

Arboricultural Report

Relating to:

127A & 127B London Road, Waterlooville,
Hampshire PO7 7SH

Tree Survey	✓
Arboricultural Implications Assessment	✓
Arboricultural Method Statement	✓

Produced For: Maven Plan Ltd

Date: 23rd July 2012

Prepared By:

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Ref: APA/AP/2012/158

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This report is for the exclusive use of the client and those involved in the submission and approval of the planning application to which the report relates and the implementation of the consented works. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the express consent of APArboriculture

Report supplied electronically as pdf document

1.0 Introduction

1.1 Overview

- The proposal is to demolish the existing two detached dwellings on the site and erect a three storey flatted development comprising 26 sheltered flats with associated parking and amenity space
- 45 trees have been surveyed
- 14 trees are to be removed
- 1 tree is to be pruned
- Existing buildings (including foundations) are to be removed within the RPAs of retained trees and a retained hedge
- There are very minor incursions of the proposed flatted development into the RPAs of retained trees
- The retained trees are all to be afforded an adequate degree of physical protection during the construction works in accordance with the BS
- A Landscaping Plan has been produced, illustrating the new planting which will maintain local amenity and ensure an adequate degree of screening

1.2 Contact Details

Contact	Name	Company/LPA	Tel. / E-mail address	Sent report
Client/Planning Agent	Nick Sutton	Maven Plan Ltd	020 3397 0357 nicksutton@mavenplan.com	✓
Architect	Peter Crowther	PAC Design Ltd	01306 887293 petercrowther@pacdesign.co.uk	✓
Arboricultural Consultant	Andrew Pinchin	APArboriculture	07921 063 171 aparboriculture@googlemail.com	
LPA Tree Officer	Jamie Gargett	Havant Borough Council	02392 446525 Jamie.gargett@havant.gov.uk	

1.3 Key Terms and Abbreviations

Arboricultural Implications Assessment - An assessment of arboricultural impact	AIA
Arboricultural Method Statement - Contains the tree protection information	AMS
British Standard 5837 2012: Trees in Relation to Construction – Recommendations – the relevant British Standard	The BS
Root Protection Area - The volume of soil a tree needs to stay healthy	RPA
Local Planning Authority - The Council	LPA
Tree Preservation Order - A legal document that is used by the LPA to protect trees	TPO

1.4 The Proposal/Relevant History

The proposal is to demolish the existing two detached dwellings on the site and erect a three storey flatted development comprising 26 sheltered flats with associated parking and amenity space.

The recent application history is as follows:

- Application Ref. 07/72522/000 (erection of 28 sheltered apartments with associated parking and amenity space) – consent refused.
- Application Ref. 08/72522/001 (erection of 26 sheltered apartments with associated parking and amenity space) – consent refused and subsequent appeal dismissed.

Arboricultural reasons were cited in both of the above planning refusals.

The current scheme has been designed to have minimal impact on trees and to ensure that suitable separation distances are maintained between the proposed flatted development and retained trees as per the recommendations given in the BS.

A Landscaping Plan is also included within this report (at Appendix 4). This illustrates how the amenities of the locality will be maintained and how an adequate degree of boundary screening will be provided.

1.5 Brief and Purpose

This report has been commissioned by Maven Plan Ltd to;

- Survey the trees in accordance with the BS.
- Detail the arboricultural implications of the proposed project.
- Present an effective tree protection strategy for the duration of the development.
- Provide the necessary arboricultural information to enable a planning application to be determined by Havant Borough Council.
- Provide a landscaping plan

1.6 Scope

The trees on and immediately adjacent to the site have been surveyed in accordance with the BS.

The report is designed to fulfil the recommended criteria for the provision of arboricultural information in relation to the validation of planning applications (ref. Department for Communities and Local Government Circular 02/2008 and the associated guidance document entitled 'Validation of Planning Applications'.)

A full hazard assessment of the trees (including the assessment of decay or defects and their implications), has not been undertaken as this is considered beyond the scope of this report. Any obvious hazards and defects have, however, been identified in the Tree Survey Schedule and appropriate works recommended for action.

Detailed ecological considerations are also beyond the scope of this report.

1.7 Documents Supplied/Used

Document	Obtained From	Format/Ref
Topographical Survey	Nick Sutton of Maven Plan Ltd	dwg
Existing and Proposed Layout Plans	Peter Crowther of Pac Design Ltd	pdf

1.8 Site Details

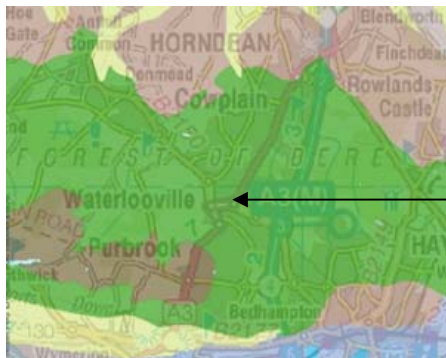
The site in question is within the administrative jurisdiction of Havant Borough Council. It is situated in a central location within Waterlooville, is roughly rectangular in shape and has an area of approximately 0.21ha. Land use around the site comprises a mixture of residential, industrial and amenity uses.

Location Plan



In terms of levels, the site is essentially level with no significant inclines in any direction.

The Online Soilsmap Viewer provided by the National Soil Resources Institute indicates that the underlying soil type is a slowly permeable, seasonally wet, slightly acid but base rich loamy and clayey soil. This soil will be less vulnerable to compaction than soils with high clay content such as London and Weald clay.

