Basements

6.107 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. Basements are also often included in developments in the Central London part of Camden and used for various purposes including commercial, retail and leisure uses, servicing and storage.

6.108 Basement development and other development that involves excavation changes the ground and water conditions of the area which can potentially lead to ground instability or flooding. Basement development can also have significant construction impacts due to the need to remove spoil and the general complexities of excavation. The Council recognises the need to protect the environment and adjoining neighbours properties and buildings from these impacts.

6.109 When this policy refers to basement development this includes basements, lightwells and other underground development.

6.110 A basement is a floor of a building which is partly or entirely below ground level. A ground or lower ground floor with a floor level partly below the ground level (for example on a steeply sloping site) will therefore generally be considered basement development.

6.111 When this policy refers to gardens and garden space this includes all outdoor (unbuilt) space on the property, including paved areas, driveways, as well as grassed or landscaped areas.

6.112 The following policies in this Local Plan are also relevant to basement development and will be taken into account when assessing basement schemes:

- Policy A2 Open space;
- Policy A3 Biodiversity;
- Policy D1 Design;
- Policy D2 Heritage; and
- Policy CC3 Water and flooding.

Policy A5 Basements

The Council will only permit basement development where it is demonstrated to its satisfaction that the proposal would not cause harm to:

a. neighbouring properties;
b. the structural, ground, or water conditions of the area;
c. the character and amenity of the area;
d. the architectural character of the building; and
e. the significance of heritage assets.

In determining proposals for basements and other underground development, the Council will require an assessment of the scheme's impact on drainage, flooding, groundwater conditions and structural stability in the form of a Basement Impact Assessment and where appropriate, a Basement Construction Plan.

The siting, location, scale and design of basements must have minimal impact on, and be subordinate to, the host building and property. Basement development should:

f. not comprise of more than one storey;
g. not be built under an existing basement;
h. not exceed 50% of each garden within the property;
i. be less than 1.5 times the footprint of the host building in area;
j. extend into the garden no further than 50% of the depth of the host building measured from the principal rear elevation;
k. not extend into or underneath the garden further than 50% of the depth of the garden;
l. be set back from neighbouring property boundaries where it extends beyond the footprint of the host building; and
m. avoid the loss of garden space or trees of townscape or amenity value.

Exceptions to f. to k. above may be made on large comprehensively planned sites.

The Council will require applicants to demonstrate that proposals for basements:

n. do not harm neighbouring properties, including requiring the provision of a Basement Impact Assessment which shows that the scheme poses a risk of damage to neighbouring properties no higher than Burland Scale 1 'very slight';
o. avoid adversely affecting drainage and run-off or causing other damage to the water environment;
p. avoid cumulative impacts;
q. do not harm the amenity of neighbours;
r. provide satisfactory landscaping, including adequate soil depth;
s. do not harm the appearance or setting of the property or the established character of the surrounding area;
t. protect important archaeological remains; and
u. do not prejudice the ability of the garden to support trees where they are part of the character of the area.

The Council will not permit basement schemes which include habitable rooms and other sensitive uses in areas prone to flooding.

We will generally require a Construction Management Plan for basement developments.

Given the complex nature of basement development, the Council encourages developers to offer security for expenses for basement development to adjoining neighbours.

Basement development

6.113 Although basement developments can help to make efficient use of the borough's limited land it is important that this is done in a way that does not cause harm to the amenity of neighbours, affect the stability of buildings, cause drainage or flooding problems, or damage the character of areas or the natural environment.

Basement impact assessment

6.114 The Council will require evidence of the impact of basement schemes in the form of a Basement Impact Assessment to be carried out by appropriately qualified professionals. Basement Impact Assessments are to include geotechnical, structural engineering, and hydrological investigations and modelling to ensure that basement developments do not harm the built and natural environment or local amenity. Basement Impact Assessments must be prepared according the specifications set out in our supplementary planning document Camden Planning Guidance on basements and the Camden Geological, Hydrogeological and Geological Study (ARUP 2010).

6.115 The level of information required will be commensurate with the scale and location of the scheme. All schemes will be expected to provide evidence against each of the considerations in Policy A5 Basements. Schemes will also be expected to submit information which relates to any specific concerns for that particular scheme or location (e.g. any history of flooding at the site or in the vicinity of the site, the presence of underground watercourses, proximity to water bodies such as the ponds on Hampstead Heath, structural instability of the development or of neighbouring properties, or unstable land). Basement Impact Assessments must use the Burland Scale in estimating effects on neighbouring properties, in accordance with the details set out in our supplementary planning document Camden Planning Guidance on basements.

6.116 Information submitted with basement applications must be contained within a Basement Impact Assessment which is specific to individual sites and particular proposals. Where hydrological and structural reports are required, they should be carried out by independent professionals (e.g. Chartered Structural Engineers) according to the qualifications set out in Camden Planning Guidance on basements.

