



Arbtech Consulting Ltd

Arboricultural Development Report

Mr C.Stubbs, C.Webb & Sons.

Fern Cottage,

Chapel Lane,

Erbistock.

7 October 2011

Table of Contents

If this report has been released electronically the appendices referred to herein can be found in the annexed zip folder/s as .pdf or .dwg files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans may be annexed separately as A1 or A0 copies where a bound-in A3 copy is not appropriate.

Executive Summary	3
General Information	4
Tree Survey.....	5
Arboricultural Implications Assessment.....	6
Development Footprint & Below Ground Constraints.....	6
Development Footprint & Above Ground Constraints	7
Development Footprint & Future Tree Works	7
Replacement Planting	8
Arboricultural Method Statement	9
Accidents and emergencies involving trees.....	9
Phasing of tree protection measures	9
Tree Works.....	10
Protective Measures	11
Prohibition.....	11
Monitoring and Supervision	12
Document Production and Approval Record.....	13
Appendix 1 - Figure 2 – Protective Barrier Diagram.....	14
Appendix 2 – Tree Protection Notice	15
Appendix 3 - Contact Details.....	16

Executive Summary

This report describes the extent and effect of the proposed development at Fern Cottage, Chapel Lane, Erbistock ("site") on trees within and adjacent to the site.

Trees within and adjacent to the site have been surveyed by Arbtech Consulting Ltd using a methodology guided by British Standard 5837:2005 'Trees in relation to construction – Recommendations' ("BS5837").

Subsequently, this report has been produced, balancing the layout of the proposed development against the competing needs of trees. This report comprises all of the requisite elements of an arboricultural implications assessment, method statement and supporting plans.

Checklist for Submission to Local Planning Authority

Tree survey	☒
Tree constraints plan	☒
Arboricultural implications assessment	☒
Arboricultural method statement	☒
Tree protection plan	☒

This report and its appendices follow precisely the strategy for arboricultural appraisal intended to provide local planning authorities with evidence that trees have been properly considered throughout the development process.

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development.

General Information

Client: Mr C Stubbs, C Webb and Sons.

Site: Fern Cottage, Chapel Lane, Erbistock.

Agent (if applicable): Ads-Plan Ltd.

Brief proposal description: Construction of a detached dwelling with associated landscaping.

Planning application reference: N/A

Documents referred to:

Document	Reference
Topographical survey drawing	465 – 08 – 10 / 01B
Proposed layout drawing	As above
Landscape master plan drawing	465 – 08 – 10 / 05
LPA pre-app comments	N/A
British Standard 5837:2005	“BS5837”

Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Alan Thompson for Arbtech Consulting Ltd on 14/06/2011.

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Land use: The site is presently unoccupied.

Topography: No significant changes of level are present.

Locality: The tree cover and quality in the locality is indicative of a rural area; mainly comprising native trees located within field boundary hedgerows and small wooded areas.

Relative amenity value: The trees surveyed generally do contribute to the landscape amenity of the site and wider locality.

Condition, age and species diversity: The trees comprise of native specimens including Ash, Hawthorn and Holly. The general condition of the trees was normal, although a small number were identified as having significant defects requiring remedial action.

Status: No statutory protection check has been performed.

Further information: A full schedule including the survey data of all individual trees and groups of trees surveyed can be found at Appendix I.

Arboricultural Implications Assessment

There are a number of issues to be addressed in an arboricultural implications assessment, and broadly these are as follows –

- The effect and extent of the proposed development within root protection areas of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees; and
- The likelihood and reasonableness of any future remedial works to retained trees, beyond that which would have been scheduled in the course of ordinary management.

Development Footprint & Below Ground Constraints

Trees to be removed:

Category R trees; T3 and T6

These trees shall not limit or constrain the development in any way and will be removed for reasons of sound arboricultural management.

Justification. T3 is dead and T6 has had its structural integrity significantly compromised by previous tree works. These trees therefore do not possess the potential to provide an amenity contribution into the long term.

Category C tree; T1

This tree is in direct conflict with the proposed landscaping (hard surfaced driveway) and shall therefore be removed to facilitate the development. However, canopy cover is ecologically important and this loss must be mitigated by incorporating good quality trees into the long term vision of the development.

Justification. Although it may be possible to retain this tree through the installation of an engineered no-dig hard surface, this tree is in decline with significant dieback and other structural defects. As such is not considered to be of sufficient quality to warrant

retention or to justify constraining the development. High quality replacement planting will enhance the existing amenity contribution so reflecting a net gain for the locality.

Category B tree; T15

This tree is in direct conflict with the proposed landscaping (hard surfaced driveway) and shall be removed to facilitate the development.

Justification. Although obtaining a BS5837 category of B due to its potential longevity, this moderate Hawthorn is not clearly visible from the road and its removal would only convey a loss of amenity to the immediate users of the site. Its loss can be easily mitigated through high quality replacement planting.

