

# ARBORICULTURAL METHOD STATEMENT

The Waterhouse

Millfield Lane

London

N6 6HT

### REPORT PREPARED FOR:

Mr and Mrs Lewis, c/o: UK & European, Woodstock Studios, 13 Woodstock Street, London W1C 2AG

# REPORT PREPARED BY:

Adam Hollis

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Ref: UKE/WHS/AMS/01c
Date: 15th December 2017

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### 1.0 Introduction

## 1.1 Purpose & Use of the Method Statement

- 1.1.1 This method statement has been prepared for Mr & Mrs Leonard Lewis, C/o UK and European, in support of a planning application at The Waterhouse, Millfield Lane, London N6 6HT. The document will address the following issue:
  - Protection of trees on site during construction
  - Protection of trees along Millfield Lane during construction
- 1.1.2 This document lays down the methodology for any proposed works that may have an effect upon the trees on and adjacent to the site. It is essential within the scope of any contracts related to the development proposals that this method statement is observed and adhered to. It is recommended that this document form part of the work schedule and specification issued to the building contractors and can be used to form part of the contract.
- 1.1.3 Copies of this document will be available for inspection on site. The developer will inform the local planning authority within twenty-four hours if the arboricultural consultant is replaced.

### 1.2 Terms of Reference

- 1.2.1 We (LT) are instructed by the client, Mr & Mrs Leonard Lewis, C/o UK and European to prepare a method statement for proposed development based on the above planning application with reference to BS 5837:2012 Trees in Relation to Design, Demolition and Construction.
- 1.2.2 For this purpose, the client has supplied us with a site survey plan (633(SK)001 (A) Existing Site Plan) and the proposed drawings (17007\_TWH\_-Sheet 0-001 Site Plan-Floor Plan 001 Proposed). We have also been provided with drawing 26028-SKD600 which details the proposed new below ground drainage around The Waterhouse and the new outbuilding. We are also in receipt of the finalised Construction Management Plan ref: CCE/V321/CMP-02. We are also reliant upon our own impact assessment report UKE/WHS/AIA/01a and plan overlays of tree constraints contained therein.

# 1.3 Development Proposals & Potential Impacts

1.3.1 The principal proposals are for: *Erection of a single storey side extension, 2 storey front infill extension, and part single part two storey rear extension, including facade and roof alterations to main house and front wing; erection of a side extension to outbuilding in rear garden to be used as ancillary habitable accommodation; and landscaping works including external ramps.* 

## 1.4 Sequence of Works

- 1.4.1 The sequence of works will be as follows:
  - initial tree works felling, stump grinding and pruning for working and access clearance
  - installation of Tree Protection Barrier (TPB) & ground protection
  - demolition of outbuilding
  - installation of supplementary ground protection
  - installation of underground services
  - main construction
  - removal of TPB
  - hard landscaping
  - soft landscaping

These works and their arboricultural implications are outlined in sequence below

# 1.5 Site Supervision

- 1.5.1 On this site, a site manager will be nominated to be responsible for all arboricultural matters on site. A pre-commencement site briefing/meeting between the site manager and arboricultural consultant will be held (see Table 1 below). The site manager's details will be issued to LB Camden in the minutes / site monitoring report for this meeting. During this meeting all the tree protection methods below will be studied and familiarization with requirements of this AMS. The site manager will also:
  - be present on site for the majority of the time;
  - have the authority to stop any work that is causing, or has the potential to cause harm to any tree;
  - be responsible for ensuring that all site operatives are aware of their responsibilities toward trees on site and the consequences of the failure to observe these responsibilities;
  - make immediate contact with the Arboricultural consultant in the event of any tree related problems occurring, whether actual or potential, in accordance with a tree protection protocol (see section 1.6 below).
- 1.5.2 At this stage, the nominated Key Personnel are as follows:

