2. How the Council will protect trees

- 2.1 The Town and Country Planning Act 1990 places an express duty on local planning authorities to ensure whenever appropriate when granting planning permission that adequate conditions are imposed to secure the preservation or planting of trees (Section 197), and that any necessary tree preservation orders are made (Section 198).
- 2.2 Given the importance of trees and vegetation to the borough, the Council will require sufficient information from applicants to demonstrate that tree and canopy coverage has been considered.

CANOPY COVER

The layer of leaves, branches and stems of trees that cover the ground when viewed from above.

- 2.3 This chapter explains how to protect trees and vegetation by undertaking site and constraints assessments and developing tree protection and arboricultural methodologies appropriate to the site and its context. It provides advice on the delivery and maintenance of landscapes that offer an attractive, safe, accessible, healthy, sustainable and ecologically diverse environment.
- 2.4 Contractors working in proximity to trees are required to fully abide by BS 5837: 2012 (or as updated) "Trees in relation to design, demolition and construction Recommendations". Those working directly on trees should follow BS 3998: 2010 (or as updated) "Tree Works Recommendations" which deals with the standards of workmanship.
- 2.5 Applicants should ensure that when they are commissioning construction works and the maintenance of trees that tenders/specifications are explicit on the qualification levels of contractors, particularly for an arboriculture professional qualification. Lists of arboricultural consultants can be found at: <u>www.trees.org.uk</u>; <u>the Institute of Chartered Foresters</u> and <u>www.consultingarboristssociety.co.uk</u>.



Tree Preservation Orders

- 2.6 Many trees in the Borough are covered by a Tree Preservation Order (TPO). To find out if a particular tree is protected by a TPO please contact the Council at <u>planning@camden.gov.uk</u>. A Tree Preservation Order is made by the Council to legally protect a specific tree or group of trees that provide public amenity or are of cultural or historic significance. The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage, or wilful destruction of trees without consent.
- 2.7 The Council will consider if TPOs are needed when considering planning applications for development. Members of the public can also draw the Council's attention to trees or groups of trees they consider to be important to the area and suitable for a TPO.
- 2.8 Works to trees with a TPO, above or below ground, require the Council's permission. We strongly encourage making these applications online, via the Planning Portal. Works to a tree with a TPO that is needed to enable the implementation of a planning permission are dealt with as part of a planning application; a further TPO application is not required.
- 2.9 The Council can also require existing trees, including those that are not the subject of a Tree Preservation Order, to be protected and retained, through the use of a planning condition. The Council also has powers to use 'conditional TPOs' which can be applied prior to planting.

Please be aware that unauthorised works to a TPO tree are a criminal offence and can result in prosecution and, upon conviction, an unlimited fine. The Council may also seek remedies under the Proceeds of Crime Act, if this is appropriate.

Trees in conservation areas

- 2.10 Planning legislation makes special provision for trees in conservation areas. All trees that contribute to the character and appearance of a conservation area should be retained and protected. Applicants should have regard to the description of local landscape character and objectives set out in relevant Conservation Area Appraisals and Management Strategies, which can be viewed on the <u>Council's website</u> and locally identified trees where set out in a neighbourhood plan see neighbourhood planning section below. These strategies will often identify problems or threats affecting the landscape.
- 2.11 Trees in Conservation Areas with a trunk diameter of 75mm or greater measured at 1.5m above ground level are protected under <u>Section 211</u> of the Town and Country Planning Act 1990 (as amended). Through Section 211, any proposal to cut down or carry out work on a tree in a conservation area, either above or below ground, must be submitted to the Council, either through a prior notification in writing or through a related full planning application.
- 2.12 **Prior notification** of the tree works will need to be submitted to the Council for approval at least 6 weeks before the work is to be undertaken. A Section 211 notification gives the Council an opportunity to consider whether a TPO should be made in respect of the tree(s). Further information about this can be found on the Council's webpage for trees located in a conservation area. The notification should be

submitted online through the <u>Planning Portal website</u>. Please note that a Section 211 notification does not apply to existing TPO trees.

2.13 **Planning permission**: If work to a tree is required in relation to a development' e.g. extension or demolition for which planning permission is required, then the tree works can be dealt with as part of the related planning application. A further section 211 notification is not required.

Please be aware that unauthorised works to a tree in a conservation area are a criminal offence and can result in prosecution and, upon conviction, an unlimited fine. The Council may also seek remedies under the Proceeds of Crime Act.