6.117 In order to provide the Council with greater certainty over the potential impacts of proposed basement development, we will generally expect an independent verification of Basement Impact Assessments funded by the applicant. The circumstances where verification is required include:

- where a scheme requires applicants to proceed beyond the screening stage of Basement Impact Assessment;
- where the proposed basement development is located within an area of concern regarding slope stability, surface water or groundwater flow;
- where there is conflicting evidence; or
- for any other basement applications where the Council feels that independent verification would be appropriate.

6.118 Basement Impact Assessments must contain a non-technical summary of the evidence that applicants have gathered against each stage of the assessment. This should be presented in a format which can be fully understood by those with no specialist technical knowledge in these matters.

6.119 Details of the requirements and process of Basement Impact Assessments are set out in our supplementary planning document Camden Planning Guidance on basements. Applicants may also contact the Council about the level of information that should be provided for a particular scheme.

Burland Scale

6.120 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 of 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.

6.121 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.

6.122 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.

6.123 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. Applicants must therefore demonstrate in the Basement Impact Assessment that the basement scheme has a risk of damage to neighbouring properties no higher than Burland Scale 1 ‘very slight’.

Cumulative impact

6.124 The cumulative effect of several underground developments in close proximity can be more significant than the impact of a single basement. The impacts include changes to ground water flow, land stability, surface water flow and flooding. Basement Impact Assessments must consider the potential wider impacts of basement schemes and the potential cumulative impact of other basement schemes in the area. Basement Impact Assessments must identify all relevant basements in the neighbouring area, including their extent and ground conditions and make an assessment of the combined effect of underground development with all nearby basements considered together. The assessment must include existing and planned development including schemes with planning permission and those to be developed under permitted development with a Certificate of Lawful Development.

Demolition and construction

6.125 The demolition and construction phases of a development can have an impact on amenity and this is a particular issue for basements. Many basement schemes are constructed in residential areas in close proximity to people’s homes, with the construction works often involving significant disturbance (including removing significant quantities of spoil) extending for many months. Construction impacts (including noise) are also controlled by other legislation, in particular the Control of Pollution Act, with traffic impacts considered under relevant highways legislation.

6.126 The Council will seek to minimise the disruption caused by basement development and will generally require Construction Management Plans to

be submitted with applications. Construction Management Plans can be used to establish a community working group involving neighbouring residents to discuss, advise and make recommendations, before and during the construction period. Construction Management Plans should be based on the Construction Management Plan Proforma which is available for download from the Council's website. Please see Camden Planning Guidance on basements for further information.

Basement Construction Plan

6.127 To ensure that basement construction is undertaken without causing damage to neighbouring properties and the water environment the Council may require the developer to provide a Basement Construction Plan in some circumstances. Basement Construction Plans may be required when a Basement Impact Assessment shows acceptable estimated effects but a particular construction methodology needs to be applied to ensure there is no damage to neighbouring properties. If a Basement Construction Plan is required this will be identified in the independent assessment of the Basement Impact Assessment. Basement Construction Plans will be secured by planning obligation.

6.128 A Basement Construction Plan sets out detailed information relating to the design and construction of the basement with a view to minimising the impacts of the development on neighbouring properties and the water environment and provides a programme of measures to be undertaken by the owner with the objective of maintaining the structural stability of the property and neighbouring properties. The developer must also ensure that throughout the construction phase a suitably qualified engineer from a recognised relevant professional body is engaged to monitor, inspect and approve the construction works. The detailed requirements of a Basement Construction Plan are set out in Camden Planning Guidance on basements.

Size of basements

6.129 In addition to protecting against flooding, ground instability and damage to neighbouring buildings as set out above, the Council will also seek to control the overall size of basement development to protect the character and amenity of the area, the quality of gardens and vegetation and to minimise the impacts of construction on neighbouring properties. Larger excavations cause greater construction impacts and can have greater risks and complexity in construction.

6.130 A basement development that does not extend beyond the footprint of the original building and is no deeper than one full storey below ground level is often the most appropriate way to extend a building below ground.

6.131 Criterion f. above states that basements should not comprise more than 1 storey. The Council considers a single storey for a basement to be approximately 3 to 4 metres in height. Where appropriate we will allow a proportion of the basement to be deeper to allow development of swimming pools.

6.132 Criterion h. above states that basements should not exceed 50% of each garden within the property. This criterion applies to the front garden, the rear garden and gardens to the side of the property individually, rather than calculated as an

aggregated garden area for the whole property. This criterion applies to gardens as they currently exist and not the gardens of the proposed development. The unaffected garden must be in a single area and where relevant should form a continuous area with other neighbouring gardens. Sufficient margins should be left between the site boundaries and any basement construction to sustain growth of vegetation and trees.

6.133 Exceptions to criterion f. to k. above may apply on large comprehensively planned sites. For the purposes of this policy, large comprehensively planned sites are:

- new major developments, for example schemes which comprise 1000sq m additional non-residential floorspace or 10 or more additional dwellings;
- large schemes located in a commercial setting; or
- developments the size of an entire or substantial part of an urban block.

