Guidance on tree issues where they are an integral part of a proposed Planning Application.
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Trees and Development Guidelines

Introduction

The visual contribution of trees to the built environment has long been recognised. In addition, trees provide important habitats for wildlife, help to improve air quality, reduce rain water run-off, provide shelter and are integral to the character of the countryside. Trees therefore have a significant role to play in achieving sustainable development.

Trees are living organisms, which are sensitive to changes in their environment and can all too easily be damaged or destroyed by construction operations. Their successful integration into a new development scheme depends on the selection of appropriate trees for retention, informed layout design and careful implementation. As part of this process it is necessary to consider the value of the trees within the context of the existing landscape character. This is the primary function of British Standard 5837 ‘Trees in Relation to Construction’, which was revised in 2005.

Legal Framework

The Town and County Planning Act 1990 makes it a duty of the Local Planning Authority:

- To ensure whenever possible that in granting planning permission for any development, adequate provision is made by the imposition of conditions for the preservation or planting of trees.

- To make such orders (Tree Preservation Orders) under Section 198 as appear to the Authority to be necessary in connection with the grant of such permission whether for giving effect to such conditions or otherwise.

North Kesteven have also adopted other policies within the Local Plan that may also be applicable on certain sites. Familiarity with this Local Plan is therefore encouraged.

Statutory Tree Protection

Local Authorities have a statutory power to make TPOs when considering planning applications if the trees merit protection. TPOs may be made either to prevent the removal of significant trees, or to protect significant trees from damage. Trees with TPOs require consent from the Local Authority before they can be pruned or removed but a Full Planning Consent allows any work necessary to be carried out without the need for a separate application under the TPO Regulations.

All trees (with some exceptions) within Conservation Areas that have a stem diameter of at least 7.5 cm measured at 1.5m above ground are automatically protected, and pruning or removal requires the consideration of the Council so
there is the opportunity to make a TPO if justified.

Planning Applications and Trees

Trees can impose restrictions on site use through the constraints of their Root Protection Area, crown spread, loss of light through shading, physical size, species, condition and location.

Trees are a material consideration in the planning process and can have a major influence on the planning process and end use. Existing trees of good quality and of appropriate species can add to the quality of a development, and increase its value. Trees may on occasion, preclude development of land but in many cases, with careful planning they can be successfully integrated into new development schemes. The retention of inappropriate trees imposes unnecessary restrictions on the site and should be avoided. Such trees are unlikely to be retained by future occupiers.

It is important to identify significant trees early in the planning process and to successfully incorporate them into the new environment. To this end, it is advisable to carry out a tree survey to assess the Arboricultural Constraints on the site in order to inform the design process. Once designed, it may be appropriate to write an Arboricultural Implications Assessment to support an application.

Trees should not be retained on the basis that their ultimate branch spread can be significantly controlled by periodic pruning. A reasonable separation must be achieved, which allows for important trees to develop in the long term. The three most important aspects of tree protection on developments sites are:

a) Deciding which trees to retain and which trees to remove

b) Determining sustainable tree/building separations

c) Protecting trees effectively during the construction process

An Arboricultural Consultant is likely to be able to provide the information required and in many cases, enable the planning application to be registered and determined more quickly.

The process may not be necessary for all planning applications. For example, planning applications for a single conservatory may not require the level of detail that needs to accompany a planning application for the development of a site with one or more dwellings. If in doubt please contact the Council Tree Officer.

Trees and Development British Standard process

The following table outlines the requirements of the British Standard. It is not however, a substitute for it. Prospective developers should obtain a copy of the Standard from the British Standards Institute on 020 8996 9001 or [www.bsi-global.com](http://www.bsi-global.com)
<table>
<thead>
<tr>
<th>BS Stage</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>a) Land Survey</td>
<td>An accurately measured topographical survey to scale showing all trees present on a scaled plan. Trees on adjacent sites should also be shown which are within a distance equal to 12 times their stem diameter. The land survey should include locations of all trees, shrubs and hedges, other relevant features such as streams and buildings, and spot level heights.</td>
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<tr>
<td>b) Tree Survey</td>
<td>Survey information should include: ref number, species, height, stem diameter, branch spread at four cardinal points, crown clearance height, age class, condition, management recommendations, life expectancy, and British Standard (BS) categorisation. Details of Tree Preservation Orders, Conservation Areas, Planning Conditions.</td>
</tr>
<tr>
<td>c) Tree Constraints Plan</td>
<td>The influence that trees have on site layout is plotted. This includes the below ground constraints posed by the Root Protection Area (RPA), and the above ground constraints posed by size, position, and future growth potential and a shade footprint through the main part of the day as described in Section 5.3 BS5837. Protected areas are calculated from the information collected from the tree survey - see BS 5837 Table 2.</td>
</tr>
<tr>
<td>d) Initial Design</td>
<td>The initial design of the site should include locations of: Roadways and sewers, Building footprints (outline including patios, paths etc.), Drains, Hard Surfacing. Details should also be included of the depth and width of any excavations and level changes necessary to implement the above.</td>
</tr>
<tr>
<td>e) Negotiation (prior to application)</td>
<td>Once the initial design has been received the Council’s Tree Officer will examine the tree information, building design and footprints, to ensure they comply with good practice and the relevant British Standards. In an ideal situation, the information provided will be acceptable, in other cases changes may be recommended, or additional information required. The Tree Officer will seek to reach a negotiated design solution wherever possible, although in some circumstances significant trees may constrain design.</td>
</tr>
<tr>
<td>f) Tree Protection and/or Removal</td>
<td>Refer to the BS categorisation (A/B/C, or R). Remember that there may be a legal obligation to retain certain trees, including the replacement of dead and/or dying trees in classes C or R. Particular care and attention should be given to veteran and aged trees.</td>
</tr>
</tbody>
</table>
| g) Design (application submitted) | BS 5837 recognises that Protected Areas are not completely ‘no go’ areas, and that exceptionally it is possible to construct Roadways, Sewers and Buildings within Protected Areas. This is, however likely to be complicated and, without a tree-friendly and informed builder, has great potential to go wrong and damage the trees concerned. Appropriate engineering solutions may include:

Roadways: Geotextile membrane on existing ground level, building up with stone and permeable surfacing. Sewers: install by trenchless techniques Buildings: Pile and beam or raft type foundations (see NHBC Standards Chapter 11.6.) Bespoke building design to minimize potential loss of light. |
| h) Planning Approval and Conditions | Once the development has been approved, construction may begin once planning conditions have been satisfied. Various Tree Conditions may be applicable and may include the need to erect protective fencing and ground protection. There may also be a requirement to submit a Method Statement detailing a methodology for operations such as constructing a driveway beneath a tree, phasing of construction works, or pile and beam foundations.

In most cases a pre-commencement site visit will be required where details of working procedures in respect of tree protection will be finalised. |
| Tree information accompanying planning applications should substantially follow the format of British Standard (BS5837, 2005). Planning applications submitted which do not conform to this Standard may be rejected as insufficient to be able to determine the application |
Tree Damage During Construction

Irreparable damage can occur in the first few days of a contractor’s occupation of a site. The early erection of protective fencing and ground protection to form the construction exclusion zone, before works commence, is essential to prevent damage – see diagram below.

![Diagram of Protective barrier](image)

1. Standard scaffold poles
2. Uprights to be driven into the ground
3. Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4. Weldmesh wired to the uprights and horizontals
5. Standard clamps
6. Wire twisted and secured on inside face of fencing to avoid easy dismantling
7. Ground level
8. Approx. 0.6 m driven into the ground

**Figure 2 — Protective barrier**

The most important part of a tree, its roots, are hidden. Most tree roots occur within the top 600mm of soil, extending radially for distances frequently in excess of tree height. Trees need roots for anchorage, water uptake and energy. Damaging tree roots may kill or weaken the tree and, in some instances, may cause the tree to fall. Tree roots require oxygen to survive. Compaction caused by vehicles can asphyxiate tree roots.

The document which describes the physical and management arrangements for protecting trees is called the ‘Arboricultural Method Statement’ in BS5837. This document, which will typically include a plan, may be required as a Condition to any Approval. It may be beneficial to provide an Arboricultural Method Statement for a tree sensitive site with the original submission.

Potential Damage to Structures

Check British Standard 5837 Table 3 to ensure that structures are not likely to be damaged by retained or newly planted trees.

Future Building Use

The end use of the building will have an effect on the long term viability of retaining such trees, e.g. a large tree on the southern side of a dwelling frontage may cause unreasonable shading and over-dominance.
It is vital to allow sufficient separation between buildings and mature trees to prevent over dominance and apprehension, as this may lead on to pressure to fell trees.

Current and Future Tree Size

Existing and ultimate crown spreads should be considered. This information will assist in designing the development to accommodate retained trees not just at the time of development completion, but also for when the tree reaches its mature size.

Tree Information Required

On sites where trees may be affected by development an Arboricultural Implications Assessment and Arboricultural Method Statement is likely to assist the LPA in determining the application.

As well as construction details the Method Statement should refer to temporary features such as details of vehicular access for construction traffic, areas for material storage, site huts, etc. as well as details of protective fencing and any other methods to be used for protecting trees both during and after the development.

Temporary access through Root Protection Areas may be achieved using appropriate ground protection such as Geo-web and fencing.

Tree Felling and Surgery

It is preferable to undertake any approved felling or surgery prior to commencement of building operations once planning approval has been granted. All such works should conform to British Standard 3998.

Tree Planting and Landscaping

Landscaping and replacement planting is sometimes required. It is useful to have detailed plans submitted as part of the Design Statement but it is typical for Landscaping to be dealt with by way of Condition.

Allowing sufficient space for new trees will inform and compliment the design process. Car parks and open spaces often provide excellent opportunities for tree planting.