Camden Planning Guidance

# Design

London Borough of Camden

CPG 1

July 2015

Camden

# CPG1 Design

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. The Council adopted CPG1 Design on 6 April 2011 following statutory consultation. This document was updated in 2013 to include Section 12 on artworks, statues and memorials, and updated in 2015 to revise the guidance for recycling and waste storage. Details on these updates and the consultation process are available at camden.gov.uk/cpg.

1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

## Design in Camden

1.3 Camden has many attractive and historic neighbourhoods as well as both traditional and modern buildings of the highest quality. These are a significant reason that the borough is such a popular place to live, work and visit. As well as conserving our rich heritage we should also contribute towards it by ensuring that we create equally high quality buildings and spaces which will be appreciated by future generations.

1.4 This objective of achieving high quality design does not just concern new development or large-scale schemes, but also includes the replacement, extension or conversion of existing buildings. The detailed guidance contained within this section therefore considers a range of design-related issues for both residential and commercial property and the spaces around them.

## What does this guidance cover?

1.5 This guidance provides information on all types of detailed design issues within the borough and includes the following sections:

1. Introduction
2. Design excellence
3. Heritage
4. Extensions, alterations and conservatories
5. Roofs, terraces and balconies
6. Landscape design and trees
7. Shopfronts
8. Advertisements, signs and hoardings
9. Designing safer environments
10. Waste recyclables storage
11. Building services equipment
12. Artworks, statues and memorials

1.6 This guidance supports the following Local Development Framework policies:

**Core Strategy**

- CS14 Promoting high quality places and conserving our heritage
- CS15 Protecting and improving our parks and open spaces & encouraging biodiversity
- CS17 Making Camden a safer place
- CS18 Dealing with our waste and encouraging recycling

**Development Policies**

- DP24 Securing high quality design
- DP25 Conserving Camden's heritage
- DP27 Basements and lightwells
- DP29 Improving access
- DP30 Shopfronts

1.7 It should be noted that the guidance covered in this section only forms part of the range of considerations that you should address when proposing new development. In addition to these specific design matters you should also consider wider issues such as cycle storage, residential space standards, wheelchair housing, designing in sustainability measures and impacts on neighbours. Further guidance on these, and other issues, is contained within the Local Development Framework documents and the Camden Planning Guidance.

# 2 Design excellence

**KEY MESSAGES**

Camden is committed to excellence in design and schemes should consider:

- The context of a development and its surrounding area;
- The design of the building itself;
- The use of the building;
- The materials used; and
- Public spaces.

2.1 High quality design makes a significant contribution to the success of a development and the community in which it is located. Design of the built environment affects many things about the way we use spaces and interact with each other, comfort and enjoyment, safety and security and our sense of inclusion.

2.2 The purpose of this guidance is to promote design excellence and to outline the ways in which you can achieve high quality design within your development.

2.3 This guidance primarily relates to Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policies DP24 Securing high quality design.

### When does this apply?

2.4 This guidance applies equally to all development, whether new build, converted, refurbished, extended and altered development. However, the implications for a proposal will vary greatly depending on the nature of the site, the proposed use, the scale of development, its interaction with surrounding sites, and existing buildings and structures on the site.

2.5 Other sections in this Camden Planning Guidance (CPG) relate to specific types of developments and relevant design matters, for example advertisements, signs and hoardings, designing safer environments, extensions, alterations and conversions, heritage and shopfronts.

## General guidance on design

2.6 Camden is committed to excellence in design. The borough contains many special and unique places, many of which are protected by conservation area status. In accordance with draft London Plan policies 7.1–7.7, Core Strategy policy CS14 requires development schemes to improve the quality of buildings, landscaping and public spaces and we will not approve design which is inappropriate to its context or fails to improve the character of an area.

2.7 We are working with our partners to promote design excellence and improve public buildings, landscaping and the street environment. We have established the Camden Design Initiative which seeks to encourage involvement, awareness and understanding of good design and this is promoted through the bi-annual Camden Design Awards which acknowledge high quality and innovative design. We are also a promoter of the national Civic Trust Awards which are awarded to buildings judged to have made a positive cultural, social or economic contribution to the local community.

2.8 In order to achieve high quality design in the borough we require applicants to consider buildings in terms of context, height, accessibility, orientation, siting, detailing and materials. These issues apply to all aspects of the development, including buildings and other structures (e.g. substations, refuse or cycle storage), outdoor spaces, landscaping and access points and should be considered at an early stage in the design of a development, as these elements are often difficult to change in later stages.

### Context

2.9 Good design should:

- positively enhance the character, history, archaeology and nature of existing buildings on the site and other buildings immediately adjacent and in the surrounding area, and any strategic or local views. This is particularly important in conservation areas;
- respect, and be sensitive to, natural and physical features, both on and off the site. Features to be considered include, but are not limited to: slope and topography, vegetation, biodiversity, habitats, waterways and drainage, wind, sunlight and shade, and local pollutant sources. Movement of earth to, from and around the site should be minimised to prevent flood risk, land instability and unnecessary transport of aggregates, especially by road; and
- consider connectivity to, from, around and through the site for people using all modes of transport, including pedestrians, cyclists, wheelchair users, those with visual impairments, people with pushchairs, and motorised vehicles.

### Building design

2.10 Good design should:

- ensure buildings do not significantly overshadow existing/proposed outdoor spaces (especially designated open spaces), amenity areas or existing or approved renewable energy facilities (such as solar panels). For further information, refer to CPG3 Sustainability Renewable energy (A shadowing exercise may be required for tall buildings or where they are near open spaces);
- consider the extent to which developments may overlook the windows or private garden area of another dwelling;
- consider views, both local and London wide, and particularly where the site is within a recognised strategic viewing corridor (as shown on the policy Proposals Map);
- consider the degree of openness of an area and of open spaces, including gardens including views in an out of these spaces
- contributions to the character of certain parts of the borough;
- provide visual interest for onlookers, from all aspects and distances. This will involve attention to be given to both form and detail;
- consider opportunities for overlooking of the street and, where appropriate, provide windows, doors and other ‘active’ features at ground floor; and
- incorporate external facilities such as renewable energy installations, access ramps, plant and machinery, waste storage facilities and shading devices into the design of the development. Careful consideration must be given to ensure that the facility does not harm the built environment.

### Land use

2.11 The use of a building should:

- take into account the proposed use, and the needs of the expected occupants of the buildings and other users of the site and development; and
- provide clear indication of the use of the building. It is noted, however, that reuse of existing buildings, as well as the accommodation of possible future changes of use, can make this difficult.

### Materials

2.12 Materials should form an integral part of the design process and should relate to the character and appearance of the area, particularly in conservation areas or within the setting of listed buildings. The durability of materials and understanding of how they will weather should be taken into consideration. The quality of a well designed building can be easily reduced by the use of poor quality or an unsympathetic palette of materials. We will encourage re-used and recycled materials, however these should be laid to ensure a suitable level accessible surface is provided. Further guidance is contained within CPG3 Sustainability (Sustainable use of materials).

### Tall buildings

2.13 Tall buildings in Camden (i.e. those which are substantially taller than their neighbours and/or which significantly change the skyline) will be assessed against a range of design issues, including:

- how the building relates to its surroundings, both in terms of how the base of the building fits in with the streetscape, and how the top of a tall building affects the skyline;
- the contribution a building makes to pedestrian permeability and improved public accessibility;
- the relationship between the building and hills and views;
- the degree to which the building overshadows public spaces, especially open spaces and watercourses; and
- the historic context of the building's surroundings.

2.14 In addition to these design considerations tall buildings will be assessed against a range of other relevant policies concerning amenity, mixed use and sustainability. Reference should be made to this CPG (Heritage chapter), CPG3 Sustainability (Climate change adaptation chapter) and CPG6 Protecting and improving quality of life (Overlooking and privacy and Wind/microclimate chapters).

2.15 Where a proposal includes a development that creates a landmark or visual statement, particular care must be taken to ensure that the location is appropriate (such as a particular destination within a townscape, or a particular functional node) and that the development is sensitive to its wider context. This will be especially important where the

development is likely to impact upon heritage assets and their settings (including protected views).

2.16 Design should consider safety and access. Guidance on these issues is contained within this CPG (Designing safer environments chapter) and CPG4 Protecting and improving quality of life (Access for all chapter). Schemes over 90m should be referred to the Civil Aviation Authority.

**Design of public space**

2.17 The design of public spaces, and the materials used, is very important. The size, layout and materials used in the spaces around buildings will influence how people use them, and help to create spaces that are welcoming, attractive, accessible, safe and useful. They can also contribute to other objectives such as reducing the impact of climate change (e.g. the use of trees and planters to reduce run-off and provide shading), biodiversity, local food production and Sustainable Urban Drainage Systems (SUDs), and provide useful amenity space. In Conservation Areas there may be particular traditional approaches to landscaping/boundary treatments that should be respected in new designs.

2.18 The spaces around new developments should be considered at the same time as the developments themselves and hard / soft landscaping and boundary treatments should be considered as part of wider cohesive design. The landscaping and trees chapter in this CPG, and individual Conservation Area Appraisals, provide further guidance on this issue.

2.19 Public art can be a catalyst for improved environmental quality by upgrading and animating public space and enhancing local character and identity through helping create a sense of place. The Council will therefore encourage the provision of art and decorative features as an integral part of public spaces, where they are appropriate to their location and enhance the character and environment.

2.20 It is important that public spaces and streets are maintained to a high standard and so, in line with the Local Implementation Plan, the Council will continue to undertake public space enhancement works through specifically targeted programmes. The Designing safer environments chapter in this CPG provides more detailed guidance on the incorporation of safety and security considerations in public spaces.

**Design and access statements**

2.21 Design and Access Statements are documents that explain the design ideas and rationale behind a scheme. They should show that you have thought carefully about how everyone, including disabled people, older people and children, will be able to use the places you want to build.

2.22 Design and Access Statements should include a written description and justification of the planning application and sometimes photos, maps and drawings may be useful to further illustrate the points made. The length

and detail of a Design and Access Statement should be related to the related to the size and complexity of the scheme. A statement for a major development is likely to be much longer than one for a small scheme.

2.23 Design and Access Statements are required to accompany all planning, conservation and listed building applications, except in certain circumstances as set out on our website www.camden.gov.uk/planning. Our website also provides a template for Design and Access Statements and lists the information that each statement should contain. Further guidance on Access Statements in provided in CPG4 Protecting and improving quality of life (Access for all chapter).

### Further information

| | |
|---|---|
| General | By Design: Urban Design in the Planning System – Towards Better Practice, DETR/CABE, 2000<br>Design and Access Statements; how to read, write and use them, CABE, 2007 |
| Tall Buildings | Guidance on tall buildings, English Heritage/CABE, 2007 |
| Historic Environment | Understanding Place: conservation areas designation, appraisal and management (2011)<br>Building in Context, English Heritage/CABE, 2002.<br>Seeing History in the View (2011)<br>Good Practice Advice 3- Settings and Views (2015) |
| Other | Royal Institute of Chartered Surveyors (RICS); and<br>Royal Institute of British Architects (RIBA). |

# 3 Heritage

**KEY MESSAGES**

Camden has a rich architectural heritage and we have a responsibility to preserve, and where possible, enhance these areas and buildings.

- We will only permit development within conservation areas that preserves and enhances the character and appearance of the area
- Our conservation area statements, appraisals and management plans contain more information on all the conservation areas
- Most works to alter a listed building are likely to require listed building consent
- Historic buildings can and should address sustainability and accessibility

3.1 This section provides guidance on our identified heritage assets (which include conservation areas, listed buildings and registered parks and gardens), including what they area and the implications of their status and designation. This section also sets out details on how historic buildings can address sustainability.

3.2 This section sets out further guidance on how we will apply Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policy DP25 Conserving Camden's Heritage.

### When does this apply?

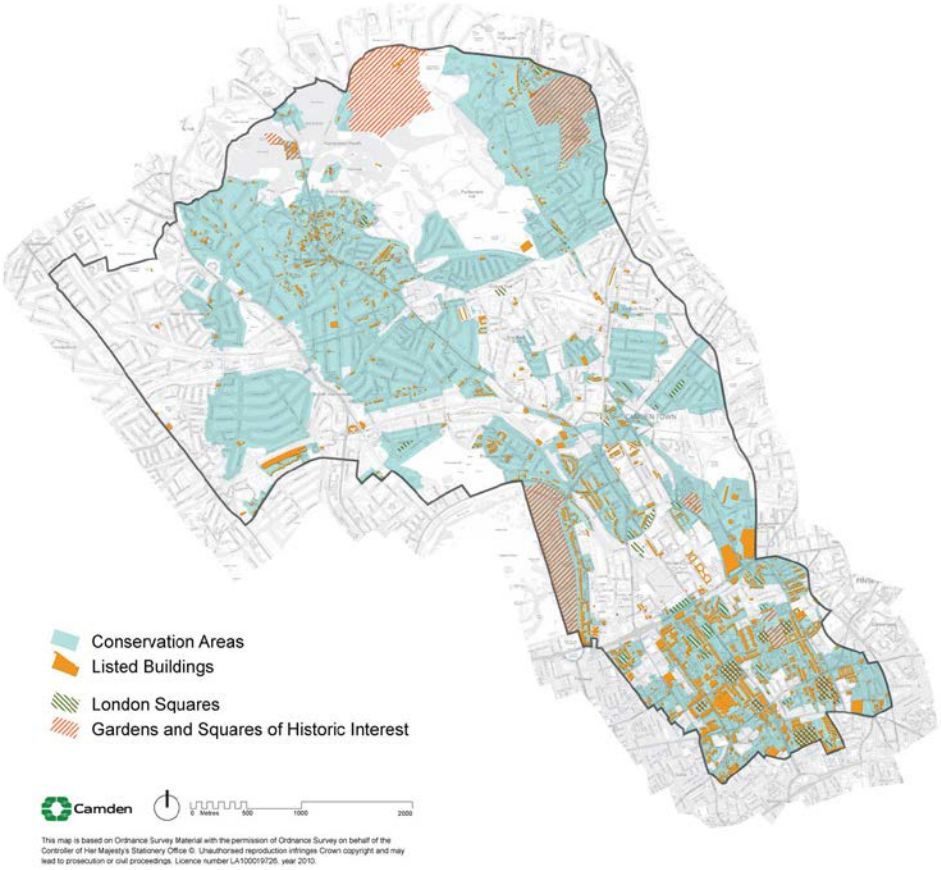
3.3 This guidance applies to all applications which may affect any element of the historic environment and therefore may require planning permission, or conservation area or listed building consent.

## Conservation Areas

### What is a conservation area?

3.4 A conservation area is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as an area of special architectural or historic interest, the character or appearance of which it is desirable to preserve and, where possible, enhance. PPS5 identifies conservation areas as “heritage assets” and requires that proposals in conservation areas are assessed for their impacts on their historic significance. There are 39 conservation areas in Camden, which vary greatly in appearance, size, character and style and these are identified on the LDF Proposals Map.

**Figure 1. Conservation Areas**




3.5 Conservation area designation is a way to recognise the importance of the quality of an area as a whole, as well as giving some protection to individual buildings within it. Conservation areas are not designated to stop all future development or change but to ensure that change is managed to conserve the historic significance of the area as a whole.

3.6 Conservation area designation is shown on the proposals map and further information on heritage is available on the 'Conservation and Design' section of the Council's website www.camden.gov.uk and on English Heritage's website www.english-heritage.org.uk.

**Effects of conservation area status**

3.7 We will only permit development within conservation areas, and development affecting the setting of conservation areas, that preserves and enhances the character and appearance of the area (see Planning Policy Statement 5 (PPS5), policy HE8).

3.8 The Council has greater control over building work in conservation areas, including demolition, materials and detailed design. Planning permission may be required for alterations or extensions that would not normally need planning permission elsewhere, such as minor roof

alterations, dormer windows, renewable energy installations or installation of a satellite dish.

**Renewable energy technology**

Renewable energy technologies generate energy from natural resources such as sunlight, wind, rain and heat in the ground, which are naturally replenished.

### Demolition in conservation areas

3.9 Conservation Area Consent is required to demolish or substantially demolish a building over 115 cubic metres or a structure such as a wall over 1 metre high that adjoins a highway, or more than 2 metres high elsewhere. When determining your application we will follow the guidance in PPS5, Core Strategy policy CS14 and Development Policy DP24 as well as that in our conservation area statements, appraisals and management plans (see below). It is an offence to totally or substantially demolish a building or structure in a conservation area without first getting consent from us and we would not normally allow their demolition without substantial justification, in accordance with criteria set out in government guidance PPS5 – Planning for the Historic Environment.

### Trees

3.10 Planning legislation makes special provision for trees in conservation areas. Prior to pruning or felling a tree in a conservation area you must provide the Council six weeks notice in writing. All trees that contribute to the character and appearance of a conservation area should be retained and protected. For further information on trees, please see Landscape Design and Trees chapter in this CPG.

## Article 4 directions

3.11 A range of minor changes can be made to buildings without the need to apply for planning permission as these have a general permission through planning legislation. These changes are known as permitted development. However, the character of a conservation area depends on the presence of specific original details and where these are lost the historic interest and attractive character of the area deteriorates.

3.12 In these situations we can issue an Article 4 direction through Article 4 of the Town and Country Planning (General Permitted Development) Order 1995 (as amended). This removes permitted development rights and means a planning application has to be made for minor works that usually do not need one.

3.13 Further information on Article 4 directions, including where they apply in Camden is available on the 'Advice and help with planning applications' section of the Council's website www.camden.gov.uk and English Heritage has published Guidance on making Article 4 Directions, available at www.english-heritage.org.uk/publications/guidance-on-making-article-4-directions/

**Conservation area statements, appraisals and management plans**

3.14 We have published a series of conservation area statements, appraisals and management plans that set out our approach to preserving and enhancing the historic significance of each individual conservation area. Many of these conservation area statements are available for download on our website.

3.15 Conservation area statements, appraisals and management plans help guide the design of development in conservation areas and we take these into account when assessing planning applications.

3.16 Each conservation area statement, appraisal or management plan contains the following:

- A summary of the location and the historical development of an area;
- A description of its character;
- An outline of the key issues and development pressures that are currently of concern;
- The key policy framework for that particular conservation area, and specific guidance for it;
- An identification of heritage assets and elements of the wider historic environment which give an area its historic significance; and
- An identification of sites and features that have a negative impact on the conservation area, or where an opportunity exists for enhancement of the area by redevelopment of a building or site.

## Listed Buildings

### What is a listed building?

3.17 A listed building is defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as a structure or building of special architectural or historic interest. These are included on the Statutory List of Buildings of Architectural or Historic Interest managed by English Heritage. Listed buildings are identified as heritage assets within the LDF and the Council is required to assess the impact that proposals to a listed building, or within their setting, may have on the historic significance of the building.

3.18 Listed buildings are graded according to their relative importance as either Grade I, Grade II* or Grade II. Grades I and II* are considered of outstanding architectural or historic interest and are of particularly great importance to the nation's heritage. The majority of listed buildings (about 94% nationally) are Grade II. However, the statutory controls on alterations apply equally to all listed buildings irrespective of their grade and cover the interior as well as the exterior and any object or structure fixed to or within their curtilage.

**Listing description**

The listing description contains details of a listed building's address, history, appearance and significance. These help to identify what it is about the building that gives it its special historic interest.

3.19 Further information on listed buildings in Camden is available on our website www.camden.gov.uk

### How can I alter a listed building?

3.20 Most works to alter a listed building are likely to require listed building consent and this is assessed on a case by case basis, taking into

account the individual features of a building, its historic significance and the cumulative impact of small alterations. The listing description is not intended to be exhaustive and the absence of any particular feature in the description does not imply that it is not of significance, or that it can be removed or altered without consent. Listed status also extends to any object or structure fixed to the listed building, and any object or structure within its curtilage which forms part of the land. You should contact the Council at the earliest opportunity to discuss proposals and to establish whether listed building consent is required.

3.21 Some 'like for like' repairs and maintenance do not require listed building consent. However, where these would involve the removal of historic materials or architectural features, or would have an impact on the special architectural or historic interest of the building, consent will be required. If in doubt applicants should contact the Council for advice.

3.22 In assessing applications for listed building consent we have a statutory requirement to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. We will consider the impact of proposals on the historic significance of the building, including its features, such as:

- original and historic materials and architectural features;
- original layout of rooms;
- structural integrity; and
- character and appearance.

3.23 We will expect original or historic features to be retained and repairs to be in matching material. Proposals should seek to respond to the special historic and architectural constraints of the listed building, rather than significantly change them.

3.24 Applications for listed building consent should be fully justified and should demonstrate how proposals would affect the significance of a listed building and why the works or changes are desirable or necessary. In addition to listed building consent, some proposals may also require planning permission. These applications should be submitted together and will be assessed concurrently.

3.25 It is a criminal offence to undertake unauthorised works to a listed building, even if you are not aware the building is listed, and could result in prosecution and fine or imprisonment (or both).

3.26 Some works that are required in order to comply with the Building Regulations (e.g. inclusive access, energy efficiency) may have an impact on the historic significance of a listed building and will require listed building consent.

**Inclusive access to listed buildings**

3.27 It is important that everyone should have dignified and easy access to and within historic buildings, regardless of their level of mobility. With

sensitive design, listed buildings can be made more accessible, while still preserving and enhancing the character of the building.

3.28 Further guidance is available in CPG4 Protecting and improving quality of life (Access for all chapter) and in the English Heritage publication "Easy Access to Historic Buildings" www.english-heritage.org.uk

### How can historic buildings address sustainability?

3.29 We recognise the role that the historic environment can play in reducing the impact of climate change. For example, reusing existing buildings could avoid the material and energy cost of new development. There are many ways to improve the efficiency and environmental impact of historic buildings, for example improving insulation, draught-proofing and integrating new energy-saving and renewable-energy technologies. We will seek to balance achieving higher environmental standards with protecting Camden's unique built environment (in accordance with LDF Core Strategy policies CS13 Tackling climate change through promoting higher environmental standards and CS14 Promoting high quality places and conserving our heritage) and PPS5 policy HE.1.

3.30 More detailed guidance on how to modify buildings without compromising their significance is contained within CPG3 Sustainability (Energy efficiency: new buildings, Energy efficiency: existing buildings, Renewable energy, Climate change adaptation, Water efficiency, Flooding and Sustainable use of materials). For further information see the links at the end of this chapter.

### Planning obligations relating to heritage assets

3.31 Many of the potential impacts of development on historic buildings and in archaeological priority and conservation areas can be covered through design and by conditions on the planning permission, for example the

need to carry out surveys or the storage and restoration of artefacts. Some objectives for building and area conservation or archaeology are unlikely to be satisfactorily controlled by a condition or in such cases and where impacts are off-site, or involve a particularly sensitive or complex programme of works, involving phasing, the Council may require implementation of these measures through a Section 106 Agreement.

## Further information

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|---|---|
| Planning Policy Statement 5<br>(PPS5) | The Government's national policies on the historic environment are set out in:<br>• Planning Policy Statement (PPS) 5 Planning for the historic environment – CLG, 2010<br>If you want guidance implement this national policy, it is provided in:<br>• PPS5, Planning for the Historic Environment, The Government's Statement on the Historic Environment for England, and The Historic Environment Planning Practice Guide |
| English Heritage | www.englishheritage.org.uk<br>Guidance on heritage assets:<br>• Guidance on Conservation Area Appraisals, 2006 – English Heritage;<br>• Guidance on Management of Conservation Areas, 2006 – English Heritage;<br>• Climate Change and the Historic Environment (2008); and<br>• Heritage at Risk Register - English Heritage http://risk.english-heritage.org.uk/2010.aspx<br>Guidance on sustainability measures in heritage buildings:<br>• Energy Conservation in Traditional Buildings<br>• Climate Change and the Historic Environment<br>There is also an online resource dedicated to climate change and the historic environment, available at:<br>• www.englishheritage.org.uk/climatechangeandyourhome<br>Guidance on accessibility:<br>• Easy access to Historic Buildings, 2012<br>• Easy access to Historic Landscapes, 2013 |
| Energy Saving Trust | www.est.org.uk |

# 4 Extensions, alterations and conservatories

**KEY MESSAGES**

- Alterations should always take into account the character and design of the property and its surroundings.
- Windows, doors and materials should complement the existing building.
- Rear extensions should be secondary to the building being extended.
- You can make certain types of minor alterations without planning permission (see below) external alterations.

4.1 This guidance provides advice to those seeking to alter or extend a residential property, including the erection of conservatories. The principles of this guidance also apply to extensions and alterations to other types of property. It expects high quality design that respects and enhances the character and appearance of a property and its surroundings, and also covers matters such as outlook, privacy and overlooking.

4.2 This guidance relates to Core Strategy Policy CS14 Promoting high quality places and conserving our heritage and Development Policies DP24 Securing high quality design.

### When does this apply?

4.3 This guidance applies to all proposals for alterations and extensions to residential properties, although some aspects will be relevant to alterations and extensions to other types of buildings.

4.4 You can make certain types of minor changes to your property without needing to apply for planning permission. These are called "permitted development rights", and further details can be found on the planning portal website www.planningportal.gov.uk or by contacting the Council. In some conservation areas, Article 4 directions have been introduced which have removed certain permitted development rights. Details of Article 4 Directions, including where they apply in Camden can be found in the Conservation and Urban Design section of our website www.camden.gov.uk.

4.5 In addition to this guidance, you should also make reference to chapters on Heritage, Design excellence and Roofs, Terraces and balconies, in this CPG. If your property is situated within a conservation area then you should also refer to the relevant Conservation Area Statement, Appraisal or Management Plan, which sets out detailed guidelines for development in a particular area. Many of these are available on our website.

## Guidance for all extensions and alterations

### External alterations

4.6 The good practice principles set out below and the general design considerations for residential façades shown in Figure 1 – 'Alterations to Residential Façades' should be followed when undertaking external alterations. A façade is the front or face of a building.

### Good practice principles for external alterations

4.7 Alterations should always take into account the character and design of the property and its surroundings. A harmonious contrast with the existing property and surroundings may be appropriate for some new work to distinguish it from the existing building; in other cases closely matching materials and design details are more appropriate so as to ensure the new work blends with the old.

#### Windows

- Where it is necessary to alter or replace windows that are original or in the style of the originals, they should be replaced like with like wherever possible in order to preserve the character of the property and the surrounding area. New windows should match the originals as closely as possible in terms of type, glazing patterns and proportions (including the shape, size and placement of glazing bars), opening method, materials and finishes, detailing and the overall size of the window opening.
- Where timber is the traditional window material, replacements should also be in timber frames. uPVC windows are not acceptable both aesthetically and for environmental reasons, including their relatively short lifespan and inability to biodegrade. Similarly, where steel is the traditional window material, steel replacements will be sought wherever possible, see also CPG3 Sustainability (Sustainable use of materials chapter), which gives guidance on the use of sustainable materials).
- Reference should be made to the Building Research Establishment's (BRE) Green Guide to Specification when sourcing replacement window frames.
- Where the original glazing bars are highly detailed and intricate, or contain stained glass or leaded panes these should be retained and repaired. See also the Camden leaflet *A Guide to Windows (2006)*, which is available on our website, for advice on secondary glazing and other ways to improve energy efficiency while retaining attractive original features.
- Where windows are replaced they should have the lowest 'U-value' feasible.
- Listed building consent will be required for replacement windows, secondary glazing and double-glazing in listed buildings.
- In conservation areas original single-glazed windows often contribute to the character and appearance of the area, and should be retained

and upgraded. There may however be some instances where double-glazing can be installed in a design that matches the original, for instance sash windows or casements with large individual pane sizes, or in secondary glazing. In such cases, the window frame and glazing bars of the replacement windows should match the existing.

- Further guidance on window alterations and the effect that this can have on energy efficiency and protecting heritage assets can be found on English Heritage's 'Climate Change and your Home' website: www.climatechangeandyourhome.org.uk

### Doors

- Where you are looking to replace doors their design should match the dimensions, proportions, joinery details, panelling and glazing of the original. Where timber replacement doors are proposed the timber should be sustainably sourced.
- Characteristic doorway features, such as porches, such be retained where they make a positive contribution to the character of groups of buildings.

### Materials

- Wherever possible you should use materials that complement the colour and texture of the materials in the existing building, see also CPG3 Sustainability (Sustainable use of materials chapter). In historic areas traditional materials such as brick, stone, timber and render will usually be the most appropriate complement to the existing historic fabric; modern materials such as steel and glass may be appropriate but should be used sensitively and not dominate the existing property.
- Materials for alterations should weather well, so their ageing process contributes positively to the character of the building, and the site's wider context.
- Original surface finishes should be retained or replicated wherever possible, as they are usually central to the architectural design / character treatment of a building. These may cover the entire building or façade (such as stucco facing), the roof elements (such as roof tiles and roof ridges), highlight specific features (such as windows or doors) or act as decorative elements (such as ironwork or terracotta panels).
- When repairing existing wall finishes, the composition of the original material (such as plaster, stucco or render) should be determined, the defective area cut out and a replacement material of identical chemical composition applied and properly bonded. Concrete repairs are generally non-original and unsympathetic to historic buildings, and can damage bricks, and should be replaced with a more traditional lime-based finish.
- The insulating quality of materials should be considered, along with their embodied energy (the energy used in manufacture) and the potential for re-use and recycling.

- Alterations or repairs to brickwork or stonework should match the original in all respects while satisfying the needs of durability and maintenance. This should include matching the original bond, mortar colour and texture. Retention of any existing pointing is encouraged wherever possible.
- Samples of brick type and mortar colour will normally be required to be submitted to the Council as part of any application.
- Painting, rendering or cladding of brickwork will normally be resisted, as it is often unsightly and can damage the appearance of a building by obscuring the texture and original colour of the façade. Painting, rendering or cladding may also trap moisture, which can cause major damp problems in the masonry.

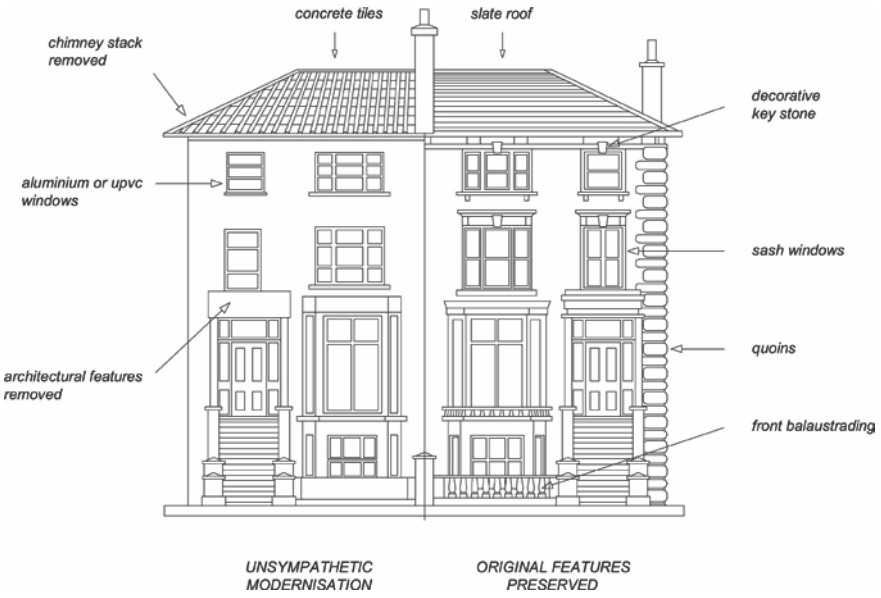
### External pipework

- Original external pipework and guttering should be repaired or reinstated in a like-for-like manner, where possible. In the case of historic buildings, cast iron replicas of original pipework are preferable to uPVC pipes. New pipework should be restricted to the side and rear elevations of buildings to avoid spoiling the appearance of the principal façade and should be grouped together and located in a discrete position.

### Scale

4.8 Extensions should be subordinate to the original building in terms of scale and situation unless the specific circumstances of the site, such as the context of the property or its particular design, would enable an exception to this approach. More detailed guidance on design considerations is contained within CPG1 Design (Design excellence chapter).

**Figure 2. Alterations to residential facades**



## Rear extensions

4.9 A rear extension is often the most appropriate way to extend a house or property. However, rear extensions that are insensitively or inappropriately designed can spoil the appearance of a property or group of properties and harm the amenity of neighbouring properties, for example in terms of outlook and access to daylight and sunlight.

### General principles

4.10 Rear extensions should be designed to:

- be secondary to the building being extended, in terms of location, form, scale, proportions, dimensions and detailing;
- respect and preserve the original design and proportions of the building, including its architectural period and style;
- respect and preserve existing architectural features, such as projecting bays, decorative balconies or chimney stacks;
- respect and preserve the historic pattern and established townscape of the surrounding area, including the ratio of built to unbuilt space;
- not cause a loss of amenity to adjacent properties with regard to sunlight, daylight, outlook, overshadowing, light pollution/spillage, privacy/overlooking, and sense of enclosure;
- allow for the retention of a reasonable sized garden; and
- retain the open character of existing natural landscaping and garden amenity, including that of neighbouring properties, proportionate to that of the surrounding area.

4.11 Materials should be chosen that are sympathetic to the existing building wherever possible (see also CPG3 Sustainability on Sustainable use of materials).

### Height of rear extensions

4.12 In order for new extensions to be subordinate to the original building, their heights should respect the existing pattern of rear extensions, where they exist. Ground floor extensions are generally considered preferable to those at higher levels. The maximum acceptable height of an extension should be determined in relation to the points outlined in paragraph 4.10 above. In cases where a higher extension is appropriate, a smaller footprint will generally be preferable to compensate for any increase in visual mass and bulk, overshadowing and overlooking that would be caused by the additional height.

4.13 In most cases, extensions that are higher than one full storey below roof eaves/parapet level, or that rise above the general height of neighbouring projections and nearby extensions, will be strongly discouraged.

### Width of rear extensions

4.14 The width of rear extensions should be designed so that they are not visible from the street and should respect the rhythm of existing rear extensions.

4.15 In addition, the rear of some buildings may be architecturally distinguished, either forming a harmonious composition, or visually contributing to the townscape. The Council will seek to preserve these where appropriate. Some of the Borough's important rear elevations are identified in conservation area statements, appraisals and management plans.

### Side extensions

4.16 Certain building forms may lend themselves to side extensions. Such extensions should be designed in accordance with the general considerations set out above in paragraph 4.10. Side extensions should also:

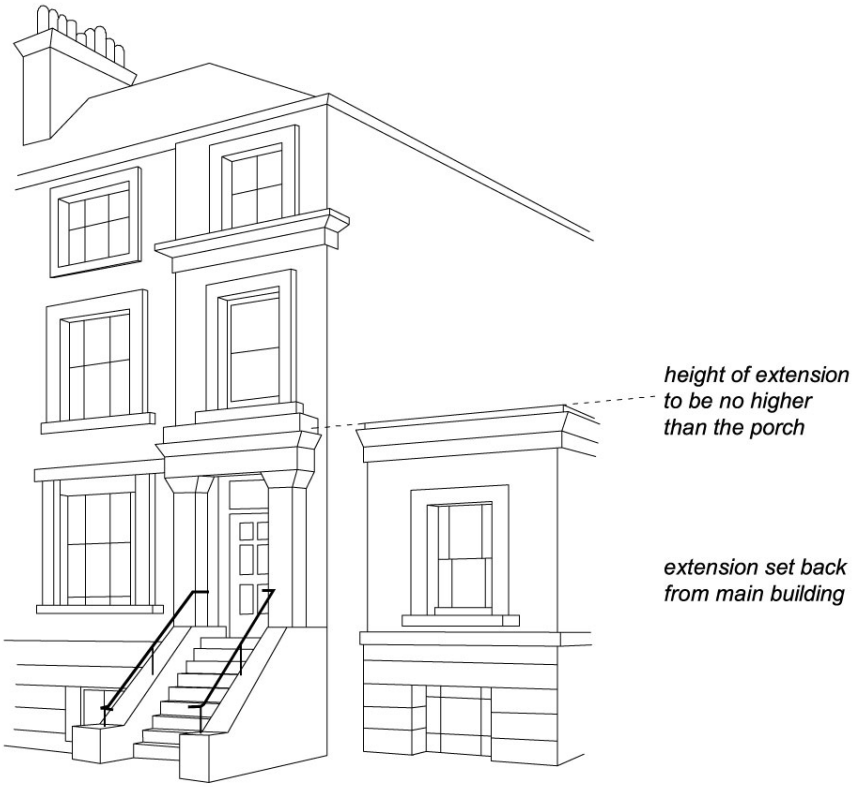
- be no taller than the porch; and
- set back from the main building.

4.17 In many streets in the north of the Borough houses have mature rear gardens that can often be seen through gaps between buildings, softening the urban scene and providing visual interest. The infilling of gaps will not be considered acceptable where:

- significant views or gaps are compromised or blocked;
- the established front building line is compromised;
- the architectural symmetry or integrity of a composition is impaired;
- the original architectural features on a side wall are obscured; or
- access to the rear of a property is lost.

4.18 Where a property is located in a conservation area, reference should be made to the relevant conservation area statements, appraisals and management plans, which often identify important gaps and vistas where infilling would be inappropriate.

**Figure 3. Side extensions**




## Conservatories

4.19 Conservatories should normally:

- be located adjacent to the side and rear elevations of the building;
- be subordinate to the building being extended in terms of height, mass, bulk, plan form and detailing;
- respect and preserve existing architectural features, e.g. brick arches, windows etc;
- be located at ground or basement level. Only in exceptional circumstances will conservatories be allowed on upper levels;
- not extend the full width of a building. If a conservatory fills a gap beside a solid extension, it must be set back from the building line of the solid extension; and
- be of a high quality in both materials and design.

4.20 Conservatories should not overlook or cause light pollution to neighbouring properties, including to those in flats above. In order to minimise overlooking, opaque lightweight materials such as obscured glass may be necessary on façades abutting neighbouring properties. Also, in order to minimise light pollution, solid lightweight materials, one-way glass or obscured glass may be required.

4.21 Further guidance is contained within CPG4 Protecting and improving quality of life (Light Pollution chapter).

**Development in rear gardens and other open land**

4.22 The construction of garden buildings, including sheds, stand-alone green houses and other structures in rear gardens and other undeveloped areas, can often have a significant impact upon the amenity, biodiversity and character of an area. They may detract from the generally soft and green nature of gardens and other open space, contributing to the loss of amenity for existing and future residents of the property.

4.23 Large garden buildings may also affect the amenity value of neighbours' gardens, and if used for purposes other than storage or gardening, may intensify the use of garden spaces.

4.24 Development in rear gardens should:

- ensure the siting, location, scale and design of the proposed development has a minimal visual impact on, and is visually subordinate to, the host garden
- not detract from the open character and garden amenity of the neighbouring gardens and the wider surrounding area
- use suitable soft landscaping to reduce the impact of the proposed development
- ensure building heights will retain visibility over garden walls and fences
- use materials which complement the host property and the overall character of the surrounding area. The construction method should minimise any impact on trees (also see Landscape design and trees chapter in this CPG), or adjacent structures
- address any impacts of extensions and alterations upon water run-off and groundwater flows, both independently or cumulatively with other extensions, and demonstrate that the impact of the new development on water run-off and groundwater flows will be negated by the measures proposed. Reference should be made to CPG3 Sustainability (Flooding chapter).

4.25 Pockets of privately owned land make important contributions to the character of certain parts of the borough, both in established neighbourhoods and areas of new development, creating village greens, informal verges, set backs for established structures or settings for listed buildings. Building on such areas will generally be discouraged.

4.26 Where any type of development, either in a rear garden or on private land that forms part of a public space, may be appropriate in principle, a full assessment should be made prior to the commencement of the development to avoid any potential impact upon trees or other vegetation in the surrounding area. This assessment may be required as part of an application for planning permission.

## Further information

4.27 The following professional bodies provide further guidance and advice on buildings and design matters:

- Royal Institute of Chartered Surveyors (RICS); and
- Royal Institute of British Architects (RIBA).

# 5 Roofs, terraces and balconies

**KEY MESSAGES**

Roof extensions fall into two categories:

- Alterations to the overall roof form; or
- Smaller alterations within the existing roof form, such as balconies and terraces.

When proposing roof alterations and extensions, the main considerations should be:

- The scale and visual prominence;
- The effect on the established townscape and architectural style;
- The effect on neighbouring properties

5.1 This guidance provides advice on roof alterations and extensions and on proposals for balconies and terraces. The Council will seek to ensure that roof alterations are sympathetic and do not harm the character and appearance of buildings or the wider townscape in the borough.

5.2 This guidance replates primarily to Development Policies DP24 Securing high quality design and DP25 Conserving Camden's Heritage.

### When does this apply?

5.3 This guidance applies to all planning applications involving roof alterations, roof extensions, balconies and terraces, and is particularly relevant to residential properties.

5.4 For properties in conservation areas, reference should also be made to the relevant conservation area statements, appraisals and management plans. These describe the area and its special character and contain specific area-based advice.

5.5 Where buildings are listed, reference should also be made to planning guidance on Heritage.

### Roof alterations and extensions – general principles

5.6 Proposals to alter and extend roofs fall into two categories: those that are accommodated within the existing roof form, such as dormer windows and roof lights, and those which alter the overall roof form, such as the construction of mansard roofs.

5.7 Additional storeys and roof alterations are likely to be **acceptable** where:

- There is an established form of roof addition or alteration to a terrace or group of similar buildings and where continuing the pattern of development would help to re-unite a group of buildings and townscape;

- Alterations are architecturally sympathetic to the age and character of the building and retain the overall integrity of the roof form;
- There are a variety of additions or alterations to roofs which create an established pattern and where further development of a similar form would not cause additional harm.

5.8 A roof alteration or addition is likely to be **unacceptable** in the following circumstances where there is likely to be an adverse affect on the skyline, the appearance of the building or the surrounding street scene:

- There is an unbroken run of valley roofs;
- Complete terraces or groups of buildings have a roof line that is largely unimpaired by alterations or extensions, even when a proposal involves adding to the whole terrace or group as a co-ordinated design;
- Buildings or terraces which already have an additional storey or mansard;
- Buildings already higher than neighbouring properties where an additional storey would add significantly to the bulk or unbalance the architectural composition;
- Buildings or terraces which have a roof line that is exposed to important London-wide and local views from public spaces;
- Buildings whose roof construction or form are unsuitable for roof additions such as shallow pitched roofs with eaves;
- The building is designed as a complete composition where its architectural style would be undermined by any addition at roof level;
- Buildings are part of a group where differing heights add visual interest and where a roof extension would detract from this variety of form;
- Where the scale and proportions of the building would be overwhelmed by additional extension.

5.9 Materials, such as clay tiles, slate, lead or copper, that visually blend with existing materials, are preferred for roof alterations and repairs. Where roofs are being refurbished, original materials such as keyhole ridge tiles or decorative chimney stacks and chimney pots should be reused. Replacement by inappropriate substitutes erodes the character and appearance of buildings and areas.

5.10 Where the principle of an additional storey is acceptable, the more specific guidance set out below will apply. This advice is supplemented by more specific area-based advice as set out in the Council's conservation area statements, appraisals and management plans which set out our approach to preserving and enhancing such areas. Many of these appraisals and management plans are available for download on our website, or are available as hard copies from our Planning reception.

## Roof dormers

5.11 Alterations to, or the addition of, roof dormers should be sensitive changes which maintain the overall structure of the existing roof form. Proposals that achieve this will be generally considered acceptable, providing that the following circumstances are met:

a) The pitch of the existing roof is sufficient to allow adequate habitable space without the creation of disproportionately large dormers or raising the roof ridge. Dormers should not be introduced to shallow-pitched roofs.

b) Dormers should not be introduced where they cut through the roof ridge or the sloped edge of a hipped roof. They should also be sufficiently below the ridge of the roof in order to avoid projecting into the roofline when viewed from a distance. Usually a 500mm gap is required between the dormer and the ridge or hip to maintain this separation (see Figure 4). Full-length dormers, on both the front and rear of the property, will be discouraged to minimise the prominence of these structures.

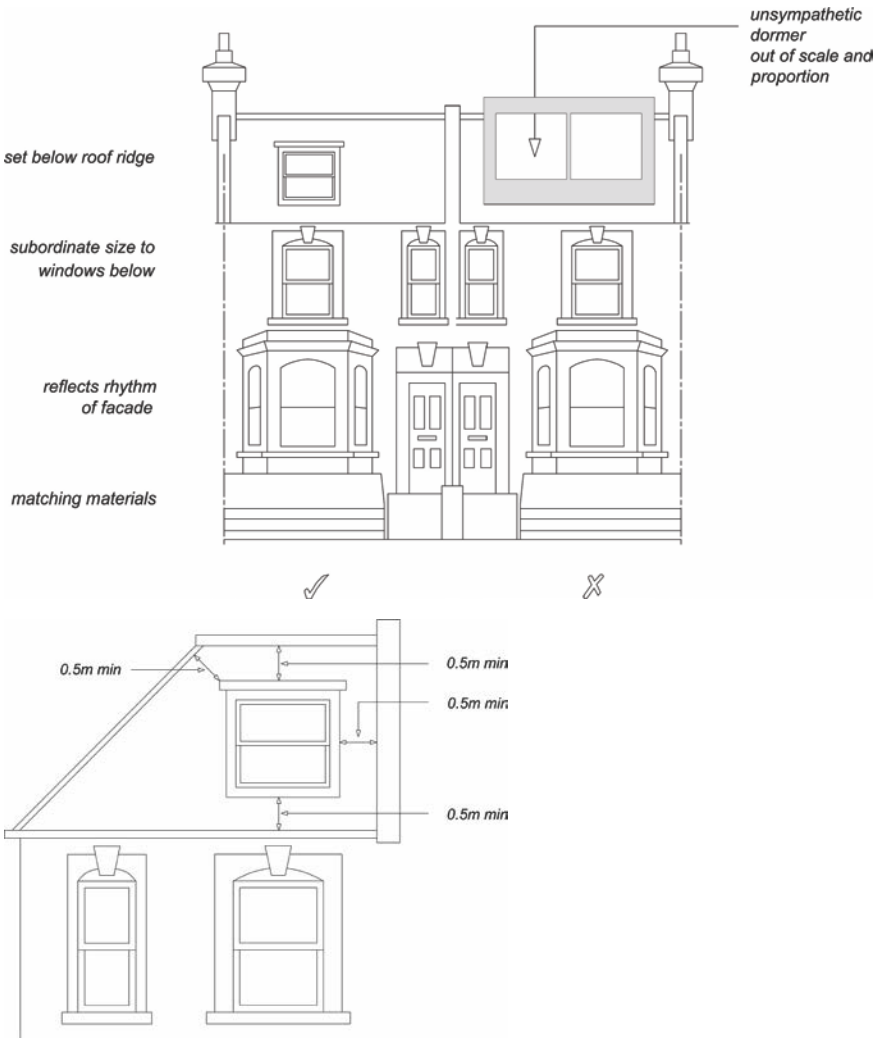
c) Dormers should not be introduced where they interrupt an unbroken roofscape.

d) In number, form, scale and pane size, the dormer and window should relate to the façade below and the surface area of the roof. They should appear as separate small projections on the roof surface. They should generally be aligned with windows on the lower floors and be of a size that is clearly subordinate to the windows below. In some very narrow frontage houses, a single dormer placed centrally may be preferable (see Figure 4). It is important to ensure the dormer sides (“cheeks”) are no wider than the structure requires as this can give an overly dominant appearance. Deep fascias and eaves gutters should be avoided.

e) Where buildings have a parapet the lower edge of the dormer should be located below the parapet line (see Figure 4).

f) Materials should complement the main building and the wider townscape and the use of traditional materials such as timber, lead and hanging tiles are preferred.

**Figure 4. Dormer windows**



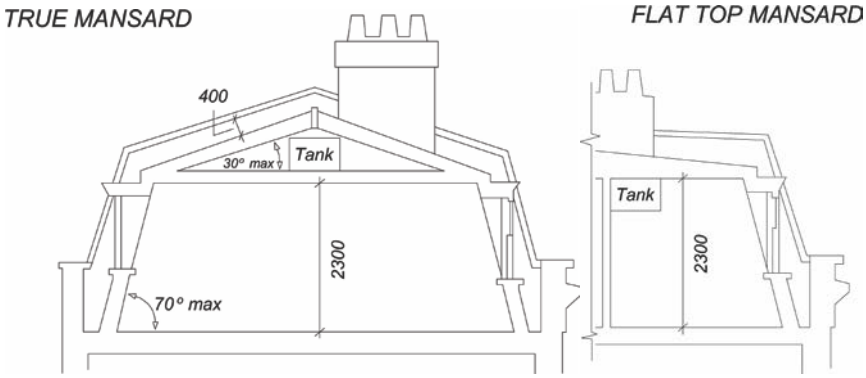

5.12 See CPG2 Housing (Residential development standards chapter) for further information, particularly the section on ceiling heights.

5.13 The presence of unsuitably designed new or altered dormers on neighbouring properties will not serve as a precedent for further development of the same kind.

### Mansard Roofs

5.14 Mansard roofs are a traditional means of terminating a building without adding a highly visible roof. This form is acceptable where it is the established roof form in a group of buildings or townscape.

**Figure 5. Mansard Roofs**




**True Mansard**

Lower slope is at a steeper angle than the upper, and the upper slope is visible

**Flat topped Mansard**

Upper slope of a pitch below 5° or totally flat

5.15 Mansard roofs are often the most appropriate form of extension for a Georgian or Victorian dwelling with a raised parapet wall and low roof structure behind. Mansard roofs should not exceed the height stated in Figure 5 so as to avoid excessive additional height to the host building. They are often a historically appropriate solution for traditional townscapes. It should be noted that other forms of roof extensions may also be appropriate in situations where there is a strong continuous parapet and the extension is sufficiently set back or where they would match other existing sympathetic roof extension already in the terrace.

**Parapet wall**

A low wall or railing that is built along the edge of a roof, balcony or terrace for protection purposes.

**Cornice**

The topmost architectural element of a building, projecting forward from the main walls, originally used as a means of directing rainwater away from the building's walls.

5.16 The three main aspects to consider when designing a mansard roof extension are its:

- pitches and profile;
- external covering; and
- windows.

5.17 The lower slope (usually 60-70°) should rise from behind and not on top of the parapet wall, separated from the wall by a substantial gutter. Original cornice, parapet and railing details should be retained and where deteriorated or lost, should be incorporated into the design of new roof extensions. Visible chimney stacks should be retained and increased in height, where necessary. Only party walls with their chimney stacks and windows should break the plane of the roof slope, and should be accommodated in a sensitive way and be hidden as far

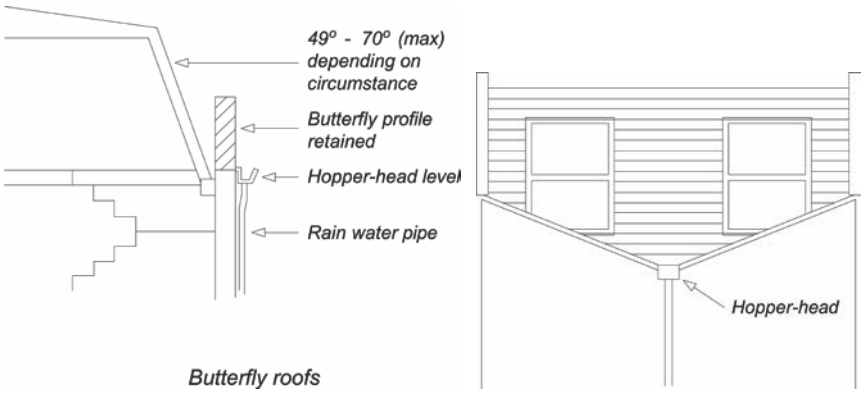
as is possible. (See also guidance on dormer windows and roof lights). Dormer windows or roof lights should be confined to the lower slope.

5.18 Roofing materials should be of the highest quality because of their significant visual impact on the appearance of a building and townscape and the need to be weather-tight. Natural slate is the most common covering and this should be laid with a traditional overlap pattern. Artificial slate or felt are not acceptable roof coverings in conservation areas. Where a roof in a conservation area is being re-covered, the choice of covering should replicate the original, usually natural slate or clay tile.

