



September 2018
CBA10257 v2

Phillips Build Ltd

ARBORICULTURAL DEVELOPMENT STATEMENT

Site:
Langstone Road



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The Complete Arboricultural Consultancy



ARBORICULTURAL DEVELOPMENT STATEMENT

Arboricultural Implications Assessment and Method Statement

guided by recommendations within BS5837:2012

Client:	Phillips Build Ltd
Site:	Langstone Road
Arboricultural Consultant:	Stefan Rose <i>BSc (Hons), TechCert (Arbor.A), TechArborA</i>
Date:	September 2018

SUMMARY

The proposals are for the development of land at 15 Langstone Road, Havant to provide residential accommodation and have been assessed broadly in accordance with BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.

This Arboricultural Development Statement (ADS) will demonstrate the protection measures for the trees and should be read in association with the Tree Protection CBA10257.02A TPP that identifies tree retention measures.

The emphasis of the report is predominantly that of preservation and tree protection. It identifies methodologies to provide protection for trees, to ensure their healthy and safe retention during and post development, as guided by BS5837:2012 and current best practice.

A total of 11 (eleven) individual trees and 7 (seven) groups of trees can be fully retained and protected within the development as detailed within this report. In addition, sections of Group 2 and 5 can be retained.

There are 4 (four) trees and 2 (two) groups plus one tree from within Group 9 that will be lost to facilitate the development, and to allow reasonable and usable garden space.

One tree (Tree 1), will be removed for sound arboricultural management regardless of any development proposals as it is dead.

The proposal retains the site entrance location that was previously approved by Havant Borough Council and therefore the impact to the street scene remains as previously approved with the loss of Tree 12 and the partial loss of Group 2.

CBA Trees believes that the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

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SUPPORTING INFORMATION/APPENDICES:

CB1	Tree Survey Schedule including Root Protection Area Schedule
CB2	Tree Survey Plan CBA10257.01B TSP
CB3	Tree Protection Plan CBA10257.02A TPP
CB4	Tree Works Schedule

GUIDING PRINCIPLES/APPENDICES:

CB5	Tree Protection Guidance Leaflet
	Construction Exclusion Zone Site Notice
	Common Causes of Damage During Construction Works
CB6	Qualifications and Experience

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ARBORICULTURAL IMPLICATIONS ASSESSMENT

1.0 INTRODUCTION

- 1.1 The proposals are for the development of land at 15 Langstone Road, Havant and have been assessed broadly in accordance with BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.
- 1.2 Document disclosure provided:
- Site survey plan: 1664_14_041_01
 - Proposed site layout, x-site 2018 08 28 (provided by MH Architecture)
- 1.3 The client and project consultants provided the original site plans and locations of the trees, and these have been the basis for the production of subsequent plans. Whilst CBA Trees has had a limited input in defining the contents of the development plan, it broadly conforms to the requirements of BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"* and current best practice advice.
- 1.4 Our advice has been sought on the principles of the development in relation to the potential impact on the existing tree stock, to inform and to facilitate the development layout.

2.0 CLIENT'S BRIEF

- 2.1 In line with our written quotation and verbal instructions, information has been compiled in accordance with BS5837:2012 and current best practice advice.
- To undertake a Tree Survey (schedule including Root Protection Areas appended at CB1).
 - To produce an AutoCAD compliant Tree Survey Plan that relies on the accuracy of the topographical survey provided by the client (plan CBA10257.01B TSP appended at CB2).
 - Based on the above and further on-going discussions, to provide an Arboricultural Development Statement detailing the methodologies for the retention of the tree stock where feasible, in relation to the approved development layout including a Tree Protection Plan (CBA10257.02A TPP appended at CB3).
- 2.2 The advice provided has been formulated without discussion with the main ground or construction contractors who at this stage have not been appointed. Once the main contractors are appointed, amendments to this statement may be required for construction purposes. All amendments will be assessed by the retained arboricultural consultant and approved in writing by Havant Borough Council.

3.0 DESCRIPTION OF THE SITE

- 3.1 The site lies to the east of Langstone Road within a residential setting. In the main the trees are located around the perimeter of the site and are typical of a private residential dwelling.

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- 3.2 The site appears to be flat in nature and is mainly laid to lawn with the existing dwelling towards the north-west corner of the plot.
- 3.3 The larger, more dominant trees are located in the south-west corner, centrally along the northern boundary and in the north eastern corner.

4.0 THE TREE STOCK

- 4.1 CBA Trees undertook a tree survey on 13th July 2016 that identified 16 (sixteen) individual trees, 11 (eleven) groups of trees and 2 (two) hedges. A resurvey was subsequently carried out in August 2018. The Tree Survey Schedule is appended at CB1 and Tree Survey Plan CBA10257.01B TSP is appended at CB2.

4.2 Tree Categorisation Method

Category U = Trees in such a condition that any value would be lost within 10 years, or should be removed for reasons of sound arboricultural management. There was 1 (one) tree classified as 'U' grade at the time of surveying (Tree 1).

Note: BS5837:2012 states -

"Category U trees are 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."

Category A = Trees of high quality and value: in such a condition as to make a substantial contribution, (40 years or more is recommended). There were no individual 'A' grade trees or groups of trees on the site at the time of surveying.

Category B = Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years. There were 2 (two) individual 'B' grade trees at the time of surveying (Trees 7 and 15).

Category C = Trees of low quality and value which might remain for a minimum of 10 years or young trees with stems of less than 150mm diameter. There were 13 (thirteen) individual 'C' grade trees on site at the time of surveying (Trees 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14 and 16).

Note:

Trees under these categories are trees that should be a material consideration in the development process; the subcategories are intended to reflect arboricultural, landscape and cultural values respectively.

- 4.3 4 (four) groups of trees and 1 (one) hedge were graded as an overall B grade classification (Groups 1, 5, 6 and 11 plus Hedge 2).
- 4.4 7 (seven) groups of trees and 1 (one) hedge were graded as an overall C grade classification (Groups 2, 3, 4, 7, 8, 9 and 10 plus Hedge 1).

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- 4.5 For more details of the existing tree stock, refer to the Tree Survey Schedule (appended at CB1).

5.0 TREE PRESERVATION ORDER/CONSERVATION AREA

- 5.1 Havant Borough Council served a Tree Preservation Order on several trees at 15 Langstone Road. The Order is referenced as TPO No:2081/2018 15: Langstone Road Havant and was served on 2nd August 2018.
- 5.2 The TPO details two individual trees and one group of trees:
- TPO T1 – CBA Tree 14 - Lime
 - TPO T2 – CBA Tree 15 - Oak
 - TPO G1 – CBA Trees 10, 11 and 12 – Sycamore
- 5.3 Review of the available online mapping system on the Council's website would suggest that the Order has been modified to only include TPO T1 and T2 and that the group has been omitted. It is advised to obtain written confirmation from Havant Borough Council to establish the legal status of these trees prior to any works being undertaken, outside the remit of a detailed approved planning application.

6.0 PROPOSED TREE RETENTION AND TREE LOSS

- 6.1 In accordance with the recommendations contained within BS5837:2012, an experienced arboriculturist has assessed the requirements for tree protection and the Root Protection Area (RPA). The implications of the proposed development are detailed below, along with any mitigating measures to ensure the retention of these trees.
- 6.2 As part of the assessment, dimensions have been scaled from the proposed drawing (ref: x-site 2018 08 28 provided by MH Architecture) prepared and modified, to include the relevant tree survey data (plan CBA10257.02A TPP appended at CB3).

7.0 SUMMARY OF ARBORICULTURAL IMPLICATIONS

- 7.1 The following is a summary of arboricultural implications as indicated on Tree Protection Plan CBA10257.02A TPP.

