

Camden Planning Guidance

# Design

London Borough of Camden

CPG **1**



July 2015



## CPG1    Design

1	Introduction.....	5
2	Design excellence .....	9
3	Heritage.....	15
4	Extensions, alterations and conservatories.....	25
5	Roofs, terraces and balconies .....	35
6	Landscape design and trees.....	45
7	Shopfronts.....	57
8	Advertisements, signs and hoardings .....	73
9	Designing safer environments .....	79
10	Recycling and Waste Storage .....	89
11	Building services equipment.....	97
12	Artworks, statues and memorials.....	101



# 1 Introduction

## What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. The Council adopted CPG1 Design on 6 April 2011 following statutory consultation. This document was updated in 2013 to include Section 12 on artworks, statues and memorials, and updated in 2015 to revise the guidance for recycling and waste storage. Details on these updates and the consultation process are available at [camden.gov.uk/cpg](http://camden.gov.uk/cpg).
- 1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

## Design in Camden

- 1.3 Camden has many attractive and historic neighbourhoods as well as both traditional and modern buildings of the highest quality. These are a significant reason that the borough is such a popular place to live, work and visit. As well as conserving our rich heritage we should also contribute towards it by ensuring that we create equally high quality buildings and spaces which will be appreciated by future generations.
- 1.4 This objective of achieving high quality design does not just concern new development or large-scale schemes, but also includes the replacement, extension or conversion of existing buildings. The detailed guidance contained within this section therefore considers a range of design-related issues for both residential and commercial property and the spaces around them.



## What does this guidance cover?

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

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

- 1.6 This guidance supports the following Local Development Framework policies:

### Core Strategy

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

### Development Policies

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

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





## 4 Extensions, alterations and conservatories

### KEY MESSAGES

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

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

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

### When does this apply?

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

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

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

## Guidance for all extensions and alterations

### External alterations

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

### Good practice principles for external alterations

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

### Windows

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

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

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

### Doors

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

### Materials

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

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

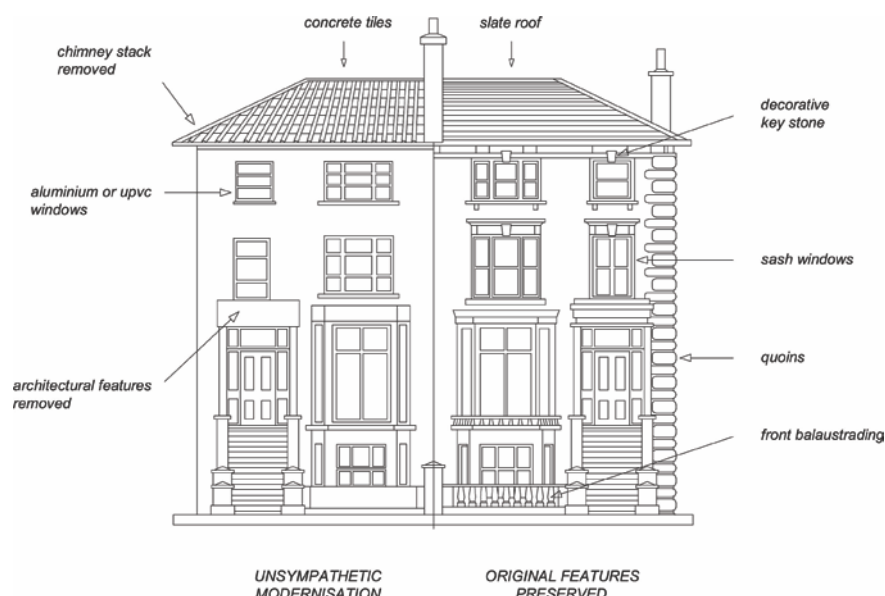
### External pipework

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

### Scale

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

**Figure 2. Alterations to residential facades**



## **Rear extensions**

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

### **General principles**

- 4.10 Rear extensions should be designed to:
- be secondary to the building being extended, in terms of location, form, scale, proportions, dimensions and detailing;
  - respect and preserve the original design and proportions of the building, including its architectural period and style;
  - respect and preserve existing architectural features, such as projecting bays, decorative balconies or chimney stacks;
  - respect and preserve the historic pattern and established townscape of the surrounding area, including the ratio of built to unbuilt space;
  - not cause a loss of amenity to adjacent properties with regard to sunlight, daylight, outlook, overshadowing, light pollution/spillage, privacy/overlooking, and sense of enclosure;
  - allow for the retention of a reasonable sized garden; and
  - retain the open character of existing natural landscaping and garden amenity, including that of neighbouring properties, proportionate to that of the surrounding area.
- 4.11 Materials should be chosen that are sympathetic to the existing building wherever possible (see also CPG3 Sustainability on Sustainable use of materials).

### **Height of rear extensions**

- 4.12 In order for new extensions to be subordinate to the original building, their heights should respect the existing pattern of rear extensions, where they exist. Ground floor extensions are generally considered preferable to those at higher levels. The maximum acceptable height of an extension should be determined in relation to the points outlined in paragraph 4.10 above. In cases where a higher extension is appropriate, a smaller footprint will generally be preferable to compensate for any increase in visual mass and bulk, overshadowing and overlooking that would be caused by the additional height.
- 4.13 In most cases, extensions that are higher than one full storey below roof eaves/parapet level, or that rise above the general height of neighbouring projections and nearby extensions, will be strongly discouraged.

### **Width of rear extensions**

- 4.14 The width of rear extensions should be designed so that they are not visible from the street and should respect the rhythm of existing rear extensions.
- 4.15 In addition, the rear of some buildings may be architecturally distinguished, either forming a harmonious composition, or visually contributing to the townscape. The Council will seek to preserve these where appropriate. Some of the Borough's important rear elevations are identified in conservation area statements, appraisals and management plans.

### **Side extensions**

- 4.16 Certain building forms may lend themselves to side extensions. Such extensions should be designed in accordance with the general considerations set out above in paragraph 4.10. Side extensions should also:
- be no taller than the porch; and
  - set back from the main building.
- 4.17 In many streets in the north of the Borough houses have mature rear gardens that can often be seen through gaps between buildings, softening the urban scene and providing visual interest. The infilling of gaps will not be considered acceptable where:
- significant views or gaps are compromised or blocked;
  - the established front building line is compromised;
  - the architectural symmetry or integrity of a composition is impaired;
  - the original architectural features on a side wall are obscured; or
  - access to the rear of a property is lost.
- 4.18 Where a property is located in a conservation area, reference should be made to the relevant conservation area statements, appraisals and management plans, which often identify important gaps and vistas where infilling would be inappropriate.

**Figure 3. Side extensions**

## Conservatories

4.19 Conservatories should normally:

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

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



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

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

- 4.22 The construction of garden buildings, including sheds, stand-alone green houses and other structures in rear gardens and other undeveloped areas, can often have a significant impact upon the amenity, biodiversity and character of an area. They may detract from the generally soft and green nature of gardens and other open space, contributing to the loss of amenity for existing and future residents of the property.
- 4.23 Large garden buildings may also affect the amenity value of neighbours' gardens, and if used for purposes other than storage or gardening, may intensify the use of garden spaces.
- 4.24 Development in rear gardens should:
- ensure the siting, location, scale and design of the proposed development has a minimal visual impact on, and is visually subordinate to, the host garden
  - not detract from the open character and garden amenity of the neighbouring gardens and the wider surrounding area
  - use suitable soft landscaping to reduce the impact of the proposed development
  - ensure building heights will retain visibility over garden walls and fences
  - use materials which complement the host property and the overall character of the surrounding area. The construction method should minimise any impact on trees (also see Landscape design and trees chapter in this CPG), or adjacent structures
  - address any impacts of extensions and alterations upon water run-off and groundwater flows, both independently or cumulatively with other extensions, and demonstrate that the impact of the new development on water run-off and groundwater flows will be negated by the measures proposed. Reference should be made to CPG3 Sustainability (Flooding chapter).
- 4.25 Pockets of privately owned land make important contributions to the character of certain parts of the borough, both in established neighbourhoods and areas of new development, creating village greens, informal verges, set backs for established structures or settings for listed buildings. Building on such areas will generally be discouraged.
- 4.26 Where any type of development, either in a rear garden or on private land that forms part of a public space, may be appropriate in principle, a full assessment should be made prior to the commencement of the development to avoid any potential impact upon trees or other vegetation in the surrounding area. This assessment may be required as part of an application for planning permission.



