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5 SEP 2014
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APArboriculture

Arboricultural Report

Relating to:

Seacourt (Land adjacent to 202 Seafront),
Hayling Island PO11 9HR

Tree Survey	✓
Arboricultural Impact Assessment	✓
Arboricultural Method Statement	✓

All to BS5837:2012 - Trees in relation to design, demolition and construction - Recommendations

Produced For: Mr I Snell Ref: APA/AP/2014/161
Date: 4th September 2014

Prepared By:

Andrew Pinchin BSc (Hons), Dip Arb (RFS), FArborA, MICFor -
Chartered Arboriculturist

Tel. 01932 450104 www.aparboriculture.co.uk

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Appendices

Appendix 1 – Tree Survey Schedule to BS5837:2012

Appendix 2 – Tree Protection Plan - Scale 1:100 at A1

Appendix 3 – BS5837 Categorisation System

✓ BS5837: 2012 compliant report, supplied electronically as pdf document

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 any 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

Introduction

1.1 Overview

- The proposal is to erect a single detached dwelling with integral garage and associated hard surfacing/ancillary structures
- There are 12 surveyed trees
- It is proposed to remove 3 trees (2 Category C trees and 1 Category U tree)
- No tree pruning works are proposed
- There is an incursion of proposed vehicular hard surfacing into the RPA of 1 tree at the front of the site
- A bin store is proposed within the RPA of 1 tree at the front of the site
- There are no other incursions into the RPAs of retained trees
- The retained trees can all be afforded an adequate level of physical protection during the development works in accordance with the BS

1.2 Contact Details

Contact	Name	Company/LPA	Tel. / E-mail address	Sent report
Client	Mr I Snell	-	-	
Planning Agent/Architect	Claire Tyne	MAA Architects	0208 973 0050 claire@maa-architects.com	✓
Arboricultural Consultant	Andrew Pinchin	APArboriculture	01932 450104 aparboriculture@gmail.com	

1.3 Key Terms and Abbreviations

Arboricultural Impact Assessment - *An assessment of arboricultural impact*	AIA
Arboricultural Method Statement - *Contains the tree protection information*	AMS
British Standard 5837 2012: Trees in Relation to Design, Demolition and 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 Planning History

The proposal is to erect a single detached dwelling with integral garage and associated hard surfacing/ancillary structures.

1.5 Brief and Purpose

This report has been commissioned by Mr I Snell to;

Survey the trees in accordance with the BS.

Assess the arboricultural impact of the proposed project.

Present an effective tree protection strategy for the duration of the development.

Provide the necessary arboricultural information for the submitted planning application to be determined by Havant Borough Council.

1.6 Scope

The trees on and immediately adjacent to the site have been surveyed in accordance with the BS. Trees with a stem diameter over 75mm have been included.

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
Existing and proposed layout plans	MAA Architects	DWG

1.8 Site Details

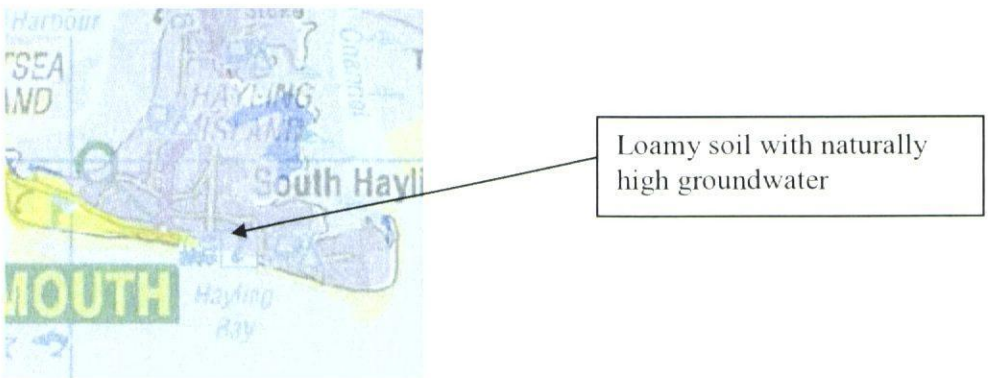
The site in question is within the administrative jurisdiction of Havant Borough Council and lies on the northern side of Seafront in Hayling Island.

In terms of levels, the site falls gently to the south.

Surrounding land use is primarily residential.

Location Plan

The Online Soilscapes Viewer provided by the National Soil Resources Institute indicates that the underlying soil type is a loamy soil with naturally high groundwater. This will be less vulnerable to compaction than soils with clay content.



2 Tree Survey

2.1 Survey Method

The trees were surveyed on 3rd September 2014.

Locations of the trees were derived from the provided topographical survey (carried out by Solent Surveys).

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.

Heights of the trees were estimated by eye. Crown spreads at each of the four cardinal points were measured using a laser measuring device.

The diameters of the trees were measured at a height of 1.5m above ground level (using a diameter tape) as per Annexe C of The BS.

