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Arboricultural Method Statement

(AMS)

For

71a Dartmouth Park Road, London

NW5

Prepared for: Franck Chesse

Prepared by: **Trevor Heaps** BSc, MICFor, M.Arbor.A,

Date: 21st October 2015

Ref: TH1119

Institute of Chartered Foresters Registered Consultant

member of local surveyors direct

1.0 Introduction

I am Trevor Heaps, Director of Trevor Heaps Arboricultural Consultancy Ltd. I have qualifications and experience in the field of Arboriculture, which are provided in Appendix 1.

2.0 Brief

I am instructed by Mr Franck Chesse to prepare an Arboricultural Method Statement (AMS) that will make recommendations for the protection of trees during development at 71a Dartmouth Park Road, London.

The AMS has been written taking into account the requirements of British Standard 5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*' (hereafter referred to as BS5837).

This AMS is to be read in conjunction with the supporting Tree Protection Plan (TPP) Ref. TH/A3/1119/TPP dated 21st October 2015 (which must be read / printed off in colour).

3.0 Limitations

The trees were surveyed by me, Trevor Heaps, during February 2015. I surveyed the trees at a preliminary level only. The survey must not be substituted for a tree risk assessment report. Detailed inspections, such as decay mapping, aerial inspections and root or soil analysis etc were not undertaken.

This AMS and TPP comprise Stage 4 of a 5 stage arboricultural process relating to planning.

Stage 5 is the implementation, supervision and on-going monitoring of tree protection during development.

4.0 Drawings provided

The following documents were used in the preparation of this report:

- Arboricultural Impact Assessment (Ref. TH1011 Rev B) dated 24th March 2015

5.0 The trees

There are two Apple trees and one Pear tree situated in the rear garden of 71a Dartmouth Park Road. The trees make a positive contribution to the amenity and arboreal character of the area. All are protected by virtue of their location within a Conservation Area.

All of the trees have the potential to be affected by the proposals; however as long as the recommendations made within this report are followed, then disruption will be kept to a minimum.

6.0 Timing of operations

This AMS lays down the methodology for any demolition and/or construction works that may have an effect upon trees on and adjacent to this site. It is essential within the scope of any contracts (related to this development) that this AMS is observed and adhered to. It is recommended that this document forms part of the work schedule and that specifications are issued to the building contractor(s) and these must be used to form part of their contract.

At this site, operations are to occur in the following sequence:

1. Carry out any recommended / facilitative tree work operations specified in the tree data schedule (highlighted yellow in Appendix 2).

2. Hold pre-commencement site meeting with project arboriculturalist, building contractors (and LPA arboricultural officer if required) prior to the commencement of **any** development work commencing on site. The purpose of this meeting is to ensure that the contractors are fully briefed and understand the requirements of (and reasons for) this AMS.

3. Install ground protection over the areas shown by the diagonal blue lines on the TPP. See section 7.0 further details.

4. Install pile and beam (or similar) foundations in the area shown by orange cross hatching on the TPP. See Section 7.0 for further details.

5. Commence construction.

6. Install services and drainage.

7. Remove ground protection after **all** construction work has been completed.

8. Undertake soft landscaping work.

7.0 Specifications for protective measures

Ground Protection

Temporary ground protection shall be placed in the areas shown by blue diagonal lines on the TPP, and shall comprise a geotextile membrane (eg *Terram - see link below*), topped with a **minimum** depth of 100mm compressible fill (such as wood chip); these are the base layers.

http://www.terram.com/products/geotextiles/weedguard.html

For the main, top layer: In the event that only pedestrian access is required over the protected areas, then exterior grade (marine) ply boards shall be used (usually 2.4 x 1.2m in size).

If vehicular access is required, proprietary ground protection such as Greentek 'ground guards' (see link below) shall be used. These ground protection mats range in sizes from 2.4 x 1.2m down to 1.8 x 0.6m. An example of this specification is shown in Figure 1.

http://www.ground-guards.co.uk/products/multitrack/

The temporary ground protection shall remain in a 'fit for purpose' condition throughout the development and to this end the compressible fill may need topping up on occasion.

Figure 1: An example of ground protection

Pile and beam footings

The proposed building conflicts with part of the RPA of all three trees (T1, T2 & T3). To mitigate any root damage, the foundations will be of pile and beam design (or similar).

