Urban Design Guide Supplementary Planning Document

Adopted July 2023

Bromley Council

Urban Design Guide Supplementary Planning Document – adopted 5 July 2023

For more information about this document, please contact:

Bromley Planning Policy Team

Email: ldf@bromley.gov.uk

1. Introduction

What is urban design and why is it important?

1.1. Urban design is the art of making places for people. It concerns the connections between people and places, movement and urban form, nature and the built fabric, and the processes for ensuring successful villages, towns and cities[1].

1.2. Urban design is essentially about placemaking, analysing, organising and shaping the urban form, knitting together the townscape, unlocking physical, social, and cultural assets to create and enhance local identity. Successful places are dependent on good design, they require a people first approach; a richer mix of uses and activities breathes life into a town or city creating a spirit, vibrancy and a sense of place.

1.3. Good urban design adds value by increasing the economic viability of development and by delivering social and environmental benefits[2]. A key objective in achieving good urban design is to adopt an integrated approach to development where all elements combine successfully to deliver greater social, economic, and environmental value and long-term sustainability for the benefit of all stakeholders. This objective underpins the purpose of this guidance.

A vision for Bromley

1.4. The Bromley Local Plan sets out the Vision for the Borough through to the 2030's:

"Bromley is known for the high quality of its living, working and historic and natural environments. The Council, local people, organisations and businesses work together to ensure that we all enjoy a good quality of life, living healthy, full, independent and rewarding lives.

Bromley values its distinctive neighbourhoods, ranging from the rural to suburban and urban. Neighbourhoods provide a choice of good quality homes, jobs and a range of shops and services appropriate to the different town, district and local centres.

The protection and enhancement of conservation areas and heritage assets, along with high quality new development have contributed to civic pride and wellbeing.

The Green Belt fulfils its purpose, and, together with other open spaces, contributes to protecting Bromley's special character and the health and wellbeing of local residents and visitors alike.

Bromley has high levels of educational attainment, whilst strong and diverse businesses are able to invest to support a thriving economy."

1.5. In accordance with the aims and objectives set out in the Local Plan, the overriding vision is to support opportunities for sustainable growth whilst ensuring that the existing character and identity of Bromley reflected by its distinctive rural, suburban, and urban neighbourhoods, conservation areas and heritage assets, Green Belt countryside, and a thriving local economy is retained and enhanced.

[1] By Design, CABE, 2000
[2] The Value of Urban Design, CABE and DETR, 2001

1.6. The wider regeneration of the borough provides the opportunity to build sensitively on Bromley's history and heritage whilst delivering new high-quality housing, public realm and community facilities.

1.7. Within this context, the Urban Design Guide Supplementary Planning Document (SPD) seeks to reflect and build upon existing physical, social and cultural assets of Bromley with the aim of sensitively stitching new development into the existing urban fabric to strengthen and reinforce a sense of place and local identity.

1.8. The SPD also aims to significantly raise the quality of spatial, urban and architectural design in Bromley and to strengthen and enhance local character in all new development, raising expectations through high quality design. Delivery of these aims will help to ensure continued investment and economic growth.

1.9. Historically the borough has tended to undertake regeneration projects in isolation; however, by considering regeneration more holistically, the benefits can be more far-reaching. Among the key objectives for any development proposal or regeneration scheme is to create greater consistency and continuity of design, transforming an existing fragmented town centre townscape into a more cohesive coherent whole.

1.10. All new development across the borough will be expected to reflect the history, character, and future aspirations of Bromley as set out in the Local Plan, as well as reflecting the needs and collective values of the local community.

Purpose of the document

1.11. The purpose of this document is to provide clear guidance on urban design to inform and engage developers, applicants, planning officers, residents and all other interested parties in bringing forward proposals for development in Bromley.

1.12. The document sets out the principles for achieving good design with the aim of significantly raising the quality of development within the borough. Key aspects of local character are highlighted alongside illustrative design guidance to ensure that new development is delivered sensitively and cohesively, achieving a sense of unity without uniformity.

1.13. The guidance is not intended to be overly prescriptive but aims to provide an overarching spatial vision outlining key design principles that should be followed, whilst also allowing for flexibility to encourage richness, variety and innovation in future detailed designs.

1.14. The aim is to promote good quality design for buildings, landscape, and public realm, establishing the desired characteristics for successful places and providing a quality benchmark for how new development should look and feel.

Status of the document

1.15. This SPD provides guidance on the interpretation of adopted planning policies as they relate to various aspects of design; it does not set out new planning policy, as this cannot be done in an SPD.

1.16. The Urban Design Guide SPD will be an important material consideration in the determination of future planning applications. Development proposals will therefore

need to take into account the guidance set out within this document, in addition to other relevant guidance and strategies.

1.17. This SPD will replace extant supplementary planning guidance set out in the General Design Principles SPG and Residential Design Guidance SPG.

Who is the document for?

1.18. This document is intended to provide clear guidance on urban design primarily for developers, architects and planners. However, whilst this is a technical document the principles and objectives outlined within are intended to inform and engage a wide range of stakeholders including Council Members and local residents in addition to built environment professionals and all other interested parties. These may include:

- Planners, architects, landscape architects, and professional consultants
- Investors, developers and project delivery organisations
- Local Planning Authority and Council Members
- Local residents and community groups
- Special interest groups (i.e. conservation and heritage)

How to use the document

1.19. This document is divided into five sections including this introduction:

- Section 2 – Policy Framework and Planning Process- sets out the relevant policy guidance and how this should be interpreted in relation to development proposals for Bromley. This section outlines national, regional and local policy and guidance which includes the Local Plan and supporting documents; and also introduces the planning application process, highlighting the key requirements for major development proposals.
- Section 3 – Character Appraisal - Understanding Bromley - provides key information about Bromley as a place and its important qualities, outlining which aspects of place should be taken into account in planning and designing new development. This section includes a study of the borough's historical development and the evolution of Bromley as it is today, which includes designated Metropolitan and Major Town Centres, open greenbelt countryside, designated conservation areas and areas of special residential character.
- Section 4 – Principles of Good Design - identifies the key principles of good urban design which should be considered and applied to future development proposals. This section highlights the key characteristics of successful well-designed places which include character and identity, responsive architecture and landscape, movement and connectivity, access and inclusion, healthy environments, sustainable design, adaptability and resilience.
- Section 5 – Design Guidance - illustrates how principles of good design should be applied to development proposals in Bromley. A number of specific and measurable objectives provide clarity in relation to the Council's expectations in achieving successful design outcomes. Guidance is provided through detailed 'SPD guidance notes' – DG1, DG2, etc - which include references to relevant policies and guidance where appropriate (these are not-exhaustive and there may be other relevant policies which apply).

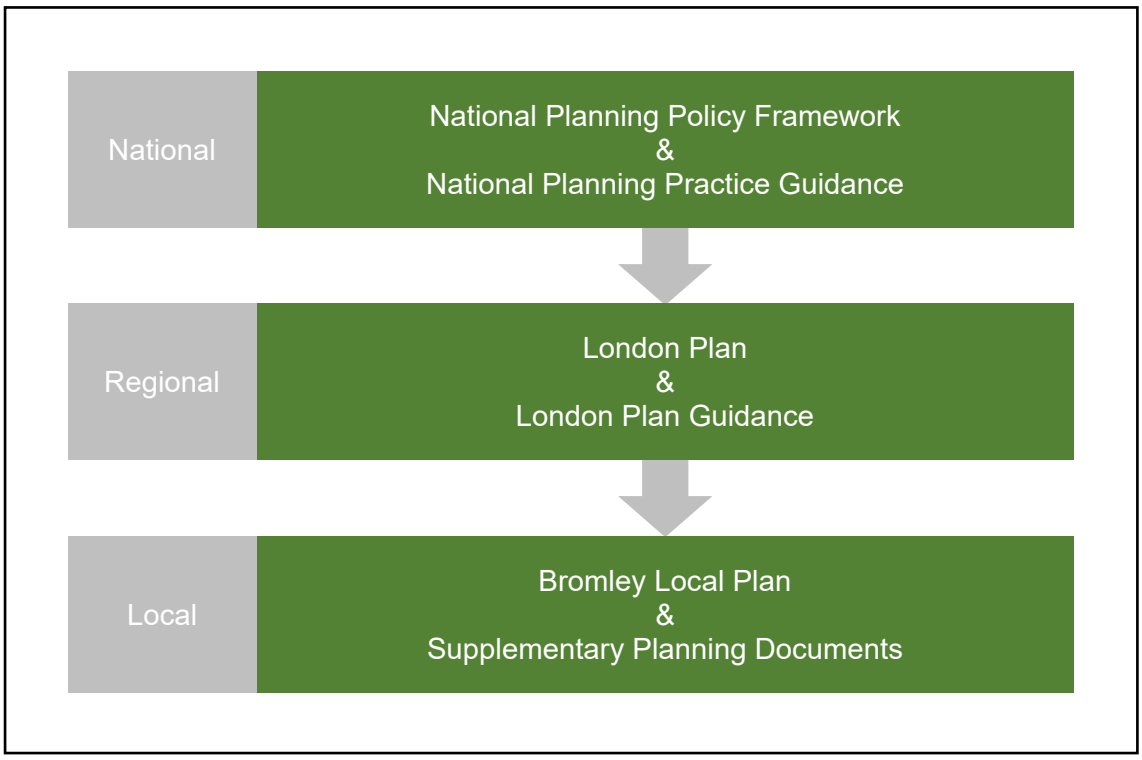
2. Policy Framework and Planning Application Process

2.1. Well-designed buildings and places can be achieved by taking a proactive and collaborative approach at all stages of the planning process, from policy and plan formulation through to the determination of planning applications and the post-approval stage.

2.2. The policy framework for Bromley encompasses planning policy and guidance at a national, regional and local level. The SPD should be read in conjunction with all relevant national, regional, and local design policy and guidance. The key policy and guidance set out below should not be considered exhaustive; where new guidance is published which is relevant to design considerations in Bromley, the SPD should also be read in conjunction with this new guidance. This includes the Bromley Town Centre and Orpington Town Centre SPDs.

2.3. The design guidance set out in this document reflect the priorities and aspirations of the Council. The document expands on the key principles set out at national, regional, and local level and suggests how development proposals in Bromley can achieve them. In some instances, the guidance provides a finer framework of design quality requirements based on a good understanding of existing local character and emerging context(s).

Figure 1 – policy framework diagram



National planning policy and guidance

2.4. The National Planning Policy Framework[3] (NPPF) sets the national policy context for preparation of local plans. Local Plans must be consistent with national policy and should enable the delivery of sustainable development in accordance with the policies in the NPPF. The NPPF is also capable of being a material consideration in the determination of planning applications. The current version of the NPPF was published in July 2021. National Planning Practice Guidance[4] (PPG) provides further detail on various aspects of the NPPF.

