

Camden Planning Guidance

# Housing

London Borough of Camden

CPG 2



July 2015



## CPG2    Housing

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# 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](http://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<sup>1</sup> per year, or £80,000<sup>1</sup> 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<sup>2</sup>, 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.

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

<sup>2</sup> 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<sup>3</sup>; 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

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<sup>3</sup> 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**

<b>Benchmark</b>	<b>Site capacity</b>	<b>Expected affordable housing floorspace</b>
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%
<b>Example</b>	<b>Site capacity</b>	<b>Expected affordable housing floorspace</b>
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 or 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 and 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 personnel, 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**

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

<b>Residual Land Value</b>	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.
<b>Existing Use Value (or EUV)</b>	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.
<b>Existing Use Value plus a premium (or EUV plus)</b>	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 than 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)	$c = a \times b / (100 - b)$

**Example**

Additional market housing floorspace proposed	= 2,500 sq m
Target for on-site affordable housing	= 25% x 2,500 sq m = 625 sq m
Off-site affordable housing target	= 25 / (100 – 25) = 33.3%
Target for off-site affordable housing contribution	= 2,500 sq m x 33.3% = 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	<a href="http://www.camden.gov.uk/ppaa">www.camden.gov.uk/ppaa</a> Camden Council Duty Planner Service – Contact Camden - 020 7974 4444

### Resources

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



### 3 Student Housing

#### KEY MESSAGES

The location and design of student housing should:

- Contribute to creating mixed and inclusive communities across the borough
- Serve higher education institutions in Camden or adjoining boroughs
- Provide a mix of unit types

- 3.1 This section provides detailed guidance on how the Council will manage the growth in student housing to ensure mixed and inclusive communities across Camden as outlined in Core Strategy policy CS6 – *Providing quality homes*, Development Policy DP2 – *Maximising the supply of housing* and Development Policy DP9 – *Student housing, bedsits and other housing with shared facilities*.
- 3.2 This guidance applies to all developments that provide student housing including new build, conversion and change of use. It specifically covers:
- location and concentration;
  - design and facilities;
  - cost and affordability;
  - safety & crime prevention; and
  - access.
- 3.3 Camden's Core Strategy policy CS6 – *Providing quality homes* and Development Policy DP9 – *Student housing, bedsits and other housing with shared facilities* support the development of student housing subject to a number of criteria, including where it:
- will not involve the loss of permanent self contained homes;
  - does not prejudice the supply of self-contained homes, affordable housing and homes for vulnerable and older people;
  - complies with relevant houses in multiple occupation (HMO) standards (see further information below);
  - is accessible to public transport, higher education institutions, shops, services and community facilities; and
  - contributes to mixed and inclusive communities (Development Policy DP9).
- 3.4 Student housing development should also:
- serve higher education institutions in Camden or adjoining boroughs;
  - be located where it is accessible to the institution it serves; and
  - include a range of unit layouts including units with shared facilities (Development Policy DP9).

## What issues will the Council consider?

### Location and Concentration

- 3.5 The creation of mixed and inclusive communities is an important factor when considering where student housing should be located. Camden acknowledges the contribution higher education institutions and their students make to the economy and to the social mix of an area. However, student housing is often associated with a concentration of relatively short term residents who, by reason of their particular social needs, the unique nature of activity associated with student life and demand for facilities and services can have an unwelcome impact on an established community.
- 3.6 Core Strategy policy CS6 and policy DP9 of the Development Policies support student housing proposals subject to several criteria, including that proposals should not prejudice the supply of self-contained homes, or involve the loss of sites particularly suitable for affordable housing or housing for older or vulnerable people. Development Policy DP2 also resists alternative development of sites particularly suitable for housing, affordable housing or housing for older or vulnerable people.
- 3.7 The Council will resist proposals for student housing developments that would prevent us from meeting the Council's target for delivery of 437 additional self contained homes per year.
- 3.8 The Council will consider the suitability of any site for alternative housing, particularly if it has been identified as one which is suitable for affordable housing or housing for older or vulnerable people. The Council will have regard to:
- the Camden Site Allocations Document; and
  - extant planning permissions that have already secured permanent C3 accommodation.
- 3.9 Camden is home to 11 HEFCE funded Higher Education Institutions (HEIs). A list of HEFCE funded Camden based HEIs can be found at Appendix C. Student housing development should serve a higher education institution based in Camden or one of its adjoining boroughs.
- HIGHER EDUCATION FUNDING COUNCIL FOR ENGLAND (HEFCE)**

This body distributes public money for teaching and research to universities and colleges. In doing so, it aims to promote high quality education and research. HEFCE also plays a key role in ensuring accountability and promoting good practice.
- 3.10 Student housing should be located in areas that are accessible to the institutions they serve. We will have regard to the distances students have to travel from their accommodation to their place of study. We will expect student housing to be located within walking or cycling distance of the institution(s) it serves, or to be accessible by public transport services that have existing or committed capacity to accommodate the

demand generated. Student accommodation should be located no more than a 20 minute walk or cycle away from their place of study.

- 3.11 Student populations are often highly dependant on local public transport routes. Proposals for student housing will be assessed against the adequacy of the local transport provision, including whether there:
- is sufficient capacity on bus and underground routes;
  - are adequate walking and cycle routes; and
  - is adequate provision for servicing.
- 3.12 When considering the location of student housing schemes, the Council will also have regard to:
- existing concentrations of student accommodation in the area as a proportion of the overall population;
  - the wider housing mix in the community; and
  - the impact on residential amenity in the area.
- 3.13 A map outlining the existing concentrations of students across Camden can be found at Appendix A. This map refers to individual schemes and closely grouped developments of 100 bed spaces or more and includes existing halls of residence and proposed student housing with valid planning consent. The Council is aware of numerous smaller sites providing student housing.
- 3.14 When considering the concentrations of students in a single area the Council will have regard to:
- the character of the area (in particular whether the area is of a residential nature);
  - the existing mix of uses; and
  - in particular the impact on any permanent residential occupiers.
- 3.15 The Council will use Census data and records of recent permissions for student housing in the area when assessing the acceptability of concentrations in student housing.
- 3.16 Where proposals for student housing are likely to disturb the balance of the community because of their scale or because of an existing concentration, the Council may seek the provision of self-contained general needs housing on part of the site, including affordable housing, in line with the priorities identified in Core Strategy policies CS1 and CS6 and Development Policy DP2. We will consider schemes on a site by site basis having regard to:
- Census information;
  - Camden's Annual Monitoring Report; and
  - Permissions for student housing schemes in the area.
- 3.17 A table outlining the number of full time students in Camden as a proportion of the overall population by ward is shown at Appendix B.

- 3.18 As outlined above student housing schemes will be considered on a site by site basis, taking into account the specific circumstances of each individual case. As a broad guide the Council will consider the following, alongside the site specific implications of any scheme:
- Where there is an existing concentration of resident students, the Council considers that proposals for student housing may harm the mix and balance of the community if they provide more than 100 bed spaces.
  - Where there is no existing concentration of resident students, the Council considers that proposals for student housing may harm the mix and balance of the community if they provide more than 250 bed spaces.
- 3.19 In some instances it may be appropriate to allow additional student housing schemes in locations where there is an existing concentration of such accommodation. Camden Development Policy DP1 and supporting paragraph 1.9 indicate that where a development adds floorspace of 200 sq m (gross) or more in Central London (excluding Hatton Garden), up to 50% of additional floorspace should be permanent self-contained housing in Use Class C3. However, paragraph 1.9 also notes that where the additional floorspace is provided for an educational institution supported by HEFCE the Council may accept student housing that serves the same institution as an alternative to self-contained housing. Student housing provided in this context should:
- form part of a mixed use development;
  - be located on a site already owned by the HEFCE institution or a provider with an agreement for nominations; and
  - be in close proximity to the institution it serves.
- 3.20 The Council will consider this on the basis that additional accommodation will not:
- exacerbate the existing balance of the student population in the area;
  - place additional demand on public transport;
  - increase the impacts on existing permanent residential communities.

### **Design & Facilities**

- 3.21 To ensure a range of accommodation is available within student housing schemes, including accommodation that will be attractive to groups who would otherwise share private rented accommodation, the Council will expect student housing developments to include a range of:
- clustered study bedrooms with some shared facilities;
  - double units (often suited to post-graduate students); and
  - single units.

- 3.22 The provision of a variety of layouts will also allow for greater flexibility for conversion to permanent self-contained housing if in future the building is no longer needed as student accommodation.
- 3.23 In addition to the basic amenities expected from student accommodation such as washing and cooking facilities, the Council will expect to see common rooms/lounge areas to be provided as part of any development.
- 3.24 For new student housing schemes provided by HEFCE institutions, the Council will also expect development to comply with the Accreditation Network UK (ANUK) 'Code of Standards for Larger Developments' (<http://www.anuk.org.uk/LargeCode/Introduction.asp>). Other student housing schemes are to comply with the Council's HMO standards.

### **Cost & Affordability**

- 3.25 Student housing has the potential to mitigate pressure on the stock of private rented homes in Camden. However, this will only happen if the accommodation provided is genuinely aimed at higher education students in the area. The Council will use design mechanisms (such as seeking cluster flats), conditions or legal agreements, as appropriate to:
- prevent the lease or sale of student accommodation as general market housing,
  - limit term time occupation to students registered at HEFCE funded higher education institutions within Camden or adjoining boroughs, or other institutions as agreed on a case by case basis by the Council
  - control the length of stays (i.e. when more than 90 days) to ensure that any new accommodation can not be used as short term let accommodation.

#### **SHORT TERM LETS:**

Accommodation let for periods of less than 90 days as defined by the amended Greater London Council (General Powers) Act 1973.

- 3.26 To ensure new student housing is genuinely attractive to students currently within the private rental market (as outlined in paragraph 9.10 of the Camden Development Policies), the Council will resist schemes that have not identified which institution the students occupying the proposed accommodation will attend.
- 3.27 In line with the above, the Council will seek:
- that the accommodation is operated directly by a Camden based (or adjoining borough) HEFCE funded higher education institution; or
  - a nominations agreement is in place with a specific HEFCE funded institution(s) which ensures that the institution(s) controls admission to the accommodation. In this regard it is important for private providers to have early discussions with HEFCE institutions to ensure the accommodation is designed and built to meet their needs and requirements.

### **Safety & Crime Prevention**

- 3.28 The Council will expect any scheme for student housing to incorporate design measures that promote personal safety and security and reduce crime and the fear of crime, taking into account the Secured by Design principles. Applicants should discuss any scheme with the Metropolitan Police's Crime Prevention Design Advisor at the pre application stage.

#### **SECURED BY DESIGN:**

Focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products.

- 3.29 Design measures may include:
- communal functions placed at the ground floor of the building to retain an active frontage;
  - card-operated access control at a main entrance gate;
  - audio-visual CCTV to increase the level of surveillance;
  - alarmed fire escape doors; and
  - on-site accommodation management.
- 3.30 All internal design and management features are to be included within a submitted Student Management Plan, secured via legal (S106) agreement (see below).

### **Access**

- 3.31 Paragraph 6.6 of Camden Development Policies which requires 10% of housing within any development to be made wheelchair accessible applies. We will expect 1 in 10 student bedrooms to be fully wheelchair accessible, or capable of being fully wheelchair accessible (see Lifetime Homes and Wheelchair Housing guidance).

### **Use of conditions and legal agreements in student housing schemes**

#### **Student Management Plan**

- 3.32 A Student Management Plan is to be submitted with any planning application to ensure student welfare and to mitigate the potential impacts of the development on the local community. The Student Management Plan should include details of safety and crime prevention and a 'Code of Conduct'. This shall include details on:
- health and safety standards and procedures;
  - maintenance and repairs;
  - environmental quality;
  - landlord and tenant relationship;
  - student welfare;

- anti-social behaviour and disciplinary procedures; and
- administration, accreditation and compliance procedures.

3.33 With regards to anti-social behaviour, the Student Management Plan should describe a 'student tenancy agreement' including conditions to ensure that students are responsible in their behaviour to respect fellow residents, neighbours and the building, in order to prevent anti-social behaviour. The management plan should describe how the owners will enforce the terms and conditions of the tenancy. Any such plan can build upon any code of conduct provisions set out by the Institution to which the students belong.

3.34 In line with the guidance detailed above the Council will also seek to secure through the S106 agreement:

- the link to a Camden (or adjoining borough) HEFCE-funded institution(s);
- the permanent occupation as student housing; and
- a nominations agreement, or direct operation by a Camden based HEFCE funded HEI.

### **Energy & Water**

3.35 Given that students generally pay a flat service charge for utilities the Council will expect the development to incorporate measures to minimise carbon dioxide emissions in accordance with Camden Core Strategy policy CS13 by minimising energy and water consumption through measures such as:

- metering electricity, heat and water use;
- incorporating energy and water efficient measures such as timers, sensors, flow restrictors, individual controls and energy efficient light bulbs;
- A and A\* rated appliances; and
- means of monitoring and feedback/education of occupiers on water and electricity usage.

### **Community Facilities**

3.36 In line with Camden Development Policy DP15, the Council will seek to ensure that any developments that result in any additional need for community, leisure or open space facilities contribute to such facilities in the area. The Council will make an assessment based on:

- the number of student units provided;
- the provision of any on-site community, leisure or open space facilities;
- the provision of any community, leisure or open space facilities provided by the higher education institution the students attend; and
- any identified deficiencies identified in the area.



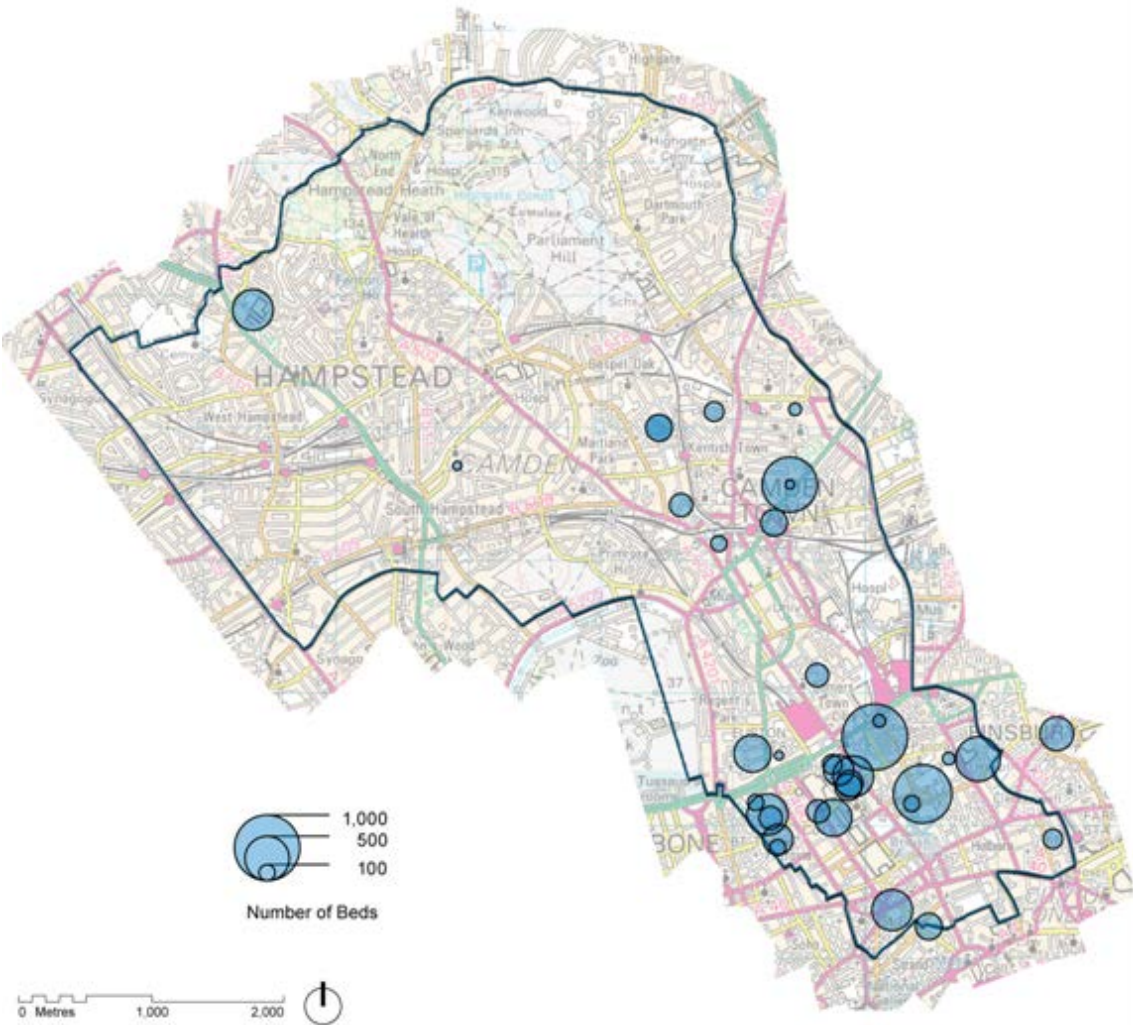
- 3.37 Where provision of facilities likely to be used by students is inadequate in the local area, we will seek a financial contribution to be used to provide or improve these types of community, leisure or open space facilities in the vicinity of the development.

### Further information

URS Student Housing in Camden Study (October 2009)	Provides information on existing provision of student housing in Camden and the pipeline of future developments. <a href="http://www.camden.gov.uk/ldf">www.camden.gov.uk/ldf</a> (see Evidence and Monitoring pages)
Census 2001	Provides population figures outlining how many students in full time occupation as a proportion of overall population by Ward.
Camden Annual Monitoring Report	Provides details of housing completions (including student housing) by year. <a href="http://www.camden.gov.uk/ldf">www.camden.gov.uk/ldf</a> (see Evidence and Monitoring pages)
HMO standards	<ul style="list-style-type: none"> <li>• Accreditation Network UK (ANUK) 'Code of Standards for Larger Developments' <a href="http://www.anuk.org.uk/LargeCode/Introduction.asp">www.anuk.org.uk/LargeCode/Introduction.asp</a> (accessed April 2011)</li> <li>• Camden HMO Standards <a href="http://www.camden.gov.uk/housing">www.camden.gov.uk/housing</a> (see Private Sector Housing/ Private Housing Standards pages)</li> <li>• Secure by Design <a href="http://www.securedbydesign.com">www.securedbydesign.com</a></li> </ul>

**Appendix A**

**Figure 8. Location of Student Housing Schemes in Camden**



Source: Camden Planning Development Monitoring  
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## Appendix B

### Full-Time Higher Education Students and Population by Ward

	All resident full-time students age 19 or over 2001*	Share of all Camden resident full-time students age 19 or over 2001*	Usual resident population 2001*	Full-time students age 19 or over as a percentage of usual resident population 2001*	No of resident full-time higher education students 2010/11 <sup>#</sup>	Share of all Camden resident full-time higher education students 2010/11 <sup>#</sup>	Usual resident population 2011 <sup>+</sup>	Full-time students age 19 or over as a percentage of usual resident population 2011
LB Camden	15,690	100.0%	198,020	7.92	23,495	100.0%	220,338	[Figures will be added when the relevant Census data becomes available]
Belsize	720	4.6%	11,653	6.18	645	2.7%	12,702	
Bloomsbury	2,341	14.9%	9,224	25.38	4,370	18.6%	10,892	
Camden Town with Primrose Hill	606	3.9%	11,574	5.24	855	3.6%	12,613	
Cantelowes	827	5.3%	10,490	7.88	1,795	7.6%	11,925	
Fortune Green	525	3.3%	10,465	5.02	585	2.5%	11,740	
Frognaal and Fitzjohns	882	5.6%	11,632	7.58	820	3.5%	11,986	
Gospel Oak	539	3.4%	10,465	5.15	515	2.2%	11,264	
Hampstead Town	550	3.5%	10,617	5.18	480	2.0%	11,270	
Haverstock	642	4.1%	11,224	5.72	1,000	4.3%	12,364	
Highgate	417	2.7%	10,492	3.97	415	1.8%	10,955	
Holborn and Covent Garden	1,017	6.5%	10,645	9.55	1,725	7.3%	13,023	
Kentish Town	646	4.1%	11,462	5.64	855	3.6%	13,417	
Kilburn	470	3.0%	10,494	4.48	580	2.5%	12,038	
King's Cross	2,622	16.7%	11,413	22.97	3,755	16.0%	11,843	
Regent's Park	1,035	6.6%	11,964	8.65	2,090	8.9%	13,528	
St Pancras and Somers Town	637	4.1%	12,490	5.10	1,595	6.8%	13,818	
Swiss Cottage	686	4.4%	11,663	5.88	755	3.2%	12,900	
West Hampstead	555	3.5%	10,053	5.52	665	2.8%	12,060	

\* 2001 Census © Crown Copyright, source tables (Borough and Ward level): ST063 - Economic activity and age of full-time students by and household type and tenure - figures for student numbers include both school pupils and Higher Education students, therefore the table uses figures for students age 19 or over; KS01 - Usual resident population; ST001 - Age by sex and type of resident. Cells in the source tables have been randomly adjusted by ONS to avoid the release of confidential data.

<sup>+</sup> 2011 Census Key Statistics and Quick Statistics, ONS © Crown Copyright, Open Government Licensed.

<sup>#</sup> HESA © 2012 (restrictions apply) - figures in this table are rounded to the nearest 5.

**Appendix C**

**List of Camden based HEFCE-funded Higher Education Institutions (HEI's)**

	<b>Institution</b>	<b>Location</b>
1	Birkbeck College (University of London)	Bloomsbury WC1E 7HX
2	Central School of Speech and Drama (University of London)	Swiss Cottage NW3 3HY
3	Conservatoire for Dance and Drama	Bloomsbury WC1H 9JJ
4	Institute of Education (University of London)	Bloomsbury WC1H 0AL
5	London School of Hygiene and Tropical Medicine (University of London)	Bloomsbury WC1E 7HT
6	Royal Veterinary College (University of London)	Camden Town NW1 0TU
7	School of African and Oriental Studies (University of London)	Bloomsbury WC1H 0XG
8	School of Pharmacy (University of London)	Bloomsbury WC1N 1AX
9	University College London (University of London)	Bloomsbury WC1E 6BT
10	University of London (School of Advanced Study)	Bloomsbury WC1B 5DN
11	University of the Arts	King's Cross Central & Holborn, WC1

## 4 Residential development standards

### KEY MESSAGE

Development should provide high quality housing that provides secure, well-lit accommodation that has well-designed layouts and rooms.

- 4.1 This guidance relates to Camden Core Strategy policies CS5 – *Managing the impact of growth and development*, CS6 – *Providing quality homes* and CS14 – *Promoting high quality places and conserving our heritage* plus Camden Development Policy DP26 – *Managing the impact of developers on occupiers and neighbours*. In addition, homes of all tenures should meet lifetime homes standards in accordance with Development Policy DP6 and the CPG on Lifetime homes and wheelchair housing.

### TENURE

Describes the ownership of a home and the relationship between a household and their home i.e. owner-occupied, shared ownership, private rented, social rented, etc.

- 4.2 The '**Access for all**' section in CPG6 **Amenity** sets out the Council's approach to providing buildings and spaces that are accessible to everyone. Reference should also be made to the **Design Excellence** section of CPG1 **Design** and to other sections of CPG2 **Housing**.
- 4.3 The space standards in this guide are minimum requirements and should not be taken as maxima. Housing which exceeds the minimum standards will always be encouraged.
- 4.4 This guidance applies to planning applications involving the provision of residential accommodation and residential conversions, extensions and change of use. In cases involving residential conversions of listed buildings a sensitive and imaginative approach to achieving these standards may need to be taken.

### MAYOR'S HOUSING SPG

The Mayor has prepared a draft replacement housing SPG. The Mayor's draft SPG supports the emerging replacement London Plan, which makes provision for residential standards to be applied across all tenures of development. Both the draft replacement London Plan and the draft replacement Housing SPG are expected to be adopted in autumn 2011.

In addition, we anticipate that housing with public subsidy in London will have to comply with the Mayor's London Housing Design Guide from April 2011 (published in interim form in August 2010). The Mayor is seeking to adopt the London Housing Design Guide standards for all housing tenures in London through the London Plan.

- 4.5 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 – see particularly policy DP5 and paragraph 5.4.

## **Guidance on residential development standards**

### **General principles**

- 4.6 All residential developments in the Borough are required to be designed and built to create high quality homes:
- All newly created dwellings for households of 2 or more people should be self-contained (applies to homes in Use Class C3, but does not apply to care homes for elderly or vulnerable people, student housing, bedsits, or other Houses in Multiple Occupation (HMOs)).
  - Each dwelling should have its own secure private entrance which leads either directly from the street or off a common entrance hall – the number of entrances off one corridor should be limited.

#### **SELF-CONTAINED**

Accommodation with its own kitchen, bathroom and toilet for the sole use of occupants behind a separate front door.

#### **HOUSES IN MULTIPLE OCCUPATION (HMO)**

HMOs are flats or houses permanently occupied by more than one household, where each household does not have exclusive access to all cooking, washing and toilet facilities behind a locked front door.

### **Layout**

- 4.7 There should usually be a permanent partition between eating and sleeping areas. Kitchens and living rooms that are permanently separated are preferable. However, combined kitchen and living areas are considered acceptable as long as the floor area is sufficient to allow for the greater range of activities that will take place in them.

### **Rooms**

- All rooms should be able to function for the purpose for the purpose for which they are intended.
- They should have an adequate size, shape, door arrangement, height, insulation for noise and vibration and natural lighting and ventilation.
- They should lead off a hallway or lobby so that it is possible to access any habitable room without passing through another habitable room, although Building Regulations Part B - Fire Safety allow inner rooms provided they meet certain criteria.

#### **HABITABLE ROOM**

A room that is capable of being used as primary living space. Generally consists of living rooms, dining rooms, large kitchen/diners and large bedrooms

### **Flexible construction/layout**

- 4.8 In addition, wherever practical dwellings should be designed to enable greater flexibility in construction design so that they can be capable of some form of extension or adaptation in order to accommodate changing lifestyles and family needs or other social use.
- 4.9 For example design features that could be considered, include:
- open plan layouts or generic layouts/floor plans;
  - avoiding load bearing internal walls;
  - easily accessible services and utilities e.g. a central accessible core or accessible floor/ceiling cavity.
  - For further examples see: By design urban design in the planning system: towards better practice:  
[www.communities.gov.uk/publications/planningandbuilding/bydesignurban](http://www.communities.gov.uk/publications/planningandbuilding/bydesignurban) by DETR (2000) (accessed April 2011).

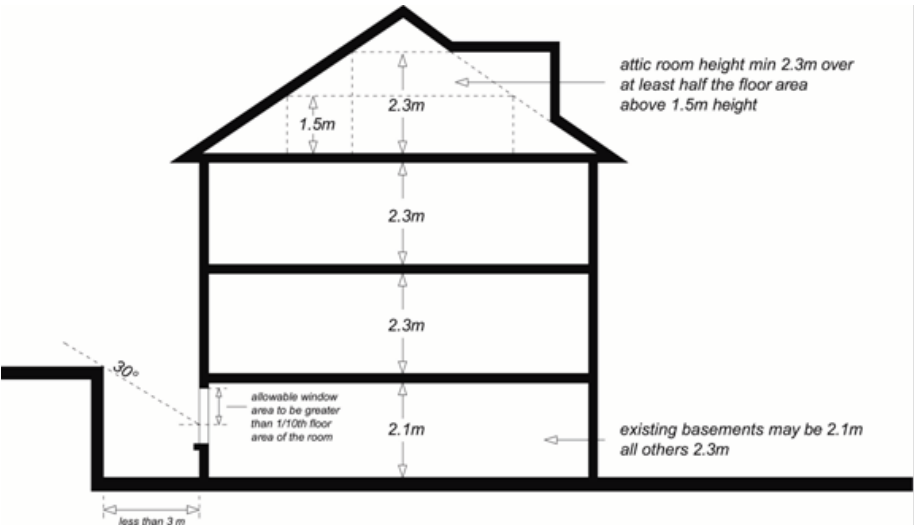
### **Internal space standards**

#### **Ceiling heights**

- 4.10 All habitable rooms should have minimum headroom of 2.3 metres. The exceptions are habitable rooms in existing basements, which may have 2.1 metres headroom, and habitable rooms in attics which should have a minimum room height of 2.3 metres over at least half of the floor area (not including any floor space where the ceiling height is less than 1.5 metres). See Figure 9.
- 4.11 Any floor area where the ceiling height is less than 1.5 metres will not count towards the habitable floorspace. We will also consider the suitability of floor to ceiling heights in relation to context of building and how size of windows and floor to ceiling heights impact design. Please also refer to CPG1 **Design** (see particularly the sections on '**Design Excellence**' and '**Roofs, terraces and balconies**') and CPG4 **Basements**.



**Figure 9. Ceiling heights and natural light for basements**



**Space and room sizes**

- 4.12 Although planning cannot control the precise internal layout of individual proposals, it is important to ensure that dwellings are capable of providing a suitable layout and adequate room sizes that reflect the use and type of accommodation. The Council will be flexible in the application of these guidelines in order to respond to site-specific circumstances.
- 4.13 The Council has set minimum space standards to ensure rooms are large enough to take on varying uses. Space standards relate to the occupancy of a home rather than number of bedrooms and the developer will be required to state the number of occupants each dwelling has been designed to accommodate. The occupancy of housing at the time of its first occupation is not a reliable prediction of future levels of occupancy over the lifetime of a home. The only sensible assessment of occupancy is therefore the designed level of occupancy.
- 4.14 The overall internal floorspace in new self-contained dwellings (excluding communal lobbies and staircases) should normally meet or exceed the minimum standards set out in the following table.

Number of Persons	1	2	3	4	5	6
Minimum floorspace (sq m)	32	48	61	75	84	93

- 4.15 For dwellings designed for more than 6 people, allow approximately 10sq m. per extra person. In order to successfully to provide ease of movement and storage space for wheelchair users, the council will normally wheelchair housing dwellings to exceed the minimum floorspace standards. Please also refer to the section on ‘Lifetime homes and wheelchair housing’ in this CPG document.
- 4.16 The Council will expect bedrooms to meet or exceed the following minimum sizes:

- First and double bedrooms - 11.0 sq m
- Single bedrooms - 6.5 sq m

4.17 The Council's Private Sector Housing Team has produced specific minimum standards for Houses in Multiple Occupation (HMO's) and hostels which includes guidance on room sizes and facilities. Schemes for bedsits, shared houses and flats and hostels should be prepared with reference to these standards. These can be viewed on Camden's website [www.camden.gov.uk/housing](http://www.camden.gov.uk/housing) (see Private Sector Housing/ Private Housing Standards pages).

4.18 Self-contained homes providing a floorspace below the minimum standards may be considered in exceptional circumstances, for example to reduce the cost of Intermediate Housing to the occupier, however their acceptability will depend on other aspects of the development proposed. Sympathetic consideration may be given where a proposal meets a number of the criteria below:

- Dwellings are targeted at, and affordable to, groups identified by the Borough as being in need.
- External amenity space is provided
- A limited number of dwellings are accessed from each entry point and corridor (ideally 8 or fewer, unless controlled by a concierge or a CCTV system allowing clear facial identification).
- Security controlled access is provided where a larger number of units are accessed from one point.
- Where cluster flats are provided in response to a demonstrable demand (i.e. there are good indications that properties will not be hard to let to the targeted tenants), a limited number of flats are clustered into each dwelling (ideally 8 or fewer) (cluster flats are bedsits with a communal kitchen/eating area).
- A laundrette or communal laundry is provided (sufficient to cater for forecast resident demand at periods of peak usage) where individual dwellings cannot accommodate a washing machine - subject to keeping service and management charges at an acceptable level. The Council will take into account any existing commercial laundrettes that would be convenient for residents.

### **Storage and utility spaces**

4.19 All accommodation should have sufficient internal storage space to meet the likely needs and requirements of potential occupiers. Dwelling layouts should make suitable provision:

- for washing machines and drying clothes;
- a storage cupboard with a minimum floor area of 0.8 sq m should be provided for 1- and 2-person dwellings;
- for each additional occupant, a minimum of 0.15 sq m storage area should be provided;

- storage for bicycles and prams should also be provided, located at the ground or lowest level of the dwelling, preferably accessed from a hall or lobby area;
- for waste and recycling bins, reference should also be made to the section '**Waste and Recycling Storage**' in CPG1 **Design**.

### **Daylight, sunlight and privacy**

- 4.20 Residential developments should maximise sunlight and daylight, both within the new development and to neighbouring properties whilst minimising overshadowing or blocking of light to adjoining properties. Maximising sunlight and daylight also helps to make a building energy efficient by reducing the need for electric light and meeting some of the heating requirements through solar gain. The orientation of buildings can maximise passive solar gain to keep buildings warm in winter and cool in summer.

#### **PASSIVE SOLAR GAIN**

Design to optimise the amount of the sun's energy that heats and lights a building naturally.

- 4.21 All habitable rooms should have access to natural daylight. Windows in rooms should be designed to take advantage of natural sunlight, safety and security, visual interest and ventilation. Developments should meet site layout requirements set out in the Building Research Establishment (BRE) Site Layout for Daylight and Sunlight – A Guide to Good Practice (1991).
- 4.22 Overall the internal layout design should seek to ensure the main living room and other frequently used rooms are on the south side and rooms that benefit less from sunlight (bathrooms, utility rooms) on the north side. Kitchens are better positioned on the north side to avoid excessive heat gain.

#### **Minimum requirements:**

- 4.23 In particular the following minimum requirements need to be met to avoid the unacceptable loss of daylight and/or sunlight resulting from a development, including new build, extensions and conversions. For example:
- Each dwelling in a development should have at least one habitable room with a window facing within 30 degrees of south in order to make the most of solar gain through passive solar energy;
  - Rooms on south facing walls should always have windows, south facing windows and walls should be designed, sized and/or shaded in summer to prevent overheating. Appropriate shading might be achieved by:
    - mature deciduous trees located so as to shade the structure
    - eaves or overhangs that protect from sun that is high in the sky only

- external shutters or blinds that can be operated by the occupant;
- External shading should be provided for western facing windows and outdoor spaces to minimise overheating in summer. Deciduous trees provide the best shade for this purpose;
- Windows on north facing walls should be sized to prevent heat loss but allow sufficient daylight;
- All habitable rooms, including basements, must have an external window with an area of at least 1/10 of the floor area of the room;
- An area of 1/20 of the floor area of the room must be able to be opened to provide natural ventilation;
- Windows to atriums will be acceptable as external windows in exceptional circumstances only;
- Passive ventilation should be favoured where possible and mechanically assisted ventilation should be silent in operation.

4.24 For further guidance reference should be made to 'The Code for Sustainable Homes' which provides technical guidance on designing for adequate internal daylighting and requires daylight levels to be calculated using the BRE assessment method. Reference should also be made to CPG3 **Sustainability**.

### **Privacy and security**

- 4.25 House and flat developments should be arranged to safeguard the amenity and privacy of occupiers and neighbours.
- New development, extensions, alterations and conversions should not subject neighbours to unacceptable noise disturbance, overlooking or loss of security.
  - Developments should seek to improve community safety and crime prevention. This may include:
    - designing developments so that open spaces are overlooked by windows, avoiding dark secluded areas and buildings face onto streets.
    - obtaining Secured by Design certification – please refer to the '**Designing safer environments**' section of CPG1 **Design**.

### **Basements**

- 4.26 All rooms within a basement should be able to function for the purpose of which they are intended. They should have an adequate size, shape, door arrangement, and height, insulation from noise and vibration, and access to natural lighting, ventilation and privacy (similar to the standards set out above). Four key considerations are set out here.
- Natural light - to ensure that adequate natural light is provided to habitable rooms, walls or structures (including the sides of lightwells) should not obstruct windows by being closer than 3 metres. Where

this is not achievable, a sufficient proportion of the glazing should be above the point on the window(s) from which a line can be drawn at 30° above the horizontal to pass the top of obstruction. The glazed area above the point should total not less than 10% of the floor area of the room. See Figure 9.