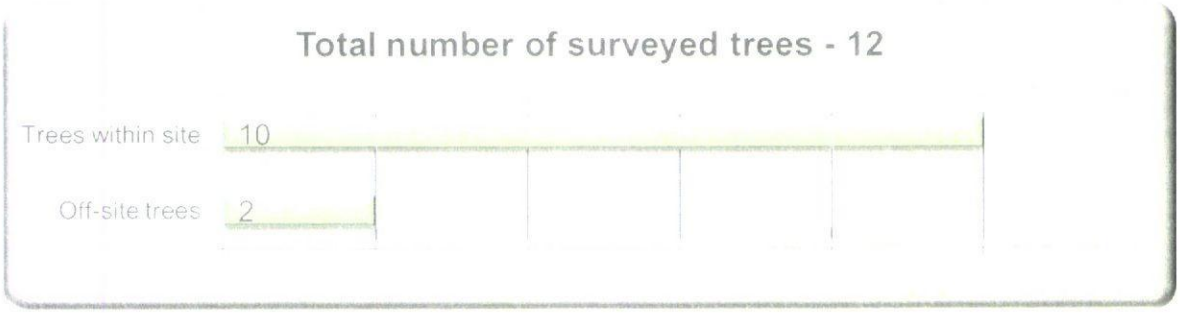
Photographs were taken on site using a digital camera.

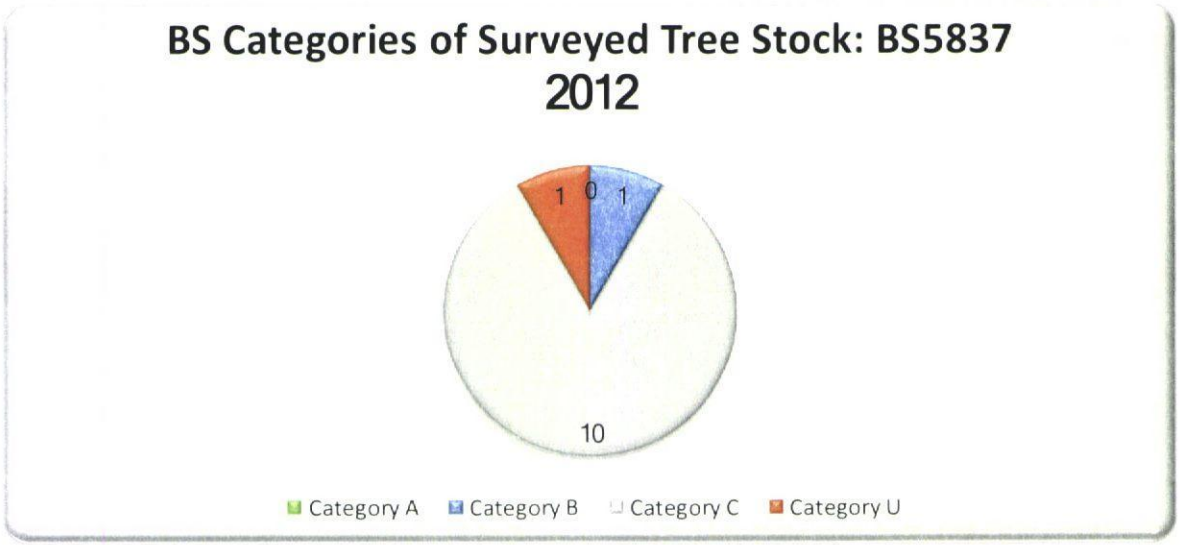
2.2 Tree Details

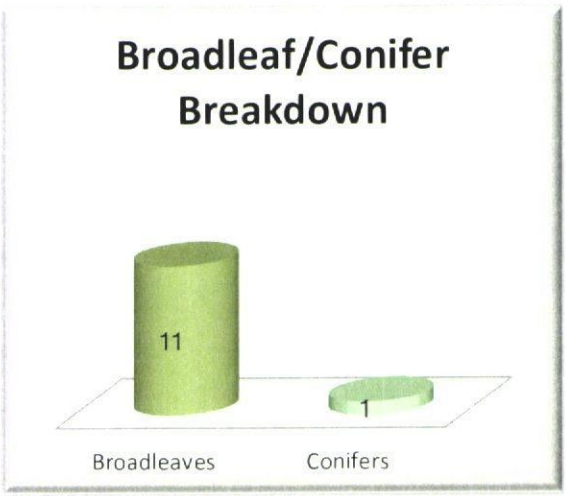
Full details of the surveyed trees and proposed works are given in the Tree Survey Schedule (Appendix 1). The locations of the trees are shown on the Tree Protection Plan (Appendix 2). The trees have been surveyed in accordance with the BS categorisation system, which can be summarised as follows:

- 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

An overview of the surveyed tree stock is as follows:







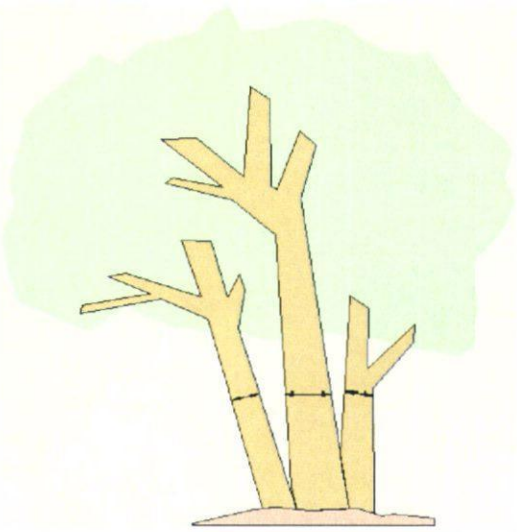
The RPAs of the trees have all been calculated in accordance with Annexe D of the BS and are given in the Tree Survey Schedule.

For single stemmed trees, the RPA radius is derived by multiplying the diameter of the tree at 1.5m above ground level by 12. For multi-stemmed trees, the RPA radius is derived by multiplying an equivalent stem diameter by 12. The formulae for calculating the equivalent stem diameters are as follows:

Equivalent stem diameter calculations for trees with multiple stems:

Trees with 2-5 stems: $\sqrt{(\text{stem diameter } 1)^2 + (\text{stem diameter } 2)^2 \ldots + (\text{stem diameter } 5)^2}$

Trees with 5+ stems: $\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$



All stems measured at 1.5m above ground level.

RPA radius derived by multiplying equivalent stem diameter by 12

As for single stemmed trees, shape may under some circumstances be modified (with sound arboricultural justification) as long as total area remains the same

The RPA is the area (given in m^2) 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.

Sections 4.6.2 and 4.6.3 of the BS provide for the shape of the RPA to be modified from the starting point of a circle where rooting patterns are likely to be eccentric, subject to the total area remaining the same.

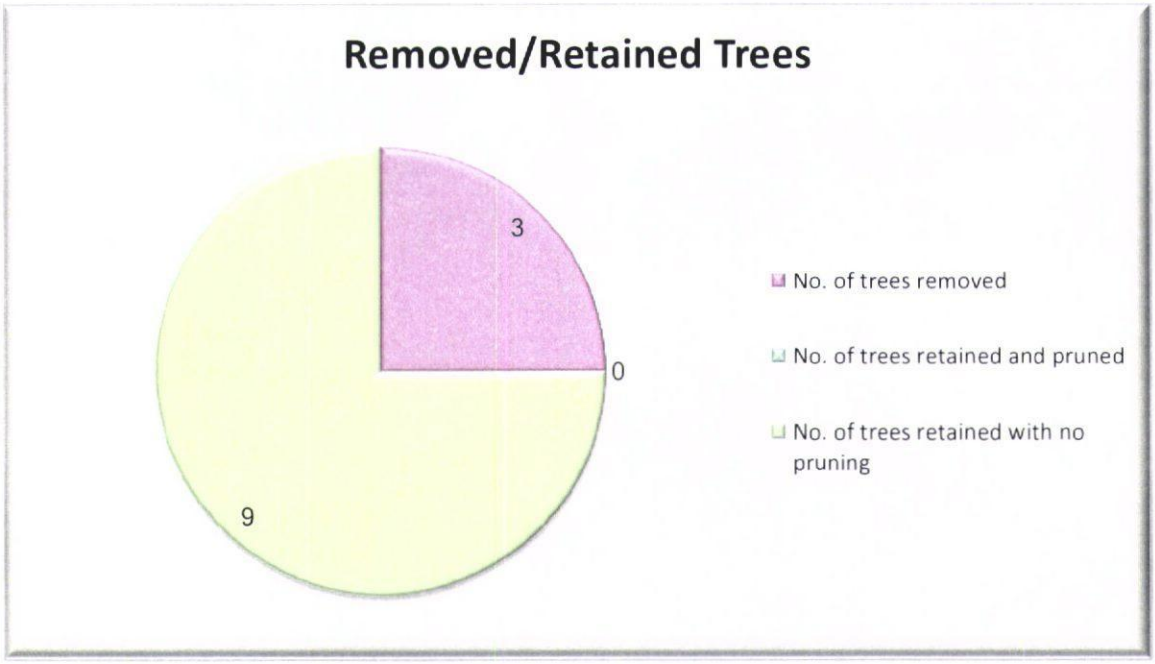
No RPAs have been modified in this instance. They are all shown as nominal circles on the Tree Protection Plan at Appendix 2.