### Valley or Butterfly roofs

5.19 On buildings with a 'valley' or 'butterfly' roof if a mansard extension is considered acceptable in terms of the guidance in paragraphs 5.7 and 5.8 of this chapter, then the parapet should be retained. The new roof should start from behind the parapet at existing hopper-head level, forming a continuous slope of up to a maximum of 70° (see Figure 6). In this context, it is usually more appropriate to introduce conservation-style roof lights, which are flush with the roof slope, rather than dormers. Terraces and additional railings will not usually be acceptable.

**Figure 6. Butterfly roofs**




**Hopper head level**

The level at which the 'hopper head' (a square or funnel shaped receptacle to connect rainwater or waste pipes to a down-pipe) is positioned.

### Other roof additions

5.20 On some contemporary buildings a less traditional form of roof addition may be more appropriate. In such cases, proposals should still have regard for the following general principles:

- The visual prominence, scale and bulk of the extension;
- Use of high quality materials and details;

- Impact on adjoining properties both in terms of bulk and design and amenity of neighbours, e.g. loss of light due to additional height;
- Sympathetic design and relationship to the main building.

### Roof lights

5.21 Roof lights can have an adverse impact upon the character and appearance of buildings and streetscapes. This occurs where they are raised above the roof slope rather than being flush with the roof profile, or where they are an incompatible introduction into an otherwise un-cluttered roofscape, or where they conflict with other architectural roof elements, e.g. gables and turrets.

5.22 Roof lights should be proportioned to be significantly subordinate both in size and number and should be fitted flush with the roof surface. Some properties, particularly listed buildings and those within conservation areas with prominent roof slopes may be so sensitive to changes that even the installation of roof lights may not be acceptable.

### Balconies and terraces

5.23 Balconies and terraces can provide valuable amenity space for flats that would otherwise have little or no private exterior space. However, they can also cause nuisance to neighbours. Potential problems include overlooking and privacy, daylight, noise, light spillage and security.

5.24 Balconies and terraces should form an integral element in the design of elevations. The key to whether a design is acceptable is the degree to which the balcony or terrace complements the elevation upon which it is to be located. Consideration should therefore be given to the following:

- detailed design to reduce the impact on the existing elevation;
- careful choice of materials and colour to match the existing elevation;
- possible use of setbacks to minimise overlooking – a balcony need not necessarily cover the entire available roof space;
- possible use of screens or planting to prevent overlooking of habitable rooms or nearby gardens, without reducing daylight and sunlight or outlook; and
- need to avoid creating climbing opportunities for burglars.

### Roof Level

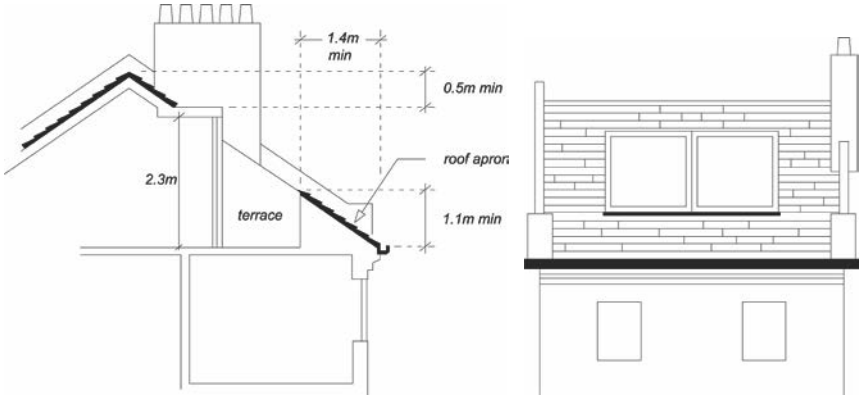
5.25 A terrace provided at roof level should be set back behind the slope of a pitched roof in accordance with Figure 7, or behind a parapet on a flat roof. A terrace should normally comply with the following criteria:

- The dimensions of the roof should be sufficient to accommodate a terrace without adversely affecting the appearance of the roof or the elevation of the property.
- A terrace will only normally be acceptable on the rear of properties. It is normally inappropriate to set back a mansard to provide a terrace.

- It should not result in the parapet height being altered, or, in the case of valley/butterfly roofs, the infilling of the rear valley parapet by brickwork or railings.
- Any handrails required should be well set back behind the line of the roof slope, and be invisible from the ground.
- It should not result in overlooking of habitable rooms of adjacent properties.

5.26 When a terrace is provided within the slope of a pitch as in Figure 7, the adjacent tiles or slates should be kept unbroken above the eaves. The width of the terrace should be no wider than a dormer opening. A terrace may be acceptable behind an existing parapet. Where the height of the parapet is less than 1.1m, a railing will be required to fulfil Building Regulations.

**Figure 7. Roof terraces**




## Building services equipment

5.27 New building services equipment and water tanks should be accommodated within the envelope of the building and its siting should be considered as part of the overall design (see chapter on Building services equipment in this CPG). Building services equipment includes, but is not limited to, heating and cooling systems, ventilation and extraction systems and associated ducting for electricity, communications and plumbing.

## Green roofs

5.28 We encourage the incorporation of green roofs into schemes where appropriate in design terms (see chapter on Green roofs and walls in CPG3 Sustainability). You should contact the Council to confirm whether planning permission is required for green roofs. Planning permission is not required on flat roofs which are concealed by a parapet.

## Solar panels

5.29 We encourage the installation of solar panels into schemes and for some properties these will not need planning permission. You should

contact the Council and visit the Planning Portal website www.planningportal.gov.uk to confirm whether planning permission is required for solar panels. Solar panels should be sited so as to maximise efficiency but minimise their visual impact and glare, for example utilising valley roofs and concealed roof slopes. Reference should be made to CPG3 Sustainability (Energy Efficiency: existing buildings and Energy Efficiency: new buildings chapters).

Camden Planning Guidance

# Housing

CPG 2

London Borough of Camden

July 2015

Camden

# CPG2 Housing

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance (CPG) to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. The Council formally adopted CPG2 Housing on 6 April 2011 following statutory consultation. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.

1.2 This document (CPG2 Housing) has been subject to two updates:

- 4 September 2013 following statutory consultation in November to December 2012, and
- 17 July 2015 following statutory consultation in March to April 2015.

Details on these updates and the consultation process are available at camden.gov.uk/cpg.

1.3 The Camden Planning Guidance covers a range of topics (such as design, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

## Housing in Camden

1.4 A key priority for the Council is to ensure that everyone has the opportunity to live in a decent home at a price they can afford in a community where they want to live. Camden is a very popular place to live, which means that average house prices are high and that the demand for affordable housing far outstrips supply.

1.5 The Local Development Framework seeks to make full use of Camden's capacity for housing to establish a plentiful supply and broad range of homes. In addition to meeting or exceeding Camden's housing targets, the Local Development Framework seeks to ensure that new homes are built to a high standard and provide well-designed accommodation that meets the needs of a range of occupiers.

## What does this guidance cover?

1.6 This guidance provides information on all types of housing development within the borough. It provides specific guidance on:

- Affordable housing
- Student housing
- Residential Space standards
- Lifetime homes and wheelchair housing
- Development involving net loss of homes

1.7 It highlights the Council's requirements and guidelines which support the Local Development Framework policies:

- CS1 – Distribution of growth
- CS5 – Managing the impact of growth and development
- CS6 – Providing quality homes
- CS14 – Promoting high quality places and conserving our heritage
- DP1 – Mixed use development
- DP2 – Making full use of Camden's capacity for housing
- DP3 – Contributions to the supply of affordable housing
- DP4 – Minimising the loss of affordable housing
- DP5 – Homes of different sizes
- DP6 – Lifetime homes and wheelchair housing
- DP7 – Sheltered housing and care homes for older people
- DP8 – Accommodation for homeless people and vulnerable people
- DP9 – Student housing, bedsits and other housing with shared facilities
- DP26 – Managing the impact of development on occupiers and neighbours

# 2 Affordable housing and housing in mixed use development

**KEY MESSAGES**

- Affordable housing includes social and affordable rented housing and intermediate housing
- Residential and mixed-use development adding 1,000 sq m gross housing or more should provide affordable housing
- Most mixed-use developments with residential floorspace should provide 50% affordable housing
- Residential developments should provide a proportion of affordable housing depending on their capacity for homes, taking into account proposed floorspace and number of dwellings
- Residential developments with capacity for 50 or more homes should provide 50% affordable housing
- Affordable housing should include a large proportion of family homes and contribute to creating mixed and inclusive communities
- Affordable housing should generally be provided on site

2.1 The guidance on affordable housing relates to Core Strategy policy CS6 - *Providing quality homes*, and Development Policies DP3 – *Contributions to the supply of affordable housing*, DP4 – *Minimising the loss of affordable homes*, and DP5 – *Homes of different sizes*. The guidance on housing in mixed-use development relates to Core Strategy policy CS1 – *Distribution of growth* and Development Policy DP1 – *Mixed-use development*.

2.2 The guidance is divided into seven subsections. Each subsection deals with a different question relating to requirements for affordable housing and housing in mixed-use development as follows:

- what is affordable housing?
- which developments should contribute to affordable housing?
- how much affordable housing do we expect?
- what types of affordable housing do we expect?
- how is affordable housing funded?
- how will the Council consider financial viability?
- can the market housing and affordable housing be provided off-site?

2.3 The property market, development finance and affordable housing funding have all been subject to considerable change since 2007, and it is likely that change will continue.

2.4 The implementation of planning policy will need to respond to these changes. Implementation guidance therefore needs to be more readily

reviewed and amended than would be possible within the Core Strategy or Development Policies.

2.5 The Government has introduced changes to national planning practice guidance in relation to affordable housing thresholds and seeking affordable housing where vacant floorspace is developed for housing *("vacant building credit")*. The Council is considering the implications of these changes and how they will operate in conjunction with Camden Development Policies 2010. This guidance will therefore continue to be subject to review as the need arises.

## When does this guidance apply?

2.6 This guidance applies primarily to development that:

- provides an additional 1,000 sq m or more (gross) of housing in Use Class C3 or Use Class C4, or
- provides an addition of 200 sq m or more (gross) of non-residential floorspace in the Central London Area (excluding Hatton Garden) or the town centres of Camden Road, Finchley Road/ Swiss Cottage and Kilburn High Road, or
- provides affordable housing floorspace, or
- involves the loss and replacement of affordable housing floor space.

2.7 We strongly encourage developers to involve a housing association or other affordable housing provider in the design of proposed affordable homes before submitting a planning application. Affordable housing development that is not purpose-designed is less likely to receive public funding and less likely to be sold or let to an affordable housing provider.

**HOUSING ASSOCIATIONS AND REGISTERED PROVIDERS**

Registered Providers are owners and managers of affordable housing who are regulated by Government. Many operate on a not-for-profit basis and use any trading surplus to maintain existing homes and to help finance new ones. Registered Providers include the Council, housing associations, housing trusts and cooperatives. In this guidance, the term housing associations is used to refer to all Registered Providers other than the Council.

2.8 A developer considering the appropriate use or mix of uses for a site should contact the Council's Regeneration and Planning Division in the first instance. The Strategic Planning and Information Team can provide initial guidance on the interpretation of policies in the Core Strategy and Development Policies document.

2.9 A formal pre-planning application advice service is available for development proposals. A fee is charged for this service on the basis of the size of the proposed development. We strongly encourage developers to use this service if they are proposing development of the type described in paragraph 2.6 of this guidance.

2.10 Where we are seeking affordable housing the developer should contact the Housing Commissioning and Partnerships Team. This team will provide guidance on the types of affordable housing that the Council is currently prioritising and suggest potential housing association partners that would be appropriate for the scheme. Paragraphs 2.60 and 2.61 of this guidance give more details of the Council's arrangements with housing associations.

## Guidance

### What is affordable housing?

2.11 Affordable housing is defined in the Government's National Planning Policy Framework (NPPF) – Annex 2 The NPPF indicates that affordable housing should:

- be provided to households whose needs are not met by the market, and
- be provided to households who are eligible for affordable housing, taking into account local incomes and local house prices, and
- remain at an affordable price for future eligible households unless arrangements are in place for subsidies to be recycled into alternative affordable housing provision.

2.12 Three types of affordable housing are defined in the NPPF– these are **social rented housing, affordable rented housing** and **intermediate housing**.

2.13 **Social rented housing** is primarily housing managed by local councils and housing associations. The cost of social rented housing is controlled through target rents set by a national rent regime. Other affordable housing providers may manage social rented housing under the same rental arrangements.

2.14 **Affordable rented housing** is housing managed by local councils and housing associations and let to households who are eligible for social rented housing. Rents are set on a scheme-by-scheme basis and are guided by local market rents rather than a national rent regime.

2.15 The NPPF indicates that rents should not exceed 80% of the local market rent (including service charges where they apply). In practice, most affordable rented housing in Camden has rents significantly below 80% of market rents. The Mayor's Housing Supplementary Planning Guidance (November 2012) stresses that the maximum percentage will not apply in all schemes or to all units within a scheme. The SPG also indicates that on average family units will be around target rent levels for social rented housing.

2.16 Camden Core Strategy 2010-2025 and Camden Development Policies 2010 do not include affordable rented housing as they were adopted before the new housing product was introduced. To guide operation of Camden's adopted planning policies, we will follow the approach of the

London Plan, and consider social rent and affordable rent together as "social-affordable rented housing". References to social rented housing in the Core Strategy and Development Policies documents will be treated as references to social-affordable rented housing.

2.17 **Intermediate housing** is housing that costs more than social housing but less than equivalent market housing. Intermediate housing costs (including service charges) must also be cheap enough for eligible income groups to afford. The London Plan and the Mayor's annual reviews provide details of eligible income groups. Most intermediate housing in Camden has been provided by housing associations, but the NPPF indicates that intermediate housing can include homes provided by private sector bodies. Provided that it costs less than market housing and is cheap enough for eligible income groups, intermediate housing can include a range of tenures such as:

- rented housing;
- shared-ownership housing (where occupiers buy a share and rent the remainder);
- shared equity housing and
- homes for sale at less than market prices.

2.18 Camden controls the cost of intermediate housing taking into account market costs and the eligible income groups set out in the London Plan and the Mayor's annual reviews. Further Alterations to the London Plan published in January 2014 indicated that eligible households were those with incomes of less than £66,000[1] per year, or £80,000[1] for family homes, defined as having three or more bedrooms. The Mayor's Housing Supplementary Planning Guidance (November 2012) noted that the London Plan eligibility figures are expressed in terms of gross household income. The Guidance also advised that Councils should seek intermediate homes that are affordable to households within the full range of incomes below the upper limit, and take account of service charges when considering the cost of affordable housing. The London Plan Annual Monitoring Report 10, 2012-13, notes that the Mayor will monitor the average annual incomes of households moving into intermediate housing against a benchmark of £43,550[2], or £50,550 for family homes with three bedrooms or more.

2.19 Eligible household incomes for intermediate housing are reviewed each year through the London Plan Annual Monitoring Report, which also indicates how the affordability of intermediate housing will be assessed.

1.1 ---

[1] updated to £71,000 per year or £85,000 for family homes in London Plan Annual Monitoring Report 11, 2013-14

[2] updated to £46,250 in London Plan Annual Monitoring Report 11, 2013-14

The London Plan Annual Monitoring Report 10, 2012-13 indicates that intermediate housing should cost:

- no more than 3.5 times the household income threshold to buy[3]; and
- no more than 40% of net household income including rent and service charges (with net income assumed to be 70% of gross income).

2.20 Camden's Core Strategy recognises that intermediate housing needs to be attractive to a range of household types across a range of incomes. More guidance is provided on how we seek a range of intermediate housing in the sub-section 'What types of affordable housing do we expect?'

### Which developments should contribute to affordable housing?

2.21 Camden's Development Policies document indicates that the Council will expect all residential developments with capacity for 10 or more additional dwellings to make a contribution to the supply of affordable housing. This also applies to mixed-use developments that include housing and have capacity for 10 or more dwellings in addition to any appropriate non-residential floorspace.

2.22 Camden's Development Policies document also indicates that an additional floorspace of 1,000 sq m (gross) is capable of accommodating 10 dwellings, and any development adding residential floorspace of 1,000 sq m (gross) or more should make a contribution to the supply of affordable housing.

2.23 A contribution to affordable housing is expected from schemes that add fewer than 10 dwellings but add more than 1,000 sq m floorspace (gross) on the basis that economic viability can still be achieved from a small number of larger and more expensive homes. A contribution will also be sought from schemes that add 10 or more dwellings but add less than 1,000 sq m floorspace (gross) unless the applicant demonstrates it would not be financially viable to proceed with the development on that basis (see the sub-section How will the Council consider financial viability?).

2.24 We acknowledge that an addition of 1,000 sq m residential floorspace will not have a 10 dwelling capacity in every single case. In assessing capacity, the Council will take into account whether the additional area is capable of contributing to the number of homes in the scheme (e.g. does it have access to natural light?). We will also take into account any other constraints that would prevent 10 dwellings from being developed, such

1.1

[3] the stipulation in the first bullet point no longer appears in London Plan Annual Monitoring Report 11, 2013-14

as where it would be impractical to provide safe vehicle access for 10 dwellings, or inappropriate to subdivide a Listed Building.

2.25 Under Development Policy DP1, the Council requires mixed-use developments to include housing where appropriate. Paragraphs 1.19 to 1.24 of the Development Policies document provide more guidance on how the Council will consider whether a contribution to the supply of housing is appropriate. In the Central London Area (except Hatton Garden) and the larger town centres of Camden Town, Finchley Road/ Swiss Cottage and Kilburn High Road, where development proposals add 200 sq m (gross) floorspace or more, policy DP1 requires up to 50% of additional floorspace to be housing. This requirement combines with the affordable housing requirements of policy DP3 so that in the Central London Area and the larger town centres, where developments add 2,000 sq m (gross) floorspace or more:

- the Council will generally seek 1,000 sq m or more of additional housing;
- the development will generally have capacity for 10 or more additional homes, and we will expect a contribution to the supply of affordable housing.

2.26 The floorspace thresholds relating to Development Policies DP1 and DP3 refer to additions to gross floorspace (and are assessed in terms of Gross External Area – GEA – including each floor, including the thickness of external walls, partition walls and common areas). The policy requirements in policy DP1 are not triggered by increases in net non-residential floor space that take place wholly within the existing building envelope, such as reduction in circulation space, common areas or plant areas. However, works involving a change to residential use will trigger policy DP3 affordable housing requirements if the residential floorspace has capacity for 10 or more additional homes.

2.27 Floorspace measurements are sometimes provided which exclude common areas and exterior walls of the building (this often applies to flats), or just exclude the exterior walls (this often applies to houses). Where a figure for Gross External Area including common areas is not available, the Council will consider using a conversion factor to assess the housing/ affordable housing requirement and to calculate the payment in lieu.

- To convert to GEA where common areas and exterior walls have been excluded - multiply by 1.25.
- To convert to GEA where only exterior walls have been excluded – multiply by 1.053.

**GROSS EXTERNAL AREA/ GROSS EXTERNAL FLOORSPACE**

The whole area of a building taking each floor into account. Includes the thickness of external walls, partition walls and common areas such as shared staircases, entrance halls and corridors.

**GROSS INTERNAL AREA/ GROSS INTERNAL FLOORSPACE**

The whole enclosed area of a building within the external walls taking each floor into account and excluding the thickness of the external walls. Includes the thickness of partition walls and common areas such as shared staircases, entrance halls and corridors.

**NET INTERNAL AREA/ NET INTERNAL FLOORSPACE**

The usable area within a building measured to the face of perimeter or party walls. Includes the thickness of internal partition walls, but excludes common areas and the thickness of partition walls that define the edge of common areas.

2.28 As indicated in the Development Policies document, the approach to affordable housing set out in policy DP3 and in this guidance is suitable for housing that is self-contained, including self-contained sheltered housing for older people (i.e. homes in Use Class C3). The approach will also apply if additional floorspace is proposed in Use Class C4 (small houses in multiple occupation) as these can be used as self-contained C3 homes without submitting a planning application.

2.29 This approach to affordable housing is not suitable for housing with shared facilities, such as student housing and bedsits. A contribution to affordable housing is not generally expected from developments of student housing and other housing with shared facilities provided that it complies with Development Policy DP9 and contributes to creating a mixed and inclusive community. However, the Council will seek to ensure that student housing is attractive to groups who would otherwise share private rented homes, and in some circumstances will seek self-contained general needs housing on part of the site, including affordable housing. A separate section of our planning guidance gives more information about development of **Student Housing**.

2.30 The Council may need to consider controlling the affordability of care homes for older people and accommodation for homeless people or vulnerable people. Some aspects of this guidance will not be suitable for these types of housing, and the Council will tailor its approach as appropriate to fit the specific type of occupier and provider.

## How much affordable housing do we expect?

2.31 Our Core Strategy and Development Policies give targets and criteria which we use to assess the appropriate contribution to affordable housing from each development. These include:

- an overall borough target equivalent to 220 additional affordable homes per year;
- seeking to achieve the maximum reasonable amount of affordable housing under the specific circumstances of the site, including the financial viability of the development;
- aiming to minimise social polarisation and create mixed and inclusive communities;

- an affordable housing target for specific developments of 50% of additional residential floorspace; and
- a sliding scale setting lower affordable housing targets for developments that have capacity for 10 to 49 additional homes.

2.32 The sliding scale is explained in paragraphs 3.17 to 3.20 of our Development Policies document. The purpose of the sliding scale is to encourage developers to cross the 10-dwelling threshold and propose medium-sized schemes rather than small schemes. In this way the sliding scale has potential to add significantly to the number of schemes that deliver affordable housing, and the overall amount of affordable housing. Paragraph 3.21 of the Development Policies document indicates that we will monitor the operation of the sliding scale closely to assess its impact on the supply of housing, and consider any need to review the approach through our Annual Monitoring Report.

2.33 The sliding scale is a simple straight-line scale, where every increase of 1 home in site capacity should provide an additional 1% in affordable housing floorspace. Sites with capacity for 10 additional homes should normally provide 10% affordable housing floorspace, sites with capacity for 20 additional homes should normally provide 20% affordable housing floorspace, and sites with capacity for 40 additional homes should normally provide 40% additional floorspace. Figure 1 below indicates how the sliding scale will operate in more detail.

2.34 When we assess capacity, we will look at the number of additional homes proposed and the additional built floorspace (GEA). As a minimum, an acceptable development has capacity for the number of additional homes proposed. In terms of floorspace, 1,000 sq m (GEA) of built development is considered to have capacity for 10 dwellings. Each additional 100 sq m (GEA) added to the development is considered to create capacity for an additional dwelling (including capacity for a share of common areas such as shared staircases, entrance halls and corridors). We will round floorspace to the nearest 100 sq m to give capacity in terms of the nearest whole number. In negotiations we will focus on seeking affordable homes of an appropriate size and layout rather than absolute mathematical correspondence with the sliding scale.

**Figure 1. Sliding scale for affordable housing negotiations**

| **Benchmark** | **Site capacity** | **Expected affordable housing floorspace** |
|---|---|---|
| 10 homes proposed, or fewer homes with a floorspace of 1,000 sq m gross | 10 homes | 10% |
| 20 homes proposed, or fewer homes with a floorspace of 2,000 sq m gross | 20 homes | 20% |
| 30 homes proposed, or fewer homes with a floorspace of 3,000 sq m gross | 30 homes | 30% |
| 40 homes proposed, or fewer homes with a floorspace of 4,000 sq m gross | 40 homes | 40% |
| 50 homes or more proposed, or fewer homes with a floorspace of 5,000 sq m gross or more | 50 homes or more | 50% |
| **Example** | **Site capacity** | **Expected affordable housing floorspace** |
| 11 homes with a built floorspace of 925 sq m gross | 11 homes | 11% x 925 sq m |
| 21 homes with a built floorspace of 1,735 sq m gross | 21 homes | 21% x 1,735 sq m |
| 21 homes with a built floorspace of 2,360 sq m gross | 24 homes | 24% x 2,360 sq m |
| 35 homes with a built floorspace of 3,749 sq m gross | 37 homes | 37% x 3,749 sq m |
| 46 homes with a built floorspace of 4,280 sq m gross | 46 homes | 46% x 4,280 sq m |
| 53 homes with a built floorspace of 4,640 sq m gross | 50 homes or more | 50% x 4,640 sq m |

2.35 As indicated in paragraphs 1.12 and 3.18 of our Development Policies document, the sliding scale will only apply to mixed use developments that include housing in limited circumstances.

- The sliding scale will apply if the development adds less than 1,000 sq m to non-residential floorspace but has a residential element with capacity for an additional 10 to 49 homes (i.e. 1,000sq m to 4,900sq m residential floor space).
- The sliding scale will not apply if the development includes an addition to non-residential floorspace of 1,000 sq m of more. In this case there is significant potential for the non-residential element to enhance the viability of the development, and we will seek 50% of residential floorspace as affordable housing (subject to DP3 criteria).

- In all mixed-use schemes with capacity for 50 or more additional homes we will seek 50% of residential floorspace as affordable housing (subject to DP3 criteria).

2.36 When negotiating on individual schemes, Camden calculates the proportion of housing in each category (market/ social-affordable rented/ intermediate) in terms of floorspace. This arrangement enables us to negotiate family-sized affordable housing in schemes where the developer proposes smaller market homes, and prevents an under-provision of affordable housing where the developer proposes unusually large market homes. Calculations will not generally be based on the number of dwellings or number of habitable rooms as these calculations would create an incentive for the developer to provide the smallest affordable homes possible.

2.37 Calculations of the capacity of the site are based on gross floorspace (GEA), including common areas. However, once the GEA has been used to identify the target affordable housing percentage, it is then generally more appropriate to use net internal floorspace when considering the split between market, social rented and intermediate housing. This allows the homes themselves to be compared without the distortion of shared spaces such as external corridors and lobbies, lifts and common staircases. See paragraph 2.27 of this guidance for more detailed definitions of gross and net floorspace.

2.38 Policy CS6 of our Core Strategy and Development Policy DP3 indicate that the Council will consider many other characteristics of the development, the site and the area when negotiating the proportion of affordable housing in specific schemes. These considerations are explained in detail in paragraphs 3.24 to 3.29 of our Development Policies document. Considerations include seeking a mixture of tenures in each part of the borough, having regard to any social problems arising from existing concentrations of a single tenure, and other planning objectives considered to be a priority for the site. As part of estate regeneration we will seek to improve the tenure mix in some areas of concentrated social rented housing, such as parts of Gospel Oak.

2.39 Where we agree that the affordable housing can be provided off-site, the amount of affordable housing sought will be adjusted. These adjustments are explained in the sub-section **'Can the market housing and affordable housing be provided off-site?'**

2.40 The Camden Affordable Housing Viability Study 2009 examined the viability of the sliding scale and the 50% floorspace target for sites with capacity for 50 homes or more. The Study indicates that the scale and target is financially viable for a range of scheme types across a range of locations in the borough. However, there will be circumstances where the percentage of affordable housing sought by the sliding scale or target is not viable. The sub-section '**How will the Council consider financial viability?**' explains what we will expect from the developer in these circumstances.

## What types of affordable housing do we expect?

### Mixing affordable housing and market housing

2.41 The Council expects affordable housing and market housing to form integral parts of each development. A common design approach should be used, with high quality materials and finishes throughout. Where a development site is large enough to accommodate several residential blocks, market and affordable blocks should be spread evenly across the site. The layout of the development should optimise residential amenity for all tenures, and avoid concentrating affordable housing close to potential sources of disturbance such as service yards, traffic and railways.

2.42 As indicated in paragraph 3.26 of our Development Policies document, in schemes with internal communal spaces, the Council does not generally seek to mix affordable and market dwellings on the same corridors or sharing the same stairs, lifts and entrance lobbies. This is because occupiers have to pay a service charge and/ or management charge for the cleaning and maintenance of communal spaces. Service charges are often a significant proportion of overall housing costs, particularly in market housing blocks, and can simply be too high for the occupiers of affordable housing to pay. The law ensures that an occupier cannot be required to pay higher service charges to subsidise charges to another occupier receiving the same common services, regardless of tenure. To ensure that service charges are kept to a minimum, the communal parts of affordable housing are generally designed for durability and low maintenance costs.

**SERVICE CHARGES**

Service charges are levied by landlords to recover the costs they incur in providing services to a dwelling. The charge normally covers the cost of such matters as general maintenance and repairs, insurance of the building and, where the services are provided, central heating, lifts, lighting and cleaning of common areas etc.

2.43 Where it is necessary for affordable and market housing to share the same entrances, stairs and lifts, the Council will seek to negotiate service charges sufficiently low for the affordable housing to be available to eligible households. Paragraph 3.14 of the Development Policies document notes that the Council may consider an off-site contribution to affordable housing if the service or management charges of an on-site scheme would be too expensive for affordable housing occupiers or providers. The Council will only take this step where measures to keep service and management charges within affordable limits have been fully explored and found to be impractical. For more information - see the sub-section of this guidance '**Can the affordable housing be provided off-site?**'

### Mix of social-affordable rented housing and intermediate housing

2.44 The Core Strategy indicates that we are aiming to tackle social polarisation and create mixed and balanced communities by seeking a diverse range of housing products to suit a range of incomes. Many households who need affordable homes in Camden will only be able to afford social rented or affordable rented housing, however we recognise that intermediate housing can make an important contribution to creating mixed-communities. Camden's Core Strategy sets out guidelines that 60% of affordable housing should be social rented housing (now treated as social-affordable rented housing) and 40% should be intermediate housing. As indicated in paragraphs 2.36 and 2.37 of this guidance, it will generally be appropriate to calculate the split between social-affordable rented and intermediate housing in terms of net internal floorspace.

2.45 Since adoption of Camden's Core Strategy and Development Policies document, the Government has introduced a new product called affordable rented housing. More information about affordable rented housing is provided in paragraph 2.14 to 2.16 of this guidance.

2.46 Rents for affordable rented housing are set on a scheme by scheme basis. Affordable rented housing should comply with the Government's definition of affordable housing and be affordable to households whose needs are not met by market housing, having regard to lower quartile market rents available locally and across the borough. The Council is unlikely to support proposals for affordable rented homes that would be more expensive than market homes available anywhere in the borough. The Mayor's Housing Supplementary Planning Guidance (November 2012) indicates that providers may wish to charge a lower rent than the relevant Local Housing Allowance (LHA) cap, which is the maximum housing benefit available to most households living in privately rented accommodation. The Council will strongly encourage providers to view the LHA cap as the maximum acceptable affordable rent where the cap is less than 80% of local market rents.

2.47 Paragraph 6.57 of Camden's Core Strategy and Development Policy DP3 indicate that the Council will consider various characteristics of the development, the site and the area when negotiating the nature of the affordable housing contribution from specific schemes. Considerations that may influence the proportion of social-affordable rented housing and intermediate housing are set out in paragraphs 3.22 to 3.30 of our Development Policies document. Circumstances where the Council may depart from the 60% social-affordable rented: 40% intermediate split include:

- providing flexibility for up to 100% social-affordable rented housing or 100% intermediate housing where the overall proportion of affordable housing in the scheme is substantially over 50%;
- seeking up to 100% social-affordable rented housing where the overall proportion of affordable housing in the scheme is 30% or less;

- providing flexibility for more than 40% intermediate housing where this can help to create a mixed an inclusive community in an area with an existing concentration of social rented housing; and
- providing flexibility for more than 60% social-affordable rented housing where high residential land values will make intermediate housing too expensive for the households that need it.

2.48 A number of intermediate housing types have been devised by the Government (most are currently marketed in London via the Mayor's First Steps programme). Camden seeks a variety of intermediate housing to suit different needs. Due to the high market values in Camden and lenders' deposit requirements, it is now rarely possible to develop homes for shared ownership in Camden that would be affordable to households with incomes below the Mayor's eligibility caps. The Council will therefore generally seek intermediate rented housing, rather than shared-ownership housing (where occupiers buy a share and rent the remainder). However, all intermediate housing must comply with the cost requirements imposed by the Government and Mayor as indicated in paragraphs 2.17 to 2.19 of this guidance. When costs are assessed, service charges are included, and we will encourage developers to take this into account at the design stage so that service charges are minimised.

**FIRST STEPS**

First Steps is the official intermediate housing programme from the Mayor of London aimed at helping low and modest income Londoners to buy or rent a property at a price they can afford. Priority is given to housing association and Council tenants and armed forces personal, followed by local priorities, which may vary from development to development. Camden's local priorities include tenants in social rented housing, people on the waiting list, and first-time buyers with a limited income, such as key workers.

2.49 We are particularly keen to promote take up of intermediate housing by tenants of social-affordable rented housing. On the basis of the household incomes of those registering an interest in intermediate housing, Camden will seek to achieve a proportion of the following (these figures are currently under review):

- intermediate rented homes that households can afford with an income of £30,000 or less per year (gross);
- one-bedroom shared-ownership homes that households can afford with an income of £30,000 or less per year (gross);
- two-bedroom shared-ownership homes that households can afford with an income of £40,000 or less per year (gross).

2.50 In negotiations on intermediate housing and legal agreements, the Council will seek to ensure that homes are occupied by households in need of affordable housing, particularly tenants of existing social-affordable rented housing, and do not remain vacant due to high costs or a shortage of mortgage finance. We will provide flexibility within legal

agreements to allow different intermediate models to be used depending on demand when the development is completed. We will also provide for intermediate housing to be used as social-affordable rented housing where this would be viable in the context of the overall financial viability of the development and any public subsidy available.

2.51 In the case of shared ownership housing, we will use legal agreements to reduce the costs to occupiers by:

- ensuring that buyers are able to buy a relatively low percentage share – generally we will set the minimum share at no more than 25%; and
- limiting the level of the rent paid on the unsold share – generally we will set the maximum rent at 2% of the value of the unsold share.

2.52 When intermediate housing was first introduced it was often aimed specifically at key workers. Key workers are generally defined as staff of public authorities such as the NHS, teachers, social workers, fire-fighters, the police and the armed forces. The Council will not generally limit occupation of intermediate housing to key workers. Where a restriction to key workers is appropriate in the context of the characteristics of the development or the area, Camden will generally use the definition of key workers given in this guidance, varied as necessary to meet the purpose of the proposal (eg for development on NHS land to provide housing for nurses). When considering the proportion of key worker housing appropriate to a development, the Council will have regard Development Policy DP3, the characteristics of the development and the area and the circumstances noted in paragraph 2.47 of this guidance.

**Mix of dwelling sizes**

2.53 The Council's Residential development standards (included as section 4 of this CPG) give general guidance on the floorspace and internal arrangements for all housing tenures. In addition, homes of all tenures should meet lifetime standards in accordance with Development Policy DP6 and the guidance in this CPG on Lifetime homes and wheelchair housing. Three other sets of guidance are particularly relevant to affordable housing design:

- The London Plan 2011 sets residential space standards that the Mayor will apply to development of housing in all tenures.
- Housing with public subsidy in London must comply with the Mayor's London Housing Design Guide (published in interim form in August 2010).
- Housing Supplementary Planning Guidance November 2012 published by the Mayor of London incorporates elements of the London Housing Design Guide and applies to development of housing in all tenures.

2.54 This sub-section of the guidance is concerned primarily with the numbers of bedrooms that are expected as part of affordable housing development. Camden's Core Strategy indicates that we will seek a

range of self-contained homes to meet identified dwelling size priorities. These priorities are set out in detail in our Development Policies document, which includes a Dwelling Size Priorities Table.

2.55 For social-affordable rented housing, we will give high priority to family homes with three or more bedrooms. Market rents in Camden are far beyond the reach of most families in housing need. The Mayor's Housing Supplementary Planning Guidance (November 2012) indicates that on average family units will be around target rent levels. When seeking the maximum reasonable proportion of affordable housing, the Council will encourage the provision of affordable rented housing in accordance with the NPPF definition and give priority to family homes at or around the level of guideline targets for social rents as resources and development viability permit.

2.56 Due to the high market values in Camden it is no longer likely to be possible to develop intermediate housing for shared-ownership that has more than one bedroom and remains affordable to households with incomes below the Mayor's eligibility caps. Consequently the intermediate dwelling size priorities set out in the Development Plan document are no longer appropriate. For intermediate housing, we will focus on ensuring that housing is affordable to households who are eligible for intermediate housing and have a range of incomes below the upper limit set by the Mayor. We will not generally seek dwellings with 2-bedrooms or more. More detailed guidance is given in the following Figure 2 and Figure 3.

**Figure 2. Mix of social-affordable rented housing**

**Overall aim: 50% of homes with 3 bedrooms or more**

**Preferred mix:**

- 1-bedroom homes – no more than 20%
- 2-bedroom homes – 30%
- 3-bedroom homes – 30%, or 50% if no 4-bedroom homes are provided
- 4-bedroom homes – 20%

**Other objectives:**

- Priority will be given to 3- and 4-bedroom homes at or around the level of guideline targets for social rent.
- Social-affordable rented homes should have physically separate kitchens and living areas where practical, particularly 3- and 4-bedrooms homes. We will seek the design of 100% of 3 bedroom and 50% of 2 bedroom homes with physically separate kitchens and living areas.
- At least 10% of homes should be designed, built and fitted-out to meet wheelchair housing standards in accordance with Development Policy DP6, subject to accompanying paragraph 6.9.

**Figure 3. Mix of intermediate housing**

**Preferred mix:**

In order to meet needs while remaining within the cost limits set out in paragraphs 2.17 to 2.19 of this guidance, we expect most intermediate homes in Camden developments to have no more than one bedroom.

- Studio flats – a proportion of studio flats may be acceptable, but we will generally resist development where all the intermediate homes are studio flats
- 1-bedroom homes – a proportion is expected in all schemes
- 2-bedrooms or more– a proportion may be included where it is possible to provide them within the limits of eligible incomes and affordability – such homes are likely to be for intermediate rent rather than shared-ownership

**Other objectives:**

- At least 10% of homes should be designed, built and fitted-out to meet wheelchair housing standards in accordance with Development Policy DP6, subject to accompanying paragraph 6.9.

2.57 The precise mix of dwellings will be negotiated with developers, affordable housing providers and any employers involved in each scheme, taking into account the character of the development, the site and the area, and other criteria included in Development Policy DP5. We will take full account of guidance in the Development Policies document dealing with large homes, child density and separate kitchens (paragraphs 5.11 to 5.13), and wheelchair housing (paragraph 6.9).

2.58 Where schemes involve both social-affordable rented housing and intermediate housing, it may often be appropriate to have a high proportion of one-bedroom intermediate homes and a high proportion of social-affordable rented homes with three bedrooms or more. Such schemes can potentially meet our dwelling size priorities while limiting the cost of the intermediate housing and limiting overall child density.

## How is affordable housing funded?

2.59 Public subsidy will usually be needed to supply the proportions of affordable housing anticipated by the Core Strategy and Development Policies. The main source of public subsidy has been the Homes and Communities Agency until recently, although the Agency's funding role within London is now carried out by the Mayor. The Council also administers its own affordable housing fund, which is formed from developer contributions where a payment-in-lieu has been provided instead of housing or affordable housing. The Council will consider providing subsidy from the affordable housing fund where funding from the Mayor of London (or successor organisations) is not available or is unable to secure an acceptable proportion and mix of affordable housing. In particular, the Council may offer subsidy from the affordable

housing fund to secure additional large homes (3 or 4 bedrooms) and additional wheelchair housing.

2.60 The NPPF indicates that affordable housing should remain at an affordable price for future eligible households, or if these restrictions are lifted, the subsidy should be recycled. In practice, almost all additions to affordable housing in the borough that are associated with private development are transferred to a housing association on completion. Where this is the case, we will ensure that the property remains available as affordable housing by negotiating transfer of the freehold to the housing association. Where this is not possible, for example because of mixed-tenures or commercial uses within the block, the Council will negotiate for a long-lease to the housing association, ideally 125 years.

2.61 Where the affordable housing is to be transferred to a housing association, one or more housing associations will usually submit bids to the developer to indicate how much they are able to pay for the transfer of ownership. The payment will be inclusive of any public subsidy, the capitalised value of future rents, and the value of any equity that will be sold (usually arising from shared-ownership housing). Camden's Affordable Housing Viability Study 2009 estimated that where subsidy is available payments have typically been around 60% of the market value of social rented homes and 80% of the market value of shared-ownership homes. These estimates reduce to 40% and 60% respectively if no public subsidy is available. For specific schemes these percentages will vary with market values, the availability of credit, levels of public subsidy, changes to Government controls on rents and changes to the Mayor's guidance on the income level of occupiers.

2.62 The Government has reduced the amount of public funding available for affordable housing. This is leading to a reduction in the number of developments that receive subsidy and a reduction in the amount of any subsidy paid for each home. We acknowledge that if public subsidy is not available the proportions of affordable housing anticipated by the Core Strategy and Development Policies will not be viable in all developments.

2.63 In some cases, it may be possible to provide intermediate housing without direct public subsidy, particularly shared ownership homes. Such opportunities can arise where land is acquired cheaply, where unusually small homes are developed, or where charitable contributions are available. We will actively pursue such opportunities, and (in accordance with paragraph 2.47 of this guidance) may be prepared to consider schemes with up to 100% intermediate housing where the overall proportion of affordable housing floorspace in the development is substantially more than 50%. Where intermediate housing is provided without public subsidy, we will still use a legal agreement to secure the long-term availability of the homes as affordable housing for eligible households.

## How will the Council consider financial viability?

### Policy background to financial viability appraisal

2.64 Our Core Strategy and Development Policies outline a number of Council aims and commitments relating to housing and mixed-use development that provide a framework for considering financial viability:

- housing is the priority land-use of the Local Development Framework
- we will seek to ***maximise the supply of additional housing***, and
- we will seek the ***maximum reasonable amount of affordable housing*** on each site, taking into account specific circumstances including the financial viability of the development
- to maximise overall housing supply, we will implement policies flexibly in response to economic uncertainty
- to ensure that housing development is viable, we may consider varying the proportion and/ or type of market and affordable housing in a development, or consider off-site solutions where necessary (see the sub-section '**Can the affordable housing be provided off-site?**')

2.65 Where a development provides an addition of 200 sq m or more (gross) of non-residential floorspace in the Central London Area or the larger town centres, applicants will need to demonstrate that the development is providing an appropriate contribution to the supply of housing. Where a development has capacity for 10 or more additional dwellings, applicants will need to demonstrate that the development is providing the maximum reasonable amount of affordable housing. In most cases, the applicant will be required to submit a financial viability appraisal to justify the proportions of housing and affordable housing proposed. Where viability will be a key factor influencing the content of development and the extent of planning obligations the Council strongly encourages discussion of viability at the pre-application stage – see paragraphs 2.70 to 2.73 below.

2.66 There is a limited amount of government guidance on how development viability should be considered in decision-taking, primarily paragraph 173 of the NPPF and National Planning Practice Guidance (NPPG) ID10 paragraphs 1 to 4 and 16 to 24. Paragraph 2 indicates that there is no single approach to viability assessment, and there is a range of sector led guidance available. The GLA has developed a methodology for financial viability appraisal in London in the form of an annually reviewed Development Control/ Development Appraisal Toolkit, and this is accompanied by detailed Guidance Notes. As well as providing information on the operation of the Toolkit, the Guidance Notes provide more general advice on viability appraisal, and will be used to inform the Council's approach.

### What is financial viability appraisal?

2.67 The NPPF advises that a viable development should provide competitive returns to a willing landowner and a willing developer. A financial viability

appraisal can be used to explore whether the NPPF test of viability is met by assessing the value of a development, subtracting an assessment of development costs and a competitive developer return, and establishing the remaining land value available to provide a return to the landowner.

2.68 A financial viability appraisal is a balance sheet for the development which enables all scheme costs and revenues to be taken fully into account. The Council expects viability appraisals to generate a 'residual land value'. The residual land value is the sum available to fund land purchase once all scheme revenues and costs have been taken into account, including provision of affordable housing, other planning obligations and the return to the developer but excluding any price already paid for land acquisition. Figure 4 sets out some of the typical inputs used in viability appraisal.

2.69 Schemes are considered to be viable where the residual land value (taking into account the provision of affordable housing and other planning obligations) matches or exceeds a benchmark land value for the site. The benchmark land value represents the competitive price at which a reasonable land owner would be willing to sell their land for development. This value will depend on the particular circumstances of the site (eg whether the land is vacant or occupied, the condition and marketability of any buildings) and the options available. The Council will seek to agree the benchmark value with the applicant, with the assistance of advice from any appointed independent verifier.

**Figure 4. Typical inputs to financial viability appraisal**

| Cost inputs | Revenue inputs |
|---|---|
| demolition and build costs (supported by an elemental cost plan)<br>professional fees<br>marketing fees<br>development finance costs<br>land finance and holding costs (for the period covering land acquisition/ scheme preparation, planning application and development)<br>planning obligations other than affordable housing<br>developer's return (non-residential floorspace and market housing)<br>contractor's return (affordable housing) | sales values<br>payment by a housing association for transfer of affordable housing<br>public subsidy for affordable housing (if not included above)<br>capitalised rents and yield (for non-residential floorspace and any proposed private rented residential floorspace)<br>capitalised ground rental income |

**Before a viability appraisal is submitted**

2.70 We strongly advise applicants to discuss the general parameters of individual viability appraisals with us before they are prepared. Early discussions can ensure that the appraisal provides the evidence needed

to assess the application and help to avoid delays after the application is submitted. Discussions should include the scope of viability appraisal, appropriate measures of land value, and the value of affordable housing. Submission of a draft viability appraisal may be appropriate.

2.71 Discussions may include whether viability appraisal of the proposed development should be accompanied by viability appraisal of alternative options such as:

- a development that meets our full expectations for housing and affordable housing contributions but is not viable
- a development that partly meets our expectations for housing and affordable housing contributions
- development for an alternative use that is lawful (having regard to the most recent lawful use and any applicable development orders), or has a current planning consent or has been agreed in principle as a site allocation in an adopted local plan or development plan document
- an alternative development falling below the relevant Development Policy thresholds (200 sq m in DP1 and 1,000 sq m in DP3)
- a development above the thresholds that makes no contribution to housing or affordable housing
- an off-site contribution to housing or affordable housing

2.72 At the pre-application stage developers are also strongly encouraged to discuss provision of affordable housing with Registered Providers and the Council's Housing Commissioning and Partnerships Team to inform discussion of likely rents, suitable intermediate housing models and capital values – see also paragraphs 2.7 to 2.10.

2.73 As indicated in our Development Policies document, in certain circumstances the Council will expect applicants to fund an independent verification of the financial viability appraisal. Where independent verification is likely to be required we will seek to discuss this at the pre-application stage, and we will seek a commitment from prospective applicants to provide the necessary funding. Independent verification will be required where the proportion or mix of housing/ affordable housing sought falls considerably short of the contributions anticipated by our Development Policies document. This independent verification will either be:

- commissioned directly by the Council in negotiation with the applicant; or
- commissioned by the applicant from an independent body subject the Council agreeing the body and the specifications in advance.

**What form should the viability appraisal take?**

2.74 Several viability appraisal models are available, and the Council does not insist that a particular model is used. However, the model must generate a residual land value on the basis of an agreed developer return (reflecting project scale, risk and loan requirements - see

paragraph 2.78), and must be capable of being fully interrogated by the Council and any appointed independent verifier. The Council encourages the use of standard viability software. Where a bespoke model is produced for a particular scheme, the Council will expect a fully working electronic copy to be made available so that assumptions can be tested and varied by the Council and any appointed independent verifier. The Council will respect any intellectual copyright existing in a bespoke viability appraisal model and seek to agree with the applicant any arrangements needed to ensure copyright is protected.

2.75 The GLA publishes an Affordable Housing Development Control Toolkit (also known as the Three Dragons Toolkit), and most financial viability appraisals submitted to the Council are prepared using the Toolkit. The GLA Toolkit was designed specifically to assist negotiations between planning officers and developers. The Toolkit is reviewed annually.

2.76 As indicated in Core Strategy paragraph 19.17, the Council will expect developers to provide information on viability through an "open-book" approach to the extent that costs and values are known at the time of the appraisal (see also paragraph 2.99 of this guidance). Some of the information required for viability appraisal may be regarded as commercially sensitive. The Council seeks to strike a balance between transparency in decision making and respect for commercial confidentiality. As part of the decision-making process the Council will therefore generally release a report of the independent verification of the financial viability appraisal. As a minimum, this report will include the intended percentage of developer return, the residual land value and the benchmark land value. Other figures in the report may be redacted if they are judged to be commercially sensitive.

2.77 If requested, the Council will endeavour to prevent release of any redacted sensitive information to third parties. However, subject to agreement with the applicant, release of sensitive information may be necessary in some circumstances, such as:

- to enable independent verification of the viability appraisal
- where another body has a role in considering the application such as the Mayor and the GLA
- where another body has a role in providing public subsidy for the development such as the Homes and Communities Agency, the Mayor and GLA
- where the development is subject to a planning appeal.

**Inputs to financial viability appraisal**

2.78 Viability appraisal of development requires the input of a range of information including build costs, developer's return (profit) and sales values. We will expect the inputs to the viability appraisal to meet the following requirements:

- all inputs should be backed up by relevant evidence;

- build costs should be backed up by BCIS data, quotations for building works, an elemental cost plan and detailed specification of the intended fit out, accompanied by any plans and drawings that have been used in formulation of the cost plan but do not otherwise form part of the planning application;
- land finance and holding costs should generally relate to a period starting from when a proposed development scheme is prepared for pre-application discussion with the Council, and continuing until development has been completed – they should not generally include periods when the site has not been in the control of the applicant, periods when the site has been generating a net revenue for the applicant from an existing use, periods when the applicant is not actively seeking to bring the site forward for development (eg if a site is held as part of a land bank), or delays and costs arising from failed appeals;
- land finance and holding cost should relate to an agreed benchmark value for the site where this differs from the price paid, as the price paid may overestimate what can be achieved on the site (see paragraphs 2.82 to 2.89);
- residential sales values should be backed up by analysed evidence of values achieved for comparable new-build homes of similar specification that have recently been completed nearby;
- affordable housing values should be based on evidence including a breakdown of assumptions regarding rent, full market value, initial equity sale, any staircasing assumptions, and anticipated rent charged on unsold equity, accompanied by capitalisation yield and calculations used to derive capital values, and should be backed up wherever practical by offers from Registered Providers that have a nominations agreement with the Council (see also paragraph 2.72);
- the appraisal should express the developer return on the market housing and commercial elements of a scheme as a percentage of their gross development value (GDV) (the capital value of all revenue derived from these elements), although this may be accompanied by other measures of developer return, such as a percentage of costs or internal rate of return (IRR);
- a lower percentage return should be assumed on the affordable housing reflecting the low risk associated with sale to a Registered Provider – this may be incorporated at a blended rate with return on the market housing and commercial elements;
- the percentage developer return should reflect the scale and the risks associated with the project, and the current requirements of lenders – the applicant should justify the percentage selected; and
- cash flows should be modelled wherever appropriate.

2.79 Sensitivity testing should be carried out and submitted as part of each financial viability appraisal to show the potential for the residual value to change significantly as a consequence of relatively small changes in the inputs. In particular, the impact of changes in sales value and build costs

should be tested given the rapid increases in Camden house prices in recent years and emerging concerns about increases in build costs. Where a viability appraisal is independently verified, this should include verification of any sensitivity testing provided by the applicant, and provide additional sensitivity testing where the submitted appraisal is deficient.

2.80 The GLA's Development Control Toolkit provides benchmark values for some viability appraisal inputs. The guidance notes accompanying the GLA Development Control Toolkit are available free and provide more detailed information on which costs can appropriately be included in a viability appraisal. The Council will closely scrutinise development costs that exceed benchmark figures. Where independent verification of the appraisal is required, this should include confirmation that the inputs used are appropriate and are in accordance with relevant evidence.