2.5. The Government sets out a framework for achieving well-designed places in Chapter 12 of the National Planning Policy Framework. Paragraph 126 emphasises the value of good design as a key aspect of sustainable development. Paragraph 128 highlights the need for design guides in order to deliver a consistent and high-quality standard of design

2.6. Paragraph 130 emphasises the need to ensure visual and functional design quality; to respect local character and establish a sense of place; optimise site potential to accommodate an appropriate amount and mix of development; and to create places that are safe, inclusive and accessible which promote health and well-being.

2.7. The NPPF advises that *"significant weight should be given to: a) development which reflects local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes; and/or b) outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings."* (Paragraph 134)

2.8. To be read alongside this guidance are two important Planning Policy Guidance notes: Design: Process and Tools[5] and the National Design Guide[6]. The National Design Guide sets out the ten characteristics of well-designed places and explains what good design means in practice.

London planning policy and guidance

2.9. The Mayor of London sets out a planning framework for 'Good Growth' in the London Plan, defined as growth that is socially and economically inclusive and environmentally sustainable.

2.10. To deliver this, each of the policy areas in the London Plan are informed by six Good Growth objectives:

- GG1 Building strong and inclusive communities
- GG2 Making the best use of land
- GG3 Creating a healthy city

3 National Planning Policy Framework (July 2021), available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

4 Planning Practice Guidance, available from: https://www.gov.uk/government/collections/planning-practice-guidance

5 Design: process and tools, available from: https://www.gov.uk/guidance/design

6 National Design Guide (January 2021), available from: https://www.gov.uk/government/publications/national-design-guide

- GG4 Delivering the homes Londoners need
- GG5 Growing a good economy
- GG6 Increasing efficiency and resilience

2.11. Chapter 3 of the London Plan sets out key urban design principles to guide development in London. Design policies in this chapter seek to ensure that development optimises site capacity; is of an appropriate form and scale; responds to local character; achieves the highest standards of architecture, sustainability and inclusive design; enhances the public realm; provides for green infrastructure; and respects the historic environment. The chapter is broken down into 14 individual design policies, each with specific criteria and supporting text.

2.12. The GLA have recently consulted on four new pieces of London Plan Guidance (LPGs) relating to design and housing quality. The LPGs listed below supersede the Draft Good Quality Homes for All Londoners SPG which was previously consulted on in late 2020.

- Characterisation and Growth Strategy
- Small Site Design Codes
- Optimising Site Capacity: A Design-led Approach
- Housing Design Standards

2.13. The first three documents focus on the policy plan-making stage; the last document focuses on standards for the development management application stage. The intention of the guidance is to front-load design considerations/assessments at an early stage before development proposals reach the decision-making stage, i.e. providing additional clarity on key design matters from the outset to reduce the risk at application stage.

Local planning policy

2.14. The Bromley Local Plan (2019) sets out the borough's planning policies and reflects its commitment to improving the quality of the natural and built environment. The Local Plan is underpinned by Bromley's 2030 vision for high quality living, working, historic and natural environments, including its valued and distinctive neighbourhoods. New development of all kinds should be well-designed, safe, energy-efficient and should complement the surroundings, respecting scale and layout.

2.15. The key objectives for Design and the Public Realm are to:

1. Ensure development attains high-quality design standards
2. Ensure development includes appropriate well-planned private or public open space that promotes and enhances biodiversity
3. Ensure public areas are well-designed, safe and accessible

2.16. Policy 37 – General Design of Development – requires all development proposals to be of a high standard of design and provides specific criteria in relation to architectural quality (scale, form, layout and materials), context (townscape character and heritage), spaces between buildings (hard and soft landscaping), amenity (daylight and sunlight), access and inclusion, and sustainable design and construction. General design guidance is supplemented with specific policies for statutory listed buildings, locally listed buildings and non-designated heritage assets, conservation areas and areas of special residential character in order to preserve and enhance the character and appearance of valued assets and distinctive settings.

2.17. Policy 47 – Tall & Large Buildings – requires tall and large buildings to make a positive contribution to the immediate setting and the wider townscape, appropriate to their location/context and to be of the highest architectural design quality. Policy 48 – Skyline – requires development to protect or enhance specific views and landmarks.

The planning application process

2.18. Most new development requires planning permission, from small scale extensions and alterations to large scale development proposals and major changes to existing buildings and/or the local environment. Detailed guidance on the planning application process is available from the planning portal website[7].

2.19. The Council has published validation guidance and local information requirements[8] for planning applications which we advise all applicants to view in order to help submit a valid application.

2.20. All major planning applications must include a Design and Access Statement which should demonstrate how the proposal meets the design requirements of the Development Plan and how the proposal responds to each of the Council's six overarching Design Principles set out in Section 4.

2.21. Design and Access Statements are important documents that explain the thinking behind the development proposal. The level of detail provided should be proportionate to the scale and complexity of the development being proposed and should include the following steps:

- assessment (site and policy context);
- involvement (professional and community engagement);
- evaluation (opportunities and constraints); and
- design (concept/design development)[9].

2.22. Applications for sites within conservation areas or within the setting of a listed building(s) should also be accompanied with a Heritage Impact Assessment. Applications involving listed buildings require Listed Building Consent, and any proposed works to a Scheduled Monument will require consent from the Department of Culture, Media and Sport and advice from Historic England. Applicants proposing development that is likely to have archaeological implications should seek advice from the Greater London Archaeology Advisory Service (GLAAS)[10].

2.23. The Council offers a pre-application advice service[11] to enable applicants to discuss the detailed design of a proposal prior to submission and/or advise on revisions following the determination of applications. We also offer an 'in principle' pre-application service for major development proposals for larger sites to advise on appropriate land uses.

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[7] https://www.planningportal.co.uk/planning/planning-applications
[8] https://www.bromley.gov.uk/planning-applications/planning-validation-requirements
[9] Further guidance on preparing Design and Access Statements is available from: https://www.designcouncil.org.uk/our-work/skills-learning/resources/design-and-access-statements-how-write-read-and-use-them/
[10] https://historicengland.org.uk/services-skills/our-planning-services/greater-london-archaeology-advisory-service/our-advice/
[11] Details of the pre-application service, including relevant forms, are available from: https://www.bromley.gov.uk/planning-applications/pre-application-planning-advice

2.24. At the pre-application stage applicants should also consider other bodies which may be involved in the decision-making process. Applicants are encouraged to contact appropriate statutory bodies at an early stage in the pre-application process.

2.25. For proposals affecting the historic environment, including Listed Buildings and Conservation Areas, Historic England provides initial, formal, and/or extended pre-application advice for applicants[12]. Historic England also produce advice and guidance notes covering a variety of heritage-related topics.

2.26. For development proposals in flood zones 2 and 3 and/or on land affected by contamination, the Environment Agency provides site-specific pre-application advice which includes bespoke technical advice and an early indication of permitting requirements[13].

2.27. In accordance with London Plan policy D4 requirements, all major development proposals referable to the Mayor of London must be subject to design scrutiny by an independent Design Review Panel and must undergo at least one design review as part of the pre-application process. The format of design reviews should be agreed with the Council. Major development proposals and/or proposals for smaller sensitive sites will be subject to independent design review provided by the Bromley Design Review Panel.

[12] Details available here: https://historicengland.org.uk/services-skills/our-planning-services/charter/our-pre-application-advisory-service/
[13] Details available here: https://www.gov.uk/guidance/developers-get-environmental-advice-on-your-planning-proposals

3. Character Appraisal - Understanding Bromley

Historical development

3.1. Bromley's historical development has played an important part in establishing its character. Bromley has a very strong architectural heritage which is reflected in several designated conservation areas across the borough which include a number of listed and locally listed buildings.

3.2. Bromley was a notable market town in the 13th Century, located on a major coaching route to London. The town developed around the marketplace, located at today's Market Square, and grew along the old London to Hastings turnpike. The market town on high ground above the valley of the River Ravensbourne benefited from pleasant views and healthy country air. Early maps show buildings grouped around the marketplace and the High Street. Up to the middle of the 19th Century the town extended from Bromley College in the north, to Tweed Cottage, next to Aberdeen Buildings, in the south, with estate gardens abutting sections of the High Street. Until the coming of the railway in 1858, little changed. The arrival of the railway and suburban expansion of London further encouraged growth as residential development radiated out from the historic town centre.

3.3. The commercial success of Bromley Town Centre altered the character of Bromley as a market town. The Glades Shopping Centre was completed in 1991 and the High Street was pedestrianised in the early 1990s to accommodate the popularity of Bromley as a commercial centre. Pedestrianisation of the High Street was facilitated by Kentish Way which was constructed in the early 1990s to bypass the town centre forming a continuation of the A21. The creation of Kentish Way and the Glades Shopping Centre were significant interventions in the evolution of Bromley Town Centre influencing its present-day character.

3.4. Beckenham has a long history as a village and the location of several notable country seats. Its transition to a town, and then to a suburb have wrought enormous changes in its built fabric that largely define its character today. The introduction of the railway saw Beckenham develop from a small village into a town on the edge of suburbia. The period of greatest growth and change, from 1860 to 1890, swept away most of the timber framed houses that had characterised the village and replaced them with architecture representative of Victorian urban life.

3.5. Development before the First World War in the Shortlands and Langley area was prompted by the railway, spreading from Beckenham south around Wickham Road and east around Bromley Road (A222) towards Shortlands Village.

3.6. To the west of the borough much of the Clock House, Elmers End and Eden Park area developed during the interwar suburban London expansion when growth, closely linked to the development of the railways, occurred around existing settlements. Clock House developed around the station and along the main route between Penge and Beckenham; Elmers End grew from an earlier settlement around the green; Eden Park grew out from the station as commuter development spread southeast.

3.7. The origins of West Wickham and Coney Hall go back to the Roman period, with a Roman Road lying beneath the two communities, and to the major estate of Wickham Court. The 20th Century growth was brought about by the sale of large estates and the electrification of the railway and comprises predominantly of larger semi-detached and detached dwellings.

3.8. To the far northwest of the borough, closely packed urban development occurred rapidly from the same time as the Great Exhibition in 1851. The Crystal Palace building was moved to the northwest of the Borough after the exhibition, and the area subsequently became known as Crystal Palace. The larger Victorian residential development around Crystal Palace Park spread downhill into Penge and Anerley and smaller workers' homes.

3.9. Development in the Bromley Common area occurred in the Victorian era along the Common with later development spreading east and south. By the 1850s, the former open frontages of the Common were lined with spacious semi-detached villas. This remains a mixed area interspersed with large areas of open land with Green Belt designation.

3.10. The Ravensbourne, Plaistow and Sundridge area grew when development before the First World War spread north from Bromley Town Centre along London Road and College Road and around Sundridge Park Station. At this time large detached Victorian Villas were built, to the west of London Road on the brow of the hill into Shortlands Valley, as well as narrower streets of tightly packed terraced houses.

