

ACS

CONSULTING

URBAN & RURAL

TREE MANAGEMENT

7th August 2015

Ref:ha/aiams1/17wadhamgdns

Your Ref:

Mr M Bailey
PlanningSense
61 Cavendish Road,
St Albans
AL1 5EF

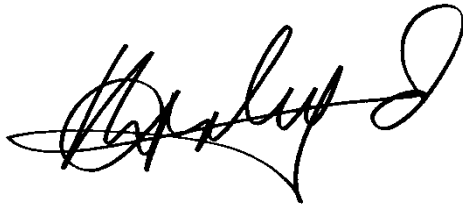
Dear Mr Bailey

**Tree Protection and Management in relation to Construction at:
17 Wadham Gardens, NW8**

Further to your instructions, please find my arboricultural report and method statement attached to assist with the planning application address the planning conditions.

I hope that this is clear and helpful but if I can be of any further assistance, please do not hesitate to contact me.

Yours sincerely



Hal Appleyard
Dip. Arb. (RFS), F.Arbor.A, MICFor.
Arboricultural Association Registered Consultant



enc.

cc Client

Arboricultural Assessment and Protection Method Statement

Site: 17 Wadham Gardens, London

Date: 7th August 2015

Prepared by: H. Appleyard Dip.Arb (RFS), F.Arbor. A, MICFor

Ref: ha/aiams1/17wadhamgdns

Appendices:

1. Tree Survey Schedule (BS5837:2012)
2. Tree Protection Plan TPP1_WG
3. Recommended tree and ground protection
4. Example of site monitoring record

1.0 Introduction and Scope

- 1.1 A planning application for the construction of a new basement is to be submitted to the Local Planning Authority in conjunction with an arboricultural report.
- 1.2 The proposed construction is to be undertaken in the vicinity of trees within a conservation area. The implications upon the trees and the methods for tree protection and preservation during the construction work are set out in this report and which includes a requisite a tree protection plan.
- 1.3 I have been appointed on behalf of the site owners as a competent and qualified arboricultural consultant to provide this report and to supervise any works that may have the potential to affect the protected and retained trees.
- 1.4 I inspected the relevant trees on 25th November 2014. The details are provided accordance with the guidance set out in BS 5837:2012 'Trees in relation to design, demolition and construction- Recommendations' (the BS) and an extract from that guidance is appended herewith.

2.0 The Site and Trees

2.1 The site comprises a three-storey detached residential dwelling. The rear garden supports lawn and mature trees. The front garden is mostly paved and hard landscaped, with some regularly trimmed hedges and one small tree. The pavement to Wadham Gardens abuts the southern boundary and similar properties adjoin the east and west boundaries.

Fig. 1 17 Wadham Gardens



2.2 The BS details of the trees are provided within the tree survey schedule at **Appendix 1** and their corresponding positions are shown on the tree protection plan included at **Appendix 2**.

2.3 There is a very modest, ornamental Cherry tree growing within the front garden area, which is surrounded by hard standing. The tree has been pruned back from the eastern boundary quite severely, which has made it somewhat one-sided. It would not be harmful to the landscape however, to replace this tree with something more robust.

- 2.4 There are mature London Planes growing within the pavement of Wadham Gardens. They are typically vigorous as can be seen by the new shoots which have developed following the most recent pruning exercise carried out by the Council. It is possible that some roots may have extended into the front garden area of No 17 from T1 but, which are likely to be few in number in my view. With reference to the literature^{1,2,3,4}, the loss of some roots from London Plane species is unlikely to affect the long term condition or quality of the tree.
- 2.5 With reference to the rear garden area, there are several understorey, garden ornamentals and two larger trees. The largest specimen in relation to this scheme is growing within neighbouring land to the east, a mature Lime tree T5. It seems typically vigorous and in normal growing condition. A mature Corsican Pine is the tallest tree in the rear garden but it has become drawn and slender growing in close proximity with the other trees.
- 2.6 A mature False Acacia (T8) appears to have been wind blown (uprooted by wind forces) at some stage in the past and the tree leans quite heavily southward. The tree bears some decay at the base and in the trunk on the opposite side of the



lean as the wound spirals slightly up the trunk. This must be considered a weak point on the tree. It will be prudent to prune the tree to reduce its weight and canopy area, which will reduce wind stresses. This is minimum work. It would not be unreasonable to remove the tree entirely and replant with a new tree for the future.