Adam Hollis Arboricultural Consultant Landmark Trees info@landmarktrees.co.uk

### 1.6 Site Monitoring

- 1.6.1 Landmark Trees are to be retained as Arboricultural Consultants responsible for site monitoring for the duration of the development. As noted above Adam Hollis MSc (Arb) is the key contact, with monitoring occasionally undertaken by James Bell Tech Cert. (subject to any new staff intake). Site supervision will be undertaken by a qualified and experienced arboriculturalist at pre-determined and agreed time intervals as indicated in Table 1 below. In addition to specific task supervision, general monitoring of protection measures will be undertaken at least once per month, coordinated where practical with visits detailed in Table 1.
- 1.6.2 Routine visits will generally be unannounced. However, the arboriculturalist will also visit subject to advance notification (2 weeks) and agreement to supervise any agreed works within the RPA, in accordance with table 1 below.
- A tree protection protocol for contingencies will be integrated into the site induction process at a pre-commencement meeting involving the developer, the arboricultural consultant, the site manager and the Council tree officer as appropriate. The protocol will be that, in the event of any unplanned incursion / accident / spillage within the RPA, the site agent should notify (by telephone) the retained arboricultural consultant immediately. The consultant will provide advice and attend site as soon as possible. This may require the stoppage of all or part of the works in the vicinity of the tree. The consultant will notify the LPA Tree Officer of the nature and extent of damage, the mitigation strategy and likely prognosis. The contact details of the LPA Tree Officer are:

Nick Bell Arboricultural Officer LB Camden nick.bell@camden.gov.uk Tel: 0207 974 4444

1.6.4 The site monitoring sheet in Appendix 3 will be used to provide photographic evidence, indicate the remedial action required and timescales for remediation completion. The consultant and officer will further liaise as necessary (perhaps meeting on site) until the officer is satisfied that protection measures are again satisfactory. The action in response to incidents will be commensurate with and appropriate to the nature of any such incident. Any breach of the stipulated timescale for remediation will trigger a further monitoring report.

- 1.6.5 Supervision will not require the arboriculturalist to be present throughout all operations to ensure tasks are carried out as per the approved methodology, but certainly, during the key elements of proposed (and any other unplanned) incursions into the protection areas (subject to LPA agreement and for whatever reasons) to ensure the arboricultural objectives were met. However, where tasks are ongoing, provided the arboriculturalist is satisfied, and after an appropriate briefing, the supervision may be reduced to telephone and email contact between the site manager and Arboricultural consultant.
- 1.6.6 The Local Authority will be accorded free access to the site subject to H&S requirements; as noted at 1.6.3, any problems will be reported directly to Arboricultural consultant, who will then visit the site and make recommendations to the developer on how best to rectify the situation and ensure implementation. As noted in Table 1 below, a final sign-off visit will be carried out at the end of the development and a formal letter sent to both the client and LB Camden indicating an end to the monitoring period. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection.
- 1.6.7 Landmark Trees will be instructed to provide the above monitoring. In the absence of routine payment (as per our business terms), routine monitoring will cease (temporarily or permanently) and LB Camden will be informed of the cessation of monitoring. The client will also reserve the right to dismiss Landmark Trees and replace with another arborist, but must inform LB Camden.

Table 1: Site Monitoring Visits

Supervision Visit No:	Details	Lead-in time required by LT	Action
Visit 1: Pre-Development Site Inspection (S.2.3 of AMS)	<ul> <li>To include Site Agent briefing (S.1.5) prior to construction phase.</li> <li>To confirm position of protective fencing and that it has been erected in accordance with AMS (S.2.2 and Tree Protection Plan in Appendix 4);</li> <li>To check any pre-demolition/construction ground protection is in place.</li> <li>To check any tree works have been undertaken in accordance with this AMS (S.2.1. and Appendix 1).</li> <li>Determine if further tree work is required and seek required permission if necessary.</li> <li>To check site facilities/access are in accordance with the AMS (S.3.3).</li> </ul>	Minimum 2 weeks	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 2: Demolition of outbuilding	<ul> <li>Attend any demolition activities where supervision is prescribed by the AMS to ensure work is undertaken in accordance with its specification.</li> <li>Date to be confirmed following formal project planning.</li> <li>2 weeks prior notice required.</li> </ul>	Minimum 2 weeks	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 3: Installation of underground services (subject to consent for works)	<ul> <li>Attend any excavation within RPA's where arboricultural supervision is prescribed by the AMS to ensure work is undertaken in accordance with its specification.</li> <li>Date to be confirmed following formal project planning.</li> <li>2 weeks prior notice required.</li> </ul>	Minimum 2 weeks	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Visit 3: Installation of piling within RPA (S3.4)	<ul> <li>Attend any excavation within RPA's where arboricultural supervision is prescribed by the AMS to ensure work is undertaken in accordance with its specification.</li> <li>Date to be confirmed following formal project planning.</li> <li>2 weeks prior notice required.</li> </ul>	Minimum 2 weeks	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Ongoing Monitoring Visits	<ul> <li>Periodically during 12 months (or longer) of entire project and prior to construction phase.</li> <li>Visits will be based on intensity of site operations, but at a minimum of monthly visits.</li> <li>Attend site at least once per month to confirm protective measures are still in place / can be removed at appointed times. Ensure attendance is timed for any other key elements of proposed (and any other unplanned) incursions into the protection areas.</li> <li>Pre-start landscape meeting with main contractor to confirm ongoing tree protection measures.</li> </ul>	TBC as project develops	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit (Site Monitoring Sheet in Appendix 3).
Final Site Visit - Completion of construction phase supervision visit (S.5)	After it has been confirmed that the construction phase is complete, allow removal of temporary protective fencing and ground protection. Specify any remedial work if necessary.	Minimum 2 weeks	Issue a brief report with findings to Architect and Main Contractor within 5 days of site supervision visit. (Site Monitoring Sheet in Appendix 3).  Provide signed arboricultural checklist (see Appendix 3)