3.11. Petts Wood developed during the late 1920s and 1930s, following the Garden Suburb principle. Station Square was laid out in 1928, and the retail centre developed around the station. Development first began on the east side of Petts Wood and spread to the west side once the station was established.

3.12. Chislehurst's present form derived from a number of physical and historical forces. Its topography is of long valleys and steep banks with a raised plateau at its centre. Upon this plateau are the commons around which a scattered village settlement developed, surrounded for most of its history by large country estates and densely wooded valleys. A network of settlements and open areas recognisable today formed around Chislehurst Common and the various routes crossing it.

3.13. With the arrival of the railway in 1865 the area became accessible and fashionable with London businesspeople and characterised by the Arts and Crafts Movement of the late nineteenth and early 20th Century. This saw large homes developed on spacious parcels of land within established woodland, accessed by winding rural lanes.

3.14. Orpington, in the east of the borough, has a long history dating back to the Stone Age. The Orpington Priory and Broomhill conservation areas are distinct areas of architectural heritage. The opening of Orpington Station in 1868 brought early development to the Crofton and Broom Hill areas. From its village origins the expansion of the railway station and residential development led to significant growth throughout the 19th and early 20th Century.

3.15. The River Cray has historically been the focus for the Cray Valley, St Paul's Cray and St Mary Cray area. Roman Baths (a Scheduled Monument) were discovered at Poverest Road and there is evidence that the area has been inhabited since at least the Middle Stone Age. Older buildings date back to a period of expansion in the 19th and early 20th Century related to the paper mill industry and the arrival of the railway.

There are a number of listed timber framed buildings which date from the 16th Century. The settlement, running south, followed the course of the river, from Main Road, St Paul's Cray, along High Street St Mary Cray.

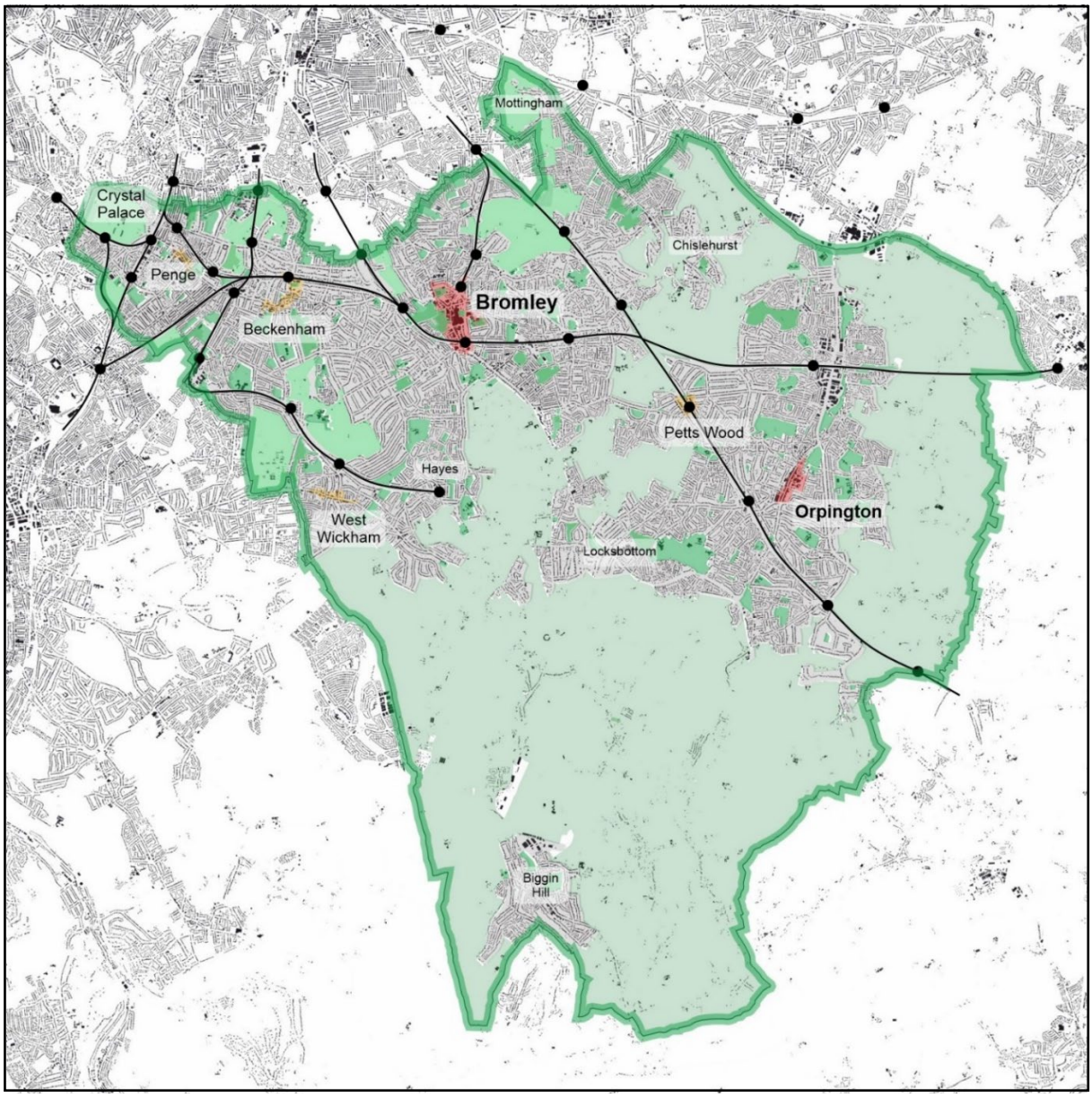
3.16. The Orpington Bypass (Cray Avenue) was developed in the 1920s running north south, parallel to the River Cray and St Mary Cray High Street. Subsequent interwar housing clustered along St Mary Cray, High Street, south of St Mary Cray Station and along Cray Avenue stretching north to St Paul's Cray.

3.17. In the 19th Century Biggin Hill at the southern tip of the borough comprised of just a handful of cottages and public houses along a ridge of land with farmland in the valleys, similar to other settlements in the area. In the late 19th and early 20th Century plots of farmland were sold off and occupied by summerhouses and bungalows along the ridge.

3.18. Biggin Hill Airport opened in 1917 and was used as an RAF base until 1974. It was during the period up to, during and for a decade after World War II that the extent of residential land, which had spread into the valleys, was set within tight Green Belt controls in the mid-1950s. This prevented merging with the developing London suburbs to the north.

3.19. Darwin, to the south of the borough features residential development clustered around historic settlements along and at junctions of rural roads. Such development took place in the 19th and 20th Century and during the interwar period, it was supplemented by small scale social housing provision in and north of Downe Village and short stretches along Leaves Green Road, Cudham Lane North and Single Street. The growth was halted abruptly by the introduction of tight Green Belt controls in the mid-1950s.

Figure 2 – Borough context map



Bromley today

3.20. Bromley is the largest borough in London covering an area of 64 sq. miles (150 sq. kilometres). Open countryside protected by the Green Belt makes up over half the borough with the majority of population concentrated in the northern part of the borough. Bromley's distinctive character arises from its protected countryside, parks, playing fields and woodlands. Tree lined roads and avenues with characterful houses and gardens are distinctive features of many of the borough's residential areas.

3.21. The built environment is varied and includes fairly high density Victorian and Edwardian residential areas, more spacious interwar suburban developments and the remnants of former large country estates exemplified by Sundridge Park and Holwood House.

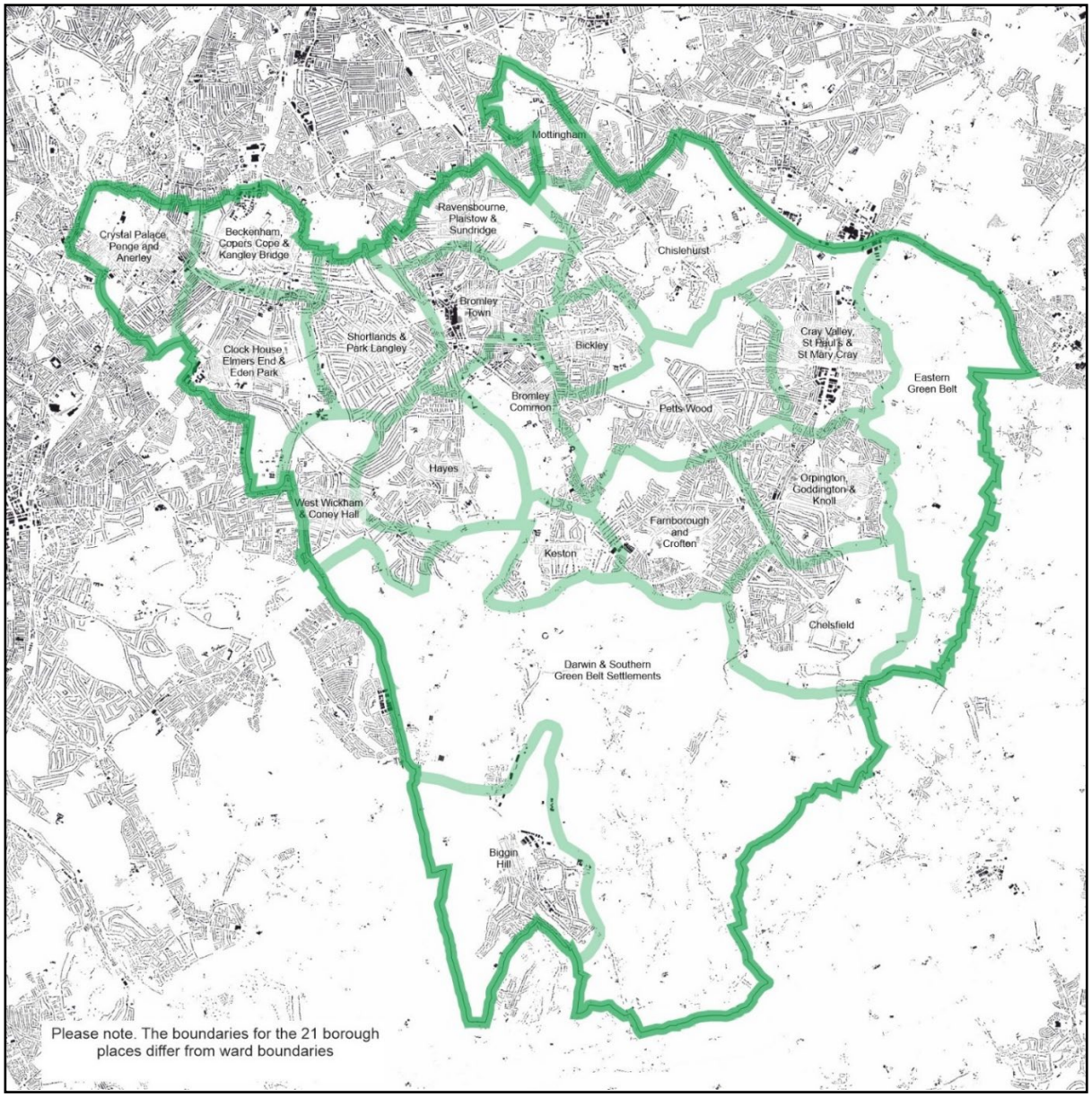
3.22. Bromley has one of the largest economies of London boroughs outside the Central Activities Zone. Bromley Town Ward is the main location for the borough's office-based businesses, with approximately 132,000sqm of floorspace, almost half of the total office floorspace in the borough. Orpington, which benefits from close links with the M25, has the next largest concentration with approximately 22,000sqm. The remainder is mainly distributed amongst the borough's District Centres. There are three designated Office Clusters in the borough, at Crayfield Business Park (Cray Business Corridor), Knoll Rise (Orpington Town Centre) and Masons Hill (Bromley Town).

