



17

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Trees and Development

1. Introduction

The purpose of this Local Planning Guidance Note is to amplify Policy EC4 of the adopted Wrexham Unitary Development Plan, regarding the protection of trees and to highlight the benefit of trees as an integral part of development design.

Policy EC4 states that: Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.

This guidance note will be a material consideration in the determination of planning applications. Much of this guidance's requirements should be undertaken by a qualified and experienced arboriculturist. The term "Tree" is used throughout this document, however much of the guidance is also applicable to hedgerows and large significant shrubs.

2. The Importance of Trees

Trees and hedgerows form an important part of our environment and in the delivery of sustainable development, the retention and the planting of new trees and hedges is crucial.

Trees contribute considerably to the amenity of the landscape and streetscene, add maturity to new developments, make places more attractive, and help soften the built environment by enhancing pleasant views, by breaking up view lines and by screening unattractive buildings and undesirable views. They contribute to people's quality of life and sense of wellbeing and produce oxygen, store carbon, intercept and absorb rainfall thereby reducing flood risk, absorb pollutants which help in reducing the causes of respiratory illnesses, filter noise, provide shelter and shade and provide habitat for wildlife.

3. Planning Guidance

The following principles are relevant:

3.1 General

A) Development which would result in damage and/or inappropriate felling of significant trees (i.e. BS 5837 Category A & B trees) and hedgerows will not normally be permitted. Planning conditions and Tree Preservation Orders will be used to safeguard trees in appropriate cases.

B) Development proposed near to existing trees, woodlands or hedgerows must be in accordance with the design and protection

principles set out in this Local Planning Guidance Note and British Standard 5837: 2012 "Trees in relation to design, demolition and construction" (or any subsequent revisions). The British Standard provides a flow chart that details the necessary steps to be taken at each stage of the development process. The chart can be found in Appendix 1 of this Guidance Note.



C) The type and level of arboricultural information to be submitted with your application (✓) and where additional information (*) may be required will depend on the scale and type of development proposed.

i) For householder applications (e.g. all works to a single dwelling, except house construction) all trees (stems and canopy spreads) and hedges on site or within influencing distance should be accurately plotted on a block plan. Include details of which trees are to be retained, removed and pruned.

ii) For small scale applications (e.g. four dwellings or less, floor space of less than 1000 m², or

outline applications of less than 0.5 Ha) where trees are on or within influencing distance of the proposed development site, a land survey, a BS 5837 tree survey and a Tree Protection Plan will be required. Include details of which trees are to be retained, removed and pruned.

iii) For large scale applications (e.g. five dwellings or more, floor space greater than 1000 m², or outline applications of less than 0.5 Ha and mineral workings and waste development proposals) where trees are on or within influencing distance of the proposed development site, a land survey, a BS 5837 tree survey, a Tree Protection Plan and an Arboricultural Implication

Assessment, and an Arboricultural Method Statement should be submitted with your application.

iv) Where significant trees (BS 5837 Category A & B trees) are present on or adjacent to small scale and householder application sites and these could be affected by the proposed development, additional information, such as a BS5837 tree survey and an Arboricultural Implication Assessment, may be required.

v) An arboricultural consultant will be able to advise you further on the above requirements.

	Householder Applications (3.1.C.i)	Small Scale Applications (3.1.C.ii)	Large Scale Applications (3.1.C.iii)
Trees & Hedges Plotted on Block Plan	✓	*	*
Land Survey	*	✓	✓
BS 5837 Tree Survey	*	✓	✓
Arboricultural Implication Assessment (AIA)	*	*	✓
Tree Protection Plan (TPP)	*	✓	✓
Arboricultural Method Statement (AMS)	*	*	✓

Table 1: Arboricultural Information Required by Scale of Development

3.2 Design

A) The planting of new trees, including the choice of species, planting locations and future maintenance needs and the integration of good quality existing trees and hedgerows is an integral part of the design process. Development must be planned around significant trees and hedgerows and where appropriate, to increase tree cover with new planting, thereby enhancing local amenity. For example, trees and hedgerows of considerable age, visual amenity, and ecological or historical value are not easily replaced and should be retained and safeguarded. Where development results in the loss of trees and hedgerows, new planting of at least equal number or canopy cover to those lost will usually be required to mitigate for the loss.