Highway trees, open spaces and the public realm

- 2.14 Where a development will result in works to the public highway that would necessitate the removal of a tree, a Section 278 agreement (a section of the Highways Act 1980 that allows developers to enter into a legal agreement with the Council to make alterations or improvements to the highway) may be entered into that provides for replacement planting.
- 2.15 New street tree planting must be designed to take into account pedestrian needs and highway activity (e.g. loading, unloading and bus stops). Pavement width is an important consideration and trees should not be planted which may create a hazard for the general public and especially wheelchair users and visually impaired people.
- 2.16 The Council is undertaking a number of cross-service public realm improvement schemes, some being delivered as a component of area-wide traffic management work. This is delivering new open spaces, improved walking and cycling facilities and a general greening of the built environment. Some larger developments will provide opportunities to create new open spaces and areas of public realm, such as civic squares. Guidance on the Council's expectations are set out in the Public Open Space CPG. The Design CPG sets out general principles that should be applied to landscaping schemes.

Private gardens

- 2.17 Front, side and rear gardens make an important contribution to the townscape of the Borough and contribute to the distinctive character and appearance of individual buildings. Many will feature trees and vegetation of amenity, townscape or biodiversity value. More detailed advice on gardens is set out in the Design CPG.
- 2.18 Historic trees and tree lines may be plotted on historic maps (e.g. the Ordnance Survey Map of 1866 of Hampstead from which common land and manorial land boundaries can be identified). These maps are sometimes available through publicly-accessible and free-to-use websites. The Council recognises that historic trees lines may help to inform landscaping plans, particularly where tree lines and woodland have also been identified as a positive element in a conservation area appraisal.

Camden Council strategies and data

- 2.19 The Council's *Tree Policy* (2015) relates to trees managed and maintained by the Council on highways, estates land and parks & open space. However many of the principles within it should be considered in the context of private development schemes. For example, it sets out circumstances when the removal of a tree or heavy pruning should be avoided. This includes the obstruction of light or a view; the dropping of fruit or flowers or leaf fall; the impact on solar panels/satellite dishes and disturbance to pavements or kerbs (in the case of the latter, an engineering solution should normally be sought). The Council's Tree Policy is included as Appendix 1 to this document.
- 2.20 Camden Council manages approximately 28,000 individual trees across the borough and 10-15,000 additional trees as part of sites of nature conservation. Camden <u>Open</u> <u>Data</u> provides information about this tree stock including the mix of tree species, tree maturity and condition. The Council also monitors changes in canopy cover by ward. This data can be used to inform new planting schemes.
- 2.21 The Council has published, and annually reviews, its environmental sustainability plan (2011-2020) called "<u>Green Action for Change</u>" that sets out Camden's goals for creating a low carbon and low waste borough. It includes an objective of increasing street tree planting in the Borough (to approximately 400 trees per annum).

Neighbourhood planning

2.22 Communities place great value on their local tree cover. Through the neighbourhood planning process, some communities in Camden have identified trees they consider to be of local importance – either individually or as part of a group, including where they form part of a historic tree line or biodiversity/green corridor (often forming part of a wider project identifying local green infrastructure opportunities).



2.23 Neighbourhood Plans can also designate 'Local Green Spaces' – green areas of particular local importance and which are to be given special protection through the planning system. The character of these areas will often derive from the planting of trees and vegetation. These Local Green Spaces can include quite small areas, such as pocket parks and verges, which may contribute positively to the amenity of the area.

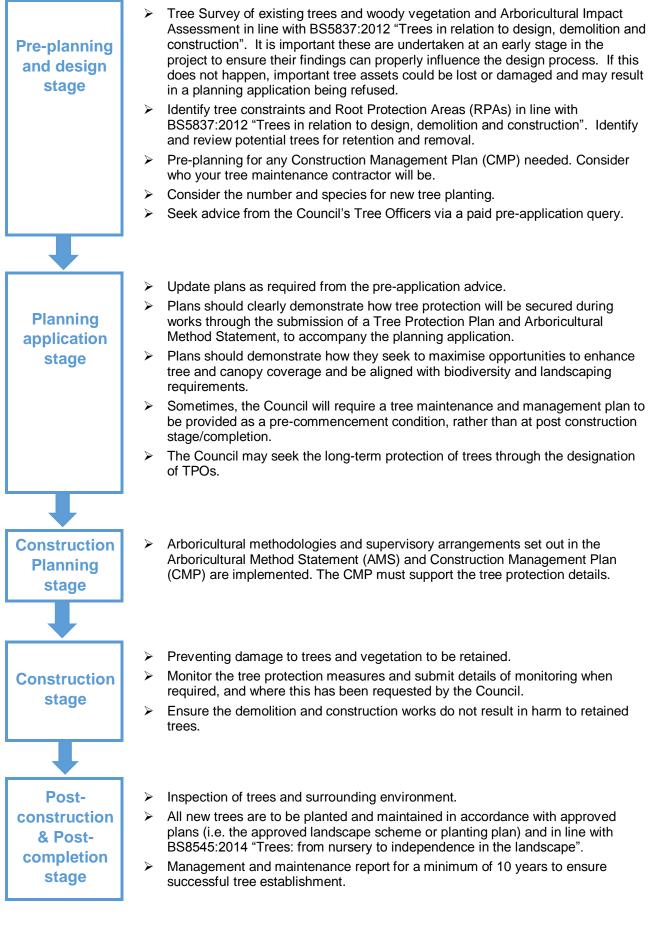
Applicants should refer to relevant planning policies on trees and biodiversity set out in <u>neighbourhood plans</u>.

