



City & County of Swansea

The Protection of Trees on Development Sites October 2016

The steps that need to be considered at the Planning and Design Stages and during Construction to ensure that significant existing and proposed trees are kept healthy and become an asset to a new development.



An example of the retention of existing and the planting of new trees in the creation of 'Place'.

This page is left intentionally blank

1.0 INTRODUCTION



Example of the retention of existing and the planting of new trees © getmapping.com

- 1.1 This guide has been produced to give developers basic information on how trees are dealt with in the planning system. The document provides clear and consistent guidance to applicants on the requirements of the Local Planning Authority (LPA) with respect to trees and development.
- 1.2 This document relates primarily to trees, woodlands, hedges, hedgerows and large shrubs (hereafter 'Trees'). 'Trees' provide habitat for protected species such as birds and bats that require consideration in the planning process and are protected by other legislation.
- 1.3 'Trees' are of vital importance to the landscape. It is now widely accepted that trees in and around towns and cities have a vital role to play in promoting sustainable communities and make a significant contribution in the cultural and heritage value in the context of a historic park, garden or designed landscape. Trees and large shrubs make a positive contribution to the scenic character and diversity of

the landscape and are important in the creation of 'place', provide vital habitat for dependant wildlife populations and substantial environmental benefits such as improving quality of life, attenuation of noise and improving the climate and air quality. Trees can also help protect buildings from the elements, provide shade and assist in energy conservation. Trees can enhance the setting of new development, its character, sense of maturity and overall quality thus helping with the saleability and profitability of properties. Their positive effect on the environment also helps to attract businesses and visitors to an area, thereby boosting the economy. In addition to legislative protection of trees and wildlife the public's awareness of environmental issues and the health benefits of being near or seeing trees is also increasing. Developers are therefore under increasing pressure to focus attention on trees and their role in providing a more pleasant and healthier environment.

- 1.4 A tree may take a century to reach maturity but it can be damaged or felled in a few minutes. Such damage is frequently caused unwittingly because of a failure to appreciate the vulnerability of trees, particularly the root system, and how easily they can be damaged. Where trees are damaged during development of a site and subsequently decline and die, or where inappropriate or poor design leads to conflict, trees become a constant source of complaint and ultimately, any positive benefits are lost. **Early erection of tree and landscape protection measures to form construction exclusion zones before work commences on site is essential. (See 6.1)**

2.0 LEGISLATIVE AND POLICY CONTEXT

- 2.1 Section 197 of the Town and Country Planning Act 1990 places a duty on local planning authorities to ensure, wherever it is appropriate, that in granting planning permission for any development, adequate provision is made by the imposition of conditions, for the preservation or planting of trees. If it appears to a local planning authority that it is expedient in the interests of amenity to make provision for the preservation of trees or woodlands in their area, Section 198 of the Act provides the power to make a Tree Preservation Order (TPO) for that purpose. Under Section 211 of the Act, trees in conservation areas are subject to similar controls as trees to which a TPO applies.
- 2.2 This guide has been prepared in accordance with guidance contained in Planning Policy Wales, Technical Advice Notes issued by Welsh Government, the City and County of Swansea Unitary Development Plan and emerging Local Development Plan⁴.
- 2.3 **Planning Policy Wales (PPW) Edition 8.** Planning Policy Wales makes it clear that "Trees, woodlands and hedgerows are of great

importance, both as wildlife habitats and in terms of their contribution to landscape character and beauty. They also play a role in tackling climate change by trapping carbon and can provide a sustainable energy source. They also intercept rain fall slowing the rate water enters rivers and drains, preventing soil erosion, whilst also taking water up through their roots. Local planning authorities should seek to protect trees, groups of trees and areas of woodland where they have natural heritage value or contribute to the character or amenity of a particular locality. Ancient and semi-natural woodlands are irreplaceable habitats of high biodiversity value which should be protected from development that would result in significant damage” (PPW Edition 8, para 5.2.9).