Table 1: Arboricultural Implications

Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
1	Blue Atlantic Cedar <i>Cedrus atlantica</i> 'Glauca'	U	• -	• Removed	• Dead tree

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
2	Juniper <i>Juniperus spp</i>	C1	Under foot print of development	Removed	Replacement planting within site
3	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	C1	Under foot print of development	Removed	Replacement planting within site
4	Bay <i>Laurus nobilis</i>	C1+2	- Damage to roots from driveway - Damage to crown - Ground compaction - Construction works - Installation of services and utilities - General site activities and movements	Retained	- To be protected as detailed in Section 2 of this report - Minimal root loss and species able to cope - Cellular confinement system used for no dig driveway section
5	Common Yew <i>Taxus baccata</i>	C1	- Damage to roots from driveway - Damage to crown - Ground compaction - Construction works - Installation of services and utilities - General site activities and movements	Retained	- To be protected as detailed in Section 2 of this report - Minimal root loss and species able to cope - Cellular confinement system used for no dig driveway section
6	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	C1+2	- Damage to roots from driveway - Damage to crown - Ground compaction - Construction works - Installation of services and utilities - General site activities and movements	Retained	- To be protected as detailed in Section 2 of this report - Minimal root loss and species able to cope - Cellular confinement system used for no dig driveway section
7	Common Yew <i>Taxus baccata</i>	B1+2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
8	Sycamore <i>Acer pseudoplatanus</i>	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
9	Highclere Holly <i>Ilex x altaclarensis</i>	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
10	Sycamore <i>Acer pseudoplatanus</i>	C1+2	- Damage to roots - Damage to crown - Ground compaction - Construction works for boundary wall - Installation of services and utilities - General site activities and movements	Retained	- To be protected as detailed in Section 2 of this report - Root spread not likely to be significant to the north of T11 and 12 - Boundary wall foundation to utilise pile and above ground concrete lintel for foundation

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
11	Sycamore <i>Acer pseudoplatanus</i>	C1+2	• Damage to roots • Damage to crown • Ground compaction • Construction works for boundary wall • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Root spread not likely to be significant to the north of T12 • Boundary wall foundation to utilise pile and above ground concrete lintel for foundation
12	Sycamore <i>Acer pseudoplatanus</i>	C1+2	• Damage to roots • Damage to crown • Ground compaction • Construction works for driveway • Installation of services and utilities • General site activities and movements	• Removed, agreed for removal under the previously consented scheme	• Replacement planting within site
13	Gum <i>Eucalyptus spp</i>	C1	• Damage to roots • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Fit for purpose ground protection for duration of site work
14	Common Lime <i>Tilia x europaea</i>	C1+2	• Damage to roots • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements • Removal of outbuilding and existing built form	• Retained	• To be protected as detailed in Section 2 of this report • Fit for purpose ground protection for duration of site work • Garden boundary wall foundation to utilise pile and above ground concrete lintel for foundation • Outbuildings and built form to be removed by hand
15	Pedunculate Oak <i>Quercus robur</i>	B1+2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report
16*	Common Ash <i>Fraxinus excelsior</i>	C1	• Under foot print of development	• Removed	• Replacement planting within site
Grp 1	Lawson Cypress Hazel Cherry Laurel Ash Rhododendron Pittosporum Bay Laurel	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
G1.1	Pittosporum	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope
G1.2	Pittosporum	C2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report •
G1.3	Bay	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope
G1.4	Lawson Cypress	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope
G1.5	Cherry Laurel	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope
G1.6	Lawson Cypress	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope
G1.7	Lawson Cypress	B2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report •
Grp 2	Cherry Laurel Bay Laurel Crab Apple	C2	• Damage to roots • Damage to crown • Ground compaction • Construction works for boundary wall • Installation of services and utilities • General site activities and movements	• Part removed as indicated on CBA10257.02A TPP, agreed for removal under the previously consented scheme	• Replacement planting within site

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
Grp 3	Ash Pittosporum Lawson Cypress Cherry Laurel	C1+2	• Damage to roots • Damage to crown • Ground compaction • Construction works • Installation of refuse area • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Existing hard standing area utilised
Grp 4	Bay Lawson Cypress Apple Sweet Chestnut Ash	C2	• Under foot print of development	• Removed	• Replacement planting within site
Grp 5	Berberis Spotted Laurel Holly Camelia Smoke Bush Spruce Japanese Red Cedar Cabbage Palm Lawson Cypress Cherry Laurel Pittosporum Purple Leaved Plum Silver Birch Sycamore	B2	• Damage to roots • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Part retained • Part removed	• To be protected as detailed in Section 2 of this report
Grp 6	Cherry Laurel Ash Lawson Cypress	B2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
Grp 7	Bay Silver Birch Hawthorn	C2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
G7.1	Hawthorn	C1+2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
G7.2	Hawthorn	C1+2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
G7.3	Bay	C1+2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
G7.4	Cherry Laurel	C1+2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
G7.5	Silver Birch	C1+2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G7.6	Hawthorn	C1+2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G7.7	Bay	C1+2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G7.8	Silver Birch	C1+2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
Grp 8	Hazel Elder	C2	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
Grp 9	Apple x 7 Pear x 2	C2	- Damage to roots and crown from dwelling construction works - Ground compaction - Installation of services and utilities - General site activities and movements - Unsustainable location within garden	- Part retained - Part removed	1 tree within group removed
G9.1	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.2	Pear	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.3	Pear	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.4	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.5	Apple	C1	Under foot print of development	Removed	Replacement planting within site
G9.6	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.7	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.8	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report
G9.9*	Apple	C1	Unaffected by development	Retained	To be protected as detailed in Section 2 of this report

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
Grp 10	Purple Leaved Plum Japanese Red Cedar Lawson Cypress Norway Spruce Berberis	C2	• Damage to roots and crown from construction works • Ground compaction • Installation of services and utilities • General site activities and movements • Unsustainable location within garden	• Removed	• Replacement planting within site
Grp 11	Common Ash Cherry Laurel Hazel Lawson Cypress	B2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section
G11.1	Common Ash	C1+2	• Damage to roots • Damage to crown • Removal of existing out buildings • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report
G11.2	Cherry Laurel	C1+2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report
G11.3	Apple	C1+2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report
G11.4	Hazel	C1+2	• Unaffected by development	• Retained	• To be protected as detailed in Section 2 of this report
G11.5	Bay	C1+2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section
G11.6	Bay	C1+2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section

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Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
G11.7	Bay	C1+2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section •
G11.8	Lawson Cypress	C1+2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section •
G11.9	Lawson Cypress	C1+2	• Damage to roots from driveway • Damage to crown • Ground compaction • Construction works • Installation of services and utilities • General site activities and movements	• Retained	• To be protected as detailed in Section 2 of this report • Minimal root loss and species able to cope • Cellular confinement system used for no dig driveway section •
H1	Leyland Cypress	C2	• Damage to roots • Damage to crown • Ground compaction • Construction of new entrance • Construction works • Installation of services and utilities • General site activities and movements	• Removed	• Replacement planting within site
H2	Common Beech	B2	• Under foot print of development	• Removed	• Replacement planting within site

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8.0 PRE-COMMENCEMENT SITE MEETING

- 8.1 It is recommended that a pre-commencement site meeting should be held prior to any works commencing on site to agree all approved processes with the arboricultural consultant, the construction personnel and Havant Borough Council Tree Officer. This meeting could be used to formally agree the methods of work, position of site offices, marking up of trees for removal, material storage, compounds, parking and tree protection measures prior to commencement of the development and the associated clearance work.

9.0 ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL

- 9.1 To provide site personnel with additional information regarding the requirements of Tree Protection, a leaflet (appended at CB5) shall be issued to all staff at the time of their site induction. Spare copies of this leaflet shall be available in the site office/clients house as replacements.
- 9.2 In order to inform site personnel of the purpose of the barriers, information notices shall be fixed to the barriers at 5m intervals. These notices shall be of all-weather construction and shall be in the form of the specimen provided at appendix CB5 and replaced as and when necessary.

10.0 PRE-DEVELOPMENT TREE WORKS

- 10.1 All tree works will be undertaken prior to the commencement of site preparation and construction works.
- 10.2 **All permitted or approved tree work** should be carried out in accordance with the British Standard "*Recommendations for Tree Work*" BS3998:2010, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and erection of protective barriers.
- 10.3 If any additional works (those works not detailed within the Tree Works Schedule appended at CB4 of this report) are required to retained trees protected by a TPO or within a Conservation Area, prior to full planning permission being granted, written approval must be obtained in advance from Havant Borough Council.
- 10.4 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.
- 10.5 Due to the bird-nesting season, considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration must also be given to the potential for nesting birds. Therefore, where tree work is to be carried out within these months the project ecologist must be consulted to:

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- Complete or advise on a pre-works survey that needs to be carried out by a suitably competent person. As a general rule it should be assumed that birds will be nesting in trees, and it is down to contactors to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds.*
 - Ground vegetation, and therefore ground nesting birds, can often be overlooked by tree workers so additional care and controls should be taken when access and egress to the work site may also cause disturbance or damage to a nesting site. This is also true for retained trees on site as the removal of adjacent trees or remedial works on a tree may lead to an established nest being abandoned, exposed to the elements or predation. This action is also a breach of the Act and therefore could lead to prosecution due to the infringement of the Wildlife and Countryside Act 1981 and breaching the Conservation of Habitats and Species Regulations 2010 (as amended).
- 10.6 Although not apparent at the time of the site visit, consideration should also be given to the presence of bats, and a full visual assessment should be undertaken before any works are carried out on the trees. Where bats are identified as a serious concern, a bat survey should be undertaken by qualified and trained personnel to identify the needs of the bats (roosts, resting place etc) and no tree works can be carried out until the 'all clear' is given, or a programme of recommendations is received in writing.
- 10.7 Should additional tree works become apparent during the construction process; written consent will be required from Havant Borough Council prior to these additional works being undertaken.
- 10.8 All tree works that are required to facilitate the development are detailed within the Tree Works Schedule appended at CB4.

