



ARBORICULTURAL METHOD STATEMENT

for

5 Warren Close, Hayling Island

- prepared on behalf of Mr & Mrs Lines –

- July 2012 -

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 (AMS) & TREE PROTECTION PLAN (TPP)

Section	Subject Heading
1	INTRODUCTION & CLIENTS BRIEF
2	DOCUMENT DISCLOSURE STATEMENT
3	TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT
4	ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN
5	PRE – DEVELOPMENT TREE WORK & WORKING WITHIN THE RPA
6	MONITORING & SITE SUPERVISION
7	CONCLUSIONS

<u>Appendices</u>	<u>Subject</u>
BH1	Figure 1- Flow Diagram from BS5837 + Tree Survey Notes
BH2	Tree Survey & Root Protection Area Plan – BJH 01/02
BH3	Tree Protection Plan – BJH 03
BH4	Qualifications & Experience

1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 My clients – Mr & Mrs Lines are the owners of the property at 5 Warren Close, Hayling Island.
- 1.2 On 31st May 2012 they were granted planning permission (Ref: APP/12/00052) by Havant Planners to demolish the existing building on site and erect a replacement detached four bed two storey house with integral garage in its place.
- 1.3 The consent was issued relative to certain Planning Conditions being satisfied – Condition 2 relates to a Landscape Master Plan which has been prepared by Jane Brown; Condition 9 relates to the protection of retained trees and I have been commissioned to deal with this condition in liaison with the Project Architect – Jeff Douglas who will be dealing with all of the other Conditions applied to this approval.
- 1.4 I am instructed to prepare a short **Method Statement (& Tree Protection Plan)** - based on the planning layout at 1:200 scale at A3 paper size as prepared by their Architect – Jeff Douglas.
- 1.5 My work is to be compiled in accordance with the Recommendations contained within BS5837:2012.

2.0 DOCUMENT DISCLOSURE STATEMENT

- 2.1 A base plan (1:200 scale at A3) has been provided by the clients Architect for my use.
- 2.2 A copy of the Planning Layout drawing as prepared at(1:200 scale at A3) has also been provided to me for the purposes of my work and I rely totally on the accuracy of this drawing.
- 2.3 I have worked closely with Jane Brown on this project and a copy of her Landscape Master Plan has also been provided to me.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 A tree survey has been prepared in accordance with BS5837 recommendations (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
Grp 1	Sycamore (<i>Acer</i>) Elder (<i>Sambucus</i>)	7	140 100 100	N- E- S- W-	1.5	1.5 N	Y	Suppressed by Lawsons Cypress-crown weighted north away from Cypress-poor quality trees-sapling trees that are dominated by the Lawsons Cypress	Trim to clear building line	5-10	U
1	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	7	250 160 150 150 180	N3 E2 S2 W5	0	1 W	EM	Ivy smothering base, trunk and through crown-multi stemmed at 1m above ground level-significant dieback on east side-small diameter deadwood throughout-previously heavily topped-central leader removed-low branching habit-poor quality tree-limited life expectancy	Remove two lowest branches on south side to facilitate development	10-20	C1
2	Arizona Cypress <i>Cupressus arizonica</i>	7	450	N3 E3 S3 W3	2	2 N	EM	Low crown density-low vigour and vitality-significant dieback-small diameter deadwood throughout-previously heavily topped-open centre-poor quality tree	Fell and stump grind	0-5	U
3	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	5	100 190	N3 E3 S0 W1	1.5	1.5 E	EM	Multi stemmed at ground level-significant basal decay-significant dieback-small diameter deadwood throughout-poor quality tree-two of three stems have been removed-limited life expectancy	Fell and grub out	0-5	U
4	Gum Tree <i>Eucalyptus</i> species	10	180 240 260 200	N4 E2 S4 W4	1	1.5 SW	SM	Multi stemmed 1m above ground level-small diameter deadwood throughout-previously heavily topped at 3m above ground level	Crown lift to clear shrubbery	20-30	C1
5	Gum Tree <i>Eucalyptus</i> species	8	200 200 300 250 250	N4.5 E4.5 S3 W2.5	0	1 E	SM	Multi stemmed 1m above ground level-small diameter deadwood throughout-previously heavily topped at 1.5m above ground level	Crown lift to clear shrubbery	20-30	C1
6	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	5	150 150 150 200	N3.5 E4 S1.5 W2.5	1	1 NES W	SM	Multi stemmed 1m above ground level-suppressed to south side-small diameter deadwood-previously reduced and reshaped-dense crown of branch work	No work considered essential at time of survey	20-30	C1
Grp 2	Leyland Cypress <i>Cupressocyparis leylandii</i>	3	60 (x 10)	N- E2.5 S- W1	0	-	SM	Previously heavily topped-linear screening belt of trees trimmed as a hedge	No work considered essential at time of survey	10-20	C2

