



ARBORICULTURAL METHOD STATEMENT

95 Park Avenue, Purbrook [Childrens Games Room]

*-prepared on behalf of **Graham Dobson** -*

The Granary, White Chimney Row, Westbourne PO10 8RS



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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 My client – **Graham Dobson** – is the owner of **95 Park Avenue, Purbrook**.
- 1.2 He seeks to construct a Childrens Games Room Outbuilding at the bottom of his garden.
- 1.3 There are TPO'd trees (and others) on this site which could possibly be impacted by these proposals.
- 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 following Planning Layout drawings by **The Martin Ralph Group** :-

- **Combined Existing Site Layout Plan & Location Plan / Proposed Play Room – 17.104.MF – 1:250 @ A3 – July 2018**
- these plans have been provided to me for the purposes of my work and I rely totally on their accuracy in terms of tree location; applying crown spreads and setting out protective fencing.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 I visited the site on **17th July 2018** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations on just those trees which are close to the areas of proposed redevelopment (see explanatory tree survey notes [at appendix BHI](#)).

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
1	Pedunculate Oak <i>Quercus robur</i>	20	850	N 7 E 4 S 5 W10	6	M	Crown weighted to the west due to competition-crown lifted to 6m-recently deadwooded and crown cleaned- dead ivy on trunk.	No works required at this time	>40	B1
2	Pedunculate Oak <i>Quercus robur</i>	20	800	N 12 E 5 S 1 W 3	6	M	Crown weighted to the north and low crown density due to competition-cavities and decay in old pruning wounds- woodpeckers have hollowed out below some of the old wounds- recently deadwooded and crown cleaned.	Climbing Inspection recommended – to verify safety of crown	30-40	C1
3	Sweet Chestnut <i>Castanea sativa</i>	18	1400	N 6 NE12 E 12 S 1 W1	4	M	Off site tree-ivy smothering throughout and dominating tree-crown weighted to the north-east due to competition-significant decay in a large open wound at ground level-previously reduced and reshaped.	Recommend a detailed inspection by an arboricultural expert in view of the visible basal decay and safety risk	10-20	C1
4	London Plane <i>Platanus acerifolia</i>	30	1300	N 9 E 12 S 9 W 8	8	M	Off site tree-leans east due to competition-small and large diameter deadwood throughout-has developed a full crown and is the dominant tree of the grouping at the bottom of the garden.	Remove all deadwood for safety reasons Recommend evenly crown lifting the 'skirt' by 2m to increase the ground clearance to the canopy and clear above play area below and also allow more light into the garden under the canopy of this very dominant tree.	>40	A1

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
1	Pedunculate Oak <i>Quercus robur</i>	B1	850	10.2	327	NO – if anything the root development will be restricted by competition from other trees
2	Pedunculate Oak <i>Quercus robur</i>	C1	800	9.6	290	NO – if anything the root development will be restricted by competition from other trees
3	Sweet Chestnut <i>Castanea sativa</i>	C1	1400	15.0	707	NO – a dominant tree that will have developed a full and balance root system
4	London Plane <i>Platanus acerifolia</i>	A1	1300	15.0	707	NO – a dominant tree that will have developed a full and balance root system

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: **RSAM** = Remove for sound arboricultural management reasons **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
1	Pedunculate Oak <i>Quercus robur</i>	B1	850	10.2	327	16m to new Play Room	YES

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
2	Pedunculate Oak <i>Quercus robur</i>	C1	800	9.6	290	9.6m to new Play Room	YES
3	Sweet Chestnut <i>Castanea sativa</i>	C1	1400	15.0	707	5m to new Play Room	YES (1)
4	London Plane <i>Platanus acerifolia</i>	A1	1300	15.0	707	1.5m to new Play Room	YES (1)

4.2 **YES** - Two (2) trees fall into this category on this project where they can be retained and fully protected in accordance with BS5837 recommendations (see **Tree Protection Plan BJH.03/04** at [appendix BH3](#)) :-

Trees: **1 Pedunculate Oak (B); 2 Pedunculate Oak (C); 3 Sweet Chestnut (C) & London Plane (A).**

4.3 **YES (1)** - Two (2) trees fall into this category on this project where they can be retained subject to mitigation measures being applied to respect the root systems. These measures are fully outlined at Section 6. of this report.

