High
Peak Borough Council

Tree Strategy

Good Practice Guide 3
Tree and Development

January 2016

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1. Introduction

Apart from the actual felling of trees on building sites, other less obvious factors can cause the loss of existing trees including damage to the root system by the compaction of the soil by machinery; changes in the drainage or in the level of the soil. Also inappropriate or poor pruning practices and physical damage can lead to the onset of disease, he death of trees from these causes is often not immediate and trees the decline may take a number of years. Trees can also be lost as an indirect result of development where poor design leads to conflict when trees are retained are inappropriately located and there is increased pressure from the occupiers of new buildings for drastic pruning or removal of trees. By following this good practice guide the unnecessary loss of trees can be avoided.

1.1 Purpose of this guide

The purpose of this guide is to provide information to developers, landowners, agents, architects, planning consultants, landscape architects, arboriculturists and contractors, on the standards that High Peak Borough Council will expect from new development proposals. The guide seeks to ensure that trees are afforded due consideration in the planning process so that they can be effectively integrated into new developments.

The format has been set out to follow the logical sequence by which development matters are generally processed; surveying the site, Site design, obtaining planning permission and Implementation.

This guidance frequently refers to BS5837 (2012) Trees in relation to design, demolition and construction and this is an important document which will provide more detailed guidance in relation to the retention and protection of trees during development.

1.2 Trees in the High Peak

Trees are of vital importance to the landscape and are widely appreciated for enhancing the rural and urban environment. They make a positive contribution to the scenic character and diversity of the landscape, and provide vital habitat for dependant wildlife populations. The retention of trees within new developments provides an immediate sense of maturity, to the benefit of a site and its surroundings, raising the overall quality of schemes and enhancing property values. Where trees are damaged and subsequently decline and die, or where inappropriate design leads to conflict, trees become a constant source of complaint and ultimately, any positive benefits are lost.

The High Peak has a range of landscape types, the most obvious variation is the split between the gritstone Dark Peak and the limestone White Peak. There are also distinct variations in the character of the tree coverage. The upland moors tend to have less tree coverage which is generally restricted to cloughs and around settlements. In contrast the lower lying settled valleys the trees and woodlands are a more prominent landscape feature.

Mature trees lend particular character to the towns in the High Peak and trees are important to the character of many of the Conservation areas. This is particularly the case in Buxton where the deliberate planting of woodlands and parks in the 18th Century have created a mature tree coverage which is one of the most significant elements that help to define the character of the town and its landscaped setting.

Derbyshire's current tree cover of approximately 5% of the total land area, less than a half of the national average of 12%, and contrasts markedly with the European average of 20%.

1.3 Legislative and planning background

National Planning Policy Framework (NPPF)

This policy specifically mentions trees and woodlands at section118:

118. When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles: …

- *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss;*

The retention, protection and planting of trees on development sites contributes to the enhancement of the natural environment as identified at section 109 of this Guidance.

109. The planning system should contribute to and enhance the natural and local environment by:

- *protecting and enhancing valued landscapes, geological conservation interests and soils;*
- *recognising the wider benefits of ecosystem services;*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by*

establishing coherent ecological networks that are more resilient to current and future pressures;

- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

The **Town and Country Planning Act 1990 (section 197)** recognises the importance of trees and charges Local Planning Authorities with a specific *'duty'*,

> *'to ensure, whenever it is appropriate that, in granting planning permission for any development, adequate provision is made by the imposition of conditions for the preservation and planting of trees'*
>
> *and*
>
> *'to make such (Tree Preservation) Orders..... as appear to the Authority to be necessary in connection with the grant of such planning permission whether for giving effect to such conditions or otherwise'.*

The **High Peak Borough Council Local Plan** contains a number of policies that relate to tree and landscape and others which refer to biodiversity which have implications for tree retention. The following is the key policy in relation to trees and woodland:

Policy EQ 9 - Trees, woodland and hedgerows

The Council will protect existing trees, woodlands and hedgerows, in particular, ancient woodland, veteran trees and ancient or species-rich hedgerows from loss or deterioration.