**Further information**

- 4.27 The following professional bodies provide further guidance and advice on buildings and design matters:
- Royal Institute of Chartered Surveyors (RICS); and
  - Royal Institute of British Architects (RIBA).



Camden Planning Guidance

# Sustainability

London Borough of Camden

CPG 3



July 2015



## CPG1 Sustainability

1	Introduction.....	5
2	The energy hierarchy.....	7
3	Energy efficiency: new buildings.....	11
4	Energy efficiency: existing buildings .....	21
5	Decentralised energy networks and combined heat and power ...	31
6	Renewable energy.....	43
7	Water efficiency .....	55
8	Sustainable use of materials.....	59
9	Sustainability assessment tools.....	67
10	Brown roofs, green roofs and green walls.....	73
11	Flooding .....	79
12	Adapting to climate change .....	85
13	Biodiversity .....	89
14	Local food growing .....	109



# 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



# 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

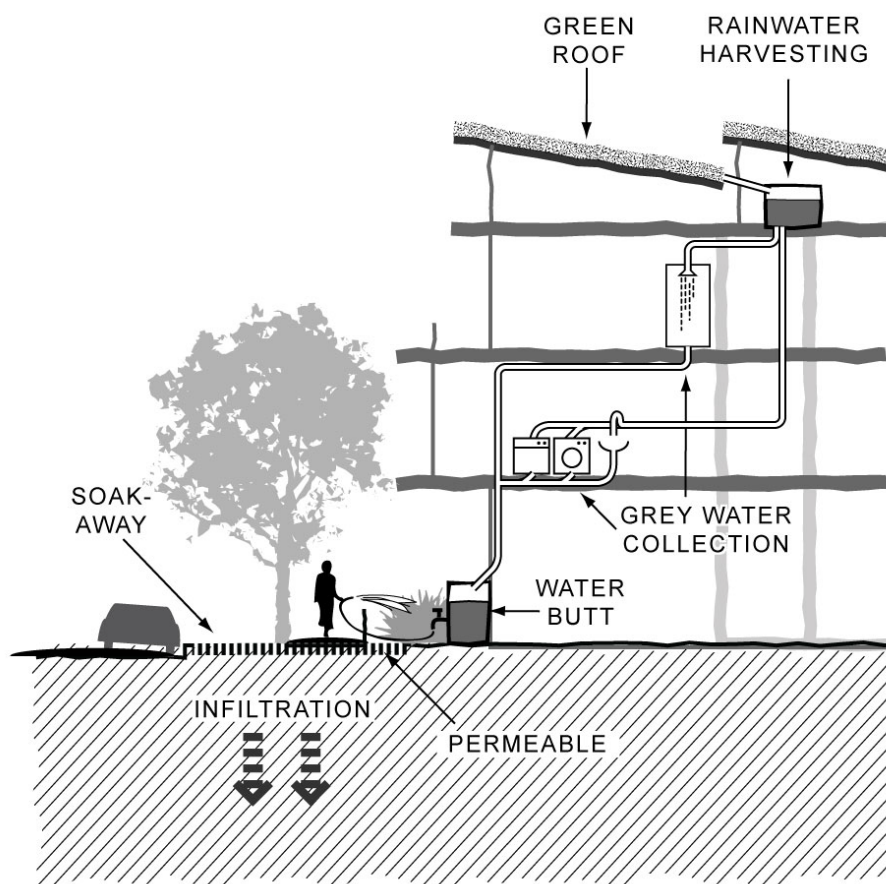
- 11.6 Surface water should be managed as close to its source as possible. The following hierarchy should be followed when considering which SUDS techniques to use. store rainwater for later use - use rainwater tanks or water butts to collect rain/storm water so that it can be re-used. See section 6 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.

1. 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.
  2. 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)
  3. 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.
  4. discharge rainwater direct to a watercourse
  5. discharge rainwater to a surface water sewer/drain
  6. 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>



Camden Planning Guidance

# Basements and lightwells

London Borough of Camden

CPG 4



July 2015





## CPG4 Basements and Lightwells

1	Introduction.....	5
	What is Camden Planning Guidance?.....	5
	Basements in Camden.....	5
	What does this guidance cover? .....	5
	When does this guidance apply?.....	6
2	Basements and lightwells .....	7
	Planning and design considerations.....	7
	Size of development.....	8
	Habitable rooms.....	9
	Conservation areas and listed buildings.....	9
	Basement walls, windows, and doors.....	10
	Trees, landscape, and biodiversity .....	10
	Lightwells.....	11
3	Assessing the impact of basement development.....	14
	Basement impact assessments.....	14
	Independent verification of basement impact assessments.....	21
	Basement construction plans .....	22
	Principal impacts of basements in Camden.....	23
4	Impacts to neighbours from demolition and construction .....	34
	Considerate Contractors Scheme .....	34
	Construction management plans.....	34
	Sustainable construction .....	35
5	Other permits and requirements .....	36
	Building regulations.....	36
	Highway licence .....	37
	Party wall award.....	37
	Security for expenses.....	37
	Freeholder permission .....	37
	Flooding and positively pumped devices (PPDs).....	38
	Other mitigation measures .....	38
	Index.....	39



# 1 Introduction

## What is Camden Planning Guidance?

- 1.1 We have prepared this Camden Planning Guidance to support the policies in our Local Development Framework (LDF). This guidance is therefore consistent with the Core Strategy and the Development Policies, and forms a Supplementary Planning Document (SPD) which is an additional “material consideration” in planning decisions. The Council adopted CPG4 Basements and lightwells on 6 April 2011 following statutory consultation. This document was updated in 2013 and again in 2015 to expand and refine the guidance. Details on these updates and the consultation process are available at [camden.gov.uk/cpg](http://camden.gov.uk/cpg).
- 1.2 The Camden Planning Guidance covers a range of topics (such as housing, sustainability, amenity and planning obligations) and so all of the sections should be read in conjunction, and within the context of Camden’s LDF.

## Basements in Camden

- 1.3 With a shortage of development land and high land values in the borough the development of basements is a popular way of gaining additional space in homes without having to relocate to larger premises. Basements are also a typical feature of the Central London part of Camden and used for various purposes including commercial, retail and leisure uses, servicing and storage. However, while basement developments can help to make efficient use of the borough’s limited land, in some cases they may cause harm to the amenity of neighbours, affect the stability of buildings, cause drainage or flooding problems, or damage the character of areas and the natural environment.

## What does this guidance cover?

- 1.4 This guidance provides information on basement and lightwell issues and includes the following sections:
- Planning and design considerations;
  - Assessing basements and Basement Impact Assessments; and
  - Impacts to neighbours from demolition and construction;
- 1.5 This guidance supports policy DP27 - Basements and lightwells in Camden Planning Guidance and the following other Local Development Framework policies:
- Core Strategy
- CS5 Managing the impact of growth and development
  - CS14 Promoting high quality places and conserving our heritage
  - CS15 Protecting and improving our parks and open spaces & encouraging biodiversity

- CS17 Making Camden a safer place
- CS18 Dealing with our waste and encouraging recycling

#### 1.6 Development Policies

- DP23 Water
- DP24 Securing high quality design
- DP25 Conserving Camden's heritage
- DP26 Managing the impact of development on occupiers and neighbours

1.7 It should be noted that the guidance covered in this section only forms part of the range of considerations that applicants should address when proposing new basement development. In addition to these specific matters wider issues such as design, heritage, sustainability and the water environment should also be considered. Further guidance on these, and other issues, is contained within the Local Development Framework documents and the Camden Planning Guidance.

### When does this guidance apply?

1.8 This guidance applies to all developments in Camden that propose a new basement or other underground development, or an extension to existing basement or other underground development where planning permission is required. Permitted development rights mean that some basements will not require planning permission. Underground developments may include ground or lower ground floors where excavation is required, for example when a ground floor is extended further into sloping land requiring excavation.

#### **PERMITTED DEVELOPMENT**

Permitted development rights are nationally set and allow certain building works and changes of use to be carried out without having to make a planning application. Permitted development rights are set out in The Town and Country Planning (General Permitted Development) Order 1995 as amended, which permits "the enlargement, improvement, or other alteration of a dwellinghouse" within the limits laid down for extensions.

