, mechanical damage to either the above ground parts of the tree or the roots, fire or any other unforeseen circumstance.

12.0 References

11.1.1 British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendation'.

11.1.2 British Standard 3998:2010 'Tree work – Recommendations'.

11.1.3 BS8545:2014 Trees: 'From nursery to independence in the landscape – Recommendations'.

11.1.4 The Forestry Act 1967.

11.1.5 The Town and Country Planning Act 1990.

11.1.6 The Town and Country Planning (Tree Preservation) (England) Regulations 2012.

11.17 APN 12, Through the Trees to Development, Arboricultural Advisory and Information Service. Derek Patch and Ben Holding.

13.0 Appendices:

Appendix 1: Schedules
Appendix 2: Plans
Appendix 3: Tree Protection
Appendix 4: Screenshots relevant to the proposed development
Appendix 5: Report Limitations
Appendix 6: Arboricultural Survey: methodologies
Appendix 7: Summary of author's qualifications and experience

Appendix 1: Schedules

Schedule 1: Cascade chart for tree quality assessment:

Table 1 - Cascade Chart for Tree Quality Assessment

Category and Definition	Criteria (including subcategories where appropriate)			Identification on Plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	▪ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning); ▪ Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline; and/or ▪ Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7*			Dark Red
Trees to be considered for retention				
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
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; or those that Are essential components of groups or formal or semiformal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g., veteran trees or wood-pasture).	Light Green
Category B **Trees of moderate** quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	Mid Blue
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value.	Grey

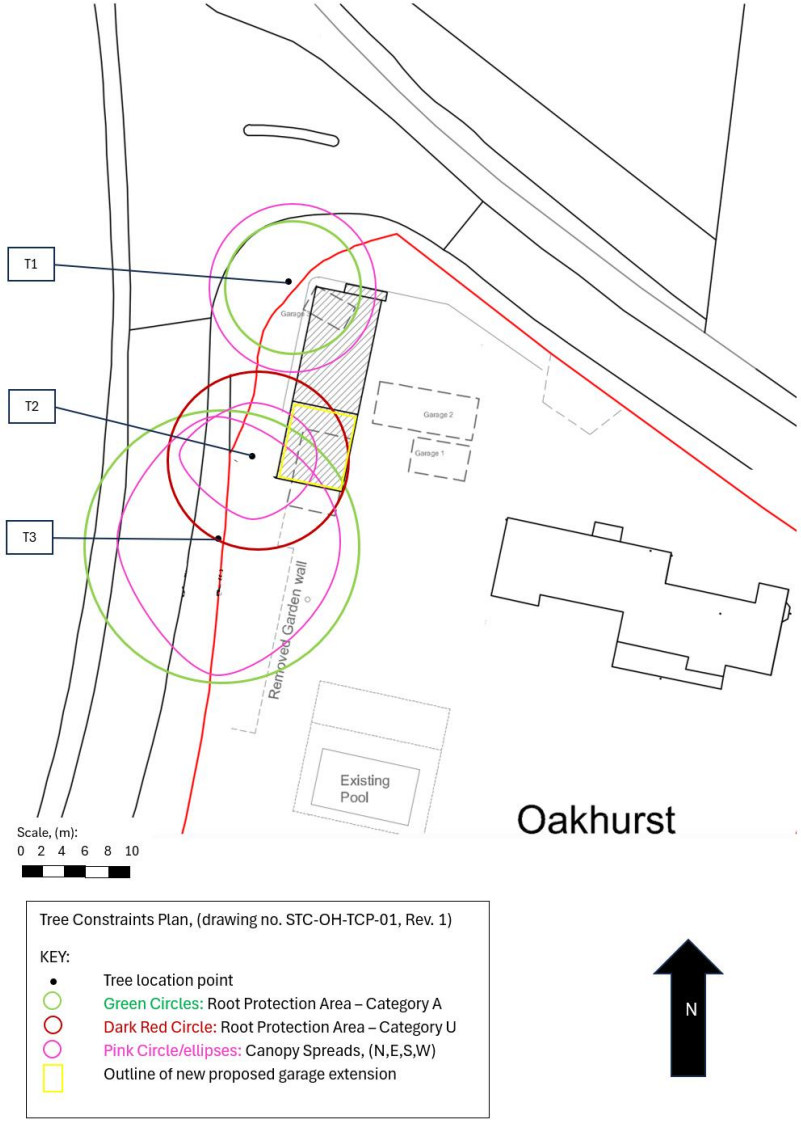
Schedule 2: BS:5837 Tree Schedule:

Client Name: Your Home Plans Ltd
Site: Oakhurst, West Chiltington Road, Pulborough, West Sussex, RH20 2EE
Tags: n / a
Ref: Full planning application