This will be achieved by:

- Requiring that existing woodlands, healthy, mature trees and hedgerows are retained and integrated within a proposed development unless the need for, and benefits of, the development clearly outweigh their loss

- Requiring new developments where appropriate to provide tree planting and soft landscaping, including where possible the replacement of any trees that are removed at a ratio of 2:1
- Resisting development that would directly or indirectly damage existing ancient woodland, veteran trees and ancient or species-rich hedgerows.

Other policies include:

Policy EQ 1	Climate Change
Policy EQ 2	Landscape Character
Policy EQ 5	Biodiversity
Policy EQ 6	Design and Place Making
Policy EQ 7	Built and Historic Environment
Policy EQ 11	Flood Risk Management

High Peak Borough Council's Supplementary Planning Document Note 5 – Landscape Character gives guidance of the landscape character and the types and groupings of trees that are suitable in contrasting landscape areas. This is a key reference document when considering planting on new developments participating in more rural locations.

High Peak Borough Council's Tree strategy of which this document forms part of has a number of policy's relating to the protection and planting of trees which are relevant to the development process. In particular

> *2.2.6 The Council will not grant planning permission for developments which directly or in directly threaten trees or woodlands of significant amenity or developments which have inadequate or inappropriate landscape proposals, unless there is adequate justification to do so.*

The Hedgerow Regulations 1997 (SI 1997/1160), implemented under **Section 97** of **The Environment Act 1995**, require Local Planning Authorities, in determining planning applications, to consider the effects of proposed developments on hedgerows.

Royal Commission on Environmental Pollution – The Urban Environment (March 2007)

Recognises the benefits of trees in urban areas

4.57 Given the multiple benefits of trees for urban areas, we recommend that the Department for Environment, Food and Rural Affairs, the Department for Communities and Local Government and their devolved equivalents:

- *publish information on the extent and condition of urban trees;*

- *increase support for urban tree planting and maintenance within national forestry strategies and planning guidance; and*

- *ensure that local authorities use their powers to protect existing urban trees and ensure that adequate provision is made for the protection or planting of trees when planning permission is granted for new developments*.

2. Surveying the site

Existing trees on development sites are particularly vulnerable to damage during the construction process. Careful planning is essential to achieve a functionally effective, sympathetic development, whilst at the same time ensuring the long term retention of trees. The basic starting point in producing a successful design is the gathering of information, particularly data obtained from carrying out a thorough and comprehensive site survey.

Where developments are likely to affect existing trees, the Council will normally require the submission of a detailed **Tree Survey**, drawn up in conjunction with the **Land Survey** and will be expected to meet the requirements of **Section 4** of the **British Standard BS5837 (2012)**.

2.1 Land surveys

This should show accurately all existing features in and around the site, including all trees with a stem over 75mm in diameter at 1.5m above ground level and other groups of vegetation. The survey should also include any trees on the boundary of the site that may also be affected by the proposed development. A detailed level survey would normally be incorporated showing existing contours or spot heights throughout the site.

2.2 Tree Surveys

Based on the land survey this should show the accurate locations of all existing trees, shrubs and hedges, including those on adjacent land which may be affected by the development, and should detail the following information in plan or tabular form:-

- Reference number relating to the plan provided.
- Species
- Height in metres
- Trunk diameter (measured at 1.5m above ground level)
- The accurate canopy spread of each tree. (Plans should define actual crown spreads rather than using illustrative circles).
- The age class of each tree, (young, semi-mature, early mature, fully mature, veteran)
- The condition and vigour of each tree including details of any relevant defects
- Details of any necessary or proposed remedial works.
- Estimated remaining contribution in years (e.g. less than 10, 10 - 20, 20 - 40 more than 40).
- The "Tree quality assessment" of each tree, or group of trees, designated as per the detailed requirements of **British Standard BS5837 (2012) Section 4.5 and table 1.**
- The plan should also indicate the root protection area (RPA) required by each tree as defined at **British Standard BS5837 (2012) Section 4.6.** In broad terms **t**he RPA is an area equivalent to a circle with a radius 12 times the stem diameter at 1.5m above ground level.
- A clear indication of which trees are to be retained, and those which are proposed for removal.

Tree surveys should be undertaken by qualified and competent arboriculturist.