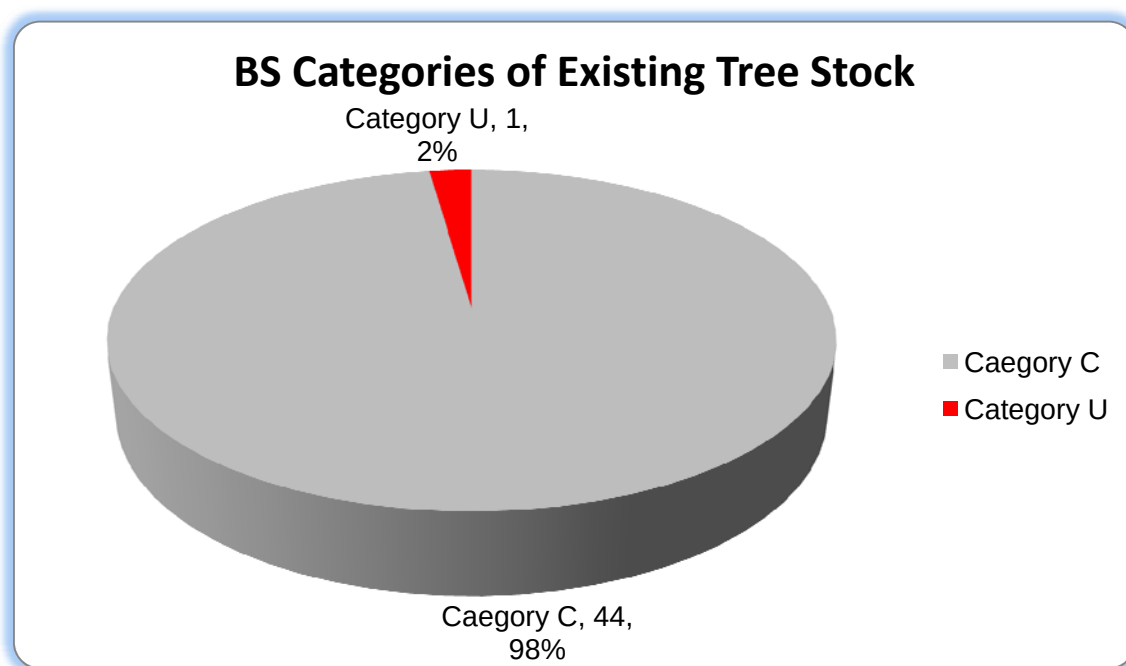


Slowly permeable,
seasonally wet, slightly
acid but base rich
loamy and clayey soil

2 Tree Survey

2.1 Dashboard Summary (Trees)

No. of Individual Trees	14
No. of Tree Groups	7 (31 trees)
Total No. of Trees (Individual Trees + Trees in Tree Groups)	45



All trees C Category apart from one U Category Tree – 127A & 127B London Road, Waterloooville

2.2 Survey Method

The trees were initially surveyed on 8th February 2012. A further site visit was carried out on 4th April 2012.

The locations of the trees were derived from the provided topographical survey. The trees were inspected from ground level using widely accepted Visual Tree Assessment techniques. No climbing inspections were undertaken. No samples of soil, tree tissue or suspected pests/pathogens were taken.

The heights of the trees were estimated by eye and crown spreads by pacing. The diameters were measured in mm at a height of 1.5m above ground level using a diameter tape.

Photographs were taken on site using a digital camera.

2.3 Tree Details

The tree details and proposed works are presented in the Tree Survey Schedule (Appendix 1) and the tree positions are shown on the Tree Protection Plan (Appendix 2).

The BS5837: 2012 categorisation system can be summarised as follows:

- **Category A** – trees of high quality and value with a life expectancy of more than 40 years
- **Category B** – trees of moderate quality and value, with a life expectancy of more than 20 years
- **Category C** – trees of low quality and value, with a life expectancy of more than 10 years
- **Category U** – trees for removal, with a life expectancy of less than 10 years

A cascade chart giving full details of the BS categorisation system is attached (Appendix 3).

There is one U Category tree among the surveyed trees. This is Lime T20, which has been heavily pollarded and has sporophores of the decay fungus

Ganoderma adspersum at the base. Removal of this tree can be recommended irrespective of any proposals for development of the site.



Ganoderma adspersum sporophores at base of Lime T20 – removal of tree recommended on grounds of safety

The remaining trees are all Category C trees of relatively modest quality. Beech T4 is one of the more visually significant trees, but has a lesion with associated decay on the western side of the stem and has therefore been allocated a C rather than a B categorisation.



Lesion with associated decay in main stem of Beech T4 near base. Further evaluation from a health and safety perspective recommended

The four Leyland Cypress trees in group G16 are collectively of some landscape significance and provide useful screening, but they have become infected by Coryneum Canker – a progressive fungal disease for which there is no effective cure. The disease can be slow to progress, however, so these trees could survive for many years to come (an estimated 10-20 years).

The two Lombardy Poplars in group G11 are also of some landscape significance in that they are visible from outside the site. They are, however, of poor quality as both are twin-stemmed at the base. Lombardy poplars as a species have relatively high failure potentials. The fact that both of these trees are twin-stemmed will make them even more prone to failure. Furthermore, one of the trees has a tree-tie embedded within the stem near the base. It would not be advisable to retain these trees within the context of new development of the site.



Leyland Cypresses in group G16 showing browning of foliage caused by Coryneum canker



Twin stemmed Lombardy Poplars in group G11, showing tree tie embedded in lower stem of one of the trees



The RPAs of the trees are included in the Tree Survey Schedule in accordance with the BS. The RPA is the area (given in m²) that contains sufficient rooting volume for a tree to survive and remain healthy. Disturbance within this area has the potential to impact significantly upon tree health and vitality.

