



ARBORICULTURAL METHOD STATEMENT

Oaklands Care Home, Stakes Hill Road, Waterlooville

-prepared on behalf of Solomon Capital Ltd. –

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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 I am instructed on this project by **Solomon Capital Ltd.** who are the owners of **Oaklands Care Home, Stakes Hill Road, Waterloooville.**
- 1.2 The owners seek to obtain planning approval to redevelop and the existing site.
- 1.3 There are on site trees which will need to be catered for and protected during this process.
- 1.4 I have been commissioned to prepare a report to satisfy the arboricultural aspects of this project to meet planning requirements.
- 1.5 My work is to be compiled in accordance with the recommendations contained within BS5837:2012.

2.0 DOCUMENT DISCLOSURE STATEMENT

I have been provided with a copy of the Planning Layout drawings as prepared by the project Architects **PWP Architects** :-

- **Proposed Site Plan – 5011 – 1152 - Rev C – 1:250 @ A3 – April 2018**
- this drawing has been provided to me for the purposes of my work and I rely totally on its accuracy in terms of tree location; applying crown spreads and setting out protective fencing and tree protection measures.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 I visited the site on **23rd March 2021** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations (see also the explanatory tree survey notes [at appendix BH1](#)).

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
Hedge 1	Common Beech <i>Fagus sylvatica</i>	2.5	Av 65 #	N 0.5 E 0.5 S 0.5 W 0.5	0	Y	Off site trees-tailored and regularly pruned hedge line	No works required at this time	30- 40	B2
1	Horse Chestnut <i>Aesculus hippocastanum</i>	24	1155	N 11 E 13 S 10 W 8	2	M	Ivy smothering and dominating-multi stemmed at 2.5m above ground-small and large diameter deadwood present-has been crown lifted on road side to 6m-cables through lower crown.	Sever Ivy at ground level. Prune to clear route of cables.	>40	A1
2	Hawthorn <i>Crataegus monogyna</i>	7	170 x 4	N 4 E 6 S 5 W 5	1. 5	EM	Off site tree on an open space area-Ivy smothering and Brambles through lower crown-cable above crown-low branching habit.	Advise owners remove the Brambles and sever the Ivy to ground level.	30- 40	B1
3	Dwarf Conifer <i>Juniperus spp.</i>	2.5	100 70	N 1.2 E 1.2 S 1.2 W 1.2	0	EM	Low branching habit down to the ground.	No works required at this time	10- 20	C1
Hedge 2	Golden Leylandii <i>Cupressocyparis spp.</i>	2.5	120	N 1 E 1 S 1 W 1	0	SM	Smothered through crowns with Ivy and Climbers which suppress its growth	No works required at this time	10- 20	C2
4	Sycamore <i>Acer pseudoplatanus</i>	16	350 320	N 2 E 7 S 6 W 7	3	EM	High crown lifted on east side-previously heavily topped out-crown comprised of regrowth from old pruning points.	No works required at this time	>40	C1
5	Sycamore <i>Acer pseudoplatanus</i>	16	410	N 2 E 6 S 3 W 2	5	EM	Recently heavily pruned back and high crown lifted on west side and central crown area thinned out.	No works required at this time - but in the next few years I would advise shortening back lateral spread on the east side to redress balance of crown for safety reasons.	30- 40	C1
6	Sycamore <i>Acer pseudoplatanus</i>	16	430	N 5 E 7 S 3 W 2	6	EM	Recently heavily pruned back and high crown lifted on west side and central crown area thinned out.	No works required at this time - but in the next few years I would advise shortening back lateral spread on the east side to redress balance of crown for safety reasons.	30- 40	C1
7	Medlar <i>Mespilus germanica</i>	5	260	N 3.5 E 3 S 3.5 W 3.5	2	M	Multi stemmed at 2m-has been pruned to sustain it at 5m and keep crown contained.	No works required at this time	30- 40	B1