- 2.4 It is the responsibility of Local Authorities to ensure that adequate provision is made for the planting or preservation of trees through imposing conditions through a planning permission and /or Tree Preservation Orders.
- 2.5 **Technical Advice Note (TAN) 10: Tree Preservation Orders.** TAN 10 supplements Planning Policy Wales and states that under the Town and Country Planning Act 1990 (section 198) Local Planning Authorities are empowered, in the interests of amenity, to protect trees and woodlands by making Tree Preservation Orders (TPOs). As such, any tree or woodland that has a TPO attached to it is legally protected from cutting down, uprooting, topping, lopping, wilful damage or destruction without consent from the Local Planning Authority.
 - 2.5.1 Tree Preservation Orders should be considered where provision should be made for the preservation of trees or woodlands in the interest of amenity (TAN10; para 14). TPOs should be made where the removal of trees and woodlands would have a significant impact on the environment and its enjoyment by the public. TPOs cannot be made on bushes, shrubs or hedgerows (however they can be made on trees within hedgerows).
 - 2.5.2 The Draft City and County of Swansea Protected Tree Policy details the approach of the Council in protecting trees and how the guidance in TAN 10 is interpreted.
- 2.6 **City and County of Swansea Unitary Development Plan.** Policy EV30 states that: “Protection and improved management of woodlands, trees and hedgerows which are important for their visual amenity, historic environment, natural heritage, and/or recreation value will be encouraged, with priority being given to:
 - i. Protecting the remaining areas of ancient semi natural woodland and planted ancient woodland sites.

- ii. Promoting new planting with species appropriate to the location, where there is no conflict with other land uses or nature conservation interests, and
 - iii. Ensuring that where management involves commercial felling and replanting, protection of amenity interests is achieved.”
- 2.7 The emerging Swansea LDP has a more detailed approach to sustaining tree cover within the City and County of Swansea. (Policy ER 11: Trees and Development)⁴

3.0 PREVENTING DAMAGE DURING CONSTRUCTION

- 3.1 In addition to the obvious parts of the tree (canopy, branches and stem), the hidden roots can also be damaged during construction. In general terms tree roots are found in the upper 600mm of soil, although root distribution can be deeper dependant on site conditions and tree species. They consist of structural roots which anchor the tree and a network of smaller roots that uptake water and nutrients.
- 3.2 **Maintaining soil structure.** An ideal soil for root growth and development contains about 50 percent pore space for water and air movement. Heavy construction equipment and/or repeated pedestrian movements can compact topsoil and subsoil dramatically reducing pore space. Compaction inhibits root growth, limits water penetration, and decreases oxygen needed for root survival. (See 4.4)
- 3.3 **Maintaining a healthy root structure.** Digging, grading, and trenching associated with construction and underground utility installation can be very damaging to roots. A tree’s root system can extend horizontally a distance one to three times greater than the height of a tree. Excavation in a tree’s root protection area can reduce tree vitality leading premature death of the tree(s). Cutting roots close to the trunk can severely damage a tree and cause it to fail in high winds. (Refer to section 4.3)
- 3.4 **Maintaining original soil levels.** The majority of fine water-and-mineral-absorbing roots are in the upper 15 to 30 cm of soil where oxygen and moisture levels tend to be best suited for growth. Even a few centimetres of soil piled over the root system to change the grade can smother fine roots and eventually lead to larger root death and the loss of trees.
- 3.5 **Avoiding root / soil contamination.** Spillages of fuels, construction chemicals or uncontrolled cement run off can change soil pH or poison tree roots.

- 3.6 **Avoiding physical impact.** Construction equipment can injure the above-ground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.
- 3.7 **Avoiding exposure.** Trees in a group grow as a community, protecting each other from the elements. Trees can grow tall with long, straight trunks and high canopies; removing neighbouring trees during construction exposes the remaining trees to increased sunlight and wind which may lead to sunscald or breakage of limbs and stems and potentially windthrow of remaining trees.

4.0 INCORPORATING TREES INTO THE DEVELOPMENT

- 4.1 **British Standard 5837:2012 - Trees in relation to design, demolition and construction – Recommendations**, will be regarded as the overriding document detailing the standard and guidance for a balanced approach on deciding;

- Which trees are appropriate for retention;
- The effect of trees on design considerations; and
- The means of protecting these trees during development.

Variation from the guidance in BS5837:2012 Trees in relation to design, demolition and construction – Recommendations, will require justification on a site specific basis.

- 4.2 **Design Stage:** A tree survey in accordance with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations, provides important information to enable decisions to be made about which trees should remain and consequently the location of development on a site. For this reason **a tree survey should be commissioned as early as possible in the process to inform the design.** Early arboricultural advice in some cases will also highlight if a scheme is viable or not.
- 4.3 When identifying trees for retention regard should be taken of their quality and condition, their potential for future growth, longevity and where applicable, their value as a group.
- 4.4 Principally a tree constraints plan should show the root protection areas and canopy spreads of the trees. The root protection area (RPA) is the **minimum** area that a tree requires to ensure that it can continue to survive. **For a single stem tree this area is a circle with a radius of 12 x the stem diameter, measured 1.5m above ground level.** The RPA should be modified from a circle if the topography dictates or if there is an obstruction preventing root

growth in a particular direction. Tree roots can extend further than this area and at times should be protected beyond it (See 4.8).