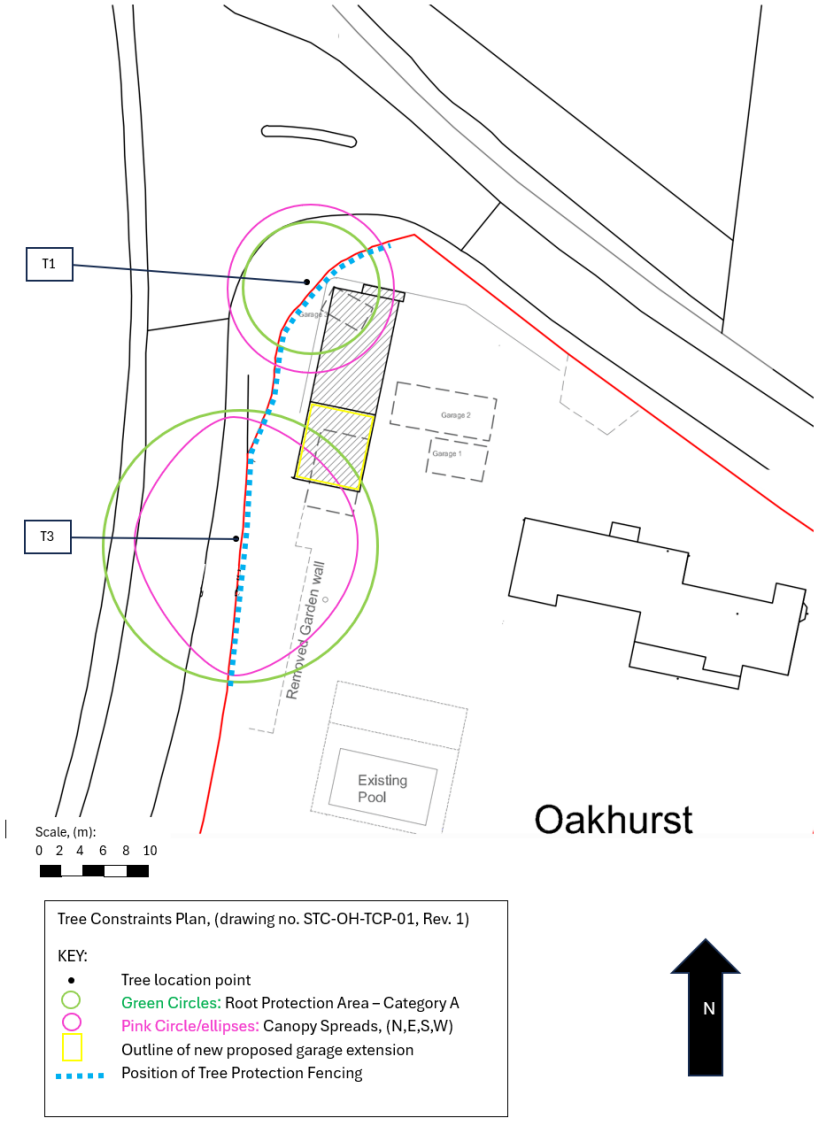
Consultant: N. Eddison
Survey Date: 15.05.2024

Tree No.	Species	Common name	Height (m)	DBH (mm)	Crown Spread (North	Crown Spread (East)	Crown Spread (South	Crown Spread (West)	Crown Height AGL	Root Protection Area Radius (m)	Root Protection Area (m²	Age	Bat habitat potentia	Condition	Risk	Category	Remedial Recommendations	Notes
T1	*Carpinus betulis*	Hornbeam	13.6	534	8	8	8	8	1	6.41	129.00	Mature	Low	Good	Low	A1	Sever and remove a 300mm section of ivy from around the entire circumference of the tree's basal region	
T2	*Betula pendula*	Silver Birch	17.6	695	5	6	6	7	3.5	8.34	218.52	Over-mature	Low	Poor	Medium	Unclassified	Fell to as near to fround level as is possible; remove stump	Tree is in decline: significant amounts of deadwood in crown and approx 10-15% of leaf cover in comparison to a healthy tree
T3	*Quercus robur*	Oak	22.4	1064	11	11	12	9	3	12.77	512.15	Over-mature	Medium	Good	Low	A1	Remove major deadwood from tree's crown	Bifurcates at approx 2m AGL

Appendix 2: Plans – Tree Constraints Plan:

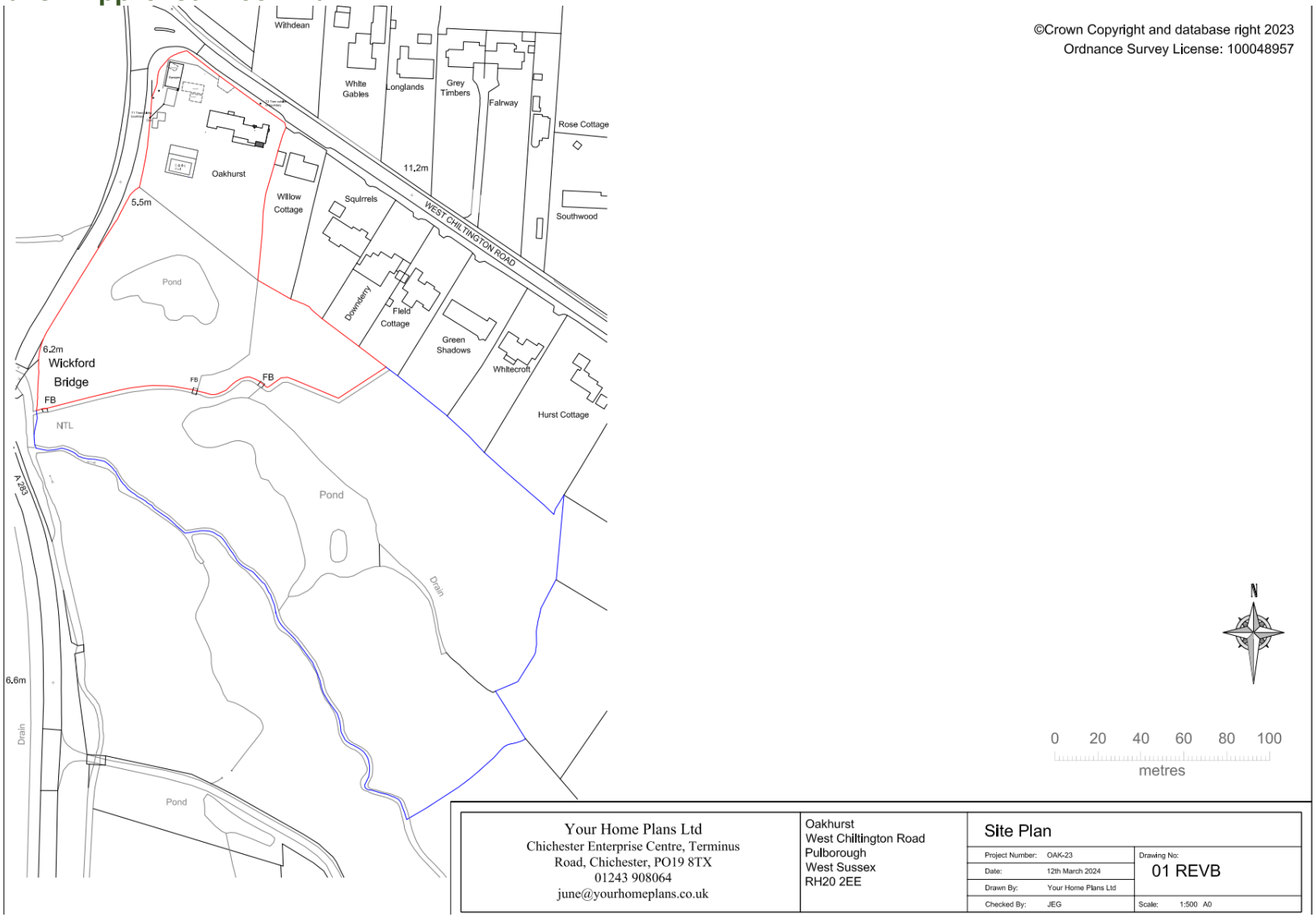


Appendix 2: Plans – Tree Protection Plan:



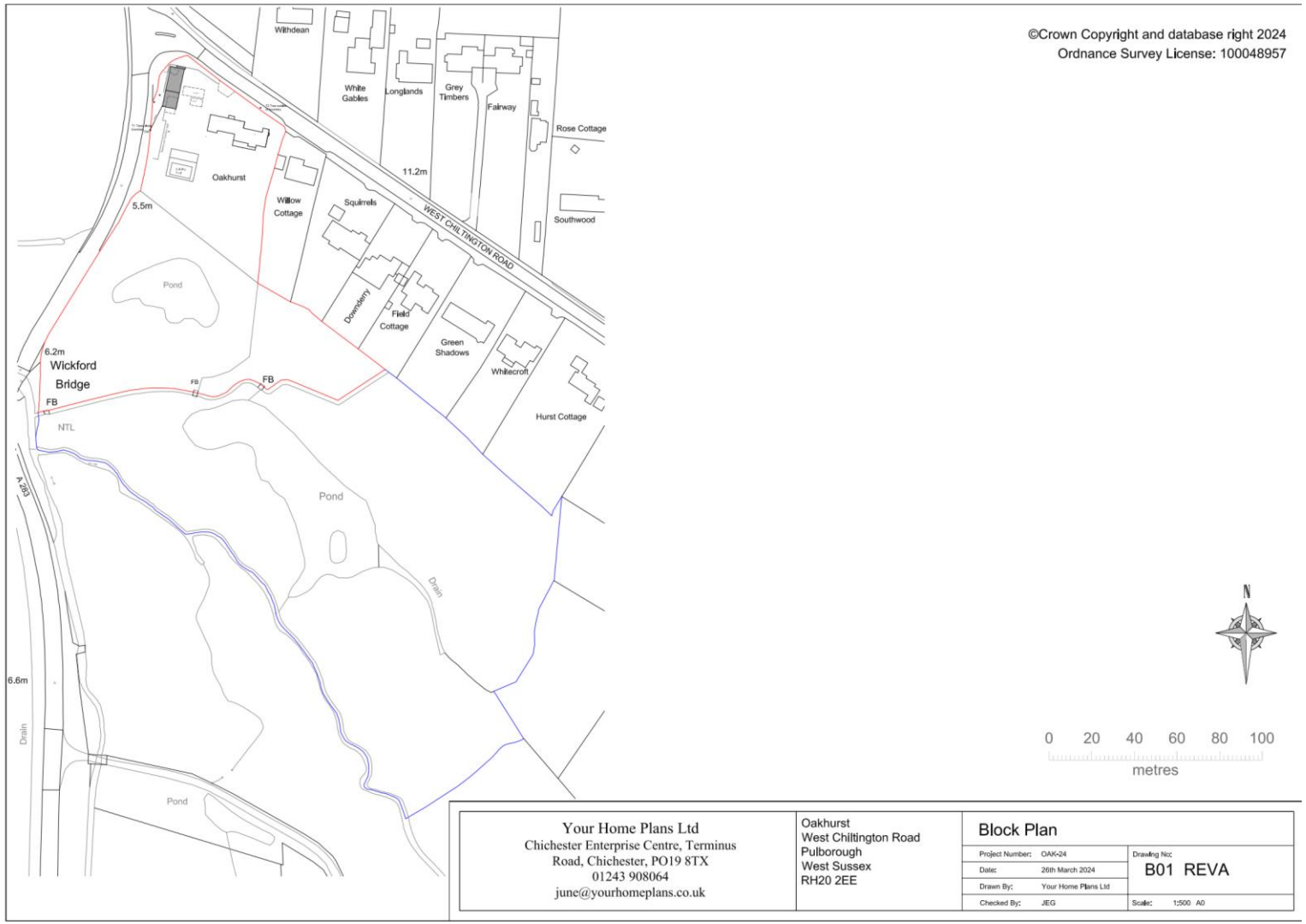
Oakhurst, West Chiltington Road, Pulborough, RH20 2EE