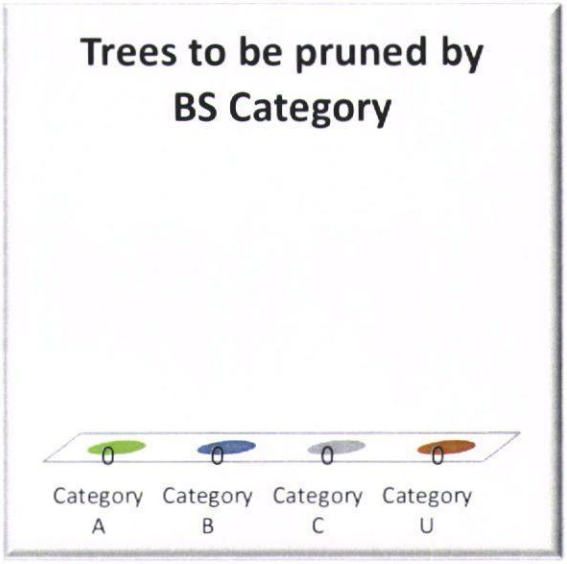
2.3 Legal Protection Status of Trees

The legal protection status of the trees has not been formally ascertained, but it is understood that the site is not situated within a Conservation Area and no Tree Preservation Orders apply. It is recommended that the current position be checked with Havant Borough Council prior to carrying out any tree works.

3 Arboricultural Impact Assessment

3.1 Overview of Arboricultural Impact





Number of trees with incursions within RPAs - 1

3.2 Removal of Trees

Three trees are to be removed in the interests of good arboricultural practice and to facilitate the proposed development works. One of these trees (Cherry T2) is a Category U tree, the remaining trees (T4 and T5) being Category C trees of modest quality and landscape significance. T4 is a twin-stemmed Holm Oak with a poor structure and T5 is a poor, heavily topped Maritime Pine. The trees are all situated towards the rear of the site and removal will not detract from the overall character and amenities of the locality.

3.3 Tree Pruning Works

No tree pruning works are proposed in connection with this planning proposal.

Summary of Proposed Tree Removal and Pruning Works:

Type	Ref	Species	Proposed Works
T	2	Cherry	Remove
T	4	Holm Oak	Remove
T	5	Maritime Pine	Remove

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
Incursion of new vehicular hard surfacing into RPA	T1	Low invasive surfacing to be used incorporating Cellular Confinement System. Installation to be carried out in accordance with Section 7 of BS under direct arboricultural supervision. No excavation to take place within RPA of tree & care to be taken at all stages not to compact the soil
Construction of small bin store within RPA	T1	Low invasive foundation (concrete raft) to be used. To be installed in accordance with Section 7 of BS under direct arboricultural supervision

3.5 Light and Proximity Issues

Section 5.3 of the BS is concerned with the proximity of structures to trees and recommends that buildings are sited at distances from trees that allow for future growth without significant problems being experienced. Issues referred to include shading of buildings and open spaces, seasonal nuisances (dropping of leaves and fruits etc.) and concerns over safety. These issues can lead to pressure to heavily prune or remove trees in the future and LPAs will be mindful of this potential pressure when considering whether proposals for development in proximity to trees are acceptable.

In this instance, separation distances and relative orientations are such that the retained trees will block little sunlight to the proposed dwelling.

In terms of general proximity to trees, the proposal accords with Section 5.3 of the BS. It is not considered likely that the retained trees will come under pressure in the future to be heavily pruned or removed as a result of the proposal being implemented.

3.6 Mitigation

There will be scope for some planting of trees during the landscaping phase of the development and the LPA may wish to attach a landscaping condition to any forthcoming planning consent to ensure implementation of a suitable scheme. Planting of these trees will ensure continuity of tree cover and ensure that the character and amenities of the locality are maintained and enhanced.

3.7 Conclusion

Subject to full compliance with the AMS, the net arboricultural implications of the proposed scheme are considered acceptable. 3 trees of modest quality and landscape significance are to be removed and no trees are to be pruned. The retained trees are to be afforded an adequate degree of physical protection during the development works in accordance with the BS.

4 Arboricultural Method Statement

4.1 Introduction

To safeguard the retained trees on the site 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 inspection/supervision required. The Arboricultural Consultant will communicate a record of the meeting to all parties by e-mail.

Matters to be discussed at Pre-Commencement Meeting

- Timing and sequencing of works
- Works to be carried out within the RPA of Holm Oak T1
- Works to be supervised/frequency of site supervision visits
- Exact locations and specifications for tree protective fencing & ground protection
- Any other arboricultural issues

It will also be useful for all parties to exchange current contact details at the meeting

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 with suggested sequencing of works:

- AMS issued to Site Manager/Building Company

- AMS to be read by all site personnel to ensure full understanding of implications. Any queries to be addressed by appointed Arboricultural Consultant

- Tree works carried out – removal of T2, T4 & T5

- Tree Protective Fencing erected and Ground Protection installed*

- Construction works carried out
- New vehicular hard surfacing installed (could be installed prior to construction works if desired)
- Tree Protective Fencing and Ground Protection removed
- Landscaping carried out

*Tree Protective Fencing to be temporarily re-aligned under direct arboricultural supervision when bin store within RPA of T1 is constructed

Summary of Required Arboricultural Inspection/Supervision:

Activity	Level of monitoring/supervision required
Erection of tree protective fencing and installation of ground protection	Inspection of tree protective fencing and ground protection by appointed arboricultural consultant
Installation of low invasive vehicular hard surfacing within RPA of T1	Direct supervision by appointed arboricultural consultant
Construction of bin store (with concrete raft foundation) within RPA of T1	Direct supervision by appointed arboricultural consultant

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 retained trees.

