TIM MOYA ASSOCIATES

Arboricultural Report

for planning purposes

99 Copse Wood Way
Northwood
Middlesex
HA6 2TU

November 2021

201044-PD-11

Project	201044-PD-11 – 99 Copse Wood Way, Northwood
Report Type	Arboriculture (Planning)
Author	Chris Wright
Checked by	Tim Moya
Date Checked	09/11/2021
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1 INTRODUCTION

Instruction

1.1 This *Arboricultural Report* (the 'Report') has been instructed by *Gautam Dalal* (the 'Client').

Author

1.2 This Report was written by Christopher Wright (the 'Author'). Christopher is an arboricultural consultant dealing with trees in relation to all forms of human activity including built development. He is a *Technician Member* of the *Arboricultural Association*, a member of the *Royal Forestry Society*, a member of the *Institute of Chartered Foresters*, holds the *Level 6 Diploma in Arboriculture (ABC)*, the *Professional Tree Inspection certificate* (*LANTRA*), and has received a *BSc (Hons) Conservation and Environment* (2:1) from *Writtle University College*.

Proposed development

1.3 The proposed development at *99 Copse Wood Way* ('the Site') is for the demolition of the existing detached dwellinghouse and the construction of a new detached dwellinghouse ('the proposed development'), within the area administrated by the *London Borough of Hillingdon* ('the LPA').

Scope

1.4 This report has been provided to assist all parties involved in the planning process, in accordance with *British Standard 5837:2012 - Trees in relation to design demolition and construction - Recommendations* ('BS5837').

Site survey

1.5 The Site was visited, and the trees and other vegetation surveyed, referring to the recommendations of BS5837, on 30th of October 2020 by the Author. The details of this survey are found within the report appendices.

1.6 The survey was not an assessment of the health and safety of the trees. However, any trees identified as a current notable risk to people and property will have been highlighted in the schedules, at Appendix B.

Map 1: *Showing the area discussed in this Report within the indicative line.*

Report preparation

1.7 This report has been prepared, with reference to the following supplied documents and information:

- proposed architectural plans; and
- topographical survey.

1.8 The appendices of this report include:

- Appendix A (plans);
- Appendix B (schedules); and
- Appendix C (ground protection).

Definition of terms

1.9 The following terms and abbreviations may be used within this Report. These terms are defined by BS5837 as follows, unless provided without quotation marks:

- **Arboricultural Method Statement ('AMS')** - "*methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained*".
- **Local Planning Authority ('LPA')** - the planning department of the borough, district, or metropolitan council.
- **Root Protection Area ('RPA')** - "*layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority*.
- **Service(s)** - "*any above- or below-ground structure or apparatus required for utility provision*" that may for example include "*drainage, gas supplies, ground source heat pumps, CCTV and satellite communications*".
- **Tree Protection Plan ('TPP')** - "*scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures*".

2 SITE INFORMATION

Current Site use

2.1 The Site currently comprises an existing detached dwellinghouse, with a double dropped kerb access from the public highway, front driveway (see Photo 1 above), and long rear garden area (see Photo 2 below).

Photo 1: *Looking north-east towards the front of the Site, showing T24 to the right (as a point of reference).*

Relevant planning history

2.2 There is relevant planning history, in the context of this report and the proposed development. Specifically, this report considers the recently approved planning application for the neighbouring property of 97 Copse Wood Way (planning reference *22144/APP/2020/2637*), which is for the demolition of the existing dwellinghouse and the construction of a new dwellinghouse in its place (i.e., the same as for this Site).

2.3 The arboriculturally significant detail of this neighbouring approved development is that it includes details that affect some of the surveyed trees (notably, T20 and T21), which includes the provision of submitted arboricultural details that were considered within the decision.

Geotechnical information

British Geological Survey

2.4 The *British Geological Survey* ('BGS') provides on-line information, regarding the general soil properties of an area, including the underlying bedrock and any superficial deposits that overlay the bedrock. This information indicates that the Site is situated upon a bedrock of *Lambeth Group* (comprised of clays, sands, and silts), over which no superficial deposits are recorded.

2.5 There are no publicly available borehole logs within or adjacent to the Site that are provided by the BGS.

Root morphology

2.6 Soils where the clay content is significant will tend to encourage tree root growth at shallower depths - often, within the upper 600mm of soil[1]. Where other soil components are present to greater extents, root morphology may differ, though impermeable layers of heavy compacted clay may restrict penetrative root growth, which may influence how far roots radiate from the stem of the tree to acquire nutrients.

Photo 2: *Looking south-west towards the rear of the existing dwellinghouse, showing T4 to the left (as a point of reference).*

1 - Forestry Commission. (2005) Information Note FCN078 - The influence of soils and species on tree root depth.

3 TECHNICAL ARBORICULTURAL DETAILS

Landscape details

Distribution

3.1 The surveyed trees and other forms of vegetation are generally located along the edges of the Site (including beyond its bounds), with the central length of the Site comprising the driveway, dwellinghouse, and rear garden lawn. T20 and T21 are located along the boundary with 97 Copse Wood Way and are close to the existing dwellinghouses either side (see Photo 4 below).

Photo 3: Looking north towards the front of the Site, from adjacent to T24, showing T20-T21 (rear centre).

Visibility

3.2 The surveyed trees that are located to the front of (i.e., to the south-west) the existing dwellinghouse comprise the most visible trees, given that they are visible from the public realm (i.e., the highway).

3.3 Views of the trees within the rear gardens of the Site are comparatively more limited, given that the existing dwellinghouses along the street obscure direct views (that are instead limited to glimpsed and partial views of upper canopies).

BS5837 details

Survey criteria

3.4 The surveyed trees and other vegetation items have been generally categorised, in terms of the arboricultural and landscape criteria as defined in BS5837. These criteria consider the arboricultural merits of individual trees, in addition to the wider value afforded in contributing to the character of the landscape.

BS5837 categorisation

3.5 In BS5837 terms, the surveyed trees and other forms of vegetation comprise:

- *Category A* (i.e., high-quality): 1no. tree.
- *Category B* (i.e., moderate-quality): 12no. trees and 1no. group.
- *Category C* (i.e., low-quality): 9no. trees.
- *Category U* (i.e., poor-quality): 1no. tree.

Photo 4: *Looking south-west towards the rear of the dwellinghouse, showing T7 (left) and T8 (centre).*

Root Protection Areas

3.6 Based on the ground conditions of the Site that includes the known or foreseeable presence of buried structures, in addition to the context within which the surveyed trees and other vegetation items are growing, the standardised circular RPAs have not been amended.

Statutory protections

Conservation Areas

3.7 The LPA publishes details of its *Conservation Areas* ('CAs') online. According to this information, the Site and any surveyed trees adjacent to the Site are not within a CA.

Tree Preservation Orders

3.8 The LPA publishes details of its *Tree Preservation Orders* ('TPOs') online. According to this information, TPOs do apply to some of the surveyed trees - specifically, including the mature trees that were present in 1986, which was the point at which *TPO 396* was made (given that the Site is affected by an area designation as *A1*). The relevant provisions of *The Town and Country Planning (Tree Preservation)(England) Regulations 2012* therefore apply, to these trees. However, this information is indicative and should not therefore be relied upon as definitive.

4 PLANNING POLICY AND GUIDANCE

National

Background information

4.1 Planning policy at national level is set out in the government's *National Planning Policy Framework* (the 'NPPF')[2] that was published in July 2021.

4.2 At this level, policy addresses the key principles of development. At its core, there is a presumption in favour of sustainable development incorporating good and durable design, by combining economic, social, and environmental strands in a balanced manner. Trees comprise an element of green infrastructure, which is one aspect of the environmental strand of sustainability.