- Forecourt parking – nearby vehicles can also restrict light to basements, and consideration should be given to any further obstruction from vehicles parked on the forecourt that may present a barrier to light serving basement windows.
- Means of escape - basements should be provided with either a door or suitably sized window allowing access to a place of safety that gives access to the external ground level, or with a protected escape route within the building leading to a final exit at ground level.
- Lightwells - stairs, ladders and gates in any railings around a lightwell that are required for means of escape should be designed to be as discreet as possible and should have regard to the character of the building and surrounding area.

4.27 Further detailed guidance on basements is contained within CPG4 **Basements**.

### **Noise and soundproofing**

4.28 The layout and placement of rooms within the building should be carefully considered at an early stage in the design process to limit the impact of external noise on bedrooms and living rooms. The impact of noise should also be considered in the placement of private external spaces. Detailed guidance is provided in the '**Noise and vibration**' section of CPG6 **Amenity** and . The following requirements must be met.

- Internal layouts of dwellings should be designed to reduce the problem of noise disturbance between adjoining properties by using 'vertical stacking', i.e. placing living room above living room and bedrooms above bedrooms etc.
- Bedrooms should not be placed above, below or next to potentially noisy rooms, circulation areas of adjacent dwellings or noisy equipment, such as lifts.
- Windows should be located away from busy roads and railway lines/tracks to minimise noise and pollution and vibration.
- The layout of adjacent dwellings and the location of lifts, plant rooms and circulation spaces should seek to limit the transmission of noise to sound sensitive rooms within dwellings.
- Party walls and floors of flats created by conversion must be adequately soundproofed.
- All housing should be built with acoustic insulation and tested to current Building Regulations standards, but acoustic insulation should not be relied upon as the only means of limiting noise.

- Minimum levels of soundproofing are set out in the Building Regulations Part E - Resistance to the passage of sound. Levels of sound insulation above the minimum are encouraged.
- Further advice is given in the London Plan SPG on Sustainable Design and Construction

### **Outdoor amenity space**

- 4.29 Outdoor residential amenity space can be provided in the form of private garden space, balconies, terraces, roof gardens or as communal amenity space. Where practical the following requirements should be met.

#### **Private outdoor amenity space:**

- All new dwellings should provide access to some form of private outdoor amenity space, e.g. balconies, roof terraces or communal gardens.
- Private gardens should be allocated to family dwellings.
- Where provided, gardens should receive adequate daylight, even in the winter.
- The access to private amenity space should be level and should be from the main living space.
- Balconies should have a depth of not less than 1.5 metres and should have level access from the home.
- Balconies and terraces should be located or designed so that they do not result in the loss of privacy to existing residential properties or any other sensitive uses.
- Balconies should preferably be located next to a dining or living space and should receive direct sunlight (they can be designed to project from main building line or be recessed).

- 4.30 In some instances, it is accepted that existing buildings may not be able to provide balconies or roof terraces, however, external amenity space i.e. access to communal gardens should still be provided where possible. See CPG1 **Design** for further guidance on '**Roofs, terraces and balconies**'.

#### **Communal amenity space:**

- Space should meet the requirements of the occupiers of the building and be wheelchair accessible. For example, if there are a large proportion of family units, child and young person's facilities should be included in the communal space. The council will use the Mayor of London's 'Providing children's and young people's play and informal recreation SPG' (March 2008) when calculating requirements: <http://static.london.gov.uk/mayor/strategies/sds/spg-children-recreation.jsp> (accessed April 2011).
- Space should be well designed so that residents have a sense of ownership of the space, which will encourage its use.

- Space should be located sensitively so that it is overlooked by surrounding development and secure for residents.
- Space should be designed to take advantage of direct sunlight.
- Space should be designed to minimise disturbance to occupiers and neighbours, e.g. by being sheltered from busy roads, by being located in the rear of the buildings, back to back, behind perimeter blocks or in courtyards.
- Landscaping and facilities provided for the space should be of a high quality and have suitable management arrangements in place.

### Further information

GLA Housing Design Guide	The Mayor's London Housing Design Guide from April 2011 (August 2010) provides detailed guidance on housing design in London <a href="http://www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide">http://www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide</a> (accessed April 2011)
Lifetime Homes and Wheelchair Housing Standards	In addition to the above residential standards, most residential schemes will also need to meet specific requirements for Lifetime Homes and Wheelchair Housing Standards: <ul style="list-style-type: none"> <li>• For further guidance on how to meet Camden's requirements refer to CPG on Lifetime homes and wheelchair housing.</li> <li>• For good practice guidance specifically on Lifetime Homes <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a></li> </ul>
Daylight and Sunlight	For good practice advice on overshadowing and providing daylight and sunlight to buildings, refer to the widely used BRE Report "Site Layout Design for Daylight and Sunlight; a guide to good practice". It provides specific guidance on: <ul style="list-style-type: none"> <li>• Providing good daylighting and sunlighting within a new development</li> <li>• Safeguarding sunlight and daylight within existing buildings nearby</li> <li>• Protection of daylighting of adjoining land for future development</li> <li>• Passive solar site layout</li> <li>• Sunlighting of gardens and amenity areas</li> </ul>
Sustainability	The Council will require all that all buildings are designed to be sustainable, thus reference should also be made to CPG3 <b>Sustainability</b> , in particular, the 'Code for Sustainable Homes' sub-section in 'Sustainability assessment tools'.



## 5 Lifetime Homes and Wheelchair Housing

### KEY MESSAGES

- All residential development should meet the 16 criteria that form the Lifetime Homes standards.
- The standards will be applied flexibly to existing buildings, but applicants should justify failure to meet any of the criteria.
- 10% of market housing development should meet wheelchair housing standards, or should meet the 13 key Habinteg wheelchair housing criteria so that they can be easily adapted to meet wheelchair housing standards.
- 10% of affordable housing development should be designed, built and fitted out to meet Wheelchair Housing standards in full.

### What does this section cover?

- 5.1 This section provides advice on how proposals can made be accessible to all by incorporating “lifetime home” standards and creating wheelchair accessible homes. It supplements Camden Development Policies policy DP6 – *Lifetime homes & wheelchair housing*, as well as DP29 – *Improving Access* and Camden Core Strategy policy CS6 - *Providing quality homes*.
- 5.2 In line with policy DP6 all new residential development will be expected to meet the following standards.

#### LIFETIME HOMES

All housing developments should meet lifetime homes standards. A lifetime home is an ordinary home incorporating 16 design features for accessible living. These make homes easier to occupy for the entire life cycle of a household, whether its members are young, old, healthy or ill.

#### WHEELCHAIR HOUSING

A minimum of 10% of new housing should either meet wheelchair housing standards, or be easily adapted to meet them. Wheelchair housing provides independence and quality of life for wheelchair users and should be tailor-made for their specific needs.

- 5.3 In addition, the following building regulations should be considered where appropriate:
- Part M of the Building Regulations (2004 edition) – this sets minimum requirements for building standards in public buildings and new dwellings only.
  - BS 8300: 2009: Design of buildings and their approaches to meet the needs of disabled people – good practice guidance that covers non-domestic buildings and details on specific building types.
- 5.4 This planning guidance is applicable to all development. It applies equally to new build, refurbished, converted, extended and altered

premises. It should also be read in conjunction with the Council's 'Camden Wheelchair Housing Design Brief 2010'.

- 5.5 The application of Lifetime Homes and Wheelchair Housing Standards varies depending on the type of dwelling as follows (see also Development Policy DP6 and supporting paragraphs 6.7 to 6.9):
- Lifetime Homes standards apply to all developments of self-contained housing (but does not apply to hotels or student housing);
  - Wheelchair Housing Standards apply to all developments providing 10 or more self-contained homes and to student housing;
  - both sets of standards apply to housing in mixed-use developments as well as purely residential developments;
  - both sets of standards apply to new build development, conversions, reconfigurations and changes of use; and
  - the requirements will be applied flexibly to take account of the circumstances of existing buildings, particularly those that are listed. English Heritage has produced guidance on "Easy Access to Historic Buildings".

### **What is the guidance on Lifetime homes?**

- 5.6 Lifetime homes are ordinary homes built incorporating 16 design features for accessible living. These features ensure a good level of accessibility from the outset, but they also allow a dwelling to be easily adapted for even higher levels of accessibility in the future should the need arise eg to cater for raising young children and declining mobility in old age.
- 5.7 Lifetime homes standards are not designed specifically for disabled people or wheelchair users but allow for accessibility features to be easily incorporated at a later date if needed. There are separate Wheelchair Housing standards to guide the design of homes to meet the specific needs of people who are long-term wheelchair users (see paragraph 5.15)
- 5.8 By planning for accessibility at the earliest stage, the Lifetime Homes features can be incorporated into the design of a dwelling without significant additional cost and can result in major cost savings to the building's occupants in the long run (for a discussion of cost benefits and savings of Lifetime Homes, refer to 'Costing Lifetime Homes' by the Joseph Rowntree Foundation.)
- 5.9 The table on the following pages gives key features of the 16 criteria forming the Lifetime Homes standards. These came into effect on 5 July 2010. We advise developers to refer to [www.lifetimehomes.org.uk](http://www.lifetimehomes.org.uk) for additional and detailed guidance on how specific requirements can be met, and also for news of any future revisions.

## Lifetime Homes – Features

LIFETIME HOMES CRITERIA	KEY OBJECTIVES	DETAILED CRITERIA
<b>1. Parking (width or widening capability)</b>	Provide, or enable by cost effective adaptation, parking that makes getting into and out of the vehicle as convenient as possible for the widest range of people (including those with reduced mobility and/or those with children).  General Note: Criterion 1 is not relevant to developments that do not contain any parking provision (for specific requirements refer to <b>Camden Development Policy – DP18 Parking standards</b> and limiting the availability of car parking - which specifically discourages on-site parking).	a) 'On plot' (non-communal) parking: Where a dwelling has car parking within its individual plot (or title) boundary, at least one parking space length should be capable of enlargement to achieve a minimum width of 3300mm.  b) Communal or shared parking: Where parking is provided by communal or shared bays, spaces should be provided with a width of 3300mm and in accordance with the specification given in Appendix 2 on page 65 or <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> .
<b>2. Approach to dwelling from parking (distance, gradients and widths)</b>	Enable convenient movement between the vehicle and dwelling for the widest range of people, including those with reduced mobility and/or those carrying children or shopping.	The distance from the car parking space of Criterion 1 to the dwelling entrance (or relevant block entrance or lift core), should be kept to a minimum and be level or gently sloping. The distance from visitors parking to relevant entrances should be as short as practicable and be level or gently sloping.
<b>3. Approach to all entrances</b>	Enable, as far as practicable, convenient movement along other approach routes to dwellings (in addition to the principal approach from a vehicle required by Criterion 2) for the widest range of people.	The approach to all entrances should preferably be level or gently sloping, and in accordance with the specification given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a>
<b>4. Entrances</b>	Enable ease of use of all entrances for the widest range of people.  Note: For the purpose of requirements d) and e) of this Criterion, main entrances are deemed to be: the front door to an individual dwelling, the main communal entrance door to a block of dwellings, plus any other entrance door associated with the approach route from parking required by Criterion 2.	All entrances should: a) Be illuminated b) Have level access over the threshold; and c) Have effective clear opening widths and nibs as specified given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> d) In addition, main entrances should also: e) Have adequate weather protection* f) Have a level external landing.*
<b>5. Communal stairs and lifts</b>	Enable access to dwellings above the entrance level to as many people as possible.	a) Communal Stairs Principal access stairs should provide easy access in accordance with the specification given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> , regardless of whether or not a lift is provided.  b) Communal Lifts Where a dwelling is reached by a lift, it should be fully accessible in accordance with the specification given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a>  Note: provision of a lift is not a Lifetime Homes requirement, but is recommended where dwellings are not entered at the same level as the main block entrance.
<b>6. Internal doorways and hallways</b>	Enable convenient movement in hallways and through doorways.	Movement in hallways and through doorways should be as convenient to the widest range of people, including those using mobility aids or wheelchairs, and those moving furniture or other objects. As a general principle, narrower hallways and landings will need wider doorways in their side walls. The width of doorways and hallways should conform to the specification given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> .
<b>7. Circulation Space</b>	Enable convenient movement in rooms for as many people as possible.	There should be space for turning a wheelchair in dining areas and living rooms and basic circulation space for wheelchair users elsewhere.

## Lifetime Homes – Features (continued)

LIFETIME HOMES CRITERIA	KEY OBJECTIVES	DETAILED CRITERIA
<b>8. Entrance level living space</b>	Provide accessible socialising space for visitors less able to use stairs.	A living room / living space should be provided on the entrance level of every dwelling (see Appendix 1 on page 65 or <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> for definition of 'entrance level'). Note: Entrance level generally means the storey containing the entrance door to the individual dwelling. It may refer to the first storey that contains a room (habitable or non-habitable) if the entrance door leads directly to an 'easy-going' stair.
<b>9. Potential for entrance level bed-space</b>	Provide space for a member of the household to sleep on the entrance level if they are temporarily unable to use stairs	In dwellings with two or more storeys, with no permanent bedroom on the entrance level, there should be space on the entrance level that could be used as a convenient temporary bed-space (see Appendix 1 on page 65 or <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> for definition of 'entrance level').
<b>10. Entrance level toilet and shower drainage</b>	Provide an accessible toilet and potential showering facilities for: a) any member of the household using the temporary entrance level bed space of Criterion 9, and; b) visitors unable to use stairs.	Where an accessible bathroom, in accordance with Criterion 14, is not provided on the entrance level of a dwelling, the entrance level should have an accessible toilet compartment, with potential for a shower to be installed – as detailed in the specification given at (see Appendix 1 on page 65 or <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> for definition of 'entrance level')
<b>11. Toilet and bathroom walls</b>	Ensure future provision of grab rails is possible, to assist with independent use of toilet and bathroom facilities.	Walls in all bathrooms and toilet compartments should be capable of firm fixing and support for adaptations such as grab rails.
<b>12. Stairs and potential through-floor lift in dwelling</b>	Enable access to storeys above the entrance level for the widest range of households.	The design within a dwelling of two or more storeys should incorporate both: a) Potential for stair lift installation; and b) A suitable identified space for a through-the-floor lift from the entrance level to a storey containing a main bedroom and a bathroom satisfying Criterion 14.
<b>13. Potential for fitting of hoists and bedroom / bathroom relationship</b>	Assist with independent living by enabling convenient movement between bedroom and bathroom facilities for a wide range of people.	Structure above a main bedroom and bathroom ceilings should be capable of supporting ceiling hoists and the design should provide a reasonable route between this bedroom and the bathroom.
<b>14. Bathrooms</b>	Provide an accessible bathroom that has ease of access to its facilities from the outset and potential for simple adaptation to provide for different needs in the future.	An accessible bathroom, providing ease of access in accordance with the specification given at <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a> should be provided in every dwelling on the same storey as a main bedroom.
<b>15. Glazing and window handle heights</b>	Enable people to have a reasonable line of sight from a seated position in the living room and to use at least one window for ventilation in each room.	Windows in the principal living space (typically the living room), should allow people to see out when seated. In addition, at least one opening light in each habitable room should be approachable and usable by a wide range of people – including those with restricted movement and reach. Note: In kitchens areas or bathrooms with only one window situated behind kitchen units or bathroom fittings, the requirement for a potential clear approach space to that window need not apply. However, the window handle height/control requirement remains applicable. Any other window within the kitchen area or bathroom, not behind fittings, is required to satisfy both the approach and window handle/control height requirements.
<b>16. Location of service controls</b>	Locate regularly used service controls, or those needed in an emergency, so that they are usable by a wide range of household members - including those with restricted movement and limited reach.	Service controls should be within a height band of 450mm to 1200mm from the floor and at least 300mm away from any internal room corner.

**APPENDIX 1 - DEFINITION OF 'ENTRANCE LEVEL' FOR THE PURPOSE OF LIFETIME HOMES CRITERIA**

The entrance level of a dwelling for the purposes of the Lifetime Homes Criteria is generally deemed to be the storey containing the main entrance door as defined by Criterion 4. This will usually be the ground floor of a house, or the storey containing the entrance door of a flat approached a communal hall, stair, or lift.

Where there are no rooms (habitable or non-habitable) on the storey containing the main entrance door (e.g. most flats over garages, some flats over shops, some duplexes and some townhouses), the first storey level containing a habitable or non-habitable room can be considered the 'entrance level' if this storey is reached by an 'easy going' stair with maximum risers 170mm, minimum goings 250mm, and a minimum width of 900mm measured 450mm above the pitch line.

**APPENDIX 2 - COMMUNAL CAR PARKING MANAGEMENT PLANS**

Where communal parking is provided, the Council may require a Parking Management Plan to ensure that adequate parking space is available for disabled people. The parking management plan should include a mechanism to ensure that the supply and demand of wider bays / blue badge bays are regularly monitored and provision reviewed, to ensure that provision equates to any change in the demand from disabled residents and visitors and that the bays are effectively enforced to stop abuse by non blue badge holders. The needs of residents who occupy a home designated for wheelchair users and any residents who hold a blue badge and occupy any other home should be addressed.

**Key requirements for lifetime homes standards:**

- 5.10 As the Building Regulations do not currently require dwellings to be built to lifetime homes standards it is necessary to check compliance at the planning application stage. Therefore planning applications for new housing are expected to include information in the design statement and access statement showing how the proposed development addresses the 16 Lifetime Homes Criteria. Information on access statements can be found in the '**Access for all**' section of CPG6 **Amenity**.



- 5.11 Applicants should specifically submit a schedule setting out how each of the 16 criteria will be met. Plans should particularly include sufficient detail of the following key internal space criteria, such as:
- 6 - Internal doorways and hallways
  - 7 - all necessary circulation space within and between rooms
  - 8 - an entrance level living space
  - 9 – potential for an entrance level space that can be used as a bed-space
  - 10 - entrance level toilet and shower drainage at entrance level
  - 12 – stairs and potential through-floor lift in dwelling
  - 14 - an accessible bathroom
- 5.12 In the case of conversion of an existing building or other circumstances of a development may mean it may not be possible for new homes to meet all 16 criteria. In this case, the development should still seek to meet Lifetime Homes Standards as far as possible to maximise accessibility and demonstrate to the Council's satisfaction why it is not possible to meet particular criteria.
- 5.13 Applicants should include a schedule within the design and access statement for their development that sets out:
- how each of the 16 Lifetime Homes criteria will be met;
  - identifying any Lifetime Homes criteria that will not be met;
  - demonstrating that these criteria cannot be met, or otherwise justifying failure to meet them.
- 5.14 The Council will expect developments involving listed buildings to incorporate accessible features. English Heritage has produced guidance on “Easy Access to Historic Buildings”. This guidance document should be referred to for further advice.

### **What is the guidance on wheelchair housing?**

- 5.15 In addition to requiring residential development to meet Lifetime Homes standards above, policy DP6 requires a minimum of 10% of all new housing designed to be suitable for permanent occupation by wheelchair users or be easily adapted to meet them. Wheelchair housing standards go significantly beyond Lifetime Homes standards, which do not provide for permanent wheelchair occupation.
- 5.16 The 10% requirement will be applied individually to each tenure within a given development scheme (ie applied to each affordability category whether market housing, social rented housing or intermediate affordable housing).
- 5.17 We may agree to increase the percentage of social rented wheelchair homes and decrease the percentage of intermediate affordable wheelchair homes (or vice versa) where this will better enable us to meet the needs of identified future occupiers.

**For market housing:**

- 5.18 We will encourage the provision of fully fitted out Wheelchair Housing, but will accept provision of 10% homes designed to be easily adaptable to meet the standards.
- 5.19 New homes that are capable of being easily adaptable should incorporate the key space criteria set out in the Habinteg Wheelchair Housing Design Guide (see Figure 10 below) and ensure that any fittings and fixtures required at a later date can be easily provided without enlarging or structurally altering the home.

**For affordable housing:**

- 5.20 The 10% wheelchair requirement should be designed, built and fitted out to meet Wheelchair Housing standards in full. These affordable homes should comply with the Camden Wheelchair Housing Design Brief 2010 produced by the Council.
- 5.21 As far as possible, the Council will seek to identify future occupiers of affordable wheelchair housing and seek to ensure that it is tailored to their needs.
- 5.22 The Council's Housing Partnerships Team should be consulted for any specific design requirements required to meet the needs of future occupiers of affordable wheelchair housing (see Further Information at the end of this guidance).
- 5.23 The Council may use its affordable housing fund to support the creation of fully-fitted out affordable wheelchair housing.

**Habinteg Wheelchair Housing Design Guide:**

- 5.24 All wheelchair housing should be designed in accordance with the standards set out in the nationally recognised Habinteg Wheelchair Housing Design Guide (WHDG).
- 5.25 The standards include guidance for main entrances, doors, hallways, storage space, bedroom space, windows, etc. Below are the 13 key space criteria relating to the internal layouts of individual dwellings. The main entrances and common parts should be designed in accordance with the relevant guidance (WHDG p30 & 31)



**Figure 10. Summary of the 13 key Habinteg wheelchair housing criteria**

1. Dwellings should normally be designed on one level storey. Where a dwelling is arranged in two or more floors a vertical rise lift serving all floors must be provided. (WHDG p63)
2. The entrance door to the dwelling should provide a minimum clear opening width of 800mm (when accessed head on) or 825mm (when the approach is not head on). It should be weather protected and lit and be provided with a 300mm clear space to the leading edge (pull side of the door) and a 200mm clear space on the push side. (WHDG p36)
3. The entrance hallway requires a manoeuvring space 1500 x 1800mm (enabling an occupier to open and close the door and turn into the living space) (WHDG p37 & 44)
4. A space to store and charge an electric wheelchair should be provided as an extension to the circulation space of the dwelling. Care should be taken to ensure that storage of the chair does not restrict the minimum clear effective width of any corridor. Consideration should be given to how the facility is accessed and used. To guarantee sufficient manoeuvring space an overall space of 1100 x 1700mm should be provided. (WHDG p45)
5. All halls and corridors (facilitating 90° turns) should have a clear unobstructed width of at least 1200mm and internal door clear opening widths of at least 800mm. To facilitate a 180° turn a corridor width of 1500mm is required. (WHDG p57)
6. All internal doors require a 300mm clear space to the leading edge (pull side of the door) and a 200mm clear space on the push side. (WHDG p58)
7. A 1500 x 1800mm turning circle should be provided in the kitchen. (WHDG p7)
8. In all bedrooms a 1200 x 1200mm clear space should be provided to one side of the bed, 1000mm circulation is required to the other sides and the foot of each bed. In single bedrooms access to one side of the bed is acceptable. All furniture and window controls should be reachable and usable. (WHDG p88)
9. In all bathrooms space should be provided to facilitate frontal, side and oblique transfer to the toilet. The bathrooms and toilets should normally have outward opening doors or provide a clear space of 1100mm between the door swing and any fixture or fitting. (WHDG p78)
10. All bathrooms should provide a 1500 x 1500mm square manoeuvring space, clear of all fittings (WHDG p78)
11. In all bathrooms a drainage gully and services to facilitate the installation of a level entry shower (1000 x 1000mm) should be provided. (WHDG p85)
12. A clear ceiling-track hoist route (suitably constructed and with a ready power supply) should be provided between the bathroom and the main bedroom (WHDG p80 & 15)
13. Windows should be able to be opened from a seated position. Controls should be located no higher than 1000mm above finished floor level and suitable for use by people with limited manual dexterity (WHDG p99)

For the latest edition of these standards, please refer to: "Wheelchair housing design guide" edited by Stephen Thorpe and available from Habinteg Housing Association:  
[www.habinteg.org.uk/pages/whdg.html](http://www.habinteg.org.uk/pages/whdg.html) (available from BREbookshop.com ISBN 1860818978)

**Key requirements for wheelchair housing standards**

- 5.26 Planning applications will need to show which units are wheelchair accessible and how they are wheelchair accessible or how they can be easily adapted to be suitable for wheelchair users. Full wheelchair housing standards should be met within affordable housing and will be negotiated within market housing on a case by case basis.
- 5.27 Applications for planning permission should show full details of how 10% of homes will comply with wheelchair housing standards or, in the case of market housing, design features that ensure that 10% of homes are easily adaptable to meet the standards.
- 5.28 Plans should identify all wheelchair housing (or homes easily adaptable to the standards) and applications should include drawings setting out how the 13 key space criteria identified in Figure 10 will be met.
- 5.29 Applicants should include a schedule within the design and access statement for their development that sets out:
- how each of the 13 key space criteria will be met;
  - identifying any key space criteria that will not be met;
  - demonstrating that these criteria cannot be met, or otherwise justifying failure to meet them.
- 5.30 In the case of conversion of an existing building, we will apply the 10% requirement flexibly to take into account any constraints that would prevent the inclusion of entrances and internal spaces suitable for a wheelchair user.
- 5.31 For further design guidance on wheelchair housing please refer to the Mayor of London's SPG: 'Accessible London – Achieving an Inclusive Environment' (April 2004) - [http://static.london.gov.uk/mayor/strategies/sds/accessible\\_london.jsp](http://static.london.gov.uk/mayor/strategies/sds/accessible_london.jsp) (accessed April 2011).

**Additional considerations****Requirements in other residential buildings**

- 5.32 In general, mobility difficulties and the need to provide for wheelchair users should be considered in the design of all forms of housing. The type of provision will need to be individually tailored to suit the nature of the facility and the likely needs of future occupiers.
- 5.33 In relation to student housing there is no requirement to meet Lifetime Homes standards, however, 10% of student bedrooms/ study flats (together with supporting communal spaces) are expected to meet wheelchair standards. Suitable design layouts are included in Approved Document M (known as Part M) of the Building Regulations.

### **Key building regulation requirements**

- 5.34 The accessibility of accommodation should be considered whether the proposal is for new build, conversions or refurbishments.
- 5.35 Part M of the Building Regulations sets minimum accessibility requirements for building standards in new residential dwellings and is required in addition to Lifetime Homes and wheelchair accessible housing standards being met. They apply at the Building Regulation approval stage and, as such, are not a matter for consideration in the planning process.
- 5.36 BS 8300:2009 'Design of buildings and their approaches to meet the needs of disabled people – Code of Practice' (BSI) provides good practice guidance for various types of non-domestic buildings.
- 5.37 For further information on part M of the Building Regulations or BS 8300:2009 please contact the Council's Building Control Service or refer to the regulations on the Department for Communities and Local Government's website:  
[www.communities.gov.uk/planningandbuilding/buildingregulations/](http://www.communities.gov.uk/planningandbuilding/buildingregulations/)

### **Securing lifetime homes and wheelchair housing through conditions and legal agreements**

- 5.38 Homes need to satisfy specific layout and space criteria in order to meet Lifetime Homes and Wheelchair Housing Standards. If homes are not designed to meet these criteria from the outset, it may not be possible to accommodate the necessary spaces within the envelope of the dwelling as proposed. Consequently, if submitted applications do not show dwellings that meet Lifetime Homes and Wheelchair Housing Standards, they cannot be secured by condition.
- 5.39 Conditions may be used exceptionally in connection with Lifetime Homes Standards where:
  - constraints of an existing building will prevent layout and space criteria from being met
  - key layout and space criteria can clearly be met by the proposed housing, but other Lifetime Homes criteria have not demonstrably been met by submissions with the planning application.  
 In each case, a condition may be used to secure submission of additional details of how specific Lifetime Homes criteria will be met before the development is implemented.
- 5.40 Development policy DP6 requires the provision of the 10% affordable wheelchair housing to be designed, built and fitted out to meet wheelchair housing standards in full. It will always be secured through a planning obligation (also known as a section 106 agreement or legal agreement). In most cases, the terms will specify:
  - all wheelchair housing in the development

- which wheelchair housing will be social rented and which will be intermediate affordable housing
- arrangements to ensure that affordable wheelchair housing is fully fitted out to the agreed specifications, including payment of a bond where appropriate
- arrangements to ensure that affordable wheelchair housing is completed and fully fitted out to an acceptable timescale.

5.41 In some cases the terms may also specify:

- arrangements for submission of revised or additional plans or schedules where key space criteria have not demonstrably been met by submissions with the planning application;
- arrangements to ensure that affordable wheelchair housing can be viewed by potential occupiers before it is fitted out;
- arrangements to ensure that affordable wheelchair housing is available to wheelchair users in the future.

5.42 Provision of 10% wheelchair housing (or easily adaptable market housing) in market schemes is required but often future occupiers will be unknown until after the homes have been fitted out - under Development policy DP6 it may be exceptionally secured through a planning obligation where submissions with the planning application do not demonstrate that 10% of market homes meet the key space criteria. In such cases, the terms will specify:

- arrangements for submission of revised or additional plans or schedules showing that 10% of market homes meet key space criteria;
- arrangements to ensure that wheelchair housing is completed to the agreed specifications.

## Further information

<p>Lifetime Homes  <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a></p>
<p>Mayor's guidance at <a href="http://www.london.gov.uk/strategy-policy/accessible-london-achieving-inclusive-environment">http://www.london.gov.uk/strategy-policy/accessible-london-achieving-inclusive-environment</a> (see Mayor's Priorities - Planning - Accessible London: Achieving an Inclusive Environment - July 2011):          SPG 'Accessible London: Achieving an Inclusive Environment' (April 2004)          'Lifetime Homes – case study examples' (September 2006)          Best Practice Guidance 'Wheelchair Accessible Housing' (September 2007)</p>
<p>Housing Supplementary Planning Guidance (Mayor of London, November 2012)  <a href="http://www.london.gov.uk/who-runs-london/mayor/publications/planning/housing-supplementary-planning-guidance">http://www.london.gov.uk/who-runs-london/mayor/publications/planning/housing-supplementary-planning-guidance</a>          (see Mayor's Priorities - Planning – Supplementary Planning Guidance)</p>
<p>London Housing Design Guide (Mayor of London, August 2010)  <a href="http://www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide">www.london.gov.uk/who-runs-london/mayor/publications/housing/london-housing-design-guide</a> (accessed April 2011)</p>
<p>Building Regulations 2010 Approved Document M - Access to and Use of Buildings (known as Part M)</p>
<p>British Standard BS 8300:2009+A1: 2010 Design of buildings and their approaches to meet the needs of disabled people – Code of Practice (BSI)</p>
<p>British Standard BS 9999:2008 Code of Practice for Fire Safety in the Design, Management and Use of Buildings (BSI)</p>
<p>Camden Council Housing Adult and Social Care 'Camden Wheelchair Housing Design Brief 2013'  <a href="http://www.camden.gov.uk/ccm/content/housing/housing-policy-and-strategies/camden-wheelchair-design-guide/camden-wheelchair-design-guide.en">http://www.camden.gov.uk/ccm/content/housing/housing-policy-and-strategies/camden-wheelchair-design-guide/camden-wheelchair-design-guide.en</a></p>

## 6 Development involving net loss of homes

### KEY MESSAGES

- We will generally resist proposals for redevelopment or conversion of housing that involve the net loss of two or more homes.
- Developments involving the loss of two or more homes may be acceptable in certain circumstances, including the creation of large homes in a part of the Borough that has a relatively low proportion of existing large dwellings.
- We will assess proposals taking into account all relevant material considerations and particularly the history of the site including previous developments and valid planning consents involving the loss of homes.

- 6.1 This guidance relates to Core Strategy policy CS6 – *Providing quality homes* and Development Policy DP2 – *Making full use of Camden's capacity for housing*. It applies to all development that involves the net loss of homes. This guidance does not relate to applications for Lawful Development Certificates.
- 6.2 Camden's Core Strategy indicates that the projected growth in the number of households exceeds the anticipated supply of additional homes. The Council therefore seeks to minimise the net loss of existing homes.
- 6.3 Camden's Development Policies document indicates that the number of conversion and redevelopment schemes each year that involve a loss of homes is sufficient to create a significant cumulative loss and contribute to the shortfall between the additional supply of homes and projected growth in the number of households. Many schemes involve combining 2 or more homes into a single large dwelling, and there is some evidence to suggest that where large homes exist in Camden, they are relatively unlikely to be occupied by large households. In 2001, 47% of the households occupying a home with 5-or-more rooms were one- or two-person households. The proportion of one- or two-person households was 54% for owner-occupied homes with 5-or-more rooms.
- 6.4 The Council does not generally seek to resist schemes combining dwellings where they involve loss of a single home. This provision creates some scope for growing families to expand into an adjoining property. However, the provision can also be used to make successive changes to a property to combine several homes into a single large dwelling. A town house comprising 5 flats (one per floor from basement to 3rd floor) could become one large dwelling through 4 losses of a single flat, reducing the number of occupiers below the capacity of the property, and generating a need for 4 additional homes elsewhere. The floorspace of the large dwelling created in such a scenario would

typically exceed 250 sq m, which is very much greater than the minimum space standards for a 6-person dwelling set out in this guidance and in the London Plan.

- 6.5 The Council will therefore apply Development Policy DP2 to resist a succession of developments that involve combining small homes to create larger homes. When considering planning applications we will take into account all relevant material considerations including the cumulative loss of units created by past changes and the potential for further losses from planning consents that have not expired. We will particularly focus on changes in the same apartment or flat building, or in the same sub-divided town house.
- 6.6 Development Policy DP2 does provide for developments involving the net loss of two or more homes where they would create large homes in a part of the borough with a relatively low proportion of large dwellings. This relates to the six wards listed in paragraph 2.24 of Camden's Development Policies document, namely Bloomsbury, Holborn and Covent Garden, King's Cross, Kilburn, Regent's Park and St Pancras and Somers Town. Census data for 1991 and 2001 shows that in both years fewer than 26% of households in these wards lived in homes with 5 or more rooms. Providing for the development of more large homes in these wards contributes to the objective of creating mixed and inclusive communities set out in the NPPF and policy CS6 of Camden's Core Strategy.
- 6.7 Development Policy DP2 also provides for developments involving the net loss of two or more homes where they would enable sub-standard units to be enlarged to meet residential space standards. We will consider such proposals favourably if existing homes are 20% or more below the space standards and the loss of dwellings is no greater than is necessary to meet the standard.
- 6.8 Development Policy DP2 also provides for developments involving the net loss of two or more homes where they would enable existing affordable homes to be adapted to provide the affordable dwelling-sizes most needed, having regard to severe problems of overcrowding and the high proportion of one-bedroom dwellings in the Council stock.
- 6.9 The Council will keep Camden Planning Guidance under review and will apply this guidance and Development Policy DP2 taking into account all relevant material considerations including the latest information from the 2011 Census, population projections, other evidence relating to housing need and supply, and the impact of changes to national and regional planning policy. We will also take account of the minimum borough annual average housing target set out in the London Plan 2011, monitoring of housing delivery and the NPPF requirement that local planning authorities should plan to meet the full objectively assessed needs for housing.







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Camden Planning Guidance

# Sustainability

London Borough of Camden

CPG 3



July 2015



## CPG3 Sustainability

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# 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](http://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

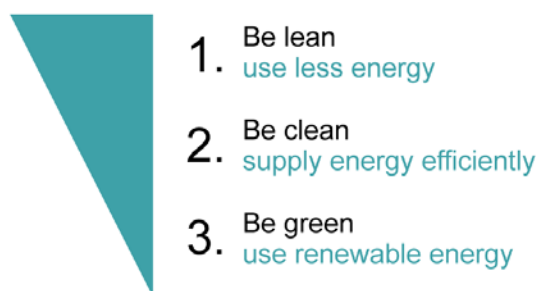
## 2 The energy hierarchy

### 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 - <i>Tackling climate change through promoting higher environmental standards</i> – sets out Camden's overarching approach to environmental sustainability.
Camden Development Policies	Policy DP22 - <i>Promoting sustainable design and construction</i> – 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 <a href="http://www.london.gov.uk/sites/default/files/guidance-energy-assessments-28-sep-10.pdf">www.london.gov.uk/sites/default/files/guidance-energy-assessments-28-sep-10.pdf</a>
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 <a href="http://www.planningportal.gov.uk">www.planningportal.gov.uk</a>

### 3 Energy efficiency: new buildings

#### KEY MESSAGES

- All new developments are to be designed to minimise carbon dioxide emissions.
- The most cost-effective ways to minimise energy demand are through good design and high levels of insulation and air tightness.

