# TREES AND DEVELOPMENT



Supplementary Planning Guidance Note Ref: SPG.02 - NLLP Policy DSP.4 (revised May 2012)

Copies available from Planning & Development, Fleming House, Cumbernauld G67 1JW - Approved 22nd September 2009

Woodlands, groups of trees and individual specimen trees along with hedges - form important features within North Lanarkshire. They contribute to landscape quality and local amenity. Trees are also habitats for wildlife, which means more variety of species (increased biodiversity). Trees can have a positive effect on the effects of climate change by reducing flooding, filtering air pollution and providing a more pleasant microclimate. North Lanarkshire wants to encourage more tree planting as part of improving the environment.

This Guidance seeks to ensure that significant and healthy trees, hedges and other vegetation are retained as an asset to new development – giving instant maturity and enhancing property values. Trees and hedges should be seen as an asset, not a constraint, during the planning and design process.

Where trees may be affected by development this leaflet provides general advice for undertaking a tree survey or for tree or hedge protection. These should be included with applications for full planning permission. The granting of consent may otherwise be delayed.

See also related Guidance: 01 Landscape; 09 Flooding & Drainage; 20 Biodiversity; 21 Public Realm; and Open Space Requirements - and Local Plan Policies DSP4; NBE1; NBE2 and NBE3 and Scottish Planning Policy SPP paras 146-148 & Circ 1/2011 on TPOs



Trees and hedges can enhance the environment, soften hard buildings or car parks, and add value and scale. They also help absorb carbon dioxide

The latest Supplementary Planning Guidance can be found online at:- www.northlanarkshire.gov.uk/spg

# A. LEGAL: TREE PRESERVATION ORDERS

A.1 Some trees may have legal protection through being covered by a Tree Preservation Order (TPO) - under Part 5 of The Planning etc (Scotland) Act 2006. You must obtain the Council's consent before carrying out work on such trees. You must also give the Council 6 weeks notice, in writing, of any work to trees in Conservation Areas. Trees in recent developments may also be covered by the planning consent. You may also require a Felling Licence if you propose to fell a certain volume of timber (a maximum of 5 cubic metres in a single calendar quarter), or consent from your feu superior if you are renting the land. Bats & Breeding birds also have legal protection - see Biodiversity SPG.20

A.2 Where a protected tree has to be removed for tree management reasons the landowner has a duty under s.167 of the Planning etc (Scotland) Act 2006 to replace a tree removed in contravention of the TPO. The Council would normally expect to see replacement trees.



Trees & shrubs can soften the appearance of car parks

A.3 To find out if a tree is in a Conservation Area or covered by a TPO or planning condition see contact details on the back page. Contravention of any of these forms of legal protection can lead to substantial financial penalties.

A.4 If consent is required then you need to

- complete the Tree Works application form
- include a scale plan showing the location of the tree(s)
- include an tree survey or arboricultural report on the tree from a qualified arborist to justify the proposed works (to comply with BS5837:2012 Trees in Relation to Design, Demolition and Construction).
- Specify the species, location and size or height eg 3 large bare rooted, ash, 3m of the new tree(s)

A.5 Contact the Council if you consider that there are trees that have amenity value, which require protection. See Circular 1/2011 on Tree Preservation Orders at: www.scotland.gov.uk/Resource/Doc/340230/0112643.pdf



A tree is defined as having a stem diameter greater than 75mm when measured at 1.5 metres above the ground

The council will seek to ensure these principles are achieved through the development management process

# **B. TREE SURVEY**

A Tree Survey should be carried out as part of the initial site assessment – to BS5837:2012 "Trees In Relation To Design, Demolition and Construction". See also the Arboricultural Association Good Practice Guidance Note No.7. It should provide an assessment of the species, health and amenity value of the trees, hedgerows and other significant vegetation – and so inform the planning process. Preserved trees which later die within 7 years will need to be replaced.