References

1. Matheny. N, Clark. J. R, 1998. '*Trees and development; A technical guide to the preservation of trees during land development*'. ISA
2. Costello, L.R, Jones. K. S, 2003. '*Reducing infrastructure damage by roots: A compendium of strategies*.' ISA Western Chapter.
3. Roberts. J, Jackson. N, Smith. M, 2006. '*Tree roots in the built environment*.' TSO DCLG
4. Harris et al, 1999 '*Arboriculture, Integrated Management of Trees, Shrubs and Vines*' Third Edition Prentice Hall

Proposed Construction and associated works

- 2.5 The proposal involves the excavation of soil from within the front and rear gardens and beneath the existing footprint of the house. It will involve underpinning existing foundations and creating new footings and side walls for the extended areas. In order to do this, piling rigs for sheet piling may be used at both front and rear.
- 2.6 Owing to the relatively confined area at the site frontage, I recommend that the small Cherry tree T3 be removed and replaced during the re-landscaping of the front garden area. This will provide effective working space, without adversely impacting upon the street scene. I recommend that the RPA of T1 (see tree protection plan) be covered with a robust ground protection (e.g. temporary concrete) to protect any roots which may well grow into the site from this tree.
- 2.7 The proposed construction does not encroach into the RPAs of retained trees in the rear garden and as such the impact upon the trees will be negligible. The trees can be effectively protected during the course of development by the erection of standard tree protection fencing and ensuring little construction traffic passes via the northern end of the site.

Table 1 **Proposed Tree Works**

Tree Works (Spec.)	Tree Nos	Visual Landscape Impact of Works*	Available Replacement Planting(Y/N)	Comments
Fell (Sp6)	T3	Low	Y	Replace tree to enable reasonable work space
Crown reduce by 3-4m (Sp1); Crown Clean (Sp3)	T8	Low	-	Weakened trunk and base; pruning for general maintenance and safety.
Total		Low	Approx. 2	Refer to landscape details

*This is a preliminary visual appraisal based upon the opinion of the author having inspected the trees in the context of their current surroundings. – None (no change or beneficial impact) Negligible or indiscernible difference to treed landscape; Low – Noticeable but mitigated by retention of other landscape trees and features; Medium – Obvious but temporary alteration to the treed landscape; High – Obvious and permanent alteration to the landscape.

Visual receptors include the public or community at large, residents, visitors or other groups of viewers together with the visual amenity of potentially affected people.

Specifications for recommended tree works:

General

All work is to conform to BS 3998:2010 'Tree work – Recommendations' and with current arboricultural best practice. Tree works are to be undertaken by a professional and specialist arboricultural contractor, who carries the appropriate experience and insurance cover, equipment and PPE. All works and processes are to comply with all relevant Planning Wildlife, Environmental, Conservation and Health and Safety legislation.

Sp1. Crown reduction will include reducing the height and spread of a tree's canopy (branching structure) whilst retaining the tree's natural tree form (species determined). The amount of reduction is described in linear metres e.g. 2m (from 6m to 4m radial spread) or 3m (from 15m to 12m tree height). Crown reduction work will be undertaken for a specific purpose, which may include containing tree growth in a given location or reducing wind purchase and stress.

Sp3. Crown Cleaning involves the removal of all dead wood small and large diameter, stubs and broken branches. Some small, densely arranged shoots (including epicormic shoots) will be thinned out or removed as recommended.

Sp6. Felling involves the careful removal of a tree to ground level (or other specified height), either in sections or in one unit (straight felling). The method of felling will be suited to the constraints of the site and judged by the competent operator undertaking the task. Removing the stump may be part of the requirements and this will be carried out using a mechanical stump grinder where accessible.

Table 2 Summary of Implications of Construction on Trees*

Tree Ident.	Landscape Contribution	Implications/Impact	Mitigation measures	Impact Assessment**
T3	Low	Fell to enable effective construction space	1. Re-plant with minimum 1 x 25cm girth tree	Positive
T8	Low	Crown reduce for safety	1. Undertake pruning professionally	Positive
T1	High	Roots within possible construction site	1. Install effective ground protection over existing surfaces	Neutral

* Main trees selected for comment included above. Refer to previous notes on other trees.