2.81 The Council will not expect viability appraisal to include land value or acquisition cost as a fixed input. Valuations and acquisition costs generally reflect an assumption by the valuer about what can be developed on the site, including an assumption about the proportions of non-residential development, market housing and affordable housing that will be acceptable. If land value forms a fixed input to the appraisal, the process becomes circular, and the proportions of market housing and affordable housing that are viable will match the initial assumption of the valuer. The Council's preferred measures of land value are given in Figure 5.

**Figure 5. Preferred measures of Land Value**

| | |
|---|---|
| **Residual Land Value** | The value of a development once all scheme costs and revenues have been taken into account, including build costs, professional fees, developer's returns, provision of affordable housing and S106 contributions, but excluding site acquisition cost. |
| **Existing Use Value (or EUV)** | The value of a site in its lawful use. The Council will require evidence of the EUV, for example the value of rents paid by an existing occupier, or values achieved for sale of comparable sites continuing in the same use. The EUV should take account of revenue from the lawful use and any refurbishment or development costs that would be incurred to re-commence lawful use of a vacated site. |
| **Existing Use Value plus a premium (or EUV plus)** | The value of a site in its lawful use, as described above, but with an additional premium added as an incentive to the landowner to make the site available for development. Any premium is usually expressed as a percentage of EUV. The scale of any premium will depend on the particular circumstances of the site (eg whether the land is vacant or occupied, the condition and marketability of any buildings and the options available. |

2.82 The residual land value should be an output of the viability appraisal. As indicated in paragraph 2.69, the Council will consider the development to be viable if the residual land value exceeds a benchmark land value that

provides an incentive sufficient for the landowner to make the site available for development, taking into account the other options available. NPPG notes that these options may include the current use value or its value for a realistic alternative use that complies with planning policy

2.83 The Council's preferred measure of land value is existing use value, although other measures of land value may also be considered where they are appropriate. As stated in paragraph 2.69, we will seek to agree the benchmark value with the applicant, with the assistance of advice from any appointed independent verifier, and the starting point for these negotiations should be the Existing Use Value (EUV). In some circumstance (eg where a property is vacant and significant expenditure would be required to return it to use) a residual land value at or around EUV may be sufficient to incentivise development. In other circumstances (eg where a tenant has an unexpired lease and will need to relocate) a premium will be need to be added to the Existing Use Value (EUV plus) to incentivise release of the site.

2.84 The NPPG indicates that the incentive needed to bring forward the land will depend on the other options available. Consequently, the GLA Toolkit Guidance Notes state that the level of the premium will depend on site specific circumstances. Following from that, there is no normal or usual percentage to apply as a premium. The Guidance notes a number of appeals in which Existing Use Value has been accepted as the starting point for benchmark land value. In some appeal cases, no premium was held be required, but in others reasonable premiums were held to be 10% or 20% of EuV.

2.85 As a broad indication of how benchmark land values will be negotiated, the Council considers that reasonable premiums to apply in different circumstances could be as follows:

- 0-10% for old dilapidated buildings at the end of economic life;
- up to 20% for a property in a viable existing use; and
- up to 30% where development would need to fund relocation of an existing activity.

2.86 The NPPG also suggests that a realistic alternative use value (AUV) could be the basis for establishing a benchmark, and the Council may consider AUV alongside EUV where appropriate. An AUV is unlikely to be appropriate where it rests on assumptions about what would be granted planning consent, and requires costs and sales values or rents to be established for a hypothetical scheme that has not been worked-up in sufficient detail to be implemented. In accordance with the GLA Toolkit Guidance Notes, the Council therefore considers that the use of AUV as the basis for a benchmark is most likely to be appropriate where there is an alternative lawful use (having regard to the most recent lawful use and any applicable development orders), or there is already a planning consent in place with potential to be implemented, or there is a site allocation in a local plan (such as the Camden Site Allocations

Document 2013) that gives sufficient detail for a realistic alternative proposal to be costed and valued.

2.87 The RICS guidance note "Financial Viability in Planning" suggests that the benchmark value should be based on the market value. There is no straightforward methodology for establishing market value, but the RICS guidance and NPPG both indicate the value should reflect development plan policies and all other planning considerations (notably planning obligations and any Community Infrastructure Levy charge). The RICS guidance also places a great deal of emphasis on the sale prices of comparable development sites, and notes that the 'risk-adjusted' value for a site without planning permission will be lower than the current market price for land with permission in place.

2.88 The RICS guidance notes that the actual price paid for a site may be used as evidence of market value where the site has recently been acquired/ disposed. However, the guidance warns that land values may change between the date of purchase and the viability appraisal, that developers may overpay due to an overestimate the acceptable development density or an underestimate the necessary planning obligations, and that site assembly may create a synergistic value greater than the components.

2.89 The Council considers that the market value and/ or the price paid for a site should be treated very cautiously in establishing a benchmark value as developers will compete for sites by assuming a reduced level of planning obligations – and particularly affordable housing (see also paragraph 2.81). However, the Council may consider market value and/ or price paid alongside Existing Market Value where market value and/ or price paid is supported by clear evidence in the form of a viability appraisal demonstrating that market value has been assessed on the basis of full compliance with planning policy. Transactional evidence may be relevant where:

- it relates to comparable sites nearby;
- full and relevant details of the transactions are known and publically verifiable; and
- there is evidence that the stated land values allow for viable development proposals that fully comply with planning policy.

2.90 The purpose of the premium referred to in Figure 5 and paragraphs 2.83 to 2.85 is to provide an incentive to a landowner to release the site for development (as a vendor). A separate incentive is provided to the developer (as a purchaser) to carry out the development through a return based on the development process itself, including the land purchase. Once a land transaction has taken place, it is not appropriate for the developer to apply a further premium to the market value or the price paid.

2.91 An alternative use value (AUV) cannot provide a meaningful benchmark value unless it represents a financially viable development that would be an option for a landowner to consider. To be financially viable, the

scheme would by definition provide competitive returns to a willing landowner and a willing developer. Consequently it should not be necessary for a further premium to be applied to an alternative use value.

### Deferred affordable housing contributions

2.92 London Plan policy 3.12 and Camden Development Policy DP3 indicate that the Council should seek the maximum reasonable amount of affordable housing in negotiations relating to residential and mixed-use sites. Many factors can have a significant impact on the maximum viable contribution to affordable housing, including changes to sales values, changes to build costs, changed specifications for materials and finishes and changes to the cost of finance. These factors can change quickly, and changes of a few percentage points can have a significant impact on the viability of a development. For example, house prices have risen sharply each year in Camden since the beginning of 2010. In the year to September 2010, prices had risen by 16.3%, with another 5.2% increase by September 2011, 7.2% higher by September 2012, 11.9% higher by September 2013 and 20.4% higher by September 2014 (source: Land Registry). Significant changes to viability are likely between the grant of planning permission and commencement, and between commencement and completion of the development.

2.93 The Council will therefore seek to negotiate deferred affordable housing contributions (similar to 'contingent obligations' referred to in London Plan policy 3.12) for developments where the provision of housing/ affordable housing falls significantly short of targets in Development Policies DP1 and DP3 due to financial viability, and there is a prospect of viability improving prior to completion. The deferred contribution is not a fixed amount, but is capped at the shortfall between the amount of additional housing/ affordable housing proposed and the Council's policy targets. The actual contribution is determined by a further viability appraisal undertaken on an open book basis at an agreed point after approval of the development but before the scheme is fully occupied.

2.94 A deferred contribution is only triggered if the further financial viability appraisal shows that there has been sufficient growth in viability. If the residual value of the development exceeds an agreed benchmark site value, then the excess is split equally between the developer and the Council unless the Council's share reaches the cap. Where the cap is reached, the contribution matches the shortfall between housing/ affordable housing provision and the Council's policy targets, and any further growth in the residual value relative to the benchmark site value will pass to the developer in full.

2.95 The Council has regard to the arrangements for 'contingent obligations' suggested by the London Plan and the Mayor's SPG. In the particular circumstances of Camden, the Council takes the following approach:

- re-appraisal of viability is expected after implementation when the development is substantially complete; and

- re-appraisal of viability and deferred affordable housing contributions are sought as part of planning obligations for developments that proceed as a single phase, as well as for phased schemes.

2.96 Particular Camden circumstances justifying our approach are set below:

- Given the pace of recent house price rises in Camden (20.4% in the year up to Sept 2014), a re-appraisal of viability immediately prior to commencement would significantly underestimate the ability of the development to contribute to affordable housing, as the sales values for market housing will have increased considerably by the time of completion.
- The pace of Camden house price rises means that even a short-term permissions (such as commencement within 12 months) and a requirement for review only if completion fails to take place within a modest period (such as 18 months from commencement) would allow a scheme to make a significantly smaller contribution to affordable housing than could be supported by the sales values finally achieved.
- Given the type and scale of housing development in Camden, most market and affordable housing is delivered by schemes that proceed as a single phase. The pace of Camden house price rises means that if they are not subject to viability re-appraisal, such schemes will make a significantly smaller contribution to affordable housing than could be supported by the sales values finally achieved.
- In a single phase scheme it is difficult to change the mix of market and affordable housing after implementation, so for single phase schemes in Camden deferred contributions will generally take the form of a payment-in-lieu.
- Many of Camden's development projects take advantage of the particular qualities of the borough to create unique homes at the higher end of the market – examples include developments in historic areas and developments creating views over Central London or Hampstead Heath. Given the uniqueness of such homes, it is exceedingly difficult to identify comparable developments or pertinent values achieved elsewhere, and consequently there is considerable uncertainty over the sales values likely to be achieved. Undertaking viability re-appraisal as close to the end of the development process as possible removes uncertainty as it allows recorded sales values to be used rather than predictions.
- Many of Camden's development projects (particularly those aimed at the higher end of the market) are designed to very high specifications in terms of materials, finishes and decor. High specifications give rise to high build costs that are difficult to confirm by reference to published sources such as BCIS, and are often engineered downwards during implementation. Undertaking viability re-appraisal as close to the end of the development process as possible removes uncertainty as it allows recorded build costs to be used rather than estimates.

- There are concerns that build costs in Camden could rise rapidly in coming years due to the unusually large number of construction projects taking place in Central London, and this uncertainty can also be removed by undertaking a later re-appraisal using recorded building costs.
- The Council's approach has been agreed as a planning obligation for more than ten developments in Camden. At the end of 2014, four of these had been completed, and had paid the full deferred affordable housing contribution, providing more than £13 million to fund additional affordable housing.

2.97 The Council will generally seek to secure the following arrangements for deferred affordable housing contributions in a S106 agreement:

- the deferred affordable housing contribution will take the form of a payment in-lieu to the Council's affordable housing fund
- the maximum contribution will be a payment-in-lieu based on the shortfall against housing/ affordable housing targets, calculated in accordance with CPG8 Planning Obligations
- full details of the agreed financial viability appraisal which guided determination of the application will be recorded
- the benchmark value for the site agreed in that appraisal (in accordance with paragraphs 2.69 and 2.82 to 2.91 of this guidance will be recorded
- at a specific point during the development process we will require a further financial viability appraisal produced on an open book basis – generally this will be either at practical completion, or when a specified number of homes in the development have been sold but there are sufficient unsold homes for sales proceeds to fund the deferred contribution
- the developer will fund an independent verification of the further financial viability appraisal (as indicated in paragraph 2.73 of this guidance)
- following independent verification, the agreed benchmark value will be subtracted from the residual value given in the further financial viability assessment – this calculation will give a negative value or zero (a deficit) or a positive value (a surplus)
- if the calculation shows a deficit, no deferred affordable housing contribution will be required
- if the calculation shows a surplus of less than twice the maximum contribution, then the deferred affordable housing contribution will be half of the surplus
- if the calculation shows a surplus that is twice the maximum contribution or more, then the deferred affordable housing contribution will be capped at the maximum
- following independent verification of the further financial viability appraisal, the Council will give formal notice of the sum required, and payment shall be made within 28 days

2.98 Different arrangements may be appropriate in some cases, depending on character and scale of the development. For example:

- Where a phased development is proposed, and improvements in viability could potentially provide additional affordable housing within the development, it may be appropriate to undertake further financial viability assessment earlier in the process.
- In the case of large developments with a long site preparation and construction period, it may be appropriate to undertake more than one further financial viability assessment.
- It may occasionally be necessary to vary the formula for calculating surplus or deficit to reflect the particular viability appraisal model being used, but the Council will expect to agree a formula that reflects the principle set out in paragraph 2.94.
- An adapted mechanism will be necessary where a development will be managed for private rent by an institution.
- Using a growth model to assess viability may be an appropriate alternative to a deferred contribution in some circumstances where changes in the values and costs are predictable and the growth model will maximise the affordable housing offer at the time an application is determined.

2.99 The further financial viability appraisal should comply with all the requirements for financial viability appraisal set out in paragraphs 2.64 to 2.91, including the modelling of cash flows. As indicated in Core Strategy paragraph 19.17, the Council will expect developers to provide information on viability through an "open-book" approach, however the Council will endeavour to prevent release of commercially sensitive information as set out in paragraphs 2.76 and 2.77 of this guidance. Where inputs such as build costs and sales values are based on estimates rather than agreed contracts and transactions on homes within the scheme, we will expect appraisals to use appropriate projections with reference to trends in the requisite segment of the housing market and to sources such as BCIS indices.

### Can the market housing and affordable housing be provided off-site?

2.100 Our Core Strategy and Development Policies promote mixed-use development and mixed and inclusive communities in line with the Government's NPPF. Development Policy DP1 indicates that housing contributions should normally be provided on site, while Development Policy DP3 indicates that affordable housing contributions should normally be made on site. Both policies do provide for off-site contributions, but only in a limited set of circumstances. The Council will only accept off-site contributions where provision cannot practically be achieved on-site in terms of meeting the criteria set out in the two Development Policies and accompanying paragraphs. The Council will only accept contributions in the form of payments-in-lieu in exceptional circumstances.

2.101 The Council will take the project management and implementation costs of off-site contributions into account and will expect there to be a neutral impact on Council expenditure and resources. Obligations may therefore need to include a payment to cover the additional costs of delivery of off-site contributions where such costs fall to the Council.

2.102 When considering the acceptability of off-site contributions and payments-in-lieu, we will have close regard to all relevant criteria in Development Policies DP1 and DP3 alongside accompanying paragraphs 1.15 to 1.24 and 3.13 to 3.30. We will also have regard to Core Strategy CS9 and the Council's support for residential communities in Central London, and ensure that off-site contributions do not undermine the benefits of mixed-use areas (such as those identified in paragraph 1.7 of our Development Policies document) or conflict with the creation of mixed and inclusive communities. These considerations apply to all sites regardless of size.

2.103 The Council will particularly expect contributions to be made on-site where the development is larger. Where mixed-use policy DP1 applies, we will expect on-site housing contributions where 1,000 sq m (gross) or more of additional floorspace is proposed. Where affordable housing policy DP3 applies, we will expect on-site affordable housing contributions where 3,500 sq m (gross) or more of additional floorspace is proposed. It may not always be practical to include affordable housing within a market development (for example in smaller developments), however prior to considering an off-site contribution the Council will expect developers of all schemes to demonstrate that, on-site provision is not practical having regard to all the considerations referred to in paragraph 2.102 of this guidance.

2.104 The NPPF indicates that affordable housing provision should be made on-site unless an off-site solution is robustly justified. To meet this objective, the Council expects all options for on-site affordable housing to be fully explored, even where small developments are involved. Before they submit an application, we will expect applicants to fully consider different arrangements of the site and the scheme to secure the best possible prospect of achieving an on-site affordable housing contribution. In particular, applicants will be expected to show that the following options cannot practically deliver an on-site contribution before off-site solutions will be considered:

- where the site characteristics provide potential for a variety of scheme design and layouts, designing the scheme to provide a separate entrance (or entrances) and stair/ lift core(s)for affordable homes
- where it is only possible to provide a single entrance lobby and stair/ lift core, designing the communal spaces to ensure that service and management charges are sufficiently low for affordable housing occupiers and providers (see also paragraph 2.42 of this guidance)
- approaching a range of housing associations and other providers (including the Council) to seek bids for acquisition of on-site affordable homes

- offering flexibility to housing associations and other providers to deliver different types of affordable housing (eg intermediate housing)
- where providing the full affordable housing contribution on-site is not financially viable, providing a reduced affordable housing floorspace on-site
- where an on-site solution is not financially viable, seeking a top-up payment from the Council's affordable housing fund.

**Making the contribution on another site**

2.105 The following terms are used in this guidance to shorten explanations of off-site arrangements:

- **application site** – the site of the proposed development that generates a policy requirement for housing under policy DP1 or affordable housing under policy DP3;
- **delivery site(s)** – one or more proposed development sites elsewhere intended to meet policy requirements off-site.

2.106 The paragraphs accompanying policies DP1 and DP3 indicate that where off-site provision is made, the overall percentage of housing/ affordable housing and non-residential uses will be considered across the aggregate floorspace on all related development sites. In other words, the percentage requirement for an off-site contribution is calculated as a proportion of the floorspace at the application site and the floorspace at the delivery site(s) added together, rather then the application site alone. In the case of policy DP1, where there is a single target of 50% for negotiation of on-site contributions, off-site contributions should normally involve matching the non-residential floorspace increase at the application site with an equivalent increase in residential floorspace at the delivery site. In the case of policy DP3, where the sliding scale applies a formula is used to calculate off-site contributions. Figure 6 and Figure 7 below show how the off-site policy requirement can be calculated.

2.107 Calculating the percentage across floorspace on all related development sites helps to ensure that the policies do not provide an unintended incentive towards off-site contributions. Off-site contributions allow more non-residential floorspace (or market housing floorspace) to be developed at the application site. Considering the sites together ensures that this gain in non-residential floorspace (or market housing) also leads to a proportionate increase in residential floorspace (or affordable housing floorspace) at the delivery site.

2.108 Calculating the proportion across all related development sites also enables land swaps. A land swap enables a developer to offset additional non-residential floorspace (or market housing) at the application site by reducing non-residential floorspace (or market housing) elsewhere.

- Under DP1, redeveloping/ converting non-residential floorspace for off-site housing can be used to offset the addition of non-residential floorspace at the application site;
- Under DP3, redeveloping/ converting market housing floorspace for off-site affordable housing can be used to offset the addition of market housing at application site.

2.109 A calculation of this type under policy DP1 is included in paragraph 1.16 of our Development Policies document and as Example 2 in Figure 6.

**Figure 6. Calculating off-site contributions under policy DP1**

| | |
|---|---|
| Additional floorspace proposed | Generally under 1,000 sq m for off-site housing contribution to be considered |
| On-site housing target | 50% of additional floorspace on the application site |
| Off-site housing target | 50% of total additional floorspace (application site plus delivery site) |
| Housing floorspace required off-site | Should match total addition to non-residential floorspace across the related sites |

**Example 1**

| | |
|---|---|
| Additional floorspace proposed (application site) | = 800 sq m |
| Housing floorspace required if on-site (application site) | = 400 sq m |
| Remaining non-residential floorspace addition on-site (application site) | = 400 sq m |
| Non-residential floorspace addition if principle of off-site housing is agreed (delivery site, with no conversion of non-residential floorspace to housing elsewhere) | = 800 sq m |
| Housing floorspace required off-site (with no conversion of non-residential floorspace) | = 800 sq m |
| Ratio of non-residential floorspace to housing floorspace off-site | 800:800 = 50%:50% |

**Example 2**

| | |
|---|---|
| Non-residential addition on-site (application site, where principle of off-site housing is agreed) | = 800 sq m |
| Housing floorspace required off-site (delivery site, with no conversion of non-residential floorspace) | = 800 sq m |
| Non-residential loss off-site through conversion to housing (delivery site) | = minus 400 sq m through conversion to housing |
| Net non-residential addition (all sites) | = 400 sq m |
| Net housing floorspace required off-site (by conversion of non-residential floorspace) | = 400 sq m |
| Ratio of non-residential floorspace to housing floorspace off-site | 400:400 = 50%:50% |

**Figure 7. Calculating off-site contributions under policy DP3**

| | |
|---|---|
| Additional market housing floorspace proposed - '**a**' | Generally under 3,500 sq m for off-site affordable housing contribution to be considered |
| On-site affordable housing target -'**b**' (percentage) | Varies according to the sliding scale for sites with capacity for less than 50 homes (NB the sliding scale does not apply where the primary application site also includes 1,000 sq m or more of additional non-residential floorspace – see paragraph 2.35 of this guidance). |
| Off-site affordable housing target (proportion) | = b / (100 - b) |
| Affordable housing required off-site (secondary delivery site) - '**c**' (sq m) | **c = a x b / (100 – b)** |

**Example**

| | |
|---|---|
| Additional market housing floorspace proposed | = 2,500 sq m |
| Target for on-site affordable housing | = 25% x 2,500 sq m<br>= 625 sq m |
| Off-site affordable housing target | = 25 / (100 – 25)<br>= 33.3% |
| Target for off-site affordable housing contribution | = 2,500 sq m x 33.3%<br>= 833.3 sq m |
| Ratio of market housing floorspace to affordable housing floorspace off-site | 2,500:833.3 = 75%:25% |

2.110 Development Policies DP1 and DP3 indicate that we will take into account the economics and financial viability of development when considering off-site contributions as well as on-site contributions. The arrangements in paragraphs 2.64 to 2.91 of this guidance will apply, and applicants will need to submit financial viability appraisals to demonstrate that the application and delivery sites are providing the maximum reasonable contributions to housing (under DP1) or affordable housing (under DP3). Applicants will be required to fund an independent verification of the financial viability appraisal where the proportion or mix of housing/ affordable housing sought falls considerably short of the contributions anticipated by our Development Policies document and this guidance.

2.111 As indicated in paragraph 2.100 of this guidance, contributions to housing/ affordable housing should normally be made on site. Mechanisms guiding the delivery of housing and affordable housing should not create a financial incentive for the developer to make off-site contributions. Where the level of off-site contribution is below the level anticipated by our Development Policies document and this guidance,

we will seek to ensure the additional value created by the development is broadly the same with an off-site contribution as it would be with an on-site contribution. In addition to the financial viability appraisal requirements of paragraphs 2.64 to 2.91, the Council may therefore seek a comparison between the financial viability of on-site and off-site solutions (taking into account the existing use value and residual development value of the application site and delivery site).

**Residential land-use credits and affordable housing credits**

2.112 Within Camden's Central London area there are a number of property investors and developers that own a significant number of sites. We may negotiate arrangements with such landowners to take advantage of commercial development opportunities, market housing opportunities and affordable housing opportunities on separate sites provided this does not compromise our objectives for mixed-use and mixed and balanced communities. In particular, owners of several sites may be able to bring forward developments of housing or affordable housing in advance of any policy requirement from Development Policies DP1 or DP3. In effect, the 'delivery site(s)' is/ are developed before the 'application site' has been identified (see paragraph 2.105 of this guidance for an explanation of these terms). The Council may agree to 'bank' this floorspace in the form of credits that can be accepted against the policy requirements from future development. When an 'application site' generates a housing/ affordable housing requirement, the Council will have discretion to agree to use of the 'banked' credits to offset part or all of the policy requirement.

2.113 The credits mechanism has potential to deliver additional housing and affordable housing earlier in the financial cycle by creating incentives for multiple site-owners to:

- seek opportunities for housing/ affordable housing development in advance during periods when commercial markets are poor rather than seeking to negotiate payments in lieu when commercial development prospects improve;
- bring forward housing/ affordable housing development that they would otherwise hold back until commercial development prospects improve;
- take up opportunities to convert lower value commercial properties to housing when leases expire;
- provide affordable housing when the market for private housing would be unable to support it.

2.114 The mechanism can also help developers to deliver commercial floorspace or market housing more quickly when demand is strongest.

2.115 There are two types of credits that could be considered in this way:

- **residential land-use credits** – created where housing is provided but is not required by policy – these can be used where market

housing is needed to offset additional commercial development under Development Policy DP1; and

- **affordable housing credits** – created where affordable housing is provided in place of market housing but is not required by policy – these can be used where affordable housing is needed to offset additional market housing development under Development Policy DP3.

2.116 The two types of credit could potentially be created by a single development at the same time if affordable housing is provided but there is no policy requirement for any type of housing. However, each type of credit can only be used once and only against a single policy requirement.

2.117 Residential land-use credits and affordable housing credits are types of off-site contributions, and will be governed by the policy considerations set out in paragraph 2.100 to 2.104 of this guidance. Paragraphs 1.15 and 3.15 of our Development Policies document indicate that off-site contributions should be made in the same area as the application site. In the case of residential land-use and affordable housing credits, the Council will only agree to bank credits from development in the Central London area, and will only allow credits to be used to offset requirements on another site in Central London. Credits should be used in reasonable proximity to the delivery site. In the Central London context, in most cases the Council will require credits to be used within 500 metres of the delivery site, taking into account any demonstrable benefits from allowing provision on a more distant site. The Council will not agree to credit arrangements that would erode the mixed-use character of Central London or add to concentrations of affordable housing at the fringes of Central London.

2.118 The Council will use two mechanisms to ensure that residential land-use credits and affordable housing credits serve to increase the overall delivery of housing or affordable housing.

- The Council will not agree to the formation of credits from development of market housing or affordable housing where this development would clearly have arisen regardless of any future DP1/ DP3 requirements on other sites.
- Where we agree to the use of credits to off-set a housing requirement from additional non-residential space or an affordable housing requirement from additional market housing, the credit required will be equivalent in floorspace terms to the overall increase in non-residential floorspace – or market housing floorspace – across the application site and the delivery site(s) together, in accordance with the considerations set out in paragraphs 2.105 to 2.109 of this guidance.

2.119 The Council may therefore agree to acknowledge development in Central London as creating residential land-use credits and/ or affordable housing credits subject to the following constraints:

- the creation of credits should form part of the resolution to grant permission for housing/ affordable housing on the 'delivery site'
- the Council will only agree the formation of credits where this will serve to increase the overall delivery of housing or affordable housing
- the scale and type of credits created should be agreed at the time of the resolution on the 'delivery site' (floorspace of residential land-use credits and floorspace of affordable housing credits)
- at the request of the credit-holder, the Council may consider credits agreed by resolution as a material consideration offsetting policy requirements at a future 'application site' in Central London
- the Council will only accept the existence of credits as a material consideration where an off-site contribution would comply with Development Policies DP1, DP3 and all other relevant policies and material considerations
- the Council will only accept the existence of credits as a material consideration for sites in Central London
- the Council will require the credits to be used in reasonable proximity to the 'delivery site', and in most cases within 500 metres
- the Council will consider the scale of credits required to off-set a policy requirement in terms of the overall increase in non-residential floorspace increase or market housing floorspace across the application and delivery site(s) together
- the existence of credits will not place any obligation on the Council in terms of its decision-making in relation to a future 'application site'
- the period over which the credit can be applied to a future 'application site' should also be agreed at the time of the resolution on the 'delivery site', usually until 10 years from the date of the resolution
- the credits will generally be specific to an applicant, developer or landowner, and will not be regarded as transferable
- the Council will seek a S106 legal agreement to ensure that where development at an application site is justified by the existence of credits, the development cannot be occupied until the housing/ affordable housing that creates the credits is completed and available for occupation
- the creation and 'cashing-in' of credits and the implementation of development at 'delivery sites' and 'application sites' will be closely monitored and regularly reported.

**Payments in lieu**

2.120 Development Policies DP1 and DP3 only allow payments-in-lieu of housing/ affordable housing in exceptional circumstances, and these will be governed by the policy considerations set out in paragraph 2.100 to 2.104 of this guidance. Payments-in-lieu may be accepted where the required housing/ affordable housing cannot practically be achieved on-site and the applicant demonstrates that no alternative site is available in the area (see paragraphs 1.17 and 3.15 of the Development Policies

document). Payments-in-lieu of housing will be paid into the Council's affordable housing fund whether they arise under policy DP1 or policy DP3, as the Council does not hold funds for investment in market housing.

2.121 Where development proposals involve a shortfall of the housing or affordable housing required under Policies DP1 or DP3, the Council may negotiate a payment in lieu of the unmet requirement.

2.122 Where the Council considers that a payment-in-lieu of housing/ affordable housing is appropriate under policies DP1 or DP3, we will calculate the payment-in-lieu in accordance with CPG on **Planning Obligations**. The calculation is based on viability research commissioned by the Council to set a standard affordable housing payment-in-lieu. In negotiating a payment-in-lieu, the Council will also take into account the economics and financial viability of the particular development. Where a payment-in-lieu at the level anticipated by CPG on Planning Obligations would not be viable, the arrangements in paragraphs 2.64 to 2.91 of this guidance will apply.

2.123 As indicated in paragraph 2.111, financial appraisal mechanisms should not create an incentive towards off-site solutions. In addition to the financial viability appraisal requirements of paragraphs 2.64 to 2.91, the Council may therefore seek financial viability appraisal of the development with and without an on-site contribution, and will seek to ensure that any payment-in-lieu is broadly equivalent to the increase in development value where no contribution is made on-site. The Council may also consider the cost of developing the required percentage of housing/ affordable housing off-site.

### Background

- The National Planning Policy Framework (NPPF) provides a definition of affordable housing and sets the framework which local councils use to secure affordable housing from market housing development.
- The London Plan and the Mayor's Housing SPG give guidance on the income groups who are eligible for intermediate housing, and also cap the cost of intermediate housing on the basis of income.
- The London Plan Annual Monitoring Report is used to review annually which income groups are eligible for intermediate housing.

### Securing works / conditions / S106

2.124 Provision of housing required under Development Policy DP1 will generally be secured by a planning obligation under S106 of the Town and Country Planning Act 1990. The precise terms of the S106 agreement will vary between developments to reflect the nature and financial viability of the development. In most cases S106 terms will include:

- identifying all homes in the development
- preventing the occupation of non-residential floorspace until the housing is completed and available for occupation, including non-residential development justified by a residential land-use credit agreed in association with a housing development on another site.

2.125 Provision of affordable housing required under Development Policy DP3 will always be secured through a S106 planning obligation. The precise terms of the S106 agreement will vary between developments to reflect the nature and financial viability of the development. In most cases, S106 terms will include:

- identifying all affordable homes in the development
- specifying which homes will be social rented housing, which homes will be affordable rented housing and which homes will be intermediate housing
- defining social rented housing in terms of the Government's national rent regime
- defining intermediate housing in terms of the income groups and the ratio of housing cost to income contained in the London Plan, the Mayor's Housing SPG and the London Plan Annual Monitoring Report
- defining affordable rented housing in terms of relevant guidance including the NPPF. the London Plan, the Mayor's Housing SPG, and in relation to Local Housing Allowance caps and lower quartile market rents available locally and across the borough
- identifying social rented, affordable rented and intermediate wheelchair homes
- arrangements for the development, fitting out and transfer of the affordable housing to an affordable housing provider
- arrangements for the fitting out/ adaptation of wheelchair homes for occupation by a household containing one or more people who are wheelchair users
- preventing the occupation of some or all market housing until the affordable housing has been completed, fitted out and transferred to an affordable housing provider - including market housing justified by an affordable housing credit agreed in association with affordable housing development on another site

- securing availability of the affordable housing to future eligible occupiers, or securing recycling of public subsidy if the affordable housing is sold.

2.126 Other S106 terms that may be required in connection with DP1 and DP3 include:

- where off-site delivery will be at a known site or sites, linking the developments together
- where a site is not identified for delivery at the outset, specifying the floorspace, nature of housing required and general location
- where a site is not identified for delivery at the outset, arrangements for identifying one or more delivery sites prior to the implementation of the development
- making a payment-in-lieu of housing/ affordable housing prior to implementation or occupation of the development
- making a payment to cover the additional costs of delivery of off-site contributions where such costs fall to the Council
- arrangements for a deferred affordable housing contribution if provision of housing/ affordable housing falls significantly short of targets due to financial viability, and there is a prospect of viability improving prior to completion
- specifying the type of intermediate housing – e.g. key-worker, intermediate rent, shared ownership
- controls on the rents of intermediate rented housing and affordable rented housing
- limiting the minimum percentage share available in shared ownership homes
- limiting the rent charged on the unsold proportion of shared ownership homes.

## Resources / contacts

### Contacts

| | |
|---|---|
| Guidance on interpretation of the LDF Core Strategy and Development Policies document | Strategic Planning and Implementation Team – 020 7974 5964 – or email planningpolicy@camden.gov.uk |
| Guidance on our affordable housing priorities and our housing association partners | Camden Council Housing Commissioning and Partnerships Team – 020 7974 2743 |
| Guidance on the pre-planning application advice service | www.camden.gov.uk/ppaa<br>Camden Council Duty Planner Service – Contact Camden - 020 7974 4444 |

### Resources

| | |
|---|---|
| Affordable Housing Development Control Toolkit and Guidance Notes, GLA 2014 | www.london.gov.uk/who-runs-london/mayor/publications/planning/affordable-housing-development-control-toolkit<br>(see Mayor's Priorities - Planning – Publications – February 2014) |
| Camden Housing Needs Survey Update 2008 | www.camden.gov.uk/ldf (see Evidence and Monitoring pages) |
| Camden Affordable Rent Study 2011 | www.camden.gov/housing<br>(see Housing Policies and Strategies – Social Housing Reform) |
| Housing Supplementary Planning Guidance, Mayor of London, November 2012 | http://www.london.gov.uk/who-runs-london/mayor/publications/planning/housing-supplementary-planning-guidance<br>(see Mayor's Priorities - Planning – Supplementary Planning Guidance) |
| National Planning Policy Framework (NPPF), CLG 2012 | https://www.gov.uk/government/publications/national-planning-policy-framework--2<br>(see GOV.UK - Publications – Policy Papers – Planning and Building - Department of Communities and Local Government – March 2012) |
| National Planning Practice Guidance, CLG 2013 and subsequent | http://planningguidance.planningportal.gov.uk/ |

Camden Planning Guidance

# Sustainability

CPG 3

London Borough of Camden

July 2015

Camden

# CPG1 Sustainability

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions.

1.2 The Council adopted CPG3 Sustainability on 6 April 2011 following statutory consultation. This document has been subject to two updates:

- 4 September 2013 to clarify the guidance in Section 9 related to the Code for Sustainable Homes, and
- 17 July 2015 to update a number of sustainable design standards and targets.

Details on these updates and the consultation process are available at camden.gov.uk/cpg.

1.3 The Camden Planning Guidance covers a range of topics as well as sustainability (such as design, housing, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden's LDF.

## What is this sustainability guidance for?

1.4 The Council is committed to reducing Camden's carbon emissions. This will be achieved by implementing large scale projects such as installing decentralised energy networks alongside smaller scale measures, such as improving the insulation and energy performance of existing buildings.

1.5 This guidance provides information on ways to achieve carbon reductions and more sustainable developments. It also highlights the Council's requirements and guidelines which support the relevant Local Development Framework (LDF) policies:

- CS13 - *Tackling climate change through promoting higher environmental standards*
- DP22 - *Promoting sustainable design and construction*
- DP23 - *Water*

### What does the guidance cover?

- Energy statements
- The energy hierarchy
  - Energy efficiency – in new and existing buildings
  - Decentralised energy and combined heat and power (CHP)
  - Renewable energy
- Water efficiency
- Sustainable use of materials
- Sustainability assessment tools - BREEAM
- Green roofs, brown roofs and green walls
- Flooding
- Climate change adaptation
- Biodiversity
- Urban food growing

# 2 The energy hierarchy

**KEY MESSAGES**

- All developments are to be design to reduce carbon dioxide emissions
- Energy strategies are to be designed following the steps set out by the energy hierarchy

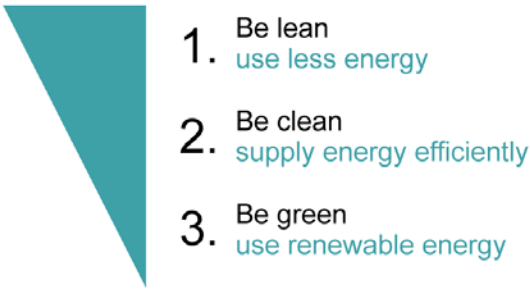
2.1 Buildings in Camden account for 88% of Camden's overall carbon dioxide emissions. These emissions result from the energy used within buildings. Therefore the Council encourages all buildings to be as energy efficient as possible. Our approach is to implement the energy hierarchy as set out in policy CS13 of the Core Strategy. The energy hierarchy is a sequence of steps that, if taken in order, will minimise the energy consumption in a building.

2.2 This section provides an overall introduction to the energy hierarchy and energy statements. This section sets out:

- The energy hierarchy
- How to apply the energy hierarchy
- When an energy statement is required
- What to include in an energy statement

2.3 The next four sections provide more detailed guidance on each of the 3 steps in the hierarchy.

The 3 steps of the energy hierarchy are:




2.4 All developments are expected to reduce their carbon dioxide emissions by following the steps in the energy hierarchy to reduce energy consumption.

2.5 Developments involving 5 or more dwellings and/or 500sq m (gross internal) floorspace or more are required to submit an energy statement which demonstrates how carbon dioxide emissions will be reduced in line with the energy hierarchy (see below for more details on what to include in an energy statement).

**Gross internal area**

The area within the perimeter of the outside walls of a building as measured from the inside surface of the exterior walls, with no deduction for hallways, stairs, closets, thickness of walls, columns, or other interior features.

## What to include in an energy statement?

2.6 An energy statement is to set out how a development has been designed to follow the steps in the energy hierarchy. It should demonstrate how the proposed measures are appropriate and viable to the context of the development.

**Baseline energy demand and carbon dioxide emissions**

Calculate the baseline energy demand of the development and the corresponding carbon dioxide emissions arising from the development. You should clearly show the methodology used. See below for more guidance on how to calculate the baseline demand and carbon dioxide emissions.

**Reduce the demand for energy**

Describe the design measures which are proposed to maximise the energy efficiency of the development. See sections 2 and 3 for guidance on how to ensure your development is as energy efficient as possible.

**Supply energy efficiently**

Describe how your development has considered further reducing carbon dioxide emissions by sourcing energy efficiently e.g. through the use of decentralised energy, such as combined heat and power systems. See section 4 for guidance on decentralised energy network and combined heat and power.

Calculate the energy use and the corresponding carbon emissions from the development having applied the first two stages of the energy hierarchy.

**Use renewable energy**

Describe how your development has considered using renewable energy technologies to further reduce carbon dioxide emissions. See section 5 for more guidance on renewable energy.

Calculate the remaining energy use and the corresponding carbon emissions from the development having applied all three stages of the energy hierarchy.

**Conclusion**

A concluding section should be provided outlining the contribution of each set of measures, technology or combination of technologies towards meeting the relevant targets set out in this guidance and providing recommendations as to which approach is most suitable for the site. Where it has not been possible to reach the targets, a clear explanation should be provided.

2.7 An energy statement should present technical data while remaining easy to read and to understand. Clearly laid out tables should be used to present data for ease of reading and comparison. Plans should be used where possible, e.g. to indicate suitable roof areas for installing solar technologies or the location of a plant room. References should be used to explain where data has been obtained from.

## Calculating the baseline energy demand and carbon dioxide emissions

2.8 You should produce a single energy statement for the entire development. The baseline energy demand should include an assessment of all the energy consumed in the operation of the development, including where there will be more than one occupier, use or building. This should include regulated energy or 'fixed' consumption (covered by building regulations) e.g. fixed lighting, heating and hot water systems, ventilation/cooling etc and non-regulated energy sources from 'plug-in' sources (not covered by building regulations) e.g. cooking, electrical appliances, centralised IT (server room) systems, communications equipment. Major developments should use modelling SAP/SBEM (Standard Assessment Procedure/Simplified Building Energy Model) to calculate this data. Benchmark data is only acceptable for minor developments.

2.9 The energy statement should clearly identify the total baseline energy demand and the carbon dioxide emissions of the development prior to the inclusion of any measures to reduce carbon dioxide emissions beyond the minimum requirements of current Building Regulations. The statement should clearly demonstrate the energy demand and carbon dioxide emissions of the development regulated by the Building Regulations as well as the additional energy demand and resulting carbon dioxide emissions. Reductions in each type of energy use should be demonstrated and the resulting total energy demand and carbon dioxide emissions.

2.10 Baseline carbon dioxide emissions should be calculated for energy use using Part L of the Building Regulations for domestic and non-domestic developments. Total development emissions should take into account all emissions sources.

## Further information

| | |
|---|---|
| Camden Core Strategy | Policy CS13 - *Tackling climate change through promoting higher environmental standards* – sets out Camden's overarching approach to environmental sustainability. |
| Camden Development Policies | Policy DP22 - *Promoting sustainable design and construction* – sets out Camden's detailed requirements for developments to comply with. |
| Mayor of London | The London Plan Supplementary Planning Guidance, Sustainable Design and Construction: – sets out the Mayor's requirements for environmental sustainability. |
| GLA Energy Team Guidance on Planning Energy Assessments October 2010 | Sets out how the GLA want Energy Assessments accompanying planning applications to be set out and what information is to be provided www.london.gov.uk/sites/default/files/guidance-energy-assessments-28-sep-10.pdf |
| Building Regulations | Approved Documents Part L - Conservation of Fuel and Power. This section of the Building Regulations deals specifically with the energy efficiency of buildings. The latest version of the Regulations can be found on the Planning Portal website www.planningportal.gov.uk |

# 4 Energy efficiency: existing buildings

**KEY MESSAGES**

As a guide, at least 10% of the project cost should be spent on environmental improvements

Potential measures are bespoke to each property

Sensitive improvements can be made to historic buildings to reduce carbon dioxide emissions

4.1 Many of the sections in this guidance focus on reducing the environmental impact of new buildings, however Camden's existing buildings account for almost 90% of the borough's carbon dioxide emissions. Therefore it is essential that these buildings make a contribution towards the borough's reduction in carbon dioxide emissions.

4.2 This section provides more information on how existing buildings can be more energy efficient. It builds on the previous section, which covered Stage 1 of the energy hierarchy and improving energy efficiency in new buildings.

4.3 Camden Core Strategy Policy CS13, paragraph 13.9 expects development or alterations to existing buildings to include proportionate measures to be taken to improve their environmental sustainability, where possible.

**WHAT DOES THE COUNCIL EXPECT?**

- All buildings, whether being updated or refurbished, are expected to reduce their carbon emissions by making improvements to the existing building. Work involving a change of use or an extension to an existing property is included. As a guide, at least 10% of the project cost should be spent on the improvements.
- Where retro-fitting measures are not identified at application stage we will most likely secure the implementation of environmental improvements by way of condition. Appendix 1 sets out a checklist of retro fit improvements for applicants.
- Development involving a change of use or a conversion of 5 or more dwellings or 500sq m of any floorspace, will be expected to achieve 60% of the un-weighted credits in the Energy category in their BREEAM assessment. (See the section on Sustainability assessment tools for more details).
- Special consideration will be given to buildings that are protected e.g. listed buildings to ensure that their historic and architectural features are preserved.

## How can I make an existing building more energy efficient?

4.4 There are many opportunities for reducing the energy we use in our homes. The design and the materials used can make a significant contribution. Simple measures, such as closing curtains at dusk, can help stop heat loss. Installing condensing boilers, heating controls and energy saving light bulbs and appliances reduce energy use and carbon dioxide emissions significantly. Reduced energy use also means lower energy bills.

4.5 When dealing with historic buildings a sensitive approach needs to be taken. Guidance on this is provided later within this section.

### Draught proofing

4.6 There is a range of effective draft proofing measures you can use to help insulate your home:

- Fix brush seals to exterior doors and letterboxes, and tape to ill-fitting doors;
- Put reflector panels behind radiators to reflect heat into the room; and
- Use shutters for windows and/or thicker curtains that do not drape over radiators.

### Energy efficient lighting

4.7 In most homes lighting accounts for 20% of the electricity bill. It is easy to cut waste by simply turning off lights and adjusting blinds and curtains to let in more natural light. When lighting a room, always use energy saving light bulbs.

### Windows

4.8 Windows let light and heat into your home, but they can also let a lot of heat out when temperatures are colder outside than inside. If you are replacing windows or building an extension, thermally efficient glazed windows will provide more effective insulation than older windows. Double glazed panels can now be fitted into some original wooden frames, without the need to replace the whole frame. This helps preserve the historic character of the building.

4.9 The use of PVCu windows is not considered to be acceptable in historic buildings, conservation areas and listed buildings as this material detracts from their historic significance and the architectural qualities of historic buildings and places. See below for more information on listed buildings and conservation areas.

4.10 There is a range of simple measures which can improve the energy efficiency of windows. These include:

- General repair and maintenance – which can substantially improve the energy efficiency of windows, as much of the heat lost through windows is through leaks and cracks.
- Installation of draught seals – which can help to further eliminate cold draughts and leaks.
- Secondary glazing – adding a second sheet of glass or plastic to a window frame can improve sound-proofing as well as energy efficiency. If carefully designed it can be unobtrusive and appropriate in a listed property or one within a conservation area.
- Secondary protection - e.g. shutters or heavy curtains, although these are predominantly a night-time option.

**Insulation**

- Loft insulation - Your home may already have some loft insulation, but if the material is thin it will not be saving as much energy and money as it could. Fitting proper loft insulation is the most cost-effective way of saving energy. As a guide, your loft insulation should be around 250mm thick to be effective.
- Floor insulation - If you have any gaps between your floorboards and skirting boards, you can reduce heat loss by sealing them with a regular tube sealant, like the silicon sealant used around the bath. It is also very useful to insulate underneath the floorboards at ground floor level.
- Cavity wall insulation involves filling the gap between the bricks with insulating material. It can reduce heat loss by up to 60%. Most homes built after 1930 will have a cavity that could be insulated
- Solid wall insulation (internal or external) – buildings constructed before 1930 almost always have sold wall construction. The only way to insulate solid walls is to add insulation to the inside or outside of the wall. External insulation involves adding a decorative weather-proof insulating treatment to the outside of your wall while internal insulation involves attaching insulating plaster board laminates or wooden battens in-filled with insulation to the inside of the wall. Generally 100mm of insulation is required to be effective. Solid wall insulation, whether internal or external, will require relocation of the services attached to the wall e.g. radiators, electrical sockets, drainpipes.

**Heating and hot water**

- New boiler - Replacing an old boiler (more than 10 years old) with a high efficiency condensing boiler and heating controls to provide heating and hot water could significantly cut energy consumption.
- New/upgraded central heating – If you install a new boiler the rest of your central heating system may need upgrading, for example large, old radiators could be replaced with smaller, more efficient radiators that are better suited to the new boiler

- Upgrading heating controls - You can install heating controls that allow you to control the temperature in different parts of your building. These can be included as an electronic timer control for your boiler, room thermostats for your main living area and thermostatic valves on all your radiators.
- Insulating hot water pipes and your hot water tank will retain hot water for longer, and save money on heating it.

4.11 See the Council's website for further information for householders on various retro-fitting measures and whether permission is required.

### Generating your own energy

4.12 Buildings can also reduce their energy consumption by generating their own energy in the form of heat or electricity using low carbon and renewable technologies which use little or no energy. See section 6 of this guidance on renewable energy for more advice on the technologies that are available and appropriate in Camden.

**CASE STUDY**

Renovated Victorian Eco-home: A semi-detached Victorian house in one of Camden's conservation areas was transformed in 2007, reducing its carbon footprint by 60%. Works undertaken to improve energy efficiency included:

- internal solid wall insulation;
- a new fully insulated roof;
- underfloor insulation;
- double glazing; and
- draught proofing.

Heat is provided by an efficient condensing boiler complemented by solar hot water panels on the rear extension; power to the panels' water pumps is provided by solar panels. Other improvements include an upgraded ventilation system with heat recovery, water saving features (e.g. rainwater harvesting for garden irrigation, dual flush toilets), low energy lighting and energy monitoring.

For further information on this property and improvements to other properties of a similar age see www.sd-commission.org.uk

### What if my building is historic, Listed or in a conservation area?

4.13 Historic buildings have special features that need to be conserved and therefore need to be treated sensitively. This section explains how energy efficiency improvements can be achieved without causing harm to the historic environment.

4.14 Reflecting the special qualities of historic buildings, additional consents may be required for statutorily designated buildings (listed buildings, or those in conservation areas). The Council's website has more detailed guidance on what types of permission are required. The Council will aim to balance the conservation of fuel and power against the need to conserve the fabric of the building.

4.15 Historic buildings can perform well in terms of energy efficiency. When looking to install high energy efficiency measures, however, it is essential to ensure that works do not compromise the character and significance of the building or area.

4.16 In order to identify the most appropriate measures, we recommend taking the following approach, which takes into account measures best suited to individual buildings and households (i.e. taking human behaviour into consideration as well as the building envelope and services):

- Assess the heritage values of the building;
- Assess the condition of the building fabric and building services;
- Assess the effectiveness and value for money of measures to improve energy performance;
- Assess their impact on heritage values; and
- Assess the technical risks.

4.17 A range of thermal efficiency measures can then be implemented, which avoid harm to the historic environment. Ranked according to their impact on heritage and the technical risks, these include:

1. Ensure that the building is in a good state of repair
2. Minor interventions - upgrade the easier and non-contentious elements:
   - insulate roof spaces and suspended floors;
   - provide flue dampers - (close in winter, open in summer);
   - use curtains, blinds and window shutters;
   - provide energy efficient lighting and appliances
   - draught-seal doors and windows;
   - provide hot water tank and pipe insulation.
3. Moderate interventions - upgrade vulnerable elements:
   - install secondary (or double) glazing (if practicable);
4. Upgrade building services and give advice to building users on managing them efficiently:
   - install high-efficiency boiler and heating controls;
   - install smart metering;
   - install solar panels, where not visible from the street or public spaces.

5. Major interventions - upgrade more difficult and contentious elements (where impact on heritage values and level of technical risk shown to be acceptable)
   - provide solid wall insulation.

4.18 When considering refurbishment, it is the owner's responsibility to ensure that any work does not cause unlawful or unnecessary damage to the building.

4.19 The Energy Savings Trust and English Heritage have published detailed guidance on refurbishing and improving the efficiency of historic buildings. See the Further Information section below for details of where to find these guides.

4.20 Before carrying out any work, find out if your property is listed, in a conservation area or subject to any other planning restrictions such as an Article 4 Direction. Then check if any of the proposed works require consent – such as listed building consent, planning permission or conservation area consent. See CPG1 Design for more information on Camden's historic buildings. The Council's website also provides detailed information on these matters.

**Article 4 Direction**

Removes the permitted development rights awarded to properties by legislation and means a planning application has to be made for minor works that usually do not need permission.

