

Arboricultural Report

for planning purposes

67 Lower Queens Road Buckhurst Hill Essex IG9 6DS

July 2021

210537-PD-11

Project	210537-PD-11 – 67 Lower Queens Road, Buckhurst Hill
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1 EXECUTIVE SUMMARY

- 1.1 The key components and conclusions of this *Arboricultural Report* are as follows:
 - The proposed development comprises of the construction of a three bedroom dwellinghouse with associated car parking and landscaping.
 - No trees are required to be removed to facilitate the development. Tree pruning works
 are required to the purple leaved plum (T1); however, these are considered to be minor
 and will not have a notable impact on the health of the tree or its visual appearance
 within the surrounding local area.
 - The demolition of existing structures and hard surfacing within the Root Protection Area of a retained tree has been assessed and special working methods can be undertaken, as outlined within this report, to minimise any tree related impacts.
 - Retained trees can be successfully protected for the duration of the proposed development works as outlined within this report.

2 INTRODUCTION

Instruction

2.1 This *Arboricultural Report* (the 'Report') has been instructed by *Michael Daley* (the 'Client').

Author

2.2 My name is Charles McCorkell; I am a senior arboricultural consultant dealing with trees in relation to all forms of human activity including the built environment. I am a Professional Member of the Institute of Chartered Foresters and Arboricultural Association, I have a BSc Honours Degree in Arboriculture from the University of Central Lancashire and I am a LANTRA qualified professional tree inspector.

Proposed development

2.3 The proposed development at 67 Lower Queens Road ('the Site') is for the construction of a three bedroom dwellinghouse with associated car parking and landscaping ('the proposed development'), within the area administrated by *Epping Forest District Council* ('the LPA').

Scope

2.4 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

- 2.5 The Site was visited, and the trees and other vegetation surveyed, referring to the recommendations of BS5837, on 18/06/2021 by Tim Moya. The details of this survey are found within the report appendices.
- 2.6 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.



Image 1: Aerial view of the property and surrounding area

Report preparation

- 2.7 This report has been prepared, with reference to the following supplied documents and information:
 - proposed architectural plans.
- 2.8 The appendices of this report include:
 - Appendix A (plans); and
 - Appendix B (schedules).

Definition of terms

- 2.9 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 trees 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".

3 SITE INFORMATION

Current Site use

3.1 The Site is currently a semi-detached dwelling with detached brick built garages in the rear garden area (see Image 2 below).

Relevant planning history

3.2 This report has been prepared in response to a local planning authority request for an arboricultural survey and report to accompany the submitted planning application for the construction of a three bedroom dwellinghouse on the property.

Landscape character

- 3.3 The Site is within the urban area of Buckhurst Hill some 400m from an area of ancient semi-natural woodland to the west and opposite the Lower Queens Road Allotments. Nearby is a large area of green space associated with the River Roding which is about 130m to the southeast.
- 3.4 The site lies within the Northern Thames Basin National Character Area (Area 111) which is characterised by both agricultural land and suburban settlements. The river valleys and woodlands make this a very diverse landscape which is, in places, very well wooded.

Geotechnical information

- 3.5 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 on the boundary between an area of London clay and silt deposits associated with the route of the River Roding.
- 3.6 There are publicly available borehole logs from investigations about 200m to the south of the Site which record sandy clay to a depth of 4.3m.
- 3.7 Soils where the clay content is significant will tend to encourage tree root growth at shallower depths often, within the upper 600mm of soil¹. 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. However, where there is a significant proportion of sand in the soil this may create conditions for improved drainage and deeper rooting.

3.8 Clay soils are liable to shrinkage as a result of desiccation cause by tree roots and precautions will be needed to ensure that building foundations are designed to accommodate this risk.

4 TECHNICAL ARBORICULTURAL DETAILS

Landscape details

- 4.1 Three trees were recorded on our survey, the largest of which is a purple leaved plum (T1 see Image 2 below). However, this is a tree of only moderate size which has been managed at a smaller size in the past and allowed to regrow. The consequence of this management is that the crown is now congested with rubbing branches and the form is rather spreading. This tree has been categorised as of low quality following the guidance in Table 1 of BS5837.
- 4.2 All three trees recorded are rear garden trees which are not clearly visible from a position in front of 67 Lower Queen Road. However, the trees are visible from an access driveway to the east of the site. Trees T2 and T3 are of little significance (see Image 2 and Image 3 below).