National Planning Policy Framework 2021

4.3 In the context of the proposed development, the NPPF provides the following guidance that is relevant in terms of the surveyed trees:

- **Paragraph 131** - "*Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.*"
- **Paragraph 174** - "*Planning policies and decisions should contribute to and enhance the natural and local environment by: ... b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of ... trees and woodland*".

Greater London

Background information

4.4 Planning policy at the *Greater London* level is set out in *The London Plan* (the 'LP'). The current iteration of the LP was published, in March 2021.

2 - HMCLG. (2021) National Planning Policy Framework. UK: HMSO.

London Plan 2021

4.5 In the context of the proposed development, the LP provides the following guidance that is relevant in terms of the surveyed trees:

- **Policy G1 Green Infrastructure** - "*London's network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits*".
- **Policy G7 Trees and Woodlands** - "*Development proposals should ensure that, wherever possible, existing trees of value are retained. If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy*".

Local

Background information

4.6 Planning policy at the local level is currently set out in the LPA's *Strategic Policies 2012* and *Development Management Policies 2020* documents (the 'LDP').

4.7 The Site is also designated as an *Area of Special Local Character* (specifically, the *Copsewood Estate*). No particular document has been prepared for this area by the LPA, though the LDP does afford policy provision (as provided below).

Strategic Policies 2012 & Development Management Policies 2020

4.8 In the context of the proposed development, the current LDP provides the following guidance that is relevant in terms of the surveyed trees:

- **Policy EM4: Open Space and Informal Recreation** - "*The Council will seek to protect existing tree and landscape features and enhance open spaces with new areas of vegetation cover (including the linking of existing fragmented areas) including front and back gardens for the benefit of wildlife and a healthier lifestyle*".
- **Policy EM7: Biodiversity and Geological Conservation** - "*Hillingdon's biodiversity and geological conservation will be preserved and enhanced*".
- **Policy DMHB 5: Areas of Special Local Character** - "*Within Areas of Special Local Character, new development should reflect the character of the area and its*

original layout. Alterations should respect the established scale, building lines, height, design and materials of the area."

- **Policy DMHB 6: Gatehill Farm Estate and Copse Wood Estate Areas of Special Local Character** - "*Within the Gatehill Farm and Copse Wood Estates, new houses should: ... v) preserve the mature trees including boundary planting to reinforce existing landscaping and Estate settings*".
- **Policy DMHB14: Trees and Landscaping** - "*All developments will be expected to retain or enhance existing landscaping, trees, biodiversity or other natural features of merit.*"

5 ARBORICULTURAL IMPACT ASSESSMENT

Removals

Numerical data

5.1 The proposed development specifies the removal of 2no. trees (i.e., T7 and T19 - both are *Category C* trees), in addition to a small section of 1no. group (i.e., G13 - overall a *Category B* group, though the affected area of this group does not contain trees).

Photo 5: *Looking south-west towards the rear of the dwellinghouse, showing T7 (centre), T8 (right), and T19 (left).*

Reasons for removals

5.2 The removal of the section of G13 and T19 are specified, due to the proximity of these items to the proposed development area, combined with their small sizes. In straightforward terms, the removal of these items permits the effective demolition of the existing dwellinghouse and the subsequent construction of the proposed development.

5.3 The removal of T7 (see Photo 5 above) is more nuanced, by comparison. Its proximity to the works associated with the proposed development is one reason for its removal (i.e., there is a high risk of harm, especially in constructing the new dwellinghouse within its nominal RPA), though this is underpinned by the observation of the sub-dominant stem having died. This is a mature birch tree and as elements of the crown begin to die it is often the case that the tree has a limited remaining life expectancy, which is considered to be the case here. Therefore, overall, the removal (and replacement - discussed within the below sub-section) of this tree is deemed the most appropriate response.

Impacts of removals

5.4 The loss of these trees and section of vegetation will have a minor level of impact on the character of the public realm, in the case of T7, because its upper crown is visible from above roof elements of existing dwellinghouses. However, it is not a prominent feature of the Site and therefore the general prevailing qualities of the public realm (i.e., verdant and well-treed) will be retained - primarily, because the trees within the front area of the Site are to be retained, which protects this verdant image.

5.5 The loss of the section of G13 and of T19 will have no impact on the character of the public realm, as these are not visible from any public vantages.

Mitigation greening

5.6 At this stage of the planning process, the proposed development has provided nominal details regarding the planting of new trees and other forms of vegetation, to address the removal of the aforementioned items. In particular, a new tree is specified to be planted slightly further down the garden (i.e., further north), to replace T7.

5.7 Details relating to the provision of a landscape specification can be provided, in response to a suitable planning condition - this will need to include the confirmation of the species of new trees, most notably.

Pruning

Numerical data

5.8 The proposed development specifies the pruning of 1no tree (i.e., T20 - a *Category B* tree).

Photo 6: *Looking north-east towards the Site, along the western driveway access, showing T20-T21 (left).*

Reasons for pruning

5.9 The basis for the lifting of the crown element of T20 that overhangs the existing dwellinghouse's roof element (see Photo 2 above and Photo 6 below) is so that it sufficiently clears the proposed development's roof element - refer to *836-200-L-X01 Proposed Elevations*, which is part of the architectural package and is not provided within this Report.

5.10 The change in the roof element will affect the crown of T20, requiring the lifting of the crown by approximately 4m, though ensuring that this approach to crown lifting tapers with the angle of the roof element and maintains at least 1m separation from its ridge tiles (but not exceeding 2m).

5.11 In order to ensure that the pruning works adhere to the above principles, the final specification for crown lifting will need to be agreed between the appointed tree surgeon, arboriculturist, and architect, during a Site visit, once the precise points of the roof element are clearly marked.

Impacts of pruning

5.12 The impact arising from the crown lifting of T20 is considered to be low, in overall terms, given that the majority of its crown will be retained and with the removed elements likely being limited to small side laterals growing over the existing dwellinghouse at lower levels.

5.13 The removal of small side lateral ensures that the structural form and condition of the tree is generally maintained, and by avoiding a larger scale of pruning works this is likely to have only a minor physiological impact on its overall condition. In visual terms, this ensures that the prevailing form and bulk of this tree is sustained, which in turn will not detract from its amenity value.

Retained tree juxtapositions

5.14 In relation to the retained trees and vegetation, the proposed development does not place any significant increased pressure upon these items that may result in inappropriate management (e.g., major branch removal or heavy pruning), noting that the crown of T20 can be appropriately pruned so that there is no major change in proximity (when observing that the tree currently is close to the existing roof element, which is a relationship that will not alter). The proposed development is therefore considered to be acceptable, regarding its juxtaposition to the retained trees and vegetation.

Demolition works

General protection details

5.15 The TPP at Appendix A sets out the specifications for tree protection that are associated with the implementation of the proposed development, based on the details that are currently available. This TPP includes an AMS, which provides some baseline information relating to the installation and management of tree protection measures.

Access and logistics

5.16 The means of access into the Site for works associated with the proposed development will utilise the existing two points of entry, given that these points of entry are established highway crossovers.

5.17 The retention of T20 and T21 within the front area of the Site does mean that the precise approach to access around the existing dwellinghouse - in addition to the approach to demolition - must consider the presence of these trees. The TPPs at Appendix A sets out the baseline approach to protection, though following the appointment of a contractor to undertake the implementation of the proposed development it may be the case that these details require amendments by the Author (i.e., the project arboriculturist).

5.18 Overall, subject to compliance with the details of the TPPs and the appropriate development/refinement of details - the proposed development can be implemented in a manner where the approach to access and logistics presents a low level of a risk of harm to the retained trees.