In certain situations such 'Permitted Development' rights are removed, such as:

- For listed buildings;
  - Within a conservation area if there are any trees which will be affected by the development;
  - Outside a conservation area if any protected trees are to be affected (further guidance on the protection of trees is on page 10); and
  - For works classified as 'engineering operations'.
- You should also check any relevant Article 4 Directions which may remove Permitted Development rights. For guidance on permitted development rights, please visit the Camden Council website.

### 3 Assessing the impact of basement development

- 3.1 The Council will only permit basements and other underground development where the applicant can demonstrate it will not cause harm to the built and natural environment and local amenity, including to the local water environment, ground conditions and biodiversity. Addressing these issues may require the submission of a variety of information to provide us with a basis for determining applications. The level of information required is defined by Policy DP27 Basements and Lightwells and will be commensurate with the scale, location and complexity of the scheme.

#### **Basement impact assessments**

- 3.2 This information must be contained within a Basement Impact Assessment (BIA) which is specific to the site and particular proposed development. Basement Impact Assessments should be submitted with the other details at planning application stage. The BIA will include the following stages:
- Stage 1 - Screening;
  - Stage 2 - Scoping;
  - Stage 3 - Site investigation and study;
  - Stage 4 - Impact assessment; and
  - Stage 5 - Review and decision making.
- 3.3 The purpose of a BIA is to enable the Council to 'assess whether any predicted damage to neighbouring properties and the water environment is acceptable or can be satisfactorily ameliorated by the developer' as stated in DP27.3.
- 3.4 Each of these stages is explained in full in this section. Please also refer to Chapter 6 of the Camden Geological, Hydrogeological and Hydrological Study, which is available on the Camden Council website. All the technical analysis and recommendations in this guidance are taken from the Study which should be treated as the evidence base and technical advice for this guidance and will be used when we are checking BIA reports.
- 3.5 We will expect a 'non technical summary' of the evidence that applicants have gathered against each stage of the BIA. This should be presented in a format which can be fully understood by those with no technical knowledge.
- 3.6 At each stage in the process the person(s) undertaking the BIA process should hold qualifications relevant to the matters being considered. We will only accept the qualifications set out in the following table:

**Qualifications required for assessments**

Surface flow and flooding	<p>A Hydrologist or a Civil Engineer specialising in flood risk management and surface water drainage, with either:</p> <ul style="list-style-type: none"> <li>• The “CEng” (Chartered Engineer) qualification from the Engineering Council; or a Member of the Institution of Civil Engineers (“MICE”); or</li> <li>• The “C.WEM” (Chartered Water and Environmental Manager) qualification from the Chartered Institution of Water and Environmental Management.</li> </ul>
Subterranean (groundwater) flow	A Hydrogeologist with the “CGeol” (Chartered Geologist) qualification from the Geological Society of London.
Land stability	<p>A Civil Engineer with the “CEng” (Chartered Engineer) qualification from the Engineering Council and specialising in ground engineering;</p> <p>A Member of the Institution of Civil Engineers (“MICE”) and a Geotechnical Specialist as defined by the Site Investigation Steering Group; or</p> <p>A Chartered Member of the Institute of Structural Engineers with some proof of expertise in engineering geology.</p> <p>With demonstrable evidence that the assessments have been made by them in conjunction with an Engineering Geologist with the “cGeol” (Chartered Geologist) qualification from the Geological Society of London.</p>

A combination of these may be required to address a variety of site conditions.

**Stage 1 - Screening**

- 3.7 The first stage of the BIA is the identification of any matters of concern which should be investigated. Screening is a process of determining whether or not a full BIA is required. All basement proposals should be subjected to the screening stage of a BIA to identify the matters relevant to assessment of local flooding and/or neighbour amenity and structural risks.
- 3.8 In order to assist in identifying what issues are relevant to a proposed scheme we have developed a series of screening flow charts over the following pages of this guidance, covering three main issues:
- Groundwater flow (see Paragraphs 2.36 to 2.38);
  - Land stability (see Paragraphs 2.39 to 2.42); and
  - Surface flow and flooding (see Paragraphs 2.43 to 2.47).
- 3.9 We will expect applicants to identify how these issues impact on neighbouring properties and the natural environment.

- 3.10 At the screening stage the applicant will need to set out clearly why or why not a full BIA is required. This will need to include an assessment against the flowcharts below and be presented along with the information set out at the end of Paragraph 233 of the Camden Geological, Hydrogeological and Hydrological Study.
- 3.11 Where a respondent answers “yes” or “unknown” to any of the questions in the flowcharts these matters will need further investigation. “No” answers will require written justification.

### **Stage 2 - Scoping**

- 3.12 The scoping stage of the BIA requires applicants to identify the potential impacts of the proposed scheme as set out in chapter 5 of the Camden Geological, Hydrogeological and Hydrological Study which are shown by the screening process to need further investigation. Applicants should use this stage to identify the potential impacts for each of the matters of concern identified in the previous screening stage, this may require some preliminary data collection and field work. Appendix F of the Camden Geological, Hydrogeological and Hydrological Study provides guidance on linking the potential impacts to the screening flowcharts. A conceptual ground model is often a useful of carrying out the scoping stage as it can include the known and suspected features on, below and adjacent to a proposed site. (refer to Section 6.3.3 and Figure 28 in the Camden Geological, Hydrogeological and Hydrological Study for further details and an example).
- 3.13 During the scoping stage the applicant should enter pre-consultation or set up a working group with local residents and amenity groups who may be impacted by a proposed basement in order to fully understand and address the concerns of local residents. The Council will expect consultation with local residents on all basement developments unless the proposed construction work is minimal and will have a negligible effect on the adjoining or nearby properties as evidenced by the applicant to the satisfaction of the Council.
- 3.14 The scoping stage should build on the information obtained for the screening stage. When doing work for scoping stage, it is mostly likely that there will need to be some works under Stage 3 of the BIA – Site investigation and study

### **Stage 3 – Site investigation and study**

- 3.15 The third stage of the BIA – site investigation – is undertaken to develop an understanding of the site and its immediate surroundings. The degree of investigation will vary depending upon the matters of concern identified in the screening and scoping stages, and therefore will be dependent on the location of the proposed basement within the borough, its size and setting in relation to existing development on the site and its relationship to adjacent properties and nearby features of importance.
- 3.16 The BIA site investigation comprises several stages, including:

- Desk study, including site walkover;
- Field investigation, including intrusive investigation;
- Monitoring;
- Reporting; and
- Interpretation.

- 3.17 Each of these stages should reflect both the site of the proposed basement scheme and beyond the site boundary.
- 3.18 Section 7 of the Camden Geological, Hydrogeological and Hydrological Study sets out in further detail how this investigation should be carried out.
- 3.19 Appendix G of the Camden Geological, Hydrogeological and Hydrological Study provides typical contents lists for reporting these stages of the site investigation and we will be looking for submissions that contain comparable content.

#### **Stage 4 – Impact assessment**

- 3.20 This stage is concerned with evaluating the direct and indirect implications of the proposed project. Essentially this involves a comparison between the present situation (the baseline) with the situation as it would be with the basement in place (i.e. constructed). Therefore the BIA should describe, quantify and then aggregate the effects of the development on those attributes or features of the geological, hydrogeological and hydrological environment which have been identified (in the scoping stage) as being potentially affected. Section 7 of the Camden Geological, Hydrogeological and Hydrological Study provides more detail on what is required at this stage.
- 3.21 The recommendations in Section 7 on boreholes and trial pits set out the sort of thorough, up to date and professional methodologies of subsurface investigation and analysis, which the Council will expect. It is important to recognise as stated in Paragraph 287 and 288 of the Camden Geological, Hydrogeological and Hydrological Study that DP27 is particularly concerned with the potentially significant impact a development can have beyond the site boundary. Where permission is not given by adjacent landowners for structural surveys or subsurface investigations to be carried out, the undetermined structural conditions and ground conditions beyond the site boundary should be identified as a risk in the impact and should be assessed and mitigated against accordingly.
- 3.22 Hydrogeological processes are subject to seasonal and longer term cyclical influences. Measurements taken at one particular time may not indicate how conditions might be in one or six months from that time. Monitoring of groundwater levels in areas where it is more likely to be present over a period of time is therefore necessary. Please refer to paragraphs 291 to 294 of the Camden Geological, Hydrogeological and Hydrological Study for more detail on monitoring periods.



