



ARBORICULTURAL METHOD STATEMENT

for

Homewell House, Homewell, Havant

-prepared on behalf of Walthams Limited –

- February 2013-

Bernie Harverson M.Arb.

3 foxcombe cottages • south harting • west sussex • gu31 5pl
tel: 01730 825297 • mob: 07875 520881 • email: bernie.harverson@virgin.net • VAT Reg No. 881 5056 16

ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN

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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 My clients – **Walthams Limited** - are demolishing some of the existing building and refurbishing the remainder and erecting two new buildings in accordance with an extant planning approval.
- 1.2 I have been commissioned to consider the impact that development will have on the existing on/off site tree stock and prepare a report/plans to satisfy a planning condition.
- 1.3 I am instructed to prepare a **Method Statement & Plans** - based on the planning layout drawings as prepared at 1:200 @ A3 scale by – **PDP Architecture Llp. – Ref: 17760-WD110 Rev.A.**
- 1.4 My work is to be compiled in accordance with the Recommendations contained within BS5837:2012.

2.0 DOCUMENT DISCLOSURE STATEMENT

- 2.1 Base plans (1:200 scale) have been provided to me by my clients architect.
- 2.2 A copy of the Planning Layout drawing as prepared at **1:200 scale - PDP Architecture Llp. – Ref: 17760-WD110 Rev.A.** has also been provided to me for the purposes of my work and I rely totally on the accuracy of this drawing.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

- 3.1 I visited the site on **Friday 1st February** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations (please see explanatory tree survey notes [at appendix BH1](#)).

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LMB m	LS	Condition Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
1	English Yew <i>Taxus baccata</i>	13	700	N7 E3.5 S5 W7	0	1.8 s	M	Growing within a containerised area that is 300-400mm higher than the surrounding car park levels-branches touch the building and roof and brush against windows	No works required at this time	>40	A1 / B1
2	Sycamore <i>Acer pseudoplatanus</i>	13	150 450	N6 E6 S5 W4	3	2 nesw	EM	Unable to access as tree is off site-ivy on main trunk-has been heavily topped out and reduced and the crown is totally comprised of epicormic regrowth from old pruning points	No works required at this time	>40	B1 / C1

Grp 1	Hybrid Poplars <i>Populus x euroamericana</i>	13	500 & 550	N2.5 E2.5 S2.5 W2.5	6	6 w	EM	Roots exposed and significantly scuffed and bark damaged-significant barkwounds on trunk and strips of bark dieback and necrosis where strips of bark are now peeling off-fungal mycelium visible beneath-previously very heavily topped out and the crown is entirely comprised of epicormic regrowth-poor quality trees	No works required at this time	10-20	C2
3	Pedunculate Oak <i>Quercus robur</i>	13	550 #	N8 E6 S6 W8	3	3 nesw	M	Unable to access as tree is off site-crown lifted to 4m agl and stubs have been left from which regrowth arises-major deadwood and stubs-good shape and form overall	No works required at this time	>40	A1

3.2 From this I have been able to prepare a Tree Root Protection Schedule in accordance with BS5837:2012 recommendations
- (please 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
1	English Yew <i>Taxus baccata</i>	A1 / B1	700	8.4	222	NO – the hard surfacing and brick retainer and building footings will all restrict rooting and actually reduce its rooting area
2	Sycamore <i>Acer pseudoplatanus</i>	B1 / C1	150 450	5.7	102	NO –there are constraints all around this tree which cancel each other out
Grp 1	Hybrid Poplars <i>Populus x euroamericana</i>	C2	500 & 550	6.0 6.6	113 137	NO –there are constraints all around these trees
3	Pedunculate Oak <i>Quercus robur</i>	A1	550 #	6.6	137	NO –there are constraints all around this tree which cancel each other out

3.3 Some of these trees are situated within the curtilage of Homewell House [Havant] and others are on adjacent private land.