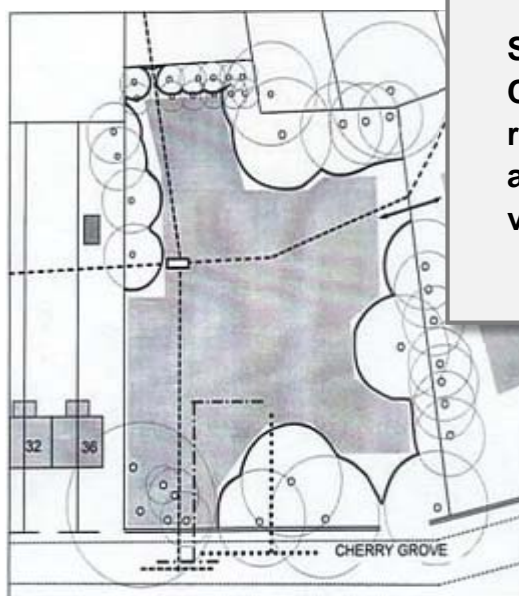
- 4.5 Any development, excavation or access within a RPA will not usually be permitted unless measures are taken to prevent damage to the tree(s) and agreed in writing by the LPA prior to development.
- 4.6 During the design and planning stages various factors must be taken into account. This should include, but is not limited to, the following:
- Tree Preservation Orders / Conservation Area protection, and protected wildlife.
 - The effects of development proposals on the amenity value of trees (post design).
 - Below ground constraints: root distribution, suitable root protection areas taking into account root morphology.
 - Above ground constraints: overbearing and large trees close to buildings/proposed development, shading to rooms and gardens, positions of infrastructural provisions that could impact upon, and be impacted by trees. Future growth of the trees should also be taken into account. Design guidance to reduce solar shading can be sought from BRE "*Site layout planning for daylight and sunlight: a guide to good practice (BR 209)*"²⁰
 - Change in hydrology – decreasing available water or waterlogging
 - Design should minimise conflicts between highways, streetlights, advertisement and signage, kerbs/haunching, hard surfacing, soft landscaping treatments and existing trees.
 - Secured by design requirements and CCTV provision
 - Mitigating conflicts between finished levels and existing trees.
 - Where the site is affected by shrinkable/ expandable clay soils, attention shall be given to the design of building foundations, walls and pavements such that they are sufficient to avoid future problems of movement exacerbated by tree roots of existing trees and new tree planting.
 - Routing of any underground services. It is unacceptable for underground services to be routed through the Root Protection Areas of existing trees.
 - Soakaways should not be installed close to trees as tree roots may exploit such areas and feeder drains may become blocked.
 - The principle of balancing tree, shrub and hedge removal with the quality of the proposed landscaping requires careful consideration at the outset and should not be considered as an afterthought. There is likely to be ongoing protection of any proposed tree planting by TPO to mitigate the loss of trees that may have been removed as part of the development process and in the creation of place. (See 8.6)
- 4.7 Ancient trees are trees in their third or final stages of life for the given species and are 'old' in comparison to trees of the same

species. A Veteran Tree may not be old but because of its environment or life experiences has developed the valuable features of an ancient tree. Both classifications of trees are less capable of surviving tree surgery or root disturbance. Ancient trees are of historic interest and a valuable part of our cultural heritage. Each individual tree is a survivor from the past and a relic of a former landscape. They are a living document of past management practices and ways of life. Britain has some 80% of Europe's 'ancient' trees. If veteran or ancient trees / woodland are identified on site they must be considered carefully in relation to a development proposal and every attempt must be made to integrate the tree into a development proposal from an early stage to secure its long-term survival and retention. Ideally ancient trees would be retained within public open space to minimise future pressure from residents requiring the removal of the tree from within their curtilage. Veteran and ancient trees are given special consideration in the UDP and emerging LDP⁴.