8	Common Ash <i>Fraxinus excelsior</i>	18	630	N 7 E 8 S 5 W4	4	M	Recently heavily pruned back and high crown lifted on west side and central crown area thinned out.	No works required at this time - but in the next few years I would advise shortening back lateral spread on the east side to redress balance of crown for safety reasons.	30-40	C1
9	Weeping Willow <i>Salix babylonica</i>	10	450	N 2 E 6 S 4 W2	2	EM	Recently heavily pruned back and high crown lifted on west side and central crown area thinned out as well as top height reduced significantly leaving a stump.	No works required at this time - but in the next few years I would advise shortening back lateral spread on the east side to redress balance of crown for safety reasons.	20-30	C1
10	Sweet Gum <i>Liquidambar styraciflua</i>	16	280 130	N 3 E 5 S 2 W3	2	SM	Bifurcated at ground level-tight forks with included bark-fastigate from to crown.	No works required at this time	30-40	B1
11	Pedunculate Oak <i>Quercus robur</i>	17	460	N 7 E 8 S 5 W2	2. 5	EM	Bifurcated at 2.5m above ground-previously heavily cut back on west face leaving an unbalanced form to crown.	No works required at this time	30-40	C1
12	Domestic Apple <i>Malus domestica</i>	8	310 270 #	N 5 E 4 S 0 W3	2	M	Off site tree-two of the main trunks have been topped out at fence height leaving tree weighted to the north side-poor quality tree.	No works required at this time	10-20	C1

3.2 A Tree Root Protection Schedule has been prepared in accordance with BS5837:2012 recommendations (see Plans BJH 01 & 02 at [appendix BH2](#))

Tree No.	Tree Species	Cat	Diam mm	BS5837:2012 Table D1 Radial Protect. Zone m	BS5837:2012 Table D1 Root Protect. Area m ²	Is An Offset Required To Cater For Existing Rooting Pattern Restrictions
Hedge 1	Common Beech <i>Fagus sylvatica</i>	B2	Av 65 #	0.9	3	NO – retaining wall constrains root spread.
1	Horse Chestnut <i>Aesculus hippocastanum</i>	A1	1155	13.9	604	NO – there are hard surfacing constraints all around this tree which cancel each other out.
2	Hawthorn <i>Crataegus monogyna</i>	B1	170 x 4	4.1	52	NO – fairly free rooting to all directions
3	Dwarf Conifer <i>Juniperus spp.</i>	C1	100 70	1.5	7	NO – free rooting to all directions
Hedge 2	Golden Leylandii <i>Cupressocyparis spp.</i>	C2	120	1.4	7	NO – free rooting to all directions

4	Sycamore <i>Acer pseudoplatanus</i>	C1	350 320	5.7	102	NO – free rooting to all directions
5	Sycamore <i>Acer pseudoplatanus</i>	C1	410	4.9	76	NO – free rooting to all directions
6	Sycamore <i>Acer pseudoplatanus</i>	C1	430	5.2	84	NO – free rooting to all directions
7	Medlar <i>Mespilus germanica</i>	B1	260	3.1	31	NO – free rooting to all directions
8	Common Ash <i>Fraxinus excelsior</i>	C1	630	7.6	180	NO – free rooting to all directions
9	Weeping Willow <i>Salix babylonica</i>	C1	450	5.4	92	NO – free rooting to all directions
10	Sweet Gum <i>Liquidambar styraciflua</i>	B1	280 130	3.7	43	NO – free rooting to all directions
11	Pedunculate Oak <i>Quercus robur</i>	C1	460	5.5	96	NO – free rooting to all directions
12	Domestic Apple <i>Malus domestica</i>	C1	310 270 #	4.9	76	NO – free rooting to all directions

4.0 IMPACT ASSESSMENT & TREE PROTECTION MEASURES RECOMMENDED

4.1 The finalised planning layout drawing has been provided to me and an assessment made as to the viability of retaining trees as part of this layout in order that they meet the RPA requirements of BS5837 - the data is presented here in tabular format :-

Key: **NO-RSAM** = Remove for sound arboricultural management reasons **NO-RTFD** = Remove to facilitate development **UF** = under footprint of proposed development