B) Where space permits, the use of large canopy trees will be required in order to provide structure to the development and surrounding landscape and streetscene.

C) Development design must ensure that retained and planted trees do not cause unreasonable nuisance or inconvenience. Proposals which would result in trees causing excessive shading or being overly dominant or oppressive, and/ or unduly encroach upon private amenity space or over residential properties, will not normally be permitted.

D) New utility services should be located far enough away from existing and proposed trees to prevent damage to the trees from installation and maintenance and to avert possible damage to the apparatus. Where possible, all utility apparatus should be ducted and laid "in corridors". Where underground services must be positioned within tree root protection areas, the installation and maintenance should be undertaken in accordance with industry best practice, National Joint Utilities Group (NJUG) Volume 4 (See Appendix 3). Thrust boring or the use of air

spades for the installation of underground services should be considered, as these methods will limit potential damage to roots.

3.3 Tree Protection

A) The type and level of protection required for retained trees and for areas to be planted will depend upon the scale and type of development. In the vast majority of cases, retained trees should be protected by well braced weld-mesh e.g. Herras or close boarded fencing. Further details can be found in BS5837.

B) The Construction Exclusion Zone for significant ancient, veteran and/ or historic champion trees (BS 5837 Category A3 trees) should be based on an area with a radius which is 15 times the diameter of the tree's stem (measured at 1.5 metres from ground level) or at a distance of 2 metres beyond the crown spread, whichever is the greater.



3.4 Planting

A) Appropriate new tree and hedgerow planting, amongst other landscaping proposals, will be required on development sites to enhance amenity and to mitigate for any loss of canopy cover from tree felling. Development should provide for tree planting along principal frontages and access routes. For residential development of ten properties or more, avenue tree planting will usually be required on principal routes within the site and individual street tree planting will be required on other internal roads. Where the loss of trees cannot be adequately mitigated for by new planting within the scheme, the Council will expect developers to provide for adequate new planting off-site, through the use of Section 106 agreements.

B) The choice of trees to be planted should take into account the layout and design of the site, future use, soil and climatic conditions, local landscape character and contextual surroundings and sufficient space must be planned within the layout to allow trees to reach their mature size.

C) Planted trees should be of a species that at maturity achieve a size and form compatible with the scale and structure of the development.

D) Where tree planting is proposed within hard surfaced areas (e.g. parking areas and footpaths) the size of planting pits should be sufficient to provide an adequate volume of soil to support the eventual size of the planted tree(s) (Further advice on tree rooting volumes can be found in the titles marked * in Appendix 3.)



Processes and Information

4.1 The Survey Stage

A) For most types of application where trees are present on or adjacent to proposed development sites, both land and tree surveys will be required (see 3.1.C).

B) Land Survey - recording the locations of all trees (with a stem diameter of 75 mm or more), including their stems and canopy spreads and any significant shrubs and hedges within the site and trees on adjacent land which are within influencing distance of the development site (refer to BS 5837 section 4.1). Where development does not impinge upon wooded areas, only the edge trees need be recorded. Trees within influencing distance include those at or within a distance equal to 12 times their stem diameter (measured at 1.5 m from ground level), those where the canopies overhang the development site boundary, and/or that cast excessive levels of shade on proposed residential properties and gardens.



C) Tree Survey - indicating the attributes, quality and value of all trees on site and those within influencing distance e.g. ref. number, species, height, stem diameter, age, condition, estimated lifespan, etc (refer to BS 5837 section 4.4.2.5 & Table 1), those proposed for removal and retention and containing a schedule of recommended works. The tree survey should be undertaken, independently of, and preferably, prior to design proposals being drawn up.