Image2: T1 (purple leaved plum - centre) with T2 (pear) to the right



Image 3: Sumach (T3)

BS5837 details

- 4.3 The surveyed trees have been generally categorised, in terms of the arboricultural criterion as defined in BS5837, focussing on the individual merits of each tree primarily. In the context of this survey, it is not considered that the trees have sufficient landscape value to broaden their categorisation to include this criteria.
- 4.4 Root protection areas as defined in BS5837 have been shown on the drawings attached at Appendix A.

Statutory protections

- 4.5 According to the Epping Forest District Council (the LPA) website, the Site is not within a Conservation Area.
- 4.6 The LPA does not publish details of its *Tree Preservation Orders* ('TPOs') online. It is not therefore known, from this information, whether TPOs apply to any of the surveyed trees. No direct communications have been undertaken with the LPA, to obtain information relating to any TPOs.

5 PLANNING POLICY AND GUIDANCE

National

- 5.1 Planning policy at national level is set out in the government's *National Planning Policy Framework* (the 'NPPF')² that was revised in February 2019, which is supported by the *National Design Guide* (the 'NDG')³ that was published in October 2019.
- 5.2 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.
- 5.3 In the context of the proposed development, the NPPF provides the following guidance that is relevant in terms of the surveyed trees:
 - Paragraph 170 "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 of trees and woodland".

Local

- 5.4 Saved policy LL10 of the Epping Forest District Council Local Plan states: "The Council will refuse to grant planning permission for any development which it considers makes inadequate provision for the retention of:
 - trees; or
 - natural features, particularly wildlife habitats such as woodlands, hedgerows, ponds and watercourses; or
 - man-made features of historical, archaeological or landscape significance."

^{3 -} HMCLG. (2019) National Design Guide. UK: HMSO.

6 ARBORICULTURAL IMPACT ASSESSMENT

Removals

6.1 It will not be necessary to remove any trees on the Site in order to facilitate the proposed development.

Mitigation greening

6.2 The proposed development includes both front and rear garden areas as well a car parking provision. Although there are no detailed landscape plans to accompany the application, there is space for new landscaping and details can be provided in response to a suitably worded planning condition.

Pruning

- 6.3 The purple leaved plum (T1) will require some pruning of lower and lateral growth in order to allow space for the demolition of the existing garages and for scaffold erection around the proposed dwelling. These works will also provide a reasonable degree of separation from the proposed dwelling.
- 6.4 The pruning required to facilitate development is fairly minor and, indeed, substantially less than the reduction works that have been carried out in the past.

Demolition works

- 6.5 The demolition of the existing garage and hard surfaces on the Site will have the potential to impact upon the retained tree (T1). Where these operations are to take place within the root protection area (RPAs) of T1, special methods of work will be required. These specific areas are highlighted and precautionary measures outlined in the tree protection method statement at Appendix A. A working methodology is supplied below.
- 6.6 The removal of the existing garage and hard surfaces is required within the RPA of retained tree T1 as highlighted on the Tree Protection Plan at Appendix A.
 - All working operations within the tree RPA are required to be carried out under the guidance and supervision of the arboricultural clerk of works.
 - The existing garage will be demolished away from the crown of the tree using the 'top down, pull back' method of works.
 - All loose material will be pulled away from the tree and stored outside its RPA for transportation off site.

- The existing garage has been built on a concrete slab and does not include footings. Working from within the demolished building footprint from an area of existing hard standing or temporary ground protection, mechanical breakers will be used to fracture the concrete slab and surrounding hard surfaces into small sections.
- Broken material will be manually lifted and removed, or pulled back using an excavator under supervision where appropriate, to a designated storage area located outside the RPAs of retained trees.
- The removal of any sub-base will be undertaken in a carful manner, ensuring that
 no excavation works occur beyond the depth of the built material and into the soil
 layer below.
- Any roots exposed due the removal of hard standing will be covered with a layer
 of topsoil and the area irrigated to prevent root desiccation from occurring. An
 irrigation programme will be required where working operations are not due to
 commence immediately.