### Further information

Energy efficiency in existing buildings:

| | |
|---|---|
| The Energy Saving Trust | A national agency promoting energy efficiency in the domestic sector. For information on home energy efficiency measures including grants, visit their website: www.energysavingtrust.org.uk<br>The Energy Saving Trust also provides technical guidance on energy efficiency in the Publications and Case Studies section of their website.<br>www.est.org.uk/housingbuildings/publications<br>Recommended Best Practice in Housing technical guidance documents:<br>• CE120 - Energy Efficient Loft Extensions<br>• CE122 - Energy Efficient Domestic Extensions |
| GreenSpec | Provides details of products and how they can be used to improve the efficiency of your home or building<br>www.greenspec.co.uk |
| The Planning Portal | Provides information on what alterations you can make to your home without requiring planning permission<br>www.planningportal.gov.uk |

Energy efficiency in historic buildings:

| | |
|---|---|
| Historic England | Historic England, the UK government's adviser on the historic environment, has produced the following guidance:<br>• A Guide to Energy Conservation in Traditional Buildings, which looks at a range of improvements that can be made to reduce the heat lost through a building's walls, windows, floor and roof. This guide is one of a series looking at reducing energy consumption in traditionally constructed homes. https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/<br>• Meeting building regulations Part L in existing buildings. The purpose of the guidance is to help prevent conflicts between the requirements of the regulations and the conservation of historic and traditionally constructed buildings. https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/<br>• saving energy in historic buildings at www.climatechangeandyourhome.org.uk which includes very detailed information about a wide range of improvements, e.g. insulating solid walls. |
| The Energy Saving Trust | Provides technical guidance on energy efficiency in the Publications and Case Studies section of their website.<br>www.est.org.uk/housingbuildings/publications<br>This includes their Recommended Best Practice in Housing technical guidance documents: CE138 - Energy Efficient Historic Homes |
| The Victorian Society | Has information on their website on greening Victorian homes - www.victoriansociety.org.uk/advice/greening |
| Building Conservation | Provides a directory of useful contacts, grant sources and websites<br>www.buildingconservation.com |
| The Sustainable Development Commission | Provides case studies of existing homes that have improved their energy efficiency, including the example detailed in this section.<br>www.sd-commission.org.uk |

## Appendix 1: Checklist for retro-fitting measures

Applies to all:

- changes of use
- conversions
- extensions over 30sq m

Please note that not all the measures will be appropriate for all buildings and some measures will require planning permission e.g. alterations to the front of a property

| Measure | Specification | Evidence |
|---|---|---|
| Draught proofing | | |
| Reflective radiator panels | | |
| Overhauling/upgrading windows | | |
| New boiler | | |
| LED lighting | | |
| Meters, timers, sensors, controls on heating or lighting | | |
| Mechanical Ventilation with Heat Recovery | | |
| Insulation | | |
| Hot water tank & pipes | | |
| Roof | | |
| Walls Internal | | |
| Walls External | | |
| Floor | | |
| Renewable energy technology | | |
| Solar PV panels | | |
| Solar thermal (hot water) panels | | |
| Ground source heat pumps | | |
| Double glazed windows / Secondary glazing | | |
| Combined heat and power unit | | |
| Green or brown roof | | |
| Rainwater harvesting | | |
| Other measures | | |
| Join the Camden Climate Change Alliance (commercial only) | | |
| Off-setting contribution | | |

# 5 Decentralised energy networks and combined heat and power

**KEY MESSAGES**

Decentralised energy could provide 20% of Camden's heating demand by 2020.

Combined heat and power plants can reduce carbon dioxide emissions by 30-40% compared to a conventional gas boiler.

Where feasible and viable your development will be required to connect to a decentralised energy network or include CHP.

5.1 This section relates to stage 2 of the energy hierarchy. Stage 2 aims to ensure that developments have done all they can to obtain an efficient supply of energy.

**THE ENERGY HIERARCHY:**

1. use less energy
2. supply energy efficiently
3. use renewable energy

5.2 Core Strategy policy CS13 and section 1 of this guidance require carbon dioxide emissions from developments to be minimised by following all the steps of the energy hierarchy. Development Policy DP22 and sections 2 and 3 of this guidance set out how the Council expects less energy to be used by developments through their design and operation.

5.3 The Mayor of London has set a target that 25 per cent of the heat and power used in London is to be generated through the use of localised decentralised energy systems by 2025. In order to achieve this target the Mayor prioritises the development of decentralised heating and cooling networks at the development and area wide level, as well as larger scale heat transmission networks.

5.4 We will expect developments to connect to a decentralised energy network and use the heat unless developers can demonstrate it is not technically feasible or financially viable.

5.5 This guidance explains how heating, cooling and power systems should be selected in order to minimise carbon dioxide emissions. It provides details of what combined heat and power is and what decentralised energy networks are including when and where they should be delivered. The guidance is set out as follows:

- What are decentralised energy networks?
- What is combined heat and power?
- In what sequence should the provision of these measures be considered?
- Which developments should investigate providing these measures?

- What is the size threshold to test feasibility and viability?
- What is the distance threshold to test feasibility and viability?
- Where are decentralised energy networks located?
- How do we expect viability to be tested?
- What is the financial contribution?
- What needs to be considered to enable installation of combined heat and power?

**What are decentralised energy networks?**

5.6 Decentralised energy networks generate and supply electricity, heating or cooling close to where it is used. The energy can be generated in the same building or a relatively short distance from where it is used and transmitted through pipes (generally as hot or cold water) or along cables. Decentralised energy is more carbon dioxide efficient than traditional energy sources due to the shorter distances the energy has to travel to where it is used. This results in less heat, coolness or electricity loss, which occurs as the energy travels along a pipe or cable. Heat, coolness or power for the decentralised energy network can be generated by various technologies including traditional boilers, combined heat and power and renewable energy technologies (See section 6 of this guidance for information on renewable energy technologies).

5.7 The provision of decentralised energy networks in an already built up area like Camden is difficult due to the need to install pipes to transfer heat. However, it is also a particularly suitable approach in Camden to reduce carbon dioxide emissions as the networks, located under roads would have minimal impacts on the conservation areas which cover much of the borough and on listed buildings.

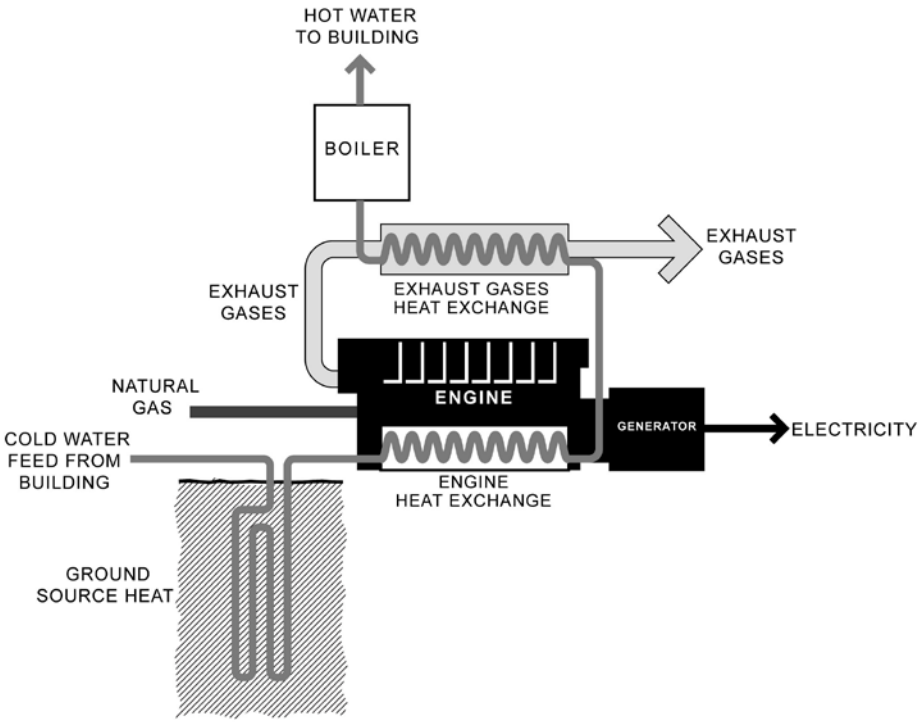
**What is combined heat and power?**

5.8 Combined heat power (CHP) includes various technologies that turn fuel such as gas or biofuel into electricity. The process of producing electricity generates heat which is captured and used to heat water. The hot water is then transported around the building or to another building by pipes. The capture and use of the heat means this method of generating electricity produces less carbon dioxide emissions than traditional power stations. Combined heat and power plants can reduce carbon dioxide emissions by 30-40% compared to a conventional gas boiler. Figure 2 below provides a diagrammatical explanation of how combined heat and power plants work.

**Biofuel**

Liquid or gas source of energy derived from organic matter that can be reproduced in a short period of time

**Figure 2. Combined Heat and Power Schematic**




5.9 Combined cooling, heating and power (CCHP) is where the heat generated by CHP is turned into coolness. Coolness is produced by passing the heat through an absorption chiller. The combined production of electricity and heat and coolness that are used is also known as trigeneration. The use of chillers to produce cooling is generally inefficient, however as part of a decentralised energy system it may be efficient, with regards to emissions in carbon dioxide where there is surplus heat in the summer.

**Absorption chiller**

Is a machine that uses chemicals to reduce the temperature of one liquid within the machine compared to another liquid in the machine.

**What is the relationship between decentralised energy and combined heat and power?**

5.10 The previous paragraph above notes that heat, coolness or power for a decentralised energy network can be generated by various technologies. However, using a combined heat and power plant to generate both the electricity and heat results in greater savings in carbon dioxide emissions as the heat is being captured and distributed for use, whereas in traditional power stations it is released. Other technologies that could supply heat with low carbon emissions to a decentralised energy network include boilers that operate on biofuels or that use waste materials. However, these technologies may not be acceptable in

Camden as they emit higher levels of pollution into the air. To find out about the Council's requirements to protect air quality see CPG6 Amenity.

### What are developments expected to do?

5.11 Once a development has been designed to be as energy efficient as possible (Energy hierarchy - Stage 1), developments will be required to consider the following steps, in the order listed, to ensure energy from an efficient source is used, where possible:

1. investigating the potential for connecting into an existing or planned decentralised energy scheme and using heat
2. installing a Combined (Cooling) Heat and Power Plant (CHP or CCHP), including exporting heat, where appropriate
3. providing a contribution for the expansion of decentralised energy networks
4. strategic sites are to allow sufficient accessible space for plant equipment to support a decentralised energy network
5. designing the development to enable its connection to a decentralised energy network in the future

> **Strategic sites**
>
> Those identified in the Site Allocations document as being required to provide an energy centre to connect or expand energy networks

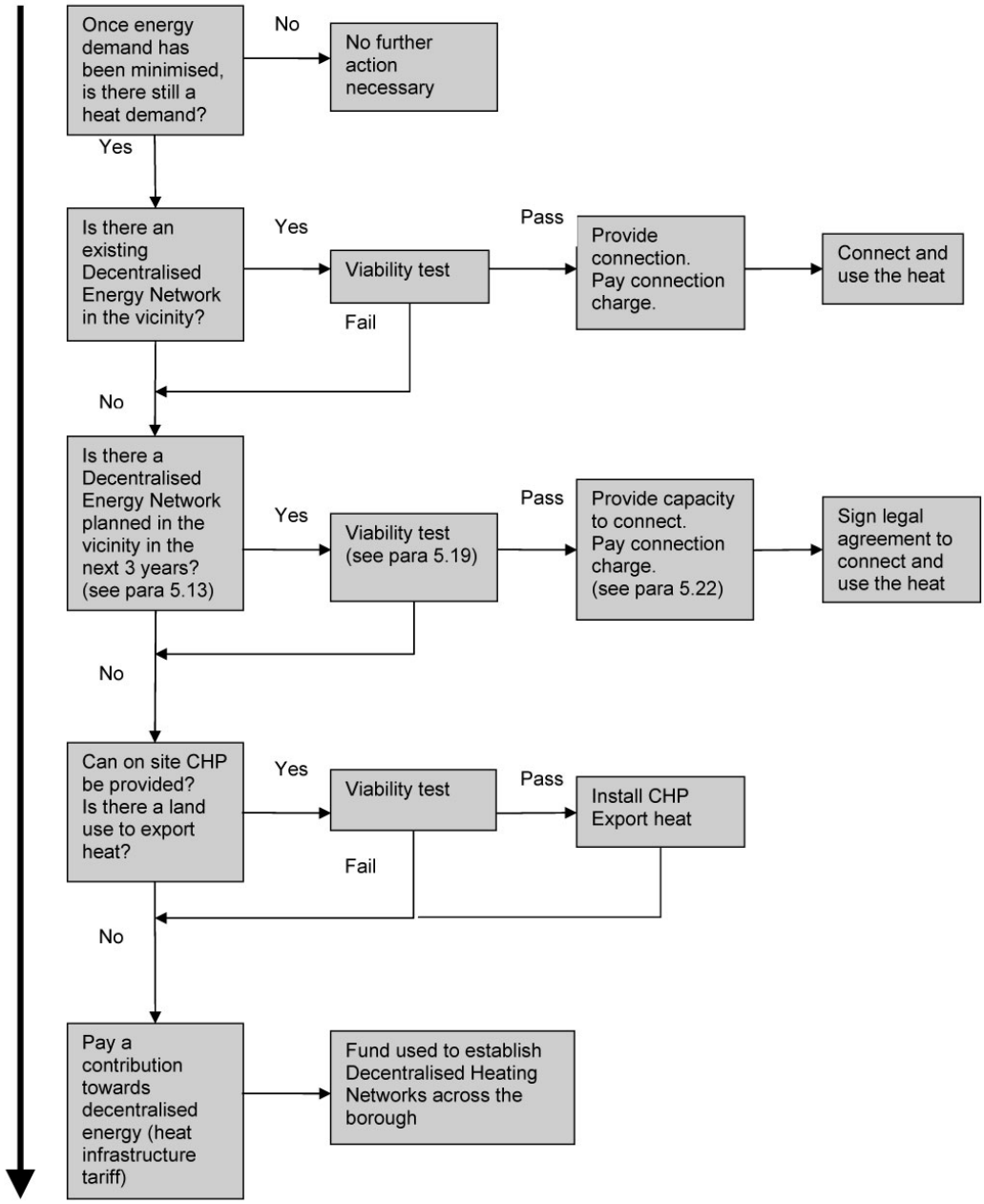
5.12 You should use the flow chart below to determine whether your development will be expected to connect to a decentralised energy network, install a combined heat and power plant or make a contribution towards a decentralised energy network.

5.13 In line with the flow chart:

- The connection of your development to a decentralised energy network is the Council's priority where it is feasible and viable to do so;
- Where there is no connection and or no agreement to connect your development within 3 years to a decentralised energy network, on-site CHP will be expected where the heating demand makes it feasible;
- Where there is a willing user for the heat, schemes will be expected to export heat to at least a similar heat demand, where feasible and viable; and

5.14 Where the development containing the combined heat and power plant has a large electricity demand, a larger amount of heat may be expected to be exported to enable the maximum viable electricity production to be generated on-site.

**Figure 3. Decentralised Energy Flowchart**



## Investigating the potential for connecting into an existing or planned decentralised energy scheme

### Is my development suitable?

5.15 There is no threshold to guide whether your development is suitable to connect to a decentralised energy network or to include combined heat and power. In general, it will depend on the heat demand of your development and its proximity to a decentralised heating network as well as the feasibility and viability of connecting or including the plant.

5.16 As a guide, developments and areas with the following characteristics will be suitable for decentralised and CHP systems:

- High heating demand;
- Mixed energy demands – a range of electricity and heating demands throughout the day; and
- Located close to an existing or emerging decentralised energy network. The location of existing and proposed/emerging networks can be found on map 4 of the Core Strategy or on the London Heat Map www.londonheatmap.org.uk

### Is my development close to an existing or proposed network?

5.17 Developments which fall within proposed within 1km of an existing decentralised energy network, or one that is likely to be operational within 3 years of occupation of the development, should assess the feasibility of connecting to the network. See figure 4 below for a map of existing and emerging networks. Further information on the networks can be found in Camden's or other provider's decentralised energy strategies. A connection should be made unless it can be clearly demonstrated that it would not be viable. Where no connection is made, a financial contribution will be sought. See paragraph 5.28 for more information on financial contributions.

5.18 Developments which are proposed within 500m of a potential network (see figure 5 below) which have no timetable for delivery should ensure that the development is capable of connecting to a network in the future. A financial contribution will be sought to fund the future expansion of the network, unless on-site CHP is feasible and included as part of the development.

**Where are the decentralised energy networks?**

The location of existing and proposed/emerging networks can be seen on figures 4 and 5 below, map 4 of the Core Strategy or on the London Heat Map: www.londonheatmap.org.uk

**Figure 4. Developments within 1km radius of an existing or emerging network.**

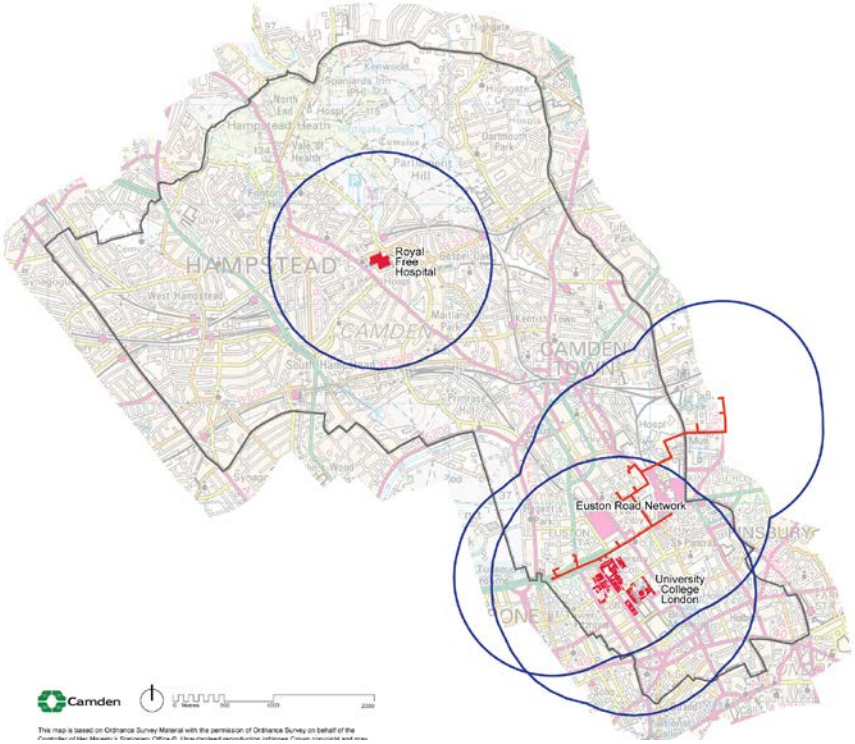
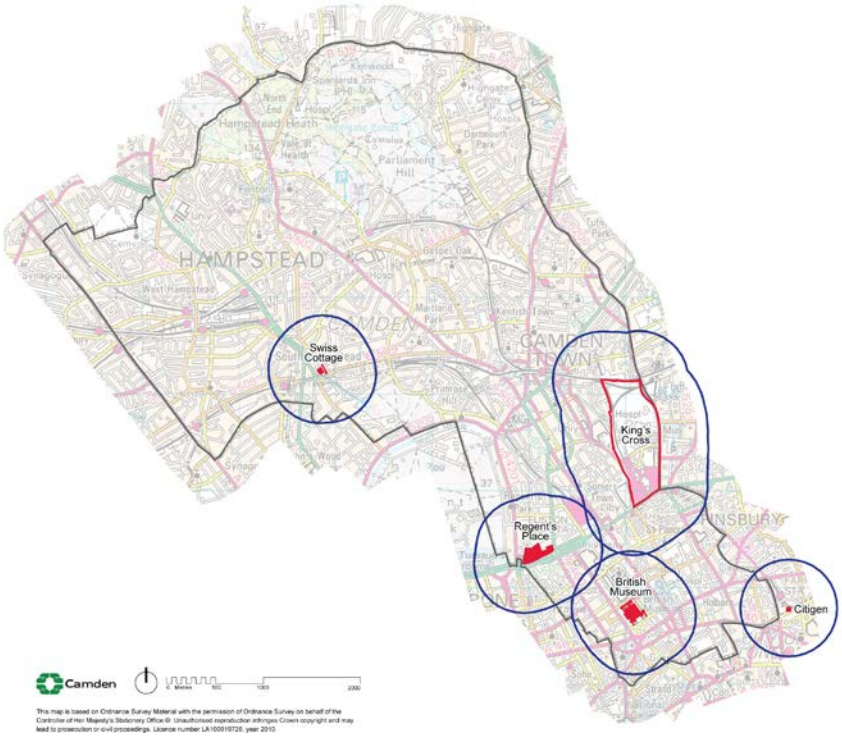



**Figure 5. Developments within 500m radius of a potential network**



### Should my development include a community heating systems

Where there is more than one occupier, use or building a community heating network will be expected.

5.19 A community heating system is a heating network that provides heat to more than one dwelling or building. A site wide or community heating system enables the whole development to convert to a low carbon fuel source in the future or connect to a decentralised heating network. For larger schemes, this approach also enables the heating demands across the site to be balanced throughout the day. You will have to provide individual heat meters and heating controls to each property.

5.20 Heat can be generated at different pressures and temperatures. Your development's heating system will also need to be designed to be compatible with the decentralised energy network it will connect to.

### Viability and feasibility

5.21 Your development will be expected to connect to a decentralised energy network and use/export the heat unless you can demonstrate that it is not technically feasible or financially viable.

5.22 Considerations of feasibility and viability include, but are not limited to:

- Size of the development;
- Distance to existing network pipes;
- Physical barriers, e.g. roads or railways;
- Other developments in the vicinity that may also be required to connect to the network;
- Other buildings in the area that are willing to connect/take heat;
- Other building in the area in the same ownership or occupation as the lead development that have a heating load;
- Cost of connection;
- Any grants available;
- Any specific technical compatibility issues; and
- The business/expansion plan of the network operator.

When demonstrating the feasibility and viability of not connecting to a decentralised energy network or including a combined heat and power plant developers will be required to address the relevant considerations above.

### Connecting to a decentralised energy network - things to consider

5.23 To ensure connection is technically feasible the heating system has to be designed to be compatible with the temperature and pressure of the heat in the decentralised energy network. This will generally require a water based or 'wet' heating system at a certain temperature and pressure.

Where a development is not connecting immediately to a network the following measures need to be included in your scheme:

- space in the plant room for a heat exchanger, any other plant and pipe and electricity connections; and
- pipes from the plant room to the property boundary where the decentralised energy pipe is most likely to be located.

A **heat exchanger** is a device that transfers heat from one source to another to either cool or heat an object or system.

### Installing combined heat and power - things to consider

5.24 There are various types of CHP engines, including gas turbines, gas engines, steam turbines or engines that run on biofuels. Heat can be produced at different pressures and temperatures. It is essential that the design of the building's heating network considers the type of heat and pressure proposed. Where the CHP is to link to, or has the potential to link into, an existing wider network it is essential that the proposed temperature and pressure are compatible with the existing network.

5.25 Where several schemes with or without CHP are to be connected through a decentralised energy network it is essential that the heat system of the buildings are compatible. This can sometimes be achieved through a heat exchanger.

5.26 Where large developments are proposed that are not near a proposed decentralised energy network, a scheme should ensure a variety of land uses to ensure a mixed heat load that would make CHP viable, subject to other policy requirements.

5.27 For existing buildings, it will be important to ensure that the potential impact on the historic fabric and archaeology has been fully considered. Please refer to CPG1 Design, the section on heritage in particular, for more information.

## Financial contributions

5.28 In line with the flow diagram above, if your scheme does not connect to a decentralised energy network or have a secure agreement to do so within 3 years, and does not include combined heat and power, a financial contribution may be required to enable expansion of the network and future connection. The financial contribution should be in line with the following table (or as updated in CPG8 Planning obligations):

| **Size of development** | **Residential (per dwelling) or Per 300sq m of non-residential floorspace** |
|---|---|
| Over 20 stories | £2,800 |
| 8-20 | £2,500 |
| 5-7 | £2,800 |
| 3-4 | £4,100 |
| 2-3 | £5,300 |
| Single dwelling houses or single storey commercial developments | £8,600 |

Source: Community energy: Urban planning for a low carbon future.

### How will the requirements of this guidance be secured?

5.29 Where appropriate Section 106 agreements will be used to secure:

- the installation of CHP/CCHP and the generation and use of energy
- details that ensure the plant and its operation is carbon dioxide efficient with regards to operating hours, compatibility with the need (amount and timing) for heat, and requirements for a heat store
- details that ensure the design of the heating system is compatible with any nearby decentralised energy network
- the export of heat, cooling and/or electricity
- development use heat, cooling and or electricity from a decentralised energy network, including by entering into a long term energy contract
- sufficient space is provided for future plant, heat exchanges, connection points to either generate, export and take heat, cooling and/or electricity
- a financial contribution towards future decentralised energy networks

**Further information**

Information on combined heat and power:

| | |
|---|---|
| Combined heat and power association | www.chpa.co.uk |
| DECC microsite | http://chp.decc.gov.uk/cms/ |

Information on how to plan for decentralised energy:

| | |
|---|---|
| Powering ahead. Delivering low carbon energy in London | http://legacy.london.gov.uk/mayor/publications/2009/docs/powering-ahead141009.pdf |
| Cutting the Capital's Carbon Footprint – Delivering decentralised energy | http://www.londonfirst.co.uk/documents/Cutting_the_Capital's_Carbon_Footprint_FULL_Low_res_FINAL.pdf |
| Community energy. Urban planning for a low carbon future | http://www.tcpa.org.uk/data/files/ceg.pdf |

Existing decentralised energy networks in or near Camden:

- Citigen - http://www.eon-uk.com/generation/citigen.aspx
- Bloomsbury heat and power
- Gower street heat and power
- King's Cross Central – managed by Metropolitan
- Royal Free Hospital to Gospel Oak – managed by the NHS/Mitie
- Euston Corridor Phase 1 – Somers Town/Kings Cross – Camden owned

How Camden can reduce its carbon dioxide emissions by 40%:

www.camden.gov.uk/ccm/cms-service/download/asset/?asset_id=2460603

# 6 Renewable energy

**KEY MESSAGES**

There are a variety of renewable energy technologies that can be installed to supplement a development's energy needs

Developments are to target a 20% reduction in carbon dioxide emissions from on-site renewable energy technologies.

6.1 This guidance covers Stage 3 of the energy hierarchy. Stage 3 involves considering how renewable energy technologies can be used to further reduce the carbon dioxide emissions of a development. You will find information in this section on the types of renewable energy technologies that are available and when they are most appropriate. Stages 1 and 2 of the energy hierarchy – energy efficiency and decentralised energy & CHP – are dealt with in sections 2, 3 and 4.

6.2 Core Strategy policy CS13 - *Tackling climate change through promoting higher environmental standards* encourages developments to meet the highest feasible environmental standards that are financially viable during construction and occupation. Paragraph 13.11 states that developments will be expected to achieve a 20% reduction in carbon dioxide emissions from on-site renewable energy generation unless it can be demonstrated that such provision is not feasible. The 20% reduction should only be attempted once stages 1 and 2 of the energy hierarchy have been applied.

**WHAT DOES THE COUNCIL EXPECT?**

All developments are to target at least a 20% reduction in carbon dioxide emissions through the installation of on-site renewable energy technologies. Special consideration will be given to heritage buildings and features to ensure that their historic and architectural features are preserved.

When assessing the feasibility and viability of renewable energy technology, the Council will consider the overall cost of all the measures proposed and resulting carbon savings to ensure that the most cost-effective carbon reduction technologies are implemented in line with the energy hierarchy.

## Renewable energy technologies

### Solar/Thermal Hot Water Panels

#### What is it?

A system made of flat plate collectors or evacuated tubes which allow water to flow through and be heated by the sun's rays.


Solar hot water tubes


Solar hot water plates

#### What does it do?

Uses the sun's heat to warm water - up to 85 degrees Celsius

#### What issues should I consider?

- Flat plate systems are cheaper. Evacuated tube systems are more efficient so need less space.
- Generally used for hot water where approximately 4sq m of solar panel per household is sufficient with 80 litres of hot water storage.
- Aim to minimise pipe lengths as this reduces heat losses.
- Not ideal with combined heat and power as it can reduce the efficiency of the CHP system.

#### Where might this technology be appropriate?

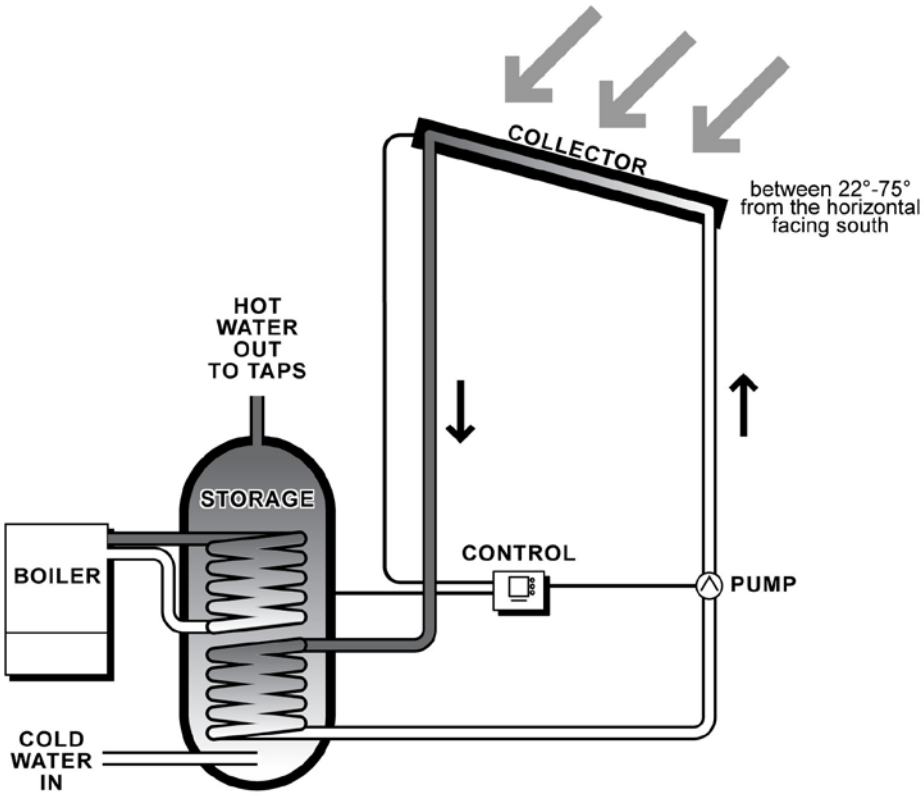
- Suitable for developments with all year hot water demands.
- South facing at 30-40 degrees is ideal, but as the panels do not rely on direct sunlight they can still be efficient at other angles.
- Can be fitted to existing buildings, but need to consider additional weight of the panels and compatibility of heating/hot water system

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- Where space allows, panels are to meet 100% of the site's summer hot water needs, which equates to 50-60% of the annual demand.
- Applicants are to confirm the number and size of panels or the overall square meters to be installed

- The accompanying heating system such as the top up boiler must be compatible. For example, it must include a storage tank and be able to use pre-heated water.
- Larger schemes should use a central system
- A meter is to be installed on the system for monitoring

**Figure 6. Solar Hot Water Heating Schematic**



## Photovoltaic (PVs)

### What is it?

Photovoltaic cells are panels you can attach to your roof or walls. Each cell is made from one or two layers of semiconducting material, usually silicon. There are a number of different types available e.g. panels, tiles cladding and other bespoke finishes.


Solar PV roof tiles


Solar PV panels

### How does it work?

When light shines on the PV cell it creates an electric field across the layers. The stronger the sunshine, the more electricity is produced.

### What issues should I consider?

- PV works best in full sunlight.
- Consider movement of shadows during the day and over the year. Overshadowing can impact the overall performance of the PV array.
- The best commercial efficiency is 22%.
- In general 1sq m of conducting material such as crystalline array will provide an output of 90-110 kWh per year.

### Where might this technology be appropriate?

- On a roof or wall that faces within 90 degrees of south, and isn't overshadowed by trees or buildings. If the surface is in shadow for parts of the day, your system will generate less energy.
- On top of a green or brown roof is ideal because the cooler temperature created locally by the vegetation improves the efficiency of the solar panel.
- Can be fitted to existing buildings, but need to consider additional weight of the panels.

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- Preference is for PVs to be flush to the roof or wall, but considerations will include the efficiency of the panel/s and whether they are visible
- Applicants are to confirm the number and size of panels or the overall square meters to be installed
- A meter is to be installed on the system for monitoring

## Ground Source Heat Pumps (GSHP) or geothermal

### What is it?

A network of underground pipes, which circulate a mixture of water and chemicals (to prevent freezing) through a loop and a heat exchanger.

### How does it work?

The heat from the ground is absorbed by the liquid that is pumped through the buried pipes. A heat exchanger in the heat pump extracts the heat from the liquid and transfers it the water in the building's heating system which can be used for central heating and hot water. In the summer, when the ground is cooler than the air, the system can be reversed to provide cooling.

### What issues should I consider?

- There are horizontal and vertical systems.
- Horizontal systems, also known as loop systems use trenches
- Vertical systems use boreholes which require a ground survey and a drilling license from the Environment Agency
- There are a range of permits and consents that might be required
- Generally provides heat at lower temperatures (30-50 degrees Celsius) than normal gas boilers.
- Buildings need to be well insulated for a GSHP to be effective
- The pump requires electricity to run so this technology will not be renewable or energy efficient in all developments.

### Where might this technology be appropriate?

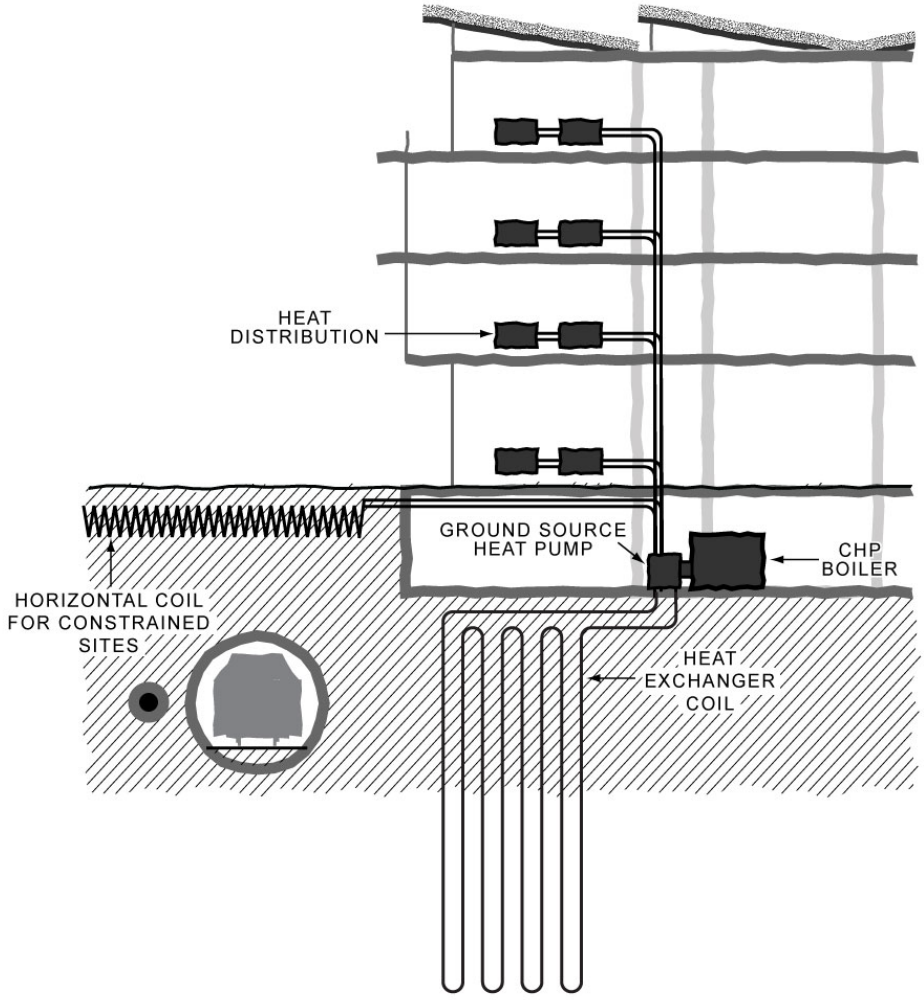
- The lower temperatures mean that GSHPs are well suited for underfloor heating
- Ideal for buildings which need heating in winter and cooling in summer

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- Evidence is to be provided to demonstrate that the local geology can accommodate the necessary excavation
- Consider how much electricity is required to work the pump versus the energy savings of providing heat or cooling. The carbon content of the electricity required to run the pump could be higher than the gas need to run a traditional gas boiler. The ratio of heat or cooling produced to the energy used to produce the heat is called the coefficient of performance (COP). For example, a heat pump which uses 1kW of electricity to produce 4kW of usable energy has a COP of 4 and is therefore 400% efficient. GSHPs need to have a COP of 4 or more to be considered renewable.

- When considering the carbon efficiency of a heat pump system the Council will take into account research and evidence of past performance of heat pumps and the seasonable performance.
- A meter on the system for monitoring

**Figure 7. Ground Source Heat Pump Schematic**



## Air source heat pumps (ASHP)

### What is it?

A heat pump that extracts heat from the outside air to heat the interior of a building or to heat hot water. It can also extract the heat from inside a building to provide cooling.

### How does it work?

Air to water heat pumps operate on a similar principle to an ordinary refrigerator. Heat from the atmosphere is extracted by an outdoor unit and is absorbed by a refrigerant solution which is then compressed to a high temperature. The heat generated is used by the indoor unit to create hot water for a traditional heating and hot water system.

Air to air heat pumps work in a similar way, but instead of generating hot water, the heat from the compressed refrigerant solution is turned into hot air by an indoor unit which is used to heat the building.

### What issues should I consider?

- ASHPs need electricity to run
- Can be less efficient than GSHPs as air temperature is more variable, i.e. colder in the winter when more heat needs to be extracted from the air.
- Consider the noise and vibration impact.
- Consider the visual impact.

### Where might this technology be appropriate?

- Where there is no gas connection.
- Where the heating demand is isolated and for a short period of time.
- Can produce cool air as well as heat, so could be suitable in buildings which may otherwise require air conditioning

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- Consider how much electricity is required to work the pump versus the energy savings of providing heat or cooling. We will expect carbon calculations to show that that their use for heating is more efficient than gas. Otherwise they will not be acceptable. The calculations will be based on the co-efficient of performance (COP) and the carbon content of electricity and gas. ASHPs need to have a COP of more than 4 to be more efficient than a conventional heating system.
- When considering the carbon efficiency of a heat pump system the Council will take into account research and evidence of past performance of heat pumps and the seasonable performance.
- Noise assessment and mitigation report to be submitted
- A meter on the system for monitoring

## Biomass heating and power

### What is it?

A boiler which generates heat for central heating as well as hot water or a system which generates heat and electricity, known as a Combined Heat and Power (CHP) system.

### How does it work?

Produces heat or heat and electricity by burning organic materials (such as wood, straw, energy crops or liquid biofuels). Natural gas can also be used, however, this will be considered to be a 'low carbon technology' rather than renewable, as gas is a fossil fuel.

### What issues should I consider?

- The suitability of this technology will depend on the:
- local air quality
- need for air quality mitigation measures
- source and carbon intensity of processing the fuel
- emissions generated from transporting the fuel
- the impact on air quality – biomass boilers releases higher levels of nitrogen oxides (NOx) and particulates than conventional gas fired boilers or CHP systems
- There are a range of permits and consents that might be required
- Space is needed for power plant and fuel store
- Servicing arrangements for fuel delivery and transfer
- Possibility of sharing the system with other developments or consider establishing of a Community Combined Heat and Power scheme (CCHP)

### Where might this technology be appropriate?

Biomass fed CHP systems are generally only proven on very large scale.

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- Boilers must be accredited as 'exempt appliance' under the Clean Air Act 1999
- Technical information relating to the biomass boiler/CHP will be required
- All biomass boilers and CHP will require an air quality assessment, including location and height of flues, details of emissions and how the emissions can be mitigated

- Biomass boilers and CHP are required to be designed, operated and maintained in accordance with best practise measures to minimise emissions to air. (Please refer to the section on Air Quality in the CPG6 Amenity for more detailed information)
- Evidence of potential fuel suppliers – a local fuel source is preferable
- Fuel is to be carbon neutral. Preparation of fuels must be treated and handled appropriately to ensure there are zero carbon emissions e.g. natural drying process not one that uses energy
- A meter on the system for monitoring

## Wind turbines

### What is it?

Blades or turbines which are rotated by the power of the wind.


Vertical axis turbine


Horizontal axis turbines

### How does it work?

The wind turns the blades of the turbine to produce electricity. Horizontal or vertical axis turbines are available

### What issues should I consider?

- Require a certain level of wind to make them feasible which is often difficult in London where there large obstacles such as buildings and trees which distort the flow of wind.
- If poorly located could use more energy than they generate.
- Need to be orientated towards the prevailing wind.
- Noise, vibration and flicker.

**Flicker:**

Rotating wind turbine blades can cast moving shadows when the sun is in a low position behind the turbine

### Where might this technology be appropriate?

Could be suitable for low density developments or those with large amounts of open space e.g. schools and playing fields.

**WHAT DOES THE COUNCIL EXPECT FOR THIS TECHNOLOGY?**

- An assessment of the impact on neighbouring properties, particularly flicker, noise and vibrations
- A wind study and feasibility report.
- A meter on the system for monitoring

## What is the feed-in tariff?

6.3 The feed-in tariff is a scheme where energy suppliers make regular payments to householders and communities who generate their own electricity from renewable or low carbon sources. The scheme guarantees a minimum payment for all electricity generated by the system, as well as a separate payment for the electricity exported to grid. These payments are in addition to the bill savings made by using the electricity generated on-site.

6.4 When considering the viability of the installation of technologies, the financial benefits of the feed-in tariff must be considered.

**Further information**

| | |
|---|---|
| The London Energy Partnership | Has produced a toolkit which explains how renewable energy can be integrated into new developments: London Renewables Toolkit - Integrating renewable energy into new developments: Toolkit for planners, developers and consultants<br>Available from the London Energy Partnership website<br>www.lep.org.uk |
| REAL Renewable Energy Action for London | A web resource run by Creative Environmental Networks which provides information on installing renewable energy for home owners, architects and developers.<br>www.cen.org.uk/REAL |
| Environmental Protection UK and LACORS | Have produced guidance on biomass and air quality. The guidance provides background material on the issues involved, and details procedures for assessing and managing the effects of biomass on air quality – specifically nitrogen dioxide (NO2) and particulates (PM10 and PM2.5).<br>There are a number of guidance leaflet available on their website:<br>• 'Biomass and Air Quality Guidance for Local Authorities'<br>'Biomass and Air Quality, Developers' Information Leaflet'<br>www.environmental-protection.org.uk/biomass |
| The Mayor of London | Mayor's Air Quality Strategy includes emissions standards for new biomass and CHP equipment which will be implemented by the GLA<br>www.london.gov.uk/publication/mayors-air-quality-strategy |

# 7 Water efficiency

**KEY MESSAGES**

At least 50% of water consumed in homes and workplaces does not need to be of drinkable quality re-using water

All developments are to be water efficient

Developments over 10 units or 1000sq m should include grey water recycling

7.1 Core Strategy Policy CS13 protects the borough's existing water infrastructure to ensure we have an adequate water supply as well as adequate water storage and foul water capacity. Development Policy DP23 expects all developments to be designed to be water efficient and to minimise the need for further water infrastructure.

7.2 This section outlines what measures the council will expect to ensure developments reduce the consumption of water and reduce the amount of water that is disposed of.

**WHAT DOES THE COUNCIL EXPECT?**

The Council expects all developments to be designed to be water efficient by minimising water use and maximising the re-use of water. This includes new and existing buildings.

## Minimising water use

7.3 The simplest way of doing this is through installing efficient water fittings and plumbing, such as

- dual flush toilets;
- low flow taps and shower heads; and
- low water consuming washing machines and dishwashers.

7.4 Your development will need to use a range of these measures to reduce their water consumption. Specifications should be practical for the intended occupier to ensure that fittings are not simply replaced.

7.5 Your development should include meters which are visible to occupants, as this has been shown to result in reductions in water use.

7.6 We will assess the performance of water minimisation measures used against the water category in BREEAM (see section 8 on sustainability assessments for more information).

## Maximising the re-use of water

7.7 At least 50% of water consumed in homes and workplaces does not need to be of drinkable quality. For example, rain water can be water used for flushing toilets, washing laundry and watering plants and gardens.

### Collecting rain water

7.8 This involves collecting rainwater from a building's roof, as well as its surroundings, and storing it in a tank. Once filtered of leaves and larger objects, the water can be re-used for toilet flushing, laundry and watering plants. If used outside, the rain water harvesting system can take the form of a simple water butt. If used within the building it will need to be supplied through pipes and taps that are separate from the standard mains water supply.

1.13 *Water butt*

**WHAT WILL THE COUNCIL EXPECT?**

The Council will require buildings with gardens or landscaped areas that require regular maintenance to be fitted with water butts.

### Green/brown roofs and collecting rain water

7.9 Green/brown roofs can be designed to include rain water collection. However, more consideration needs to be given to the materials and pipe work that will go underneath the green/brown roof structure. Green/brown roofs with rainwater harvesting may also need to use extra filters to ensure the water can be re-used. See section 10 for more information on green/brown roofs.

### Re-using water

7.10 'Grey water' (water that has already been used in hand basins, baths and showers) can be stored, filtered and disinfected, and then reused, for toilet flushing, garden watering or laundry. It is also possible to recycle 'black water' (water used for toilet flushing and washing up) although this is more resource intensive. Both 'grey water' and 'black water' systems will require regular maintenance to ensure their ongoing quality and effectiveness. A separate standard mains supply will also always be needed in addition to provide drinking water.

The Council will require developments over 10 units or 1000sq m and/or intense water use developments, such as hotels, hostels, student housing etc to include a grey water harvesting system, unless the applicant demonstrates to the Council's satisfaction that this is not feasible.

7.11 When considering the feasibility of grey water systems applicants should consider

- The cost of the system;
- Cost savings for owner/occupier over a 10 year period;
- Projected grey water generation;
- Projected demand for use of grey water; and

- Water savings as a result of the grey water system.

**Further information**

The Environment Agency produces a range of guidance about how to conserve and reduce water consumption.

- Conserving Water in Buildings: Fact Sheets, Environment Agency,
- Greywater: An information guide, Environment Agency, 2008
- Harvesting rainwater for domestic uses, Environment Agency, 2008

They are all available on the EA website:
www.environmentagency.gov.uk

# 8 Sustainable use of materials

**KEY MESSAGES**

Reduce waste by firstly re-using your building, where this is not possible you should implement the waste hierarchy

The waste hierarchy prioritises the reduction, re-use and recycling of materials

Source your materials responsibly and ensure they are safe to health.

8.1 This guidance relates to Core Strategy policy CS13 - T*ackling climate change through promoting higher environmental standards* in design and construction. It encourages developments to be sustainable: through the choice of appropriate materials which will assist in minimising energy needs both during construction and occupation periods and by making efficient use of resources.

8.2 It also relates to Development Policy DP22 - *Promoting sustainable design and construction which* encourages developments to conserve energy and resources through the use of recycled and renewable buildings materials.

8.3 This guidance shows how you can minimise the use of resources through your choice of materials to limit the environmental impact of developments. You can achieve this by focusing on the sustainable (re)use of existing materials as far as possible before considering introducing new materials. There are 5 key measures:

1. Managing existing resources;
2. Specifying materials using the Building Research Establishment's Green Guide to Specification;
3. Ensuring that materials are responsibly sourced;
4. Minimising the harmful effects of some materials on human health; and
5. Ensuring that specified materials are robust and sensitive to the building type and age.

### Managing existing resources

8.4 Most development sites have existing materials which can be re-used, recycled or obtained from nearby development sites. You should always look for options to sensitively re-use, refurbish, repair and convert buildings, rather than wholesale demolition (see Camden Development Policies paragraph 22.4). This will reduce the amount of resources used and will help reduce construction waste.

8.5 Where the retention of a building or part of a building is not possible, you should aim to tackle the quantity of waste produced - from the demolition phase through to the construction phase – through the use of the waste hierarchy.

**WHAT WILL THE COUNCIL EXPECT?**

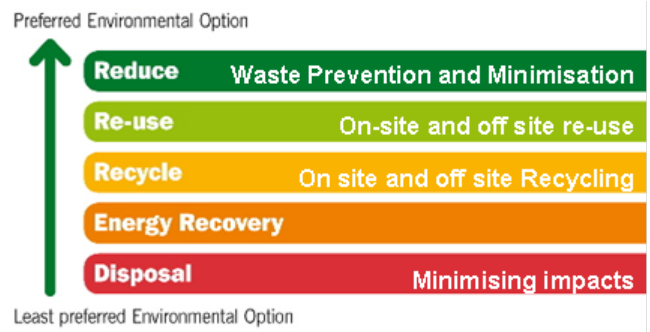
All developments should aim for at least 10% of the total value of materials used to be derived from recycled and reused sources. This should relate to the WRAP Quick Wins assessments or equivalent as (highlighted in the waste hierarchy information section below). Special consideration will be given to heritage buildings and features to ensure that their historic and architectural features are preserved.

Major developments are anticipated to be able to achieve 15-20% of the total value of materials used to be derived from recycled and reused sources.

## The Waste Hierarchy

8.6 The 'waste hierarchy' ranks the different ways in which waste can be treated so that it limits the amount of resources used and waste generated. You are to justify the use of (existing) resources and materials in your development through the implementation of the waste hierarchy below to minimise waste generated during the demolition and construction process.

**Figure 8. The waste hierarchy**




8.7 In line with the waste hierarchy, during the construction phase, our preferred approach is:

1. the use of reclaimed materials;
2. the use of materials with higher levels of recycled content; and
3. the use of new materials.

8.8 Similarly, in demolition you should:

1. prioritise the on site reuse of demolition materials;
2. recycle materials on site recycling, then off site recycling; and
3. the least preferred option - disposal to landfill.

### Reduce

8.9 Reducing waste is the preferred option and at the top of the waste hierarchy – this means the Council prefers you prevent waste being produced in the first place rather than recycle or dispose waste that is

produced. You should focus on opportunities for waste reduction from the outset, at the earliest stages of design, as well as through better methods of purchasing and ways of working, for example by ordering the right amount of materials for the job.

8.10 Where demolition is necessary, you and your contractors are encouraged to:

- safely remove the most valuable or more contaminating materials and fittings for later re-use or processing before work commences.
- optimise the reuse and recycling of demolition materials - the Council strongly encourages the use of the Demolition Protocol where substantial demolition is proposed (over 1000 square meters). In general the protocol is a 'demolition waste audit' - a process that describes the percentage of the materials present on a site which can be reused/recycled (either in the development site or one nearby). For further detailed guidance on the Demolition Protocol (2003), refer to: Institute of Civil Engineers (ICE) and London Remade: www.londonremade.com
- You are to demonstrate that the most significant opportunities to increase the value of materials derived from recycled and reused content have been considered. A good way of achieving this aim at no additional construction cost is to use the Waste and Resources Action Programme (WRAP) by selecting the top ten WRAP Quick Wins or equivalent, and implement the good practice guidance highlighted: www.wrap.org.uk
- Building contractors are legally required to produce Site Waste Management Plans (SWMP) for all projects with an estimated construction cost of over £300,000. A Site Waste Management Plan provides a framework for managing waste in line with the hierarchy by identifying types and quantities of materials for re-use/recycling to reduce the amount of waste produced by construction projects. For further guidance see the WRAP NetWaste tool which has a site waste management plan function: www.wrap.org.uk
- The WRAP Quick Wins assessment can form part of a development's Site Waste Management Plan.
- Designing for deconstruction (rather than demolition) is strongly encouraged. Deconstruction is the dismantling of a structure in the reverse order in which it was constructed, which means that the materials that were put on last are removed first.
- From the outset, new buildings should be designed with the prospect of future deconstruction being implementable. This process will facilitate the segregation and extraction of materials that could be carefully removed intact during redevelopment, and then re-used/recycled wherever possible.
- You are encouraged to incorporate a 'material salvage phase', in which construction and surplus materials are recovered from the site. Additionally, materials should be segregated into categories, e.g.

timber waste, metal waste, concrete waste and general waste – to aid re-use or recycling.

8.11 Only once all the 'Reduce' options have been considered, should you consider the other waste options.

**Re-use**

8.12 Re-using materials (either onsite/off-site) is defined as putting resources/materials to an alternative use so that they are not wasted and disposed of. This can be done during the design, procurement and construction phases of a development by, for example:

- identifying and segregating materials already on site for re-use in the new development, such as:
  - bricks, concrete
  - internal features – historic fireplaces, timber floorboards, doors
  - metal frames, plastics, granite
  - sub-soil, top soil;
- using the BRE Smart Waste www.smartwaste.co.uk management plan tool. This is an on line template contractors can use to input data on the amount and type of waste and have it sorted by the management tool;
- making materials not reused on site available for reuse elsewhere. Consider the exchange/sale/donation of construction site materials to waste recovery businesses, such as: BRE Materials Information Exchange (www.bre.co.uk); Waste Alert North London's Waste Exchange service (www.wastewatch.org.uk , etc. These specialists can sort the waste materials into various types and then find businesses that can reuse/recycle them.