3.4 The finalised planning layout drawing - **17760-WD110 Rev.A.** - 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: **RSAM** = Remove for sound arboricultural management reasons

RTFD = To be removed to facilitate development

UF of. = Under footprint of development

TRANS = Transplant to an alternative location on site

Tree No	Species	Cat	Stem Diam mm	BS5837:2012 Radial Protection Area m	BS5837:2012 Polygon Area m ²	Distance from Site Features (see key above)	Can Tree Be Retained
1	English Yew <i>Taxus baccata</i>	A1 / B1	700	8.4	222	1.3m to existing building 1.8m to existing retaining wall 2m to existing tarmac car parking area at a lower level	YES (1)
2	Sycamore <i>Acer pseudoplatanus</i>	B1 / C1	150 450	5.7	102	1m to existing substantial stone boundary wall 7.6m to closest new building 14m to refuse and bin store area	YES
Grp 1	Hybrid Poplars <i>Populus x euroamericana</i>	C2	500 & 550	6.0 6.6	113 137	12.9m to closest new building 10.7m to refuse and bin store area	YES
3	Pedunculate Oak <i>Quercus robur</i>	A1	550 #	6.6	137	6.5m to refuse and bin store area 3.5m to new close boarded fencing 3m to existing substantial stone boundary wall	YES (1)

3.5 **YES**

There are two trees in this category which can be fenced off for the duration of the demolition/construction works and fully protected from any adverse impact in accordance with BS5837 recommendations.

Tree 2 – Sycamore

Group 1 – Hybrid Poplars

3.6 YES (1)

There are two trees in this category which will require special attention and protection measures along with works phasing to ensure that they are fully protected from the impact of development works.

Tree 1 – English Yew

- This is a large TPO'd mature tree of somewhat open straggly habit which is situated in a raised container immediately abutting the front building line of the retained building which is due to be refurbished. It is a highly visible tree of significant amenity value.
- This work will entail the erection of scaffolding to facilitate works to the facia of the building and currently branches touch the building line and also overhang the roof.
- Any works to increase light percolation to the habitable rooms would have to be part of a separate TPO application process. This is why no protective fencing is shown around this tree atop the brick retainer because this would require extensive crown lifting as the tree has a very low branching habit - added to which access is needed to the front of the building.
- The RPA for this tree is some 8.4m radius but I would anticipate that the containerised state will have restricted rooting to the south side – nevertheless there will be some roots found in this area which means that ideally the existing tarmac surfacing should be retained as long as possible as it adequately protects any roots in this zone. It would be my suggestion that the soft landscaping [grassing as shown] and footpath detailing are left to the end of the construction phase. At this point the tarmac surface can be broken out by machine as can the sub-base – with the machinery always working from protected ground outside of the RPA. Once bare earth is reached all machinery must be removed from the area and any further excavation works must be undertaken with 'Hand Tools' and this work would need to be monitored by an arboricultural expert (see Section 6 below). Any small diameter [25mm or less] roots that are exposed in the dig can then be cleanly severed by the arb. expert using secateurs.
- In the long term the Yew tree will benefit from the conversion of the tarmac to soft landscaping - provided that no significant root disturbance occurs during the build process – which is why the above measures are needed.

Tree 4 – Pedunculate Oak

- This is a large off site mature tree that is highly visible and of significant amenity value with both a crown and RPA overhang of the boundary line.
- The RPA overlaps the new bin store bases by some 100mm which means that if the bases cannot be moved outside of this zone a ‘Hand Dug’ slit trench will need to be excavated around the outer edges of the concrete base - with the use of ‘Hand Tools’ only with the works supervised by an arboricultural expert (see Section 6 below). It is doubtful whether any roots will be encountered but any small diameter [25mm or less] roots that are exposed in the dig can then be cleanly severed by the arb. expert using secateurs.
- There is a close boarded fence shown to be erected within the RPA of this tree – this fence cannot be erected until the final phase of works when primary construction activity has ceased and the landscaping is to be carried out – all post holes locations must first be probed to make sure that major roots are not encountered and then the post holes will have to be hand dug to facilitate concreting in – holes should be kept to a minimum diameter and this work should be arb expert monitored.

