BS5837:2012 – Trees in relation to design, demolition and construction – Recommendations

Epping Forest District Council

In April 2012 the revised - BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations came into force.

The revision updates and supersedes the previous BS 5837:2005 (Trees in relation to construction). This note summarises its requirements and provides a reminder of best practice for LPAs in general, and within EFDC in particular. Amongst other changes the new British Standard gives additional weight to the need to retain and protect veteran trees.

Statutory duty to consider trees -

The context is Town and Country Planning Acts s 197(a) which gives the LPA the statutory **duty** to consider the preservation and planting of trees when granting planning permission, and the strong local plan policies. The potential effect of development on all trees is a material consideration irrespective of whether they are protected by TPO/ conservation area status, or not.

The recommendations of the standard apply where there are trees on the site or within 15m of it. Consideration of trees is required for all 'full',' householder' ,'outline' applications or where works are being undertaken under permitted development rights. Tree team advice on the impact of development on trees, recommendations and requirements for information will be based on this British Standard.

British Standard procedures

There are 3 stages within this new standard, –

1. planning application,
2. application for approval of conditions and
3. implementation and aftercare.

STAGE 1 - Planning application

Key issue: has feasibility been demonstrated?

-At this stage it is the feasibility of the proposal that needs to be demonstrated. Lack of the necessary information would be grounds for refusal. The following tree related information should be submitted –

- Arboricultural Impact Assessment to include -
    - A full tree survey

- A tree retention / removal plan.
- Evaluation of tree constraints.
- Retained trees and Root Protection Areas (RPAs) to be shown on proposed layout plans.
- Strategic hard and soft landscape design, including species and location of new tree planting.
- Arboricultural method statement to demonstrate feasibility, without causing harm to the tree,, particularly when construction is said to be necessary within the RPAs
- Tree protection plan.

Additional information eg a daylight / sunlight assessment, may also be required depending on the site conditions, retained trees and development proposal.

Root Protection Areas

The default position is that structures (ie building, road, driveway, path, wall or service run) are located **outside** the RPAs of trees to be retained. Where there is an overriding justification for construction within the RPA, technical solutions to prevent damage may be explored, subject to additional provision elsewhere and other mitigation measures (eg to improve soil conditions).

No construction, including the installation of hard surfacing should be allowed within the RPA of any veteran tree.

Lack of the required information will be grounds for refusal, in that it has not been demonstrated that the proposal could be implemented without a detrimental impact on trees on or adjacent to the site (ie is contrary to Policy LL10 – Adequacy for the provision of landscape retention).

If an acceptable level of information has been provided and the trees have been fully considered and accounted for and there are no other tree or landscape related concerns, a recommendation for approval should follow subject to the inclusion of tree / landscape conditions.

STAGE 2 - Application for approval of conditions –

Key point: only appropriate when feasibility has been established.

- Tree surveys should always be submitted and considered as part of full planning applications- by this stage its findings may not be capable of influencing design, potentially resulting in loss or damage to important tree assets.

- Conditions secure the information necessary to ensure tree protection and a high standard of landscape planting -

  - what will be done,
  - how it will be done , and
  - the frequency of arboricultural monitoring.

- The information is required to be submitted for approval, prior to **ANY** work (including demolition) taking place on site.

- Information required at this stage includes –

- **Tree protection plan**
    - to include the alignment of utility apparatus (including drainage and ground source heat pumps), and
    - the site set up ie locations for site huts, temporary toilets, contractor parking, storage of materials, cement mixing etc.
- A detailed **Arboricultural Method statement** including a list of contact details for all relevant parties.
- **Schedule of works** to retained trees eg works required to facilitate demolition / construction activities.
- **Arboricultural site monitoring schedule**
- **Detailed hard and soft landscape scheme.**

STAGE 3 - Implementation and aftercare –

Key points:

- This is for the developer,

- with close adherence to the above paperwork, there should be few tree related issues- they should have been fully considered and mitigated for prior to any activities on site.

During the course of development, should any aspect of the approved details require amendment, these will require to be approved by the LPA.

It is anticipated that during the course of development activities, at least one visit will be undertaken by a Tree Officer. If it were found that the methods approved within the above documents were not being implemented on site, a breach of condition notice or stop notice would be justified.

An additional incentive to comply should flow from the fact that if, at the end of the project the developers should wish to apply for a final discharge of tree protection conditions they would need to provide evidence that the arboricultural site monitoring schedule had been adhered to, e.g. a letter from the arboricultural consultant named within the Arboricultural Method Statement / Monitoring Schedule detailing when the site was visited and any interventions required.

General –

Trees can offer many benefits including –

- Providing visual amenity
- Softening or complementing the effect of the built environment
- Adding maturity to new development.

They are also important elements to Green Infrastructure, they contribute to urban cooling through evapotranspiration and provide micro-climatic effects that can reduce energy demands in buildings.

The part of a tree most susceptible to damage during demolition and construction processes is the root system, which, because it is not visible is frequently ignored. Damage to, or death of, the root system affects the health, growth, life expectancy and safety of the entire tree. The effects of such damage might only become evident several years later. An extensive proportion of a trees rooting system is to be found within the top 600mm of soil. Therefore, any ground excavations, or sustained walking, or machinery moving across the rooting zone of a tree has the potential to cause irreversible damage.

Root systems, stems and canopies, with allowance for future movement and growth, need to be taken into account in all projects, including those that do not require planning permission.

A tree which has taken many decades to reach maturity can be damaged irreparably in a few minutes by actions that might be unwitting, negligent or wilful - the early provision of protective fencing is therefore critical.

This summary is not exhaustive and is intended as guidance only. Reference should be made to the British Standard document for full details of requirements.

Prepared by Melinda Barham for the Tree and Landscape team, May 2012.