3.23. Industry and warehousing are important elements of the local economy. There are approximately 120 hectares of land in industrial or warehousing use, the majority being concentrated within the Business Areas in the Cray Business Corridor, Lower Sydenham (Kangley Bridge Road), Elmers End and Biggin Hill. St Mary Cray is the largest of the areas with just under 40 hectares used for light industry or warehousing; this area is one of two designated Strategic Industrial Locations (SIL) in the borough alongside the Foots Cray Business Area. In addition there are 12 designated Locally Significant Industrial Sites (LSIS) which include sites in Penge, Lower Sydenham, Elmers End, Bromley North, Bromley Common, Keston, and Biggin Hill.

3.24. The scale of the borough is such that it comprises of a wide range of places and communities; urban, sub-urban and rural. In order to effectively plan and manage future change it is important to understand the distinctive character and identity of each of the individual borough 'places', the age profile of the local community and the need for all forms or transport.

3.25. There are 21 borough places which reflect work first undertaken in 2011 to inform the development of the Local Plan. The borough is not comprised of rigidly delineated areas (e.g. ward boundaries) and hence the borough 'places' deliberately overlap, acknowledging the gradual transition from one place to another. In this respect they differ from wards, which are defined for electoral purposes, and whose sharp boundaries may cut through places and communities. The loose boundaries of the borough 'places' provide a basis on which to inform more detailed character appraisal assessments.

Figure 3 – Borough 'Places' map[14]



[14] Please note that the Borough 'Places' do not follow ward boundaries

3.26. There are currently 47 designated Conservation Areas in Bromley, each designated because of its special architectural or historic interest. Specific SPD guidance for individual Conservation Areas has been produced to protect character and appearance and to ensure that change is managed in a sensitive way. There are also 13 Areas of Special Residential Character (ASRCs) – areas where there is a well-established, distinctive, coherent, and readily identifiable architectural character. Development proposals in these areas are required to respect, enhance, and strengthen their special and distinctive qualities.

3.27. There are a number of important archaeological sites in Bromley ranging from Crofton Roman Villa in Orpington to the remains of a moated Tudor mansion in Chislehurst; some of these sites are Scheduled Monuments. The Local Plan (policy 46) identifies a number of areas which may have important archaeological remains surviving. Historic England has recently reviewed Bromley's archaeological priority areas; this review will be a relevant material consideration for planning applications within the areas[15]. The London Plan policy HC1 will also be relevant to any development proposals within these areas.

Borough places

Beckenham, Copers Cope & Kangley Bridge

3.28. Beckenham is the third largest town centre within the borough and is a designated District Centre. The High Street is a significant retail centre comprising of a wide variety of independent shops and restaurants. Beckenham has an urban village feel, making it unique compared to other nearby towns.

3.29. The majority of dwellings in Beckenham are Victorian with some 1940s and 1950s flats and houses. During the latter part of the 20th Century a significant number of Victorian villas were converted or replaced by modern flatted blocks or housing. Several conservation areas and ASRCs have been established to help preserve and enhance the historic character and appearance of the area.

3.30. There are a variety of historic listed buildings in Beckenham, these include St. Georges Parish Church, Odeon Cinema and Beckenham Public Hall. Public Houses such as The George Inn and The Coach and Horses also have historic significance.

3.31. The majority of green space is in the north of the area where there are a number of sports fields, park and allotments. Much of the land is designated as Metropolitan Open Land (MOL) and forms part of the South East London Green Chain; there is limited access to green space in other parts of the area, particularly to the southeast. The River Beck, a tributary to the River Ravensbourne, cuts through the area, much of the central and northern part of the watercourse flows through protected open space.

3.32. Lower Sydenham is a designated LSIS, with a significant number of light industrial units covering a large area. Land to the east of the LSIS has recently been redeveloped into flatted residential developments.

Bickley

3.33. Bickley is a predominantly residential suburban area characterised by mainly detached dwellings. Unlike other parts of the borough the area does not have a clearly defined

[15] Further information is available on the 'Archaeology in Bromley' webpage, available from: https://www.bromley.gov.uk/local-history-heritage/archaeology-bromley

centre. Bickley Station and Chislehurst Station are widely used by commuters, and both provide good links to London and Kent.

3.34. The Bickley Conservation Area comprises of around 90 mainly residential properties; these tend to be large dwellings on spacious plots, it also includes St. George's Church built in 1864. There are good examples of buildings built during the Arts and Crafts Movement, a traditional style that adds to the distinctive characteristics of the area and it is a style that has been mirrored in the design of modern housing throughout Bickley. The Mavelstone Road Conservation Area has a strong representation of the Arts and Crafts Movement in its style of architecture. There is also a significant ASRC of spacious interwar residential development.

3.35. Whilst public open space in Bickley is limited, there are large gardens associated with well-spaced properties. The more densely populated area to the south borders Whitehall Recreational Ground and Jubilee Country Park, on the edge of the Green Belt.

3.36. The area includes some commercial uses, particularly industrial units and offices. The Waldo Road area is a designated LSIS. Some smaller, older business sites have been redeveloped for residential use.

Biggin Hill

3.37. Biggin Hill's distinctive hilltop and valley character arises from its separation from the suburban spread of London, lying some 4 miles south of Keston Mark, in open countryside designated as Green Belt. The presence of the airport also gives a specific identity to the area which is a designated LSIS

3.38. The airport was formerly an RAF military airfield; its use by the RAF for flying ceased in 1959, after which the runways were used for civil aviation. Military use of the ground facilities ceased in 1992. The Biggin Hill RAF Conservation Area includes 14 listed structures, a number of which are currently included on Historic England's Heritage at Risk Register.

3.39. The wider area comprises of a patchwork of housing types following the piecemeal development of individually owned plots creating a wide range of styles and designs from the second half of the 20th Century. With the exception of the Green Belt areas, Biggin Hill has the highest proportion of detached houses and bungalows in the borough.

3.40. The generally sloping nature of the Biggin Hill landscape and historic incremental development, without large scale planned development, has meant very limited social housing development. An exception to the small-scale plot development is the Leavesden estate to the north of the town comprising 130 dwellings and a village green. Whilst the town is bounded by Green Belt there is relatively little open space within the built-up area, flat recreational space is limited

Bromley Common

3.41. Bromley Common is one of five 'renewal areas' within the borough and forms part of the A21 corridor, a major radial route into London and an important transition area between Bromley Town Centre and the more rural and residential areas to the south of the borough.

3.42. Parts of Bromley Common are characterised by large areas of Green Belt open land, although a considerable amount of Green Belt land has been lost in recent years. The older residential areas around Chatterton Road are more densely populated. Bromley Common Conservation area comprises 1850s semi-detached Victorian villas which face the common. The difference between the Bromley Common villas and the much less spacious red brick later suburbs constructed to meet the demands of the railway commuters is marked.

3.43. The Bromley, Hayes and Keston Commons Conservation Area is a group of conservation areas to the south. There are six conservation areas linked by common land creating a rural feel; the majority of buildings contribute to the unique characteristics of the area. Chatterton Village is a distinctive centre with a variety of independent retailers, small industrial units, restaurants and a pub.

3.44. The Turpington Lane Estate, formerly a Council housing estate, was built in the late 1950s / early 1960s and comprises houses and flats, including Bonnington Tower. The area has experienced significant recent change including the 'Trinity Village' housing development on former Green Belt land, and further north, the changing nature of Homesdale Road from commercial offices and houses to flatted development. Two tributaries to the River Ravensbourne flow through the north-west and east of the area.

3.45. Bromley Common has three designated LSISs - Enterprise House (Hastings Road), The Beechwood Centre (Lower Gravel Road), and Bencewell Business Park (Oakley Road) - containing a range of industrial, and business uses.

Bromley Town Centre

3.46. Bromley Town Centre is the largest town centre in the borough and is a designated Metropolitan Town Centre and Opportunity Area. The town centre is built on an elevated plateau, with the oldest historic part situated to the north, the High Street follows a sloping ridge down to Bromley South Station and the area beyond which sits on lower topography.

3.47. The town centre offers a range of retail, leisure, cultural, office and residential provision including The Glades Shopping Centre, the Churchill Theatre, a pedestrianised High Street area and Bromley North Village.

3.48. The central High Street area extends from Elmfield Road in the south to Market Square in the north and has a varied character, some buildings have survived from the early 19th Century; these tend to be modest two-storey structures with traditional detailing. The remaining buildings are a mixture of late 19th Century to early 20th Century buildings. The former tend to be two-to-three-storeys in height with narrow frontages following traditional building plots with well detailed commercial facades in brick.

3.49. The western side of the High Street contains large plots with post-war modernist buildings. The Glades Shopping Centre built in the early 1990s is a substantial structure contrasting with the finer grain surroundings, the large footprint contributes to east-west severance within the town centre.

3.50. The northern High Street area runs from Market Square in the south to Bromley and Sheppard's Colleges in the north, this section is open to traffic and is a main vehicle thoroughfare through the town centre. The majority of buildings date from the late 19th Century; typically three-to-four-storeys in height with narrow frontages. A number of earlier buildings survive and are much lower timber framed two-storey structures.

3.51. Market Square links the northern and southern High street character areas and has an intimate character; buildings are typically two-to-three-storeys in height including the prominent 1930s neo-Tudor building in the centre. The square is framed by several locally listed buildings of architectural merit.

3.52. There are distinctive Victorian terraced dwellings in Bromley North Village and in the vicinity of Bromley North Station, which stretch north and northeast and incorporate a small business area at Farwig Lane. The Bromley North character area contains a number of important listed and locally listed landmark buildings including Bromley North Station, former Town Hall, former Public Library building and Bromley Baptist Church. Many of the buildings form part of a civic node, the original Victorian and Georgian architecture is attractively detailed and carefully executed, unfortunately many of the mid-late 20th Century additions have not been to the same standard.

