

Planning and Design Guide

Part D: Guidelines for High Quality Sustainable Development

Draft for DM use and Public Consultation October 2016
V3 (post-Executive)

DRAFT

Contents

Introduction to the Draft SPD	i
Introduction	1
Achieving high quality sustainable design	3
Using Part D.....	4
Section 1: Context and character	5
1.a) Settlement Hierarchy and Character	5
1.b) Sense of Place and Place Shaping	8
1.c) Understanding Local Patterns of Development.....	8
Section 2: Policy Guidance	10
2.a) Design Principles.....	10
2.b) Connectivity and Layout	11
2.c) Streetscape and building layout	16
2.d) Density and housing mix	18
2.e) Garden land development	20
2.f) Views and landmarks	24
2.g) Site layout: urban areas	25
2.h) Site layout: previously developed land (PDL) in the Green Belt	26
2.i) Public realm	28
2.j) Demolition and Replacement of Buildings in Conservation Areas	30
2.k) Height, massing and roof forms	32
2.l) Taller Buildings	35
2.m) Setback and building lines.....	37
2.n) Separation distances between buildings	38
2.o) Solar orientation and natural sources of energy	39
2.p) Front gardens and boundaries	40
2.q) Landscaping and biodiversity	42
2.r) Parking and waste storage	43
2.s) Basements in residential developments.....	49
2.t) Appearance and detail	54
i) Lighting	54
ii) Windows (including dormers and rooflights)	54
iii) Materials	56
Section 3: Living Conditions and the Environmental Impacts of Development	57
3 a) Daylight and sunlight	57
3.b) Privacy and outlook	58
3.c) Residential Internal Space Standards	62

Hertsmere Draft Planning and Design Guide SPD Part D
Draft for DM use and Public Consultation October 2016

3.d)	Garden space and external amenity space standards	65
3.e)	Safe and Inclusive Developments	68
3.f)	Flood Risk and Drainage	71
3.g)	CO ₂ Reductions and Energy Use and Generation	72
Glossary		75
Documents referred to in this guide		77

This document forms part of the Hertsmere Planning and Design Guide. The full guide consists of this document and the following sections:

Part A: Overview and Context

~~Part B: Permitted Development~~ - *Please note that Part B: Permitted Development has been superseded by new secondary legislation (the Town and Country Planning (General Permitted Development) Order) and has been withdrawn*

Part C: Site Appraisal: Design and Access Statements

Part E: Guidelines for Residential Extensions and Alterations

Part F: Shop Fronts

The above sections can be obtained from our website (www.hertsmere.gov.uk), by contacting the Planning Policy Team on 020 8207 2277 or by sending an email to local.plan@hertsmere.gov.uk.

This section to be removed before adoption

Part D: Guidelines for High Quality Sustainable Development: Draft for Public Consultation 2016

Introduction to the Draft SPD

This section of the Planning and Design Guide (the Guide) sets out general guidance for design in the Borough. These elements are informed by the seven key principles described in Part A and rely on a thorough understanding of the constraints and opportunities of the site and its surrounding area, as discussed in Part C. Part D is intended to be applicable to all types of development although there is an emphasis on new development. Part E contains more specific guidelines on residential extensions. Part F sets out more detail in relation to shop fronts.

The changes which are proposed take account of national and local policy changes since the last update in 2013, as well as relevant contextual changes, including local planning appeals. Approval of the revised SPD is sought from the Executive for interim Development Management use and for a period of public consultation.

Why is a revised SPD required?

Part D was first published in 2006, and was partially updated in 2013 when additional guidance was added to cover, among other things, internal residential space standards and backland / garden land development. It is now timely to update the guide to reflect development pressures, experience, best practice and changes to national and local policy which have occurred since its adoption.

The SPD requires further review as a result of national and local policy changes and new evidence and information arising from experience of applying the SPD in the determination of planning applications.

What have we reviewed to get to this new SPD?

Key planning policy changes

National policy

- the new national planning practice guidance (NPPG) places a stronger emphasis on the delivery of development;
- the new Nationally Described Space Standard for residential development, which came into effect in October 2015, and a potential review by the Government (announced during consideration of the Housing and Planning Act in May 2016) to be completed by Spring 2017; and
- changes to national policy on Sustainable Drainage Systems (SuDS) effective from April 2015.

Local policy

- the Site Allocations and Development Management Plan (SADM) is now at an advanced stage in the Examination process and should be adopted before the end of 2016. This Plan contains policies relating to design, some of which differ from the policies in the Local Plan 2003, including SADM3 – Residential Developments, SADM11 – Biodiversity and habitats, SADM12 – Landscape Character, SADM13 – Trees, Landscaping and Development, SADM16 – Sustainable Drainage Systems, SADM20 – Waste Storage in New Development, SADM27 – Development Standards in the Green Belt, SADM30 – Heritage Assets and SADM31 Design Principles; and
- The Elstree Way Corridor Area Action Plan was adopted in July 2015.

Relevant contextual information

- recent local appeal decisions relating to design issues;

- increased numbers of development proposals involving basements and the experience of London authorities, many of which have issued guidance on basements;
- recent planning applications for the redevelopment of previously developed sites in the Green Belt;
- increased development pressures for taller buildings in London and neighbouring boroughs, in particular Watford, which has recently adopted a Taller Buildings SPD; and
- the experience of the Development Management Team with applying the SPD in the determination of planning applications.

Why is it important to update the SPD now?

- a) to aid consistency and understanding;
- b) to reflect changes in national and local planning policy;
- c) to clarify that development should relate to its context and move away from solely numerical/prescriptive guidance on some elements of design which can lead to context being a secondary consideration;
- d) to take account of lessons from policy and practice in Hertsmere, in neighbouring boroughs and in the wider region including London;
- e) to provide clarification on a number of issues which have remained unclear or where the situation has changed.

To which Core Strategy policies does the SPD relate?

This Supplementary Planning Document provides detailed local guidance relating to the following policies in the Local Plan:

Core Strategy policies: CS12, CS13, CS14, CS16, CS17, CS22, CS25, CS26;

Elstree Way Corridor AAP policies: EWC6, EWC7, EWC8;

Emerging SADM Policies Plan: SADM3, SADM11, SADM12, SADM13, SADM16, SADM20, SADM27, SADM30, SADM31, SADM32, SADM41.

What changes have been made to the SPD?

This draft document proposes new and amended guidance on the context and setting of sites, site layout in the Green Belt, the demolition of buildings in Conservation Areas, the Council's approach to 'PD fallback' in the Green Belt, and how basement proposals will be considered. The section on privacy and outlook has been revised and the document has been updated to reflect new national and local policy and policy guidance. The title and layout of the SPD have been amended to reflect the change in content. Full details of the proposed changes is set out in the accompanying Consultation Statement, which can be found on the Council's website at www.hertsmere.gov.uk/designguide2016.

Changes are being proposed to the SPD relating to the following topics:

- i The layout of the SPD has been changed to reflect a more logical ordering of the topics, moving from larger-scale considerations to smaller ones (e.g. from street layout to window design and materials).
- ii A greater emphasis is now placed on the need for development to respond to its context, with less emphasis on solely numerical/prescriptive guidelines.
- iii The Residential Internal Space guidelines have been updated to reflect the new Nationally Described Space Standard. A separate justification report on this topic accompanies this Draft SPD.
- iv New guidance has been produced on basements in new and existing dwellings covering issues raised by officers during the determination of planning applications. Amongst other things this

section clarifies the accepted position (based on appeals and case law) that large basements in the Green Belt need to be assessed in the same way as above-ground development. It also includes guidance on basements in urban areas and covers issues including flood risk, impacts on the streetscene, neighbouring amenity (in particular where site levels are uneven), car parking, garden space and environmental implications of basement construction.

- v Specific guidance has been added on Hertsmere's approach to taller buildings, to reflect development trends in outer London and neighbouring boroughs which may also manifest in Hertsmere. Watford Council have recently adopted a Taller Buildings SPD, and although Hertsmere is unlikely to face the same level of pressure for tall buildings as Watford, available development land is constrained by the extent of the Green Belt and the Elstree Way Corridor area in particular is expected to be a higher-density housing area where taller buildings may be proposed. It should be emphasised that the proposed changes to the Planning and Design Guide do not seek to encourage and promote taller buildings. A 'taller building' is one which is particularly tall in relation to its context and its proportions (being large or slender), so a specific height threshold for something being a 'taller building' has not been proposed in order to allow an assessment to be made in relation to its context. In typical residential streets, a 'tall building' may be anything above 3 storeys (so around 12m and above), while in another area, such as in the Elstree Way Corridor, 6 or 7 storeys (around 21m) may not look out of place with one 12 storey building approved in 2013.
- vi Guidance has been added on the demolition and replacement of buildings in Conservation Areas. This sets out that the Council will normally refuse consent for the demolition of buildings which make a positive contribution to the character and appearance of a Conservation Area, including those specifically identified in the Council's character appraisals. Replacement buildings should also preserve or enhance the Conservation Area, and have regard to *Building in Context* (Historic England and the Design Council).
- vii A section has been included to clarify the Council's stance on site layout on previously developed sites in the Green Belt. This emphasises that site layouts should respond to their specific local context, and makes clear that the existing layout of buildings on previously developed sites in the Green Belt is not always a suitable basis for the design and layout of a proposed development on that site.
- viii A short section has been added to cover the principles of Sustainable Drainage Systems (SuDS) to reflect national policy and the proposed policy SADM16 within the SADM Plan. This sets out that SuDS are expected to be incorporated into all schemes at the design stage and references HCC's detailed guidance document.
- ix Changes are proposed to the section on overlooking distances between buildings to take better account of the context within which new development takes place rather than relying solely on prescriptive, numerical minimum distances. In particular, overlooking and privacy distances should differentiate between the relationship between existing and new homes and the relationship between new homes on the same development site.
- x Additional detail is proposed to the section on bulk and massing to cover roof types, in particular where certain roof types, e.g. crown roofs and large dormers, are used to make space for an additional storey to a building. These types of roof can appear bulky and out of place, so the guidance aims to provide some guidance on appropriate roof types and other potential solutions where an additional storey is required. These include the use of mansard roofs or setting part or all of the lower storey below ground, depending on the context of the particular site.
- xi Additional diagrams are proposed to provide further clarity on what is meant by 'tandem' and 'backland' development.
- xii In addition to guidance on their appearance, a maximum overall height of 1.5m is proposed as a guide for electric and non-electric gates to the front of private properties in order to prevent them

from creating an unwelcoming streetscene and increasing the fear of crime in an area. The presumption against allowing gated housing schemes remains.

Status of this Guidance

This is a draft document to be considered by the Council's Executive Committee for public consultation and approval for interim Development Management purposes from September 2016. The Council will review responses to the public consultation and make any necessary amendments before formally adopting the document. The adopted SPD will itself be subject to updates as and when appropriate.

The SPD will be a material consideration in the determination of planning applications. This means that the Council will use the guidance in the document in pre-application discussions and in the assessment of planning applications. It will also form part of the officer advice given to the Planning Committee in deciding applications and may be taken into account by a Planning Inspector at appeal.

This SPD forms part of a suite of supplementary guidance. All supplementary documents can be viewed and downloaded from the [Council's website](#). Details of the status of SPDs and future updates are summarised in the Council's Annual Monitoring Report (AMR).

Consultation

The production of the revised SPD has been a collaborative process within the Planning Department led by officers in the Policy team, in consultation with the Development Management team, the Member Planning Panel as a policy steering group and the Planning Committee as decision-takers who will be using the document in determining planning applications.

Following approval from the Executive, a wider consultation process will be undertaken involving statutory consultees, developers, planning agents and relevant local organisations (e.g. residents' associations), who will be notified of the consultation in writing, and the draft document will be made available online and at libraries and other deposit points around the Borough for a 6-week period.

This draft SPD will be published for a six-week period of consultation in September and October 2016. A wide range of organisations and stakeholders will be consulted, including those who have expressed an interest through the process of preparing the new Local Plan.

Once all representations on the draft SPD have been received they will be carefully reviewed and changes made to the document where necessary. The SPD is expected to be considered again by the Council's Executive in January 2017 for adoption.

Introduction

This section of the Planning and Design Guide (the Guide) sets out general guidance for design in the Borough. These elements are informed by the seven key principles described in Part A and rely on a thorough understanding of the constraints and opportunities of the site and its surrounding area, as discussed in Part C. Part D is intended to be applicable to all types of development although there is an emphasis on new development. Part E contains more specific guidelines on residential extensions. Part F sets out more detail in relation to shop fronts.

Proposals for new homes which are inspired by good design can deliver places that are desirable to live in and can improve the quality of the existing environment. It is important that developers adopt a 'design-led' approach in new developments, to create imaginative, safe and attractive new residential development, which responds to the specific setting and location of each site. Above all, development should seek to enhance and contribute positively to the appearance of an area.

The design and appearance of a development and its relationship to its surroundings are important material considerations in determining planning applications. This guidance constitutes a statutory Supplementary Planning Document (SPD) and as such its contents represent an important material consideration in the determination of planning applications for new residential development.

Planning Policy Context

This SPD provides guidance on how the principles of sustainable and high quality design contained within Hertsmere's Local Plan and national planning policy should be applied to all development within the Borough. It ensures that policies are implemented in a consistent manner in accordance with principles of good design.

National policy and guidance

The National Planning Policy Framework (NPPF) 2012

"The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people." (NPPF 2012, para.56).

The NPPF encourages local planning authorities are encouraged to use design codes where they can help deliver high quality outcomes and reinforce local distinctiveness, but policies should not attempt to impose architectural styles or tastes, or stifle innovation. Local design policies should avoid unnecessary prescription or detail and concentrate on guiding the overall scale, density, massing, height, landscape, layout, materials and access of new development in relation to neighbouring buildings and the local area more generally.

The NPPF is clear that great weight should be given to outstanding or innovative designs which help raise the standard of design more generally in the area, while permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions.¹

Planning Practice Guidance (PPG), first published 2014

The PPG further stresses the importance of good quality design, and that it should be secured through local plan policies. Development proposals should reflect the requirement for good design set out in national and local policy. Highly sustainable proposals should not be refused permission purely for reasons that it would be incompatible with the existing townscape unless there is concern over the impact of a proposal on a designated heritage asset.

Local policy

¹ National Planning Policy Framework (NPPF) 2012, [paragraph 63-64](#)

Core Strategy, adopted 2013

The Core Strategy sets out the Council's vision and strategy for the Borough for the next fifteen years. It includes a vision for Hertsmere for the delivery of a high quality, accessible, safe and economically viable environment to be achieved through a commitment to the principles of sustainable development.

This guidance supports a number of the Core Strategy Objectives:

2. To protect the Green Belt and its role in preventing urban sprawl and the coalescence of towns.
6. To improve environmental and streetscape quality in town centres and protect and enhance the built heritage of Hertsmere.
8. To raise levels of access by seeking development in locations not dependent on access by car and by requiring the provision of physically accessible transport interchanges and other buildings.
9. To promote safe and healthy communities, respecting the diverse needs of the whole Borough.
13. To protect and enhance local biodiversity.
14. To secure efficient land use through well-designed development reflecting the size, pattern and character of settlements in Hertsmere.²

It contains a number of policies which relate to the design and setting of development. These policies are CS12 The enhancement of the natural environment, CS13 The Green Belt, CS14 Protection or enhancement of historic heritage assets, CS16 Environmental impact of new development, CS17 Energy and CO₂ reductions, CS22 Securing a high quality and accessible environment, CS25 Accessibility and parking, CS26 Promoting alternatives to the car.

Elstree Way Corridor Area Action Plan, adopted 2015

The Elstree Way Corridor Area Action Plan (EWC AAP) is a spatial strategy for the coordinated development and design of the area known as the Elstree Way Corridor. It will help to guide development and seeks to provide confidence and certainty to public bodies and developers. The overall purpose of the AAP is to establish the basis for shaping the redevelopment of the area and to ensure that the wider public realm and highways improvements come forward.

The EWCAAP should be read in conjunction with other planning policy documents. It will provide planning policy, and allocate uses for certain sites. It contains the following policies which are relevant to design: EWC6: Public Realm and Townscape, EWC7: General Building Heights, and EWC8: Parking Requirements.

Emerging Site Allocations and Development Management (SADM) Policies Plan, submitted 2015

The Site Allocations and Development Management Policies Plan sets out detailed proposals and policies by which the Council sees the aims and objectives of the Core Strategy being best achieved. It contains site allocation policies which establish the principle that a specific form of development should be located on a particular site or within a given area, and development management policies which set out criteria by which all planning applications will be judged. The policies will enable the delivery of the objectives and long term vision for the Borough in the Hertsmere Core Strategy.

It is the development management policies which are most relevant to design, specifically: SADM3, SADM11, SADM12, SADM13, SADM16, SADM20, SADM27, SADM30, SADM31, SADM32, SADM41.

Local Policy Guidance

The SPD should be read in conjunction with the Council's other planning policy documents including:

- Planning and Design Guide SPD:
 - Part A: Overview and Context
 - Part C: Site Appraisal: Design and Access Statements
 - Part E: Guidelines for Residential Extensions and Alterations
 - Part F: Shop Fronts

² Hertsmere Core Strategy, 2013, p.21

- Affordable Housing SPD
- Developer Contributions Framework (DCF)
- Biodiversity and Trees SPD
- Parking Standards SPD

Achieving high quality sustainable design

Public and professional awareness of high quality design and sustainability has increased in recent years, with the National Planning Policy Framework (NPPF) emphasising high quality design and sustainable development.

The NPPF states that good design is a key aspect of sustainable development, indivisible from good planning, and should contribute positively to making places better for people. High quality design should be planned for in all development, including individual buildings, public and private spaces and development schemes covering a wider area.³

Policy CS22 of the Core Strategy seeks to ensure that all development is of high quality design to ensure the creation of attractive and usable places and that development proposals take advantage of opportunities to improve the character and quality of an area.

High quality design

Successful buildings, streets, spaces, villages, towns and cities are those which function well, look good and are likely to last. These three key design principles of usefulness, beauty, and durability are important, universal indicators that make it possible for anyone to recognise good design.

Well-designed places are those that people find beautiful and want to spend time in. These places tend to be valued and cared for, while poorly-designed places tend to lead to greater costs for society in terms of crime and perception of crime, high maintenance, poor health and social exclusion. Everyone uses and experiences the built environment every day, and it tells us more about what makes our society unique and special than any other art form. This is because buildings and public spaces reflect a society's aspirations and values and the way they are looked after and re-used is an indicator of national and local pride and identity.⁴

High quality design can lead to buildings and places which are better for peoples' physical and mental wellbeing, through creating spaces for living and working whose design facilitates positive social interactions and encourages more active lifestyles. The design of the home, workplace and neighbourhood impacts both positively and negatively on many different aspects of physical and mental health.⁵

Sustainable design

Half of all of the UK's carbon emissions come from the energy used in constructing, occupying and operating buildings.⁶ A high standard of design and construction is therefore vital to achieving statutory emissions and energy use targets set in the Climate Change Act 2008, as well as ensuring that we are able to meet the needs of the present without compromising the ability of future generations to meet their own needs.⁷

Sustainable design is concerned with implementing sustainable development at the scale of individual sites and buildings. It takes account of the resources used in construction, and of the environmental, social and economic impacts of the construction process itself and of how buildings are designed and used. Design which is truly sustainable will improve building performance over its lifetime, reducing the

³ National Planning Policy Framework (NPPF), 2012, [paragraph 69](#)

⁴ Simmons, R., [Good Design: the fundamentals](#), CABI, 2009

⁵ The UK Green Buildings Council, [Health and Wellbeing in Homes](#), July 2016

⁶ Cross Sector Group on Sustainable Design and Construction, August 2012, [Good Practice Guide: Sustainable Design and Construction](#)

⁷ International Institute for Sustainable Development, [Sustainable Development definition](#)

financial and environmental costs of maintenance or replacement over the long-term. There is evidence that highly sustainable buildings can be produced at little or no additional cost⁸, provided sustainability is designed in from the outset.

In summary, sustainable design seeks to:

- minimise the use of resources (including energy and water);
- ensure that the built environment mitigates and is resilient to the impact of climate change;
- protect and enhance biodiversity and green infrastructure;
- provide buildings and spaces that are pleasant and healthy for occupiers and users;
- ensure the sustainable sourcing of materials; and
- minimise waste.

Using Part D

Section 1 of this guidance sets the scene for development in the Borough. This section identifies wider objectives for the design of all new development in the Borough.

Sections 2 and 3 provide more specific guidance on particular aspects of development. Each sub-section identifies objectives for the particular issue, and gives a series of guidelines towards meeting those objectives.

Objectives

The objectives set out what the particular section of the guide aims to achieve. All development proposals should be consistent with the objectives.

Guidelines

The Planning and Design Guide sets out guidance only, and should inform the design and assessment of development proposals. In some cases other relevant factors will result in new development legitimately departing from the Council's guidance.

The Council recognise that not all forms of development require planning permission. Nevertheless it is strongly encouraged that all development adheres to the standards in this guidance document.

Where a residential development is assessed as acceptable in relation to Part D of this Guide and is granted planning permission, the Council will assess whether it is appropriate to remove permitted development rights on the property by way of a condition attached to any permission granted. This will mean that you and/or future occupiers of the development will have to submit a planning application for work which normally does not need one (e.g. loft or garage conversions or rear extensions).

For large-scale developments where the Council considers it necessary, it will seek to manage future development via the use of an Article 4 Direction. Article 4 Directions are issued by the Council where specific control over development is required, primarily where the character of an area of particular importance would be threatened by cumulative impacts of small developments which do not need planning permission. This process would be subject to the relevant legal procedures and consultation exercises. This will enable the Council to manage the form of any future development and therefore protect the character of the property and the surrounding area.

⁸ BRE: Sustainability At No Extra Cost <http://www.bre.co.uk/page.jsp?id=1809>

Section 1: Context and character

1.a) Settlement Hierarchy and Character

As a Borough, Hertsmere cannot be defined as having a single identity. When Hertsmere was formed in 1974 it combined parts of the Bushey Urban District and the Potters Bar Urban District with the Elstree Rural District and a section of the Watford Rural District. As a result of this, a number of separate identities can be found.

Settlement Hierarchy

The Core Strategy 2013 sets out the Settlement Hierarchy for the Borough. This identifies Borehamwood as the main town in Hertsmere, with Potters Bar and Bushey performing important local functions to the east and west of the Borough. Radlett is a smaller settlement which performs as a key local shopping centre, and Shenley and Elstree are the key service villages in the Borough.

