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ARBORICULTURAL METHOD STATEMENT FOR TREE PROTECTION MEASURES

Haselmere
Church Road
Hockley
Essex

6th November 2014

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Scope

The purpose of this report is to provide Arboricultural advice in relation to the protection measures to be implemented to prevent unnecessary damage occurring to trees on site during construction works on site by the implementation of a planning permission granted by the local council, in accordance with the guidelines and principles of BS5837: 2012.

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1 INTRODUCTION

1.1 Brief:

To provide an arboricultural method statement in accordance with the guidelines and principles set out in BS5837: 2012, to allow as much protection as possible to trees on site during works to implement the planning permission granted.

1.2 Qualifications and experience:

I have based this report on the provided information, and I have come to conclusions in the light of my experience. I have experience and qualifications in arboriculture and list the details in **Appendix 1**.

1.3 Documents and information provided:

A plan showing the approved layout.

1.4 Relevant background information:

Planning permission has been granted.

1.5 Scope of this report:

This report is only concerned with trees that could be impacted on by the construction works and the measures required in order to provide protection for them as best prescribed in the guidance of BS5837: 2012. Any issues regarding construction methods etc is outside the remit of an Arborist and remedy should be sought with suitably qualified persons, for example builder, engineer etc. For the purposes of this report an Arborist / Arboriculturalist is someone who through training and experience has the knowledge to assess trees and their condition in a competent manner.

2 APPRAISAL

2.1 Brief site description:

The site is already occupied by a large detached house and detached garage. To the front is an in / out drive and lawn. Running adjacent to the southern boundary is an access road to a garage set back in the garden. The rear garden is laid to lawn.

2.2 Phase protection for the trees

The main aspects of the protection measures are as follows:

- A suitably qualified arborist is retained to provide advice on the site set up in terms of tree protection fencing and risks to trees.
- All relevant site personnel are briefed by the supervising arborist on the protection measures to be implemented and maintained and all site employees are made aware of the protection measures that have been implemented and are responsible for maintaining them for the duration of the project.
- The method statement is to be adhered to at all times.

Brief qualifications and experience of Andrew Day

I hold a Higher National Diploma in Arboriculture. I have been working in the field of arboriculture for approximately 10 years, spending time as a contracting arborist undertaking all aspects of practical arboriculture both in the UK and Europe. I have also worked within local government as a tree officer working for a variety of local authorities. I have a broad experience of both the practical and theoretical aspects of arboriculture having worked within the public and private sector. I am currently a consulting arborist for Andrew Day Arboricultural Consultancy.

1. Qualifications:

Higher National Diploma in Arboriculture (1996)

NPTC (National Proficiency Training Council) units 20, 21 and 22

Lantra professional tree inspection certificate

2. Practical experience:

Prior to establishing my company I worked for a private Arboriculture company for three years undertaking many practical aspects of Arboriculture. I moved on from this to become a local authority tree officer for five years, my duties included consultation on planning matters with regard to trees, advice to the general public, managing the council's tree stock and liaising with other professionals on Arboricultural related issues. I was approached by EssexArb an established tree contracting and consulting company in Essex to develop and run the consultancy department as their principle consultant which I did for three years.

Tree Protection Method Statement

Tree Protection Method Statement and Protection Criteria

Hand dig method statement

Notices for Protective Fencing

Arboricultural Considerations notice for site hut and inducted personnel

Method Statement for Tree Protection Measures

PROJECT: Haselmere, Church Road, Hockley Essex

CLIENT: Mr S Page

1.1 Brief

Provide protective measures specification for trees to be retained using the guidelines and principles prescribed in BS5837: 2012 'trees in relation to construction'.

1.2 Protective Fencing and Site Supervision

1.2.1

Before work continues on site a suitably qualified arborist will be appointed and named as the supervising arborist for the project. This person will liaise with the site manager and tree officer with regard to tree protection matters on site and throughout the project to ensure the trees are protected as far as is practically possible at all times.