11.0 TREE PROTECTION MEASURES

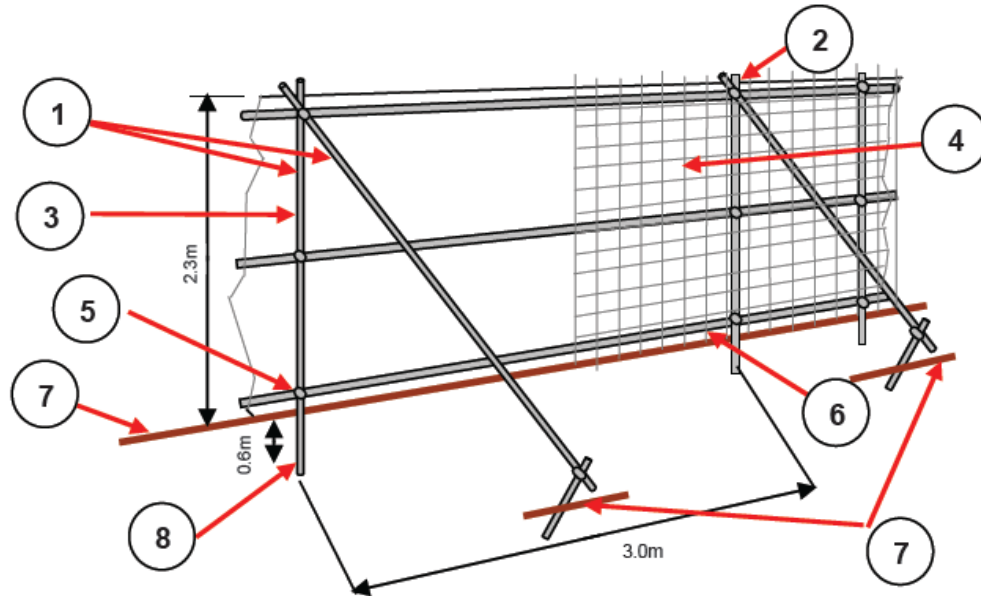
- 11.1 Tree protection will be installed in accordance with Tree Protection Plan CBA10257.02A TPP prior to the commencement of any site preparation works. A copy of the Arboricultural Statement and Tree Protection Plan will be available on site at all times.
- 11.2 At all times the tree protection will be fit for purpose, i.e. it will exclude all site clearance and construction activity from the protected area. It is imperative that the contractors are made aware that the barrier and ground protection is located to restrict their movements and that the area beyond this is sacrosanct.
- 11.3 It may be reasonable to use site hoarding as a tree protective barrier and if this is the case, then advice and confirmation should be sought from the project arboricultural consultant and the design approved by Havant Borough Council.
- 11.4 All retained trees, groups and hedges will be protected by installing the following protective barrier as indicated on Tree Protection Plan CBA10257.02A TPP. The

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barrier is to comprise of a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Onto this, weldmesh panels should be securely fixed with wire or scaffold clamps.

Figure 1: Protective Barrier



1. Standard scaffold poles
2. Uprights to be driven into the ground
3. Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4. Weldmesh wired to the uprights and horizontals
5. Standard clamps
6. Wire twisted and secured on inside face of barriers to avoid easy dismantling
7. Ground level
8. Approximately 0.6m driven into the ground

Example of protective barrier:



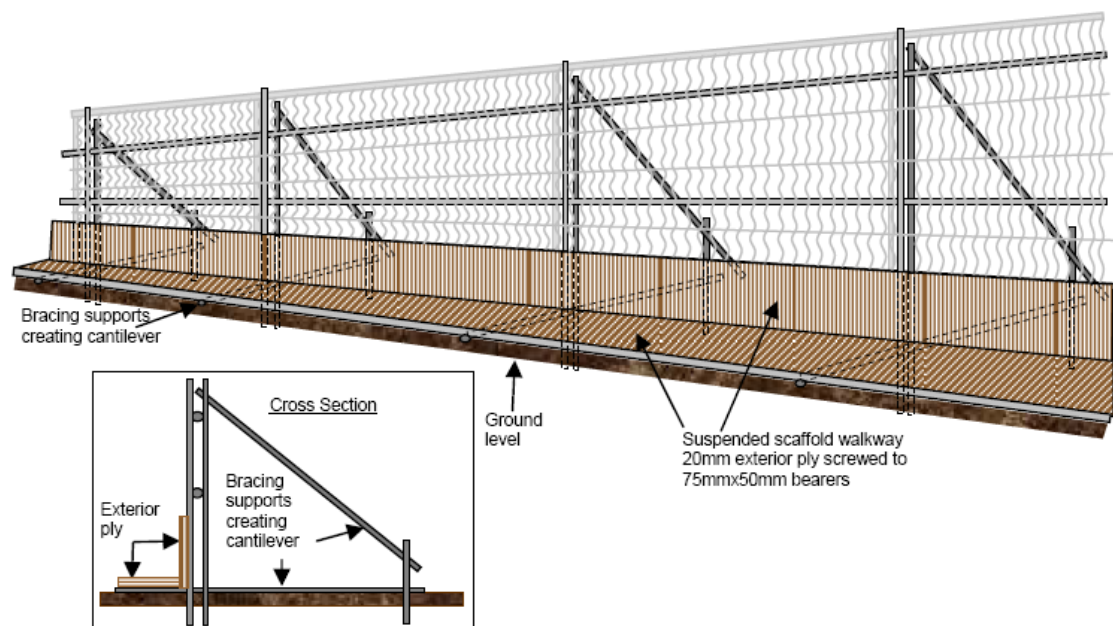
11.5 **Ground Protection**

Pedestrian movements

Trees 13 and 14 require construction activity within the identified Construction Exclusion Zone (CEZ). Ground protection will be implemented for these trees as shown on the Tree Protection Plan CBA10257.02A TPP.

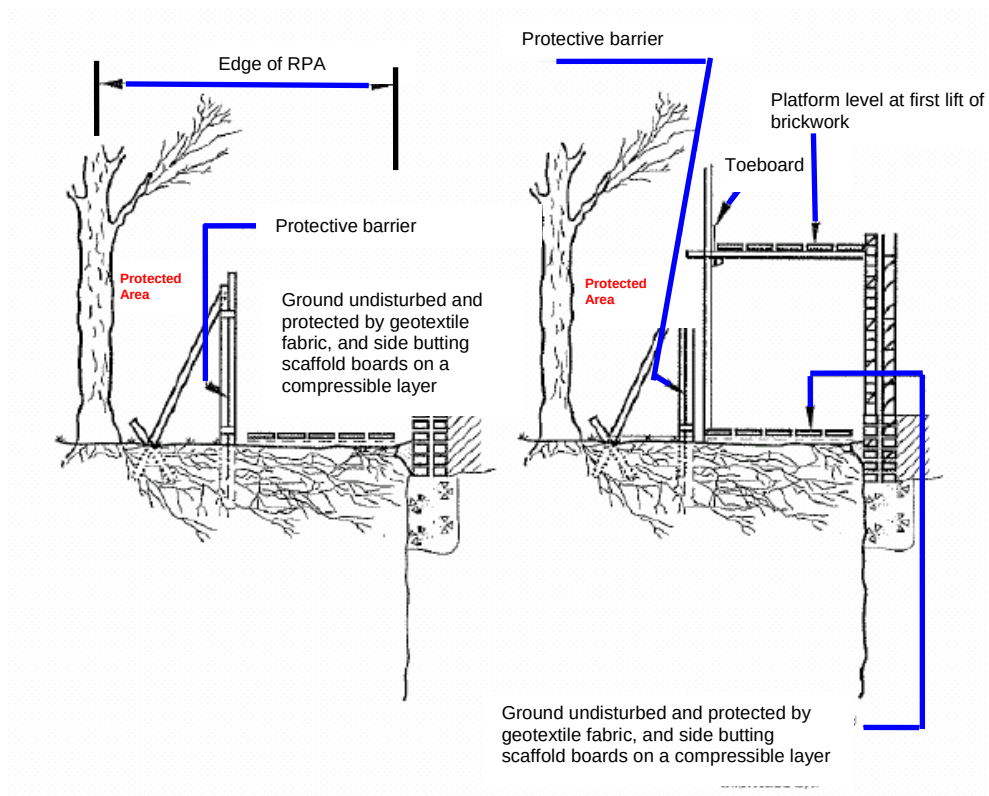
Ground protection will be constructed in accordance with Figure 2 below, and consist of a suspended walkway decked with 20mm exterior grade Plyboard supported on 75 x 50mm bearers. The specification provides for pedestrian access only.

Figure 2: Pedestrian walkway within the Root Protection Area



- 11.6 An alternative approach is provided (Figure 3 below), the method will allow for construction and working space within the CEZ of Trees 13 and 14. This method will consist of a single thickness of butt jointed scaffold boards supported on a 150mm thick layer of composted woodchip that is prevented from mixing with the underlying soil by geotextile separation layer.