3. Site Layout and design considerations

3.1 General design considerations

Developers should anticipate the need to accommodate trees within a development, whether through the retention of existing trees or tree planting directly. In areas open countryside or adjacent to it particular reference should be made to **Landscape Charcter** and in Conservation Areas the appropriate **Conservation Area Character appraisals.**

Due deliberation should be given to the requirements of trees by all members of the multi-disciplinary development team throughout the design stages. When developers are encouraged to produce layouts or development site masterplans for discussion, such plans should include tree and landscape details.

3.2 Tree Constraints plan (TCP)

The production of a tree constraints plan will aid in the design process. Based on the tree survey this should show:

- Accurate location of the trees
- Accurate crown spread of the trees
- Identify those it is most desirable to retain using the 'Tree quality assessment'.
- Show the RPA which is the area around each tree which should be left undisturbed to protect the root system.

Trees are only one factor to be considered when developing the site the aim of this plan is to aid the design process by identifying the most important and suitable trees for retention and what the spatial requirements for these trees are to avoid direct damage to the root systems.

3.3 Site layouts

The following a factors that need to be considered in relation to the layout of a scheme.

- The retention of as much of the existing tree cover as is practicable. Making adequate provision for the long term retention of trees, groups of trees or areas of woodland which are identified as having significant current or potential future amenity value.

- There should be appropriate space allowed for new planting and where proposals include the felling of existing trees, landscaping schemes should make provision for sufficient replacement planting to offset adequately any resulting loss of amenity.

- All building work must take place outside the RPA of trees to be retained and allow adequate space for access during construction. Building work includes the construction of buildings, roads, other hard surfaced areas and trenches required for underground services.

- It is advisable to keep buildings at least 4m from the edge of the canopy of mature trees to avoid direct damage to the building from tree branches. For younger trees greater allowance should be made for future growth. Greater distances will be required if the tree is near a window of a habitable room, especially on the south side.

- The plan and accompanying documentation should include sufficient information to allow for a full, detailed assessment of the short and long-term arboricultural and landscape implications of the development proposals to be made.

- There should be no changes in ground levels within the RPA of a tree.

3.4 Construction within the root protection area (RPA)

Where development proposals include construction works within the identified RPA, or where it is considered that a site cannot accommodate all of the operations associated with the implementation of a proposed development, without the need to intrude into the RPA, the Council may request the submission of detailed construction specifications and method statements in support of the application, in order to determine the likely effects of such works on the long term health and structural stability of the trees. The council will not normally allow conditional approval for such works.

Where proposed for new areas of hardstanding are within the defined RPA 'minimal dig' or 'no-dig' engineering treatments, using geotextiles and/or cellular confinement systems, may be considered acceptable dependant on the site-specific, detailed construction specification/method statement submitted in support of the planning application.

The long-term implications of any construction work within the exclusion zones should also be carefully assessed in relation to Table 3 of BS 5837 (2012). New structures, drains, services, walls, paths, driveways and areas of hardstanding should be sited or designed so as to avoid direct damage from future growth of the bole and main structural roots of retained trees.

3.5 Site layout avoiding future conflicts

Development layouts, even if not affecting trees directly, may not be acceptable if they would result in undue pressures, in the short or long term, for felling or excessive pruning of important trees. Therefore merely avoiding the RPA may not necessarily be adequate. Other factors must be taken into account.

Incoming occupiers of properties will want trees to be in harmony with their surroundings without casting excessive shade, or otherwise unreasonably interfering with their prospects of reasonably enjoying their property. Layouts may require careful adjustment to prevent trees which are to remain from causing unreasonable inconvenience to future occupiers, leading inevitably to requests for consent to fell.

The site layout and juxtaposition of trees and buildings should be such that it can be reasonably expected that the trees can be retained to maturity, thereby providing maximum amenity benefits with minimum maintenance requirements. In considering the juxtaposition of trees and buildings, site layout designs will be expected to ensure that trees which are to remain are given adequate space including sufficient allowance for future growth, without the need for excessive or unreasonable pruning. The predicted mature height, branch spread and crown form of individual trees should be assessed in conjunction with site factors such as aspect, topography, soil conditions and exposure. (The ultimate mature size of any individual tree will be dependant on site specifics and a qualified assessment should be sought).