3.2 From the data gathered I have prepared a Tree Root Protection Schedule in accordance with BS5837 recommendations :-

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
Grp 1	Sycamore (<i>Acer</i>) Elder (<i>Sambucus</i>)	U	140 100 100	2.4	18	NO – these trees will be removed for sound arboricultural management reasons
1	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	C1	250 160 150 150 180	4.9	75	NO – fairly free rooting to all directions
2	Arizona Cypress <i>Cupressus arizonica</i>	U	450	5.4	92	NO – this tree will be removed for sound arboricultural management reasons
3	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	U	100 190	3.4	36	NO – this tree will be removed for sound arboricultural management reasons
4	Gum Tree <i>Eucalyptus</i> species	C1	180 240 260 200	5.3	89	NO – fairly free rooting to all directions
5	Gum Tree <i>Eucalyptus</i> species	C1	200 200 300 250 250	6.5	133	NO – fairly free rooting to all directions
6	Purple Plum <i>Prunus cerasifera</i> 'Nigra'	C1	150 150 150 200	3.9	49	NO – fairly free rooting to all directions
Grp 2	Leyland Cypress <i>Cupressocyparis leylandii</i>	C2	60 (x 10)	2.3	16	NO – constrained within the line but otherwise fairly free rooting to all other directions

3.3 The RPA's of all of these trees have been plotted on the Tree Survey & Root Protection Plan - (see Plan BJH01/02 [at appendix BH2](#)).

3.4 With the aid of this data it has been possible to devise a Tree Management Strategy detailing the tree retentions and removals required on this project.

Grp 1 – Sycamore /Elder – very poor quality sapling trees that are growing up under the dominant canopy of the adjacent conifer and are distorted due to this – at the present time the conifer is to be retained for screening and separation value and these two trees interfere with its growth habit and have no real amenity value so it is proposed that they be removed for sound arboricultural management reasons regardless of any redevelopment proposals.

Tree 1 – Lawsons Cypress – a poor quality tree which has been topped out and stunted in the past and contains a high level of deadwood and dieback - it has no long term value and the plan is to ultimately remove this tree and plant replacements of high quality at this location – however in the interim this tree does have separation and screening value and the intention is to retain it with remedial tree surgery being undertaken to provide adequate ground clearances and remove all deadwood and dieback.

Tree 2 – Arizona Cypress – a very poor quality tree in a state of terminal decline with low crown density and high levels of deadwood and dieback – the heavy topping out in the past has further distorted the crown and undermined any remaining amenity value – it is proposed that this tree be removed to both facilitate the construction process and more importantly provide a space into which a tree of high quality can be planted to enhance the site for the future.

Tree 3 – Purple Plum - a very poor quality tree in a state of terminal decline with low crown density and high levels of deadwood and dieback – there is significant fungal decay within the tight forks close to ground level which have probably been the cause of the decline – this tree has no amenity value and a short life expectancy and it will be removed for sound arboricultural reasons regardless of any redevelopment proposals.

Tree 4 – Gum Tree – not a tree of high value having been heavily topped out in the past – however given the fact that there are very few trees in this rear garden it will be retained in the short term until the new plantings become established and allow a future phase of either heavy lopping or removal and replacement planting to be considered – in the interim it will have a few low branches removed that interfere with the growth of other trees around it but otherwise will be retained as is.

Tree 5 – Gum Tree - not a tree of high value having been heavily topped out in the past – however given the fact that there are very few trees in this rear garden it will be retained in the short term until the new plantings become established and allow a future phase of either heavy lopping or removal and replacement planting to be considered – in the interim it will have a few low branches removed that interfere with the growth of other trees around it but otherwise will be retained as is.

Tree 6 – Purple Plum – a small tree of reasonable shape and form which will be retained as part of the new layout for the rear garden – this tree does not require any tree work at this time.