This guidance covers:

- Stage 1 of the energy hierarchy; and
- How to ensure new buildings are as energy efficient as possible.

- 3.1 Stage 1 involves ensuring that the design of a development includes a range of low carbon techniques that will reduce its energy consumption.
- 3.2 Stages 2 and 3 of the energy hierarchy – Decentralised energy networks and combined heat and power and renewable energy are dealt with in sections 4 and 5 of this document.
- 3.3 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.

#### WHAT WILL THE COUNCIL EXPECT?

All new developments are to be designed to minimise carbon dioxide emissions by being as energy efficient as is feasible and viable

#### Energy efficient design techniques

- 3.4 Energy efficient design requires an integrated approach to solar gain, access to daylight, insulation, thermal materials, ventilation, heating and control systems. It is important you always consider these aspects in relation to each other when designing a scheme.
- 3.5 This section provides detailed guidance on all the ways you can design your building to be more energy efficient. It is split into four sections:
- Natural systems;
  - Thermal performance;
  - Mechanical systems; and
  - Other energy efficient technology.

#### Natural systems

- 3.6 Designing natural systems into new buildings can make the most of naturally occurring energy, such as the heat and light from the sun.



**Making the most of sunlight**

- Consider locating principal rooms that require warmth and daylight on the south side of buildings to benefit from the sun's heat. Within 30 degrees of south is ideal.
- Consider any overshadowing from adjoining or of adjoining buildings and spaces that will reduce the amount of solar gain.
- Consider the possibility of including renewable energy technologies, for example by including a flat or south facing roof for solar panels.

**Making the most of daylight**

- Maximise the amount daylight while minimising the need for artificial lighting.
- Carefully design windows to maximise the amount of sunlight entering rooms to meet the needs of the intended use.
- Daylight is dependent on the amount of open, un-obscured sky available outside a window, the amount of sunshine and the amount of light reflected from surrounding surfaces.
- The size, angle and shape of openings together with room height depth and decoration determine the distribution of daylight.

- 3.7 More information on daylight and sunlight can be found in CPG6 Amenity.

**Preventing overheating**

- 3.8 Some developments may experience too much sunlight in the summer, therefore you should achieve a balance between benefitting from solar gain and preventing over heating. To prevent over heating:
- Locate any spaces that need to be kept cool or that generate heat on the north side of developments.
  - Use smaller windows on the south elevation and larger windows on the north.
  - Use shading measures, including balconies, louvers, internal or external blinds, shutters, trees and vegetation. Any shading needs to be carefully designed to take into account the angle of the sun and the optimum daylight and solar gain.
  - Include high performance glazing e.g. triple glazed windows, specially treated or tinted glass.
  - Make use of overshadowing from other buildings.
  - Include green and brown roofs and green walls which help to regulate temperature. See section 9 of this guidance on brown roofs, green roofs and green walls for more information.

**Natural ventilation**

- Natural ventilation includes openable windows, the 'stack effect' system where pressure differences are used to draw air through a building (see Figure 1) and, double layers, where one layer has

openable windows where air can flow freely. These systems allow air to be drawn through a building and can operate in tall buildings. Careful design of the space is required as air flows are impeded by walls and partitioning.

- Room layouts, shallow floor plans and high floor to ceiling heights all help the natural ventilation of buildings

### **Natural cooling**

- Can be created by shading, the evaporation effect from trees and other vegetation including green roofs and walls which naturally cool the environment. See section 9 for more guidance on green roofs.

#### **WHAT INFORMATION DOES THE COUNCIL REQUIRE?**

- A full model of the building should be carried out to ensure the building design optimises solar gain and daylight without resulting in overheating for developments comprising 5 dwellings or more or 500sq m or more of any floorspace
- Consider maximising the use of natural systems within buildings before any mechanical services are considered

### **Thermal performance**

- 3.9 The thermal performance of a building relates to the amount of heat that is retained inside and the amount that is lost to the outside air. Ensuring a high thermal performance is one of the most effective ways to ensure your development is energy efficient.

#### **Insulation**

- 3.10 A high level of insulation is the most effective way to ensure new buildings are energy efficient. Use insulation with low overall heat transfer coefficient (U-value). See the Energy Savings Trust's Insulation materials chart for details on the thermal performance of various materials.

##### **U-value**

The rate at which heat transfers through a building material. The lower the U-value, the better the insulator.

- 3.11 Consider how the insulation is attached to the building structure or walls. If a joint is badly insulated or if the material is penetrated by materials that conduct heat such as metal nails, it could cause cold patches and reduce the efficiency of the insulation. Ensure special attention is given to these potential heat loss areas to prevent cold bridging and potential points of condensation.

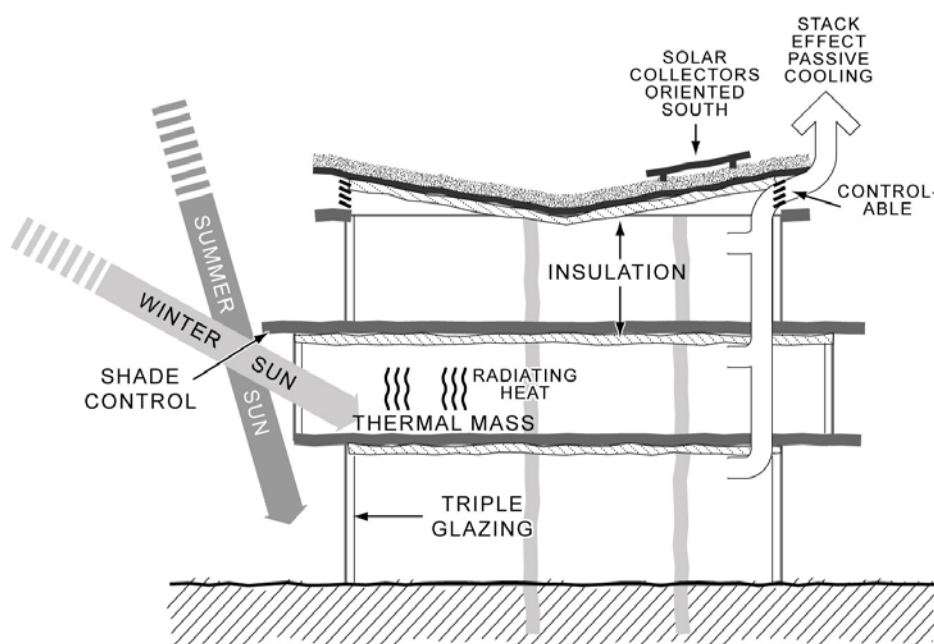
##### **Cold bridging**

Cold bridging occurs on a surface where one material loses heat faster than other, for example, through a concrete frame or a metal nail.

### Materials with thermal properties

- 3.12 Materials with a high thermal mass e.g. concrete absorb and retain heat produced by the sun. These materials can be used to regulate indoor temperatures, especially to keep inside spaces cool during the day. Where heat is generated from within a building, exposed areas of thermal mass within the building can be used to transmit heat out of a building as the outdoor temperature drops.
- 3.13 Figure 11 below shows how heat from the sun can be absorbed by the thermal mass material and be released over time to help keep the building warm and insulated

Figure 1. Natural system principles



### Thermal buffers

- 3.14 Porches, atriums, conservatories, lobbies and sheltered courtyards are useful 'thermal buffers'. You can design these features to prevent excessive heat loss from doors and windows by providing a transition between the cold outside and the warm inside of a building.
- 3.15 Insulation is central to low energy construction but it must be installed without any gaps to ensure a building is air tight to reduce heat loss. In some buildings around half of all heat losses are due to air leakage throughout the building materials.
- 3.16 To achieve air tightness, buildings must be designed with a continuous seal around the internal materials to eliminate unwanted draughts. Once the seals are in place, they ensure that the insulation can function to its optimum performance, saving energy and drastically reducing carbon emissions for the lifetime of the building.

**Air tightness**

Air tightness is the control of air leakage, i.e. the elimination of unwanted draughts and holes through the external materials of the building. It is measured by the rate at which air passes through a building (m<sup>3</sup>/m<sup>2</sup>/h)

- 3.17 Particularly air tight buildings may need to include a specialised ventilation system to ensure that naturally pre-heated fresh air is circulated through all the rooms without losing heat. See the section on Mechanical systems below for more information on Mechanical Ventilation with Heat Recovery (MVHR).

**Mechanical systems**

- 3.18 Mechanical systems are generally required by the Building Regulations to enable buildings to be occupied. These systems vary from simply extraction fans in kitchens and bathrooms to whole office cooling systems. The Council will expect applicants to consider the following when choosing mechanical systems:

**Efficient heating**

- Use heating systems that run using gas as they are generally more carbon efficient than systems which use electricity. Gas systems can also be designed so that they can be connected to a decentralised heating network.
- Locating plant e.g. pipes, flues, machinery, close to where the heat is required ensures a lower level of energy for pumping.
- A community heating scheme, where appropriate e.g. Combined Heat and Power (see section 4 of this guidance on Decentralised energy and combined heat and power for more information)
- Avoiding electric heating systems unless there is no access to a gas connection, or where heating is required for very short periods in isolated locations

**WHAT INFORMATION DOES THE COUNCIL REQUIRE?**

- Any development proposing electric heating (including heat pumps) will need to demonstrate the carbon efficiency of the proposed heating system. Specifications of the electric heating system and calculations will need to be provided to demonstrate that the proposed electric heating system would result in lower carbon dioxide emissions than an efficiency gas fuelled heating system.

**Efficient ventilation and cooling**

- Mechanical Ventilation with Heat Recovery (MVHR) conserves energy by recovering heat from stale warm air leaving a building and transferring the heat to the cooler incoming air.
- Water based cooling systems reduce the need for air conditioning by running cold water through pipes in the floor and/or ceiling to cool the air.

- Ground source cooling.
- Evaporation cooling which cools air through the simple evaporation of water.
- Exposed concrete slabs.
- The natural 'stack effect' which draws cool air from lower levels whilst hot air is released.

3.19 For some uses such as laboratories, where sterile conditions are essential, natural ventilation will not be required. These rooms should be located to minimise the heating or cooling required and close to the plant to limit the energy required by fans and pumps.

#### **WHAT INFORMATION DOES COUNCIL REQUIRE?**

- Where traditional mechanical cooling e.g. air conditioning units are proposed applicants must demonstrate that energy efficient ventilation and cooling methods have been considered first, and that they have been assessed for their carbon efficiency.
- NB: Air source heat pumps will be considered to provide air conditioning in the summer unless it can be demonstrated that the model chosen is not capable of providing cooling.

#### **Other energy efficient technology**

- In the average home, lighting accounts for around 20% of the electricity bill. In some developments it can be one of the highest energy consumers and can generate large amounts of heat that is wasted.
- High efficiency lighting with controlled sensors e.g. timers, movement sensors and photo sensors, which adjust the brightness of the light depending on the natural light level.
- Zoned lighting, heating and cooling with individual control.
- Specifying appliances which are A+ rated.
- Efficient mechanical services system or a building management system – computer systems which control and monitor a building's mechanical and electrical equipment. Their main aim is to control the internal environment, but in doing so can also reduce the energy consumption of a building.
- Using heat recovery systems.
- Energy monitoring, metering and controls should be used to inform and facilitate changes in user behaviour.

#### **Heat recovery system**

A heat recovery system uses heat leaving a building or generated as waste from mechanical operations to pre-heat fresh air entering a building

### What is considered best practice?

- 3.20 Policy 5.2 *Minimising carbon dioxide emissions* of the Draft Replacement London Plan introduces a carbon dioxide reduction target for new development to make a 35% improvement on the current 2013 Building Regulations:
- 2010 – 2013 25 per cent
  - 2013 – 2016 35 per cent
  - 2016 – 2031 Zero carbon
- 3.21 The following standards focus on improving a building's fabric to achieve best practice U-values over and above current Building Regulations. The Council considers that the standards below are feasible in all but exceptional circumstances to meet the new London Plan targets. There are other ways to reduce the energy efficiency of a building as set out in the first part of this section.
- 3.22 The table below generally relates to residential developments, however the building fabric standards are also applicable to commercial developments. For all developments a balance will need to be reached between the need to retain heat, the heat generated within a development and the need to remove excess heat.

### Standards

External wall	0.20
Roof	0.13
Floor	0.20
Windows	1.50 British Fenestration Rating Council band B or better
Doors	1.00 (solid) 1.50 (glazed)
Air tightness	3.00 (m <sup>3</sup> /h.m <sup>2</sup> at 50 Pa)
Proportion of energy efficient lighting	100%
BREEAM	Developments will be expected to achieve 60% of the un-weighted credits in the Energy category of their BREEAM assessment. (See section 8 on sustainability assessment tools for more details relating to BREEAM.

Thermal insulation measured in U-Values (W/m<sup>2</sup>.K)

### What is carbon offsetting?

- 3.23 Where the London Plan carbon reduction target in policy 5.2 cannot be met onsite, we may accept the provision of measures elsewhere in the borough or may require a s106 financial contribution to Camden's carbon offset fund which will be used to secure the delivery of carbon

reduction measures elsewhere, in connection with projects identified in the Council's Environmental Sustainability Plan 'Green Action for Change'. A contribution may be in the form of an integral element of the development, "in-kind" provision on or off site or a financial contribution secured through a s106 agreement (in accordance with CIL regulations). What does zero-carbon mean?

- 3.24 The government has set out a timetable for residential development to be zero carbon by 2016, public buildings by 2018 and non-residential development to be 'zero carbon' by 2019. The Council has reflected these ambitions in Development Policy DP22 – *Promoting sustainable design and construction* by using a stepped approach to the requirements for achieving higher levels of the Code for Sustainable Homes. Buildings built or refurbished today will be competing with low and 'zero-carbon' buildings in the near future. For commercial buildings this could have a particular impact on their future letability and value as new commercial buildings are anticipated to be zero carbon from 2019.
- 3.25 To determine how developments should meet the 'zero carbon' standard the Zero Carbon Hub has developed an energy efficiency standard for all new homes (currently awaiting government approval). For more information see the Zero Carbon Hub website [www.zerocarbonhub.org](http://www.zerocarbonhub.org)

#### **What does PassivHaus mean?**

- 3.26 PassivHaus is a specific design and construction standard from Germany that can result in a 90% reduction in energy demand and usage. It can be applied to both commercial and residential buildings. Core Strategy policy CS13 - *Tackling climate change through promoting higher environmental standards* notes that PassivHaus is an example of energy efficiency principles.
- 3.27 To be PassivHaus buildings must meet the following criteria:
- the total energy demand for space heating and cooling is less than 15 kWh/m<sup>2</sup>/yr of the treated floor area;
  - the total primary energy use for all appliances, domestic and hot water and space heating and cooling is less than 120 kWh/m<sup>2</sup>/yr
- 3.28 PassivHaus' are designed using a special software package called the PassivHaus Planning Package (PHPP) and regional climate data.
- 3.29 The Council will be supportive of schemes that aim to PassivHaus standards, subject to other policy and design considerations. More information can be found on the PassivHaus website - [www.passivhaus.org.uk](http://www.passivhaus.org.uk)



**Further information**

The London Plan	Sustainable Design and Construction: Supplementary Planning Guidance, Mayor of London provides detailed guidance on the energy hierarchy.
The Energy Saving Trust	Provides detailed guidance on the specification of new homes to reduce energy consumption. The Energy Saving Trust has developed a range of guidance and technical documents to help meet the energy performance requirements of the Code for Sustainable Homes and assess a range of materials and technologies for their thermal and carbon dioxide emissions levels. A wide range of best practise documents and guidance can be found at <a href="http://www.energysavingtrust.org.uk">www.energysavingtrust.org.uk</a>
The Town and Country Planning Association (TCPA)	Has produced a guide titled 'sustainable energy by design'. Section 4.1 of that document focuses on the design and development process, and shows how sustainable energy can be incorporated into new development in line with the energy hierarchy. <a href="http://www.tcpa.org.uk">www.tcpa.org.uk</a>
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: <a href="http://www.planningportal.gov.uk">www.planningportal.gov.uk</a>
The Zero Carbon Hub	Has a lead responsibility for delivering homes to zero carbon standards by 2016. It has produced guidance on energy efficiency standards for new homes. <a href="http://www.zerocarbonhub.org">www.zerocarbonhub.org</a>



## 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 solid 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](http://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	<p>A national agency promoting energy efficiency in the domestic sector. For information on home energy efficiency measures including grants, visit their website: <a href="http://www.energysavingtrust.org.uk">www.energysavingtrust.org.uk</a></p> <p>The Energy Saving Trust also provides technical guidance on energy efficiency in the Publications and Case Studies section of their website.</p> <p><a href="http://www.est.org.uk/housingbuildings/publications">www.est.org.uk/housingbuildings/publications</a></p> <p>Recommended Best Practice in Housing technical guidance documents:</p> <ul style="list-style-type: none"><li>• CE120 - Energy Efficient Loft Extensions</li><li>• CE122 - Energy Efficient Domestic Extensions</li></ul>
GreenSpec	<p>Provides details of products and how they can be used to improve the efficiency of your home or building</p> <p><a href="http://www.greenspec.co.uk">www.greenspec.co.uk</a></p>
The Planning Portal	<p>Provides information on what alterations you can make to your home without requiring planning permission</p> <p><a href="http://www.planningportal.gov.uk">www.planningportal.gov.uk</a></p>

## Energy efficiency in historic buildings:

Historic England	<p>Historic England, the UK government's adviser on the historic environment, has produced the following guidance:</p> <ul style="list-style-type: none"> <li>• 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. <a href="https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/">https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/</a></li> <li>• 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. <a href="https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/">https://www.historicengland.org.uk/advice/technical-advice/energy-efficiency-and-historic-buildings/</a></li> <li>• saving energy in historic buildings at <a href="http://www.climatechangeandyourhome.org.uk">www.climatechangeandyourhome.org.uk</a> which includes very detailed information about a wide range of improvements, e.g. insulating solid walls.</li> </ul>
The Energy Saving Trust	<p>Provides technical guidance on energy efficiency in the Publications and Case Studies section of their website. <a href="http://www.est.org.uk/housingbuildings/publications">www.est.org.uk/housingbuildings/publications</a></p> <p>This includes their Recommended Best Practice in Housing technical guidance documents: CE138 - Energy Efficient Historic Homes</p>
The Victorian Society	<p>Has information on their website on greening Victorian homes - <a href="http://www.victoriansociety.org.uk/advice/greening">www.victoriansociety.org.uk/advice/greening</a></p>
Building Conservation	<p>Provides a directory of useful contacts, grant sources and websites <a href="http://www.buildingconservation.com">www.buildingconservation.com</a></p>
The Sustainable Development Commission	<p>Provides case studies of existing homes that have improved their energy efficiency, including the example detailed in this section. <a href="http://www.sd-commission.org.uk">www.sd-commission.org.uk</a></p>

## 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.

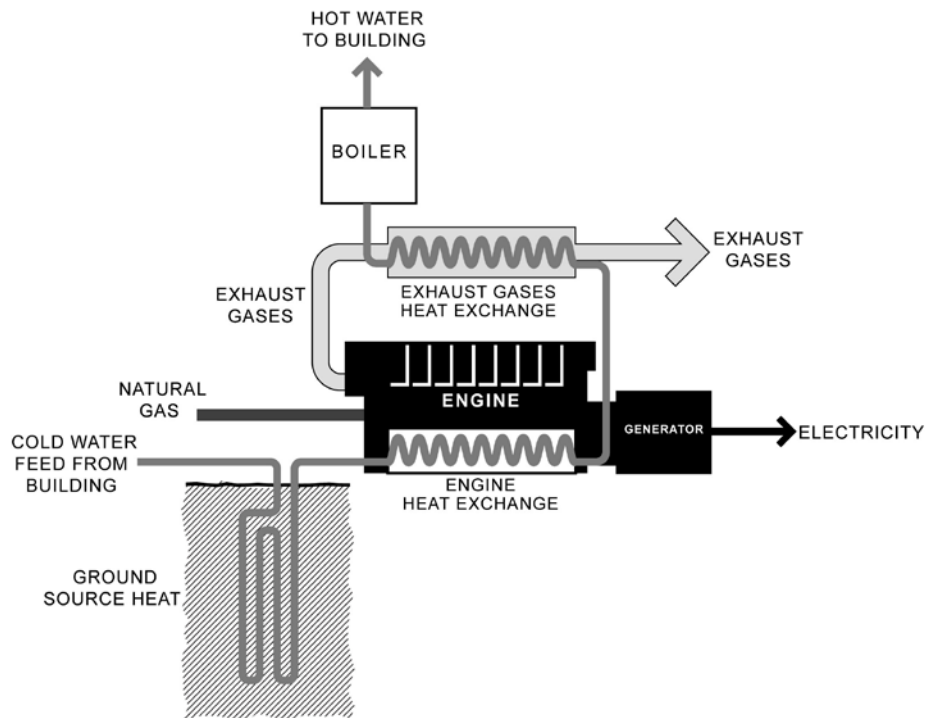
**What is combined heat and power?**

- 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?

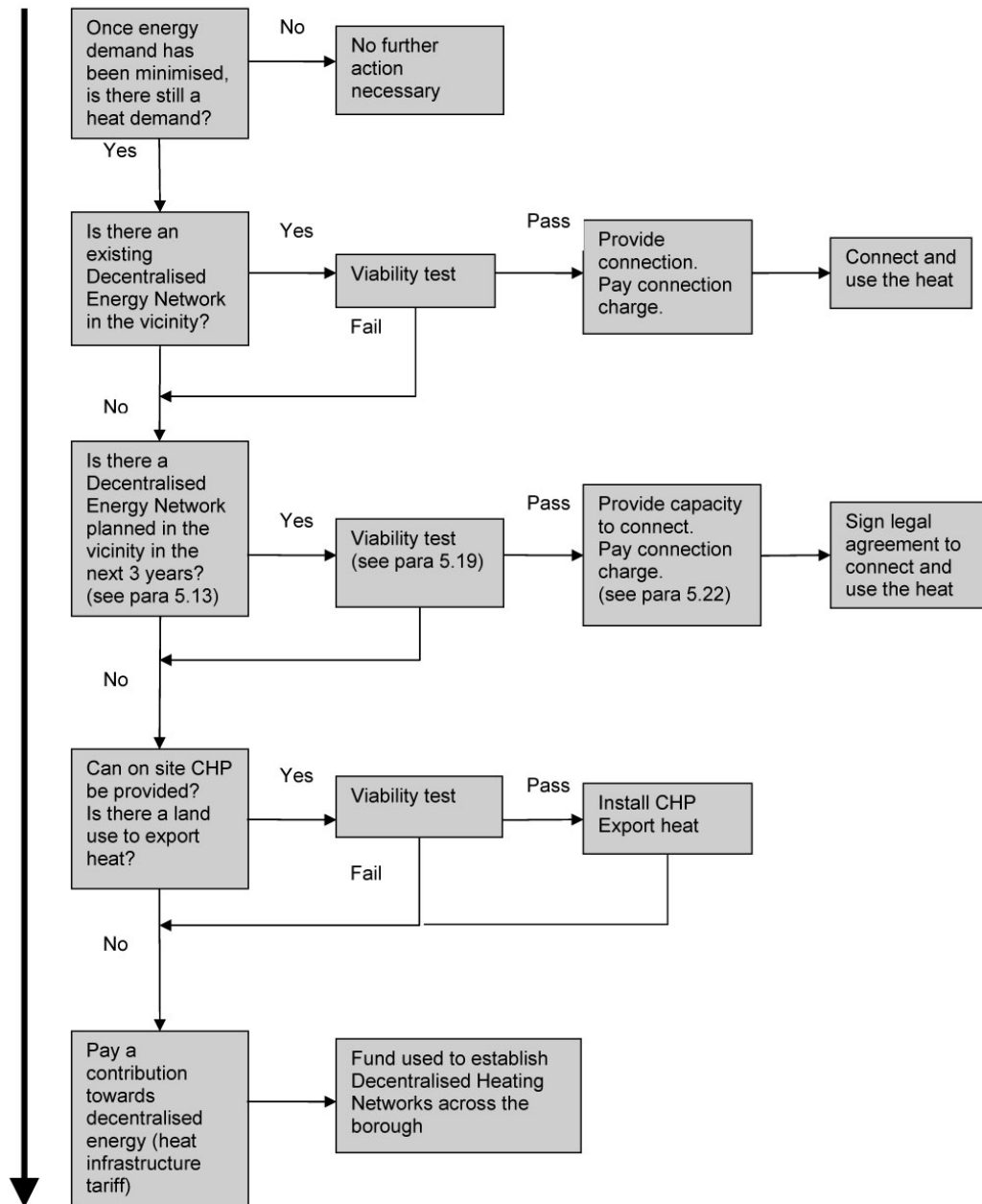
- 5.11 Once a development has been designed to be as energy efficient as possible (Energy hierarchy - Stage 1), developments will be required to consider the following steps, in the order listed, to ensure energy from an efficient source is used, where possible:
1. investigating the potential for connecting 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](http://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](http://www.londonheatmap.org.uk)

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

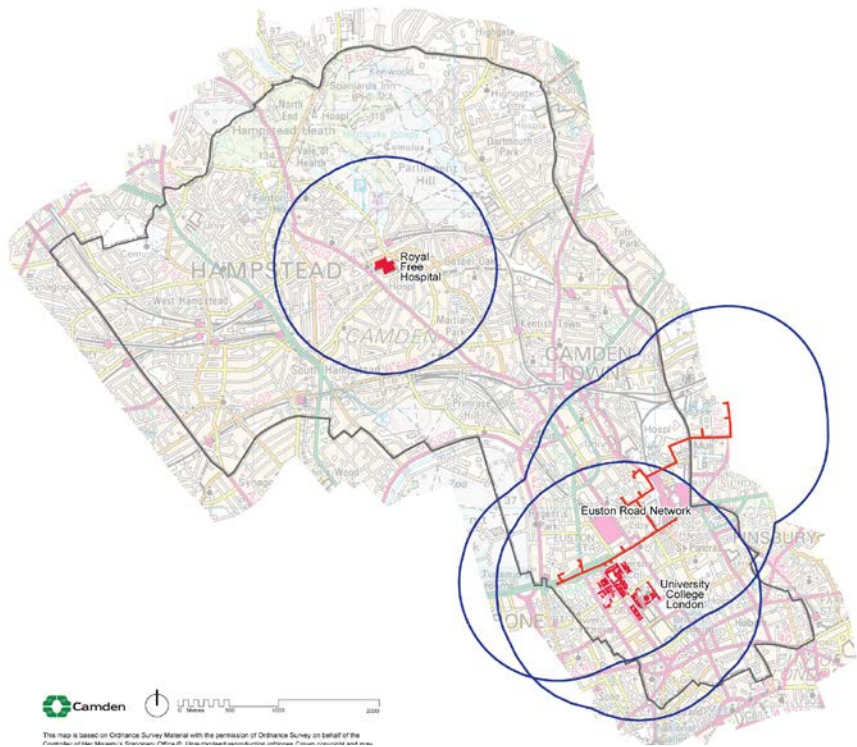
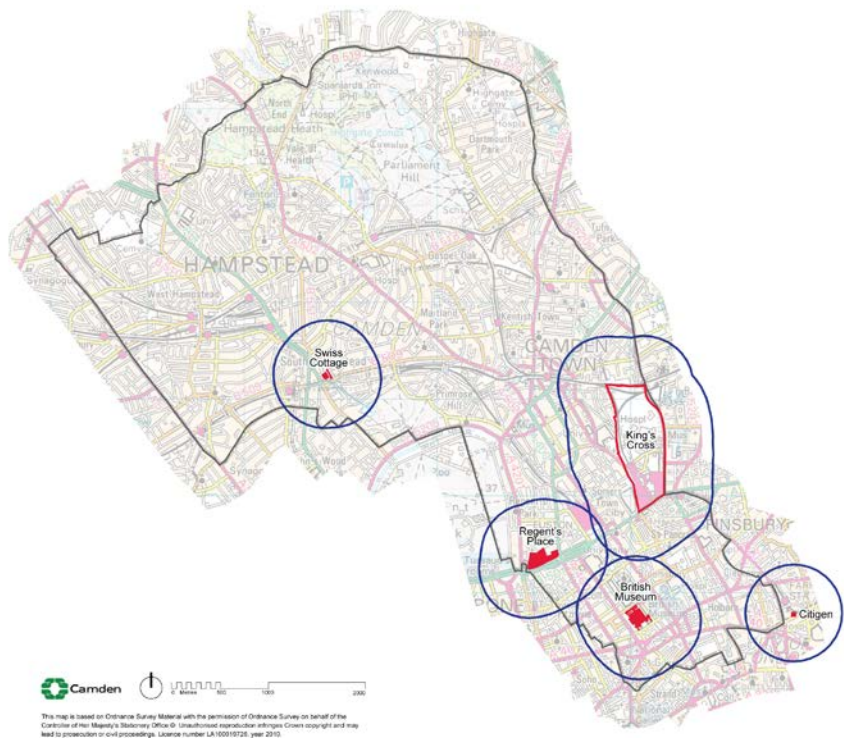


Figure 5. Developments within 500m radius of a potential network



### 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	<a href="http://www.chpa.co.uk">www.chpa.co.uk</a>
DECC microsite	<a href="http://chp.decc.gov.uk/cms/">http://chp.decc.gov.uk/cms/</a>

Information on how to plan for decentralised energy:

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

Existing decentralised energy networks in or near Camden:

<ul style="list-style-type: none"> <li>• Citigen - <a href="http://www.eon-uk.com/generation/citigen.aspx">http://www.eon-uk.com/generation/citigen.aspx</a></li> <li>• Bloomsbury heat and power</li> <li>• Gower street heat and power</li> <li>• King's Cross Central – managed by Metropolitan</li> <li>• Royal Free Hospital to Gospel Oak – managed by the NHS/Mitie</li> <li>• Euston Corridor Phase 1 – Somers Town/Kings Cross – Camden owned</li> </ul>
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How Camden can reduce its carbon dioxide emissions by 40%:

[www.camden.gov.uk/ccm/cms-service/download/asset/?asset\\_id=2460603](http://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.



#### 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?

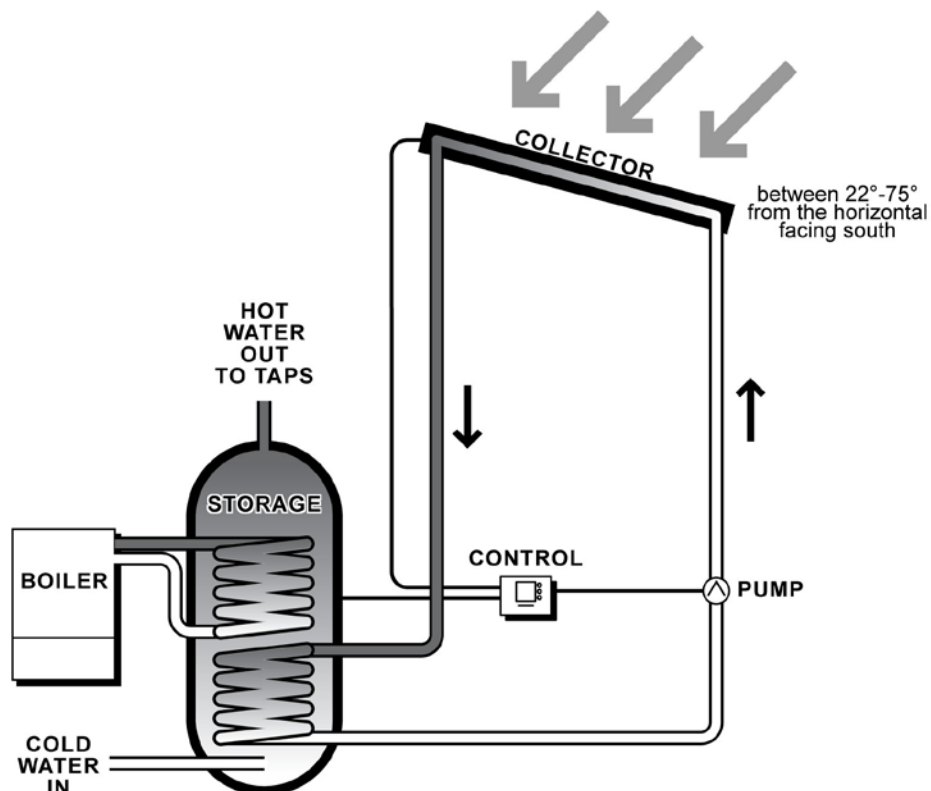
- Suitable for developments with all year hot water demands.
- South facing at 30-40 degrees is ideal, but as the panels do not rely on direct sunlight they can still be efficient at other angles.
- Can be fitted to existing buildings, but need to consider additional weight of the panels and compatibility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



### 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?

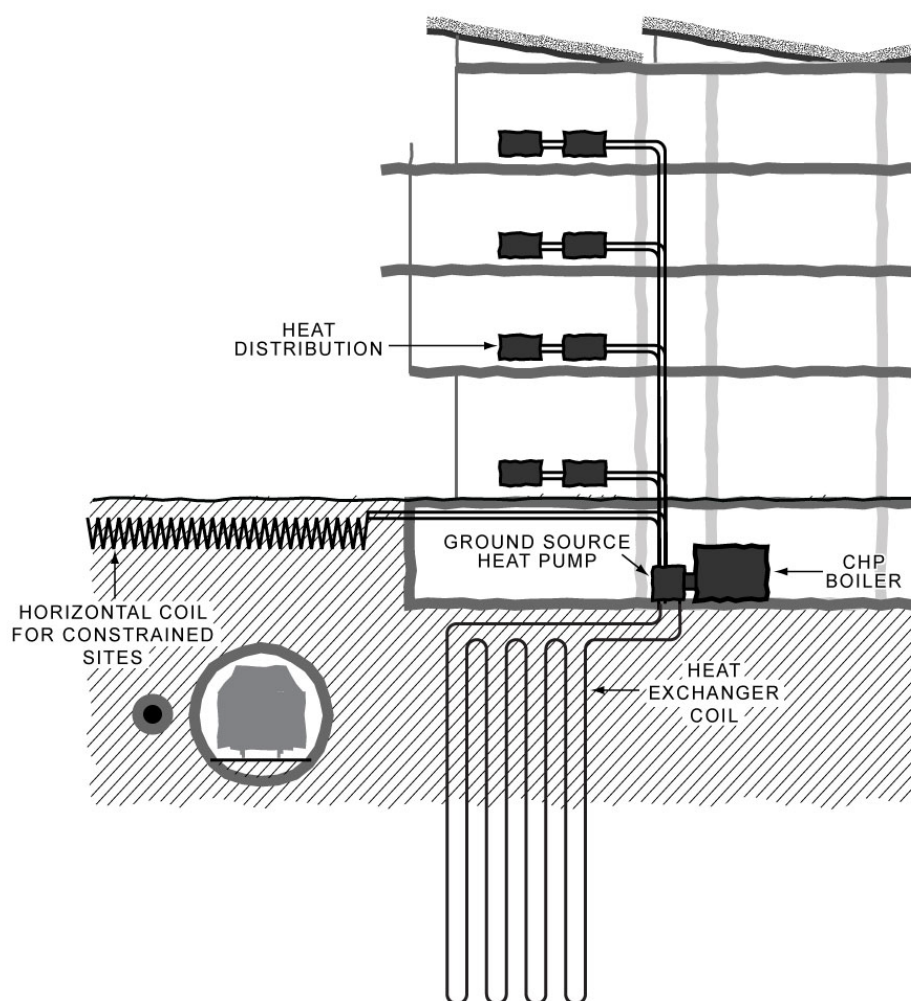
- The lower temperatures mean that GSHPs are well suited for underfloor heating
- Ideal for buildings which need heating in winter and cooling in summer

### 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 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	<p>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</p> <p>Available from the London Energy Partnership website  <a href="http://www.lep.org.uk">www.lep.org.uk</a></p>
REAL Renewable Energy Action for London	<p>A web resource run by Creative Environmental Networks which provides information on installing renewable energy for home owners, architects and developers.  <a href="http://www.cen.org.uk/REAL">www.cen.org.uk/REAL</a></p>
Environmental Protection UK and LACORS	<p>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 (NO<sub>2</sub>) and particulates (PM<sub>10</sub> and PM<sub>2.5</sub>).</p> <p>There are a number of guidance leaflet available on their website:</p> <ul style="list-style-type: none"> <li>• ‘Biomass and Air Quality Guidance for Local Authorities’</li> </ul> <p>‘Biomass and Air Quality, Developers’ Information Leaflet’  <a href="http://www.environmental-protection.org.uk/biomass">www.environmental-protection.org.uk/biomass</a></p>
The Mayor of London	<p>Mayor's Air Quality Strategy includes emissions standards for new biomass and CHP equipment which will be implemented by the GLA  <a href="http://www.london.gov.uk/publication/mayors-air-quality-strategy">www.london.gov.uk/publication/mayors-air-quality-strategy</a></p>





## 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.



#### 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](http://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 - *Tackling 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?**

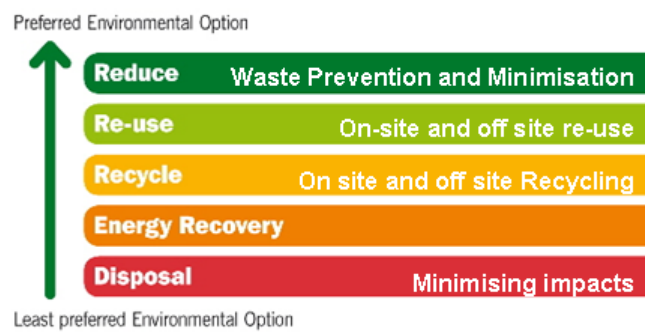
All developments should aim for at least 10% of the total value of materials used to be derived from recycled and reused sources. This should relate to the WRAP Quick Wins assessments or equivalent as (highlighted in the waste hierarchy information section below). Special consideration will be given 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](http://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](http://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](http://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](http://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](http://www.bre.co.uk)); Waste Alert North London's Waste Exchange service ([www.wastewatch.org.uk](http://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](http://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](http://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](http://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 <a href="http://www.london.gov.uk">www.london.gov.uk</a>
BREEAM	BRE Environmental Assessment Method <a href="http://www.breeam.org">www.breeam.org</a>
BRE Smart Waste	An on-line site waste management plan tool. It's a template contractors can use to input data. <a href="http://www.smartwaste.co.uk">www.smartwaste.co.uk</a>
Materials	<p>For Materials Information Exchange and Architectural salvage and surplus building materials:</p> <ul style="list-style-type: none"> <li>• Architrader - <a href="http://www.architrader.com">www.architrader.com</a></li> <li>• SALVO - <a href="http://www.salvomie.co.uk/">www.salvomie.co.uk/</a></li> <li>• Waste Exchange - <a href="http://www.wasteexchange.net">www.wasteexchange.net</a></li> </ul> <p>To find out how you can use more recycled and reclaimed products and building materials see <a href="http://www.ecoconstruction.org">www.ecoconstruction.org</a>. 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.</p> <p>Design for deconstruction – principles of design to facilitate reuse and recycling, B Addis (2003) CIRIA Best Practice Guidance C607.</p>
Volatile Organic Compounds	<p>For current controls on avoiding VOCs and using healthy materials, see:</p> <p>British Standard (BS) regulates UFFI quality, limits the product's use and limits ingress of formaldehyde vapour into buildings (BS: 5617, 5618 (1985)).</p> <p>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.</p>

## 9 Sustainability assessment tools

### KEY MESSAGES

- The Code for Sustainable Homes has been withdrawn however 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.
- The creation of 5 or more dwellings, or 500sq m or more of floorspace, from an existing building will need to be designed in line with BREEAM Domestic Refurbishment.
- Development of 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,
  - Camden's arrangements following the Housing Standards Review,
  - The 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 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](http://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%
2016+	'excellent'	Water 60% Materials 40%

### 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%
2013+	'excellent'	Water 60% Materials 40%

### 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: <a href="http://www.bre.co.uk">www.bre.co.uk</a>
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: <a href="http://www.breeam.org">www.breeam.org</a>
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: <a href="http://www.zerocarbonhub.org">www.zerocarbonhub.org</a>

## 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 been 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 <a href="http://www.environment-agency.gov.uk/business/sectors/91967.aspx">www.environment-agency.gov.uk/business/sectors/91967.aspx</a>
"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. <a href="http://www.LivingRoofs.org">www.LivingRoofs.org</a>
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. <a href="http://www.greenroofcentre.co.uk">www.greenroofcentre.co.uk</a>

# 11 Flooding

## KEY MESSAGES

- All developments are required to prevent or mitigate against flooding.
- All developments are expected to manage drainage and surface water.
- There is a hierarchy you should follow when designing a sustainable drainage system.