Site layouts must ensure that the trees do not:

- dominate buildings, inevitably leading to concerns about safety and ultimately to requests to fell or heavily prune;
- cause unreasonable obstruction of direct daylight to properties.

Factors to be consider are:

- individual species characteristics; potential for future growth;
- garden size and layout;
- the aspect of the tree from the building;
- building to tree clearances;
- building orientation and the positioning and size of windows, especially in habitable rooms.

3.6 Site access

Site access layouts and visibility splay clearances may require the removal or pruning of trees and hedges. There may also be a need to make provision for temporary site access or particularly wide loads or high vehicles during construction phase. Where there is such a likelihood, applicants will be expected to liaise with the appropriate Highway Authority, and seek clear guidance of their requirements, prior to submission of an application. In general, permanent and temporary site access designs will be expected to minimise tree and hedgerow removals, and ensure the long term retention of all important trees and hedges.

3.7 Services

Drainage and service layouts must be designed in such a way as to allow for installation and future maintenance without adversely affecting trees and their root systems. The provision of common service trenches may help to minimise potential conflicts. Full details of service layouts should be submitted with any planning application. Service layout planning and installation should be carried out in accordance with the requirements of The National Joint Utilities Group (NJUG) Publication No 10. Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees.

4. Applying for planning permission

4.1 Arboricultural Implication Assessment (AIA)

It is essential that all relevant information pertaining to the assessment of trees and landscaping on a site is submitted with the planning application to allow the Council to make an accurate assessment of the short and long term arboricultural implications of the proposals. This is normally provided by way of and Arboricultural Implication Assessment (AIA) including a tree protection plan (TPP). Where the Council feels that insufficient detail has been forwarded in support of any application, the following supplementary information may be requested, prior to determination.

The following information will normally be required:

- Tree survey and plan (as per section 2.2);
- Details of tree protection including plan showing RPA's;
- An arboricultural implication assessment – an evaluation of the impact of development on the trees and any intended mitigation including details of an tree works required;
- Permanent/temporary access arrangements;
- Full levels survey (which should include existing and proposed spot levels at tree bases and around crown extremities. Cross sectional diagrams may be required in certain cases);
- Drainage and service details;
- Soft and hard landscaping treatments.

5. Implementation

5.1 Tree works

Any proposals for tree works prior to or during implementation of a scheme will normally formed part of the application. In some cases when planning approval is granted planning conditions may be used to ensure that finalised tree work schedules are approved prior to implementation. Sometimes it may be a condition that these for part of an arboricultural Method Statement

All tree works undertaken on the site should be in accordance with current arboricultural best practice and with the requirements of British Standard BS3998 (2010) Recommendations for Tree Work. The Council expects all Tree Work operations to be carried out to the highest standards and will apply planning conditions and use Tree Preservation Orders, where necessary in order to ensure that such standards are maintained.

5.2 Preventing damage to tree roots

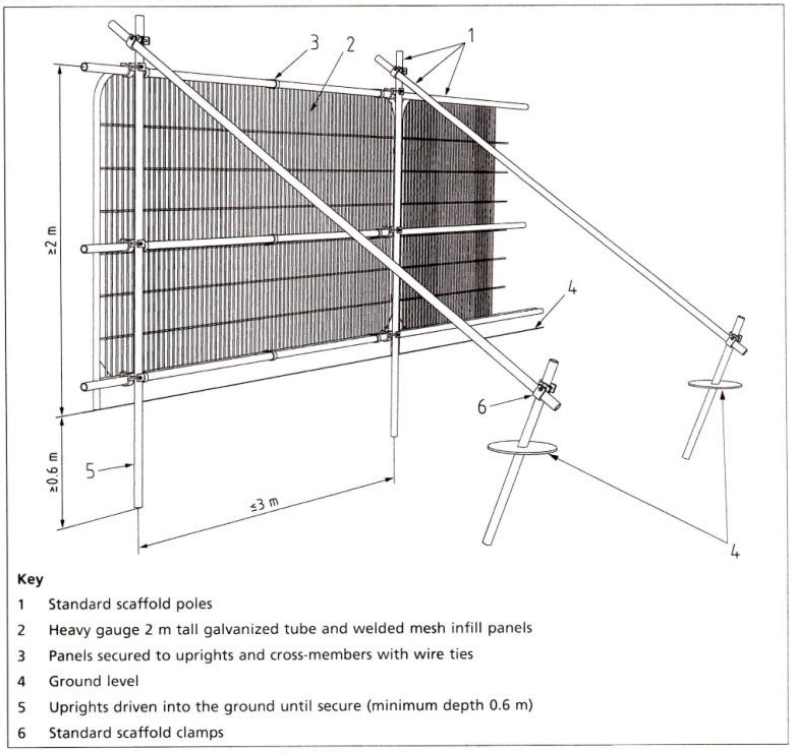
Trees on development sites are particularly vulnerable to disruption during the construction process, and damage is often irreparable leading to decline and death. Tree root systems are especially sensitive to construction damage. Such damage is not usually deliberate and is more often than not due to a lack of understanding of how easily trees can be harmed by nearby activities.