Trees and planning applications

2.24 The Council has a statutory duty to consider the preservation of trees when granting planning permission. The potential effect of development on all trees is a material consider irrespective of whether they are protected by Tree Preservation Order /

conservation area status, or not. Failure to supply the documents set out in this document may lead to a planning application not being validated.

- 2.25 Consideration of trees is required for all 'full', 'outline' or 'householder' applications or where works are being undertaken under permitted development rights. If an acceptable level of information has been provided and the trees and vegetation have been fully considered and accounted for and there are no remaining tree or landscape related concerns, the Council will seek the inclusion of appropriate tree / landscape conditions on a planning permission to ensure that the development can be implemented successfully. Planning conditions are used to ensure trees will not be harmed and a high standard of landscaping planting is achieved.
- 2.26 The Council has a team dedicated tree and landscaping officers who can provide advice on the impact of development on trees, appropriate methods of tree protection and the suitability of planting schemes. The tree officers can be contacted at <u>planning@camden.gov.uk</u>. A flow diagram showing how trees should be considered during the planning process is set out below.



- 2.27 <u>Camden's Local Area Requirements (LARs)</u> state that a Tree Survey and Arboricultural Impact Assessment may need to be submitted to the Council as part of a planning application. They are carried out prior to the design of the scheme in order to identify what trees and vegetation should be retained and protected. At this stage, it is the feasibility of the planned scheme that needs to be demonstrated. This section of the CPG provides more information of what the Council expects these documents to consider.
- 2.28 The Council will expect developers to follow the principles and practices for tree care set out in BS 5837:2012 "Trees in relation to design, demolition and construction Recommendations." Key principles and approaches are summarised in this CPG.
- 2.29 In 2018, Natural England and the Forestry Commission published updated standing advice for planning authorities on "Ancient woodland, ancient trees and veteran trees: protecting them from development" (Link to ancient woodland and veteran trees advice). It is intended to help local authorities with decision making but its advice on assessing potential impacts and appropriate forms of mitigation are likely to be beneficial for applicants.

Tree Survey

- 2.30 We will require a survey of existing trees and vegetation to be carried out prior to the design of a scheme in order to identify what trees and vegetation should be retained and protected on site, which will include a scaled topographical plan with tree reference numbers and spot levels of trees². This will ensure that the needs, condition and vulnerability of existing planting is properly considered and provide an early indication of the site's landscaping potential.
- 2.31 The need for a tree survey applies to all schemes where trees could be affected and should be submitted as part of a planning application. As a minimum, the Council expects tree surveys to provide the following information about trees within the development site, and on neighbouring land where relevant:
 - Species;
 - Height of canopy above ground (in metres);
 - Age class (young, middle age, mature, veteran etc.);
 - Presence of TPO trees;
 - Diameter of the stem (measured at 1.5 metres above ground on single stem trees and immediately above the root flare on multi-stemmed trees);
 - Crown spread (in metres) for all 4 compass points;
 - Height of crown base (in metres), i.e. clearance above ground of lowest branches;
 - Assessment of condition (physiological and structural) including trunk, crown and roots;
 - Life expectancy, i.e. useful remaining contribution (40+, 20+, 10+ <10 years);
 - Location of existing hedges and shrubs (including woody species they contain) and any other landscape features, e.g. walls, boundary features, utilities, buildings;
 - Amenity in terms of visibility from viewpoints (including footpaths and roads); rarity; suitability in surroundings, i.e. suitability to setting and presence of other trees in the vicinity;
 - Description of soils;
 - Desirability for retention in accordance with BS5837:2012.

² All trees over 75mm stem diameter at 1.5metres

- 2.32 The design of the scheme should seek to retain Category A and B trees and Category C trees should be considered for retention where they would not impose a significant restraint on development. For full definitions of these categories, please refer to <u>BS</u> <u>5837</u>.
- 2.33 There is often a misconception that Category C trees, being those of lower quality and value, are dispensable. However, in certain situations the Council may expect certain Category C trees to be retained until new planting has become established.
- 2.34 Normally, the retention of existing mature trees and vegetation can make an important contribution to the sustainability of a project. For example by reducing the impacts and energy demand associated with the provision of new planting, such as in their transportation and the irrigation required. We will also seek the retention of landscape features and habitats which are important to the character of the site or local townscape.
- 2.35 Inclusion of trees on neighbouring land should be guided by whether they would influence the development site itself and whether the trees are an important part of the local landscape character. It will always include trees where the crown or RPA (root protection area) encroach upon the application site.
- 2.36 Existing trees within a development site should be assessed using the <u>Capital Asset</u> <u>Value for Amenity Trees (CAVAT)³</u>. The resulting value calculated for each tree should accompany the Tree Survey. All information about using CAVAT can be found on the London Tree Officers Association website <u>here</u>.
- 2.37 Following a Tree Survey, if it is discovered that a tree to be retained through the proposed scheme is dead or dangerous, contact should be made with the Council's Tree Officer (please e-mail <u>planning@camden.gov.uk</u>).