** Negative – adverse impact upon trees and landscape; Neutral – no material impact (negative or positive); Positive – improvement (potential) to tree quality and landscape

3.0 Recommended Construction Precautions (trees)

- 3.1 In order to afford protection from general construction processes associated with the building of the basement extensions, it will be necessary to erect a robust tree protection fence (normally wire mesh panels) in the position indicated on the Tree Protection Plan at **Appendix 2** (TPP1_WG). The recommended type of BS grade tree protection fencing is included at **Appendix 3**.
- 3.2 Following erection of the tree protection fencing, I recommend installing some ground protection (refer to TPP) to ensure that roots under the surface are not damaged by compaction during regular passing by operatives and machinery. I have included recommended examples of ground protection at **Appendix 3** also.

NOTE: THE APPOINTED ARBORICULTURAL SUPERVISOR IS TO BE CONSULTED BEFORE ANY WORK, EITHER SCHEDULED OR UNSCHEDULED, IS CONSIDERED WITHIN THE EXCLUSION ZONE OR ROOT PROTECTION AREAS OF ANY RETAINED TREE. FAILURE TO DO SO MAY LEAD TO ENFORCEMENT ACTION BY THE LPA.

- 3.4 In order to ensure that the tree protection measures are implemented effectively, a site monitoring exercise will be undertaken to confirm:

- i) The efficacy and accuracy of the fencing and ground protection

An example of a site record (tree protection) is provided at **Appendix 4**. In this case, the form will be used as confirmation that all practical precautions have been undertaken in accordance with this method statement.

- 3.5 A copy of this method statement is to be retained on site for the duration of the build process together with a scaled, colour copy of the Tree Protection Plan.

- 3.6 The details pertaining to tree protection as set out in this method statement, specifically include:

- i) erection of tree protection barriers;
ii) the installation of ground protection;
iii) lines of communication and incident reporting,

are to be explained to the Site Agent at the pre-commencement site meeting. It will be the responsibility of the Site Agent to ensure that all personnel working on site are aware to the tree protection measures processes. A copy of this method statement is to be retained on site for the duration of the build process together with a scaled, colour copy of the Tree Protection Plan.

3.7 Key times for site supervision include:

1. Completion of agreed/necessary tree works
2. Erection of tree protection fencing
3. Installation of ground protection
4. Works within RPAs of retained trees
5. Landscaping

3.8 Effective site monitoring will be undertaken from the outset of the project and at agreed intervals thereafter. The frequency of monitoring may well decrease following the proper installation of all tree protection measures. Below is a recommended programme of arboricultural supervision. (This programme may alter dependent upon site circumstances or by agreement.)

3.9 The process for recording the tree protection measures will involve:

- i) Site Agent to contact Arboricultural Supervisor with a minimum of 5 days' notice of any site work commencement.
- ii) Arboricultural Supervisor to monitor site to agree tree protection fencing
- iii) When all tree protection is installed in accordance with the tree protection plan, the Arboricultural Supervisor is to arrange with LPA tree officer and relevant contractors **the pre-commencement site meeting** in order to agree the tree protection and subsequent works within RPAs of retained trees and importantly the lines of communication between the on-site contractors, the Arboricultural Supervisor and the LPA tree officer. and incident reporting,
- iv) Arboricultural Supervisor to record all site visits and distribute reports to LPA tree officer and contractors for their records
- v) Subsequent to completion, Arboricultural Supervisor to sign-off and complete.
- vi) Any incidents resulting in potential tree damage are to be reported in line with the 'Incident Reporting Flow Chart in **Appendix 4**.

Table 3 Preliminary site supervision schedule

Stage	Action	Arboricultural Supervisor (AS) (Required – Y/N)	Notes
1	Pre-commencement meeting*	Y	Site Agent(SA) and LPA tree officer, contractor to attend
2	Tree works	Y	Following completion of tree works
3	Installation of Tree protection fencing and ground protection	Y	PRIOR to ground works
4	Excavations and ground works	Y	
5	Construction phase	Y	
6	Remove tree protection fencing/ground protection	N	SA to liaise with AS; No tree protection is to be removed without prior agreement from the AS
7	Tree planting/landscaping	Y	Brief landscape company

3.9 The frequency of tree protection monitoring depends upon the nature of the project. In this case it will be appropriate for the SA to organise with the AS monitoring visits to be twice in the initial 28 days from commencement and thereafter once every 28 days for two months and then by agreement.