Figure 3: Ground Protection Specification (shown on next page)



Site and Machinery Access within Construction Exclusion Zone

- 11.7 At this stage, no information has been provided as to the type, weight or ground pressure of the equipment to be deployed, and therefore the exact type of ground protection is yet to be specified. The method of ground protection will be engineer designed and fit for purpose. Prior to the commencement of works, ground protection will be assessed by the retained arboricultural consultant and approved in writing by the Havant Borough Council Tree Officer.
- 11.8 A compressible layer will be incorporated into the design to minimise compaction of the rooting environment. This layer could consist of a thick layer of composted wood chip or preparatory neoprene mats.

Ground protection could consist of hardwood Eki Mats. These mats are suitable for rubber tyre vehicles and should be laid to form a single track of either 3m or 5m width.

These mats may be used to support evenly distributed weights of up to 21 tonne for 3m and 35 tonne for 5m depending on ground conditions on site.

Example of Eki mats in use



PART 2

ARBORICULTURAL/ CONSTRUCTION METHOD STATEMENTS

Ground protection could consist of an aluminium preparatory Trackway system e.g. Eve Trackway. This trackway consists of extruded aluminium planks that are connected to create this high capacity panel that has a corrugated surface to aid vehicle traction. By interconnecting panels in any combination of widths and layers, the heavy-duty system provides guaranteed access for any load, up to 1000 tonnes.

Example of Eve Trackway in use



- 11.9 Prior to the commencement of works, ground protection will be assessed by the retained arboricultural consultant and approved in writing by the Havant Borough Council Tree Officer.
- 11.10 Ground protection within the CEZ of trees, along with the protective barriers, will remain *in-situ* for the duration of the construction project. It will therefore be necessary to install aeration irrigation pipes to maintain a healthy rooting environment beneath the ground protection. Pipes will be laid over a geotextile separation layer that is covered with 150mm of composted wood chip. Irrigation will be provided from April to September at a rate of 100 litres per week for each 10m² of trackway installed or as directed by the retained arboricultural consultant.
- 11.11 Narrow scaffolding maybe required adjacent to Group 5 and green mesh safety netting could be used to hold back the branch tips.
- 11.12 At no time can ground levels be reduced or increased within or immediately adjacent to the tree protection measures without consulting with and gaining approval from the arboricultural consultant.
- 11.13 Once all ground and construction works is complete, materials and plant have been removed from site then the scaffolding and tree protection barriers can be removed from site.
- 11.14 The areas protected by barriers and existing hard surfacing will be regarded as **sacrosanct**, and the tree protective barriers shall not be taken down or relocated at any time without the written approval of Havant Borough Council. An example of a Construction Exclusion Zone (CEZ) notice is appended at CB5.

12.0 FOUNDATIONS CONSTRUCTION

- 12.1 The proposal places an access driveway and car parking bays within the root protection area of Trees 5, 6 and Group 11. Patio foundations within the root protection area of Tree 14 will also require special construction methods to ensure minimal impact on these trees.
- 12.2 It has been recognised that traditional foundations cannot be installed within these locations and that specialist foundations as advocated within BS5837:2012 will be required.
- 12.3 Construction details are not yet available but will be engineer designed, assessed by the retained arboricultural consultant and submitted for approval in writing to Havant Borough Council prior to the commencement of works on site.
- 12.4 Foundations will be designed to:
- Minimise direct damage and severance of roots within the RPA of retained trees
 - Maintain soil structure
 - Prevent compaction of rooting environment during construction
 - Minimise ground level increases within the RPA
 - Maintain soil moisture beneath the structure
 - Maintain aeration beneath the structure
 - Allow for future root growth
 - Be sufficient to withstand soil volumetric change as a result of future growth or loss of adjacent trees.
- 12.5 Design principles include:
- The proposed hard surface will consider site-specific factors and will be designed in accordance with advice from a structural engineer drainage engineer and arboricultural consultant. This will result in a design which is fit for purpose, adequate for the task and sympathetic to the biological requirements of the trees.
 - If ground levels are to be raised to provide a level surface, this should be achieved with a granular material which does not inhibit gaseous exchange (such as no-fines gravel, washed aggregate or cobbles).
 - Sub-base within the confinement system will consist of a non-binding, no fines granular material which does not inhibit water percolation or gaseous exchange.
 - If a substantial area of fill is to be installed, provision will be made for the installation of irrigation and aeration system within the RPA of retained trees. Distance between pipes will not exceed 400mm, irrigation pipes will be connected to the surface water drainage system. Aeration pipes will be installed in between and will be protected by paving mounted grills.
 - Any 3-dimensional cellular confinement system must allow gaseous exchange both vertically and horizontally. Any load suspension system should only be used in accordance with the manufacturer's guidelines, and its installation should comply with any relevant health and safety guidance.

- It will be finished with a surface treatment which is permeable to gaseous and water movements.
- Any proposed no-dig hard surfacing will be designed to allow future growth of the roots and the base of the trunk, and as such should be no closer than 500mm from the trunk base. This will avoid future damage, both to the tree and engineered surface.

12.6 Wearing courses which could be installed over the granular material include:

- Washed Gravel – This is particularly useful as it retains its porosity (unless excessively consolidated), and can accommodate irregular shapes and changes in level. It is rarely suitable where vehicle or heavy pedestrian access is expected. Any gravel should have a low fines content to avoid low permeability resulting from consolidation.
- Paving Slabs and Pavers – These can be installed with infiltration spaces between the slabs, and should be installed dry-jointed and on a sharp sand-foundation.
- Bitumen Paving – If implemented, this must be of a porous construction however, such surfaces will eventually become clogged with silt, and provision must be made for regular vacuum sweeping within the future maintenance of the surface or be installed in a similar way to the in-situ concrete, or be limited to less than 20% of the RPA.
- Other surfaces may be used but the final design of any no-dig hard surface should always be in agreement with a structural engineer and the retained arboriculturist.

12.7 If edge supports are required, they will be designed so as not to require any excavation of the existing soil surface, and should be in the form of either wooden or other edging materials, approved by a structural engineer and the retained arboriculturist. These edgings should be pinned in place, and the location of the pins should seek to avoid exposed surface or structural roots exceeding 25mm diameter.

13.0 EXISTING SERVICES

- 13.1 No information has been provided on the location and size of existing services. However, existing services within the RPA and CEZ of retained trees will not be chased out, but cut at the edge of any structure and left *in-situ*.
- 13.2 Where required, cabling will only be recovered from beneath a CEZ where it is located in ducting, and can be removed by winching from an existing service manhole beyond the CEZ.
- 13.3 Service pipes and ducts, where they are located within the CEZ or RPA of retained trees, will be made redundant if required either by pipe bursting or by filling with an inert material such as foamed concrete.

14.0 AVOIDING DAMAGE TO STEMS AND BRANCHES

- 14.1 Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact could result in serious damage to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees will be conducted under the supervision of a banksman, in order to ensure adequate clearance from trees is maintained at all times.

15.0 VEHICULAR MOVEMENTS

- 15.1 There should be minimal vehicular movement in the potential rooting zone and outside the CEZ identified on CBA10257.02A TPP.
- 15.2 All contractor vehicles and plant machinery will use the existing hard standing area and access to the front car parking area of No.15 Langstone Road to enable the removal of Trees 1 and 12 and Hedges 1 and 2 and the part removal of Group 2 to allow for the new entrance to be created. Once this vegetation has been removed and protective barriers are set up as per the tree protection plan CBA10257.02A TPP, a temporary site access can be established in the position of the approved access so that plant and contractors can get into site to start demolition works with minimal damage to the retained trees. Once the access is established then no plant or contractor vehicles will use the original access for No.15 Langstone Road.
- 15.3 It is advised that the ground works (utilities/services/drainage beneath the driveway access) and driveway are established early within the ground works phase to provide a clear and solid route for vehicles into and out of the site. It is anticipated that there will then be no need for excess vehicular movement near the retained trees during the construction phase.

16.0 SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS

- 16.1 It is anticipated that all storage materials and deliveries shall make use of the space outside of the RPAs of the retained trees within the site confines, in order to avoid unnecessary damage to tree roots.
- 16.2 This shall be accommodated outside of the CEZ, particularly to avoid harmful spillages of fuel, or phytotoxic substances that may damage the health of retained trees.
- 16.3 The locations shall be agreed in writing with Havant Borough Council prior to the commencement of works on site and will remain in only those agreed locations throughout the construction phases. If an alternative location is required, this must be agreed in writing with Havant Borough Council. This will also include the delivery; storage and movement of all essential facilities, as well as aspects such as temporary contractor vehicle parking and site location of chemical mixing (e.g. concrete). All

such locations will be outside of the RPAs, and avoid areas where 'run off' of chemicals may flow into RPAs.

16.4 Site Huts

All site huts (if required) that are to be situated on ground that is not existing hard surfacing, shall have appropriate footings or be situated on a temporary surface, which will aid in reducing the potential for compaction of the ground, where they are in close proximity to the existing tree protective barrier line. Site huts can be used as part of the protective barrier boundary, and in some cases, can be beneficial where installation does not conflict with the aerial parts of the tree.