D) It may also be necessary to carry out further surveys where features on or adjoining the site may be favourable to protected species. Trees can contain roosting and breeding sites for bats, a European protected species, and birds, whilst, hedgerows and lines of trees can provide an important wildlife corridor function. Contact the Council's Ecologist or Countryside Council for Wales for advice on this matter.



E) Native hedgerows are afforded protection under the Hedgerow Regulations 1997 and should be assessed to determine whether they are 'important' within the meaning of Regulations. Further guidance on this can be found in the DETR published guidance booklet "The Hedgerow Regulations 1997: A guide to the law and good practice".

The Design Stage

A) Development design should take into account the constraints and opportunities posed by existing quality trees, woodland and hedgerows and provide adequate space for new planting.

B) Where appropriate (see 3.1.C) the following information will be required in order to assess the impact of the proposed development on trees and hedgerows:

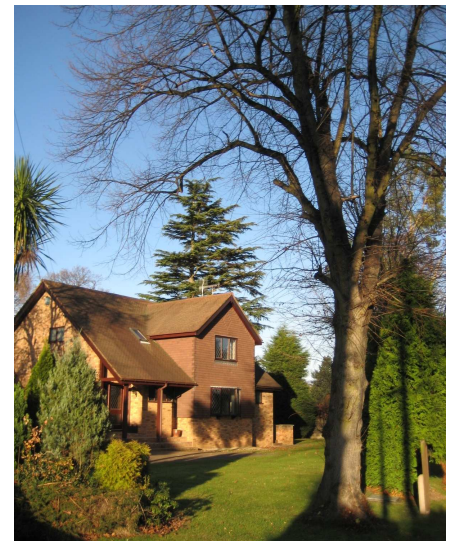
C) Arboricultural Implication Assessment (AIA)

comprehensively identifying and evaluating the direct and indirect impacts of development on trees and advising on subsequent mitigation measures (e.g. special engineering and tree protection measures and replanting details where tree loss is unavoidable). The assessment should comprehensively include tree survey schedule data, a tree survey plan, a tree retention/removal plan, a tree protection plan, and where necessary proposals for replacement planting, shading analysis and an indicative Arboricultural Method Statements.

D) Tree Protection Plan (TPP) - indicates tree protection measures and illustrates:

i) Root Protection Area (RPA)

- an area around a tree that is indicative of the **minimum** rooting volume (root spread and soil) which the tree requires to survive and which must be protected during development. This is determined by the diameter of the tree's trunk e.g. for single stemmed trees the diameter (at 1.5 metres from ground level) is multiplied by 12, for category A3 trees the stem diameter is multiplied by 15. For multi-stemmed trees refer to BS 5837:2012 section 4.6.1. a & b. These figures are then converted by an arboriculturist into an area (in m²) around each tree, taking into account any constraints to root growth such as foundations, roads, etc.



ii) Construction Exclusion Zone (CEZ)

- an area around retained trees which must be protected during development, including ground level changes, demolition and construction. This is based on a tree's Root Protection Area (in m²) and canopy spread, with the Construction Exclusion Zone extending to the edge of the tree's canopy or Root Protection Area, depending on whichever is bigger. For significant ancient, veteran and historic champion trees the Council will expect the Construction Exclusion Zone to be increased in accordance with section 3.3.B of this guidance note.

E) The Tree Protection Plan

should also show all trees, hedgerows and large significant shrubs to be retained and removed, the location of protective fencing and ground protection measures, including specifications, and areas for proposed tree planting (see Appendix 2).



4.3 The Construction/ Aftercare Stage

Planning permission may include conditions relating to:

A) Arboricultural Method Statement (AMS) - specifies working practices relating to any operations in close proximity to retained trees and should include details of tree surgery works, the erection of tree protection measures, works within tree Root Protection Areas and Construction Exclusion Zones, arboricultural supervision, contingency plans, proposed landscaping in proximity to retained trees and contact details.