Contact List (to be completed **PRIOR** to commencement)

Interested Party	Name	Company/LPA	Contact Number(s)	Comment/ Responsibilities
Site Agent	TBA			Day to day site management; co-ordination of timings; contact with project Arboriculturist
Main Contractor	TBA			Legal and administrative running of the project; finance; appointment of and liaison with all project consultants
Arb. Supervisor	TBA			Tree protection and management; dissemination of tree-related information
LPA Tree Officer	TBA	L B Camden	020 7974 4816	Tree protection and management
Site Engineers				Technical advice and design
Architects	Mr J Wiggins	GPad Ltd	020 75492133	Design

TBA – to be advised

***Pre-commencement means i) before any works including tree felling or pruning and ii) before any ground works or demolition commences and upon completion of the initial installation of the tree protection, including ground protection.**

4.0 Precautions during Landscape Work

- 4.1 The following steps (both general and site specific), are advisable in relation to implementing any landscape works, which may have the potential to affect retained and or protected trees:
1. Advise arboricultural supervisor of intended time frame of landscape work in advance of commencement.
 2. Re-locate existing tree protection fencing/ground protection to enable landscape work to proceed.
 3. With bio-degradable spray paint or site pins with plastic tape, mark out the position of the relevant tree root protection areas (RPA) as per the tree protection plan.
 4. Within the RPAs, avoid using any mechanical tools or vehicles (e.g. tracked or wheeled machinery).
 5. Spread any mulch or top soil manually, with the use of wheel barrows and hand tools. It will be acceptable to use of the back actor of a tracked excavator to spread piled top soil or mulch into the RPAs of protected trees provided the bucket does not come in contact with the ground and that the power unit is positioned outside of the RPAs at all times.
 6. Any planting pits are to be excavated manually within the RPAs of any retained trees.
 7. Multiple passes within the RPAs along one route, pedestrian and with wheel barrows will require some ground protection to be installed prior to working. Ground protection can be scaffold boards over wood chip for example.
 8. A record of the landscape working method is to be made and provided to the Council for their file.
 9. Hard landscaping features will be constructed under supervision within the RPA of retained trees and will avoid, where possible, the re-grading of soil.

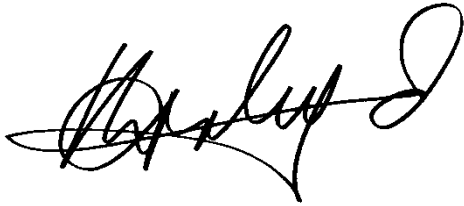
5.0 General site care (trees)

- 5.1 No fires will be lit on site.
- 5.2 No access will be permitted to within the fenced or otherwise protected areas (unless for site accommodation or Authorised agreement) at any stage during construction.
- 5.3 No materials, equipment or debris will be stored within the fenced areas unless agreed with the arboricultural supervisor.
- 5.4 Areas for mixing are to be located beyond RPAs of trees and contained to prevent leaching into the soil.
- 5.5 A copy of this report and the Tree Protection Plan is to remain on site at all times.

Liability Limitation

This report has been prepared for the sole use and benefit of the Client. ACS Consulting shall not extend its liability to any third party. No part of this report is to be reproduced without authorisation from ACS Consulting (London).

Please note that all relevant planning approvals and approval to planning conditions must first have been issued by the relevant planning authority in order for this report to become effective. We strongly advise that you consult your planning advisors before implementing any recommendations set out in this report.