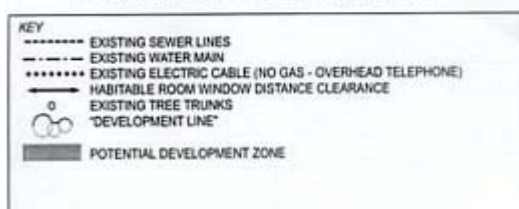
- 4.8 The root protection area for ancient trees will be considered in favourable site conditions to be 15 x the diameter of the stem at 1.5m from ground level (*Veteran Trees: A guide to good management*). This is to take into account their intolerance of root disturbance.
- 4.9 Whilst the tree survey shall inform the design process and ultimately the site layout, the LPA recognises the competing needs of development and that trees are only one factor requiring consideration. However, certain trees, woodlands and hedgerows are of such importance and sensitivity as to prevent development occurring or substantially modify its design and layout.
- 4.10 Care shall also be taken to avoid misplaced tree retention; attempting to retain too many low quality trees, unsuitable trees or trees that are unlikely to survive the development process on a site may result in excessive pressure during and after the development work and subsequent demands for their removal. The end result may be a poor design with fewer trees or less suitable and sustainable tree cover than would be the case if careful planning and expert arboricultural and/or landscape advice had been employed from the outset.
- 4.11 Trees can impinge on many aspects of site development. Throughout the development process all members of the design team should give adequate consideration to the requirements of trees. **Even if trees are not present within the site, off site trees and areas for planting trees, where potentially affected, should be identified and plotted on the Tree Constraints Plan and protected from damage or compaction.**

5.0 APPLICATION REQUIREMENTS

- 5.1 Whilst building works carried out as **permitted development** do not require any documentation to be submitted to the LPA, it will be generally in the best interests of a householder to consider trees using the guidance in this document. Permitted development rights do not allow damage to protected trees (including qualifying trees within a Conservation Area ⁵) and a tree works application will be required if work is likely to affect protected trees. Construction will need to comply with building regulations and foundation design should follow guidance in NHBC Standards, Building near trees, (See 4.2)¹⁴
- 5.2 Trees on neighbouring land potentially affected by permitted development should also be considered as action can be taken under common law if damage causes the death of the tree or harm to the neighbouring people or property. (See also 4.11)
- 5.3 **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 (i.e. off-site) should be accurately plotted on a block plan. Details of which trees are to be retained, removed and pruned should be shown.
- 5.4 Where the block plan shows a conflict between the proposals and trees then a more detailed Arboricultural Impact Assessment may



Sample Householder Constraints Plan. To be replaced by a more appropriate plan in final version



be required after consultation with the Councils Arboriculturalist. Submitting this at the outset may reduce delays in processing the application.

- 5.5 **For larger scale development** (e.g. new build, mineral workings and waste development proposals) where trees are on or within influencing distance (i.e. off-site) of the proposed development site, a land survey, a BS 5837 tree survey and an Arboricultural Impact Assessment is likely to be required.
- 5.6 Where possible a Tree Protection Plan and an Arboricultural Method Statement and often a Landscape Plan will be a condition of planning, and this information may be required to demonstrate that the development is feasible prior to approval.
- 5.7 An application for **outline permission** will normally only require a tree survey, however if the indicative layout or density shows development close to trees then an Arboricultural Impact Assessment is likely to be required / should also be submitted. This will evaluate future potential conflicts between the development and the final size of adjacent trees and hedgerows that are to remain. If the impacts are considered a threat to the trees then a Tree Protection Plan and an Arboricultural Method Statement may also be required.

	Householder Applications	Outline Applications	Full Applications
Trees & Hedges Plotted on Block and Site Layout Plans	✓	✓	✓
Indication of Services and Drainage	* (maybe required)	* (maybe required)	✓
Land Survey	X	✓	✓
BS 5837 Tree Survey	* (maybe required)	✓	✓
Arboricultural Impact Assessment (AIA)	* (maybe required)	✓ (if impacts to trees are foreseeable)	✓
Tree Protection Plan (TPP)	* (maybe required)	✓ (maybe required to show development is feasible or will be a reserved matter)	✓ (can be conditioned)
Arboricultural Method Statement (AMS)	* (maybe required)	✓ (maybe required to show development is feasible or will be a reserved matter)	✓ (can be conditioned)

Table 1: Documentation required with different types of application.