4.0 PRE-DEVELOPMENT TREE WORK and WORKING WITHIN THE RPA

No	Species	Tree Works Recommended
1	English Yew <i>Taxus baccata</i>	• No works permitted at the present time – TPO application required

5.0 ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN

5.1 Demolition & Construction Phases–

Specific Actions:

- Full specification Tree Protection with back stays in accordance with BS5837 - Section 6.2.2 & Figure 2 will be erected as shown on the **Tree Protection Plan BJH.04.**
- Carry out works in a Phased Manner :-

1. **Phase 1** – erect protective fencing and retain the tarmac surfacing within the RPA's of Trees 1 & 3 – then undertake all demolition works.
2. **Phase 2** – retaining as much of the tarmac surfacing as possible utilise this to create a compound for the storage of materials and machinery – where tarmac is absent and bare earth areas are to be used they must first be protected with thick polythene sheeting over which will be laid 150mm of woodchip and then hoarding/boarding used to cover the entire surface area – in this way it is hoped that any inadvertent chemical leaks will be contained and not be permitted to contaminate the soil and kill tree roots.
3. **Phase 3** – proceed with all construction works to their conclusion such that all machinery has been removed from site before the protective fencing is lowered to allow for the final landscaping works.
4. **Phase 4** – the protective fencing can now be removed and the area opened up for landscaping – these areas will most likely be thick with weeds and brambles and it will be necessary to plan ahead and spray these zones with a chemical spray containing Glyphosate active ingredient such that the vegetation dies back before the protective fencing is fully removed - if outside the growing season then spraying will not be effective and under these circumstances it should be noted that these areas are still within the RPA's of retained trees that are to be respected thus any landscaping excavation works for removal of the surface layer of vegetation and tilling the soil must be undertaken with hand tools only. In the case of the areas that are currently tarmac surfaced within the RPA of Tree 1 these will clearly have to be broken out with the aid of a machine that works only from protected ground and once bare earth is exposed all further excavation work must be undertaken by hand with the use of hand tools only. Where the new surface treatment is to be under a new hard surfaced footpath the excavation works will have to be monitored by an arb expert.

Generic Actions:

- It is suggested that clear and concise points of contact and lines of communication are established prior to commencement of the works on site including:- Arboricultural Consultant; Local Authority Tree Officer; Local Authority Planning Officer; Site Manager and Foreman
- The Site Manager should establish his own list of contact details at the Pre-Start site meeting and hang this up in the site office along with the Tree Protection Plan for all to refer to.
- Care must 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.

- **ALL** machine operators should undergo an induction session prior to being allowed to work on site, where the Method Statement is explained to them and a copy pinned up in the site office for their reference.
- In addition a copy of the Tree Protection Plan will be provided and should be pinned up in the site hut and the trees which are to be retained and protected will be pointed out to the operator and they will also be shown which trees these are on site before they start work. In this way it is hoped that unnecessary damage, by root disturbance and collision of machinery booms and operating arms with tree crowns can be avoided.

6.0 MONITORING & SITE SUPERVISION

- It is recommended in BS5837:2012 that an arboricultural expert is retained to advise on all tree related aspects of site monitoring and supervision and it is the local authority's responsibility to make this a condition of planning approval with the said Condition requiring a set schedule of operations and timings prior to undertaking works on site.
- In this instance it is recommended that an Arboricultural Expert is in attendance when :-
 1. The trench is excavated across the corner where the bin store intrudes into the RPA of the Oak (T3).
 2. The tarmac surfacing and sub-base layer are removed from within the RPA of the Yew (T1) and the area is dug over to accommodate the new grass and hard surfaced footpath link.
 3. Digging of post holes for the erection of wooden close boarded boundary fencing.
- The timing of the above works will be the responsibility of the developer who needs to come up with a timing and phasing schedule to satisfy the Council.