Construction works

6.7 The construction of the proposed dwelling will not require excavation or other works within the root protection area (RPAs) of retained trees. No special measures are therefore required to prevent root damage. However, it will be necessary to ensure that site operations do not cause damage to trees or the soil environment upon which they rely. Details of the measures to be taken to protect trees are included at Appendix A.

Landscaping works

- 6.8 The rear garden of the proposed dwelling is located within the RPA of retained tree T1. Following the removal of the existing garage and surrounding hard surfacing, a layer of topsoil will be spread across the tree's rooting area. The proposed garden levels are required to tie in with the existing levels surrounding the main stem of the tree.
- 6.9 Any new planting works required within the garden area and RPA of T1 must be undertaken manually with the use of hand tools only. Where roots greater than 25mm in diameter or large clumps of fibrous roots from T1 are encountered, these are required to be retained.

Services and utilities

6.10 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.
- 6.11 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*⁴.

7 CONCLUSIONS

Arboricultural impacts

7.1 The proposed development has minimal impacts upon trees and landscaping with the potential to enhance the landscape and amenities of the property and the wider area over the medium to long term. I therefore consider the proposals to be neutral to positive in landscape terms.

Landscape impacts

7.2 Given the limited impact the proposed development will have on retained trees, the provision of new formal landscaping is not considered a strict requirement of the development.

Policy compliance

7.3 The proposed development has complied with local planning policies, in relation to trees. Specifically, trees have been properly considered in formulating these proposals and alterations have been made to accommodate the retention of trees and to minimise impacts on retained trees.