6.0 PLANNING CONDITIONS

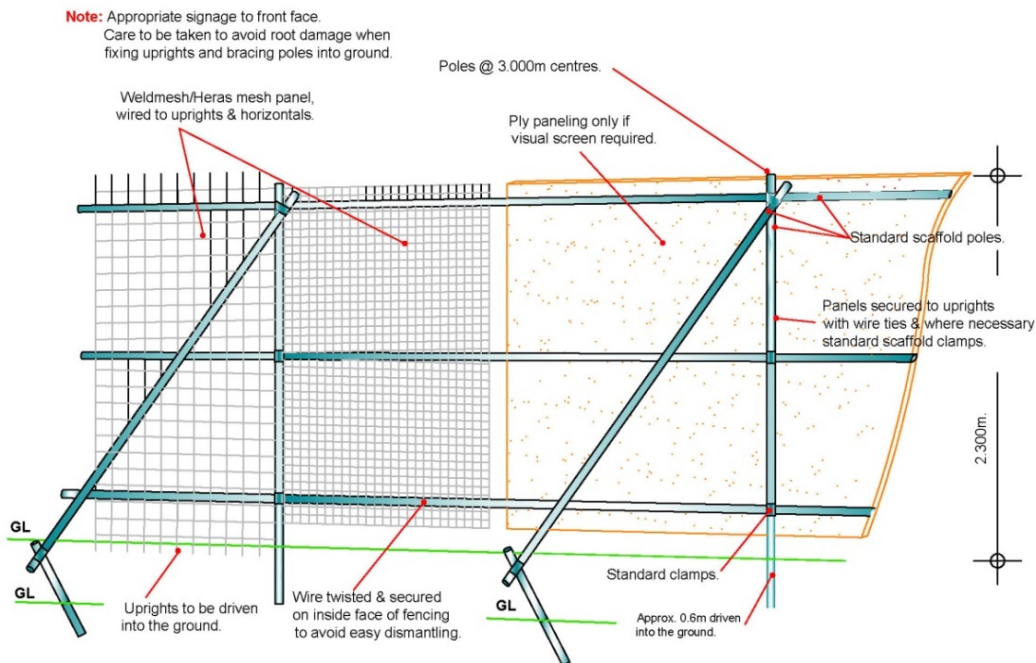
- 6.1. A tree protection scheme is more likely to be successfully implemented if submitted and approved as part of the planning application.
- 6.2 Conditions will be attached to a planning permission to ensure that that the Root Protection Areas of retained trees are adequately fenced off for the duration of the demolition/construction phase of the development.
- 6.3 Developers will be required to notify the LPA prior to commencement of any works on site, including demolition or vegetation clearance. At this stage the Council Officers may inspect the measures that have been put in place to protect trees during construction. Ad-hoc visits will be made throughout the construction phase to check that tree protection measures are still in place. The LPA will exercise its powers of enforcement, where necessary, to ensure compliance.
- 6.4 The LPA will not only expect developers to obtain the appropriate professional advice during the application stage but may also attach a condition to ensure adequate supervision of the construction phase by the developer's own Arboriculturist.
- 6.5 If difficulties are experienced at any time during the construction process in complying with conditions relating to trees (e.g. in maintaining the distances of protective fencing in accordance with the Tree Protection Plan) and it is desired that the terms of any conditions be modified, it will be necessary to consult with and get written approval of the LPA prior to carrying out any changes.
- 6.6 **Failure to comply with Planning Conditions:** Where a breach of any tree protection related planning condition is identified, the LPA will take appropriate enforcement action. This may include serving a 'Stop Work Notice' on a construction site where a contravention has occurred, or the instigation of legal proceedings under Section 210 of The Town & Country Planning Act 1990.

7.0 TREE PROTECTION PLAN AND THE ARBORICULTURAL METHOD STATEMENT

- 7.1 **Tree protective fencing must be in place before any aspect of development starts** and maintained in this position throughout the lifetime of the development. The fencing must be in position prior to demolition, commencement of ground works, materials being brought onto site etc. The majority of damage to soil and trees on development sites occurs during these activities. If alternative fencing layouts are needed for the various stages of demolition and

construction these must be detailed on the Tree Protection Plan with a clear definition between layouts and ‘phases’.