Table 6. The Settlement Hierarchy

<p>Borehamwood</p> <p>A diverse, growing population and an important economic centre for south Hertfordshire, rail and bus links to London and other key towns, an international reputation for film and television production, along with a retail centre with a growing presence of national multiples.</p>	
<p>Potters Bar</p> <p>A key local town in the east of the Borough with a number of major employers, two distinct shopping areas, thriving industrial areas and rail and bus links to London and towns to the north.</p>	<p>Bushey</p> <p>Predominantly residential in character covering three distinct centres (Bushey Heath, Bushey Village and North Bushey) with bus and nearby rail links to Watford and London, significant pockets of industrial land and a wide variety of local shops and services.</p>
<p>Radlett</p> <p>Largely residential in character and surrounded by Green belt with good rail links to London and a popular district centre serving both the local population and an increasing number of visitors from further afield.</p>	
<p>Shenley (that part proposed to be removed from the Green Belt)</p> <p>The Former Shenley Hospital development, a key service village largely residential in character with 900 new homes and a limited range of local shops and services. Limited opportunities for infill development.</p>	<p>Elstree (that part outside of the Green Belt)</p> <p>A distinctive village in its own rights, which, despite its close proximity and association with Borehamwood, contains a small but viable centre with a range of local businesses and services with limited opportunities for infill development.</p>
<p>Elstree (that part within the Green Belt), Aldenham (including Wall Hall), Letchmore Heath, Patchetts Green, Ridge and South Mimms, Shenley (that part within the Green Belt)</p> <p>Small rural villages within the Green Belt which remain largely residential in character and land use, relying on larger settlements nearby for employment and local services.</p>	

Character

80% of the Borough is Green Belt and the Council attaches importance to the protection of this open land. The majority of the Borough is located within the Watling Chase Community Forest (WCCF)⁹ and despite its proximity to London, there is a predominantly rural character to much of the Borough.

Hertsmere has over 330 listed buildings, gardens or structures, 15 Conservation Areas and four Scheduled Ancient Monuments. This historic fabric contributes to the character of the Borough's towns and villages. A new list of locally important buildings contains over 350 properties.

New development should reflect the fact that Hertsmere is made up of very distinct communities - both geographically, economically and demographically - with close inter-relationships to London, Watford and other nearby centres of population.

Borehamwood (including the part of Elstree within the wider Borehamwood urban area)

- Strong links to North London, in particular Edgware and Barnet.
- Linear town centre with more recent retail park development.
- Small historic core with Victorian and early-20th Century housing at Drayton Road, Furzehill Road and Mildred Avenue.
- Extensive post-war semi-detached and terraced local authority housing development around edges with a generally verdant character due to wide, tree-lined streets, front gardens and large rear gardens.
- Some variation in character in places including the town centre, Farriers Way, detached housing in streets west of Furzehill Road, 21st Century Poets Estate (near Station). Higher density flats at, for example, Stratfield Road, Leeming Road/Aycliffe Road and Manor Way.
- Taller buildings limited to commercial areas, the town centre and around local shopping parades.
- The part of the wider Borehamwood urban area to the west of the railway line is generally known as Elstree and has a different character. This area consists of a mix of primarily detached 20th Century houses and bungalows in various styles, with fairly long and narrow plots. There are also some flats set in leafy grounds and a later development of detached houses on smaller plots to the south west at Nicholas Road.
- Higher density, recent residential development along Elstree Way.
- Employment and light industrial development around the station and to the east and south-east of the town at Elstree Way/Stirling Corner.

Potters Bar

- Physically separate from other settlements in Hertsmere.
- Two town centres performing different functions.
- Links to Welwyn Hatfield and North London via East Coast mainline and A1(M).
- Majority of housing built in early-mid 20th Century.
- Two Conservation Areas protecting Arts and Crafts-style bungalows (The Royds) and a small garden suburb at Heath Drive (Darkes Lane West).
- Central and West Potters Bar characterised by 1930-50s detached and semi-detached houses and bungalows, spacious plots and wide streets with street trees.
- East of High Street generally characterised by 1960-70s housing in smaller plots and streets which tend to have fewer street trees and give more space to the private car.
- Some high-rise commercial buildings around the station. Few residential buildings above 2-storeys: some 3-storey flat blocks at The Causeway and 3-storey houses at Willow Way.

⁹ [Watling Chase Community Forest \(WCCF\) Plan 1995](#) on the WCCF web site

Bushey

- Strong links to Watford.
- Three distinct areas: Bushey Village, Bushey Heath and North Bushey.
- Local shopping centres in Bushey Village and Bushey Heath.
- **Bushey Village** is the oldest part of Bushey, characterised by St James' Church and 17th/18th Century buildings on the High Street.
- Victorian heritage characterised by terraced housing in residential streets off the High Street and the former Herkomer Art School and Bushey Rose Garden.
- Majority of the area has a suburban character with housing built in mid-20th Century, including post-war local authority housing in Herne Road and Great Grove, and later 20th Century housing in Great Grove, Meadow Road and Harcourt Road.
- A substantial 21st Century development at Farrington Avenue creates its own distinct character amid the Harcourt Road housing area.
- Bushey Village has a strong link with Bushey Station and Oxhey, which are in Watford Borough.
- **Bushey Heath**: Aside from a ribbon of older development along Sparrows Herne and Elstree Road, Bushey Heath was largely developed through the early to mid-20th Century, and includes Arts and Crafts housing in The Lake Conservation Area and former Ministry of Defence housing at Farm Way to the south-west of Bushey Heath which has been designated as a special character area in Policy SADM32.
- **North Bushey** has a particularly strong link to Watford town centre and Watford Junction Station.
- Characterised by mid-20th Century houses and bungalows.
- Large-scale commercial development focussed along Otterspool Way.

Radlett

- Links with Borehamwood, St Albans and London via Watling Street and Thameslink railway.
- Historic centre surrounded by 20th Century suburban housing of varying form and character, including bungalows, most with generous rear gardens.
- Area of post-war local authority housing to the west.
- Linear town centre with good local retail offer including convenience and comparison goods, restaurants and A2 uses.
- Few taller buildings, with flats concentrated around the station and shopping parade.

Shenley

- Links with Borehamwood and Radlett.
- Original village focussed around London Road is within the Green Belt and contains a mix of historic and more modern housing styles and types, and has a rural character.
- This part of the village is protected by a Conservation Area designation.
- There are some amenities in the centre, but the village largely relies upon nearby settlements for employment and services.
- Former Shenley Hospital Site to the north west redeveloped as housing in the 2000s and removed from the Green Belt through the Local Plan. This is an area of high-density housing including a small shopping parade. It also features the historic Shenley Park Mansion and water tower, both of which are now split into multiple residential units.
- Shenley Park is part of a former country estate and adjoins the hospital site. This functions as a small country park with walled garden and tea rooms.

Elstree Village

- Links with Borehamwood and north London.
- The historic village centre is focussed around the High Street and St Nicholas Church, and is within the Green Belt. It contains a mix of historic and more modern housing styles, and has the character of small but a fairly dense, rural village centre. Victorian and early-20th Century housing spreads out along Elstree Hill North and Elstree Hill South, with larger houses in more spacious plots along Barnet Lane.
- This part of the village is protected by a Conservation Area designation.
- There are some amenities in the centre, but the village largely relies upon nearby settlements for employment and services.
- The large composers estate to the south-west comprises post-war local authority housing. This area is not within the Green Belt, as has a more suburban character.
- Centennial Park is a larger commercial estate to the south-west of Elstree Village.

South Mimms, Ridge, Aldenham, Letchmore Heath, Patchetts Green

- Aldenham has a small historic nucleus centred around S John the Baptist church, and enlarged by a small number of streets of post-war, mainly semi-detached housing and some late 20th Century housing at Church Farm Way.
- (including Round Bush and High Cross), Letchmore Heath and Patchetts Green (including Delrow) are small villages to the south west of Radlett and north east of Bushey. They have a rural character and consist of
- Some local services e.g. pub and/or village shop.
-

1.b) Sense of Place and Place Shaping

Place shaping means developing an area with the understanding that every place will have its own unique, identity and function. To many people, some parts of the Borough are defined by a leafy, suburban character, while other areas have a more dense, urban character, and others are more rural.

With a growing need to accommodate higher levels of housing, it is important to maintain and enhance this suburban character through sensitive residential design to ensure Hertsmere remains an attractive place to live, work and visit.

Objectives

- creating and enhancing places with their own identity.
- ensuring the design contributes positively to the public realm, e.g. creating an active street frontage with frequent doors and windows to create a sense of activity;
- introducing landmark buildings where appropriate to enhance a sense of place, e.g. housing on corner plots that are visible from within both long and short vistas;
- introducing planting and landscaping to soften hard urban edges and disguise residential parking areas; and,
- maximising opportunities to reveal lost or hidden aspects of the natural characteristics of the Borough.

1.c) Understanding Local Patterns of Development

The character of each part of a settlement or context is distinctive, so careful consideration should be given to its preservation or enhancement in the design of new buildings and other development. The patterns of development found in any settlement reflect its historic development, whether this has taken place over centuries or decades. New development should be respectful of existing development patterns whilst adding a new layer to the rich history of the place. It is important to remember that the proposed development will eventually be part of the community and environment in the area, and its positive and/or negative effects will continue to be felt well into the future.

Objectives

- New development will be expected to consider the wider context through the design process; this should be clear through the justification set out in the Design and Access and / or Planning Statements.
- New development must be sensitive to local character and not detrimentally affect the townscape and landscape, however it should seek to enhance key characteristics which contribute to landscape and architectural quality, but should not set out to mirror existing development. To achieve this, the scale and massing of existing development should be replicated rather than any particular architectural style.
- Where existing development is not in keeping with the local area, new development should not replicate this.

- Larger developments are encouraged to create their own distinctive identity whilst respecting and where possible enhancing local character. Innovation can exist alongside existing development, with old and new buildings fitting together provided new buildings are carefully designed.
- Where there are no significant local traditions or no overriding character in a particular area, the challenge to help shape a place with a distinctive local character will be greater.

Assessing the character of the area

- a. Understanding the key characteristics of your neighbourhood could help achieve more from a development. Each proposal is capable of having positive and negative impacts beyond its site boundaries, and the cumulative effect of developments in an area can significantly influence the quality and enjoyment of a neighbourhood.
- b. A neighbourhood analysis enables those working on the design to fully understand the wider environment and community that the proposed development will be part of. The range, scale and level of detail of neighbourhood conditions investigated within any neighbourhood analysis will be dependent on the scale and complexity of the project.
- c. When determining what information is relevant to your neighbourhood analysis, it is important to define the extent of your neighbourhood. In some instances, this will be a residential area/rural settlement with clear boundaries. If it is less obvious, a 400m radius circle is recommended, as this distance is widely recognised as being the distance people will happily walk in order to meet their daily needs, and typically equates to a five minute walking distance.
- d. The assessment of the character of a neighbourhood should address the following issues:
 - landform and natural environment elements (e.g. topography, flood risk, trees);
 - predominant street patterns;
 - plot coverage and the space around existing buildings;
 - transport options and the way people move or travel through the area;
 - land uses;
 - building form and character;
 - areas of cultural or historical significance; and
 - the over-arching cultural and environmental values of the area.
- e. The result of a neighbourhood analysis is often one or two A3 pages, consisting of annotated maps, supporting text and a collection of photos, and can be included as part of the Design and Access Statement.

Section 2: Policy Guidance

2.a) Design Principles

Part A of the Planning and Design Guide SPD sets out seven principles for good development, these being character, continuity and enclosure, quality of the public realm, ease of movement, legibility, adaptability and diversity.

Three additional broad design principles of usefulness, beauty, and durability, are important, universal indicators of good quality design, so have been taken through into this guidance.

- a. New residential accommodation should be designed to ensure that the housing delivered is of high quality and that it accords with housing need set out in the current Local Plan, and that an appropriate proportion of affordable units are provided in line with the relevant Development Plan policies and the Affordable Housing SPD.
- b. The prevailing development typology around the site should be respected (in terms of both its physical form and use), and where possible maintained, unless a departure from this can be justified, e.g. where the established character is weakly defined and requires enhancement to reinforce local identity.
- c. Housing provision should also reflect the prevailing development typology in terms of occupancy, e.g. in areas of predominantly family housing, additional residential accommodation should also be family housing.
- d. The design of new residential development should maintain good levels of amenity for existing neighbouring residents, whilst ensuring good living standards for future occupants.
- e. The following sections describe the key considerations to be taken into account when designing proposals for residential development. In each case the objectives are set out and policy guidance is provided.

2.b) Connectivity and Layout

The urban structure is made up of the street layout and movement networks, including roads, footpaths and cycleways, along with the broad mix of land uses and activities. The integration of new developments with the existing urban structure is paramount to producing developments that respect the prevailing character of the local area. A well-designed urban structure enables the successful implementation of other urban design elements.

People's travel choices are significantly influenced by the layout of a development and its links with surrounding street networks. In general terms, layouts should provide direct routes, be permeable and connect well to surrounding routes in order to offer the greatest opportunities for walking, cycling and travel by public transport.

Objectives

New development should allow and support the safe and convenient movement of people within and between settlements by all modes of transport, rather than act as a barrier to this. In particular, it should not make it more difficult for people to move within or between settlements using sustainable means of transport i.e. means other than private motorised vehicles.

The Council wishes to see new development contributing to an urban structure which is:

- Safe and secure;
- Accessible;
- Logical to understand and find your way through ('legible');
- Provides accessible public amenity space;
- Promotes sustainable travel patterns; and
- Provides a sound basis for developing attractive and liveable neighbourhoods.

i) Connectivity

Guidelines

- a. The chosen layout and connection points of a new development should be informed by the findings of a contextual appraisal which considers the range of facilities and services in the neighbourhood; existing public transport services; public rights of way and routes; and travel desire lines through and around site. The findings can then inform decisions on how the site can connect into the wider movement network and how best to arrange the movement structure of the development proposal.
- b. As part of the design process, it is important to consider how to create an inclusive built environment which meets the needs of all people regardless of or ability. New developments should provide equal convenient access for all potential users, including disabled people, older people, children and families. legible layout will also make it easier for people with sensory or cognitive impairment to work out where they are and where they are going.

Layout of streets and blocks

- c. New layouts of streets, buildings and spaces should respond and connect to existing layouts to provide connectivity and legibility.

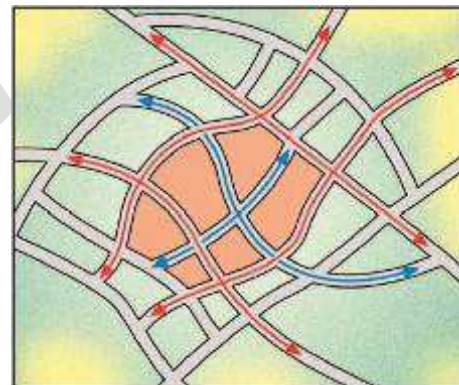


Figure 2.1: Connecting new developments to the existing built form. Red = primary routes, Blue = secondary routes.

cycle
the
best

age
and

A

- d. Proposed street layouts should make walking and cycling more attractive and convenient for short trips than using the private motor vehicle. Distances by foot and cycle paths should be more direct than by car.
- e. The orientation of streets should aim to achieve the greatest possible energy efficiency in subsequent development. An emphasis on achieving an east-west street orientation is usually the most efficient as it allows buildings to face north / south.
- f. A broadly grid-style street pattern will usually enable greater connectivity with the existing road networks. Within any grid pattern, however, there should be sufficient links for pedestrian and cyclists between residential areas.
- g. The perimeter block layout can help provide a pedestrian friendly design solution which integrates well with the neighbourhood. It connects existing and proposed streets and provides direct, convenient routes to local facilities, community infrastructure and bus stops.
- h. In contrast, typical cul-de-sac or spine road style developments produce introverted layouts which lack connectivity with its surroundings, particularly with larger developments. The result of this is convoluted, illegible routes which are less convenient for the pedestrian and cyclist and encourage short car trips.



Figure 2.2: Locating services at major transport junctions and ensuring access to public spaces

Street design

- i. It is preferable that cars, pedestrians and cyclists share the same route as people feel safer on streets where there is natural surveillance from drivers, residents and other users. However to create a safer and more attractive environment residential streets should be designed to encourage low traffic speeds (20 mph or less). Detailed design measures need to be implemented which address junctions, desire lines and road crossings, surfacing, lighting and road calming.
- a. The Council supports the principle of home zones as an effective means of creating a truly shared street where no single use dominates (see Figure 2.3)¹⁰. The key to a home zone is to develop street design that makes drivers feel it is normal to drive slowly and carefully. Features can include physical measures to reduce speeds to below 20mph such as trees and planters, benches and play areas. They also have the additional benefits of fostering community interaction, promoting a sense of ownership of the street and reinforcing the sense of place.
- b. Road layouts should be designed to an adoptable standard in accordance with the guidance set out in the County Council's guidance, whether or not it is intended that they are adopted by the Highway Authority. Where new roads are not designed to an adoptable standard, the onus will be on the applicant to demonstrate why this could not be achieved.



Figure 2.3: example of a home zone in an existing neighbourhood (Morice Town, Plymouth)

Further guidance:

Hertfordshire County Council (the County Council) has the responsibility for designating home zones and additional information on slowing traffic is set out in [Roads in Hertfordshire – Highway Design Guide](#) and the [Hertfordshire Speed Management Strategy](#).

¹⁰ Image from Planet Health Cymru, [Example of practice: Home Zones](#), (study by Institute of Highways Engineers)

Hertsmere Borough Council has also produced a [Streetscape Manual](#) which contains further guidance on improving the public realm in shopping streets.

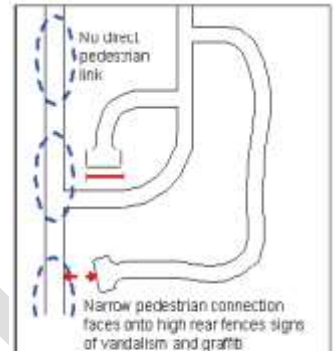
A range of design guidance on home zones has also been prepared by external organisations, including the [Design Council](#) (formerly CABE), the [Institute of Highway Engineers](#) (IHE) and the [Chartered Institution of Highways and Transportation](#) (CIHT).

See also [Manual for Streets](#), produced by the Government Departments for Transport (DfT) and Communities and Local Government (DCLG).

Cycle and pedestrian networks

- j. Additions to existing cycle and pedestrian networks should be integrated into the initial design of developments, and not considered as an afterthought. Materials used for these networks should be robust and of suitable material and quality of construction.
- k. Routes should be kept as near to level as possible along their length and width as this will benefit wheelchair and pram users.
- l. Street furniture should be kept to a minimum in order to avoid obstruction to movement along pedestrian and cycle routes. The [Streetscape Manual](#) contains further guidelines for street furniture layout in shopping areas.
- m. Pedestrian and cycle-only links can be acceptable if they provide a more direct route than the road and are designed well. Such links should be wide, open, short, well overlooked by buildings and barrier free. Streets and footpaths / cycle paths should be well lit at night and should avoid 'blind corners' to improve safety and security. There should be clear demarcation between cycle and pedestrian paths in order to help prevent conflict between users.
- n. Narrow routes enclosed by tall, blank elevations or high, visually impermeable fences should be avoided as they create a sense of claustrophobia and insecurity for the user. Such routes are likely to be poorly used and can attract antisocial behaviour.

Poorly connected site: reduced access to local facilities and public transport and encourages car use.



Well-connected site: direct and overlooked routes for walking means less congestion on local High Street and better use of public

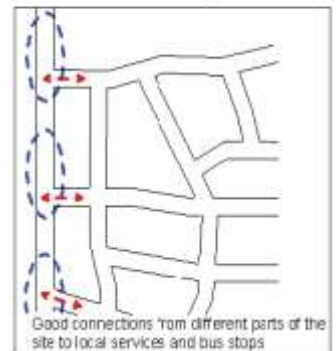


Figure 2.4: examples of poor and good connections (*illustrative example from St Helens Design Guide – to be replaced with our own diagram*)

ii) Layout

Guidelines

Layout and mix of uses

- a. Proposed layouts should make the most efficient use of land and encourage an appropriate mix of uses and densities that support the viability of, and have good access to, local services and transport.
- b. Open space and community facilities should be well integrated and sited in suitable locations with good accessibility, rather than on land which is effectively left over after the scheme has been designed or which simply has the least value.

- c. New residential developments should be located and laid out to provide ease of access to nearby local services and facilities, and to provide the wider community with easy access to any new services and facilities provided as part of the new development. Often the most effective way of achieving this is to ensure that the site is laid out so that new routes connect directly with the existing network of surrounding routes.
- d. Subdividing large sites into smaller development plots, each with direct access to public roads or spaces, can help create diversity, especially if different approaches to design are adopted, e.g. using different architects on larger schemes. Where this approach is taken the designs should contribute to an overall harmony throughout the whole site.

Provision of infrastructure and services

- e. Layouts should provide for public transport services, including lay-bys, build-outs, raised kerbs and passing points where necessary. The design of such infrastructure should be carried out in accordance with guidance issued by the Highway Authority (the County Council).
- f. Adequate arrangements need to be made for the provision of water, electricity, gas, telecommunications, sewerage and drainage services, including pipes and cables when considering site layout, and should form an integral part of a site plan. Applicants should ensure that such facilities meet the Building Regulation and British Standard requirements.
- g. New homes should be sited so that the boundary is never more than 25 metres from where refuse collection vehicles are able to stop.

Layout of building plots within a site

- h. It is considered good practice to design a housing layout incorporating perimeter blocks which ensure that streets are fronted by the active façade of the homes and that private spaces and gardens are located securely facing other back gardens. Public fronts and private backs are made distinct when primary access is from the street.¹¹ This type of layout helps to create a successful and legible design which links with its surroundings and can help foster a sense of community.
- i. In contrast, stand-alone pavilion buildings expose blank facades, parking and servicing areas to the street.
- j. In laying out building plots, the creation of back-land areas accessed by alleyways should generally be avoided to reduce the risk of crime, particularly in urban areas where crime is a particular issue. If access to a back-land area is unavoidable, particular attention will need to be given to ensuring security for people and property and ongoing maintenance.



Figure 2.5: Perimeter blocks accommodate different building typologies which all fit in with the built form of surrounding development.

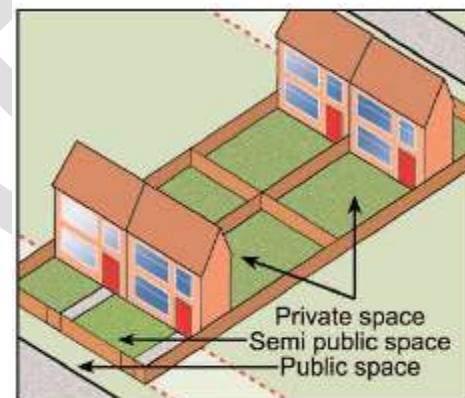


Figure 2.6: Distinction between public and private space.