B) Tree and Hedgerow Works - in accordance with an approved tree survey works schedule and carried out in accordance with British Standard 3998: 2010.

C) Tree and soft landscaping protection measures - in accordance with the tree protection plan, measures should be installed before all development works (including demolition, soil stripping and/ or ground re-grading works) commence. The type of tree protection fencing used will depend upon the scale and type of development. Protection measures should be inspected following installation and thereafter on a regular basis until the development is completed satisfactorily.

D) Landscape scheme - clarifies the location, type and standards to which planting works will be undertaken to and should include a planting specification and plan. The planting specification should include plant species, stock type and size, the need for stakes/ underground guying, water/aeration tubes, tree shelters/ rabbit guards/ trimmer guards, tree pit dimensions and preparation and any requirements for fertilisers /soil amelioration.

E) Maintenance period - where development includes tree planting, a maintenance schedule for a minimum period of five years will be required. Maintenance of planted trees, including watering, weed control, checking and adjusting tree ties regularly and the removal of tree stakes and ties after 2-3 years will be required to be undertaken to ensure successful establishment.

F) Arboricultural supervision - regular inspections by an arboriculturist of:

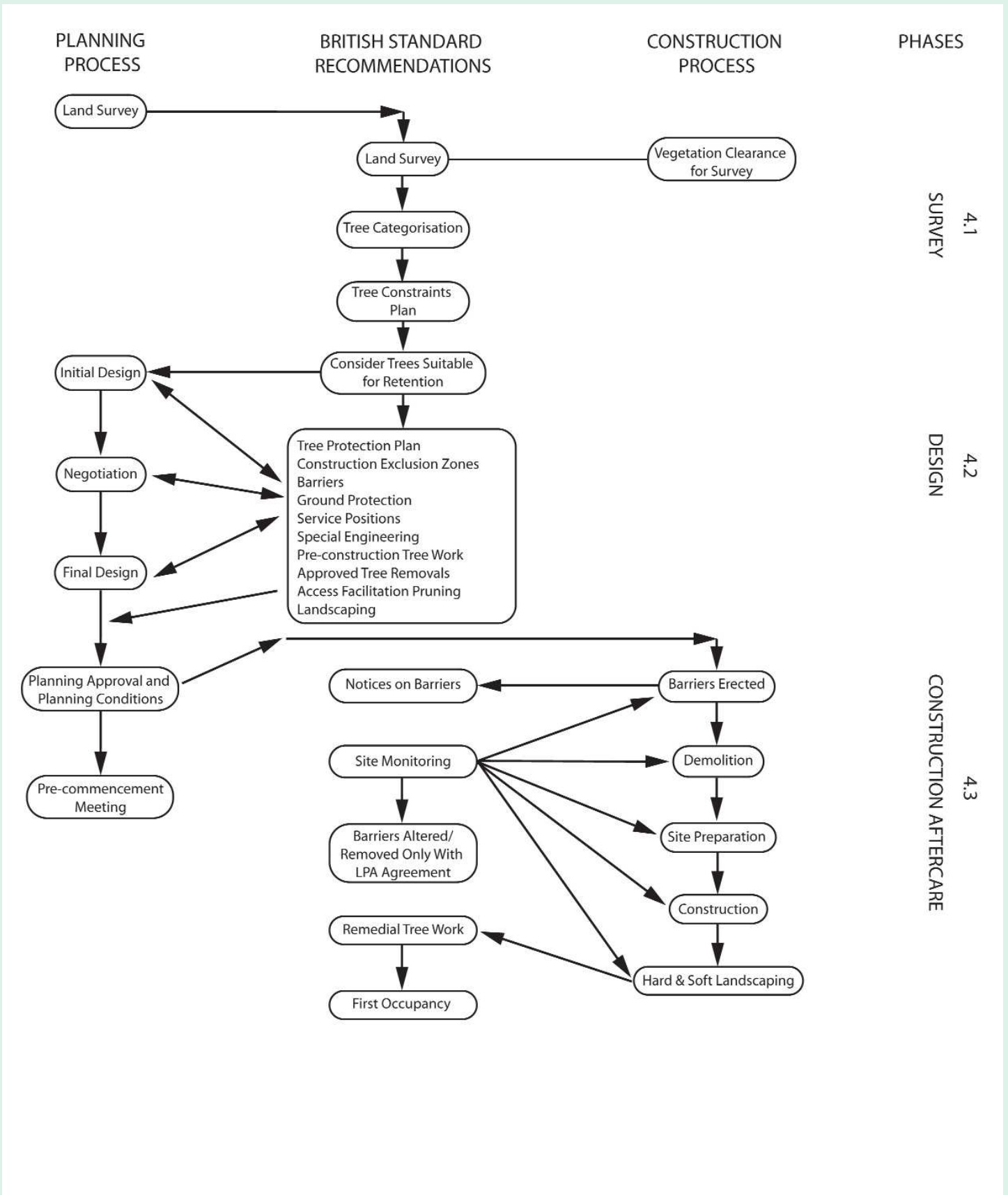
- i) Tree and hedge protection measures (fencing and ground protection).
- ii) Works within tree Root Protection Areas and/or Construction Exclusion Zones.