1.2.2

The protective fencing will be erected in the locations shown on the tree protection plan in **Appendix 4. The supervising arborist will inspect the fencing to ensure that it is in the correct location and adequately installed** to provide the trees as much protection as possible. Key site personnel will also be briefed about the need for the fencing and how the trees could be affected by their actions.

All persons inducted on site will be made aware of the tree protection measures and will be responsible for their own actions in ensuring these are not breached. Failure to do so could result in the cost of mitigation works or shut down time made to them.

1.2.3

A pre-commencement meeting with all relevant site personnel will be held prior to works on site to discuss tree protection measures and for the supervising arborist to explain its importance and the procedures required to install them and make them effect and fit for purpose. After this time monthly inspections by the supervising arborist will be undertaken to ensure that protection measures are being maintained and adhered to for the duration of the works on site. A log of these visits and any actions required will be available to the council on request and kept on site.

1.2.4

The placing of tree protection and any ground protection measures within the construction timescale will not be altered and it is re-emphasised that this is to take place prior to any other activities starting on site.

1.2.5

Protective fencing will be as shown in **Diagram 1** below. Where different fencing is to be used, it must be demonstrated to the council that it is fit for purpose and approved in writing as acceptable by the local authority. Protective fencing will be placed in the locations that best protect the trees in relation to the planning proposal and tree constraints present on site. The tree protection plan can be found in **Appendix 4**.

The informatives provided below will be placed on the fencing or on posts to reiterate the reason for its presence, and placed at a height of approximately 1.5m on all sides of the fencing or at intervals of 5m or 10m, whatever is deemed suitable by the supervising arborist.

Diagram 1 following illustrates how the scaffold frame will be erected where applicable. If space constraints become limited and scaffolding is required to be erected within or close to the RPA and incorporated as part of the protective fencing, it will be erected as shown in **Diagram 2**.

Diagram 1

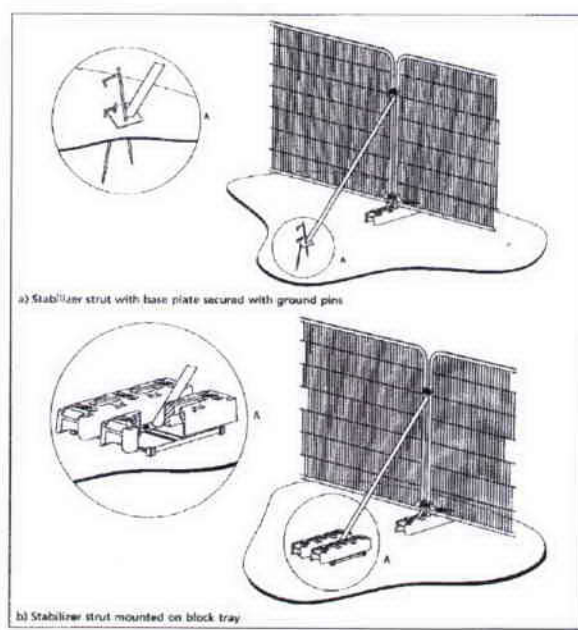
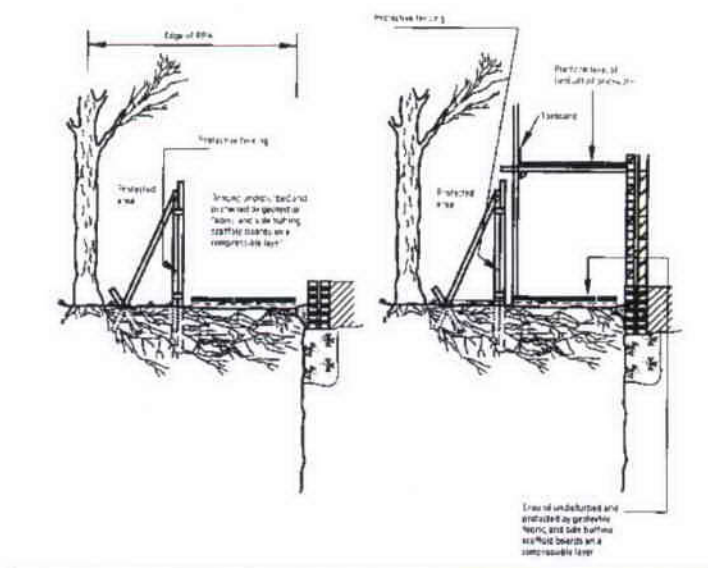