Photo 7: *Looking north-west towards the corner of the dwellinghouse adjacent to the stem of T20 (left).*

Superstructure demolition

5.19 Within the area by T20 (as highlighted on the TPP at Appendix A - see also Photo 7 above), the demolition of the existing dwellinghouse will need to be undertaken in a controlled manner - specifically, by demolishing the dwellinghouse in a top-down and pull-back manner, which avoids the use of plant and other machinery beneath its crown, and focusses Site activities within the central area of the frontage of the Site that does not contain trees. Overall, this reduces the level of pressure within the area and therein reduces the risk of harm to T20, ensuring that the residual level of risk of harm is low.

Foundation demolition

5.20 The demolition of the existing foundation element of the dwellinghouse, where it overlaps the nominal RPA of T20, will need to be undertaken manually, to ensure that the surrounding soil is able to be protected from inadvertent disturbance.

5.21 While there are unlikely to be roots beneath this foundation element, it is very likely that they are present within the soil immediately surrounding the foundation (i.e., within the area highlighted on the TPP for requiring ground protection), which requires this controlled approach to the demolition of the foundation that in effect ensures that the level of risk of harm is maintained at a low level during the demolition process.

Construction works

General protection details

5.22 The TPP at Appendix A sets out the specifications for tree protection that are associated with the implementation of the proposed development, based on the details that are currently available. This TPP includes an AMS, which provides some baseline information relating to the installation and management of tree protection measures.

Access and logistics

5.23 The same matters as discussed within the sub-section starting at paragraph 5.16 apply, for the construction phase.

Foundation construction

5.24 The position of the proposed development is no closer to the stems of T20 and T21 than is the case for the existing dwellinghouse. Therefore, subject to compliance with the details of the TPP for the protection of their RPAs within the 'live' area of the Site, the foundation element of the new dwellinghouse can be constructed in a manner that does not result in any increased impact to these trees.

Superstructure construction

5.25 For the same reasons as outlined above at paragraph 5.24, the construction of the superstructure element of the new dwellinghouse can be completed in a manner that appropriately protects T20 and T21.

5.26 However, further information will need to be incorporated into the TPP by the arboriculturist, once details relating to scaffolding is determined. However, scaffolding can be erected in a manner that does not require ground excavations and therefore the residual level of the potential risk of harm to these trees from scaffold erection is low.

Construction of light structures and surfaces

5.27 The proposed development does not include details relating to hard and soft landscaping, within the front area of the Site. It is assumed that the existing front driveway will be retained, based on current available information.

5.28 At the rear of the proposed dwellinghouse, a new timber decking area is specified over the nominal RPA of an off-Site tree (i.e., T8), within an area affecting 8% of the RPA. At its closest distance the decking area is approximately 3.5m from its stem. The basis of the approach to the design of this decking area will be to construct it above the existing ground level, so that the decking area is constructed upon small screw piles onto which the decking rests, to enable the creation of a void beneath, for air and water ingress into the soil and thus the benefit of this tree. Overall, this decking area is considered to have a low level of risk of harm to T8, subject to compliance with these baseline design principles.

Landscaping works

5.29 Landscaping operations will typically take place at the end of the construction period. These works will normally require the removal of barrier fencing, to facilitate the required access for works. There is a risk that plant and machinery may damage the soil structure within which tree roots are growing.

5.30 These risks can be managed, by maintaining good professional standards of work and by working in accordance with an AMS. The principle of avoiding soil disturbance or changes in levels within the RPAs of retained trees must be followed, unless advice has been obtained by the project arboriculturist.

Services and utilities

5.31 At this stage of the planning process, details pertaining to the location of new service runs and any required access to existing runs are not established. In this context, it is

not possible to determine the level of impact of this element of the designs to the retained trees.

5.32 In the eventuality that access to existing service runs or to install new service runs involves work operations within the RPA of the retained trees, the impact to the trees can be managed by following the recommendations of BS5837, which includes as a normative reference the *National Joint Utilities Guidance*[3].

3 - NJUG. (2007) Volume 4: Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees - Issue 2. UK: National Joint Utilities Group.

6 CONCLUSIONS

6.1 The proposed development specifies the removal of 2no. trees, in addition to a small section of 1no. Group. The loss of these from the Site will have only a minor impact on the character of the public realm - the same applies to the specified pruning to T20.

6.2 The proposed development indicates the planting of new trees, to address the aforementioned removals to an appropriate extent. There is sufficient space within the front and rear areas of the Site, for tree planting, in general terms.

6.3 The retained trees are able to be protected so that the residual risk and level of harm to these trees is low, during works to demolish the existing dwellinghouse and construct the new dwellinghouse, subject to compliance with the details of this Report (including the TPPs), and the area adjacent to T20 and T21 will need to be most carefully managed.

6.4 Further information can be provided, through the production of a detailed AMS, which incorporates logistical details as can be provided by an appointed main contractor. Typically, these documents are provided in response to planning conditions.

7 APPENDICES CONTENTS

APPENDIX A - Plans

- 201044-P-10 Tree Survey
- 201044-P-11 Proposed Layout and Tree Works
- 201044-P-12 Tree Protection Plan for Demolition
- 201044-P-13 Tree Protection Plan for Construction

APPENDIX B - Schedules

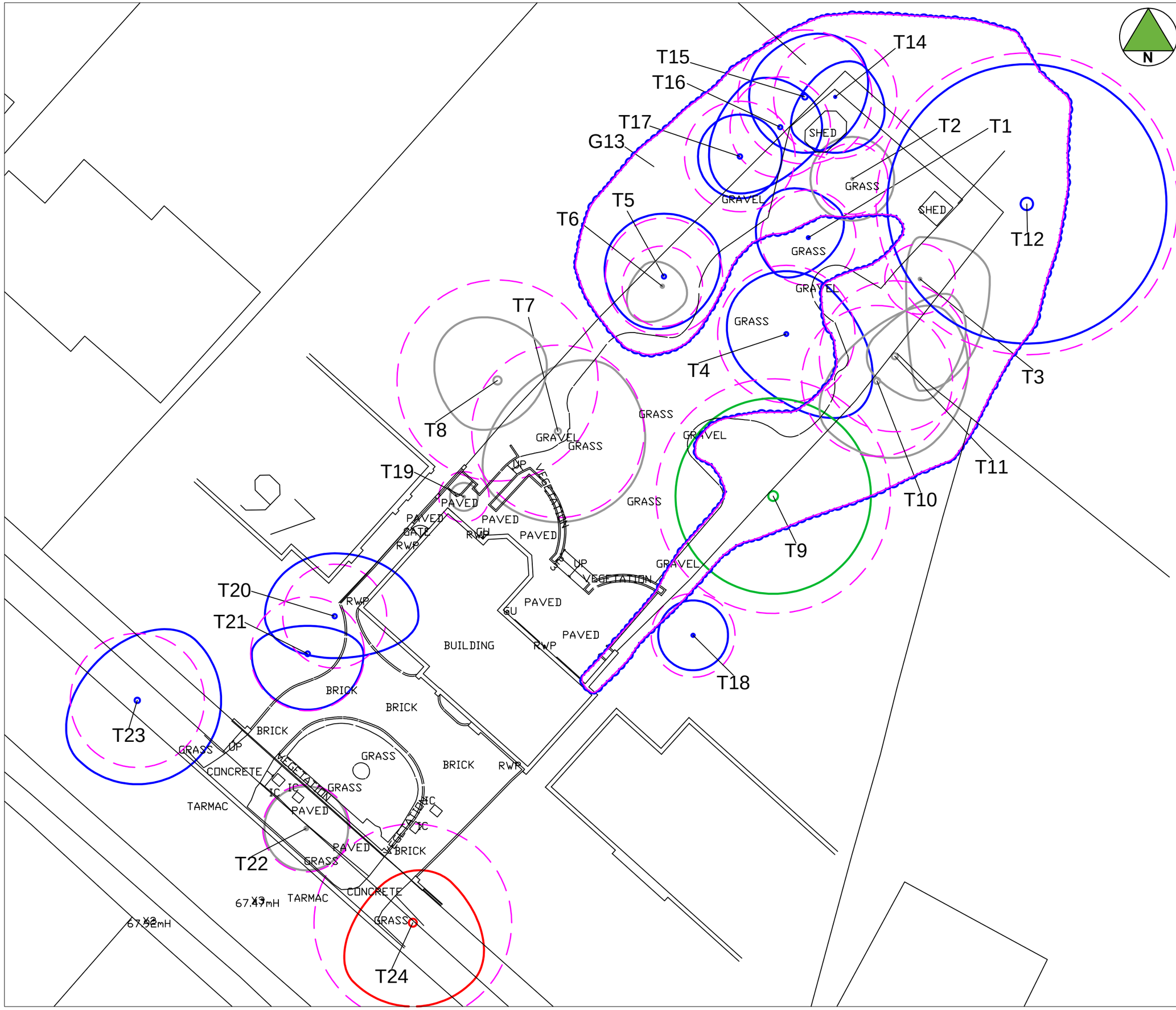
- 201044-PD-10 Tree Schedule
- 201044-PD-12 Tree Work Schedule