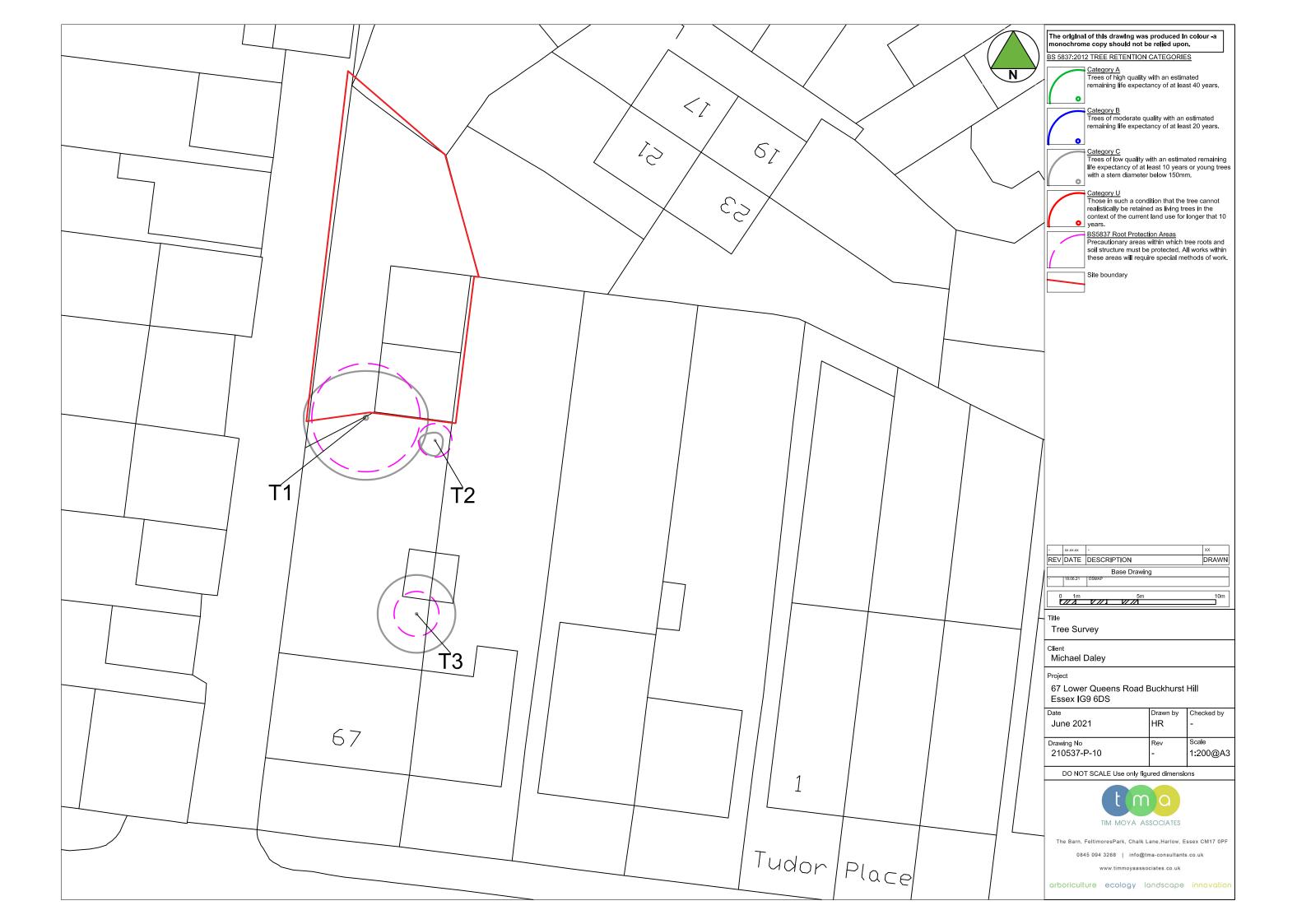
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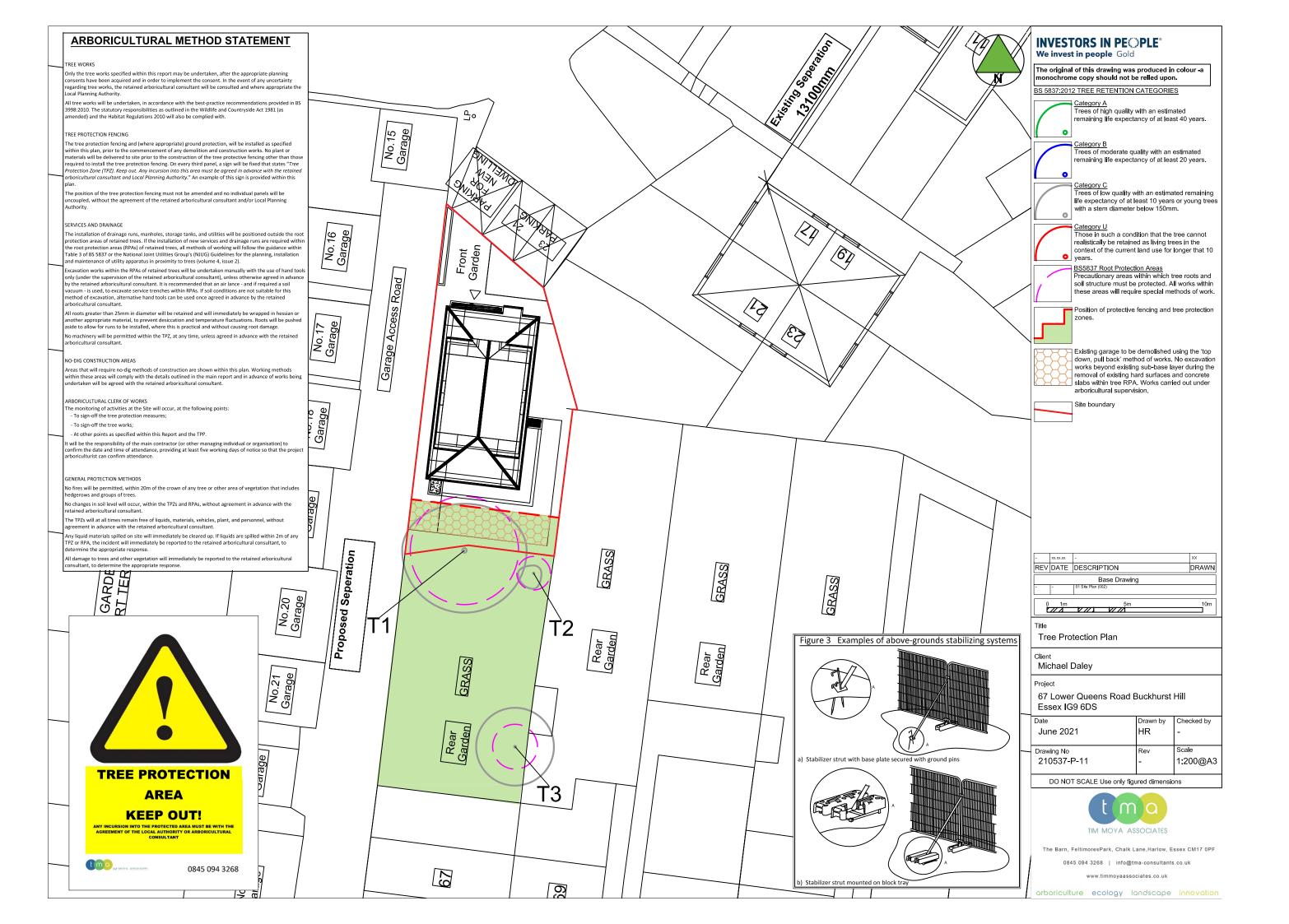
APPENDIX A - PLANS