17.0 GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CONSTRUCTION EXCLUSION ZONE

17.1 Inside the CEZ formed by the protective barrier measures, the following prohibitions shall apply:

- No construction activity will occur within the CEZ unless otherwise stated in this report, or agreed in writing with Havant Borough Council prior to the specific activity taking place.

17.2 In addition to the above, further precautions are necessary adjacent to trees outside the CEZ:

- Materials which will contaminate the soil e.g. concrete mixing, diesel oil and vehicle washings, shall not be discharged within 10 metres of the tree stem. This should take into consideration the topography of the site and slopes, to avoid materials such as concrete washings running towards trees.
- Fires shall not be lit in a position where their flames can extend to within 5 metres of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.
- Notice boards, telephone cables or other services shall not be attached to any part of the tree. (See appendix CB5 Common Causes of Damage During Construction Works)

18.0 UTILITY/DRAINAGE SERVICE CONNECTIONS

18.1 Details of all service and drainage location proposals have not been forwarded to CBA Trees at the time of compiling this assessment. It is however assumed, given the location of the trees to be retained, that any new services will be installed outside the RPAs of those retained trees, and connected to the existing where practicable. This will avoid disturbance of tree roots and ensure their healthy retention.

18.2 New services, utilities and drainage should be routed through the new access driveway to the public road.

19.0 REPORT DAMAGE TO TREES AND TREE PROTECTION BARRIERS

- 19.1 Should any damage be caused to the trees noted for retention, either by the above works or as the result of any other action related to the development proposal, the damage should be reported to the site supervisor immediately. The site supervisor shall report up the chain of responsibility to the retained consultant arboriculturist, or in the absence of such an appointment, to an appropriately qualified arboriculturist, to enable remedial measures to be implemented as necessary and as agreed with Havant Borough Council's Tree Officer.
- 19.2 Should damage occur to a protective barrier to impair its function in protecting trees, all work will cease near the damage, until the barrier has been returned to standard.

20.0 REMOVAL OF PROTECTIVE BARRIERS

- 20.1 When the demolition, ground and construction phases are complete, all drainage and service runs are in place, all site machinery has been removed and any landscaping for the principal area of the site has been implemented, the protective barriers will be dismantled.
- 20.2 This barrier dismantling must be undertaken with great care, and will need to be supervised to avoid heavy machinery being used within the Root Protection Areas. Hoarding, scaffolding and other barrier materials will need to be removed from site immediately.

21.0 CONCLUSIONS

- 21.1 The proposals are for the development of land at 15 Langstone Road, Havant and have been assessed broadly in accordance with BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.
- 21.2 It is our opinion that the trees identified for retention can be afforded due respect and provided adequate protection, ensuring their safe and healthy retention during the development process.
- 21.3 A total of 11 (eleven) individual trees and 7 (seven) groups of trees can be fully retained and protected within the development as detailed within this report. In addition, sections of Group 2 and 5 can be retained.
- 21.4 There are 4 (four) trees and 2 (two) groups plus one tree from within Group 9 that will be lost to facilitate the development, and to allow reasonable and usable garden space.
- 21.5 One tree (Tree 1) will be removed for sound arboricultural management regardless of any development proposals as it is dead.

PART 2

ARBORICULTURAL/ CONSTRUCTION METHOD STATEMENTS

- 21.6 The proposal retains the site entrance location that was previously approved by Havant Borough Council and therefore the impact to the street scene remains as previously approved with the loss of Tree 12 and the partial loss of Group 2.
- 21.7 Provided the recommendations included within this report are strictly adhered to, CBA Trees believes the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

22.0 CONTACT LIST

- 22.1 It is suggested that points of contact and lines of communication are established prior to commencement of the works on site including:-

Project Architect: Chris Purdy	01243 774748
Project Arboricultural Consultant: Stefan Rose	02380 986229
Havant Borough Council	02392 446015

- 22.2 It is advised that the site supervisor establishes their own listing of contact details at the pre-start site meeting, and displays this in their office for general use as necessary.

23.0 BIBLIOGRAPHY

- British Standard 5837:2012 –
“Trees in Relation to Design, Demolition and Construction - Recommendations”
- British Standard 3998:2010 –
“Recommendations for Tree Work”
- National Joint Utilities Group Publication Volume 4 –
“Guidelines for the planning, installation and maintenance of utility services in proximity to trees”
- Wildlife and Countryside Act 1981
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Town and Country Planning Acts







The Professional Arboricultural Consultancy

TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best practice.

- Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.

- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y	=	young trees
SM	=	semi-mature trees
EM	=	early mature trees
M	=	mature trees
OM	=	over-mature trees

- An assessment of a tree's physiological condition is defined as:

Good	=	fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure
Fair	=	fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure
Poor	=	a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure
Dead	=	dead

- An assessment of a tree's structural condition is defined as:

Good	=	no significant structural defects
Fair	=	structural defects which could be alleviated through remedial tree surgery or management practices
Poor	=	structural defects which cannot be alleviated through tree surgery or management practices
Dead	=	dead

- An assessment of a tree's future life expectancy is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2012. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category U				Identification colour on plan
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	- 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			DARK RED
Category A	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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	Trees, groups or woodlands, of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
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 down-graded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation value or other cultural value	MID BLUE
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. This will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either “*full ground level inspection*” or “*climbing inspection required*”. There may also be a further reference to the need for “*decay detection equipment*” to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

	BS5837:2012 TREE SURVEY REPORT	
	Site:	Langstone
	Date:	3 rd August 2018
	Consultant:	Stefan Rose <i>BSc (Hons), TechCert (Arbor.A)</i>
	Tagged:	No

Notes:

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing.
8.
 - a) At this stage the Root Protection Area (RPA) information is for your guidance and ongoing discussion purposes only as it assumes that all but the 'U' grade trees will be retained, which may not be the case.
 - b) For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m² in accordance with Section 4.6.1 of BS5837:2012.
9. Trees marked with * are indicatively plotted on the associated Tree Survey Plan.

TREE PRESERVATION ORDER/CONSERVATION AREA:

CBA Trees has not been instructed to investigate whether trees on or adjacent to the site are protected by a Tree Preservation Order or located within a Conservation Area.