- 11.1 Camden has few permeable surfaces and a very high population density. As a result it is deemed to have a high risk of surface water flooding, which is likely to be increased by further growth and intensification of the built environment as well as the increasing risk of heavy rainfall due to climate change. Surface water flooding is caused when the existing water infrastructure (drains and sewers) cannot cope with heavy rainfall.
- 11.2 Map 5 in the Camden Core Strategy (and Map 2 in Development Policies) shows the parts of the borough that have experienced surface water flooding in the past and identifies the areas which are at risk of surface water flooding in the future. The location of development can impact the way that water flows around and underneath new and existing structures. Therefore all developments need to consider the risk of flooding. Especially developments within the identified areas, which must be designed to prevent causing additional pressure on adjoining sites and the sewer system.
- 11.3 Legislation has been introduced in the Floods and Water Management Act setting up a potential additional approval system for drainage plans. No further details are currently available on the specific requirements to support the Act.

## WHAT DOES THE COUNCIL EXPECT?

Developments must not increase the risk of flooding, and are required to put in place mitigation measures where there is known to be a risk of flooding.

Within the areas shown on Core Strategy Map 5 (Development Policies Map 2) we will expect water infrastructure to be designed to cope with a 1 in 100 year storm event in order to limit the flooding of, and damage to, property.

All sites in Camden over one hectare or 10,000sq m require a Flood Risk Assessment in line with the National Planning Policy Framework. The assessment should be site specific and concentrate on the management of surface water run-off, and / or ground water where applicable, and should address the amount of impermeable surfaces resulting from the development and the potential for increased flood risk both on site and elsewhere within the catchment. These must be prepared by a suitably qualified professional and should be submitted with a planning application.

## How to reduce the risk of flooding

### Surface water

- 11.4 Every urban surface should be considered as a rainfall collector, allowing water to pass through to a drainage layer below or flow to a soakage area so that water volumes do not build up to cause problems downstream. Therefore, the design of drainage is very important. Poorly designed and maintained drainage can lead to surface water flooding caused by heavy rainfall. It needs to be able to cope with the heaviest of rainfall expected over the buildings lifetime (this is around 60 years for commercial development and 100 years for residential development) and also help reduce and slow the amount of run-off leaving a site.
- 11.5 The best way to deal with heavy rainfall and a traditional pipe drainage system is to introduce new areas for water to soak into the ground. Sustainable Drainage Systems (SUDS) provide a way to manage surface water in a way which mimics the natural environment. SUDS help reduce the amount of surface water leaving a site and can slow down the rate water flows. It also helps improve water quality by filtering out contaminants. SUDS can provide broader benefits, including the capture and re-use of water by linking into a rainwater or grey water harvesting system. They can also provide green, landscaped areas offering recreation and habitat for wildlife.

### WHAT DOES THE COUNCIL EXPECT?

All developments are expected to manage drainage and surface water on-site or as close to the site as possible, using Sustainable Drainage Systems (SUDS) and the hierarchy set out below.

The Council will expect plans and application documents to describe how water will be managed within the development, including an explanation of the proposed SUDS, the reasons why certain SUDS have been ruled out and detailed information on materials and landscaping.

The Council will expect developments to achieve a greenfield surface water run-off rate once SUDS have been installed. As a minimum, surface water run-off rates should be reduced by 50% across the development.

## The SUDS hierarchy

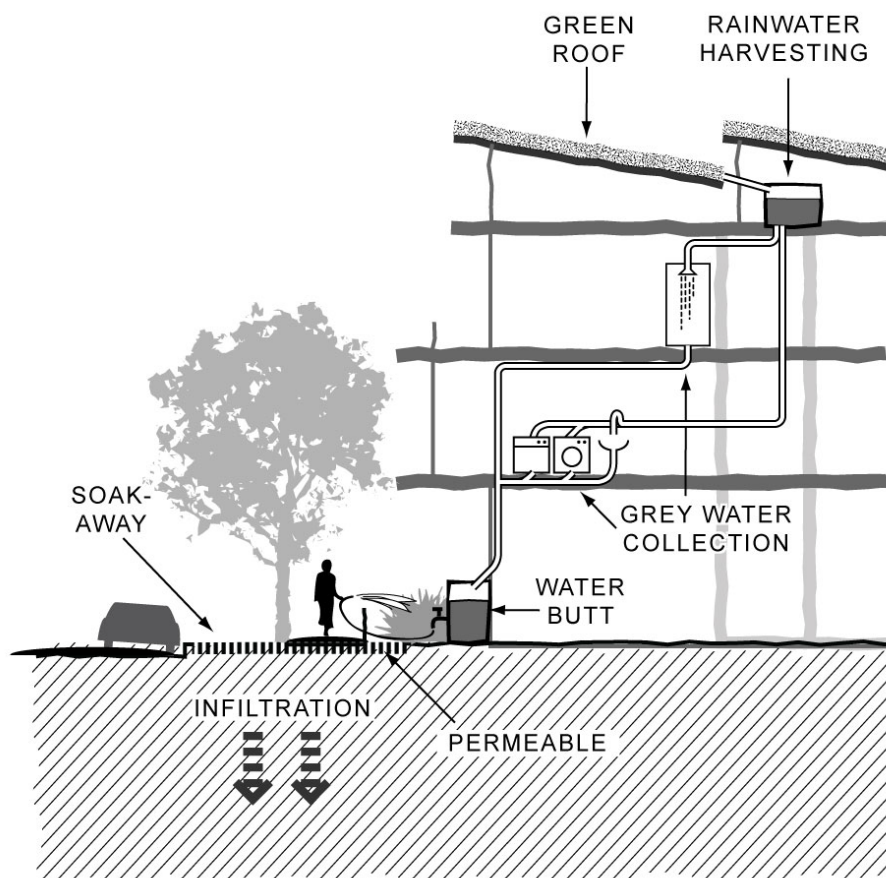
- 11.6 Surface water should be managed as close to its source as possible. The following hierarchy should be followed when considering which SUDS techniques to use.
1. store rainwater for later use - use rainwater tanks or water butts to collect rain/storm water so that it can be re-used. See section 6 of this guidance for more information on grey water and rainwater harvesting systems. This will help to stop flash flooding during periods of heavy rainfall.
  2. Use infiltration techniques - porous and permeable surfaces which allow water to soak (infiltrate) directly into the subsoil, rather than flowing over the top. This method is particularly appropriate on London Clay (in the North of the borough) where infiltration is slow. A layer of material needs to be laid between the clay and the uppermost surface to act as a storage/drainage channel. The use of permeable surfaces in urban SUDS design is critical because space is at a premium in Camden and permeable pavements and surfaces are one technique which does not require any additional land to function effectively.
  3. Collect and store (also known as attenuation) rainwater in ponds or open water features for gradual release - SUDS can be designed to hold storm water in ponds or specially designed wetland areas so that it can then be released more slowly into the ground or sewer. This is generally suitable for larger sites and those up stream of areas at risk of flooding)
  4. Collect and store rainwater in tanks or sealed water features for gradual release - where sites are constrained, with no natural landscaping or open areas, tanks can be installed which store water so that it can then be released more slowly into the ground or existing sewer.
  5. discharge rainwater direct to a watercourse
  6. discharge rainwater to a surface water sewer/drain
  7. discharge rainwater to the combined sewer
- 11.7 All the above can be incorporated into the landscaping on a site or development. For example 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. For more information, please see section 10 of this guidance on



brown roofs, green roofs and green walls and section 5 on Landscape design and trees in CPG1 Design for more information.

- 11.8 Figure 10 below shows all the different types of SUDS, from rain water harvesting, green roofs, porous surfaces, vegetation to ponds, reed beds and rivers.

**Figure 9. Sustainable Urban Drainage System**



### Ground water

- 11.9 The geology in the northern parts of the borough is gravel and silt on top of a layer of clay. Water can travel through the gravel and silt, but the rate of infiltration slows when it reaches the clay layer. This results in an area where ground water is likely to collect. This geology has resulted in the formation of springs, wells and the chain of ponds on Hampstead Heath. The flow of water through the ground is important in order to maintain the local wells and ponds. It is essential that development, especially subterranean development, does not stop or significantly alter the direction of this underground flow of water.
- 11.10 Ground water must be considered when development involves below ground excavation and construction. New underground structures can alter the flow of groundwater as it needs to change its course to flow

around the new structure. This can cause water to collect or pool upstream which may result in flooding of nearby areas or buildings.

- 11.11 More information on geology and hydrology in the borough can be found in the Camden Hydrological and Geological Study 2010. We also have further guidance on basement development in CPG4 Basements and lightwells.

### **Basements**

- 11.12 The Council will require all applications for basement and underground developments to be accompanied by an assessment of the scheme's impact on drainage, flooding, groundwater conditions and structural stability, as appropriate.
- 11.13 The Council will also require a site-specific flood risk assessment with applications for basements on streets identified as being 'at risk' from surface water flooding, unless it can be demonstrated that the scale of the scheme is such that there is no, or minimal, impact on drainage conditions. See map Core Strategy Map 5 (also DP Map 2). We also have further guidance on basement development in CPG4 Basements.
- 11.14 In line with Development Policy DP27, the Council will not allow habitable rooms and other sensitive uses for self contained basement flats and other underground structures in areas at risk of flooding.

### **How to reduce the impact of flooding**

- 11.15 Developments should be designed so that they can cope with flooding. This can be done by carefully considering design and layout, for example by locating the most vulnerable uses in lower risk parts of the development, ensuring buildings do not block key flood routes and by raising floor levels.
- 11.16 Flood proofing measures can also be designed into developments to reduce flood damage. The Environment Agency has prepared advice on how you can plan to reduce flood damage and reduce the amount of flood water that enters your building. See the Further Information section below for details.



**Further information**

Environment Agency	<p>Provides a range of guidance on SUDS, including planning advice  <a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a></p> <p>Guidance on how to reduce flood damage  <a href="http://www.environment-agency.gov.uk/homeandleisure/floods/105963.aspx">www.environment-agency.gov.uk/homeandleisure/floods/105963.aspx</a></p> <p>Guidance on how to keep flood water out of a building  <a href="http://www.environment-agency.gov.uk/homeandleisure/floods/106769.aspx">www.environment-agency.gov.uk/homeandleisure/floods/106769.aspx</a></p>
CIRIA	<p>Provide a range of advice and publications on SUDS, including the SUDS Manual, Sustainable Drainage Systems – design manual for England and Wales and Sustainable Water Management in Schools  <a href="http://www.ciria.org.uk/suds">www.ciria.org.uk/suds</a></p>
Interpave -	<p>Provide technical guidance on the construction of permeable concrete block paving  <a href="http://www.interpave.org">www.interpave.org</a></p>
Living roofs	<p>Provides information on the role of green roofs in SUDS  <a href="http://www.livingroofs.org">www.livingroofs.org</a></p>
LB Camden Strategic Flood Risk Assessment	<p>Carried out to inform the preparation of Boroughs Local Plan. The SFRA presents the most up to date flood risk information in the borough.  <a href="http://www.camden.gov.uk/ccm/cms-service/download/asset?asset_id=3245094">http://www.camden.gov.uk/ccm/cms-service/download/asset?asset_id=3245094</a></p>



## 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 sun's 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"	<a href="http://www.climatesoutheast.org.uk">www.climatesoutheast.org.uk</a>
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: CIBSE TM36 – "Climate Change and the Indoor Environment: Impacts and Adaptation" <a href="http://www.cibse.org">www.cibse.org</a>
UK Climate Impacts Programme	Helps organisations to adapt to climate change <a href="http://www.ukcip.org.uk">www.ukcip.org.uk</a>

## 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](http://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](http://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](http://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](http://www.ukbap.org.uk/library/UKBAPPriorityHabitatDescriptionsfinalAllhabitats20081022.pdf#TO)
- The London Biodiversity Action Plan  
[www.lbp.org.uk/londonhabspp.html](http://www.lbp.org.uk/londonhabspp.html)
- Camden Biodiversity Action Plan  
[www.ukbap-reporting.org.uk/plans/lbap.asp](http://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 as 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 Brown roofs 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: <a href="http://livingroofs.org/">http://livingroofs.org/</a>
	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.  Example: Swift boxes installed in brickwork 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 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.  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

		<p>can be used to complement natural vegetation.</p> <p>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.</p> <p>Peat-free products only should be used in planting schemes.</p>
	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	<p>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 <a href="http://www.plantpress.com/wildlife/home.php">http://www.plantpress.com/wildlife/home.php</a></p>

	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/londonnaturesignatures.aspx](http://www.naturalengland.org.uk/regions/london/ourwork/londonnaturesignatures.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 <a href="http://www.naturalengland.org.uk/ourwork/regulation/wildlife/default.aspx">www.naturalengland.org.uk/ourwork/regulation/wildlife/default.aspx</a>
Livingroofs.org	Independent UK Resource For information on Green Roofs <a href="http://www.livingroofs.org">www.livingroofs.org</a>

## 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 will 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: <ul style="list-style-type: none"> <li>all buildings with weather boarding and/or hanging tiles that are within 200m of woodland and/or water;</li> <li>pre-1960 detached buildings and structures within 200m of woodland and/or water;</li> <li>pre-1914 buildings within 400m of woodland and/or water;</li> <li>pre-1914 buildings with gable ends or slate roofs, regardless of location;</li> <li>all tunnels, mines, kilns, ice-houses, adits, military fortifications, air raid shelters, cellars and similar underground ducts and structures;</li> <li>all bridge structures, aqueducts and viaducts (especially over water and wet ground).</li> </ul>	• • • • • •		• • • • • •					
Proposals involving lighting of churches and listed buildings 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.	• •		• •				•	•
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: <ul style="list-style-type: none"> <li>old and veteran trees that are older than 100 years;</li> <li>trees with obvious holes, cracks or cavities,</li> <li>trees with a girth greater than 1m at chest height;</li> </ul>	• • •		• • •					• • •
Major proposals within 500m of a pond or Minor proposals within 100m of pond (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 <sup>2</sup> 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 <u>protected species are known to be present</u> *.	•	•	•	•	•	•	•	•
Major proposals within 500m of Hampstead Heath or Minor proposals within 100m of Hampstead Heath (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 <sup>2</sup> floor area or more than 1 hectare)	•		•	•	•	•	•	
Table adapted from version produced by ALGE 2007, Validation of Planning Applications								
*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

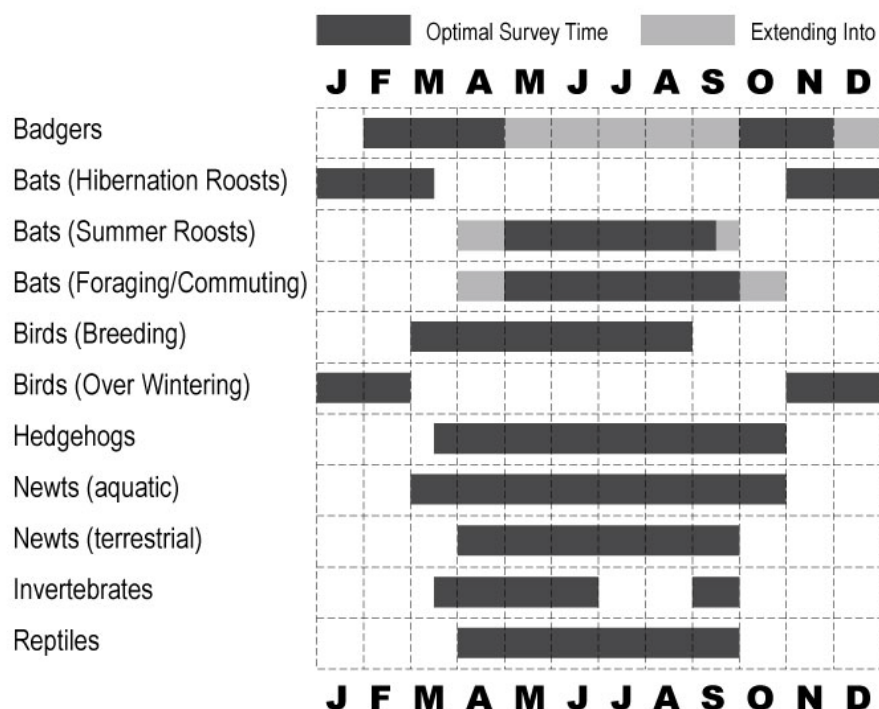
(as identified by the Local Biodiversity Partnership - see paragraph 84 ODPM Circular 06/2005)

- 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 information. Similarly negative results gained outside the optimal period should not be interpreted as absence of a species and further survey work may be 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](http://www.ieem.org.uk/Publications.htm) - Guidelines for Survey Methodology
- Natural England:  
<http://www.naturalengland.org.uk/publications/default.htm>









## 14 Local food growing

### KEY MESSAGES

- We encourage food to be grown wherever possible and suitable.
- Rooftops and shared spaces such as gardens and parks provide opportunities for food growing.

- 14.1 Local food growing in Camden encompasses a range of activities including back garden food growing, roof top gardening allotment cultivation, community gardening projects, bee keeping, planting orchards and fruit trees on public land, city farms, urban fringe farms and market gardens.
- 14.2 Cultivating land and growing food can help to improve the health of residents because it requires physical activity and promotes healthy eating. It can also help to improve air quality as people travel smaller distances to access fresh produce.
- 14.3 The Council encourages food growing where ever it is possible and suitable. This includes at ground level, on roofs in the form of green roofs and as part of green walls.
- 14.4 The Council is involved in a number of food growing initiatives. These are outlined in the Council's Food Growing Strategy.



### Where is food growing appropriate?

- 14.5 The incorporation of infrastructure for growing food is particularly appropriate to the design of housing, developments providing food retail

and restaurant outlets, hospitals and schools either on roof tops or within surrounding space.

- 14.6 Roof tops provide a particular resource in respect of local food growing. Roof gardens for food growing offer the same benefits as other types of green roofs. Storm water and grey water recycling can be incorporated into the management and maintenance of these roofs. They also provide a means of direct recycling of a buildings food waste when composting systems are incorporated into their design. Roof tops for greenhouses and aquaponic systems – where plants are grown without soil, also provide a similar range of opportunities to integrate recycling water and food waste systems into the design they can incorporate recycled heat waste from buildings. Providing the infrastructure for food production on roof tops will depend on the relative priority of other objectives and benefits associated with green roofs. See section 9 in this guidance for more information on green roofs.



- 14.7 We will expect development proposals consider the opportunities for food growing. If food growing is appropriate, the necessary infrastructure should be successfully incorporated the into building and site design
- 14.8 The Council may use Section 106 agreements to secure space for food growing where appropriate. Contributions may also be sought where there are opportunities to fund local food growing initiatives.

### Where are the food growing projects in Camden?

#### CASE STUDIES

A vineyard has been planted for commercial purposes by Alara Foods on wasteland close to its warehouses near Kings Cross. The company has also planted a Forest Garden behind its warehouses and installed three beehives.

Acorn House restaurant, in the Kings Cross area, has developed a roof garden growing herbs, vegetables and fruits to supply the restaurant with fresh seasonal produce.

**Further information**

Healthy and sustainable food strategy	<p>Good Food for Camden: the healthy and sustainable food strategy (2009-2012). It aims to:</p> <ul style="list-style-type: none"> <li>• improve health and reduce health inequalities</li> <li>• achieve environmental sustainability</li> <li>• enhance community engagement</li> <li>• build the local economy</li> <li>• support cultural diversity</li> </ul>
Capital Growth	<p>Capital Growth offers practical advice and support to communities that want to grow their own food, including getting access to land, and runs the Edible Estates competition to find the best community food growing projects on London's housing estates.</p> <p><a href="http://www.capitalgrowth.org">www.capitalgrowth.org</a></p>
Other	<p>Images of multifunctional urban design and planning data associated with incorporating hydroponic green houses on the roof tops of residential and industrial buildings can be seen at <a href="http://www.brightfarmsystems.com">www.brightfarmsystems.com</a></p> <p>There are many local and international examples of the different types of urban food production that can be seen via the Sustain and City Farmer websites:</p> <p><a href="http://www.sustainweb.org">www.sustainweb.org</a>  <a href="http://www.cityfarmer.org">www.cityfarmer.org</a></p> <p>An example of roof tops allotments incorporated into the design of an apartment block can be seen at <a href="http://www.onebrighton.co.uk">www.onebrighton.co.uk</a></p>



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Camden Planning Guidance

# Amenity

London Borough of Camden

CPG 6





## CPG6 Amenity

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# 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

## 2 Air quality

### KEY MESSAGES:

- All of Camden is a designated Air Quality Management Area due to the high concentrations of nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>).
- All developments are to limit their impact on local air quality.

2.1 Poor air quality can harm health and the environment. The Council aims to make sure that new development does not harm air quality. This guidance provides advice on how to address air quality issues in planning applications.

2.2 Camden Core Strategy policy CS16 - *Improving Camden's health and well-being* and policy DP32 – *Air quality and Camden's Clear Zone* of the Camden Development Policies sets out our approach to air quality in the borough.

2.3 *Planning Policy Statement PPS23: Planning and Pollution Control* contains the Government's core policies and principles on air quality and air pollution. The London Plan outlines regional policies related to protecting local air quality during the planning process.



### Air quality in Camden

2.4 An Air Quality Management Area (AQMA) must be declared by the local authority for an area that is unlikely to meet the national air quality targets for specific air pollutants. The authority then produces a Local Air Quality Action Plan. See Camden's website for our air quality plan.

2.5 The whole of Camden is an Air Quality Management Area (AQMA) as it does not meet national air quality targets for nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM<sub>10</sub>). The main sources of air pollution in Camden are road transport and gas boilers. The Council's Air Quality Action Plan outlines measures to reduce emissions from the key sources of air pollution in the borough. Included in the plan are measures to minimise and control NO<sub>x</sub> and PM<sub>10</sub> emissions associated with new developments both during the construction of a building and its future use.

2.6 Air quality is particularly poor in the south of borough which is characterised by high levels of traffic. We will only grant planning permission for development that significantly increases travel demand in

the south of the borough where it includes appropriate measures to minimise the transport impact of development.

- 2.7 Where appropriate we will seek developments to include monitoring equipment to allow us to better understand local air quality.

#### **WHAT DOES THE COUNCIL REQUIRE?**

The Council's overarching aim is for new development is to be 'air quality neutral' and not lead to further deterioration of existing poor air quality.

You will be required to include mitigation and offsetting measures to deal with any negative air quality impacts associated with your development proposals. At the same time your development should be designed to minimise exposure of occupants to existing poor air quality.

To manage and prevent further deterioration of air quality in Camden, we will require an air quality assessment with planning applications for development that could have a significant negative impact in air quality. This impact can arise during both the construction and operational stages of a development as a result of increased NO<sub>x</sub> and PM<sub>10</sub> emissions.

- 2.8 An air quality assessment will also be required for a proposal if it introduces uses that are susceptible to poor air quality, such as housing or a school, into areas of particularly poor air quality.
- 2.9 The Council will not grant planning permission for developments that could significantly harm air quality or introduce people into areas of elevated pollution concentrations, unless mitigation measures are adopted to reduce the impact to acceptable levels and protect public exposure (see paragraph 32.4 of policy DP32 of the Camden Development Policies).
- 2.10 Although all of Camden is covered by an AQMA we will only require an air quality assessments where development could potentially cause significant harm to air quality as set out in the table below.

**An Air Quality Assessment is required in developments:**

- with potential to significantly change road traffic on any road exceeding 10,000 vehicles per day. Significant changes include:
  - increase in traffic volumes > 5% (Annual Average Daily Traffic (AADT) – or peak);
  - lower average vehicle speed or significant increase in congestion;
  - significant increase in the percentage of HGVs;
- that introduce, or increase car parking facilities by, 100 spaces or more;
- with commercial floorspace of more than 1,000sq m;
- with more than 75 homes;
- where people will be exposed to poor air quality for significant periods of the day, in particular developments located on busy roads;
- involving the following - biomass boilers, biomass or gas combined heat and power (CHP);
- involving industrial or commercial floorspace regulation under the Environmental Permitting (England and Wales) Regulations (EPR) which will be subject to Environmental Assessment under the Town and Country Planning (Environmental Impact Assessment) Regulations 1999.

**What should an air quality assessment cover?**

2.11 Air quality assessments for developments potentially contributing to poor air quality are to include the following:

- a) An inventory of the PM<sub>10</sub> and NO<sub>x</sub> emissions associated with the proposed development, including the type and quantity of emission concentrations, during the construction and operational phase. This shall cover transport, stationary and mobile emission sources.
- b) The application of atmospheric dispersion modelling to predicted existing and future NO<sub>2</sub> and PM<sub>10</sub> concentrations, both with and without the proposed development. Dispersion modelling shall be the carried out in accordance with Air Quality and Planning Guidance, London Councils (2007) and Technical Guidance Note (TG09). (Specific guidance for modelling combustion plant emissions can be obtained from the Council's Sustainability Team – see Useful Contacts at the end of this section).
- c) An assessment of the significance of air quality impacts during both the construction and operational phases. Reference shall be made to the Environmental Protection UK Guidance Note: Development Control: Planning for Air Quality (2010 Update).
- d) Consideration of the potential cumulative impacts on air quality which may arise during the construction or operational phases as a result of emissions arising from other developments within a 100m radius of the development.
- e) Where a biomass boiler or combined heat and power (CHP)/combined cooling, heating and power (CCHP) will be used for

on site energy generation, you are to complete the Council's Air Quality Information Request Form. This requires specific technical details related to the appliance, fuel type, emission concentrations, maintenance and exhaust stack. The forms can be obtained from Camden's Air Quality Officer or the Council's air quality webpage under Environment.

- f) Applications which include biomass boilers or biomass CHP, the air quality assessment shall compare the impact of emissions from the intended biomass boiler/CHP and a gas boiler/CHP of identical thermal rating.
- g) An indication of the number of new occupiers and users of the site who will be exposed to poor air quality as a result of the development (the occupiers/users should also be shown on a map). For further information please refer to the Environmental Protection UK Guidance Note: Development Control: Planning For Air Quality (2010 Update).
- h) An assessment of the impacts on air quality of the demolition and construction phase and details of mitigation methods for controlling dust and emissions from plant and machinery. Reference should be made to the Best Practice Guidance: The control of dust and emissions at construction and demolition, London Councils (2006).
- i) An outline of, and justification for, mitigation measures associated with the design, location and operation of the development in order to reduce air pollution and exposure to poor air quality.

### **Developments containing sensitive uses**

- 2.12 Developments which will not result in additional NO<sub>x</sub> and/or PM<sub>10</sub> emissions and present no risk in worsening air quality, but introduce new sensitive uses to an area which breaches the air quality standards for NO<sub>2</sub> or PM<sub>10</sub> need to submit an assessment of the local air quality but can omit requirements B, D and E above.

### **What measures can reduce air pollution emissions and protect public exposure?**

- 2.13 Various actions can be taken to mitigate air pollution emissions arising from the construction and operational phases of a new development. Additional actions can be adopted to curtail public exposure in areas where air pollution levels are particularly high. These should be taken into account during the design stage of an application. The key measures are detailed below:

#### **Demolition and construction**

- 2.14 The impact of the construction and demolition phases of a development on air quality must be taken into account as part of your planning application. Exhaust



emissions from construction vehicles and machinery such as generators, piling and grinding equipment can result in:

- dust emissions;
- gases (NO<sub>x</sub>); and
- fine particles.

2.15 Controlling dust emissions is important to:

- prevent disturbance to local residents due to soiling;
- minimise damage to vegetation; and
- reduce impacts on local PM<sub>10</sub> concentrations, thereby protecting public health.

2.16 We may require PM<sub>10</sub> monitoring, before and during the construction and demolition phase, dependant upon the scale of the proposed development.

2.17 We will encourage best practice measures to be adopted during construction and demolition work to reduce and mitigate air pollution emissions. You will be encouraged to adopt the procedures outlined in the London Council's best practice guidance *The control of dust and emissions from construction and demolition*. These focus around three principles to control emissions – prevention, suppression and containment. We will expect you to include the following items in construction management plans:

- Identification of whether demolition/construction represents a low, medium or high risk site in the context of air quality.
- Identification of the best practice measure required to control and mitigate plant and vehicles exhaust emissions.  
(See section 8 of this Guidance on Construction management plans for further details).

#### **Distance of impacts**

Depending of the size, location and characteristics of your development, impacts from demolition and construction phases can occur at distance of 10 to 500m.

### **Building location and design**

2.18 The location of a development has a direct influence on exposure to elevated air pollution levels. This is particular relevant where developments include sensitive uses such as hospitals, schools and children's playgrounds. Suitable building design, layout and orientation can avoid increasing exposure whilst minimising energy demand and energy loss. The Council requires the impact of outdoor air pollution on indoor air quality in new developments to be taken into account at the earliest stages of building design.



- 2.19 The location of outside space is also an important consideration and any exposure of gardens and roof terraces should be screened and, where practicable, minimised through appropriate positioning and orientation. You should take care not to locate flues and exhaust vents in close proximity to recreational areas such as roof terraces or gardens. An energy efficient building design can minimise air pollution resulting from the use of gas boilers. Adopting sustainable building design (e.g. the Code for Sustainable Homes and the Building Research Establishment Environmental Assessment Method (BREEAM)), will reduce thermal heat losses and result in less gas use leading to lower NO<sub>x</sub> emissions. See Camden Planning Guidance 3 – Sustainability for further details on the Code and BREEAM.

### **Gas boilers**

- 2.20 Gas boilers are a large source of NO<sub>x</sub> emissions in Camden. In order to minimise NO<sub>x</sub> emissions arising from heating and hot water systems the Council requires boilers fitted in new development to achieve a NO<sub>x</sub> emissions of <40 mg/m<sup>3</sup> and an energy efficiency rating >90%.

### **Renewable Energy and Combined Heat and Power**

- 2.21 Core Strategy policy CS13 promotes the use of renewable energy technologies to reduce carbon emissions and tackle climate change. The adoption of renewable energy and energy efficiency technologies in major developments can minimise air pollution emissions through reductions in gas consumption required for heating and hot water. These include solar thermal collectors and ground source heat pumps in addition to gas and hydrogen fuel cell combined heat and power (CHP) or combined cooling heat and power (CCHP).

#### **Hydrogen fuel cell**

A fuel cell is an electrochemical cell that converts energy from a fuel (hydrogen) into electricity.

- 2.22 Biomass boilers however can give rise to higher emissions of NO<sub>x</sub> and PM<sub>10</sub> emissions than conventional gas boilers. Permission to operate these appliances will only be granted if the air quality impacts are demonstrated to be equivalent or lower than those associated with a conventional gas boiler of similar thermal rating. Where an assessment demonstrates adverse effects on air quality, this type of biomass boiler should not be used in the development.
- 2.23 You are advised to refer to the national guidance note *Biomass and Air Quality Guidance Note for Local Authorities*, published by Environmental Protection UK. In cases where emissions released from a biomass boiler do not lead to negative impacts on air quality, the



appliance will be required to meet high standards of air pollution control with particular emphasis given to:

- boiler design and operation;
- pollution abatement equipment;
- servicing and maintenance;
- fuel quality, storage and delivery; and
- exhaust stack height.

2.24 We will require evidence that the exhaust stack height of gas CHP/CCHP has been appropriately calculated to guarantee that NO<sub>x</sub> emissions are effectively dispersed, and do not risk increasing ground level NO<sub>2</sub> concentrations. An air quality assessment will be required for developments including CHP/CCHP. Where the assessment reveals a negative impact on air quality, mitigation measures will be required entailing the best available techniques to reduce emissions. This includes the installation of NO<sub>x</sub> abatement technology such as:

- use of low NO<sub>x</sub> burners; or
- increasing stack height.