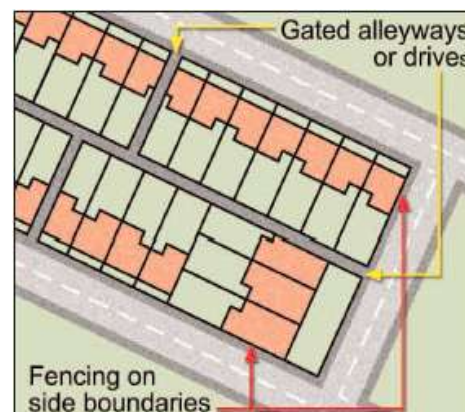


Figure 2.7: Ensuring the security of private backland areas

¹¹ English Partnerships, 2007, *Urban Design Compendium 1*, chapter 3.7.1

'Left-over' land

- k. Fragments of left-over land that are hard to maintain and serve no useful purpose need to be avoided. Spare land remaining after the planning and design process can detract from the appearance of an area and attract litter and anti-social behaviour. The Council will, therefore, seek improvements to layouts which include unusable, left-over land.
- l. It may be possible to formally landscape left-over land and / or maintain it as public or private open space. Where this happens, arrangements need to be made for their upkeep and maintenance and if necessary, these will be secured through a legal agreement or planning condition.

Elsewhere in this document:

Section 3f) ii) Designing out Crime provides additional guidance.

DRAFT

2.c) Streetscape and building layout

Successful urban space is defined and enclosed by buildings, structures and landscape. The relationship between buildings, the street and other spaces and uses nearby, are key to the development of attractive and high quality neighbourhoods. New development should respond to its surroundings and, as such, standard designs are often inadequate.

Objectives

The Council wishes to ensure that the layout of new buildings in the Borough:

- Results in a harmonious and attractive streetscape;
- Conserves and enhances local features and distinctiveness, regardless of the density of proposals;
- Is energy efficient and helps reduce travel demand;
- Create safe and secure built environments;
- Clearly defines public and private space; and
- Creates attractive and functional public and private places.

Guidelines for all sites

Site and building layout

- a. When determining the dimensions of building plots and the siting of buildings, the provision of the following should be ensured:
 - Private open space;
 - Pedestrian access;
 - Disabled access;
 - Vehicle access, including access for cycles;
 - Servicing;
 - Parking; and
 - Meeting the guidelines set out in the Local Plan and this Guide.
- b. New streetscapes should reflect local distinctiveness and character, and should usually include landscaping schemes that maintain that distinctiveness and promote biodiversity. To make sure that landscaping is robust and long-lasting native species should be used that are likely to thrive in local soil and weather conditions. These can create valuable green links between wildlife habitats to enable movement and encourage local wildlife species.
- c. There may be some locations in which landscaping does not form part of the existing local streetscene, so all proposals will be assessed on their own merits, although in general soft landscaping and trees are a welcome feature in most locations.

Further guidance:

Hertsmere's [Biodiversity, Trees and Landscape SPD](#) gives further guidance on designing for biodiversity in developments.

Rhythm of development

- c. To avoid bland or overbearing developments, proposals should create and maintain a harmonious pattern of building sizes and shapes, and spaces in between them.
- d. Developments that integrate features that reflect those of surrounding buildings can help to maintain an appropriate, locally distinctive rhythm of development. Such features include windows, doors, balconies, porches, chimneys, brick patterns, colours etc.

Landmarks and corner sites

- e. Opportunities to enhance or provide vistas, focal points and landmarks should be taken advantage of, to provide legibility and a sense of identity. These can take the form of natural or built features.
- f. The design of corner buildings and those at the end of a street are particularly important. The Council will expect to see a high quality of design in these locations and may resist proposals that do not take account of the site's importance to the streetscape.
- g. 'Landmark' or 'iconic' buildings are not always appropriate and should be avoided where they would over-dominate the streetscene. This is particularly the case in sensitive locations, such as conservation areas, where they can detract from the overall character of the area. Buildings should be attractive and well-designed, and innovation and the use of high quality materials is encouraged, however the majority of the townscape should be made up of attractive background buildings which contribute to the character of the area while being adaptable and durable.



Figure 2.8: example of a corner building

Relationship of buildings to the street

- h. Access to buildings from the street should provide a level access where possible in order to provide access for all. Where a level access is not possible, ramps and handrails, for example, should be included as an integral feature of the design, and should not appear as an afterthought.
- i. New buildings should respect the height and building envelope of existing buildings within the vicinity to help create a balanced streetscape and avoid harm to the amenity of the occupiers of any existing or proposed buildings. New development should help to create an appropriate sense of enclosure. The width of new streets should be proportionate to the heights of buildings and their location (e.g. town centre, suburban, village / rural). A continuous building line, with few significant gaps between buildings, can also help to create a greater sense of enclosure and lines of street trees can have an important impact along otherwise weakly contained routes.
- j. Appropriately scaled buildings and trees should define streets, squares, parks and other spaces. The height of buildings should relate to the width and importance of the space, as well as to the character of the area.
- k. Buildings should not be separated from the street solely by areas of hard-standing such as car parking. Car parking should not dominate building frontages.
- l. Development should aim to mediate between public and private spaces, for example by siting the building to follow the boundary of the street block or through the use of landscaping.

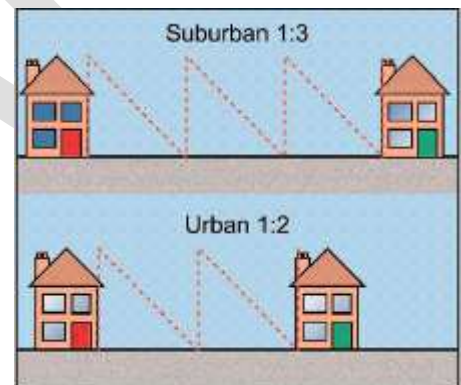


Figure 2.9: Width of new roads proportionate to heights of buildings

Elsewhere in this document:

- Further detail on protecting residential amenity is provided in **Section XX** Privacy and Outlook.
- Setback, height and mass, density, and solar orientation will also be key issues in the arrangement of buildings. These are addressed under separate sections in this guide.

2.d) Density and housing mix

Development should promote the efficient use of land by integrating a range of land uses, housing types, transport options and open space to create diverse and sustainable neighbourhoods that provide access to jobs and services locally and reduce the demand for travel by private vehicle. Numerical densities are a useful preliminary means of assessing the suitability of proposals, particularly for schemes of more than five homes, but will not be the only method of assessing new housing schemes.

Objectives

The Council wishes to ensure that development makes the most efficient use of land, particularly in highly accessible locations, without compromising the character, environment and appearance of existing areas.

Guidelines

Higher density development

- a. The Council expects all development proposals to respect the context of the surrounding area. Higher density schemes will only be considered appropriate where it is clear that proposals are in keeping with and would have no adverse effects on the surrounding area.
- b. The Council will not use numerical densities to assess the suitability of schemes of fewer than five units. Nor will it adopt a prescriptive approach towards the density of any development.
- c. In many parts of the Borough, larger residential developments should be capable of being developed at a density of between 30 to 50 homes per hectare. Where schemes propose a density of greater than 50 homes per hectare, the number of habitable rooms per hectare will also be taken into consideration, to achieve a mixture of housing sizes and to help ensure that the character of the area is maintained. The use of numerical assessments of density will be avoided on schemes of five or less homes.
- d. Higher density developments are most likely to be acceptable in locations with good access to public transport and services, such as town centres, and in locations where this reflects the surrounding scale, massing and pattern of development.
- e. Design solutions should be applied where higher density development is proposed to ensure that proposals do not overly dominate their surroundings. For example, usable underground or under-croft car parking (with appropriate security measures) can help to reduce the visual impact of hard standing associated with car parking, however underground parking areas tend to reduce the environmental sustainability of a development due to the construction techniques and materials used, so may not always comply with Core Strategy Policy CS16. Access roads, car parking and landscaping should contribute to achieving a high quality development.
- f. Proposals for the intensification of existing residential land use, for example, through the replacement of a large house with a series of



Figure 2.10: Traditional low density development in Radlett



Figure 2.11: Newer build medium density development in Shenley



Figure 2.12: Traditional high density development in Borehamwood

smaller properties or where appropriate, through garden land development, will be considered on their individual merits. They should be designed in a manner that achieves adequate garden space, parking space, cycle and bin storage, and without harming the character of an area.



Figure 2.13: Newer build high density development

Elsewhere in this document:

- Further guidance can be found on the redevelopment of previously developed sites in the Green Belt at **Section 2h)** and garden land development at **Section 2e).**

Mix of uses

- g. Mixed-use development – including housing, live-work units, retail, employment, leisure and community facilities will be encouraged on suitable, accessible sites, in particular sites in town centres and close to public transport hubs.
- h. Single-use proposals on larger sites may be resisted where an opportunity to create a vibrant mixed-use scheme in an accessible location would be lost.
- i. Where a site contains an existing or former (i.e. disused) community facility, the Council will seek provision of an alternative community use on-site in line with Core Strategy Policy CS19 unless it can be demonstrated there is no reasonable scope for this type of use.

Mix of housing types and tenues

- j. A mix of housing types and sizes should be provided at both the neighbourhood and site level. The mix provided should reflect the requirements set out in the Local Plan and latest Housing Market Assessment for Hertsmere.
- k. The provision of Affordable Housing should contribute toward social inclusion. Therefore, where Affordable Housing forms a component of a development, it should:
 - Not be distinguishable from private housing by its design and appearance;
 - Not be sited within the least attractive part of the site; and
 - Not normally be sited apart from other housing.

Further guidance:

Hertsmere's [Affordable Housing SPD](#) contains more information on the Council's approach to affordable housing in development.

Adaptable buildings

- l. Adaptable buildings and spaces, that allow for different uses to be accommodated over time as needs and demands change, will be encouraged. (N.B. some future changes of use may require planning permission.)

2.e) Garden land development

A proportion of new residential development in Hertsmere has taken place as a result of building on existing garden land. This type of residential intensification can have a considerable impact on the character and appearance of a neighbourhood, and in 2010 the government changed its definition of 'previously developed land' to exclude garden land, meaning that this form of development is no longer automatically acceptable. This section also applies to proposals which seek to demolish an existing dwelling and redevelop the site including some garden land.

Objectives

Residential gardens are classed as land that has not been previously developed ('greenfield land'). Although residential intensification contributes to the availability of suitable housing it must be sensitively designed to fit with the existing form of development and urban grain of the area. This guidance should be read alongside other sections of this document.

Paragraph 53 of the NPPF does not support the inappropriate development of residential gardens, and the Council's planning policies (Policy SADM3 of the emerging SADM Policies Plan) state that the redevelopment of sites for residential use must be of a scale and design which respects its immediate surroundings including the local pattern of development, and should not result in a tandem development layout.

Guidelines

Definition of garden land development

- a. **The Council considers residential garden land to be usable amenity space within the curtilage of a residential property. This includes communal amenity space, such as that normally associated with flats. It also includes amenity areas that have been covered with a hard surface, such as a rear patio, an outbuilding or any other ancillary structure.**
- b. These guidelines do not apply directly to the extension of existing houses or the replacement of an existing house with a single dwelling. Part E of the Planning and Design Guide SPD is applicable in relation to householder development, and other guidance in this document is relevant to replacement dwellings, in particular the sections on building design and materials.
- c. Garden land development should follow existing building lines and result in the creation of new properties with their own frontage and access directly onto an existing highway. This form of development is generally capable of having a positive impact on the character and appearance of a neighbourhood while making efficient use of land in sustainable locations.
- d. However certain forms of garden land development are generally out of character with the surrounding area, and do not compliment or respect existing patterns of development. These include 'tandem developments' (also known as two tier developments) and other forms of backland development such as the assembly of multiple back gardens will be discouraged as they are unlikely to respect the character of an area.
- e. The Council considers individual planning applications on their own merits because no two proposals or sites are exactly alike; however there is a general presumption against these forms of garden development.

'Tandem' development

- f. 'Tandem development' is where one or more houses is built directly behind another and shares the same access with one or more existing dwelling(s). It may

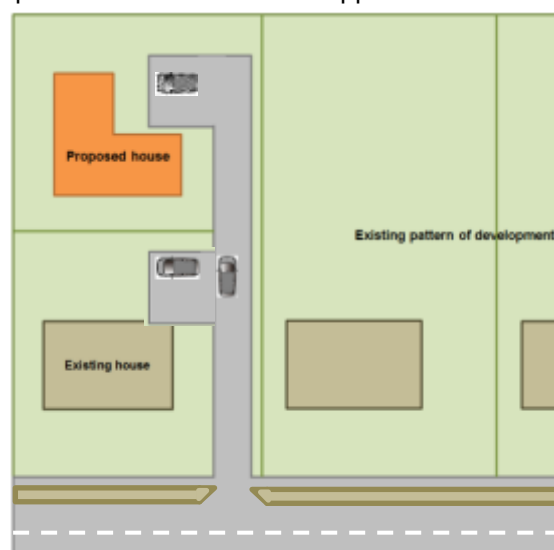


Figure 2.14: A form of tandem development: subdivision of a single back garden.

involve the subdivision of a single back garden or the acquisition of several back gardens (see Figure 2.14)

- g. There is a general presumption against allowing such forms of development because it often results in a detrimental change in the character of an area. This is often through the introduction of a cramped form of development, or large areas of hardstanding.

'Backland' development/ residential intensification

- h. Residential intensification that requires the assembly and development of one or more back gardens with a vehicular access through an existing residential plot is unlikely to address the problems with tandem development described above. Such proposals rarely fit well with the existing character of an area due to the introduction of uncharacteristic street layouts and patterns of development (see Figure 2.15).
- i. This form of development may be considered acceptable if the prevailing character of the surrounding area is already clearly defined by cul-de-sacs of a similar type. If such cases the proposed development should include a highway access to an adoptable standard and have frontage development along its full length.

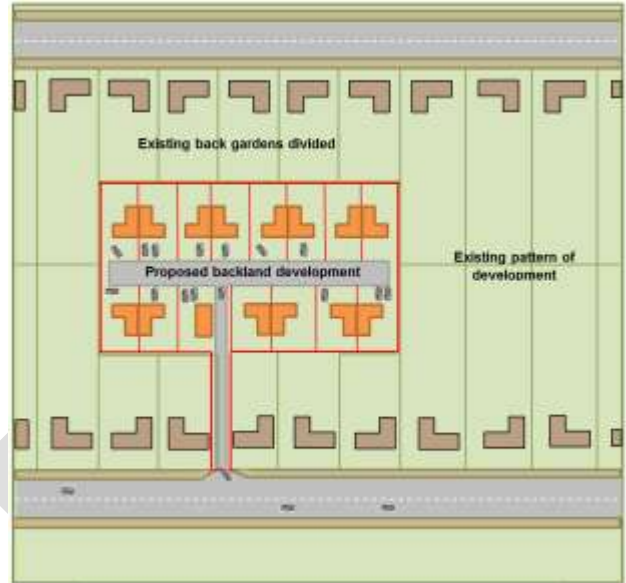


Figure 2.15: A form of backland development: assembly of parts of multiple back gardens with access through existing plot. This form of development is unlikely to fit well with the existing character of an area.

Density, character and form

- j. The density of development resulting in residential intensification on garden land sites should be in keeping with the prevailing density of development in the area.
- k. Proposals should avoid introducing a tandem layout (see paragraph f above) or other layout which does not fit with the prevailing pattern of development in the area and/or which proposes a long access road beside an existing house (see paragraph h above). Proposals that result in a density or scale of development that is out of character with their surroundings will normally be refused. In particular, the Council will resist proposals that would result in higher density development in locations which are unsustainable due to their remoteness or lack of accessibility to services and employment.
- l. Any development which is considered acceptable should take account of:
- Street pattern and block layout;
 - Property type;
 - Solar orientation;
 - Separation distance and sky gaps;
 - Frontage width;
 - Setback and building line;
 - Plot size, including the sizes of front and rear gardens; and
 - Topography and views.
- m. Garden land developments which are considered acceptable should also respect the architectural form, detail and materials of surrounding development but avoid pastiching surrounding building styles. Contemporary architectural styles and construction methods may be acceptable where the buildings are sensitively-designed and relate well to their context. The preceding sections of this document should also be consulted to ensure that the proposed built form is acceptable in its context.

- n. Where the development of any garden land is considered acceptable, the Council will also expect all healthy trees and hedges with ecological and amenity value be retained. Where the removal of healthy trees and hedges is necessary, compensatory planting will be expected. This is because the vegetation and green areas usually present in large back gardens contribute significantly to the character and appearance of an area, particularly where they are visible from the highway, such as in side gardens.
- o. Any new plots that are created as a result of the sub-division of existing sites should be appropriately landscaped. Landscaping should reflect the character of the area and enhance the setting of a building. A landscaping scheme should be prepared at the design stage of any proposal and submitted in support of a planning application.
- p. Design and Access Statements should clearly set out the design process, including how the proposal has developed in response to existing local patterns of development.

Further guidance:

Design Council guidance: [Design and Access Statements: How to write, read and use them.](#)

Residential amenity considerations

- q. The amenity of the occupiers of existing houses can be detrimentally affected by all forms of garden land development, due to the potential for greater overlooking and impact on the outlook from neighbouring dwellings. The amenity of the future residents of the proposed development is another important consideration which needs to be factored in at the early design stages.
- r. There should be no unacceptable reduction in the level of garden space as a result of residential intensification. The Council will expect that existing residential properties retain gardens that exceed the minimum guidelines set out within Section 3d) of this document. Any new properties should also exceed these guidelines. There should be adequate distance between new and existing properties, where applicable, to ensure an acceptable level of privacy. Minimum separation distances to ensure privacy are set out within Section 3b) of this document.
- s. New properties built on garden land should not significantly reduce sunlight to the habitable rooms of existing neighbouring properties (including kitchens), and should not impact negatively on their outlook. Likewise, existing neighbouring buildings should not cause an unacceptable level of overshadowing to any new properties. Section 3b) covers these considerations in more detail.
- t. In cases where new plots are accessed through an existing plot, or through a gap between existing plots, there should be substantial separation between existing properties and any access road. This is to protect residential amenity and minimise the disturbance caused by traffic movements. The edge of a proposed carriageway, including footpaths, should be a minimum of 2 metres from any blank elevation of an existing property, a minimum of 3 metres from any window or door serving an ancillary room in an existing property, and a minimum of 5 metres from any window or door serving a habitable room in an existing property.

Access and parking considerations

- u. The impact of garden land development on highway safety is an important consideration. The intensification of use of the land brings with it an increase in both motorised and non-motorised traffic around the site, so it is essential that these additional movements can be accommodated safely. Tandem development in particular can impact on highway safety through the introduction of long narrow access roads and small plot sizes with insufficient space for vehicular manoeuvrability within the site.
- v. Where garden land development is considered acceptable it should not result in an inadequate level of car and cycle parking provision at new or existing properties. Sufficient parking should be provided for all residential properties in accordance with the Council's [Parking Standards SPD](#). It

should also be noted that, when assessing proposed parking levels in relation to cases of residential intensification, any likely increase in pressure on on-street car parking will be taken into account. Residents of new developments within existing Controlled Parking Zones (CPZ) will not be eligible to receive car parking permits, hence the importance of providing adequate off-street parking.

- w. Adequate arrangements should be made for pedestrian and vehicular access between the existing highway and any new residential plots. The Council will expect there to be no negative impact on the safety and operation of the highway as a result of the development, and the Council will normally view several houses being accessed off of a single, narrow road as unacceptable. The safety of non-motorised road users, including pedestrians, should be prioritised and footways provided on access roads and drives.
- x. The Council will expect access roads in new developments to comply with the County Council's Highway Design Guide *Roads in Hertfordshire*, including the standards for footways. Footways should be of a suitable width to allow people using pushchairs and wheelchairs to pass easily. For a road with speeds of below 30mph, the recommended footway width is 3.1m, and the minimum acceptable footway width is 2.0m. Minimum carriageway widths should also comply with the County Council guidance; for a shared surface road or home zone this is 4.1m, for other road types it is wider.

Further guidance:

Hertsmere's [Parking Standards SPD](#) contains detailed guidance on the levels of parking expected within new developments as well as the design and layout of these.

Hertfordshire County Council guidance document titled [Roads in Hertfordshire – Highway Design Guide](#).

2.f) Views and landmarks

Views may be long distance, short distance or panoramic views of special features such as a listed building, landmark or landscape feature or important public space. Views and landmarks help to define a place, and are often elements that people remember when recalling the character of a particular place.

Objectives

The Council wishes to encourage developments which:

- Protect or enhance existing views which contribute to the character of a place; and
- Creates new landmarks and views where these enhance the character of a particular location.

Note: 'views' in this context does not mean the view enjoyed by an individual from a window or garden, but public views which highlight defining features of a town or village.

Guidelines

- a. Developments should protect views where they already exist, or provide an opportunity to open up a view that had previously been obscured.
- b. A development scheme may itself form a focal point within a view from outside the site and should be designed to reflect its visibility. A suitable architectural response will be sought where a development closes an existing view.
- c. Where new views are created they should add to the character and individuality of an area, using buildings to define the edges of this view. Such views can add interest to an area and can help the visitor to orientate through the space.
- d. Landmarks should be well related to the buildings and spaces surrounding them. They should add to the individuality of a space.
- e. Landmarks should be locally relevant, using local artists, or be related to the local character.
- f. Landmarks and focal points can also take the form of natural features such as trees or landscapes. The use of locally native species would be preferred as these are more likely to thrive in local soil and climatic conditions and support local biodiversity.
- g. New views and vistas created by new development should, where possible, focus on memorable buildings and landscape features.



Figure 2.16: High buildings – emphasising a point of civic or visual significance



Figure 2.17: Figure 25: Protecting views and 'sky gaps' between buildings.

Elsewhere in this document:

- **Section 2l)** addresses Taller Buildings
- **Section 2n)** addresses separation distances between buildings in order to maintain sky gaps

2.g) Site layout: urban areas

Guidelines for sites in urban areas

Site and building layout

- a. The siting of buildings should avoid creating places where people or property can be hidden or concealed areas (see also Section 3f) ii) Designing out Crime).
- b. The siting of buildings should avoid creating places where people or property can be hidden or concealed areas.

Relationship of buildings to the street

- c. Development should respect the existing street pattern, create active frontages and provide buildings that front streets and integrate with surrounding development rather than being isolated within a site.
- d. Buildings should be orientated to address streets and public spaces. All main entrances and doors should be visible from the public realm. Where a building sits on a corner site, it should turn the corner and address both frontages. Development that follows the boundary of the street block will help to create a clear distinction between public and private space.
- e. In urban environments where there are known to be security issues, blank flank walls that face toward the street should be avoided. Continuous building frontages will be preferred so as to maintain surveillance of the public domain from the windows of buildings.