The BS provides for the shape of the RPA to be modified from the starting point of a circle to account for site features where rooting may be restricted, as long as the total area remains the same. The RPAs of the heavily topped trees (mixed species) in Hedge H21 have been modified slightly owing to the presence of an existing garage/outbuilding. No other RPAs have been modified as this has not been considered appropriate.

2.4 Legal Protection Status of Trees

Type of Protection	Details/Ref.
Conservation Area	No
Tree Preservation Order	No

The above information was obtained directly from Havant Borough Council by telephone at 10.15am on 17th April 2012.

3 Arboricultural Impact Assessment

3.1 Dashboard Summary (Implications)

Total number of surveyed trees	45
Number of trees to be Removed	14
Number of trees to be pruned	1
Number of trees with incursions in their RPAs	6

3.2 Removal of Trees

14 trees are to be removed in connection with the proposed development.

The most significant trees to be removed in Landscape terms are the two Lombardy Poplars in group G11. Although visible from outside the site, these trees have drawn structures and are not particularly attractive. The contribution they make to the overall character and amenities of the locality is relatively modest and they could be perceived as being somewhat incongruous in their current setting. As indicated in Section 2.3 above, both of these trees are twin-stemmed at the base and one has a tree-tie embedded in the lower stem. The trees have relatively high failure potentials and retention within the context of re-development of the site is considered inappropriate.

The other trees it is proposed to remove comprise a Category U Lime tree (T20), a Category C Magnolia at the front of the site (T14) and some trees in the western part of the site adjacent to the north-western boundary (Holly T7, Eucalyptus T8, the three Leyland Cypress trees in group G9, Prunus trees T10 and T12 and Lawson Cyprresses T13 and T15). Bay Laurel T19 in the northern part of the site (more of a large shrub than a tree) is also to be removed. These are all Category C trees of up to approximately 12m in height. They are of relatively modest quality and landscape significance.

To compensate for the loss of the trees to be removed and to ensure that the amenities of the locality are maintained, new planting is proposed. Further details on the landscaping are given in Section 3.5 below.

3.3 Tree Pruning Works

The only tree pruning works proposed comprise light pruning of one of the Leyland Cypress trees in group G16 to give 1.5m clearance from the proposed building. These works will not significantly affect the health or overall appearance of the tree.

3.4 Incursions into RPAs

Incursions may be fully invasive (where a degree of root disturbance is considered acceptable) or low invasive (where specialist methods are used to limit the degree of disturbance).

The table below details the incursions and how they are to be dealt with:

Incursions into RPAs of Retained Trees		
Type of Incursion	Trees affected	Action
Removal of existing buildings (outbuildings) within/immediately adjacent to RPAs	T4, G16 & G18	Removal of foundations to be carried out in accordance with Section 7 of the BS under direct arboricultural supervision
Construction of flats – incursion of foundations	T4 & G16	Very minor incursions into RPAs (1-2% of RPAs at margins). Incursions so minor that no specific precautions considered necessary

3.5 Light and Proximity Issues

The layout has been specifically designed to ensure that appropriate separation distances are maintained between the proposed flatted development and the retained trees. The building is set several metres back from the closest parts of the crowns of the trees adjacent to the southern boundary and no problems with blocking of light are anticipated. The largest tree in this area (Beech T4) has already been pruned back substantially on the side of the site. The locations and relative orientations of the other retained trees are such that they will not block any direct sunlight to the proposed development or hinder the reasonable use of the building and grounds.

In terms of general proximity to trees, the proposal accords with Section 6.3 of the BS. It is not considered likely that any of the retained trees will come under pressure in the future to be heavily pruned or removed.

3.5 Mitigation

To compensate for removal of the trees to be removed and to ensure that local amenities are maintained (and that adequate screening is provided), new landscaping is proposed as shown on the Landscaping Plan at Appendix 5.

The key details of the proposed landscaping are as follows:

- Two Beech trees, one Turkish Hazel, one Fastigate Oak and one Magnolia to be planted
- 20m stretch of 2m ht Cherry Laurel hedging (Elvedon Instant Hedging as supplied by Practicality Brown Ltd) to be planted along north-western boundary of site to maintain screening
- Remaining areas at the rear of the site are to be laid to grass

3.6 Conclusion

Subject to full compliance with the AMS, the net arboricultural implications of the proposed development are relatively minor. Of the 14 trees to be removed, one is a Category U tree and the remainder are all Category C trees of relatively

modest quality and landscape significance. In terms of pruning works, only light pruning of one Leyland Cypress tree is proposed. The retained trees can all be afforded an adequate degree of physical protection during the development works in accordance with the BS. New landscaping will ensure that adequate screening will be provided and that the amenities of the locality will be maintained.

✓	Proposal Acceptable on Arboricultural Grounds
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4 Arboricultural Method Statement

4.1 Introduction

To safeguard the retained trees during the development process, the tree protection measures set out below will be adhered to. These will protect the rooting systems and aerial parts of the trees.

The essential principle is that the area inside the tree protective fencing and where ground protection has been used is to be protected for the duration of the works.

Any specialist methods referred to in this AMS are to be implemented in full and arboricultural inspection/supervision is to be carried out as detailed in the Sequencing and Supervision Section (Section 4.3).

A copy of this AMS will be maintained on site at all times and made available to all site personnel.

All site personnel will be made aware of the key implications of this AMS. The Arboricultural Consultant can give a 'tool-box talk' to site personnel if required to ensure that the tree protection details are fully understood.

As of 2005, Local Planning Authorities have powers to serve Temporary Stop Notices if agreed tree protection measures are not carried out. Adhering to this AMS will ensure that such costly and time consuming action is avoided.