Tree Constraints Plan

- 2.38 Once the Tree Survey has identified the important trees and vegetation, within the site or nearby, tree constraints and Root Protection Areas (RPAs) should be identified. This must occur before detailed design to ensure the successful integration of trees into a layout which uses land efficiently. A Tree Constraints Plan should inform the design of the scheme to minimise the likelihood of conflicts between fully grown trees, buildings/structures and people through the identification, and evaluation, of significant constraints, e.g. shading. Effective use of a Tree Survey and Tree Constraints Plan will lead to smoother construction management and reduced costs over the lifecycle of a development.
- 2.39 All design elements (buildings, roads, services, security equipment, hard landscaping) should be arranged to ensure a good relationship between development and trees to be retained and planted and avoid harmful nuisance. Potential nuisance includes the obstruction of light to habitable rooms and inadequate clearances for overhead cables and vehicles. A Tree Constraints Plan is essential to identifying space above and below ground for new planting to develop and mature and existing trees to continue to grow and flourish.
- 2.40 Applicants should also consider archaeological implications when removing or digging tree pits and arrange archaeological recording where appropriate.

³ This should follow the "Full Method" approach

- 2.41 The Council expect a Tree Constraints Plan to be prepared in line with BS 5837:2012 and:
 - Record accurately the positions and dimensions of all tree constraints, on and off site (including existing buildings and structures, their foundations and hard surfaces, archaeology, underground services, overhead cables, sight lines for highways, CCTV and lighting requirements, water courses, access to sunlight, overlooking, soil types and conditions and changes in levels);
 - Relate to an accurate topographical survey;
 - With the AIA, inform future tree management, retention and protection, including TPOs;
 - Record crown spreads measured N/S/E/W;
 - Map Root Protection Areas and buffer zones, taking account of current and potential tree height and maximum branch spread.
- 2.42 Sufficient space should be maintained beyond the crown to avoid undue pressure for felling or excessive pruning.

ROOT PROTECTION AREA (RPA)

An RPA is the area around a tree in which roots are found, which needs to be protected during development. The radius of an RPA is calculated by measuring the diameter of the stem at 1.5m above ground level and multiplying it by 12 or, in the case of veteran trees by 15. The RPA may extend beyond the branch spread where there are barriers to development on one or more side of a tree.

BUFFER ZONE

A Buffer Zone is an area identified where it would be unreasonable to locate inhabited buildings. This should be established having regard to the ultimate size of trees– their height and spread. This zone will allow trees to grow and mature naturally without unreasonably dominating buildings or gardens either now or in the future and should take account of reasonable daylight requirements.

- 2.43 Developers should avoid development within a Root Protection Area, including the routing of underground services and drains. The default position is that structures are located outside the RPAs of trees to be retained. Where there is an overriding justification for construction within, or in proximity to, the RPA, technical solutions to prevent damage should be explored.
- 2.44 The Council recommends keeping services together where possible and deploying trenchless techniques. This will also make servicing of utilities easier in the future. Where it is impossible to avoid the running of services through an RPA, the Arboricultural Method Statement should set out how damage to the roots of a tree will be minimised.
- 2.45 Please note that guidance on the planting, installation and maintenance of utilities in proximity to trees is available from the National Joint Utilities Group. Their website is: <u>www.streetworks.org.uk</u>.

- 2.46 Permeability of the RPA should be maintained or improved through the avoidance of compaction and the use of appropriate materials. It may be necessary to quantitatively assess the extent of root spread by undertaking sensitive tree root excavations.
- 2.47 It should not be assumed that building/excavating up to the edge of an RPA is acceptable. The Council will generally expect developers to provide adequate space between proposed buildings and an RPA through the identification of a buffer zone. It may be acceptable to locate buildings structures such as driveways, paths or hard standing within a buffer zone or RPA provided special measures are taken, which have been approved by the Council.
- 2.48 The identification of tree constraints and Root Protection Areas is an essential prerequisite for guiding decision making for which trees should be retained, and where it is necessary for trees to be removed. This information will inform the development of a planting plan or landscaping scheme for the site. This is addressed further in Chapter 3 of this CPG.