- 3.23 The BIA will comprise a factual report and an interpretative report. This is explained in more detail in Section 7 of the Camden Geological, Hydrogeological and Hydrological Study. The interpretative report will have three sections:
- detailed site geology;
  - the geotechnical properties of the ground; and
  - an engineering interpretation of the implications of the ground conditions for the development of the site.
- 3.24 Appendix G3 of the study sets this out in more detail from which it should be noted that it must contain details of the retaining wall design for the basement excavation. It is essential for the Council to make the assessment called for by DP27 and to be able to consider, if planning approval is to be given, how the terms of any planning conditions or planning agreements should be drafted.
- 3.25 The engineering interpretation will require calculations of predicted ground movements and structural impact to be provided. Examples of these calculations are given in appendix D of the Camden Geological, Hydrogeological and Hydrological Study. The sides of excavation always move to some extent no matter how they are supported. The movement will typically be both horizontal and vertical and will be influenced by the engineering properties of the ground, groundwater level and flow, the efficiency of the various support system employed during the underpinning and the efficiency or stiffness of any support frames used.
- WATER INGRESS**  
Change to water flows and levels both above and below ground.
- 3.26 If the identified consequences are not acceptable, mitigation should be incorporated into the proposed scheme and the new net consequences determined. For example, where there is predicted structural damage to neighbouring property, or where water ingress to neighbouring gardens or properties is predicted to be damaging to residential amenity. Any proposed mitigation measures should be described in the BIA report with details of how they reduce and/or alter the impact of the proposed basement on the surrounding environment. Mitigation measures which may be included in basement development proposals include (but are not limited to):
- Controlled or adequate drainage;
  - High permeability corridors;
  - Underpinning of neighbouring structures; and
  - Setting the basement in from property boundaries.

### **Burland Scale**

- 3.27 Where a BIA identifies risk of damage to properties by subsidence this risk should be described using the Burland Scale. The Burland Scale methodology has been adopted for projects internationally and has been used by the Building Research Establishment and the Institution of

Structural Engineers, London. The classification system of the scale is based on the ease or repair of visible damage. Subsidence is only one element in the many potential impacts assessed in a BIA and other methods will be employed when describing these other impacts.

- 3.28 In the Burland Scale the damage to properties caused by subsidence may be considered in three broad categories:
- (i) visual appearance or aesthetics,
  - (ii) serviceability and function, and
  - (iii) stability.
- 3.29 Burland Scale categories 0, 1, and 2 refer to (i) aesthetic damage, category 3 and 4 relate to (ii) serviceability and function, and 5 represents damage which relates to stability.

Figure 2. Burland Scale

Category of damage	Description of typical damage	Approximate crack width (mm)	Limiting tensile strain $\epsilon_{lim}$ (per cent)
0 Negligible	Hairline cracks of less than about 0.1 mm are classed as negligible	<0.1	0.0-0.05
1 Very slight	Fine cracks that can easily be treated during normal decoration. Perhaps isolated slight fracture in building. Cracks in external brickwork visible on inspection	<1	0.05-0.075
2 Slight	Cracks easily filled. Redecoration probably required. Several slight fractures showing inside of building. Cracks are visible externally and some repointing may be required externally to ensure weathertightness. Doors and windows may stick slightly.	<5	0.075-0.15
3 Moderate	The cracks require some opening up and can be patched by a mason. Recurrent cracks can be masked by suitable lining. Repointing of external brickwork and possibly a small amount of brickwork to be replaced. Doors and windows sticking. Service pipes may fracture. Weathertightness often impaired.	5-15 or a number of cracks > 3	0.15-0.3
4 Severe	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Windows and frames distorted, floor sloping noticeably. Walls leaning or bulging noticeably, some loss of bearing in beams. Service pipes disrupted.	15-25 but also depends on number of cracks	>0.3
5 Very severe	This requires a major repair involving partial or complete rebuilding. Beams lose bearings, walls lean badly and require shoring. Windows broken with distortion, Danger of instability.	Usually > 25 but depends on number of cracks	

Damage Category Chart (CIRIA C580)

- 3.30 In line with policy DP27 the Council will ensure that harm is not caused to neighbouring properties by basement development. Burland states that it is a major objective of design and construction to maintain a level of risk to buildings no higher than category 2, where there is only risk of aesthetic damage to buildings (see Burland, J. "The assessment of the

risk of damage to buildings due to tunnelling and excavations”, Imperial College London, 1995). However the Council considers that neighbouring residential properties are particularly sensitive to damage, where relatively minor internal damage to a person’s home can incur cost and considerable inconvenience to repair and redecorate. The Council therefore will expect BIAs to provide mitigation measures where any risk of damage is identified of Burland category 1 ‘very slight’ or higher. Following inclusion of mitigation measures into the proposed scheme the changes in attributes are to be re-evaluated and new net consequences determined.

### **Cumulative impacts of basement development**

- 3.31 The cumulative effect of the incremental development of basements in close proximity, particularly when these are large, can potentially create a significant impact. Therefore Basement Impact Assessments must identify neighbouring basements and make the assessment considering all nearby basements. Both existing and planned (with planning permission) underground development must be included in this assessment. To ensure cumulative impacts are considered Basement Impact Assessments must respond to the issues raised in paragraph 168 to 174 of the Camden Geological, Hydrogeological and Hydrological Study.

### **Stage 5 – Review and decision making**

- 3.32 The final stage of the BIA is undertaken by LB Camden and consists of an audit of the information supplied by the applicant and a decision on the acceptability of the impacts of the basement proposal. Section 8 of the Camden Geological, Hydrogeological and Hydrological Study outlines in more detail what Council officers will be looking for, as a minimum.

### **Independent verification of basement impact assessments**

- 3.33 In order to provide the Council with greater certainty over the potential impacts of proposed basement development, we will expect an independent verification of Basement Impact Assessments to be funded by the applicant. Independent verification will be required in the following circumstances:
- Where a scheme requires applicants to proceed beyond the Screening stage of the Basement Impact Assessment (i.e. where a matter of concern has been identified which requires the preparation of a full Basement Impact Assessment);
  - Where the proposed basement development is located within an area of concern regarding slope stability, surface water or groundwater flow; or
  - For any other basement applications where the Council feels that independent verification would be appropriate (e.g. where conflicting evidence is provided in response to a proposal).

- 3.34 This independent verification will be commissioned by the Council.

### **Basement construction plans**

- 3.35 In some circumstances the Council may require a basement construction plan secured through a Section 106 Agreement. The Council may require provision of a basement construction plan when the proposed development involves excavation or construction that if improperly undertaken could cause damage to neighbouring properties. In most instances this will be on larger and more complex basement schemes and where excavation is close to neighbouring buildings and structures or involve listed buildings.
- 3.36 A basement construction plan sets out detailed information to demonstrate how the design and construction of the basement has been prepared in order to minimise the impacts on neighbouring properties and the water environment, and provides a programme of measures to be undertaken by the owner to with the objective of minimise the impact on the structural integrity of neighbouring properties and sensitive structures such as the public highway.
- 3.37 A basement construction plan should contain:
- a method statement detailing the proposed method of ensuring the safety and stability of neighbouring properties throughout the construction phase including temporary works sequence drawings,
  - appropriate monitoring including details of risk assessment thresholds and contingency measures,
  - detail demonstrating that the basement has been designed using evidence of local factors including ground conditions, the local water environment and the structural condition of neighbouring properties, in order to minimise the impact on them.
  - provision to retain at the property throughout the construction phase a suitably qualified engineer from a recognised relevant professional body to monitor, inspect, and approve the permanent and temporary basement construction works, and
  - measures to ensure the ongoing maintenance and upkeep of the basement.
- 3.38 The basement construction plan should ensure that:
- a suitably qualified and experienced engineer has agreed the design,
  - the modelling of ground conditions and water environment is appropriately conservative; and
  - best endeavours are undertaken to prevent any impact on the structural integrity of the neighbouring properties.
- 3.39 Prior to final submission to the Council for approval, basement construction plans will need to be certified by a suitably qualified and experienced engineer who is independent of the design team. The certification will need to be funded by the applicant.

## Principal impacts of basements in Camden

- 3.40 This section sets out the principal impacts that basement development can have upon the built and natural environment, and neighbour amenity. Each of these impacts should be considered when undertaking the Basement Impact Assessment, particularly stages 1 and 2: Screening and Scoping (see Paragraphs 2.12 to 2.19 of this report).

### **GROUNDWATER FLOW**

The movement of water that travels and seeps through soil and rock underground.