Diagram 2



Should the line of fencing need to be altered in any way or replaced by alternative materials then the supervising arborist and the tree officer is to be consulted and the appropriate action taken in accordance with this advice.

1.3 Demolition of garage

The demolition contractor will provide a method statement of how this building will be demolished, that demonstrates how the tree protection measures will be adhered to and incorporated within the work required.

1.3.1

If feasible the building will be demolished by hand, or if not in a 'pull in, pull back' fashion, that reduces the risk of materials falling towards the trees.

1.3.2

If necessary the height of the protective fencing will be increased to ensure debris does not fall onto the trees or within the RPA (root protection area).

1.4 Removal of hard surfaces within the RPA

1.4.1 Excavation works within the confines of the RPA will be undertaken using hand tools and in accordance with the hand dig method statement provided, and only occur if specific permission is granted by the local authority to do so either as part of a planning permission or any other criteria. Where excavation works are required in this protected area, the supervising arborist will be present at all times.

1.4.2 Only hand tools will be used to carefully break up the existing hard surface, ensuring every effort is made to be careful not to extend too deep at any one time, in case roots are present. If allowed by the tree officer, a competent digger driver will assist in dismantling the hard surface using a vehicle mounted pneumatic drill if hand tools are not possible or practical for long term dismantling.

1.4.3 The vehicle will start at the end point for the excavation / dismantling procedures, working on the hard standing and moving backwards as the surface is broken up. At no point will the vehicle access soft ground within the RPA.

1.4.4 Debris will be removed by hand and the area inspected by the arborist during works and at frequent intervals to ensure roots are not being exposed and put at risk of damage. A suitably qualified arborist will oversee the operation.

1.4.5 Dust or debris will not be allowed to settle on the tree or foliage at any point. Should dust settle on the branches or foliage it will be washed off as soon as possible by using clean water. Debris will not be allowed to fall against the tree and cause damage.

1.4.6 At no point will roots be damaged, pruned or left uncovered unless the local authority tree officer has specifically given permission.

1.4.7 A suitably qualified arborist will be present to ensure that if roots are encountered, they are not damaged and any exposed roots are covered and treated accordingly to prevent stress to the tree.

1.4.8 If considered necessary by the supervising arborist or tree officer, the soil will be de-compacted by either forking over or with an air spade or similar, depending on the degree of de-compaction required. This will be agreed with and carried out within a time period acceptable to the tree officer.

1.5 Forbidden activities within RPA

1.5.1 Within the root protection area the following activities will be prohibited, unless the local authority in writing grants specific permission:

1.4.2 No storage of chemicals or other substances likely to leach and cause harm to the trees to be stored.

No storage of heavy plant or materials likely to cause further soil compaction.

No ground disturbance works not required to implement the planning permission granted.

No activities that could indirectly affect the trees such as bonfires etc.

1.4.3 No excavation work apart from those granted by the local authority is to be undertaken within the confines of the RPA without the written permission of the local authority. Any excavation works allowed will be undertaken in accordance with the hand dig method statement provided.

The protected area is not to be breached at any time, unless the local authority has granted permission and a qualified arborist has been consulted and supervises any work activities that need to take place.

1.5 Storage of chemicals /materials an contractor parking

1.5.1 Storage of chemicals will be placed in a sealed area, with no discharge allowed onto the ground or watercourses. The area containing these materials will have an impervious surface and stored **if possible 10m away** from the RPA. If accidental spillage of chemicals or other damage to the trees takes place the local authority is to be notified as soon as possible, and the supervising arborist will be consulted as to the best actions to take to mitigate any damage that may have occurred as a result of the accident and these works to be approved by the tree officer and undertaken to mitigate the situation as soon as possible.