APPENDIX C - Ground protection

- Ground Protection examples

APPENDIX A - Plans

- 201044-P-10 Tree Survey
- 201044-P-11 Proposed Layout and Tree Works
- 201044-P-12 Tree Protection Plan for Demolition
- 201044-P-13 Tree Protection Plan for Construction



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BS 5837:2012 TREE RETENTION CATEGORIES

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years or young tree with a stem diameter below 150mm.

Category U
Those in such a condition that the tree cannot realistically be retained as living trees in the context of the current land use for longer that 10 years.

BS5837 Root Protection Areas
Precautionary areas within which tree roots and soil structure must be protected. All works within these areas will require special methods of work

REV	DATE	DESCRIPTION	DRAWN
-	xx.xx.xx	-	xx
-	02.11.20	Base Drawing TOPO	

Title
Tree Survey

Client
Homeowner of 99 Copse Wood Way

Project
99 Copse Wood Way, Northwood, Middlesex HA6 2TU

Date	Drawn by	Checked by
November 2020	HR	-

Drawing No	Rev	Scale
201044-P-10	-	1:250@A

DO NOT SCALE Use only figured dimensions

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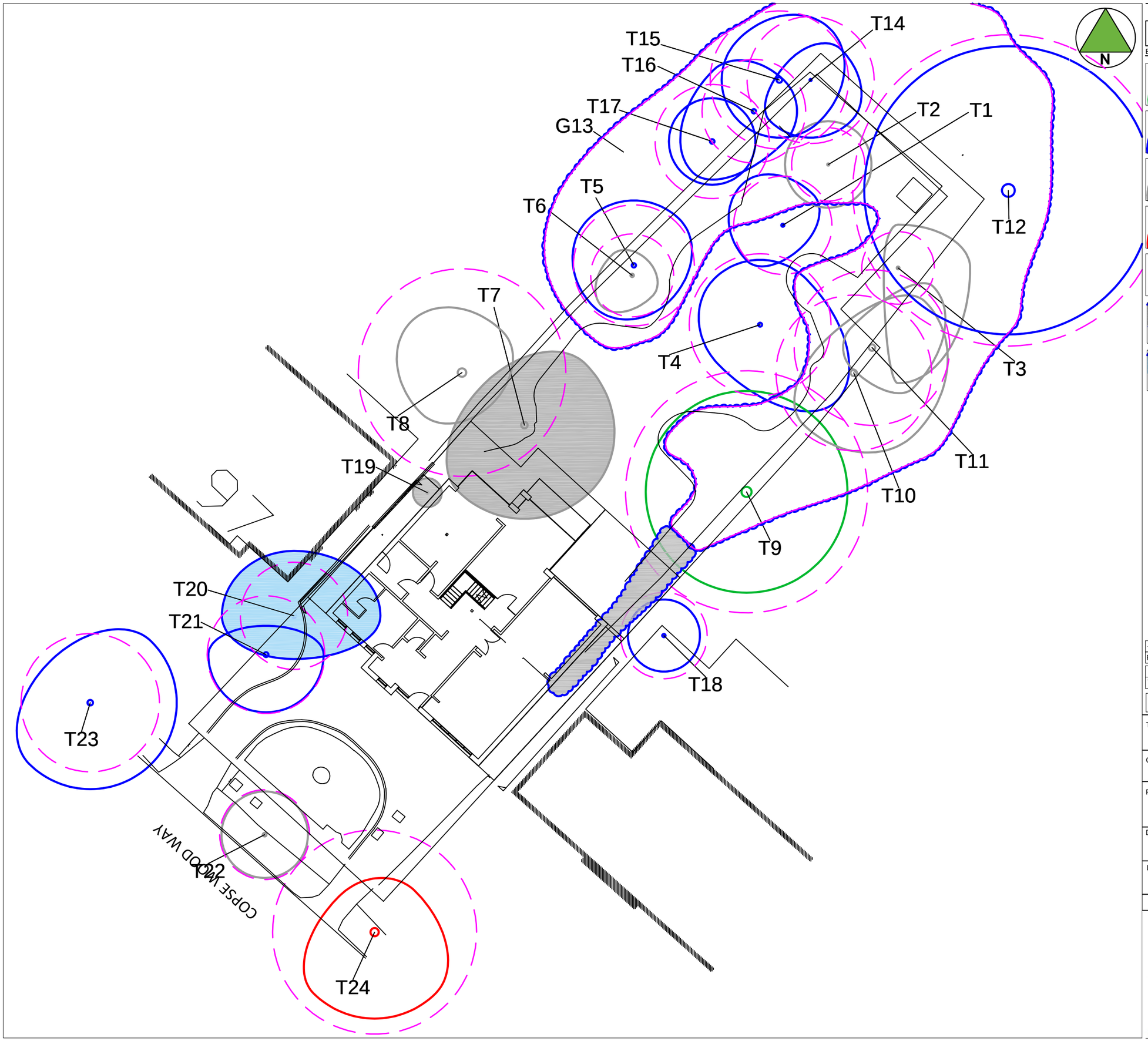

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BS5837 Root Protection Areas
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Trees to be removed shown shaded

Crown lift the area that overhangs the roof element of the proposed development, ensuring at least 1m of separation from the proposed level of the ridge tiles (but not exceeding 2m separation), and otherwise ensuring an even taper that runs parallel with the taper of the roof. Final specification for crown lifting to be agreed between the appointed arborist, arboriculturist, and architect, during a Site visit, once the precise levels of the roof element are clearly marked and prior to the construction of the new dwellinghouse.

REV	DATE	DESCRIPTION	DRAWN
-	xx.xx.xx	-	xx

Base Drawing

-	08.11.20	0836-200-L-10 P01 Proposed Site Plan

Title
Tree Works Plan

Client
Homeowner of 99 Copse Wood Way

Project
99 Copse Wood Way, Northwood, Middlesex HA6 2TU

Date	Drawn by	Checked by
October 2021	HR	-
Drawing No	**Rev**	**Scale**
201044-P-11	-	1:250@A3

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PRELIMINARY ARBORICULTURAL METHOD STATEMENT

TREE WORKS

Only the tree works specified within this report may be undertaken, after the appropriate planning consents have been acquired and in order to implement the consent. In the event of any uncertainty regarding tree works, the retained arboricultural consultant will be consulted and where appropriate the Local Planning Authority.

All tree works will be undertaken, in accordance with the best-practice recommendations provided in BS 3998:2010. The statutory responsibilities as outlined in the Wildlife and Countryside Act 1981 (as amended) and the Habitat Regulations 2010 will also be complied with.