Statutory Protection

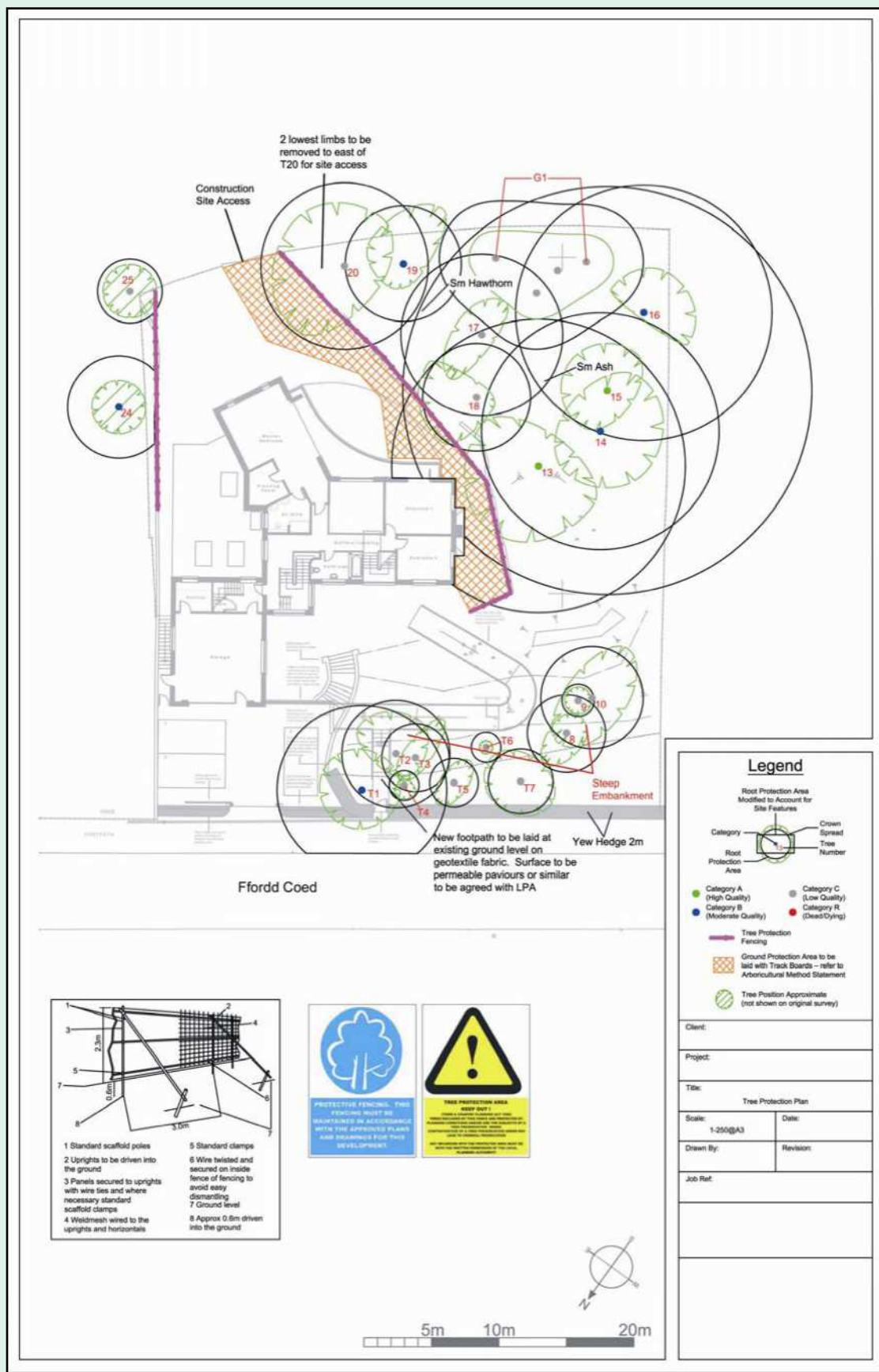
A) Trees on or adjacent to development sites may be protected by planning conditions, or because they are located within Conservation Areas or because they are subject to Tree Preservation Orders, with all three being administered by the Council. All trees in Conservation Areas with a stem diameter of 75 mm or more (measured at 1.5 metres from ground level) have the same level of protection as a Tree Preservation Order. It is an offence, subject to certain exemptions, to prune or fell a tree protected by a Tree Preservation Order or Conservation Area status. Additionally, the Forestry Commission has a statutory duty to regulate tree felling through the issue of felling licences. Where trees and hedgerows contain protected species (e.g. bats, dormice) tree works require the grant of a licence from the Countryside Council for Wales.