1.5.2 Particular attention will be made to the type of materials to be stored and the type of machinery needed to move them, ensuring that sufficient protection measures in accordance with this method statement and space are provided to prevent damage to the trees to remain. The site manager will provide a plan detailing the locations of material storage, site facilities and contractor parking etc.

1.6 Ground Protection

- 1.6.1 If access into the RPA is required where there is no hard surfacing or it is felt additional protection is required, the following ground protection measures will be implemented as required.

For pedestrian traffic:

A single thickness of scaffold boards placed on top of a scaffold frame so as to form a suspended walkway (similar to diagram 2), or boards laid on to a geotextile membrane with a layer of wood chips 100mm in thickness.

For pedestrian operated plant up to 2 tonnes:

Interlinked ground protection boards of plywood or similar at least 2.5cm thick, laid onto a geotextile membrane on a bed of wood chip 150mm in depth.

For wheeled or tracked traffic exceeding 2 tonnes gross weight:

Metal tracking designed and fit for purpose, pre-cast concrete slabs or similar, laid to an engineering specification on a compression resistant layer e.g. wood chips that will likely spread the weight of the load and prevent compression of the soil underneath.

This form of ground protection is to be implemented until the new drive is constructed using a cellular confinement system and 'No Dig' methodology. The project architect will provide details on this structure.

- 1.6.2 **AT NO POINT WILL THE GROUND WITHIN THE RPA BE LEFT UNPROTECTED WHEN ACCESS IS REQUIRED IN THIS SACROSANCT ZONE.**

1.7 Completion

- 1.7.1 Protective fencing will only be removed once all of the construction activities on the site have been completed and the supervising arborist has assessed the trees and any mitigation works deemed necessary have been carried out. If de-compaction of the soil within the RPA is required, this will be done by lightly forking the soil over by hand or via an air spade.
- 1.7.2 **Any proposed landscape works will be discussed with the supervising arborist first, to determine if any proposals are likely to have a negative impact on the trees and if so solutions to remedy this.**

2 HAND DIG METHOD STATEMENT

PROJECT: Haselmere, Church Road, Hockley, Essex

- 2.1** The area to be excavated will be inspected by a professional arborist to assess the likely proximity of root activity and concentration prior to the commencement of any works. All relevant authorized personnel to be informed and required permissions gained before work commences.
- 2.2** If hand digging is not possible/practicable a method of excavation will be agreed and undertaken by a suitably qualified person for example air spading or a competent digger operator etc., in the presence of a qualified arborist.
- 2.3** During excavation great care will be taken to minimize damage to retained roots, including the bark around the roots.
- 2.4** All roots greater than 25mm diameter should be retained and worked around. Where clumps of smaller roots (including fibrous roots) are found these are to be retained.
- 2.5** Roots with a diameter in excess of 25mm must not be severed without permission from an Arborist.
- 2.6** If roots are encountered, the Arborist must conduct the root pruning and inform the relevant person to suggest mitigation works to the tree(s) if required. If severance is unavoidable roots must be cut back using a sharp tool, leaving the smallest wound possible.
- 2.7** If there is a possibility of infection being passed from one specimen to another, tools will be sterilized in an appropriate method to reduce the risk of cross contamination.
- 2.8** When backfilling an inert granular material mixed with top soil or sharp sand (not builder's sand) is to be used around the retained roots. Unless an alternative backfill substrate has been agreed with in writing by the appropriate authorized personnel.
- 2.9** If roots are to be left exposed for a period of longer than 1 hour (dependent on weather conditions), then a covering of dampened Hessian or similar material is to be used to cover the exposed roots. Any changes to this practice are to be authorized by a qualified arborist.
- 2.10** All levels are to be returned to the original plane after any excavation, unless specific design and relevant permission has been authorized.
- 2.11** A qualified Arborist is to be on site to supervise during any operations within the protection zone.