2.25 A programme of on-going maintenance and servicing will be necessary to minimise gas emissions released from CHP/CCHP.

2.26 The Council will use Section 106 obligations to set requirements for controlling emissions from biomass boilers and CHP/CCHP.

### **Traffic Reduction**

2.27 Reducing car usage caused by new developments is the principle way to minimise vehicle emissions and protect local air quality. Please refer to transport policy *CS11 - Promoting sustainable and efficient travel* in the Camden Core Strategy for more on our approach to improving air quality through transport measures. This requires:

- the adoption of car free and car capped developments;
- provision cycling facilities to encourage sustainable transport;
- green travel plans;
- provision of car club bays; and
- infrastructure for low emissions vehicles such as electric vehicle recharging points.

**Further information**

Planning Guidance	<ul style="list-style-type: none"> <li>• Planning Policy Statement 23: Planning and Pollution Control (2004)</li> <li>• Planning Policy Statement 23 Annex 1: Pollution Control, Air and Water Quality These documents outline the government's advice on methods of planning for pollution control.</li> </ul>
Air Quality Guidance	<ul style="list-style-type: none"> <li>• Technical Guidance Note: Assessment of Air Quality Issues of Planning Applications, Association of London Government (ALG), 2006 This provides technical advice on how to deal with planning applications that could have an impact on air quality.</li> <li>• Development Control: Planning for Air Quality. Environmental Protection UK, 2010 This advises of the significance of air quality assessments within the planning process.</li> <li>• Best Practice Guidance - The control of dust and emissions from construction and demolition (London Councils) 2006 The aim of this guidance is to protect the health of on-site workers and the public and to provide London-wide consistency for developers.</li> <li>• Biomass and Air Quality Guidance for Local Authorities (Environmental Protection UK) 2009 This guidance details procedures for assessing and managing the effects of biomass on air quality and provides background material.</li> <li>• Low Emission Strategies (Beacon Low Emission Group) 2009 This provides advice on how to reduce emissions of air pollutants and greenhouse gases from transport.</li> </ul>
Useful Contacts	Camden Council Corporate Sustainability Team <a href="http://www.camden.gov.uk/smallsteps">www.camden.gov.uk/smallsteps</a> (020 7974 4444) provides guidance on air quality in Camden

### 3 Contaminated land

#### KEY MESSAGES:

- Contaminated land can pose a serious risk to health.
- The Council will expect developers to identify and assess potentially contaminated land at an early stage.
- Developers will be expected to follow the Council's Contaminated Land Strategy.

3.1 This guidance provides advice on how to approach the development of potentially contaminated sites. This guidance should be read in conjunction with Core Strategy policy CS16 – *Improving Camden's health and well-being*.

3.2 To protect the local environment and the health and well-being of residents, workers and visitors, we will carefully assess any proposals for the redevelopment of sites that:

- are known to be contaminated;
- have the potential to be contaminated, through previous or current uses; or
- are located in close proximity to these sites.

#### What is contaminated land?

3.3 Contaminated land is land that has been polluted with harmful substances to the point where it now poses a serious risk to health and the environment.

#### Causes of land contamination

- improper chemical handling or disposal practices,
- accidental spillages, or leakages of chemicals during manufacturing or storage.
- polluted groundwater migrating under a site
- particles settling from factory emissions.

3.4 The most common pollutants of land are metals and organic compounds. Typical land uses that can cause land contamination include petrol stations and gas works.

3.5 Contamination can also come from historical activities dating back many hundreds of years, such as spoil heaps from some Roman lead mines, and even from naturally occurring substances.

3.6 Contaminants may still be present above acceptable levels even though the polluting use stopped many years ago. 'Contaminated land' has a specific legal definition which is used in relation to an 'unacceptable risk'

of harm to health. For more information please see Department for Environment, Food and Rural Affairs (DEFRA) web pages.

- 3.7 In principle we will support the redevelopment of contaminated sites where the contamination issue can be successfully addressed and where future uses can be carried out safely. Remediation is particularly important where people have access to ground for gardening, play or planting food for consumption within redeveloped sites.

### **What should you do if your site is contaminated or potentially contaminated?**

- 3.8 In accordance with Planning Policy Statement (PPS) 23: Planning and Pollution Control, if you propose a development on contaminated or potentially contaminated land, it is your responsibility to ensure that contaminated land issues are considered at the planning application stage.
- 3.9 Where contamination is known or suspected on a site or the proposed use would be vulnerable to contamination, we will expect you to provide, as a part of your planning application, the necessary information as outlined in this chapter to determine whether the proposed development is acceptable.
- 3.10 The information required will need to be sufficient for us to determine:
- the existence or otherwise of contamination;
  - the nature of the contamination and the risks it may pose; and
  - whether these can be satisfactorily reduced to an acceptable level.
- Please refer to Annex 2 of PPS23 for further details.
- 3.11 The identification and assessment of land contamination issues is to be carried out by a qualified and experienced consultant, in consultation with the Council's Environmental Health Service. The contamination report is to be submitted with your planning application so that contamination issues can be assessed at the planning application stage and any necessary remediation measures secured through conditions or a Section 106 legal agreement.
- 3.12 The Council's Contaminated Land Strategy sets out how we will:
- deal with contaminated land;
  - make information available to the public; and
  - implement the requirements of the Part IIa of the Environmental Protection Act 1990 and Environment Act 1995. This and other documents are available on the Council's website ([www.camden.gov.uk/contaminatedland](http://www.camden.gov.uk/contaminatedland)) and should be referred to where contamination is a potential issue.
- 3.13 If there is any existing contamination (or potential risk of contamination) to ground or surface water or to land with statutory nature conservation designation, either from the existing state of land or from proposed

works, the Environment Agency must be informed and their consent obtained to any works. The English Heritage Archaeological Section should be contacted where contaminated land is included within an Archaeological Priority Area.

**Archaeological Priority Area**

As specified in the Camden Proposals Map, and Map 4 of the Camden Development Policies, to help protect archaeological remains that might be affected by development. See policy DP25 Conserving Camden's Heritage of the Camden Development Policies for further guidance on the borough's Archaeological Priority Areas.

- 3.14 Your report should comply with the policies and advice given in PPS23 and its annexes. There are also various best practice documents and British Standards that should be followed. The London Boroughs have produced a local guidance document titled *Contaminated Land: A Guide to Help Developers Meet Planning Requirements*. This document provides guidance on what information should be contained within a contamination report and is available on Camden's website.

## Supporting documents

PPS23	<p>Planning Policy Statement 23: Planning and Pollution Control. Office of the Deputy Prime Minister, November 2004. <a href="http://www.odpm.gov.uk">www.odpm.gov.uk</a></p> <p>In particular Annex 2 should be referred to as this section deals specifically with contaminated land issues. The policies and advice contained in PPS23 is not repeated in this guidance and therefore should be consulted for detailed guidance.</p>
Camden Council Website	<p>Information on the Council approach to management of land contamination, information on historical land uses in the Borough and a copy of the London Borough's 'Guide for Developers on Contaminated Land'.</p> <p><a href="http://www.camden.gov.uk/contaminatedland">http://www.camden.gov.uk/contaminatedland</a></p>
Department of Food, Environment and Rural Affairs	<p>has published a number of documents on land contamination. These can be found at:</p> <p><a href="http://www.defra.gov.uk/environment/land/contaminated/index.htm">www.defra.gov.uk/environment/land/contaminated/index.htm</a></p>
Environment Act 1995	<p>Available from Stationary Office:</p> <p><a href="http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm">www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm</a></p>

## Useful Contacts

Camden Environmental Health Service (Contaminated Land) web page [www.camden.gov.uk/contaminatedland](http://www.camden.gov.uk/contaminatedland) has more information on the Council's approach to contaminated land.

English Heritage [www.english-heritage.org.uk](http://www.english-heritage.org.uk) can provide advice on the approach to contaminated land within Archaeological Priority Areas.



## 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. <a href="http://www.communities.gov.uk/publications/planningandbuilding/ppg24">www.communities.gov.uk/publications/planningandbuilding/ppg24</a>
DEFRA	The Department of Food, Environment and Rural Affairs provide a number of publications on noise and noise related issues. <a href="http://www.defra.gov.uk">www.defra.gov.uk</a>
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 <a href="http://www.camden.gov.uk/noise">www.camden.gov.uk/noise</a> Also see <i>Camden's Guide for Contractors working in Camden</i> 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. <a href="http://legacy.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf">http://legacy.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf</a>



## 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. <a href="http://www.odpm.gov.uk">www.odpm.gov.uk</a>
DEFRA	The Department of Food, Environment and Rural Affairs has published a number of documents on light pollution. These can be found at: <a href="http://www.defra.gov.uk/environment">http://www.defra.gov.uk/environment</a>
Environment Act 1995	Available at the Stationary Office: <a href="http://www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm">www.opsi.gov.uk/acts/acts1995/Ukpga_19950025_en_1.htm</a>

### Useful Contacts

Camden Planning Service [www.camden.gov.uk/planning](http://www.camden.gov.uk/planning)

The Institution of Lighting Professionals [www.theilp.org.uk](http://www.theilp.org.uk) promotes good practice and excellence in lighting schemes.

The Chartered Institute of Building Services Engineers [www.cibse.org](http://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 be assessed on a case by case basis.

### Daylight

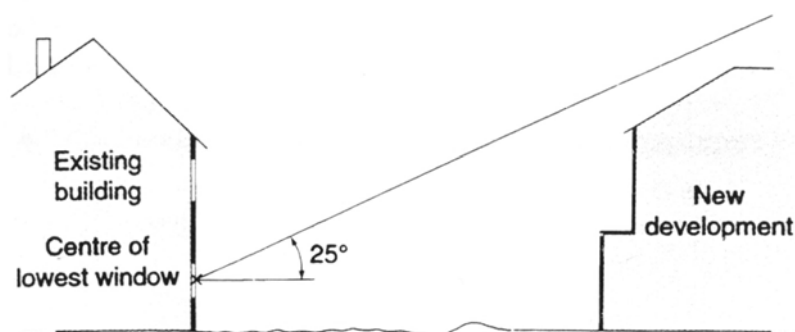
- 6.6 We will aim to minimise the impact of the loss of daylight caused by a development on the amenity of existing occupiers and ensure sufficient daylight to occupiers of new dwellings taking in account overall planning and site considerations. If your proposal will have an unreasonable impact on amenity 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.

**Section**

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](http://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](http://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 the 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<sub>10</sub> and NO<sub>x</sub> emissions from vehicles and plant;
- Techniques to control dust emissions from construction and demolition;
- Air quality monitoring; and
- Techniques to reduce CO<sub>2</sub> 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.

## 9 Access for all

### KEY MESSAGES:

- Well designed, accessible buildings and spaces ensure that local services and facilities are accessible to everyone and increase equality of opportunity and social inclusion. We will seek to ensure the highest standards of access and inclusion in Camden's built environment and public realm.
- We expect all development of buildings and places, including changes of use and alterations to or refurbishment of existing buildings where practical and reasonable, to be designed to be accessible and useable by all to promote equality of opportunity.
- Access should be considered at the beginning of the design process.

- 9.1 A successfully accessible and inclusive environment is one that everyone can benefit from by being able to move freely, independently and uninhibited within the built environment regardless of age or disability.
- 9.2 This guidance applies to all development in Camden that may affect the accessibility of buildings and spaces.
- 9.3 All new developments should incorporate a suitable level of access for everyone and be inclusively designed.
- 9.4 Changes of use, alterations and extensions to existing buildings and spaces should, where practicable and reasonable, be designed to improve access for all.
- 9.5 The planning system is not able to require existing buildings or areas to retrospectively improve access where alterations are not being made.
- 9.6 For developments involving housing, reference should also be made to Camden Development Policies policy DP6 – *Lifetime homes & wheelchair housing* and Camden Planning Guidance on Lifetime homes and wheelchair housing. The accessibility needs are lower for certain sectors of the population, such as students, and so the Council will assess each development proposal on its own merits to determine a suitable level of accessible accommodation to be provided.
- 9.7 Guidance on the provision of parking spaces for drivers with disabilities is contained in Camden Planning Guidance on Vehicle access.
- 9.8 This guidance provides general advice on accessibility and advises on further sources of more detailed information. In particular this guidance relates to Core Strategy policy CS14 - *Promoting High Quality Places and conserving our heritage*; CS6 - *Providing quality homes* and policy DP29 - *Improving access* of the Camden Development Policies.
- 9.9 It is more effective to consider access arrangements from the beginning of the design process as they are an integral aspect of building design.

Overcoming access barriers at a later stage in the project can result in a building or space that is not inclusive and may be inaccessible to many people.

- 9.10 Applicants are advised to consult the Council’s Building Control Service at an early stage in the formulation of development proposals to ensure conformity with the relevant requirements relating to access. Satisfying some of the requirements of Part M of the building regulations can affect the size and design of the building and needs to be taken into account at the early design stage.
- 9.11 The following table sets out four key principles which, if put together successfully, should help create an accessible environment:



### **Additional information**

- 9.12 Level access should be provided to the principal entrance in all developments, and is a requirement for all new dwellings. Any new works must not make access any worse than what may have previously existed, in line with Approved Document M of the Building Regulations.
- 9.13 The design of routes around buildings should be clear and free from obstruction, especially to the entrance. Any obstructions should be made clear and avoidable, for example by changes in surface texture.
- 9.14 The above access principles apply mainly to non-residential developments – although the first two will also be applicable to residential developments. In the case of residential development, proposals must meet Lifetime Home Standards as set out in policy *DP6 – Lifetime Homes and wheelchair homes* of the Camden Development Policies. Reference should also be made to Camden Planning Guidance 2 and the section on Lifetime Homes and wheelchair housing.

### **Design and Access Statements**

- 9.15 A Design and Access Statement is a short written and illustrated report which accompanies and supports a planning application. It explains the thinking behind a design and its context in a proposal in a structured way. A Design and Access Statement should:
- Show how the applicant has analysed the site, its setting, and as a result of this assessment, formulated and applied design principles to achieve a good, inclusive design for buildings and public spaces;
  - Include the specific needs of disabled people, by showing how they have been integrated into the proposed development, and how inclusion will be maintained and managed; and
  - Be flexible, adaptable and be able to change with the design of the proposal should any amendments or changes occur.
- 9.16 The level of detail appropriate in an access statement will depend on the size, nature and complexity of the proposal, as a minimum, all should include:
- A short illustrated statement setting out the site and context appraisal, the purpose of the proposed development, a list of design principles and a description of the proposal explaining how the design responds to the appraisal and design principles;
  - A plan of the site, surrounding area or natural form and key features as identified in the appraisal;
  - Annotated sketches and photographs;
  - Important elements of the context that inform the design principles;
  - Plans and elevations of the proposal;
- 9.17 The following points should be taken into account when preparing a Design and Access statement:

- A brief explanation of the applicant's approach to access, with particular reference to the inclusion of disabled people;
- A description of how the sources of advice on accessibility and technical issues will be, or have been, followed;
- Details of any consultations undertaken or planned, including the number of users, particular user need groups (for example, visually impaired, deaf or hard of hearing, ethnic groups, people with learning disabilities and mental health) and the degree to which the process has been influenced by it;
- Details of any professional advice that has been followed, or will be sought, including recommendations from access audits or appraisals;
- An explanation of any specific issues affecting accessibility to, or within, the particular environment being considered, and/or service provision, employment or educational opportunities.
- Details of access solutions adopted to overcome any issues, including those which deviate from recognised good practice;
- Details of the management and maintenance practices adopted, or to be adopted, to maintain features enhancing accessibility (for example, lighting, colour and luminance contrast, door closing forces etc), specialist equipment (for example, induction loops, audible and visual fire alarm systems etc), and staff training; and
- A plan illustrating features such as routes in, out and around the outside of the building, vertical and horizontal circulation routes, positions of accessible car parking bays, the location of public transport, and any other features relevant to the proposal.

9.18 Where good practice cannot be met, the Access Statement should say why this is the case, set out the implications for users, and explain what other measures are being taken to ensure access is provided to the facilities available. See Further Information at the end of this section for links to more detailed guidance.

### **Listed buildings**

- 9.19 Design and access statements are also required for a listed building consent. Where a planning application is submitted in parallel with an application for listed building consent a single combined statement can be submitted which should address the requirements for both.
- 9.20 Measures to facilitate dignified and easy access to and within listed buildings can often be sensitively incorporated without damage to their special architectural or historic interest. However, the Disability Discrimination Act 1995 does not override other legislation such as listed building or planning legislation. Listed Building Consent will almost always be required for works to improve access and in formulating proposals; applicants are encouraged to undertake early discussions with the Council.

- 9.21 English Heritage has produced guidance on this topic titled Easy Access to Historic Buildings (see Further Information for the link). Additional information is also contained in Circular 01/06.

**Other considerations**

- 9.22 Applicants should note that Design and Access Statements differ from the requirements for Access statements set out in Approved Document M of the Building Regulations, which are only required when specific building control regulations can not be met. Approved Document M of the Building Regulations sets out the requirements to ensure access to and use of a building's facilities are accessible to all.
- 9.23 It may also be appropriate to combine the Design and Access Statements with other statements requested in other sections of Camden Planning Guidance, provided that the requirements of all such statements are adequately addressed.
- 9.24 Part 3 of the Disability Discrimination Act 1995 gives disabled people a right of access to goods, facilities and services. This requires service providers to:
- Alter a barrier feature so that it no longer has effect;
  - Provide a reasonable means of avoiding that feature; or
  - Provide a reasonable alternative method of making the service available.
- 9.25 These requirements apply to all buildings where services are provided to the public and to transportation infrastructure.

## Further information

Design and Access Statements	<p>Department for Communities and Local Government (March 2010) Guidance on information requirements and validation:  <a href="http://www.communities.gov.uk/publications/planningandbuilding/validationguidance">www.communities.gov.uk/publications/planningandbuilding/validationguidance</a></p> <p>ODPM publication: Planning and Access for Disabled People: A Good Practice Guide  <a href="http://www.communities.gov.uk/publications/planningandbuilding/planningaccess">www.communities.gov.uk/publications/planningandbuilding/planningaccess</a></p> <p>Department for Communities and Local Government Circular 01/2006: Guidance on Changes to the Development Control System: Section 3 provides guidance on the legislative position and information required  <a href="http://www.communities.gov.uk/publications/planningandbuilding/circularcommunities2">www.communities.gov.uk/publications/planningandbuilding/circularcommunities2</a></p> <p>The Commission for Architecture and the Built Environment (CABE) 'Design and access statements: how to write, read and use them'  <a href="http://www.cabe.org.uk">www.cabe.org.uk</a></p> <p>Mayor of London's Supplementary Planning Guidance: Accessible London: Achieving an Inclusive Environment  <a href="http://legacy.london.gov.uk/mayor/strategies/sds/docs/spg_accessible_london.pdf">http://legacy.london.gov.uk/mayor/strategies/sds/docs/spg_accessible_london.pdf</a></p>
Access and the historic environment	<p>English Heritage have published guidance on 'Easy Access to Historic Landscapes' and 'Easy Access to Historic Buildings' which can be found on their website at:  <a href="http://www.english-heritage.org.uk/publications/easy-access-to-historic-buildings/">www.english-heritage.org.uk/publications/easy-access-to-historic-buildings/</a></p>
Lifetime Homes and wheelchair housing standards	<p>Lifetime Homes  <a href="http://www.lifetimehomes.org.uk">www.lifetimehomes.org.uk</a></p> <p>Accessible London: Achieving an Inclusive Environment, GLA (April 2004)</p>





## 10 Wind and micro-climate

### KEY MESSAGES:

- Buildings taller than their surroundings may cause excessive wind in neighbouring streets and public areas.
- New developments should consider the local wind environment, local temperature, overshadowing and glare, both on and off the site.
- Where poor wind conditions already exist reasonable attempts must be made to improve conditions generally.

- 10.1 The construction of a building changes the microclimate in its vicinity. Micro-climate refers to local conditions including wind, temperature, overshadowing, access to daylight and general comfort. In particular high-rise buildings can cause high wind velocities at pedestrian level which can create an uncomfortable environment and can even be dangerous. Therefore, the design of your building should not only focus on the building envelope and on providing good indoor environment, but should also include the effect of the design on the surrounding outdoor environment.
- 10.2 The purpose of this guidance is to ensure that appropriate standards are met in the design of buildings and outdoor features to ensure that suitable wind safety and comfort levels are achieved.
- 10.3 This guidance relates to Core Strategy CS14 - *Promoting high quality places and conserving our heritage* and policy DP24 - *Securing high quality design* of the Camden Development Policies.

### When does this guidance apply?

- 10.4 This guidance applies to all development that has the potential to change their environment with regard to wind and micro-climate, whether new build or extension. However, the implications for a proposal will vary greatly depending on the nature of the site, the scale of development, its interaction with surrounding sites, and existing buildings and structures on the site.

#### **DEVELOPMENTS LARGE ENOUGH TO CHANGE THEIR LOCAL ENVIRONMENT WILL INCLUDE:**

- New or modified buildings that are 18 metres or 5 storeys higher than any surrounding building;
- Significant modifications to the built environment in areas of quantifiable and recognised existing wind nuisance;
- Major proposals adjacent to or incorporating a significant area of public or outdoor space;
- Developments with a large amount of glazing or dark masonry surfaces; or
- A combination of new or modified buildings that cumulatively, will significantly change the wind environment.

#### **Wind environment around buildings**

- 10.5 Buildings taller than their surroundings may cause excessive wind in neighbouring streets and public areas. Environmental winds are primarily driven by building massing and should be considered at the early design stages, when changes to achieve design objectives can be made most easily.
- 10.6 We will expect you to consider the local wind environment when designing your scheme, both on and off the site. Where poor wind conditions exist in the area prior to development, a reasonable attempt must also be made to improve conditions in general.

#### **What information should I provide?**

- 10.7 Relevant developments are expected to use the Lawson Comfort Level Ratings (set out below). Areas that must be considered are:
- public and private open spaces on and adjacent to the site;
  - outdoor areas on upper levels of the development;
  - entrance and exit areas;
  - shop windows;
  - bus stops;
  - outdoor dining areas;
  - thoroughfares; and
  - pedestrian crossing points.

- 10.8 The Lawson Criteria are used throughout the UK to assess local wind environments and are a widely accepted assessment tool.

**The Lawson Comfort Criteria**

The Lawson Comfort Criteria is a scale for assessing the suitability of wind conditions in the urban environment based upon threshold values of wind speed and frequency of occurrence. It sets out a range of pedestrian activities from sitting through to crossing the road and for each activity defines a wind speed and frequency of occurrence. If the wind conditions exceed the threshold then the conditions are unacceptable for the stated activity.

**Figure 1. Lawson Comfort Level Rating**

<b>Lawson Comfort Level Rating</b>	<b>Predominant activity</b>	<b>Mean hourly wind speed exceeded less than 5% of the time</b>
C4 - Long term "Sitting"	Reading a newspaper and eating and drinking	4m/s
C3 - "Standing" or short term sitting	Appropriate for bus stops, window shopping and building entrances	6m/s
C2 - Pedestrian Walking or "Strolling"	General areas of walking and sightseeing	8m/s
C1 - Business "Walking"	Local areas around tall buildings where people are not expected to linger	10m/s

- 10.9 If this applies to your development your planning application should be accompanied by qualitative wind impact statement, prepared by a suitably qualified professional (i.e. wind engineer or similar).
- 10.10 You must firstly carry out a qualitative wind impact assessment. If the results of this show potential negative impacts you will also need to carry out a quantitative assessment. Both assessments must be submitted with your planning application. Your assessment must provide detailed information on how the proposal meets the criteria in the guidance, using quantitative measures (i.e. evidence of wind tunnel testing or similar).

**Your Wind Impact Statement must:**

- Show how the proposal is expected to affect the local wind environment;
- Describe how the proposal has addressed the local wind environment;
- Include reference to specific features of the site or the development that make a contribution to the wind environment, either positively or negatively, and highlight areas of concern; and

- Reference the proposal's ability to meet the targets of this guidance, and make recommendations regarding the necessity for additional work, as described below.

**Your Wind Impact Statement should:**

- Compare existing and proposed conditions against the Lawson Comfort Criteria in both summer and winter conditions;
  - Demonstrate how the proposal has adapted to the local wind environment;
  - Reference specific features of the site or the development that make a contribution to the wind environment, both positively or negatively;
  - Highlight areas of concern, and
  - Describe the proposal's ability to adhere to the guidance.
- 10.11 If your proposal does not achieve the targeted ratings or outcomes you must provide sound justification to demonstrate, to the satisfaction of the Council, why your proposal cannot meet the targets. This justification should be prepared in conjunction with, and endorsed by your wind engineer, and must include evidence of the attempts that have been made to address design deficiencies.
- 10.12 If your proposal does not satisfactorily meet the criteria, and you have not provided justification, your proposal may be refused.
- 10.13 A condition may be imposed to secure the achievement of wind speed(s) around the building no greater than those predicted. The Council may require alterations or other remedial measures at the developer's expense if wind speed targets are not met.

**Other considerations relating to the wind environment**

- 10.14 Your development must not compromise the viability of wind-driven renewable energy generators on adjacent and nearby sites. Where wind-driven energy generators are likely to be significantly affected, you are responsible for ameliorating the loss by moving, modifying or replacing the installation, or by incorporating equivalent renewable energy generation within your site.
- 10.15 Where a development affects the viability of an existing wind-driven renewable energy generator, and the solution is to modify the installation off-site, all approvals, expenses and risks are the responsibility of the applicant. This requirement will be incorporated as a condition or in a S106 agreement relating to any approval. Where additional renewable energy capacity is to be installed on site, this will be assessed in conjunction with other renewable energy installations. (Note: additional capacity that is gained by installations off-site should be credited toward the onsite requirement for the development)
- 10.16 Wind environment also impacts on natural ventilation systems. Natural ventilation must also be considered in building design.

## Other influences on micro-climate

### Local heat

- 10.17 Local air temperature can be affected by your building's ability to absorb heat during the day and release it at night. This cumulative effect of this happening across London results in the urban heat island effect. We strongly encourage green roofs, brown roofs, green walls and soft landscaping in all developments to reduce this affect. You can also consider light coloured building materials so unnecessary heat is not absorbed by your building. See Camden Planning Guidance 3 – Sustainability for further guidance on these issues.

### Overshadowing

- 10.18 You should consider the design of your proposal carefully so that it does not overshadow windows to habitable rooms or open spaces and gardens. This may be particularly difficult in central London. However, it will be particularly important in Central London to prevent overshadowing of amenity space and open spaces given the limited amount of open spaces and the existing amount of overshadowing.

### Glare

- 10.19 Glare is uncomfortably bright sunlight reflected from a building façade. It is generally caused by tall, fully glazed and sloping facades with reflective finishes that reflect the sun. Tall buildings should be designed to avoid this and use materials that do not result in glare.

### Further information

General guidance on design principles	By Design: Urban Design in the Planning System – Towards Better Practice, DETR/CABE, 2000
Tall buildings	Guidance on tall buildings, English Heritage/CABE, 2007
Urban design in relation to the historic environment	Understanding Place, English Heritage 2010; and Building in Context, English Heritage/CABE, 2002



## 11 Open space, outdoor sport and recreation facilities

### KEY MESSAGES:

- If your scheme is over a certain size it is expected to make a contribution towards the provision of public open space in the borough;
- Our priority is for the provision of public open space on-site, therefore it is important this is taken into account at the design stage of your scheme;
- Other forms of public open space contributions could be provision off-site or as a payment in lieu.

- 11.1 This guidance gives details of how the Council expects development to provide for a variety of public open space, outdoor sport and recreation facilities. It sets out:
- Which developments are expected to make provision for open space, outdoor sport and recreation opportunities;
  - The amount of open space we expect;
  - The type of open space and outdoor sport and recreation facilities we expect;
  - How we will calculate the open space expected for a specific development; and
  - The Council's priorities for how open space, outdoor sport and recreation facilities will be provided.

- 11.2 This guidance primarily relates to:

#### Core Strategy Policies:

- CS5 – Managing the impact of growth
- CS15 – Protecting and improving our parks and open spaces and encouraging biodiversity

#### Development Policies:

- DP26 – Managing the impact of development on occupiers and neighbours
- DP31 – Provision of, and improvements to, open space and outdoor sport and recreation facilities.

### **Which developments are expected to contribute towards open space, outdoor sport and recreation facilities?**

- 11.3 As set out in paragraph 31.6 the Camden Development Policies document you will need to make a contribution to the provision of these facilities in the borough if your development falls within the following categories:



- Five or more additional dwellings;
- Student housing schemes creating an additional 10 or more units/rooms or occupiers; and
- Developments of 500sq m or more of any floorspace that are likely to increase the resident, worker or visitor populations of the borough.



**How much open space do we expect?**

- 11.4 Development Policy *DP31 – Provision of, and improvements to, open space and outdoor sport and recreation facilities* sets out the amount of open space to be provided by developments as follows:

**Figure 2. Amount of open space to be provided by land use**

Development type	Open space provision
Residential (all types)	9 sq m per occupier
Commercial development	0.74 sq m per worker

- 11.5 Non-residential developments for higher education are considered to generate requirements per occupier (including employees and students) at the same rate as commercial developments.

**What types of open space, outdoor sport and recreation facilities will we expect?**

- 11.6 Open space standards relate specifically to public open space. The Council acknowledges the private amenity space and other private open land can reduce pressure on the use of public open space. However public open spaces provide opportunities for social interaction and a focus for community activities. Private spaces cannot be used as a substitute for public open space.

- 11.7 Public open space includes a wide variety of different facilities that are available to the public:
- Green amenity spaces, including natural and semi-natural spaces;
  - Active spaces for outdoor sport and recreation and for children's play; and
  - Civic spaces.
- 11.8 Green amenity spaces can be formal or informal parks and gardens or other landscaped areas, which provide areas of passive recreation for all age groups and attractive green areas within the urban environment. They are intended to be attractive spaces for people to enjoy using or viewing. This type of open space can include areas of natural or semi-natural green spaces, which support wildlife conservation and biodiversity and promote environmental education and awareness.
- 11.9 Active spaces are areas of grassed or artificial surfaces providing opportunities for sport and recreation together with ancillary facilities such as changing rooms and flood lighting. These include playing pitches, courts, greens, athletic tracks and Multi Use Games Areas (MUGAs). Formal recreation areas may be stand-alone facilities or may form part of a larger open space (e.g. the tennis courts and bowling greens at Hampstead Heath).
- 11.10 Civic spaces are hard surfaced areas designed for pedestrians, such as piazzas, which often provide a setting for civic buildings.
- 11.11 Given the amount of hard surfaces in Camden, our priority will generally be for green spaces, especially in the south of the borough. Paragraphs 11.12 to 11.17 give more details of specific types of public open space.

### **Children's play space and young people's recreation space**

- 11.12 These are formal or informal areas designed to engage children or young people. Formal spaces are designated areas for children and young people containing a range of facilities and an environment that has been designed to provide focused opportunities for outdoor play. There are three categories of formal children's play space defined by the National Playing Fields Association (NPFA).
1. LAP - Local Area for Play;
  2. LEAP - Local Equipped Area for Play;
  3. NEAP - Neighbourhood Equipped Area for Play.
- 11.13 Informal spaces are less well defined areas and can be incorporated into smaller spaces such as local footpaths where wide enough or town centre spaces. It involves incorporating features that children can play with such as fountains or objects to climb.
- 11.14 Contributions to children's play space and young people's recreation space can include formal and informal areas. We must be satisfied that any informal space has been sufficiently designed to meet the requirements of children and young people.

### **Natural and semi-natural green spaces**

- 11.15 These include sites and areas formally recognised for their nature conservation value such as Sites of Special Scientific Interest, Sites of Nature Conservation Importance and Local Nature Reserves as well as other areas with biodiversity such as gardens, parks and open spaces.
- 11.16 In exceptional circumstance, generally in areas deficient in nature conservation sites, we may consider the inclusion of a biodiverse green roof, brown roof or green wall as a contribution towards natural and semi-natural green spaces in the borough. For more information about areas of deficiency please see Appendix A to this section. For more information about green roofs, brown roof and green walls please see Camden Planning Guidance 3 – Sustainability.

### **Allotments and Community Gardens**

- 11.17 Allotments and community gardens provide opportunities for people to grow food as part of the long term promotion of sustainability, health and social inclusion.

### **What type of open space, outdoor sport and recreation facilities are expected for specific development types?**

- 11.18 For this guidance, and in line with *Camden's Open space, Sport and Recreation Study Update 2008* we have identified the following five broad categories of open space:
- Public amenity open space;
  - Children's play space and young people's recreation space;
  - Natural and semi-natural green space;
  - Allotments and community gardens; and
  - Outdoor sport and recreation.
- 11.19 We recognise that not every type of development will generate a need for all types of open space, outdoor sport and recreation facilities. For example, housing for older people will not generate demand for children's play space. Figure 3 sets out the types of open space that are likely to be needed for various types of development.

**Figure 3. Type of open space to be provided by development**

	<b>Amenity open space</b>	<b>Children's playspace</b>	<b>Natural green-space</b>	<b>Outdoor sport facilities</b>	<b>Allotments / Community gardens</b>
Self-contained homes (Use Class C3)	✓	✓	✓	✓	✓
Student housing	✓	x	✓	✓	x
Housing for older people	✓	x	✓	x	✓
Commercial	✓	x	✓	✓	x

Source: adapted from Camden Open Space, Sport and Recreation Study Update 2008.

- 11.20 The requirement for 9 sq m of public open space per residential occupier and 0.74 sq m of public open space per employee/ student (commercial/ higher education developments) should generally be divided into different types of open space approximately as set out in Figure 4.
- 11.21 In Camden the potential to add to outdoor sports facilities for adults is limited. Provision for outdoor sports will be sought within the overall requirement of 9 sq m per residential occupier where an opportunity for provision arises. Where a development provides public facilities for outdoor sports these will reduce the requirement for other types of open space.
- 11.22 The Camden Open Space, Sport and Recreation Study Update 2008 derived a separate standard for allotments of 0.9 sq per residential occupier. The study indicated that additional space to grow food could only be provided by taking a flexible approach including community gardens, roof gardens, temporary use of vacant sites and converting parts of existing open spaces. Although the standard is not included within the 9 sq m overall requirement, paragraph 31.7 of the Camden Development Policies document indicates that allotments and community gardens are a Council priority. Provision will be sought wherever an opportunity arises, and will be considered to reduce the requirement for other types of open space.

**Figure 4. Break down of open space by type of provision**  
**Residential Developments (all types)**

Type of open space	Provision per adult	Provision per child
Amenity open space	5 sq m	4 sq m
Children's playspace (where applicable)		2.5sq m
Natural green space	4 sq m	2.5 sq m

**Commercial / higher education (non-residential)**

Type of open space	Provision
Amenity open space	0.4 sq m per person
Natural green space	0.34 sq m per person

**How we will calculate the open space expected for a specific development**

- 11.23 Figure 5 below shows the figures we will use to assess open space requirements for individual residential, commercial and higher education developments. The figures are based on the break down of open space requirements in Figure 4 and the occupancy rates recommended by the Camden Open Space, Sport and Recreation Study Update 2008. The occupancy rates are given in Appendix B to this section.

**Figure 5. Open space required for specific developments**

Self-contained homes in Use Class C3	Amenity open space	Children's play space	Natural green space	Total
One bedroom home	6.5 sq m		5.2 sq m	11.7 sq m
Two bedroom home	9.2 sq m	0.6 sq m	7.2 sq m	17.0 sq m
Three bedroom home	12.8 sq m	2.9 sq m	9.5 sq m	25.2 sq m
Four bedroom home	14.1 sq m	3.6 sq m	10.2 sq m	27.9 sq m
<b>Student housing, hotels and hostels</b>				
Single room	5.0 sq m		4.0 sq m	9.0 sq m
Double room	10.0 sq m		8.0 sq m	18.0 sq m
<b>Commercial/ higher education development</b>				
Per 1,000 sq m gross external area	21.6 sq m		17.9 sq m	38.9 sq m

- 11.24 Appendix D sets our worked examples showing the open space required for a number of different development types and sizes.