YES = Yes can be retained and fully protected

YES (1) = Yes can be retained subject to mitigation measures being applied

Tree No	Species	Cat	Stem Diam mm	BS5837:2012 Radial Protection Area m	BS5837:2012 Table D1 Root Protect. Area m ²	Distance from Site Features (see key above)	Can Tree Be Retained
Hedge 1	Common Beech <i>Fagus sylvatica</i>	B2	Av 65 #	0.9	3	No changes will affect these trees	YES
1	Horse Chestnut <i>Aesculus hippocastanum</i>	A1	1155	13.9	604	3.4m to existing tarmac surfaced access point 5m to two new parking bays. 9m to two new parking bays 15m to closest point of new building	YES (1)
2	Hawthorn <i>Crataegus monogyna</i>	B1	170 x 4	4.1	52	1m to existing tarmac surfaced driveway which will be removed 2.2m to new footpath 6.4m to closest part of new building	YES (1)
3	Dwarf Conifer <i>Juniperus spp.</i>	C1	100 70	1.5	7	UF of new building	NO-RTFD
Hedge 2	Golden Leylandii <i>Cupressocyparis spp.</i>	C2	120	1.4	7	5.5m to closest part of new building 5m to new footpath	YES
4	Sycamore <i>Acer pseudoplatanus</i>	C1	350 320	5.7	102	5m to closest part of new building 1m to new footpath	YES (1)
5	Sycamore <i>Acer pseudoplatanus</i>	C1	410	4.9	76	6m to closest part of new building 0m to new footpath	YES (1)
6	Sycamore <i>Acer pseudoplatanus</i>	C1	430	5.2	84	5m to closest part of new building 1.4m to new footpath	YES (1)
7	Medlar <i>Mespilus germanica</i>	B1	260	3.1	31	4.7m to closest part of new building 1.7m to new footpath	YES (1)
8	Common Ash <i>Fraxinus excelsior</i>	C1	630	7.6	180	5.4m to closest part of new building 1.7m to new footpath	YES (1)

Tree No	Species	Cat	Stem Diam mm	BS5837:2012 Radial Protection Area m	BS5837:2012 Table D1 Root Protect. Area m ²	Distance from Site Features (see key above)	Can Tree Be Retained
9	Weeping Willow <i>Salix babylonica</i>	C1	450	5.4	92	6.3m to closest part of new building 1.7m to new footpath	YES (1)
10	Sweet Gum <i>Liquidambar styraciflua</i>	B1	280 130	3.7	43	5.7m to closest part of new building 2.4m to new footpath	YES (1)
11	Pedunculate Oak <i>Quercus robur</i>	C1	460	5.5	96	7.8m to closest part of new building 5m to new footpath	YES (1)
12	Domestic Apple <i>Malus domestica</i>	C1	310 270 #	4.9	76	5.2m to closest part of new building 4.2m to new footpath	YES (1)

4.2 SUMMARY

	YES	YES (1)	NO-RTFD	NO-RSAM
	Can be retained and fully protected in accordance with BS5837 recommendations - see Tree Protection Plan BJH.03/04 at appendix BH3	Can be retained and protected in accordance with BS5837 recommendations (see Tree Protection Plan BJH.03/04 at appendix BH3) - subject to adherence to the methodology prescribed in this report – see Section 6 for full details.	Recommended for removal in order to facilitate development proposals	Recommended for removal on sound arboricultural management grounds [health and safety grounds] regardless of any redevelopment proposals
A	-	1 Horse Chestnut	-	-
B	Hedge 1 Beech	2 Hawthorn; 7 Medlar; 10 Sweet Gum	-	-
C	Hedge 2 Leylandii	4, 5 & 6 Sycamores; 8 Common Ash; 9 Weeping Willow; 11 Pedunculate Oak & 12 Apple	3 Dwarf Conifer	-
U	-	-	-	-

4.3 One small low (C) graded tree will need to be removed to facilitate the proposed development – this is not a significant tree in the landscape.

4.4 The RPA's for trees 1 to 12 overlap either the footprint of the proposed new building or the new footpaths - it will therefore be necessary to apply mitigation measures to ensure their safe and healthy survival. (see methodology at Section 6 of this report).