#### **TREE SURVEY**

A tree survey should provide the following information:-

- A plan showing the location of each individual tree or group, including trees overhanging from adjacent sites (tree tags must be used to number individual trees on site), Root Protection Area (RPA) and mature hedges.
- Species, Age, Class and life expectancy
- Trunk diameter, height & canopy spread
- Health, vigour & condition and amenity value
- Contours or spot heights
- Recommendations for tree surgery
- Root Protection Area (RPA) former Tree Protection Zone -TPZ)
- Other tree constraints (eg unreasonable shading due to the proposed development; SUDS)

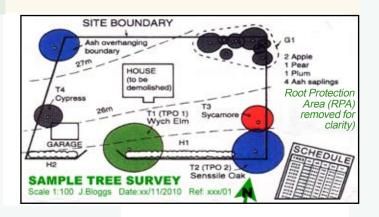


If emergency works are needed contact the council as soon as possible, give as much information as you can

#### **CATEGORIES**

Based on the survey, the trees should be divided into four categories (which can be colour coded on the survey plan).

- A Trees of high quality with a remaining life expectancy of at least 40 years, good examples of species or part of a formal feature.
- **B** Trees of moderate quality with remaining life expectency of at least 20 years, (would be category A but for impaired condition)
- C Trees of low quality with a remaining life expectency of at least 10 years, stem diameter below 150mm (limited merit or damaged)
- U Trees which are in such a condition that they cannot realistically be retained for longer than 10 years (structural defects, dead or in irreversible decline or infected with pathogens



# **C. TREE ROOTS**

Damage to trees is not usually deliberate but is due to a lack of understanding of how easily they can be harmed by nearby activities. The roots are most vulnerable to damage – but because they are out of sight their needs are frequently ignored. Although damage to branches can be unsightly, damage to roots can affect the health of the whole tree.

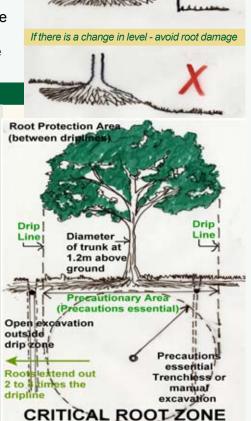
#### **IMPORTANT FACTS to avoid damage to tree roots**



Think of the shape of a tree and its roots as similar to a wine glass on a dinner plate

In applying BS5837:2012 the NJUG
"Guidelines for the planning, installation
& maintenance of utility apparatus in
proximity to trees" may assist. Trench
excavation should wherever possible
be avoided near roots

- There is almost as much of a tree below ground as above
- The volume of roots is in direct proportion to the volume of the crown
- Tree roots are usually shallow and often spread beyond the edge of the canopy.
- 90% of the roots are within the top 600mm of the soil. They need air, water minerals to survive.
- Avoid severance of roots within 3m of the trunk as it will kill all the feeding roots beyond and affect the trees stability - possibly making it dangerous.
- Avoid compaction of the soil around the tree by driving over it or siting/ storing materials under the canopy - as this will also kill the feeding roots.



# **D. PLANNING & DESIGN**

see BS5837:2012 A good and accurate tree survey is the starting point - helping determine which trees should be retained (categories A, B, C) and which could be removed (U). Younger healthier trees are more likely to withstand some disturbance. Wildlife, biodiversity and amenity value should also be assessed. The landscape plans should accurately show the canopies of all retained trees in relation to the proposed building, paving structures, service runs and any changes in level. It should show the Tree Constraint Plan and Root Protection Area (RPA). The document Trees and Development provides best practice and exampes: http://www.tdag.org.uk/trees-in-the-townscape.html

Use existing trees in a positive way in the site layout – for example - to help create focal points or landmarks, to provide scale and break up the roofscape, or to punctuate and frame views. Good visibility should not be impeded.

# Rapidly growing trees can often block out light and cause ground movement. Deciduous species usually grow more slowly and adjust their screening to the season.

#### **D.1 POSITION OF BUILDING ON SITE**

- There should be no ground disturbance or new construction under the canopy of trees
- The Root Protection Area (RPA) should be 12 times the trunk diameter at breast height (or 10 times the diameter if a multi-stemmed trunk). All buildings should be at least 3m away from the edge of the canopy of mature trees (up to 15m from trunk) as the roots often extend far beyond the drip line of the canopy. This should prevent physical damage to trees and reduce leaf blocking problems to gutters & drains. Similar distances should apply to new trees.
- Greater separation distances are likely to be required if the tree is not yet mature and to avoid shading of windows of habitable rooms and gardens, especially on the south side (where light loss is a common reason for requesting removal).
- Choose the species of tree or hedge to minimise problems. Large trees such as oak or beech will suit rural or public open space locations where they can provide a feature and scale - but would be too large for small domestic gardens where they are likely to cause excessive shade.
- When building near trees it is important to consider the size and depth of foundations - ensuring they take account of the proximity and type of trees, their age and potential growth, as well as the soil type. For example, with clay soils the moisture content is critical. Bear in mind that tree removal (and related change in moisture content of the ground, can also cause problems (heave). Tree roots usually need to be contained close to roads.