TREE PROTECTION FENCING

The tree protection fencing and (where appropriate) ground protection, will be installed as specified within this plan, prior to the commencement of any demolition and construction works. No plant or materials will be delivered to site prior to the construction of the tree protective fencing other than those required to install the tree protection fencing. On every third panel, a sign will be fixed that states "*Tree Protection Zone (TPZ). Keep out. Any incursion into this area must be agreed in advance with the retained arboricultural consultant and Local Planning Authority.*" An example of this sign is provided within this plan.

The position of the tree protection fencing must not be amended and no individual panels will be uncoupled, without the agreement of the retained arboricultural consultant and/or Local Planning Authority.

SERVICES AND DRAINAGE

The installation of drainage runs, manholes, storage tanks, and utilities will be positioned outside the root protection areas of retained trees. If the installation of new services and drainage runs are required within the root protection areas (RPAs) of retained trees, all methods of working will follow the guidance within Table 3 of BS 5837 or the National Joint Utilities Group's (NJUG) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees (volume 4, issue 2).

Excavation works within the RPAs of retained trees will be undertaken manually with the use of hand tools only (under the supervision of the retained arboricultural consultant), unless otherwise agreed in advance by the retained arboricultural consultant. It is recommended that an air lance - and if required a soil vacuum - is used, to excavate service trenches within RPAs. If soil conditions are not suitable for this method of excavation, alternative hand tools can be used once agreed in advance by the retained arboricultural consultant.

All roots greater than 25mm in diameter will be retained and will immediately be wrapped in hessian or another appropriate material, to prevent desiccation and temperature fluctuations. Roots will be pushed aside to allow for runs to be installed, where this is practical and without causing root damage.

No machinery will be permitted within the TPZ, at any time, unless agreed in advance with the retained arboricultural consultant.

NO-DIG CONSTRUCTION AREAS

Areas that will require no-dig methods of construction are shown within this plan. Working methods within these areas will comply with the details outlined in the main report and in advance of works being undertaken will be agreed with the retained arboricultural consultant.

ARBORICULTURAL CLERK OF WORKS

The monitoring of activities at the Site will occur, at the following points:

- To sign-off the tree protection measures;
- To sign-off the tree works;
- At other points as specified within this Report and the TPP.

It will be the responsibility of the main contractor (or other managing individual or organisation) to confirm the date and time of attendance, providing at least five working days of notice so that the project arboriculturist can confirm attendance.

GENERAL PROTECTION METHODS

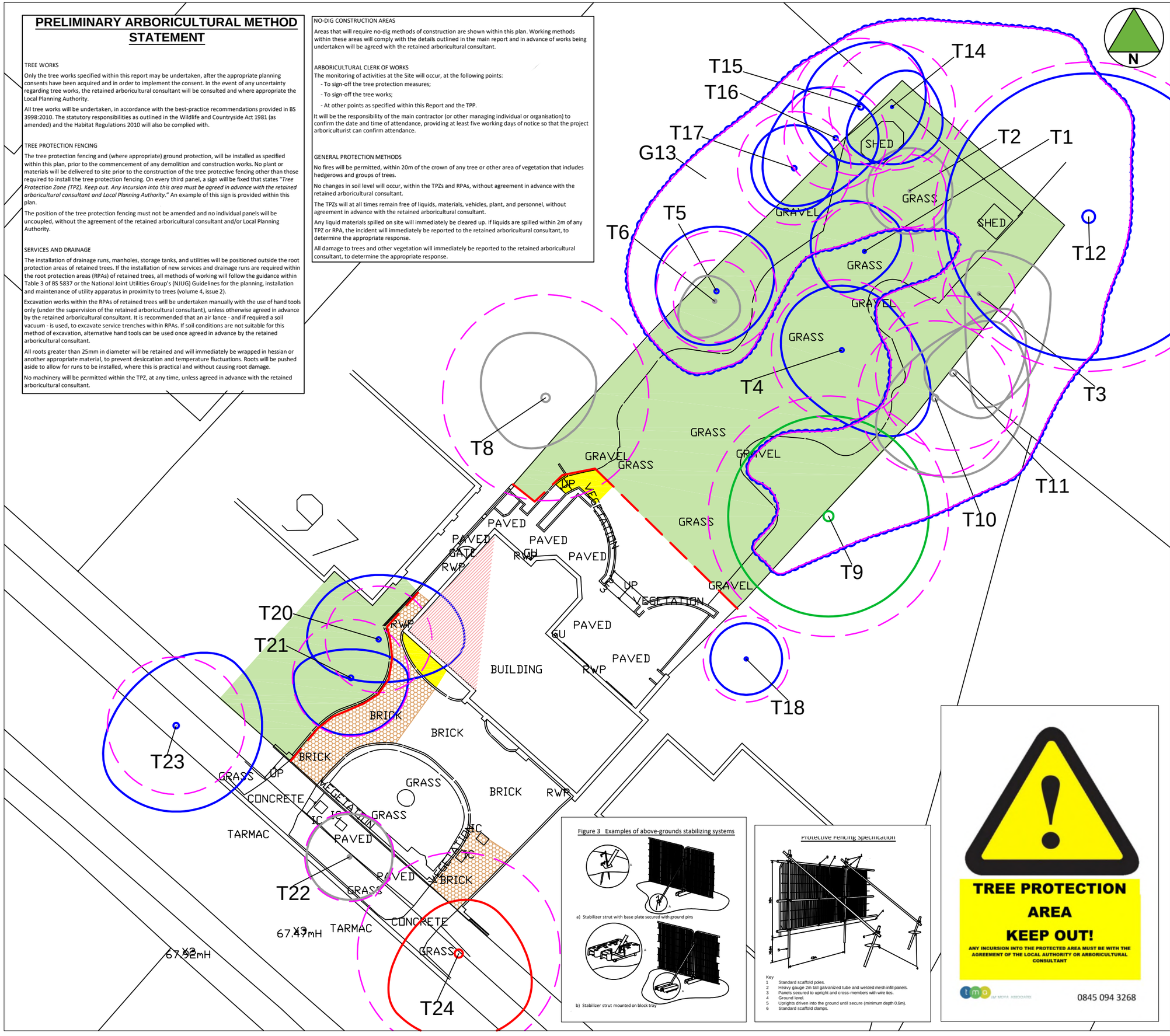
No fires will be permitted, within 20m of the crown of any tree or other area of vegetation that includes hedgerows and groups of trees.

No changes in soil level will occur, within the TPZs and RPAs, without agreement in advance with the retained arboricultural consultant.

The TPZs will at all times remain free of liquids, materials, vehicles, plant, and personnel, without agreement in advance with the retained arboricultural consultant.

Any liquid materials spilled on site will immediately be cleared up. If liquids are spilled within 2m of any TPZ or RPA, the incident will immediately be reported to the retained arboricultural consultant, to determine the appropriate response.

All damage to trees and other vegetation will immediately be reported to the retained arboricultural consultant, to determine the appropriate response.



The original of this drawing was produced in colour -a monochrome copy should not be relied upon.

BS 5837:2012 TREE RETENTION CATEGORIES

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

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.

Category U
Those in such a condition that the tree cannot realistically be retained as living trees in the context of the current land use for longer that 10 years.

Position of protective fencing and tree protection zones.

Existing ground levels to be retained. No excavations permitted. Additional ground protection to be installed, above the existing driveway surface, to protect the soil layer from damage that is dependent on the applied gross loads – refer to Appendix C for examples, with final specifications to be agreed by the project arboriculturist.

Existing dwellinghouse superstructure to be demolished in a top-down and pull-back approach at all times pulling the superstructure down and away from T20 and T21 (i.e., working from the north-east, east, and south-east). Foundation element to be manually demolished, within the nominal RPA of T20. No excavations to occur, beyond the immediate lateral extents of the foundation element.