B) The Council will exercise its enforcement powers where development is not undertaken in accordance with approved plans or where planning conditions are not adhered to. Where breaches of Tree Preservation Orders and/ or Conservation Area tree legislation occurs, the Council will normally instigate prosecution proceedings, when protected trees are damaged or destroyed.

Appendix 1: Planning For Trees on Development Sites - Flow Diagram



Appendix 2: Tree Protection Plan Example



Acknowledgements

The Tree Protection Plan was provided by Tree Solutions Arboricultural Consultancy.

Appendix 3: Additional Information

The following British Standards, guidance notes and books offer further guidance on development and trees. Additionally, the Council has produced a series of information sheets on specific tree and development matters, available from the Planning Department and the Council's website: www.wrexham.gov.uk/planning

- British Standard 5837: (2012): Trees in Relation to design, demolition and construction - Recommendations.
- British Standard 1192: Part 4: (1984): Construction Drawing Practice - Recommendations for Landscape Drawings.
- British Standard 3882 (2007): Specification for Topsoil and requirements for use.
- British Standard 3936: (1992): Specification for Nursery Stock.
- British Standard 3998:(2010): Tree Work.- Recommendations
- British Standard 4043: (1989): Transplanting Root-Balled Trees.
- British Standard 4428: (1989): Code of Practice for General Landscape Operations.