To determine the optimal location for the piles (i.e. to avoid damage to significant roots over 25mm in diameter) site investigations will be carried out by hand.

The pile holes will be hand-dug to the required depth and the piles will be as small as is practically possible.

Services and drainage

If it becomes apparent that trenching is required within the RPA of retained trees to provide routes for services, this work shall be undertaken in accordance with guidelines set out in National Joint Utilities Group (NJUG) Volume 4 (2007) under supervision by the project arboriculturist.

This document can be downloaded at no charge using the link below:

http://www.njug.org.uk/document-download/?URL=http://www.njug.org.uk/wp-content/uploads/V4-Trees-Issue-2-16-11-2007.pdf

General precautions

Storage of materials: No materials or spoil are to be stored within the area protected by the ground protection. It is strictly prohibited to use 'protected' ground for any form of material or spoil storage.

Levels: There is to be no alteration of ground levels within the area protected by protective fencing and/or ground protection, unless previously specified and agreed upon.

Fires: No fires are to be lit within 20 metres of the stems of trees to be retained.

Above ground damage to trees: Care must be taken in planning the location and operation of machinery to avoid above ground damage to trees. BS5837 (2012) Section 6.2.4.1 states '*Planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights(including drilling rigs) in order that they can operate without coming into contact with retained trees. Such contact can result in serious damage to trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance of trees is maintained at all times. Access facilitation pruning should be undertaken where necessary to maintain this clearance.*

Remedial works and soil improvement: Exposed soils are easily compacted resulting in loss of water and gaseous exchange; this can lead to root death (and subsequently tree death). To relieve ground compaction, which may have resulted from the use of vehicles or by the storage of materials, the soils should be broken up to allow air to penetrate and for the soil structure to be restored. There are various methods to achieve this, such as: auguring the soil by hand / fork or pneumatic excavation (e.g. with an air spade); both should be combined with soil structure improvements.

The soil structure can be improved by incorporating a compost or mulch within the topsoil, of 75-100mm in depth. This can be spread over the surface and gently forked into the soil. If bark chip is used as mulch NPK fertilizer should be added to counteract the nitrogen depletion of the soil. There are options for additives of microrryhizal fungal which may also improve root function.

8.0 Arboricultural Supervision

If required by the LPA, a qualified arboriculturalist will provide on-going supervision during work at this site. The critical times when supervision is required are:

- Prior to any development work starting, attend a pre-commencement meeting with the site managers and contractors to discuss exactly what is required in order to ensure that the retained trees receive full protection in accordance with this AMS. During the initial meeting a site supervisor will be appointed to take responsibility for tree protection and to be given the duty of reporting any damage to trees or deviation from the AMS to the project arboriculturalist.

- After the installation of temporary ground protection.

- During the installation of the pile and beam foundations.

- During the construction process as required and in any event no less frequently than once every two months.

The project arboriculturist shall prepare a written site monitoring report following each site visit. This report will state the condition of tree protection measures and any actions required (where necessary) in the event of any digressions.

The site monitoring reports shall be made available to the LPA's arboricultural department on request.

9.0 Signature

This report represents a true and factual account of the potential arboricultural impacts, and recommended protective measures, at:

71a Dartmouth Park Road, London, NW5

Signed

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Trevor Heaps
Chartered Arboriculturist
BSc (Hons), MArborA, MICFor

Dated

21st October 2015

Appendix 1 - Professional Résumé

I am Trevor Heaps, director of Trevor Heaps Arboricultural Consultancy Ltd.

I have been working within the Arboricultural industry since 1995. I spent the first seven years working as a climber and groundsman in the U.K. and Australia. Following this, I spent another seven years working for several local authorities as a tree inspector and tree officer dealing with Council-owned trees situated on highways, parks, housing and education land.

Since 2009, I have worked in a Planning Department for a London Borough assessing tree reports that support planning applications and also applications to work on protected trees.

I am a Chartered Arboriculturist, a Professional Member of the Arboricultural Association (AA) and hold a First Class Honours Degree in Arboriculture.