Notice boards, telephone cables or other services will not be attached to any parts of retained trees.

Site operations will be planned to avoid damage to the aerial parts of trees. Particular care will be taken when using piling rigs and plant with booms, jibs and counterweights.

Materials that contaminate the soil (e.g. concrete mixings, diesel oil, builders' sand and vehicle washings) will not be permitted to enter the RPAs of 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. Lists of reputable local tree contractors are also available on many Local Authority websites. APArboriculture can provide advice on enlisting the services of tree contractors where required.

If at any time during the project a need for additional 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.

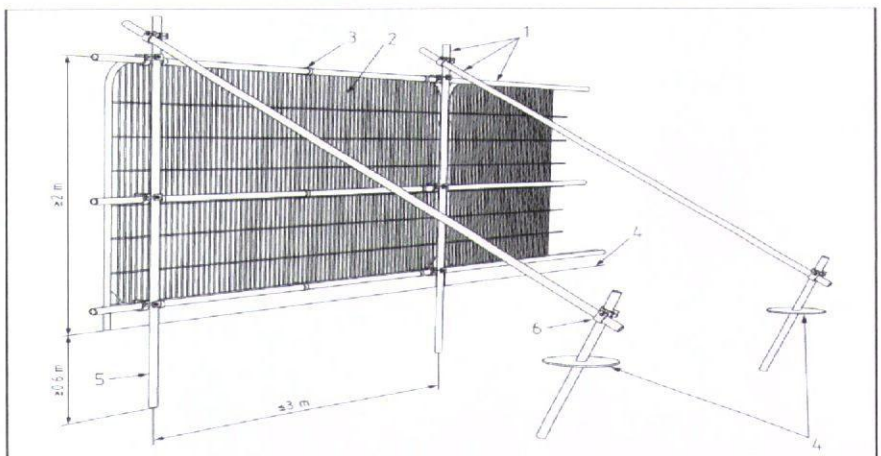
4.6 Tree Protective Fencing and Ground Protection

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/altered 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



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

Braced Heras Tree Protective Fencing in situ – BS5837: 2012

It may *in some cases* be acceptable (e.g. on smaller sites) for rubber or concrete 'feet' at the base of heras fencing to be pinned to the ground or for short outriggers to attached to the fencing and pinned to the ground in lieu of a full scaffold framework. The exact specification of fencing that will be acceptable in this instance can be discussed at the pre-commencement meeting.

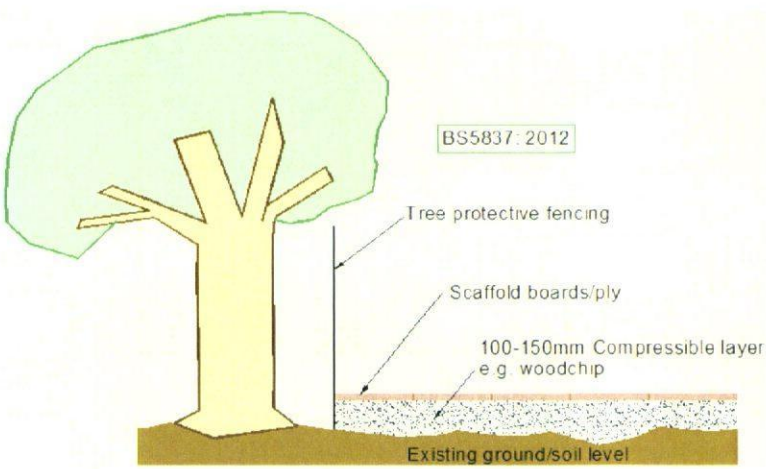
Ground protection has also been specified to protect the RPAs of the retained trees. To accord with the BS, the specification for the ground protection will be as follows:

A geotextile membrane on the ground

100-150mm depth of a compressible layer (e.g. woodchips)

Side butting scaffold boards or plywood on top

Schematic of ground protection & example on site



Nb. The above ground protection specification is suitable for loadings up to 2 metric tonnes (2000kg). For wheeled or tracked construction traffic of over 2 tonnes in weight (gross), more substantial ground protection will be required (e.g. Eve Trakway or a similar proprietary system). In this instance, the above specification is likely to be sufficient.