# 2.0 Pre- Development Site Preparation

### 2.1 Arboricultural Works

- 2.1.1 All works must be carried out by a competent arborist in accordance with BS 3998: 2010 and any other prevailing good professional practice including BS 8545:2014 Trees: from nursery to independence in the landscape. Recommendations.
- 2.1.2 Specific works recommended to facilitate development are the felling of trees T1, G10a, T12, T20, T31 and T35. Pruning works comprise the crown lifting of T15. These specific works to facilitate development and any other husbandry works for trees on-site are listed in Appendix 1.

### 2.2 Installation of Tree Protection Barrier

- 2.2.1 The Root Protection Area (RPA) indicates the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. The default position is for the RPA's to be fully fenced off to form the boundary of the Construction Exclusion Zone (CEZ), an area based on the RPA, from which access is prohibited for the duration of the project, including the storage of any works materials and equipment.
- 2.2.2 A Tree Protection Barrier [TPB] comprising steel mesh panels of 2.4m in height ('Heras') should be erected to protect retained trees. These panels will be mounted on a scaffolding frame as shown in Figure 1 below (this is also Figure 2 of BS5837: Trees in Relation to Design, Demolition and Construction in paragraph 6.2.2.2). G21 young birch along the drive will be individually hoarded to 2.4m in height.
- 2.2.3 The TPB's are to be erected before any work (other than tree surgery) commences on site, are to remain 'in situ' undamaged for the duration of all work or each phase, and only to be removed once all work is completed. If any work is deemed necessary prior to the erection of fencing a Landmark Trees representative should be informed to enable their presence to oversee the work being carried out.
- 2.2.4 The location of the TPB's are shown in the Tree Protection Plans at Appendix 5.
- 2.2.5 Trees along Millfield Lane will be protected from contact with construction traffic by the existing boundary treatments. Where any small trees / shrubs are growing outside those boundary treatments, they are to be protected by self-supporting boxed hoarding 2.4m in height.

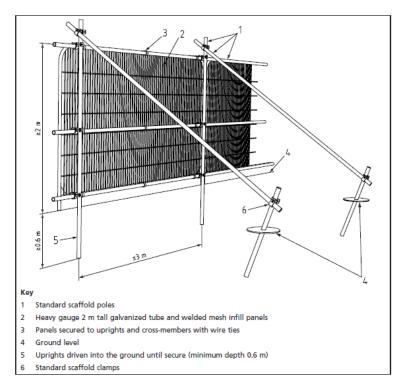


Fig. 1 Tree Protection Barrier Specification (Source: Figure 2 from BS5837 - Default specification for protective barrier)

# 2.3 Ground Protection

- 2.3.1 Extant areas of RPA that cannot be fenced off and therefore lie outside the CEZ must be protected with fit-for-purpose ground protection. The location and type of ground protection is shown in the Tree Protection Plans at Appendix 5. As per paragraph 2.2.3, this ground protection is to be installed before any work (other than tree surgery) commences on site, is to remain 'in situ' undamaged for the duration of all work until the landscape phase and only to be removed once all construction work is completed.
- 2.3.2 It is proposed to provide protection from construction traffic to the trees along Millfield Lane by installing a 3-D cellular confinement system on top of the existing surface. This will be installed prior to the commencement of construction works and remain in situ following their completion. The protection will extend from the start of the unmetalled section of Millfield Lane to the entrance to The Waterhouse as necessary. Details on the suitability of this product are provided at page 15 of this document.
- 2.3.3 The ground beneath the existing outbuilding shall be protected following its demolition by the retention of the hard standing beneath it supplemented by 100mm of mulch overtopped by marine plyboards or similar.