## How public open space will be provided

11.25 There are three ways in which you can make a contribution to public open space in Camden:

1. On site provision of new public open space;
2. Off site provision of new public open space;
3. Providing a financial contribution in lieu of direct provision.

## On site provision of new public open space

11.26 If your development is located in an area deficient in public open space or with an under provision of public open space we expect provision of new public open space on the development site (see Appendix A to this section and Core Strategy Map 7). This is in accordance with paragraph 31.7 of the Camden Development Policies document. Paragraph 31.7 and accompanying Table 1 also set out other developments that are expected to provide open space on-site. Some on-site provision is expected for residential development adding 60 or more homes and commercial development adding 30,000 sq m or more.

11.27 The amount and type of public open space that can be achieved on-site will be determined by the size of the site. Where children's play facilities are required as a result of the development, priority should be given to the provision of these facilities. On sites already covered by development, and where appropriate access may have to be restricted to the occupiers of the building, the provision of a roof garden as a contribution to public open space may be considered. If a roof garden is to be considered as public open space, as a minimum it should be able to be used by all the occupants of the building.

11.28 Any new public open space that is provided as part of your development should be:

- Large enough to cater effectively for the intended users;
- Designed to be fully accessible, where possible;
- Designed in consultation with the Council's Open space team; and
- Practical to maintain.

11.29 Where you are required to make a contribution to public open space we will ensure that the type of open space you provide best meets the needs of the occupiers or users of the development. You should consider designing your open space carefully to enable different types of open space to be located together or adjacent to each other to complement the overall provision of open space, sport and recreation opportunities.

11.30 We will expect new open space provision to be publicly accessible, however in exceptional circumstances, for example where an existing open space is in private ownership or already has restricted access we may accept an alternative access arrangement.

### **Off site provision of new public open space**

- 11.31 Where a site cannot provide public open space on-site, the preferred option will be provision of new suitable open space off-site. Once again this is especially important where a site does not have access to existing open space in accordance with the distance thresholds (see Appendix A to this section). The new provision should be within the distance threshold for the type of public open space to be provided. For example, if a developer is to provide a children's play area of 100 sq m this should be provided within 50 m walking distance of the development, if amenity open space is to be provided, this should be a maximum of 280 m from the development. If the developer is to provide for a new formal recreation area such as a multi-use games area, this should be provided within 1,200 m of the development.
- 11.32 We will accept the provision of public access to an existing open space that currently has restricted access as a contribution to off-site public open space provision.

### **Providing a financial contribution in lieu of direct provision**

- 11.33 The Council may agree to accept financial contributions in place of direct provision of new public open space where the development site is too small to incorporate on-site open space and the densely built up character of Camden prevents direct provision of off-site public open space. Financial contributions may be used for:
- The creation of an area of public open space, including buying additional land or leasing it at a nominal rate;
  - Improving access to existing public open space;
  - Opening up access to existing private open space;
  - Fit out of a new or existing open space, or some elements of the open space; and
  - Qualitative improvements to existing open space.
- 11.34 Financial contributions may be pooled to create, fit out, improve or provide access to open space. For example, where the Site Allocations Document indicates that new public open space is required on a development site, contributions from other developments within 280 m may be pooled to facilitate the creation of the new public open space.
- 11.35 Financial contributions are calculated on the basis of the costs and requirements set out in Figure 6.. We will aim to spend the collective amount in the proportions set out in Figure 6 and within the same ward as the contributing development where possible. However individual financial contributions will be spent on priorities identified in:
- Camden's open space, sport and recreation study update 2008;
  - Camden's open space strategy;
  - Camden's biodiversity action plan;
  - Camden's play strategy;
  - Camden's sport strategy;



- Individual park management plans.

11.36 A financial contribution is based on the:

- Capital cost of providing new public open space;
- Cost of maintenance for the first 5 years; and
- Cost for the open space team to administer the contribution and design schemes.

**Figure 6. The financial contributions**

	<b>Capital cost</b>	<b>Maintenance</b>	<b>Design and admin</b>
<b>Self-contained homes in Use Class C3</b>			
One bedroom home	£385	£386	£46
Two bedroom home	£663	£561	£80
Three bedroom home	£1,326	£832	£159
Four bedroom home	£1,537	£921	£184
<b>Student housing, hotels and hostels</b>			
Single room	£297	£297	£37
Double room	£593	£594	£71
<b>Commercial/ higher education development</b>			
Per 1,000 sq m	£1,265	£1,284	£152

- 11.37 These aggregate contributions are based on provision of public open space, natural green space and (where applicable) children's play space. Specific contributions to allotments and community gardens and to outdoor sport and recreation provision will be sought on a case by case basis depending on whether there are opportunities to add to provision or are local facilities that need to be maintained.
- 11.38 The calculation of the aggregate contributions is set out in Appendix C to this section. Appendix C includes break down of the capital cost by open space type. This may be needed for developments where a proportion of the open space requirement is met on site or where adequate open space of some types is already available locally.
- 11.39 Payments for maintenance and design and administration are explained in paragraphs 11.45 to 11.50. They have not been aggregated with capital costs as payments will sometimes be required need to be calculated separately (eg where open space will be provided by the developer but maintained by the Council. The Council may also wish to draw separately on funds for capital works, funds for maintenance and funds for design and administration.
- 11.40 The contributions may be adjusted upwards or downwards according to the particular circumstances of the development. They provide a starting



point for negotiations between the Council and developers. The scale of financial contributions will be reviewed and updated as appropriate.

- 11.41 Appendix D to this section sets out worked examples showing the contributions required for a number of different development types and sizes.

### **Providing a combination of open space provisions**

- 11.42 Your development may contribute to public open space through one of the ways listed above or by a combination of them. To determine the amount and type of public open space you are expected to provide, either on-site or off-site we will consider the:

- Type and size of the existing public open space provision within the distance threshold of your development; and
- Size and likely users of your development.

- 11.43 For example, if you propose a residential development located within 280 m of a small local park you may not be required to contribute to amenity open space, but may still be required to contribute to children's play facilities or a formal recreation area if suitable facilities do not exist within the distance threshold of the development.

- 11.44 In all cases a legal agreement will be required to secure the ongoing use of the open space provided as public open space, or to secure the financial contribution in lieu of direct provision.

## **Maintenance**

### **On or off-site provision**

- 11.45 Where you provide a contribution towards public open space outdoor sport or recreation facilities (either on-site or off-site), the Council will need to be satisfied that it has been properly laid out and completed and that suitable contractual arrangements for its long-term maintenance have been put in place. If you provide new public open space (either on-site or off-site) you will be expected to transfer the space to the Council to maintain and retain for such use.
- 11.46 Where your new public open space is to be transferred to us, you will normally be required to remain responsible for its maintenance for an initial establishment period of 5 years. After this time, we will take full responsibility for the maintenance of that public open space.

### **Financial contribution**

- 11.47 If you make a financial contribution in lieu of direct provision, whether it is for substantial qualitative or accessibility improvements to existing sites already maintained by the Council or for the provision of a new public open space, we will expect you to provide a commuted sum for the maintenance of these facilities for a period of five years.
- 11.48 Where your new public open space is not to be transferred to the Council a commuted sum for maintenance will not be required. However,

if you choose to retain control of your public open space, we will need to be sure that adequate provision for the maintenance and access of that public open space is in place.

- 11.49 In ALL cases a legal agreement will be required to secure the maintenance of public open space over a defined period or to secure the financial contribution in lieu of direct maintenance.

### **Design and administration**

- 11.50 For payments in lieu of providing public open space, on-site or off-site payments we will also require a 12% contribution towards the costs of our open space team to administer the financial contribution and to plan and design works within our open spaces.

### **Further information**

Open Space, Sport And Recreation Study	Camden's open space, sport and recreation study update 2008 provides an assessment of open space, sport and recreation provision and demand in the borough. <a href="http://www.camden.gov.uk/planning">www.camden.gov.uk/planning</a>
Biodiversity Action Plan	Camden's Biodiversity Action Plan provides Camden's priorities for improving our greenspaces and biodiversity. <a href="http://www.ukbap-reporting.org.uk/plans/lbap.asp">www.ukbap-reporting.org.uk/plans/lbap.asp</a>
PPS17	Planning Policy Guidance 17 – Planning for open space and its companion guide provide policy and guidance for the provision of open space including the quantitative and qualitative considerations. <a href="http://www.communities.gov.uk">www.communities.gov.uk</a>
Mayor of London's Supplementary Planning Guidance	The Mayor of London's Supplementary Planning Guidance Providing for children and young people's play and informal recreation provides guidance and examples of how to incorporate space for children and young people. <a href="http://legacy.london.gov.uk/">http://legacy.london.gov.uk/</a>

## Appendix A

### Public Open Space Deficiency

Figure 7 shows the maximum distance that people can reasonably be expected to travel on a regular basis to use different types of open space. Amenity open space and children's play space should be available within easy walking distance of the development to which they relate. People are generally willing to travel further to use recreation areas providing outdoor sport facilities or to larger parks.

**Figure 7. Distance threshold for different types of public open space**

Type of public open space	Minimum size (where applicable)	Distance from development to public open space
Public amenity open space		280m*
Formal recreation area		1.2 km
<b>Play Space</b>		
LAP	100sq m	50m*
LEAP	400sq m	280m*
NEAP	1000sq m	500m*
Natural greenspace	Any	500m
Allotments and community gardens	Any	Any

\*This distance is the actual walking distance, taking into account local circumstances, such as the location of entrance gates, street patterns, the severance effects of railway lines or heavy traffic flows that could all reduce the accessibility of open spaces.

(Based on Guide to preparing Open Space Strategies: Best practice guidance of the London Plan, Mayor of London, 2002)

Camden Core Strategy Map 7 shows areas of the borough that are deficient in public open space.

#### AREAS DEFICIENT IN PUBLIC OPEN SPACE

Areas more than 280m walking distance away from a public open space with a multi-functional role, that is a space over 0.25ha (2,500sq m).

Core Strategy policy CS13 also refers to areas with an under-provision of open space. These are areas with access to open space, but the provision is not sufficient to meet the level of local need due to the number of children, dwelling density, and social disadvantage in the area. These are shown in Figure 4.4 of Camden's Open Space, Sport and Recreation Study Update.

Both components are needed to ensure that everyone is within an appropriate distance of public open space based upon their needs and to ensure that people are not prevented from accessing that open space as a result of prohibitive costs. Contributions to open space will be

encouraged within the distance thresholds for the particular type of open space to be provided.

Paragraph 15.18 of Camden's Core Strategy indicates that residents and visitors further than 1 km away from a metropolitan or borough Site of Nature Conservation Importance (SNCI) are considered to have poor access to the natural environment. Core Strategy Map 8 shows all areas greater than 500 m from an SNCI as deficient in access to nature conservation areas.

**AREAS DEFICIENT IN NATURE CONSERVATION SITES**

Areas more than 500m walking distance away from a Borough or Metropolitan level Site of Nature Conservation Interest.

**Appendix B**

**Occupancy rate by development type**

The Camden Open Space, Sport and Recreation Study Update 2008 recommends calculating occupancy rates and child yields on the basis of the London Housing Survey 2002 and DMAG briefing 2005/25. The occupancy rates are shown in Figure 8.

**Figure 8. Occupancy rate for C3 homes based on the London Housing Survey and DMAG briefing 2005/25**

Self-contained homes in Use Class C3	Total persons	Children (average)	Adults (net)
One bedroom home	1.3	0.04*	1.3
Two bedroom home	1.9	0.25	1.65
Three bedroom home	2.8	1.15	1.65
Four bedroom home	3.1	1.44	1.66

Source: Camden Open Space, Sport and Recreation Study Update 2008.  
\*The average child yield for a one bedroom home equates to 1 child per 25 homes, which would not generate a meaningful play space requirement, and has been treated as 0.

Occupancy rates for student housing, hotels and hostels are assumed to be one person per single bedroom and two people per double bedroom.

The study recommends assuming an employee density of one worker per 19 sq m (gross external area) for commercial floorspace. This generates an occupancy rate of 52.6 employees per 1,000 sq m (gross external area). Non-residential developments for higher education are considered to generate the same number of occupants (including employees and students) as commercial developments.

## Appendix C

### Calculation of financial contributions

This appendix shows how we have calculated the financial contributions for provision or enhancement of public open space.

In addition to this capital cost, you will be expected to pay a commuted sum to cover:

- Maintenance of the facility and open space provision over a 5 year period; and
- Designing the new open space works and administering the financial contribution by Camden's open space team.

**Figure 9. Capital cost of provision**

Type of public open space	Capital cost
Amenity open space	£46.22 per sq m
Children's play space and young people's recreation space	£199.48 per sq m
Natural and semi-natural greenspace	£16.42 per sq m
Allotments/Community Gardens	£32.50 per sq m

Source: Camden Open Space, Sport and Recreation Study Update 2008

Figure 5 sets out the break down of open space requirements for developments of specific sizes. The capital costs have been aggregated in accordance with Figure 5 as set out in Figure 10.

**Figure 10. Calculation of financial contribution to capital cost**

<b>Capital cost per square metre</b>	<b>Amenity open space £46.22 psm</b>	<b>Children's play space £199.48 psm</b>	<b>Natural green space £16.42 psm</b>	<b>Total (amenity space + play space + green space)</b>
<b>Self-contained homes in Use Class C3</b>				
One bedroom home: space required	6.5 sq m		5.2 sq m	
Space required x cost per square metre	£300		£85	£385
Two bedroom home: space required	9.2 sq m	0.6 sq m	7.2 sq m	
Space required x cost per square metre	£425	£120	£118	£663
Three bedroom home: space required	12.8 sq m	2.9 sq m	9.5 sq m	
Space required x cost per square metre	£592	£578	£156	£1,326
Four bedroom home: space required	14.1 sq m	3.6 sq m	10.2 sq m	
Space required x cost per square metre	£652	£718	£167	£1,537
<b>Student housing, hotels and hostels</b>				
Single room: space required	5 sq m		4 sq m	
Space required x cost per square metre	£231		£66	£297
Double room: space required	10 sq m		8 sq m	
Space required x cost per square metre	£462		£131	£593
<b>Commercial/ higher education development</b>				
Space required per 1,000 sq m	21.0 sq m		17.9 sq m	
Space required x cost per square metre	£971		£294	£1,265

### Contributions to maintenance costs

In addition to capital costs, the Council has established a maintenance cost of £6.60 per square metre per year, based on the 2006 Parks and Open Spaces Budget, plus inflation.

The standard length of time developers should provide for maintenance of new and enhanced public open space is 5 years.

Commuted sums for maintenance of public open space are calculated as follows: open space requirement (sq m) x £6.60 x 5. This equates to £33 per square metre of open space required.

### Contributions to the cost of design and administration

Design and administration costs have been assessed as 12% of the capital cost of the open space provision or contribution.

## Appendix D

### Worked Examples

#### Worked Example 1:

##### Public open space provision for self-contained homes (C3)

A residential development of 16 new homes provides the following mix of dwelling sizes: 3 x 1-bedroom, 8 x 2-bedroom, 4 x 3-bedroom and 1 x 4-bedroom. The open space requirement can be calculated as follows:

Home size	No of homes	x open space requirement per home (sq m) from Figure 5	= total requirement (sq m)
One bedroom home	3	11.7	35.1
Two bedroom home	8	17.0	136.0
Three bedroom home	4	25.2	100.8
Four bedroom home	1	27.9	27.9
Total for all homes	16		299.8

The total open space requirement for this 16 home scheme would be approximately 300 sq m.

#### Worked Example 2:

##### Public open space provision for non-residential development

An office development provides 1,500sq m of additional floorspace. The open space requirement can be calculated as follows:

Additional floorspace	÷ 1,000 to give floorspace in thousands of sq m	x open space requirement per 1,000 sq m from Figure 5	= total requirement (sq m)
1,500 sq m	1.5	38.9	58.35

The total open space requirement for this additional non-residential floorspace would be approximately 60 sq m.

#### Worked Example 3:

##### Payment in lieu of open space provision for non-residential development – capital costs

As per example 2, an office development provides 1,500 sq m of additional floorspace. The payment in lieu of open space provision can be calculated as follows:



<b>Additional floorspace</b>	<b>÷ 1,000 to give floorspace in thousands of sq m</b>	<b>x capital cost per 1,000 sq m from Figure 6</b>	<b>= total payment for capital costs</b>
1,500 sq m	1.5	£1,265	£1,897.50

The payment in lieu of open space provision for this additional non-residential floorspace based on capital costs would be £1,897.50. However, we would also expect payments towards maintenance and design and administration – see example 5.

#### **Worked Example 4**

##### **Payment in lieu of open space provision for student housing – capital costs**

A student housing scheme provides 30 single rooms and 10 double rooms. The payment in lieu of open space provision can be calculated as follows:

<b>Bedroom type</b>	<b>No of bedrooms</b>	<b>x capital cost per bedroom from Figure 6</b>	<b>= total payment for capital costs</b>
Single	30	£297	£8,910
Double	10	£593	£5,930
Total for all bedrooms	40		£14,840

The payment in lieu of open space provision for this student housing based on capital costs would be £14,840. However, we would also expect payments towards maintenance and design and administration – see example 5.

#### **Worked Example 5**

##### **Payment in lieu of open space provision for self-contained homes (C3) – all costs**

A residential development of 5 new homes provides the following mix of dwelling sizes: 1 x 1-bedroom, 3 x 2-bedroom, 1 x 3-bedrooms. The total payment in lieu of open space provision can be calculated in 4 stages

**Stage 1 – Capital costs**

Home size	No of homes	x capital cost per home from Figure 6	= total payment for capital costs
One bedroom home	1	£385	£385
Two bedroom home	3	£663	£1,989
Three bedroom home	1	£1,326	£1,326
Total for all homes	5		£3,700

The payment in lieu of open space provision for this 5 home scheme based on capital costs would be £3,700.

**Stage 2 – Maintenance costs**

Home size	No of homes	x maintenance cost per unit from Figure 6	= total payment for maintenance
One bedroom home	1	£386	£386
Two bedroom home	3	£561	£1,683
Three bedroom home	1	£832	£832
Total for all homes	5		£2,901

The payment in lieu to cover maintenance of new or enhanced open space for this 5 home scheme would be £2,901.

**Stage 3 – Design and administration costs**

Home size	No of homes	x design and administration cost per unit from Figure 6	= total payment for design and administration
One bedroom home	1	£46	£46
Two bedroom home	3	£80	£240
Three bedroom home	1	£159	£159
Total for all homes	5		£445

The payment in lieu to design and administration for new or enhanced open space for this 5 home scheme would be £445.

**Stage 4 – Sum of all costs**

The three separate types of costs will not usually be aggregated for the Council's purposes (see paragraph 11.39). However, for the guidance of developers, the three costs can be added together.

In this example, the total cost to the developer would be:

Capital costs	£3,700
+ maintenance costs	£2,901
+ design and administration costs	£445
<b>= grand total</b>	<b>£7,046</b>

## 12 Planning for healthy communities

### KEY MESSAGES:

- Planning has a significant role in improving health;
- Applicants should consider the impact of the development on health;
- Applicants should submit a completed health checklist with applications.

- 12.1 It is widely recognised that the health and well-being of individuals is directly influenced by a number of related factors. These include:
- housing;
  - employment;
  - education;
  - access to green and open spaces;
  - social capital and community cohesion;
  - climate change and sustainability;
  - community safety;
  - building and urban design;
  - air and noise pollution;
  - diet and food;
  - waste; and
  - other factors.
- 12.2 Planning and the built environment have a significant role in influencing, both directly and indirectly, all of these health determinants.
- 12.3 In the UK, the 2010 Marmot review, Fair Society and Healthy Lives, also identified a number of recommendations to help deliver one of its objectives to: create and develop healthy and sustainable places and communities. These include:
- active travel;
  - provision of good quality open and green spaces;
  - improving the food environment;
  - energy efficiency of housing; and
  - to fully integrate planning, transport, housing, environmental and health systems to address the social determinants of health.



12.4 Camden's Core Strategy reflects health across the strategy as a cross-cutting theme and so almost all the policies in the Core Strategy will have an impact on health. For example, the following policies all have an influence on health and well-being:

- CS6 - *Providing quality homes;*
- CS15 - *Protecting and improving our parks and open spaces and encouraging diversity;* and
- CS11 - *Promoting sustainable and efficient travel.*

12.5 Policy CS16 - *Improving health and well-being* brings these policies together to ensure they are all working to tackle health inequalities and improve well-being. CS16 also sets out how we will work with NHS Camden to improve and protect health and also support the provision of new health facilities.

12.6 The following Core Strategy policies are also relevant as they work together to promote health and improve well-being:

- CS8 - *Promoting a successful and inclusive Camden economy,*
- CS10 - *Supporting community facilities and services,* and
- CS17 - *Making Camden a safer place.*

12.7 The following policies of the Camden Development Policies are also relevant:

- DP15 - *Community and leisure uses;*
- DP26 - *Managing the impact of development on occupiers and neighbours;* and
- DP32 - *Air quality and Camden's Clear Zone.*

### **Creating healthy communities**

12.8 Where possible developments should:

- Encourage walking and cycling;
- Discourage car use to reduce emissions and accidents;

- Provide landscaping, planting and trees to improve air quality and quality of life;
- Provide adequate amenity space for visual and physical recreation;
- Ensure a mix of uses within or near the residential area to reduce the need to travel; and
- Improve the environmental quality of buildings to ensure buildings stay warm in winter and cool in summer.

### **The NHS Camden Health Checklist for Planning**

- 12.9 This guidance is designed to complement policy 3.2 of the London Plan which requires Health Impact Assessments for major developments, and consideration of the health impacts of development to ensure major new development promotes public health within our borough.
- 12.10 The NHS Camden health checklist for planning has been developed to ensure that health is a key consideration within new developments. The checklist provides support and guidance for developers in order to maximise the health benefits of any scheme. The NHS Camden Health Checklist for Planning is contained in Appendix 1 of this section.
- 12.11 We will require a completed health checklist to be supplied alongside all applications for all developments which meet the following criteria:
- More than 10 residential units, including changes use and new dwellings
  - More than 1,000sq m of non-residential floor space
  - Loss/gain of D1 floorspace of more than 50sq m

### **Hot food takeaways (A5 uses)**

- 12.12 The document *Healthy Weight, Healthy Lives: A Cross Government Strategy for England*, published by the government in January 2008 highlights the commitment to promoting healthier communities. A key element of this strategy is the promotion of healthier food choices. The document highlights the need for local authorities to manage the proliferation of fast food outlets as a means of combating their known adverse impact on community health.
- 12.13 Core Strategy policy CS7 and policy DP12 of the Camden Development Policies, along with Camden Planning Guidance 5 - Town Centres, Retail and Employment aim to manage the number and concentration of food, drink and entertainment uses, including hot food takeaways. The measures we use include:
- limiting the number of A5 units in centres and rows of shops (frontages);
  - preventing consecutive takeaway shops opening next to one another;
  - only allowing new A5 uses in appropriate locations where their impact can be minimised; and

- using legal obligations to ensure that impacts are controlled e.g. opening hours.

12.14 Please see section 5 on town centres, retail and entertainment uses in Camden Planning Guidance 5.

### **Assessing the requirement for new health facilities**

12.15 Health facilities include hospital and other premises that provide health and medical services such as doctors, integrated care centres, polyclinics and dentists. Camden Core Strategy policy CS10 aims to ensure that sufficient community facilities (including health facilities) are provided to meet the needs of Camden's population. Policy CS16 specifically aims to ensure that there is adequate provision of health facilities in partnership with NHS Camden.

12.16 Part e) of CS10 expects development that increases the demand for community facilities and services to make appropriate contributions towards providing new facilities or improving existing facilities. These contributions could be financial or they could involve the direct (re)provision of health facilities within or near a proposed development site.

12.17 The Council will consult with NHS Camden to assess the appropriate level and type of contribution required to mitigate any health care impacts which might be generated by a development proposal. The Council will also have regard to the model commissioned by the Healthy Urban Development Unit (HUDU), updated October 2009. The model is designed to forecast the level of demand for health facilities that might result from a new development and the subsequent cost of provision. Large, strategic schemes will be expected to assess the impact of visitors and employees in addition to the new and existing resident population. In other cases, contributions will not normally be sought for developments of less than 10 residential units.

12.18 Please see Camden Planning Guidance 8 – *Planning obligations* for our detailed approach.

**Further information**

PPS1	PPS1 - Delivering Sustainable Development indicates that LDF policies should plan to protect human health and address accessibility for all members of the community to a range of facilities including health, leisure and community services. It also states that LDF documents should deliver safe, healthy and attractive places to live and support the promotion of health and wellbeing by making provision for physical activity.
PPS23	PPS 23 - Planning and Pollution Control states that potential health impacts arising from development can be a material consideration.
The London Plan	The London Plan (consolidated since 2004) published in 2008 recognises health as a key cross-cutting objective of the overall strategy. The Plan also contains the following relevant policies: <ul style="list-style-type: none"> <li>• Policy 3A.20 Locations for health care</li> <li>• Policy 3A.21 Health objectives</li> <li>• Policy 3A.22 Medical excellence</li> </ul>
Mayor's Guidance	<ul style="list-style-type: none"> <li>• Health Issues in Planning: Best Practice Guidance (June 2007) – explains how planning decisions can directly and indirectly improve health and reduce health inequalities through a number of topics, e.g. housing, transport, employment and skills, education etc.</li> <li>• Sustainable design and Construction (May 2006) – recommends a number of building specific measures to benefit the health of occupants, e.g. improving internal air quality, ensuring sufficient levels of natural light etc.</li> </ul>
CABE	Commission for Architecture and the Built Environment. (2009). Future health: sustainable places for health and wellbeing.
Key determinants of health	Search on the London Health Observatory: <a href="http://www.lho.org.uk">www.lho.org.uk</a>
Healthy Urban Development Unit	Guidance on linking planning and health: <a href="http://www.healthyurbandevelopment.nhs.uk/pages/key_docs/key_documents_hudu.html">www.healthyurbandevelopment.nhs.uk/pages/key_docs/key_documents_hudu.html</a>



## Appendix 1: NHS Camden health checklist for planning

Issue to address	Included in proposal/development	Provide details (Evidence from proposals)	Further action required	Relevant LDF policies
<b>1.0 HEALTHCARE FACILITIES AND SERVICES</b>				
<b>1.1</b> Will the development increase demand on existing primary and secondary care health services?	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core strategy policy CS16
<b>2.0 PHYSICAL ACTIVITY</b>				
<b>2.1</b> Do the proposals maximise physical activity opportunities? (Active travel; leisure facilities; access to green and open spaces; HomeZones; schools; business; Olympics etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policies, CS11, CS15, CS16 and Development Policies DP15, DP17, DP31
<b>3.0 CRIME AND COMMUNITY SAFETY</b>				
<b>3.1</b> Have measures been taken to ensure that the proposals will not have a negative impact on crime and community safety? (Licensed premises; drugs & alcohol; road traffic injuries; etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policy CS17
<b>4.0 HOUSING</b>				
<b>4.1</b> Do the proposals include housing which is: affordable, in mixed use developments; mixed tenure (private, affordable, social); different sizes, accessible and suitable for all ages.	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policy CS6 and Development Policies DP1-9
<b>5.0 EMPLOYMENT AND TRAINING</b>				
<b>5.1</b> Do the proposals provide employment and training opportunities for local people?	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policy CS8 and Development Policy DP13
<b>6.0 EDUCATION</b>				
<b>6.1</b> If education facilities are provided, will they be designed to include wider community use and include green and open space?	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policy CS10
<b>7.0 NEIGHBOURHOOD AND BUILDING DESIGN</b>				
<b>7.1</b> Do the proposals include: accessible street designs for older people and people with mobility problems; and gardens allotments or play areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policies CS14 and CS15
<b>7.2</b> Do proposals ensure that buildings are designed to maximise physical activity (positioning of stairwells, shower rooms, secure cycle parking etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy policies CS11, CS16 and Development Policies DP6, DP17, DP24
<b>8.0 CLIMATE CHANGE AND SUSTAINABILITY</b>				
<b>8.1</b> Do the proposals mitigate against a negative impact on the environment (noise & air quality; renewable energy; contaminated land; waste management etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			Core Strategy Policy CS13 and Development Policy DP22
<b>9.0 FOOD</b>				
<b>9.1</b> Do the proposals include provision of affordable and nutritious food outlets, food growing and limit the proliferation of fast-food outlets?	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			CS16
<b>10.0 WIDER ASSESSMENT</b>				
<b>10.1</b> Have the health impacts been considered as part of any other assessment? (SEA, HIA, IIA, EIA etc)	<input type="checkbox"/> Yes <input type="checkbox"/> No (if no, please indicate what further action will be required)			n/a

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Camden Planning Guidance

# Transport

London Borough of Camden

CPG 7





## CPG7 Transport

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# 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. This new guidance will replace the Camden Planning Guidance 2006, updating advice where appropriate and providing new guidance on matters introduced or strengthened in the LDF.
- 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.

## Transport in Camden

- 1.3 Camden benefits from excellent transport provision with international and national rail links, numerous tube stations and a large number of bus routes providing accessibility within Camden, to the rest of London and beyond. However, being a located in central London, the borough also faces considerable transport challenges, including congestion and poor air quality.

## What does this guidance cover?

- 1.4 This guidance provides information on all types of detailed transport issues within the borough and includes the following sections:
  1. Assessing transport capacity
  2. Travel Plans
  3. Delivery and Servicing Management Plans
  4. Car free and car capped development
  5. On-site car parking
  6. Vehicle access
  7. Streets and public spaces
  8. Cycling facilities
  9. Minicab offices
- 1.5 This guidance supports the following Local Development Framework policies:

## Core Strategy

- CS11 Promoting sustainable and efficient travel
- CS16 Improving Camden’s health and well-being



**Development Policies**

- DP16 The transport implications of development
- DP17 Walking, cycling and public transport
- DP18 Parking standards and limiting the availability of car parking
- DP19 Managing the impact of parking
- DP20 Movement of goods and materials
- DP21 Development connecting to the highway network
- DP32 Air quality and Camden's clear zone

## 2 Assessing transport capacity

### KEY MESSAGES

- A Transport Assessment is required for all schemes which will generate a significant travel demand
- Further guidance is contained within Transport assessment best practice guidance document, TfL 2006

- 2.1 This guidance aims to make sure that applicants submit all the information that is needed to determine a planning application in terms of the assessment of transport conditions before and after the development has taken place, and transport measures that will need to be secured before a development comes into use.
- 2.2 It relates to Camden Core Strategy policy CS11 - *Promoting sustainable and efficient travel* and policy DP16 - *The transport implications of development* of the Camden Development Policies.



### When does this apply?

- 2.3 This guidance applies to planning applications that involve a change in the way that a site is accessed from the highway, and planning applications that will alter how people or goods are moved, how many trips they make, and when the trips take place.
- 2.4 Reference should be made to Transport for London's guidance document 'Transport assessment best practice' for more detailed guidance, along with section 2 of this guidance, relating to Travel Plans. In line with policy DP16 of the Camden Development Policies document, where the transport implications of proposals are significant we will

require a Transport Assessment to examine the impact on transport movements arising from the development.

## **How should Transport Assessments be prepared?**

### **The requirement for a formal Transport Assessment**

- 2.5 Appendix 1 of the Camden Development Policies document provides guidance on the scale of development that is likely to generate a significant travel demand and therefore require either a transport assessment or a transport statement. The use class and floorspace relationships in Appendix 1 are simply guidelines, and have been selected on the basis that their travel characteristics are likely to have a significant impact on travel. The Council will require submission of a Transport Assessment for a development likely to have any of the following travel characteristics (having regard to any existing travel generated by activity on the development site):
- a) More than 1,000 person trips per day; or
  - b) More than 100 person trips during the morning or evening peak (0700-1000 or 1600-1900); or
  - c) More than 500 vehicle movements per day; or
  - d) More than 100 vehicle movements in any single hour; or
  - e) More than 20 heavy goods vehicles (over 7½ tonnes) per day; or
  - f) Any heavy goods vehicle movements between midnight and 6am.
- 2.6 Although a formal Transport Assessment is not required for schemes that do not have any of these travel characteristics, where there is any material change to travel patterns, information will still need to be submitted as part of the standard development control process, indicating the amount of travel that will arise, and when and how it will be accommodated (see paragraph 2.12).

### **Information required as part of a Transport Assessment**

- 2.7 At an early stage, applicants should discuss with the Council the scope of the Transport Assessment, and the most appropriate methods to use (e.g. data sources, estimation of trips generation, modelling requirements). The level of information contained within the Transport Assessment should relate in scale and kind to the particular development.
- 2.8 A Transport Assessment should generally include the following information. Please note that this table is a summary of the information contained within Transport assessment best practice guidance document, TfL 2006 and so reference should be to this TfL guidance.

**Figure 1. Transport Assessment Requirements**

<b>TA1. Description of development</b>		
a)	Detailed site plan (min. 1:1250).	Always required.
b)	Schedule of floor areas of existing uses on the site.	Always required.
c)	Schedule of floor areas of proposed uses on the site.	Always required.
<b>TA2. Description of base networks</b>		
a)	Plan showing relationship of site to the surrounding road, public transport, pedestrian and cycle networks. Include any tram routes or proposals.	Study area and base networks to be agreed with the Council.
b)	Information on traffic flows, accident records, on-street parking conditions, and identify any critical links and junctions.	For proposals increasing motor vehicle movements, criteria C to D.
c)	Information on frequency, reliability and capacity of bus, tram, underground and rail services within the study area.	For proposals increasing trips and trip concentrations, criteria A and B.
<b>TA3. Trip generation</b>		
a)	Number of person trips generated by mode and time of day.	Always required.
b)	Number and size of vehicles required to service the building.	Always required.
<b>TA4. Trip assignment</b>		
a)	Assignment of vehicular trips to the road network.	For proposals increasing motor vehicle movements, criteria C to D
b)	Assignment of public transport trips to the bus and rail networks.	For proposals increasing trips and trip concentrations, criteria A and B.
c)	Justification for assignment methodology.	Always required.
<b>TA5. Vehicular access and circulation</b>		
a)	Analysis of junction design for access and egress, using appropriate packages if necessary (such as PICADY, OSCADY, LINSIG and TRANSYT).	Always required where a new access is provided or where an existing access will be more intensively used.
b)	Describe the arrangements for servicing and access for emergency vehicles.	Always required.
c)	Describe the number, allocation and design of on-site parking and compare this with Council standards.	Always required.
<b>TA6. Pedestrians and cyclists</b>		
a)	Assess the capacity and safety of existing pedestrian and cycle facilities and describe how they are affected by the development.	Always required.
b)	Describe the number, allocation and design of on-site cycle parking and compare this with Council standards.	Always required.
c)	Describe design features on or outside the site to assist pedestrians and cyclists.	Always required.
<b>TA7. Public transport</b>		
a)	Assess the accessibility of the site by public transport.	Always required.
b)	Identify BR and Underground stations and lines, tram routes or proposed tram routes, and bus services that will be significantly affected by the development. Evaluate and quantify impact of additional demand on capacity.	For proposals increasing trips and trip concentrations, criteria A and B.
c)	Assess and quantify impact of additional road traffic on bus and tram reliability.	For proposals increasing motor vehicle movements, criteria C to D.
<b>TA8. Road network</b>		
a)	Identify junctions and links that will be affected by development traffic. Quantify and evaluate the reserve capacity, queues and delays at critical junctions.	For proposals increasing motor vehicle movements, criteria C to D
b)	Carry out a Safety Audit.	Only required where physical changes are proposed on the public highway.
<b>TA9. People with a transport disadvantage</b>		
a)	Identify measures to make the site accessible to people with a transport disadvantage, including access for community transport services, the provision of designated car parking, drop-off points, shopmobility and scootability schemes (loan of scooters or electric wheelchairs to assist movement in the area around a home or destination from the initial point of arrival), and physical design features.	Always required.
<b>TA10. Environmental impact</b>		
a)	The impact of generated traffic on air pollution and noise (unless included in an Environmental Assessment).	For proposals increasing motor vehicle movements, criteria C to D.
<b>TA11. Conclusions and recommendations</b>		
a)	Summary of transport impacts.	Always required.
b)	Details of remedial measures proposed to alleviate any identified problems or evidence provided that no remedial measures are necessary. In most cases, these will include outline provisions of a Transport Plan.	Always required.