**Recycling**

8.13 Recycling materials (either onsite/off-site), is the preferable solution only when waste minimisation 'reduce' or reuse are not feasible. The recycling of materials enables them to be made into something new). Every opportunity should be taken to recycle materials, this can be done by, for example:

- identifying and segregating materials for recycling, such as:
  - metals and high value materials
  - timber, plasterboard, packaging
  - concrete crushed and re-used for concrete aggregate;
- using the BRE Smart Waste www.smartwaste.co.uk , mentioned above
- considering 'take-back' schemes with suppliers for materials and packaging. This where suppliers take back any materials not used as well as any packaging the materials are delivered in

- making materials not reused on site available for reuse elsewhere, as discussed above.

### Disposal

8.14 Disposal is the least preferred waste management approach. Developers should only consider disposal of materials and waste after all of the above approaches have been carried out. Disposal generally involves burying the materials in a landfill or burning it at high temperatures in an incinerator. Where disposal is the only option for the materials developers should:

- identify materials that are contaminated and cannot be reused and arrange for their safe and legal disposal by the authorised waste management;
- remove all toxic and hazardous materials from a development site in accordance with any relevant legislation, unless they are integral to the structure or a feature to be retained, and any harm to environmental or public health should be mitigated;
- limit waste disposal to minimise the amount of land fill tax that needs to be paid.

## Using the BRE Green Guide to Specification

8.15 You are encouraged to use the BRE Green Guide which provides guidance on how to make the best environmental choices when selecting construction materials and building components. The Green Guide ranks, materials and components on an A+ to E rating scale – where A+ represents the best environmental performance / least environmental impact, and E the worst environmental performance / most environmental impact.

8.16 In new-build and development projects with either - 500sq m of any floorspace or more or 5 dwellings or more - you should seek to achieve an area weighted average of A+ to B for the major building elements (roof, external walls, floor finishes, internal partitions and windows) in accordance with the BRE Green Guide to Specification. For further guidance see the sections on BREEAM assessments in section 9 of this guidance which sets out standards for developments to meet in the Materials category. For further guidance on BRE Green Guide to Specification: www.bre.co.uk

## Responsible Sourcing

8.17 You should specify materials from suppliers who participate in responsible sourcing schemes such as the BRE BES 6001:2008 Responsible Sourcing Standard. All timber specified should be sourced from schemes supported by the Central Point of Expertise for Timber Procurement such as Forest Stewardship Council (FSC) accreditation (which ensures that the harvest of timber and non-timber products maintains the forest's ecology and its long-term viability). The use of

responsible sourcing can contribute towards attaining the BREEAM credits but a clear audit trail will need to be provided to gain these credits. For further guidance on responsible sourcing of materials: http://www.bre.co.uk/

**'Healthy' materials**

8.18 The Council recommends the use of environmentally sensitive building (non-toxic) materials and avoiding the use of materials or products that produce VOC (volatile organic compounds and formaldehyde) which can affect human health. For current controls on VOC's see the link below. The use of 'healthy' material options can contribute towards attaining the BREEAM credits but a clear audit trail will need to be provided to gain these credits.

**Historic materials**

8.19 In projects that involve the refurbishment of heritage buildings (those built before 1919) or those in conservation areas, materials should be specified in line with the following hierarchy:

- Reclaimed materials should be matching and appropriate to the building type/area (original construction time/period) and sufficiently robust in their performance not to compromise building function;
- Materials with a low environmental impact as determined by the BRE Green Guide to Specification subject to approval from Conservation Officers and provided those materials do not compromise the performance (thermal, structural or otherwise) of the existing building; and
- When selecting insulation materials for older buildings, preference should be given to natural fibre based materials that prevent moisture retention in the building fabric.

## How will the Council secure the sustainable use of materials?

**Design and Access Statement**

8.20 As part of the Design and Access Statement for your development, you will be expected to describe how the development has considered materials and resources. This statement should provide an explanation of the opportunities for the selection and sourcing of sustainable materials that have been considered in the proposal, and the reasons for the sourcing choices made. Your statement should also detail which existing materials on the site are to be re-used as part of your development or made available for re-use elsewhere.

**Construction Management Plan (CMP)**

8.21 A Construction Management Plan will be required to support many developments and will help manage on site impact arising from demolition and construction processes. The types of schemes where a CMP will usually be appropriate include:

- major developments;
- basement developments;
- developments involving listed buildings or adjacent to listed buildings; and
- For a full list see Development Policy DP26 - *Managing the impact of development on occupiers and neighbours*, paragraph 26.10 and the relevant sections on Construction management plans in CPG4 Basements and Lightwells, CPG6 Amenity, and CPG8 Planning Obligations.

A set of minimum standards and a template Construction Management plan is available on the Council's website.

**Site Waste Management Plan (SWMP)**

8.22 Where a 'site waste management plan' (SWMP) is required (in projects with an estimated construction cost of over £300,000) it should include a pre-demolition audit of materials completed by a qualified professional and submitted with an application, in accordance with the Demolition Protocol. The audit must show what materials can and will be reused. If a full audit cannot be provided with the application, it should be submitted to and approved by the Council prior to commencement of works on site. Therefore the Construction Management Plan (where required) will have to reflect that space will be required to sort, store and perhaps crush/recycle materials as part of the SWMP. This link into the WRAP NetWaste tool has a site waste management plan function: www.wrap.org.uk/construction/tools_and_guidance/net_waste_tool

**Planning obligations and Section 106**

8.23 Meeting the requirements for sustainable design and construction is often achieved in the detailed design or construction phases. Normally, requirements for environmental design will be dealt with using conditions, but in some circumstances a Section 106 agreement may be required to secure an environmental assessment of the proposed development carried out by an impartial assessment body or a sustainability plan to provide and maintain the highest environmental standards of development.

8.24 If a proposal generates a requirement for a management plan such as a SWMP or CMP (as discussed above) but cannot be implemented through the approved design or satisfactorily secured through conditions, they may be secured as part of a Section 106 Agreement. The requirements will be relevant, proportionate and related to the specific nature and potential impacts of the development proposed. The associated costs to the Council of any post-planning decision assessments, verification, or monitoring in relation to these and other related sustainability and energy plans shall be met by the developer.

### Further information

| | |
|---|---|
| Sustainable Design and Construction | The London Plan Supplementary Planning Guidance, Mayor of London www.london.gov.uk |
| BREEAM | BRE Environmental Assessment Method www.breeam.org |
| BRE Smart Waste | An on-line site waste management plan tool. It's a template contractors can use to input data. www.smartwaste.co.uk |
| Materials | For Materials Information Exchange and Architectural salvage and surplus building materials:<br>• Architrader - www.architrader.com<br>• SALVO - www.salvomie.co.uk/<br>• Waste Exchange - www.wasteexchange.net<br>To find out how you can use more recycled and reclaimed products and building materials see www.ecoconstruction.org. There is a searchable database of available products on this website with information about the manufacturing processes of the products and their compositions, as well as contact details of suppliers.<br>Design for deconstruction – principles of design to facilitate reuse and recycling, B Addis (2003) CIRIA Best Practice Guidance C607. |
| Volatile Organic Compounds | For current controls on avoiding VOCs and using healthy materials, see:<br>British Standard (BS) regulates UFFI quality, limits the product's use and limits ingress of formaldehyde vapour into buildings (BS: 5617, 5618 (1985)).<br>A BS Institution standard (BS 5669 part I (1989), BS 1142 (1989)) regulates the formaldehyde content, together with test methods that must be used to assess formaldehyde levels in particle boards and fibreboards. |

# 9 Sustainability assessment tools

**KEY MESSAGES**

Arrangements following the Government's Housing Standards Review and withdrawal of the Code for Sustainable HomesThe creation of 5 or more dwellings from an existing building will need to be designed in line with BREEAM Domestic Refurbishment

500sq m or more of non-residential floorspace will need to be designed in line with BREEAM

9.1 A way to ensure buildings are sustainable is to use a standardised environmental assessment tool to measure the overall performance of buildings against set criteria. Buildings that achieve high ratings use less energy, consume less water and have lower running costs than those designed to building regulations alone.

9.2 Paragraph 13.8 of Core Strategy policy CS13 - *Tackling climate change through promoting higher environmental standards* notes that BREEAM is a helpful assessment tool for general sustainability.

9.3 This section explains:

- when you need to carry out a BREEAM assessment
- arrangements following the Housing Standards ReviewThe standards which need to be met for each type of development. These are more detailed targets for Energy, Water and Materials than those in the Development Policy DP22 - *Promoting sustainable design and construction.*
- The information required at each stage of the assessment

### When do you need to carry out a sustainability assessment?

| Development type | What does this include? | Threshold for assessment | Appropriate assessment tool |
|---|---|---|---|
| Residential - Existing | Refurbishments, conversions and changes of use | 5 dwellings or more<br>500sq m of floorspace or more | BREEAM Domestic Refurbishment |
| Non-residential | Includes offices, retail, industrial, education health | 500sq m of floorspace or more | BREEAM |
| Mixed use schemes | If your scheme includes both residential and non-residential uses that total 500sq m of floorspace or more we will require a BREEAM assessment for the non-residential parts. | | |

9.4 This table sets out when the Council will require a sustainability assessment for all the types of development and which assessment tool to use.

9.5 The assessment tools are updated periodically and therefore the most recent version of the assessment tool is to be used.

### Code for Sustainable Homes – housing standards review transitional arrangements and approach

9.6 The Code for Sustainable Homes has now been withdrawn and the Ministerial Statement dated 25 March 2015 sets out the Government's national policy on the setting of technical standards for new dwellings.

9.7 The Council will continue to require new residential development to submit a sustainability statement demonstrating how the development mitigates against the causes of climate change and adapts to climate change, in line with existing policies contained in Camden's Core Strategy CS13 Tackling climate change through promoting higher environmental standards and Development Policies document DP22 Sustainable design and construction.

9.8 Proposals should demonstrate how sustainable design and construction principles, including the relevant measures noted in the table on page 104 of the Development Policies Document have been incorporated into the design and proposed implementation. Acceptable new residential schemes will be required to ensure that the measures stated in the Sustainability Statement are secured and implemented.

9.9 New residential development will be required to demonstrate that the development is capable of achieving a maximum internal water use of 105 litres per person/day, with an additional 5 litres person/day for external water use.

9.10 The Council is still able to apply policies which require compliance with energy performance standards until the Planning and Energy Act 2008 has been amended The Code Level 4 equivalent in carbon dioxide emissions reduction below part L Building Regulations 2013 is 20%. New residential dwellings will be required to demonstrate how this has been met by following the energy hierarchy in an energy statement. Policy CS13 also requires that all developments (existing and new build) achieve a 20% reduction in on-site carbon dioxide emissions through renewable technologies, unless demonstrated that such provision is not feasible.

**Zero Carbon**

Zero carbon refers to buildings that are so energy efficient they do not release any carbon emissions. The Government is currently aiming to ensure that all new homes are zero carbon by 2016. For more information visit www.zerocarbonhub.org

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

## BREEAM

9.11 BREEAM stands for Building Research Establishment Environmental Assessment Method. It is a tool to measure the sustainability of non-domestic buildings. There are specific assessments for various building types such as offices, retail, industrial, education and multi-residential. For developments that are not covered by one of the specific BREEAM assessment tools, this often applies to mixed use schemes, a tailored assessment can be created using the BREEAM Bespoke method

9.12 BREEAM assessments are generally made up of nine categories covering:

- Energy
- Health and Well-being
- Land use and Ecology
- Management
- Materials
- Pollution
- Transport
- Waste
- Water

9.13 Each of the categories above contain criteria which need to be met in order to gain credits. The higher the rating, the greater the number of specific credits needed. Some of the criteria have weighted credits which are used to reflect how important certain elements are, such as energy efficiency. All the credits are added together to produce the overall score. The development is then rated on a scale from PASS, to GOOD, VERY GOOD, EXCELLENT and ending with OUTSTANDING

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

| Time period | Minimum rating | Minimum standard for categories (% of un-weighted credits) |
|---|---|---|
| 2010-2015 | 'very good' | Energy 60%<br>Water 60%<br>Materials 40% |
| 2016+ | 'excellent' | |

## BREEAM Domestic Refurbishment

9.14 BREEAM Domestic Refurbishment is used to assess the sustainability of existing of housing where refurbishment, conversion or a change of use is proposed. It uses the same principles as BREEAM with categories, criteria and credits.

You are strongly encouraged to meet the following standards in accordance with Development Policy DP22 - *Promoting sustainable design and construction*:

| Time period | Minimum rating | Minimum standard for categories (% of un-weighted credits) |
|---|---|---|
| 2010-2012 | 'very good' | Energy 60%<br>Water 60%<br>Materials 40% |
| 2013+ | 'excellent' | |

## What are the relevant stages?

### Pre-assessment

9.15 The pre-assessment stage involves an initial review of the development to determine how sustainable it will be. It provides you with an early indication of the overall score your development will achieve by using the plans and drawings to estimate the number of credits that are likely to be achieved for each category. The results of the pre-assessment identify changes that need to be made to your scheme before construction begins to ensure it is as sustainable as possible. The pre-assessment stage also helps to identify if there are any experts, such as ecologists, that you need to invite to become involved in the development.

9.16 The results of your pre-assessment will form the basis of the condition or Section 106 planning obligation for the final development, so accuracy is crucial. In some circumstances it may be appropriate to over estimate the credits needed to achieve the final rating as some credits can be lost during the final design stages.

**AT THIS STAGE THE COUNCIL WILL EXPECT:**

- The submission of a pre-assessment report at the planning application stage. The report should summarise the design strategy for achieving your chosen level of BREEAM and include details of the credits proposed to be achieved.

- The pre-assessment report is to be carried out by a licensed assessor. The name of the assessor and their licence number should be clearly stated on the report.

### Design stage assessment

9.17 The aim of the design stage assessment is to review the detailed design specifications of your development. More detailed site specific information is generally available at this stage, in comparison to the pre-assessment stage, which allows the assessor to make a more precise estimate of the BREEAM rating. Some elements of the assessment will need to be refined once construction has begun, because some materials and appliances are not specified until after or during construction. However, the assessor will ensure that any design and/or specification changes are reflected in the final Design Stage Assessment.

9.18 Once the assessor has completed the assessment it is submitted to the BRE for review and certification. The BRE will then issue a BREEAM Design Stage certificate indicating what level of sustainability the development has achieved.

**AT THIS STAGE THE COUNCIL WILL EXPECT:**

- Submission of an early design stage assessment to the Council prior to beginning construction of the development. This is needed to discharge the relevant condition or Section 106 planning obligation
- Ensure the assessor submits the final Design Stage Assessment to BRE for certification
- Submission of a copy of the Design Stage certificate to the Council

### Post-construction assessment

9.19 The post-construction assessment reviews the design stage assessment and compares it with the completed development to ensure that all the specified credits have been achieved. It is carried out once your development has been completed and is ready for occupation. Once the assessment has been completed, it needs to be submitted to BRE for certification.

**AT THIS STAGE THE COUNCIL WILL EXPECT:**

- A post-construction assessment to be carried out as soon as possible after completion
- Submission of a copy of the post-construction certificate to the Council
- Submission of a copy of the Design Stage certificate to the Council, if not already submitted

9.20 There is often a delay between the completion of a development and the receipt of a post-construction certificate. Therefore the Council will allow occupation prior to the receipt of the final certificate. This approach will

be monitored to ensure that the design stage certificate is consistent with the final post-construction report and certificate.

**Further information**

| | |
|---|---|
| BRE (Building Research Establishment) | Provides detailed information on sustainability assessments, how to find an assessor, example assessments and how to submit your assessment: www.bre.co.uk |
| BREEAM | Provides detailed information on all the different types of BREEAM assessments that are available, how to use them, how to find an assessor, what all the different stages are and other useful guidance: www.breeam.org |
| Zero Carbon Hub | This organisation is working with the Government to implement the target towards ensuring all new homes are zero carbon. Their website provides information on what zero carbon is, how it can be achieved and case studies: www.zerocarbonhub.org |

# 10 Brown roofs, green roofs and green walls

**KEY MESSAGES**

All developments should incorporate green and brown roofs

The appropriate roof or wall will depend on the development, the location and other specific factors

Specific information needs to be submitted with applications for green/brown roofs and walls

10.1 As development densities increase, brown roofs, green roofs and green walls can provide valuable amenity space, create habitats and store or slow down the rate of rain water run-off, helping to reduce the risk of flooding.

10.2 Green and brown roofs can help to reduce temperatures in urban environments. This is particularly valuable in Camden where we suffer from increased temperatures in Central London (known as the urban heat island effect).

10.3 Development Policy DP22 states that schemes must incorporate green or brown roofs and green walls wherever suitable. Due to the number of environmental benefits provided by green and brown roofs and green walls, where they have not be designed into a development the Council will require developers to justify why the provision of a green or brown roof or green wall is not possible or suitable.

**WHAT WILL THE COUNCIL EXPECT?**

The Council will expect all developments to incorporate brown roofs, green roofs and green walls unless it is demonstrated this is not possible or appropriate. This includes new and existing buildings. Special consideration will be given to historic buildings to ensure historic and architectural features are preserved.

## What are green and brown roofs?

10.4 Green and brown roofs are roofs that are specially designed and constructed to be waterproof and covered with material to encourage wildlife and to help plants grow. They can be left without planting - 'brown' or planted with a range of vegetation - 'green' depending on the depth or the soil or substrate.

**Substrate**

Substrate is a layer of material which supports the roots and sustains the growth of vegetation.

There are three main types of green and brown roof:

1. Intensive roofs
2. Semi intensive roofs
3. Extensive roofs.

**The general features of these roofs are shown below:**

| | **Extensive** | **Semi Intensive** | **Intensive** |
|---|---|---|---|
| **Use** | Ecological Landscape | Garden/Ecological Landscape | Garden/Park |
| **Type of vegetation** | Mosses, Herbs, Grasses | Grasses-Herbs-Shrubs | Lawn, Perennials, Shrubs & Trees |
| **Depth of Substrate** | 60-200mm | 120-250mm | 140-400mm |
| **Weight** | 60-150 kg/m2 | 120-200 kg/m2 | 180-500 kg/m2 |
| **Maintenance requirement** | Low | Periodic | High |

### Intensive roofs

10.5 Intensive roofs provide the widest range of uses such as for accessible amenity space or to create ecological habitats. They are known as 'intensive' due to the high level of design, soil or substrate depth and maintenance that they require. They can also be used to manage water by including systems that process wastewater or store surplus rain water. They can also be designed specifically for food production.

### Semi Intensive roofs

10.6 Semi Intensive Roofs can provide a degree of access and the potential for the creation of habitat. Similar water management functions can be integrated into their design as outlined above.

### Extensive roofs

10.7 Extensive Roofs are generally light weight, with a thin layer of substrate and vegetations. They can be further sub divided into 3 types:

#### 1. Sedum Roofs:

These either take the form of Sedum mats or plug planted Sedum into a porous crushed brick material. Sedum roofs are relatively light weight and demand low levels of maintenance. They can be more readily fitted on to existing roofs.

**Sedum**

Sedum is a type of vegetation. They are generally short plants with shallow roots and thick leaves.

**2. Brown roofs for biodiversity:**

Brown roofs should create habitats mimicking local brownfield sites by using materials such as crushed brick or concrete reclaimed from the site. However, these materials are very heavy and cannot hold water for irrigation. Therefore it is preferable to use materials of known quality and water holding capacity. The brown roof is then planted with an appropriate wild flower mix or left to colonise naturally with areas of dead wood or perches for birds.

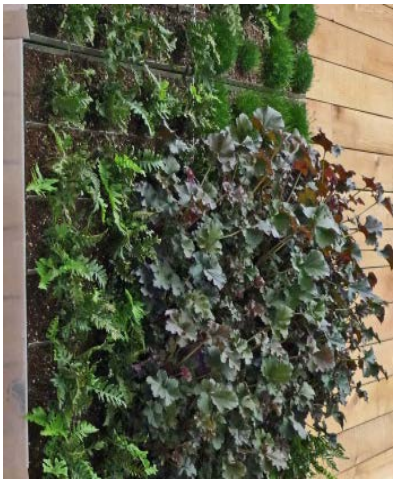
**3. Green roofs for biodiversity:**

Green roofs are usually formed by planting a wild flower mix on an appropriate layer of material. There are various techniques for the creation of this type of roof.

## What are green walls?

10.8 Green Walls are walls or structures attached to walls where plants have been planted. Plants can be planted directly into a material within the wall or can be planted in the ground or a pot and encouraged to climb up a structure so that the wall is covered with vegetation.

Green walls provide a number of benefits:



- They provide useful habitat for invertebrates which in themselves provide a food source for birds and bats. Dense foliage provides nesting sites for a number of birds such as robin, wren and blackbirds
- evergreen, climbing plants provide insulation and can reduce wind chill during winter months
- climbing plants provide shade which can help to cool a building in summer, particularly when grown on south and western facing walls.
- climbing plants can also be effective in trapping airborne pollutants
- provide visual interest adding colour and texture to the wall surface

Green wall can be split into 3 main types:

4. Self clinging climbers such as Ivy, Russian Vine and Virginia Creeper. These plants are able to grow directly onto the wall surface.
5. Climbers which need support e.g. Honeysuckle and Jasmine. Supports are usually provided by trellis structures, wires etc. Well designed trellis or cable structures can become design features in themselves.

6. Vertical Systems (also known as Living Walls, Vertical Gardens). These walls are called 'systems' as they are made up of modular panels designed to support plant growth and require a feeding and watering system. The modules themselves are supported on or within a steel framework. Watering systems and a plant nutrient supply is incorporated into these systems requiring ongoing maintenance. The planted panels can be designed with a variety of plants depending on the aesthetic and habitat requirements of a project.

### What to consider when choosing green roof or brown roof or green wall

10.9 Selecting the appropriate type of green/brown roof or wall type will depend on a number of factors including:

- the type of building
- cost
- maintenance
- weight of the roof or wall
- provision of amenity space
- provide visual interest to surrounding building occupants
- habitat creation
- reduction of rain water run off
- reduction of heating and cooling energy usage of a building
- water conservation and recycling
- space for food production (see section 14 of this guidance on urban food production).

### What will the Council consider when assessing applications?

10.10 All developments should aim to incorporate green or brown roofs and green walls. Careful consideration needs to be given to the design of the roofs and any blank walls to enable the incorporation of these features and the need to access these areas for maintenance.

10.11 The Council will expect green or brown roofs and green walls to be provided in areas with low levels of vegetation, such as town centres and Central London, which are both more likely to feel the effects of climate change and developments where occupiers will be susceptible to overheating such as schools and offices. (See Camden Core Strategy policy CS15 - *Protecting and improving our parks and open spaces and encouraging biodiversity*).

10.12 The assessment of planning applications incorporating green/brown roofs and green walls will be made based on appropriateness for the site, the degree to which the chosen design objectives are met by the proposal and sustainable maintenance. Where green roofs are to be accessible for amenity purposes potential overlooking and loss of

privacy to adjoining properties will also be assessed (See the Overlooking, privacy and outlook section of the CPG6 Amenity)

10.13 The most appropriate green or brown roof and green wall should be incorporated into a development. We will consider the following factors when determining the most appropriate form of roof and wall:

- the loss of any biodiversity habitat on the site and the surrounding area;
- the existing need for habitat on the site and surrounding area;
- whether the site is overlooked;
- whether the site is an area that has historically suffered from surface water flooding;
- the amount of external heat generated by the development;
- whether the roof is to be accessible;
- the location of mechanical plant;
- the inclusion of areas of blank wall;
- access to walls and roofs;
- where being retro-fitted, the weight of the new roof or wall; and
- the amount of irrigation and maintenance required.

**WHAT INFORMATION WILL THE COUNCIL EXPECT?**

- a statement of the design objectives for the green or brown roof or green wall
- details of its construction and the materials used, including a section at a scale of 1:20
- planting details, including details of the planting technique, plant varieties and planting sizes and densities.
- a management plan detailed how the structure and planting will be maintained

**Further information**

| | |
|---|---|
| The Environment Agency | The EA has a green roof toolkit that can be used to help you determine what solution is best for your development<br>www.environment-agency.gov.uk/business/sectors/91967.aspx |
| "Living Roofs: Promoting green roofs, roof terraces and roof gardens across London" | GLA document which highlights the significant role that the roof space on buildings have to play in providing amenity space, increased biodiversity and improved building performance in terms of energy conservation and SUDS. |
| LivingRoofs.org | Provides detailed information on all the types of green and brown roofs as well as case studies, articles and research.<br>www.LivingRoofs.org |
| National Centre of Excellence for green roofs | This website has a wide range of information on green roofs, including best practice, guidance, research and case studies.<br>www.greenroofcentre.co.uk |

# 12 Adapting to climate change

**KEY MESSAGE**

All development should consider how it can be occupied in the future when the weather will be different

The early design stage is the most effective time to incorporate relevant design and technological measures.

12.1 In Camden the changing climate is likely to mean we will experience warmer, wetter winters with more intense rainfall and local flooding events. It will also bring hotter drier summers which will potentially increase the number of days we experience especially poor air quality. Hotter summers will also increase the demand for our open space, water and the use of electricity for mechanical cooling e.g. air conditioning.

12.2 Sections 1 to 11 have concentrated on climate change mitigation measures which are aimed at minimising the impact of human activity on the climate (e.g. by minimising carbon emissions). However, it is also important to think about how we will adapt to a changing climate, so this section is about responding to the unavoidable changes in climate that are already occurring. Adaptation recognises both risks and opportunities arising from climate change and the need to plan for them now.

12.3 Policy CS13 expects developments to be designed to consider the anticipated changes to the climate, especially developments vulnerable to heat and in those locations susceptible to surface water flooding.

12.4 Policy DP22 requires development to be resilient to climate change by ensuring schemes include appropriate adaptation measures.

**WHAT WILL THE COUNCIL EXPECT?**

All development is expected to consider the impact of climate change and be designed to cope with the anticipated conditions.

### How to adapt to warmer temperatures

12.5 Plants and vegetation - Plants can have evaporative cooling effects. Improving the boroughs network of green spaces, parks, trees, and green roofs and walls will have a significant cooling effect.

12.6 Shading - Planting, shading and special glazing, such as triple glazing with filters that remove some of the suns harmful UV rays, can be used to reduce the heat from the sun. European style shaded squares and seating areas can also be used to provide cover during intense periods of heat / sunshine. Large, shade providing trees also provide cool, shady areas during summer.

### Insulation

12.7 Materials should be selected to prevent penetration of heat, including the use of reflective building materials as well as green roofs and walls. Appropriate levels of glazing, which facilitates natural daylighting but prevents excessive overheating should also be considered.

### Water cooling

12.8 Innovative use can be made of water for cooling, including by using ground or surface water. See sections 3 and 4 on energy efficiency and section 6 on renewable energy for more information.

### Natural Ventilation

12.9 Instead of using air conditioning, buildings should be designed to enable natural ventilation and the removal of heat using fresh air. The use of plant equipment that expels hot air increasing the local outdoor air temperature.

### Thermal materials

12.10 Materials with high thermal storage or mass capacity, particularly where it is exposed, can be used to absorb heat during hot periods so that it can dissipate in cooler periods, usually using ventilation.

### Orientation

12.11 Buildings should be orientated as far as possible to reduce excessive solar gain and facilitate natural ventilation.

### 'Cool' surfaces

12.12 Certain materials on roadways or large parking areas can increase surface reflectivity (though it is important to avoid glare problems) or increase rainfall permeability to encourage the cooling effect of evaporation. Porous cool pavements offer the additional benefit of rainwater infiltration at times of heavy rain. Networks of 'cool roofs' made of light coloured materials can reduce solar heat gain and the need for mechanical cooling.

## How to adapt to heavier rainfall

### Sustainable Drainage Systems (SUDS)

12.13 SUDS reduce the quantity of water leaving a site, limiting both the volume and rate of runoff during heavy rainfall and storms. They do this by using mechanisms to capture, filter and store rainwater on site (See section 11 on Flooding for more information on SUDS).

### Green space

12.14 Green open space, verges and green roofs can be designed to filter and store rainwater, thus reducing pressure on drainage systems during heavy rainfall. Trees also reduce surface water runoff.

## How to adapt to drier summers

### Plants and vegetation

12.15 Selecting drought resistant or low water use plants will greatly reduce water demands associated with landscape. This is sometimes known as xeriscaping.

### Water efficient fixtures and fittings

12.16 These can significantly reduce demand for water and will become increasingly important for high density developments. (See the section on Water conservation and flooding for more information on minimising water consumption).

### Re-using water

12.17 Collecting rainwater from roofs and other surfaces for reuse (for example in flushing toilets or irrigation) or recycling greywater from sinks or showers reduces water use. By reducing the amount of water entering the drains, water reuse also reduces the risk of surface water flooding.

## How to adapt to changing ground conditions

12.18 During longer, hotter summers shrinkable clay soils are likely to dry out, making buildings and service pipes vulnerable to cracking. Wetter winters will contribute to risks of ‘heave’ where ground swells.

- Plants and trees - Trees can prevent shrinking and heave as they retain moisture in the soil.
- Structural stability - Stronger retaining walls and fences with good drainage or use of vegetation can prevent surface erosion. Careful choice and placement of trees should avoid building subsidence where soils swell after heavy rainfall and shrink in hot, dry conditions.
- SUDS – Use of SUDS techniques, such as surfaces which allow water to flow through and ponds, which increase infiltration of water into the ground, can reduce subsidence caused by drying out of soils (See section 11 on Flooding for more information on SUDS).
- Foundation design - Foundations should be designed to be strong enough and extend downward below the zone that may be affected by seasonal variations in moisture content. Other measures include underpinning with concrete supports that extend under existing foundations into more stable soils and infilling of foundations.

### Climate change and the historic environment

12.19 Many historic buildings have withstood climatic changes in the past, but we need to make sure they are protected from the impacts of a changing climate in the future. Many of the adaptation measures above can be used in the historic environment. However, the character of historic features and the potential for their damage and loss should always be taken into account when adaptation measures are being planned and executed.

12.20 These climate-change proposals should avoid harm to historic character and fabric, as assessed against the Planning (Listed Buildings and Conservation Areas) Act 1990 and PPS5. Please see English Heritage's Climate Change and the Historic Environment (2008) for further detail on climate change issues.

12.21 See section 4 on Energy efficiency: existing buildings of this guidance and section 2 on Heritage in CPG1 Design for more guidance on Camden's historic environment.

### Further information

| | |
|---|---|
| London Climate Change Partnership | Provides a checklist to help establish how developments can best adapt to climate change |
| "Adapting to Climate Change: A Checklist for Development" | www.climatesoutheast.org.uk |
| Chartered Institution of Building Services Engineers | Provides guidance on how to change and adapt buildings to be more sustainable and adapt to future climatic conditions. Their website has a number of guidance notes including:<br>CIBSE TM36 – "Climate Change and the Indoor Environment: Impacts and Adaptation"<br>www.cibse.org |
| UK Climate Impacts Programme | Helps organisations to adapt to climate change<br>www.ukcip.org.uk |

# 13 Biodiversity

**KEY MESSAGES**

Proposals should demonstrate:

- how biodiversity considerations have been incorporated into the development;
- if any mitigation measures will be included; and
- what positive measures for enhancing biodiversity are planned.

13.1 Development can harm biodiversity directly by destroying or fragmenting habitat, or indirectly by altering local conditions for species. Conversely, sensitively designed developments can increase connectivity between urban habitat patches, and contribute to landscape scale conservation and enhancement of biodiversity.

13.2 Biodiversity is integral to the planning process and we will expect it to be fully incorporated into the design and construction stages. In principle, all development activity should have minimal impacts on biodiversity and enhance it wherever possible.

13.3 It is essential that the development process, from demolition to construction, is undertaken in an appropriate manner to avoid harm to biodiversity. This guidance sets out:

- What species are protected;
- What are our priority species and habitats;
- How to protect biodiversity in the development process;
- Habitat provision, enhancement, creation and restoration; and
- Management and monitoring.

### When does this guidance apply?

13.4 This guidance applies to all development sites. Sites already designated or adjacent to sites designated for their biodiversity value or that form part of a green corridor should receive special attention proportionate to the weight afforded by these designations. These include sites which are identified in the LDF and designated as:

- Sites of Special Scientific Interest (SSSI),
- Sites of Nature Conservation Importance (SNCI) and
- Local Nature Reserves (LNR)
- Habitat corridors and Habitat Corridor – missing links

13.5 Sites of Metropolitan Importance for nature conservation and the Blue Ribbon Network are identified by the Mayor of London. An indicative map is contained in the London Plan.

13.6 It is also important to conserve and improve land outside designated areas as these areas support biodiversity networks through connecting, stepping stone and buffering qualities. Opportunities to improve biodiversity must be considered in all developments.

## What species are protected?

13.7 Certain species are protected under UK or European Legislation. Natural England provides a list of protected species as well as legislative and policy guidance relating to protected species and the planning system: www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/default.aspx

13.8 National advice for protected species www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/default.aspx

13.9 The protection given to species under UK and EU legislation is irrespective of the planning system. It is the applicant's responsibility to ensure that any activity on a site (regardless of the need for planning consent) complies with the appropriate wildlife legislation.

13.10 Applicants should note that Paragraph 98 of ODPM Circular 06/2005 states that 'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat'.

13.11 Paragraph 99 states 'It is essential that the presence or otherwise of a protected species, and the extent that they may be affected by the proposed development is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision'.

13.12 Certain development activities within the vicinity of protected species and their habitats require a licence from Natural England. Developers are strongly advised to contact the Natural England Wildlife Management and Licensing Service to discuss any protected species issues.

## What are the priority habitats and species?

### The Natural Environment and Rural Communities Act 2006

13.13 Section 40 of the Natural Environment and Rural Communities Act 2006 imposes a duty on public bodies "to have regard" to the conservation of biodiversity in England, when carrying out their normal functions. Under Section 41 of the same Act the Secretary of State has published a list of species of flora and fauna and habitats considered to be of principal importance in the conservation of biodiversity. Whilst we will give specific consideration to the species and habitats on this list when planning for biodiversity and assessing planning applications, we will also take seriously our duty to conserve all biodiversity. The full list can

be found on the Natural England web-site www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx

### The Camden Biodiversity Action Plan

13.14 The Camden Biodiversity Action Plan (BAP) provides a framework for improving biodiversity. There are species and habitats identified as priorities in national, regional or borough Biodiversity Action Plans that although may not have legal protection, are still a material consideration in planning, and we will take into account in the planning process.

13.15 The Camden's BAP contains a number of targets and actions that we will consider in the protection and enhancement of biodiversity in Camden.

Where to find the Biodiversity Action Plans:

- UK Biodiversity Action Plan Priority Habitat Descriptions www.ukbap.org.uk/library/UKBAPPriorityHabitatDescriptionsfinalAllhabitats20081022.pdf#TO
- The London Biodiversity Action Plan www.lbp.org.uk/londonhabspp.html
- Camden Biodiversity Action Plan www.ukbap-reporting.org.uk/plans/lbap.asp

## How will we protect biodiversity in the development process?

13.16 We will use a 'five-point approach' to planning decisions for biodiversity, based on the five following principles – information, avoidance, mitigation, compensation and new benefits. (based on Royal Town Planning Institute Good Practice Guide - 'Planning for Biodiversity')

### Camden's 'five-point approach' to planning decisions for biodiversity

1. Information – We will require appropriate information at the outset on habitats and species and the impact of development on them;
2. Avoidance – Developments should avoid adverse effects to wildlife and habitats as far as reasonably possible;
3. Mitigation - Where avoidance is not possible, biodiversity impacts should be reduced as far as reasonably possible. We may use conditions or planning obligations/agreements to achieve this;
4. Compensation - Appropriate replacement and compensation will be required, where, exceptionally development that is harmful to biodiversity is permitted;
5. New benefits - In all cases, opportunities should be taken to enhance on-site biodiversity, or within the locality or borough, to provide new benefits for wildlife, for example, by habitat creation or enhancement.

**Before the design stage**

13.17 Developments are to consider the quality of the existing biodiversity and the potential for enhancement as any site or building may have important biodiversity or contain nature conservation features. This should be done by carrying out a habitat and ecology survey.

### Requirement for ecological surveys

13.18 Ecological surveys carried out in accordance with this guidance are expected to be submitted upfront with any planning application, and will be used to assess the impact of the development on biodiversity, within the site, the locality, or where appropriate, on the regional or national resource. The paragraph below provides details of the recommended level of information to be provided.

### When in the development process is a survey to be done?

13.19 Ecological surveys are to be carried out prior to the design stage. Information for the development site and wider area is to be obtained from, but not limited to:

- London Environmental Records Centre
- appropriate statutory or non-statutory conservation organisations e.g. London Bat Group

13.20 A habitat survey is to identify important habitat features, including BAP Priority Habitats. Whilst the presumption is not to lose any areas of BAP priority habitat in particular, other habitats are also valuable. The scale and detail of the surveys should be in proportion to the size of the proposed development and likelihood of protected species using the site. The aim is to characterise important habitats and species, the presence of any protected species, and the extent that they may be affected by the proposed development. This information is to also inform the design and form of the development.

### What developments need to carry out a survey?

13.21 For Protected Species - Table 1 in the Appendices sets out when a survey and assessment is required. For Designated sites and priority habitats - Table 2 in the Appendices sets out when a survey and assessment is required.

### What needs to be included in a survey?

13.22 The level of scope and detail required is outlined in the Appendices. Optimal times to carry out surveys are provided in Figure 1 in the Appendices.

### Who should carry out the survey?

13.23 Protected species such as bats, may be found throughout Camden in buildings, or in structures and using features for foraging or commuting,

and it may not appear immediately obvious that a protected species may be found on site or impacted upon by the proposed development. Developers are to employ the services of a professional ecological consultant. The Institute of Ecology and Environmental Management provides a commercial directory search of their membership directory at http://www.ieem.net/ieemdirectory.asp. The Council's Nature Conservation Section can advise on the scope of survey work required.

**The design stage**

13.24 This is arguably the most critical time in the development process to ensure that nature conservation opportunities and constraints are identified and taken account of. The aim should be to create ecologically orientated and sustainable development. During the design stage the biodiversity value of developments can be improved significantly if the design and management of buildings and landscaping elements is more explicitly geared towards nature.

**LIGHTING**

Lighting can have particular negative impacts on biodiversity. Unnecessary lighting should be avoided. Where lighting may harm biodiversity timers or specific coloured lighting will be required to minimise any disturbance.

13.25 Proposals should demonstrate how biodiversity considerations have been incorporated into the development, if any mitigation measures will be included, and what positive measures for enhancing biodiversity are planned. Where there are significant features of nature conservation value on site the Council will seek to secure, retain and enhance these features. All developments (major and minor) can contribute to a robust functioning ecosystem by providing a well-connected system of habitats, and the design stage is the perfect time to achieve this. A built structure or landscaping elements has the potential to impact on biodiversity and ecology, and developers must consider how to minimise any adverse effect upon both biodiversity and ecology. Developers must also consider how a built structure and any landscaped elements can deliver wider ecological benefits and enhancements at this stage.

13.26 Some species range a long way from their "core" habitat and there is a risk that species may be left isolated in a highly urban and fragmented landscape such as Camden with no access to suitable foraging areas or water. Developers may therefore be required to retain and enhance foraging areas or routes (e.g. for bats) or carry out other provisions that contribute towards conservation of the species on or off-site.

**The construction planning phase**

13.27 The nature conservation value of a site and its surrounding area will also need to be protected during the construction phase. A list of measures to ensure the nature conservation interest is protected is given below. The list is not to be considered exhaustive.

13.28 Measures to protect the nature conservation interest during the construction phase

- Timing of development to avoid disturbance to species such as birds in the breeding season;
- Use of protective fencing to preserve important ecological areas and reduce direct damage by fencing off storage areas and areas for construction huts, and carefully planning and limiting and their placement;
- Planning vehicular movements to minimise the impact on ecologically sensitive areas and reduce soil compaction;
- In ecologically sensitive areas keep disruptive elements such as light, noise and human presence to a minimum;
- Implement measures to protect water courses and ground water from pollution;
- For sites of high nature conservation value, or its adjoining sites a construction management plan to protect biodiversity during the construction phase may be requested and secured by legal agreement or planning condition prior to the commencement of works on the site.

**Post-construction**

13.29 Where a site has been identified has having nature conservation importance, maintenance and monitoring may be required once the development has been completed. The management and maintenance of areas of nature conservation value that are to be retained, enhanced or created on a development site are essential to ensure these areas of nature conservation attain their full potential. A long term management plan should outline the conservation objectives, the means of monitoring habitats and species, and describe the practical maintenance measures that may be needed. Implementation of the management plan is likely to be a contractor's responsibility and should be considered at the tender evaluation stage. Maintenance and monitoring may be secured by way of a legal agreement or planning condition.

13.30 Where appropriate, the Council will seek a legal agreement where on site biodiversity aims are unlikely to be met through the use of a condition attached to a planning permission.

## Habitat provision, enhancement, creation and restoration

13.31 In line with policy and guidance, opportunities should be sought for the incorporation of biodiversity into developments and for habitat creation or enhancing existing habitats in any development proposal. It is not a case of one size fits all. This list is not exhaustive and developers are encouraged to follow this guidance and think creatively to fully integrate biodiversity into design.

**Best practice examples of habitat provision, enhancement, creation and restoration**

| Design Area | Design Opportunities | Details |
|---|---|---|
| Roofs | Green roofs<br>Brown roofs<br>Roof gardens and terraces | Green roofs are intentionally vegetated roof surfaces. Typically, they can be intensive on a deep growing medium (150-400mm), or extensive on shallower growing medium (60-200mm) or any transition between the two. In all cases consideration will need to be given to type of habitat desired. Other than the traditional sedum matting, green roofs can provide a varied profile comprising mosaics of bare ground with very early pioneer communities on nutrient-poor substrates e.g. locally sourced aggregate, through to more established open grasslands with herbs, or even trees and scrub and ponds. Green roofs should not be seen as an automatic substitute for ground level landscaping. Consideration should first be given to ground level landscaping for biodiversity. Further information can be found at: http://livingroofs.org/ |
| | Artificial roost | Artificial roosts for bats can be incorporated into conversions or within new development such as a roof void by providing suitable access. Products are available to aid bat roosting potential or access to potential roost spaces such as bat access tiles. |
| | Bird and Bat boxes | The type of box, its location, and surroundings will depend on the species the box is intended for. You will need to take into account ecological requirements of the target species: position, aspect, height, obstructions, cleaning and maintenance, whether a single or colonial species, and whether surroundings suitable for commuting and/or foraging. It is preferable to install boxes into the fabric of the building as this provides longevity. There are numerous bird and bat boxes specifically designed for brickwork.<br>Example: Swift boxes installed in brickwork<br>Swift boxes should be sited on a north, north west or west aspect out of the sun and heat which can harm the chicks. They should be installed at a height of at least 6 to 7m, preferably under the shelter of the eaves or overhanging roofs. A 5 metre drop, clear of obstructions provides clear airspace for high speed entry and egress. Several boxes |

| | | |
|---|---|---|
| | | together will assist the formation of swift colonies. |
| Buildings | Walls<br>Green/living walls | Living walls are typically composed of climbing plants. They provide opportunities for wildlife such as habitat for insects and spiders, which in turn will be food for insect-eating birds and bats, and if sufficiently dense provide can provide nesting habitat for birds. They can also reduce fragmentation of habitats by forming a link between ground level landscaping and green roofs. Climbers can adhere directly to brick and stone, but where it is desirable to encourage growth away from the building facade a network of trellises and wires can be used. |
| | Lighting | Artificial lighting has significant impacts on animals and insects, disrupting activities such as the search for food and mating behaviour. Where lighting is necessary, take into account: type of lamp (low pressure sodium lamps or high pressure sodium preferred), aim to avoid light spillage using hoods, cowls etc., the height of lighting column should be as short as possible, light levels should be as low as possible, and timing of lighting to provide some dark periods.<br>The Bat Conservation Trust in association with the Institution of Lighting Engineers (ILE) has produced a guidance document 'Bats and Lighting in the UK' |
| Outdoor Space | Sustainable Urban Drainage Systems (SUDs) | SUDs can help to slow down the runoff rate and store water on a temporary basis, reducing the impact of urbanisation on flooding, and provide a habitat for wildlife. Examples include the use of constructed wetlands, such as ponds, reed beds, planted swales, and detention basins. |
| | Ponds/reed beds | Ponds and reed beds can have significant wildlife value. Ponds can be constructed using concrete, butyl liners or puddled clay. It is better that they are designed using methods such as rainwater harvesting as this can be fed directly into a pond, as topping up with mains water adds nutrients to the pond and can lead to algal blooms. |
| Landscaping and planting. | General Planting | Retaining and planting native plants of UK or local origin will not only help to maintain the integrity of ecosystems close to the development, but will also increase biodiversity within the development itself. Planting of trees, bushes, forbs and grass |

| | | |
|---|---|---|
| | | can be used to complement natural vegetation.<br>Only native/local provenance species to be planted on sites adjacent to or within specified distance of a SNCI and should reflect or complement the species composition of the SNCI where possible.<br>Peat-free products only should be used in planting schemes. |
| | Wildflower meadows/areas of long grass | Wildflower rich grassland or meadows reflecting natural communities of local soil types can be created, or restored, in areas of greenspace. These habitats need ongoing management to maintain their biodiversity interest. It is expected that a management plan and provision for ongoing management is provided as part of any development proposal. Areas of amenity grassland of are of limited value for biodiversity. |
| | Tree, shrub and understorey planting. | Depending on the scale of planting proposed, this encompasses single trees to small areas of scrub, and even woodland. Where possible, it is desirable to plant native species reflecting natural communities of local soil types. If possible establish a graded canopy down from large trees to smaller, dense lower shrubs, to field and ground layer. However, the urban environment is highly modified by people and the value of non-native plants with high species associations is also recognized. |
| | Hedgerows | Hedgerows comprised of native species reflecting natural communities of local soil types are by far the best for wildlife. Climbers such as honeysuckle and bramble can be integrated into hedgerows. Existing native species hedgerows should be as far as possible retained, or replaced. Even low species rich hedgerows may form commuting routes for species such as bats. |
| | Flower planting for birds and insects | Choose plants likely to attract wildlife. Any planting scheme will need ongoing management to maintain its' biodiversity interest. It is expected that a management plan and provision for ongoing management is provided as part of any development proposal. Natural England's Gardening with Wildlife in Mind provides a searchable list of native and non-native plants that benefit wild species at http://www.plantpress.com/wildlife/home.php |

| | | |
|---|---|---|
| | Retention of ecologically important habitats | Where there is remnant natural vegetation on site, the aim should be to maintain these areas. Loss or damage to these areas should be kept to a minimum. |
| | Hard surfaces | Hard surfaces should be kept to a minimum in new schemes. Permeable materials should be used. This will encourage insects and reduce run-off. Soil sealing on site should be kept to a minimum. Any runoff should be directed onto vegetated area. Run-off that is high in pollution and certain nutrients can pollute ponds and waterways, altering their biodiversity. |
| | Deadwood | Deadwood habitats can be integrated creatively into a development, such as monoliths with coronet cuts to provide habitat for deadwood specialists such as fungi and wood boring beetles. |
| | Orchards | Traditional orchards are hotspots for biodiversity supporting a wide range of wildlife. Traditional fruit and nut varieties are preferred. These features will require on-going management. It is expected that a contaminated land assessment is provided by the applicant if the produce is for consumption. |
| | Herbicide and pesticide use | Herbicide and pesticide use should be avoided and alternative control methods used, except when controlling invasive species. |

**Habitat Suitability Maps**

13.32 Where the nature of the development provides opportunities for habitat creation, this should contribute to habitat creation targets in the BAP. Developers should contact the Nature Conservation Section, who will advise on the choice of habitat by reference to the Habitat Suitability Maps developed by GiGL and LBP. The role of the site in buffering or connecting neighbouring or nearby open space should also be taken into consideration as part of this process, as should the habitat composition of such open space.

13.33 In cases where the site is not covered by the Habitat Suitability Maps (i.e. not existing open space), large-scale habitat creation should reflect the landscape character of the area, as identified in Natural England's London's Natural Signatures project www.naturalengland.org.uk/regions/london/ourwork/londonnaturalsignatures.aspx

### Management and monitoring

13.34 The management and maintenance of areas of nature conservation value that are to be retained, enhanced or created on a development site is essential to ensure these areas of nature conservation attain their full potential. A long term management plan should outline the conservation objectives, the means of monitoring habitats and species, and describe the practical maintenance measures that may be needed. Implementation of the management plan is likely to be a contractor's responsibility and should be considered at the planning application stage.

### Compensation

13.35 Where, exceptionally, damage or loss to natural habitats is unavoidable and or inadequate mitigation proposed, compensatory measures will be required. This may involve new habitat creation or habitat enhancement, a contribution towards meeting the objectives of the Camden Biodiversity Action Plan or improvements to the Boroughs biodiversity. The Council will seek to use planning conditions and planning legal agreements to achieve this.

### Further information

| | |
|---|---|
| Natural England Wildlife Management and Licensing Service | provides advice on wildlife management and issues licences www.naturalengland.org.uk/ourwork/regulation/wildlife/default.aspx |
| Livingroofs.org | Independent UK Resource For information on Green Roofs www.livingroofs.org |

## Biodiversity Appendices

13.36 Extra information on biodiversity surveys

- In general, it is expected that all surveys and baseline ecological information collected from the site must be submitted at the planning application stage.
- A desk study and site walkover surveys must be carried out on all Major Developments to identify the ecological characteristics of a site and any significant impacts. This will also inform whether further ecological surveys are necessary to be submitted with any planning application. Surveys may be required on smaller developments where protected species or priority BAP species or habitat are likely to be present - refer to tables and information below for guidance;
- Developers are expected to carry out a protected species survey where desktop surveys show protected species in the vicinity.
- Surveys must be carried out by suitably qualified and experienced persons e.g. Member of IEEM;
- Surveys must be carried out using recognised survey methodology and following good practice guidelines i.e. in suitable weather conditions, at an appropriate time and of appropriate duration and frequency, and at the correct period of the year;
- Habitat surveys must be to an appropriate level of detail e.g. Extended Phase I Habitat Survey with Target Notes, to characterise the nature conservation interest of the site;
- The survey data should be used to inform the design and form of the development, and any recommendations for management afterwards.
- An assessment must be provided of the likely effects of development, and the magnitude of their potential impact of the development on nationally, regionally and locally important habitats and species recorded on site or in the locality;
- The assessment should identify measures to be taken to avoid impacting on those important species and habitats, either directly or indirectly, on site and in the locality, during demolition and construction operations;
- Survey data will be considered valid for a period of 1 Year after which re-surveys may be required;
- If the level of detail provided is deemed inadequate then additional surveys will be required;
- The results of site surveys must be made available to the London Environmental Records Centre (Greenspace Information for Greater London).