Party Wall Act and security for expenses

6.134 The Council encourages developers to offer security in all instances where basement schemes have a risk of causing damage to neighbouring properties. Many types of basement developments such as excavation near a neighbouring building will require that building owners meet a number of obligations under the Party Wall etc. Act 1996. These obligations include serving advanced notice of works, stating whether you will be strengthening or safeguarding the foundations of the neighbouring property and providing plans and sections. Under the Party Wall Act adjoining owners may request the building owner to provide a bond or insurances to provide security in the event of a dispute. Security bonds may be provided either as part of a party wall agreement or as a separate private arrangement between the developer or owner and the neighbour.

Flood risk

6.135 The National Planning Policy Framework (NPPF) states that “inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk” (paragraph 100).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. No parts of the borough are currently identified by the Environment Agency as being prone to flooding from waterways although some areas are subject to localised surface water flooding, as set out in Map 6: Historic flooding and Local Flood Risk Zones on page 266 and identified in the North London Strategic Flood Risk Assessment. Please see Section 8: Sustainability and Policy CC3 Water and flooding for more on the location of these areas and our approach to flooding.

6.136 The Council will require the submission of a development-specific flood risk assessment with applications for basements within flood risk areas identified on Map 6: Historic flooding and Local Flood Risk Zones, in the Flood Risk Strategy, or in any future updated Strategic Flood Risk Assessment in line with the criteria set out in the National Planning Practice Guidance on Flood Risk, unless it can be demonstrated to the Council’s satisfaction that the scale of the scheme is such that there is no, or minimal, impact on drainage conditions (refer to our supplementary planning document Camden Planning Guidance on sustainability for further information).

6.137 Some parts of Camden contain unusual and unstable subsoils, along with many underground streams and watercourses, making drainage and structural safety key concerns (including around Hampstead Heath). In such areas, applications for basement developments may be required to show through hydrological modelling whether it will be possible through the inclusion of drainage systems to prevent any significant harm from changes to groundwater levels or flow.

6.138 The use of Sustainable Drainage Systems (SuDS) will be encouraged in all basement developments that extend beyond the profile of the original building. For basements that encroach into garden space or reduce the area of permeable surface on the site, the use of SuDS will be required to mitigate any harm to the water environment. Further guidance on sustainable urban drainage is contained in Policy CC3 Water and flooding.

Protection of gardens and trees

6.139 As set out in Policy A3 Biodiversity, the Council will protect green areas including gardens and retain and protect trees of significant amenity value and which make a positive contribution to the character and appearance of a conservation area. Basement development should be designed to retain and protect gardens and trees.

6.140 The protection of garden space to support large canopy trees is of particular importance near to open spaces. Basement development should be designed to avoid damage to trees both on or adjacent to the site, including street trees and the root protection zones needed by these trees. Where there are trees on or adjacent to the site, the Council will require an arboricultural report to be submitted as part of a planning application. Further information on protection of trees is available in our supplementary planning document Camden Planning Guidance on design.

6.141 Basement developments should mitigate any loss of storm water infiltration capacity or biodiversity habitat caused by that development through the planting of vegetation above the basement and other appropriate measures. This will usually take the form of a soft landscaping or retention pond on the top of the underground structure, which is designed to temporarily hold a set amount of water while slowly draining to another location. The Council expects that a minimum of 1 metre of soil is provided above the basement development, where this extends beyond the footprint of the building, to enable garden planting and for rainwater runoff and flood mitigation.

Listed buildings

6.142 Basement development underneath a listed building can harm the fabric, structural integrity, layout, inter-relationships and hierarchy of spaces and architectural features of the building. The addition of a floor level beneath the original lowest floor level of a listed building (basement, cellar, or vault) may affect the hierarchy and historic integrity of the floor levels within the building. The development of a basement beneath a listed building can also necessitate the removal of significant parts of the original structure and fabric of the building.

6.143 The Council will only permit basements where they do not cause harm to the significance of a listed building or its garden. Listed buildings often form an

intrinsic element of the character of conservation areas and therefore basement development which harms the special architectural and historic interest of a listed building is also likely to fail to preserve or enhance the character or appearance of the conservation area in which it is located. Further details on the Council's approach to preserving heritage assets are set out in Policy D2 Heritage.

Lightwells

6.144 Where basements and visible lightwells are not part of the prevailing character of a street, new lightwells should be discreet and not harm the architectural character of the building, the character and appearance of the surrounding area, or the relationship between the building and the street. In situations where lightwells are not part of the established street character, the characteristics of the front garden or forecourt will be used to help determine the suitability of lightwells.

6.145 In plots where the front garden is quite shallow, a lightwell is likely to consume much, or all, of the garden area. This will be unacceptable in streets where lightwells are not part of the established character and where the front gardens have an important role in the local townscape.

6.146 Lightwells to the side or rear of a property should be set away from the boundary of a neighbouring property. Excessively large lightwells will not be permitted in any garden space.