- 2.9 The Regent's Canal in Camden has a transport function for walking and cycling and to a lesser extent for movement of passengers and freight by water. In addition to considering the highway and public transport networks detailed above, where a development is adjacent to the Canal, or the Canal forms a part of the pedestrian and cycle network close to a development, the Transport Assessment should consider how the development may affect travel on and alongside the Canal. Policy DP20 of the Camden Development Policies deals specifically with the use of the Regent's Canal for moving goods and materials.

### **What should the Transport Assessment achieve?**

- 2.10 Where an Assessment is submitted, it should enable the Council to consider whether:
- the development is acceptable in its proposed form and without any alterations to existing transport arrangements;
  - some alteration would be needed to the development or to transport facilities or networks in order to accommodate the travel it would generate in an acceptable way;
  - the development could not proceed without unavoidable harm to travel or the transport system, in which case the proposal will be contrary to LDF policy DP16, and will be refused by the Council if it is not withdrawn.
- 2.11 If the Assessment shows that amendments are needed, it should recommend specific amendments and mechanisms to ensure that these amendments take place in the event of the development being implemented. Recommendations might include:
- conditions to prevent implementation prior to the completion of planned transport provision with secured funding;
  - conditions to ensure that implementation is in phases, such that each phase follows completion of any necessary planned transport provision with secured funding;
  - a legal agreement to ensure submission and implementation of:
    - a travel plan to manage travel demand;
    - a servicing plan to manage on- and off-site servicing arrangements following completion;
    - a construction management plan for the period from commencement to full operational occupation of the development to manage on- and off-site construction traffic, delivery and removal of materials, and any temporary changes to other traffic movements (including pedestrian and cyclist movements) in and around the site;
  - changed on-site arrangements for pedestrians, cyclists, cycles or motor vehicles (including public transport) through substitution of drawings showing amended facilities for movement, picking-up and

setting-down, parking, storage, queuing, loading and unloading, and/or employee lockers and showers;

- changed off-site arrangements for pedestrians, cyclists, cycles or motor vehicles (including public transport) through a legal agreement to ensure funding and implementation of amended or new facilities for movement, picking-up and setting-down, parking, queuing, loading and unloading, and/or other measures such as public transport services, shelters, information and signage, city car clubs and city car schemes.

### **Developments below the threshold for Transport Assessment**

- 2.12 Development Policy DP16 states that larger developments that would have implications for transport, but which fall below the threshold for a full transport assessment, will still be required to submit information regarding the transport implications of that scheme. Appendix 1 of the Development Policies document provides guideline floorspace thresholds for these types of developments. The type of information required is set out in DP16 and could be submitted as part of a Design and Access Statement.

### **Further information**

Draft Guidance on Transport Assessment, Department for Communities and Local Government/ Department for Transport, August 2006 - this can be viewed on the consultation papers pages in the roads and vehicles section of: [www.dft.gov.uk](http://www.dft.gov.uk)

Transport assessment best practice guidance document, Transport for London, May 2006 – this can be obtained via TfL at: 0845 305 1234





### 3 Travel plans

#### KEY MESSAGES

- Travel Plans enable a development to proceed without adverse impact on the transport system
- The requirements of a Travel Plan will be tailored to the specific characteristics of the site and the development

3.1 This guidance explains the circumstances under which travel plans are sought, what they are intended to achieve, how they should be prepared, and what measures should be considered for inclusion. In addition to general guidance for travel plans, this section provides guidance on:

- Workplace travel plans;
- School travel plans;
- Residential travel plans;
- Visitor management plans; and
- Leisure and event travel plans.

3.2 It relates to paragraph 11.16 of Core Strategy policy CS11 - *Promoting sustainable and efficient travel* and policies DP16 to DP21 of the Camden Development Policies.



#### When does this apply?

3.3 This guidance applies to all planning applications that involve a significant impact on travel or the transport system. It will also guide consideration of Travel Plans submitted where the impacts are less, but where the transport provision does not have capacity for increased demand, and where demand management measures are desirable to



address sustainability concerns. Transport for London recommends that a Travel Plan be submitted for any residential development of over 30 units. Various uses may not fall into these categories (e.g. religious institutions), but we will seek Travel Plans where appropriate and requirements will be tailored to the characteristics of the site and the development.

- 3.4 Reference should be made to Transport for London's documents 'Guidance for workplace travel planning for development' (TfL, 2008) and 'Guidance for residential travel planning in London' (TfL, 2008) for more detailed guidance. Reference should also be made to planning guidance about Transport assessments. In line with Development Policy DP16, the Council will also require a Transport Assessment to be submitted in support of any development that significantly increases travel demand or would have a significant impact on travel or the transport system.

### **General guidance**

- 3.5 Travel Plans are one way in which developments can contribute to meeting targets on traffic reduction and improving air quality. A Travel Plan is a package of measures, generally developed by employers or property managers, which is designed to reduce car use and promote greener forms of transport. Travel Plans will often be a mechanism that arises from a Transport Assessment as a means of enabling a development to proceed without adverse impact on the transport system. The Council, Transport for London, and partners in the North and Central Travel-plan Network can provide advice and assistance in the creation of Travel Plans by organisations that are existing, new, relocating or expanding, including hospitals, schools, and businesses organisations.
- 3.6 Where a Travel Plan is necessary in terms of policy DP16 or because elements of the transport system have no additional capacity, submissions in connection will generally be secured by S106 agreement. This is because the applicant will rarely be the final occupier of the scheme, and furthermore a Travel Plan will require ongoing development subsequent to the initial occupation. Travel Plans will require monitoring on at least an annual basis, and the Council will usually require submission of a monitoring report.
- 3.7 Travel Plans are developed over time, with a typical 3-year target being a specified reduction in the number of motor vehicle trips. This means promoting and increasing cycling, walking, and the use of public transport so that a real choice may be made between all travel methods. It is the enthusiasm and commitment of the organisation in putting the theories into action that ensures a Plan's success. Key to this is the support of senior management in the development of a Travel Plan. If the development does not replace an existing use, the Council will advise on the appropriate modal split targets.

## **Workplace travel plans**

- 3.8 A workplace travel plan will usually contain measures geared particularly to promoting alternatives to single-occupancy car use. A workplace travel plan will be specific to each individual site and the nature of the business activity there. Workplace travel plans are potentially suitable for any organisation that generates a significant number of employee trips including offices, hospitals, distribution centres, large shops and supermarkets, cinemas and theatres, primary care centres and GP surgeries. Specific guidance is available on school travel plans where the travel of pupils needs to be considered.
- 3.9 As a minimum, a workplace travel plan should address travel by staff to and from work and on business. However, a travel plan may also address visitor, client and customer travel, suppliers making deliveries, contractors undertaking work on site and fleet procurement/management.
- 3.10 The key components necessary for all workplace travel plans are:
- corporate/management support and commitment;
  - designated travel co-ordinator;
  - consultation on the plan;
  - staff travel surveys - baseline & monitoring;
  - targets – challenging but achievable;
  - promotion of the package to the workforce;
  - monitoring – on-going, to check and maintain progress and development.
- 3.11 Detailed measures will include some or all of the following:
- restricted availability of workplace car parking, and introduction of charges;
  - a communication strategy detailing how sustainable transport and travel plan issues will be promoted to staff and visitors;
  - easily available in-house public transport information for all staff at the workplace and for visitors, including leaflets and maps, intranet and internet;
  - public transport promotion and initiatives including interest-free season ticket/ travelcard loans, and mutual beneficial links with public transport operators to increase ridership and improve the services convenient for the workplace;
  - promotion of car-sharing where walking, cycling and public transport is not an option;
  - cycle prioritisation and provision of secure and convenient facilities such as: well-lit, workplace parking; lockers; showers and changing rooms;
  - procurement of a cycle repair and servicing facility (possibly through external tender process);

- financial benefits for cyclists such as mileage allowances for work-related journeys, 0% loans and salary sacrifice initiatives for purchase of bikes and equipment, assistance with cycle insurance;
- replacement of company cars with more sustainable benefits, adjusted car allowances and loans to discourage car use and release resources for greener options;
- on-site charging for electric bikes and vehicles;
- reduction of vehicle emissions through policies such as regular emissions testing;
- scheduled replacement of any existing fleet or pool vehicles with pool bikes and other pool vehicles that use cleaner fuels;
- travel reduction initiatives – for example, increased working from home, teleworking and teleconferencing can reduce the number of employee trips to the workplace;
- walking encouragement and provision of information on the best routes to and from the workplace for commuting, working and leisure, for staff and for visitors.

### **School travel plans**

- 3.12 A school travel plan (STP) can bring benefits of safer and more sustainable transport for the whole community. Each STP will need must be designed to take into account and be tailored to local circumstances. Where a school has strong links with other schools in the area, consideration should be given to developing a joint STP. An STP can potentially result in:

- Less cars and congestion around the school;
- Healthier, more active pupils, families;
- Less pollution around the school;
- Safer walking and cycling routes around the school;
- Improved school grounds with provision for bicycle storage;
- A more accessible school site; and
- Improved attendance and achievement.

- 3.13 All STPs have to be sent to Camden and to Transport for London for approval. It is essential that an STP complies with the Transport for London criteria used to assess STPs. It must also be signed and approved the school's Headteacher and the Chair before submission. These criteria for assessing STPs are detailed in the TfL publication 'What a school travel plan should contain'.

### **Residential travel plans**

- 3.14 A residential travel plans provide a key mechanism for ensuring that sustainable access is an integral feature of a development. Each one should form a holistic package of measures integrated into the design, marketing and occupation of the site rather than 'retrofitted' once the

development is established. A residential travel plan provides a mechanism for setting out how the various parties (including the developer and future occupiers) can work together in partnership to encourage sustainable travel patterns.

- 3.15 Residential travel plans are concerned with journeys made from a single origin (home) to multiple and changing destinations. Each residential travel plan is site specific, with detailed measures partly determined by site opportunities and constraints such as the location of existing public transport routes, health facilities and workplaces in the immediate area. A residential travel plan should include parking restraint, and should support walking, cycling and public transport use. A residential travel plan should include both hard measures, such as site-design, provision of infrastructure and new services, and soft measures such as marketing, promotion and awareness-raising among residents. A S106 agreement securing a residential travel plan will also need to require that all future residents are informed of the existence of the travel plan and any restrictions it implies (for example, lack of access to parking permits in controlled zones).
- 3.16 The main objectives of a residential travel plan are to:
- address residents' need for access to a full range of facilities for work, education, health, leisure, recreation and shopping. In some cases this will mean providing facilities that reduce the need to travel, such as a local shop;
  - reduce the traffic generated by the development to a significantly lower level of car trips than would be predicted for the site without the implementation of the travel plan;
  - promote healthy lifestyles and sustainable, vibrant local communities;
  - encourage good urban design principles that open up the permeability of the development for walking and cycling linked to the design and access statements;
  - address specific problems identified in the site's Transport Assessment - for example, a road safety problem that prevents children or older people from gaining access to key facilities.
- 3.17 There are two distinct phases in development of a residential development plan:
- 3.18 Stage 1 should cover design, construction, occupation, and the first monitoring and review period. Preparation and implementation will initially rest with the developer or a consultant appointed by the developer, however implementation may involve a steering group which has representation from different agencies such as the local authority, public transport operators and residents (once they are in occupation). At this stage, the developer, the manager of the development, and the person designated as travel plan coordinator will have to be closely involved in managing and refining the travel plan. This period is crucial in terms of ensuring that the measures outlined in the plan are actively

implemented as part of the development and that the objectives and targets identified in the plan have potential to be met.

- 3.19 Stage 2 will be after full occupation of the development and completion of all measures to integrate the development with the surrounding area. Responsibility for managing and developing the travel plan will generally need to be passed on, and measures put in place to ensure that implementation of the plan continues.
- 3.20 It is important that an effective management structure is put in place to enable the overarching responsibility for the plan to be passed from the developer to the residents or to a residents' management company or to another body such as the Council. The manager will need to be able to ensure the continuation of travel plan measures such as car clubs, car share schemes. A residential travel plan will therefore need to specify its own management structures, which should generally have the following characteristics:
- identifying the developer as the party responsible for delivering the travel plan and for initial implementation, including responsibility for achieving the targets and objectives established in the travel plan. The plan should specify clearly at what point the developer can pass on responsibility for the plan wholly to residents, a management committee, or similar. Up to that time, steering groups and other management structures may assist in implementing the travel plan, provided that the developer retains ultimate responsibility;
  - establishing the ongoing management committee or group with a clear purpose, accountability and ability to take action – this is most likely to be achieved by developing a constitution for the group;
  - providing funding to ensure ongoing administrative support for the group once established and adequate resources to carry out continuing travel plan measures

### **Visitor management plan**

- 3.21 Where developments are likely to involve visitors arriving and leaving in taxis and coaches, submitted proposals should show how these can be accommodated without harm, and a Visitor Management Plan may be required to where it is necessary to impose controls on the types of vehicle, the times of arrival, and the specified picking-up and setting-down points.

### **Leisure and event travel plan**

- 3.22 Event travel plans are designed for short-term events (either regular or one-off) and as such will be implemented differently to workplace travel plans. The general structure of the plan will be similar but the content of each section will be different when dealing with events.

### 3.23 An event travel plan should contain the following:

- Background information - providing an overview of the event and its organisers and including information on any existing environmental policy, why a travel plan is being produced and detailing the location of the event along with some information on the site's accessibility.
- Site audit and survey - providing the information to inform the rest of the travel plan. The site audit provides details on how accessible the site is by various forms of transport and includes both on-site and off-site infrastructure.
- Aims and objectives - broad statements of intent regarding what it is hoped the travel plan will achieve.
- Targets - There are two types of target that can be set for a travel plan. The first is known as an 'aim-type' target and is generally based on the percentage share of each travel mode used, and the other type of target that is set is the 'action-type' target which sets a deadline for a certain action to have taken place.
- Measures - detailing the various incentives and initiatives that can be employed to achieve the targets set in the previous section. The measures that are implemented will depend on various factors including the results of the surveys, the size of the event (area or number of visitors), the site audit and the amount of funding available.
- Monitoring Strategy and Management Structure – in order to record the overall success of the travel plan as well as how effective individual measures have been.
- Action Plan – providing a summary of how the travel plan will be implemented and monitored. An action plan typically lists the measures that are due to be implemented along with details on who is responsible, when they are to be undertaken, how the success will be gauged and which aims and objectives they relate to.

### Further information

Government resources related to travel plans can be viewed in the sustainable travel section of: [www.dft.gov.uk](http://www.dft.gov.uk)

Residential and employment travel plans best practice guidance documents, Transport for London, forthcoming 2006-07 – when published these will be available from TfL at: 0845 305 1234

What a school travel plan should contain, Transport for London - this can be viewed on the Camden Schools/ School Travel Plans/ Success Factors pages in the education section of Camden's website - [www.camden.gov.uk/ccm/navigation/education/camden-schools/school-travel-plans/success-factors/](http://www.camden.gov.uk/ccm/navigation/education/camden-schools/school-travel-plans/success-factors/)



## 4 Delivery and servicing management plans

### KEY MESSAGES

- Transport Assessments represent the best tool to consider how a development can most appropriately be serviced
- Developments should accord with the Servicing Guidelines provided in this guidance

- 4.1 The purpose of this guidance is to give details on how Delivery and Servicing Management Plans can be used to manage and mitigate the potential impacts of deliveries and servicing on the amenity of occupiers and neighbours.
- 4.2 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?

- 4.3 This guidance applies to all development proposals which are likely to generate delivery and servicing movement and therefore may incur significant noise and disturbance impacts. Further details on the circumstances in which the Council will expect/require Delivery and Servicing Management Plans are set out within this guidance.

### How should Delivery and Servicing Management Plans be prepared?

#### Service vehicles and waste collection

- 4.4 General guidance on requirements for service vehicles and goods vehicles is given in Development Policy DP20 - *Movement of goods and materials*. Transport Assessments represent the best tool to consider how a development can most appropriately be serviced. Loading and unloading for some developments can safely and appropriately take place on-street, depending on the nature of the street and the development. Where a development is most appropriately serviced off-street, the application should show that the development will accord with the servicing guidelines shown in the table at the end of this section.
- 4.5 Guideline thresholds for the scale of development where a Transport Assessment will be required are given in LDF Development Policies Appendix 1. For development of significant floorspace in commercial use and residential institutions, the LDF proposes off-site bays for servicing, but also proposes a Transport Assessment that can test the appropriateness of alternative solutions.



- 4.6 For retail-type floorspace (Use Classes A1-A5), the guideline threshold is developments of 1,000 sq m or more. For other commercial floorspace, hotels, and institutional residential accommodation such as hotels, colleges and hostels, the guideline threshold is developments of 2,500 sq m or more. The transport characteristics of Use Classes D1-D2 (including surgeries, places of worship and cinemas) are too variable for any assumption to be made about the need for on-site servicing, but a Transport Assessment is sought in most cases.
- 4.7 The scale of a development is not the only factor controlling the servicing needs it generates. A Transport Assessment is required for any development that would significantly impact the transport system under policy DP16 of the Camden Development Policies. This could be expected to include, for example, any development serviced on-street and likely to receive more than 10 deliveries a day or 2 deliveries an hour. Assessment is also required for developments that generate a number of heavy vehicle movements (see the Assessing Transport Capacity section of this guidance).
- 4.8 If waste collection vehicles need to access a development site, this can be a key consideration in the design of motor vehicle access and circulation spaces. Information on the amount of space needed for sorting and storage of waste on-site prior to collection is given in the Waste recycling and storage section of CPG1 Design. The Council does not generally allow waste to be left on the highway for collection on a specified day except in the case of residential development of 6 dwellings or less.
- 4.9 External storage space for large waste containers is sought for residential development of 7 dwellings or more, and for most non-residential development. The external storage space should be at or near street level, and within 10 metres of a place suitable for a collection vehicle to stop. If appropriate external storage space for waste cannot be provided within 10 metres of the public highway, it will generally be necessary for the collection vehicle to access the development site. In this case, circulation spaces will need to be considered in the same way as those for service vehicles.

### Servicing Guidelines

Swept paths	Applicants should provide evidence of swept paths on submitted drawings.
Turning areas	Normally, all vehicles must be able to enter and leave the site in a forward facing direction. If in exceptional cases this is not possible, the service area must be designed to enable vehicles to reverse off the highway rather than onto it.
Demarcation	Servicing bays and turning areas should be clearly marked out, for example, by the use of different colours and materials, to discourage their misuse for car parking and storage.
Pedestrians	Care must be taken to provide safe segregated routes for use by pedestrians. Where access roads for service vehicles represent the most direct or visible route for pedestrians, a segregated footway at least 1.8 m in width should be provided with direct links to each pedestrian entrance of each building on site.
Access roads	A minimum carriageway-width of 6.0 m is required where an internal access is designed for two-way use by service vehicles. Where a footway is not provided to each side, a safety margin with a minimum width of 0.5m must be provided wherever there is no footway.
Headroom	A vertical clearance of 3.5m must be provided for light and medium goods vehicles.

### Further information

CPG1 Design, LB Camden 2011

Camden Streetscape Design Manual, LB Camden 2005

Camden Council transport strategies and plans, including the Streetscape Design Manual, can be viewed in the transport and streets section of the Council's website

Residential roads and footpaths: layout considerations - Design bulletin 32 (2nd edition), HMSO 1992 – this can be obtained via:

[www.tsoshop.co.uk/bookstore.asp](http://www.tsoshop.co.uk/bookstore.asp)



## 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 Policies. 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	<p>90° parking – aisles may be two-way</p> <p>The minimum aisle width between the ends of spaces is 6.0m</p> <p>60° parking – aisles must be one-way</p> <p>The minimum aisle width between the ends of spaces is 4.2m</p> <p>45° parking – aisles must be one-way</p> <p>The minimum aisle width between the ends of spaces is 3.6m</p>

- 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. We 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.



## 7 Vehicle access

### KEY MESSAGES

- Planning permission must be sought for works to create or alter an access onto a classified road
- The Council will not approve applications that would cause unacceptable parking pressure or add to existing parking problems

- 7.1 This section gives guidance on designing developments to provide safe access and use by motor vehicles, ensuring that new means of access do not cause harm to the safety of other users of the development and the adjacent highway. It focuses on the Council's approach to planning applications that include new footway crossovers and new access routes to enable access to properties and sites.

#### **Footway crossover**

A dropped kerb or short ramp to permit vehicle access.

- 7.2 It relates to Core Strategy Policy CS11 - *Promoting sustainable and efficient travel* and policies DP18 - *Parking standards*; DP19 - *Managing the impact of parking*; and DP21 - *Development connecting to the highway network* within the Development Policies.

- 7.3 This section provides guidance on how proposals are judged in terms of:

- impact on the highway network and on-street parking conditions;
- visibility and sightlines for emerging vehicles;
- impact on the footway;
- layout and dimensions for footway crossovers; and
- Preventing waiting on the highway for schemes that include controlled access points, lifts and ramps.

### **When does this apply?**

- 7.4 This guidance applies to planning applications that involve a change in the way that a site is accessed from the highway.

- 7.5 Planning permission must be sought for works to create or alter an access onto a classified road, including a crossover over a footway or pavement to provide access onto private land. However, there are certain circumstances where planning permission may not be required for access to a paved area or garage. These can include an access:

- from a road that is not classified (classified roads are listed in the Camden Network Management Plan);
- to a property that is not subdivided into flats, and is occupied by a single household.

**Classified road**

A road which has a number in the national road system (i.e. M - motorway, A - first-class road, and B - secondary road).

- 7.6 Before considering applications for vehicle access we will first assess how an application has sought to minimise car use in accordance with Core Strategy Policy CS11 and policies DP16 - DP20 of the Camden Development Policies document. Relevant 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.

- 7.7 It should also be noted that, separately to planning permission, consent is required from the relevant Highway Authority for a new or altered access from the public highway onto private land, and must be obtained before embarking on any work. The Council is the Highway Authority for all public roads in the Borough except the Transport for London Road Network (see Development Policies Map 1), for which, Transport for London is responsible.

**How should vehicle access be provided?**

- 7.8 Access to a site by motor vehicles will either be by driving over the footway using a crossover or the footway will be interrupted by a new junction to create a level access direct from the carriageway:
- Crossovers may be appropriate where the site is not intensively used by vehicles. The Council's Street Management Division will advise on the appropriateness of crossovers and, where a crossover is appropriate, will generally carry out its construction at the developer's expense, in accordance with the design requirements set out in the Camden Streetscape Design Manual;
  - Direct access using a new junction is likely to be appropriate either where the site is intensively used by vehicles, or where access is required by heavy goods vehicles. The Council will seek adoption of new roads, and so they must be designed in conjunction with the Council's Street Management Division (see Development Policy DP21).

**Impact on the highway network and on-street parking conditions**

- 7.9 The Council's approach to development and highway management is set out in policy DP21 of the Camden Development Policies, which seeks to ensure that new connections to the highway network from developments do not cause harm to the network, to its users or the environment. Applicants whose schemes will connect directly to the highway network should also refer to Camden's Network Management Plan and consult Council.
- 7.10 The creation of off-street parking and new access routes frequently involves the loss of on-street parking spaces due to the creation of a

crossover over the kerb. As set out in paragraphs 19.6 - 19.9 of the Camden Development Policies document, we will not approve applications for planning permission (and for highways consent) that would cause unacceptable parking pressure or add to existing parking problems.

- 7.11 Camden's Parking Enforcement Plan Parking provides regularly updated parking permit data, which is used to establish levels of on-street parking pressure on each of Camden's roads. This information will be used when considering the acceptability of applications that would involve the loss of on-street parking spaces.
- 7.12 We will require developments to be car free, where necessary, in order to avoid harmful impacts on on-street parking conditions through the creation of new access routes (see section 4 of this guidance for more information on our approach to car free development).

### **Visibility and sightlines for emerging vehicles**

- 7.13 Vehicles joining the highway network need clear views of pedestrians, cyclists and other traffic, and users of the highway network need clear views of those joining it. Views can be obstructed by boundary treatments and parked cars. The relationship between motor vehicles and cyclists and pedestrians is particularly sensitive.
- 7.14 Adequate visibility for emerging vehicles should be provided with new vehicle accesses, or development that effects existing vehicular accesses. Developers should refer to the Manual for Streets for guidance.

### **Layout and dimensions for footway crossovers**

- 7.15 It is essential that footway crossovers do not harm ease of pedestrian movement, and the front building line should provide a minimum pavement width of at least 1.8 metres. Any changes to the public highway would need to be approved by the highway authority and design details should be discussed with Camden highway authority prior to the submission of an application.
- 7.16 It is important that new access points are not overly steep, in order to allow for safe and convenient access. For normal pavement crossovers that involve a dropped kerb, the Council will apply the following gradients:
- Vehicular ramps from the carriageway to the area of level footway should be a maximum of 15% (1:6);
  - For pedestrians dropped kerbs should be a lower gradient.
  - For longer vehicular ramps, the Council will apply the following gradients:
  - Vehicular ramps should be a maximum gradient of 10% (1:10)



- For pedestrians, ramps should be a maximum gradient of 1:12, in line with the Disability Discrimination Act (DDA) requirements (although a gradient of 1:20 is preferred)

- 7.17 Where possible, the ground floor level of a development should be the same as the level of the highway, in order to avoid the provision of unnecessary steps, and to allow the footway to be constructed with an adequate slope (i.e. “crossfall”) to allow water run off.

**Preventing waiting on the highway: Controlled access points, lifts and ramps**

- 7.18 Sometimes it will be necessary to provide a limited amount of space for vehicles on the site or curtilage, with controls at the point of entry and/ or provision of vehicle space at a different level from the street, accessed by a vehicle ramp or lift.

**Curtilage**

The enclosed area of land adjacent to a dwelling house.

- 7.19 In each case, an area should be provided within the site for all vehicles waiting for a traffic signal, barrier or vehicle lift. This area should be sufficient to accommodate the maximum likely number of queuing vehicles, without any obstruction to pedestrians and vehicles using the public highway. Where a lift, ramp or other access is only available to one vehicle or direction of flow, there must be space at each end for leaving vehicles to pass those queuing to enter.
- 7.20 Depending on expected traffic flows, access roads may be expected to be two-way. Segregated areas for pedestrians and/ or cyclists may also be required.

**Further information**

- 7.21 The Council’s Road Network Management Plan establishes the road hierarchy in Camden and provides a list of classified roads in the borough. It sets out how the Council will manage the road network in order to provide for efficient movement of vehicles and pedestrians and reduce disruption and congestion.
- 7.22 The Camden Streetscape Design Manual provides information on the Council’s expectations for the detailed design and layout of highways, footways and public spaces in Camden. Detailed consideration should be given to the Manual before designing any highway works.
- 7.23 Other relevant documents include:
- Department of Environment, Department of Transport Design Bulletin 32 - Residential Roads and Footpaths - Layout Considerations – which describes the main considerations that should be taken into account in the design of residential layouts. It also takes into account new initiatives on matters such as road safety and includes references to improvement schemes on existing estates.

- Design Manual for Streets; DfT, 2007 – which provides advice for the design of residential streets and the creation of sustainable and inclusive public spaces.
- Design manual for roads and bridges – which is a series of 15 volumes that provide official standards, advice notes and other documents relating to the design, assessment and operation of trunk roads and motorways.

7.24 Regard should also be had to:

- the creation of high quality streets and public spaces (see section 7 of this guidance);
- potential community safety issues associated with forecourt parking – see Core Strategy policy CS17 and Designing safer environments section of the CPG1 Design.



## 8 Streets and public spaces

### KEY MESSAGES

- New development should contribute to the creation of attractive, clean and well-maintained public places
- All new pedestrian areas and footpaths are required to be constructed to a standard that is considered appropriate for adoption by the relevant Highway Authority.

- 8.1 This section provides guidance on the design and layout of streets and public spaces. It aims to ensure that a good quality pedestrian environment and good pedestrian access are provided. This includes ensuring that development is accessible to all members of the community, including all disability groups.
- 8.2 The guidance relates to Camden Core Strategy Policy CS11 - *Promoting sustainable and efficient travel* and policies DP16 - *The transport implications of development* and DP17 - *Walking, cycling and public transport* and DP21 - *Development connecting to the highway network* in Camden Development Policies.

#### **Public realm**

All areas to which the public has open access.

#### **Legible London scheme**

A new signage scheme which aims simplify pedestrian movement around London.



- 8.3 This section includes guidance for the design and layout of streets and public spaces including:

- quality of the public realm;
- ease of pedestrian movement;
- street furniture;
- footpaths that are not alongside roads,
- our approach to shared surfaces; and
- information on the Legible London scheme.

### **When does this apply?**

- 8.4 This guidance applies to planning applications that involve a change in the way that pedestrians access a site or move in and around the site, and also applications that change vehicle movements in a way that will affect pedestrians.
- 8.5 It should guide arrangements for pedestrians that arrive by car, public transport or bicycle, as well as those arriving on foot.

### **The design and layout of streets and public spaces**

#### **CAMDEN STREETSCAPE DESIGN MANUAL (2005)**

Provides useful guidance for those who are planning the design and layout of streets and public spaces. The manual sets out the Council's detailed expectations for street works in the borough, addressing issues such as responding to local character, footway design and materials, and street furniture.

### **General principles**

- 8.6 We will seek improvements to streets and spaces to ensure good quality access and circulation arrangements for all. This includes improvement to existing routes and footways that will serve the development. Key considerations informing the design streets and public spaces include the following:
- Camden Streetscape Design Manual;
  - ensuring the safety of vulnerable road users, including children, elderly people and people with mobility difficulties, sight impairments, and other disabilities;
  - maximising pedestrian accessibility and minimising journey times;
  - providing stretches of continuous public footways without public highway crossings;
  - linking to, maintaining, extending and improving the network of pedestrian pathways;
  - maximising pedestrian safety by providing adequate lighting and overlooking from adjacent buildings;
  - taking account of surrounding context and character of area

- providing a high quality environment in terms of appearance, design and construction, paying attention to Conservation Areas, and using traditional materials (such as natural stone or granite setts) where appropriate,
- use of paving surfaces which enhance ease of movement for vulnerable road users; and
- avoiding street clutter and minimising the risk of pedestrian routes being obstructed or narrowed, e.g. by pavement parking or by street furniture.

### **Ensuring high quality public spaces**

- 8.7 The Core Strategy seeks to ensure that new development contributes to the creation of attractive, clean and well-maintained public places (see Policy CS14). It is essential that new streets and public spaces integrate with surrounding spaces and links, and are designed and built to a high standard, including through the use of good quality materials. The government's Manual for Streets provides useful guidance on achieving successful public spaces, and Camden's Streetscape Design Manual sets out guidance on how to ensure works contribute to local character and distinctiveness.
- 8.8 Where developments generate the need for works to road, highways and adopted public spaces, these should be funded by the developer (see CPG8 Planning obligations for transport provision) but carried out by the council in order to ensure consistent high standards of implementation and materials in streets and public spaces. In line with policy DP21 of the Camden Development Policies, all new pedestrian areas and footpaths are required to be constructed to a standard that is considered appropriate for adoption by the relevant Highway Authority.

#### **Street clutter**

Excessive use of road signs, bollards and lampposts leading to an untidy street environment.

### **Ease of pedestrian movement**

- 8.9 Footways should be wide enough for two people using wheelchairs, or prams, to pass each other. We seek to maximise the width of footways wherever possible. The Camden Streetscape Design Manual sets out minimum widths for different kinds of footways.

#### **Wayfinding**

The process of navigating or defining a path through an environment.

- 8.10 Policy DP21 of the Camden Development Policies document states that we will expect works affecting highways to avoid unnecessary street clutter. Design of footways should not include projections into the footway, unnecessary and cluttered street furniture or other obstructions. Any minimum standards for footway widths should not be used to justify the provision of unnecessary street clutter or reduction in footway width.

The Council will generally resist proposals that involve the opening of doors into footways as they raise safety concerns, and can obstruct pedestrians.

- 8.11 Footways should be designed with frequent and convenient road crossing points for pedestrians. The detailed design of edges, crossings and gradients should take into account the need for the maintenance of minimum pavement widths, ease of movement and wayfinding, and appropriate measures for those with visual impairments and mobility difficulties. The Camden Streetscape Design Manual and DETR 'Guidance on the use of Tactile Paving Surfaces 1998' provide useful guidance which should be used to inform the design of edges, crossings and gradients.

#### **Tables and chairs**

- 8.12 The Council will sometimes licence the placing of tables and chairs on the footway in association with adjacent cafes and similar uses. The area where tables and chairs may be placed must be designated and must not interrupt the area of footway for pedestrian movement. The licence will specify permitted hours, after which the removal of tables and chairs will generally be required. Further guidance on tables and chairs is provided in CPG5 Town centres, retail and employment.

#### **Lighting, signage and street furniture**

- 8.13 Footways should be well lit and well signed, but with care to avoid light pollution and obstructions. Wherever possible, lighting and signs should be placed on buildings or existing street furniture to minimise footway clutter. Please also see paragraphs 7.17 to 7.22 on Legible London below.
- 8.14 The installation of seating, bus shelters, litter bins and cycle parking is encouraged in association with new footways provided that it will improve the pedestrian environment, and the use of sustainable modes of transport. However, they should be positioned so they do not interrupt the minimum area of footway designated for pedestrians. If possible, cycle stands (and cycles parked at them) should be wholly clear of the footway.

#### **Footpaths that are not alongside roads**

- 8.15 Footpaths independent of roads can be beneficial in terms of directly following the most direct routes for pedestrians and creating pleasant environments. However, great care is needed to provide security for pedestrians and discourage anti-social behaviour. Designs should consider:
- lighting;
  - natural overlooking from adjacent buildings;
  - maintaining visibility over the full stretch of the route between roads;
  - the appropriateness of planting; and



- avoiding features that could conceal assailants.

### **Pedestrian and vehicle shared surfaces**

- 8.16 Policy DP17 of the Camden Development Policies states that we will seek shared surfaces in appropriate circumstances and where it will be safe for all users. Safety and accessibility for all will be examined thoroughly in any shared surface proposal.

#### **Shared surface**

A highway where distinction between pedestrian and vehicle areas has been removed or reduced and sends a strong signal that the whole of the highway space is open equally to all users.

- 8.17 Where shared surfaces are used, a combination of other traffic management measures should also be used to reduce vehicle speeds to 5-10 mph. Measures to reduce vehicle speeds should not limit visibility for pedestrians and vehicles, and must not prejudice safety. Further measures to promote safety include
- the removal of parked vehicles from the shared surface to avoid potential conflicts with children at play; and
  - provision of clear routes and surface textures to assist orientation of people with visual impairments.

### **Legible London wayfinding signage**

- 8.18 Legible London was set up by Transport for London (TfL) in partnership with London boroughs to create a standard pedestrian wayfinding and signage system for central and inner London. It is a map-based system which gives users a good understanding of the surrounding area and encourages them to choose their own route to a specific destination.
- 8.19 Legible London signage is supported in Camden's Core Strategy Policy CS11 as a key element of Camden's approach to promoting walking in the borough. It has also been adopted by other London boroughs and thus provides consistent pedestrian signage across central and inner London.
- 8.20 The Legible London standard has been adopted by Camden and all new signs on the public highway should be of a Legible London type. The Council will also seek Legible London signage on private land, where appropriate.
- 8.21 TfL's Legible London programme currently covers the Central London area and we will extend the Legible London scheme throughout the borough, prioritising key destinations and busier areas, such as our town centres (see Core Strategy Policy CS11 paragraph 11.11). We will seek on-site provision of Legible London signage in these areas as appropriate, and on developments that contain:
- key routes to or through the site;



- decision points, arrival points and places where pedestrians are likely to gather;
  - complex spaces and areas outside civic spaces and public buildings.
- 8.22 Where relevant, sign types and quantities should tie into any relevant area strategies produced by the Council, in partnership with TfL.
- 8.23 As well as on-site provision, developments will also be expected to provide contributions to the Legible London in other locations, where appropriate, in order to mitigate the increased level of activity their development generates (see transport section of CPG8 Planning obligations).