5.0 RECOMMENDED TREE WORKS

No	Species	Tree Works Recommended
Hedge 1	Common Beech <i>Fagus sylvatica</i>	• OFF SITE trees – but no works required at this time as the owner keeps it regularly cut as a formal hedge line.
1	Horse Chestnut <i>Aesculus hippocastanum</i>	• Sever the Ivy at ground level as it is beginning to dominate the crown and may be hiding other defects on the main trunk. • Judiciously prune to clear around the route of the cable.
2	Hawthorn <i>Crataegus monogyna</i>	• OFF SITE tree – advise that the owners remove the Brambles and sever the Ivy which are dominating the crown - if unattended this will lead to the demise of this tree.
3	Dwarf Conifer <i>Juniperus spp.</i>	• Fell to ground level. • Grub out the stump and primary root runs.
Hedge 2	Golden Leylandii <i>Cupressocyparis spp.</i>	• Advise the removal of any Brambles and Ivy which are hampering the true development of this hedge.
4	Sycamore <i>Acer pseudoplatanus</i>	• Advise that this tree is reduced and reshaped to match the remaining trees in this boundary screen.
5	Sycamore <i>Acer pseudoplatanus</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
6	Sycamore <i>Acer pseudoplatanus</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
7	Medlar <i>Mespilus germanica</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
8	Common Ash <i>Fraxinus excelsior</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
9	Weeping Willow <i>Salix babylonica</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
10	Sweet Gum <i>Liquidambar styraciflua</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.
11	Pedunculate Oak <i>Quercus robur</i>	• This tree has recently been very heavily cut back on the west side – presumably by the neighbours – this has left the tree in a precarious situation with a heavy crown weighting to the east side which now requires to be addressed for safety reasons – this will also serve to provide adequate safe clearance from the new building line.

12	Domestic Apple <i>Malus domestica</i>	• OFF SITE tree – no works required as owner has fairly recently heavily cut back the two trunks closest to the Oaklands boundary.
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6.0 METHOD STATEMENT

Generic Measures

- 6.1 It is recommended that **ALL** of the above recommended tree works are completed prior to demolition contractors being allowed to access the site. This work should be carried out by a fully qualified professional tree surgery company in accordance with current BS3998 recommendations.
- 6.2 Prior to demolition contractors being allowed to access the site first erect the protective fencing in the locations shown on the **Tree Protection Plan – Demolition Phase BJH 03/04 (D)** ([see at appendix BH3](#)). *Existing hard surfacing and consolidated gravelled parking bays are to be retained intact throughout the Demolition Phase of works to protect tree roots from contamination or compaction damage.*
- 6.3 On completion of the Demolition works and prior to the Construction works commencing the protective fencing is to be re-aligned and located as shown on the **Tree Protection Plan – Construction Phase BJH 03/04 (C)** ([see at appendix BH3](#)). In addition to this ensure that the ground protection measures specified are also installed prior to any work being started on site. Barriers are to be ‘Fit For Purpose’ to exclude construction activity and must be maintained to ensure that they remain rigid and complete and in the original setting out positions. These checks will need to be incorporated into a schedule of site monitoring visits to be agreed with the clients subject to phased development operations and subsequently copies of these site visit reports will need to be copied in to the Council.
- It should be noted that the protective fencing around T1 is to be relaxed at the Construction Phase to allow for contractor working space – this will also mean that the ground must be fully protected in accordance with BS5837:2012 Section 6.2.3.3.*
- 6.4 A copy of the Tree Protection Plan is to be pinned up in the offices/mess hut on site for all site staff to see. The area within the fenced off exclusion zone is to be regarded as **sacrosanct** and the fencing shall not be taken down or relocated at any time without the prior written approval of the monitoring arboriculturist or local authority tree officer, unless this has already been agreed as part of the planning application consent process and is detailed in writing and shown on a plan.

The following prohibitions shall apply within the area enclosed by the Tree Protection Fencing [**Construction Exclusion Zone**]:-

- **No** mechanical digging or scraping once the initial ground cover vegetation has been cleared and the site fenced off.

- **No** storage of plant, equipment or materials
- **No** vehicular or plant access
- **No** fire lighting
- **No** handling, discharge or spillage of any chemical substance, including cement washings
- **No** action likely to cause localised water-logging
- **No** change in ground levels

6.5 All site works storage areas and compounds/welfare units/toilet blocks and any mixing areas are to be located outside of and well clear of retained trees and positioned over impervious surfaces or over special catchment areas such that any leakage will be captured and cannot leak into the soil causing contamination.

6.6 The details of the proposed utility service links have not been made available to me at this time but it should be possible to link in to existing or lay new services without impinging on the RPA's of retained trees. In the unlikely event that some incursion is necessary then a separate Mini-Method Statement can be provided to satisfy a Planning Condition.