Appendix 2: Plans – Approved Block Plan:



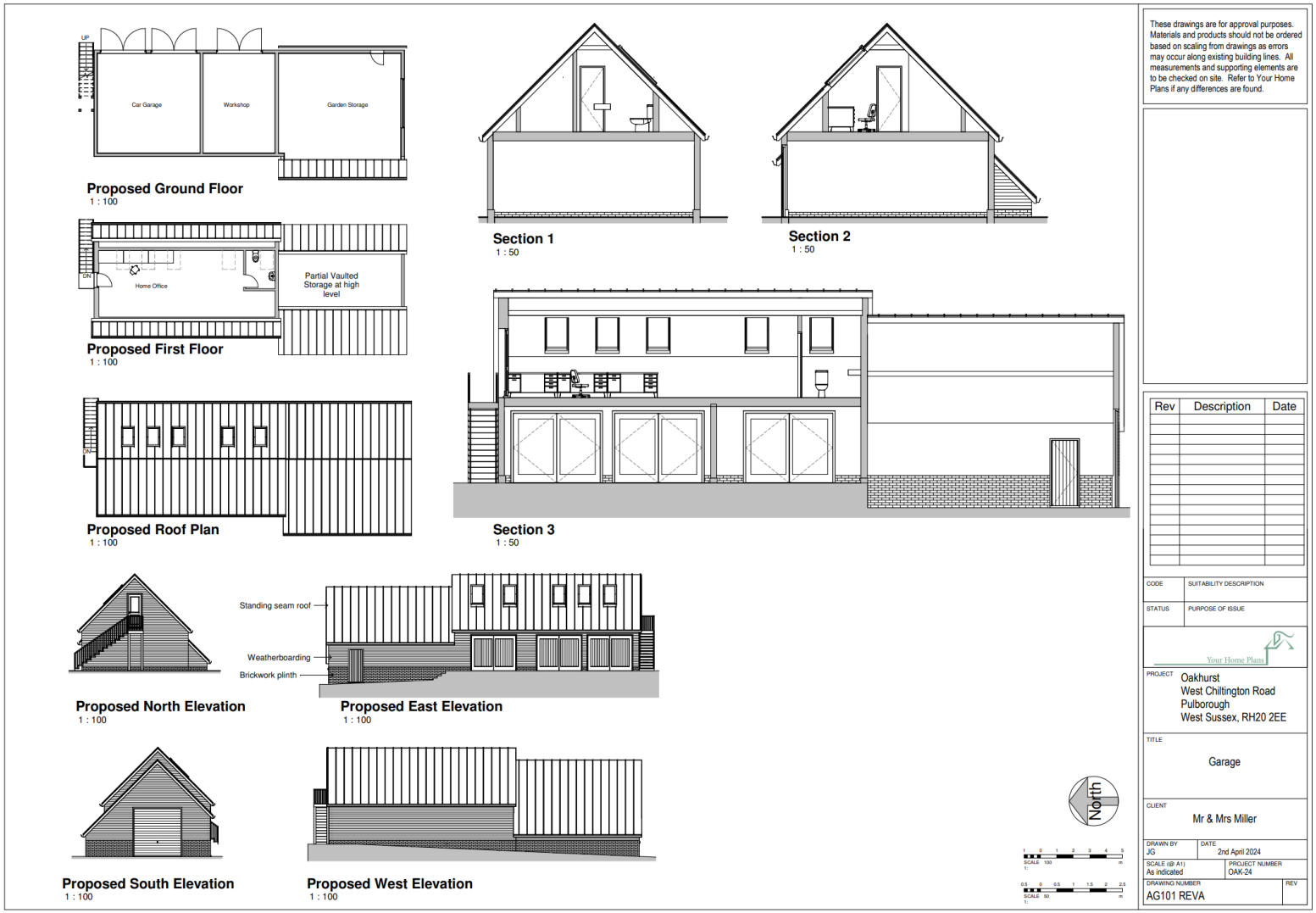
Oakhurst, West Chiltington Road, Pulborough, RH20 2EE

Appendix 2: Plans – Block Plan:



Oakhurst, West Chiltington Road, Pulborough, RH20 2EE

Appendix 2: Plans – Garage

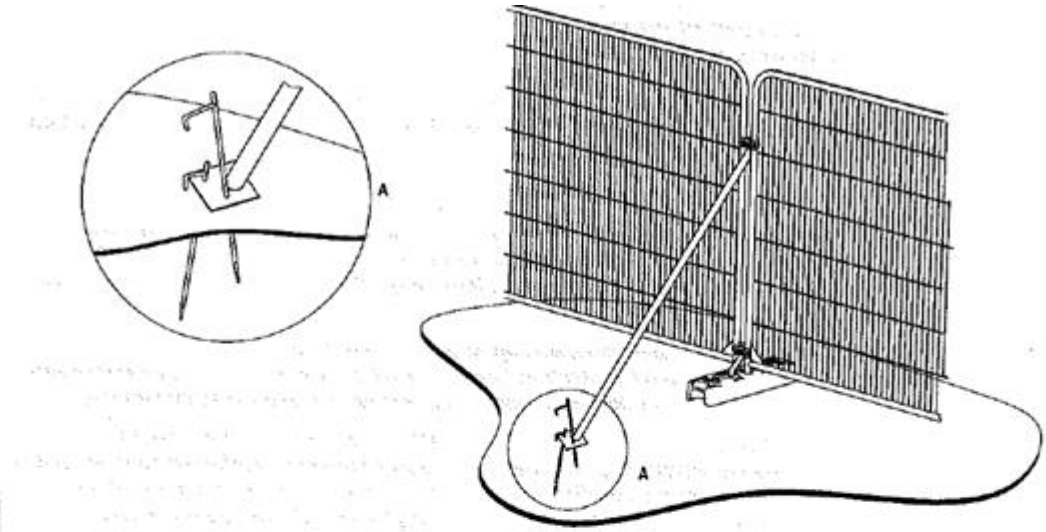


Oakhurst, West Chiltington Road, Pulborough, RH20 2EE

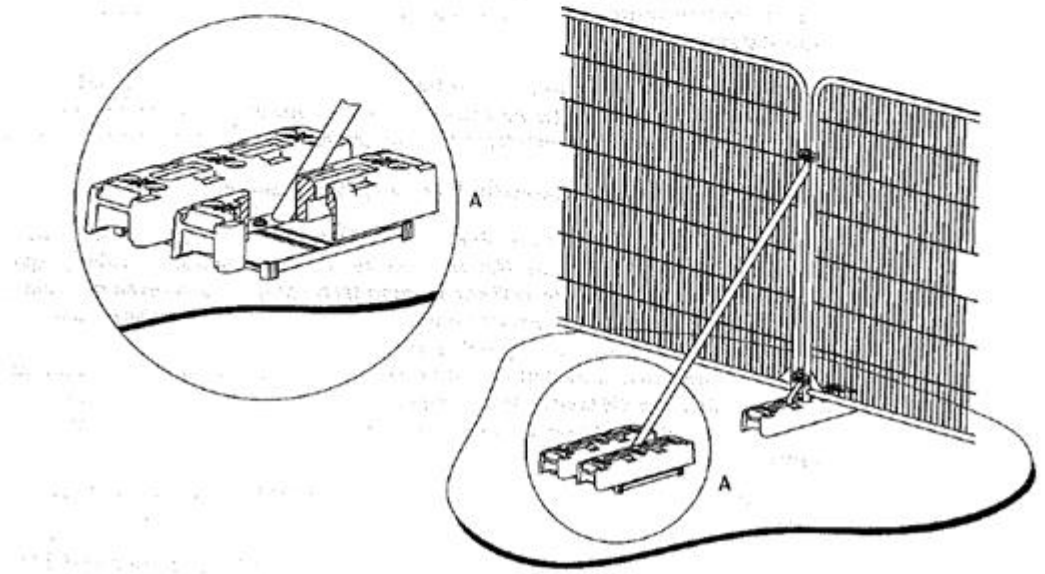
Appendix 3 Tree Protection:

Tree Protection Fencing – specifications:

BS5837 Recommended protective barrier (Fence A-Herras type fence)



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Tree Protection Fencing – signage:



Appendix 4: Screenshots relevant to the proposed development:

LPAs online TPO checker map:



Oakhurst, West Chiltington Road, Pulborough, RH20 2EE

Appendix 5: Report Limitations, (1.5.2 – 1.5.19)

1.5.2 The observations, assessments and analyses made are valid from the time of inspection. These, and any recommendations made, are subjected to the timescales detailed elsewhere in this report, applicable from time of surveying.

1.5.3 This is an arboricultural report and as such no reliance should be given to comments relating to buildings, engineering or soil.

1.5.4 This is not an arboricultural health and safety survey, a more detailed survey of internal decay detection etc. can be supplied but would be subject to a further fee.

1.5.5 This is a report which accompanies a planning application and provides no detail specifically in relation to the health and safety of the trees.

1.5.6 This report does not comment on the effects of surveyed trees in relation to any issues of subsidence or heave.

1.5.7 The analysis of the tree's / trees' status and assessments of condition, (in this report), are valid for 12 months from the date of site-survey. Any appraisals, and conclusions based thereon, will be invalidated and need reviewing in the event of material change/s to the site or site usage which result in any impact to the trees, (including their rooting zones), from the time of site-surveying, however minor. Consultation with The Sussex Tree Company, (STC), will be necessary, for clarification purposes, if there is any doubt as to whether any such changes materially affect the trees.

1.5.8 Formal assessment of topography, drainage, service conduits, soil conditions and the like are outside the scope of this report. Topographical surveying for the development project has been undertaken, as far as the author is aware. Proposed new extension were provided to STC by Your Home Plans Ltd.

1.5.9 Other specialist arboricultural surveys (e.g., root collar examination or sonic tomography) have not been made and are beyond the scope of this report.

1.5.10 Specific laboratory investigations of soil properties (plasticity index, moisture content, suction pressure) have not been made and are beyond the scope of this report.

1.5.11 Where further inspections of particular trees, (or features), are made as recommendations in this report, an additional or updated report must be submitted following these inspections; either as a new report or part of a re-edit of the comprehensive report. The findings for the re-inspected trees are ***only*** valid for 12 months from the time of re-inspection. Any inspections are chargeable.

1.5.12 Trees are growing dynamic structures. Whilst reasonable effort is made to identify defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. No tree is ever absolutely safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.

1.5.13 Trees are living organisms and as such are subject to change through the natural occurrence of growth, maturation and senescence – as well as in response to naturally occurring events outside of human control and influence. When the inspected tree/s

experience naturally occurring events materially affecting their status, the findings in this report will be invalidated; re-inspection may be necessary to meet the thresholds for duty-of-care liabilities. Such events can be, (but are not limited to): strong, storm winds; extremely heavy, sustained and unusual rainfall resulting in sustained waterlogging of rooting zones; or heavy, settled snowfall. Any re-inspections are chargeable.