4.7 Site Access and Hard Surfacing

The proposed driveway is within the RPA of T1. A low invasive surface incorporating a Cellular Confinement System (CCS) is to be used, the depth of which will be ascertained following consultation with an engineer or the Geosynthetics Ltd design service. The surfacing is be installed in accordance with Section 7 of the BS under direct arboricultural supervision. No lowering of existing soil levels is to take place within the RPA of the tree and great care will be taken at all stages to avoid compaction of the soil.

The levels on this site lend themselves to such an approach, but great care will need to be taken throughout the works not to damage the roots or rooting environment of the tree.

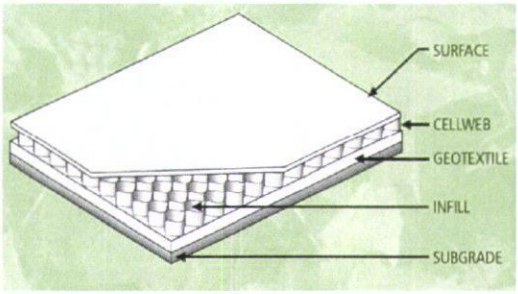
Following careful removal of the existing grass sward tools, a geotextile membrane will be applied. The CCS will be laid on the membrane and filled with no fines road-stone. The final surfacing will then be applied. The final surfacing will be of a permeable nature owing to the extent of the incursion within the RPA of the tree. The exact nature of the final surfacing can be discussed and clarified at the pre-commencement meeting.

Typical sequencing of works when installing low invasive vehicular surfacing incorporating a cellular confinement system is summarised below:

Installation of Cellular Confinement System (CCS) – Sequencing:

- Remove surface vegetation using a glyphosate based herbicide or with the use of hand tools. Compaction of soil to be avoided
- Level ground using sharp sand/top soil if necessary
- Apply geotextile membrane
- Lay the CCS – depth to be determined by an engineer or by reference to the Geosynthetics Ltd Design Service
- Fill CCS with no-fines road stone (ideal particle size 20-40mm diameter), ensuring that machinery/plant/vehicle use is restricted to areas where the CCS has been filled
- Install edging (e.g. boards or kerbs with concrete haunching) on geotextile membrane. Drilled kerbs may be retained using road pins
- Line with heavy gauge polythene if concrete used for edging
- Apply final surfacing (fully permeable in this instance)

Illustrative cross section through Cellular Confinement System



4.8 Demolition

No demolition works are proposed within the RPAs of retained trees.

4.9 Underground Services

It will not be necessary to install any new underground services within the RPAs of retained trees.

4.10 Foundations and Construction

A small bin store is to be constructed within the RPA of T1. A low invasive foundation is to be used, comprising a concrete raft. Following temporary re-alignment of the Tree Protective Fencing, this will be constructed in accordance with Section 7 of the BS under direct arboricultural supervision. No excavation into existing soil levels will take place and care will be taken at all stages to avoid compaction of the soil.

The underside of the concrete foundation will be lined with heavy gauge polythene to safeguard the rooting environment of T1 from the potentially toxic effects of leaching cement.

If the development has not been completed when the bin store has been constructed, the Tree Protective Fencing will be re-aligned again in accordance with the Tree Protection Plan at Appendix 2.

4.11 Fencing and Landscaping

During the landscaping phase of the development, the following precautions will be observed:

Soil within the RPAs of retained trees (and where new tree planting is proposed) will not be compacted. This will preclude the use of heavy plant within RPAs unless suitable ground protection is used

There will be no changes in ground levels within the RPAs of retained trees

Unwanted vegetation within the RPAs of retained trees will be removed manually or using contact herbicides that will not damage tree roots

No underground irrigation or drainage pipes will be installed within the RPAs of retained trees

Care will be taken when carrying out planting works not to damage the roots of retained trees. All planting pits within RPAs will be dug by hand and hedging will not be trench-planted

If any fence posts are installed within the RPAs of retained trees, excavation will be carried out using hand tools. Posts will be re-positioned if roots in excess of 25mm in diameter are encountered. Post holes will be lined with heavy gauge polythene where concrete is used to safeguard the rooting systems of the trees from the potentially toxic effects of leaching concrete.