Site Specific Measures

6.7 **Augered Piled Foundations**

Applicable to trees **4 Sycamore; 6 Sycamore & 8 Common Ash**

- Their RPA's overlap the building line which necessitates mitigation measures be applied to ensure the safe and healthy retention of these trees.
- A Structural Engineer will need to assess the loadings of the building and design an appropriate size and spacing for the augered piles.
- A Mini Tracked Piling Rig can be brought to site to auger the pile holes and reinforced rods inserted (at depths specified by the Structural Engineer) and then backfilled with concrete – the Piling Rig to work outside the tree RPA's at all times.
- To prevent soil contamination from the concrete it will be necessary to line the holes with an appropriate insulating material.
- Caps will need to be formed over the concrete piles and these can be set into the ground by up to 100mm without adversely impacting on tree roots – provide that the excavation work is carried out with hand tools ONLY and no machinery is involved.
- Reinforced lintels will then be laid to connect between the pile caps and these will need to support a suspended reinforced floor to avoid any excavation work and potential adverse impact on tree roots.

- This will then form a stable base for the new structure.

6.8 **Ground Protection**

Rear of Site - Applicable to trees (*4 to 12 Mixed Species – see schedules*)

Access will be required around the outside perimeter of the new building and also to allow for the erection of scaffolding – therefore mitigation measures will need to be applied here as follows :-

- **The Tree Protection Plan - Construction Phase BJH 03/04 (C)** ([see attached at Appendix BH3](#)) shows the area that will require covering to prevent ground compaction or soil contamination.
- Lay the ground protection in accordance with BS5837 Section 6.2.3.3. a) recommendations ([see attached at Appendix BH3](#)). Only pedestrian access is required as all machinery can work from the east side and outside of tree RPA's.
- This ground protection is to be in situ from the outset and before any building contractors enter the site and work commences - it will need to remain in situ until all construction work has been completed.

Front of Site – Applicable to trees (*1 Horse Chestnut & 2 Hawthorn*)

During the Construction Phase it will be necessary to use areas within the RPA for these trees for working space and storage areas - therefore mitigation measures will need to be applied here as follows :-

- Prior to site occupation by the Construction contractors the protective fencing around T1 will be reduced as shown on **The Tree Protection Plan - Construction Phase BJH 03/04 (C)** ([see attached at Appendix BH3](#)).
- Adequate ground protection measures will be laid in accordance with BS5837:2012 Section 6.2.3.3 to allow this area to be used during the construction works without causing soil contamination or compaction

N.B. ALL mixing of chemicals and concrete and other noxious fluids is to be undertaken outside of this trees RPA on the existing parking bay area to the front of the site.

6.9 **‘No Dig’ Porous Sub Base and Surfacing Detail for Footpaths [front and rear] and Parking Bays 1 to 4**

These principles will be used for both of these situations as the footpaths to front and rear of the site as well as the parking bays 1 to 4 at the front of the site are all within tree RPA's - therefore mitigation measures will need to be applied here as follows :-

- Firstly the existing tarmac surfacing for the access drive to NO 218 Little Oaks will need to be carefully broken up and prised out – machinery may be used to break up the surface detail and also remove all arisings/debris BUT it must work over ground protection at all times.
- Once bare earth has been exposed beneath the sub base layer all works must cease and ground protection is to be laid.
- The new footpaths and parking bays will then need to be constructed in accordance with the examples provided at [Appendix BH3](#) using proprietary materials designed for the purpose e.g. *CellWeb or GeoCell and Porous Geotextile Membranes*.

7.0 **SITE MONITORING & SUPERVISION**

BS5837 recommends that wherever trees on or adjacent to a site have been identified on the Tree Protection Plan as requiring special protection measures, there should be an auditable system of arboricultural site monitoring. This should extend to direct arboricultural monitoring whenever demolition/construction and development activity is to take place within or adjacent to any RPA.

- 7.1 A Pre-commencement site meeting is to take place between the development teams arboricultural consultant and the site manager and client representative where the protective fencing will be inspected to verify that it is 'Fit For Purpose' as shown on the **Tree Protection Plan**.
- 7.2 Lines of communication will be established with the Site Manager and a contact sheet prepared so that in the event that an incident occurs involving the retained trees that requires urgent advice and guidance from the project Arboricultural Expert this can be easily organised.