4.2 Pre-Commencement Meeting

A pre-commencement site meeting, involving the Site Manager, the Arboricultural Consultant and the LPA Tree Officer will be held to ensure that all aspects of the tree protection process are understood and agreed. Any potential problems can be discussed at this stage, along with the exact sequencing of events and the level of arboricultural supervision required. The appointed Arboricultural Consultant will communicate a record of the meeting to all parties by e-mail.

4.3 Sequencing and Inspection/Supervision

Sequencing of events and effective arboricultural inspection/supervision are important elements of the tree protection process.

Works that have the potential to affect trees will be supervised by a suitably qualified and experienced Arboricultural Consultant.

The appointed Arboricultural Consultant will make a record of any visits to the site and will communicate details of each visit to the Client and the LPA. This will provide evidence of compliance and ultimately enable the LPA to discharge tree related planning conditions.

Key Stages:

- AMS issued to Site Manager/Building Company
- AMS read by all site personnel to ensure full understanding of implications.
Any queries addressed by appointed Arboricultural Consultant
- Convening of pre-commencement meeting
- Tree works carried out (removal of 14 trees and pruning of 1 tree)
- Tree Protective Fencing erected and Ground Protection installed as per Tree Protection Plan
- Demolition works carried out (including arboriculturally sensitive removal of foundations within RPAs of trees)
- Construction works carried out
- Tree Protective Fencing and Ground Protection Removed

Summary of Required Arboricultural Inspection/Supervision:

Activity	Level of monitoring/supervision required
Erection of tree protective fencing and installation of ground protection	Inspection of fencing and ground protection by appointed arboricultural consultant prior to works commencing
Removal of existing building foundations within RPAs	Direct supervision by appointed arboricultural consultant

In addition to the arboricultural inspection detailed above, telephone contact will be maintained between the Site Manager/Building Company and the Arboricultural Consultant to ensure that the development progresses smoothly and that compliance with the AMS is being achieved.

4.4 General Site Precautions

The following points will be observed at all times:

- No fires will be lit within 10m of the canopies of the retained trees
- No access will be permitted inside the tree protective fencing
- No materials, equipment or debris will be stored within the tree protective fencing
- Notice boards, telephone cables or other services will not be attached to any parts of the retained trees
- Materials that contaminate the soil (e.g. concrete mixings, diesel oil and vehicle washings) will not be permitted to enter the RPAs of the retained trees

4.5 Carrying out of Tree Works

All works will be carried out in accordance with BS 3998: 2010 'Recommendations for Tree Work' and to current arboricultural best practice. Tree works will be carried out by a suitably qualified and experienced arboricultural contractor holding the necessary insurance cover. A list of such contractors is available from the Arboricultural Association at www.trees.org.uk.

If at any time during the development a need for any tree works is highlighted to facilitate the proposed works or access for machinery/plant, the Arboricultural Consultant will be contacted to advise on appropriate works and liaise with the LPA as necessary.

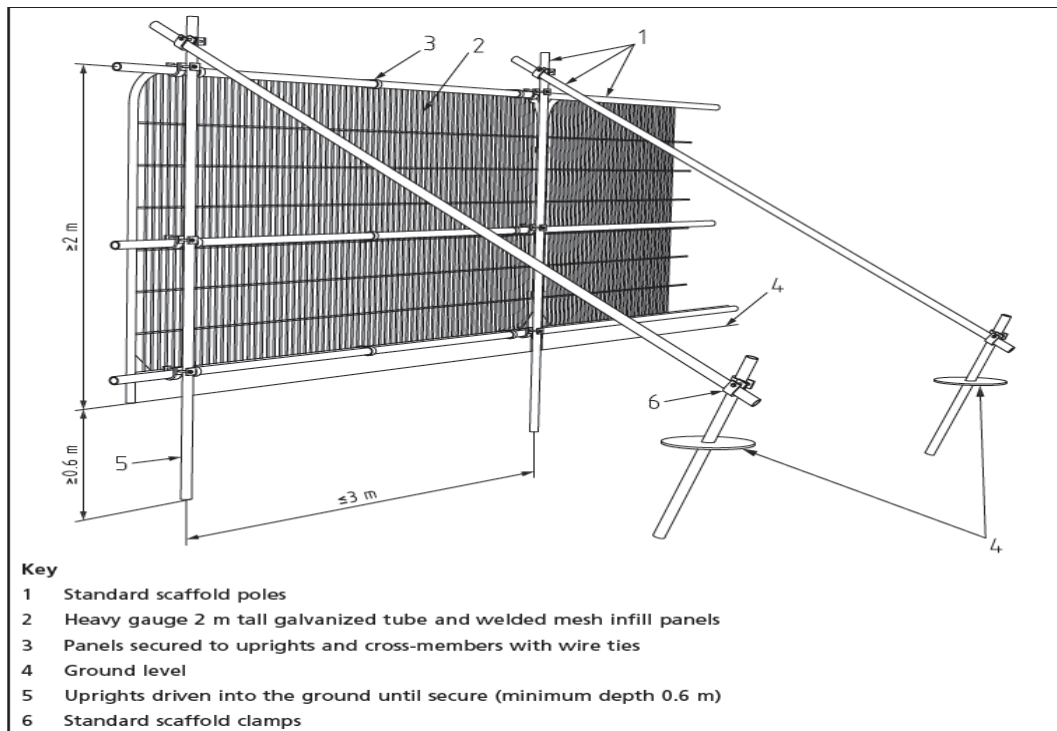
4.6 Tree Protective Fencing and Ground Protection

Tree protective fencing and ground protection are used to ensure that the RPAs of retained trees are safeguarded.