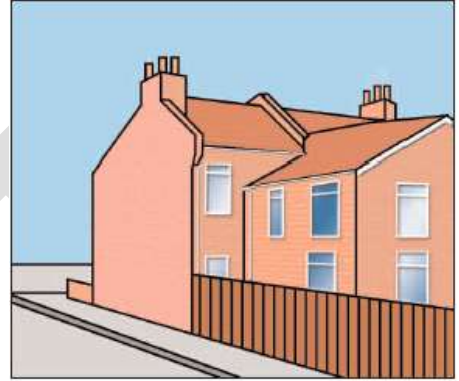


Figure 2.18: Blank wall facing the street – not typically acceptable in urban areas.

2.h) Site layout: previously developed land (PDL) in the Green Belt

Previously developed land (PDL) is land which is or was occupied by a permanent structure, including the curtilage of that structure (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes land used for agriculture or forestry buildings, minerals extraction, landfill, sites where structures have blended into the landscape and land in built-up areas e.g. parks and gardens.¹²

The NPPF allows for the infilling or redevelopment of such sites provided there is no greater impact on the openness of the Green Belt and the purpose of including the land within it than the existing development.

Objectives

The Council wishes to ensure that development on previously developed sites in the Green Belt results in high quality design that:

- has no greater impact on the openness of the Green Belt than the existing development;
- does not harm the other purposes of including land within the Green Belt as set out in the NPPF;
- is sensitive to surrounding built and landscape features both on and off the site.

These principles also apply to any development proposals on sites allocated as Safeguarded Land in the Local Plan, provided proposals also accord with Safeguarded Land policies in the Local Plan.

Guidelines

Site and building layout

- a. Development layouts should conserve and enhance a site's natural features (such as streams, wetlands, ponds, hills, trees, wildlife habitats, rock outcrops) to maintain local distinctiveness and character and to help promote biodiversity and conserve protected species.
- b. The impact on the openness of the Green Belt of cumulative small developments in one area will be considered.

Relationship of buildings to their surroundings

- c. When redeveloping Green Belt sites, the openness of the Green Belt should be improved wherever possible.
- d. In most cases it is preferable to concentrate the proposed buildings in a limited area of a site. Clustering buildings together more closely reflects historic patterns of development in villages in Hertsmere, while suburban layouts do not improve the openness of the Green Belt.
- e. Large buildings, including substantial 'executive' homes, spaced out across the site are not considered to maintain the openness of Green Belt sites. This type of layout tends to create a suburban-style development, which is not compatible with the Green Belt or many of the Borough's historic villages.
- f. Existing buildings do not always provide a good basis for the layout of previously developed sites in the Green Belt. This can apply to buildings which pre-date the designation of the Green Belt. Existing buildings are often unattractively designed and may not have required planning permission



Diagram 2.19: an acceptable site layout on the edge of a village in the Green Belt.

¹² NPPF 2012 [Glossary](#)

to build, so it should not be presumed that the existing layout is the most appropriate placement of buildings on the site.

- g. Where a site is located on the edge of a settlement or large existing development, concentrating the built form of new development closer to the existing built-up area can reduce the impact on the openness of the Green Belt. Care should be taken to ensure that the new development respects the character of the existing settlement, particularly where the settlement is designated as a Conservation Area.

Relationship with surrounding open land

- h. On elevated/hillside sites, the visual impact of development can be mitigated to a degree through the use of screening. Trees and hedgerows provide an effective natural screen as well as a habitat for some forms of wildlife. The introduction of fencing, gates and other formal boundary treatments can significantly harm local character and the openness of the Green belt, so will be carefully controlled as part of any new development.
- i. Landscape Character Assessments provide a useful resource in identifying the wider context of a development site.

Materials

- j. In rural locations, the materials should not stand out from their surroundings, particularly when viewed from the surrounding countryside and public rights of way.
- k. Where new development is attached to a village it should be constructed in the local vernacular, using locally-prominent materials to help it to blend with existing development in the area, and to reduce its visual impact when viewed from the Green Belt.
- l. The visual impact of new development can also be mitigated through the careful use of materials. On highly visible sites, materials which are lighter in colour and blend in with the sky, or which are of a similar colour to the surrounding landscape are preferred.

Further guidance:

- Government guidance on the classification of previously developed land and the purposes of Green Belts can be found within the National Planning Policy Framework
<http://planningguidance.communities.gov.uk/blog/policy/>
- Hertfordshire County Council has produced [Landscape Character Statements](#)

2.i) Public realm

Public spaces comprise areas such as parks, squares, streets, playgrounds, footpaths and cycle paths. The design of public spaces and the buildings that front them contributes to the shaping of the public realm. Public spaces can also consist of urban green space that can be designed to positively contribute to local biodiversity and can improve the quality of life and health of users. This guidance is applicable to developments that provide publicly accessible buildings with new public spaces and should be read in conjunction with the Council's Streetscape Manual

Objective

The Council wishes to ensure that new developments provide public space which is:

- Attractive;
- Accessible;
- Functional;
- Safe; and
- Enjoyable.

Guidelines

- Developments should make sure that public spaces have a function, such as adding to a pedestrian network. These spaces should be fully accessible to all users (including for people with disabilities) and should not be restricted to users of the surrounding new development.
- Where developments contain public and private spaces that adjoin, careful consideration should be given to how the two spaces interact. The scheme should provide for security and privacy of the private space, without creating hostility or obstruction within the public space.
- Buildings should have active frontages where they adjoin public spaces. This increases overlooking and security.
- Landscaping and street furniture (such as trees and light columns) should be designed to enhance the character of an area and to minimise loss of privacy and light intrusion. They can also be used as informal boundaries between public and private spaces.
- Public spaces and street furniture schemes should be designed to ensure ready access to utility infrastructure for maintenance purposes. Junctions and streets should be designed as public spaces, and not just as traffic routes.
- The design of public spaces should take account of local climatic conditions, including daylight, wind, temperature and frost pockets.
- Any landscaping schemes should consider the use of locally native species that are more likely to thrive in local climatic conditions.
- Buildings should be designed to create effective boundaries between private and public spaces. Where buildings enclose a public space the space should be designed with a purpose that enhances the character and use of the buildings surrounding it. Spaces should not be treated as areas that are simply not built upon.

Further guidance:

Hertsmere's [Biodiversity, Trees and Landscape SPD](#) gives further guidance on designing for biodiversity in developments.

Security in the public realm

- h. Public spaces should be overlooked from buildings throughout the day and night. They should be well-lit and use high quality, suitable materials. Public spaces should therefore be designed with surrounding buildings being used for a mixture of uses on the ground floor.
- i. The use of CCTV within developments in public places can enhance the security of a location. It can however, increase the amount of clutter through the cameras themselves or their associated signs. Integrating these in to the overall design of the development can increase the effectiveness of surveillance, whilst reducing the visual clutter of CCTV systems. CCTV systems should use innovative design solutions to reduce the possibility of being vandalised, whilst making them visual, yet non-obtrusive.

Lighting

- j. Public space, including car and cycle parking areas, should be well lit in order to aid security and natural surveillance. Energy efficient lighting and lighting powered from renewable sources (e.g. solar powered) should be used wherever possible.
- k. The choice of lighting should be appropriate to the space being lit and avoid unnecessary energy use and light 'spillage', particularly on locations visible from the Green Belt or in other sensitive areas. Where bats are known to be present, advice on lighting should be sought from a qualified expert. In other sensitive areas, low-level bollards or footlights could be more appropriate to light footpaths than lamp columns, which could cause areas of shadow or shine into residential windows.

Street furniture and art

- l. Large areas of public space within a new development should include provision of street furniture and public art.
- m. Public art should have local significance and be well related to the buildings or space surrounding it. Public art should be sited in a location that, whilst being eye-catching, should not cause highway or pedestrian safety concerns.
- n. Street furniture schemes should be attractive and functional and should be integrated in to the initial design to avoid later additional items that will create clutter and obstruct movement through the area.
- o. Bespoke designs of street furniture should be used to enhance spaces and create a sense of place and character.



Figure 2.20: a careful choice of street furniture and making use of existing street furniture (e.g. lamp posts) for multiple signs can enhance the quality and character of a place.

Further guidance:

Hertsmere Borough Council has also produced a [Streetscape Manual](#) which contains further guidance on improving the public realm in shopping streets.

Consideration should be given to BS 5489-2013 when designing a lighting scheme.

2.j) Demolition and Replacement of Buildings in Conservation Areas

Planning permission is required to demolish most unlisted buildings in Conservation Areas.¹³ Many buildings within Conservation Areas make a positive contribution to the area as a whole and the reasons for its designation, while others either make a neutral or negative contribution. It is recognised that Conservation Areas need to be allowed to change in order to remain vibrant, viable places, but this has to be balanced against the need to preserve the special qualities of the area which were the reason for its designation.

Objectives

The Council wishes to ensure that unlisted *buildings within Conservation Areas* are retained where they make a positive contribution to the character and appearance of the area.

These are general guidelines which apply to all Conservation Areas in Hertsmere. Conservation Area Appraisals are available for many parts of the Borough, and where available, these should be consulted as they provide detail of the features and buildings which are of particular significance in each area.

Guidelines

Demolition in Conservation Areas

- a. Consent will normally be refused for the demolition of buildings that are identified by the Council as making a positive contribution to the character and appearance of Conservation Areas. Buildings which make a positive contribution are discussed in the relevant Conservation Area Appraisal.
- b. If planning permission is granted for demolition of any building, the Council will seek to ensure that replacement buildings protect, conserve or where possible enhance the character and appearance of the Conservation Area as a whole.
- c. In cases where the existing building has a negative impact on the area, the Council will still expect a high quality replacement building which preserves or enhances the character of the Conservation Area.
- d. Listed Building Consent is required for the demolition of any statutory listed building, and there is a clear presumption against allowing this. Replacement buildings will be expected to be of a very high quality.

Guidelines for replacement buildings

- e. Replacement buildings should preserve or enhance the character of the Conservation Area.
- f. Contemporary and modern styles of building may be appropriate within Conservation Areas if they are of a high quality and sensitively designed.
- g. While the Council welcomes the use of 'green' building methods and technologies, (e.g. green roofs, passive solar/photovoltaic panels), where these are proposed in a Conservation Area the impact on the character and appearance of the area needs to be carefully assessed.



Figure 2.21 solar roof tiles can be less visually intrusive than solar panels.

¹³ Buildings with a volume not exceeding 50 cubic metres do not need permission because this does not amount to development under the [Town and Country Planning \(Demolition – Description of Buildings\) Direction 2014](#). Buildings with a volume less than 115 cubic metres (not included in (a) above) is permitted development under Part 11 of Schedule 2 to the [Town and Country Planning \(General Permitted Development\) \(England\) Order 2015](#) subject to conditions set out in the Order. Listed Building Consent is required for works to listed buildings.

- h. Solar panels can be particularly visible and have a significant impact on the character of an area. For this reason they should only be used in Conservation Areas where they will not be visible from a public location. In some cases the use of solar roof tiles may help to reduce the visual impact.

Materials – windows, doors and other detailing

- i. Plastic window frames and doors are not felt to be able to replicate the quality and appearance of original timber windows in conservation areas. When used in highly visible parts of a building it can have a negative effect upon visual appearance, so will not normally be permitted in conservation areas.
- j. It is expected that the style and materials used in replacement windows and doors will fit with the character of the building and the area.

Further guidance:

Conservation Area Appraisals are available at: www.hertsmere.gov.uk/conservationareas
Historic England guidance, [*Building in Context*](#)

2.k) Height, massing and roof forms

The height and mass of new buildings and extensions to buildings are essential considerations in creating a development that makes a positive contribution to its surroundings rather than one that has an uncomfortable relationship with its neighbours.

Objectives

The height and mass of all new development in the Borough should:

- respect and enhance the character of the area;
- contribute to a harmonious street scene;
- minimise visual intrusiveness; and
- maximise privacy and light to proposed and existing buildings.

Guidelines

- All development should respect the scale, massing and height of neighbouring buildings as well as the local topography and dominant pattern of building heights. The height and massing of buildings is traditionally greater towards the centre of towns and neighbourhoods. Reinforcing this trend will mean that most efficient use is made of land that is particularly central or well-connected relative to local facilities and sustainable transport links.
- The height, mass and bulk of new development should contribute to a harmonious street scene, generally reflecting the topography and scale of the street. Where there are a variety of building heights within a street, a proposal that meets an average of the height of buildings either side or takes its cue from adjacent buildings will normally be considered acceptable. The presence of existing buildings which stand out as being inappropriate in the streetscene will not be taken as a precedent for allowing new buildings which appear out of scale or which have an inappropriate mass or bulk.
- As well as reflecting the overall height and mass of existing buildings around the site, proposals should also reflect and relate to the general proportions and storey heights of these buildings so as to appear less visually dominant.
- The massing of a new building should be in response to its surroundings, including other nearby structures, and it is important that it relates to surrounding public spaces at a human scale and does not dominate the area in order to help retain or create a sense of place.

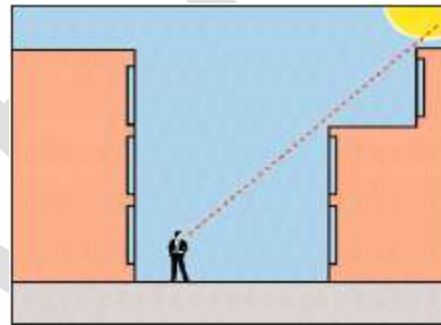


Figure 2.22: Setting the upper floor back from the front building line may help reduce the visual bulk and mass.

Height

- Where the ridgeline of existing buildings forms a dominant feature in the area, the ridge height of proposed developments should generally not exceed this ridge height.
- In some cases taller buildings may be appropriate, for example to signify a place of civic, commercial or visual importance, to highlight the location of a town centre or transport hub, or where higher density development is desirable in order to make efficient use of land in appropriate, sustainable locations. A 'taller building' is one which is unusually tall for its location.
- Taller buildings should interact positively with surrounding buildings, resulting in buildings of architectural merit and interest, but which do not have an overbearing impact on the surroundings. The ground floor of a taller building should relate to surrounding streets and public spaces at a human scale through its ground floor use, design and detailing. Any taller building should also show consideration to the height and mass of neighbouring buildings, for example by stepping down to its neighbours or being wrapped with smaller, appropriately scaled adjoining buildings.

Elsewhere in this document:

Section 2I) provides further guidance on Taller Buildings.

Width and depth

- h. Buildings should be modulated to help break up their bulk and avoid them from being unusually wide and / or deep. The use of superficial design elements alone (such as varying materials and colours) will not be sufficient to successfully achieve this goal, and instead the built form itself should be broken up. This could be done, for example, through using projecting and / or recessed elements, blocks of varied heights, balconies, and the design of roof forms or a physical separation between blocks. Breaking up large blocks with narrower vertical elements can help to soften the appearance of otherwise bulky buildings.



Figure 2.23: Example of a crown roof used to create additional habitable space in the roof.

- i. New buildings should be designed to complement, rather than visually dominate, their surroundings. Modern and contemporary styles are appropriate where they positively contribute to the character of the area. Developers will be encouraged to move away from corporate architectural styles to ensure that new buildings respect and reflect local character.
- j. Where the topography of a site or its locality contributes to the dominant appearance of a proposed building, positive use should be made of changing ground levels across a site to avoid increasing their mass (e.g. stepping a building up a slope).
- k. Where buildings are set at an angle to the street their mass can appear greater. Detailed consideration should be given to the design of such proposals to avoid creating a bulky or overbearing building, which is less likely to be considered to be appropriate.



Figure 2.24: Using a half hipped roof can reduce the bulky appearance of living space within the roof compared with a gable or crown roof.

Roof forms

- l. Crown roofs can often appear bulky or overbearing, so should usually be avoided in residential developments. All applications are considered on their individual merits, so there may be situations where proposals incorporating crown roofs will be acceptable, for example where they are an integral feature of the existing streetscene.
- m. Where living space in the roof is required Consideration should be given to roof types other than crown roofs which may allow the incorporation of living space into the roof in a way that does not result in such a visually bulky form. Examples include:
- half hipped roof. This can reduce the bulky appearance of the roof while allowing room for living space within the roof.
 - small and / or recessed dormer windows. These can provide light to rooms in the roof while retaining the lighter appearance of a full pitched roof.

- traditional Mansard or Gambrel roof. This can give the appearance of a lighter roof form providing the design does not make the building appear top-heavy.



Figure 2.25: Gambrel roof
(<http://www.geograph.org.uk/article/Roof-Types#mansard>)

(Images to be replaced before adoption)



Figure 2.26: A recessed dormer (<http://www.builderbill-diy-help.com/dormer->

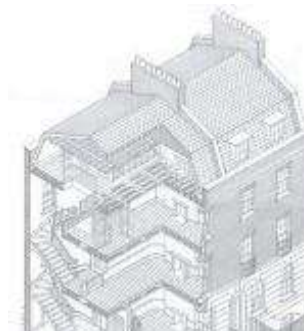


Figure 2.27: Mansard roof form
(image taken from <https://historicengland.org.uk/images-books/publications/london-terrace-houses-1660-1860/>)

Elsewhere in this document:

- **Section 2I)** addresses Taller Buildings
- **Section 3b)** covers privacy and outlook

2.1) Taller Buildings

A 'taller building' is one which is particularly tall in relation to its context and its proportions, so a specific height threshold is not set in this guidance. In the right place, well-designed taller buildings can make a positive contribution to urban life, however if they are in the wrong place or are not well-designed, taller buildings are overbearing and seriously harm the qualities that people value about a place due to its widespread visibility.

The intensification of land uses, particularly in constrained areas, can aid the delivery of new homes other forms of development in more sustainable areas which are closer to services and public transport infrastructure. At the same time they can help to alleviate pressure on green field sites and sites in the Green Belt and other less sustainable locations.

Objectives

The Council wishes to ensure that taller buildings;

- do not dominate over existing significant features of an area;
- form part of developments which are at an appropriate density for the area;
- create a street frontage which is at a human scale;
- avoid creating wind tunnels and excessive shading to surrounding buildings.

Guidelines

- a. Taller buildings are those which exceed typical buildings heights for the locality. This guidance does not specify a height threshold above which a building is classed as a 'taller building'. This is in order to allow assessments to be made in relation to the context on each individual site.
- b. Taller buildings may be appropriate in certain situations, for example to signify a place of civic, commercial or visual importance, to highlight the location of a town centre or transport hub, or where higher density development is desirable in order to make efficient use of land in appropriate, sustainable locations.
- c. Many of the issues associated with designing taller buildings will be the same as with other developments, so the basic approach should be the same, with careful consideration being given to the context and sense of place. It is particularly important that taller buildings follow exemplary design standards because they are more noticeable than other buildings and are capable of having an impact across a wide geographical area.
- d. Good design will take the opportunities available for improving the character of an area (NPPF paragraphs 58 and 64), so the height of a building should be guided through careful consideration of how it will relate to the width of the street and to neighbouring buildings, and of whether the density of use within the building is appropriate for the location.
- e. In the majority of typical residential neighbourhoods in Hertsmere, few buildings are taller than 3 storeys – or around 12m – in height, while in other parts of the Borough, such as parts of the Elstree Way Corridor in Borehamwood and around Potters Bar station, buildings of 6 to 7 storeys – or around 21m – or higher may not look out of place.
- f. For developments proposed within the Elstree Way Corridor in Borehamwood, the guidance in this SPD should be used alongside the policies in the Elstree Way Corridor Area Action Plan (EWCAAP) 2015. Policy EWC7 General Building Heights sets out areas in which particular building heights (expressed in storeys) should not be exceeded unless there would be no adverse impact on the living conditions of neighbours and the building has been designed with an awareness of their likely impact on their immediate surroundings and the wider area.
- g. Taller buildings are capable of being very energy intensive during their construction and use. The Council expects that they will conform to Policy CS1 Environmental Impact of Development, as well as the other sections of this guide which relate to sustainability and energy use.

Form and massing

- h. All proposed buildings should pay careful attention to their surroundings in all aspects of their form, including their massing. Taller buildings should relate to surrounding public spaces at a human scale, respond to nearby architectural styles and help to retain or enhance the sense of identity of their location.
- i. Taller buildings should not be used purely for the sake of creating an 'iconic' building, or just to put a location 'on the map'.
- j. Taller buildings are capable of creating wind tunnelling and vortex effects where their setting is poorly considered. This often happens in situations where a tall building is set in a fairly wide square or plaza, surrounded by other buildings with wide gaps in between them.

Relationship with the street

- k. The relationship of a building to the streets and / or public spaces that surround it can make the difference between successful and unsuccessful design. Tall buildings present a particular challenge because they can easily appear out of scale and cut-off from the area if they do not relate to their immediate surroundings at a human scale and provide features which are recognisable and welcoming at street-level.
- l. The ground floor of a tall building should relate to the surrounding streets and public spaces through its use, form and detailing. Taller buildings should also show consideration for the heights of neighbouring buildings, for example stepping down to its neighbours or being wrapped in with smaller, appropriately-scaled adjoining buildings.

Taller buildings in Conservation Areas / near designated heritage assets

- m. Where taller buildings are proposed in or close to Conservation Areas and designated heritage assets, their design should be assessed in the same way as other applications for development which affects heritage assets.
- n. The design of taller buildings in these locations must relate well to and not detract from heritage assets and their setting. This includes considering any impact on views of heritage assets, particularly key views which help to form a key impression of the character of a place.

Further guidance:

- Historic England Advice Note 4 – Tall Buildings
- Conservation Area Appraisals have been carried out for some Conservation Areas in the Borough. These can be viewed at www.hertsmere.gov.uk/conservationareas

Further reading: Heritage policy

The [Site Allocations and Development Management \(SADM\) Policies Plan](#) sets out Hertsmere's policy on development which affects the historic environment. Policy SADM30 – Heritage Assets requires the retention of important open spaces and views, and that proposals do not harm the setting of a listed building.

2.m) Setback and building lines

'Setback' refers to the distance that a building is located from its boundaries to the street and to neighbouring properties. Buildings that relate to a common building line define and reinforce the street. Building setbacks should respect the character of the local area, the setbacks of other buildings in the street (particularly those next door), and the privacy and solar access of adjoining properties (see also Privacy and outlook).

Objectives

The Council wishes to ensure that new development across the Borough provides setbacks that:

- Complement the streetscape;
- Avoid impacting on the light, privacy and outlook of neighbouring properties;
- Provide flexibility in the siting of buildings; and
- Allow for suitable landscaping and open space.

Guidelines

- a. Setbacks should contribute toward a harmonious and attractive streetscape.
- b. The ground floor setback of buildings, for example, in primary and secondary retail frontages should aim to maintain a lively street frontage and direct access between buildings and the street. New shops should not be separated from primary or secondary frontages by areas of car parking.
- c. The front and rear building lines of new development should have regard to:
 - the corresponding setbacks of neighbouring properties and the character of the area;
 - the amenity of adjoining properties and future occupants (in particular solar access and visual privacy)
 - the potential to provide emphasis and variety to the streetscape through the use of discrete projections and setbacks from the building line, where this would not compromise continuity and the local character.
- d. Side building lines and elevations should have regard to:
 - The amenity of adjoining properties and future occupants (in particular solar access and visual privacy);
 - The need to avoid preventing neighbouring properties from extending;
 - The need for access to the rear of the property;
 - The pattern of gaps between buildings in the street; and
 - The retention and enhancement of views from a public place to significant local landmarks, trees and even sky through gaps between buildings.