Existing ground levels to be retained. No excavations permitted. Additional ground protection to be installed, above the existing soft surface, to protect the soil layer from damage that is dependent on the applied gross loads – refer to Appendix C for examples, with final specifications to be agreed by the project arboriculturist.

-	xx.xx.xx	-	xx
REV	DATE	DESCRIPTION	DRAWN
Base Drawing			
-	02.11.20	TOPO	

Title
Tree Protection for Demolition

Client
Homeowner of 99 Copse Wood Way

Project
99 Copse Wood Way, Northwood, Middlesex HA6 2TU

Date	Drawn by	Checked by
October 2021	HR	-
Drawing No	**Rev**	**Scale**
201044-P-12	-	1:250@A3

DO NOT SCALE Use only figured dimensions

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PRELIMINARY ARBORICULTURAL METHOD STATEMENT

TREE WORKS

Only the tree works specified within this report may be undertaken, after the appropriate planning consents have been acquired and in order to implement the consent. In the event of any uncertainty regarding tree works, the retained arboricultural consultant will be consulted and where appropriate the Local Planning Authority.

All tree works will be undertaken, in accordance with the best-practice recommendations provided in BS 3998:2010. The statutory responsibilities as outlined in the Wildlife and Countryside Act 1981 (as amended) and the Habitat Regulations 2010 will also be complied with.

TREE PROTECTION FENCING

The tree protection fencing and (where appropriate) ground protection, will be installed as specified within this plan, prior to the commencement of any demolition and construction works. No plant or materials will be delivered to site prior to the construction of the tree protective fencing other than those required to install the tree protection fencing. On every third panel, a sign will be fixed that states "*Tree Protection Zone (TPZ). Keep out. Any incursion into this area must be agreed in advance with the retained arboricultural consultant and Local Planning Authority.*" An example of this sign is provided within this plan.

The position of the tree protection fencing must not be amended and no individual panels will be uncoupled, without the agreement of the retained arboricultural consultant and/or Local Planning Authority.

SERVICES AND DRAINAGE

The installation of drainage runs, manholes, storage tanks, and utilities will be positioned outside the root protection areas of retained trees. If the installation of new services and drainage runs are required within the root protection areas (RPAs) of retained trees, all methods of working will follow the guidance within Table 3 of BS 5837 or the National Joint Utilities Group's (NJUG) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees (volume 4, issue 2).

Excavation works within the RPAs of retained trees will be undertaken manually with the use of hand tools only (under the supervision of the retained arboricultural consultant), unless otherwise agreed in advance by the retained arboricultural consultant. It is recommended that an air lance - and if required a soil vacuum - is used, to excavate service trenches within RPAs. If soil conditions are not suitable for this method of excavation, alternative hand tools can be used once agreed in advance by the retained arboricultural consultant.

All roots greater than 25mm in diameter will be retained and will immediately be wrapped in hessian or another appropriate material, to prevent desiccation and temperature fluctuations. Roots will be pushed aside to allow for runs to be installed, where this is practical and without causing root damage.

No machinery will be permitted within the TPZ, at any time, unless agreed in advance with the retained arboricultural consultant.

NO-DIG CONSTRUCTION AREAS

Areas that will require no-dig methods of construction are shown within this plan. Working methods within these areas will comply with the details outlined in the main report and in advance of works being undertaken will be agreed with the retained arboricultural consultant.

ARBORICULTURAL CLERK OF WORKS

The monitoring of activities at the Site will occur, at the following points:

- To sign-off the tree protection measures;
- To sign-off the tree works;
- At other points as specified within this Report and the TPP.

It will be the responsibility of the main contractor (or other managing individual or organisation) to confirm the date and time of attendance, providing at least five working days of notice so that the project arboriculturist can confirm attendance.

GENERAL PROTECTION METHODS

No fires will be permitted, within 20m of the crown of any tree or other area of vegetation that includes hedgerows and groups of trees.

No changes in soil level will occur, within the TPZs and RPAs, without agreement in advance with the retained arboricultural consultant.

The TPZs will at all times remain free of liquids, materials, vehicles, plant, and personnel, without agreement in advance with the retained arboricultural consultant.

Any liquid materials spilled on site will immediately be cleared up. If liquids are spilled within 2m of any TPZ or RPA, the incident will immediately be reported to the retained arboricultural consultant, to determine the appropriate response.

All damage to trees and other vegetation will immediately be reported to the retained arboricultural consultant, to determine the appropriate response.

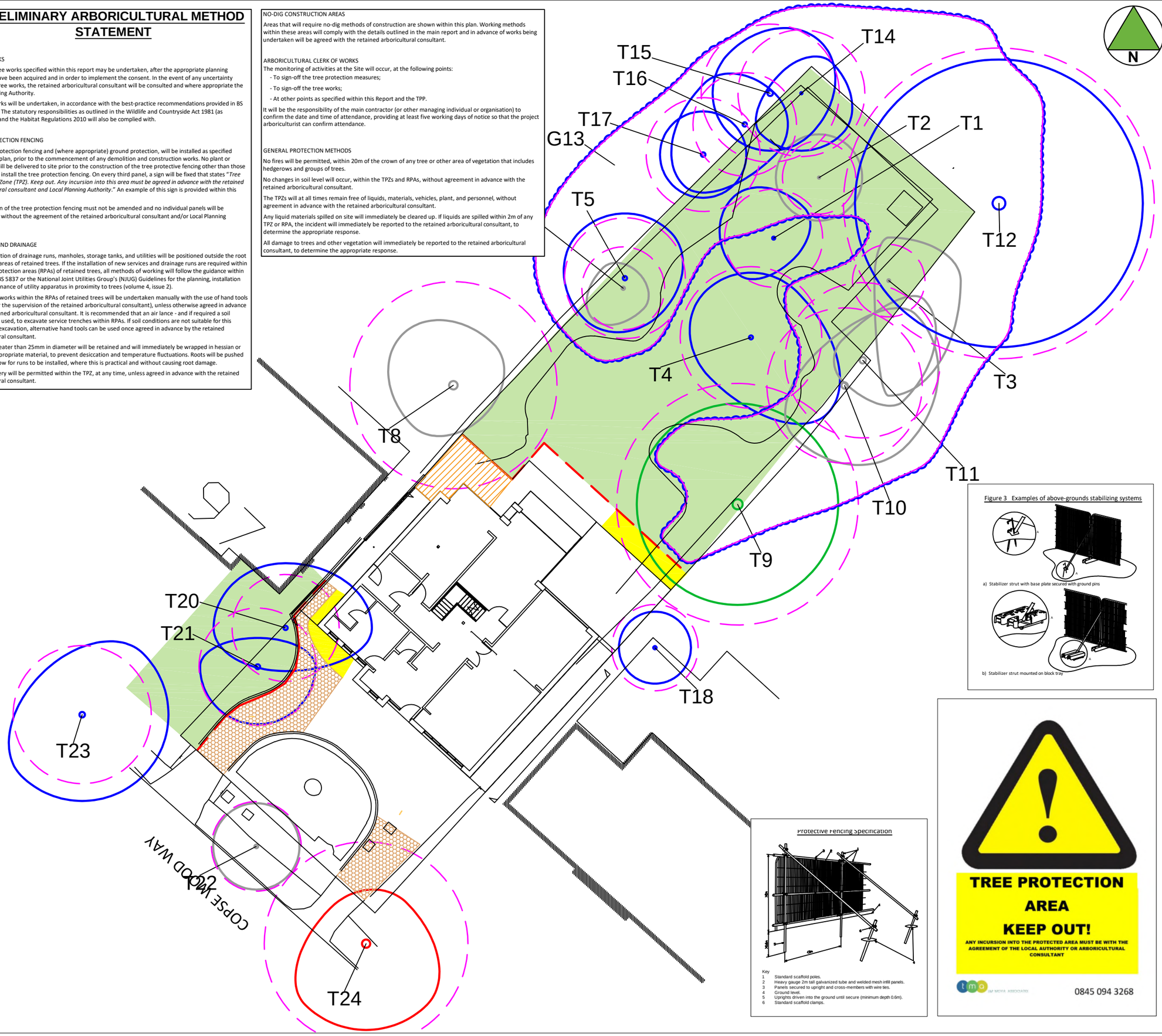

Figure 3 Examples of above-grounds stabilizing systems

a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray

Protective Fencing Specification

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

0845 094 3268

The original of this drawing was produced in colour -a monochrome copy should not be relied upon.