3.53. A distinctive feature of the town centre is an unusually good provision of green open space. Church House Gardens links the High Street with Martin's Hill recreation ground, both of which slope down to Queensmead recreation ground in Shortlands. Queens Gardens lie to the rear of the Glades Shopping Centre and the grounds of the Bromley Palace are located on the Civic Centre site to the east.

3.54. There is a concentration of flatted developments to the north and dwellings behind the High Street sloping down to Bromley South Station and also Shortlands in the valley to the west. To the north of the town centre lies the Farwig Lane industrial area which is a designated LSIS.

3.55. Beyond the immediate town centre environment there is a dramatic contrast between the town centre and the residential suburban setting, east of Kentish Way (A21) stretching towards Bickley. The River Ravensbourne runs just west of the town centre, substantially through open space.

Chelsfield

3.56. Located to the east of the borough the character of the area is reflected by its open countryside origins and the introduction of tight Green Belt controls. The area includes Chelsfield Park; a private estate built in the 1920s lying southeast of Chelsfield Station comprising of large, detached dwellings with spacious gardens.

3.57. Chelsfield Village and Chelsfield Park remain relatively untouched from suburban growth, predominantly comprising of 1940s semi-detached and detached dwellings. Development includes areas of social housing; these properties typically have good sized gardens and off-street parking.

3.58. Chelsfield Village, separated by a swathe of Green Belt has retained much of its original character featuring smaller village properties and bungalows. As a designated Conservation Area, it includes several historic and statutory listed buildings. The green and recreation ground are located in the heart of the area and are valued by local residents. The Green Belt is used mainly for arable farming, market gardening and horticulture as well as a golf course and school playing fields.

Chislehurst

3.59. Chislehurst is a typically suburban area with significant green space and recreational facilities; the majority of dwellings tend to be detached or semi-detached houses. A

large part of the area falls within Chislehurst Conservation Area which incorporates diverse styles and forms of development and open space. Parts of Chislehurst are more rural in character.

3.60. The Conservation Area is the largest in the borough which comprises predominantly residential development in the west, agricultural and rural land in the east, with the intervening portions incorporating extensive Commons and open space, nodes of retail, service and community facilities, and residential areas.

3.61. Local sites of interest include Chislehurst Caves, Scadbury Manor (which is a Scheduled Monument) and Camden Place, a residence of Napoleon III in the 1870s which is now a Grade I listed building.

3.62. The characterful nature of Chislehurst has maintained pressure for residential development throughout the 20th Century and beyond. The degree to which successive phases of development have complemented or eroded earlier phases is variable, but a strong overall consistency of character has been sustained.

Clock House, Elmers End & Eden Park

3.63. Situated in the northwest of the borough, these inter war suburbs merged together and as a result have many characteristics in common. The area consists predominantly of two-storey terraced and semi-detached properties, most benefit from easy access to local amenities and recreation grounds. Elmers End includes a designated LSIS.

3.64. Some suburban roads have retained their particular residential styles and spatial qualities and have Conservation Area status or have been identified as an ASRC. The area merges into Langley Park to the east.

3.65. The area benefits from several large playing fields, recreation grounds as well as allotments and significant areas of private open space around the Royal Bethlem Hospital. The hospital site and stretches of open space along the route of the Beck are designated Sites of Importance for Nature Conservation (SINCs). Both the Beck and Chaffinch Brook run through the area.

Cray Valley, St Paul's & St Mary Cray

3.66. Cray Valley is bounded by Chislehurst and Petts Wood to the west and Orpington to the south. The Orpington bypass (Cray Avenue), developed in the 1920s, runs north south parallel to the River Cray and St Mary Cray High Street. Subsequent interwar housing, including suburban terraces, semi-detached houses and bungalows are clustered along St Mary Cray, High Street, south of St Mary Cray Station and along Cray Avenue stretching north to St Paul's Cray.

3.67. St Mary Cray is the largest industrial/employment area in the borough with just under 40 hectares used for light industry or warehousing. The main industrial activity clusters north and south of St Mary Cray Station (including Nugent Shopping Park) and extends north through St Paul's Cray; further north at Ruxley Corner, the business area links across the borough boundary into Foots Cray (in Bexley). These areas are designated SILs.

3.68. St Mary Cray and St Paul's Cray owe much of their character to the London County Council 'cottage estates' house building of the 1950s which developed rapidly in the London Green Belt. The social housing estates lie both east and west of the valley, north and south of the railway line, consisting predominantly of two storey houses and

maisonettes with small rear gardens. They were designed with some large areas of open space, school facilities and access to local shops. Additionally, there are some high-rise flatted blocks close to St Mary Cray High Street and Cotmandene Crescent.

3.69. The character of St Paul's Cray estate, to the west, is little changed other than extensions to privately owned homes and 1980s cul-de-sac infill development. However, areas of the St Mary Cray estates to the east have seen wholesale redevelopment providing social housing at higher densities.

3.70. The Cray Valley Renewal Area comprises two adjacent identified borough places; 'Cray Valley, St Paul's Cray & St Mary Cray' and 'Orpington, Goddington and Knoll'. The Cray Valley Renewal Area includes areas identified by the Mayor as Areas for Regeneration, in the vicinities of Cotmandene Crescent, Ramsden and east of St Mary Cray High Street.

3.71. The River Cray runs through open spaces, including recreation grounds, Site of Special Scientific Interest (SSSI) and SINC designations, as well as residential, commercial and industrial areas and two Conservation Areas. The River Cray remains open and accessible in places although the network is halted as parts are culverted and inaccessible for nature and people.

3.72. Towards the east of the valley the Crays are bordered by a significant swathe of Green Belt comprising of farmland, parkland and golf courses. There are sites of nature conservation interest and a SSSI at Ruxley. Gypsy and Traveller sites border the area at Star Lane and Old Maidstone Road.

Crystal Palace, Penge, and Anerley

3.73. This area is dominated by the historic Grade II* Crystal Palace Park. Designated as MOL it is archaeologically significant and includes a significant Site of Interest for Nature Conservation and the listed Dinosaur sculptures. Conservation Areas protect a range of historic development, including the large Victorian villas, smaller workers' cottages (Alexandra Cottages), and almshouses (Watermans Square) and the Park itself.

3.74. The majority of large Victorian properties have been converted into flats, resulting in the area being densely populated. Parts of Penge and Anerley also include distinct social housing estate developments which have been developed at some of the highest densities in the borough. The historic reliance upon local facilities has produced a concentrated network of local parades and centres making it difficult to draw clear boundaries between neighbouring communities within and beyond the borough boundary. The tight urban development is interspersed by only small recreation grounds, allotments and school playing fields; this northwest area of the borough lacks publicly accessible green open space.

3.75. Crystal Palace, Penge and Anerley is one of five 'renewal areas' within the borough identified by the Council. This area shares a District Centre boundary with Croydon, as well as boundaries with Lambeth, Southwark and Lewisham. Penge has two designated LSISs; Oakfield Road and Franklin Industrial Centre (Franklin Road) incorporating industrial and retail warehousing units.

Darwin & Southern Green Belt Settlements

3.76. Darwin is the most southerly, highest, and most rural area in the borough. There is a rich legacy of historic and built heritage and a sense of tranquillity and remoteness.

The character of the area reflects its topography and historic past. Dry chalk valleys run north through the area, separated by a plateau formed from clay with flints, producing a range of distinctive ridges.

3.77. Pratts Bottom is a small hamlet which straddles the boundary with Sevenoaks, comprising of mainly detached dwellings. The village has a green, and local amenities, and contains two ASRCs.

3.78. Within the open countryside lie the historic villages in Downe and Cudham and the hamlet of Nash which are designated Conservation Areas. Since the mid-20th Century development has been limited. The majority of dwellings in the area are detached houses or bungalows with generous sized gardens and/or paddocks. The area is sparsely populated and includes farmland and significant recreational open spaces including High Elms Country Park, and Hayes and Keston Commons. There is an extensive but disjointed network of public rights of way with promoted circular walks.

3.79. Designated as Green Belt this is one of London's richest areas for wildlife. Across the chalk downlands, heathland and ancient woodlands there are SSSIs, local nature reserves, SINCs and part of the designated Kent Downs Area of Outstanding Natural Beauty (AONB).

Eastern Green Belt

3.80. This rural settlement is a remnant of a post medieval landscape sandwiched between the Cray Valley to the east, including St Mary Cray and St Paul's Cray and the Darent Valley including Swanley (Sevenoaks) to the west. The current borough boundary is defined by the 1,000-year-old parish boundary and marked by significant individual trees; the railway line and A20 also create significant physical barriers.

3.81. Unlike the southern area of the Green Belt there are no distinct settlements over a great swathe of Green Belt to the east of the borough. Instead, farmhouses, workers cottages and small holdings are scattered across the area along the rural roads. Many of the buildings are statutory or locally listed and the St Paul's Cray conservation area stretches into this Green Belt area. There are some mid-20th Century houses at Hockenden and Kelvington and some semi-detached houses along Old Maidstone Road. There are also several sites occupied by mobile homes and caravans including Gypsy and Travellers Sites.

3.82. St Paul's Cray Country Park provides the main recreational space serving the nearby suburban population. There is a nature reserve at The Warren and a number of SINCs which are mainly ancient semi-natural woodlands.

3.83. The southern part of the area is the most heavily wooded, part of which falls within the Kent Downs AONB.

Farnborough & Crofton

3.84. Farnborough and Crofton is a suburban area comprising of mainly semi-detached and detached housing. There are several listed buildings in Farnborough Village which is a designated Conservation Area.

3.85. During the interwar years most of the intervening farmland was developed with low density housing including single storey bungalows and two storey semi-detached houses. Farnborough Park Conservation Area and part of the Keston Park Conservation Area are within the locality. They comprise larger detached homes and

there are some examples of buildings from the Arts and Crafts and Garden City Movements. The area includes social housing within the Darrick Wood Estate in Broadwater Gardens which is a typical example of suburban housing built in the 1980s.

3.86. Almost half of the area is green space, it includes Darrick, Sparrow and Newstead Woods and also a large area of Green Belt to the south. There is a wooded appearance to the area due to the low density and its secluded private estates. A branch of the River Ravensbourne also runs northwards passing Locksbottom.

Hayes

3.87. Hayes, whilst being a suburban residential area, owes much of its character to its historic past and its significant areas of open land, with significant areas of Green Belt, including commons and farmland. This Green Belt extends to within half a mile of Bromley Town Centre, while in the opposite direction, it leads towards the Kent countryside.

3.88. The bulk of the developable area was built during the interwar period and has been confined to its current area due to it being bounded on two sides by Green Belt. Hayes Village incorporates a number of historic buildings typical of a Kentish village, listed buildings include the Church of St. Mary the Virgin, St. Mary Cottages and Hayes Library (The Old Rectory). There is a Conservation Area covering much of the heart of the village.