1.5.14 This report will seek to clarify the existence or otherwise of statutory protections on trees for the site and publish findings. However, should any operational works be commissioned as a result of the survey it is incumbent on the contractor undertaking those works to seek clarification from the Local Planning Authority and give any notifications / seek any permissions should protections be in place and not covered by the granting of the proposed project's planning permissions. After accessing the LPA's on-line GIS mapping system and selecting the appropriate map layers: Tree Preservation Orders, (TPO), and Conservation Areas, (CA). The author has established there is no TPO in force for the proposed development site, (see Appendix 4), and the property is not located within a CA.

1.5.15 On undertaking the recommended works, the arborist / tree surgeon must without delay report any defects that become apparent while climbing or working on the tree/s in question. Those defects must be reported immediately to the relevant project manager, landowner and/or the author of this report to enable the appropriate remedial action.

1.5.16 The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds' nests whilst under construction or in use, and any contents therein. Any species listed in the Conservation of Habitats and Species Regulations 2017, are also protected, (commonly known as 'European Protected Species' – 'EPS'). Some may create habitats within trees. This is particularly relevant to bats as trees and features can provide roosts. All bats and their roosts are protected. Whilst this report does make an assessment to the likelihood or otherwise of bat roosts, this is indicative and cannot be relied upon, as all observations are made from ground level. It is incumbent on any contractor undertaking operational works to ensure appropriate aerial checks are made for EPS before commencement of works with the potential to disturb or destroy a roost.

1.5.17 This is an arboricultural report and therefore does not rely on ecological or archaeological data. If either is commented upon within the report further professional advice should be sought

1.5.18 To achieve the study objectives stated in this report, STC were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations completely defined the degree or extent of e.g., species abundances or habitat management efficacy described in the report.

1.5.19 All rights in this report are reserved for the commissioning client and The Sussex Tree Company. The report or its constituent contents may not be lent, sold, hired out or divulged to any 3rd-party not directly involved with the development project unless permission is sought and obtained from The Sussex Tree Company.

Appendix 6: Arboricultural Survey – methodologies:

Arboricultural survey

- On-site analysis follows the VTA practice, developed by Prof. Dr. Claus Mattheck and published by Lonsdale, (VTA: 1999); all observations are made from ground level.
- Assessment uses the guidance for survey requirements and categorisation uses the Cascade Chart for Tree Quality Assessment, (Appendix 1), both taken from BS 5837: 2012. Recorded trees have been given a reference number which can be found within the Tree Survey, and on the supplied drawings.
- Assessment is based around the useful life expectancy of the tree(s) and their condition and their contribution to the amenity value of the environment – categorised using four letters, the values of which are described in Appendix 1, Schedule 1.
- Branch spread, in general, has been measured on four sides together correlating to the compass points: north; east; south; west. Stem diameters are measured at 1.5m above ground.
- Current tree heights have been measured using a HAGLOFF clinometer, except where trees are inaccessible, when measurements will have been estimated, and, if possible, using Pythagoras' theory of trigonometry.
- Where, due to local constraints such as impenetrable vegetation or tree location in private property to which direct access to trees was not possible, field data will have been estimated and referenced in the data with shading, (grey) and an (E) beside the figure.

Ash die-back disease

- Following reports of ash dieback disease, first reported in 2012 and caused by the fungus *Hymenoscyphus fraxineus,* there is concern over the future health of ash trees in the UK. Any categorisation of ash trees within this survey are based around the condition at the time of surveying and life expectancy in a normal environment.
- Where ash trees are found to have the disease, they will fall into a C or U category, (dependent on contemporary research findings), and be reported to the Forestry Commission, as well as the client.
- More information can be found on the Forestry Commission's web page: http://www.forestry.gov.uk/planthealth

Glossary / key to interpreting tree survey data sheet

- **Tree/**group **of trees number:** where trees have historic tree-tag numbers attached to their stems, the tag number is used for identification. Where there are not tags, a number is attributed to each tree or group of trees surveyed and corresponds to marked areas on the Tree Location Plan(s).

- **Species:** the botanical and common names for each tree or group of trees is provided.

- **Height:** an estimated height is given in metres; although a clinometer is used, these devices are not infallible. Precise ways to obtain tree height are by either climbing to the highest growth tip and measuring from there to ground level; or to using Pythagoras' theory of trigonometry to mathematically calculate height – however, the Haglöf clinometer STC LLP use estimates within tolerable levels of accuracy.

- **DBH range:** an estimation of the tree's diameter at breast height is given, measured in millimeters and in ranges of 75mm. The typical DBH reading is taken at around 4.5ft or 1.37m AGL – diameters are taken at 'breast height' to avoid potential inaccurate readings at ground level, where buttressing of roots is common for many species.