The required tree protective fencing is shown on the Tree Protection Plan (Appendix 2). The fencing will remain in position for the duration of the development and will only be moved/alterd as agreed in writing by the LPA following arboricultural advice.

The tree protective fencing will be 2.0m Heras fencing as specified in the BS. The fencing will be supported by a scaffold framework with supporting struts firmed into the ground on the side of the trees. The purpose of the supports is to prevent the fencing being moved during the development. Clear signs will be attached to the fencing (e.g. Tree Protection Area – Keep Out!)

Tree Protective Fencing Default Specification - BS5837: 2012



Ground protection has also been specified to protect the RPAs of retained trees. To accord with the BS, the specification for the ground protection will be as follows:

- A geotextile membrane on the ground
- 150mm depth of a compressible layer (woodchips or sharp sand)
- Side butting scaffold boards or plywood on top

4.7 Site Access and Hard Surfacing.

No new hard surfacing is proposed within the RPAs of the retained trees.

4.8 Demolition

Some outbuildings are to be removed within the RPAs of some retained trees and hedges (H21, one tree within G16 and G18). Although the incursions into the RPAs are relatively minor, the following precautions are to be observed:

- Foundations to be removed in accordance with Section 7 of the BS under direct arboricultural supervision. All roots over 25mm in diameter to be retained. Any smaller roots that need to be severed to be cut cleanly with a sharp saw/secateurs in accordance with Section 11.3.5 of the BS
- Parts of the foundations to be left in situ if possible to minimise any disturbance to roots of retained trees

4.9 Underground Services

No new underground services are to be installed within the RPAs of the retained trees.

4.10 Foundations and Construction

There are small incursions of the foundations of the proposed flatted development into the RPAs of G16 and T4. These incursions are so small (1-2% of the RPAs at the margins) that no specific precautions are considered necessary. The tree protective fencing and ground protection is to be maintained as per the Tree Protection Plan at Appendix 2 at all times.

4.11 Fencing and Landscaping

No fencing works are proposed within the RPAs of retained trees. Care is to be taken during the implementation of the landscaping works not to damage any of the aerial parts of the retained trees or to compact the soil within their RPAs.

4.12 Amendments

Issues may arise on development sites that require amendments to the previously agreed tree protection details. Any amendments to this AMS will be approved in writing by the LPA prior to being implemented. Copies of paperwork relating to any amendments will be communicated by the Arboricultural Consultant to the Client and LPA.

Appendix 1

Tree Survey Schedule

Tree Ref.	Common Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	RPA Multiplier	RPA Radius	Vigour	Structural Condition	Landscape Value	B.S. Cat	Sub Cat	Useful Life	Notes and Observations	
T 1	Pine	14	4 3	4 5 4	4	Middle Aged	420 e	12	5.0	Normal	Poor	Medium	C	1,2	20-40	Off site tree; colonised by ivy
No. of trees: 1																
Recommended Works: No works proposed Reasons for Works: N/A																
T 2	Sycamore	14	4 5	4 6 4	3	Mature	650 e	12	7.8	Normal	Poor	Medium	C	1,2	10-20	Off site tree; colonised by ivy
No. of trees: 1																
Recommended Works: No works proposed Reasons for Works: N/A																
G3	Sycamore	15	4 5	4 4 5	2	Middle Aged	270 m	12	3.2	Normal	Poor	Medium	C	1,2	20-40	Off site trees; self sown adjacent to boundary
No. of trees: 8																
Recommended Works: No works proposed Reasons for Works: N/A																
T 4	Beech	17	4 7	4 6 8	5	Mature	680	12	8.2	Normal	Poor	Medium	C	1,2	10-20	Off site tree; heavily pruned on side of site; lesion and cavity western side from base to 1.2m height
No. of trees: 1																
Recommended Works: Carry out detailed hazard evaluation - in particular to assess lesion and cavity Reasons for Works: Constitutes good arboricultural practice																
T 5	Hazel	9	4 4	4 4 4	1	Middle Aged	220	12	2.6	Normal	Fair	Low	C	1,2	10-20	Off site tree; surrounded by dense Cherry Laurel
No. of trees: 1																
Recommended Works: No works proposed Reasons for Works: N/A																

Tree Ref.	Common Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	RPA Multiplier	RPA Radius	Vigour	Structural Condition	Landscape Value	B.S. Cat	Sub Cat	Useful Life	Notes and Observations
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[illegible]

Recommended Works:

No works proposed

Reasons for Works:

N/A

Heavily and poorly pruned

[illegible]

Recommended Works:

Remove

Reasons for Works:

To facilitate proposed development works

Growing adjacent to boundary fence

[illegible]

Recommended Works:

Remove

Reasons for Works:

To facilitate proposed development works

Multi-stemmed at 1.2m height; heavily pruned with very poor structure

[illegible]

Recommended Works:

Remove

Reasons for Works:

To facilitate proposed development works

Poor structures

[illegible]

Recommended Works:

Remove

Reasons for Works:

To facilitate proposed development works

Poor specimen

Tree Ref.	Common Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	RPA Multiplier	RPA Radius	Vigour	Structural Condition	Landscape Value	B.S. Cat	Sub Cat	Useful Life	Notes and Observations
G11	Lombardy Poplar	17	4 4 4	3	Middle Aged	580 m	12	7.0	Normal	Poor	Medium	C	1,2	10-20	Both twin-stemmed at base; relatively poor structures with high failure potentials; tree tie embedded in stem of one tree near base
No. of trees: 2															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													
T 12	Prunus sp.	8	2 2 2	1.5	Young	110	12	1.3	Normal	Fair	Low	C	1,2	10-20	Small Cherry tree of little landscape significance
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													
T 13	Lawson Cypress	9	1 2 1	.5	Young	180	12	2.2	Normal	Poor	Low	C	1,2	10-20	Of relatively poor quality
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													
T 14	Magnolia	8	4 3 3	1	Mature	450	10	4.5	Normal	Fair	Low	C	1,2	10-20	Multi-stemmed at base
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													
T 15	Lawson Cypress	10	1 1 1	0	Middle Aged	290	10	2.9	Normal	Fair	Low	C	1,2	10-20	Feathered variety; multi-stemmed at base
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													