BS 5837:2012 TREE RETENTION CATEGORIES

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

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.

Category U
Those in such a condition that the tree cannot realistically be retained as living trees in the context of the current land use for longer that 10 years.

Position of protective fencing and tree protection zones.

Existing ground levels to be retained. No excavations permitted. Additional ground protection to be installed, above the existing driveway surface, to protect the soil layer from damage that is dependent on the applied gross loads – refer to Appendix C for examples, with final specifications to be agreed by the project arboriculturist.

Existing ground levels to be retained. No excavations permitted. Additional ground protection to be installed, above the existing soft surface, to protect the soil layer from damage tha is dependent on the applied gross loads – refer t Appendix C for examples, with final specification to be agreed by the project arboriculturist.

Existing ground levels to be retained. No excavations permitted. Additional ground protection to be installed, above the existing soft surface, to protect the soil layer from damage tha is dependent on the applied gross loads – refer t Appendix C for examples, with final specification to be agreed by the project arboriculturist. Ground protection to be removed, after the completion of the construction phase, to facilitate landscaping. New timber decking to be installed above the existing ground level, with decking founded on small screw piles to permit the creat of a void between the existing ground level and t base of the decking structure.

-	xx.xx.xx	-	xx
REV	DATE	DESCRIPTION	DRAWN

Base Drawing		
-	08.11.21	0836-200-L-10 P01 Proposed Site Plan

Title
Tree Protection for Construction

Client
Homeowner of 99 Copse Wood Way

Project
99 Copse Wood Way, Northwood, Middlesex HA6 2TU

Date	Drawn by	Checked by
October 2021	HR	-
Drawing No	**Rev**	**Scale**
201044-P-13	-	1:250@A

DO NOT SCALE Use only figured dimensions

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APPENDIX B - Schedules

- 201044-PD-10 Tree Schedule
- 201044-PD-12 Tree Work Schedule

201044-PD-10-Tree schedule (BS5837)

TIM MOYA ASSOCIATES

201044 - 99 Copse Wood Way ARB

Tree ID	No.	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m) N	NE	E	SE	S	SW	W	NW	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Tree T1	1	Betula pubescens (Downy Birch)	13.0	28 COM	2		3.0		2.0		3.5		4.0	5.0		Mature	Structural condition Fair. Physiological condition Fair. Decay / structural defect - Base. Epicormic growth - Bole / principal stems. Raised surface roots. Stems - Co-dominant.	30/10/2020	36.6	3.4	20-40	B2
Tree T2	1	Aesculus hippocastanum (Horse Chestnut)	9.0	21 COM	2		3.0		3.0		3.0		3.0	2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Buttresses / buttress roots - Minor adaptive growth / moderate development. Decay / structural defect - Base. Fork - Weak with included bark.	30/10/2020	20.4	2.5	10-20	C2
Tree T3	1	Betula pubescens (Downy Birch)	11.0	21	1	3.0		5.0		8.0		1.0		3.0		Early Mature	Structural condition Poor. Physiological condition Fair. Decay / structural defect - Bole. Leaning trunk - Major.	30/10/2020	20.0	2.5	10-20	C2
Tree T4	1	Betula pubescens (Downy Birch)	17.0	41 COM	2		4.5		7.5		4.0		4.5	3.0		Mature	Structural condition Fair. Physiological condition Fair. Buttresses / buttress roots - Minor adaptive growth / moderate development. Decay / structural defect - Base. Fork - Weak with included bark. Raised surface roots. Stems - Co-dominant.	30/10/2020	76.1	4.9	20-40	B1/B2
Tree T5	1	Betula pubescens (Downy Birch)	16.0	34 COM	2		4.5		3.5		4.0		4.5	5.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Base / stems obscured - Vegetation. Buttresses / buttress roots - Minor adaptive growth / moderate development. Decay / structural defect - Base. Fork - Weak with included bark.	30/10/2020	55.4	4.2	20-40	B2
Tree T6	1	Betula pubescens (Downy Birch)	9.5	24	1		1.5		2.0		3.0		2.0	3.5		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Competition - Adjacent trees.	30/10/2020	26.1	2.9	10-20	C2

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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201044 - 99 Copse Wood Way ARB

Tree ID	No.	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m) N	NE	E	SE	S	SW	W	NW	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Tree T7	1	Betula pubescens (Downy Birch)	16.0	51 COM	2		6.0		6.5		6.5		4.0	2.0		Mature	Structural condition Poor. Physiological condition Fair. Buttresses / buttress roots - Major adaptive growth / strong development. Decay / structural defect in crown limb / limbs - Major. Deadwood - Major. Decay / structural defect - Base. Decay / structural defect - Bole. Fork - Weak with included bark. Raised surface roots. Dead sub-dominant stem.	30/10/2020	119.9	6.2	10-20	C1/C2
Tree T8	1	Quercus robur (English Oak)	13.0	60	1		4.0		3.0		4.0		5.0	2.5		Mature	Structural condition Poor. Physiological condition Fair. Buttresses / buttress roots - Minor adaptive growth / moderate development. Crown reduction - Recent. Epicormic growth - Bole / principal stems.	30/10/2020	162.9	7.2	10-20	C1/C2
Tree T9	1	Quercus robur (English Oak)	16.0	70	1		7.0		7.0		7.0		7.0	2.5		Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Base / stems obscured - Vegetation. Form - Spreading crown.	30/10/2020	221.7	8.4	40+	A1/A2
Tree T10	1	Populus sp. (Poplar sp.)	18.0	45	1		7.0		6.0		5.0		3.0	6.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Base / stems obscured - Vegetation.	30/10/2020	91.6	5.4	10-20	C1/C2
Tree T11	1	Populus sp. (Poplar sp.)	16.0	45	1		6.0		4.0		2.0		2.0	6.0		Mature	Structural condition Poor. Physiological condition Fair. Access to inspect base - Not possible. Base / stems obscured - Vegetation.	30/10/2020	91.6	5.4	10-20	C2
Tree T12	1	Quercus robur (English Oak)	19.0	90	1	10.0		10.0		10.0		10.0		5.0		Mature	Structural condition Poor. Physiological condition Fair. Access to inspect base - Not possible. Base / stems obscured - Vegetation. Die-back - Upper crown. Deadwood - Major. Form - Spreading crown.	30/10/2020	366.4	10.8	20-40	B2

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Generated By MyTREES tree management software

201044 - 99 Copse Wood Way ARB

Tree ID	No.	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m) N	NE	E	SE	S	SW	W	NW	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Group G13	10	x Cupressocyparis leylandii (Leyland Cypress)	19.0	45 AVE										0.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Base / stems obscured - Vegetation. Numbers indicative. Comprises on- and off-Site vegetation.	30/10/2020			20-40	B2
	15	Rhododendron sp. (Rhododendron sp.)																				
	5	Populus sp. (Poplar sp.)																				
	20	Laurocerasus officinalis (Cherry Laurel)																				
	15	Ilex aquifolium (Holly)																				
	25	Fagus sylvatica (Common Beech)																				
	10	Corylus avellana (Common Hazel)																				
	5	Betula pubescens (Downy Birch)																				
Tree T14	1	Corylus avellana (Common Hazel)	6.0	36 COM	6		3.0		4.0		4.0		2.0	3.0		Mature	Structural condition Fair. Physiological condition Good. Deadwood - Major. Decay / structural defect - Base. Decay / structural defect - Bole. Multi-stemmed.	30/10/2020	61.1	4.4	20-40	B2
Tree T15	1	Populus sp. (Poplar sp.)	19.0	40	1		5.0		4.0		4.0		4.0	7.0		Mature	Structural condition Poor. Physiological condition Good. Decay / structural defect - Bole.	30/10/2020	72.4	4.8	20-40	B2