## Local Requirement for Protected Species: Criteria and Indicative Thresholds (Trigger List) for when a Survey and Assessment is required

| Proposals for Development That Will Trigger a Protected Species Survey | Species likely to be affected and for which a survey wil be required | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Bats | Badgers | Breeding Birds | Plants | Hedgehogs | Reptiles | Amphibians | Notable Invertebrate |
| Proposed development which includes the modification, conversion, demolition or removal of buildings and structures (especially roof voids) involving the following:<br>▪ all buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;<br>▪ pre-1960 detached buildings and structures within 200m of woodland and/or water;<br>▪ pre-1914 buildings within 400m of woodland and/or water;<br>▪ pre-1914 buildings with gable ends or slate roofs, regardless of location;<br>▪ all tunnels, mines, kilns, ice-houses, adits, military fortifications, air raid shelters, cellars and similar underground ducts and structures;<br>▪ all bridge structures, aqueducts and viaducts (especially over water and wet ground). | ●<br>●<br>●<br>●<br>● | | ●<br>●<br>●<br>●<br>● | | | | | |
| Proposals involving lighting of churches and listed buildings<br>Proposals involving flood lighting of green space within 50m of woodland, water, field hedgerows or lines of trees with obvious connectivity to woodland or water. | ●<br>● | | ●<br>● | | | | ● | ● |
| Proposals affecting woodland, or field hedgerows and/or lines of trees with obvious connectivity to woodland or water bodies. | ● | ● | ● | ● | | | ● | ● |
| Proposed tree work (felling or lopping) and/or development affecting:<br>▪ old and veteran trees that are older than 100 years;<br>▪ trees with obvious holes, cracks or cavities,<br>▪ trees with a girth greater than 1m at chest height; | ●<br>●<br>● | | ●<br>●<br>● | | | | | ●<br>●<br>● |
| Major proposals within 500m of a pond or Minor proposals within 100m of pond<br>(Note: A major proposals is one that is more than 10 dwellings or more than 0.5 hectares or for non-residential development is more than 1000m$^2$ floor area or more than 1 hectare) | ● | | | | | | ● | ● |
| Proposals affecting or within 200m of rivers, streams, canals, lakes, or other aquatic habitats. | ● | | ● | ● | | | ● | ● |
| Proposals affecting 'derelict' land (brownfield sites), allotments and railway land. | | ● | ● | ● | ● | ● | ● | ● |
| Proposed development affecting any buildings, structures, feature or locations where protected species are known to be present *. | ● | ● | ● | ● | ● | ● | ● | ● |
| Major proposals within 500m of Hampstead Heath or Minor proposals within 100m of Hampstead Heath<br>(Note: A major proposals is one that is more than 10 dwellings or more than 0.5 hectares or for non-residential development is more than 1000m$^2$ floor area or more than 1 hectare) | ● | | ● | ● | ● | ● | ● | |
| Table adapted from version produced by ALGE 2007, Validation of Planning Applications<br><br>*Confirmed as present by either a data search (for instance via the local environmental records centre) or as notified to the developer by the local planning authority, and/or by Natural England, the Environment Agency or other nature conservation organisation. | Bats | Badgers | Breeding Birds | Plants | Hedgehogs | Reptiles | Amphibians | Notable Invertebrates |

**Exceptions for when a full species survey and assessment may not be required**

a) Following consultation by the applicant at the pre-application stage, the LPA has stated in writing that no protected species surveys and assessments are required.

b) If it is clear that no protected species are present, despite the guidance in the above table indicating that they are likely, the applicant should provide evidence with the planning application to demonstrate that such species are absent (e.g. this might be in the form of a letter or brief report from a suitably qualified and experienced person, or a relevant local nature conservation organisation).

c) If it is clear that the development proposal will not affect any protected species present, then only limited information needs to be submitted. This information should, however, (i) demonstrate that there will be no significant affect on any protected species present and (ii) include a statement acknowledging that the applicant is aware that it is a criminal offence to disturb or harm protected species should they subsequently be found or disturbed.

In some situations, it may be appropriate for an applicant to provide a protected species survey and report for only one or a few of the species shown in the Table above e.g. those that are likely to be affected by a particular activity. Applicants should make clear which species are included in the report and which are not because exceptions apply.

## Local Requirements for Designated Sites and Priority Habitats:

Criteria (Trigger List) for When a Survey and Assessment are Required

### 1. Designated sites (as shown on the Council's Proposals Map)

Nationally designated sites

- Site of Special Scientific Interest (SSSI)
- National Nature Reserve (NNR)

Regionally and locally designated sites

- Local Sites (e.g. Site of Nature Conservation Importance)
- Local Nature Reserve (LNR)

### 2. Priority habitats (Habitats of Principal Importance for Biodiversity under S.41 of the NERC Act 2006)

- Arable Field Margins
- Ancient and/or species-rich hedgerows
- Lowland heathland
- Lowland dry acid grassland

- Lowland meadows (e.g. species-rich flower meadows)
- Lowland mixed deciduous woodland
- Lowland Beech and Yew Woodland
- Open Mosaic Habitats on Previously Developed Land
- Ponds
- Reed beds
- Traditional Orchards

### 3. Other biodiversity features

(as identified by the Local Biodiversity Partnership - see paragraph 84 ODPM Circular 06/2005)

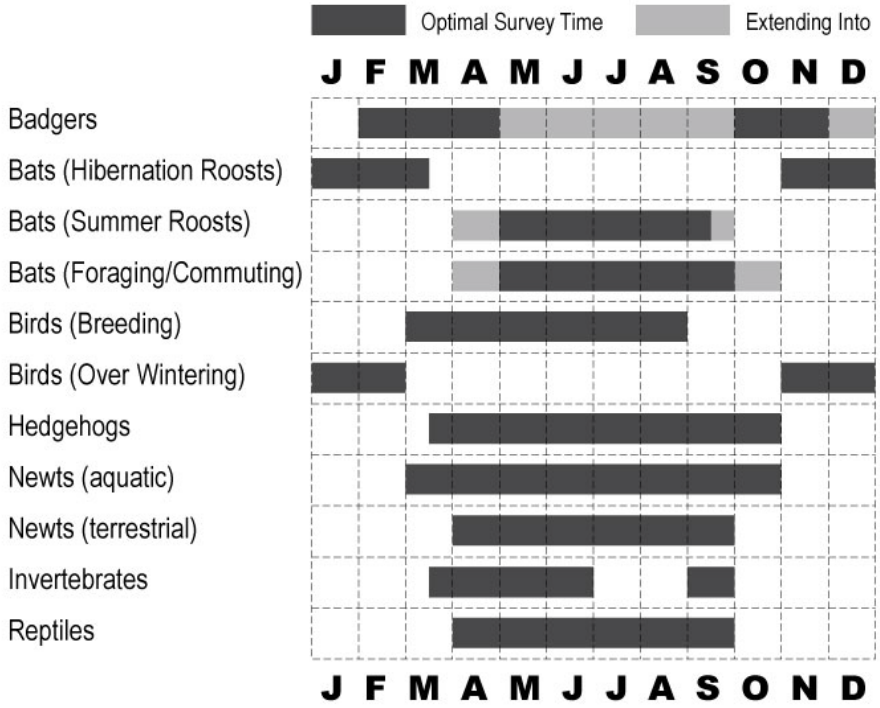
- Waterways and wetlands (e.g. canals, lakes, reservoirs, ponds, aquifer fed fluctuating water bodies)
- Woodland, Hedgerows and Trees (e.g. secondary woodland and scrub, mature/veteran Trees, deadwood habitats)
- Parks, Open Space and Private Gardens (e.g. urban green space, parks, allotments, orchards, flower-rich road verges, canal sides, wildlife gardens)
- The Built Environment (e.g. previously developed land, railsides and churchyards and cemeteries)

**Exceptions When a Full Survey and Assessment May Not Be Required**

International and National Sites: A survey and assessment will not be required where the applicant is able to provide copies of pre-application correspondence with Natural England, where the latter confirms in writing that they are satisfied that the proposed development will not affect any statutory sites designated for their national or international importance.

Regional and Local Sites and Priority Habitats: A survey and assessment will not be required where the applicant is able to provide copies of pre-application correspondence with the Local Planning Authority's ecologist (where employed), or ecological advisor and/or the local Wildlife Trust that they are satisfied that the proposed development will not affect any regional or local sites designated for their local nature conservation importance or any other priority habitats or listed features.

**Figure 10. Ecological survey seasons**




Points to note regarding surveys are as follows:

- For certain species and habitats surveys can be carried out at any time of year, but for other species, particular times of year are required to give the most reliable results, as indicated in Figure 11
- Surveys conducted outside of optimal times (Figure 11) may be unreliable. For certain species (e.g. Great Crested Newt) surveys over the winter period are unlikely to yield any useful in formation. Similarly negative results gained outside the optimal period should not be interpreted as absence of a species and further survey work maybe required during the optimal survey season. This is especially important where existing surveys and records show the species has been found previously on site or in the surrounding area. An application may not be valid until survey information is gathered from an optimum time of year.
- Species surveys are also very weather dependent so it may be necessary to delay a survey or to carry out more than one survey if the weather is not suitable, e.g. heavy rain is not good for surveying for otters, as it washes away their spraint (droppings). Likewise bat surveys carried out in wet or cold weather may not yield accurate results.
- Absence of evidence of a species does not necessarily mean that the species is not there, nor that its habitat is not protected (e.g. a bat roost is protected whether any bats are present or not).

- Local Biological / Environmental Records Centre may have useful existing information and records.
- Competent ecologists should carry out any surveys. Where surveys involve disturbance, capture or handling of a protected species, then only a licensed person can undertake such surveys (e.g. issued by Natural England). Surveys should follow published national or local methodologies. Further details may be found in the Local Authority's SPD for Biodiversity or on the following web sites:
- IEEM at: www.ieem.org.uk/Publications.htm - Guidelines for Survey Methodology
- Natural England: http://www.naturalengland.org.uk/publications/default.htm

Camden Planning Guidance

# Town Centres, Retail & Employment CPG 5

London Borough of Camden


September 2013

Camden

# CPG5 Town Centres, Retail and Employment

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Camden Core Strategy and Camden Development Policies, and is a formal Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. The Council formally adopted CPG5 – Town centres, retail and employment on 7 September 2011 following statutory consultation. This document was updated on 4 September 2013 following statutory consultation to include Section 4 on the Central London Area food, drink and entertainment, specialist and retail uses. The Camden Planning Guidance documents (CPG1 to CPG8) replace Camden Planning Guidance 2006.

1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction with, and within the context of, Camden's other LDF documents.

## What does this guidance cover?

- Retail uses;
- Town centres;
- Central London local Areas;
- Central London frontages;
- Neighbourhood centres;
- Small shops;
- Controlling the impact of food, drink and entertainment uses; and
- Employment sites and business premises.

1.3 This guidance supports the following Local Development Framework policies:

### Camden Core Strategy

- CS5 Managing the impact of growth and development;
- CS7 Promoting Camden's centres and shops, and policies;
- CS8 Promoting a successful and inclusive economy and Development Policy
- CS9 Achieving a successful Central London

### Camden Development Policies

- DP10 Helping and promoting small and independent shops;
- DP11 Markets;
- DP12 Supporting strong centres and managing the impact of food, drink, entertainment and other town centre uses;

- DP13 Employment premises and sites; and
- DP26 Managing the impact of development on occupiers and neighbours.

# 7 Employment sites and business premises

**KEY MESSAGES**

- Camden has a very restricted supply of sites and premises suitable for light industrial, storage and distribution uses.
- We will categorise sites according to their characteristics to determine which sites and premises should be retained.
- In instances where we accept the principle of redevelopment of an employment site, our priority will be to secure permanent housing and/or community uses.

7.1 This guidance supports Camden Core Strategy policy CS8 *Promoting a successful and inclusive economy* and policy DP13 *Employment premises and sites* in the Camden Development Policies. These policies work together to provide our approach to the provision and protection of employment sites and business premises.

7.2 We will protect existing employment sites and premises that meet the needs of businesses and employers. This guidance explains the circumstances when we will consider alternative uses for an employment site. It also provides more information on marketing requirements and our approach to Hatton Garden, the Industry Area and mixed use developments.

## Offices

7.3 Camden's Core Strategy sets out the projected demand and planned supply of office floorspace in the borough. We expect the supply of offices to meet the projected demand over the plan period and as a result we may allow a change from B1(a) offices to another use in some circumstances, such as older office premises or buildings that were originally built as residential dwellings. Our priority is for the replacement use to be permanent housing or community use. This approach is in line with policy DP13 *Employment premises and sites* in the Camden Development Policies.

7.4 There are a number of considerations that we will take into account when assessing applications for a change of use from office to a non-business use, specifically:

- the criteria listed in paragraph 13.3 of policy DP13 of the Camden Development Policies;
- the age of the premises. Some older premises may be more suitable to conversion;
- whether the premises include features required by tenants seeking modern office accommodation;

- the quality of the premises and whether it is purpose built accommodation. Poor quality premises that require significant investment to bring up to modern standards may be suitable for conversion;
- whether there are existing tenants in the building, and whether these tenants intend to relocate;
- the location of the premises and evidence of demand for office space in this location; and
- whether the premises currently provide accommodation for small and medium businesses.

7.5 When it would be difficult to make an assessment using the above, we may also ask for additional evidence in the form of a marketing assessment. Paragraph 6.18 below provides more information on marketing.

### Hatton Garden

7.6 As set out in the Core Strategy policy CS8 and policies DP1 and DP13 of the Camden Development Policies, the Council takes a different approach to development in Hatton Garden. Here the conversion of office premises to residential or D1 use will only be permitted where 50% of the floorspace is provided as affordable B1c space for use as jewellery sector workshops. Where proposals involve an increase in B1a or residential floorspace then 50% of the uplift must be provided as jewellery sector B1c space. In addition, the conversion of office premises will only be permitted where it can be demonstrated that they have been vacant and marketed for at least two years. Paragraph 6.18 below provides more information on what we expect to be included in any marketing exercise.

7.7 Where it has been agreed by the Council that the provision of jewellery workshop space is not possible, we will still require the provision of residential floorspace in line with Policy DP1 of the Camden Development Policies. In addition we will require a financial contribution towards the support of the jewellery industry. The level of contribution will be related to the area of workspace that would otherwise have been expected. Where jewellery sector workshop space is provided, we will require the space to be marketed at rents comparable to average rents paid by existing jewellery manufacturers for comparable premises in Hatton Garden. Please see CPG 8 – Planning Obligations for our detailed approach.

### Light industrial, industrial, storage and distribution

7.8 Camden has a very restricted supply of sites and premises suitable for light industrial, storage and distribution uses. This means that there is a high level of demand for the remaining sites and that the majority of sites are well occupied and able to secure relatively high rents as long as they have good access and separation from conflicting premises.

7.9 We have identified three main categories of sites and premises in the borough:

### Category 1

7.10 Sites in this category provide the highest quality accommodation. Typically, they provide:

- purpose built accommodation;
- predominantly single storey premises;
- clear, high ceiling heights;
- high loading bays and doors (min 5.5m or 18ft high);
- access for large delivery and servicing vehicles both into and around the site;
- 24 hour operation with unrestricted loading access; and
- minimal risk that the 24-hour operation will adversely harm the amenity of neighbouring properties.


### Category 2

7.11 The majority of Camden's industrial stock falls into Category 2. They usually have a selection of the following characteristics:

- good access for servicing and delivery;
- slightly more restricted hours of operation than Category 1 sites;
- roller shutter doors;
- clear, high floor to ceiling heights (3-5m);
- lots of natural light;
- level access – normally ground floor;
- flexible neighbouring uses;
- limited number of upper floors with goods lift access; and
- some off street parking.

### Category 3

- small, isolated premises;
- poor access - narrow streets, small doors, steps;
- no goods lifts;

- little or no space for servicing;
- incompatible neighbouring uses (most often residential); and
- lower ground or basement level.

7.12 Category 1 sites are rare in Camden and will always be protected. Category 2 sites are more common in Camden and will usually be protected unless there is very strong marketing evidence (see below for details of our marketing expectations) to show that they are no longer suitable. The Business Premises Study 2011 advises that most sites within categories 1 and 2 can be marketed and let successfully. Category 3 sites are heavily compromised and may not be suitable for continued industrial use when they become empty or need significant investment, although they could be suitable for office B1(a) space.

7.13 We will use these categories to determine which sites and premises should be retained and which can be released for redevelopment. The characteristics of categories 1 and 2 will also be used to guide the design of new business premises.

#### Refurbishment and improvements

7.14 Many industrial buildings only require a small amount of investment to maintain them or to bring them back into a reasonable condition. As long as the site has good access other factors, such as the age of a building, are irrelevant for most occupiers as the specification for an industrial unit has not changed in many years.

#### New industrial premises

7.15 The characteristics that make new industrial premises successful are similar to categories 1 and 2 above. Ideally, new space should resemble category 1 as closely as possible. The most important features are good delivery/servicing access, separation from other uses, freedom to operate at all times and a 50-70% site coverage. Where mixed use development is planned employment and residential uses should normally be provided in separate blocks. Whilst it may be difficult to achieve all of these features in Camden, we will expect new developments to include as many as practically possible.

### Industry area

7.16 Camden's Industry Area is one of the few areas where there is a concentration of industrial, storage and distribution uses (within classes B1, B2, B8 or related Sui Generis) where no other uses prejudice the operation of business in the area.

7.17 As stated in Core Strategy Policy CS8 and in paragraph 8.15, the Industry Area will be safeguarded by resisting any proposals which jeopardise the continued use of sites for industrial, storage and distribution purposes. This includes proposals which would introduce any of the following uses: residential, student accommodation, community facilities, retail, food, drink or entertainment premises.

## Marketing

7.18 We will require evidence of a marketing exercise for the loss of employment uses, in line with Core Strategy Policy CS8 and policy DP13 of the Camden Development Policies. As a minimum, we will expect marketing exercises to include the following:

- Use of a reputable local or national agent with a track record of letting employment space in the borough;
- A visible letting board on the property (constant throughout the marketing period);
- Marketing material should be published on the internet, including popular online property databases such as Focus;
- Continuous over at least 2 years from when the letting board is erected and the property is advertised online (i.e. not simply from when agents were appointed). We will consider shorter marketing periods for B1(a) office premises;
- Advertised rents should be reasonable, reflecting market rents in the local area and the condition of the property;
- Lease terms should be attractive to the market:
  - at least three years, with longer terms, up to five years or longer, if the occupier needs to undertake some works
  - and/or short term flexible leases for smaller premises which are appropriate for SMEs;
- A commentary on the interest shown in the building, including any details of why the interest was not pursued; and
- Where there is an existing employment use then we will require evidence that the tenant intends to move out.

### Further information

- Camden Business Premises Study, 2011, Roger Tym and Partners
- The Demand for premises of London's SMEs, 2006, London Development Agency
- Industrial Capacity Supplementary Planning Guidance, 2008. Greater London Authority

# 8 Appendices

## Appendix 1 - Properties located within Camden's Centres

8.1 The following tables contain all the addresses which are within Camden's centres.

**Properties located within the town centre core retail frontages**

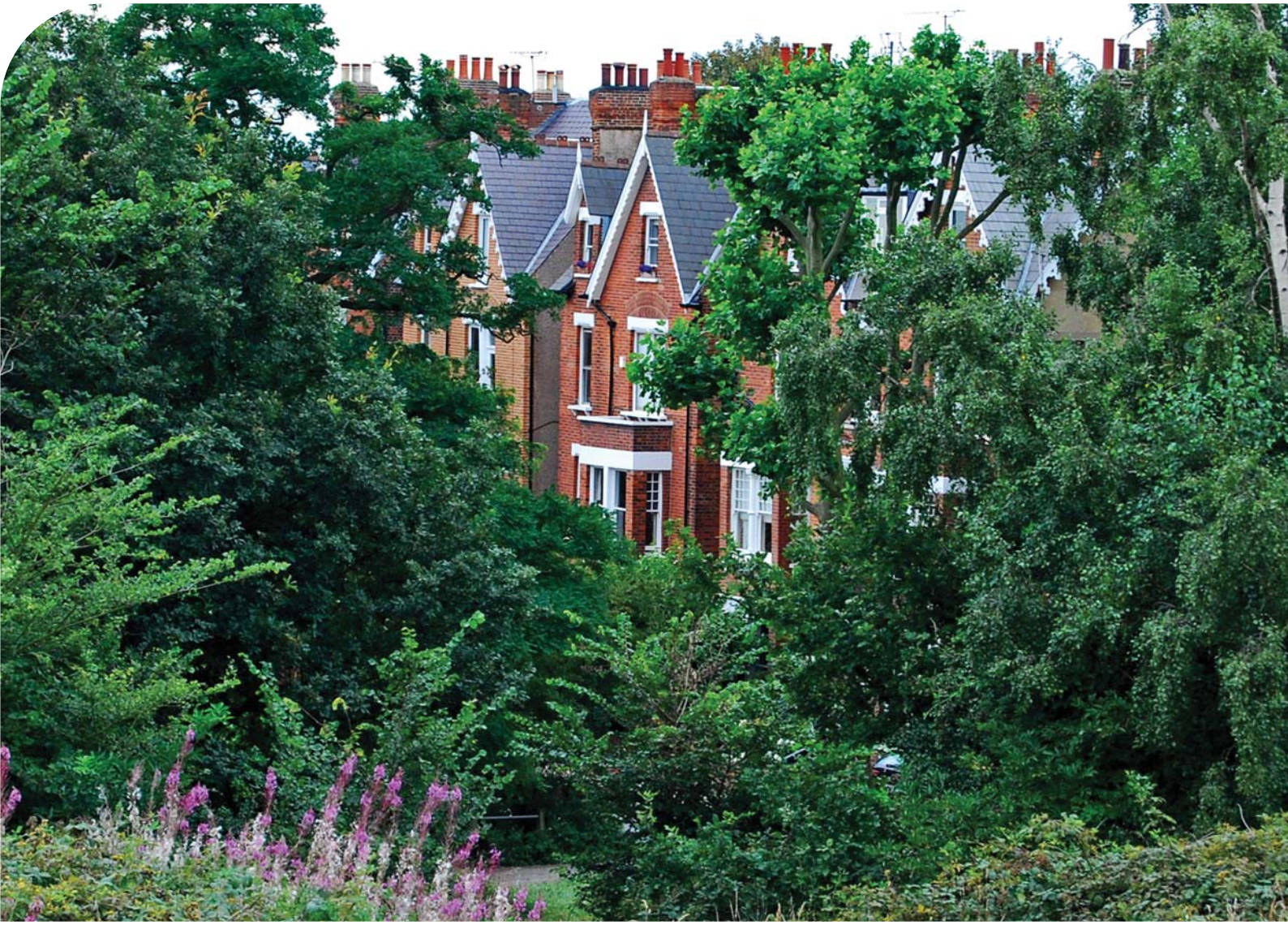
| | |
|---|---|
| Camden Town | Core frontages south:<br>38-224 Camden High Street (E side)<br>57-265 Camden High Street (W side)<br>Core frontages north:<br>267- 289 Camden High Street (W side)<br>East yard, Chalk Farm Road (W side)<br>226-250 Camden High Street (E side)<br>1-89 Chalk Farm Road (E side)<br>2-18a Haverstock Hill (E side) |
| Hampstead | Core frontages:<br>1-47 (N side) and 55-84 (S side) Hampstead High Street,<br>4-62 (E side) and 23-47 (W side) Heath Street,<br>1-10 and 12-16 Perrins Court,<br>1-17 (NW side) and 2-10 (SE side) Flask Walk |
| Kentish Town | Core frontages:<br>124-282 (E side) and 189-345 (W side) Kentish Town Road |
| Kilburn High Road | Core frontages:<br>42-218 Kilburn High Road (E side) |
| Swiss Cottage | Core frontages:<br>135-265 Finchley Road<br>O2 Centre |
| West Hampstead | Core frontages:<br>176-280 West End Lane (E side) |

Camden Planning Guidance

# Amenity

CPG 6

London Borough of Camden



Camden

# CPG6 Amenity

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this guidance to support the policies in our Local Development Framework (LDF). It is therefore consistent with the Camden Core Strategy and Development Policies, and is a formal Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions. This guidance will replace Camden Planning Guidance 2006, updating advice where appropriate and providing new guidance on matters introduced or strengthened in the LDF.

1.2 Camden Planning Guidance covers a range of topics (such as design, housing, sustainability and planning obligations) and all of sections should be read in conjunction with, and within the context of, Camden's other LDF documents.

## Amenity in Camden

1.3 A key objective of the Camden Core Strategy is to sustainably manage growth so that it avoids harmful effects on the amenity of existing and future occupiers and to nearby properties.

## What does this guidance cover?

1.4 This guidance provides information on all types of amenity issues within the borough and includes the following sections:

1. Air quality
2. Contaminated land
3. Noise and vibration
4. Artificial light
5. Daylight and sunlight
6. Overlooking, privacy and outlook
7. Construction management plans
8. Access for all
9. Wind and micro-climate
10. Open space, outdoor sport and recreation facilities

1.5 This guidance supports the following Local Development Framework policies:

### Camden Core Strategy

- CS5 - Managing the impact of growth and development
- CS15 - Protecting and improving our parks and open spaces & encouraging biodiversity
- CS16 - Improving Camden's health and well-being

**Camden Development Policies**

- DP26 - Managing the impact of development on occupiers and neighbours
- DP28 - Noise and vibration
- DP31 - Provision of, and improvements to, public open space and outdoor sport and recreation facilities
- DP32 - Air quality and Camden's Clear Zones

# 4 Noise and vibration

**KEY MESSAGES:**

We will ensure that noise and vibration is controlled and managed to:

- Limit the impact of existing noise and vibration sources on new development; and
- Limit noise and vibration emissions from new development.

4.1 The impact of noise and vibration can have a major affect on amenity and health and can severely affect people's quality of life.

4.2 Policy *DP28 – Noise and Vibration* of the Camden Development Policies aims to ensure that noise and vibration is controlled and managed. It sets out the Council's thresholds for noise and vibration and goes beyond the thresholds set out in Planning Policy Guidance 24: Planning and noise (see below). DP28 contains noise/vibration thresholds for the day, evening and night.

## How can the impact of noise and vibration be minimised?

4.3 The main sources of noise and vibration in Camden are generated from:

- Road traffic;
- Railways;
- Industrial uses;
- Plant and mechanical equipment;
- Entertainment uses (such as bars and nightclubs); and
- Building sites.

4.4 For details on how to manage noise and vibration from building sites see section 8 on Construction management plans.

### Ways to minimise the impact of noise on your development

#### Design

- Locating noise sensitive areas/rooms away from the parts of the site most exposed to noises;
- Creating set backs;
- Designing the building so its shape and orientation reflect noise and protect the most sensitive uses;
- Stacking similar rooms (such as kitchens and living rooms) above each other; and
- Positioning non-residential uses closer to the noise source in mixed use developments.

#### Built fabric

- Insulating and soundproofing doors, walls, windows, floors and ceilings;
- Sealing air gaps around windows;
- Double glazing;
- Including architectural fins (where appropriate); and
- Laminated glass.

#### Landscaping and amenity areas

- Incorporating planting, landscaping, fencing/barriers and solid balconies to reflect sound.

4.5 Our preference for controlling noise:

- Begins with attempting to reduce noise at its source;
- Then to separate the development (or at least the sensitive parts e.g. habitable rooms) from the source or to use noise barriers; and

- Finally construction materials such as acoustic glazing should be used.

4.6 When you consider measures to minimise noise and vibration you also need to take into account our policies on design and crime prevention. You should consider the implications of noise and vibration at the beginning of the design process to enable prevention or mitigation measures to be designed into the scheme. Poorly designed schemes will not be acceptable.

4.7 Proposals will be expected to include appropriate attenuation to alleviate or mitigate the impact of noise and vibrations to an acceptable level, as set out in policy *DP28 – Noise and vibration* of the Camden Development Policies. Where appropriate, the Council will consider the cumulative impact of noise sources (for example, air conditioning units).

4.8 Everyday domestic activities can also generate noise, e.g. communal entrances and roof terraces. Sufficient sound insulation must be provided between dwellings to prevent the transmission of noise between them, particularly in conversions where new partition walls are often deficient in terms of insulation.

**Ways to mitigate noise emitted by your development**

**Engineering**

- Reducing the noise emitted at its point of generation (e.g. by using quiet machines and/or quiet methods of working);
- Containing the noise generating equipment (e.g. by insulating buildings which house machinery and/or providing purpose-built barriers around the site); and
- Protecting any surrounding noise-sensitive buildings (e.g. by improving sound insulation in these buildings and/or screening them by purpose-built barriers).

**Layout**

- Ensuring an adequate distance between source and noise-sensitive buildings or areas; and
- Screening by natural barriers, buildings, or non-critical rooms in the development.

**Administrative**

- Limiting the operating time of the source;
- Restricting activities allowed on the site; and
- Specifying an acceptable noise limit.

4.9 If your proposal could result in noise and vibration that would cause an unacceptable impact to nearby uses or occupiers, or proposes sensitive uses near a source of noise or vibration and cannot be adequately attenuated then planning permission is likely to be refused.

Developments will be assessed against the thresholds set out in policy DP28.

### How will the Council manage the impact of noise and vibration?

4.10 Detailed acoustic/noise and vibration information in the form of a report will be required if your development proposes:

- The installation of plant, ventilation or air conditioning equipment;
- A use that will create significant noise (e.g. new industry, nightclub)
- A noise-sensitive development in an area where existing noise sources are present (e.g. an existing industrial site, busy road, railway line);
- A use that will generate a significant amount of traffic.

**Noise sensitive developments**
Those developments located near sources of noise, including housing, schools and hospitals as well as offices, workshops and open spaces.

4.11 The list above is a guide only and you may need to provide noise and vibration information for other developments depending on the circumstances of the site or proposal.

4.12 The appropriate amount and detail of information required will depend on the specific circumstances of your proposal. At a minimum you will be expected to provide the following information to support your application:

- Description of the proposal;
- Description of the site and surroundings, a site map showing noise and vibration sources, measurement locations and noise receivers;
- Background noise levels;
- Details of instruments and methodology used for noise measurements (including reasons for settings and descriptors used, calibration details);
- Details of the plant or other source of noise and vibration both on plan and elevations and manufacturers specifications;
- Noise or vibration output from proposed plant or other source of noise and vibration, including:
  - Noise or vibration levels;
  - Frequency of the output;
  - Length of time of the output;
  - Features of the noise or vibration e.g. impulses, distinguishable continuous tone, irregular bursts;
- Manufacturers' specification of the plant, supporting structure, fixtures and finishes;

- Location of neighbouring windows (and use if applicable);
- Details of measures to mitigate noise or fume emissions and vibration;
- Details of any associated work including acoustic enclosures and/or screening;
- Cumulative noise levels of all the proposed and existing units;
- Hours/days of operation.

4.13 Where appropriate the Council will seek a legal agreement to control or reduce noise levels where this is unlikely to be met through the use of a condition attached to a planning permission.

### Further information

| | |
|---|---|
| PPG24 | Planning Policy Guidance Note 24: Planning and Noise provide Government guidance on noise. This guidance defines four Noise Exposure Categories (A-D) and outlines what should be done if your proposal falls into one of these categories. Advice is also provided on how to address noise issues and secure amelioration methods through the planning system. www.communities.gov.uk/publications/planningandbuilding/ppg24 |
| DEFRA | The Department of Food, Environment and Rural Affairs provide a number of publications on noise and noise related issues. www.defra.gov.uk |
| Camden Council website | Camden's Environmental Health web pages provide strategic information on noise in Camden including the results of monitoring that has taken place www.camden.gov.uk/noise<br>Also see *Camden's Guide for Contractors working in Camden* on the Camden website. |
| The Mayor's Ambient Noise Strategy | This provides details on the Mayor of London's approach to reducing noise in London. http://legacy.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf |

# 5 Artificial light

**KEY MESSAGES:**

When considering proposals for artificial lighting the Council will consider the:

- need for planning permission;
- need for the lighting;
- design of the lighting; and
- impacts on biodiversity.

5.1 This section provides guidance on the Council's approach to artificial lighting. This guidance should be read in conjunction with policy *DP26 Managing the impact of development on occupiers and neighbours* of the Camden Development Policies.

5.2 Artificial lighting has many benefits, however excessive or poorly designed lighting can be damaging to the environment and result in visual nuisance including by:

- Having a detrimental impact on the quality of life of neighbouring residents;
- Significantly changing the character of the locality;
- Altering wildlife and ecological patterns; and
- Wasting energy.

5.3 Nuisance often occurs due to glare and 'light spillage' because the lighting has been poorly designed.

5.4 *Planning Policy Statement 23 (PPS23): Planning and Pollution Control* enables the Council to take account of the possible obtrusive impact of

lighting and paragraph 3.25 of PPS23 permits us to use conditions or planning obligations to protect the environment.

**WHAT IS LIGHT POLLUTION?**

Light pollution is the term used to describe any adverse effect of artificial lighting. Light pollution includes:

- Glare - the uncomfortable brightness of a light source when viewed against a dark sky;
- 'Light trespass' – the spread of light spillage the boundary of the property on which a light is located; and
- 'Sky glow' - the orange glow we see around urban areas caused by a scattering of artificial light by dust particles and water droplets in the sky.

## Will planning permission be required for lighting?

5.5 Structures supporting, and the installation of lighting equipment may require planning permission, especially if they are substantial or affect the external appearance of a building. Planning permission is not required for the carrying out of maintenance which affects only the interior of the building or does not materially affect the external appearance of the building. Temporary lighting schemes generally do not require planning permission.

5.6 Planning permission is normally required for:

- the erection of columns to support lighting or other similar structures;
- the erection of substantial structures or installations that affect the external appearance of a property;
- external lighting as part of an industrial or commercial scheme;
- new lighting structures or works which are integral to other development requiring planning permission; and
- illuminated advertisements, although there are some exceptions such as those indicating medical services and some commercial advertisements on the front of business premises (See Camden Planning Guidance 1 - Design).

5.7 You are advised to check with the Planning Service before installing any lighting scheme. You will need to provide the following details:

- Number of lights;
- Likely lux output;
- The height of the lighting columns (if applicable); and
- The area to be lit.

In accordance with policy DP26 in Camden Development Policies, schemes that would cause harm to amenity will not be permitted.

## What information should accompany a planning application?

5.8 Where planning permission for lighting schemes is required you will need to submit the information required by paragraph 5.7. We will also expect the submission of the following additional information:

- The design of lights and infrastructure;
- A plan or plans showing layout of the lights, including orientation of the beams of light;
- Lighting levels, lumen details, lamp type, wattage;
- Control systems including types and location of sensors, times lighting will be on; and
- The need for the lighting, that is, an explanation of what activity the lighting is supporting.

5.9 All light installations must be energy efficient and 'Dark Sky' compliant, thereby not causing obtrusive light pollution, glare or spillage (by reference to the British Astronomical Association Campaign for Dark Skies).

**Lumen**
This is a measurement of the light output from a light source.
**Lux**
This is a measurement of the light intensity falling on a surface.
**Dark sky compliance**
To design lighting schemes in order to avoid lighting that extends beyond its intended target and would be inefficient and waste energy. It also avoids glare and light in unwanted areas.

## What should you consider when designing lighting?

### General lighting requirements

5.10 To minimise obtrusive light you should follow the general principles taken from the Institution of Lighting Engineers, Guidance Notes for the Reduction of Obtrusive Light (2005):

a) Lighting is to be directed downwards wherever possible to illuminate its target. If there is no alternative to up lighting, then the use of shields will help reduce the spill of light to a minimum. Up lighting is a particularly bad form of obtrusive light and contributes to sky glow.
b) Lighting is to be designed to minimise the spread of light near to, or above, the horizontal. Again, any light that shines above the horizontal line of the light adds to the sky glow effect.
c) Lighting should be designed to the correct standard for the task. Over-lighting is a cause of obtrusive light and also represents a waste of money and energy.
d) The main beam angle of all lights proposed directed towards any potential observer is to be kept below 70°. It should be noted that the higher the mounting height, the lower the main beam angle could be. This will help reduce the effect of glare and light spill on neighbouring dwellings, passing motorists, pedestrians, etc.
e) Lighting should be directed to minimise and preferably avoid light spillage onto neighbouring properties. Wherever possible use floodlights with asymmetric beams that permit the front glazing to be kept at, or near parallel to, the surface being lit.
f) The lights used should be the most efficient taking into account cost, energy use, and the purpose of the lighting scheme required. All lighting schemes should meet British Standards.

5.11 We will seek to ensure that artificial lighting is sited in the most appropriate locations to cause minimal disturbance to occupiers and wildlife, while still illuminating the intended area. This includes considering any occupiers located above the lighting source.

5.12 Consideration should be given to lighting associated with buildings of special historic and architectural interest in order to protect their special interest and that of the wider area. This applies both to the lighting of such buildings and the impact of the lighting installation when seen by day.

### Lighting Infrastructure

5.13 The visual effect of lighting infrastructure when viewed in the daytime needs to be considered. These elements can include junction boxes, poles, brackets and cabling. The design, size and colours of the physical infrastructure needs to be carefully considered and should relate to the building it is located on.

### Use

5.14 The design of lighting should be specific to the use it supports (e.g. for recreation facilities). Hours of lighting should be limited to the times needed to support the use (both in summer and winter) and be restricted through the use of timers and sensors where relevant (e.g. for security lighting).

5.15 The Council may seek to secure conditions to any planning permission in order to control the hours of operation of any approved lighting scheme.

## Why do impacts on biodiversity need to be considered?

5.16 Artificial lighting can often impact on wildlife habitats, particularly where lighting is proposed in open spaces, for example to provide lighting for sports courts and pitches or to improve security (such as along Regents Canal). Artificial lighting can have particularly severe implications for the natural daily rhythms of a range of animals and plants, and therefore sites and habitats identified for their nature conservation value should not be adversely affected by lighting. (See the Local Development Framework Proposals Map for a list of nature conservation sites).

5.17 If your proposed lighting is located within or adjacent to areas of open space we will expect that any biodiversity impacts arising from the installation or operation of the lighting is mitigated. This may require a survey to identify if there are any nesting birds in the immediate vicinity or if it is close to an area where bats may hibernate or emerge at feeding time. This is particularly important if the operation of the lighting extends beyond dusk, which is roughly the time bats will come out to forage. See Camden Planning Guidance 3 – Sustainability for further information on our approach to protecting biodiversity.

5.18 You should contact Camden's Biodiversity Officer at an early stage to discuss measures to mitigate the impact of lighting schemes on biodiversity.

## Further information

| | |
|---|---|
| PPS23 | Planning Policy Statement 23: Planning and Pollution Control. Office of the Deputy Prime Minister, November 2004. www.odpm.gov.uk |
| DEFRA | The Department of Food, Environment and Rural Affairs has published a number of documents on light pollution. These can be found at: http://www.defra.gov.uk/environment |
| Environment Act 1995 | Available at the Stationary Office: www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm |

### Useful Contacts

Camden Planning Service www.camden.gov.uk/planning

The Institution of Lighting Professionals www.theilp.org.uk promotes good practice and excellence in lighting schemes.

The Chartered Institute of Building Services Engineers www.cibse.org provides information on appropriate lighting designs and mechanisms.

# 6 Daylight and sunlight

**KEY MESSAGES:**

- We expect all buildings to receive adequate daylight and sunlight.
- Daylight and sunlight reports will be required where there is potential to reduce existing levels of daylight and sunlight.
- We will base our considerations on the Average Daylight Factor and Vertical Sky Component.

6.1 Access to daylight and sunlight is important for general amenity, health and well-being, for bringing warmth into a property and to save energy from reducing the need for artificial lighting and heating. The Council will carefully assess proposals that have the potential to reduce daylight and sunlight levels for existing and future occupiers.

6.2 This guidance relates to:

- Camden Core Strategy policy CS5 - *Managing the Impact of Growth and Development*;
- Core Strategy policy CS14 - *Promoting high quality places and conserving our heritage*; and
- Policy DP26 – *Managing the impact of development on occupiers and neighbours* of the Camden Development Policies.

DP26 sets out how the Council will protect the quality of life of building occupiers and neighbours by only granting permission for development that does not cause harm to amenity.

### When will a daylight/sunlight report be required?

6.3 The Council expects that all developments receive adequate daylight and sunlight to support the activities taking place in that building.

6.4 A daylight and sunlight report should assess the impact of the development following the methodology set out in the most recent version of Building Research Establishment's (BRE) "Site layout planning for daylight and sunlight: A guide to good practice". Reports may be required for both minor and major applications depending on whether a proposal has the potential to reduce daylight and sunlight levels. The impact will be affected by the location of the proposed development and its proximity to, and position in relation to, nearby windows.

**WHAT DOES THE COUNCIL REQUIRE?**

The Council will require a daylight and sunlight report to accompany planning applications for development that has the potential to reduce levels of daylight and sunlight on existing and future occupiers, near to and within the proposal site.

Daylight and sunlight reports should also demonstrate how you have taken into consideration the guidance contained in the BRE document on passive solar design; and have optimised solar gain. Please refer to the BRE guidance on daylight and sunlight.

6.5 While we strongly support the aims of the BRE methodology for assessing sunlight and daylight we will view the results flexibly and where appropriate we may accept alternative targets to address any special circumstances of a site. For example, to enable new development to respect the existing layout and form in some historic areas. This flexible approach is at the Council's discretion and any exception from the targets will assessed on a case by case basis.

### Daylight

6.6 We will aim to minimise the impact of the loss of daylight caused by a development on the amenity of existing occupiers and ensure sufficient daylight to occupiers of new dwellings taking in account overall planning and site considerations. If your proposal will have an unreasonable impact on amenity the planning application will be refused. When assessing daylight issues, we will use the guidelines and methods contained in the BRE's *Site layout planning for daylight and sunlight: A guide to good practice*.

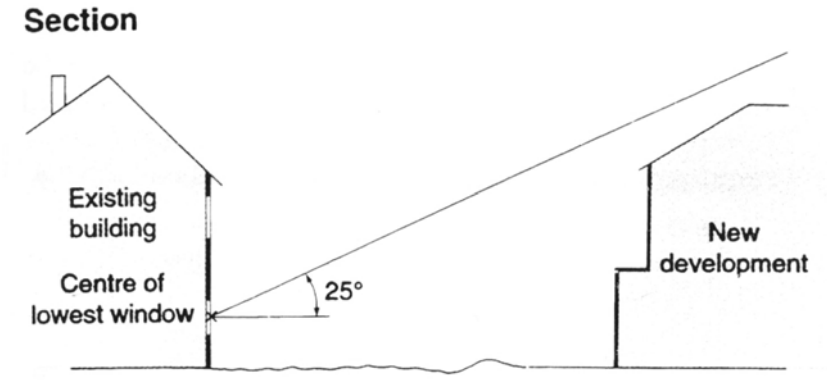
6.7 There are two quick methods that can be used to assess access to daylight:

#### Daylight to new development

- project a 25 degree line, starting 2m above ground level from a wall of your proposed development;
- if none of the existing surrounding buildings extend above this line, then there is potential for good daylighting to be achieved in the interior of your new development.

#### Daylight to existing development

- project a 25 degree line from the centre of the lowest window on the existing building;
- if the whole of your new development is lower than this line then it is unlikely to have a substantial effect on the daylight enjoyed by occupants in the existing building.




Source: BRE, Site layout planning for daylight and sunlight: A guide to good practice.

6.8 For either test, if buildings extend above the 25 degree line a more detailed test needs to be carried out to fully assess either the loss of daylight in existing buildings or the level of daylight achievable in the new development. The two most common measurements of daylight of the more detailed test are the Vertical Sky Component (VSC) and the Average Daylight Factor (ADF).

**Vertical Sky Component**
The amount of light striking the face of a window

6.9 The Vertical Sky Component is expressed as a ratio of the maximum value of daylight achievable for a completely unobstructed vertical wall. The maximum value is almost 40%. This is because daylight hitting a window can only come from one direction immediately halving the available light. The value is limited further by the angle of the sun. This is why if the VSC is greater than 27% enough sunlight should be reaching the existing window. Any reduction below this level should be kept to minimum.

6.10 Windows to some existing rooms may already fail to achieve this target under existing conditions. In these circumstances it is possible to accept a reduction to the existing level of daylight to no less than 80% of its former value. Any greater reduction than this is likely to have a noticeable affect on amenity. If this occurs then applications may be refused.

**Average Daylight Factor**
Average Daylight Factor is a measure of the level daylight in a room. It can be used to establish whether a room will have a predominantly daylit appearance. It provides light levels below which a room should not fall even if electric lighting is provided.

6.11 The Average Daylight Factor can be used as a measure to determine whether a room will receive adequate daylight (expressed as a percentage). The ADV takes into account the:

- net glazed area of windows;

- the total area of the room surfaces (ceiling, floor, walls, and windows);
- the average reflectance; and
- the angle of visible sky.

6.12 If a predominately daylit appearance is required, then the daylight factor should be 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. This figure should be as high as possible to enable occupiers to rely on as much natural light and not use artificial lighting, but as a minimum for dwellings the figures should be 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

6.13 These minimum figures may not be applicable when measuring the impact of new buildings on existing dwellings as the simple preservation of minimum ADFs will not necessarily be seen as an indication of acceptability, especially if the VSC demonstrates a significant worsening in daylight levels. For existing dwellings the Council will consider the overall loss of daylight as opposed to the minimum acceptable levels of daylight. As the BRE guidance suggests, the readings will be interpreted flexibly as their aim is to support rather than constrain natural lighting. However, daylight is only one of the many factors in site layout design. Therefore, when applying these standards in Camden, we will take into consideration other site factors and constraints.

6.14 The calculation of the VSC and the ADF is complex. For full details on how these calculations are carried out you should refer to the most up to date version the BRE's "Site layout planning for daylight and sunlight: A guide to good practice". For more complex and larger developments we will expect a daylight study to be submitted with the planning application showing the windows that will be affected and provide before development and post development figures for VSC and ADF.

6.15 Other methods can be used to measure daylight and these can be incorporated in daylight and sunlight reports, where necessary, as a supplement to VSC and ADF measurements, such as the No Sky Line (NSL) test contained within BRE guidance.

**Sunlight**

6.16 The design of your development should aim to maximise the amount of sunlight into rooms without overheating the space and to minimise overshadowing.

**WHAT DOES THE COUNCIL EXPECT?**

New developments should be designed to provide at least one window to a habitable space facing within 90 degrees of south, where practical.

This window should receive at least 25% of Annual Probable Sunlight Hours, including at least 5% of Annual Probable Sunlight Hours between 21 September and 21 March, where possible.

**Annual Probable Sunlight Hours**
The annual amount of sunlight a window receives in an average year.

6.17 The BRE's "Site layout planning for daylight and sunlight: A guide to good practice" provides guidance on access to sunlight in relation to:

- site layout, building orientation and overshadowing for new buildings;
- protecting sunlight to existing buildings, and
- new and existing gardens and open spaces.

6.18 Design for access to sunlight will be specific to the orientation of your site, and the specific design and uses within your proposed development. You should follow the detailed design requirements recommended in the "Sunlighting" section of the BRE document. The Council recognises that not all of the guidance contained within the BRE document, particularly orientation, can be adhered to in all developments due to the dense and constrained urban nature of Camden.

### Other considerations

#### Right to Light

6.19 The right to light is a legal right which one property may acquire over the land of another. If a structure is erected which reduces the light to an unobstructed property to below sufficient levels this right is infringed. A right to light can come into existence if it has been enjoyed uninterrupted for 20 years or more, granted by deed, or registered under the Rights of Light Act 1959. Planning permission does not override a legal right to light, however where a right to light is claimed, this is a matter of property law, rather than planning law. The Council will have no role or interest in any private dispute arising and it will be for the owner or occupier affected to seek a legal remedy.

## Supporting documents

6.20 For further information on daylight and sunlight please refer to:

Building Research Establishment (BRE). Site layout planning for daylight and sunlight: A guide to good practice.

Copies of this are available directly from BRE.

BRE Bookshop, 151 Roseberry Avenue, London, EC1R 4GB
020 7505 6622
brebookshop@emap.com
www.constructionplus.co.uk

# 7 Overlooking, privacy and outlook

**KEY MESSAGES:**

- Development are to be designed to protect the privacy of existing dwellings;
- Mitigation measures are to be included when overlooking is unavoidable;
- Outlook from new developments should be designed to be pleasant;
- Public spaces benefit from overlooking as natural surveillance.

7.1 This section aims to ensure that when designing your development you successfully consider the potential impact on the privacy and outlook of neighbouring properties.

7.2 This guidance relates to Core Strategy policy CS5 Managing the Impact of Growth and Development and Core Strategy policy CS14 Promoting high quality places and conserving our heritage.

7.3 Policy *DP26 – Managing the impact of development on occupiers and neighbours* of the Camden Development Policies outlines how the Council will protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity.

## Overlooking and privacy

7.4 Development should be designed to protect the privacy of both new and existing dwellings to a reasonable degree. Spaces that are overlooked lack privacy. Therefore, new buildings, extensions, roof terraces, balconies and the location of new windows should be carefully designed to avoid overlooking. The degree of overlooking depends on the distance and the horizontal and vertical angles of view. The most sensitive areas to overlooking are:

- Living rooms;
- Bedrooms;
- Kitchens; and
- The part of a garden nearest to the house.

**WHAT IS GOOD PRACTICE?**

To ensure privacy, there should normally be a minimum distance of 18m between the windows of habitable rooms of different units that directly face each other. This minimum requirement will be the distance between the two closest points on each building (including balconies).

7.5 Where this standard cannot be met we may require you to incorporate some of the following design measures into your scheme to ensure

overlooking is reduced to an acceptable level. Design measures to reduce the potential for overlooking and the loss of privacy include:

- Careful consideration of the location of your development, including the position of rooms;
- Careful consideration of the location, orientation and size of windows depending on the uses of the rooms;
- Use of obscure glazing;
- Screening by walls or fencing; and
- Screening by other structures or landscaping.

7.6 Where landscaping is used as a method of screening, arrangements for ongoing maintenance should be put in place and this may be secured by a planning condition.

7.7 Public spaces and communal areas will benefit from a degree of overlooking due to the increased level of surveillance it can provide.

### Outlook

7.8 Outlook is the visual amenity enjoyed by occupants when looking out of their windows or from their garden. How pleasant an outlook is depends on what is being viewed. For example, an outlook onto amenity space is more pleasant than an outlook across a servicing yard. You should design developments so that the occupiers have a pleasant outlook. You should screen any unpleasant features with permanent landscaping.

7.9 When designing your development you should also ensure the proximity, size or cumulative effect of any structures do not have an overbearing and/or dominating effect that is detrimental to the enjoyment of their properties by adjoining residential occupiers. You should carefully consider the location of bin or cycle stores if they are in close proximity to windows or spaces used by occupiers.

7.10 You should take particular care if your development adjoins properties with a single aspect over your development.

7.11 You should note that the specific view from a property is not protected as this is not a material planning consideration.

## Further information

*Better Places to Live: By Design - A companion guide to PPG3* (ODPM) makes number of design recommendations which recognise the importance of privacy in the home.

*Perceptions of Privacy and Density in Housing* report available from Design for Homes; 0870 416 3378 or www.designforhomes.org. This report highlights some of the issues facing households living at higher densities, and the implications for future design of buildings.

# 8 Construction management plans

**KEY MESSAGES:**

- Construction management plans are required for developments that are on constrained sites or are near vulnerable buildings or structures;
- They are essential to ensure developments do not damage nearby properties or the amenity of neighbours.

8.1 The purpose of this guidance is to give details on how construction management plans can be used to manage and mitigate the potential impacts of the construction phase of a development.

8.2 All construction and demolition work will cause at least some noise and disturbance. Where construction impact is particularly significant Camden will ensure it is managed through a legally binding construction management plan.

8.3 This guidance relates to Core Strategy Policy CS5 Managing the impact of growth and development and policies DP20 Movement of goods and materials, and DP26 Managing the impact of development on occupiers and neighbours of the Camden Development Policies.

### When does this guidance apply?

8.4 This guidance applies to all development proposals which, having regard to the nature of the surrounding area, are likely to give rise to significant noise and other disturbance during construction. Details on the circumstances in which the Council will expect construction management plans are set out within this guidance.

### How should construction management plans be prepared?

8.5 Camden's planning policies make it clear that the effect on local amenity and the highway network from construction and demolition is a material planning consideration. Construction management plans are used to set out the measures a developer should take (both on-site and off-site) in order to reasonably minimise and manage the detrimental effects of construction on local amenity and/or highway safety. Usually Camden will secure construction management plans through a Section 106 Agreement, although sometimes for less complicated schemes they may be secured by using a condition attached to planning permission.

8.6 Whilst construction management plans are a 'planning led' document they will incorporate mechanisms controlling planning considerations that overlap with other regulatory regimes (particularly highways and environmental protection). Hence, most construction management plans will be an umbrella document managing all impacts of the demolition, excavation and construction process.

8.7 Besides ensuring measures under these different regimes are coordinated in one document, construction management plans represent a proactive way of dealing with construction issues. They encourage developers to work with the Council and local people in managing the construction process with a view to ensuring that problems do not arise in the first place.