Hal Appleyard
Date: 7th August 2015

APPENDIX 1

Site: 17 Wadham Gardens, NW3

Date: 25th November 2014

Surveyor: H. Appleyard

Ref: ts1/17wadhamgdns

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	Protection Multiplier	Protection Radius	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	Observations
T1	Plane, London	17	5 5 5	8/E7	Mature	700	12	8.4	Normal	Good	High	B	1,2	>40	Root pattern affected by structures (road) Street tree; high pollarded
T2	Plane, London	17	5 5 5	8/E7	Mature	700	12	8.4	Normal	Good	High	B	2	>40	Root pattern affected by structures (road) Street tree; high pollarded
T3	Cherry, Autumn Flowering	6	4 4 4	2/W2	Middle Aged	200	12	2.4	Normal	Good	Medium	C	1,2	20-40	Garden ornamental
T4	Cherry, Autumn Flowering	6	2 3 4	2/W2	Middle Aged	200	12	2.4	Normal	Good	Low	C	1,2	10-20	Garden ornamental Reduced in past; one-sided, suppressed
T5	Lime, Common	20	6 6 6	4/N4	Mature	500e	12	6.0	Normal	Good	High	A	1,2	>40	A tree with insignificant defects Off-site tree
T6	Pine- Corsican	20	2 3 2	3/S3	Mature	430	12	5.2	Normal	Good	Medium	B	1,2	20-40	Drawn habit Deadwood (small diameter) Stubs
T7	Yew, Common	6	3 3 3	2/S2	Young	150	12	1.8	Normal	Good	Low	C	1,2	>40	Boundary screen tree

Notes:

- Height describes the approximate height of the tree in meters from ground level.
- The Crown Spread refers to the crown radius in meters from the stem centre and is shown above on each of the four compass points (i.e. N, E, S, W) clockwise.
- Ground Clearance is the height in meters of crown clearance above adjacent ground level together with the height and direction of the lowest branch
- Stem Diameter is the diameter of the stem measured in millimetres at 1.5m from ground level. The diameter may be estimated (e), where access is restricted. An average (a) may be taken for tree groups. A full inspection is always recommended.
- Protection Multiplier is 12 for single-stemmed trees; for multi-stemmed a cross-sectional area is calculated to derive the DBH, which in turn is multiplied by 12.

- Protection Radius is a radial distance measured from the trunk centre and is used to calculate the BS RPA.
- Growth Vitality - Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
- Structural Condition - Good (no or only minor defects), Fair (remediable defects), Poor - Major defects present or suspected.
- Landscape Contribution - High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
- B.S. Cat. refers to British Standard 5837:2012 Table 1 category and refers to tree/group quality and value; 'A' - High, 'B' - Moderate, 'C' - Low, 'U' - Remove or very poor quality.
- Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservation/ecological, historic and commemorative.
- Useful Life is the tree's estimated remaining effective contribution in years.

Site: 17 Wadham Gardens, NW3

Date: 25th November 2014

Surveyor: H. Appleyard

Ref: ts1/17wadhamgdns

Tree No.	English Name	Height	Crown Spread	Ground Clearance	Age Class	Stem Diameter	Protection Multiplier	Protection Radius	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	Observations
T8	False Acacia	17	5 6 5 9	3/W3	Mature	430	12	5.2	Moderate	Fair	Low	C	1	10-20	Dying back Extensive decay in wound/cavity in main trunk from ground to 3-4m Leaning tree with some evidence of uprooting; dead top, branches with dead bark and cankers
T9	Mimosa	6	1 3 2 3	2/W2	Young	120	12	1.4	Normal	Fair	Low	C	2	10-20	One-sided form/suppressed Garden ornamental

Notes:

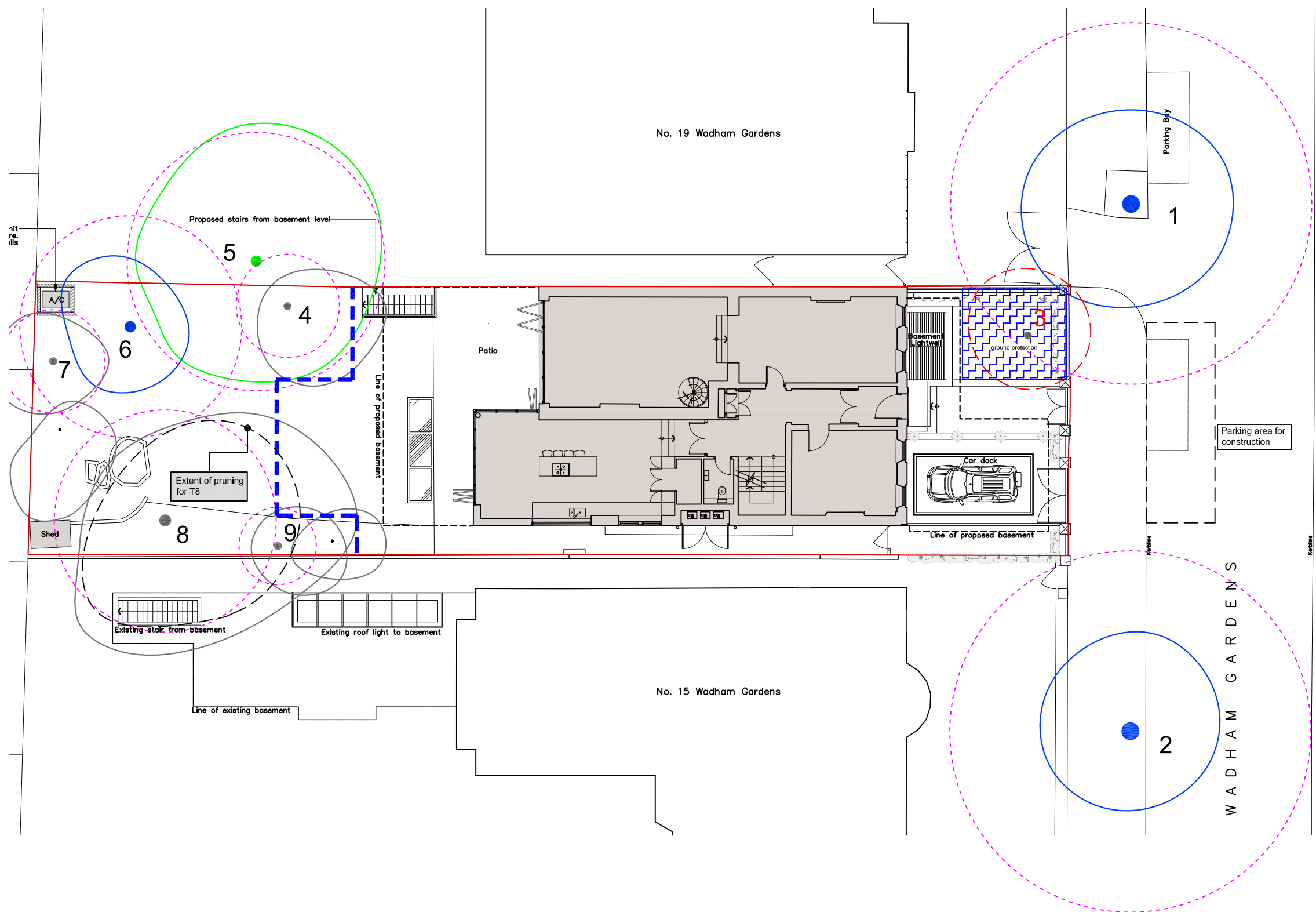
1. Height describes the approximate height of the tree in meters from ground level.
2. The Crown Spread refers to the crown radius in meters from the stem centre and is shown above on each of the four compass points (i.e. N, E, S, W) clockwise.
3. Ground Clearance is the height in meters of crown clearance above adjacent ground level together with the height and direction of the lowest branch
4. Stem Diameter is the diameter of the stem measured in millimetres at 1.5m from ground level. The diameter may be estimated (e), where access is restricted. An average (a) may be taken for tree groups. A full inspection is always recommended.
5. Protection Multiplier is 12 for single-stemmed trees; for multi-stemmed a cross-sectional area is calculated to derive the DBH, which in turn is multiplied by 12.

6. Protection Radius is a radial distance measured from the trunk centre and is used to calculate the BS RPA.
7. Growth Vitality - Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
8. Structural Condition - Good (no or only minor defects), Fair (remediable defects), Poor - Major defects present or suspected.
9. Landscape Contribution - High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
10. B.S. Cat. refers to British Standard 5837:2012 Table 1 category and refers to tree/group quality and value; 'A' - High, 'B' - Moderate, 'C' - Low, 'U' - Remove or very poor quality.
11. Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservation/ecological, historic and commemorative.
12. Useful Life is the tree's estimated remaining effective contribution in years.


Table 1 Cascade chart for tree quality assessment

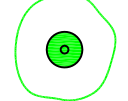
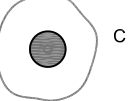
Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
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)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are 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	See Table 2
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 150 mm	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	See Table 2

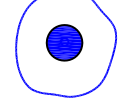
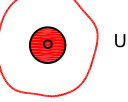
APPENDIX 2

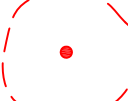



ACS Trees (Consulting) LEGEND

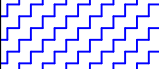
BS Root Protection Area, (RPA) shown uniform (above left) but site features such as roadways, retaining walls and foundations, may modify root patterns and therefore the RPA shape. 