7.2 All operatives should be aware of all tree protection measures and a

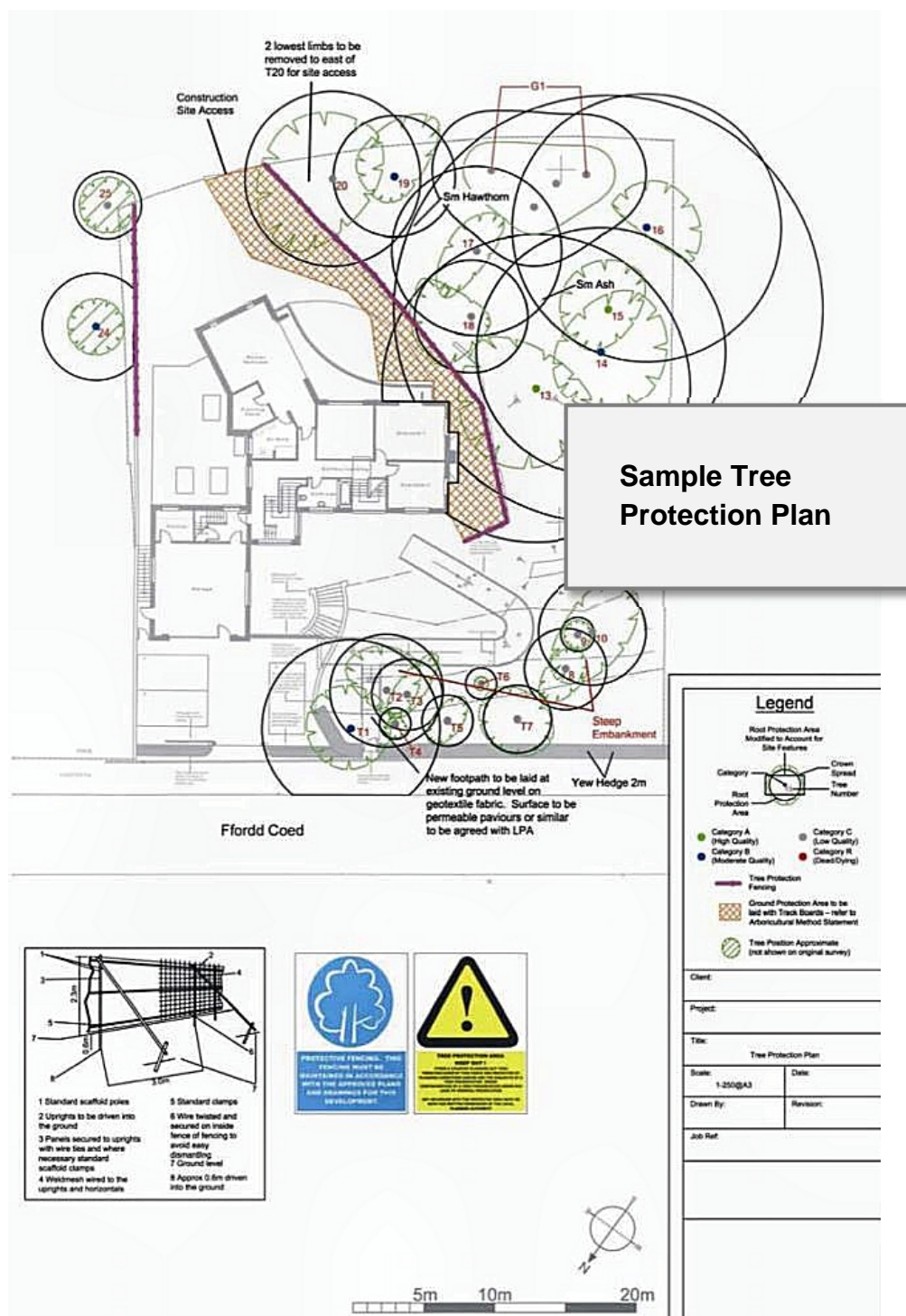


Typical Detail: Tree Protection Fence To BS5837

copy of the approved Tree Protection Plan, any Arboricultural Method Statements and a copy of the planning consent with conditions **should be available for inspection on the site**. The following simple rules **MUST** be adhered to throughout the demolition and construction phases of the development:

- Do not remove the protective fencing around a RPA for any reason without prior approval.
- Repair any damage to the protective fencing around a RPA immediately.
- Do not park or operate machinery and equipment near trees.
- Do not store materials within the RPA. Contaminants (fuel, oil and chemicals) must be stored at least 10m away from the protected area.
- Do not mix cement near trees (See also 7.6)
- Do not light fires within 10m of any tree and beware of flames drifting towards branches.
- Do not secure temporary overhead cables or floodlights to trees.
- Do not change the ground level or excavate within the branch spread of existing trees.

- 7.3 The purpose of the Tree Protection Plan is to provide the precise location and physical protection measures, including ground protection, for trees woodlands or hedges present on or immediately adjacent to the development site that are identified for retention and are likely to be affected either directly or indirectly by the development. The plan must be fit for purpose and have enough detail so that a contractor can install the measures.
- 7.4 The Tree Protection Plan shall take account of the RPA, areas of proposed structural landscaping, trees to be retained and removed and the precise location of protective barriers and their signage. Barriers shall be fit for the purpose of excluding construction activity and appropriate to the intensity and proximity of work taking place around trees selected for retention. In certain circumstances standard Heras, chestnut pale or orange barrier mesh fencing may be appropriate. However, deviation from the default British Standard will require justification;
- 7.5 **The Tree Protection Plan** shall give details of:
- The physical means of tree protection on site, indicated through drawings and/or descriptive text.
 - The position of the tree protection fencing and any ground protection showing the actual position with dimensions from a fixed point.
 - Dimensions of the exclusion zone and position and type of signage identifying them as an exclusion zone shall be noted on the Tree Protection Plan.
 - The protective fencing requirements appropriate for the development should be identified within the Tree Protection Plan and approved in writing by the LPA prior to the commencement of work on site.
 - Where approved work is detailed to occur within the RPA, details of the re-aligned position of fencing, along with specific ground protection details shall be supplied.
 - The plan must be to a suitable scale, with a north point and scale bar.