7.0 CONCLUSIONS

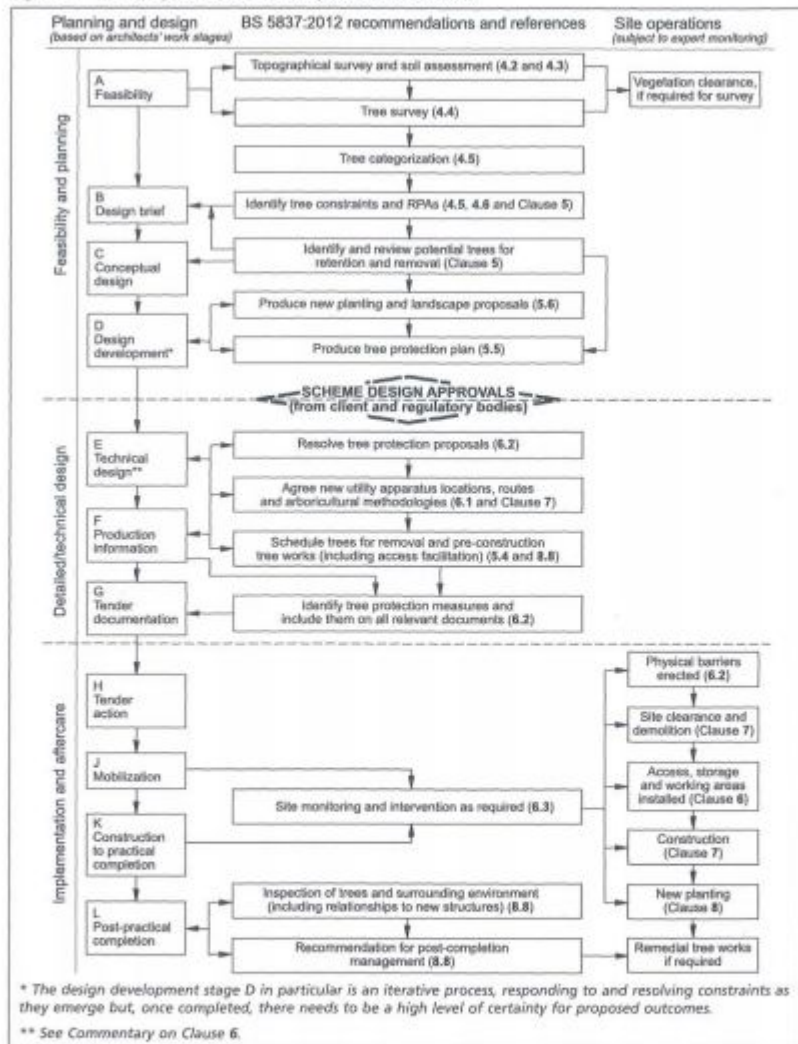
- No tree removal is required to facilitate this project.
- Provided that the methodology prescribed in this MS & TPP report is strictly adhered to (inclusive of site monitoring works) I would expect the retained trees to survive the development unscathed and to continue to grow on safely and healthily in the future.
- This is therefore in my opinion a fully supportable scheme in arboricultural terms.



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 :- **■** (dark red); **■** (light green); **■** (mid-blue) and **■** (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 ■ 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 ■ 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 ■ 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 ■ 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 & BJH 02



BH 3

Tree Retentions & Removals &
Tree Protection & Site Set Up Plan
BJH 03 & BJH 04



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 : –
3 Foxcombe Cottages, South Harting, West Sussex GU31 5PL and also at Cedar Court, 5 College Street, Petersfield
- I hold the following arboricultural qualification - **Master of Arboriculture** (Royal Forestry Society – 1976)
- I have over **forty** 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 surgery company and twelve years with CBA Trees as an 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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tel: 01730 825297 • mob: 07875 520881 • email: bernie.harverson@virgin.net • VAT Reg No. 881 5056 16