## 3.0 Development Phase

- 3.1.1 The following general precautions will apply:
  - No fires shall be made on any part of the site, or within 20m of any tree to be retained.
  - No spilling or pouring of fuels, oils, solvents, tar shall be made on any part of the site.
  - No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained.
  - No spillage or discharge of wet mortar or concrete shall be made on any part of the site.
  - No storage of materials shall be made within the protective fences.
  - No breaching or moving of the protective hoarding without the approval of an arboriculturist.
- 3.1.2 The procedures for dealing with variations and incidents are detailed in S1.6.

### 3.2 Working within Root Protection Areas (RPA)

- 3.2.1 Although the default position is to exclude all construction activity from the RPA, this degree of protection is not entirely possible on the site: demolition and rebuilding of outbuilding, installation of services to outbuilding, construction of extension, installation of retaining walls and construction of new landscaping.
- 3.2.2 All involved parties will need to be made aware of the deficiencies. In these instances, careful and supervised working, as described in sections, S. 3.4 (services), S. 3.6 (demolition), S. 3.7 (construction) and S. 3.8 (landscaping) will be required.

### 3.3 Site Access, Accommodation & Storage

- 3.3.1 Site access will be as per the layout within our Tree Protection Plan (Appendix 5). Site accommodation and material storage will utilise the driveway, away from tree RPAs.
- 3.3.2 Construction Management Plan reference: CCE/V321/CMP-02 states that delivery vehicles will be limited in size to no more that 3.5T and will be excluded from RPA's by fencing and ground protection. In order to maintain pedestrian safety and prevent damage to overhanging foliage, delivery vehicles will be limited to 3m.p.h. along the unmetalled part of Millfield Lane. Materials can be unloaded onto protected ground within RPA's and stored throughout the interior of the site(s) away from protected trees.
- 3.3.3 All plant will be delivered to site using 3.5T vehicles with concrete mixing taking place on site with the raw materials again being delivered only using 3.5T vehicles.

## 3.4 Routing & Installation of Services

- 3.4.1 Drawing 26028-SKD600 details the proposed new drainage routes around the existing property and to the rebuilt outbuilding. It shows new foul water drain runs within the RPA of T11 and T17 and new surface water drains within the RPA of T5 and T15. In order to prevent potentially significant damage to the roots of these trees, it will be necessary to adopt the provisions detailed in NJUG Vol.4 and BS5837 to install this drainage. This will comprise the Airspade excavation of all drainage runs within the RPAs of retained trees. Roots encountered within the drainage runs will be retained and immediately covered with damp hessian which will remain in place until the trench is backfilled.
- 3.4.2 We have not at this time been supplied by the applicant with details of other services to the outbuilding but would recommend that consideration be given to running them in the surface water drain trench described above. These further matters will need to be resolved separately by variation of condition, they cannot be resolved herein as a generic item.

# 3.5 Changes in Grade

3.5.1 No changes in level are proposed beyond any direct effect of employing a no-dig construction technique for the proposed new landscaping.

### 3.6 Demolition Measures.

- 3.6.1 Demolition of structures within what would otherwise be an RPA will proceed with due caution to avoid unnecessary damage to trees. Such measures apply in particular to the demolition of the existing outbuilding and hard landscape / surfacing removal for the alterations around The Waterhouse itself.
- 3.6.2 All plant and vehicles engaged in demolition works (removals only) will either operate outside the RPA, or work from within the existing built structure and protected ground, near trees. Where trees stand adjacent to structures scheduled for demolition, it will be necessary to undertake demolition inwards within the footprint of the existing building (often referred to as "top down, pull back").
- 3.6.3 Should levels of dust build-up on trees occur, it may be necessary to seek the advice of Landmark Trees on remedial measures, e.g. hose down the tree(s) immediately following any significant accumulation of dust.
- 3.6.4 The existing hard standing to be replaced around The Waterhouse within the RPA of T's 5, 11, 13 and 18 will be first broken up with manual power tools and then carefully removed manually. Existing paying slabs should be lifted by hand.