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Generated By MyTREES tree management software

201044 - 99 Copse Wood Way ARB

Tree ID	No.	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m) N	NE	E	SE	S	SW	W	NW	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Tree T16	1	Populus sp. (Poplar sp.)	19.0	30	1		3.0		3.0		6.0		4.0	7.0		Mature	Structural condition Poor. Physiological condition Good. Decay / structural defect - Bole.	30/10/2020	40.7	3.6	20-40	B2
Tree T17	1	Aesculus hippocastanum (Horse Chestnut)	11.0	33	1	3.0		3.0		3.0		3.0		5.0		Mature	Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees.	30/10/2020	49.3	4.0	20-40	B2
Tree T18	1	Populus sp. (Poplar sp.)	13.0	25	1	2.5		2.5		2.5		2.5		4.0		Early Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible.	30/10/2020	28.3	3.0	20-40	B1/B2
Tree T19	1	Juniperus sp. (Juniper sp.)	3.5	15	1	1.0		1.0		1.0		1.0		0.0		Mature	Structural condition Fair. Physiological condition Good.	30/10/2020	10.2	1.8	10-20	C2
Tree T20	1	Betula pendula (Silver Birch)	16.0	31	1	4.5		6.0		3.0		5.0		2.0		Mature	Structural condition Good. Physiological condition Good. Competition - Adjacent trees.	30/10/2020	43.5	3.7	20-40	B1/B2
Tree T21	1	Betula pendula (Silver Birch)	16.0	34	1	2.0		4.0		4.0		4.0		1.5		Mature	Structural condition Fair. Physiological condition Good. Base / stems obscured - Vegetation. Competition - Adjacent trees.	30/10/2020	52.3	4.1	20-40	B1/B2
Tree T22	1	Betula pendula (Silver Birch)	11.0	26	1	3.0		3.0		3.0		3.0		2.0		Mature	Structural condition Fair. Physiological condition Poor. Decline - Evident / observed.	30/10/2020	30.6	3.1	10-20	C1/C2
Tree T23	1	Quercus robur (English Oak)	13.0	40	1		6.0		6.0		6.0		4.0	3.0		Early Mature	Structural condition Fair. Physiological condition Good.	30/10/2020	72.4	4.8	20-40	B1/B2
Tree T24	1	Quercus robur (English Oak)	13.0	59	1		4.0		6.0		6.0		3.5	2.5		Mature	Structural condition Poor. Physiological condition Poor. Decline - Evident / observed. Deadwood - Major. Decay / structural defect - Base. Decay / structural defect - Bole. Epicormic growth - Bole / principal stems.	30/10/2020	157.5	7.1	0-10	U

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Generated By MyTREES tree management software

Table 1 of BS5837 (2012) **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see note)				
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 * Trees infected with pathogens of significance to 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			**RED**
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Tree that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricutural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	**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.	**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 150 mm	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**

201044-PD-12 Tree Work Schedule

TIM MOYA ASSOCIATES

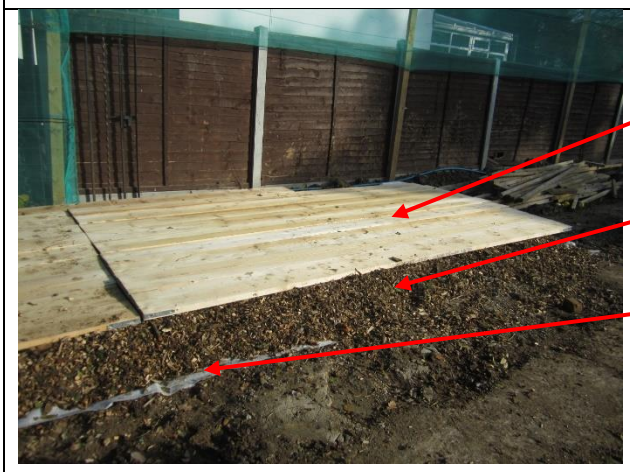
ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
T7	1 *Betula pubescens* Downy Birch	C1/C2	To facilitate development Fell - Ground level.	Proposed
G13	5 *Betula pubescens* Downy Birch 10 *Corylus avellana* Common Hazel 25 *Fagus sylvatica* Common Beech 15 *Ilex aquifolium* Holly 20 *Laurocerasus officinalis* Cherry Laurel 5 *Populus sp.* Poplar sp. 15 *Rhododendron sp.* Rhododendron sp. 10 *x Cupressocyparis leylandii* Leyland Cypress	B2	To facilitate development Fell - Ground level the area as highlighted on plan 201044-P-11 at Appendix A of the Report.	Proposed
T19	1 *Juniperus sp.* Juniper sp.	C2	To facilitate development Fell - Ground level.	Proposed
T20	1 *Betula pendula* Silver Birch	B1/B2	To facilitate development Lift low canopy - Specified extent. Crown lift the area that overhangs the roof element of the proposed development, ensuring at least 1m of separation from the proposed level of the ridge tiles (but not exceeding 2m separation), and otherwise ensuring an even taper that runs parallel with the taper of the roof. Final specification for crown lifting to be agreed between the appointed arborist, arboriculturist, and architect, during a Site visit, once the precise levels of the roof element are clearly marked and prior to the construction of the new dwellinghouse.	Proposed

APPENDIX C - Ground protection

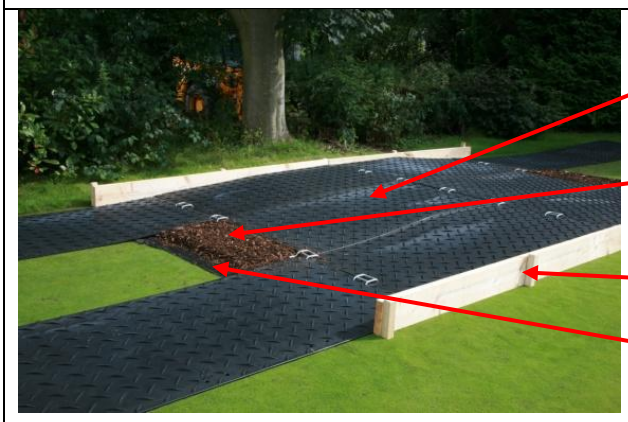
- Ground Protection examples

BS5837:2012 - Section 6.2.3.2 - Ground Protection Measures

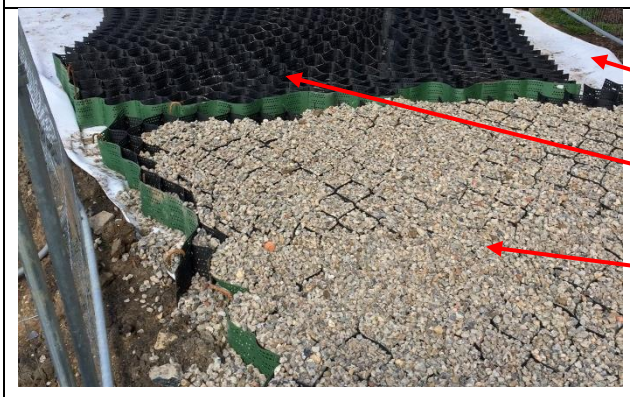
for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane



for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;



for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.



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