- **Age Class:** a subjective judgment on the extent of maturation of each tree or group of trees surveyed; each value is based on the report author's knowledge of the particular species of tree in question and is judged against the average length of life for the species in an 'ideal' or 'usual' surrounding environment. The categorisation used is:

    - Newly planted
    - Juvenile
    - Semi-mature
    - Mature
    - Over-mature
    - Veteran
    - Dead specimen

- **Bat Habitat Potential:** an assessment of the tree or its features and the likelihood whether these present a suitable potential habitat for bats or other EPS. The categorisation used is:

    - n/a
    - Low
    - Medium
    - High

- **Condition:** an appraisal of the tree or group of trees present overall structural status and physiological health, as well as any significant pre-existing external environmental impacts. The categorisation used is:

    - n/a
    - Dead
    - Poor
    - Fair
    - Good

- **Risk Rating:** an assessment of the observed hazards presented by the tree/group of trees and associated features, and the categorisation of the severity of risk these present to

persons or property. The categorisation used is:

- Low – potential risk to damage persons or property is within tolerable levels harm is not likely to occur within the next 12-24 months
- Medium – potential risk to damage persons or property is of a medium likelihood; harm may occur within the next 6-12 months
- High – potential risk to damage persons or property is of a high likelihood; harm may occur within the next 3-6 months
- Immediate – potential risk to damage persons or property is immediately likely; harm may occur immanently

- **Remedial recommendations:** enacting the recommendations for work given will mitigate or remove any hazard observed and lower the tree/group of trees' risk rating to tolerable levels; this does not apply where the recommendation given is for further surveying, analysis or investigation – in such instances the report's recommended instructions must be followed and delivered, as if the risk rating for the tree/groups of trees were 'immediate'. Further recommendations made as a result of the re-surveying, assessment, analysis or investigation also must be followed and delivered to lower the tree/group of trees' risk rating to tolerable levels, (any associated timeframes will apply from the date of the re-surveying, assessment or investigation).

- **Abbreviations and glossary:** certain commonly used phrases have been abbreviated for ease of delivering this survey. These are listed below. Certain technical terms used in arboriculture may appear in this report and their precise meaning may not be familiar to 'lay-people', so the author has supplied brief explanations. These are listed in the glossary below:

Abbreviations:	NWR –	No works recommended
	GL –	Ground level
	AGL –	Above ground level
	DBH –	Diameter at breast height
	VTA –	Visual tree analysis
	DOC –	Duty of Care
	CODIT –	Compartmentalisation of dysfunction/damage in trees

Glossary:

Access Facilitation Pruning – *description of an arboricultural operational task* – A one-off tree pruning operation necessary to provide access for operations on site, which, when complete, are without significant adverse impact on tree physiology or amenity value.

Aerial investigation and report – *a description of arboricultural consultancy practice* – to undertake an investigation of aerial sections of a tree, not observable from ground level, using a systematic approach; to analyse structural integrity and any observable features – recommended when the VTA analysis from ground level is incomplete/inconclusive and the consultant has seen a feature/s which require further investigation to decide on a risk-rating and/or works priority.

Arboriculturalist – *description of professional status* – person who has gained expertise in the field of trees, (with particular refence to construction projects), through relevant education, training and experience.

Arboricultural Impact Assessment (AIA) – *arboricultural consultancy task for trees on development sites* – a study, undertaken by an arboriculturalist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

Arboricultural Method Statement – *arboricultural consultancy task for trees on development sites* – a document describing the methodology for the implementation of any aspect of development that has potential to result in loss of or damage to a retained or newly installed tree.

Bifurcated – *description of tree architecture* – when a tree has 2 distinct stems.

Cambium/cambial – *description of tree morphology* – the layer of cellular structure immediately behind the bark, where vascular tissues are created.

Cavity – *description of tree morphology* – a feature of a tree's architecture that is an incursion into the interior wood in some way, shape or form, usually formed as a result of a branch tearing away from the tree, pathogenic incursion or animal incursion, (or combination of all of these).

Canker – *description of tree morphology* – an area of bark/wood that exhibits dysfunctional growth patterns, often with localised degradation in structural integrity.

Construction Exclusion Zone – *arboricultural consultancy terminology* – an area based on the RPA where access is prohibited for the duration of the enabling and construction phases of a development project

Crown – *description of tree architecture* – the part of the tree distinct from the roots and stem(s), where most of the tree's leaves are, supported by primary, secondary, tertiary branches and twigs/shoots.

Drop-crotching – *description of arboricultural operational practice* – to prune a tree by selecting branches with terminal growth as the reduction's desired length from crown perimeter.

Epicormic – *description of tree morphology* – a type of branch/shoot growth emergent from adventitious buds or parenchyma tissue present within the layer of wood immediately below the tree's bark, (cambium). These branches attach to the tree's branches/stems in a way that is structurally much weaker than branch attachments made in the normal course of a tree's development.

Ganoderma applanatum – *a tree pathogen* – commonly known as the artist's bracket, artist's conk or bear bread. It is a wood-decay fungus

that causes rot of the tree's heartwood. Its fruiting bodies are hard brackets that appear white at first and then later brown in colour. https://en.wikipedia.org/wiki/Ganoderma_applanatum

Internal investigation and report – *a description of arboricultural consultancy practice* – to undertake an investigation of the trees internal wood/wood structures using specialist equipment; either a Resistograph drill machine or a tomograph machine. These will give readings that when analysed that can be interpreted by the arboricultural consultant to make judgments about the integrity or otherwise of the tree's internal wood structures and deduce/extract from these the likelihood of failure and/or recommendations to mitigate risks.

Kretzschmaria deusta – *a tree pathogen* – commonly known as 'brittle cinder' is a fungus and plant pathogen. It is a 'soft rot', preferentially degrading the cellulose, then later both the cellulose and lignin that make up wood cells. It colonises the lower stem and/or roots of living trees through injuries or by root contact with infected trees. It can result in sudden breakage/complete failure from the root/stem junction in otherwise apparently healthy trees. https://en.wikipedia.org/wiki/Kretzschmaria_deusta

Lesion – *description of tree morphology* – a small area of dysfunctional bark tissue.

Limb – *description of tree morphology* – branch.

Management recommendations – *arboricultural consultancy task for trees surveyed* – comments based on VTA observations, on the condition of the tree, group or woodland and recommendations for future works.