Tree Ref.	Common Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	RPA Multiplier	RPA Radius	Vigour	Structural Condition	Landscape Value	B.S. Cat	Sub Cat	Useful Life	Notes and Observations
G16	Leyland Cypress	16	5 5	1	Mature	540 m	12	6.5	Moderate	Fair	Medium	C	1,2	10-20	Some Coryneum Canker in crowns; trees of modest quality
No. of trees: 4															
Recommended Works: Reasons for Works:		Lightly prune one of the trees to give 1.5m clearance from the new building To facilitate proposed development works													
T 17	Sorbus sp.	8	5 2	1	Middle Aged	230	12	2.8	Moderate	Poor	Low	C	1,2	10-20	Twin-stemmed near base; colonised by ivy
No. of trees: 1															
Recommended Works: Reasons for Works:		No works proposed N/A													
G18	Lawson Cypress	9	3 3	1	Middle Aged	270 m	12	3.2	Moderate	Poor	Low	C	1,2	10-20	Trees essentially comprise a section of hedging; poor structures
No. of trees: 7															
Recommended Works: Reasons for Works:		No works proposed N/A													
T 19	Bay Laurel	7	1 1	1	Mature	190	12	2.3	Normal	Fair	Low	C	1,2	10-20	Multi-stemmed at base; several stems removed; diameter of largest stem x 12 taken for RPA calculation (measurement at base would give disproportionately large RPA)
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove To facilitate proposed development works													
T 20	Lime	9	1 1	9	Mature	540	12	6.5	Poor	Poor	Low	U		<10	Heavily pollarded with <i>Ganoderma sp.</i> sporophores at base
No. of trees: 1															
Recommended Works: Reasons for Works:		Remove Constitutes good arboricultural practice													

Tree Survey Schedule

Tel: 07921 063 171

Site: 127A & 127B London Road, Waterlooville, Hants

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Date of Survey: 8th February and 4th April 2012

BS5837: 2012 compliant survey by:

Andrew Pinchin

Ref: APA/AP/2012/104 A

Tree Ref.	Common Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	RPA Multiplier	RPA Radius	Vigour	Structural Condition	Landscape Value	B.S. Cat	Sub Cat	Useful Life	Notes and Observations
H21	Mixed	4	1 1 1	0	Middle Aged	300 m	12	3.6	Moderate	Poor	Low	C	1,2	10-20	Hedge comprises mainly heavily topped Sycamore trees - other species include Ash and Holly
No. of trees: 0			1												
Recommended Works:		No works proposed													
Reasons for Works:		N/A													
G22	Mixed Broadleaves	9	3 3 3	2	Middle Aged	200 m	12	2.4	Normal	Poor	Low	C	1,2	10-20	Off site trees; comprise mixture of Cherry, Sallow, Hazel, Ash & Sycamore; 2 trees multi-stemmed; all of modest quality and landscape significance
No. of trees: 5			3												
Recommended Works:		No works proposed													
Reasons for Works:		N/A													

Total no. of trees: 45

Key to Tree Survey Schedule (BS5837: 2012)

Tree Ref. – Consecutive numbering. T = Individual Tree: G = Tree Group: H = Hedge

Common Name – Most commonly used English name for tree

Height – Height of tree in metres (estimated)

Crown Spread – Radial crown spread in metres at the four cardinal points (N E S W)

Ground Clearance – Height of lowest parts of crown above ground level

Age Class – Young, Semi-Mature, Early-Mature, Mature, Over-Mature

Stem Diameter – Diameter of stem in mm at 1.5m above ground for single stemmed trees. For multi-stemmed trees, equivalent diameter figure calculated as per the BS.

RPA Multiplier – Applied to the stem diameter (or equivalent stem diameter for multi-stemmed trees) to derive the Root Protection Area radius. It is 12 for single and multi-stemmed trees.

RPA Radius – The radius of the Root Protection Area of the tree (from the tree centre) in metres

Vigour – An indication of the physiological health of the tree. Normal, Moderate, Poor, Dead

Structural Condition – Good, Fair, Poor

Landscape Value – High, Medium, Low

BS Cat – BS5837: 2012 Category. **A**- High, **B**- Moderate, **C**- Low, **U**- Remove * Colour coding used on drawings as per the BS

Sub Cat – BS5837: 2012 Sub Category. 1- Arboricultural, 2- Landscape, 3- Cultural *

Useful Life – Estimated remaining contribution to the landscape in years

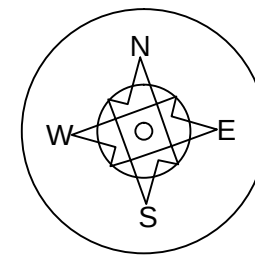
* For more detailed explanation see BS5837: 2012 Cascade Chart at Appendix 3.