**Circumstances Camden will expect a construction management plan**

8.8 Whether a construction management plan is required for a particular scheme will be assessed on a case by case basis, although the Council will usually require a construction management plan for larger schemes (i.e. over 10 residential units or 1,000sq m of new commercial floorspace). However, occasionally a relatively large development will have comparatively little impact on its neighbourhood.

8.9 Conversely, small schemes on confined or inaccessible sites can have very significant impacts, particularly where the construction process will take place over a number of months (or even years) or outside normal working hours. When assessing smaller developments, special regard should be had to on-site factors that would seriously exacerbate the impact of the development works on the surrounding area. These could include development in residential areas, in close proximity to a school or a care home or very narrow or restricted site access (e.g. development in a mews with no footways). Regard will also be had to the nature and layout of a site. It will be much more difficult to fully absorb or contain the effects of demolition and construction in terms of noise, dust vibration etc within the boundaries of a small constrained site. Furthermore, lack of on-site space for plant, storage of materials and loading and unloading of construction may mean that construction effects will inevitably take place close to the boundary and spill out on to the highway network – a particular issue in much of Camden.

8.10 The types of schemes where a CMP will usually be appropriate include:

- Major developments (and some larger scale non major developments);
- Development where the construction process has a significant impact on adjoining properties particularly on sensitive uses;
- Developments which give rise to particular ‘on-site’ issues arising from the construction process (e.g. large scale demolition or complicated or intrusive remediation measures);
- Basement developments;
- Significant developments involving listed buildings or adjacent to listed buildings;
- Developments that could seriously affect wildlife;
- Developments that could cause significant disturbance due to their location or the anticipated length of the demolition, excavation or construction period;

- Development where site specific issues have arisen in the light of external consultation (where these are supported by objective evidence); and
- Development on sites where constraints arising from the layout or size of the site impact on the surrounding road network.

**Contents of a construction management plan**

8.11 Any construction management plan will manage on-site impact arising from demolition and construction. It will also seek to establish control over construction traffic and how this integrates with other construction traffic in the area having regard to t cumulative effect.

8.12 A Section 106 or planning permission securing a construction management plan will contain provisions setting out in detail the measures the final version of the construction management plan should contain. Most construction management plans will be umbrella documents managing all impacts of the demolition, excavation and construction processes. This would include (but is not limited to) issues such as:

- Dust, noise and vibration on site and off site;
- Traffic management highways safety and highways congestion;
- Protection of listed buildings (if relevant);
- Stability of adjacent properties;
- Protection of any off-site features that may be damaged due to works;
- Protection of biodiversity and trees; and
- Preserve the amenity of surrounding residential and other sensitive uses.

8.13 A construction management plan is often split into two elements. The first element will be focussed on controlling environmental impacts, pollution and other non-highway related impacts arising from the scheme, having regard to the requirements of the Council's Considerate Contractor Manual and best practice guides from the GLA. In particular this will seek to control hours of operation and monitor and manage air quality, noise, dust and other emissions of other pollutants and location of equipment. The second element will be focussed on traffic control with a view to minimising disruption, setting out how construction work will be carried out and how this work will be serviced (e.g. delivery of materials, set down and collection of skips), with the objective of minimising traffic disruption and avoiding dangerous situations for pedestrians and other road users.

8.14 Sometimes the Section 106 will link the construction management plan with a requirement to convene a working group to act as a forum for the developer to meet with local residents and businesses to deal with construction issues as they arise.

8.15 Construction management plans will also have to be consistent with any other plans required for the development. For example, a Site Waste Management Plan, which is a legal requirement for works over a certain size which may require the re-use or recycling of materials on-site and therefore the construction management plan will have to reflect that space will be required to sort, store and perhaps crush or recycle materials.

8.16 The construction management plan should include the following statement:
"The agreed contents of the construction management plan must be complied with unless otherwise agreed with the Council. The project manager shall work with the Council to review this construction management plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council and complied with thereafter."

**Transport considerations**

8.17 The details contained within a construction management plan will relate to the nature and scale of the development, however, in terms of assessing the impact on transport the plan should demonstrate that the following has been considered and where necessary the impacts mitigated:

a) Start and end dates for each phase of construction;
b) The proposed working hours;
c) The access arrangements for vehicles;
d) Proposed routes for vehicles between the site and the Transport for London Road Network (TLRN). Consideration should also be given to weight restrictions, low bridges and cumulative effects of construction on the highway;
e) Sizes of all vehicles and the frequency and times of day when they will need access to the site, for each phase of construction;
f) Swept path drawings for any tight manoeuvres on vehicle routes to the site;
g) Details (including accurate scaled drawings) of any highway works necessary to enable construction to take place;
h) Parking and loading arrangements of vehicles and delivery of materials and plant to the site;
i) Details of proposed parking bays suspensions and temporary traffic management orders;
j) Proposed overhang (if any) of the public highway (scaffolding, cranes etc);
k) Details of any temporary buildings outside the site boundary, or overhanging the highway;
l) Details of hoardings required or any other occupation of the public highway;

m) Details of how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any banksman arrangements;

n) Details of how traffic associated with the development will be managed in order to reduce congestion;

o) Arrangements for controlling the movements of large/heavy goods vehicles on and in the immediate vicinity of the site, including arrangements for waiting, turning and reversing and the provision of banksmen, and measures to avoid obstruction of adjoining premises.

p) Details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres);

q) Details of how any significant amounts of dirt or dust that may be spread onto the public highway will be cleaned or prevented;

r) Details of any Construction Working Group that may be required, addressing the concerns of surrounding residents, as well as contact details for the person responsible for community liaison on behalf of the developer, and how these contact details will be advertised to the community;

s) A statement confirming registration of the site with the Considerate Constructors Scheme;

t) How the servicing approach takes into consideration the cumulative effects of other local developments with regard to traffic and transport;

u) Provision for monitoring of the implementation of the CMP and review by the council during the course of construction works;

v) Any other relevant information with regard to traffic and transport; and

**Air quality and climate change considerations**

8.18 A method statement should be prepared and adopted as part of the construction management plan to minimise gaseous and particulate matter emissions generated during the Construction Phase. The following best practice measures shall be included in the method statement:

- Techniques to control $PM_{10}$ and $NO_x$ emissions from vehicles and plant;
- Techniques to control dust emissions from construction and demolition;
- Air quality monitoring; and
- Techniques to reduce $CO_2$ emissions from construction vehicles.

## How will we secure construction management plans?

8.19 Generally a Section 106 agreement (rather than a condition) is the most appropriate mechanism for securing a construction management plan. For larger schemes or developments on constrained sites within heavily

built-up areas where building activities could materially affect the highway construction management plans will always be secured through Section 106s. While the use of conditions is normally preferred to Section 106 Agreements, conditions can only be used to control matters on land within the developer's control. The range of matters typically covered by a CMP, particularly in relation to highways, mean that a Section 106 Agreement will be necessary in most cases.

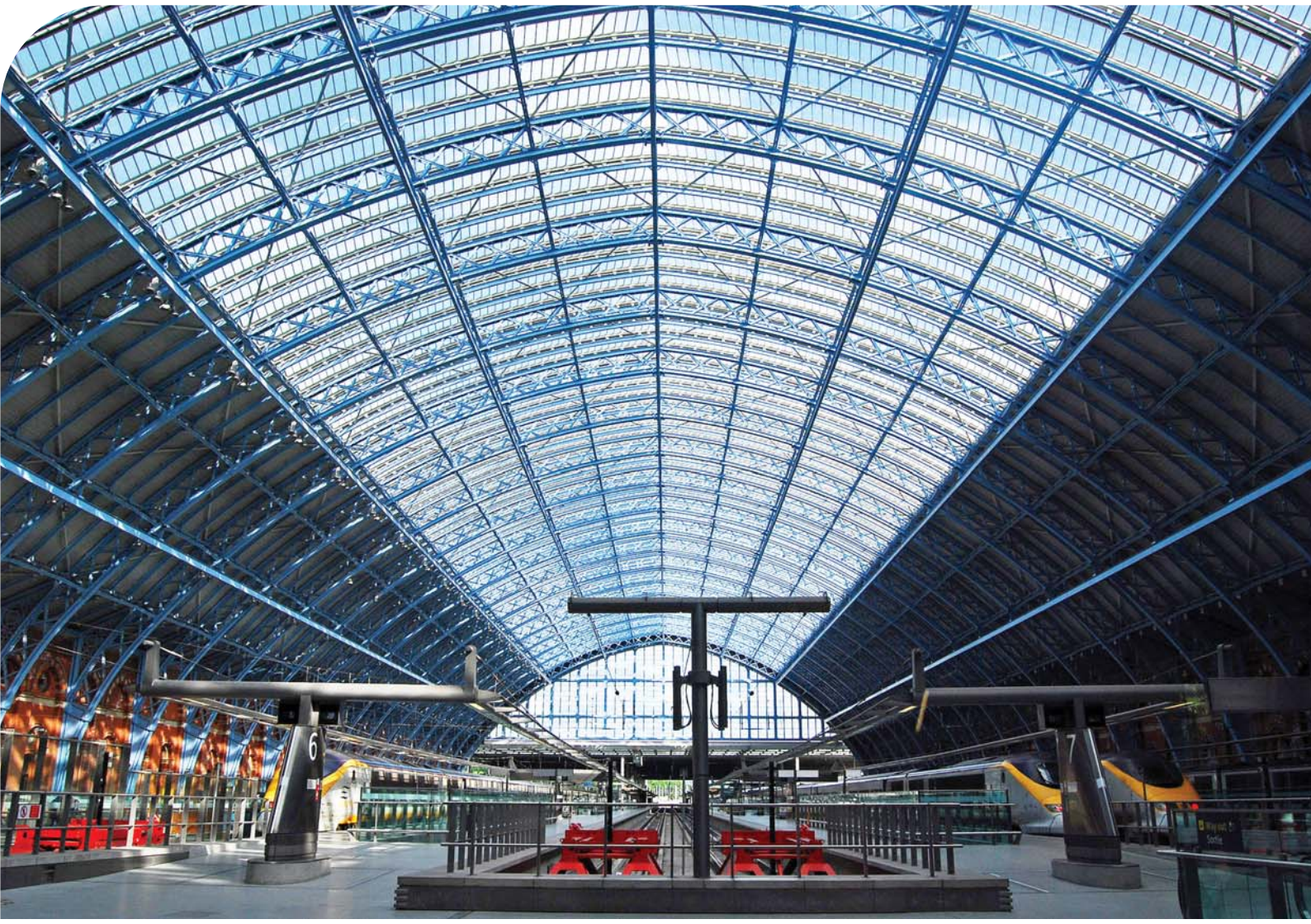
8.20 The level of detail contained in a typical Section 106 also lends itself to the tailored, site-specific approach Camden uses for construction management plans. However, the use of a condition to secure a construction management plan may be sufficient for sites where the building activities associated with the build out can be totally accommodated within the site itself, particularly where these are smaller schemes.

Camden Planning Guidance

# Transport

CPG 7

London Borough of Camden




Camden

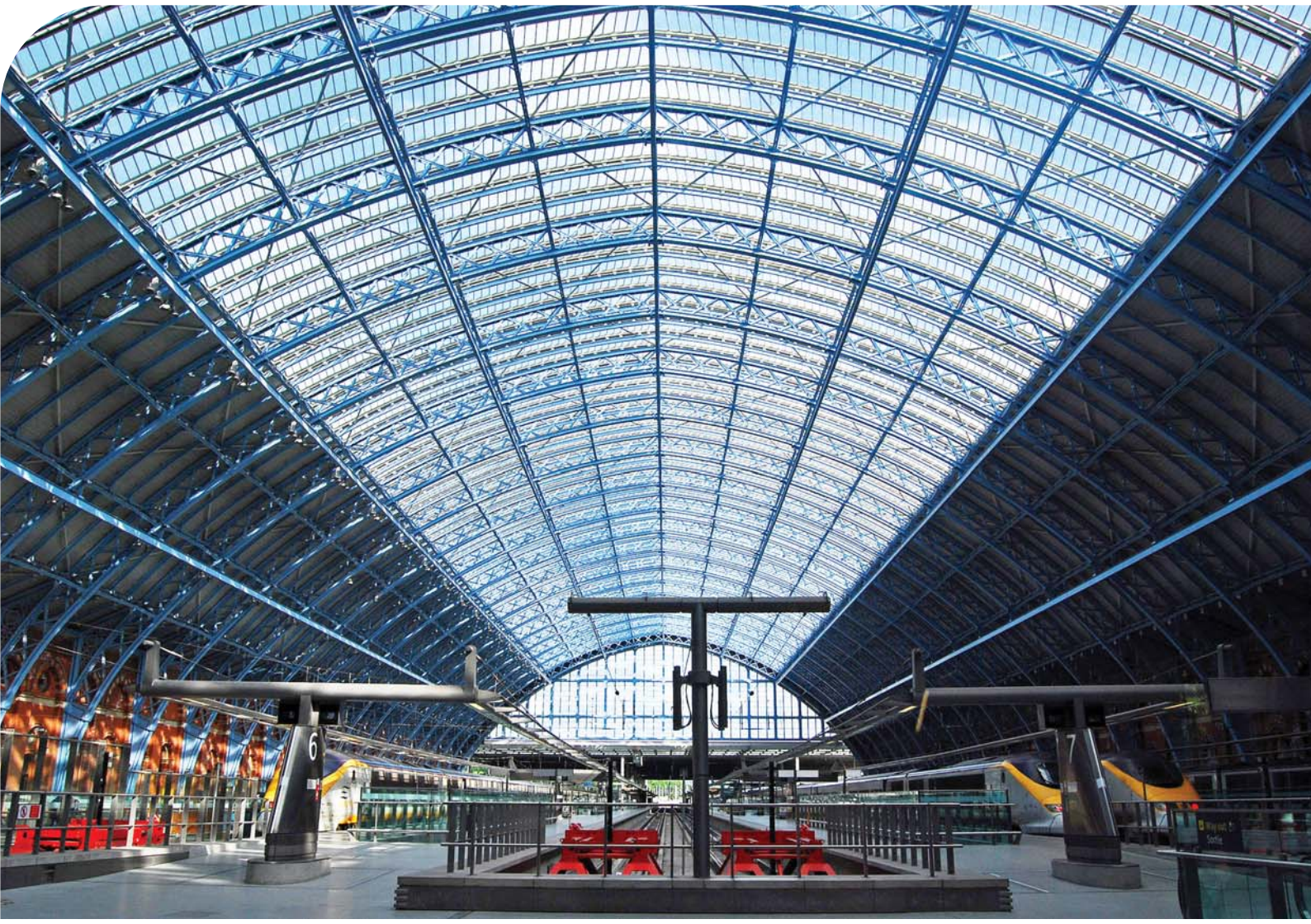
# CPG7 Transport

Camden Planning Guidance

# Transport

CPG 7

London Borough of Camden




Camden

# 5 Car free and car capped development

**KEY MESSAGES**

- We expect car free development in the borough's most accessible locations and where a development could lead to on-street parking problems
- Legal agreements will be used to maintain car-free and car-capped development over the lifetime of a scheme

5.1 This section explains further the terms car-free and car-capped development, as referred to in the Camden Core Strategy and Camden Development Policies, the mechanisms that are needed to secure them, and the circumstances in which it will be appropriate for the Council to refuse additional dwellings that are not car free or car capped.

5.2 It relates to Core Strategy Policy CS7 – *Promoting sustainable and efficient travel* and policies DP18 – *Parking standards and limiting the availability of parking* and DP19 - *Managing the impact of parking* of the Camden Development Policies.

**Car-free development**
A development which has no parking within the site and occupiers are not issued with on-street parking permits
**Car-capped development**
A development which has a limited amount of on-site car parking, but no access to on-street parking permits.

5.3 Car-free and car capped development is successful in Camden because most of the borough has very good access to public transport services. Levels of car ownership are low compared with London generally, and choosing not to own a car can be an attractive lifestyle option. The guidance in this section covers:

- What car free development is, and where it is sought;
- What car capped development is, and where it is sought;
- Implementation of off-street parking restrictions for car-free and car-capped development, including partial provision of car free and car capped development, and maintaining the on-street parking rights of existing occupiers;
- Meeting the parking needs of disabled people.

### When we expect car free and car capped housing

5.4 Car free and car capped requirements apply to developments in particular locations and circumstances:

- we expect car free development in the Central London area, our town centres and other areas with high public transport accessibility (see Development Policy DP18);

- we will also expect car free development where the creation of a new access could lead to on-street parking problems where the loss of kerb space creates unacceptable parking pressure. Refer to Development Policy DP21, and the Access section of this guidance for more information);
- Car capped development applies to schemes that would have an unacceptable impact on on-street parking conditions or highway management and safety through the introduction of new units with access to on-street parking permits (see Development Policy DP19).

5.5 Car-free or car-capped housing may be sought wherever development involves the creation of one or more additional dwellings – whether newly built, or created by a conversion or change-of-use.

5.6 Non-residential development can potentially involve car-free or car-capped designation if it creates a new non-residential address or involves a change-of-use that would otherwise increase the demand for car parking. This reflects the operation of the parking permit scheme, where permits relate to individual addresses.

### Car free development

5.7 Car-free development is development that does not have any car parking. No parking is provided or allowed on the site (except parking designated for disabled people), and all of the dwellings or units created are not entitled to on-street car parking permits. Where we seek car free development our parking standards do not apply as no parking is allowed.

5.8 Camden Development Policy DP18 states that we will expect development to be car free in the Central London Area, the town centres of Camden Town, Finchley Road/ Swiss Cottage, Kentish Town, Kilburn High Road and West Hampstead, and other highly accessible areas.

5.9 'Highly accessible areas' are considered to be areas with a public transport accessibility level (PTAL) of 4 and above. The PTAL of a specific site can be established using Transport for London's Planning Information Database website pages, which can be found at: http://webpid.elgin.gov.uk/.

5.10 Car free development will also be required where the creation of an access to allow off-street parking would reduce the availability of on-street parking (see also section 6 of this guidance on vehicle access), or would otherwise cause problems relating to highway management or safety. Policy DP19 of the Camden Development Policies states that we will resist developments that would harm on-street parking conditions or harm highway safety.

### Car capped development

5.11 Car-capped development is development in which all of the dwellings or units created are not entitled to on-street car parking permits, although some or all of the dwellings or units created may have a parking space

on the site, in accordance Camden's parking standards (see policy DP18 and Appendix 2 of the Camden Development Policies). It therefore differs from car free development because some on-site car parking is allowed, in line with Camden's parking standards.

5.12 Car capped development is sought in developments that are not in the locations listed in paragraph 4.7 above, where additional off-street spaces can be accommodated within the development without harming highway or on-street parking conditions, but where additional on-street car parking is not considered acceptable.

### Circumstances where additional on-street car parking is not acceptable

5.13 There are parts of the Borough where increasing competition for on-street parking through introducing additional premises with on-street parking rights is not acceptable. This is generally the case in the Central London Area, but also in many other areas where the parking spaces available cannot meet existing demand. This has implications for queuing and congestion, illegal parking, and highway safety. In these circumstances, if a developer will not enter into an agreement to designate the additional development as car-free or car-capped, planning permission will not be given.

5.14 In considering the ability of available on-street parking to accommodate the impact of additional development, we will have regard to the cumulative effect of proposals in the area, including unimplemented and partly implemented schemes already granted planning approval.

5.15 Our Parking and Enforcement Plan provides regularly updated permit data, which is used to establish levels of on-street parking pressure on each of the borough's roads. This information will be used when considering the acceptability of applications that would involve the potential allocation of additional on-street parking permits to the future occupiers of new development.

### Implementation of on-street parking restrictions for car-free and car-capped development

5.16 The whole of Camden has controlled parking and, in principle, is appropriate for car-free or car-capped development. On most days, most parking spaces on residential streets are only available to people holding a parking permit issued by the Council. In Controlled Parking Zones we can restrict access to on-street car parking because we can control the issuing of parking permits.

> **Controlled Parking Zones**
> Designated areas in regulations control how parking may be used on different sections of the street and at different times.

5.17 In order to be able to maintain car-free and car-capped development over the lifetime of a scheme, the developer will be required to enter into

a legal agreement under Section 106 of the Town and Country Planning Act 1990 (as amended), which would permanently remove the entitlement to an on street parking permit for each home created:

5.18 The legal agreement requires the owner of the development to inform incoming occupiers that they are not eligible to obtain a parking permit for on-street parking, or to purchase a space in a Council-controlled car park. This part of the legal agreement stays on the local search in perpetuity so that any future purchaser of the property is informed that occupiers are not eligible for parking permits.

### Maintaining on-street parking rights of existing occupiers

5.19 Existing parking rights can normally be retained on development sites, where it can be demonstrated that existing occupiers are to return to the address when it is completed. This is common where an existing dwelling or block is being extended or subdivided. It can also occur where a change-of-use brings a site or property into residential occupation.

5.20 If a development is to have new occupiers, existing parking rights will not apply, and the Council will apply its car-free / car-capped policies as set out in Development Policies DP18 and DP19.

### Meeting the needs of disabled people

5.21 Car-free development and car-capped development should be designed taking into account the needs of disabled car users. Blue Badge holders are able to use parking spaces in Controlled Parking Zones without a parking permit. Minimum parking standards apply to parking for people with disabilities, and 1 parking space for people with disabilities is required per 10 general-purpose dwellings (see Appendix 2 of the Camden Development Policies document). In addition, where car-free and car-capped developments contain wheelchair housing, the Council will expect a parking space to be provided for each wheelchair dwelling. Where a resident in need of a reserved disabled parking space moves into a development with no off-street spaces, the Council will consider a request for a designated disabled space on-street in the same way whether the development is formally car-free or not.

### Further information

5.22 In addition the guidance above regard should also be had to Camden's Parking and Enforcement Plan (2004), which provides further information on our approach to managing parking in the borough.

# 6 On-site car parking

**KEY MESSAGES**

This section includes detailed guidance on:

- Implementation of numerical car parking standards
- Dimensions and layout of spaces, including dedicated spaces for disabled people
- Underground and stacked parking
- Car clubs and pool cars
- Electric charging points

6.1 This section assists applicants for developments that will involve the provision of off-street parking spaces.

6.2 It relates to Core Strategy Policy CS11 - *Promoting sustainable and efficient travel* and policy DP18 - *Parking standards and limiting the availability of car parking*; and Appendix 2 Parking standards of the Camden Development Policies. It should be read in conjunction with section 6 of this guidance on vehicle access.

### When does this apply?

6.3 This guidance applies to planning applications that involve creation of off-street parking spaces, in line with the standards set out in the Camden Development Polices. The parking requirements for emergency services, such as ambulance, fire and policing facilities, will be assessed on an individual basis, having regard to the specific operational needs of a particular use.

6.4 Applicants should first seek to minimise car use from their development, in accordance with Core Strategy Policy CS11 and policies DP16-DP20 of the Camden Development Policies. Alternative measures include:

- provision for walking, cycling and public transport;
- car-free development so that there is no need for parking; and
- car clubs and pool cars.

### How should on-site car parking be provided?

6.5 Standards for the number of spaces required for car parking and servicing are given in Camden Development Policies Appendix 2.

6.6 Thresholds and standards are given as a gross floor area (GFA) relating to the development as a whole, and are not intended to be applied separately to individual units that form part of a larger development. Shared use of parking spaces and servicing bays between units will be encouraged where practical.

6.7 Where a development crosses a threshold, requirements apply to the entire floorspace, not only the floorspace above the threshold. For example, for hotels, the requirement for visitor parking spaces for people with disabilities is 1 space per 1,250 sq m from a threshold of 2,500 sq m (Development Policies Appendix 2). This means that no requirement applies to a hotel of 2,000 sq m, but for a hotel of 5,000 sq m, a requirement of 4 spaces for disabled visitors applies.

6.8 Paragraph 18.7 of Camden Development Policies addresses the provision of parking for employees with a need for "continuous access to a car for work purposes", as part of the maximum standards for employment generating uses. For the removal of doubt, this refers to travel needs that cannot be met by walking, cycling or public transport, and relates to access during the working day, not commuting to and from work

### Dimensions and layout of car parking spaces

6.9 Figure 2 below sets out our minimum standards for the dimensions and layout for off-street car parking spaces.

**Figure 2. Dimensions and layout of car parking spaces**

| | |
|---|---|
| Off-street car parking space (standard) | 2.4m wide by 4.8m deep. |
| Front Garden/Forecourt | 5.0m wide by 6.0m deep. |
| Off-street car parking space for use by disabled people | 3.3m wide by 4.8m deep. |
| Layout of car parking spaces for general use | 90° parking – aisles may be two-way<br>The minimum aisle width between the ends of spaces is 6.0m<br>60° parking – aisles must be one-way<br>The minimum aisle width between the ends of spaces is 4.2m<br>45° parking – aisles must be one-way<br>The minimum aisle width between the ends of spaces is 3.6m |

6.10 Disabled parking should be in line with the Mayor's Draft London Housing Design Guide SPG (July 2009), which states in paragraph 3.3.2 that "Each designated wheelchair accessible dwelling should have a car parking space 2.4m wide with a clear access way to one side of 1.2m wide".

6.11 Dedicated car parking spaces for use by disabled people should be designated with appropriate markings and signs. These spaces should be located as close as possible to main pedestrian entrances and passenger lifts. There must be no obstruction – such as a raised kerb or

heavy doors - between the parking spaces and the entrance to the building. In considering the appropriateness of distances to the furthest facility served by a dedicated parking space, the following guidelines will be taken into account:

| | |
|---|---|
| Uncovered route | Less than 50m |
| Covered route (unenclosed or part enclosed) | Less than 100m |
| Completely enclosed route (unaffected by bad weather) | Less than 200m |

6.12 In addition to dedicated parking spaces, where premises are likely to attract visits by the public, vehicular setting down and picking up points suitable for use by disabled people should be available as close to main building entrances and passenger lifts as possible.

**Underground and stacked parking**

6.13 Because of the high cost of land in Camden, some developers are seeking to use more space-efficient forms of car parking, such as underground and 'stacked' parking.

6.14 Whilst the Council considers that such provision can be appropriate in some circumstances, it must not cause harm in terms of visual impact and safety. In particular, proposals for underground and stacked parking would need to satisfactorily address potential issues in relation to vehicles queuing/ waiting, and impact on the highway, congestion and safety as vehicles manoeuvre around the site, along with any archaeological implications.

6.15 As with any car parking provision, underground and stacked parking must meet Camden's parking standards.

**Car clubs**

6.16 Paragraphs 11.18 of the Camden Core Strategy and 18.14 and 18.15 of the Camden Development Policies encourage the provision of car club spaces as an alternative to the provision of private car spaces, in order to make private transport more sustainable.

6.17 We will seek publicly accessible spaces, where provision is made as part of development. This enables spaces to form part of a wider network, improving accessibility to spaces, benefitting the local community and reducing impact on the public highway (by avoiding the provision of additional on-street spaces).

6.18 Developers should provide spaces for a Camden-approved city car club operator. Please contact the Council for our full list of approved operators.

6.19 The Council's preference is for the provision of car club spaces for electric or low carbon vehicles.


### Electric charging points

6.20 As part of our approach to making private transport more sustainable, the Council promotes the use of low emission vehicles, including through the provision of electric charging points (see Camden Core Strategy Policy CS11).

6.21 Electric charging points allow electric vehicles to charge up whilst parked, ready for the next journey, and are normally located in dedicated parking bays. Further information on electric charging points can be found at: http://www.newride.org.uk/

6.22 We will seek the provision of electric charging points as part of any car parking provision in new developments (policy DP18 of the Camden Development Policies). The emerging London Plan (policy 6.13 Parking) states that 1 in 5 new spaces provided in new developments should provide charging points.

6.23 The Council will promote provision of electric vehicle charging spaces as an alternative to any general car parking spaces, but particularly if the charging spaces will be for electric pool cars or electric car-club cars. W e will encourage use of renewable energy to provide power for charging points.

6.24 Parking for low emission vehicles, pool cars and car clubs should be provided from within the general car parking allowed by Camden's parking standards. If they are provided in addition to general car parking spaces, they are unlikely to be effective in encouraging more sustainable means of transport, and to the Council's overall aim of reducing congestion in the Borough.

### Further information

6.25 The creation of off-street parking spaces will often require the creation of a new vehicle access to a site. This section should therefore be read alongside section 6 of this guidance on Access to sites for motor vehicles, which sets out how proposals involving new means access are judged in terms of impact on the highway, safety and visibility for emerging vehicles.

6.26 Other useful sources of information include:

- Mayor's draft Housing SPG, which contains detailed guidance on the levels of car parking;
- Manual for streets; DfT; 2007, which provides guidance on accommodating car parking within the street environment; and
- Camden Parking and enforcement plan, which sets out a comprehensive approach to managing parking and addresses the need for effective enforcement of parking controls, for both on-street and off-street parking.

# 9 Cycling facilities

**KEY MESSAGES**

This section includes guidance on:

- The implementation of our minimum cycle parking standards for new development;
- The design and layout of cycle parking; and
- Cycle hire and cycle stations.

9.1 This section provides guidance on meeting cycle parking standards in an effective way, so that cycle parking is convenient and secure, and users of a development are more likely to use bicycles to travel to and from the site.

9.2 It relates to Core Strategy Policy CS11 – *Promoting sustainable and efficient travel* and policies DP17 – *Walking, cycling and public transport* and DP19 – *Parking standards and limiting the availability of parking* of the Camden Development Policies. It should be read in conjunction with Development Policies Appendix 2 – Parking standards.

## When does this apply?

9.3 This guidance applies to:

- Applications which involved the creation of one or more additional dwellings;
- Applications which proposed additional floorspace of 500 sq m or more; and
- Applications which are likely to significantly increase the demand for people to cycle to the site.

## How do we implement our cycle parking standards?

9.4 Numerical standards for cycle parking spaces are introduced by policy DP18 of the Camden Development Policies, and set out in detail in Development Policies Appendix 2. These standards are applied at a threshold of 500 sq m in most cases. Throughout the standards, the stated number of spaces relates to the number of bicycles to be accommodated, not to the number of stands.

9.5 Where a development crosses the threshold, requirements apply to the entire floorspace, not only the floorspace above the threshold. For example, at a new leisure development, 1 visitor cycle parking space per 250 sq m is required from a threshold of 500 sq m. This means that no requirement applies to a facility of 400 sq m, but 4 visitor spaces are required for a facility of 1,000 sq m.

9.6 Thresholds and standards are given as a gross floor area (GFA) relating to the development as a whole, and are not intended to be applied

separately to individual units where a development is subdivided into smaller units. Thus, space for cycles may be required for small premises (under 500 sq m) which form part of a larger development.

9.7 Table 6.3 of the London Plan sets out additional cycle parking standards and states that additional cycle parking provision will be required for larger (C3) residential units.

### Location, design and layout of off-street cycle parking

9.8 Cycle parking should be provided off-street, within the boundary of the site. Cycle parking needs to be accessible (in that everyone that uses a bike can easily store and remove a bike from the cycle parking) and secure (in that both wheels and the frame can easily be locked to the stand). Security is a critical concern in the location, design, enclosure and surveillance of all cycle parking. The table below provides detailed guidance on the location, design and layout of cycle parking for various groups of cyclists.

#### Location of off street cycle parking

| |
|---|
| **General**<br>• Cycle parking outside buildings should be positioned near entrances and where frequent surveillance is possible. For short stays, the parking should be sited within 25 metres of building entrances. For stays of over an hour, the parking should be sited within 50 metres of building entrances.<br>• All cycle parking, including all parts of the parked cycles, should be clear of routes needed for pedestrian movement.<br>• The route to cycle parking from street level should be step free. cycle parking inside buildings should be at the entrance level of the building or accessible by a ramp or lift from street level that can accommodate a bike. |
| **Parking for visitors**<br>Parking for visitors should be clearly visible or clearly signed from the public highway, and should be near building entrances |
| **Parking for employees (and other long stay parking)**<br>Parking for employees (and other long stay parking) should be provided either within the building, or otherwise protected from the weather. Consideration should be given to providing lockers and showers for cyclists. For larger development this would be expected and would be a requirement of a Travel Plan (see section 2 of this guidance concerning Travel Plans). |
| **Parking for residents**<br>Parking for residents should be within the building. Parking for a resident may take the form of a space within an individual dwelling provided that the space is close to the door of the dwelling, and access to the dwelling is level, or by a ramp or lift that can accommodate a bike. |

### Design and layout of cycle parking: Sheffield and "Camden" cycle stands

The Council recommends the use of either "Camden" or Sheffield for the provision of off-street cycle parking, as they meet the Council's requirements in terms of accessibility and security, provided they are laid out correctly.

- The "Camden" stand is a new form of Sheffield Stand, which is now used for all new cycle parking installed on Camden's public highway. Developers are encouraged to use it in place of the Sheffield stand, although the Sheffield stand is still acceptable. The Council's Public Realm and Transport team can advice on purchasing "Camden" stands as they are not as widely available as the Sheffield stand.
- The Sheffield Stand is the most common type of cycle stand used in the public highway. It is recommended for use along with Josta two-tier cycle parking;

Annex 1 provides more detailed guidance on the design and layout of "Camden", Sheffield and Josta stands.

We are willing to consider other forms of cycle parking, however you must meet our accessibility and security requirements, details of which can be obtained from the Council's Public Realm and Transport team. Generally, designs that require cycles be lifted into place or provide insufficient opportunity to lock the cycle will not be acceptable.


## The London Cycle Hire Scheme

9.9 The London Cycle Hire Scheme is a public bicycle sharing scheme for short journeys in and around central London. Users can pick up a bike from a docking station, use it for short journeys, then drop it off at any docking station, ready for the next person.

9.10 Whilst the cycle hire scheme is currently focused around central London, the Mayor of London is investigating its expansion. The Camden Core Strategy states that we will seek to ensure that the scheme is extended to key destinations across the borough, including our town centres (see Core Strategy paragraph 11.13).

9.11 Where appropriate, developments close the area covered by the London Cycle Hire Scheme will be expected to contribute towards the scheme,

where justified as a result of increased trips generated. Contributions could include:

- a financial contribution towards cycle hire facilities. The amount sought will be based on the number of additional trips that are generated by the scheme;
- provision of space on-site to accommodate new cycle hire docking stations, in larger developments where there is space and the location is suitable. Transport for London (TfL) is producing a set of guidance for developers regarding specifications and design requirements for docking stations due to be released in 2011.

9.12 Contributions sought will relate both to the individual impact of a scheme and to any cumulative impact of a number of schemes in the same area.

**Cycle stations**

9.13 Cycle stations provide a secure managed area for cycle parking. The Camden Core Strategy promotes the provision of cycle stations as part of an effort to increase the availability of cycle parking in the borough (see paragraph 11.13 of the Core Strategy), and we intend to create a network of publically accessible cycle stations across the borough.

9.14 We will seek the provision of cycle stations in locations where it will be possible to attract a sufficient number of users. Suitable locations include:

- town centres and the central London area;
- transport interchanges;
- large commercial developments;
- residential areas - linked to new and existing residential development of a suitable scale; and
- larger health and education facilities.

9.15 Where developments generate an increased level of activity they will be expected to provide contributions towards the provision and maintenance of nearby cycle stations, in order to mitigate the effects of the increased number of journeys.

9.16 We will also seek on-site provision of cycle stations as part of larger developments in suitable locations. On-site provision of cycle stations can incorporate a development's cycle parking requirements for visitors (as set out in our parking standards), but should also include extra provision for the wider public. Parking provision for employees and residents of a development, as set out in our parking standards, should be provided separately in order to ensure that they retain the appropriate number of spaces to meet the demand that they generate.

**Design of cycle stations**

9.17 As a minimum, cycle stations should incorporate indoor, sheltered standard cycle parking (e.g. Camden or Sheffield type cycle stands) with

controlled access to the indoor area, and lighting. Cycle stations can incorporate a variety of other features including automated cycle locks, changing facilities, lockers, toilets and showers. Access to and from the cycle station by bike must be safe and convenient and accounted for within the space.

9.18 The Camden Cycle Stations Programme - Review of Best Practice (March 2009) provides information on best practice in the provision of cycle stations. Features that contribute to a successful cycle station include:

- Being located not more than 100m from the target destination, with shorter stays requiring shorter distances;
- Good surveillance by staff, other users and passers-by.
- Effective maintenance and management
- Clear and unambiguous signing to and within the cycle station.

## Further information

9.19 In addition to the guidance provided in Annex 1 below (which includes details on the layout of off-street cycle parking), reference may also need to be made to the Camden Streetscape Design Manual. The manual contains dimensions for on-street cycle parking and the widths required for unobstructed pedestrian routes.

9.20 Other supporting documents include:

- Forthcoming TfL Design and specification of cycle hire scheme
- Forthcoming TfL Guidance on Cycle Stations
- Camden Cycle Stations Programme - Review of Best Practice (March 2009)

9.21 London Cycle Network Design Manual (London Cycle Network Steering Group, March 1998)

### Annex 1 – Sheffield Stand Cycle Parking

9.22 This Annex describes in detail how to lay out Sheffield stands. It also can also be applied to the layout of “CaMden” stands.

9.23 The "Sheffield Stand" refers to a common design of cycle parking made from a tubular steel loop, approximately 50mm to 75mm in diameter, that is fixed to the ground (either bolted through a baseplate or set in concrete). Each Sheffield Stand can accommodate two bicycles, one either side, provided there is sufficient clearance next to the stand and sufficient circulation space so all cycle parking spaces can be accessed

9.24 The CaMden Stand is similar to the Sheffield Stand but is in the shape of a rounded “M” rather than a simple loop. This is designed to encourage uses to lock both wheels and the frame to the stand, rather than just the top tube / frame.

**Figure 3. Sheffield Stand Elevation**

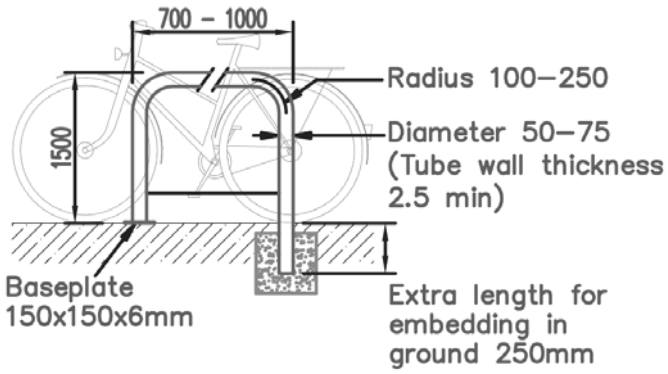
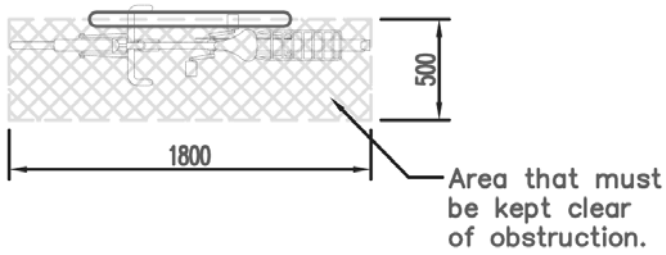


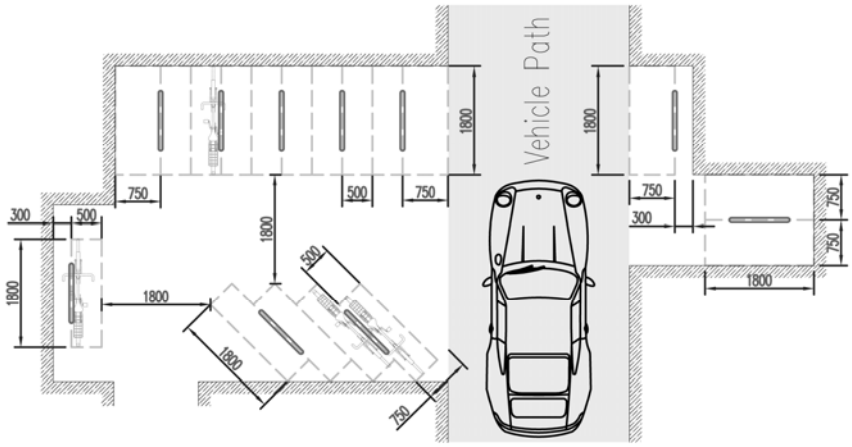

**Figure 4. Sheffield Stand Plan**




9.25 For adjacent stands, an area of at least 1800mm by 500mm next to the stand (measured from the centre line of the tube), must be kept clear for each cycle parking space to allow room for the cycle and working space for locking the bike to the stand. However, if a stand is next to a physical obstruction, such as a wall or a vehicular path, there must be at least 750mm between the stand and the physical obstruction to enable both sides of the stand to be used. If a stand is to be placed close to a wall or other physical obstruction so that only one side of it can be used (i.e. only one cycle can be locked to it), there must be at least 300mm between the stand and the physical obstruction.

9.26 Aisles around the cycle store must be at least 1800mm in width. An example cycle store showing various layout options is shown below. Note that the area to be kept clear does not actually have to be marked on the ground, but is shown in outline for clarity.

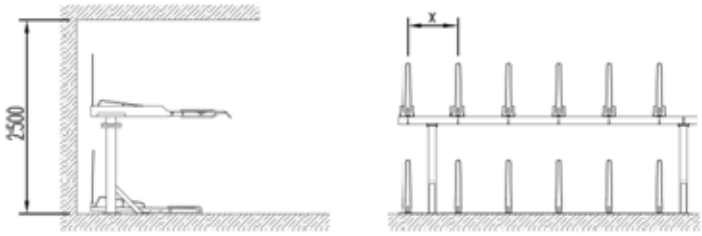
**Figure 5. Cycle stand siting**



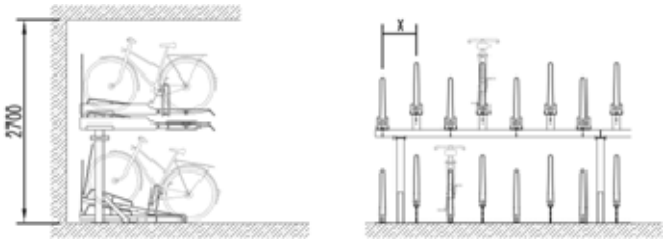

**Josta Two-tier Cycle Parking**

9.27 The Josta two-tier cycle parking system (or similar) is generally able to accommodate approximately twice as many cycles per square meter of floor space as Sheffield stands. It also still meets the Council's requirements for accessibility and security, but requires a ceiling height of at least 2500mm.

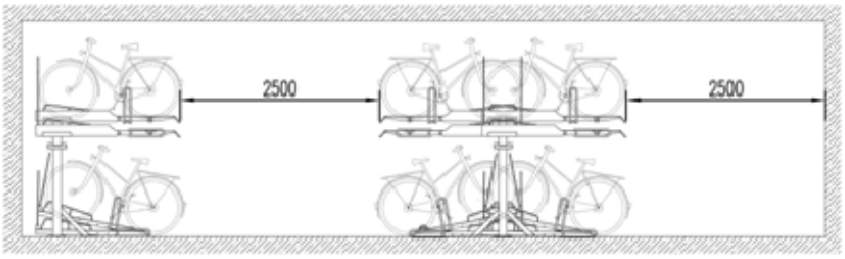
9.28 With a ceiling of at least 2500mm the stands can be placed 650mm apart, i.e. X = 650mm in the diagram below.




9.29 With a ceiling of at least 2700mm the stands can be placed 400mm apart, i.e. X = 400mm in the diagram below.

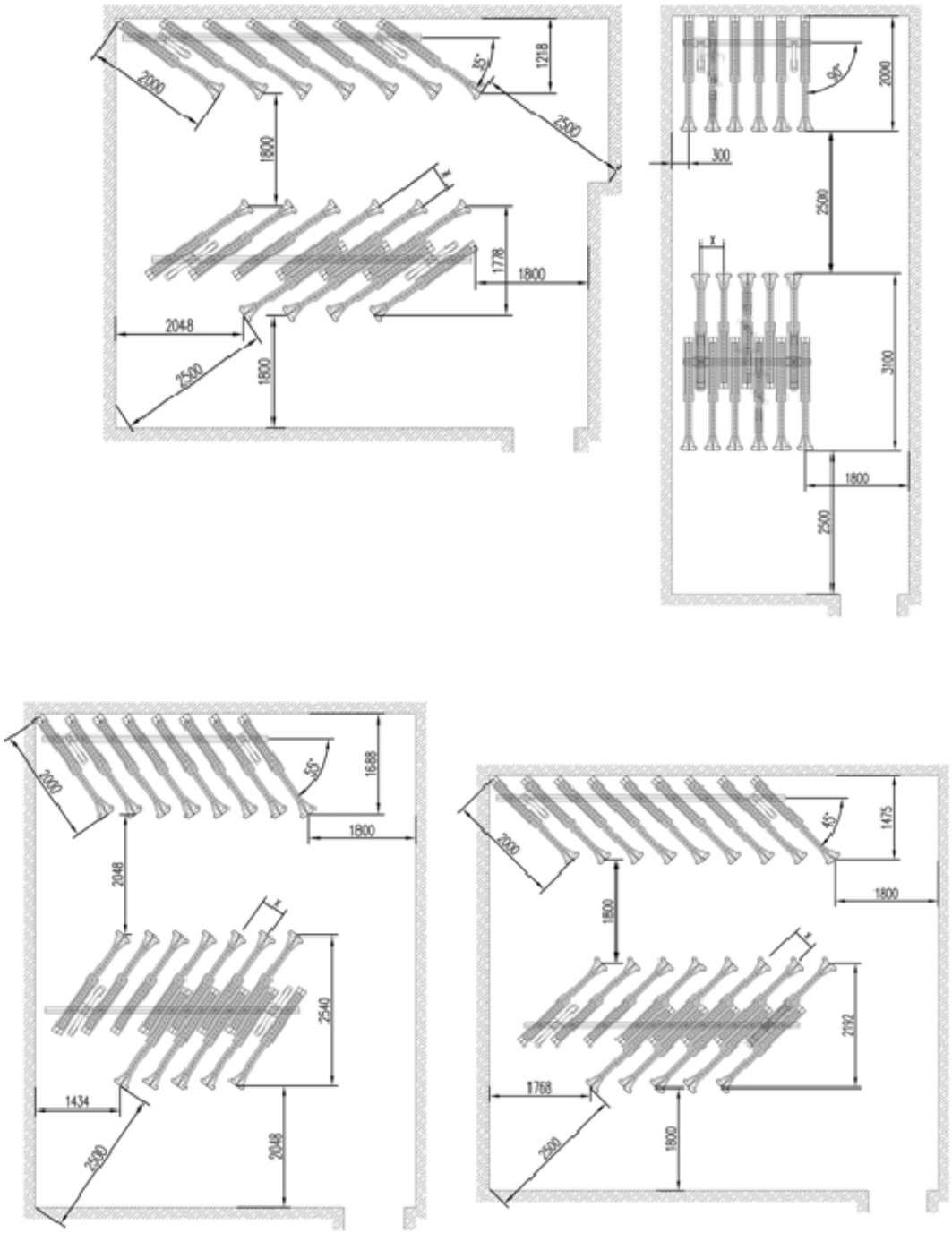



9.30 In order to enable the top tier to be used, at least 2500mm of clearance in front of the stand, measured on a line at the same angle at which the top tier stands are extended (see diagrams below), is required between rows of stands, walls or other obstructions.




9.31 The Josta stands can be arranged at different orientations (angles) provided there is 2500mm of clearance in front of the rack to remove cycles from the top tier (as described above) and aisles around the cycle store at least 1800mm in width. Examples, with minimum distances are shown below. “X” indicates the spacing between stands, which depends on the ceiling height as described on the previous page.

**Figure 6. Josta Stand minimum siting dimensions**



Camden Planning Guidance

# Planning obligations

CPG 8

London Borough of Camden

July 2015

Camden

# CPG8 Planning obligations

# 1 Introduction

## What is Camden Planning Guidance?

1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Plan documents. This guidance is therefore consistent with our adopted Core Strategy and Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional material consideration in planning decisions.

1.2 The Council adopted CPG8 Planning obligations on 7 September 2011 following statutory consultation. This document has been subject to two updates:

- Updated 25 February 2015 to take into account Camden's Community Infrastructure Levy (CIL) Charging Schedule following independent examination. Camden's CIL charging schedule came into effect on 1 April 2015.
- Updated 17 July 2015 to include revised guidance for employment and business support.

Details on these updates and the consultation process are available at camden.gov.uk/cpg.

## What does this guidance cover?

1.3 The purpose of this guidance is to provide an indication of what may be required when the Council considers that a development proposal needs a planning obligation to be secured through a legal agreement. Planning obligations can be used positively and to address some of the negative impacts of development which would otherwise make a development unacceptable. This guidance also sets out how planning obligations will be operated alongside the Community Infrastructure Levy.

## When will it apply?

1.4 This guidance applies to all development where proposals are likely to be subject to planning obligations under Section 106 of the Town and Country Planning Act 1990 (as amended). In dealing with planning applications, local planning authorities consider each proposal on its merits and reach a decision based on whether the application accords with the development plan, unless material considerations indicate otherwise. Where applications do not meet these requirements, they may be refused.

1.5 In some instances, however, it may be possible to make development proposals which might otherwise be unacceptable, acceptable through the use of planning conditions or, where this is not possible, through planning obligations. Where there is a choice between imposing conditions or entering into a planning obligation a condition will be used.

1.6 The use of planning obligations is an important tool in managing the impacts of development and assisting the delivery of necessary infrastructure to support the London Plan and Camden's Local Plan documents. They will be used to ensure that the strategic objectives of the Core Strategy and Development Polices are met through requirements attached to individual development proposals.

1.7 The use of planning obligations is specifically required through policy CS19- Delivering and monitoring the Core Strategy although other Development Policies may be used to justify an obligation, particularly those relating to affordable housing, sustainability and transport. Further site specific requirements are set out in our adopted Site Allocations DPD. This guidance is intended to provide general advice on how planning obligations operate. Large scale developments generally have more significant and complex obligations attached to them, but obligations may also be applied to small scale developments to achieve measures such as car free housing or to manage the impacts of construction.

# 2 Background

## Infrastructure to support new growth

2.1 In order to deliver growth and ensure development is implemented in a sustainable way it is essential that the necessary infrastructure is in place to support and enhance this development. This applies both to the direct infrastructure needs of development sites such as highway works and landscaping, but also the cumulative impacts of additional development on infrastructure such as schools, transportation, open spaces and community facilities.

## National planning context

2.2 The legislative framework for planning obligations is set out in Section 106 of the Town & Country Planning Act 1990 (as amended).

2.3 Further legislation is set out in Regulations 122 and 123 of the Community Infrastructure Levy (CIL) Regulations 2010 (as amended).Government policy on planning obligations is set out in Paragraphs 203 to 205 of the National Planning Policy Framework (NPPF) (March 2012).

2.4 Regulation 122 and Paragraph 204 of the NPPF set out the following tests that must be satisfied in order for obligations to be used to allow planning permission to be granted for development proposals:

- the obligation must be necessary to make the development acceptable in planning terms;
- the obligation must be directly related to the development;
- the obligation must be fairly and reasonably related in scale and kind to the development.

## The Community Infrastructure Levy

2.5 The Community Infrastructure Levy (CIL) is a charge which local authorities will be able to collect on new developments in their area. It is based on a formula relating to the type and size of development and is collected when planning permissions for new developments are implemented. The 2008 Planning Act introduced the power to allow a levy to be charged on property developers to raise funds for infrastructure. For the purposes of the Act infrastructure includes: roads and other transport facilities, flood defences, schools and other educational facilities, medical facilities, sporting and recreational facilities and open spaces. The CIL will generate funding to deliver infrastructure projects that support residential and economic growth, provide certainty for future development, and benefit local communities.

2.6 Camden commissioned an Infrastructure study to be carried out by URS planning consultants in 2012. This sets out most of the infrastructure which will be needed to support new growth in Camden.