Potentially damaging operations include:-

- Excavation within the rooting zone.
- Raising or lowering of ground levels.
- Compaction of the soil by construction works, by site machinery or vehicles, and by the storage of materials and debris.
- The dumping or spillage of toxic materials, .
- The installation of impermeable surfacing.
- Direct damage to trunks and branches by construction vehicles.
- Fires built closer than 20m from the base of any tree.

To avoid damage to the root systems of the trees to be retained the erection of protective fencing will be required. This will be positioned around the trees to enclose the RPA in accordance with the approved scheme. The protective fencing should be fit for purpose and appropriate for the degree of construction activity. In most cases barriers should consist of a scaffold framework in accordance with Figures 2 and 3 of BS5837:2012.

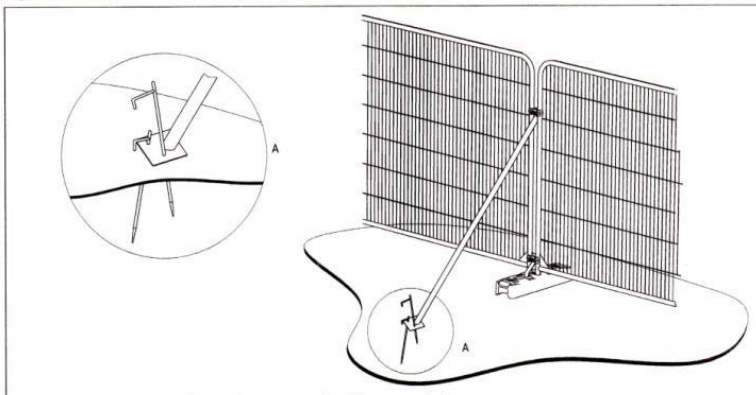
Figure 2 **Default specification for protective barrier**



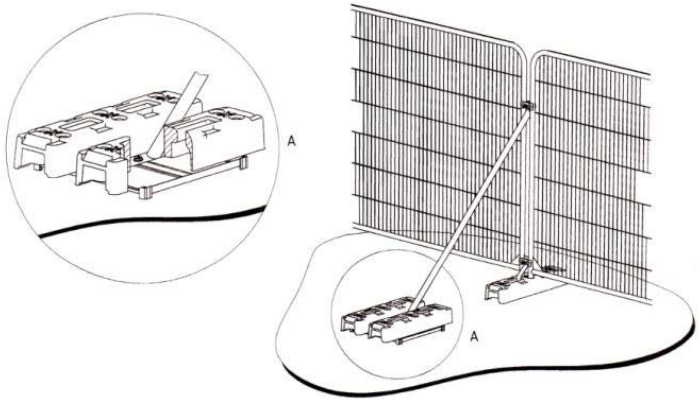
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Alternative specifications may be considered where it is appropriate to the site and the anticipated level on construction activity.