#### **D.2 LEVELS**

- Ground Levels should not be changed within a tree's canopy spread. Lowering levels will destroy essential feeding roots & potentially change moisture content. Raising levels will cause compaction, kill sensitive feeding roots, and cause rot where bark is covered by soil. Changing levels will precipitate the decline and ultimate death of the tree. Hand digging is essential within a RPA.
- Changes in levels close to the canopy may need retaining walls.

#### **D.3 ACCESS**

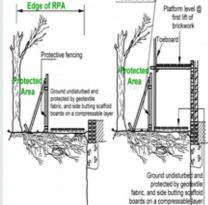
- Avoid vehicle access or storage near or under tree canopies through careful management
- Paving under trees requires very careful design. Kerbs have haunchings that can sever roots
- Paths & lightly trafficked surfaces (eg domestic driveways) can encroach under the canopy of retained trees where the surface is permeable and there are no kerbs or changes in level.
- Consider crown lifting to allow adequate headroom.

#### D.4 SERVICES - see also NJUG Guidance

- Where possible keep service runs together and avoid surrounding a tree with trenches. Trenches should be outside the RPA and the canopy spread.
- If running a service under the canopy is unavoidable, it must be thrust bored, or excavated by hand, leaving all roots greater than 25mm intact. Locate trees to avoid interfering with light spread from street lights

#### D.5 APPLYING FOR PLANNING PERMISSION

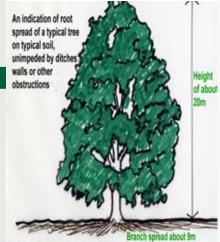
- Where existing mature trees or hedges are affected by proposed development a tree survey will be required as part of the Design & Access Statement. This should include a location plan showing all the trees (T1, T2, etc) and a schedule of the trees to be retained, removed or requiring surgery (and type of surgery proposed). The positions and species of trees you propose to remove need to be shown.
- Planted tree or hedge areas can have an important buffer function helping to screen and soften new development as well as in ensuring defensible space and good visibility. Specimen mature trees can help to provide scale to a development.
- All large or sénsitive developments will also require a detailed landscape scheme. See Guidance SPG 01 Landscape on what this should contain. This should indicate the location and specification of fencing to protect existing trees during construction.
- Some development sites may also require an Arboricultural Method Statement, or the employment of an Arboricultural Consultant to monitor all tree works during the throughout the development. See www.trees.org.uk for guidance.



BS5837 Scaffolding within(the RPA (Root Protection Area)



Trees can provide scale and help screen car parks



Main root spread about 12m

# **E. BEFORE CONSTRUCTION**

Note: The Proposed High Hedges (Scotland) Bill, when enacted will create the right to apply to the local authority to prevent certain high hedges from interfering with neighbouring property. See www.scotland.gov.uk for further details.

#### TREE REMOVAL AND SURGERY to comply with BS5837:2012

This is best done before the contractor starts on site. Works to trees should usually NOT be undertaken between April and September inclusive (when birds may be nesting). Advice should be sought if a habitat survey identifies specific wildlife, birds or bats on the site. See BS5837:2012 (or update)

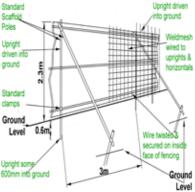
#### PROTECTIVE FENCING to comply with BS5837:2012

This must be erected around all retained trees and hedgerows AFTER surgery BUT BEFORE any materials or machinery are brought onto site, and before any demolition, earth moving (including stripping of top soil) is started. Such fencing needs to be maintained at all times whilst the contractor is on site. See BS5837:2012 (or update)

#### TREAD CAREFULLY...

With protective fencing erected and properly maintained to prevent disturbance within the RPA or protected area, tree survival should be assured. Care is however needed with regard to the following operations:

- Excavations trenching for services or foundations, kerbs etc can sever feeding and anchoring roots. Hand digging may be required to minimise any damage.
- Changes in Levels Soil stripping will remove most feeding roots. Permanent reductions
  can affect the water table. Raising soil levels even for a few weeks can suffocate roots.
- Compaction Materials Stored under the tree canopy or even a single passage by heavy
  equipment can cause significant root damage.
- **Storage** as well as causing compaction storage can prevent rain reaching the ground and dry up roots. The protected area should not be used to store materials or topsoil.
- Toxic Materials spillage and leachate from oil, bitumen or cement can be lethal to trees.
   They, and concrete mixing, should be kept more than 10m away, and kept downhill of trees.
- Waste and Fires Wastes should be recycled where possible or disposed to licenced tips.
   Fires should be at least 5m away from the nearest branch tips and always on downwind side.
- Fixing to the trunk this should not be used for notices or as an anchorage point. These
  can damage the bark and allow fungi to infect the tree.



#### BS5837 - PROTECTIVE BARRIER



# Checklist

The Council will expect proposals for sites with trees to include the information on the right.

On larger or more complicated sites you may benefit from the advice and design expertise of a qualified professional from:

The Arboricultural Association Tel: 01794 368717 www.trees.org.uk or www.treesurgery.com

The Landscape Institute, 6/7
Barnard Mews, Clapham, London
SW11 1QU Tel: 071 738 9166
www.li-scotland.org.uk or
www.landscapeinstitute.org

Scottish Natural Heritage Tel: 01738 444177 www.snh.org.uk

Forestry Commission Scotland Tel: 0845 3673787 www.forestry.gov.uk/scotland

Scottish Wildlife Trust Tel: 0131 312 7765 www.swt.org.uk

British Standards: Tree work BS3998:1989; Trees in Relation to Construction BS5837

Utilities Services in proximity to Trees www.njug.org.uk (NJUGVol4)

The TPO Register is available for public inspection at the Council's Planning Offices at Fleming House, 2 Tryst Road, Cumbernauld, G67 1JW

# does your scheme ...

- ☐ Include an accurate tree survey with schedule, and biodiversity survey?
- Show that it has taken the findings of the tree survey into account?
- ☐ Show existing and proposed ground levels?
- ☐ Show the proposed location of temporary / protective fencing for existing trees or retained features including specification?
- ☐ Avoid any temporary or permanent construction or activities which might injure trees or disturb wildlife (bats/ badgers/ birds, etc)?
- ☐ Show the locations of existing and proposed over /under ground service runs?
- ☐ Include method statements for all works proposed near trees?
- □ Provide details of any necessary surgery to existing trees?
- ☐ Show potential crown spreads of trees in the proposed landscaping?
- ☐ Show a full layout of all buildings, parking, entrances, footpaths, pavings, edges, services, structures, etc and trees & their canopies on the same plan?
- ☐ Provide information on appropriate new tree and shrub planting specifying the density, species, size and location of such new planting?
- ☐ Provide enough trees? the target is 1 tree for every 5 parking spaces
- □ Include an explanation in the Design Statement as to how the Tree and Landscape scheme seeks to reflect and complement the layout of the development eg highlighting and reinforcing entrances, movement desire lines, links to open space & Green Networks, security, biodiversity?
- ☐ Include proposals and a strategy for management of existing and new trees on the proposed development site? Does it confirm that new trees dying within the first two years will be replaced? and that preserved trees dying within 7 years will be replaced?
- □ Does it affirm that such maintenance information will be incorporated into sales or letting literature to inform prospective purchasers/ leasees?

#### The latest Supplementary Planning Guidance and index can be found online at:www.northlanarkshire.gov.uk/spg

This is one of a series of Supplementary Planning Guidance leaflets aimed at encouraging good practice in the design and layout of new development. The advice supplements the policies in the North Lanarkshire Local Plan. The Council will have regard to this Guidance when assessing the merits of planning applications. This leaflet was approved following public consultation and consideration of all comments made, formally adopted as Supplementary Guidance on 22nd September 2009. It is available on-line can be translated or provided in other languages or formats on request

Ref: SPG.02 Trees - Approved 22 Sept 2009 d www.northlanarkshire.gov.uk/spg North Lanarkshire Council, Environmental Services, Strategic Planning, Fleming House, 2 Tryst Road, Cumbernauld G67 1JW Tel 01236 632625 esdesign@northlan.gov.uk