Appendix 2

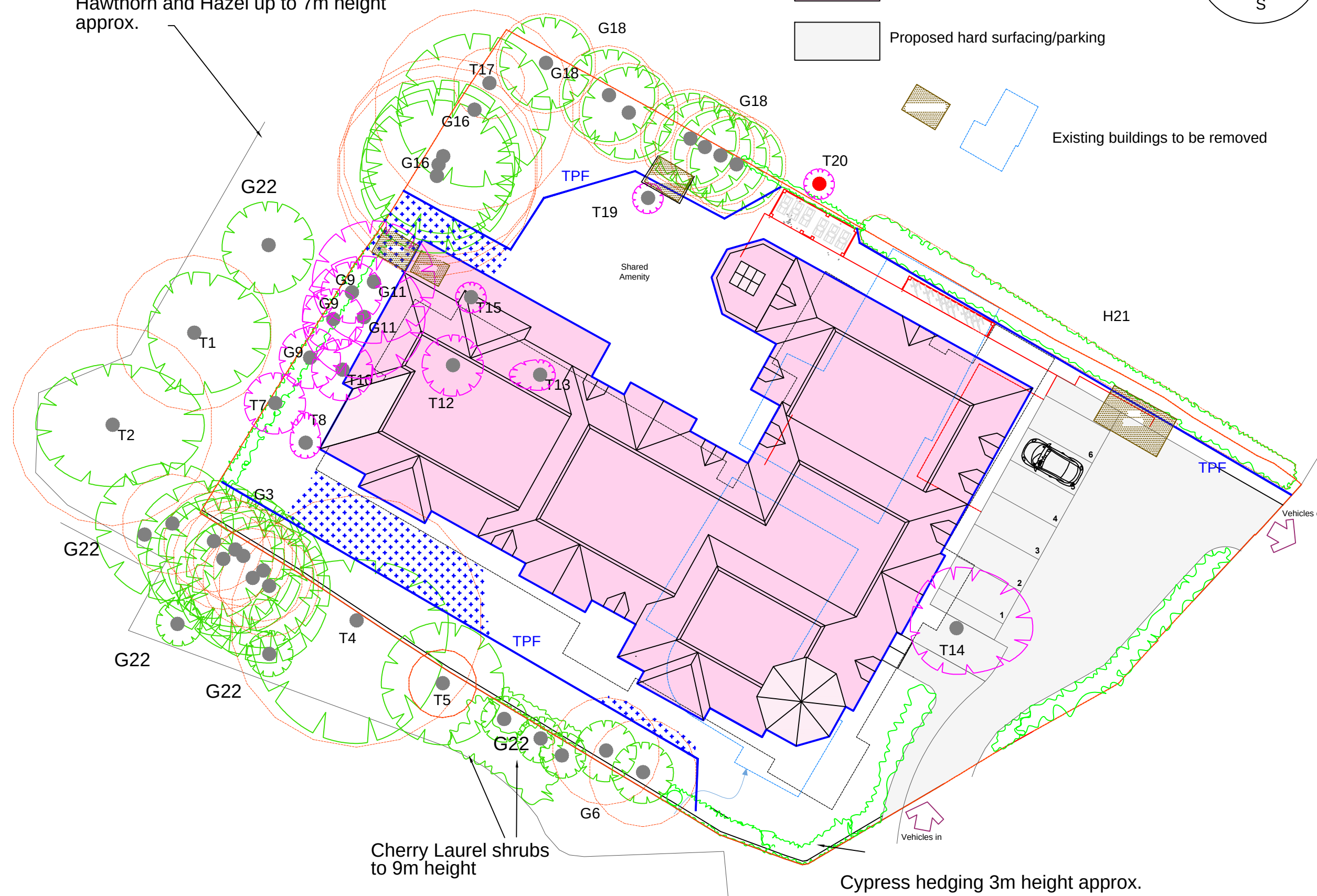
Tree Protection Plan

Mixed dense ground cover, shrubs and sub-BS survey size small trees including Ivy, Bramble, Viburnum, Lonicera, Cherry Laurel, Holly, Hawthorn and Hazel up to 7m height approx.

Proposed 3 storey flatted development
Proposed hard surfacing/parking



- Root Protection Area (RPA)
- Category A
- Category B
- Category C
- Category U
- Tree to be removed
- Tree protective fencing
- Ground protection



Cherry Laurel shrubs to 9m height

Cypress hedging 3m height approx.

Print in Colour and to Scale

PLAN DESCRIPTION

Tree Protection Plan

SITE

127A & 127B London Road, Waterlooville, Hants

SCALE 1:250 @ A3	DATE 23.07.2012	DRAWN BY AP
DRAWING NUMBER TPP/APA/AP/2012/158		REV

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Appendix 3

BS5837:2012 Cascade Chart

-

Table 1 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 the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	See Table 2
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	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 semi-formal 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
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
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 with material conservation or other cultural value
	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