Arboricultural Impact (or Implications) Assessment (AIA)

- 2.49 This aims to ensure that all possible impacts of a proposed development on the landscape including trees and vegetation, views and visual amenity are fully considered and that potential harm is avoided, or successful addressed. This includes trees on adjacent sites or highway trees that could be affected by the implementation of the scheme. It is used to inform decisions as to tree retention, protection, or removal and replacement.
- 2.50 The assessment process involves:
 - Identifying the impacts a proposal is likely to have on trees within the site or nearby, the finished building/structure and the future wellbeing of occupants;
 - Incorporating measures to avoid and mitigate (reduce) impacts;
 - Assessing the significance of any residual effects after mitigation;
 - Identifying appropriate compensation measures including CAVAT values to offset significant residual effects;
 - Identifying opportunities for ecological enhancement; and
 - Justification for the removal of any tree to show the loss of the tree is unavoidable.

Arboricultural Method Statement, including Tree Protection Plan

- 2.51 On sites where trees are to be retained, an Arboricultural Method Statement (AMS), including a Tree Protection Plan, should be submitted to the Council for approval. This will ensure that foreseeable risks are identified and that suitable protection is provided for the crown, trunk and roots of trees (and on neighbouring land) throughout the development scheme (including demolition and clearance works). It is a particularly common requirement on congested development sites where working/storage space is likely to be limited.
- 2.52 It is essential that suitable techniques are followed to ensure there is no damage from the demolition and construction process. Consideration should also be given to how the soil can be protected, as well as the roots. A variety of potential risks to tree health can arise from construction work. This includes ground excavations, or sustained movements from walking and movement of machinery leading to soil compaction, preventing the absorption of water and creating anaerobic conditions. Tree failure can

also occur where root protection areas and buffer zones are not properly managed and maintained. For example, spills and leaching can be toxic to trees and rising soil levels can suffocate roots. A robust supervisory and communications framework for site contractors must be in place to ensure that the risks to planting are minimised.

- 2.53 The Tree Protection Plan and Method Statement must be prepared by a qualified arboriculturalist across the various phases of the development. Applicants must demonstrate to the Council's satisfaction that suitable tree protection measures will be place prior to any works commencing on-site.
- 2.54 The precise content of the Tree Protection Plan and Arboricultural Method Statement will depend on the requirements of each individual planning application; however, it should be prepared in line with BS:5837:2012. Key considerations are set out below.

The Tree Protection Plan should show:

- Retained trees against the finalised site layout;
- Location of Root Protection Areas (RPAs);
- Operations/ construction within RPAs;
- Details of protective fencing / barriers and any construction exclusion zones / areas designated for storage/mixing of materials and welfare facilities;
- Mitigation tree planting (as shown in the landscaping scheme);
- Any other relevant location-based tree information.

The Arboricultural Method Statement will guide the relevant operations on the site and should include:

- Supporting information for the Tree Protection Plan and rationale for the proposals;
- Schedule of all arboricultural works to facilitate construction/demolition activities, including pruning and moving, and their timing/phasing in connection with the development;
- Relevant construction and demolition details and methods of tree protection for each stage of the works, within Root Protection Areas and buffer zones. This includes the construction of ancillary structures (e.g. bin stores), provision of site accommodation, location of storage areas and cement mixing, removal and replacement of surfacing; arrangements for the disposal of materials, specification and installation of temporary and permanent access, the positioning of heights and arcs of cranes and space needed for piling rigs and excavation and utility/service runs;
- Supervisory and communications framework for all parties working on-site; i.e. how works will be supervised throughout the demolition/construction and identification of the key personnel that will be involved in the project: names and contact details.
- How relevant parties will be made aware of the protection measures, including local residents and community groups;
- Monitoring arrangements.
- 2.55 The Method Statement should be developed in liaison with the Council and developers must notify the Council's Tree Officer prior to the commencement of any works onsite, including demolition. All tree protection measures are to be installed in line with the approved tree protection details prior to commencement to prevent excavations, the storage of materials, deposition of waste, compaction etc.. These measures, e.g.

fences, should be properly maintained throughout the construction process. Where tree protection measures are not properly maintained, the Council may use a stop notice to prevent the development from continuing.

- 2.56 Site huts, scaffolding and cranes, temporary site structures and any other buildings and structures to be located on site during the construction phase should not interfere with trees, including their canopies and root system, and vegetation to be retained. Materials should be carefully stored and disposed of to avoid harm to the wellbeing of trees and vegetation.
- 2.57 The Council's Tree Officer will inspect the measures that have been put in place to protect trees. Ad-hoc visits will be made throughout the demolition/construction phase to check that tree protection measures are still in place.
- 2.58 No tree protection measures should be removed during the construction programme unless the Council's Tree Officer or a qualified arboriculturalist employed by the developer has inspected the site.

3. New & replacement planting and management

- 3.1 Section 197 of the Town and Country Planning Act 1990 places a duty on the Local Planning Authority to secure the planting of new trees. Policy A3 of the Camden Local Plan states that the Council will expect developments to incorporate additional trees and vegetation wherever possible as part of a package of biodiversity enhancing measures.
- 3.2 Applicants should therefore seek opportunities to restore and enhance planting throughout the site as part of their landscaping scheme. We will take a 'right tree for the right place' approach with the aim of delivering an attractive treed environment with age and species diversification. It will also ensure that trees have the optimum conditions for establishment and longevity for future generations to enjoy. The landscaping or planting scheme should take into account the impact of trees when they are fully grown and provide sufficient replacement trees to mitigate the loss of canopy cover where appropriate.