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1	Blue Atlantic Cedar <i>Cedrus atlantica</i> 'Glauca'	-	-	-	-	-	-	-	-	Dead	Structural Condition - Poor Dead tree	Advise removal	-	U
2	Juniper <i>Juniperus spp</i>	6	S	190	16	2.3	N 2 E 1.5 S 1.5 W 2.5	N 1 E 1.5 S 1.5 W 1	Semi-mature	Fair	Structural Condition - Good Low crown density Low hanging branches Old pruning wounds Minor deadwood in crown	None required at time of survey	10+	C1
3	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	6	MS	60 70 80 130 90	18	2.4	N 1 E 1.5 S 1 W 1	N 1 E 1 S 1 W 1	Early Mature	Fair	Structural Condition - Fair Old pruning wounds Crown shape distorted Minor deadwood in crown Multi-stemmed at ground level Weighted south-east	None required at time of survey	10+	C1
4	Bay <i>Laurus nobilis</i>	7	MS x12	260	31	3.1	N 3 E 3.5 S 2.5 W 2.5	N 1 E 1 S 1 W 1	Mature	Good	Structural Condition - Fair Low hanging branches Minor deadwood in crown Old pruning wounds Basal suckers Multi-stemmed at ground level	None required at time of survey	10+	C1+2
5	Common Yew <i>Taxus baccata</i>	7	S	250	28	3.0	N 3 E 4 S 2 W 2.5	N 1.5 E 1.5 S 1.5 W 1	Semi-mature	Good	Structural Condition - Good Old pruning wounds Minor deadwood in crown Low hanging branches Ivy on trunk	None required at time of survey	20+	C1
6	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	12	S	280	35	3.4	N 2 E 2 S 2 W 2	N 1 E 1 S 3 W 0.5	Semi-mature	Good	Structural Condition - Good Old pruning wounds Minor deadwood in crown Ivy on trunk	None required at time of survey	10+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
7	Common Yew <i>Taxus baccata</i>	7	S	320	46	3.8	N 3 E 4 S 4 W 4	N 1 E 1 S 2 W 3	Semi-mature	Good	Structural Condition - Good Ivy on trunk Low hanging branches Minor deadwood in crown Crown shape distorted Growing under canopy of T10	None required at time of survey	20+	B1+2
8	Sycamore <i>Acer pseudoplatanus</i>	10	S	170	13	2.0	N 1 E 4.5 S 5 W 2	N 3 E 3 S 3 W 3	Young	Good	Structural Condition - Fair Tall and etiolated due to group pressure Crown shape distorted due to group pressure Developing tree Minor deadwood in crown Self-set regeneration Growing under canopy of T10 Trunk shape distorted due to group pressure	None required at time of survey	10+	C1
9	Highclere Holly <i>Ilex x altaclarensis</i>	7	MS	40 80 60 60	7	1.5	N 2 E 3 S 3 W 3	N 1 E 0 S 0 W 3	Semi-mature	Good	Structural Condition - Fair Basal suckers Crown shape distorted due to group pressure Minor deadwood in crown Multi-stemmed at ground level Growing under canopy of T10	None required at time of survey	10+	C1
10	Sycamore <i>Acer pseudoplatanus</i>	17	S	690	215	8.3	N 4 E 7 S 8 W 10	N 9 E 2 S 5 W 5	Mature	Good	Structural Condition - Fair Ivy on trunk Crown shape distorted due to group pressure Epicormics in crown Minor deadwood in crown Bifurcated at 4m above ground level Growing with T11 Weighted south	None required at time of survey	20+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
11	Sycamore <i>Acer pseudoplatanus</i>	17	S	430	84	5.2	N 4 E 6 S 2.5 W 8	N 3 E 8 S 8 W 5	Early Mature	Good	Structural Condition - Fair Crown shape distorted Ivy on trunk and in crown Minor deadwood in crown Growing with T10 Weighted north	None required at time of survey	20+	C1+2
12	Sycamore <i>Acer pseudoplatanus</i>	15	S	450	92	5.4	N 8 E 6 S 4 W 9	N 5 E 5 S 4 W 5	Early Mature	Good	Structural Condition - Fair Ivy on trunk and in crown Crown shape distorted Minor deadwood in crown Weighted and leans north	None required at time of survey	20+	C1+2
13	Gum <i>Eucalyptus spp</i>	16	S	450	92	5.4	N 4 E 4 S 4 W 4.5	N 3 E 4 S 2 W 2.5	Early Mature	Good	Structural Condition - Fair Epicormics on trunk and in crown Minor deadwood in crown Old pruning wounds on trunk Previously crown reduced at 5.0m above ground level	Re-reduce within 5 years	10+	C1
14	Common Lime <i>Tilia x europaea</i>	18	S	1140	588	13.7	N 9 E 7 S 7 W 6	N 2 E 2 S 2 W 3	Mature	Good	Structural Condition - Fair Remains of an old greenhouse base to south Old pond to south-east Grows on site boundary Multi-stemmed by 3.0m above ground level with tight forks with included bark Epicormics on trunk and in crown Unable to verify health and safety due to no access Previously crown reduced at approximately 5.0m above ground level Minor deadwood in crown Old pruning wounds on trunk and in crown Appears to grow on neighbouring land Tight forks in many unions	Consider works to thin/ reduce crown due to dense regrowth	10+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
15	Pedunculate Oak <i>Quercus robur</i>	17	S	680	209	8.2	N 9 E 6 S 7 W 11	N 4 E 3 S 6 W 2	Mature	Good	Structural Condition – Good Crown shape distorted Weighted north Low hanging branches Crossing branches and rubbing wounds in crown Major deadwood in crown Old pruning wounds in crown Epicormics in crown	Remove deadwood	20+	B1+2
16*	Common Ash <i>Fraxinus excelsior</i>	9	S	100	4	1.2	N 2 E 1.5 S 1 W 2	N 4 E 3 S 4 W 4	Young	Good	Structural Condition – Fair Tie occluded in trunk at 1.0m above ground level Epicormics on trunk Self set regeneration Tall and etiolated due to group pressure Of limited value	None required at time of survey	20+	C1
Grp 1	Lawson Cypress Hazel Cherry Laurel Ash Rhododendron Pittosporum Bay Laurel	8	See below	See below	See below	See below	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition – Fair Crown shapes distorted due to group pressure Low hanging branches Minor deadwood in crowns Old pruning wounds Trunk shapes distorted due to group pressure Group grows along site boundary providing visual separation Some trees are multi-stemmed	None required at time of survey	20+	B2
G1.1	Pittosporum	-	MS	90 130 80 80 80	20	2.5	-	-	-	-	-	-	-	B2
G1.2	Pittosporum	-	MS	120	6	1.4	-	-	-	-	-	-	-	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m ²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
G1.3	Bay	-	MS	120 120 120	20	2.5	-	-	-	-	-	-	-	B2
G1.4	Lawson Cypress	-	S	290	38	3.5	-	-	-	-	-	-	-	B2
G1.5	Cherry Laurel	-	S	270	33	3.2	-	-	-	-	-	-	-	B2
G1.6	Lawson Cypress	-	S	270	33	3.2	-	-	-	-	-	-	-	B2
G1.7	Lawson Cypress	-	S	160	12	1.9	-	-	-	-	-	-	-	B2
Grp 2	Cherry Laurel Bay Laurel Crab Apple	7	S	200	18	2.4	N - E - S - W -	N - E - S - W -	Early Mature	Good	Structural Condition - Fair Crown shapes distorted due to group pressure Low hanging branches Minor deadwood in crowns Old pruning wounds Trunk shapes distorted due to group pressure Informal planting Some multi-stemmed at ground level Dieback in Crab Apple adjacent to existing drive	None required at time of survey	10+	C2
Grp 3	Ash Pittosporum Lawson Cypress Cherry Laurel	7	S	270	33	3.2	N - E - S - W -	N - E - S - W -	Semi- mature	Good	Structural Condition – Fair Possibly offsite Crown shapes distorted due to group pressure Trunks and crown shapes distorted Small group of planting on edge of driveway Dieback in Ash and Pittosporum	None required at time of survey	20+	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
Grp 4	Bay Lawson Cypress Apple Sweet Chestnut Ash	5	S	120	6	1.4	N - E - S - W -	N - E - S - W -	Young	Good	Structural Condition – Fair Developing trees Some multi-stemmed at ground level Low hanging branches Minor deadwood in crowns	None required at time of survey	10+	C2
Grp 5	Berberis Spotted Laurel Holly Camelia Smoke Bush Spruce Japanese Red Cedar Cabbage Palm Lawson Cypress Cherry Laurel Pittosporum Purple Leaved Plum Silver Birch Sycamore	5	S	100	4	1.2	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition – Fair Mixed species boundary group Trunk shapes distorted due to group pressure Sporadic in parts Minor deadwood in crowns	None required at time of survey	20+	B2
Grp 6	Cherry Laurel Ash Lawson Cypress	8	S	190	16	2.3	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition –Fair Some trees offsite Ivy on trunks and in crowns limits survey Trunk shapes distorted due to group pressure	None required at time of survey	20+	B2
Grp 7	Bay Silver Birch Hawthorn	9	See below	See below	See below	See below	N - E - S - W -	N - E - S - W -	Early Mature	Fair	Structural Condition – Fair Boundary edge trees of poor form Many multi-stemmed at ground level Low hanging branches Basal suckers Trunk shapes distorted due to group pressure Minor deadwood in crowns Bark wounds on trunks Old pruning wounds on trunks and in crowns	None required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
G7.1	Hawthorn	-	MS	290 120 170	59	4.3	-	-	-	-	-	-	-	C1+2
G7.2	Hawthorn	-	MS	100 120 90 150 110	31	3.1	-	-	-	-	-	-	-	C1+2
G7.3	Bay	-	MS	180 170 200 130 110	62	4.4	-	-	-	-	-	-	-	C1+2
G7.4	Cherry Laurel	-	S	180	15	2.2	-	-	-	-	-	-	-	C1+2
G7.5	Silver Birch	-	S	300	41	3.6	-	-	-	-	-	-	-	C1+2
G7.6	Hawthorn	-	MS	140 150	20	2.5	-	-	-	-	-	-	-	C1+2
G7.7	Bay	-	MS	140 120 110 100 100	31	3.1	-	-	-	-	-	-	-	C1+2
G7.8	Silver Birch	-	S	280	35	3.4	-	-	-	-	-	-	-	C1+2
Grp 8	Hazel Elder	4	S	300	41	3.6	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition – Fair Multi-stemmed at ground level Elder is regeneration from stumps Low hanging branches Crown shapes distorted due to group pressure Unmaintained section of existing garden	None required at time of survey	10+	C2