### **Highway authority approval**

- 8.24 Works to streets and public spaces also require separate approval from the relevant highway authority (usually Camden council). You are advised to contact our Highways department as soon as possible to discuss the approach to and proposed works to streets and public spaces.

### **Further information**

- 8.25 In addition to Camden's Core Strategy, Development Policies, the Camden Streetscape Design Manual and other sections in this guidance, reference should be made to the following guidance:
- Manual for Streets, DfT, 2007
  - Residential roads and footpaths: layout considerations – DfT Design bulletin 32 (2nd edition), HMSO 1992
  - Guidance on the use of tactile paving surfaces, DETR 1998 - this can be viewed on the 'transport infrastructure, pedestrians, wheelchair and scooter users' pages in the 'access for disabled people' section of: [www.dft.gov.uk](http://www.dft.gov.uk)

## 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**

<p><b>General</b></p> <ul style="list-style-type: none"><li>• 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.</li><li>• All cycle parking, including all parts of the parked cycles, should be clear of routes needed for pedestrian movement.</li><li>• 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.</li></ul>
<p><b>Parking for visitors</b></p> <p>Parking for visitors should be clearly visible or clearly signed from the public highway, and should be near building entrances</p>
<p><b>Parking for employees (and other long stay parking)</b></p> <p>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).</p>
<p><b>Parking for residents</b></p> <p>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.</p>

## 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 users to lock both wheels and the frame to the stand, rather than just the top tube / frame.

Figure 3. Sheffield Stand Elevation

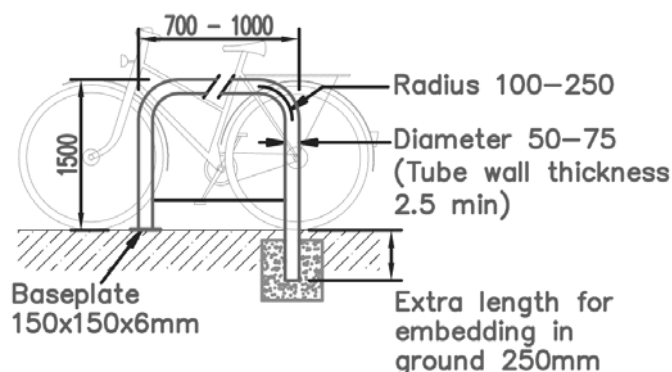
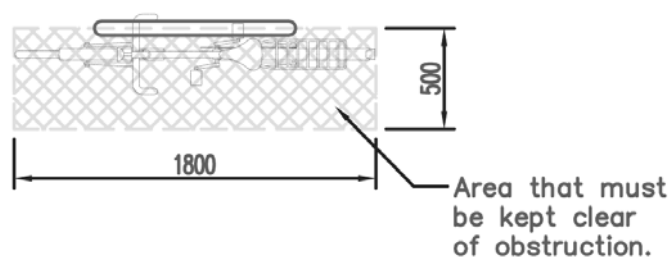


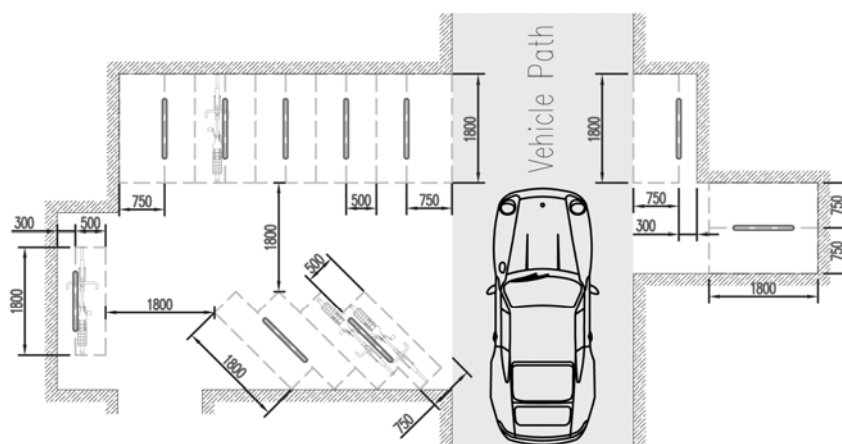
Figure 4. Sheffield Stand Plan



- 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.

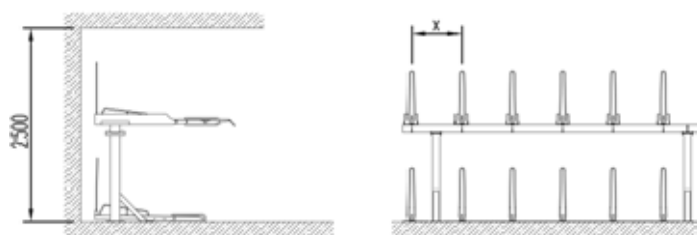


Figure 5. Cycle stand siting

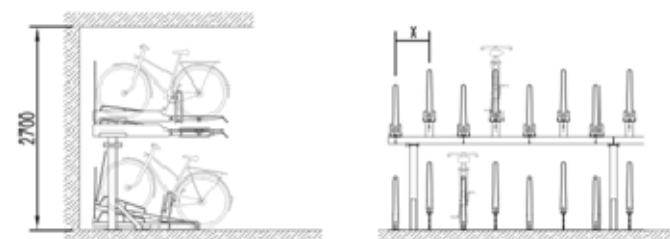


### Josta Two-tier Cycle Parking

- 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.  $X = 650\text{mm}$  in the diagram below.

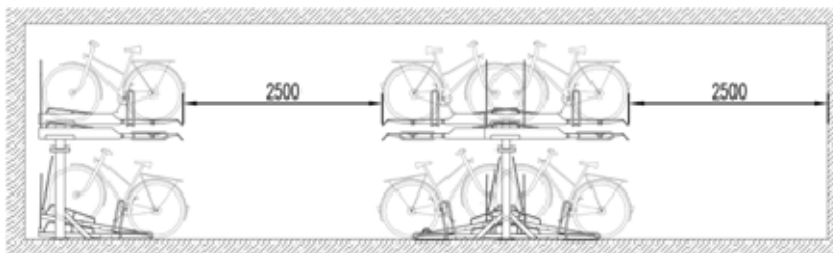


- 9.29 With a ceiling of at least 2700mm the stands can be placed 400mm apart, i.e.  $X = 400\text{mm}$  in the diagram below.

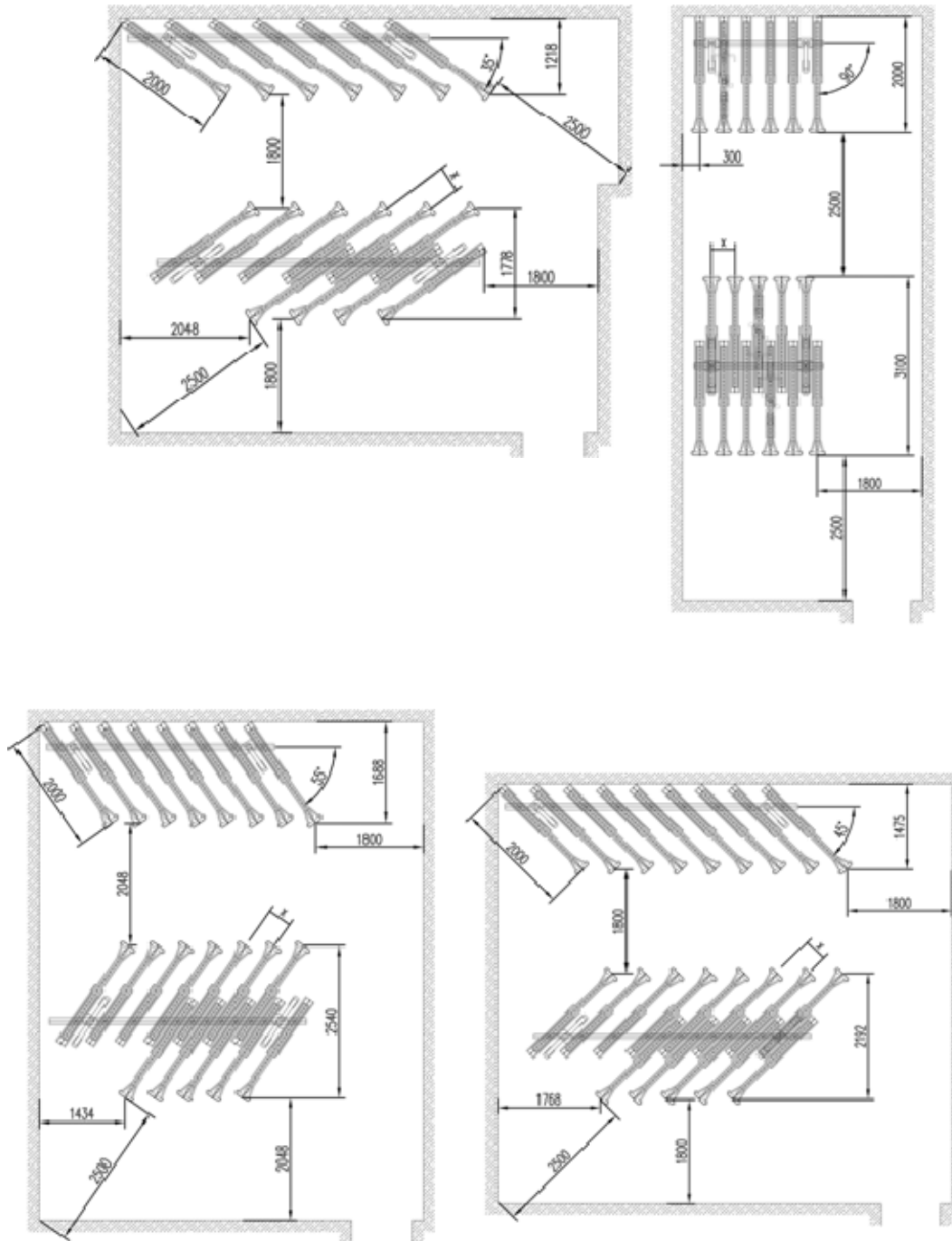


- 9.30 In order to enable the top tier to be used, at least 2500mm of clearance in front of the stand, measured on a line at the same angle at which the top tier stands are extended (see diagrams below), is required between rows of stands, walls or other obstructions.





- 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**

## 10 Minicab offices

### KEY MESSAGES

- The Council will seek to minimise any impacts caused by minicab offices relating to emissions, noise, highway and traffic problems, and community safety
- The Council will resist minicab offices in locations which adjoin residential accommodation

- 10.1 This section provides guidance on the provision of minicab offices in Camden, setting out the main issues which should be considered in order to minimise their impact, and the most appropriate locations for them.
- 10.2 It relates to policy DP12 - *Supporting strong centres and managing the impact of food, drink, entertainment and other town uses* of the Camden Development Policies.

### When does this apply?

- 10.3 This guidance applies to all applications concerning minicab hire offices, including both change of use applications and proposals for extensions and internal and external alterations to existing premises.
- 10.4 In some circumstances mini-cab offices fall within the B1a use class, specifically where cabs are controlled remotely from a small office. For a mini-cab office to be considered within such a use the premises would have no defined frontage distinct from the existing office accommodation and the presence of the mini-cab office would not be advertised outside. The intent therefore would be to remotely control drivers and not to attract passing trade to come into the premises to order cabs. There would be no element of taxis ranking up, whether formally or informally, to pick up customers from the premises.

### How should minicab offices be provided?

- 10.5 Minicabs make a valuable contribution to the transport needs of Camden's residents and workers and provide new business opportunities and employment. However, we must balance the needs of minicab businesses with the need to minimise traffic congestion and protect residents from undue disturbance, particularly as minicab offices tend to operate for 24 hours a day. Particular issues that may arise from minicab offices are emissions and noise, highway and traffic problems, community safety and the fear of crime.

### Location

- 10.6 Policy DP12 in Camden Development Policies acknowledges that town and neighbourhood centres are generally the most appropriate location for minicab offices although we will carefully consider their potential

impact when assessing planning applications to make sure that they do not harm the centre or the amenity of neighbours.

- 10.7 We will resist minicab offices in locations which adjoin residential accommodation.
- 10.8 We welcome the use of radio-controlled vehicles since this reduces the need for drivers to return to the office for each fare which, in turn, should reduce any disturbance to nearby residents and minimise traffic congestion.

### **Extensions**

- 10.9 Should you wish to extend an existing minicab office, or change its appearance you may need to apply for planning permission, and you should contact the Council to check. If the building is listed you may need listed building consent for alterations both inside and outside. Further advice on listed buildings is contained within CPG1 Design (Heritage).
- 10.10 Extensions should not occupy car parking or access areas. Where this is proposed you will be required to reprovide parking and provide a new access. Extensions or alterations that make access for vehicles dangerous will not be permitted. Further general guidance is provided in CPG1 Design (Extensions, alterations and conservatories).

### **Additional controls**

- 10.11 The following additional controls may apply to minicab offices:

#### **Off-street parking**

- 10.12 Minicab offices should, where possible, provide off-street car parking for drivers visiting the office. This parking should be located within or in close proximity to the office site.

#### **Advertisements and shopfronts**

- 10.13 Minicab offices will be subject to the same controls on advertising and shopfronts as other town centre uses. You should refer to CPG1 Design for detailed guidance on Advertisements, signs and hoardings and Shopfronts.

#### **Soundproofing**

- 10.14 Soundproofing may protect adjoining premises from noise disturbance. This is particularly important where minicab offices include waiting rooms for customers. Internal soundproofing cannot, however, reduce outdoor noise from car doors, slamming, engines, horns etc or alleviate the disadvantages of an inappropriate location.

### **Satellite dishes and antennae**

- 10.15 Satellite dishes or radio antennae may be required and this equipment should be away from the view of nearby residential properties or public areas. If the building is listed, or in a conservation area, special care is required to ensure that the equipment does not affect the traditional character of the building or its setting. Additional guidance is contained within CPG1 Design (Heritage and Building services equipment). Please note that satellite dishes and radio antennae may require permission from the council before they are erected.

### **Access**

- 10.16 If customers can visit your offices you should try to ensure that it is accessible to all members of the public. Further guidance on the measures that could be introduced to enable this is contained within Camden Planning Guidance on access for all.

### **Marshalled Taxi Ranks**

- 10.17 The Council is keen to introduce marshalled taxi ranks in busier nightlife areas such as Camden Town, in order to ensure the safe loading of passengers into taxis and to help reduce any alcohol-related problems which may arise in such locations. Should a managed taxi rank be introduced, community safety will be a key issue and we will encourage the installation of additional lighting, security cameras and regular police patrols to monitor the area.

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# 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](http://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 Policies 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.

<b>Mechanism</b>	<b>Details</b>	<b>Use</b>
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 Infrastructure to address the site specific and related impacts of development and which is not included in Regulation 123 list 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 Council's 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 of 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.



## **4 Community facilities**

- 4.1 Community facilities include childcare, education and training, healthcare, police stations, fire stations, youth provision, libraries, community halls, meeting spaces, places of worship, public conveniences and other similar uses that provide a service to the local community. Leisure facilities include cinemas, music venues, theatres, leisure centres, indoor and outdoor sports facilities and other similar uses.
- 4.2 Core Strategy policy CS10 – Supporting community facilities and services, sets out the Council's overarching approach to protecting and providing the community facilities that meet the needs of Camden's growing population. Development Policy DP15 – Community and leisure uses helps to deliver the Core Strategy by providing information about the detailed approach that will be taken to protect existing community and leisure facilities and the expectation that schemes which create additional demand for community facilities to make an appropriate contribution towards community facilities on-site or close to the development.

### **Education**

- 4.3 Education infrastructure is an integral component of balanced and sustainable communities. CIL funds will generally be used to address the cumulative impacts of developments on school places. The Children, Schools and Families department of the Council (or other appropriate education providers) may as part of infrastructure programming, require funds to expand school places where they are necessary to meet growing population needs and to support new development.
- 4.4 These kind of projects in most cases may be set out the Regulation 123 list. On large scale major sites it may be necessary to provide schools or land for schools directly on site or nearby to address the direct impacts of the development. This type of site specific provision will generally be secured through planning obligations where legitimate.

### **Other community facilities**

- 4.5 There are a number of community centres and recreation facilities including meeting halls and spaces, libraries and indoor sports halls across Camden, and such centres provide an important component of daily life for a significant section of the population. These can help to enhance quality of life, improve personal health and well-being, deliver a sense of community and help to reduce crime.
- 4.6 New residential or commercial development which generates or attracts significant numbers of people to an area may require new provision or lead to an increased demand on existing community facilities near to a site. The provision of these facilities is important in supporting new growth as recognised in planning policies. CIL funds will generally be used to address the cumulative impacts of development on community

facilities. Services providers may as part of infrastructure programming require funds to provide new or improve community facilities where they are necessary to support new growth.

- 4.7 In exceptional cases where a community facility is to be lost as a result of a development, or a development generates the need for increased facilities the Council will normally expect it to be provided on the development site or for alternative provision to be made in the locality.
- 4.8 Where this is not possible the Council may seek a financial contribution based on the cost of provision of a replacement facility. In cases where a community facility is provided the Council will prescribe a specification for the building to facilitate the occupation by community groups, which may include subsidised rents.
- 4.9 On large scale major sites it may be necessary to provide new community facilities or land for such facilities directly on site or nearby to address the direct impacts of the development. This type of site specific provision will generally be secured through planning obligations where legitimate.

### **Contributions to healthcare**

- 4.10 New development can lead to an increase in demand for new health care provision and put pressure on existing facilities and capacity to meet the health care needs of local residents, workers and visitors to the borough. It is appropriate for those carrying out major new development in Camden to make a contribution towards the provision of health care, particularly local primary health care, if development generates or increases pressures on existing facilities.
- 4.11 The Council will consult with statutory healthcare providers in the area to identify the healthcare needs likely to be generated by a development. CIL funds can be used to address the cumulative impacts of development on health facilities. Separate planning obligations and contributions will not generally be sought for developments of less than 50 residential units but local circumstances will need to be assessed, e.g. loss of health facilities.
- 4.12 In schemes of more strategic importance where significant numbers of visitors or workers are going to be generated, in addition to a new residential population, there will be a need for developers to carry out an assessment of the health implications of the development and its impact on local health services.
- 4.13 On large scale major sites it may be necessary to provide health facilities or land for such facilities directly on site or nearby to address the direct impacts of the development. This type of site specific provision will generally be secured through planning obligations where legitimate.

## 5 Design

- 5.1 The Council's planning policies seek to ensure that Camden's places and buildings are attractive, safe, healthy and easy to use. Core Strategy policy CS14 - Promoting high quality places and conserving our heritage requires development to be of the highest standard of design that respects local context and character, including improving the spaces around buildings and achieving high quality landscaping in schemes. More information about our detailed approach to the design of new developments and alterations and extensions can be found in Development Policy DP24 - Securing high quality design.
- 5.2 The Core Strategy also sets out our approach to other matters related to design, such as tackling climate change through promoting higher standards (CS13), the importance of community safety and security (CS17) and protecting amenity from new development (CS5). Further guidance on design is contained in our Camden Planning Guidance 1 – Design

### **Soft landscaping and ecology**

- 5.3 Landscaping is an essential element of high quality design. Planning obligations may be required to protect or secure appropriate landscaping and planting on or around the site if the potential impacts of a development on public spaces, parks and other local green spaces are substantial enough to require mitigation measures. If they are deemed to be necessary to make a development acceptable and so closely related to a development site then they may be secured through a section 106 agreement. More generic area based landscaping works will generally be funded through the CIL.
- 5.4 The Council will consider the detailed landscaping proposals submitted with applications or if necessary specify the scope of the requisite measures and calculate the cost of new planting, new features and associated works based on the cost of implementation by Council contractors. As part of a section 106 Agreement the Council may require a developer to submit for approval a landscape management plan setting out measures and standards in relation to the retention, management and maintenance of affected wildlife habitats, landscapes and other valued spaces which support biodiversity.

### **Hard landscaping, works to streets, highways and public realm**

- 5.5 A whole range of developments may require works to be carried out to the surrounding streets and public spaces to ensure that the site can be safely accessed, and to allow a new development to properly and safely function. Some works may also need to be carried out to mitigate the impacts of development and could include any of the items listed below. Where these works are clearly related to the development of a particular site they will be funded through section 106, but more area based generic works or schemes would generally be funded through the CIL.

#### 5.6 These site specific works could include:

- a connection to a public highway;
- alterations and improvements to junctions;
- new or improved footways and pedestrian facilities;
- new or improved cycle routes and cycle stands;
- new traffic islands/refuges;
- pavement reinstatement and resurfacing;
- new or improved crossings and traffic control signals;
- crossovers;
- road closures / stopping up;
- road realignment and/or widening;
- bridge works;
- traffic reduction and calming measures
- parking management schemes/revisions to a CPZ;
- Traffic Regulation Orders, e.g. loading areas;
- works and improvements to canals and waterways.

Other site-specific public realm works may include:

- retention, repair and reinstatement of historic surface treatments;
- making access to a new development easier and safer for disabled people;
- trees on streets, public or private open spaces;
- street furniture (in some cases removal/rationalisation of street furniture would be appropriate);
- improved street lighting;
- associated signage;
- public art – either within public areas or on private land visible from the street;
- CCTV;
- associated drainage works;
- specific site related conservation area enhancement; and specific area initiatives, e.g. town centre improvements.

#### **Highway works**

- 5.7 The Council, as the local highways authority, is responsible for the maintenance, safety and quality of the borough's roads and highways and other adopted public spaces. It will determine how highway and/or other related works should be designed and implemented, in consultation with developers, to ensure that they are carried out in accordance with Council procedures and standards. Developers should refer to the Camden's Streetscape Design Manual. (Note: the Transport

for London Road Network is the exception where TfL are the highway authority).

### **Level plans**

- 5.8 The design of any development needs to take account of the surrounding topography and in particular the levels of site where it adjoins the public highway. The Council will not adjust highway levels to meet accesses that do not sit at the required level. It will be a requirement of a Section 106/278 agreement for the developer to submit level plans to the Council for approval prior to implementation. These plans will need to show existing and proposed levels for channel, top of kerb, back of footway and any other features of relevance. They will also need to clearly show that any accesses or adjoining open areas will match the back of footway levels required.

### **Agreement of highway works**

- 5.9 There are two main ways for public highways works on Borough roads to be undertaken through a section 106 / 278 obligation. The Council can design and carry out these works at the developer's expense; or the developer can (with the Council's agreement) design the works themselves to a specification set by the Council. The Council will then undertake these works at the developer's expense.
- 5.10 In both cases, the Council will exercise control over the design of the works and be involved in the implementation of the scheme. Any works which will or may affect the structural integrity of the highway requires approval and inspection by the Engineering Service's structural engineers. Works may be subject to a formal Approval in Principle under highways legislation. For more information and advice please contact the Council's Engineering Service. Occasionally where very minor works are involved, the Council may, subject to agreement in advance, allow the developer to undertake the works on the Council's behalf (under Council supervision).
- 5.11 In very limited circumstances (e.g. where a Borough road is not maintainable at the public expense, or in large scale developments), a scheme could be designed and implemented by the developer, although the Council's Engineering Service would still need to instruct and approve the scheme. The Council will always have the right to intervene (at the developer's expense) if any works are not to the Council's reasonable satisfaction.
- 5.12 For planning applications located on or affecting GLA roads (Transport for London Network - TLRN), the local planning authority will consult with Transport for London regarding the suitability of the proposed scheme. Where the development would involve an alteration to or a new access onto the TLRN, Transport for London has ultimate responsibility for indicating what is acceptable.
- 5.13 The particular approach to be followed will need to be agreed with the Council before the obligation can be completed. In all cases the works

will need to be completed within an agreed timescale. In some situations where highway works are necessary to allow the development to commence, the works will need to be completed before the works approved by the planning permission are started though in many circumstances any highways or public realm works will tend to follow on from the main construction.

### **Payment for highways works**

- 5.14 The Council will secure payment of required works by preparing an estimate (including fees) for the scheme that the developer will be required to pay before commencing development. It is inevitable that, sometimes, unforeseen costs can arise during more detailed design and implementation. The agreement can provide for a subsequent adjustment to be made if actual costs exceed the amount paid, up to a maximum figure, usually agreed through the planning obligation. On completion of the works the Council will certify how much money was expended in undertaking the works.
- 5.15 If extra costs are incurred which cannot be reasonably predicted or costed, e.g. involving utilities and statutory undertakers and the expenditure exceeds the contribution paid through the section 106 agreement, the Council will require the developer to pay the excess amount. An option may be for developers to pay a one-off negotiated returnable bond or contingency sum in addition to the estimated cost, the size of which will be based on the nature, scale and risk associated with the particular works
- 5.16 If the works cost less than estimated and the agreement of the developer or landowner has not been obtained so that funds can be spent on complementary and similar works in the vicinity of the site, then the Council will repay any unspent monies.
- 5.17 Scheme costings include design, supervision and contract fees will be indexed linked from the date the agreement is signed. The developer will also be required to pay the Council's costs in respect of any necessary traffic management orders or other appropriate costs related to the works.
- 5.18 In occasional situations, it may be appropriate for other accountable parties to implement works or expend funds under the supervision of the Council. Examples of this may include works to canals/waterways or other areas of land over which the Council does not have control.

### **Public art**

- 5.19 The Council encourages the use of public art, either as a permanent or temporary feature, within the urban design process. Public art can be a catalyst for improved environmental quality by upgrading and animating public space, enhancing local character and identity through helping create a 'sense of place', and promoting better visual 'legibility' of the local area by contributing to more recognisable and distinctive places and townscape.



- 5.20 Public art can also serve as an emblem of civic pride or corporate image. It can further improve the marketability of a property and add to the process of urban regeneration. In this sense public art can be seen, both in the short and long term, to add value to a development and to enhance the visual quality of an area.
- 5.21 Examples could include painting, sculpture, photography, film and video, projections, installations, murals, tapestry, decorative ironwork, glass engravings, street and performance art, and elements integral to buildings and surrounding public spaces themselves. Many developers will be committed to public art and high quality design and will positively incorporate public art plans and works when new major developments are being designed and commissioned.
- 5.22 A new development, particularly one which is large enough to attract significant numbers of visitors or to change its context, may be expected to incorporate public art as part of the necessary measures proposed to enhance public spaces and the surrounding townscape. Public art initiatives may more appropriately be an integral part of the design and commissioning process for new development or through the creative management and use of spaces and facilities. Exceptionally they may need to be provided or funded either through the use of section 106 agreements or planning conditions.
- 5.23 The Council will only seek a planning obligation in circumstances which are appropriate and directly related to the proposed development, and where it is not possible to deal with the matter through the imposition of a planning condition. The circumstances where an agreement may be required will be determined by factors such as the precise location, nature and scale of a development, taking into account the nature of the site, the scale of associated public realm schemes and the extent of public accessibility.

### **Community safety**

- 5.24 Achieving community safety in all new developments is an important objective for the Council which is reflected in Core Strategy policy CS17– Making Camden a safer place. Crime preventive design is an important aspect of achieving community safety and should be considered from the earliest stages of a development proposal and integrated into the design. More information on designing safer environments is provided in CPG1 – Design, chapter 09 - Designing safer environments.
- 5.25 Where an otherwise acceptable development could have potentially negative impacts on local community safety, either through its uses , hours of operation, or its design, the Council will require the developer to undertake or fund appropriate site related works or measures to minimise these impacts, which may be secured through a Section 106 Agreement.

5.26 Developments of the following types may require a planning obligation to address community safety issues:

- New proposals (generally those considered “major” or over 1000 square metres) for leisure facilities and venues including uses such as gyms, leisure centres and cinemas that are likely to operate late at night. Any development proposals for entertainment venues will be expected to contribute to improving local safety (e.g. through CCTV coverage);
- Most cafes, restaurants, public houses and clubs with late night opening (generally those that could hold 100 or more people). With applications for new licensed premises (including clubs), the use of security measures around entrances and vicinity management may be required. This will be especially important in the areas identified as having relatively high levels of crime;
- Major town centre and high street developments including retail, hotel, office and mixed use developments that may be open into the night and/or are substantial enough to generate significant increases in visitor numbers and use of local public transport facilities;
- Major residential developments (over 10 units) that suffer from poor public transport accessibility and/or poor pedestrian routes and linkages to public transport facilities, local shops and community facilities;
- Developments located in the vicinity of a canal or waterway; and
- Developments that have specific user or design requirements, such as secured rear servicing, that have implications for the quality of pedestrian routes and streets (e.g. high, blank walls and blank elevations).

5.27 Whilst many measures can be addressed through good design planning obligations (which could take the form of financial or non- financial) may be sought to address a range of issues set out below. Where the measures are directly related to the acceptable development of site they will be secured through section 106 with more area based generic improvements being funded the through the CIL:

- Improving and creating safer routes for pedestrians directly serving and in the vicinity of the development
- Improving and creating safer routes for cyclists directly serving and in the vicinity of the development;
- Improvement or provision of lighting to established or proposed pedestrian routes and cycle routes to make them safer;
- Rerouting of or controlling access to underused and potentially dangerous paths and links such as subways and alleyways which serve a limited purpose;
- Improvements to housing estates in the vicinity of the development at risk of an increase of Anti-social behaviour and crime as a result of it;

- Environmental improvements that contribute towards improving safety in town centres, Central London areas and other areas affected by a development, e.g. landscaping works to improve visibility and removing areas of concealment;
- Improvements to the accessibility, safety and quality of transport infrastructure and facilities serving the development;
- Works to improve the accessibility and safety of waterways and towpaths in the vicinity of the development;
- Community initiatives which may form one strand of crime prevention e.g. youth projects, provision of community safety officers/street wardens;
- Safety improvements to existing or proposed public facilities and car parks where new developments may be located; and
- Providing new and supplementing existing CCTV schemes including management and maintenance.

- 5.28 The provision of local management plans including community safety management plans to manage the impact of the development on the surroundings may be required. This could include plans for the construction and/or post construction phases of the development.

### **Development involving heritage assets**

- 5.29 Camden has a rich architectural heritage with many special places and buildings from many different eras in the area's history. These places and buildings add to the quality of our lives by giving a sense of local distinctiveness, identity and history. Core Strategy policy CS14 - Promoting high quality places and conserving our heritage and Development Policy DP25 – Conserving Camden's Heritage recognise our responsibility to preserve and enhance the Borough's heritage assets. Further guidance on how these policies will be applied is provided in Camden Planning Guidance 1 – Design, in particular chapter 2 - Heritage.
- 5.30 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.
- 5.31 Some objectives for building and area conservation or archaeology may not be satisfactorily controlled by a condition. 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. This would be in accordance with policy DP25.
- 5.32 Depending on the nature of the scheme, the Council may require a developer to:
- put measures in place so that work can be stopped if the developer finds some archaeological artefacts during construction;

- provide, implement and maintain a suitable historic landscape management plan;
- draw up a listed building or conservation maintenance, repair and/or management plan;
- provide and implement a restoration scheme for historic buildings and features perhaps to a set timescale and an agreed specification;
- provide and financially support an information centre including the resourcing of staff;
- carefully record, remove, store, display and maintain specifically identified artefacts or remnants from demolition as part of a new development or in another location;
- safeguard in perpetuity an area containing significant remains and incorporate it into the design of the scheme and allow and manage public access;
- undertake and complete specified works prior to implementation or occupation of any new or enabling development; and
- carry out related surveys.

5.33 A financial contribution or works in kind may also be justified for other site specific works. For example:

- to secure the investigation and protection of archaeological remains and ancient monuments in advance of development;
- to investigate, record and remove any archaeological finds and/or allow and manage public access;
- to reinstate and repair historic features (such as streetlights, bollards and surfaces, such as granite setts, cobblestones and York stone paving) directly affected by the development and its construction impacts;
- installing new paving, lighting or bollards to complement and enhance a directly affected conservation area or heritage asset.

## 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](http://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](http://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 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 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 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

<b>Example 1</b> 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% = 367.5sq m
Payment-in-lieu of affordable housing	= 367.5sq m x £2,650 = £973,875
<b>Example 2</b> 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% = 566.4sq m
Payment-in-lieu of affordable housing	= 566.4sq m x £2,650 = £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**

<b>Example 1</b>	= 800sq m
Total floorspace addition	
Target for on-site housing	= 800 x 50% = 400sq m
Affordable housing sought?	No
Payment level	£700 psm
Payment-in-lieu of market housing	= 400sq m x £700 = £280,000
<b>Example 2</b>	= 2,400sq m
Total floorspace addition (NB an on-site housing contribution would be required unless there is clear evidence that off-site provision is more appropriate)	
Target for on-site housing	= 2,400 x 50% = 1,200sq m
Affordable housing sought?	Yes
Payment level	£1,350 psm
Payment-in-lieu of all housing	= 1,200sq m x £1,350 = £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<sup>1</sup>) = 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:

$1000\text{sq m} / 12\text{sq m} = 83 \text{ FT jobs lost (floorspace / average space per worker):}$

No. of jobs lost which would be expected to be filled by Camden residents:

$83 \times 23\% = 19 \text{ jobs (FT jobs lost} \times 23\%)$

Cost of retraining and supporting number of Camden residents who would be expected to be employed in former use:

$19 \times £3,995 = £76,571$  (No. of jobs lost which would be expected to be filled by Camden residents multiplied by retraining costs)

## 1.1

<sup>1</sup> 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):

$$4,000 / 12 = 333 \text{ FT jobs}$$

Net jobs lost (FT jobs expected in employment use minus FT jobs in new (hotel) use):

$$333 - 50 = 283 \text{ FT jobs}$$

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]):  $283 \times 23\% = 65 \text{ jobs}$

Cost of retraining and supporting number of Camden residents who would be expected to be employed in former use:  $65 \times £3,995 = £260,341$  (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.



## **9 Provision of flexible shops and business space**

- 9.1 In order to encourage flexibility of provision, vitality and diversity in town centres and other employment areas Camden will use planning obligations to secure the provision of the types of flexible business space described below. Please refer to Camden Planning Guidance 5 Town Centres and Retail and Employment for a fuller explanation of Camden's approach to these issues.

### **Affordable business space (Hatton Garden)**

- 9.2 Policy DP1 requires that 50 percent of additional floorspace in Hatton Garden is to be provided as jewellery sector workspace at affordable rents (defined as an average of rents paid by the jewellery industry in Hatton Garden). Where jewellery workshop space cannot easily be provided, mainly in cases where the floorspace is too small to provide viable workshop/ business space, a financial contribution will be secured in lieu of the direct provision. This will be based upon the equivalent cost of providing alternative workshop floorspace and will be used for related measures to support this business sector.

### **Affordable business space (outside Hatton Garden)**

- 9.3 On major development sites outside of Hatton Garden the Council may require the inclusion of affordable workspace to help support small businesses and provide a range of employment opportunities.

### **Provision of affordable, small and independent shops**

- 9.4 In order to maintain and encourage a balance of different types of shops to maintain and support successful and diverse town centres in line with Policy DP10 of Development Policies the council will expect the provision of small and affordable shop units (100sq m or less) in large retail developments (over 1,000sq m). Legal agreements may be used to manage the rents of these units to appropriate levels and to control their size, location and the nature of occupant.





## 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.



**Figure 4. The financial contributions**

	Capital cost	Maintenance	Design and Project Management
<b>Self-contained homes in Use Class C3</b>			
One bedroom home	£385	£386	£46
Two bedroom home	£663	£561	£80
Three bedroom home	£1,326	£832	£159
Four bedroom home	£1,537	£921	£184
<b>Student housing, hotels and hostels</b>			
Single room	£297	£297	£37
Double room	£593	£594	£71
<b>Commercial/ higher education development in the Central London Area</b>			
Per 1,000 sq m	£1,265	£1,284	£152

11.14 Please refer to CPG 6 Amenity for the full explanation and worked examples.



Strategic Planning and Implementation

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