5.3 Arboricultural Method Statement (AMS)

On sites where it is considered that particular attention is required in respect of tree protection a planning condition requiring the submission and approval of a detailed Method Statement for Arboricultural Works may be attached to the planning approval. The Method Statements will be expected to address the following:

- Timing and phasing of all arboricultural works in relation to the proposed development.
- Implementation, monitoring, supervision and maintenance of the Tree Protection Scheme.
- Implementation, monitoring and supervision of the approved Tree Work Specification.
- Implementation, monitoring and supervision of any approved development works or construction activities within the defined RPA.
- Provision for regular monitoring of ongoing development operations to ensure full compliance with the approved Tree Protection Scheme and Arboricultural Method Statement for the duration of the development.
- The setting up of an agreed framework for maintaining appropriate levels of communication between all involved parties.
- Provision for qualified arboricultural supervision.

5.4 Landscaping scheme

A landscaping scheme may be required as part of the application or as a condition of approval. The Council expects sufficient information to be provided, to judge the value of tree planting schemes.

The minimum levels of information required for new tree planting proposals are as follows:-

- An accurate, detailed planting plan and schedule.
- A comprehensive list of species and a stock specification.
- Detail of planting densities and spacings.
- Individual locations of all specimen trees and shrubs.
- Clear indication of existing trees specified for retention and those for removal.

The long term aims of a scheme can only be achieved if the landscaping succeeds. The Council will pay particular attention to the practical measures that are proposed as part of any scheme, to ensure the

successful establishment of new planting. Tree planting schemes will, therefore, be expected to include the following provisions:

- Preparation of the planting environment (including decompaction and drainage) should be at least to the standards set out in British Standard BS4428 (1989) Code of Practice for General Landscape Operations (excluding hard surfaces).

- Plant material provided will be expected to comply with and be planted in accordance with the requirements of: British Standards **...** BS 8545:2014 Trees: from nursery to independence in the landscape, BS3936-1: 1992 Specification for Nursery Stock, BS4043:1989 Recommendation for Transplanting Rootballed Trees and BS4428: and Code of Practice for General Landscape Operations (excluding Hard Surfaces), as appropriate.

- The inclusion of a detailed maintenance schedule in accordance with the requirements of BS4428:1989 Code of Practice for General Landscape Operations (excluding Hard Surfaces).

7. More information

Arboricultural Officer
High Peak Borough Council
Town Hall
Market Place
Buxton
SK17 6EL

Email:trees@highpeak.gov.uk

Development Control
High Peak Borough Council
Town Hall
Market Place
Buxton
SK17 6EL

Email:planning@highpeak.gov.uk

Useful contacts and websites

Arboricultural Association	Tel: 01242 522152 www.trees.org.uk
Bat conservation Trust	Tel: 020 7627 2629 Bat Helpline: 0845 1300 228 (local rate) Website: www.bats.org.uk
British Standards	020 8996 9001 www.bsistandards.co.uk
Commission for Architecture and the Built Environment- (CABE)	020 7070 6700 www.cabe.org.uk
Derbyshire Wildlife Trust	01773 881188 www.derbyshirewildlifetrust.org.uk
Natural England (Derbyshire Office)	Tel: 01629 816640 www.naturalengland.org.uk
Planning portal	www.planningportal.gov.uk
The Tree Council	0207 407 9992 www.treecouncil.org.uk
Woodland Trust	01476 581135 www.woodland-trust.org.uk

Documents referred to in text

British Standard B4428:1989 Code of Practice for General Landscape Operations (excluding Hard Surfaces).

British Standard BS 3998:2010 Tree work (currently being revised)

British Standard BS 5837:2012Trees in relation to construction - Recommendations

British Standard BS3936: Part 1:1992 Nursery Stock. Specification for Trees and Shrubs

British Standard BS 8545:2014 Trees: from nursery to independence in the landscape
British Standard BS4043:1989 Recommendation for Transplanting Rootballed Trees

High Peak Borough Council Conservation Area Character assessments

High Peak Borough Council adopted Local Plan

High Peak Borough Council Supplementary Planning Document 5 – Landscape Character
National Planning Policy Framework (NPPF) 2012

The Hedgerow Regulations 1997 (SI 1997/1160

The National Joint Utilities Group (NJUG) Publication No 10. Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees

Town and Country Planning Act 1990.