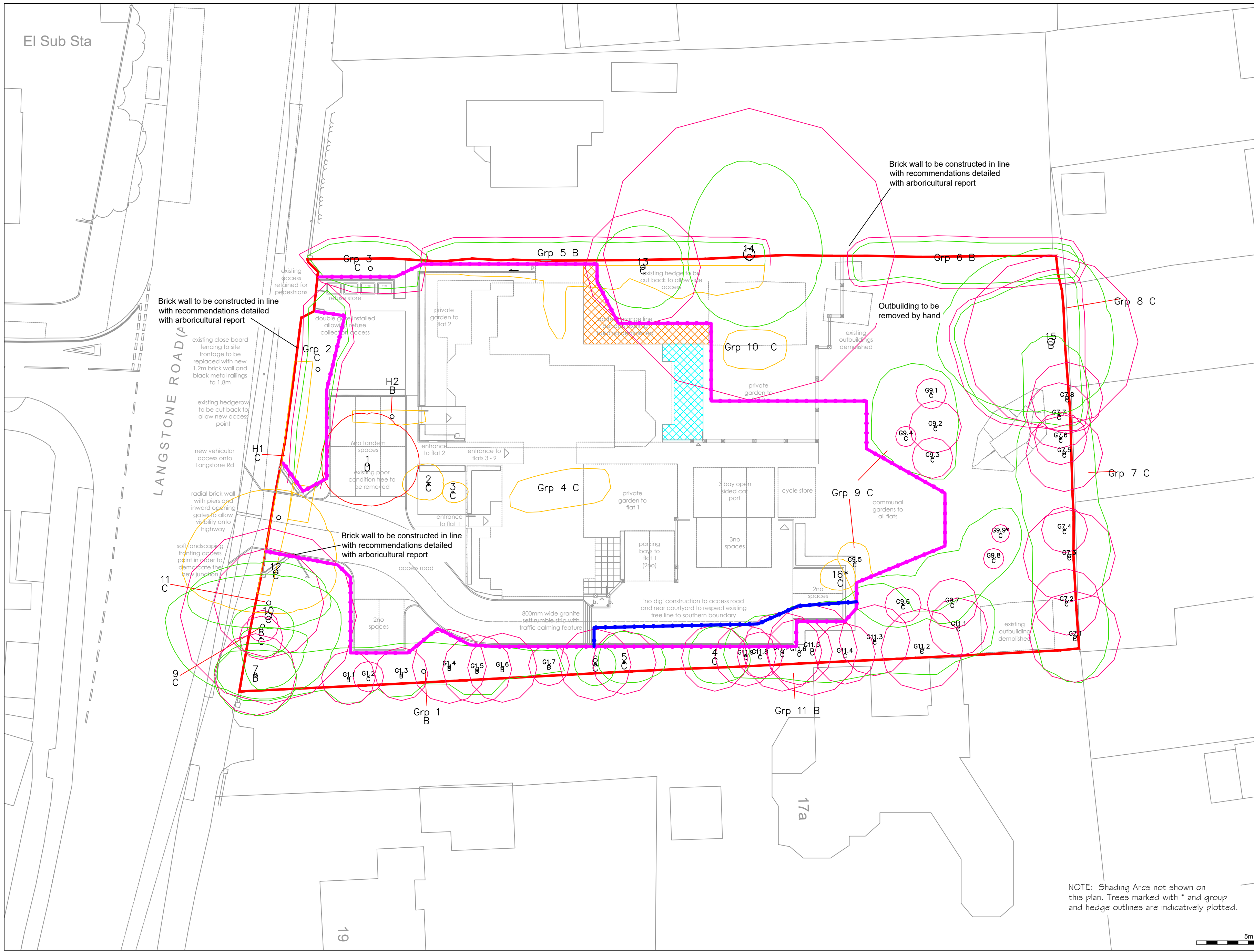
Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
Grp 9	Apple x 7 Pear x 2	5	See below	See below	See below	See below	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition – Fair Garden fruit trees of limited value to wider amenity Trunk and crown shapes distorted due to group pressure Low hanging branches Old pruning wounds on trunks and in crowns	None required at time of survey	10+	C2
G9.1	Apple	-	S	120	6	1.4	-	-	-	-	-	-	-	C1
G9.2	Pear	-	MS	140 110 100	20	2.5	-	-	-	-	-	-	-	C1
G9.3	Pear	-	S	160	12	1.9	-	-	-	-	-	-	-	C1
G9.4	Apple	-	S	80	3	1.0	-	-	-	-	-	-	-	C1
G9.5	Apple	-	S	70	2	0.8	-	-	-	-	-	-	-	C1
G9.6	Apple	-	MS	110 90	10	1.8	-	-	-	-	-	-	-	C1
G9.7	Apple	-	MS x6	80	18	2.4	-	-	-	-	-	-	-	C1
G9.8	Apple	-	S	80	3	1.0	-	-	-	-	-	-	-	C1
G9.9*	Apple	-	S	70	2	0.8	-	-	-	-	-	-	-	C1
Grp 10	Purple Leaved Plum Japanese Red Cedar Lawson Cypress Norway Spruce Berberis	5	S	120	6	1.4	N - E - S - W -	N - E - S - W -	Young	Good	Structural Condition – Fair Small mixed species group internal to the site Low hanging branches Crown shapes distorted due to group pressure Of limited value	None required at time of survey	20+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
Grp 11	Common Ash Cherry Laurel Hazel Lawson Cypress	9	See below	See below	See below	See below	N - E - S - W -	N - E - S - W -	Early Mature	Good	Structural Condition – Fair Group grows along site boundary providing good separation to and from site Some trees multi-stemmed at various heights Low hanging branches Minor deadwood in crowns Old pruning wounds on trunks	None required at time of survey	20	B2
G11.1	Common Ash	-	MS	140 180	24	2.8	-	-	-	-	-	-	-	C1+2
G11.2	Cherry Laurel	-	S	320	46	3.8	-	-	-	-	-	-	-	C1+2
G11.3	Apple	-	MS	170 220	15	2.2	-	-	-	-	-	-	-	C1+2
G11.4	Hazel	-	MS x7	90	26	2.9	-	-	-	-	-	-	-	C1+2
G11.5	Bay	-	MS	180 190 220 160	65	4.6	-	-	-	-	-	-	-	C1+2
G11.6	Bay	-	S	260	31	3.0	-	-	-	-	-	-	-	C1+2
G11.7	Bay	-	MS	160 160 140 160	43	3.7	-	-	-	-	-	-	-	C1+2
G11.8	Lawson Cypress	-	S	180	15	2.2	-	-	-	-	-	-	-	C1+2
G11.9	Lawson Cypress	-	S	240	26	2.9	-	-	-	-	-	-	-	C1+2
H1	Leyland Cypress	6	S	180	15	2.2	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition - Fair Topped hedge in part planted along site boundary Lower sides regularly clipped Becoming ivy clad and overgrown	None required at time of survey	10+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m ²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
H2	Common Beech	1.8	S	70	2	0.8	N - E - S - W -	N - E - S - W -	Young	Good	Structural Condition - Good Formal hedge planting on edge of existing driveway	None required at time of survey	20+	B2







KEY

- TREES TO BE RETAINED AND PROTECTED
- TREES TO BE REMOVED TO FACILITATE DEVELOPMENT
- TREES TO BE REMOVED FOR SOUND ARBORICULTURAL MANAGEMENT
- TREE PROTECTION BARRIER
- TEMPORARY TREE PROTECTION BARRIER TO BE ESTABLISHED AND MAINTAINED UNTIL DRIVEWAY + PARKING BAY WORK STARTS
- FIT FOR PURPOSE GROUND PROTECTION
- MINIMAL DIG PATIO AREA

KEY

- ROOT PROTECTION AREA (RPA)
- CROWN SPREAD
- TREE NUMBER
- CATEGORY

JOB TITLE
15 Langstone Road,
Havant

DRAWING TITLE
Tree Protection Plan

CBA DRAWING No.
CBA I 0257.02A TPP

BASE PLAN DRAWING No.
x-site 2018 08 28

SCALE
1-250@A2

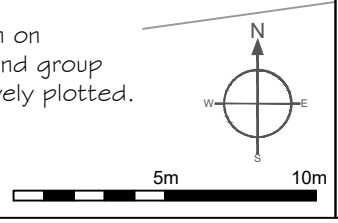
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DATE
September 2018

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CBA Trees
East Lodge, Leylands Business Park, Colden Common, Winchester, SO21 1TH
A Tel: 02380 986229

NOTE: Shading Arcs not shown on this plan. Trees marked with * and group and hedge outlines are indicatively plotted.





	TREE WORKS SCHEDULE		
	Client:	Phillips Build Ltd	Site: 15 Langstone Road, Havant
	Date:	September 2018	Consultant: Stefan Rose <i>Bsc (Hons), TechCert (Arbor.A), TechArborA</i>

Tree No.	Species	Recommended Works
1	Blue Atlantic Cedar <i>Cedrus atlantica 'Glauca'</i>	• Fell and remove stump
2	Juniper <i>Juniperus spp</i>	• Fell and remove stump
3	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	• Fell and remove stump
4	Bay <i>Laurus nobilis</i>	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way
5	Common Yew <i>Taxus baccata</i>	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way
6	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way
7	Common Yew <i>Taxus baccata</i>	• No works required
8	Sycamore <i>Acer pseudoplatanus</i>	• No works required
9	Highclere Holly <i>Ilex x altaclarensis</i>	• No works required
10	Sycamore <i>Acer pseudoplatanus</i>	• No works required
11	Sycamore <i>Acer pseudoplatanus</i>	• No works required
12	Sycamore <i>Acer pseudoplatanus</i>	• Fell and remove stump
13	Gum <i>Eucalyptus spp</i>	• Re-reduce within 5 years
14	Common Lime <i>Tilia x europaea</i>	• Thin crown by 20%
15	Pedunculate Oak <i>Quercus robur</i>	• Remove deadwood with a branch attachment >50mm
16*	Common Ash <i>Fraxinus excelsior</i>	• Fell and remove stumps
Grp 1	Lawson Cypress Hazel Cherry Laurel Ash Rhododendron Pittosporum Bay Laurel	• Prune canopies as required and detailed below
G1.1	Pittosporum	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way and car parking bay
G1.2	Pittosporum	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way and car parking bay
G1.3	Bay	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way and car parking bay
G1.4	Lawson Cypress	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way
G1.5	Cherry Laurel	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way
G1.6	Lawson Cypress	• Prune canopy as required to provide 3.0m ground level clearance over the access drive way