Trees: **3 Sweet Chestnut (C) & London Plane (A).**

5.0 RECOMMENDED TREE WORKS

No	Species	Tree Works Recommended
1	Pedunculate Oak <i>Quercus robur</i>	Recently 'cleaned out' and no further works are required at this time
2	Pedunculate Oak <i>Quercus robur</i>	Climbing Inspection recommended to verify safety of crown
3	Sweet Chestnut <i>Castanea sativa</i>	Off – Site tree not under my clients control Advise owner has a tree safety audit exercise performed by an expert as there are signs of significant basal decay in this tree.
4	London Plane <i>Platanus acerifolia</i>	Off – Site tree not under my clients control Advise my client to approach the owner seeking consent to carry out the following works:- - Remove all deadwood for safety reasons - Recommend evenly crown lifting the 'skirt' by 2m to increase the ground clearance to the canopy and clear above play area below and also allow more light into the garden under the canopy of this very dominant tree.

6.0 METHOD STATEMENT

- 6.1 All of the recommended tree works should be undertaken by an approved and experienced tree contractor prior to any construction contractors commencing works on site.
- 6.2 Erect the protective fencing as specified and shown on the **Tree Protection Plan BJH03/04 at appendix BH3**. 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. There will also be a need for ground protection measures to be applied in accordance with BS5837 recommendations.
- 6.3 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

SITE SPECIFIC PROTECTION MEASURES

- 6.4 The proposed development can be safely undertaken provided that ground protection is laid around the new Play Room since all works are being undertaken within the RPA's of trees 3 & 4.
- 6.5 There is no room to get a piling rig in beside the house so the Play Room will have to be supported on concrete pads with a suspended floor clear of the ground. The following methodology will need to be followed:-
- Lay the ground protection in accordance with **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;
 - Under direct Arboricultural Expert monitoring 'Hand Dig' the holes which are to form the concrete pads (typically 300mm x 300mm x 600mm but a Structural Engineer will have to confirm this).
 - If roots are encountered then they will need to be dealt with – under 25mm diameter will be cleanly severed by the Arb Expert using sharp bypass secateurs – over 25mm diameter will need to be left intact and the hole will need to be moved to one side or the other to avoid them.
 - Once completed the holes will need to be lined with thick polythene sheeting before the concrete is poured into them.
 - Depending on the final design it may be that there will need to be a metal strut placed in the centre of the concrete which will then have the suspended floor bolted to it (layout drawings to be submitted separately by Architects). Alternatively perhaps the wooden support posts of the Play Room will bear

directly onto the concrete and then holes will be drilled into the concrete pads and metal brackets bolted to both materials to secure the Play Room in place.

- Once the suspended floor has been laid the building can be constructed above it – there is sufficient ground clearance for there not to be an issue with the lower branches of the London Plane.
- On completion of all works the ground protection may be removed.

6.6 Site works delivery/storage areas and any mixing areas are to be located on the existing consolidated driveway or in the rear garden but outside the RPA's of retained trees.

6.7 There will almost certainly need to be an electricity supply linked to the Play Room and this could be above ground but is more likely to be buried in a conduit. If the latter process is to be followed then once again the trench that will receive the conduit must be 'Hand Dug' under direct Arboricultural Expert monitoring, where this takes place within the RPA of the London Plane, and any roots of 25mm diameter or less cleanly severed by the Arb Expert using sharp bypass secateurs. As before in the eventuality that a root greater than 25mm diameter is encountered then the trench will have to be diverted to avoid it.

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 (Council Tree Officer to be invited) development teams arboricultural consultant and the main building contractor and the clients representative where the protective fencing and ground protection measures will be inspected to verify that they are 'Fit For Purpose' and have been erected/laid as per the **Tree Protection Plan**.
- 7.2 Lines of communication will be established with the Contract Site Manager and contact details exchanged in the event that an incident occurs involving the retained trees that requires urgent advice and guidance outside of the scheduled site visits.
- 7.3 The details of the PCSM works and all follow up site visits will be photographed by the Arb Expert and the following reporting procedure will be adopted and after each site visit a copy of the report will be sent through to the Councils Tree Officer for ratification.