- 7.3 The details of the PCSM works will be photographed by the Arboricultural Expert and the following reporting procedure will be adopted. This is an example of the format for the **Site Monitoring Schedule** that would be prepared. :-

Schedule Of Site Monitoring & Supervision for – Oaklands Care Home, Stakes Hill Road, Waterloooville

- In accordance with the Arboricultural Method Statement Report - 1173.bjh.Mar21 & Tree Protection Plan - BJH 03/04 (C) & (D)

Date of Inspection	Item	In Attendance	Notes/Observations From Inspection	Details Of Any Follow Up Action Required
tba	Pre-Commencement Meeting	Project Arb Consultant & Site Construction Manager	• A joint site inspection was conducted and agreement reached that the protection measures are in place and that everyone understands their responsibilities.....	•
tba	Further Site Monitoring Visits – AS REQUIRED	Project Arb Consultant & Site Construction Manager [invite Council Tree Officer to attend]	•	•

8.0 CONCLUSIONS

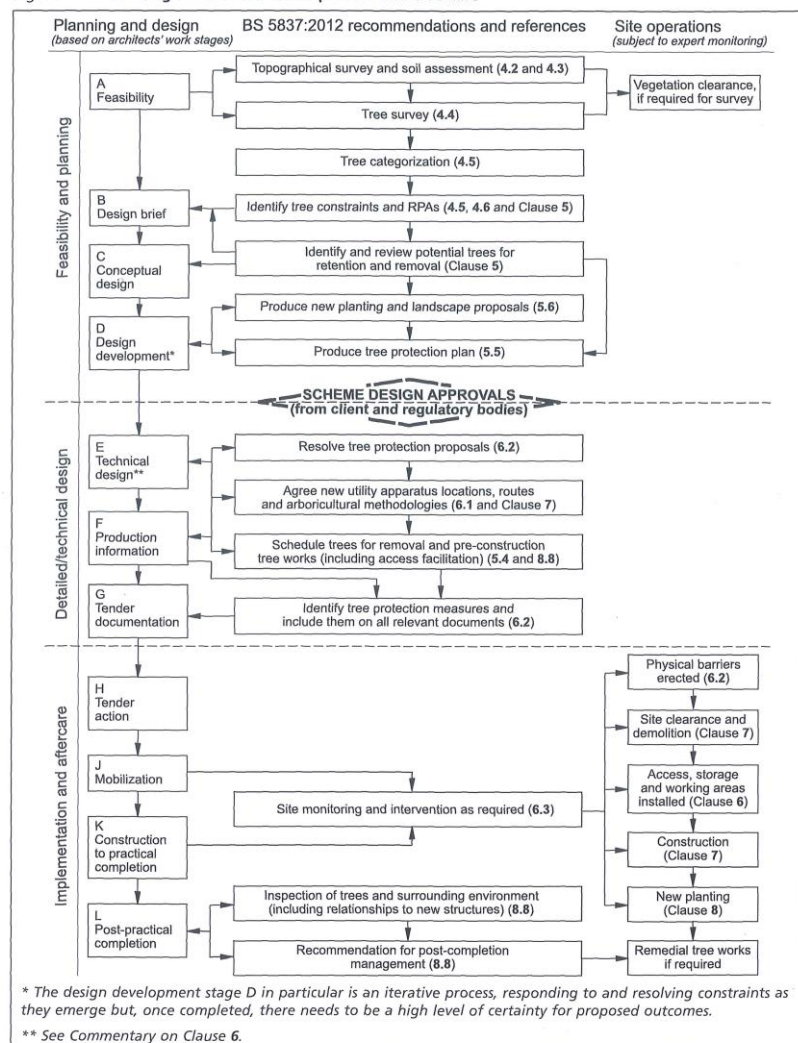
- This development can be completed with the removal of one small low grade and insignificant dwarf Conifer.
- All other trees (on and off site) can be retained and with the mitigation measures specified under Section 6 Method Statement above the impact on tree roots can be kept to minimal and acceptable levels within the framework recommendations of BS5837:2012.
- Overall, provided that the above methodology is strictly adhered to in the carefully considered and phased and supervised manner prescribed then I would not foresee any detrimental impact taking place that might undermine the ongoing health and stability or visual amenity value of those trees shown for retention both on and off this site.



BH 1

Figure 1 - Flow Diagram
& Tree Survey Notes

Figure 1 The design and construction process and tree care



TREE SURVEY NOTES

These Tree Survey Notes have been prepared in accordance with the recommendations of **British Standard 5837:2012** and they define the criteria for pre –development tree surveys.