Tree No.	Species	Recommended Works
G1.7	Lawson Cypress	Prune canopy as required to provide 3.0m ground level clearance over the access drive way
Grp 2	Cherry Laurel Bay Laurel Crab Apple	Fell and remove stumps as indicated on CBA10257.02A TPP
Grp 3	Ash Pittosporum Lawson Cypress Cherry Laurel	No works required
Grp 4	Bay Lawson Cypress Apple Sweet Chestnut Ash	Fell and remove stumps
Grp 5	Berberis Spotted Laurel Holly Camelia Smoke Bush Spruce Japanese Red Cedar Cabbage Palm Lawson Cypress Cherry Laurel Pittosporum Purple Leaved Plum Silver Birch Sycamore	- Fell and remove stumps as indicated on CBA10257.02A TPP - Clip and prune southern side to provide 2.0m separation from building line
Grp 6	Cherry Laurel Ash Lawson Cypress	No works required
Grp 7	Bay Silver Birch Hawthorn	No works required
G7.1	Hawthorn	No works required
G7.2	Hawthorn	No works required
G7.3	Bay	No works required
G7.4	Cherry Laurel	No works required
G7.5	Silver Birch	No works required
G7.6	Hawthorn	No works required
G7.7	Bay	No works required
G7.8	Silver Birch	No works required
Grp 8	Hazel Elder	No works required
Grp 9	Apple x 7 Pear x 2	See below
G9.1	Apple	No works required
G9.2	Pear	No works required
G9.3	Pear	No works required
G9.4	Apple	No works required
G9.5	Apple	Fell and remove stump
G9.6	Apple	No works required
G9.7	Apple	No works required

Tree No.	Species	Recommended Works
G9.8	Apple	No works required
G9.9*	Apple	No works required
Grp 10	Purple Leaved Plum Japanese Red Cedar Lawson Cypress Norway Spruce Berberis	Fell and remove stumps
Grp 11	Common Ash Cherry Laurel Hazel Lawson Cypress	Prune canopies as required and detailed below
G11.1	Common Ash	No works required
G11.2	Cherry Laurel	No works required
G11.3	Apple	No works required
G11.4	Hazel	Prune canopy as required to provide 3.0m ground level clearance over the car parking bay
G11.5	Bay	Prune canopy as required to provide 3.0m ground level clearance over the access drive way and car parking bay
G11.6	Bay	Prune canopy as required to provide 3.0m ground level clearance over the access driveway
G11.7	Bay	Prune canopy as required to provide 3.0m ground level clearance over the access driveway
G11.8	Lawson Cypress	Prune canopy as required to provide 3.0m ground level clearance over the access driveway
G11.9	Lawson Cypress	Prune canopy as required to provide 3.0m ground level clearance over the access driveway
H1	Leyland Cypress	Fell and remove stumps
H2	Common Beech	Fell and remove stumps

- It is advised that all remedial tree works such as pruning is carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998: 2010 – Tree Works. Only natural target pruning method to be used.
- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.





SUMMARY OF TREE PROTECTION MEASURES

Introduction

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form, the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under LEGAL PROTECTION and damaging them can result in heavy fines.

Two common misconceptions about trees:

MYTH: Trees have deep taproots and so shallow excavations will not harm the tree.

FACT: 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.

MYTH: Trees will quickly heal over any bark wound, with no ill effect.

FACT: Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.

Tree Protection

All trees adjacent to unsupervised work areas have been protected by fencing.

This fencing must be respected at all times and no attempts shall be made to damage, bypass or ignore it.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- No digging or scraping
- No storage of plant or materials
- No vehicular access
- No fire lighting
- No handling, discharge or spillage or any chemical substance
- No water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaves of 20m.

Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **CBA Trees** as follows:

Office Telephone: 02380 986229

**REMEMBER:
ALL TREE DAMAGE
IS AVOIDABLE –
SO AVOID IT!**



**PROTECTIVE BARRIERS.
THESE BARRIERS MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

(TOWN & COUNTRY PLANNING ACT 1990)

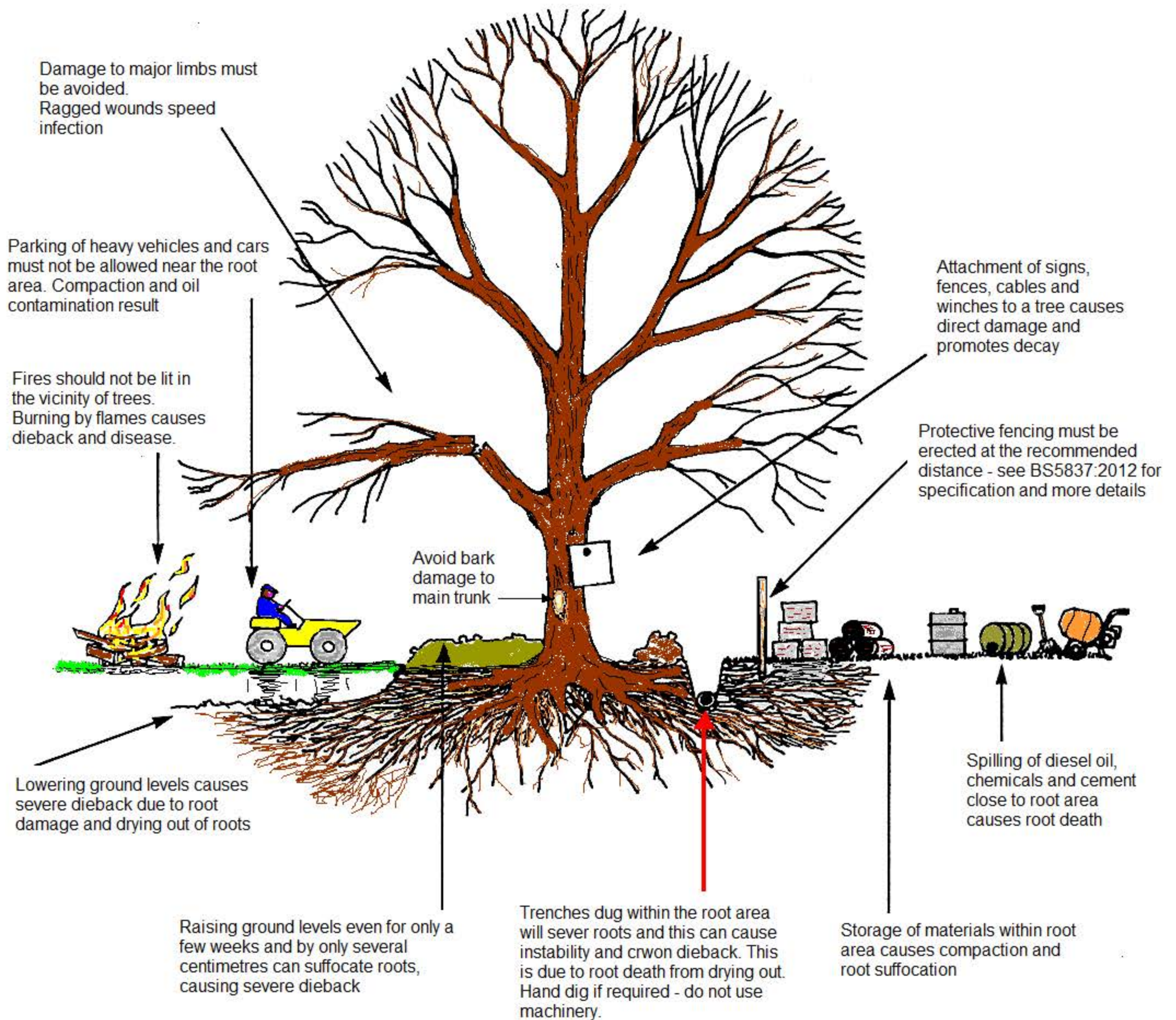
**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.**

**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**

COMMON CAUSES OF TREE DEATH

The use of properly positioned protective barriers can prevent tree deaths occurring.







The Professional Arboricultural Consultancy

Qualifications of Stefan Rose Senior Consultant

Stefan Rose BSc (Hons) TechCert (Arbor.A) joined CBA Trees in 1998 as a junior surveyor and having gained extensive knowledge has become a respected Senior Consultant. He has considerable experience in working as a locum for Local Authorities, assessing new and extant Tree Preservation Orders, and continues to work on a number of major development projects nationwide.

As a retained Senior Consultant, Stefan undertakes Health and Safety Audits and BS5837:2012 Tree Surveys using the latest data capture equipment, together with site assessments and site monitoring. He also provides advice to prominent development companies and produces Implications Assessments and Method Statements for the submission of planning applications.