Appendix 4

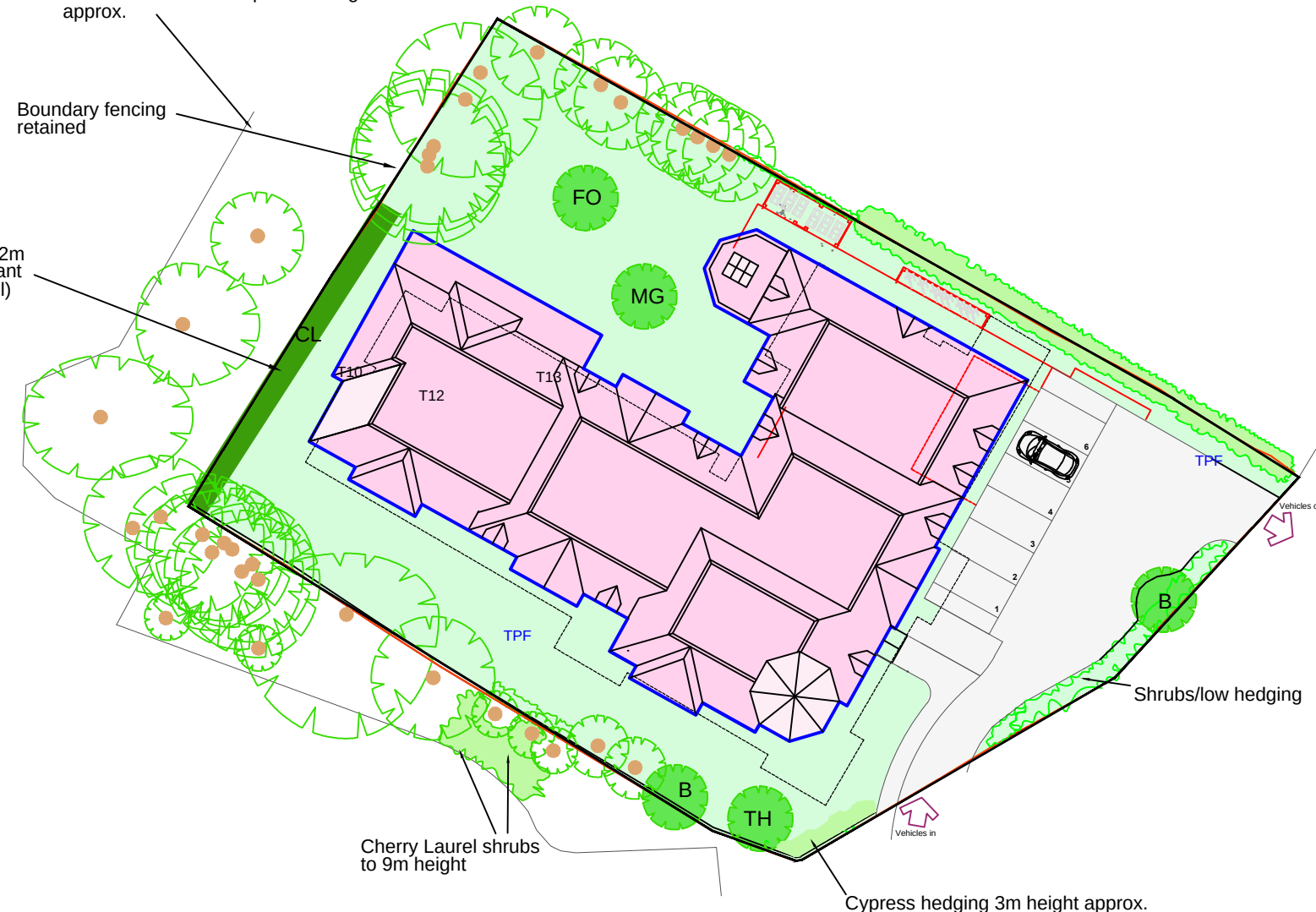
Landscaping Plan

-

Mixed dense ground cover, shrubs and sub-BS survey size small trees including Ivy, Bramble, Viburnum, Lonicera, Cherry Laurel, Holly, Hawthorn and Hazel up to 7m height approx.

Boundary fencing retained

20m section of 2m ht Elvedon Instant Hedging (Laurel)



Cherry Laurel shrubs to 9m height

Cypress hedging 3m height approx.

Shrubs/low hedging

Standards:

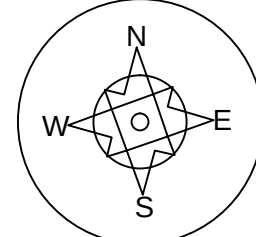
All planting works to be in accordance with approved horticultural and arboricultural standards and all relevant British Standards.

Plants to be supplied in accordance with the HTA Trade Certification Scheme and handled in accordance with the CPSE Handling and Establishment of Plants Guidelines.

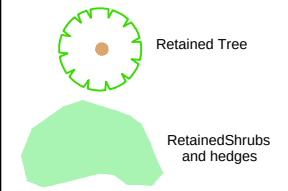
Trees, hedges and shrubs to be planted as per current best practice with suitably sized planting pits. Soil to be decompacted and enhanced as necessary. Any imported soil to conform to BS3882.

Trees to be suitably secured using above or below ground staking/anchoring systems. All stock to conform to British Standard for Nursery Stock BS3936.

Turf to be of a meadow variety to BS3969.



Existing Site Features:



KEY

- New Tree/Shrub
- Grass
- New Hedging
- New Vehicular Hard Surfacing - tarmac

Aftercare - 5 year programme:

- Mulch circles 1m diameter min. to be created around each new tree
- Mulch to be topped up as necessary and weeds controlled for 5 yr period
- All trees to be provided with watering tubes
- Trees to be regularly watered during summer months for 5 yr period
- Any trees that die to be replaced immediately like for like (containerised stock)

Planting Schedule - Trees and Shrubs				
Reference	Species	Total No.	Root Cultivation Method/Type	Size at Planting
B	Beech	2	Containerised	14–16cm girth
MG	Magnolia	1	Containerised	2m ht min
FO	Fastigate Oak	1	Containerised	14–16cm girth
TH	Turkish Hazel	1	Containerised	14–16cm girth
Planting Schedule - Hedges				
Reference	Species	Size at Planting	Root Cultivation Method/Type	Planting Density (Centres)
CL	Cherry Laurel (Prunus laurocerasus)	2m ht	Elvedon Instant Hedging	N/A

PLAN DESCRIPTION

Landscaping Plan

SITE

127A & 127B London Road, Waterlooville, Hants

SCALE
1:400 @ A3

DATE
23.07.2012

DRAWN BY
AP

DRAWING NUMBER
LP/APA/AP/2012/158

REV
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