- Each tree/group/hedge/shelterbelt/woodland has been allocated a unique number (**No.**), where specifically requested and appropriate fees are agreed small durable numbered metal tags can be applied to each tree/group surveyed.
- The tree species (**Species**) is provided in both English and Latin name formats.
- Height assessments (**Ht**) are estimated in metres. This will be adequate for the majority of cases, but where accurate heights become a critical issue it may be necessary to return to site, as a separately commissioned exercise, to collect accurate measurements with the aid of optical instruments.
- Trunk/stem diameters (**Diam**) are measured in millimetres at 1.5m above ground level – where the tree is inaccessible the diameter is estimated as indicated by suffix #
- Radial crown spread assessments (**Brch Sprd**) are estimated in metres from the centre of the trunk/group to each of the four primary points of the compass (**N**-north; **E**-east; **S**-south and **W**-west) in order to achieve a representation of the crown shape which will be shown on the accompanying tree survey plan. These provide a general guide as to the main bulk outline of a tree/groups crown but are not tape measured dimensions. These would only be undertaken as part of a separately commissioned exercise, where precise dimensions are critical to the project at hand.
- Both the canopy ground clearance (**GC**) and the height & compass direction of the lowest major branch (**LMB**) are estimated and shown in metres
- An assessment of a tree/groups 'life stage' (**LS**) is made in terms of its site specific maturity as part of the surrounding landscape, taking into account its overall shape and form in that setting, and is recorded thus :-
Y - Young tree/group; **SM** - Semi-Mature tree/group; **EM** - Early-Mature tree/group;
M – Mature tree/group; **OM** - Over – mature tree/group
- Data on the structural condition (**Condition Comments**) of the tree/group is provided to give its visual appearance and any significant health and safety issues.
- Details of any recommended tree works required at the time of survey is given under the heading – **Preliminary Management Recommendations**.
- An estimate of a tree/groups remaining contribution in years (**RC**) is made and is recorded thus :-
0-5; 5-10; 10-20; 20-30; 30-40 or **>40** years.
- The category grading (**Cat**) for each tree/group is assessed according to the criteria provided within **BS5837:2012**. The assessment is made of the tree/group in its current condition and within the environment encountered bearing in mind its suitability for retention as part of any future proposed

development; although the exact layout detail of any specific scheme will not be known at the time of surveying. The trees have been classified into one of four categories and colour coded as BS5837 recommends :- **U** (dark red); **A** (light green); **B** (mid-blue) and **C** (grey). Please note that suffixed numerical sub-categories are also applied for guidance only and do not carry any cumulative or increased value for the tree/group. This colour coding scheme will be applied to all drawings provided.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Colour on plan
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (i.e. 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 NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve.			Dark Red
Trees to be considered for retention				
	Criteria – Subcategories			
	1	2	3	
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and /or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	Light Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in the category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Mid Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 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