### 3.7 Construction Measures

Detailed method statements and risk assessments will be obtained from all specialist subcontractors involved in the new build and these will be scrutinised by the site agent to ensure the AMS requirements have been considered therein.

- 3.7.1 The extension and outbuilding encroachments will require the use of specialised foundation techniques, i.e. a mini-piling and raft design. Flexibility of final pile position has been built into the foundation design.
- 3.7.2 The outline of the proposed extension and outbuilding and their piling holes will be established by the site engineer with Netlon fencing and trial holes. The arboriculturalist will be consulted on the possible pinch points where the retained tree canopies and RPA's are in close proximity to the outbuilding (i.e. T15 & 17). RPA piling encroachments will be pre-emptively excavated by hand or with an Airspade under arboricultural supervision. Roots smaller then 25mm diameter may be cut cleanly with a sharp pruning saw or secateurs back to a junction. Roots larger then 25mm diameter may only be cut in consultation with the retained arboriculturalist.
- 3.7.3 The path of the foundations of the retaining structures within the RPA of T18 and T23 will be manually excavated to 750mm depth (or the required footing depth, whichever is less) under arboricultural supervision; any roots encountered within the trenches / pits will be cleanly pruned back to an appropriate junction with a sharp pruning saw or secateurs back to a junction. Roots larger than 25mm diameter may only be cut in consultation with an arboriculturalist.
- 3.8 Removal of Ground Protection & Post Construction Landscaping & Treatment
  - 3.8.1 The tree protection may be removed upon completion of the construction phase and any site machinery has been removed from the RPA.
  - 3.8.2 The replacement paving/hard landscaping will require a no-dig construction technique, either using a cellular confinement system with no fines aggregate or building upon existing sub-base. Where the existing sub-base is to have a new surface laid upon it, it is imperative no excavation or compaction beyond this sub-base occurs.
  - 3.8.3 Method Statement Specifications for no dig paving construction where these surfaces are to be laid over what is currently soft ground and installation of ground protection along Millfield Lane:
    - i. The Construction will be undertaken when the ground is sufficiently dry to prevent compaction occurring. Any surface vegetation should be removed by hand or with suitable herbicide.
    - ii. Fill any hollows in the exposed ground with sharp sand or 4/20mm or 40/20mm clean angular stone.

- iii. Place Root-tex 300 Geotextile over the area to be protected ensuring laps are a minimum of 300mm. The geotextile should not be trafficked across at any time.
- iv. The (for example) Protectaweb system is available in 5 depths for varying traffic loadings but each site should have a specific design detailed to ensure the correct depth of product is used. However, unless the existing ground conditions are very soft and have a low CBR then the following can apply:
  - 75mm deep Protectaweb for Pedestrians, Cycleways and vehicles up to 1.5 tons:
  - 100mm deep Protectaweb for Cars, 4 Wheel Drives, Vans etc up to 6 tons;
  - 150mm deep Protectaweb for Fire Tenders, Removal Vehicles and Dust Carts up to 20 tons;
- v. Roll out Root-Tex 30 Geotextile to cover the area to be protected. Insert 4 equally spaced steel pins along the width of the panel. Expand the panel over the Root-Tex 30 and the pins, extend to the required length, then pin across the opposite panel end. Pin along the length of the panel each side. If full panels are not being used then ensure the cells have been expanded to their full dimension. The ProtectaWeb panels can be cut to shape if required with a heavy duty Stanley Knife. Staple or cable tie any adjacent panels together.
- vi. Infill the Protectaweb cells with clean angular stone (Type 4/20mm or Type 20/40mm), working towards the tree and using the infilled panels as a platform. Use a minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface. If the area is to be trafficked immediately, slightly increase the amount of surcharge overfill to a maximum of 50mm over the ProtectaWeb with 4/20mm or 40/20mm clean angular stone. No compaction is required of the infill. Do not use a whacker plate or other means of compaction.
- vii. Where edging is required for footpaths and light structures, a peg and treated timber board edging is acceptable, other options include wooden sleepers, kerb edging constructed on-top of the Protectaweb system, plastic and metal edging etc. Any excavation necessary to install the proposed aluminium edging will be carried out manually.
- viii. The Protectaweb system is to be surfaced with the materials listed below. Porous systems will be of greater benefit for the trees, however it is understood that this is not always possible.