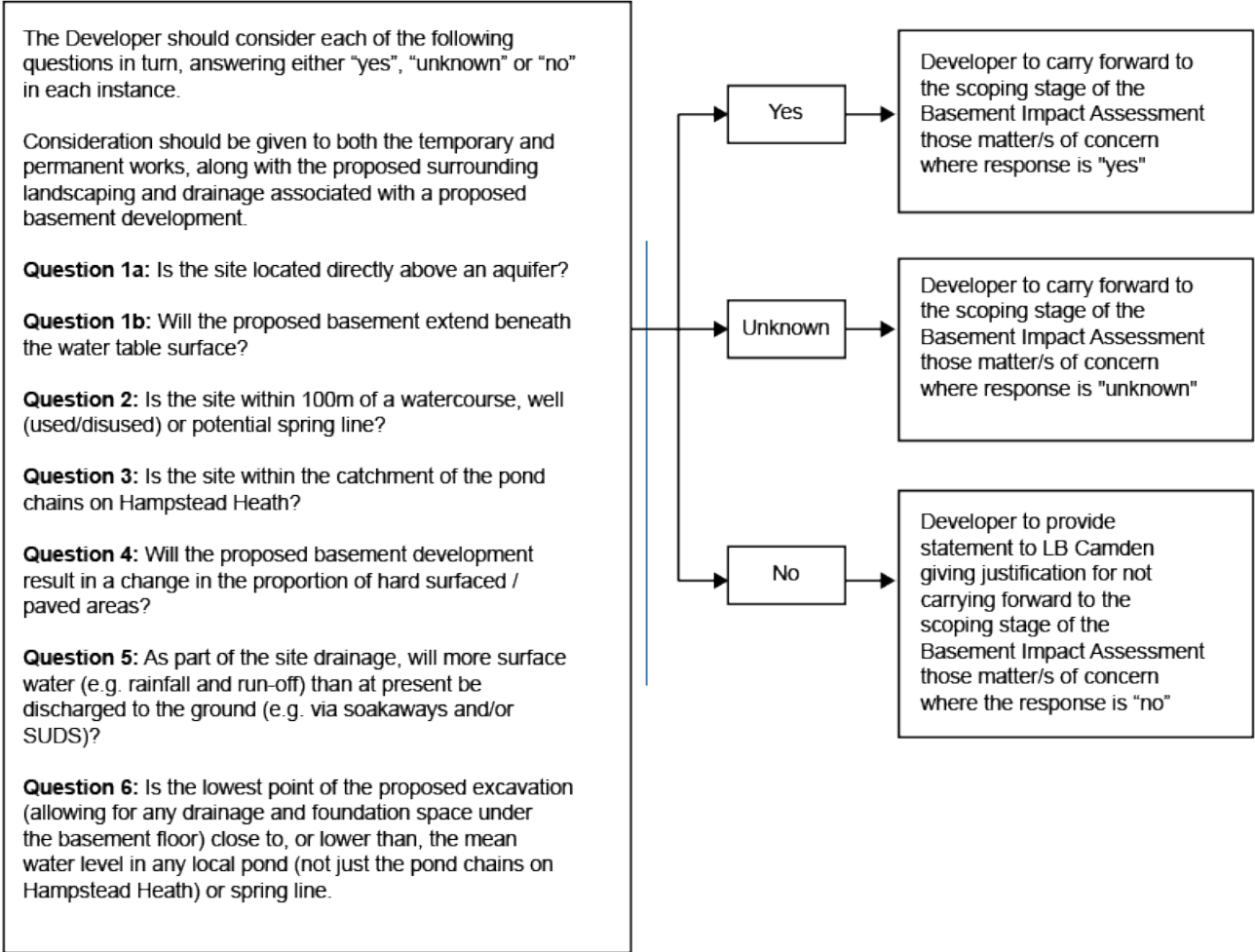
### **HYDROGEOLOGY**

The study of groundwater moving through soils and rock formations

## Groundwater flow

- 3.41 Basement development may affect groundwater flows, and even though the displaced water will find a new course around the area of obstruction this may have other consequences for nearby properties, trees, etc. Given the nature of the ground in many higher parts of the borough, or those where streams once flowed, basement development may have the potential to divert or displace groundwater which can cause a rise in groundwater and cause flooding, upstream of the development, whilst immediately downstream the groundwater level may decline, which may affect wells, springs and ponds. Figure 23 of the Camden Geological, Hydrogeological and Hydrological Study sets out diagrammatically the potential impacts.
- 3.42 Applicants should consider the flowchart below to determine whether or not to carry forward to the scoping stage of the Basement Impact Assessment. Where certain factors are present or proposed, for example geological setting, proximity to Hampstead Heath Ponds catchment, or an intention to undertake dewatering as part of the site works, this flowchart will identify that a hydrogeological assessment will be required. If this is the case, it should be prepared by:
- A Hydrologist with the “CGeol” (Chartered Geologist) qualification from the Geological Society of London; and
  - A Fellow of the Geological Society of London.
- 3.43 The Camden Geological, Hydrogeological and Hydrological Study contains a number of maps and plans relevant to groundwater flow, including:
- Figures 2 and 3 showing geology for the whole borough;
  - Figure 4 which shows the geology for Hampstead Heath;
  - Figure 5 showing the geology for the south of the borough;
  - Figure 11 which maps the water courses within and around the borough; and
  - Figure 14 which identifies Hampstead Heath surface water catchments and drainage.

Figure 3. Subterranean (ground water) flow screening chart





### **SUBTERRANEAN (GROUND WATER) FLOW SCREENING CHART NOTES AND SOURCES OF INFORMATION**

**Question 1:** In LB Camden, all areas where the London Clay does not outcrop at the surface are considered to be an aquifer. This includes the River Terrace Deposits, the Claygate Member and the Bagshot Formation. The location of the geological strata can be established from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to  $\pm 50\text{m}$  at best.

Additionally, the Environment Agency (EA) "Aquifer Designation Maps" can be used to identify aquifers. These can be found on the "Groundwater maps" available on the EA website ([www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)) follow "At home & leisure" > "What's in Your Backyard" > "Interactive Maps" > "Groundwater". Knowledge of the thickness of the geological strata present and the level of the groundwater table is required. This may be known from existing information (for example nearby site investigations), however, it may not be known in the early stages of a project. Determination of the water table level may form part of the site investigation phase of a BIA.

**Question 2:** Watercourses, wells or spring lines may be identified from the following sources:

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbols may be present: W; Spr; water is indicated by blue colouration. (check the key on the map being used)
- British Geological Survey maps (e.g. 1:10,000 scale, current and earlier editions). Current maps will show indicative geological strata boundaries which are where springs may form at the ground surface; of relevance are the boundary between the Bagshot Formation with the Claygate Member and the Claygate Member with the London Clay. Note that the boundaries are indicative should be considered to be accurate to  $\pm 50\text{m}$ . Earlier geological maps (e.g. the 1920's 1:10560 scale) maps show the location of some wells.
- Aerial photographs
- "Lost Rivers of London" by Nicolas Barton, 1962. Shows the alignment of rivers in London and their tributaries.
- The British Geological Survey (BGS) GeoIndex includes "Water Well" records. See [www.bgs.ac.uk](http://www.bgs.ac.uk) and follow "Online data" > "GeoIndex" > "Onshore GeoIndex".
- The location of older wells can be found in well inventory/catalogue publications such as "Records of London Wells" by G. Barrow and L. J. Wills (1913) and "The Water Supply of the County of London from Underground Sources" by S Buchan (1938).
- The Environment Agency (EA) "Source Protection Zone Maps" can be used to identify aquifers. These can be found on the "Groundwater maps" available on the EA website ([www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)) follow "At home & leisure" > "What's in Your Backyard" > "Interactive Maps" > "Groundwater".
- The EA hold records of licensed groundwater abstraction boreholes. LB Camden is within the North East Area of the
- Thames Region. Details can be found on the EA website.
- LB Camden Environmental Health department may hold records of groundwater wells in the Borough.

Where a groundwater well or borehole is identified, it will be necessary to determine if it is extending into the Lower Aquifer (Chalk) or the Upper Aquifer (River Terrace Deposits, Bagshot Formation, Claygate Member etc). It is water wells extending into the Upper Aquifer which are of concern with regard to basement development.

**Question 3:** Figure 14 in the attached study, (prepared using data supplied by the City of London Corporation's hydrology consultant, Haycocks Associates) shows the catchment areas of the pond chains on Hampstead Heath.