Setting objectives for planting design

- 3.3 Planning applications will be assessed to consider whether the chosen objectives of a soft landscaping scheme is appropriate for its site and setting, and the degree to which the scheme is likely to meet its objectives.
- 3.4 The aims of planting design can be categorised into three main objectives: (1) Functional (2) Ecological and (3) Aesthetic. These objectives are inter-related but one may be prioritised over another for the purpose of a particular project.

Functional objectives include:

- Integrating a site with its surroundings
- Providing spatial definition and enclosure
- > Directing pedestrian and vehicular movement
- Providing shelter
- Providing micro climatic amelioration
- Providing SUDS

Ecological objectives include:

- Maintaining and enhancing natural processes
- Increasing the biodiversity value of a site

Aesthetic objectives include:

- > Contributing to or creating the character of a place
- > Adding to people's sensory enjoyment in the use of a space.
- 3.5 Policy D1 of the Local Plan states that the Council will require development to incorporate high quality landscape design and maximise opportunities for greening through tree planting and other soft landscaping. The Council will therefore expect a detailed landscaping scheme for all major developments, as set out in Camden's 'Local Area Requirements'. This should include:

- Details of trees and shrubs to be planted (species, plant sizes, proposed numbers/densities), surface materials, boundary screen walls and fences, and associated timescales for implementation;
- Preparation, transportation, handling and storage of stock;
- Relevant planting methods and rooting environment (including sufficient soil volume) to include sectional drawings of proposed planting pits;
- Aftercare proposals should include a long-term maintenance and landscape management plan (see below).

The Council will secure a planting plan or landscaping scheme through a development's Section 106 agreement.

- 3.6 We will give priority to the provision of new trees and vegetation on sites where it is currently lacking (or degraded) and where this would enhance public areas. All planting should have regard to the Council's <u>Biodiversity Action Plan</u>, particularly native species of value to wildlife. Planting of trees and vegetation may also assist the realisation of 'green corridors', including the resolution of gaps in the corridors. These corridors are used by wildlife for movement and foraging.
- 3.7 When considering the aesthetic and social value of a tree, applicants should take into account the scale, balance, impact, texture and colour provided by the species in the tree planting scheme.
- 3.8 We will expect tree planting schemes to consider the opportunities for increasing tree species and genetic diversity in the Borough, suitable in the context of the local landscape character. This can help to enhance the resilience of the tree stock and canopy to both disease and the effects of climate change. An over-reliance on a limited number of tree species and a restricted gene pool is likely to be detrimental over the medium to long term. Applicants should refer to information relating to Camden's tree profile in <u>Open Data</u>. We will also strongly encourage proposals that seek to restore or enhance tree lines, wooded glades and vegetation where this has deteriorated or been lost over time.
- 3.9 Local Plan Policy A3 identifies a range of factors that applicants should be aware of when considering new tree planting:
 - The **amenity value** of any trees to be removed.
 - **Ecology** we expect new trees and vegetation to increase the biodiversity value of the site.
 - **Historic context** trees/vegetation should take account of the existing qualities of the site and complement the surrounding architecture and the historic landscape character, recognising the evolution and use of the site, the local character and important views.
 - Availability of space this should take account of both Root Protection Areas and buffer zones, as identified by the Tree Constraints Plan and Arboricultural Impact Assessment. The impact of different tree species on buildings above and below ground and ancillary structures, such as boundary walls, should be considered. The planting plan must also consider the potential for trees, over their lifetime, to give rise to unacceptable loss of light to habitable rooms and consider necessary clearances for CCTV, street lighting and overhead cables and high/large vehicles. Trees should be planted in positions which permit a tree to grow to maturity without inhibition of form.