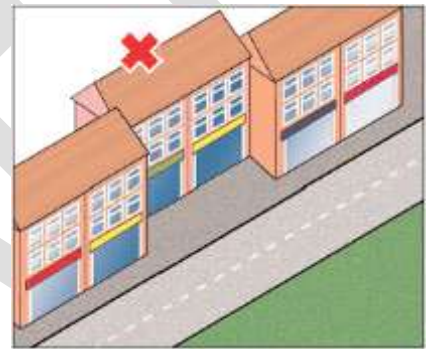


Figure 2.28: Inappropriate set back from building line in a shopping parade

Corner plots

- e. New homes developed on a corner plot with a road or footpath alongside it are likely to be visible from the public highway. In these circumstances, the development should be set back from the building line in each street, unless the prevailing pattern of development indicates otherwise.
- f. The impact of the new building on the character and appearance of the street will be assessed. Proposals that would result in an unsympathetic or bulky addition to the street scene will be refused. New homes developed on corner plots will be subject to other guidance contained in this guide. Any illustrations, artists' impressions or graphics accompanying a planning application should present a realistic picture of the planned development and its setting.

2.n) Separation distances between buildings

'Setback' refers to the distance that a building is located from its boundaries to the street and to neighbouring properties. Buildings that relate to a common building line define and reinforce the street. Building setbacks should respect the character of the local area, the setbacks of other buildings in the street (particularly those next door), and the privacy and solar access of adjoining properties (see also Privacy and outlook).

Objectives

The Council wishes to ensure that new development across the Borough provides setbacks that:

- Complement the streetscape;
- Avoid impacting on the light, privacy and outlook of neighbouring properties;

Guidelines

Minor infill developments and side boundary separation distances

- This type of development must take account of immediately adjoining buildings and those in the wider area.
- In those locations in the Borough where there is a significant separation between buildings, this should be retained in small infill developments. In such locations the street scene is likely to be characterised by spacious plots, clear visual breaks between houses and a low density of development.
- Proposals in areas where there is significant separation between buildings should ensure that all floors of buildings are located at least 2 metres away from the side boundary. A greater distance will be required in many locations to ensure that sky gaps are retained.
- In locations where buildings have little separation between them, infill developments should place new buildings at least 1 metre away from the side boundary.
- In all cases where bungalows are replaced by taller buildings, a minimum 2m gap should be maintained between the side elevations of the buildings and the property boundary. In some cases the upper floor of the replacement building may need to be set further away from the boundary than the ground floor.

Key points

Area type	Development type	Distance sought between building and boundary
Areas with significant separation between buildings	All	>2m
Areas with little separation between buildings	All	>1m
All areas	Bungalow replaced by taller building	>2m gap at least at upper floor level

2.o) Solar orientation and natural sources of energy

Buildings and developments that are designed to take advantage of natural light and heat can significantly reduce the cost of lighting and heating bills over the building's lifetime, and use less finite resources in the process. This section should be read in conjunction with Parts F, J, L and N of the Building Regulations.

Objective

As part of its commitment to the principles of sustainable development, the Council wishes to ensure that all new buildings maximise the use of natural heat and light, and minimise the use of energy. The Council will expect applications to demonstrate how good practice has been applied to all applications.

Guidelines

- Buildings should be designed to make the optimal use of natural light and warmth, so as to minimise the use of energy for lighting, heating and cooling.
- The number of south facing homes should be maximised.
- The use of renewable energy sources, particularly solar panels and solar water heating, will be encouraged.
- Roofs with solar access, particularly those facing south, should be designed to accommodate solar panels and / or water heating (whether installed at the time of construction or potentially in the future).
- Developments should have regard to good practice in respect of energy, natural ventilation, noise insulation and water conservation.
- Developments should consider the integration of green roofs into designs where the solar orientation does not favour solar access, but would support the growth of green roofs, i.e. those that face east or west. Green roofs can promote biodiversity whilst providing insulation.
- The main habitable rooms of new homes should wherever possible, be south facing, or otherwise designed so as to maximise natural light and warmth to habitable rooms.
- North facing rooms could have smaller windows in order to reduce heat loss.
- Development should not reduce the ability of neighbouring properties to take advantage of natural light and heat sources.

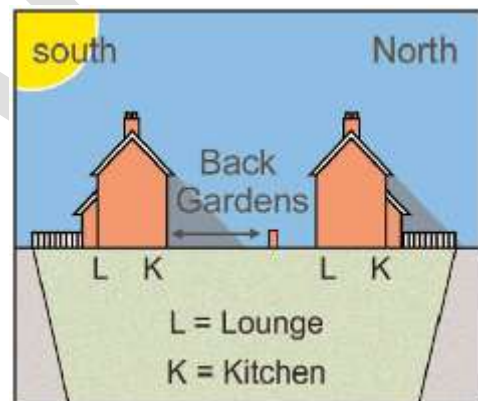


Figure 2.29: Larger north facing gardens

Further guidance:

'Sustainable Energy By Design' provides more information on designing sustainable buildings. The Guide is available on the Town and Country Planning Association website.

2.p) Front gardens and boundaries

The use of well-designed front gardens and boundary enclosures is essential in providing clear ownership and responsibility for all open areas around a new development. Front boundaries can also protect the inhabitants of buildings from noise and air pollution and enable natural ventilation. All schemes should include proposals for defining all boundaries and details of the proposed treatments, without creating a 'fortress' like environment for the residents of or visitors to the development.

Objectives

The Council wishes to encourage development in Hertsmere which:

- Adds colour, texture, variety and a sense of character within a street scene; and
- Defines ownership and provides security, particularly to the sides and rear, without dominating or closing off the street

scene.

Guidelines

Front boundaries

- a. All new front amenity / garden areas should have a landscape design which includes appropriate boundary treatments, planting, paving, access and (where required) lighting.
- b. The boundary design should complement the design materials and techniques used in the overall scheme, and should reflect the character of the area.
- c. Front fences may be used where they are already a feature of the street. The design should complement the existing pattern of boundary treatment and should be integrated with hard and soft planting.
- d. In areas dominated by green front and side boundary treatments, new developments should reflect this in their designs, and should not use hard features such as railings, walls and fences to define boundaries.
- e. The installation of high security gates can create a sense of segregation, can increase fear and perception of crime and will be resisted by the Council. Where planning permission is granted exceptionally for gates because of the particular circumstances of an individual property, they should be set back from the street, modest in scale, well screened, capable of closing quietly and should not dominate the street scene in any way. The same principles will apply to piers, columns and walls adjoining the gates.
- f. Domestic gardens can contribute to sustaining green corridors and can create diverse habitats. The use of locally native trees, shrubs and grasses (appropriate to that location) should be used to encourage habitation by native wildlife. Landscaping schemes should contribute to local biodiversity through providing a range of environments.

Driveways

- g. A good landscaping scheme can help to reduce the visual impact of driveways and hard-standing areas.



Figure 2.30: trees and low-level boundary treatments create an attractive and welcoming environment.



Figure 2.31: similar boundary treatments along this terrace help to define a clear character and sense of identity within the street.

- h. Driveways in new developments should be of a porous material, such as gravel, or blocks rather than an impervious material such as concrete or tarmac. This can help to reduce the risk of flooding, enable penetration by roots of plants and trees and improve the visual appearance and layout.
- i. The driveway area should only be as large as necessary and should be designed as part of an overall landscaping scheme, retaining or creating new verges, hedgerows and prominent planting.
- j. Double width and in and out entrances (including carriage driveways) may be resisted where they result in highway safety concerns or create an over-dominance of hard surfacing.

Gates and means of enclosure

- m. Boundary treatments which front the highway play a role in helping to define public, semi public and private spaces, but they should not be divisive or intimidating in appearance.
- n. The installation of high security gates to the front of individual properties reduces visibility between the public and private realm, which can lead to increases in crime and the perception of crime in an area, creating an unwelcoming environment for pedestrians and cyclists in particular. High front gates also have an undesirable impact on the streetscene where they are not a part of the original layout of an area. Lower level boundary treatments contribute to a more open environment which encourages natural surveillance and does not impact on the safety or perceived safety of highway users.
- o. Where front gates are considered to be acceptable they should typically be no greater than 1.5m in height at their highest point (including gate posts and any spikes, finials or other decorative features). In all cases, gates should be designed to respect the character of the surrounding area, and should be capable of closing quietly. Gates should be set back from the street so that they do not dominate the streetscene or adversely impact on highway safety.
- p. Front boundary treatments (e.g. garden walls, hedges) should help to create and enhance the local sense of place by maintaining consistency within the street. Where new front boundary treatments are proposed within existing streets it is essential that these connect the development to its environment and contribute towards a harmonious streetscene.
- q. gated developments tend to create a sense of segregation by reducing visibility and connectivity between developments, so will not normally be acceptable. They reduce natural surveillance, often result in an increase in crime and the perception of crime, and are generally out of character with the surrounding pattern of development.



Figure 2.32: Tall front gates create a more closed-off, exclusive frontage with



Figure 2.33: Lower-level boundary treatments contribute to a more open and inclusive character, promoting natural surveillance for pedestrians and residents.

2.q) *Landscaping and biodiversity*

(cross-reference Bio SPD – check whether this is required or just have a very short section here cross-referencing BTL SPD and new SADM policy)

- a. Where developments result in the unavoidable removal of healthy trees and hedgerows a scheme for replacement planting will be required. This will be controlled by a planning condition. Proposals that involve the removal of trees subject to a Tree Preservation Order will be refused unless there are highly exceptional circumstances.
- b. The scale of landscaping schemes should be related to the topography of the application site and to the scale of the buildings. They should enhance the pattern of buildings and help to define spaces.
- c. Landscaping schemes should help the visitor orientate through a space, and should therefore be integrated into the scheme from the start and not considered as an afterthought.
- d. Landscaping schemes should help to form barriers between public and private spaces.
- e. To make sure that landscaping is robust and long-lasting native species should be used that are likely to thrive in local soil and weather conditions.
- f. Domestic gardens can contribute to sustaining green corridors and can create diverse habitats. The use of locally native trees, shrubs and grasses (appropriate to that location) should be used to encourage habitation by native wildlife. Landscaping schemes should contribute to local biodiversity through providing a range of environments.
- g. Where landscaping schemes form part of public spaces they should be designed to provide an accessible and interactive space for disabled users, with textured and scented planting and structures for the enjoyment of the visually impaired.
- h. The use of different colours, textures and materials in the hard elements of a landscaping scheme can create a sense of character and identity.
- i. In most cases, particularly on larger developments and those for public/commercial building or flats, a condition will be attached to the planning permission to require that the consented landscaping scheme be maintained for at least 5 years.

2.r) Parking and waste storage

Car parking areas and insensitive storage of bins can have a significant visual impact on the streetscape. Parking and servicing areas need to be carefully designed to ensure that they integrate sympathetically with the development and locality.

Objectives

The Council wishes to ensure that adequate provision is made for servicing and car parking where it is required, and that its layout and design:

- Respects the quality and integrity of the streetscape and does not dominate it;
- Is integrated with the overall site and building design;
- Is safe for pedestrians and vehicles;
- Allows vehicle manoeuvrability and servicing; and
- Minimises the area of impervious surfaces, pollution, noise disturbance, and light spillage into properties.

Guidelines

Parking provision

- a. The Parking Standards SPD provides more information on the requirements for off-street car parking provision.
- b. On-street parking should be considered in locations where road safety and traffic flow would not be compromised and where there will not be a nuisance to existing residents. Where on-street parking is proposed in a road within or near to an existing Controlled Parking Zone, a contribution may be expected for the maintenance of this CPZ or to investigate any possible extension of a CPZ. The applicant will need to check with the Council whether there is capacity within the CPZ for additional vehicles.

Design of car parking areas

- c. Car parking layout and design is to be carried out in accordance with the guidance issued by the Highway Authority (the County Council) and Local Plan documents.
- d. Where 'home zones', mews-type developments and street designs involving shared surfaces are proposed, County Council highway guidance should be carefully followed to ensure that roads within the development are capable of being adopted.
- e. Parking facilities for residential developments should be well overlooked by buildings with adequate lighting. The design should not provide hiding spaces or enclosures that are intimidating or increase the potential for crime.
- f. Boundaries around private car parking areas should create a clear boundary between private and public space.
- g. The design of any paved parking, garages or vehicle access areas should be integrated into the streetscape and should not be visually dominating or detract from the appearance of the development frontage. Off-street car parking should be located either to the rear, to the side or underneath buildings. Off-street car parking to the side or rear of buildings should be broken up into small groups of no more than 6 spaces located within a reasonable distance of the properties they serve to avoid large, concentrated areas of car parking. All parking areas should be well overlooked with an appropriate lighting scheme. Any on-street car parking should be also be broken up into small clusters of spaces, separated by areas of pavement, street furniture and / or planting.



Figure 2.34: Frontage landscaping lost to hard-standing; limited separation between public and private space

h. Large areas of impermeable paving should be avoided. Porous or open block paving is generally preferred, which should be broken up with soft landscaping. **The Council is likely to refuse applications that do not provide porous surfaces where large areas of parking are provided.**

i. The main entry to a building for pedestrians should not be directly through car parking spaces or driveways.

a. Access roads and driveways should minimise the intrusion of vehicle lights into homes and other sensitive uses. Service areas should usually be located to the rear of a development with access roads being as short as possible to minimise the distance travelled in close proximity to buildings.

j. Parking can be provided underground or through an under-croft design in order to achieve more efficient use of the site. The design of underground and under-croft car parking should:

- Minimise the visual impact of the entrance to the street;
- Maximise pedestrian safety and maintain pedestrian access;
- Provide access for people with a disability; and
- Provide safe and secure, well-lit storage for vehicles.

k. Providing car parking on a communal basis, rather than on a basis exclusive to a particular property can make better use of the spaces provided and accommodate different car ownership level. Consideration should be given to achieving the Associations of Chief Police Officers (ACPO) Park Mark award which assesses safety where communal car parking is proposed.

l. Developments should be designed to ensure ready access to utility infrastructure for maintenance purposes.

Cycle parking

m. All cycle parking at both residential and commercial developments should be fit-for-purpose, secure and well located, and provided in line with the levels set out in the Parking Standards SPD 2014.

n. Well-designed and well-located cycle parking can ensure there is adequate parking for people who already cycle, reduce cycle theft, encourage more people to choose to cycle, encourage inclusive cycling and reduce obstruction caused by inappropriate cycle parking. Users need to feel both that their cycle will be safe where it is parked, and that they will be safe accessing and using the parking.

o. An inclusive approach to cycle parking is recommended, including:

- step-free access, which may require provision of shallow ramps or lifts large enough to carry all types of cycle;
- signing to accessible parking at locations where the type of cycle parking is difficult or impossible for all to use;
- making available spaces for larger models (e.g. tricycles) and, potentially, reserving allocated spaces for disabled cyclists in larger developments.

p. Long-term communal cycle parking areas for residential and workplace uses should be covered, well-lit and secure, being accessible to registered users only using a key/fob/swipe card. Where cycle parking is inside a building, it should have step-free



Figure 2.35: Access to building through area of car parking

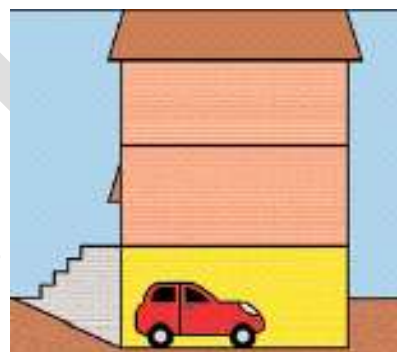


Figure 2.36: Undercroft parking



Figure 2.37: A "cyclepod" providing space efficient bicycle storage in a residential garden

access, wide doorways and spacious corridors. Lifts or shallow gradient ramps should be provided to any basement or above-ground cycle parking. Lifts should be large enough to accommodate all types of cycles, particularly tricycles likely to be used by disabled cyclists.

- q. Cycle storage for individual houses should be provided within a garage, in a lockable garden shed or storage unit within a front or rear garden, or behind a lockable gate, and communal cycle parking for houses or flats should be in a location accessible using a key or swipe card. Cycle storage inside the home can work well if it is provided over and above the minimum gross internal floor area and minimum storage and circulation space requirements (see Section 3c). Cycle storage identified in habitable rooms or on balconies is not considered acceptable.
- r. Workplace cycle parking should have complementary facilities such as accessible showering and changing facilities, storage lockers for equipment and clothes, and equipment for basic maintenance, e.g. pumps.
- s. Short-term, visitor parking (including parking for shop/restaurant customers) should be provided within the public realm, and be convenient, visible, overlooked and close to the building's entrance.
- t. Any on-street cycle parking proposed as part of a development should contribute to the streetscape and should not create hazards for any users of the highway.

Garages

- u. Larger properties, typically with four or more bedrooms, should be developed with their own garages. Garages and extensions to garages should be set back 6 metres from the rear of the footway or (if there is no footway) the highway. This distance is required to enable a car to park on the driveway and allow a standard garage door to be opened so that a vehicle would not obstruct the footway or highway. This standard is equally applicable where it is proposed to install gates on a private driveway.
- v. Garages and garage doors should not dominate the appearance of new developments. The front building line of any detached or attached garage should be set back from the main front building line. The door of any integral garage should be inset.
- w. Further guidance, including volume requirements, can be found within the Council's technical note on waste storage provision requirements for new developments.
- x. Where garages are provided in new developments these should be of a practical size that is capable of storing large domestic vehicles in order to ensure the long term use of the garage for off-street parking. A standard garage built to 2.4 x 4.8 metres will only hold a small domestic vehicle. Garages should therefore be a minimum of 3 x 4.8 metres. Garage door openings should measure at least 2.5 metres. Garages should comply with the Parking Standards SPD, which may be updated from time to time.

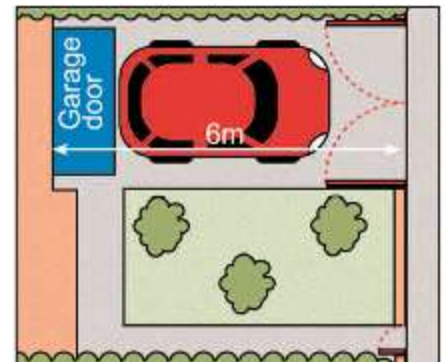


Figure 2.38: 6m distances in front of garage

Further guidance:

The Hertsmere [Parking Standards SPD](#) contains detailed car and cycle parking requirements.

[Appendix E to Part E of this Design Guide](#) contains guidance on the conversion of residential garages to habitable rooms.

Waste storage and collection

- b. All new development will be expected to provide areas for the sorting, storage and collection of materials for recycling and general refuse in line with the policy SADM20¹⁴ and any successor policies.
- c. Bin storage areas must be designed with the practicalities of waste collection in mind. Such considerations should be incorporated into design at an early stage. The Council is unlikely to accept proposals that fail to make proper provision for the safe and efficient collection of waste; it should be noted that waste storage provision should not be dealt with by condition.

Amount of waste storage

- d. Each household in Hertsmere requires the following waste and recycling storage provision:
 - 240 litres (L) for general waste
 - 240L for green waste
 - 240L for plastic / cans / glass
 - 38L for paper
- e. Bins must be accommodated within the boundary of the property they relate to and must not be stored on the public highway. Storing bins permanently on the public highway can block access for people using the footway. This can be particularly problematic for wheelchair users and people with pushchairs. Off-street bin storage should be planned for in all new developments, whether or not the highway will eventually be adopted by the highway authority.
- f. For dwellings with individual waste storage provision, each unit should accommodate 3 x 240 litre wheelie bins (72cm deep x 58cm wide x 1.07m high) and 1 x 38L recycling box, plus future storage capacity equivalent to an additional 55L box.
- g. For dwellings with communal/shared waste storage provision, the storage can be in either Eurobins or wheelie bins depending on the size of the development (if more than 1 or 2 wheelie bins would be required, a Eurobin should be used instead). The same amount of space will need to be provided per unit as listed above, and the minimum volume should always be exceeded to account for any increase in waste. In developments with shared garden space, the total amount of space required for green waste should be reduced by 1 third.
- h. Eurobins come in two sizes: 660L and 1100L. No bin over 660L in size should be used to provide for the storage of paper due to its weight.



Figure 2.39: Current bin storage arrangements typical of many new developments, obstructing the footway.

Table 2.1: Worked example for development with communal / shared storage provision

Example scheme: 20 flats are proposed		
General waste	240L x 20 flats = 4,800L	5 Eurobins (4 x 1,100L Eurobins + 1 x 660L Eurobin) = 5,060L
Green waste	240L x 20 flats = 4,800L Reduce by 1/3 rd (4,800L x 0.66) = 3,168L	3 Eurobins (3 x 1,100 Eurobins) = 3,300 L
Plastic / cans / glass recycling	240L x 20 flats = 4,800L	5 Eurobins (4 x 1,100L Eurobins + 1 x 660L Eurobin) = 5,060L
Paper recycling	38L x 20 Flats = 760L	1 Eurobin & 1 wheelie bin (1x 660L Eurobin + 1 x 240L wheelie bin) = 900L

¹⁴ Site Allocations and Development Management (SADM) Policies Plan (published 2015), policy SADM20 Waste Storage in New Development

Possible future waste storage requirements	55L x 20 Flats = 1,100L	1 Eurobin (1 x 1,100L Eurobin) = 1,100L
<i>This example scheme would require a total storage requirement of: 12 x 1,100L Eurobins, 3 x 660L Eurobins and 1 x 240L Wheelie bins.</i>		

Table 2.2: bin dimensions

	1,100L eurobin	660L eurobin	240L wheelie bin
Depth (back to front)	960	710	720
Width (side to side)	1,200	1,200	580
Height (floor to top of lid)	1,350	1,310	1,070

Design and location of waste storage areas

- i. Waste storage areas should be sited sensitively and should be designed not to dominate the appearance of a new development or existing street. Within these constraints, communal bin stores should also be located as near as practicable to the outside of a development so as to minimise the distance that refuse vehicles have to travel.



Figure 2.40: Recommended bin storage arrangements within front gardens

- j. All bin storage areas must be sited at ground level, with adequate lighting (natural or artificial); good natural ventilation; a smooth easily cleanable floor laid to a fall with suitable drainage; and should have a suitable enclosure e.g. wooden fencing, brick or concrete walls. Basement/underground bin stores are not acceptable.
- k. Bin storage areas for flat developments must be constructed so that all types of bin can be easily removed without causing injury to waste collection operatives. They should be large enough to allow bins to be fully opened and to allow for the movement of bins within the area. They should also have double doors with a clear opening of at least 1.5 metres and a facility to hold doors open during collection. Doors should not be sprung.
- l. Smaller external storage and collection areas that occupants are not able to stand within, will require a clear turning circle area of at least 1.5m diameter to enable residents or waste operatives to turn and manipulate bins.
- m. Bin stores should be designed to be robust, with an intended lifespan similar to that of the development as a whole. Suitable metal and rubber “bump strips” should be provided internally on doors and walls to prevent damage from loaded bins. Signage should indicate which properties are entitled to deposit waste there to prevent bins being overfilled.