3.89. Away from the village, are various other listed buildings, many of them standing within or on the edge of Hayes Common, with some pockets of historic interest lying within the Bromley, Hayes and Keston Commons Conservation Area. Hayes Common also benefits from being a SINC, within which is an SSSI.

3.90. The housing comprises mainly semi-detached and detached family dwellings of quite low density with private gardens. The Warren Wood Estate is a designated ASRC. The area includes some pockets of social housing. The distinctive Hayesford Park Estate includes houses and flats that won an architectural award when built in the 1960s. It includes a range of shops and facilities. The Pickhurst Rise Estate, to the west, includes four long avenues of interwar terraced and semi-detached properties stretching down to West Wickham.

3.91. A substantial proportion of land is Green Belt resulting in an abundance of commons, playing fields and recreation grounds. Blackheath and Bromley Harriers Athletics Club, Bromley Football Club as well as other clubs for rugby, cricket, tennis, and bowls are located in the area. Additionally, allotment gardens and parks are interspersed with housing.

Keston

3.92. There are three types of residential area that make up Keston: Keston Park and part of Farnborough Park, where there are very generously spaced detached houses in gated communities; north of Croydon Road is an interwar suburban area of mainly semi-detached houses; and the older Keston Village lies adjacent to Hayes Common. These are interspersed with extensive stretches of open land all protected by Green Belt designation and consequently there is good access to parkland and open countryside including Keston Common and Padmall Wood. Much of the open land is covered by SINCs and Keston Common is a SSSI. The area also has two designated LSISs; Kimberley Business Park, Leaves Green and Higham Hill Farm.

3.93. There are three conservation areas locally: the Keston and Farnborough Park Conservation Areas have similar characteristics of openness and spaciousness. There is not one particular architectural style, although there are examples from the Arts and Crafts Movement. There has been pressure for development in these areas and some of their open characteristics have been lost as a result.

3.94. The Keston Village Conservation Area covers the historic village and windmill, although the parish church, pre-Roman and Roman historic features lie to the south in the Darwin and Green Belt Settlements area. Part of the residential area around Hollydale Recreation Ground is designated as an ASRC.

Mottingham

3.95. Mottingham to the north of the borough stretches over the borough boundary shared with Lewisham to the west and Greenwich to the east. The A20 is a significant barrier to movement to the north; it cuts off both Mottingham Station and Eltham Palace in the borough of Greenwich.

3.96. The Bromley element of the area includes large areas of open space protected as Metropolitan Open Land. Mottingham Village and the area around Mottingham Hall was established during the Victorian period and includes several listed buildings. Interwar suburban housing spread from these centres, it includes two former council housing estates, a predominate feature of the area. Mottingham contains a much larger percentage of social rented accommodation relative to the rest of the borough.

3.97. The 1930s London County Council (LCC) Mottingham Estate was built with shops and local facilities at its centre, comprising of two storey family housing with private gardens; it is similar in character to the adjoining LCC estates in Lewisham and Greenwich. These estates, which still retain the original sense of scale and some of the existing shared social infrastructure, feature in the Mayor's 'Areas of regeneration' as being among the most deprived areas in the Borough.

3.98. Mottingham is one of five 'renewal areas' within the borough. Whilst there are areas of private, relatively spacious, interwar semi-detached dwellings, the majority of Mottingham has been developed at high densities.

3.99. There are significant areas of open space linking across borough boundaries. As well as being designated MOL they fall within the Green Chain – a linked series of open spaces stretching across southeast London.

Orpington, Goddington and Knoll

3.100. Orpington is the second largest town centre in the borough and is a designated Major Town Centre within London. The town centre is located within the Cray Valley with land rising to either side. The relationship of the town to the wider Green Belt countryside, and views to it, are important to the town's character and identity.

3.101. The town centre offers a range of retail, leisure, cultural, education, office and residential provision including the Walnuts Shopping Centre, Odeon cinema, library, leisure centre, Orpington College and a vibrant commercial high street including a street market held in Market Square.

3.102. The long linear High Street running north to south is characterised by two-to-three-storey buildings, predominantly narrow fronted shops with residential flats above.

These are punctuated by several larger buildings generally set on corners or other key sites. The northern end of the High Street has retained a village scale and form reflected in the street width and placement of buildings flush against the street frontage.

3.103. The Walnuts Shopping Centre built in the 1970s is an inward facing development forming part of a cluster of larger scale buildings on the eastern side of the High Street which create a barrier to east-west and north-south permeability. Buildings in this part of the town centre have larger floor plates and are of a greater scale and massing, typically stepping up in height to around four-to-five-storeys. Orpington College (11 storeys) is currently the tallest building in the town.

3.104. The Orpington Priory and Broomhill Conservation Areas are distinct areas which have particular architectural and historic interest. Orpington Priory Conservation Area includes the town's most significant concentration of listed buildings, located in the historic village centre. The house known as Barn Hawe (formerly Fern Lodge) dates from the 1770s and is Listed Grade II, as are the timber-framed outbuildings of The Priory. The Priory is Listed Grade II* and includes elements dating from the 13th Century with successive enlargements and changes, notably the timber-framed 16th Century extension. Priory Gardens is also Grade II listed.

3.105. The Knoll area is suburban and residential in nature, characterised by detached and semi-detached two storey properties; it includes the Knoll ASRC, a designated area encompassing Broxbourne Road, Dale Wood Road, Lynwood Grove and Mayfield Avenue. The area's distinctive character is defined by generous sized plots and a readily identifiable and coherent streetscene. Within the Knoll area, the Broomhill Conservation Area lies to the west of the Town Centre, centred on Broomhill Common. Crofton Roman Villa, a Scheduled Monument, is sited adjacent to 19th and 20th Century commercial and transport development at Orpington Station. Though well protected by the late 20th Century structure that encloses it, the Villa's impact on the wider public realm is minimal.

3.106. Aynscombe Angle to the north of the High Street is a notable grouping of terraced houses conceived and developed with a strong consistency in form and materials but with variations of detail. Incremental changes to the component buildings since their construction have generally been sympathetic to this consistency.

3.107. Housing typologies across Orpington are varied as a result of the town's growth over time. The majority of homes in Orpington are interwar semi-detached houses with sizable gardens which extend up to, and radiate out from, the town centre. Small greens and school playing fields are located within built up areas, with the eastern boundary defined by Green Belt. Orpington benefits from the open green space of Priory Gardens in the heart of the town, as well as Poverest Park and other incidental landscapes and parks nearby.

3.108. Goddington is an area with mainly detached dwellings which surround Goddington Park, an outcrop of Green Belt. Goddington House, located on the northeast corner of the park is a 19th Century Grade II listed building. Pockets of residential development built after Green Belt constraints were introduced are laid out at a higher density in a cul-de-sac style. A phased redevelopment of the Ramsden Estate, which comprised mainly of social housing, has created new homes and improvements to public spaces.

Petts Wood

3.109. Petts Wood is one of five District Centres in the borough, unusually split by the railway line; the retail centre which was developed around the station has a variety of independent retailers, restaurants and pubs.

3.110. The suburban residential development to the east, which was conceived and is maintained on the garden suburb principle, is predominantly Neo-Tudor with many Arts and Crafts Movement references. There are large, detached houses on spacious plots, and semi-detached two-storey houses and some detached bungalows. The majority of dwellings have generous rear gardens. The main development pressure comes from residential extensions and replacement houses which can alter the character and appearance of the locality.

3.111. The scale of the intact layout is recognised by the largest ASRC in the borough, within which, particularly fine examples of these styles can be found in the five designated Conservation Areas; Station Square, the Chenies, the Covert, the Thrifts and Chislehurst Road.

3.112. Development to the west is less linear with narrow roads and long crescents and is more closely spaced. There are some detached houses and clusters of bungalows, however, the 1930s style semi-detached house style predominates. Many chalet-style semi-detached dwellings have had roof extensions and bungalows have been demolished or extended to create two-storey houses.

3.113. A large number of mature trees in private gardens give the area its wooded character. Petts Wood is bounded by open space such as Sparrow Wood, Jubilee Country Park in the west and Petts Wood itself to the east. There are also a number of recreation grounds. The Kyd Brook is a mostly culverted watercourse running through the area.

Ravensbourne, Plaistow & Sundridge

3.114. Ravensbourne, Plaistow and Sundridge is one of the borough's designated 'renewal areas' comprising of a mixed area of housing around a large area of open space (Sundridge Park Golf Course) and served by local centres at Plaistow Lane and Burnt Ash Lane. The Bromley North branch railway line runs through the area with limited crossing points. Development west of the branch line is a complex mix of residential styles and ages. Wide avenues of large dwellings with substantial gardens are situated between Burnt Ash Lane and London Road. Burnt Ash Lane features interwar development in the form of semi-detached houses as well as the Burnt Ash Heights Estate constructed in the 1960s/70s which includes a 12-storey tower block alongside smaller scale flatted blocks of social housing.

3.115. The area includes the southern edge of the Downham Estate built by the London County Council (LCC) between the wars. The estate is characterised by terraced cottages laid out with small gardens and a range of public open spaces; it lies mostly in neighbouring Lewisham although some of the estate roads, primary school and Shaftesbury Park lie within Bromley.

3.116. Many of the pre-war dwellings on large plots have been redeveloped for flats and cul-de-sac housing developments, and since the 1980s there has been a marked change in character west of London Road, around Oaklands Road and Grassmere Road.

3.117. East of the railway line lies the Grade I Sundridge Park Mansion and golf course. There are two distinct residential areas next to the golf course; to the south (off Plaistow Lane) lie spacious roads of large, detached dwellings of a range of styles and

ages, the older pre-World War I group are within a designated Conservation Area. Towards the borough boundary lies ‘Hall’s Farm’ estate. Comprising of interwar detached and semi-detached houses it is only accessible by a single road ‘New Street Hill’ which runs under the railway line. In addition to Sundridge Park golf course there are many open spaces, both public and private, including playing fields, parks, allotments, sports clubs, cemeteries and a covered reservoir.

Shortlands & Park Langley

3.118. This area covers the slopes between the River Beck to the west and the River Ravensbourne in the east. Early Beckenham suburbs, which include a number of listed and locally listed buildings, are characterised by large Victorian villas north and south of the railway line and sloping down from St Mary’s Church, Shortlands, to more tightly packed development, including smaller cottages and terraced housing in Ravensbourne Valley around Shortlands Station. Development around Shortlands Station includes a range of houses and flats of various styles and ages, with local shops and services and a recreation ground at the heart of the community.

3.119. In contrast, the areas to the south, either side of Hayes Lane, feature wide roads which are almost exclusively residential including the Langley Park estate and roads around South Hill Road, much of which is designated Conservation Area or an ASRC. They are spaciously laid out with substantial size detached and semi-detached dwellings with large front and rear gardens.