**Question 4:** This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement.

**Question 5:** This will be specific to the proposed development and will be a result of the chosen drainage scheme adopted for the property.

**Question 6:** The lowest point will be specific to the proposed development. Knowledge of local ponds may be taken from

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbols may be present: W; Spr; water is indicated by blue colouration. (check the key on the map being used)
- Aerial photographs

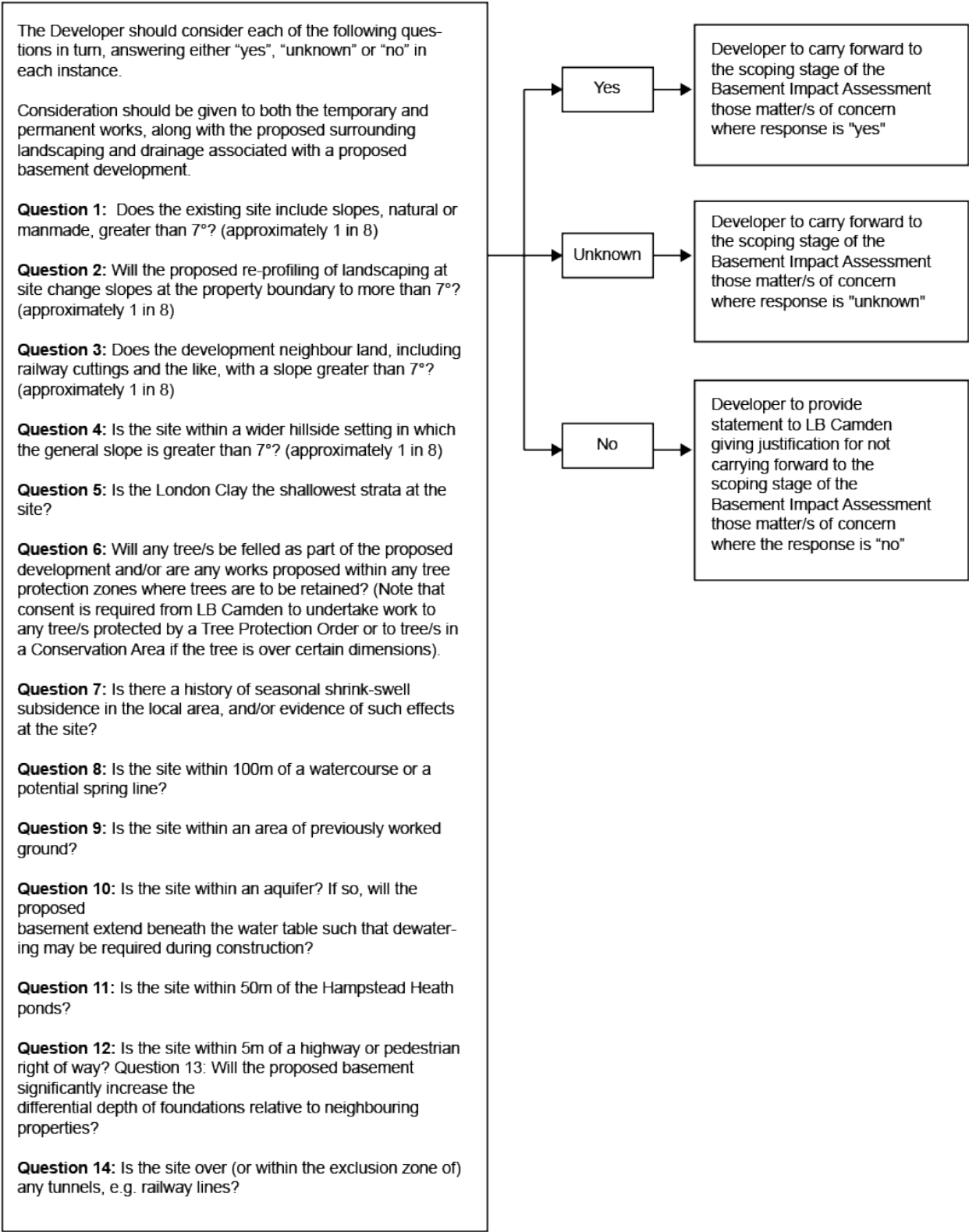
## Land stability

### LAND STABILITY

Steep areas and a change in geological layers can have vulnerable land stability.

- 3.44 The Council will expect all basement development applications to provide evidence that the structural stability of adjoining or neighbouring buildings is not put at risk. In the first instance applicants should consider the screening flowcharts to determine whether to progress to the scoping stage of the Basement Impact Assessment. If so, it should be prepared by:
- A Civil Engineer with the “CEng” (Chartered Engineer) qualification from the Engineering Council and specialising in ground engineering;
  - A Member of the Institution of Civil Engineers (“MICE”) and a Geotechnical Specialist as defined by the Site Investigation Steering Group; or
  - A Chartered Member of the Institute of Structural Engineers with some proof of expertise in engineering geology, with demonstrable evidence that the assessments have been made by them in conjunction with an Engineering Geologist with the “cGeol” (Chartered Geologist) qualification from the Geological Society of London.
- 3.45 For listed buildings, or properties adjoining or adjacent to listed buildings, we will require a structural stability report before we validate applications.
- 3.46 The Camden Geological, Hydrogeological and Hydrological Study contains a number of maps and plans relevant to land stability, including:
- Figures 2 and 3 showing geology for the whole borough;
  - Figure 4 which shows the geology for Hampstead Heath;
  - Figure 5 showing the geology for the south of the borough;
  - Figure 11 which maps the water courses within and around the borough;
  - Figure 16 which is a land stability slope angle map; and
  - Figure 17 which outlines areas of significant landslide potential.

Figure 4. Slope stability screening flowchart



**SLOPE STABILITY SCREENING FLOWCHART****NOTES AND SOURCES OF INFORMATION**

**Question 1, 3 & 4:** The current surface slope can be determined by a site topographical survey. Slopes may be estimated from

1:25,000 OS maps, however in many urban areas such maps will not show sufficient detail to determine surface slopes on a property-by-property scale, just overall trends. With regard to slopes associated with infrastructure, e.g. cuttings, it should be ensured that any works do not impact on critical infrastructure.

**Question 2:** This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement.

**Question 5:** The plan footprint of the outcropping geological strata can be established from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to  $\pm 50\text{m}$  at best.

**Question 6:** this is a project specific determination, subject to relevant Tree Preservation Orders etc.

**Question 7:** this can be assessed from local knowledge and on-site observations of indicative features, such as cracking. Insurance firms may also give guidance, based on post code. Soil maps can be used to identify high-risk soil types. Relevant guidance is presented in BRE Digest 298 "Low-rise building foundations: the influence of trees in clay soils" (1999); BRE Digest 240 "Low-rise buildings on shrinkable clay soils: part 1" (1993); and BRE Digest 251 "Assessment of damage in low-rise buildings" (1995).

**Question 8:** Watercourses or spring lines may be identified from the following sources:

- Local knowledge and/or site walkovers
- Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). If features are marked (they are not always) the following symbol may be present "Spr"; water is indicated by blue colouration. (check the key on the map being used)
- Geological maps will show indicative geological strata boundaries which are where springs may form at the ground surface; of relevance are the boundary between the Bagshot Formation with the Claygate Member and the Claygate Member with the London Clay. Note that the boundaries are indicative should be considered to be accurate to  $\pm 50\text{m}$  at best. British Geological Survey maps (e.g. 1:10,000 scale, current and earlier editions).
- Aerial photographs
- "Lost Rivers of London" by Nicolas Barton, 1962. Shows the alignment of rivers in London and their tributaries.

**Question 9:** Worked ground includes, for example, old pits, brickyards, cuttings etc. Information can be gained from local knowledge and/or site walkovers, and from historical Ordnance Survey maps (at 1:25,000 or 1:10,000 scale, or better) and British Geological Survey maps (at 1:10,000 scale, current and earlier editions). Earlier geological maps (e.g. the 1:10560 scale series from the 1920s) include annotated descriptions such as "old pits", "formerly dug", "brickyard" etc.

**Question 10:** In LB Camden, all areas where the London Clay does not outcrop at the surface are considered to be an aquifer.

This includes the River Terrace Deposits, the Claygate Member and the Bagshot Formation. The general footprint of the geological strata can be assessed from British Geological Survey maps (e.g. 1:50,000 and 1:10,000 scale). Note that the boundaries are indicative and should be considered to be accurate to  $\pm 50\text{m}$  at best.