Group 2 – Leyland Cypress – a formal clipped hedge of trees that are effectively a ‘hedge’ and not individual trees – they have some value for screening and separation purposes but this is undermined by the fact that they have spread into the garden to an extent where they occupy a considerable area of ground which will compromise the plans for re-landscaping this area – under these circumstances I would have no hesitation in recommending the removal of this hedge in favour of the new planting proposed.

3.5 By reference to the Landscape Master Plan it can be seen that high levels of shrub and tree planting as well as other landscape features will be added to enhance this site and these more than adequately mitigate the loss of any current trees from this site.

4.0 PRE-DEVELOPMENT TREE WORK and WORKING WITHIN THE RPA

No	Species	Tree Works Recommended
Grp 1	Sycamore (<i>Acer</i>) Elder (<i>Sambucus</i>)	Fell and grind out the stumps
1	Lawsons Cypress <i>Chamaecyparis lawsoniana</i>	- Remove the two lowest branches from the south side of the tree making final cuts in a correct fashion against the main trunk - Remove all dead wood and dieback particularly from the east side of the tree
2	Arizona Cypress <i>Cupressus arizonica</i>	Fell and grind out the stump
3	Purple Plum <i>Prunus cerasifera</i> ‘Nigra’	Fell and grub out the stump
4	Gum Tree <i>Eucalyptus</i> species	Remove two low branches from the south side of the tree
5	Gum Tree <i>Eucalyptus</i> species	Crown lift to provide a ground clearance of 1.5m to 2m overall
6	Purple Plum <i>Prunus cerasifera</i> ‘Nigra’	No works required at this time
Grp 2	Leyland Cypress <i>Cupressocyparis leylandii</i>	Fell and grub out the stumps

5.0 ARBORICULTURAL METHOD STATEMENT & TREE PROTECTION PLAN

5.1 Demolition Phase/Construction Phase –

Specific Actions:

- **Undertake all of the above listed tree works prior to occupation of the site by Demolition Contractors**
- Having first carried out the felling/grinding of Tree 2 and the pruning of Tree 1 and then lay ground protection over the area to the rear of the Cypress in the form of a geotextile membrane over which will be laid a 100mm layer of woodchips or washed aggregate – then place breeze blocks or similar supports at strategic corners to take the weight of the secure storage container that will be positioned in this corner of the site for the duration of the construction phase of works and which will be used to store all of the owners personal and house related items.
- Full specification Tree Protection with back stays in accordance with BS5837 - Section 6.2.2 & Figure 2/3 are applicable for this project and should be erected throughout the site after the completion of the above works and before any demolition work begins.
- The ‘Proposed Site Set Up Plan’ prepared by Jeff Douglas clearly shows how the site is to be configured to allow adequate working space for both the Demolition and Construction phases of work. It can be seen that the location for the ‘key operatives car parking’ and the ‘Temporary Site Office/Secure Portakabin’ marginally overlaps the RPA for T1 Cypress. It is therefore proposed that the driveway surfacing works are undertaken at the outset so that this can act as ground protection – albeit with polythene sheeting being laid to prevent ground contamination. At the completion of works it will then be a relatively simple exercise to remove this surface protection to reveal the protected and finished drive surface beneath.
- The proposed final surfacing for the turning head and the main drive is shown to be tarmac positioned outside of the RPA for T1 – however this does not allow sufficient flexibility for the provision of temporary parking of vehicles or for the comfort of an added turning area so it is suggested that whilst the main access drive from the entrance to the house would remain as tarmac the turning head and the area immediately to the north of the tree could be surfaced with a porous cellular confinement system which can then be filled with soil and grass seed so that it appears as lawn but can in fact can take the weight of a vehicle when necessary without damaging the roots of the retained tree. Similar systems have been seen to be used successfully on approved layouts nearby. The final detail of the choice of materials to be used for this purpose have not been decided on at this juncture so will be subject to a further submission to satisfy this condition but the principle is acceptable in arboricultural terms. The methodology will involve an arboricultural expert monitoring the hand digging operation in this area of the site. Excavation to a depth of no more than 200mm will be with the use of

forks and NOT spades and as roots are exposed they will be cleanly severed with secateurs by the arb expert before further digging takes place. The porous sub-base layer can then be laid and the cellular confinement material added filled up with topsoil – however the grass seeding will not take place until the end of the build process when the temporary protective covering layer for these areas is removed.