3.120. The formally laid out interwar estates remain substantially unaltered except along Westmoreland Road where there has been small scale redevelopment. By contrast the character of the pre-World War I development that spread out from Beckenham has changed significantly. Having become a desirable commuter suburb, many of the larger properties in significant grounds were redeveloped at high density for flats with parking and communal gardens, and tight cul-de-sac developments, particularly along The Avenue and Albemarle Road. The redevelopment of larger properties and the conversion of others has resulted in higher density with relatively little private space. The pressure for the redevelopment of the remaining older dwellings is likely to continue. Several areas of Edwardian and interwar development which are of a particular style and character are within designated Conservation Areas.

3.121. The site of the former GlaxoSmithKline pharmaceutical research facility to the east of South Eden Park Road has recently been redeveloped into a residential housing scheme providing 280 new homes designed in a traditional architectural style in keeping with the character of the area.

3.122. There are areas of open space to the southwest and northeast, comprising golf courses and sports grounds. Whilst properties generally have large private gardens, the majority of the area has limited access to public open space. Other than South Hill Park, public opens paces are located at the fringes; at Kelsey Park to the west and Shortlands recreation ground across the railway tracks.

West Wickham & Coney Hall

3.123. West Wickham is a District town centre; it is set on a ridge and shares some of the characteristics of Coney Hall which lies in the valley to the south, below the steep rise to Hayes and West Wickham Commons. The built-up part of Coney Hall has a distinct character, being almost wholly one 1930s estate with an obvious boundary and having a uniform suburban style projecting southwards into the Green Belt; it comprises smaller semi-detached properties, many of which were built as 2 bed homes but have

been subsequently extended. Whilst neither area has a Conservation Area, there are a number of statutory and locally listed buildings as well as a Scheduled Monument in the grounds of Coney Hall.

3.124. The area has good access to open space with designated Metropolitan Open Land to the north, including recreation grounds, numerous playing fields, SINCs and woodland. Much of the open space to the south is designated Green Belt, comprising woodlands, sports grounds along Addington Road (including ‘Sparrows Den’) and commons stretching into farmland. To the west lies ‘The Beck’ watercourse, limiting routes into Croydon.

4. Principles of Good Design

The role of planning

4.1. Good design is integral to good planning; thinking about urban design from the **start** of the **planning process** is key to achieving successful and sustainable development. Design now has a greater emphasis in national and regional planning policy than ever before in recognition that good design **adds value** (social, environmental, economic) – it is a prerequisite for planning approval and should no longer be seen as an 'optional extra'.

4.2. Design is an important part of planning at every scale, from the materiality and detailing of individual buildings to the layout, use, scale, architecture and landscape of large-scale developments and wider spatial strategies and masterplans.

4.3. **Design quality** should be considered at each stage of the planning process (pre-application discussions, planning application submission, post-planning conditions, monitoring and review) and at every stage of the design process (development brief, context appraisal, conceptual ideas, design development, design review, implementation and delivery).

4.4. **Development Management** is fundamental in delivering planning policy objectives and safeguarding the design quality of individual proposals throughout the process. The Council will seek to take a **positive and proactive** role in managing development in order to achieve spatial/regeneration objectives and to encourage desired forms of development that meet wider strategic visions whilst resisting poorly conceived proposals and/or poor-quality design.

4.5. Planning and design is a multidisciplinary **collaborative process** particularly for larger complex schemes; the Council's overarching aim is to ensure quality without constraining development. Enabling officers to inform and influence the design of development proposals early in the pre-application process can avoid the need for revisions at a later stage and minimise uncertainty and delay. The Council will aim to **lock-in quality** at an early stage; an additional layer of design scrutiny will be applied via independent design review in accordance with London Plan requirements.

4.6. The achievement of a successful outcome is a **shared responsibility** between the various professionals/disciplines involved, it is important that applicant's, developers, and design teams consider themselves as participants within the wider development management process using their role responsibly and collaboratively in order design and deliver successful places.

The characteristics of successful places

4.7. There are some common **characteristics** that are identifiable in successful places. These characteristics are widely recognised and documented in several key publications by various leading authors, institutions and organisations. These characteristics relate to how we **use** and **experience** places.

4.8. The characteristics of successful places are listed below; these have remained valid and largely unchanged over the past 20 years.

By Design (DETR/CABE, 2000)

- **Character –** A place with its own identity**.**
- **Continuity and Enclosure** – A place where public and private spaces are clearly distinguished.
- **Quality of the Public Realm** – A place with attractive and successful outdoor areas.
- **Ease of Movement** – A place that is easy to get to and move through.
- **Legibility** – A place that has a clear image and is easy to understand.
- **Adaptability** – A place that can change easily.
- **Diversity** – A place with variety and choice.

National Planning Policy Framework (NPPF, 2021)

- A strong **sense of place**, sympathetic to **local character**
- Arrangement of **streets**, **spaces**, building types and materials
- Attractive as a result of **good architecture**, **layout** and **appropriate and effective landscaping**
- Provide for high quality **walking and cycling networks**, create places that are **safe**, **inclusive** and **accessible**
- **Function well** and add to the overall quality of the area
- **Sustainability and resilience**
- Appropriate amount and **mix** of development

4.9. The **National Design Guide (2021)** forms part of the Government's collection of planning practice guidance, the document identifies 10 characteristics of well-designed places listed below:

- **Context** – enhances the surroundings
- **Identity** – attractive and distinctive
- **Built form** – a coherent pattern of development
- **Movement** – accessible and easy to move around
- **Nature** – enhanced and optimised
- **Public spaces** – safe, sociable and inclusive
- **Uses** – mixed and integrated
- **Homes and buildings** – functional, healthy and sustainable
- **Resources** – efficient and resilient
- **Lifespan** – made to last

Figure 4 – National Design Guide: 10 characteristics of a well-designed place

4.10. The characteristics identified in the key publications referenced above form part of the evidence base upon which the Council's own design principles are based.

Approach

4.11. Urban design draws together the many stands of **placemaking** (social, environmental and economic) with the aim of creating vibrant places with **character** and **identity**. The design of spaces and places affect us all to varying degrees, decisions made by the Council must therefore be carefully considered on many different levels.

4.12. General (higher level) strategies are often 'loose'/open to interpretation and their implications can be obscure, while specific objectives/goals (lower level) can be too specific and 'fixed'. The connection between the two may not always align, and furthermore, prescribing overly specific rigid solutions can result in some unwanted/unintended consequences such as creating/shifting problems elsewhere.

4.13. In order to avoid this, the Council has developed 6 overarching interrelated **design principles** (Contextual, Responsive, Connected, Inclusive, Healthy, and Sustainable) which inform the more specific guidance outlined in Section 5 – ensuring that the detailed and measurable design objectives ('SPD guidance notes') relate to, and are underpinned by, the principles.

Design-led approach

4.14. In recent years there has been a policy shift from a previous quantitative numerical approach (density matrix) to a **design-led** (character assessment) approach to establishing appropriate density and site capacity with a focus on **context** and **character** – as set out in the London Plan. The Council strongly supports this approach.

4.15. The appropriate layout and density for a site should derive from a creative **design-led approach** which responds to the particular **characteristics** of a site, its surroundings and the needs of existing and future residents. All development must make the best use of land by following a design-led approach that **optimises** the capacity of sites, including site allocations.

4.16. Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site, i.e. optimise (responding to the qualities of a place) as opposed to maximise (over development of a plot for economic gain). It is important to recognise that density should be an **outcome not a starting point**, the focus should be on **quality of place** over quantum of development.

Assessing 'good design'

4.17. In addition to the six overarching design principles set out below (see paragraph 4.19), the Council will assess development proposals against three broad design considerations; **connection** (in relation to form and layout), **contribution** (in relation to visual and functional quality), and **clarity** (in relation to the quality of user experience). These considerations should form the **starting point** for architects and designers providing a basic framework to inform design thinking.

<u>Connection – Form and Layout</u>

- How well does the scheme **respond** with and **relate** to its setting? (local, existing, emerging context)
- How well does it **stitch** into the existing urban fabric? (connectivity, permeability, movement)
- **Relationship** with neighbouring buildings/surrounding context (height, scale and massing)
- Suitability of **architectural approach**; building typologies (character and identity)
- **Landscape strategy** (quality and quantity of amenity spaces and public realm)
- Design-led approach; emphasis on **place** over quantum (optimising rather than maximising site potential)

<u>Contribution – Visual and Functional Quality</u>

- Does the development proposal make a **positive contribution** to its setting?
- **Visually** – in terms of the quality of the architecture/design (does it improve and enhance the setting)
- Suitability of the **architectural approach**, i.e. materiality and detailing (character and appearance)
- **Functionally** – in terms of activation and use of buildings and spaces (mixed-use, diversity and choice)
- What does it 'give back' to the **community**? (social, economic, environmental benefits)
- **Sustainability** credentials (adaptability, low-energy design, green infrastructure)

Clarity – Quality of User Experience

- Quality of user experience (buildings and spaces) for residents and visitors
- **Access and inclusion**, safe and engaging public realm
- **Health and well-being** (social spaces and meeting places)
- **Legible routes and spaces**, healthy streets (spaces to stop and stay)
- **Housing design quality**:
  - Outlook, privacy and relationship to neighbours ('quiet enjoyment')
  - Space; adaptable and flexible layouts
  - Natural light, ventilation and outlook
  - Low energy and environmentally sustainable
  - Outdoor space, private and shared
  - A sense of community
- Understanding that compliance (with minimum space standards) is not the same as quality

4.18. It is important to recognise that good placemaking is not just about the physical characteristics of buildings and spaces, but how they are **used** (how they function) and how they are **experienced**. Understanding **context** is key, thinking beyond the red line boundary (zooming out and zooming in). The emphasis should never be solely on a specific building or space, it should always be about **place**, i.e. starting with people first, then space, then buildings.

Design principles

4.19. The Council has identified six overarching principles (performance indicators) that are considered essential components in delivering good quality design, and which are widely documented as being among the key characteristics of successful well-designed places.

- **Contextual** (Character and Identity)
- **Responsive** (Architecture and Landscape)
- **Connected** (Movement and Connectivity)
- **Inclusive** (Access and Inclusion)
- **Healthy** (Health and Well-being)
- **Sustainable** (Sustainable Design, Adaptability and Resilience)

Contextual (Character and Identity)

4.20. Bromley has a strong architectural and cultural heritage with a distinctive character arising from its protected green spaces and open countryside. The success of new development is largely dependent upon how well it relates to, and responds with, it's surrounding context.

4.21. As set out in the National Design Guide (NDG), well-designed places are based on a sound understanding of the surrounding context, influence their context positively and are responsive to local history, culture and heritage. Creating a positive sense of place helps to foster a sense of belonging and contributes to well-being, inclusion and community cohesion. Well-designed places respond to existing local character and identity and contribute to local distinctiveness.