 A grade trees  C grade trees

 B grade trees  U grade trees

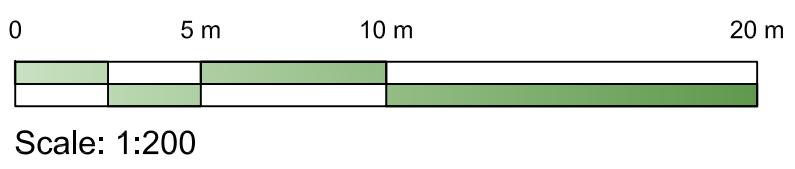
 Tree to be removed

 Recommended position for fixed tree protection fencing

 Recommended area for effective ground protection

Tree Protection Methods to be adopted on site.

1. Undertake pre-commencement site meeting to agree tree protection methods and timings.
2. Carry out any permitted tree works - ask before beginning.
3. Erect and fix in place all tree and ground protection to conform with BS 5837 (see Appendix 3).
4. Undertake piling and excavations in accordance with contractor's specification
5. Clear debris/arising from site.
6. Construction phase.
7. Remove fencing and ground protection.
8. Undertake landscaping.



Client : Whitehallpark		
Project : 17 Wadham Gardens		
Title : Tree Protection Plan		
Scale : 1:200 A3	Dwg No : TPP1_WG	Rev : -
Date : Aug. 2015		
Do not scale from this drawing. Any discrepancies are to be reported to ACS Consulting. This drawing is to be used when printed to scale & in colour.		

ACS Trees (Consulting)
Consultants in Tree & Woodland Management

Pilgrims Court
15-17 West Street
Reigate
Surrey RH2 9BL

T: 0208 687 1214 E: info@acstrees.co.uk W: acstrees.co.uk



APPENDIX 3

Tree Protection Fencing

Specifications (specifically identified by outline box)

2.4m Hoarding

3.0m 100 X 100mm square wooden posts

3 X 38 X 87mm wooden rails affixed to posts

2.4m X 1200 outside grade ply panels (12mm) affixed to rails.

50 X 100mm angled supporting struts affixed internally (quantity as required).

(Supporting posts fixed into position using concrete. All post holes to be hand excavated. Post holes to be no larger than 300 X 300mm.)