Professional Training

- Trees and the Law (Dr Charles Mynors) - June 2015
- Mortgage (Home Buyers) Report Writing (LANTRA / CAS) - February 2015
- Tree Preservation Orders - effective application (LANTRA / CAS) - November 2014
- Professional Tree Inspection 3 day course (LANTRA / AA) - July 2014
- Arboricultural Consultancy Course (AA) - May 2014
- Further down the subsidence trail 1 day course (AA) - April 2013
- Getting to grips with subsidence 1 day course (AA) - November 2012

Appendix 2 - Tree Data Schedule

Ref	Name	Age	DBH (mm)	Hgt (m)	Can hgt (m)	Can N (m)	Can E (m)	Can S (m)	Can W (m)	Gen cond	Life Exp	Ret Cat	Comments	Rec's
T3	Pyrus (Pear)	M	620	8	3	3.2	3.2	3.2	3.2	Good	10+	B3	Good tree with good form	Tip reduce any low, hanging branches to provide adequate clearance
T1	Malus (Apple)	M	270	6	4	2.5	2	2	4	Fair	10+	C3	Tree leans to the west, but this is not significant	Tip reduce any low, hanging branches to provide adequate clearance
T2	Malus (Apple)	M	370	8	3	3.8	3.5	2.5	2	Fair	10+	C3	Tree leans to north-west, but this is not significant. Some branches are growing into neighbour's garden	Tip reduce any low, hanging branches to provide adequate clearance

Appendix 3 - Tree Survey Schedule Explanatory Notes

This section explains the terms used in the **Tree Data Schedule**.

Ref: Each item of vegetation has its own unique number prefixed by a letter such that:

T1=Tree **S2**=Shrub or stump **G3**=Group **H4**=Hedge **W5**=Woodland

Species: Common and Latin names are given.

Age:

- **Y - Young -** Usually less than 10 years old

- **SM - Semi-Mature** - Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy)

- **EM - Early-Mature** - Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy)

- **M - Mature** - Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy)

- **V - Veteran** - A level of maturity whereby significant management may be required in order to keep the tree in a safe condition

- **OM - Over Mature** - As for veteran except management is not considered worthwhile

DBH (mm): Stem diameter, measured in mm, taken at 1.5m above ground level where possible. On trees with two to five stems, the combined stem diameter is calculated as follows:

√ (stem diameter 1) ^{2} + (stem diameter 2) ^{2}... + (stem diameter 5) ^{2}

For trees with more than five stems, the combined stem diameter is calculated as follows:

√ (mean stem diameter) ^{2} x number of stems

Hgt (m): Height: Measured from ground level to the top of the crown in metres.

Can Hgt (m): Crown Height: Measured from ground level to the height at which the main crown begins in metres. Where the crown is unbalanced it is measured on the side deemed to be most relevant. This is usually the side facing the area of anticipated development.

Can: - Canopy extents N, E, S, W:
Radial crown spread approximately measured to the four cardinal points (for individual trees only)

Gen cond: - General condition:

- **Good** - Healthy and with no symptoms of significant disease
- **Fair** - Disease present or vigour is impaired
- **Poor** - Significant disease present or vigour is extremely low
- **Dead** - Major defects which will usually require significant remedial works or tree removal

Life Exp: Life Expectancy: The estimated number of years before the tree may require removal. Classified as (<10), (10 – 20), (20 – 40), or (40+).

Ret. Cat.:- Retention Category: BS5837:2012 Category where:

- **U = Trees unsuitable for retention**. Trees in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. These trees are shown on the tree plans with red centres.
- **A = Trees of high quality**. Trees of high quality with an estimated remaining life expectancy of at least 40 years. These trees are shown on the tree plans with green centres.
- **B = Trees of moderate quality**. Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. These trees are shown on the tree plans with blue centres.
- **C = Trees of low quality.** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. These trees are shown on the tree plans with grey centres.

Trees of notable quality are graded as Category A or Category B. These trees are sometimes divided further into sub-categories:

- Sub-category 1 is allocated where it has been assessed that the tree has mainly arboricultural qualities.

- Sub-category 2 is allocated where it is assessed that the tree has mainly landscape qualities.

- Subcategory 3 is allocated where it is assessed that the tree has mainly cultural qualities, including conservation.

Trees may be allocated more than one sub-category. All sub-categories carry equal weight, with for example an A3 tree being of the same importance and priority as an A1 tree.

Comments: Tree form and pruning history are also recorded along with an account of any significant defects. Defects and descriptive terms are dealt with in more detail at the end of this section.

Rec's - Recommendations: Usually based on any defects observed and intended to ensure that the tree is in an acceptable condition.