Waste collection

- n. The maximum acceptable ‘carry distance’ from refuse storage to collection point is 25 metres. The bin storage area should therefore be no more than 25m walking distance from the vehicle stop point.

- o. Bin storage areas for Eurobins should be situated so that doors are directly adjacent to a lowered curb. Domestic sized wheeled bins can be taken up or down short flights of shallow steps (not more than three steps), but Eurobins cannot.
- p. Lowered curbs from bin stores should lead onto a section of road that is accessible to refuse vehicles at all times and that will not be used for car parking.
- q. From the bin area to the vehicle the ground should be flat and level i.e. no gravel or cobble stones. The area should also be free from obstructions e.g. bushes and trees.
- r. Gradients of access paths should not exceed 1 in 10, and should be at least 1.5 metres wide for access to shared bin storage.
- s. All access roads used by refuse vehicles must be designed to withstand a laden weight of not less than 28 tonnes. Any manhole cover or gully grating in these roads must be of a heavy-duty 'Grade A' type.

Further guidance:

Association of Directors of Environment, Planning and Transport (ADEPT), [*Making Space for Waste: Designing Waste Management in New Developments*](#), 2010

2.s) Basements in residential developments

Basements within new development can provide additional usable space with minimal visual impact and land take. As such they will be supported where possible. They can also reduce the need to provide additional upper floors or a bulky roof to accommodate further living space.

However in some instances basements can have adverse effects on the character and appearance of a location, on localised flood risk, on the amenity of neighbours, or on the functioning of garden space. Basements in the Green Belt can lead to an intensification of the use of the site which, although there may be little visual impact, still has an impact on the openness of the Green Belt and the purposes of including land within it.

This section applies both to basements within new residential developments and basement extensions to existing houses in built-up areas and in the Green Belt.

Objectives

Where basements are proposed either as part of new residential development or as extensions to existing houses, the Council wishes to ensure that these do not have harmful effects on the character and appearance of the area. Although basements are largely below ground level, they can still have a significant visual impact on the area, so elements such as windows, rooflights and lightwells need to be carefully considered to ensure that they are appropriate in the context of surrounding development.

The focus of the NPPF on sustainable development and good design means that the environmental implications of excavating and occupying basements need to be given significant consideration, including energy usage and carbon emissions during construction and use, the effects on flood risk and drainage, and impacts on biodiversity and trees.

Basements in the Green Belt in particular should not represent disproportionate additions to an existing house or contribute to a form of new development which is substantially larger than any existing buildings it replaces.

This section of the Design Guide begins by setting out the considerations that will be taken into account in the determination of planning applications for all new basements, and then goes on to set out considerations which are specific to proposed basements (or new dwellings including basements) in the Green Belt.

Guidelines for all basements in residential buildings

This section applies to all basements and subterranean development relating to residential development.

Sustainable design

- a. All proposals for basements need to comply with Core Strategy Policy CS16 Environmental Impact of Development (and any successor policies relating to the same themes) in terms of the requirements to make efficient use of natural resources, achieve reduced levels of energy consumption, and minimise waste during both construction and occupation.
- b. The process of excavating basements and their conversion into living space requires considerable amounts of energy and creates large quantities of waste. Concrete is normally used, which has a high embodied carbon content (carbon released during the entire process of extracting resources, producing and transporting the material), and the process of excavation and construction can generate significant waste and increase flood risk.
- c. Basements can be more energy-intensive than above-ground accommodation due to the requirements for artificial light and ventilation. This can be particular issues where uses such as gyms, swimming pools and media rooms are proposed, which are all energy-intensive uses.
- d. In order to minimise construction waste and avoid unnecessary CO₂ emissions during construction and occupation, consideration should be given to the potential to provide the required space above ground level before a basement is accepted as the most sustainable solution. Where a basement is the best solution, it should make use of natural light and ventilation wherever possible (e.g. using lightwells, skylights, light tubes, passive stack or heat-recovery ventilation systems).

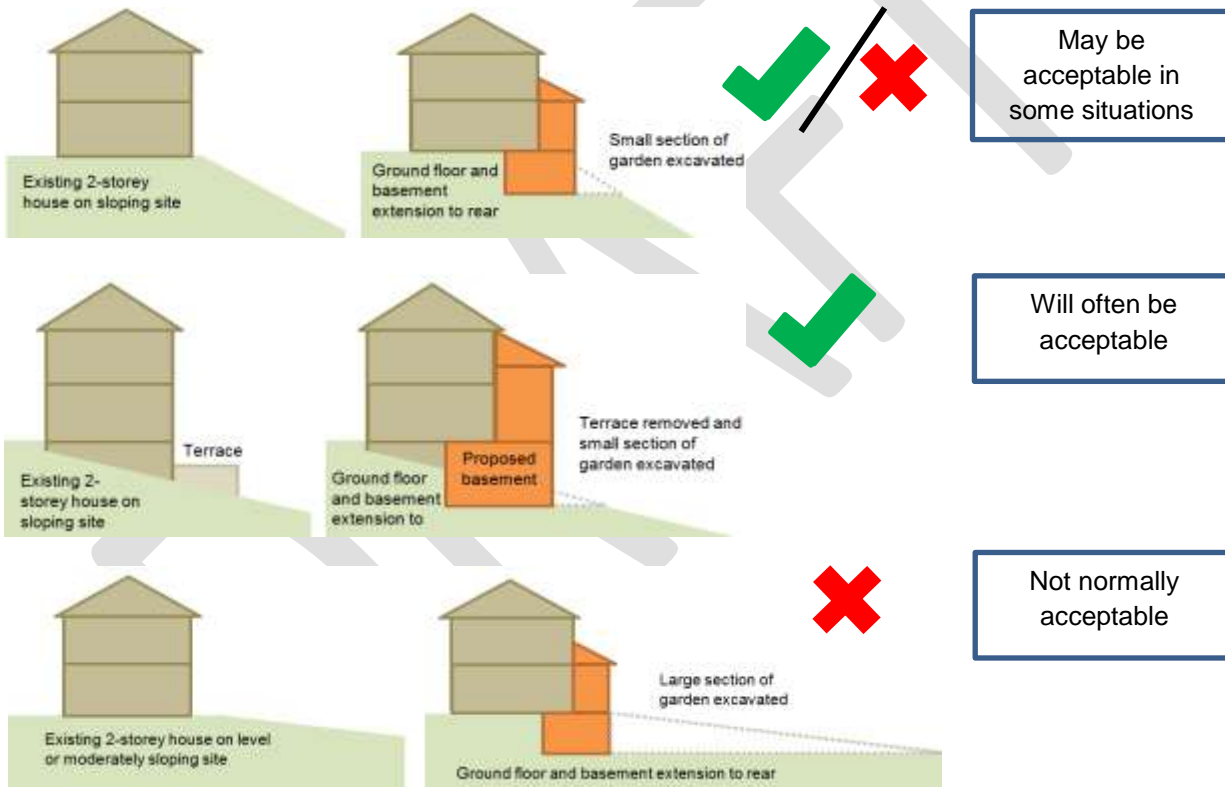
Size and proportion

- a. Basements in new residential developments should not extend beyond the proposed footprint of the house or building. Basements can be a useful way to provide some additional living or service space within a dwelling or a block, but the majority of living space should be provided above ground level.

- b. Where proposed basements in a new dwelling provide additional habitable rooms which are not part of the normal living space for the house (e.g. TV rooms, games rooms, additional sitting rooms etc.) these should not be so large so as to be out of proportion with the part of the house that is above ground.
- c. Where a basement extension is proposed to an existing house, the basement should be entirely beneath the ground and the existing ground levels around the house should not be artificially lowered in order to create the appearance of an additional storey.

Impact on rear gardens

- d. In larger existing buildings within extensive plots it may be possible to extend beneath part of the rear garden. It will be necessary to ensure that a mature garden can be established and maintained above the basement and details of soil and drainage will normally be required at the time of submitting a planning application.
- e. Ground levels in the rear gardens of new developments should not be artificially lowered to create the appearance of an additional storey.
- f. Where the topography of a site slopes steeply away to the rear and allows for an additional storey or part-storey to the rear of an existing house, this may be considered acceptable dependent on the overall scale, bulk and appearance of the building proposed, and the relationship with neighbouring houses and gardens.



Basements and car parking

- g. Where a basement extends beneath a front garden or driveway, and lightwells/skylights are introduced, care should be taken that the space available for off-street car parking continues to meet the requirements of the Local Plan as set out in the Parking Standards SPD 2014 (and any successor document). Planning permission may be refused if these standards are not met without robust justification.
- h. If off-street parking spaces are located too close to basement windows, parked cars can restrict light to the basement. This is a particular problem where the windows, skylights or lightwells serve a basement flat or are the primary source of natural light for any habitable rooms within a dwelling.



Figure 2.41: Basement car parking can have a detrimental impact on the streetscene if not carefully designed.

- i. Carefully designed basement or undercroft parking can present an appropriate solution to communal parking in constrained areas. However basement car parking can have a detrimental impact on the streetscene if not carefully designed, and can raise other issues including safety, crime and the perception of crime and inclusive access (including access for people with disabilities, pedestrians and cyclists).

Living conditions

Habitable rooms in multi-storey dwellings

- j. Bedrooms and main living spaces at basement level should be avoided. Basements containing any habitable rooms must be carefully designed to ensure that the space has sufficient natural light and ventilation, privacy and headroom.

Basement / lower ground floor flats

- k. Where proposed new-build flats or flats in converted houses or other buildings have all or most of their living space at basement or lower-ground floor level, it is important that all of the amenity standards in the guide are met and exceeded wherever possible in order to help ensure a good standard of living for the future occupiers.
- l. Flats in basements or at lower ground floor level must have a reasonable outlook from at least one aspect of the unit, and primary windows to habitable rooms should not directly face a retaining wall as this will not provide a good outlook for occupiers.
- m. Single-aspect flats in basements are unlikely to be acceptable as these do not generally provide a good level of outlook for the occupiers, and are more likely to require artificial sources of light and ventilation.

Basements and flood risk

- n. Residential basements are classed as 'highly vulnerable' in the flood risk vulnerability classification (as set out in the PPG) so are not appropriate in Flood Zone 3.
- o. Basements for residential use may be permitted in Flood Zone 2 following the application of the Sequential Test and Exception Test as set out in the NPPF and PPG. Residential basements will generally be acceptable within Flood Zone 1 subject to meeting other relevant policy requirements.
- p. Basements take up space beneath the land which would otherwise be used for the storage of flood water in times of flooding from rivers or surface water flooding in the case of heavy rainfall. Removing this natural flood storage within the soil can exacerbate flood risk on neighbouring sites, because the flood water has nowhere else to go. Where a basement is proposed within an area identified to be at risk of flooding (i.e. either within Flood Zone 2 or 3 or at risk from surface water flooding) a site-specific flood risk assessment will be required and appropriate mitigation measures may be necessary.

Further guidance:

Find out whether a site is at risk of flooding from rivers or surface water by checking the [Environment Agency flood maps](#).

Basements and trees

- q. The construction of basements should not have a detrimental impact on trees protected by Tree Preservation Orders (TPOs), or any healthy, high-quality trees or hedgerows.
- r. Where trees or hedgerows exist on-site which are likely to be affected by a proposed basement, reference should be made to the Council's Biodiversity, Trees and Landscape SPD (or any successor document), and an arboricultural assessment will normally be required as part of a planning application.

Lightwells, skylights and external access

- s. Lightwells or skylights should be proportionate in size to the main/original building, and should be

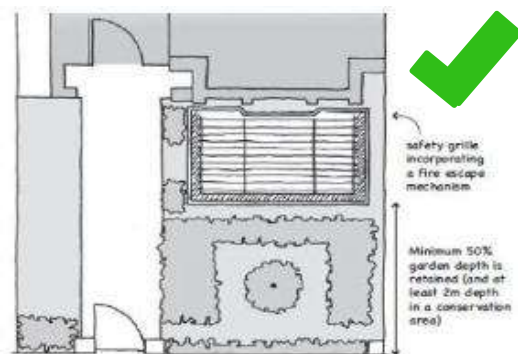


Figure 2.42: Front lightwell with security grille which retains most of the depth and soft landscaping within the front garden.

located well away from the property boundary to enable boundary planting to be maintained. Excessively large lightwells which are disproportionate to the size of the front garden or the house should be avoided.

- t. Where open lightwells and sunken terraces are introduced to the front of the house to provide natural light or the access to basements, these can have a negative impact on the appearance of the streetscene. For this reason, lightwells and sunken terraces should be avoided in small front gardens and in Conservation Areas unless they are an established feature of the area. It should be considered whether it is possible to locate lightwells or terraces to the side or rear of the house to allow sufficient light into the basement while reducing the impact on the streetscene.
- u. Railings or grilles are required in order to secure lightwells and comply with the building regulations. Where front lightwells are proposed, and are otherwise acceptable, grilles should be used in order to minimise the impact on the appearance of the front of the house. Railings may be acceptable where they are an established feature in the streetscene, where the front garden is large or not visible from the street, or where their height or overall design would mean that they would not cause harm to the appearance of the house.

Guidelines for residential basements in the Green Belt

Inappropriate development in the Green Belt

- a. This guidance applies to basements in new build houses as well as basement extensions to existing houses.
- b. In the Green Belt, basements can be a more acceptable way of providing accommodation than building upward with additional storeys and/or bulky roofs. However, proposed basements in the Green Belt will be assessed in exactly the same way as development above the ground when considering whether they constitute inappropriate development in the Green Belt.

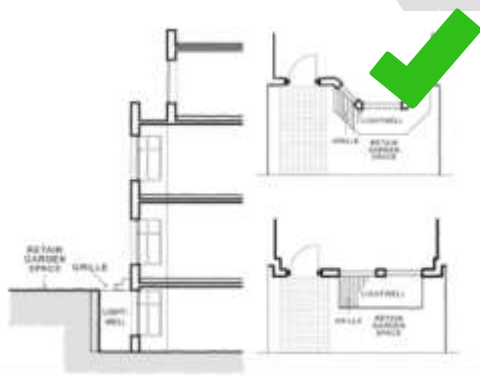


Figure 2.43: (from Camden Basement SPD 2015 – to be replaced before adoption)

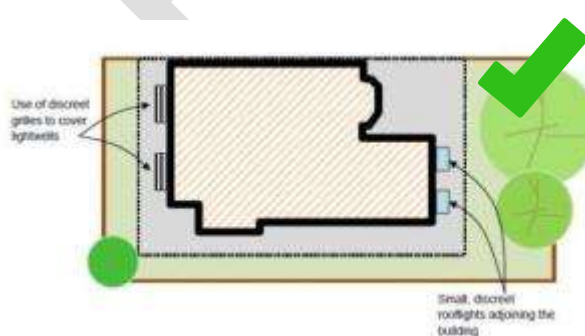


Figure 2.44: (from RBKC Draft Basement SPD 2015 – to be replaced before adoption)

- c. The NPPF makes it clear that an essential characteristic of Green Belts is their openness. ‘Open’ in this context means the absence of development, whether or not this can be seen above the ground or would be clearly visible from public vantage points. Basements that do not meet the exceptions in NPPF Paragraph 89 are inappropriate development in the Green Belt even if the proposal would have no significant visual impact, so a case of very special circumstances will need to be made.

Defining ‘development’

The definition of ‘development’ in [Section 55 of the Town and Country Planning Act 1990](#) is “**the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land**”.

- d. Paragraph 89 of the NPPF sets out a number of exceptions which are not inappropriate development in the Green Belt. Some basement proposals are likely to fall under these exceptions, for example:
 - proposed basement extension to existing building which is not disproportionate;

- proposed replacement dwelling with a basement which is not materially larger than the existing dwelling it replaces;
 - proposed redevelopment of a previously developed site including basement space which would have no greater impact on the openness of the Green Belt than the existing development.
- e. Where a proposal does not fall within one of the exceptions in Paragraph 89 of the NPPF, the proposal is inappropriate development and the applicant will be required to demonstrate that very special circumstances exist.

New or replacement dwellings in the Green Belt

- f. Where a new dwelling is proposed, such as where it is replacing an existing house or existing non-residential buildings, any basement space will be included in the assessment of whether the proposed house is materially larger than the one it would replace. This assessment will be informed by calculations of volume, footprint and internal floor area.
- g. New dwellings which are proposed on previously developed sites in the Green Belt, any proposed basement space will be included in the assessment of whether the proposed house has any greater impact on the openness of the Green Belt and the purpose of including land within it than the existing development.

Basement extensions to existing houses in the Green Belt

- h. Basement extensions in the Green Belt will be considered in the same way as extensions above ground, with consideration being given to the additional volume, floor area and footprint being created. Therefore they should not result in additions which are disproportionate to the existing house.
- i. Basement extensions which result in disproportionate additions over and above the size of the original building will be inappropriate development in the Green Belt under Paragraph 89 of the NPPF.
- j. Large basement extensions to Green Belt homes in more isolated locations may lead to an increase in the number of occupants, and have an undesirable suburbanising effect on the area. Factors involved in this are a likely increase in the amount of residential paraphernalia in gardens, increased car travel to and from the property, and larger areas for garaging and hardstanding which cumulatively detract from the open appearance of isolated rural locations.

Further reading: Green Belt policy

The National Planning Policy Framework (NPPF) sets out [national planning policy on development in Green Belts](#).

Local Green Belt policy for Hertsmere is contained in [Core Strategy](#) policy CS13 and the emerging [Site Allocations and Development Management \(SADM\) Policies Plan](#) policies SADM23-27. (Policy numbers to be updated following adoption of SADM).

2.t) *Appearance and detail*

The front of a property makes a valuable contribution to the quality and character of a street. Developments can enhance the appearance of the street, maintain the rhythm of architectural features and contribute to the identity of a location. Ill-conceived designs can stand out within a street scene to the detriment of the quality of the area.

i) *Lighting*

Guidelines

- 3a. The use of innovative lighting designs can add character and define a sense of place. Where buildings are of a significant scale, lighting schemes should be designed to emphasise the features of the building.
- 3b. Lighting schemes, particularly near to residential locations should not cause light intrusion into residential properties.
- 3c. Well-lit entrances to publicly accessible buildings increase the perception of safety both of the entrance and the street.

Elsewhere in this document:

Section 3f) ii) covers Designing out crime

- 3d. In locations near to, or within areas of known habitation by bats and other nocturnal wildlife, all external lighting schemes should consider the potential impact of such lighting, particularly the direction and luminance. Where applications are located within such locations the applicant is encouraged to consult Hertfordshire Biological Records Office to confirm the presence of such wildlife.

ii) *Windows (including dormers and rooflights)*

The way in which windows and dormers are designed and placed within elevations is an important factor determining the quality and attractiveness of new development. A well-designed building will usually have well-proportioned windows and dormers, made of quality materials and spaced in fairly regular patterns.

Objectives

To ensure that windows, dormers and rooflights:

- Are in proportion to the building;
- Contribute toward a harmonious and attractive streetscape;
- Promote energy efficiency; and
- Help contribute to neighbourhood safety by providing informal surveillance.

Guidelines for windows

- a. Well-designed windows on publicly accessible buildings can increase the interaction between the building and the street. They can also soften the appearance of a building.
- b. Reflective glass should not be used in residential developments or on buildings within largely residential areas.
- c. Unless the design style specifically requires otherwise, front elevations should be composed of a relatively regular pattern of well-proportioned windows.
- d. Small or irregular sized windows, for example those often used for toilets or utility rooms, should not be located on the front elevation.
- e. Where windows are located on side elevations facing another property these should contain obscured or frosted glass. This is to maintain the privacy of neighbouring residents.

- f. Bay windows enable increased security by increasing the angles at which outlook can be achieved. They can also increase light penetration into internal rooms.

Elsewhere in this document:

- **Section 3f) ii)** addresses Designing out crime
- **Section 3a)** covers Daylight and sunlight
- **Section 3b)** covers Privacy and outlook
- **Section 2o)** covers Solar orientation

Guidelines for dormers and rooflights

Dormers

- g. Dormer windows are one way of providing additional living accommodation with minimal impact on the size and appearance of a new house. However, if the dormer is not designed sensitively, it can harm the integrity of the building and the character of the street scene.
- h. Dormers should normally only be located within the rear roof slope. The Council will resist dormers within the front or side roof slope unless they are a feature of the street scene within a new development.
- i. Dormers should be as small as possible. They should generally be used to provide the light to a room and not form substantial part of the room itself. In some cases, two smaller dormers in a rear roof slope will in some cases be more acceptable than one large dormer.
- j. A dormer window or roof extension must be constructed in the centre of the roof face.
- k. Measured vertically, dormers should be set at least 0.3 metres (30 cm) from the main roof ridge and eaves to remain a genuinely subservient feature of the roof. To avoid being highly visible from the street, dormers should also be set in by at least 0.5 metres (50 cm) from the side or boundary walls of the building. On larger roof slopes the Council will require dormer set-ins to exceed these minimum distances, and if this is not possible there will be an onus on developers to demonstrate why.
- l. To help the dormer blend in with the character of the house and street, the design and style of the dormer roof should match that of the roof of the main house. However, a flat roof may sometimes be acceptable for a rear dormer.



Figure 2.45: Position of dormer within the roof slope (explanatory example only).



Figure 2.46: Position of dormer within the roof slope (explanatory example only).

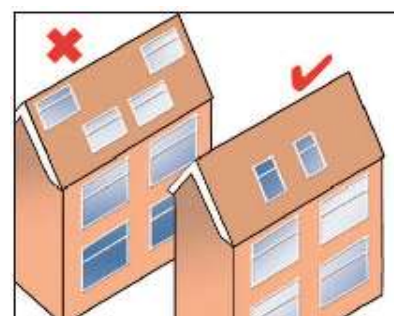


Figure 2.47: the fewer roof lights, the better

Bad examples of dormers? (Royds Design Guide)

Roof Lights

- m. Where they need planning permission, the number of new roof lights should be kept to a minimum and limited to rear elevations. Any roof lights should have regard for the size and position of the windows in the main house.