- **Soil conditions** including hydrogeology ensuring there is sufficient soil volume, the right soil type and drainage in order that roots can grow and function properly.
- Potential for **improvements to air and soil quality**.
- Adapting to climate change taking opportunities to improve a site/area's sustainability and function. Applicants should consider the ability of trees/vegetation to withstand drought and extreme weather, and changes in the prevalence of pathogens.
- **Long-term resource consumption** the level of input required for the management and maintenance of trees and the effect this has on lifespan.
- Advice in BS 8545 Trees: from nursery to independence in the landscape Recommendations.
- 3.10 The Camden Local Plan Policy A3 states that the Council will expect provision of tree species of a large ultimate size where opportunities allow. Existing large canopy trees are part of the character of several areas of the borough. In these areas in particular, and other areas where the opportunity arises, space should be made for the growth and development of large canopy trees. Trees of a large ultimate size are usually considered to be trees which reach a mature height of 15-20m+, provided their growth is not restricted by constraints to root development. Site design should make provision for the expansion of the crown of the trees and sufficient soil volume to support the long-term growth and stability of the tree.
- 3.11 The tree and plant species to be selected should be suitable for local growing conditions (soil conditions, seasonal variations, daily temperature ranges, rainfall, sun light and shade) and their ongoing maintenance should be taken into account. Where a development site contains mainly older trees, new planting should normally be included to ensure canopy cover is sustained over time. Trees should form part of the local landscape character and different planting is likely to be appropriate for a private garden or open space compared to the highway and public areas. For information Camden's wider tree population please the information in <u>Open Data</u>.
- 3.12 Existing species will serve as an indicator of what might be successfully grown on the site when selecting additional plants. Generally, native species are considered to be most suitably adapted to local conditions; however, there are a range of non-native trees and plants which are at least equally adaptable to the unique ecology of urban areas and provide an important contribution to biodiversity. On larger sites, applicants are strongly considered to draw on a wide-ranging planting list featuring both native and non-native species suitable to different types of urban settings. This will enhance ecological resilience to diseases and climate change⁴. Invasive species that threaten biosecurity must however be avoided and applicants should ensure that all planting stock supplied is free of pests or disease.
- 3.13 The make-up of existing trees managed by Camden Council is set out in <u>Open Data</u> and is likely to be a useful resource to inform future planting schemes.

Ensuring successful tree establishment

3.14 Water conservation should be intrinsic to the design of a planting scheme whether it is by selecting drought tolerant plants, maintaining soil conditions conducive to water retention, for example by mulching, or providing for on-site water harvesting and grey water recycling.

⁴ See TDAG: "Trees in the Townscape – A Guide for Decision Makers"

- 3.15 The successful establishment of trees is also linked to how they have been initially grown (i.e. bare root, root balled or container grown). This may influence the time at which planting occurs and the associated soil conditions that may be required. Tips for good planting are set out below:
 - ✓ Ensure the tree pit does not contain any construction materials or debris;
 - ✓ Cover the roots of the tree to avoid desiccation;
 - ✓ Make sure the pit is deep enough to accommodate roots without bending;
 - The bottom and sides of the pit should be forked over to ease the passage of roots;
 - ✓ After placement in the pit, the tree should be oriented to best advantage in bare rooted stock. Roots should be spread evenly, ensuring they do not circle the hole or point upwards. Circling roots on the edge of a rootball or container grown tree should be cut;
 - The tree should be placed at the same level as it had been growing in the nursery (the 'nursery mark');
 - ✓ Fertiliser or compost may be necessary;
 - ✓ The pit should be backfilled in layers and the soil consolidated to ensure there are no air pockets and the tree is firmly anchored in the soil;
 - ✓ The tree should be provided with an appropriate support system, including below ground support, during establishment.
- 3.16 It is recognised that on some sites, e.g. historic courtyard or mews developments, it may not be appropriate to provide additional tree planting. The historic context should be considered as part of the Tree Constraints Plan. In some locations, there may be opportunities to positively enhance the significance of a heritage asset through the replacement of inappropriate species or restoration of historic hedgerows or treelines.
- 3.17 We will normally discourage the replacement of soft landscaping with hard landscaping in order to preserve the environmental and other benefits of the planting.
- 3.18 Where trees are planted in a hard landscape (e.g. street tree planting), we will expect appropriate surface materials around the trees and shrubs to ensure their long-term sustainability. Every opportunity should be taken to ensure trees are planted in a location where the roots can extend within a wider soil volume than the initial pit allows. This will reduce watering, lead to trees being healthier and living longer and promote a well-rounded and visually attractive specimen.
- 3.19 For the planting of new street trees, a trial hole may be investigated to investigate ground conditions including potential archaeological remains and existing utilities. This may preclude planting, although root barrier protection can sometimes will be used allowing trees to grow successfully. Where these issues are known to exist, the Council may seek an additional sum for the establishment of tree planting.
- 3.20 Please note that trees located in planters will not generally be encouraged because the true development and longevity of the tree is compromised. Furthermore, this type of planting is dependent on a life support system based on permanent irrigation for the life of the tree.