- At the bottom northwest corner of the site the proposal is to increase the height and spread of the bunding for flood protection purposes. This will involve working within the RPA of Tree 4 Gum Tree so whilst machinery may be used to transport materials down to the bottom of the garden they must then be stockpiled outside the RPA and hand barrowed into the RPA zone to create the bund. The materials to be used must be topsoil and NOT spoil of any sort. The tree will quickly adapt to this change and put out roots into this area. The railway sleeper retaining wall can be pinned and bolted in place and will stop migration of materials but have no adverse impact on the tree.

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

- In this instance with such a small project with minimal potential for impact on trees it is probably only necessary for the Consultant Arboriculturist to conduct one combined site visit:-
 1. A site visit after the tree works have been completed to monitor the hand excavation exercise and the laying of the cellular confinement system as well as the ultimate erection of protective fencing at the front of the property
 2. As well as at the same visit reviewing the erected protective fencing at the rear of the site to verify the position and effectiveness of same.

7.0 CONCLUSIONS

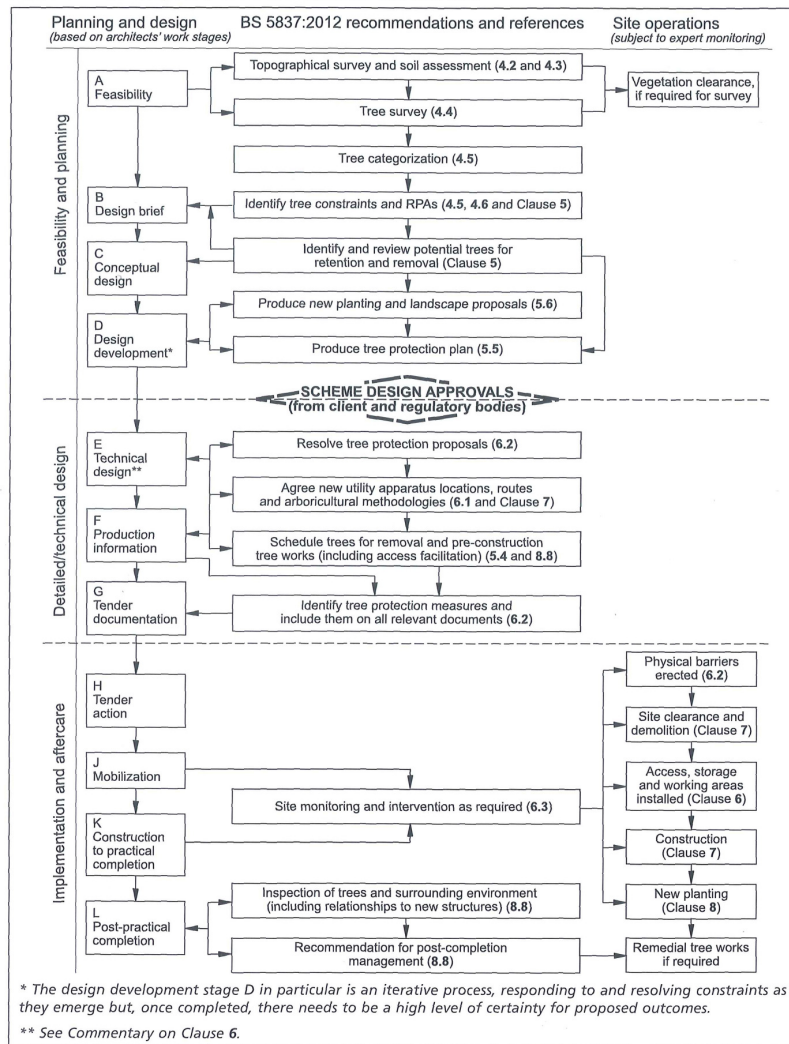
- Minimal tree removal is required to facilitate development as well as a requirement for some tree pruning works to facilitate works.
- The trees proposed for removal are all of low value and grading and most could have been removed for sound arboricultural reasons regardless of any redevelopment proposals.
- From a review of the Landscape Master Plan it can be seen that high levels of shrub and tree planting as well as other landscape features will be added to enhance this site and these more than adequately mitigate the loss of any current trees from this site.
- Provided that the methodology prescribed in this AMS & TPP report is strictly adhered to and the site monitoring exercise is undertaken I would expect the retained tree(s) 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.



BJH 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



BJH 2

Tree Survey & Root Protection
Plan - BH01/02



BJH 3

Tree Protection Plan - BH03



BJH 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.

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