Further guidance:

Hertsmere Planning and Design Guide SPD Part E: [Guidelines for Residential Extensions and Alterations](#)

iii) Materials

- 3e. Where modern materials are proposed developments should consider ways to maintain a relationship between the development and the surrounding area. Methods could include using landscaping and massing to reduce the visual dominance of the design.
- 3f. In certain locations within the Borough more detailed regard should be paid to the type and quality of materials used in new development, including within Conservation Areas or near to Listed Buildings.
- 3g. Design features which are sensitive to the local surroundings and high quality, locally relevant materials should be considered where these would add to or enhance the buildings visual appearance.
- 3h. Where particular materials and/or architectural details form a dominant feature within a street scene these should be carried on into new developments to help maintain and enhance the character of the locality.
- 3i. Where developments propose a standard corporate design, particularly for large commercial buildings, it may be necessary to move away from or tone down the visual impact of this design in order to ensure the building respects and reflects the local character.

Section 3: Living Conditions and the Environmental Impacts of Development

3 a) Daylight and sunlight

The availability of natural daylight within the habitable rooms of a property improves the quality of living conditions, whilst reducing reliance on artificial lights, limits the amount of energy consumption.

Objectives

The Council wishes to ensure that existing and future residents can enjoy reasonable levels of natural daylight in their homes and private garden space.

Guidelines

- a. New development should be designed so that residential outlook for existing homes is not unduly affected.
- b. Where new development would adjoin existing homes, the building line of the new development should not cross a 45 degree line drawn from the nearest edge of any window, front or rear facing, serving a habitable room (including a kitchen) in the existing home. Where there is a significant difference in ground levels between adjoining properties, the Council may require an angle of less than 45° to be maintained.
- c. While there is no 'right to light' within planning legislation, a right to light exists under common law. In any case, it will be expected that new buildings and boundary trees should not significantly reduce sunlight to the habitable rooms or solar collectors of neighbouring properties.
- d. The layout of new developments should take into account any overshadowing by adjoining buildings, structures or trees so as to maximise the availability of light and promote energy efficiency. In some cases it may be appropriate for applications to be supported by daylight / sunlight assessments of the type developed by the Building Research Establishment (BRE).
- e. Buildings should be built to a depth and shape that enables maximum light penetration into internal rooms. Buildings that are too deep will require artificial lighting and ventilation and reduce their ability to adapt to other uses over time. Light wells and internal courtyards can also be utilised, especially in respect of larger buildings.

Elsewhere in this document:

Section 2o) covers solar orientation and natural sources of energy

3.b) Privacy and outlook

When new development is proposed, people's expectations of avoiding overt intrusion into their homes must be balanced against the natural and unavoidable interactions which occur in urban and suburban environments. It is important that new development is planned with respect for the privacy of both neighbouring residents and the future occupiers of the development. The outlook from a residential property is also a key consideration as a poor outlook from homes can impact on peoples' quality of life. These considerations need to be factored in at the earliest stage of the design of a development.

High quality design tends to result from reacting to the surroundings of the particular site rather than following generic rules, so in this vein, this section of the guidance aims to outline the principles that should be taken into account in order to protect privacy and outlook and promote high quality design. This section does set out some numeric distances between buildings, however these are intended only as an indication of what might be acceptable. Each site and development is different and must ensure appropriate levels of privacy and outlook for residents in relation to its context, so a proposal that meets the distances laid out in this guide is not automatically acceptable, and conversely, a proposal that does not meet them is not automatically unacceptable.

Objectives

The design of new buildings and gardens should ensure a reasonable level of privacy for the intended occupants and for the occupants of adjoining properties, and avoid direct and intrusive overlooking between habitable parts of buildings which are in close proximity to each other. A reasonable outlook should also be ensured from habitable rooms in both new development and existing neighbouring buildings to protect the well-being of the occupants.

Defining 'habitable rooms'

- *for the purposes of this guidance, 'habitable rooms' means living rooms, bedrooms, dining rooms and kitchens.*
- *all distance measurements should be taken from the outer face of the wall containing the relevant window(s). Where protruding window designs are proposed (e.g. a bay), measurements should be taken from the outermost part of the protruding window.*

Guidelines

Privacy and overlooking

Ensuring adequate privacy in residential buildings and gardens

- a. Development layouts will be expected to ensure reasonable privacy for all occupiers of the proposed development and existing neighbouring developments. A 'reasonable level of privacy' is a situation in which occupiers do not feel that their privacy is being infringed by proximity to or overlooking from neighbouring windows, and which is broadly comparable to levels of privacy enjoyed by existing residents in the area. New development should aim not to reduce the privacy of existing residents in the area, while also ensuring sufficient privacy for future occupiers of the development.
- b. At an early stage in the design process, consideration should be given to ensuring the privacy of future occupiers and neighbours. This includes considering of the amount of space between buildings, ensuring that habitable rooms are sensitively located within the layout, and ensuring that private outdoor amenity spaces enjoy a reasonable level of privacy.
- c. Where there are differences in levels across a site or between adjoining sites, or significant height differences between buildings, new buildings should be positioned to ensure that privacy is not compromised by overlooking. In such cases the Council may require a greater distance between buildings than would be required on level ground.

Privacy and street width

- d. Front elevations are normally less private than rear elevations due to activity along the street, however the privacy of the occupants still needs to be given consideration in the design of new development. With this in mind, residential buildings on narrow streets should ideally be designed so that windows to habitable rooms do not directly face each other, particularly in flats and the upper floors of houses.

- e. The Hertfordshire County Council Highway Design Guide *Roads in Hertfordshire* sets out a minimum carriageway width of 4.1m for a shared surface street or a home zone, although the acceptability of this will depend on the location and the design and layout of the scheme.
- f. The minimum width for a minor access road serving up to 10 dwellings is 4.8m, plus 2m minimum footway width on either side. This means that new roads within a development could potentially be a minimum width of 8.8m but in most scenarios, particularly in lower-density parts of the Borough, wider roads will be more appropriate.
- g. Different types of neighbourhood within the Borough have different characteristics which need to be carefully taken into account in order to retain privacy for existing residents.
 - a. In areas characterised by wide streets and long front gardens (5m-10m deep) front elevations containing windows tend to be between 18m and 30m apart (e.g. post-war housing in Borehamwood, Bushey and Potters Bar).
 - b. In areas of medium to high density housing front elevations containing windows tend to be between 15m and 20m apart. This is the case in both older housing (e.g. Victorian terraced housing in Bushey Village, around Station Road, Radlett, and streets off Shenley Road, Borehamwood) and some more recent developments (e.g. mid-20th Century housing off Mutton Lane, Potters Bar). Front gardens in these areas are generally 3-5m deep.
 - c. In cases where street layouts encourage shared use of the public realm, such as home zones, smaller distances may be acceptable. This type of layout will only be suitable on larger sites where new streets are being created as part of the development.
 - d. Front to front distances will typically be expected to be within the ranges described above, although these are not intended to be prescriptive and development should first and foremost respond to its surroundings.



Figure 3.1: Use of home zones reduces separation distances between the front elevations of homes within a proposed development (Hertswood School site, Borehamwood, approved site layout).



Figure 3.2: High-density development with home zones and front-to-front separation distances between 6m and 10m (Accordia in Cambridge).

Further guidance:

Hertfordshire County Council guidance document titled [Roads in Hertfordshire – Highway Design Guide](#).

Avoiding intrusive overlooking to the rear of buildings

- h. Where a proposed front or rear elevation containing windows to habitable rooms faces another proposed rear elevation either directly or at an angle, buildings should be a sufficient distance apart to prevent direct overlooking between habitable rooms. In many cases a separation distance of 20m will ensure a reasonable level of privacy within low to medium density housing schemes, however lesser or greater separation distances may be more appropriate in some cases.
- i. Where an elevation containing windows to habitable rooms would directly face the rear elevation of an **existing** residential building, a distance of 28m is suggested as a starting point to prevent inappropriate levels of overlooking, although this is subject to consideration of the context of the proposed development. 28m should not be used as an absolute distance and will not be appropriate in all cases, as the context of the development and the nature of the building being replaced must be taken into account.
- j. Where a proposed building would replace an existing building, the new building should normally be no nearer to neighbouring residential buildings than the building being replaced, or no nearer than 28m, whichever is the lesser distance.

- k. Where rear elevations containing windows to habitable rooms face each other at an angle, there may still be some potential for overlooking, and an appropriate separation distance in such case will depend on the particular situation.
- l. Where front or rear elevations directly face a side elevation containing windows to habitable rooms, buildings should be a reasonable distance apart so as not to allow easy overlooking. A minimum distance of 10 metres between buildings will be used as a baseline, although this is flexible depending on the context of the development and the scope for any mitigation measures. In some cases a wider gap will be more appropriate (e.g. where the principal window to a habitable room in a side elevation would be overlooked), while in other locations (e.g. older parts of the Borough) a smaller distance which reflects the existing character of the area will be appropriate.
- m. It may be appropriate for secondary windows to habitable rooms to be closer together where mitigation measures are put in place. Examples of mitigation measures include frosted, high level or angled windows, although care should be taken with frosted windows as they can give the impression of a loss of privacy because movement can be seen through them.

Overlooking to rear gardens

- n. The most private area of a residential rear garden is likely to be the 3 metres closest to the house, so new development should not allow direct and uninterrupted views from ground floor habitable rooms or elevated external areas into this section of a neighbouring garden. Some overlooking from habitable rooms on the upper floors of adjoining houses into neighbouring rear gardens is acceptable because this is part of a normal relationship between buildings and is expected in most residential streets.
- o. Balconies and roof terraces provide important private outdoor amenity space, particularly in flats in urban locations. Balconies (including Juliette balconies) and terraces should not allow direct overlooking to the first 3m of gardens or to any primary windows serving habitable rooms in neighbouring homes. Where balconies and roof terraces are acceptable, screening may be required to protect the amenity of both neighbours and the future users of the balcony or terrace.
- p. The use of trees to screen boundaries can help retain privacy in neighbouring homes and gardens; however trees do not necessarily provide screening throughout the year and are at risk of being removed by future occupiers. The choice of trees is important: they should provide sufficient screening throughout the year, but dominant or nuisance tree or vegetation species should be avoided. Where possible, screening vegetation should be positioned to avoid encroachment onto neighbouring land.

Diagram showing first 3m of garden and normal overlooking relationships in a typical residential street, plus balcony overlooking garden.

Relationships between residential and non-residential buildings

- q. Where windows serving usable areas of a proposed non-residential building (i.e. not plant, stairwells or circulation spaces) would directly overlook windows to residential habitable rooms, sufficient distance should be maintained between the buildings to ensure the privacy of the residents, and also to ensure that the users of the future non-residential use can carry out their business without inappropriate overlooking from residential buildings.
- r. Mitigation measures may be required in the proposed building, such as high level windows (at least 1.7m above internal floor level) where the building is at double-aspect, or obscure-glazed windows below 1.7m. Appropriate mitigation will depend on the proposed use of the rooms that face each other, and how large a separation distance is possible within the site constraints.
- s. If a residential building is proposed close to an existing non-residential use, balconies and primary windows to habitable rooms should normally be avoided on the elevations facing the non-residential use unless there is sufficient distance between the buildings to ensure appropriate privacy for the occupants of both buildings. Where buildings are unavoidably close together, secondary windows to habitable rooms may need to be obscure-glazed and balconies may need to be screened in order to protect privacy.

- t. Where any mitigation measures are required they should be proposed within the planning application drawings, although in some cases it may be possible for certain mitigation measures to be required through planning conditions.

Outlook

- u. Primary windows serving habitable rooms in proposed developments should not look directly onto nearby blank walls. This is to ensure that future occupants will have a reasonable outlook. Where a habitable room has more than one window, it may be acceptable for a secondary window to face a blank wall providing the primary window has a reasonable outlook.
- v. Blank walls in new developments should normally be no closer than 10m to any window to a habitable room in an existing home, although the appropriate distance will be assessed on a case-by-case basis.
- w. Where there is a difference in height between neighbouring buildings (e.g. due to a difference in site levels or building heights) greater distances may be required between buildings in order to retain an adequate outlook.
- x. Unsightly building features such as plant or the access to underground car parking should normally be located away from the windows of habitable rooms of neighbouring homes. If this is unavoidable due to other site constraints, mitigation measures will be required (e.g. screening using vegetation).

Diagram showing blank walls close to habitable room windows.

Elsewhere in this document:

See **Sections 1 and 2** of this guide for more on urban grain and patterns of development, and ensuring that new development fits with the local character of an area.

3.c) Residential Internal Space Standards

Space, as well as other aspects of design, impacts the quality of housing. A lack, or poor use of internal space can result in low quality homes and the internal environment of a residential property can have an impact the wellbeing of its occupants. All homes should provide space for social activities, as well as places that are capable of providing quiet and privacy; homes should also have spaces for storage, areas capable of being used for work and study, and enough room for the circulation of occupants around furniture.

Objectives

The Council wishes to ensure that all new homes provide a good standard of accommodation and internal space. The internal size and layout of new homes should ensure that the needs of occupants can be accommodated; an element of flexibility should also be possible, should these needs change over an occupant's lifetime.

Guidelines

- a. The Council will expect new residential developments to achieve the minimum internal guidelines set out in the Technical housing standards – nationally described space standard. These should be exceeded wherever possible.

*Internal space guidelines*¹⁵

- b. New residential units should be built to the following minimum gross internal areas (GIAs) as set out in the [Technical housing standards - nationally described space standard 2015](#). The standard requires that:
 - the dwelling provides at least the gross internal floor area and built-in storage area set out in Table 1 below;
 - a dwelling with two or more bedspaces has at least one double (or twin) bedroom;
 - any area with a headroom of less than 1.5m is not counted within the Gross Internal Area unless used solely for storage (if the area under the stairs is to be used for storage, assume a general floor area of 1m² within the Gross Internal Area);
 - any other area that is used solely for storage and has a headroom of 900-1500mm (such as under eaves) is counted at 50% of its floor area, and any area lower than 900mm is not counted at all;
 - a built-in wardrobe counts towards the Gross Internal Area and bedroom floor area requirements, but should not reduce the effective width of the room below the minimum widths set out above. The built-in area in excess of 0.72m² in a double bedroom and 0.36m² in a single bedroom counts towards the built-in storage requirement;
 - the minimum floor to ceiling height is 2.3m for at least 75% of the Gross Internal Area.

¹⁵ All guidelines for internal space and bedrooms are reproduced from the [Technical housing standards - nationally described space standard 2015](#).

Table 1 - Minimum gross internal floor areas and storage (m²)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

Bedroom space guidelines¹⁶

c. The following minimum floor areas for bedrooms should be met within each unit of accommodation:

Room type	Minimum internal floor area	Minimum width
Single bedroom	7.5m ²	2.15m wide
One double/twin bedroom providing 2 bedspaces	11.5m ²	2.75m wide
Every other double/twin bedroom providing 2 bedspaces	11.5m ²	2.55m wide

Other local internal guidelines

- d. The Council will not normally accept proposals that include single aspect units with 3 or more bedrooms. Where such single aspect dwellings are proposed the onus will be on the applicant to demonstrate that all habitable rooms benefit from good levels of ventilation, daylight and privacy.
- e. Kitchens and bathrooms in particular should benefit from natural ventilation and lighting in order to reduce energy usage.
- f. The Council may exercise some flexibility in respect of internal residential guidelines where:
- Most of the Council's internal guidelines are clearly exceeded;
 - A building is being converted or subdivided;
 - A development is constrained by a heritage designation;
 - A development is constrained by an irregularly shaped site; and
 - In certain other circumstances, the design approach otherwise fully accords with the objectives and considerations set out in this section and / or the prevailing character of an area.

¹⁶ See footnote note 15

- g. All planning applications for residential development should be submitted with floor plans at an identified standard metric scale (normally 1:50 or 1:100), annotated with the internal dimensions of all proposed residential units. A schedule should also be submitted, setting out the following information for each proposed residential unit:
- number of bedrooms and intended occupants; and
 - gross internal floor area.

Further guidance:

These standards are taken from the [Technical housing standards - nationally described space standard 2015](#)

See also the **Explanatory Note** published alongside this SPD.

3.d) Garden space and external amenity space standards

Amenity space and landscaped areas can enhance the appearance of a development as well as provide spaces people can use for informal leisure and recreation, whilst promoting local biodiversity and improved quality of life for residents. All landscaping schemes should consider the need to incorporate Sustainable Drainage Systems (SuDS) and ensure ready access to utility infrastructure such as drainage and access points for maintenance purposes.

Objectives

The Council wishes to ensure that developments include garden space and / or landscaping which:

- Utilise and enhance existing planting and topography, and contribute to local biodiversity through new planting;
- Are integrated into the overall design in order to create natural boundaries, variety, colour and texture;
- Are of a useable size and configuration relative to the needs of the building's occupants;
- Contribute to an attractive and functional development;
- Are properly maintained with arrangements in place for the maintenance of communal garden space or landscaped areas; and
- Incorporate Sustainable Drainage Systems (SuDS) in line with the relevant Local Plan policies and Section 3g) of this guide

Guidelines

Garden space

- a. Private and usable outdoor garden space should be provided for in residential developments.
- b. Outdoor garden space should be of a size and dimension to suit the requirements of the building's occupants for informal recreation and enjoyment. The Council will resist proposals where the amenity space is of a size or shape that are not suitable for such use and enjoyment.
- c. The orientation of outdoor garden space should aim to retain natural features of the site, maximise natural light and afford neighbours and future occupants a reasonable level of privacy.
- d. Gardens facing north will generally need to be longer than those facing south to ensure that the garden receives adequate light.
- e. Outdoor garden space for homes should be directly accessible from the house to allow for secure, private outdoor relaxation, entertainment and children's play.
- f. Garden space should include room for the installation of water butts, recycling storage areas and composting bins. Composting bins should be located in a sunny corner in order to aid the natural composting process.
- g. The height and area of decking should be limited to what can be achieved without compromising the appearance of the property and the privacy of neighbouring land. Where necessary screening should be used to protect neighbouring amenity. Decking or paving over large areas of the garden should be avoided as this can be harmful to local biodiversity and exacerbate the risk of surface water flooding. Any areas of hard surfacing should allow water to permeate through them.



Figure 3.3: Typical boundaries providing privacy in rear gardens

Rear Gardens - Houses and bungalows

- h. Houses and bungalows must be provided with rear private gardens of a useable size and shape. As a guide, the table below indicates what is considered to be a minimum acceptable area for rear gardens in new developments.

Table 3.1: minimum garden space requirements

House / bungalow size	Minimum garden area
1 bedroom	40m ² per unit
2 / 3 bedrooms	60m ² per unit
4 bedrooms	80m ² per unit
5+ bedrooms	100m ² per unit

- i. These amounts should be exceeded wherever possible and where there is scope to provide additional, private and useable garden space, the Council will expect this to be achieved. In all cases, regardless of compliance with the table above, the Council will require adherence to the overlooking distances set out in section 9.2 of this Guide.
- j. For the purpose of this area calculation, side access areas and front gardens will not be included.
- k. Where the development involves the use of existing gardens, the gardens that remain must also comply with the guidelines.
- l. Some flexibility may be acceptable:
 - On corner plots;
 - In town centre locations with close proximity to areas of public open space;
 - On schemes involving four or more homes, provided that the average rear garden size meets the prescribed area;
 - In certain other circumstances, where an alternative design approach fully accords with the objectives and considerations set out in this section and / or the prevailing character of an area;
 - Where roof gardens are proposed; and
 - In cases where amenity space would be provided off site via a planning obligation (to be read in conjunction with the Planning Obligations SPD).

Rear Gardens - Flats and maisonettes

- m. Flats and maisonettes should be provided with sufficient private useable amenity space. 1 bedroom units should provide at least 20 square metres of amenity space, with a further minimum 10 sq m of amenity space for each additional bedroom. Private useable amenity space can be either communal, allocated to individual units or a combination of these two options. These amounts should be exceeded wherever possible and where there is scope to provide additional, useable garden space, the Council will expect this to be achieved. Where any impact on neighbouring amenity would be acceptable, roof gardens are considered to make an appropriate contribution towards garden space provision.
- n. The Council may take a more flexible approach in respect of higher density schemes of flats and maisonettes within town centres and the Elstree Way Corridor regeneration area. The Council will take into account:
 - The suitability of that location for high density development, including its accessibility;
 - Proximity to areas of public open space;
 - The provision of private usable balconies and / or terraces; and
 - The provision of amenity space off site via planning obligations (to be read in conjunction with the Planning Obligations SPD).
- o. The provision of private usable balconies and terraces will be encouraged. Ground floor flats and maisonettes should normally have private garden areas. A balcony, terrace or private garden area will be considered usable where its dimensions are at least 5 sq m with a depth of at least 1.5 metres. The screening of balconies and terraces may be necessary to protect neighbouring amenity.
- p. Areas of 'soft' landscaping around the building(s) will only be counted as outdoor amenity areas, where they form useable and reasonably private amenity space. Very small or awkwardly shaped

areas of the site which makes no contribution to the setting of the building(s) will not be counted towards meeting the required garden area standard.

- q. Developments should make provision for the long term maintenance of out door garden areas for flats, and areas of landscaping and open space.
- r. Larger developments should normally include on-site play areas. See Section 3F) for further details.

Residential care homes

- s. Residential care homes (including extra care homes) will normally be expected to make provision for private usable communal garden space on the same basis as schemes of flats and maisonettes. The Council may exercise some limited flexibility in cases where it can be demonstrated that there has been an emphasis on the quality of landscape design, rather than quantity of space, to meet the specific, identified needs of occupants.

Elsewhere in this document:

See **Section 3f)** of this guide for details of the requirements for the provision of public open space on new residential development.

3.e) Safe and Inclusive Developments

i) Accessibility

*Buildings with high levels of accessibility can be used by a range of users over a long period of time. Accessibility is essential for creating an inclusive society and can considerably improve the quality of life of the occupants or users. Applications for new buildings that contain a facility that is accessible to the public **must** provide an Access and Design Statement, as required under the Planning and Compulsory Purchase Act 2004. This Statement should clearly explain how the provisions of Part M of the Building Regulations, British Standard 83000:2009+A1:2010 and the Equality Act 2010 have been met. More information on Access and Design Statements can be found on the Disability Rights Commission website: www.drc-gb.uk.*

Objectives

The Council wishes to ensure that developments are easy to access and use for:

- all people, regardless of age, gender or, disability; and
- pedestrians and cyclists, to encourage walking and cycling.

Guidelines

Building access

- Proposals should include details of how accessibility requirements have been addressed where the building is required to comply with the requirements of the Equality Act 2010.
- Access to buildings and spaces for disabled people should be integrated into the initial designs in order to ensure accessibility throughout a development site. In this way developments can ensure suitable gradients, level access and reduce obstructions to access.
- Access ramps should be signed, well-lit, with surrounding landscaping designed in a manner that does not obscure views or close in the user. They should be designed in a manner that provides level resting surfaces to enable easy manoeuvring.
- Buildings and their grounds should be designed to accommodate access for pushchairs as well as wheelchairs. Suitable storage spaces should be made available for pushchairs in buildings likely to be used by children, including apartment buildings.
- In the case of non-residential buildings, there should be adequate separation between properties and side boundaries on at least one side to provide rear access for emergency services. This could also be used to accommodate the storage of refuse and recycling bins.