Heras Fencing

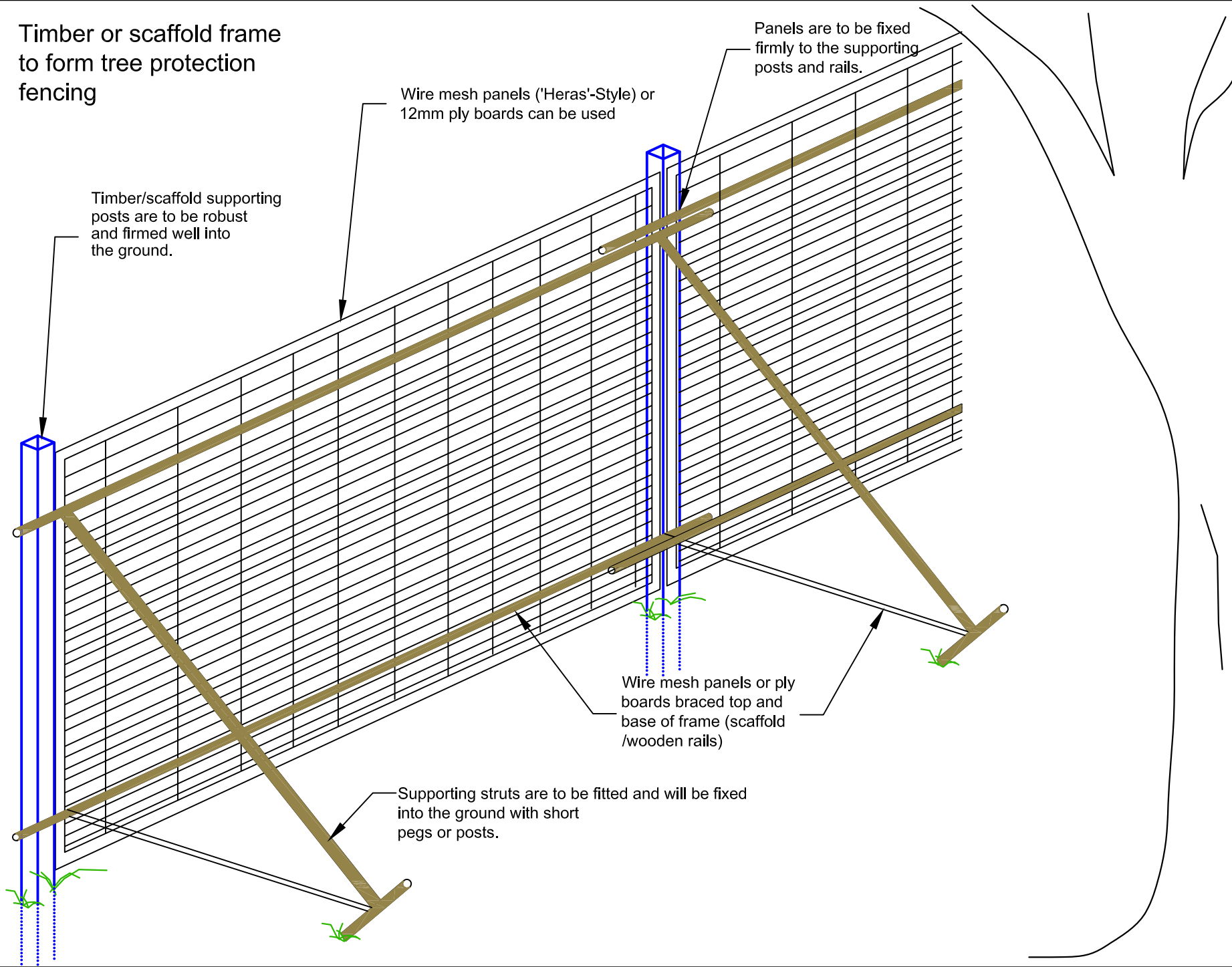
Heras fencing describes the 2.4m galvanised steel mesh panelled fencing normally supplied with pre-cast concrete bases. **Bases are to be replaced with a fixed frame to which panels are clamped/ firmly fixed.** For extra stability, scaffold poles/4x4 wooden posts are to be firmed into the ground as supporting posts and supporting struts are to be attached at a 45 degree angle on the 'tree-side' of the fencing and fixed into the ground. Supporting posts will be braced at the top and base for added support.

Timber or scaffold frame
to form tree protection
fencing

Wire mesh panels ('Heras'-Style) or
12mm ply boards can be used

Panels are to be fixed
firmly to the supporting
posts and rails.

Timber/scaffold supporting
posts are to be robust
and firmed well into
the ground.



Wire mesh panels or ply
boards braced top and
base of frame (scaffold
/wooden rails)

Supporting struts are to be fitted and will be fixed
into the ground with short
pegs or posts.

ACS Consulting (London)

Tree Management
Consultants

Justin Plaza 3
341 London Road
Mitcham
CR4 4BE

T: 020 8687 1214
F: 020 8687 2456
E: info@treebiz.co.uk

Title:
Example of Tree
Protection Fencing

Note:
Steel scaffold or timber can
be used to support boards
or wire mesh panels

Date: Jan. 07

Ref:

Note: Sketch Plan Only - Not to
Scale

Tree Protection Fencing

Scaffold Framework supporting 'Heras' type panels with signs attached.



Wooden Framework with 'Heras' type panels attached.



Examples of Ground plates, useful for dissipating load and spreading forces both from above and below.



APPENDIX 4

Arboricultural Site Supervision

Site: 1 Hyde Park, London
Inspected By: H .Appleyard
Client: RPC
Site Agent: Shaun Clark

Date of Inspection: 15/02/2007
Time of Inspection: 3:30pm

Tree Protective Fencing

Tree protection in correct location

Comments/Action

No action at this time

Agreed Construction Exclusion Zone

No debris within construction exclusion zone

Comments/Action

No action at this time

Amendments to Documentation Required

No amendments required

Comments/Action

Building works outside scope of Method Statement

Remedial Works

General Comments

Tree protection and on-site supervision effective and understood.



Effective fencing in position



Fencing with signs

*Tree Damage is defined as: any unauthorised/accidental exposure of tree roots; any accidental or unauthorised branch removal; any exposure of fresh wood (pruning or accident); any removal of bark.

Procedure for reporting and action following inadvertent damage to a protected or retained tree(s) on a construction site.