The Environment Agency (EA) Aquifer Designation Maps can be used to identify aquifers. These are available from the EA website ([www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)), by clicking on 'At home & leisure' > 'What's in Your Backyard' > 'Interactive Maps' > 'Groundwater'.

Details are required of the thickness of the geological strata present and the level or depth of the groundwater table. This may be known from existing information (for example nearby site investigations); however, it may not be known in the early stages of a project. Determination of the water table level may form part of the site investigation phase of a BIA and may require specialist advice to answer. Depth of proposed development is project specific.

**Question 11:** From local knowledge and/or site walkovers, and from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). In relation to the stability and integrity of the pond structures and dams, the guidance of a Panel Engineer should be sought. (Details of Panel Engineers can be found on the Environment Agency website: <http://www.environment-agency.gov.uk/business/sectors/64253.aspx>). Duty of care needs to be undertaken during any site works in the vicinity of the ponds.

**Question 12:** From local knowledge and/or site walkovers, and from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale). Any works should not impact on critical infrastructure.

**Question 13:** From local knowledge and/or site walkovers. May find some details on neighbouring properties from searches of LB Council databases, e.g. planning applications and/or building control records.

**Question 14:** From local knowledge and/or site walkovers, from Ordnance Survey maps (e.g. 1:25,000 or 1:10,000 scale) and directly from those responsible for tunnels (e.g. TfL or Network Rail). Any works should not impact on critical infrastructure.

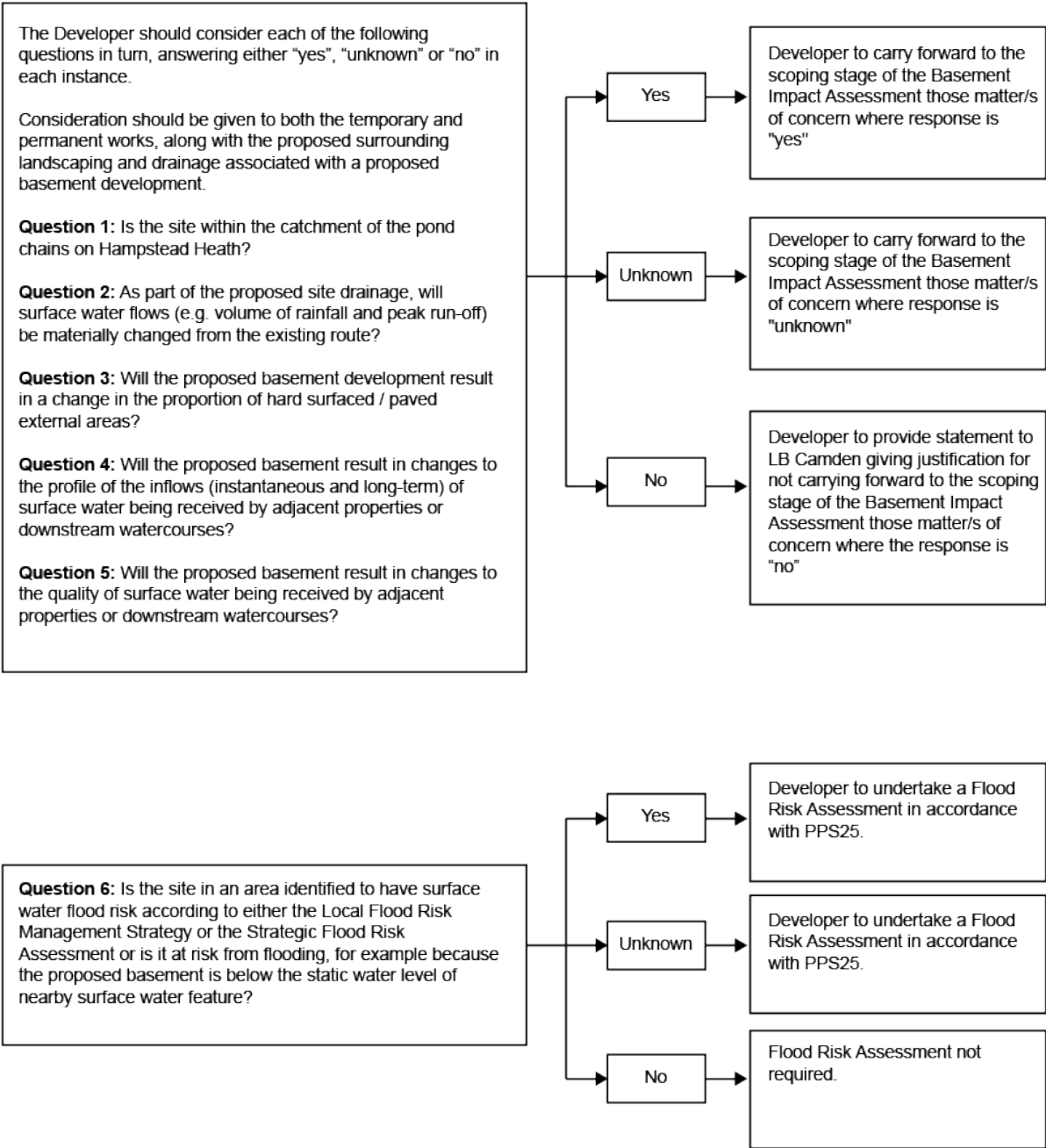
### Surface flow and flooding

- 3.47 While nowhere in the borough is identified by the Environment Agency as being flood prone from rivers or the sea, there are still parts that are identified as being subject to localised flooding from surface water. This is caused during times of heavy rainfall when the local combined sewer system is unable to deal with the volume and rate of flow. Detailed modelling suggests that areas of West Hampstead, Hampstead Town and South Hampstead are at a higher risk of surface water floods, with some risk in Highgate and Gospel Oak.
- 3.48 All applications for a basement extension within flood risk areas identified in the LB Camden Flood Risk Management Strategy or in any future updated Strategic Flood Risk Assessment will be expected to include a Flood Risk Assessment. In line with Policy DP27 in Camden Development Policies, 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.

- 3.49 Applicants should consider the flowchart below to determine whether to proceed to the scoping stage of the Basement Impact Assessment and whether a Flood Risk Assessment should be undertaken as part of this. For surface flow and flooding issues the Basement Impact Assessment should be undertaken by a Hydrologist or a Civil Engineer specialising in flood risk management and surface water drainage, with either:
- The “CEng” (Chartered Engineer) qualification from the Engineering Council; or a Member of the Institution of Civil Engineers (“MICE”); or
  - The “C.WEM” (Chartered Water and Environmental Manager) qualification from the Chartered Institution of Water and Environmental Management.
- 3.50 Figure 14 within the Camden Geological, Hydrogeological and Hydrological Study identifies Hampstead Heath surface water catchments and drainage.



Figure 5. Surface flow and flooding screening flowchart



**SURFACE FLOW AND FLOODING SCREENING FLOWCHART  
NOTES AND SOURCES OF INFORMATION**

**Question 1:** Figure 14 in the Camden geological, hydrogeological and hydrological study (prepared using data supplied by the City of London Corporation's hydrology consultant, Haycocks Associates) shows the catchment areas of the pond chains on Hampstead Heath

**Question 2:** This will be specific to the proposed development and will be a result of the proposed landscaping of areas above and surrounding a proposed basement. The developer should provide documentation of discussion with Thames Water to confirm that the sewers have capacity to receive any increased wastewater flows.

**Question 3:** This will be specific to the proposed development and will be a result of the chosen drainage scheme adopted for the property

**Question 4:** This will be specific to the proposed development and will be a result of the proposed landscaping and chosen drainage scheme adopted for the property. SUDS will be required to compensate any increases in peak flow.

**Question 5:** This will be specific to the proposed development and will be a result of the proposed landscaping and chosen drainage scheme adopted for the property. SUDS will be required to compensate any increases in peak flow.

**Question 6:** The principles outlined in PPS25 should be followed to ensure that flood risk is not increased.

- 3.51 Basement development should not displace ground water or surface water flow so it causes flooding on nearby sites or those further away. The Council will require an adequate drainage plan and has a preference for the use of Sustainable Urban Drainage Systems (SUDS). Only where this cannot be achieved should surface/ground water be discharged to combined sewers (refer to the chapter on water efficiency in CPG3 Sustainability and policy DP23 Water).