### Block / Flag Paving:

- Place Root-tex 10 separation fabric over the filled Protectaweb.
- Lay sand / gravel bedding material as per manufacturer's recommendations.
- Place porous / standard blocks as per manufacturer's instructions.

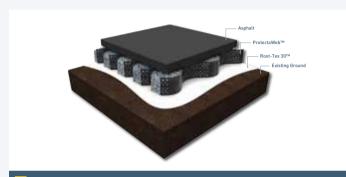
3.8.4 For technical data on the Geotextile membrane and the Protectaweb cellular confinement system always refer to the manufactures guidelines for design and implementation. Further technical advice can be gained from the manufacturer:

Wrekin Products Ltd Europa Way Britannia Enterprise Park Lichfield WS14 9TZ www.wrekinproducts.com 01543 440440

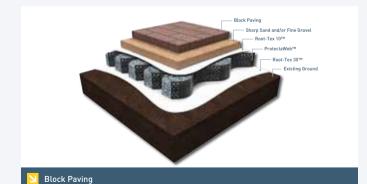
3.8.5 All landscaping and associated ground works within RPA will be carried out manually and carefully with due regard for soil and root protection, avoiding changes of ground levels or deep digging. Mechanised cultivation must not be used within any RPA's.

# ProtectaWeb™ examples of construction detail ∠

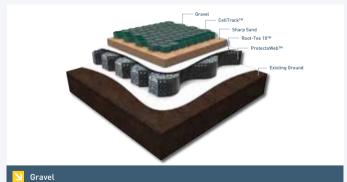












# 4.0 Summary of Proposed Methods

# 4.1 Table of Impacts and Mitigation

4.1.1 The table below summarises the main areas where trees could become damaged by the proposed development and the methods that need to be adopted in order to prevent such damage:

Table 2: Summary of Proposed Methods

<u>Impact</u>	<u>Mitigation</u>	<u>Reference</u>	Trees Affected	
General site access, material storage etc.	Ground protection to acceptable standards.	Paras 2.2.1 & 3.3.3 Tree Protection Plan in Appendix 4	All retained trees	
Demolition of existing structures within RPA	Pull back technique within RPA	Section 3.6	T15 & T17	
Damage to roots caused by services installation within RPA	Airspade excavation	Section 3.4	T5, T13, T15, T17 & T18	
Damage to roots from building encroachment	Low-invasive foundations	Section 3.7	T11, T15 & T17	
Damage to roots from installation of retaining structures	Manual excavation of top 750mm of encroachment	Section 3.7	T18 & T23	
Damage to roots caused by provision of new hard surfacing	No-dig construction	Section 3.8	T5, T11, T13 & T18	

# 5.0 Completion

# 5.1 Completion Meeting

5.1.1 Following completion of the works listed above, a Landmark Trees consultant will conduct a walkover survey of the trees to review any defects or signs of ill-health, and inform the local authority in a final report as per Table 1. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection. A separate LT post-development tree inspection (with specific reference to trees identified in the Appendix 1 schedules) is recommended to facilitate a constructive meeting.

Signed

Yours sincerely

Adam Hollis

MSc Arb MRICS FArborA MICFor C ENV

Registered Consultant

Chartered Surveyor, Forester & Envrionmentalist

Adam Hollis MSc ARB MICFor FArbor A

15th December 2017

For and on behalf of *Landmark Trees* 

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# APPENDIX 1: ARBORICULTURAL WORKS

# Notes for Guidance:

# 1, 2, 3 - Urgent (ASAP), Standard (within 6 months), Non-urgent (2-3 years)

RP - Pre-emptive root pruning of foundation encroachments under arboricultural supervision.

CB - Cut Back to boundary/clear from structure.

CL# - Crown Lift to given height in meters.

CT#% - Crown Thinning by identified %.

CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs).\*

CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)

DWD - Remove deadwood. Fell - Fell to ground level.

FInv - Further Investigation (generally with decay detection equipment).

Pol - Pollard or re-pollard.