Monolith – *description of arboricultural operational practice* – to partially fell a tree, but leave a designated length, (above ground level), of stem standing; the remaining section is not considered a hazard and will become a site for wildlife habitation.

Re-trenchment pruning – *description of arboricultural operational practice* – crown reduction in late-mature and senescent trees to anticipate or keep pace with decline in the crown.

Root Protection Area, (RPA) – *arboricultural consultancy terminology* – a layout design tool showing the minimum area needed around a tree's stem to protect its subterranean rooting structures so as to maintain the tree's future viability, if left undisturbed.

Root/stem junction – *description of tree morphology* – where the root and the stem join.

Scaffold – *description of tree morphology* – a primary branch; one that grows directly from the stem and acts as a support for secondary branching

Self-set – *description of a tree's origins* – when the tree has been naturally propagated, in other words, not planted by human agency.

Tree Constraints Plan– *a description of arboricultural consultancy task for trees on development sites* – a scale drawing showing the pre-existing trees, groups of trees and hedges, (and other landscape features), on the site of a proposed development as well as the footprint of the proposed development, thereby illustrating what, if any, constraints the tree-scape imposes.

Tree Protection Plan– *a description of arboricultural consultancy task for trees on development sites* – a scale drawing incorporating finalised design proposals for a development, showing locations and dimensions of retained trees, there RPAs and the location of tree and landscape protection measures; also, the locations of any new trees to be installed, (and any tree and landscape protection measures required for these).

Trifurcated – *description of tree architecture* – when a tree has 3 distinct stems

Union – *description of tree morphology* – a site within the tree's architecture where 2 branches or stems, (or combination of both), originate

Veteran Tree – *arboricultural specific terminology* – a tree that, by recognised criteria, shows up to 4 features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned. These might be large girth, habitat features, signs of crown retrenchment and hollowing of the stem.

Wound-wood/reaction wood – *description of tree physiology* – a type of wood grown by trees, distinct from wood grown in the usual course of development, and in reaction to a wounding event, as part of the CODIT defense strategy trees have. Wound-wood has greater strength properties than wood grown in the usual course of development.

Appendix 7: Summary of author's qualifications and experience

The author, Nicholas Eddison, has the following qualifications and experiences and has undertaken CPD as described, below:

i. Qualifications

BA (Honours): Politics, Philosophy and History, (Birkbeck College, University of London)

Level 4 Diploma in Arboriculture, (Merrist Wood)

LANTRA Professional Tree Inspection Certificate

Arboricultural Association Certificate in Undertaking Aerial Tree Inspections

Named Manager in the Arboricultural Association's approved contractor scheme for a medium/large business

Arboricultural Association Certificate in Risk Assessment for Commercial Arboriculture

Arboricultural Association Certificate in Subsidence Reporting in relation to Trees

Certificate in Bat Awareness Training: compliant with BS: 8596: 2015 – Surveying for Bats in Trees and Woodland

Arboricultural Association Certificate in Assessing Tree Risk – Likelihood of Failure

Arboricultural Association Certificate in Assessment of Tree Forks

NPTC Level 2 Certificates in: Chainsaw Cross-Cutting and Maintenance; Felling and Processing Trees up to 380mm; Tree Climbing and Aerial Rescue; Use of chainsaw from a Rope and Harness
City and Guilds: Signing and Guarding, (Chapter 8)

ii. Practical/relevant experience

9 years as a practicing Arboricultural Consultant
4.5 years at director level as an Arboricultural Director
Assessor for the Arboricultural Association's Approved Contractor scheme.
Trainer of chainsaw maintenance and cross-cutting at Brinsbury College.
Over 20 years' experience as a practicing Climbing Arborist; in the domestic, commercial and civil arenas.
Over the preceding 9 years the author has undertaken and delivered multiple Tree Condition Survey Reports; BS:5837 Tree Surveys and

Arboricultural Reports in support of planning applications; Aerial Inspection Reports; Subsidence Reports; Resistograph Internal Investigation Reports; Tree Hazard Assessment Report; also worked as Project Arboriculturalist for civil development projects.

iii. Continuing professional development

The author periodically attends courses and lectures in order maintain his knowledge base and to further his learning and development. Examples of recently attended CPD events:

- Regular CPD sessions required for Assessor's of the Arboricultural Association's Approved Contractor scheme.
- Arboricultural Association's seminar on the Approved Consultant scheme
- a training day for AutoCAD and the 'Keytree' application, from Keysoft solutions – September 2019;
- the most recent meeting of TDAG, (Trees in Design Action Group) – September 2019;
- a seminar in morphophysiology of trees at Barcham tree nursery – summer 2019;
- Arboricultural Association's Subsidence Reporting course – Spring 2019;
- Arboricultural Association's Aerial Tree Inspection course – Spring 2019; the
- Arboricultural Association's Business Masterclass – Winter 2019;
- and Claus Mattheck's farewell lecture at Loughborough University in the summer of 2018.

The Sussex Tree Company:

We are providers of specialist services to the Arboricultural and Development industries in the UK:

Arboricultural Consultancy: all requirements are serviced

Business-to-business advice and assistance for the arboricultural industry:

- For achieving compliance and award of Arboricultural Association approved contractor status
- For developing efficient and ergonomic business systems
- For developing efficient and intuitive financial reporting and management systems

All of the 3 service offerings improve businesses and generate increased growth in revenues, profits and in professionalism

Development and Construction: we are a 'single-point of contact' for all tree-related requirements; from design/pre-planning to post-handover

Visit our website at www.thesussextreecompany.co.uk for a comprehensive overview

Oakhurst, West Chiltington Road, Pulborough, RH20 2EE