- 210537-P-10 Tree Survey Plan
- 210537-P-11 Tree Protection Plan

APPENDIX B - SCHEDULES

- 210537-PD-10 Tree Schedule
- 210537-PD-12 Tree Work Schedule





210537-PD-10-Tree schedule (BS5837)



210537 - 67 Lower Queens Road, Buckhurst Hill

Tree ID	No	. Species	Height (m)	Stem diameter (cm)	No. of Stems	N	NE E		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	Prunus cerasifera 'Nigra' (Purple Cherry Plum)	9.0	29	1	3.0	4.0	4.0	4.0	1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Rubbing limbs. Previously reduced to 3.5m and regrown	18/06/2021	38.0	3.5	10-20	C2
Tree T2	1	Pyrus communis (Garden Pear)	2.0	9	1	0.5	0.5	1.0	1.0	1.0		Young	Structural condition Fair. Physiological condition Good.	18/06/2021	3.7	1.1	20-40	C1
Tree T3	1	Rhus typhina (Stag's Horn Sumach)	3.5	12	1	2.5	2.5	2.5	2.5	1.5		Early Mature	Structural condition Fair. Physiological condition Good.	18/06/2021	6.5	1.4	10-20	C1

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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Generated By

Summary table with retention category

	Tree	Total
C1	2	2
C2	1	1
Total	3	3

Summary table with life stage

	Tree	Total
Early Mature	2	2
Young	1	1
Total	3	3

Category and definition	Criteria (including subcategories	s where appropriate)	ldentificati	on on plan			
Trees unsuitable for retention (see not	ce)						
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land us 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						
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation				
Trees to be considered for retention							
Category A	Tree that are particularly good examples of	Trees, groups or woodlands of particular	Trees, groups or	GREEN			
Trees of high quality	their species, especially if rare or unusual; or those that are essential components of	visual importance as arboricutural and/or landscape features.	woodlands of significant conservation, historical,	OKLLIN			
with an estimated remaining life expectancy of at least 40 years	groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).		commemorative or other value (e.g. veteran trees or wood-pasture).				
Category B	Trees that might be included in category A,	Trees present in numbers, usually growing	Trees with material	BLUE			
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	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.	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.	conservation or other cultural value.	BEGE			
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			

210537-PD-12 - Planning Tree Works Schedule

67 Lower Queens Road, Buckhurst Hill, Essex, IG9 6DS



ID	No	. / Species	BS5837 Category	Purpose of works Recommended works	Status
T1	1	Prunus cerasifera 'Nigra' Purple Cherry Plum	C2	To facilitate development Lift low canopy - Specified extent. Lift low canopy to 2.5m above ground level and carry out a minor lateral reduction to provide a 1.5m separation from the proposed dwelling.	Proposed

Tree work analysis (trees and trees in groups)

	To facilitate development	Total
Lift low canopy - Specified extent	1	1
Total	1	1





arboriculture ecology landscape innovation

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