British Standards available from www.bsi-global.com

- Building Research Establishment (BRE) - Low-Rise Building Foundations: The Influence of Trees on Clay Soils (1999). Available from www.brebookshop.com
- Ancient Tree Guides No. 3: Trees and Development. Available from www.woodlandtrust.org.uk
- Department of Environment and transport (DETR) - Hedgerow Regulations 1997: A Guide to the Law and Good Practice. Available from www.hedgelink.org.uk
- Department for Communities and Local Government (DCLG) -Tree Roots in the Built Environment (2006). Available from most book stores.
- National Joint Utilities Group (NJUG) Volume 4 - Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (2007). Available from www.njug.org.uk
- National House Building Council (NHBC) Standards - Building Near Trees: Chapter 4.2 (Amended 2003). Available from www.nhbc.co.uk or by phoning: 0844 633 1000.
- * Trees in the Urban Landscape - Site Assessment, Design and Installation (Wiley) (2004). Available from most book stores.
- * Up by Roots - Healthy Soils and Trees in the Built Environment (ISA) (2008). Available from www.isaarboriculture.org

Appendix 4: Useful Contacts

● Head of Community Wellbeing and Development

Wrexham County Borough Council,
16 Lord Street, Wrexham LL11 1LG
Tel: 01978 292016

E-mail: planning@wrexham.gov.uk
Web: www.wrexham.gov.uk/planning

Advice on trees on development sites,
Conservation Area trees and Tree
Preservation Orders.

● Arboricultural Association (AA)

The Malthouse, Stroud Green, Standish,
Stonehouse, Gloucestershire. G40 3DL
Tel: 0 1242 522152

E-mail: admin@trees.org.uk
Web: www.trees.org.uk

Advice on trees and produces an annual
directory of AA registered arboriculturists (Tree
Consultants) and contractors (Tree Surgeons).

● Arboricultural Advisory & Information Service

Alice Holt Lodge, Wrecclesham,
Farnham, Surrey, GU10 4LH.

Tel: 09065 161147 (Premium rate) or
administration 01420 22022

Email: admin@treehelp.info
Web: www.treehelp.info/

Advice and guidance on tree care and issues
related to trees on development sites.

● Countryside Council Wales

Tel: 0845 1306 229
Web: www.ccw.gov.uk

Advice on protected species and habitats.

● Consulting Arborist Society (CAS)

E-mail: chairman@consultingarboristsociety.co.uk
Web: www.consultingarboristsociety.co.uk

Provides a list of CAS approved
arboriculturists (Tree Consultants).

● British Standards Institute

Customer Services, 389 Chiswick High Road,
London, W4 4AL
Tel: 020 8996 9001

E-mail: cservices@bsigroup.com
Web: www.bsi-global.com

Provision of British Standards.

- **Forestry Commission Wales**,
Rhodfa Padarn, Llanbadarn Fawr, Aberystwyth,
Ceredigion, SY23 3UR
Tel: 0300 068 0300
E-mail: fcwenquiries@forestry.gsi.gov.uk
Web: www.forestry.gov.uk/wales

Advice on felling license controls.

- **Institute of Chartered Foresters**
59 George Street, Edinburgh, EH2 2JG.
Tel: 0131 2401425
Web: www.charteredforesters.org

Provides a list of chartered arboriculturists
(Tree Consultants) and foresters.

- **International Society of Arboriculture (UK& Ireland Chapter)** 148 Hydes Road,
Wednesbury, West Midlands, WS10 0DR,
United Kingdom.
Tel: 0121 556 8302
E-mail: enquiries@isa-arboriculture.org.uk
Web: www.isa-arboriculture.org

Provides guidance and books on trees and
development and produces a list of ISA
certified arborists (Tree Surgeons).

- **National Joint Utilities Group (NJUG)**
111 Buckingham Palace Road, London,
SW1W 0SR.
Tel: 0207 340 8737
E-mail: info@njug.org.uk
Web: www.njug.org.uk

Produces guidance on utilities near trees (NJUG 4).

For further information contact:

*Community Wellbeing & Development
Planning Service
16 Lord Street,
Wrexham, LL11 1LG
Telephone: (01978) 292016.
E-mail: planning@wrexham.gov.uk
Web: www.wrexham.gov.uk*

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