2.7 The study looked at the whole range of infrastructure which may be needed under the general headings of social infrastructure (including education, health, sports/leisure, open spaces, libraries ,employment training and community facilities), utilities (water energy, telecommunications, sewerage flood risk, policing ambulance and fire services) and transport (roads, public realm, walking/cycling provision and public transport). Taking into account other funding sources a funding gap of at least £280 million was identified until 2026. This included £55-60M for schools, £22M for community facilities, £60M for health, and £140M for transport. This study was used to as part of the evidence to justify introducing a CIL in Camden. An update to the Infrastructure study has been carried out which was published in February 2015.

2.8 The CIL regulations also scale back the scope of section 106 legal agreements so that financial contributions from only 5 obligations entered into after April 2010 can be pooled for the same type of infrastructure or project. This restriction will apply from 1 April 2015 when Camden introduces its CIL charging schedule. Affordable housing contributions are not affected by these changes, but some forms of contributions for local infrastructure such as school places or open space may in future be funded through the CIL.

**Development Plan policies supporting planning obligations**

2.9 The content and nature of any legal agreements in Camden needs to be considered having regard to the London Plan and Camden's Core Strategy and Development Policies. London Plan Policy 8.2 (Planning Obligations) states:

'…C. Development proposals should address strategic as well as local priorities in planning obligations.

D. Affordable housing; supporting the funding of Crossrail (see Policy 6.5) where this is appropriate; and other public transport improvements should be given the highest importance. Where it is appropriate to seek a Crossrail contribution in accordance with Policy 6.5 (of the London Plan), this should generally be given higher priority than other public transport improvements.

E. Importance should also be given to tackling climate change, learning and skills, health facilities and services, childcare provisions and the provision of small shops….'

2.10 The use of planning obligations has an important role to play in meeting the strategic objectives of the Council's Core Strategy and in particular ensuring that the infrastructure is provided to support new growth, meet Camden's needs for new homes jobs and facilities, and to provide an attractive and sustainable environment as in policy CS19 – Delivering and monitoring the Core Strategy.

2.11 This states the Council will:

- work with relevant providers to ensure that necessary infrastructure is secured to support Camden's growth and provide the facilities needed for the borough's communities. Information on the key infrastructure programmes and projects in the borough to 2025 are set in Appendix 1;
- use planning obligations, and other suitable mechanisms, where appropriate, to:
  - support sustainable development,
  - secure any necessary and related infrastructure, facilities and services to meet needs generated by development, and
  - mitigate the impact of development ...'

## Use of planning obligations

2.12 Camden will still use planning obligations where appropriate to mitigate the negative impacts of development which would otherwise not be acceptable through:

- Restricting the development or use of the land in any specified way;
- Requiring specified operations or activities to be carried out in, on, under or over the land;
- Requiring the land to be used in any specified way; or
- Requiring a sum or sums to be paid to the authority on a specified date or dates periodically.

2.13 Unless it is stated otherwise, planning obligations run with the land in perpetuity and may be enforced against the original covenantor, and anyone else that acquires an interest in the land, until such time as they are discharged or otherwise modified. A planning obligation must be by a deed and is registered as a local land charge and can only be secured through the following ways:

- Bi-lateral Section 106 agreements between local planning authorities, persons with a legal interest in a piece of land and any other interested parties
- Unilateral planning obligations, sometimes call "unilateral undertakings" (UUs) signed solely by parties with a legal interest in the land or other interested parties. These are used when only the owner/ mortgagee/ developer (and not the Council) are to be bound by the agreement.

2.14 As proposals differ in terms of scale, nature, location and impacts the relative priorities of obligation types will differ on a case-by-case basis. What may be required will be established through the key policies and associated planning guidelines. When assessing the scope of planning obligations the Council will also take into account the range of other benefits provided by a particular development and financial viability issues.

2.15 In some cases developers may wish to argue as a background consideration that the economic viability of their development may be compromised by the range and/or scale of any CIL and the obligations being sought. The Council will expect developers to co-operate on an "open book" basis to provide information to demonstrate these circumstances. Developers should always make themselves aware of the Council's policies at early stage, so that the policy requirements and potential costs of a CIL and obligations are fully factored into any land purchase or development decisions.

2.16 Housing is the identified priority land use of the Core Strategy and the delivery of affordable housing will be a high priority in terms of planning obligations. This also accords with the London Plan. The local impacts of individual and cumulative schemes on the local environment and local community infrastructure, and how they are designed and integrated physically and socially with existing neighbourhoods are also very important issues.

2.17 Where the impacts of a use and/or a design go beyond the immediate boundary of the site then these will need to be addressed and this may be through the use of planning obligations. The Council encourages developers to initiate and carry out local consultation where appropriate and take into account local issues in drawing up their detailed proposals. The use of forums such as the Development Management Forum can also be useful in presenting potential schemes and identifying local issues. Design and Access Statements will be useful tools for developers to assess how their development integrates with local areas in terms of local streets, public spaces and local facilities.

## Interaction between CIL and planning obligations

2.18 Many planning obligations will be non-financial. However, Regulation 123 of the CIL Regulations indicates that in the future planning obligations cannot be sought to secure infrastructure projects or types of infrastructure that will be wholly or partly funded by the CIL.

2.19 The Council will publish a 'Regulation 123' list of infrastructure projects or types of infrastructure that it intends will be, or may be, wholly or partly funded by CIL. When the Camden CIL Charging Schedule and the Regulation 123 list are adopted by the Council, funding for the specific types of infrastructure or projects on the list cannot therefore be sought through section 106 planning obligations.

2.20 The provision of affordable housing currently lies outside of the remit of CIL and will continue to be secured through planning obligations. Planning obligations will also continue to be used for local infrastructure requirements directly related to development sites, such as provision of open space and landscaping on or in the immediate vicinity of a site, habitat protection, and highways works to make development acceptable in planning terms.

2.21 The principle is that all eligible developments must pay towards CIL as well as – by way of a s106 Agreement – contributing to the costs of any site specific requirements that are necessary to make the development acceptable in planning terms, while adhering to the provisions of Regulations 122 and 123 of the CIL Regulations 2010.

| Mechanism | Details | Use |
|---|---|---|
| CIL | A standard charge per square metre of all chargeable development as set out in the Charging schedule. | To secure financial contributions for Borough-wide infrastructure as specified in the Regulation 123 list which will be likely to include generic projects for transport, education open space and community facilities |
| Planning Obligations | Measures required to mitigate the site-specific impacts of development. These could include non-financial obligations and financial contributions. | Affordable Housing<br>Infrastructure to address the site specific and related impacts of development and which is not included in Regulation 123 list<br>Non-financial obligations such as management plans, or car- free restrictions. |

2.22 The CIL regulations allow collecting authorities to accept land in lieu of a CIL payment. It is not envisaged that Camden will make use of this provision. The regulations also permit the provision of infrastructure as payment towards a CIL. Camden intends to use this power only sparingly and in genuinely exceptional cases where it can be demonstrated that the payment will secure the delivery of a transformative strategic infrastructure project e.g. though the unlocking of the development potential of a particular area.

## General procedures

### Pre-application stage

2.23 The Council offers a formal pre-application advice service to assist potential applicants when proposals are being drawn up and applicants should familiarise themselves with adopted policies and this

supplementary guidance. The pre-application service will be useful in identifying areas that may be subject of planning obligations prior to submission of a planning application.

2.24 Where formally required, supporting documents such as a Design and Access Statement, an Environmental Statement and a Transport Assessment will be expected to consider the relevant range of impacts of the proposed development and set out measures proposed to deal with them. Indeed on larger development applicants will be expected to provide a statement setting out their planning obligations strategy. It is therefore important that local consultation takes place on larger schemes to identify these local impacts and issues and how they will be addressed.

**Application stage**

2.25 The final content and scope of planning obligations will be negotiated through the planning application process which will be carried out by the Council's Development Management Team. Applicants will be expected to enter into an agreement based on the Council's standard agreement and clauses.

2.26 Once an application is identified as potentially requiring one or more planning obligations, the Council's legal team will be instructed to produce an early "without prejudice" draft for discussion. Applicants will be required to provide contact details of their advisors as soon as possible in the application process. The Council's legal team will require a legal undertaking from the applicant's advisors to cover the cost of drafting the legal agreement as well as any relevant disbursements, e.g. Land Registry title information.

2.27 The Council will take the implementation costs of any obligations into account and will expect there to be a neutral impact on Council expenditure and resources. Obligations may need to include fees or associated costs for delivery of obligations where such costs fall to the Council.

**After planning permission has been granted**

2.28 When planning permission has been granted and the legal agreement issued, copies of the documentation will be forwarded to the Council's Planning Obligations officers. Officers will maintain a record of the planning obligation requirements and will monitor the implementation of the legal agreements signed by developer. It is important that notices of implementation, any plans, payments or other details required through a legal agreement should be sent to the planning obligations officer in the first instance.

**Costs and charges relating to planning obligations**

2.29 In addition to any related fees or contributions owed under specific obligations such as highways works, as a principle the Council will also seek to recover all of its costs in relation to the preparation , monitoring,

administration and processing of planning obligations and the work arising out of them. These charges fall into two categories

- (i) those relating to work undertaken by legal and other officers in preparing the legal agreement containing the obligations ("Legal and Preparation Charges") and
- (ii) those relating to work undertaken by officers in processing, monitoring and implementing obligations contained in the Agreement ("Processing and Monitoring Charges").

Charges will be based on a standard Charging Schedule referencing the number of Heads of Terms in an Agreement and have been agreed by Cabinet under its functions agreeing Council fees and charges.

**Legal and preparation charges**

2.30 To facilitate preparation of consistent agreements standard legal templates can be made available to give an indication of the likely format of an agreement, but the final drafting will be carried out by Camden Legal Services and a charge will be levied. Legal and Preparation Charges are contained in a schedule of fees agreed by the Council's Cabinet on an annual basis and available on the Council's website or from Camden Legal Services upon request. All Legal and Preparation Charges will be payable prior to or at the time that a Section 106 agreement is completed.

**Processing and monitoring charges**

2.31 The processing, monitoring and implementation of planning obligations before and after completion of the Agreement requires the input of significant Council resources. This relates to a range of activities which arise directly from the grant of planning permission for development and are necessary to ensure that details of measures required to mitigate the development impacts are submitted and approved, and the measures are properly carried out.

2.32 Costs associated with this work are distinct from any costs associated with processing a planning application and legal fees for preparation of the Agreement, and in many cases will be ongoing after a development has been implemented and would not have arisen were it not for the specific planning impacts of the development and related obligations. Hence it is appropriate that Processing and Monitoring charges relating to such obligations are borne by the developer.

2.33 Examples of activities carried out by the Council to facilitate planning obligations are:

- Ensuring the details of all agreements are accurately recorded on a database and Monitoring agreements (including site visits to check for implementation, as necessary);
- Correspondence associated with requirements and payment of financial contributions (including index linked calculations);

- Receipt and monitoring of financial contributions and reminders/enforcement action taken if appropriate; and ensuring that contributions are spent in accordance with the terms of agreements including any expenditure deadlines:
- Coordinating and assessing discharge of both non-technical and technical plans and strategies (e.g. sustainability and energy efficiency plans)
- The assessment, inspection and supervision of related plans and proposals to manage impacts arising during construction and, where necessary, liaising with developers, contractors and neighbours to put in place additional measures to alleviate local resident concerns.
- The project management and delivery of specific obligations for which contributions have been made in lieu of meeting on-site requirements and require Council resources to implement, such as off-site affordable housing.

2.34 Current Processing and Monitoring Charges have been established by taking into account financial and non-financial clauses and reflect the size and potential complexity of the agreement. In respect of significant major schemes and the delivery of certain obligations bespoke charges will be negotiated with reference to the scale and complexity of the agreement , the nature of the obligations and the resources likely to be required.

2.35 For Minor schemes the Processing and Monitoring Charge per head of term is currently £531 and for Major Schemes the Processing and Monitoring Charge per head of term is £745. These charges will be subject to review and will increase on an annual basis by up to 3%, to be determined by using the relevant indices published by ONS as part of the annual review of Council fees and charges. Any increases in fees and charges over 5% are subject to Cabinet approval. Like legal fees, Processing and Monitoring charges are payable prior to or upon completion of the Section 106 legal agreement. There may be some limited circumstances where the level of monitoring charge may be reviewed if warranted.

2.36 Separate fees in the form of contributions payable through section 106 agreements may be negotiated where warranted and are considered necessary in planning terms and directly related to development where further costs of technical verification, inspection and ongoing supervision are likely to be incurred as a direct result of a particular development. Examples of obligations which may necessitate a contribution for implementation include construction management plans and basement construction plans. Further information on construction management plans is available in CPG6 Amenity and further information on basement construction plans is available in CPG 4 Basements and lightwells.

## Financial obligations

2.37 In most cases, financial obligations are intended to provide infrastructure to serve the occupiers of a development, or to provide for works that will

mitigate the local impacts of development. To ensure that the necessary measures are in place prior to or as soon as possible after occupation, all Section 106 financial obligations related to a development will be payable when implementation of the development commences, when CIL liability also takes effect. This principle will apply unless an alternative arrangement is specified in the legal agreement and is in accordance with other parts of this guidance or is otherwise justified by the particular characteristics of the development or the obligation.

2.38 The Council will not normally accept clauses in agreements that place unrealistic time constraints on expenditure of funds. Projects such as transport infrastructure can take many years to deliver. Rather, the Council's usual approach will be for the agreement to specify that monies should be spent on an agreed scope of works and the Council will work with developers and landowners to carry out those works in deliverable time periods.

# 3 Amenity

3.1 Development can be positive, but it can also have a significant environmental impact on the amenity of those who live near the development site. It can sometimes cause general nuisance and disturbance, vibration, noise pollution and dust pollution. Development can also have an impact on the surrounding landscape and biodiversity.

3.2 The negative impacts of development on amenity can be short term and connected to the construction phase of the development, or they can be long term and connected to the day to day operation of the development. The negative impact of a development on the amenity of the surrounding area can normally be offset by good design, planning conditions and controls covered by other legislation.

3.3 Where these measures are not adequate to deal with the potential negative environmental impacts of a proposed development which is deemed generally acceptable, a Section 106 Agreement can be drawn up between the Council and the developer, requiring the developer to undertake certain actions to offset those impacts.

3.4 The Council will seek to manage the impact of development when considering a development proposal in line with Development Plan policies DP26 and DP28. However, certain aspects of demolition and construction have specific planning implications and may need to be addressed through planning conditions or planning obligations entered into through a Section 106 Agreement.

3.5 Depending on the complexity and potential impact of the proposal costs may be sought from the applicant to cover the additional costs to the Council of resourcing the necessary assessment and supervision of these plans and requirements.

## Construction

3.6 Where demolition and construction is likely to affect local amenity, it is better to consider the environmental impacts at the planning stage and seek ways to minimise them. Many concerns can be addressed through adoption of a co-operative stance between all parties involved and developers should refer to and utilise the Considerate Constructors Scheme.

3.7 Many of the environmental impacts of construction works are covered by specific legislation to control pollution, maintain clean air and minimise disturbance. Because of this and other controls small construction projects cause relatively minor amounts of local disturbance and in most cases will not require a section 106 agreement to deal with construction management. However, in the case of large construction and demolition works, planning obligations may be used to minimise the environmental impacts and address the consequences of construction (e.g. to manage construction traffic and/or reinstate surfaces to a condition that existed prior to construction).

3.8 In most cases planning obligations will involve a demolition and/or construction management plan. Please refer to Camden Planning Guidance 6 Amenity, Section 8 for further detail on Construction Management Plans (CMPs). In these plans the developer undertakes to carry out the demolition or construction works in strict accordance with a plan approved by the Council. The plan may include provisions for phasing, sequential development, management of waste, controlling noise and access during construction. When drawing up the construction or demolition management plan the developer will be required to consult with officers of the Council, the police and local residents and businesses as relevant. Local businesses could also be used to supply materials and services in relation to development and construction in order to minimise travel distances and transport costs.

3.9 As outlined also in CPG4: Basements and lightwells measures to alleviate impacts may be secured through condition and/or section 106 agreement as appropriate. As many impacts occur beyond the application sites section 106 agreements will need to be used.

3.10 This may require the submission and approval of further plans and methodologies in advance of works starting. These will need to be submitted as soon as logistically possible e.g. on appointment of a contractor (who should be informed of and familiar with these type of requirements as part of a selection process), but well in advance of any works on site taking place. If the Council cannot approve the submitted material because it is inadequate or not enough time has been given then works cannot commence.

3.11 **All related plans must be prepared and submitted well in advance of works taking place and must be approved before any related works commence.**

3.12 The Council may require the developer to set up a Construction Working or Liaison Group in order to discuss, advise and, where appropriate, make recommendations to the developer in relation to construction management. The Working Group should be made up of an appropriate number of representatives from local residents and/or business associations, a nominee of the Council, and a project manager and/or Liaison Officer who will act as a point of contact between the local community and the developer.

3.13 A Construction Working Group can have an input into the Construction or Demolition Plan or Method Statement for Construction, which the developer must submit for the approval of the Council before implementation. The plan or statement should normally cover the following:

- the programme for construction works;
- site conditions;
- erection of hoardings and scaffolding;
- time of operations;

- noisy activities;
- time of deliveries;
- dealing with construction traffic, vehicles and other likely traffic and parking issues;
- temporary road and footway closures and surfacing reinstatement/repair proposals; and
- consideration of complaints from the business and residential community.

3.14 Construction should proceed at all times in accordance with this plan or Method Statement and updated where appropriate to respond to changing circumstances. A pro-forma CMP is available on the Councils website at http://www.camden.gov.uk/ccm/content/environment/planning-and-built-environment/two/planning-applications/making-an-application/supporting-documentation/planning-agreements.en

## Construction waste

3.15 The Council will seek to minimise the amount of waste generated by a development and to maximise the amount of waste that is reused or recycled. Developers should try to ensure that construction waste is minimised. Recycling of demolition waste can help reduce the amount of aggregates that have to be transported through London and contribute to the saving of resources.

3.16 Construction waste needs to be disposed of safely and the vicinity of the construction site should be kept in a clean and safe condition. The Council may require the developer to submit for approval a Construction Waste Management Plan separately, or as part an overall Construction and Demolition Plan, which the Developer will be obliged to follow during the period of construction.

## Noise

3.17 Noise pollution has a major effect on amenity and on quality of life in general. The Council will not grant permission for noise sensitive development in locations where there is noise pollution, unless appropriate attenuation measures are taken. Policy DP28 Noise and vibration sets out the acceptable thresholds for noise in relation to sensitive uses. If suitable separation cannot be achieved the Council will consider whether it is practical to control or reduce noise levels through the use of conditions, planning obligations or other environmental legislation.

3.18 Whilst design measures and planning conditions will often be sufficient to address noise impacts within the development site, planning obligations may require (including a financial contribution where legitimate):

- noise mapping;

- noise monitoring to identify the number of people adversely affected by noise from road traffic and railways, and to validate noise levels calculated by noise mapping; and/or
- a post development survey to confirm that requisite measures have been implemented successfully.

3.19 In addition the Council may require a noise management plan through a legal agreement, which may require a developer to:

- put in place a scheme for the sound insulation of affected dwellings in order to safeguard amenity;
- reduce noise at source, e.g. by vehicle fleet selection to minimise noise generated by individual vehicles such as delivery lorries, cars and railway vehicles;
- implement off-site noise mitigation measures against traffic noise and vibration such as noise barriers and sound insulation of residential properties and other noise sensitive receivers;
- provide and maintain off-site tree and landscape buffers;
- put into operation a traffic management scheme to reduce road traffic noise; and/or
- work with the local highways authority to implement requisite highways works and a maintenance programme incorporating provision of quieter road surfaces, such as porous asphalt.

## Contaminated land

3.20 Contamination of the ground and underground water can affect human health, cause harm to the natural environment and damage buildings and underground services. The Council will require measures to remove unacceptable risk from contaminated land and thus make the site suitable for its new use by way of planning conditions.

3.21 Where a development includes any potentially contaminative uses the Council will expect proposals to be submitted to prevent future contamination of land or groundwater and may impose planning conditions to that effect. Land contamination issues must be fully addressed in any environmental assessment or statement to accompany a planning application.

3.22 For those developments in or adjacent to areas where objectives for land contamination are unlikely to be met by condition (i.e. where there is still a residual impact), the Council will require a section 106 planning obligation. The planning obligation will be directed towards measures designed to deal with the contamination, including during construction works, and to make the site suitable for its intended use.

3.23 The Council may require a financial contribution for:

- site investigation and remediation works which would include any measures to prevent hazards arising from future use of the site and the disposal or containment of any contaminants;

- for monitoring work following the completion of the development, e.g. measuring gas or water contamination in boreholes or installing permanent monitoring equipment; and/or
- a post-development survey to confirm that requisite measures have been implemented successfully.

3.24 A management plan may also be necessary requiring the maintenance of remedial works such as landscaping or water treatment facilities, or imposing restrictions on the land to minimise and control future potentially hazardous or contaminating development or use of the site.

## Microclimate

3.25 Large developments have the potential to change the microclimatic conditions in the surrounding area, for example by overshadowing a public space for large parts of the day, or by causing windy conditions around the development. The Council will expect that in the case of a development that has the potential to have an adverse effect on the environmental conditions in a nearby street or public space relevant attenuation measures should be integrated into the proposals.

3.26 On-site attenuation measures can also be specified in the planning conditions attached to a planning permission. The Council may require a developer to undertake an assessment (e.g. a wind assessment) of the development as part of the planning application submission. The developer may be required to integrate any findings or recommendations into the finished development. The Council may also require the developer to manage and maintain a development in accordance with an environmental plan, which may need to be approved as part of an application.

3.27 In certain cases the adverse effects of a development on the environmental conditions of the public spaces around and within the development may be attenuated by off-site measures such as planting trees as a windbreak. Other off-site shading or shielding devices may be required to control or improve the environmental conditions in public and semi-public spaces around the proposed development. The Council may require the developer to pay a financial contribution to secure these site related works.

# 6 Affordable housing and housing in mixed-use development

6.1 The Council will use planning obligations to secure the provision of:

- an appropriate proportion of housing in mixed-use developments; and
- an appropriate proportion of affordable housing in residential and mixed-use developments.

6.2 Contributions to housing and affordable housing may be required under Development Policy DP1 – Mixed-use development and Development Policy DP3 – Contributions to the supply of affordable housing. Policies DP1 and DP3 indicate that the contributions should normally be made on the development site that generates the policy requirement, but the policies provide for off-site contributions in a limited set of circumstances, and these contributions may exceptionally take the form of a payment in lieu.

6.3 CPG2 Housing sets out all the Council's usual arrangements for the provision of housing and affordable housing through policies DP1 and DP3, and housing in mixed-use, particularly section 1 Affordable housing and housing in mixed-use development. CPG2 gives guidance on providing housing and affordable housing on-site and off-site, including the use of planning obligations. Paragraphs 2.68 to 2.88 set out the limited circumstances where on off-site contribution may be accepted and the exceptional circumstances where this may take the form of a payment in lieu.

6.4 This section of the guidance provides guidance on how payments in lieu of housing/ affordable housing are calculated, but does not provide guidance on any other aspects of policy DP1 and policy DP3. To find out whether a payment in lieu might be acceptable, please also refer to paragraphs 2.68 to 2.88 of CPG2 Housing.

6.5 In summary:

- payments-in-lieu will only be accepted under exceptional circumstances where provision cannot practically be made on site

and the applicant demonstrates that no alternative site is available in the area;

- payments-in-lieu of housing and payments-in-lieu of affordable housing will be pooled into an affordable housing fund and used to assist provision of affordable housing
- where a payment-in-lieu at the level anticipated by this guidance would not be viable, arrangements for financial viability appraisal apply, as set out in paragraphs 2.60 to 2.68 of CPG 2 Housing; and
- where development proposals involve a shortfall of the housing or affordable housing required under Policies DP1 or DP3, the Council may negotiate a payment-in-lieu of the unmet requirement.

6.6 The Council will take the project management and implementation costs of off-site contributions into account. Obligations may need to include a payment to cover the costs of delivery of off-site contributions where such costs fall to the Council. These could include site searches/identification, feasibility work and associated professional costs and fees. The circumstances where these may be negotiated would include:

- Where there is no identified off-site solution in the agreement (requiring the Council rather than the developer to identify deliverable sites),
- Where there is no programmed project and/or planning approval in place (requiring the Council rather than the developer to undertake feasibility/design work), or
- Deliverability and sources of alternative funding for off-site solutions (e.g. an off-site solution may involve a Council site where approvals and funding are already in place).

6.7 The costs will be proportionate to the level of the obligation and will be capped at the accepted levels utilised by the applicant in their financial appraisals or agreed recognised source e.g. RICS. Where such costs are agreed to fall to the developer, no obligations will be required.

**How the payment-in-lieu levels have been set**

6.8 The Council has commissioned research on standard payment-in-lieu figures for housing and affordable housing based on the Camden Affordable Housing Viability Study 2009. The first part of this research (published as the Payments in Lieu Working Paper 2010 – see the evidence base and monitoring section of our Local Development Framework pages at www.camden.gov.uk/ldf) compared the residual value of a range of market housing development types with and without the affordable housing element sought by Development Policy DP3. These comparisons show the additional value created by omitting affordable housing from the development. This has been converted to a payment per square metre of on-site affordable housing sought.

6.9 The second part of the research (published as the Mixed Use PIL Working Paper 2011 – see the evidence base and monitoring section of

our Local Development Framework pages at www.camden.gov.uk/ldf) compared the residual value of a range of Central London office developments with and without the housing element sought by mixed-use Development Policy DP1. These comparisons show the additional value created by omitting housing from the development. This has been converted to two figures for payment per square metre of on-site housing sought, one for small floorspace additions and one for larger floorspace additions (for these larger schemes the housing sought would include affordable housing).

**The payment levels**

6.10 The three discrete payment levels are set out in the table below. One level applies to residential schemes where a contribution to affordable housing is sought under Development Policy DP3. Two payment levels apply to non-residential schemes where a contribution to housing is sought under mixed use Policy DP1. The higher level applies to larger non-residential schemes which would also trigger an affordable housing requirement under Policy DP3. The higher figure takes account of the impact of affordable housing on viability, so it is not necessary to combine the different payment levels.

6.11 All figures are expressed as £ per square metre (gross external area). The figures are applied to the **on-site** target for housing/ affordable housing. They should not be applied to the total or additional floorspace of the proposed development, or to the off-site target for affordable housing.

**Figure 1. Housing/ affordable housing payment levels**

| **Development type/ policy requirement** | **Level of payment in lieu** |
|---|---|
| Market residential scheme/ affordable housing policy DP3 | £2,650 per sq m<br>x on-site target for affordable housing |
| Non-residential with less than 2,000sq m additional floorspace (gross external area)/ mixed-use policy DP1 | £700 per sq m<br>x on-site target for housing |
| Non-residential with 2,000sq m additional floorspace or more (gross external area)/ policies DP1 and DP3 | £1,350 per sq m<br>x on-site target for housing |

6.12 The payment levels in Figure 1 for non-residential schemes have been derived on the basis of developments that omit all types of housing requirement (under DP1 and DP3), and are based on costs and values for office developments. These figures may not be appropriate for a large non-residential scheme that only omits affordable housing, or where the primary use is a non-office use such as retail or a hotel.

Where the type of development proposed is substantially different from the developments used to set the payment levels, or the payment levels indicated in Figure 1 would not be viable, the Council will:

- apply the arrangements for financial viability appraisal set out in paragraphs 2.59 to 2.67 of CPG2 Housing; and
- negotiate a payment on the basis of the financial viability of the particular development.

6.13 For a primarily residential scheme with a non-residential element of less than 1,000sq m gross, if the Council agrees that a payment in lieu of affordable housing is appropriate, the level of payment will be guided by policy DP3 and the figure of £2,650 per sq m of on-site target for affordable housing.

**GROSS EXTERNAL AREA**

Calculations in this guidance are based on Gross External Area (GEA). This is generally the total area of every floor in the building including common areas and external walls. Payment-in-lieu figures have been calculated on that basis.

Floorspace measurements are sometimes provided which exclude common areas and exterior walls of the building (this often applies to flats), or just exclude the exterior walls (this often applies to houses). Where a figure for Gross External Area including common areas is not available, the Council will consider using a conversion factor to assess the housing/ affordable housing requirement and to calculate the payment in lieu.

- To convert to GEA where common areas and exterior walls have been excluded - multiply by 1.25.
- To convert to GEA where only exterior walls have been excluded – multiply by 1.053.

A fuller explanation of the terms Gross External Area and Gross Internal Area is given in paragraph 2.25 of CPG2 Housing.

### How to calculate affordable housing payments under policy DP3

6.14 Where the payment is in lieu of affordable housing under Development Policy DP3, calculations of the payment will proceed in accordance with CPG2 Figure 2 and paragraphs 2.31-2.32 and 2.35, as follows:

- the capacity of the site will be assessed and be converted into a percentage target for on-site affordable housing;
- the percentage target for on-site affordable housing will in turn be assessed and converted into a floorspace figure (GEA);
- the target for on-site affordable housing floorspace will be multiplied by the payment per square metre figure of £2,650.

6.15 Please refer to CPG2 for full details of the factors which influence capacity and on-site affordable housing target. In summary:

- assessment of capacity is based on the number of additional homes proposed and the gross floorspace addition including common areas;
- capacity is assessed as the number of additional homes proposed or 1 home per additional 100sq m (gross), whichever is the greater;
- capacity is rounded to the nearest whole number;
- the on-site affordable housing target is assessed as 10% where capacity is 10 additional homes plus 1% for every further increase of capacity by 1 home, up to a target of 50% where capacity is 50 additional homes.

**Figure 2. Example calculations: payments in lieu of affordable housing under policy DP3**

| | |
|---|---|
| **Example 1**<br>21 additional homes with a built floorspace of 1,750sq m gross | Site capacity = 21 homes |
| Percentage target for on-site affordable housing | = 21% |
| Floorspace target for on-site affordable housing | = 1,750 x 21%<br>= 367.5sq m |
| Payment-in-lieu of affordable housing | = 367.5sq m x £2,650<br>= £973,875 |
| **Example 2**<br>22 additional homes with a built floorspace of 2,360sq m gross | Site capacity = 24 homes |
| Percentage target for on-site affordable housing | = 24% |
| Floorspace target for on-site affordable housing | = 2,360 x 24%<br>= 566.4sq m |
| Payment-in-lieu of affordable housing | = 566.4sq m x £2,650<br>= £1,500,960 |

**How to calculate housing payments under policy DP1**

6.16 Where the payment is in lieu of housing under Development Policy DP1, calculations of the payment will proceed as follows:

- the additional floorspace proposed will be multiplied by the 50% target for on-site housing to produce a floorspace target (GEA);
- where the additional floorspace proposed is less than 2,000sq m (GEA)

  - the on-site housing floorspace target is less than 1,000sq m (GEA)
  - consequently no contribution to affordable housing would be sought under policy DP3
  - the target for on-site housing floorspace will be multiplied by the payment per square metre figure of £700;
- where the additional floorspace proposed is 2,000sq m (GEA) or more
  - the on-site housing floorspace target is 1,000sq m (GEA) or more
  - consequently an on-site contribution to affordable housing would be also be expected under policy DP3
  - the target for all on-site housing floorspace will be multiplied by the higher payment per square metre figure of £1,350.

**Figure 3. Example calculations: payments in lieu of housing under policy DP1**

| | |
|---|---|
| **Example 1**<br>Total floorspace addition | = 800sq m |
| Target for on-site housing | = 800 x 50%<br>= 400sq m |
| Affordable housing sought? | No |
| Payment level | £700 psm |
| Payment-in-lieu of market housing | = 400sq m x £700<br>= £280,000 |
| **Example 2**<br>Total floorspace addition<br>(NB an on-site housing contribution would be required unless there is clear evidence that off-site provision is more appropriate) | = 2,400sq m |
| Target for on-site housing | = 2,400 x 50%<br>= 1,200sq m |
| Affordable housing sought? | Yes |
| Payment level | £1,350 psm |
| Payment-in-lieu of all housing | = 1,200sq m x £1,350<br>= £1,620,000 |

# 7 Sustainability

7.1 Promoting a sustainable Camden is an integral element of our Local Plan documents strategy. Core Strategy policy CS13 – Tackling climate change through promoting higher environmental standards sets out a key part of our overall approach to tackling climate change, which includes promoting higher environmental standards in design and construction.

7.2 Core Strategy policy CS13 states that the Council will have regard to the costs and feasibility of measures to tackle climate change within developments (paragraph 13.4). This approach also applies to policy DP22. We will also take into account the cumulative costs of not responding to the need to mitigate and adapt to climate change as well as the long term cost savings, such as on energy and water bills, to future occupiers. Measures to tackle climate change are integral in the development process and are a priority of the Council, therefore, they should not be seen as 'add-ons'. They are an essential element of sustainable development. For further information on ways to achieve carbon reductions and more sustainable developments please refer to Camden Planning Guidance note 3 – Sustainability.

## Biodiversity and habitats

7.3 Planning obligations may be used to require developers to carry out works to secure or reinstate existing habitat features, enhance existing features, create new features or to undertake habitat creation schemes. In those very exceptional cases where a developer cannot protect an ecological habitat adjacent to or within the boundaries of the site and in other respects the development is acceptable they will be required to provide an alternative compensatory measure of equal or greater value.

7.4 These measures could be land off-site on which the Council or other responsible agency can carry out works and recover the reasonable costs from the developer, or assistance in enlarging or enhancing existing nature conservation assets and habitats and make provision for maintenance of the site.

7.5 A planning obligation may also be appropriate where additional monitoring or survey work is considered necessary to confirm that relevant environmental measures have been implemented successfully. Some developments may result in increased activity and affect the value of areas of nature conservation merit adjacent to or within the site.

7.6 In certain circumstances legal agreements may be appropriate to restrict types and hours of activities and development rights. They may also be used to control access so as not to damage or harm existing features and to make proper provision for the long-term maintenance of directly affected sites.

## Sustainable design and construction

7.7 Policy DP22 – Promoting sustainable design and construction contributes towards delivering the strategy in policy CS13 by providing detail of the sustainability standards we will expect development to meet. Meeting the requirements for sustainable design and construction is often achieved in the detailed design or construction phases. Normally, requirements for environmental design will be dealt with using conditions, but in some circumstances, a Section 106 agreement may be required to secure an environmental assessment of the proposed development carried out by an impartial assessment body or a sustainability plan to provide and maintain the highest environmental standards of development.

7.8 If they cannot be implemented through the approved design or satisfactorily secured through conditions, the following design features may be specified through a sustainability plan required to be submitted as part of a section 106 Agreement:

- energy efficient design measures;
- renewable energy facilities;
- waste and recycling storage facilities;
- water retention and recycling facilities;
- heating or cooling systems;
- internal water consumption levels; and
- materials sourcing proportions.

7.9 Other specific management plans may normally be required through a condition of a planning approval. However, some proposals or aspects of a proposal might generate a requirement for a management plan to deal with some of the following issues, depending on the scale, nature and location of the scheme:

- waste management;
- energy including renewable energy on site and energy efficiency;
- facilities management;
- construction and demolition;
- water efficiency;
- Sustainable Drainage Systems (SUDs)
- community safety;
- contamination;
- hazardous substances; and
- biodiversity.

7.10 This list is not exhaustive, and the requirements will be relevant, proportionate and related to the specific nature and potential impacts of the development proposed.

7.11 Camden Planning Guidance 3, Sustainability provides further detail on the appropriate standards for different types of development – BREEAM, Ecohomes or the Code for Sustainable Homes. A Section 106 Agreement may be used by the Council to require the developer to carry out and submit a post-construction review to ensure that the development has met the criteria which were approved earlier as part of the estimate and design stage assessments. The Council will not permit occupation of the development until a satisfactory post-construction review has been provided and any issues identified in that review have been satisfactorily addressed

## Decentralised energy networks

7.12 Developments are expected to connect to a decentralised energy network unless it can be demonstrated that it is not technically feasible or financially viable. Developers should use guidance in CPG3 – Sustainability chapter 5, to determine whether connection to a decentralised energy network, a combined heat and power plant or a contribution towards a decentralised energy network will be expected.

7.13 Where justified and clearly related to the development of a site section 106 agreements will be used to secure:

- the installation of CHP/CCHP and the generation and use of energy;
- details that ensure the plant and its operation is carbon dioxide efficient with regards to operating hours, compatibility with the need (amount and timing) for heat, and requirements for a heat store;
- details that ensure the design of the heating system is compatible with any nearby decentralised energy network; the export of heat, cooling and/or electricity;
- developments use heat, cooling and or electricity from a decentralised energy network;
- sufficient space is provided for future plant, heat exchanges, connection points to either generate, export and take heat, cooling and/or electricity; and
- a financial contribution towards future decentralised energy networks in the immediate vicinity of the site.

# 8 Employment and business support

8.1 Local businesses can provide employment for local people and new business development can benefit the local economy and existing businesses through the use of local shops, facilities and services. Core Strategy Policy CS8 – Promoting a successful and inclusive Camden economy and Development Policy DP13 – Employment premises and sites aims to ensure that the borough's economy will be strong and diverse and that Camden's residents can play a role in this by supporting training and employment opportunities.

8.2 There is an identified skills gap between Camden residents and the jobs on offer in the Borough. Currently, only 23% of the workforce in Camden is resident in the Borough. Local employment and training initiatives can open up job opportunities for people from many sectors of the community, who may otherwise find it difficult to access employment offered by existing and new businesses, helping to bridge the identified skills gap.

8.3 The Council may require developers to assist with training and employment initiatives via section 106 Agreements where the development impacts on the availability of jobs for Camden residents, including the following types of development:

- Any commercial land use where the proposed development could offer local employment opportunities, or would have the potential to provide it on account of its floorspace (i.e. greater than 1,000sq m or 50 jobs);
- A development in a location where there are identified employment and training issues (e.g. higher than Borough-average levels of unemployment, lower than Borough-average levels of skills/education attainment);
- Where major developments result in the loss or displacement of existing employment opportunities; and
- Major infrastructure or development projects involving significant construction contracts (e.g. over £3 million build costs or 1,000sq m or more net additional floorspace).

8.4 Schemes that provide 1,000sq m or more of net additional floorspace could potentially have build costs exceeding £3 million if they are costly schemes, for example for very high specification buildings. The Council will therefore expect schemes of this size or larger to provide employment or training initiatives secured by s106 with the Council, unless evidence is provided to demonstrate that the scheme is below the £3m build cost trigger.

8.5 A financial contribution to assist local residents to receive training in the skills that would enable them to access the jobs created by the new development may be sought. These monies will be held by the Council and used to support activities that create or promote opportunities for employment or training.

8.6 Developers may need to fund or provide construction training opportunities for local residents related to a development, either through recognised local initiatives or partnerships (e.g. Kings Cross Construction Skills Centre), or through in-house training schemes operated by their contractors and agreed with the Council's Economic Development Team.

8.7 Developers and occupiers of new development will be strongly encouraged to put in place measures to seek to recruit widely from Camden's resident population, for example by registering all vacancies with the local Job Centre, by advertising in the local press and running local recruitment events. As part of this approach, the Council also encourages developers and their contractors to recruit local residents for construction jobs during development of the scheme.

8.8 Contributions to employment and business support will be primarily funded through section 106 where legally justified rather than CIL because they do not constitute infrastructure as defined by the CIL regulations and also will not be subject to pooling restrictions.

## Developments which result in a loss of employment space

8.9 Policies CS8 and DP13 aim to protect employment sites which provide employment opportunities. However, in exceptional circumstances we may agree that change of use is acceptable. In these circumstances, where the loss of employment use can be expected to result in a reduction of job opportunities for Camden residents, developers may be required to contribute towards measures which create or promote opportunities for employment or training of local people.

8.10 In line with paragraph 13.11 of Policy DP13, the term 'business' and 'employment' refer to B1, B2, B8 uses and other sui generis uses of a similar nature.

8.11 A contribution will only be sought in cases where:

- the net loss of employment space is 500sq m or more;
- where the building is occupied by a commercial tenant or has only recently been vacated; and
- it meets relevant policy and legal tests

8.12 The calculation will take account of the proposed alternative use of the floorspace, such as for education or training use, and whether this use can be expected to create employment or training opportunities for Camden residents.

8.13 The planning obligation for loss of employment floorspace will be based on the following formula:

> Gross employment floorspace lost (sq m) / 12sq m (space requirement per full time employee[1]) = full time jobs lost.
>
> Full time jobs lost x 23% [% of Camden residents in the workforce] x £3,995 [cost to provide training per employee] = contribution

These figures will be subject to review and may be updated to reflect the latest information.

**Worked example 1: Change of use from employment to residential**

8.16 If the existing building provides 1,000sq m of employment floorspace and a change of use to residential is proposed, we will expect a contribution of £76,571 to cover training and employment support measures.

> Net fulltime jobs lost, in this case the no. of full time jobs expected if use continues:
>
> 1000sq m / 12sq m = 83 FT jobs lost (floorspace / average space per worker):
>
> No. of jobs lost which would be expected to be filled by Camden residents:
>
> 83 x 23% = 19 jobs (FT jobs lost x 23%)
>
> Cost of retraining and supporting number of Camden residents who would be expected to be employed in former use:
>
> 19 x £3,995 = £76,571 (No. of jobs lost which would be expected to be filled by Camden residents multiplied by retraining costs)

1.1

[1] Employment density estimates provided by the Homes and Communities Agency (2010) for general office uses, Alternative HCA figures may be used for B2 and B8 uses.

**Worked example 2: Change of use from employment to hotel**

8.23 If the existing building provides 4,000sq m of employment floorspace and a change of use to hotel is proposed we will expect a contribution of £260,341 to cover employment training. This takes account of the hotel use providing 50 FTE jobs.

The contribution required would recognise that the hotel would generate some employment opportunities for Camden residents but the number of full time jobs created would be fewer than if the building remained in its former use. The contribution is based on the difference between the number of jobs expected to be supported if a building remained in its existing employment generating use and the number of jobs expected to be generated by the hotel use.

No. of full time jobs expected in an employment generating use (floorspace / average space per worker):

4,000 / 12 = 333 FT jobs

Net jobs lost (FT jobs expected in employment use minus FT jobs in new (hotel) use):

333 – 50 = 283 FT jobs

No. of net jobs lost expected to be filled by Camden residents (net loss of FT jobs X 23% [% of Camden residents in the workforce]): 283 x 23% = 65 jobs

Cost of retraining and supporting number of Camden residents who would be expected to be employed in former use: 65 x £3,995 = £260,341 (No. of jobs expected to be filled by Camden residents multiplied by retraining costs)

## Employment and local procurement during construction

8.24 In line with Core Strategy Policy CS8, large schemes which have significant job creation potential will be expected to produce an Employment and Training Strategy which will be secured through a Section 106 agreement. This applies to all major developments which will result in an increase of 1,000sq m or more of floorspace or a net increase of 10 or more homes.

The strategy will involve the developer/point of contact meeting with Camden Council and their nominated partner at pre-tender stage/pre-implementation to discuss an Employment and Skills Strategy for every phase of the development and liaising with local employment providers to fill vacancies.

### Construction apprenticeships

8.25 Developments over £3 million build costs will be required to recruit one construction apprentice through Camden Council, or its nominated partner, for every £3 million of build where the length of the project allows (generally, where the contract is 52 weeks or more).

8.26 A support fee of £1,700 per apprentice placement will also be payable in order to cover:

- pre-employment;
- recruitment process;
- training provider brokerage; and
- post-employment mentoring and support.

8.27 Where the length of the project/build does not allow for an apprenticeship placement, a £7,000 fee per apprentice will be payable to allow for the creation of training opportunities elsewhere in the borough. In certain circumstances a bond may be required to secure training and employment measures.

### Local recruitment for construction related jobs

8.28 The Council encourages developers to recruit from Camden's resident population for construction related jobs. The Council will expect developers to work toward the Construction Industry Training Board (CITB) benchmark which specifies the number of jobs advertised through local employment vehicles. The local employment vehicle will be King's Cross Construction Skills Centre or another agency recommended by the Council. The benchmark should be used as a minimum requirement for developers to meet or exceed and has been created to provide proportionality against the size and type of projects on which they are to be used.

### Construction work experience placements

8.29 In addition to construction apprenticeships the Council also expects large schemes to provide construction work experience placements for local residents. As a guide the Council will seek to secure one, two-week work experience placement per 20 net additional housing units or 500sq m of net additional employment floorspace, however the Council will also take into consideration other scheme specific factors when agreeing the appropriate number of placements. Work experience placements are to be recruited through King's Cross Construction Skills Centre. The Council will expect provision for work experience placements to be undertaken by the developer to be form part of the Employment and Training Strategy and secured by section 106 agreement.

### Local Procurement Code

8.30 Developers will also be required through a legal agreement to sign up to the Camden Local Procurement Code where the value of the scheme exceeds £1,000,000. This will involve the developer/point of contact meeting with Camden Council and their nominated partner prior to the implementation of their scheme to discuss potential for local businesses becoming part of the supply chain and to draw up a Local Procurement plan in line with the Local Procurement Code. The Council expects that developers work towards a local procurement target of 10% of total procurement value.

## Employment in development after completion

8.31 Camden Council encourages the creation of apprenticeships and training placements to help to close the skills gaps between the jobs on offer in the borough and the skills of the local workforce, allowing companies to recruit and retain local people into work. This approach is supported through policy CS8 of the LDF and applies to major commercial developments which will result in a NET increase of 1,000sq m or more of employment space including office, hotel and leisure developments.

8.32 The Council will seek to negotiate a section 106 contribution to be used by the Council's Economic Development service to support initiatives which create and promote employment and training opportunities and to support local procurement initiatives in Camden. The contribution is lower than for developments involving a loss of employment space to reflect the fact these developments are providing new employment opportunities. Contributions will be calculated as follows:

**Employment space**

Net increase in floorspace (sq m) / 12sq m [space requirement per full time employee] = full time jobs created

Full time jobs created x 23% [% of Camden residents in the workforce] x 35% [% of employees requiring training] x £3,995 [£ per employee requiring training]

**Hospitality**

No of bedrooms x 0.5 [number of employees per bedroom] = full time jobs created

Full time jobs created x 23% [%of Camden residents in the workforce] x 35% [% of employees requiring training] x £3,995 [£ per employee requiring training]

8.33 Where the end use occupier is known, as part of the s106 we will seek an agreement with the developer to provide a specified number of

apprentice or work experience places within the development. Where the end use occupier is not known, the Council will seek an agreement to ensure that its aims and objectives, in respect of employment and skills, are promoted by brokering a meeting between the new occupier and the Economic Development team.

## Central London Forward

8.34 The Council cooperates with the Central London Forward boroughs on local training initiatives. Central London Forward is a sub-regional strategic organisation representing the eight central London local authorities. The member local authorities of Central London Forward are Camden, City of London, Islington, Kensington and Chelsea, Lambeth, Southwark, Westminster, and Wandsworth.

8.35 When local labour targets cannot be met by residents of Camden, the Council will expect that developers seek to meet these obligations with residents of the Central London Forward boroughs. This requirement will be negotiated on a case by case basis and the details will be secured through s106 agreement.

# 10 Transport

## Car free and car capped housing

10.1 In order to encourage use of other types of transport and reduce parking stress the Council will use legal agreements to make development car free or car capped. This will limit the number of new residents from being able to obtain on-street parking permits (unless the resident is the holder of a disabled persons badge issued pursuant to Section 21 of the Chronically Sick and Disabled Persons Act 1970.)

10.2 Agreements will require the owner of the property to inform the Council's Planning Obligations officer in writing of the official postal address of the property (as issued and agreed by the Council's Street Name and Numbering Department) and to clearly identify the unit number of the car free units specified in the legal agreement before the development is occupied. The owner will also be required to inform any occupants of the property of any car free restrictions (in writing). Please refer to CPG7: Transport on car free and car capped developments for an explanation why the Council imposes these restrictions.

10.3 Once planning permission is granted which includes a car free restriction, a copy of the agreement will be passed to the Council's permit issuing team who will maintain a record of properties excluded from obtaining a parking permit. In cases where part of the property is subject to a car free restriction no parking permits will be issued until the owner or developer has clarified in writing with the Council's Planning Obligations officer the official postal address of the property and identified the unit(s) to which the car free restriction applies.

## Travel plans

10.4 The Council may use legal agreements to require travel plans to manage the impacts of the development where these measures are deemed necessary to control the impacts of the development. A contribution may be sought to cover the staff costs for overseeing the implementation of these plans. Please refer to CPG7:Transport for further information on Travel Plans and Transport Assessments.

## Public transport contributions

### a) Contributions towards Crossrail

10.5 The collection of funds for Crossrail is required under Policy 6.5 of the London Plan (Funding Crossrail and other strategically important transport infrastructure) which states that:

10.6 'In view of the strategic regional importance of Crossrail to London's economic regeneration and development, and in order to bring the project to fruition in a suitably timely and economic manner, contributions will be sought from developments likely to add to, or create, congestion on London's rail network that Crossrail is intended to

mitigate. This will be through planning obligations, arrangements for the use of which will be established at strategic level, in accordance with relevant legislation and policy guidance.'

10.7 In April 2013 Supplementary Planning Guidance was published by the Mayor explaining how this system will operate alongside the Mayor's Crossrail CIL. In Camden all office, retail and hotel development schemes in Central London and the Euston and Kings Cross Opportunity area which add more than 500sq m of floorspace will need to will need to pay a charge.

| **Use** | **Rate per sq m** |
|---|---|
| Office | £140 |
| Retail | £90 |
| Hotels | £61 |

10.8 Applicants' are recommended to consult the 2013 Supplementary Planning Guidance note on the Use of Planning Obligations in the Funding of Crossrail, and the mayoral community infrastructure levy which can be viewed on the Greater London Authority web site.

10.9 In general terms, funds collected under the Mayor's CIL for office, retail and hotel uses (currently £50 per sq m) can be deducted from the section 106 charge. The charge will be collected by Camden on behalf of the Mayor. The negotiation of the contribution towards Crossrail will be carried out having regard to Policy 8.2 (Planning Obligations) in the London Plan.

**b) Other public transport contributions**

10.10 Where public transport provision is not adequate to serve a development (in terms of capacity, frequency, reliability, boarding points, access to boarding points and vehicles), and the absence of such provision would make a development unacceptable the Council may seek a contribution to public transport provision in accordance with the statutory tests. This will be assessed through the transport assessment. Please see CPG7: Transport on Assessing transport capacity.

10.11 The Council will therefore consider mechanisms such as those listed below to reconcile development proposals with the public transport services which will serve them:

- seeking contributions to existing provision so that they can serve the development better (examples could include enhancing pedestrian routes to stops, providing shelters, better seating and real-time information at stops, or increasing service frequencies); and
- seeking contributions towards pooled funds to be used towards a particular provision or type of provision once accrued funds are adequate (examples could include funds for bus priority measures extending some distance along a route, for an extension to a route, or

for a co-ordinated series of measures across an area to make public transport safer at night).

10.12 The pooling of funds will be limited to 5 contributions per infrastructure project or type of infrastructure. The Council will generally consider seeking contributions towards facilities that assist the use of public transport services which have an existing or proposed boarding point within a convenient walking distance of the development. For bus services, a convenient walking distance is generally up to 400 metres. For rail services, a convenient walking distance is generally up to 800 metres. Funds will not be sought for transport projects which are in Camden's CIL funding list.

## Pedestrian, cyclist and environmental improvements

10.13 New developments also have wider impacts and may increase the demands on a transport network that at certain times already operates above capacity. Traffic problems include congestion, traffic intrusion (e.g. additional traffic on quiet lanes), road safety, air quality and the impact of additional traffic on other, especially vulnerable, highway users. Such development also increases the need to improve transport alternatives such as walking, cycling and public transport; this requires further investment so as to make these modes more attractive. Where these are site specific and necessary works to make a scheme acceptable they may be secured through planning obligations. Wider strategic and area-based network improvements will generally be addressed through the use of CIL funds.