Funding for off-site contributions and compensation

- 3.21 It is important that the multiple benefits of Camden's tree canopy are not progressively eroded by the cumulative impacts of development. There will be a presumption against the loss of trees protected by Tree Protection Orders (TPOs) or trees that make a significant contribution to a Conservation Area. Where the felling of either protected or significant trees has been demonstrated to be unavoidable, we will seek replacement planting on-site of an appropriate size, number and species in an appropriate location.
- 3.22 In a tightly developed urban area, there will be occasions where it is not be possible for trees or trees providing the same amenity or biodiversity benefits to be replaced on-site because of the footprint of proposed new buildings. While it will always be the Council's preference for significant trees to be replaced within the curtilage of the development, it is important that equivalent benefits provided by existing trees and vegetation can be secured where this is not feasible.
- 3.23 This will be achieved through securing a commuted sum where the cost of replacement planting is calculated according to its CAVAT (Capital Asset Value for Amenity Trees) value⁵. This is a way of calculating the value of trees in monetary terms and is a widely used approach to ensure that realistic replacement and / or compensation is provided. The CAVAT value allows for contributions, positive and negative, of the tree's location, relative contribution to amenity value (including the numbers of people that interact with the tree) and appropriateness, as well as functionality and life expectancy. The basic value is modified by a consideration of the impact of these factors to determine the quantum of general amenity benefit. Applicants may be required to fund independent inspection and valuation of trees to establish CAVAT values.
- 3.24 The Council will use these commuted sums to fund tree planting in the immediate area where this is possible through the planting of trees on Council owned land such as highways, parks, housing estates and nature reserves. The funding may also be used to fund tree planting on other large private developments in the local area. This funding will also be expected to cover a minimum of 10 years of maintenance costs. Replacement trees will be planted in the following tree planting season wherever possible.
- 3.25 As set out in the Local Plan, the Council will expect tree planting plans and landscaping schemes to take account of the time trees take to reach maturity. Use of CAVAT value will ensure that the local amenity benefits of existing semi-mature and mature trees are taken into account when appropriate replacement planting is being considered. This recognises that only when a tree reaches maturity that its full return on investment is capable of being realised. Depending on the species, it may take between 15 and 40 years for a tree to grow a canopy large enough to deliver a full range benefits, such as rainwater management and air pollution removal. From an ecological perspective, older trees will also be richer in wildlife.
- 3.26 Subject to the CIL regulations, the Council will also seek to pool funds to increase tree coverage in parts of the Borough where it is currently lacking. We will also take into

⁵ The "Full Method" approach should be followed.

account priority areas for tree planting where these have been identified through a neighbourhood plan that has passed the examination stage. The local element of CIL is potentially a good source of funding for tree planting and greening projects.

Management and maintenance

- 3.27 It is important that a robust management regime for newly planted trees and landscaping schemes to ensure that trees and vegetation are able to reach maturity and deliver maximum benefits and functions (carbon sequestration, stormwater mitigation etc.) over their life course. Maintenance requirements and method of aftercare management should be considered during the design stage (e.g. ensuring there is access for maintenance, storage of materials on-site and availability of sources of water). This will also ensure that the overall sustainability of the planting scheme is acceptable.
- 3.28 Proper management arrangements will ensure that trees and vegetation do not become a nuisance for the occupants of the scheme or surrounding community.
- 3.29 We will expect the detailed landscaping scheme or planting plan to include a landscape management plan. This will ensure that all planting on site is sustainable and adequately maintained in line with BS8545 for sufficient duration. This will be secured by a planning condition or in a Section 106 agreement.
- 3.30 Thorough and consistent irrigation of the soil around a tree is essential to its survival and should continue for a 3-5 year period or longer in special circumstances. Following initial irrigation, the surface of the tree pit should be mulched. Key considerations for the aftercare of young trees to avoid complications during the establishment period are:
 - ✓ Stability of soils;
 - ✓ Maintenance of mulching (as mulch materials may decompose or be disturbed);
 - ✓ Watering;
 - Pruning to remove dead or crossing branches or branches in poor shape or form or have a poor union with the main stem;
 - ✓ Weeding especially grass which competes for moisture;
 - ✓ Appropriate support systems and checking to make sure they are performing as intended. Below ground systems may also require adjustment due to soil settlement;
 - ✓ Continuing protection from human activity, wildlife and pathogens, e.g. strimming at the base of a tree, stripping of bark.
- 3.31 The landscape management plan should set out the management, supervisory and reporting arrangements and maintenance schedules for all landscaped areas (hard and soft), other than for small, privately owned, domestic gardens. We would expect this to be submitted to the Council for approval prior to the occupation of the scheme. The landscape management plan must subsequently be implemented as approved.
- 3.32 By choosing a tree maintenance contractor and collaborating with them during the design of a proposal, a developer can submit a realistic management plan with a planning application that will demonstrate landscape management in the whole context of the scheme as well as for the trees.

- 3.33 Please note that in major developments, a landscaping scheme may include areas of public open space. The amount and quality of public open space the Council expects, and management arrangements for these spaces are set out in adopted <u>Camden</u> <u>Planning Guidance: Public Open Space</u>.
- 3.34 Funding for ongoing maintenance should be considered and provided in any new planting scheme. The Council will seek a financial contribution to cover a minimum of 10 years of maintenance.
- 3.35 If within five years from the date of planting trees or vegetation are removed, uprooted or destroyed or dies or becomes seriously damaged, the Council will expect replacement planting of the same size and species, unless it gives its written consent to any variation.