Trees to be retained:

Category B trees; TT2, T4, T5, T11 and T14
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Category C trees; T7, T8, T10, T12 and T13
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These trees will not be impacted by the proposals; the RPAs are situated wholly outside of the proposed footprint. The trees are in close proximity to the proposed working areas and therefore protective barrier fencing will be installed to protect the RPAs from construction materials / traffic. A specification for protective barrier fencing can be found in the arboricultural method statement and is illustrated on the tree protection plan (TPP).

Development Footprint & Above Ground Constraints

The retained trees have an adequate clearance from the proposals; as such no remedial tree works are required to facilitate the works.

Development Footprint & Future Tree Works

No issues arise in relation to light/shading of the site as a consequence of the development as no windows of proposed buildings/annexes are unreasonably shaded by the retained trees. The leaf litter and minor twig debris is not oppressively burdensome to cope with and does not render the proposed development unsafe.

Replacement Planting

The ratio of trees removed to trees replanted should not necessarily be 1:1. Instead, the ratio should take into consideration the available space for tree growth and development in order to ensure the trees are physically suited to the site at maturity. A specification for and notation relating to the precise alignment of replacement trees can be contained in the landscape proposal.

Arboricultural Method Statement

This method statement is to be approved and agreed to in writing by all key personnel prior to the commencement of site works.

No site personnel are to be present and no demolition, site clearance, building work or delivery of materials is to occur until the protective barrier fencing (PBF) in accordance with this method statement and the Tree Protection Plan (TPP-01) is installed.

Protective barrier fencing in accordance with this method statement and the Tree Protection Plan (TPP-01) are to remain unaltered and in situ, unless otherwise specified, for the entire duration of the construction.

Accidents and emergencies involving trees

Any accidents and emergencies involving trees shall be immediately reported to Arbtech and their advice sought and agreed to by the council.

Phasing of tree protection measures

The tree protection measures shall be phased as follows (See Arbtech Consulting Ltd. Tree Protection Plan No. TPP – 01).

- a) Undertake tree works
- b) Install the protective barrier fencing in accordance with the approved protection plans and this method statement
- c) Undertake and complete works to building
- d) Undertake external landscape works to areas outside of construction exclusion zones
- e) Remove protective barrier fencing and ground protection
- f) Undertake remaining soft landscaping works
- g) Sign off from the company as no further involvement required

Tree Works

For reasons of public safety, all tree works referred to herein must be carried out prior to any site personnel commencing works or any building materials being delivered.

Summary of Tree Works

Tree or Group Reference #	Remove	Canopy	Other
T1, T3, T6 and T15	Remove to ground level.		

All tree work is to be undertaken in accordance with British Standard BS 3998:2010, Recommendations for tree work. All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber Lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

Protective Measures

Protective measures are to be installed immediately following the completion of the tree works, and are to be sited and aligned in accordance with the tree protection plan (See Arbtech Consulting Ltd. Tree Protection Plan No. TPP – 01). These protective measures are to remain in situ for the entire duration of the development unless otherwise agreed in writing by the council.

Protective Barrier Fencing

Protective barrier fencing should be appropriate for the intensity and proximity of the development to protect trees where development activity is in close proximity. BS5837 defines protective barrier fencing to be *“a scaffold vertical and horizontal framework, well braced to resist impact with the vertical tubes spaced at a maximum of 3.0m. Onto this, weld mesh panels should be securely fixed with wire or scaffold clamps. Weld mesh panels on rubber or concrete feet are not resistant to impact and should not be used.”* Signage denoting the words *“tree protection area”* at 5.0m intervals should be fixed to the protective barrier fencing (See Appendix 1 – Figure 2 – Protective Barrier Diagram & Appendix 2 – Tree Protection Notice).

Protective fencing is to be removed ONLY with the written permission of the arboricultural consultant and approval of the local planning authority (LPA).

Prohibition

- Mechanical digging or scraping is not permitted within a defined root protection area or within areas cordoned off by protective barrier fencing.
- Fires are not permitted within 10.0m of any vegetation.
- Machinery, plant and vehicles are not permitted to be washed down within 5.0m of vegetation.
- Leaning objects against or attaching of objects to a tree is not permitted.
- Chemicals and materials are not to be transported, stored, used or mixed within a root protection area or within areas cordoned off by protective barrier fencing.

Monitoring and Supervision

The development's tree protection is to be monitored by Arbtech Consulting Ltd, who will be retained to record and report observations to the council at appropriate intervals.

Prior to the commencement of any works on site a pre-start meeting is to be held to discuss the protection methodology, arboricultural method statement and swap contact details.

As a suggested minimum, the arboricultural consultant should visit once to check that the tree protective measures are in the correct location and if so to sign off their installation.

There after regular visits at intervals of once every four weeks, to ensure that tree protection measures are in place and are functioning as designed. A record of these visits will be kept and any faults will be logged, this will then be copied to the site agent, developer and local planning authority.

Regular contact will be maintained with the site manager to determine any forthcoming operations that may make an impact upon the tree protection measures and when/if any arboricultural supervision is required.

The arboricultural consultant will be advised a minimum of 48 hours prior to the commencement of any works that require his attendance, i.e. installation of underground services, removal/construction of hard surfacing, any excavations within or adjacent to the RPAs.