ANDREW DAY
ARBORICULTURAL CONSULTANCY LTD

REDUCING COSTS BY DELIVERING PRACTICAL SOLUTIONS

TREE PROTECTION ZONE

**DO NOT CROSS WITHOUT
PERMISSION**

**BREACHING THIS BARRIER CAN
RESULT IN THE FOLLOWING:**

- **SHUT DOWN OF THE JOB**
- **FINANCIAL IMPLICATIONS**
- **CRIMINAL PROCEEDINGS**

ARBORICULTURAL SITE CONSIDERATIONS

THIS NOTICE IS TO BE DISPLAYED IN THE SITE OFFICE OR A SUITABLE LOCATION WHERE IT IS CLEARLY VISIBLE AND ISSUED TO ALL PERSONNEL INDUCTED ONTO SITE

The following site considerations must be observed at all times during the development process, from site preparations through to completion.

- ❖ The protected area of the RPA must be regarded as sacrosanct and not breached except where to implement the planning permission granted, without prior consultation with either the local planning authority or the supervising arborist.
- ❖ Ground protection must not be lifted or removed without prior consultation with either the local planning authority or the supervising arborist.
- ❖ Damage caused to ground protection must be reported to the site manager to ensure suitable repair or actions are taken.
- ❖ No materials, chemicals, machinery or vehicles to be stored within the RPA (root protection area) as defined on the tree protection plan and on site by fencing and ground protection.
- ❖ No materials etc. must be rested against or machinery chained to trees.
- ❖ No pruning of trees may be undertaken by anyone other than a qualified arborist and approved by the supervising arborist and local authority tree officer.
- ❖ Any physical damage caused to a tree to be retained must be reported to the site manager immediately so that suitable remedial works can be commissioned without delay.
- ❖ Builder's sand (which contains high levels of salt) must not be used to back fill excavations within or in close proximity to tree roots, as it has a toxic effect and can cause root desiccation. Sharp sand must be used under such circumstances.
- ❖ Soil contaminants such as concrete mixings, diesel oil and vehicle washings must be kept suitably contained, preferably within bunded areas. Any spillages within 2m of a fenced area must be reported to the site manager and supervising arborist immediately so that suitable mitigation works can be commissioned.
- ❖ Fires must not be lit in positions where their flames can extend to within 5m of foliage, branches or trunks. Wind direction and size of fires will impact on this.
- ❖ Notice boards, telephone cables or other services etc. must not be attached to any part of a tree.

Remember the tree officer can turn up at any time or neighbours may report any poor practice or threats to the trees.

Site Personnel Contact Information

As far as I am aware the only personnel associated with this site at the time of writing this report is the site owner and project architect. Table 1 shows the contact details of the project architect who is to be contacted if any enquires relating to this project need answering.

Table 1

Name	Relation to Site	Contact Details
David Grew	Project Architect	07740 201389

LIMITATIONS AND QUALIFICATIONS

LIMITATIONS AND QUALIFICATIONS

Unless specifically mentioned the report will only be concerned with ground inspections. No below ground inspections will be carried out without prior confirmation from the client that such works should be undertaken.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available during the inspection process. No checking of independent data will be undertaken, Andrew Day will not be responsible for the recommendations within this report where essential data are not made available, or are inaccurate.

This report will remain valid for one year from the date of inspection, but will become invalid if any tree works not recommend within the report are undertaken, soil levels around the trees are altered in any way and if any building works which were not disclosed during the inspection are undertaken.

If any of the above occurs then it is strongly recommended that a new tree inspection is carried out.

It will be appreciated, and deemed to be accepted by the client that the formulation of the recommendations for the management of the trees will be guided by the following:

1. The need to avoid reasonable foreseeable damage
2. The arboricultural considerations – Tree safety, good Arboricultural practise and aesthetics.

The client is deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where time constraints or the client limits sources, this may lead to an incomplete quantification of the risk.

Tree Protection Plan

(Please refer to the separate A3 plan to scale from if required)