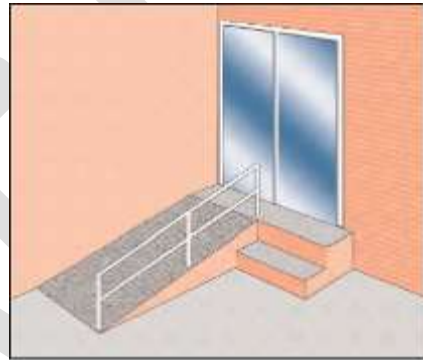


Figure 3.4: Accessible entrances where a level site entrance cannot be provided

Lifetime homes

- For new residential developments, the Council requires that new homes are constructed in accordance with the Lifetime Homes Design Criteria. This will enable new homes to be both accessible to visitors with limited mobility and capable of adaptation without undue difficulty, to fully wheelchair-accessible housing.
- The 'ordinary' appearance of such properties means that most lifetime homes are indistinguishable from most other properties and developers are encouraged to build all new housing to the Joseph Rowntree Lifetime Homes Design Criteria where practicably possible.

Cycle access

- New development should make provision for secure cycle storage in a convenient, signed and safe location.

ii) *Designing out crime*

The creation and maintenance of a safe and secure environment for those living, working in and visiting the Borough is of paramount importance. Successful planning and design has a major role in reducing crime and the fear of crime, through well-designed and well-managed environments which can lower levels of criminal activity and anti-social behaviour.

Objectives

High quality and well thought out design can provide public spaces, streets and parking areas which are overlooked, well-used and maintained and consequently, more likely to provide a safer environment. The environment is a crucial factor in influencing levels of crime, vandalism and anti-social behaviour. A series of key attributes for crime prevention within sustainable communities:

- **Access and movement:** places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security.
- **Activity:** places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times.
- **Management and maintenance:** places that are designed with management and maintenance in mind, to discourage crime in the present and the future.
- **Ownership:** places that promote a sense of ownership, respect, territorial responsibility and community.
- **Physical protection:** places that include necessary, well-designed security features
- **Structure:** places that are structured so that different uses do not cause conflict.
- **Surveillance:** places where all publicly accessible places are overlooked.

Guidelines

- a. The creation of safe and secure environments needs to be considered from the outset and incorporated into the planning and design stage. The Council will liaise with Hertfordshire Constabulary in assessing whether proposals have adequately sought to design out crime. Proposals should always include the following elements:
- b. Natural Surveillance can arise from the presence of other users through a mix of uses or from careful siting and layout of buildings, as well as layouts within buildings. Entrances should be visible from the street with windows providing unobstructed views or overlooking of footpaths, play areas, parking and other public areas.
- c. Clearly defined boundaries and defensible space help to bring a place under the care and control of its residents by reducing wasted, left-over or anonymous space in favour of well-defined private or public space.
- d. Gated developments can create a sense of segregation, increase fear and perception of crime and will be resisted by the Council. Refer to Section 2p) for further details.
- e. Secure buildings, surroundings, good lighting and where appropriate CCTV can improve security.
- f. Safe and secure provision for the storage of hazardous chemicals required on a site, both during and following construction, should also be provided. The Council supports the use of CHEMSAFE, a voluntary scheme run by the Chemical Industries Association and an integral part of the chemical industry's 'Responsible Care' initiative.
- g. Well-designed and laid-out buildings offer the best means of reducing the risk of crime but it will never be possible to eliminate all security risks. Additional measures which increase actual levels of

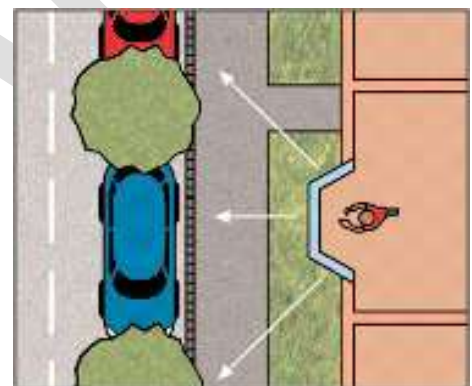


Figure 3.5 Natural surveillance through bay windows

Hertsmere Draft Planning and Design Guide SPD Part D
Draft for DM use and Public Consultation October 2016

security within buildings, together with good lighting and CCTV can reduce the likelihood of both crime and the fear of crime.

- h. Care should be taken to ensure that security measures do not detract from the character or appearance of an area.

Checklist

When preparing Design Statements as part of an application submission, early consultation with the Crime Prevention Design Advisor is strongly advised. The following checklist is also provided for developers and should be considered in the planning and design stages of new proposals.

<input type="checkbox"/>	<i>Guidelines and specifications as set out in Association of Chief Police Officers "Secured by Design" website (www.securedbydesign.com) are met.</i>
<input type="checkbox"/>	<i>Boundaries are clearly defined to indicate whether areas are in public or private ownership.</i>
<input type="checkbox"/>	<i>There is maximum natural surveillance of public and communal spaces, including streets, footpath and play areas.</i>
<input type="checkbox"/>	<i>All entrances, exits, pathways and car parks are well lit, accessible and visible to passersby and / or from neighbouring properties.</i>
<input type="checkbox"/>	<i>Recessed entrances (including houses and shop fronts) and any other recesses, such as alleyways are avoided.</i>
<input type="checkbox"/>	<i>Open spaces serve a definite function and are fronted by development that offers natural surveillance throughout the day.</i>
<input type="checkbox"/>	<i>Blank walls are avoided as far as possible, particularly fronting onto open spaces.</i>
<input type="checkbox"/>	<i>Appropriate defensible planting has been used to deter intruders</i>
<input type="checkbox"/>	<i>Landscaping does not create areas of concealment or obscure entrances, lighting, CCTV and signage.</i>
<input type="checkbox"/>	<i>New alleyways, where deemed necessary, are suitably gated.</i>
<input type="checkbox"/>	<i>Materials have been selected to deter graffiti and vandalism. Use of railings to avoid 'graffiti walls' and maximise natural surveillance is recommended where appropriate.</i>
<input type="checkbox"/>	<i>Shop fronts and other commercial premises will not be permitted to use solid grills and shutters for their protection.</i>
<input type="checkbox"/>	<i>CCTV is provided where appropriate and carefully located, with regular ongoing surveillance and monitoring.</i>

Further guidance:

[Secured by Design](#) provides a range of information from ACPO Crime Prevention Initiatives on designing for security and crime prevention.

Detailed guides have been produced by the [Hertfordshire Constabulary Crime Prevention Design Service](#).

See also the [British Parking](#) website.

3.f) Flood Risk and Drainage

i) Sustainable Drainage Systems (SuDS)

SUDS are drainage systems that are considered to be environmentally beneficial, causing minimal or no long-term detrimental damage. They are often regarded as a sequence of management practices, control structures and strategies designed to efficiently and sustainably drain surface water, while minimising pollution and managing the impact on water quality of local water bodies.

Objectives

- The Council expects SuDS to be integrated into all development proposals. All developments should achieve as close to a greenfield runoff-rate as possible to reduce the impact of new development on surface water drainage infrastructure and to prevent the discharge of water onto adjoining sites.
- SuDS design should follow the drainage hierarchy set out in the Planning Practice Guidance and policy and guidance published by Hertfordshire County Council as the Lead Local Flood Authority.
- The benefits that can be achieved by SuDS will be influenced by the site, but fit broadly into four categories; water quantity, water quality, amenity and biodiversity. Each of these categories has its own design objectives.

Guidelines

- National planning policy requires SuDS on all major developments of 10 units and above, and with floorspace of over 10,000m². The Hertsmere Local Plan seeks SuDS on all new development through policy SADM16 – Sustainable Drainage Systems¹⁷.
- The Lead Local Flood Authority will be consulted on all major schemes and on any smaller schemes where the council considers it to be necessary.
- SuDS features should be incorporated into the design of amenity space and landscaping for developments, and should be considered at the earliest stages of a design project.
- Guidance produced by Hertfordshire County Council and Susdrain provides detailed information on the design and implementation of SuDS.

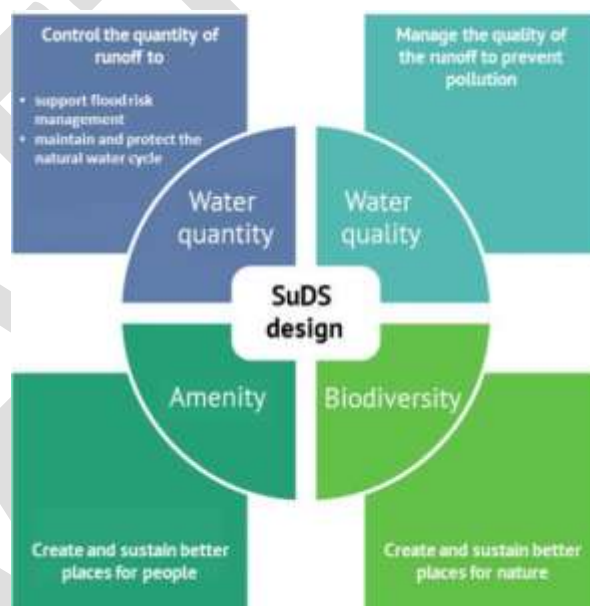


Figure 3.6: Four pillars of SuDS design (from susdrain)

Further reading: SuDS Policy

Hertfordshire County Council, [Sustainable Drainage Systems Policies](#), 2015

Hertsmere Borough Council, [Site Allocations and Development Management \(SADM\) Policies Plan](#) (published 2015), policy SADM16 – Sustainable Drainage Systems

Further guidance:

Susdrain – [online guidance on SuDS](#)

¹⁷ Site Allocations and Development Management (SADM) Policies Plan (published 2015), policy SADM16 – Sustainable Drainage Systems

3.g) CO₂ Reductions and Energy Use and Generation

*The construction industry has an enormous impact on the environment and use huge amounts of natural resources. Energy from fossil fuels consumed in the construction and operation of buildings accounts for approximately half of the UK's emissions of CO₂ with housing alone generating 27% of UK emissions primarily due to fossil fuel use in space heating.*¹⁸

*The construction, demolition and refurbishment of buildings accounts for around 100 million tonnes of waste in the UK each year.*¹⁹ *Reducing the carbon embodied within buildings and finding better ways to deal with the waste produced through the construction process are important for many reasons; not only for reducing resources and associated costs but also alleviating longer term risks around resource availability.*²⁰

Objectives

Sustainable design and construction are central to delivering quality places and is an important means of reducing the environmental impact of development as well as dealing with waste at the high end of the waste stream. Waste generation through development arises through the construction process and the occupation of buildings.²¹ Policies CS16 and CS17 in the Core Strategy seeks to reduce the environmental impact of all new developments and reduce CO₂ emissions, and set out potential measures which can help to achieve this.

This section focuses on principles for:

- minimising construction waste through improved design and the use of recycled building materials;
- minimising future demolition waste by designing flexible buildings which are able to be reused in the future should need change.
- reducing the embodied carbon within new buildings through the use of building materials with lower levels of embodied carbon, in particular using recycled and renewable materials;
- incorporating renewable energy generation within larger developments.

Sustainable construction techniques should not conflict with other local or national policies and policy guidance documents, such as those concerning listed buildings, conservation areas and development in the Green Belt.

Guidelines

Construction waste and demolition methods

- a. Where there is a proposal to demolish buildings and replace them with new buildings, the best way to reduce the amount of demolition waste is to reuse as much of the materials as possible on-site within the new building. Therefore the design of the replacement building should be carefully considered in order that it is possible to re-use available materials on-site.
- b. The reuse of inert demolition waste in construction projects is encouraged by the county council. However, consideration should also be given to any environmental aspects limiting reuse, such as the landscape impacts of reusing all excavated spoil.

Further reading: Waste Policy

Hertfordshire County Council [Waste Core Strategy and Development management Policies DPD \(adopted 2011\)](#)

¹⁸ Constructing Excellence, [Plain English Guide to Sustainable Construction](#), 2008

¹⁹ BRE and DEFRA, [Developing a strategic approach to construction waste](#)

²⁰ UK Green Building Council, [Tackling embodied carbon in buildings](#), February 2015

²¹ Hertfordshire County Council, [Waste Core Strategy and Development management Policies DPD \(adopted 2011\)](#)

Reducing embodied energy and carbon within buildings

- c. In order to reduce the energy consumption and carbon footprint of development it is important that the energy and carbon embodied in building materials and design and construction processes is accounted for. The embodied energy within a building is the total energy required to bring the building into use, including the energy consumed in winning raw materials, processing them and manufacturing composite items as well as transporting materials between and within these processes.
- d. The greatest opportunity for impact on embodied carbon comes at the design stage, in particular in the building structure. Opportunities taken at this early stage can lead to large embodied carbon savings over the lifetime of the building.
- e. Reductions in embodied carbon are beneficial to the developer through:
- Financial benefits from reductions in materials use and waste;
 - less reliance on energy-intensive manufacturing routes; and
 - a reputation for good environmental management.
- f. The selection of materials plays an important role in reducing embodied carbon within developments. Some materials (e.g. traditional cement concrete) contain high levels of embodied energy and their production process is energy-intensive and creates heavy levels of pollution and direct environmental damage. Using renewable materials (e.g. sustainably sourced timber) and recycled materials (e.g. cement substitutes like pulverised fuel ash [PFA] in concrete) can help to achieve lower levels of embodied energy and carbon within a development.
- g. Re-using and recycling materials (e.g. reclaimed bricks or locally recycled aggregates) not only reduces construction waste but also lowers the embodied carbon within a building.



Figure 3.7: The WWF Living Planet Centre, Woking, uses double instead of triple glazing as it was more carbon efficient over the lifetime of the building.

Example:

At the WWF Living Planet Centre in Woking a 'whole life' carbon assessment showed that, for this building, double glazing was more carbon efficient than triple. This was because the lifetime capital carbon costs of the triple glazing outweighed the operational carbon savings over the anticipated life. This choice also significantly reduced initial capital expenditure, with only a small operational increase.²²

Further guidance:

UK Green Building Council, [Tackling embodied carbon in buildings](#)

Waste and Resources Action Programme (WRAP), [Information sheet for construction clients and designers](#)

Sustainable energy generation within new development

- h. Core Strategy Policy CS17: Energy and CO₂ Reductions requires all large-scale developments to incorporate energy generated from decentralised and renewable or low carbon sources where this is feasible or existing sources cannot be identified.
- i. The opportunity for developments to contribute to renewable energy generation will vary, as the potential to integrate the technologies will differ between developments and sites. Suitable

²² UK Green Building Council, [Tackling embodied carbon in buildings](#)

sustainability installations are likely to be affected by the physical nature of the development such as aspect, building height, amount of on-site open space and the ecology of the area, as well as other planning constraints and considerations such as design and impacts in local character.

- j. Various forms of small-scale renewable and low carbon energy generation have been identified through a 2010 technical study²³ as being potentially suitable in Hertfordshire:
- solar thermal and PV.
 - heat pumps (air and ground sourced) may be suited to areas not served by gas and where under floor heating is possible.
 - biomass heaters are ideal in lower density areas for individual buildings and where DH is feasible in higher density areas.
 - there is limited data on energy generation from building mounted wind turbines in urban locations but early examples appear to have generated significantly less than was predicted by manufacturers and installations should carefully consider local topography.
 - fuel cells can be used as CHP systems in buildings but are considered to be an emerging technology and currently the costs are high.
- k. Sustainable energy technologies can be relatively expensive to install and may add to the embodied carbon within a building, however a whole-life approach allows long-term financial and carbon-reduction benefits to be factored in at the planning stage.
- l. In larger developments, in particular mixed-used schemes, consideration should be given to employing community heating, cooling and power networks supplied by low- and zero-carbon technologies to improve energy self-sufficiency and reduce demand for energy from fossil fuels. Building-integrated technologies such as solar (passive and active) and micro-wind will be more suited to higher-density urban areas, while more space-intensive technologies, such as biomass, ground-source heat and medium to large wind turbines, may be suited to sub-urban and rural/urban fringe locations alongside building-integrated technologies.
- m. Renewable energy generation should accompany a reduction in energy demand throughout the lifetime of the building through its design and operation.
- n. There are a number of design issues associated with the varying forms of renewable and low carbon energy generation.

For individual buildings where micro-renewable technologies may be employed these can include siting, efficiency (e.g. pitch of solar PV panel or viable wind speed), colour and appearance, noise, connection, safety and potential ecological and landscape impacts.

For groups of buildings where combined heat and power and/or heat networks are employed these can include access (for fuel provision i.e. biomass), visual intrusion, location of plant, noise from traffic and plant operations, health and local ecology, mix of uses to balance the demand for energy, installation and transmission costs, adjoining developments and heat networks and potential ecological and landscape impacts.

Further guidance:

Building Research Establishment (BRE), [Microgeneration Certification Scheme \(MCS\)](#)

Aecom for Hertfordshire Local Planning Authorities, [Hertfordshire Renewable and Low Carbon Energy Technical Study](#)

Planning practice Guidance, [Renewable and low carbon energy](#) (this is primarily relevant to proposals for larger-scale renewable energy generation schemes)

Town and Country Planning Association, [Sustainable Energy By Design](#)

²³ Aecom for Hertfordshire Local Planning Authorities, [Hertfordshire Renewable and Low Carbon Energy Technical Study](#)

Glossary

Active frontage: An active frontage is a frontage which has lots of openings so that the street outside can be seen from inside and is used by people. A shop window would be an active frontage whereas a blank brick wall would not be an active frontage.

Amenity (general): A positive enjoyable factor of an area.

Amenity space: A (normally) green space that is used for relaxation. A garden for example.

Building line: The line formed by the frontages of buildings along a street.

Bulk: The combination of length height and depth of a building. Also referred to as **mass**.

Character: Identity or appearance of an area or building.

Context: The setting of a building, site or area. This can include surrounding development heights, plot shape, materials used, greenery and vegetation etc.

Desire line: An imaginary line linking facilities or places that people would find it convenient to travel along.

Dominant feature: The most notable feature. A feature which stands out the most because of its height, mass, material or placement / repetition within the street scene. A dominant feature can be a positive or negative feature.

Elevation: The façade of a building. Often used to refer to a drawing of a building from a particular direction, e.g. east elevation.

Enclosure: The use of buildings or vegetation to create a defined sense of place.

Fenestration: The arrangement of windows on a façade.

Gateway: The design of a building, site or landscape to symbolise a special entrance to a settlement or special area.

Hardstanding: Hard surfaced or paved area, usually to provide off street car parking,

Harmonious: In keeping with its surroundings. This could be assessed in terms of bulk, mass, position of the development on the plot of land etc.

Incongruous: Not in keeping with its surroundings.

Landmark building: A building or structure that stands out from its background, by virtue of its height, size or another aspect of its design. Such a building is often deliberately placed in a townscape vista.

Legibility: How easily a place can be understood or navigated. Whether somewhere is legible or not is often due to the layout of a place, as well as the topography and the types of buildings.

Mass: The combination of length height and depth of a building. Also referred to as **bulk**.

Modulation: Variation to the plane of a building wall (such as different projections) that is often used to break up the mass of a building and to create visual interest.

Permeability (development layout): The connectivity of a street layout. A layout where there are minimal dead-ends.

Permeable (hardstanding); A surface that will allow water to pass through it.

Permitted development / permitted development rights: You can perform certain types of work without needing to apply for planning permission. These are called "permitted development rights". They derive from a general planning permission granted not by the local authority but by Parliament. Bear in mind that the permitted development rights which apply to many common projects for houses do not apply to flats, maisonettes or other buildings. Similarly, commercial properties have different permitted development rights to dwellings. See the [Planning Portal](#) for more information.

Public realm: Open spaces (streets, lanes) that are wholly accessible to the public.

Respect: To compliment an existing building or area. Development or a feature that does not overwhelm the building or area.

Scale: Relates to the size of the building within its context.

Sense of Place: Where a place has a strong and unique identity or character.

Typology: The classification of buildings according to their general type e.g. high rise flats, bungalows, warehouses

Topography: A description of the shape of the land. Changes in the height of the land, for example.

Verdant: Green landscaping, green character of an area.

Vibrant: Busy, exciting, well used space. A space with lots of visual interest.

Vista: An enclosed view, especially a long, narrow one.

Documents referred to in this guide

Planning Policy

National Planning Policy

[National Planning Policy Framework](#) (NPPF), 2012

Local Planning Policy

[Hertsmere Core Strategy](#), adopted 2013

[Elstree Way Corridor Area Action Plan](#) (EWCAAP), adopted 2015

[Site Allocations and Development Management \(SADM\) Policies Plan](#), emerging policy published 2015

[Hertsmere Local Plan](#), adopted 2003 (partially superseded by Core Strategy and EWCAAP)

Guidance

National planning guidance

[Planning Practice Guidance](#) (PPG), 2014

[Technical housing standards – nationally described space standard](#), 2015

Design

Design Council (incorporating CABE) [Design and Access Statements: How to write, read and use them](#), 2006

Association of Directors of Environment, Planning and Transport (ADEPT), [Making Space for Waste: Designing Waste Management in New Developments](#), 2010

Simmons, R., *Good Design: the fundamentals*, CABE, 2009

<http://www.designcouncil.org.uk/resources/guide/good-design-fundamentals>

The UK Green Buildings Council, *Health and Wellbeing in Homes*, July 2016

<http://www.ukgbc.org/resources/publication/uk-gbc-task-group-report-healthy-homes>

Transport for London (TfL), [London Cycling Design Standards](#), 2015

Sustainability and energy use

Constructing Excellence, [Plain English Guide to Sustainable Construction](#), 2008

Lifetime Homes – Joseph Rowntree Foundation: www.lifetimehomes.org.uk

Town and Country Planning Association, [Sustainable Energy By Design](#), 2006

Waste and Resources Action Programme (WRAP), [resources for construction designers and consultants](#) (note that the creation of a free account may be required to access some features)

Crime Reduction

[The British Parking Association](#)

[Secured by Design](#)

Hertfordshire County Council

[Hertfordshire Building Futures Sustainable Design Toolkit](#) (note the Toolkit is accessible through subscription only – details are available through clicking the link)

[Roads in Hertfordshire – Highway Design Guide](#)

Hertsmere Borough Council Supplementary Planning Documents

[Affordable Housing SPD](#), 2015

[Biodiversity, Trees and Landscape SPD](#), 2010

[Parking Standards SPD](#), updated 2014

[Developer Contributions Framework](#) (online resource)

Other Hertsmere Borough Council publications

[Technical note: Waste storage provision requirements for new developments](#), 2014

[Streetscape Manual: Improving the public realm in Hertsmere's shopping centres](#), 2012

These and other Hertsmere Borough Council SPDs and publications can be downloaded from the [Planning Policy pages](#) of the council's website.