7.6 An **Arboricultural Method Statement** shall describe construction operations to be undertaken in proximity to trees as highlighted in the arboricultural impact assessment. The Arboricultural Method Statement shall make allowance for, and plan, all construction operations to be undertaken in proximity to trees. This shall include, but is not limited to, the following aspects;

- Site construction access;
- The intensity and nature of the construction activity;
- Special engineering solutions (foundations etc.) to protect trees;
- Specification of no-dig surfacing details within tree RPAs and method statement;
- Method for approved excavation in RPA's;

- Contractors car parking and phasing of construction works;
- Space required for foundation excavations and construction works;
- The location and space required for any service runs, both underground and overhead, including: foul and surface water drains, land drains, soakaways, gas, oil, water, ground source heat systems, electricity, telephone, television or other communication cables;
- All changes in ground levels including the location of retaining walls and steps, making adequate allowance for the foundations of such structures, drainage and back filling;
- Space for cranes, plant, scaffolding and access during works;
- Space for site huts, temporary toilets (including their drainage) and other temporary structures;
- The type and extent of landscape works which will be needed within the protected area, and the affect these will have on the root systems
- Space for storage (whether temporary or long-term) materials, spoil and fuel and the mixing of cement and concrete (including storage);
- The effect of slope on the movement of potential harmful liquid spillages towards or into protected areas.
- Particular attention, where applicable, to be given to the height of storage of topsoils and subsoils that is to be reused and should be dealt with as per BS 3882:2015 and BS 8601:2013
- Measures for dealing with Japanese Knotweed / Himalayan Balsam etc.
- Any proposed arboricultural watching brief to monitor and confirm the implementation and maintenance of tree protection measures.
- Tree surgery specification (in accordance with BS3998:2010 Tree work – Recommendations)
- Method for mitigating any accidents or contravention of the Tree Protection Plan.

8.0 TREE AND SHRUB PLANTING

- 8.1 Appropriate new tree, shrub and hedgerow planting, amongst other landscaping proposals, may be required on development sites to enhance amenity, mitigate for any loss of tree canopy cover and to provide a sense of 'place'. It may also be to mitigate for a loss of biodiversity due to tree felling.
- 8.2 Planting should be carried out in accordance with British Standard BS8545 '*Trees: from nursery to independence in the landscape – Recommendations*'.
- 8.3 The choice of trees to be planted should consider the layout and design of the site, future use, soil and climatic conditions, local landscape character and contextual surroundings. Sufficient space must be planned within the layout to allow trees to reach their mature size.

- 8.4 Planted trees should be of a species that at maturity achieve a size and form compatible with the scale and structure of the development.
- 8.5 Where tree planting is proposed within hard surfaced areas (e.g. parking areas and footpaths) details of the drainage / irrigation (where necessary) and size of planting pits must 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 the Reference section.)
- 8.6 Commercial and large scale development should consider how trees can be integrated into the development taking into account other factors such as Sustainable Drainage Systems (SuDS) requirements. Guidance on tree integration can be found in *“Trees in the Townscape: A Guide for Decision Makers”* and be delivered using guidance in *“Trees in Hard Landscapes: A Guide for Delivery”*. (See UDP Policy EV35 ‘Surface Water Run-off’)
- 8.7 **Protection of trees after the development is complete.** Both newly planted trees and existing ones retained within a development should be cared for after the development is complete. Conditions will normally be placed on planning consents to ensure that if any new tree included in a landscaping scheme of a development becomes unhealthy, or dies within 5 years of the completion of the development (or other conditioned period of time for the replacement of tree and shrub failures), it will be replaced by a new tree of like species, similar in age and size to the tree to be removed and at the same location. After 5 years (or other conditioned period of time for the replacement of tree and shrub failures) have elapsed following the completion of the development the LPA may consider making TPOs on the trees protected previously by condition.

9.0 PROFESSIONAL ADVICE

- 9.1 Who do you need to employ, Tree Consultant, Landscape Architect or Tree Surgeon / Contractor?
- A Tree consultant will give professional advice on the health and/or safety of a tree; relationships with proposed or existing buildings and development sites or any other tree issue requiring a report.
 - A suitably qualified, experienced and resourced Landscape Architect will give comprehensive advice on working with and the protection of the existing landscape, will design and ‘make’ great places and may give advice on existing tree issues. See links to the Landscape Institute (LI) in the Contacts page to see what a Landscape Architect can offer, the categories of membership of the LI and find a Practice with the skills and expertise you need.