Mon

- Check / monitor progress of defect(s) at next consultant inspection which should be <18 months in frequented areas and <3 years in areas of more occasional use. Where clients retain their own ground staff, we recommend an annual in- house inspection and where practical, in the aftermath of extreme weather events.

Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

<sup>\*</sup>Not generally specified following BS3998:2010



Site: The Water House

**Date:** 6 /6/17

# Appendix 1

Surveyor(s): Adam Hollis

**Ref:** UKE\_WHS\_AMS

# **Recommended Tree Works**

Hide irrelevant
Show All Trees

_andma	rk Trees						Show All Trees
Tree No.	English Name	B.S. Cat	Height	Ground Clearance	Crown Spread	Recommended Works	Comments/ Reasons
1	Mulberry, Black	С	8	2.0	5233	Fell	Decay in trunk  Poor form; trunk initialially runs along ground - appears to be twin stemmed but isn't  To facilitate development
4	Hawthorn, Common	U	6	2.5	1222	Fell	Ivy smothered Dead Recommended husbandry 2
5	Oak, English	Α	20	1.0	9	CR 2.5m Works recommended following PICUS	Decay in trunk and at trunk base 122cm basally Reduction should be considered in light of crown size & decay near separation point at 6/7m To facilitate development
8	Eucalyptus	С	20	8.0	2343	DWD  Monitor ongoing condition	Dying back (unilateral) Low taper multi-stem growth Ivy covered stems over neighbours appear dead Recommended husbandry 2
10a	Laurel, Portugese	С	8	0.0	1111	Fell	Screen separating front from rear garden To facilitate development
12	Apple, Cultivated	С	8	2.5	4534	Fell	Decay in trunk To facilitate development
15	Birch, Silver	В	19	4.0	5755	CL 5m	Drought-stressed Minor-bleeds and cracks Ivy obscures base To facilitate development



Site: The Water House

**Date:** 6 /6/17

# Appendix 1

Surveyor(s): Adam Hollis

**Ref:** UKE\_WHS\_AMS

# **Recommended Tree Works**

Hide irrelevant
Show All Trees

Landina	IK ITEES						_ Show All Trees
Tree No.	English Name	B.S. Cat	Height	Ground Clearance	Crown Spread	Recommended Works	Comments/ Reasons
17	Hornbeam	С	17	3.0	8877	DWD CR CR to correspond to DWD	Honey fungus toadstools around S base A sparser than normal canopy Deadwood (to 50mm) through crown Advisable for good arboricultural practice
20	Magnolia (M. X soulangiana)	С	5	2.5	1.5	Fell	Garden ornamental To facilitate development
31	Willow, Goat	С	7	3.0	2	Fell	Erratic growth habit To facilitate construction access
35	Hawthorn, Common	С	6	2.0	2122	Fell	Ivy clad Dying back (unilateral) 80mm stem dead To facilitate development

# **APPENDIX 2: GENERAL GUIDELINES**

- 2.1 All work must be to BS 3998:2010 'Recommendations for tree work'.
- 2.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and will be covered by adequate public liability insurance.
- 2.3 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the consultant's attention immediately.
- 2.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this method statement are carried out under the supervision of a Landmark Trees consultant.
- 2.5 It is advisable to have trees inspected by a consultant regularly. On this site it is recommended that these inspections are made every year.

# APPENDIX 3: SAMPLE SITE MONITORING SHEET



# **Site Monitoring Report Sheet**

Client:				Planning Ref:	
Local Authority:				Date:	
Site Address:					
Proposal:					
Visit Checklist		Y/N			Y/N
Tree protection barrier place	(TPB) in		TPE	3 as per approved	
Ground protection (GF	) in place		GP	as per approved	
TPB / GP breached				es damaged	
Site Agent briefed by L	T				
LT briefed by Site Agen	†				
LPA informed					
Remedial action requir	ed				
Comments					
Recommendations					
Outcome					
1					
2					
3					
4					