7.4 This is an example of the format for the **Site Monitoring Schedule** that would be prepared. :-

Schedule Of Site Monitoring & Supervision for – 95 Park Avenue, Purbrook

- In accordance with the Arboricultural Method Statement Report – 1021.bjh.Aug18 & Tree Protection Plan – BJH 03/04

Date of Inspection	Item	In Attendance	Notes/Observations From Inspection	Details Of Any Follow Up Action Required
tba	Pre-Commencement Meeting	Council Tree Officer invited to attend Project Arb Consultant Building Contractor	A joint site inspection was conducted and agreement reached that the protection measures are in place and that everyone understands their responsibilities in respect of protecting the trees.	•
tba	Hand Digging of Concrete Support Pads	Project Arb Consultant Building Contractor	The works were supervised and monitored on the day and the following noted:-	•
tba	Hand Digging of Electricity Supply Trench	Project Arb Consultant Building Contractor	The works were supervised and monitored on the day and the following noted:-	•

8.0 CONCLUSIONS

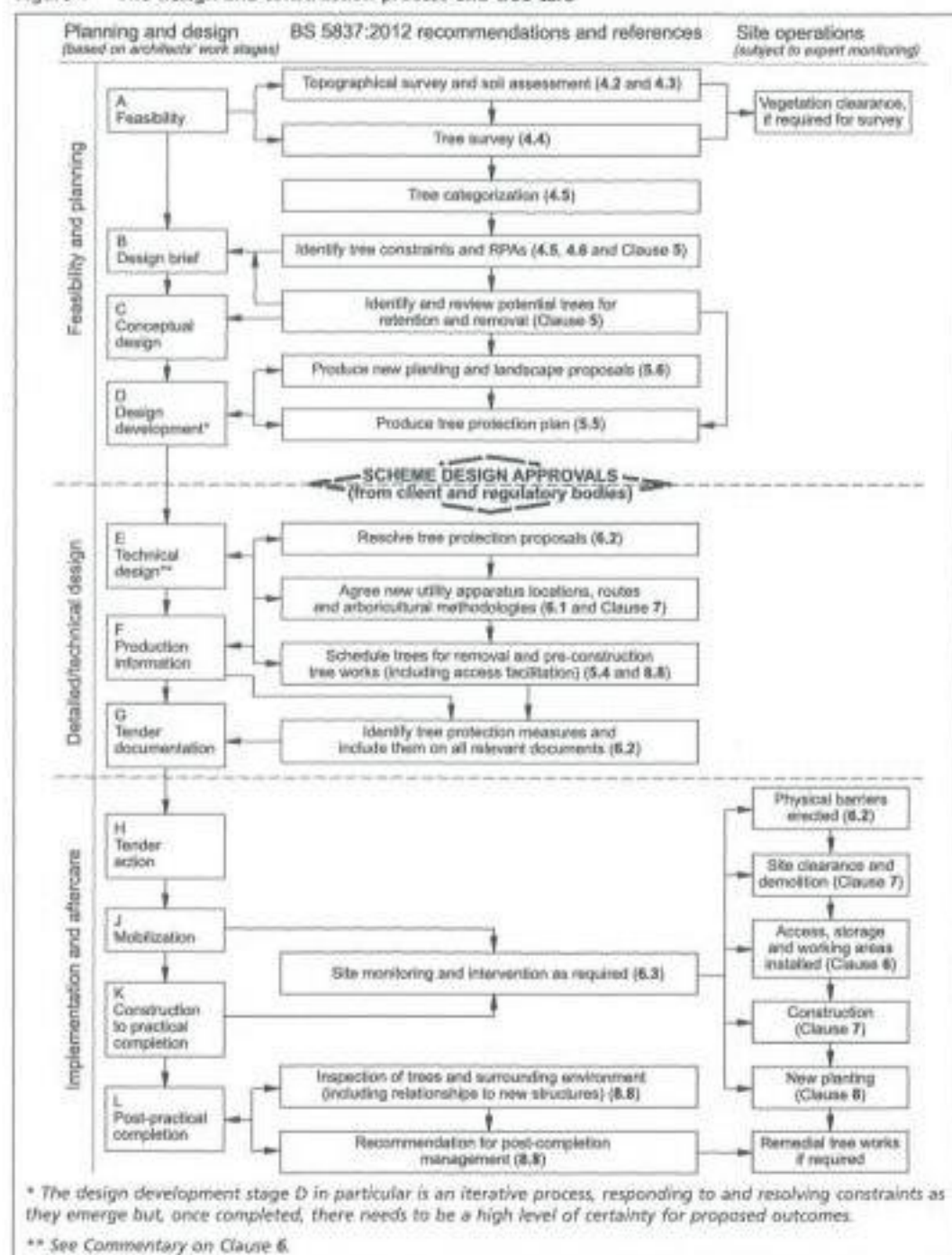
- The primary trees on this site are those at the bottom of the rear garden (all TPO'd) and they can all be afforded due respect and protection to ensure that they survive the construction works in good order without detriment to their vigour and vitality and visual amenity value in the landscape.
- Provided that the above methodology is strictly adhered to in the phased and monitored manner advocated I would not foresee any detrimental impact taking place that might undermine the health and stability or visual amenity value of the trees shown for retention.