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

APArboriculture
www.aparboriculture.co.uk

Tree Survey Schedule

Tel 01932 450104

Site: Seacourt (Land Adjacent to 202 Seafront), Hayling Island PO11 9HR

BS5837 2012 compliant survey by Andrew Pinchin

Date of Survey: 3rd September 2014

Ref APA/AP/2014/161

Tree Ref	Common Name	Height	Crown Spread	Crown Height	Age Class	No. of Stems	Stem Diameter	RPA Radius	Vigour	Structural Condition	Landscape Value	BS Cat	Useful Life	Notes & Observations
T1	Holm Oak	12	4 9 7 6	2	M	1	600	7.2	Normal	Fair	Medium	B1	20+	Asymmetric crown but situated in prominent location; poorly pruned in past; scattering of dead wood to 75mm diameter in crown
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T2	Cherry	9	4 4 5 4	3	M	1	350 e	4.2	Poor	Poor	Low	U	<10	Off-site tree; significant die-back in crown; tree in decline
No. of trees: 1														
Recommended Works:	Remove													
Reasons for Works:	Constitutes good arboricultural practice													
T3	Turkey Oak	13	4 6 6 4	4	EM	1	260 e	3.1	Normal	Poor	Medium	C1	20+	Off-site tree; relatively poor structure
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T4	Holm Oak	12	3 2 2 5	3	EM	2	700	8.4	Normal	Poor	Medium	C1	10+	Twin-stemmed at base with poor structure
No. of trees: 1														
Recommended Works:	Remove													
Reasons for Works:	To facilitate proposed development works													
T5	Maritime Pine	11	8 0 7 8	2	M	1	620	7.4	Normal	Poor	Low	C1	10+	Heavily topped with poor structure
No. of trees: 1														
Recommended Works:	Remove													
Reasons for Works:	To facilitate proposed development works													

Tree Ref	Common Name	Height	Crown Spread	Crown Height	Age Class	No. of Stems	Stem Diameter	RPA Radius	Vigour	Structural Condition	Landscape Value	BS Cat	Useful Life	Notes & Observations
T6	Holm Oak	10	2 2 3 2	4	Y	1	210	2.5	Normal	Fair	Low	C1	20+	Drawn structure with narrow crown
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T7	Holm Oak	12	4 7 6 6	4	EM	2	760	9.1	Normal	Poor	Medium	C1	20+	Twin stemmed at base with poor structure
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T8	Holm Oak	11	3 6 4 2	4	Y	1	250	3.0	Normal	Fair	Medium	C1	20+	Eccentric crown
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T9	Holm Oak	11	1 3 3 3	4	Y	1	230	2.8	Normal	Fair	Low	C1	20+	Drawn crown structure
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T10	Holm Oak	11	2 3 4 4	3	Y	1	190	2.3	Normal	Poor	Low	C1	20+	Drawn crown structure with mis-shapen stem
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													
T11	Holm Oak	13	6 7 5 5	1	EM	2	630	7.6	Normal	Fair	Medium	C1	20+	Twin-stemmed at base
No. of trees: 1														
Recommended Works:	No works proposed													
Reasons for Works:	N/A													

Tree Ref	Common Name	Height	Crown Spread	Crown Height	Age Class	No. of Stems	Stem Diameter	RPA Radius	Vigour	Structural Condition	Landscape Value	BS Cat	Useful Life	Notes & Observations
T 12	Cherry	6	3 3 3	1.5	Y	2	170	2.0	Normal	Fair	Low	C1	20+	Twin-stemmed at 1.3m ht

No. of trees: 1

Recommended Works: No works proposed

Reasons for Works: N/A

Total no. of surveyed trees: 12

Key to Tree Survey Schedule (*BS5837: 2012*)

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

Species – Common or Latin name for tree

Height – Height of tree in metres

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

Crown Height – Height of lowest parts of crown above ground level in metres

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

No. of Stems – Number of stems over 75mm in diameter at 1.5m above ground level

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 (e= estimated value; m = mean value)

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

Vigour – An indication of the physiological condition/health of the tree: Normal, Moderate, Poor, Dead

Structural Condition – An assessment of the overall structural condition of the tree: Good, Fair, Poor

Landscape Value – High, Medium, Low

BS Cat – BS5837: 2012 Category. A- High, B- Moderate, C- Low, U- Remove. *For full description of categories see Table 1 of BS5837:2012*