- A qualified, competent and experienced tree surgeon / contractor will give a professional service including pruning, and removal and may give basic advice on tree condition and tree management operations as required.

The LPA is unable to recommend who to employ but further guidance is set out below.

9.2 **Tree Consultant.** A tree survey should be undertaken by a suitably qualified and experienced arboriculturist (as required by BS5837). All reports must specify the qualifications held by the arboriculturist and all surveyors. A professional providing this type of service **should hold Professional Indemnity Insurance** and one of the following qualifications or industry recognised standards:

- Certificate in Arboriculture level 3/4 (Tech Arbor A).
- Diploma in Arboriculture level 6 Dip Arb (RFS)
- BSc or MSc (Degree or Masters) in arboriculture.
- Professional Member or Fellow of the Institute of Chartered Foresters] attained by an arboricultural route / Chartered Arboriculturist (MICFor / FICFor)
- Fellow of the Arboricultural Association Arboricultural Association Registered Consultant

9.3 **Tree surgeon / contractor.**

Picking the wrong contractor could lead to:

- Injury to people,
- Damage to property,
- Irrevocable damage to trees that have taken many years to grow.

Tree work operations (arboriculture) require a high degree of technical competence, supported by training and experience. For these reasons tree work should only be undertaken by well trained, suitably resourced, competent contractors who hold adequate insurance. Look for:

- Employers Liability and Public Liability Insurance (recommended min £5 million)
- NPTC Certificates of Competence
- Written quotations
- Membership of a professional organisation. (Membership does not guarantee work standards but does show a degree of commitment)
- References for similar work

9.4 An arboriculturist (e.g. an arboricultural Consultant) can help you prepare the necessary documentation required by the LPA in support of a planning application.

REFERENCES

- ¹ **Planning Policy Wales** (Edition 8, January 2016)
- ² **Technical Advice Note (TAN) 10: Tree Preservation Orders** (1997)
- ³ **City and County of Swansea Unitary Development Plan.**
Adopted November 2008
- ⁴ **City and County of Swansea Emerging Local Development Plan 2016**
- ⁵ **City and County of Swansea Draft Protected Tree Policy**
- ⁶ **British Standard BS5837:2012 Trees in relation to design, demolition and construction - Recommendations**
- ⁷ **British Standard BS3998:2010 Tree Work – Recommendations**
- ⁸ **British Standard BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations**
- ⁹ **British Standard BS3882:2015 Specification for topsoil**
- ¹⁰ **British Standard BS8601:2013 Specification for subsoil and requirements for use**
- ¹¹ **'Tree Roots in the Built Environment'**. (2006). Department for Communities and Local Government (DCLG)
- ¹² * **'Up by Roots' - Healthy Soils and Trees in the Built Environment.** James Urban. (ISA) (2008).
- ¹³ * **'Urban Trees: A Practical Management Guide'**. Steve Cox. (2011)
- ¹⁴ **NHBC Standards, Building near trees, Chapter 4.2**
- ¹⁵ **'Ancient Tree Guides No. 3: Trees and Development.'**
- ¹⁶ **'Ancient and other veteran trees: further guidance on management'**. Lonsdale (2013)
- ¹⁷ **'Veteran Trees: A guide to good management'**. Helen Read. (2000). All ancient / veteran tree books are available from www.woodlandtrust.org.uk as a free download.
- ¹⁸ **'Trees in the Townscape: A Guide for Decision Makers'**. 2012. TDAG
- ¹⁹ **'Trees in Hard Landscapes: A Guide for Delivery'**. 2014. TDAG. Both TDAG books are available as a free download at <http://www.tdag.org.uk>
- ²⁰ **'Site layout planning for daylight and sunlight: a guide to good practice (BR 209)'** BRE. P.Littlefair

USEFUL CONTACTS

- **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 Consultants

- **Landscape Institute (LI)**
107 Grays Inn Road
London WC1X 8TZ
Tel: 020 7685 2640
<http://www.landscapeinstitute.org>

See what a Landscape Architect can offer and find a practice with the skills and expertise you need.

- **Consulting Arborist Society (CAS)**
Email: chairman@consultingarboristsociety.co.uk
Web: www.consultingarboristsociety.co.uk

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

- **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

For more information contact:

- **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.

- **Planning and City Regeneration**
City and County of Swansea
Council
Civic Centre
Oystermouth Road
Swansea
SA1 3SN
01792 636000
planning@swansea.gov.uk
ProtectedTrees@swansea.gov.uk
www.swansea.gov.uk