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 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

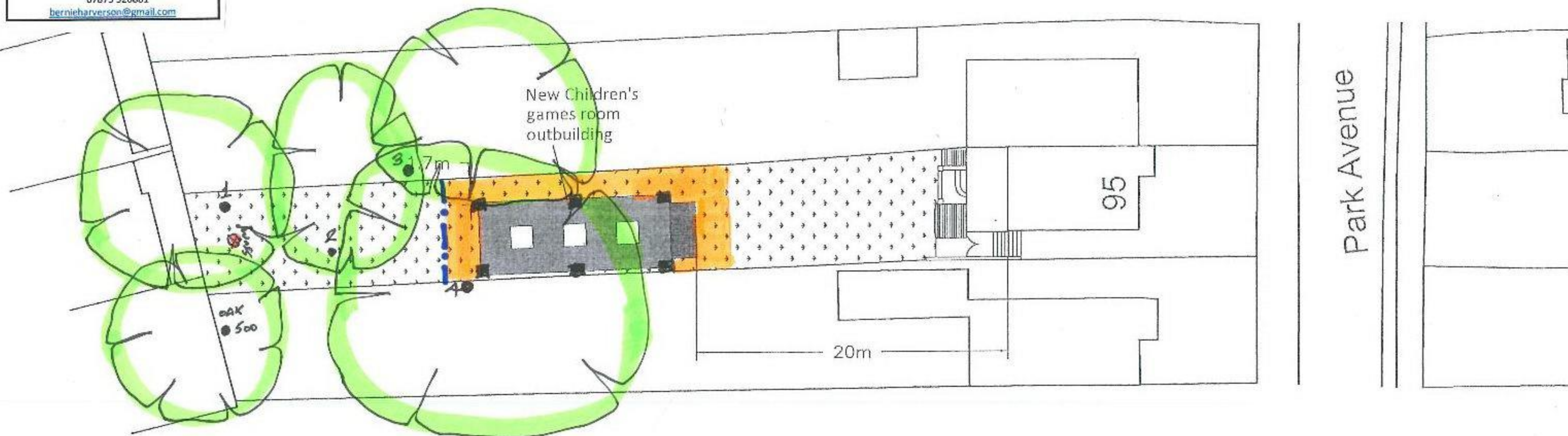
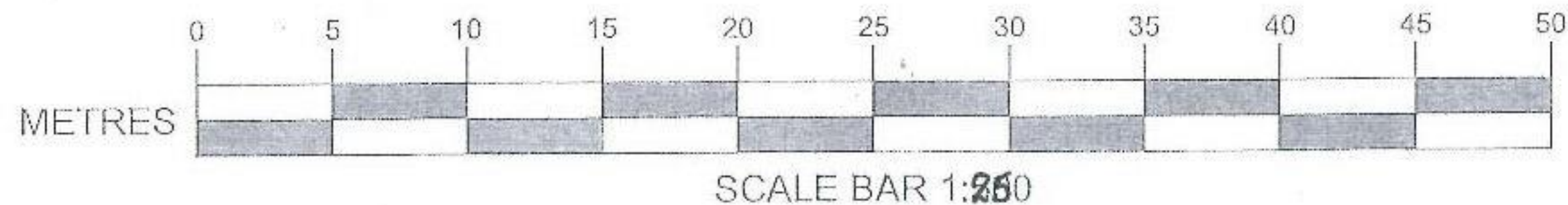
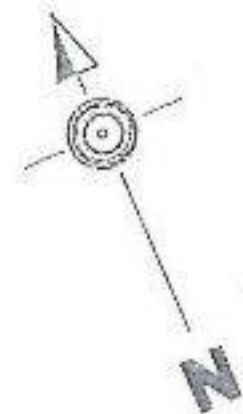


BH 2

Tree Survey & Root Protection Plans

BJH 01/02

	
project	95 Park Avenue Purbrook Waterlooville
client	Mr G Dobson
title	Tree Protection Plan
dwg	BJH 03/04
scale	1:250 @ A3
date	Aug 2018
job	1021
drawn by	bjh
The Granary - White Chimney Row - Westbourne PO10 8RS 07875 520881 bernieharverson@gmail.com	



Key:

-  = Trees which will be retained and fully protected during construction works
-  = Trees which cannot be retained with this layout
-  = The setting out positions for the Protective Fencing in accordance with BS5837:2012 recommendations - Section 6.2
-  = The ground will need to be protected in accordance with BS5837:2012 recommendations - Section 6.2.3.3 a)
-  = Indicative locations for Hand Dug concrete pad supports

Site Plan (1:500)

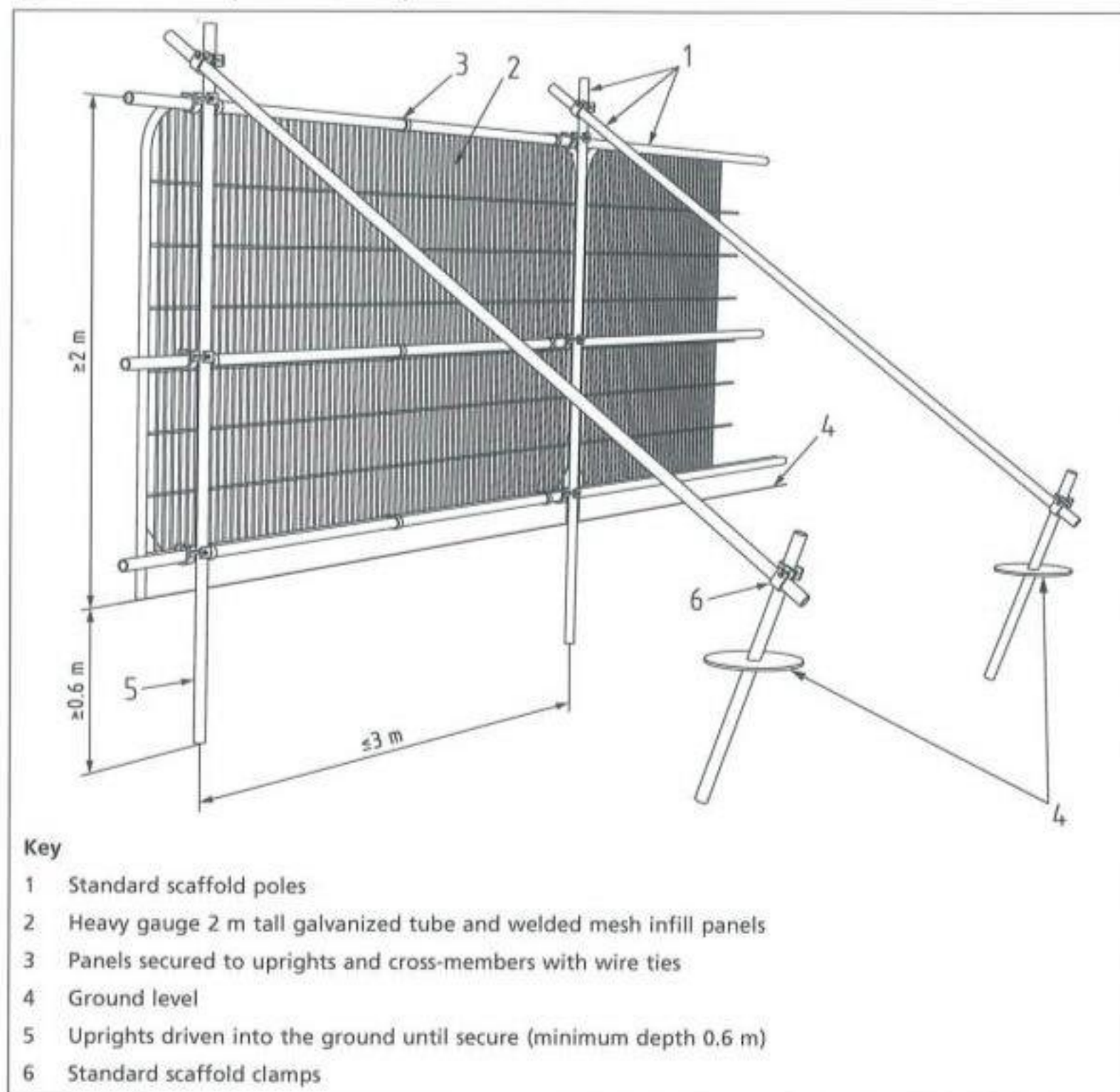


BH 3

Tree Protection Plan BJH 03/04

+ BS5837:2012 – Figures 2 & 3

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;*



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 **forty eight** 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.

The Granary, White Chimney Row, Westbourne PO10 8RS