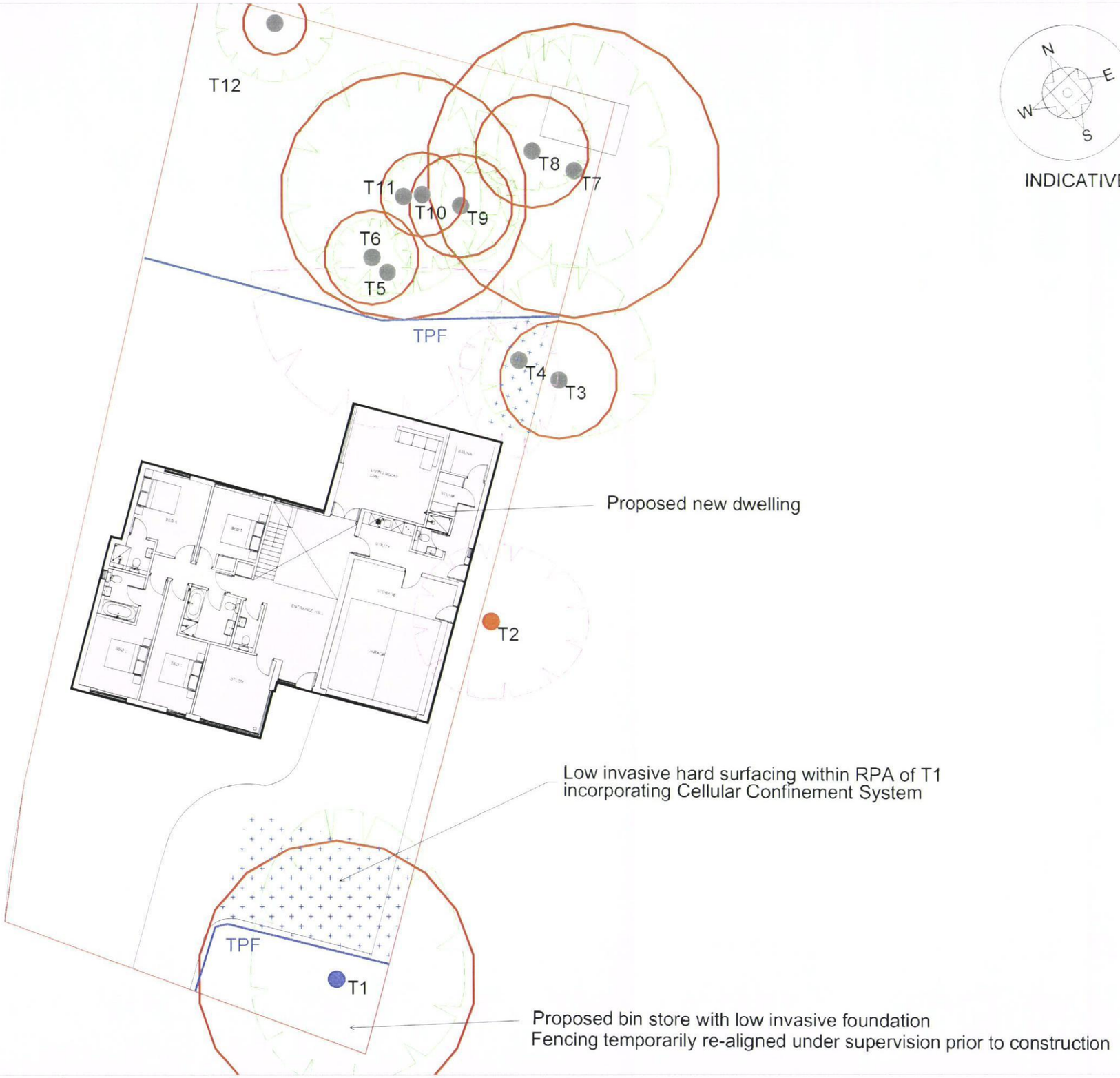
Useful Life – Estimated remaining contribution to the landscape in years

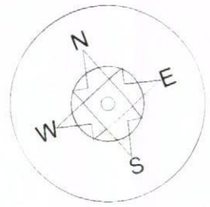
Notes and Observations – miscellaneous notes where it is considered that these may be useful

(Recommended works and reasons for works also given in Tree Survey Schedule).

Appendix 2

Tree Protection Plan





INDICATIVE

Root Protection Area (RPA) of retained tree (ref BS5837 2012)

Category A

Category B

Category C

Category R

Tree to be removed

TPF Tree protective fencing

Ground protection

Plan to be printed in colour and to scale

DRAWING TITLE

Tree Protection Plan

PROJECT

Seacourt
Hayling Island
PO11 9HR

SCALE	DATE	DRAWN BY
1:100 @ A1	04.09.14	AP

DRAWING NUMBER: TPP/APA/AP/2014/161 REV

APArboriculture
15 Church Street
Weybridge
Surrey
KT13 8NA

Tel: 01932 450104
aparboriculture@gmail.com

www.aparboriculture.co.uk

Appendix 3

BS5837 Categorisation System

BS5837:2012 Categorisation System (Abbreviated)

Category A		*Trees of high quality with an estimated remaining life expectancy of at least 40 years.* Particularly good specimens (A1); Trees, groups or woodlands of particular landscape significance (A2); Trees, groups or woodlands of significant conservation, historical or commemorative value (A3)
Category B		*Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.* Trees of slightly lower individual quality (B1); Trees of collective value but of lesser overall landscape significance than Category A trees (B2); Trees with material conservation or cultural value (B3)
Category C		*Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.* Unremarkable trees of limited merit (C1); Trees, groups or woodlands of low landscape value (C2); Trees with no material conservation or cultural value (C3)
Category U		Trees 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 (dead, declining and diseased trees etc.) It will normally be recommended that these trees be removed (unless they have particular conservation/ecological value)

- Category A, B and C trees should be considered for retention
- Although Category C trees are generally of lower overall quality and landscape significance, they may still constitute a material planning constraint
- Category U trees are usually unsuitable for retention

Tree to be removed (Category U trees and other trees where justification can be presented within context of development works being proposed)

The legal protection status of the trees will also be an important consideration regarding retention or otherwise of trees (see Section 2.3 of report)

For a complete description of the categories, see Table 1 of BS5837:2012 – Cascade chart for tree quality assessment