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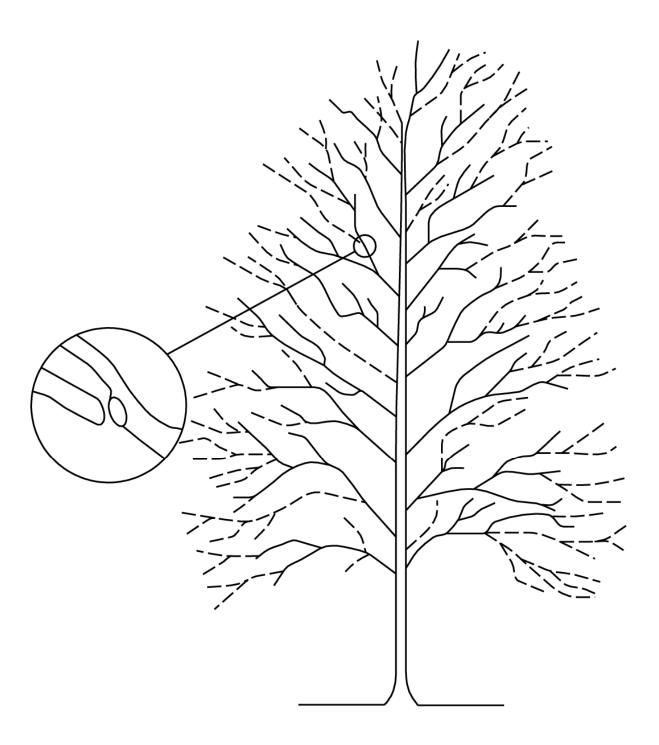




**Arboricultural Supervision Sign off Checklist** 

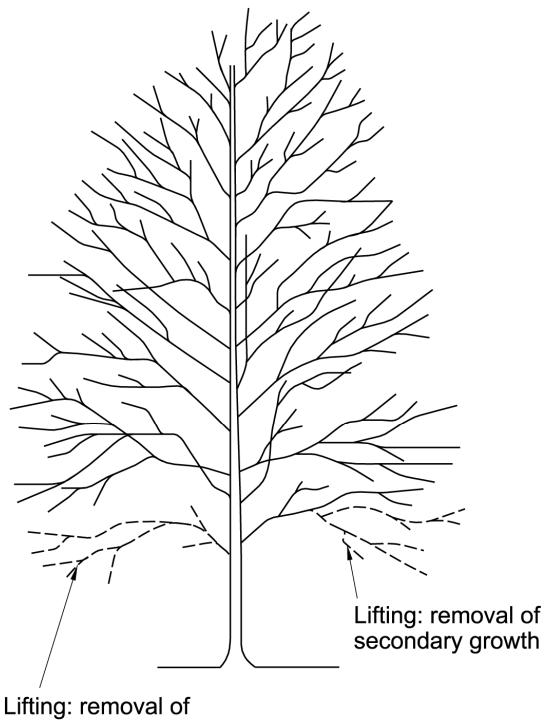
Tree	Project Phase	Task	Date	Signed (Project	Signed	
No (s)			Completed	arboriculturist)	(Site Manager)	
	Pre- commencement	Pre-commencement site meeting to include site manager briefing (S.1.5)				
	Pre- commencement	Confirm the location and specification of the protective measures is in accordance with AMS & Tree Protection Plan (TPP)				
	Pre- commencement	Confirm any tree works have been undertaken in accordance with this AMS (S.2.1/ App 1) and determine if further tree work is required				
	Pre- commencement	Seek required permission for further tree works if necessary.				
	Installation of any new services	Attend any excavation within RPA's where arboricultural supervision is prescribed by the AMS (S3.4) to ensure work is undertaken in accordance with NJUG provisions or other specification.				
	Demolition	Demolition of hard surfaces/ structures within RPA (S3.6) Confirm position of any additional temporary ground protection and that temporary ground protection is in accordance with AMS.				
	Completion of Demolition	Sign off of the demolition phase				
	Construction	Supervised manual excavation of foundations				
	Construction	Installation of 'No Dig' hard surfacing				
	Construction	Additional excavations (if required)				
	Completion of Construction	Completion of construction				
	Post Construction	Removal of machinery and materials from site				
	Post Construction	Dismantle & removal of protective measures				
	Landscaping	Completion of Landscaping				
	Project Completion	Sign off from project arboriculturist				

# **APPENDIX 4: INDICATIVE PRUNING GUIDELINES**



NOTE: Branches pruned back to suitable outward pointing bud or small branch.

# REDUCING THE CROWN



whole branch

# **CROWN LIFTING**

# **APPENDIX 5: TREE PROTECTION PLAN**