Once all construction works have been completed all materials and machinery has been removed the arboricultural consultant shall visit the site and to sign the development off and recommend that protective measures can be removed.

Document Production and Approval Record

Status	Issue #	Editor	Position	Date
Draft	2.0	Matthew Middle	Senior Surveyor	06/10/2011
Review	2.1	Alexandra Ashton	Secretary	07/10/2011
Final	2.2	Matthew Middle	Senior Surveyor	07/10/2011

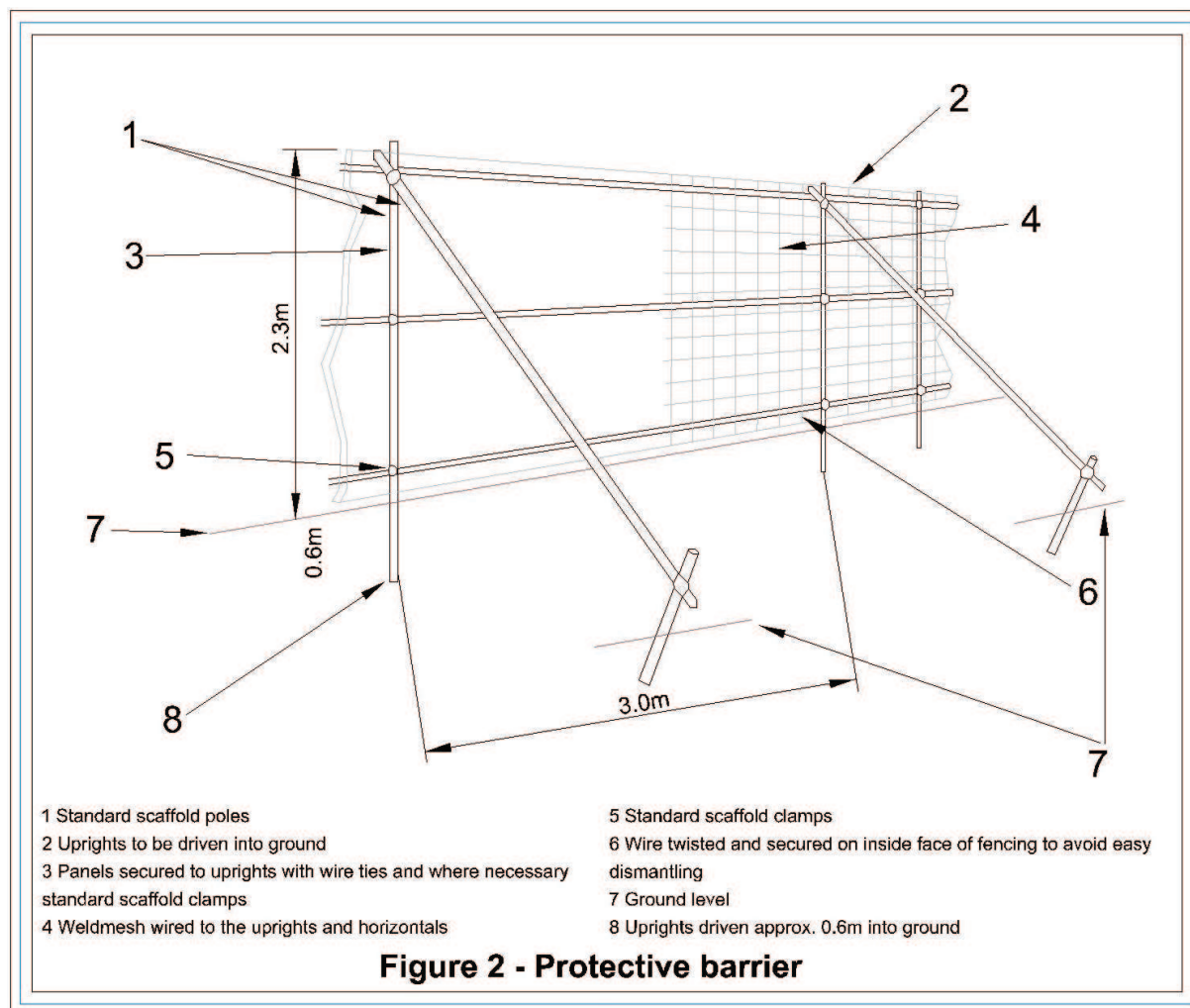
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Appendix 1 - Figure 2 – Protective Barrier Diagram



Tree Protection Fencing as shown in BS5837:2005

Appendix 2 – Tree Protection Notice

Tree Protection Area **KEEP OUT** Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL
PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN
PERMISSION OF THE LOCAL PLANNING AUTHORITY

THIS FENCE MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DOCUMENTS FOR
THIS DEVELOPMENT. IF YOU NOTICE ANY DAMAGE TO, OR BREACH OF THIS TREE PROTECTION AREA
PLEASE CALL:



ARBTECH Consulting Ltd.
Murlain House, Union Street, Chester, Cheshire, CH1 1QP.
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Appendix 3 - Contact Details

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