BH 2

Tree Survey & Root Protection Plans

BJH 01/02

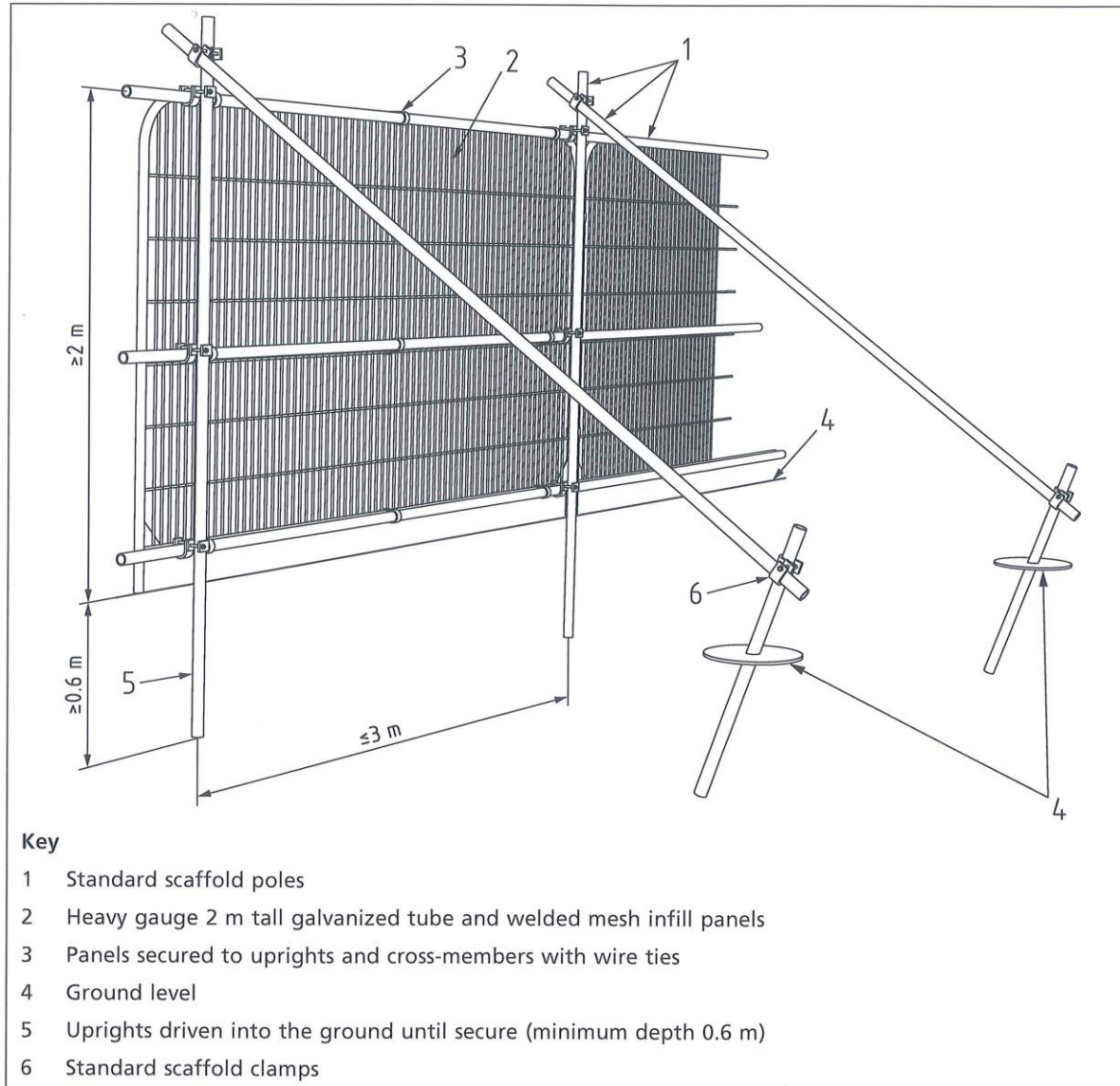


BH 3

Tree Protection Plan BJH 03/04

- + BS5837:2012 – Figure 2
- + BS5837:2012 – Section 6.2.3.3
- + Examples of ‘No Dig’ Porous Surfacing Details
- + Illustration of a Mini Piling Rig

Figure 2 Default specification for protective barrier



BS5837:2012 – Section 6.2.3.3 - New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

Note The ground protection might comprise one of the following:

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;*
- b) for pedestrian –operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;*
- c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.*



BH 4

Qualifications & Experience



QUALIFICATIONS AND EXPERIENCE

- My name is Bernie Harverson and I am a self employed independent arboricultural consultant in private practice. I take instructions primarily in the South of England but also on occasions work nationwide and abroad and have offices at : –

The Granary, White Chimney Row, Westbourne PO10 8RS

- I hold the following arboricultural qualification – **National Diploma in Arboriculture (Royal Forestry Society – 1976)**
- I have **fifty (50)** years of practical and managerial experience in the arboricultural industry including periods in both the public and private sectors.
- My Local Government sector experience comprises one year as a tree surgeon with Brighton Parks and nine years spent in Arboricultural Officer posts with both Westminster City Council and Portsmouth City Council.
- My past practical experience in the private sector includes two years at Tilhill Forest Nursery and over ten years for various companies as a Climbing Arborist/Tree Surgeon.
- Managerial work in the private sector includes two years as manager of Beechings Tree Surgeons and twelve years with CBA Trees as Managing Director & Senior Arboricultural Consultant.
- As an independent self employed Arboricultural Consultant I now provide a comprehensive range of services including :-
tree surveys, appraisals, assessments and inspections with particular reference to planning and development and tree safety audits with a service offered as a climber to undertake full climbing inspections to better understand the condition of a given tree before prescribing a management strategy.
- I also undertake litigation work appearing as an Expert Witness in Court Actions and at Planning Appeals, Hearings and Public Local Inquiries.

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