**SUSTAINABLE URBAN DRAINAGE SYSTEMS (SUDS)**

Low environmental impact approaches to drain away dirty and surface water run-off through collection, storage, and cleaning before allowing it to be released slowly back into the environment, thereby preventing flooding, pollution and contamination of groundwater.

**DEMOLITION PROTOCOL**

Provides a framework for sustainability in construction, demolition and refurbishment projects.

- 4.5 In considering applications, the Council will refuse permission for plans which do not minimise the harmful impacts of construction on the building and on local amenities. Construction management plans should consider the recommendations from the Camden Geological, Hydrogeological and Hydrological Study. See Camden Planning Guidance 6 for more information on Construction Management Plans.

**Processing and monitoring fees**

- 4.6 Please note that processing and monitoring fees apply for Section 106 agreements - see CPG8 Planning obligations for further details.

**Sustainable construction**

- 4.7 As part of an application for a basement development, applicants will be required to describe within their Design and Access Statement how the development has considered materials, resources and energy. This statement should explain how the use of sustainable materials has been considered and applied in the proposal, and the reasons for the choices that are made. The statement should also detail which existing materials on the site are to be re-used as part of the development or made available for re-use elsewhere, and the measures to improve the energy efficiency of the development. Further guidance is provided within CPG3 Sustainability (sustainability assessment tools chapter).

**DESIGN AND ACCESS STATEMENT**

A report supporting a planning application that justifies the design principles and concepts of the scheme, and explains how issues relating to access have been dealt with. The level of detail depends on the scale and complexity of the application.

## 5 Other permits and requirements

### Building regulations

- 5.1 A Building Regulations application is required when converting an existing basement to habitable use, excavating a new basement or extending an existing basement. Due to the nature of the work, in which different problems can arise, it is advised that the “deposit of plans route” is adopted to obtain building regulation approval. This is the most widely known procedure and involves you submitting plans which show full details of the work. These plans are then checked for compliance with the Building Regulations and, if satisfactory, an Approval Notice is issued.

**BUILDING REGULATIONS APPLICATION:**

The Building Regulations apply to most ‘Building Work’ and you need to make an application to our Building Control department before proceeding. Further details are available from the Building Control section of the Council’s website.

- 5.2 We recommend that you follow the full plans procedure unless the work is of a very minor nature. The Full Plans procedure gives greater protection to the building owner.
- 5.3 As part of the application it will be necessary to submit a full site investigation and a consulting civil or structural engineers report on the investigation and development proposals.
- 5.4 Building Regulations are set out by various technical parts (A-P) and the principal requirements include the following:
- Part A Structure
  - Part B Fire Safety
  - Part C Site preparation and resistance to contaminants and moisture
  - Part E Resistance to passage of sound
  - Part F Ventilation
  - Part H Drainage
  - Part J Combustion appliances
  - Part K Protection from falling collision and impact
  - Part L Conservation of fuel and power
  - Part M Access and use of building
  - Part P Electrical safety
- 5.5 The above are available to be viewed on the Communities website [www.communities.gov.uk](http://www.communities.gov.uk). Additional guidance can be obtained from the Approved Document: Basements for Dwellings 2nd edition 2004 (superseded but provides the framework for satisfying the building regulations).



Camden Planning Guidance

# Amenity

London Borough of Camden

CPG 6





## CPG6 Amenity

1	Introduction .....	5
2	Air quality .....	7
3	Contaminated land .....	15
4	Noise and vibration .....	19
5	Artificial light .....	25
6	Daylight and sunlight .....	31
7	Overlooking, privacy and outlook .....	37
8	Construction management plans .....	39
9	Access for all .....	45
10	Wind and micro-climate .....	53
11	Open space, outdoor sport and recreation facilities .....	59
12	Planning for healthy communities .....	79





# 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

## 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.

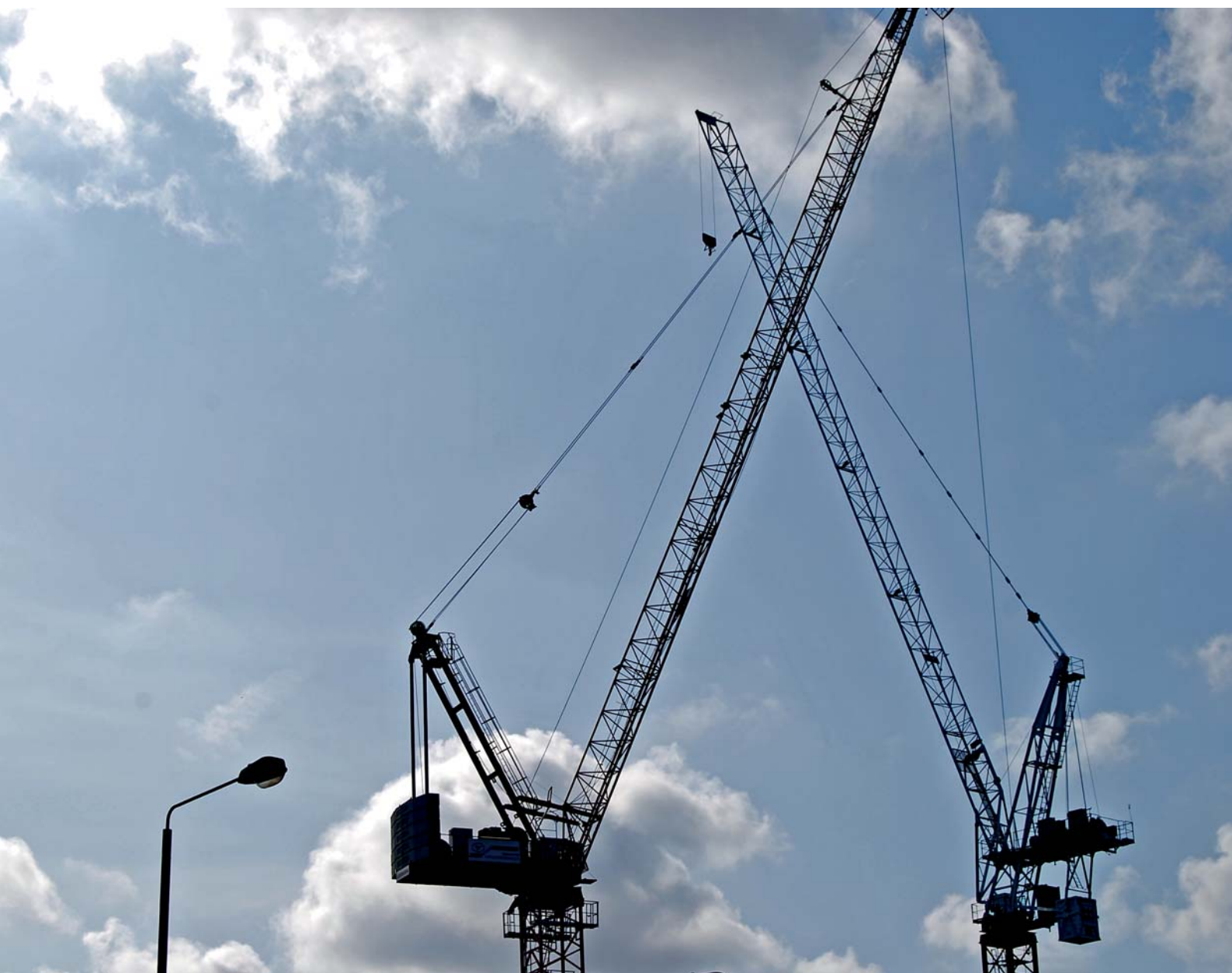
- 8.20 The level of detail contained in a typical Section 106 also lends itself to the tailored, site-specific approach Camden uses for construction management plans. However, the use of a condition to secure a construction management plan may be sufficient for sites where the building activities associated with the build out can be totally accommodated within the site itself, particularly where these are smaller schemes.

Camden Planning Guidance

# Planning obligations

London Borough of Camden

CPG **8**



July 2015



## CPG8 Planning obligations

1	Introduction.....	5
2	Background .....	7
3	Amenity .....	17
4	Community facilities.....	23
5	Design.....	25
6	Affordable housing and housing in mixed-use development ..	33
7	Sustainability .....	39
8	Employment and business support.....	43
9	Provision of flexible shops and business space .....	51
10	Transport.....	53
11	Provision of public open space .....	57



# 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.

## 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.