4.22. There are several historic buildings of notable architectural merit and local significance within the borough, it is expected that all new development proposals identify existing

physical, social, and cultural assets and seek to strengthen them in the design of new schemes in order to reinforce local identity and sense of place.

4.23. A key urban design objective is to preserve and enhance the existing qualities of the borough's townscape, landscape, and streetscape character. All new development should make a positive contribution to its setting and seek to reinforce and enhance local identity.

Responsive (Architecture and Landscape)

4.24. Good design is about making places for people and should seek to evoke a sense of joy and delight. Well-designed places focus not just on the physical characteristics of buildings and spaces but on how they are used and experienced. Quality is measured as much by experience as it is by appearance.

4.25. As set out in the NDG, well-designed places use the right mix of building types, forms and scale of buildings and public spaces for the context and proposed density, to create a coherent form of development that people enjoy.

4.26. The Council will seek to promote design excellence throughout the borough to ensure that new development achieves the highest standards of visual, functional and environmental quality to engage and inspire people, reflecting local identity, values, and aspirations.

4.27. Historically the juxtaposition of new buildings and spaces alongside the existing urban fabric demonstrates how traditional character and innovative design can coexist; with local identity highlighted rather than eroded by new interventions.

4.28. In order to achieve this careful consideration should be given to the key aspects of development form: layout, scale, height and massing, appearance, and landscape. All new development should consider its relationship with both the immediate and wider context including neighbouring buildings, townscape, streetscape, urban grain, and local views, vistas and landmarks.

4.29. All new development should seek to reference local context to inform detail, materials, and landscape; incorporating and/or interpreting those elements that are attractive, valued and which contribute to the quality of the surrounding area. Architectural design and materiality should be sympathetic to the local vernacular and responsive to the surroundings so as not to undermine or compromise local character, identity and distinctiveness

Connected (Movement and Connectivity)

4.30. Ease of movement is integral to well-designed places, influencing how they function and feel. Creating better connections allows people to have greater choices between different modes of transport and greater access to social and economic opportunities both within and beyond their communities.

4.31. As set out in the NDG, successful development depends upon a movement network that makes connections to destinations, places and communities, both within the site and beyond its boundaries.

4.32. Well-designed streets contribute significantly to the quality of the built environment and play a key role in the creation of sustainable communities. The Council will seek to promote healthy streets and active lifestyles in accordance with London and Local

Plan policies by encouraging walking and cycling and promoting sustainable modes of transport.

4.33. Legibility is a key aspect of movement and a key urban design objective. A legible place is a place that is easy to understand and move through, new development can promote legibility by providing recognisable routes, focal points, nodes, and landmarks which stitch into the existing urban fabric. All new development should promote accessibility, legibility, and ease of movement by creating places that connect well with each other and the wider area.

Inclusive (Access and Inclusion)

4.34. Inclusive design is integral to good design. The built environment should be safe, accessible, and convenient for all, it is therefore essential that new development considers inclusive design principles from the outset.

4.35. Inclusive design aims to remove the barriers that create undue effort and separation, enabling everyone to participate equally, confidently and independently in everyday activities. (Commission for Architecture and the Built Environment (CABE), The Principles of Inclusive Design, 2006)

4.36. Inclusive design places people at the heart of the design process, acknowledges diversity and difference, offers more than one solution when required, provides for flexibility in use, and provides buildings and spaces that are convenient and enjoyable for everyone.

4.37. As set out in the NDG, well-designed places are designed to be inclusive and to meet the changing needs of people of different ages and abilities. This includes families, extended families, older people, students, and people with physical disabilities or mental health needs. They provide well-integrated housing and other facilities that are designed to be tenure neutral and socially inclusive.

4.38. The Council expects applicants to carry out meaningful engagement with relevant user groups at an early stage in the design process, which may include disabled people or older people's organisations.

Healthy (Health and Well-being)

4.39. The places in which we live and work affect our health and well-being. Adopting healthy placemaking principles which prioritise our long-term health is an essential part of good urban design.

4.40. As set out in the NDG, well-designed places include well-located public spaces that support a wide variety of activities and encourage social interaction, to promote health, well-being, social and civic inclusion. Well-designed homes and buildings are functional, accessible and sustainable. They provide good quality internal environments and external spaces that support the health and well-being of their users.

4.41. New development can help to provide strong, vibrant, sustainable communities by creating healthy environments which support both physical and mental health. The link between healthy homes and access to green open space and mental well-being in particular is well documented.

4.42. The Council will promote healthy living by ensuring that new development seeks to maximise opportunities to support and enhance health and well-being, encouraging physical activity, providing accessible and adaptable homes, ensuring social inclusion and access to open space particularly in areas of deficiency, and optimising health benefits throughout each stage of the design process. New development can also help to combat loneliness, for example through design which delivers community infrastructure and which fosters social interaction[16].

4.43. Objective GG3 of the London Plan advocates use of Health Impact Assessments, which are used as a systematic framework to identify the potential impacts of a development proposal, policy or plan on the health and well-being of the population, and to highlight any health inequalities that may arise. Health Impact Assessments should be undertaken as early as possible in the design process to identify opportunities for maximising potential health gains, minimising harm, and addressing health inequalities.

Sustainable (Sustainable Design, Adaptability and Resilience)

4.44. The NPPF highlights three interdependent overarching planning objectives in achieving sustainable development; economic (supporting growth), social (supporting communities), and environmental (protecting and enhancing our natural and built environment) that need to be considered collectively.

4.45. A key urban design objective is to ensure that new development achieves the highest standards of sustainable design and construction in accordance with national, London and local plan policies to improve environmental performance by reducing energy demand, improving resource efficiency, and by encouraging the efficient use of buildings and previously developed land.

4.46. The London Plan highlights the importance and multifunctional benefits of green infrastructure (an important element of sustainable design) which include promoting physical and mental health, enhancing local biodiversity, and its role in helping to adapt to the impacts of climate change. Air quality, cooling, and flood mitigation can all be addressed in part with green infrastructure.

4.47. As set out in the NDG, well-designed places and buildings conserve natural resources including land, water, energy and materials. Their design responds to the impacts of climate change, is fit for purpose and adaptable over time and adopts technologies to minimise their environmental impact.

4.48. The most successful places are those that are adaptable to change and are able to continually evolve in order to remain vibrant. Places need to be adaptable at every scale. New development should be designed to allow for future social, economic, and environmental change to accommodate the needs of both existing and future communities.

[16] 'Tackling Loneliness: A strategy for Bromley 2022 to 2026' sets out various actions the Council is taking to tackling the issue of loneliness, and may be a useful reference for applicants preparing planning applications. It is available at: https://www.bromley.gov.uk/downloads/file/1165/tackling-loneliness-a-strategy-for-bromley-2022-to-2026

5. Design Guidance

5.1. The overarching **Design Principles** described in Section 4 inform and underpin the specific design guidance provided in this section. For added clarity and ease of use, the **characteristics of successful places** discussed in Section 4, which include all aspects of urban structure (movement, layout, uses, form, and landscape), streetscape, architecture, materiality, and sustainability, are presented under the heading of each relevant design principle.

5.2. The guidance introduces each characteristic and its importance to good urban design, its relevance to national/regional/local policy guidance, and its application within the context of Bromley. Specific requirements are provided in the form of detailed design guidance notes which include links to relevant planning policies.

Contextual

Character and Identity

5.3. Understanding **context** is the starting point for any new development proposal, it refers to the location, character and features of an area within which new development will sit, it includes the immediate surroundings of the site, the neighbourhood in which it sits and the wider setting.

5.4. As set out in the NDG well-designed places are based on a good understanding of the site and the surrounding context, are integrated into their surroundings and are responsive to local history, culture and heritage. The **character and identity** of a place comes from the way that buildings, streets and spaces, landscape and infrastructure combine together and how people experience them. Well-designed places have a positive and coherent identity that everyone can identify with.

5.5. The borough is made up of a number of **places** each with distinctive characters shaped by the physical characteristics of their setting (urban, suburban, and rural) and the social characteristics of the communities who live there. Reinforcing local character and identity is a key urban design objective.

5.6. A comprehensive **context appraisal** should be undertaken before any design work begins, identifying existing physical, natural, social and cultural assets, which should inform and influence initial design thinking, design development, and final scheme proposals. An understanding of the borough wide context (wider surrounding area), character area or place (neighbourhood), and site setting (characteristics of the site itself) should be demonstrated as part of the design process.

Figure 5 – The Avenue, Saffron Walden: *Responding sensitively to its context within a Conservation Area and adjacent to a listed water tower, by creating a series of character areas which reflect the pattern and character of the neighbouring townscape using traditional materials and modern detailing.*

Figure 6 – Abode, Great Kneighton*: Creating a hierarchy of spaces and housing types to suit the transition from urban edge to adjacent countryside, the transition is enhanced by the use of brick and timber cladding with soft landscaping and high-quality public realm.*

DG1: Reinforcing Local Character and Identity

All development proposals should make a positive contribution to the setting and seek to reinforce local character and identity by:

a) Responding to local context, preserving and enhancing the existing qualities of the borough's townscape, landscape, and streetscape character, and creating a coherent identity for residents and communities to identify with.

b) Adopting a considered and informed approach in the siting and design of development to safeguard local distinctiveness and reinforce a sense of place. Responding to local building forms and patterns of development in terms of scale, massing, form, proportions, features, materials, views, vistas and landmarks.

c) Preserving and enhancing the positive aspects of Bromley's unique character by referencing and taking cues from the surrounding context to inform an appropriate architectural language which is sympathetic and responsive to the existing or emerging context. The introduction of new building forms may be appropriate in areas which have an inconsistent character or limited qualities in order to create a more positive identity.

d) Respecting and enhancing the settings of listed and locally listed buildings, designated Conservation Areas and Areas of Special Residential Character. Heritage assets (buildings and landscapes), character areas and landscape character areas are key to local identity, their significance as instantly identifiable tangible assets with added value and meaning to local residents should be reflected in the sensitive siting and design of new development.

Relevant policy and guidance includes:

Local Plan – policies 4, 6, and 37, 38, 39, 40, 41, 42, 43 and 44

London Plan – objectives GG1 and GG2, and policies D3, D4, H2 and HC1

NPPF – sections 11, 12 and 16

Heritage and Conservation

5.7. Heritage assets can strongly influence our understanding of **place**; they can make a significant contribution to our natural and built environment, positively contributing to local **character and identity**, as well as providing wider social, cultural and economic benefits.

5.8. As set out in the NPPF, these assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.

5.9. **Understanding and responding** to the historic environment is key to creating successful and sustainable places. Achieving the right balance between conservation and development requires careful management in order to enable opportunities for positive change.

5.10. Bromley has a particularly strong heritage with many natural and built form assets of architectural and historic significance. This includes 47 designated Conservation Areas, a significant number of statutory listed and locally listed buildings and several Registered Parks and Gardens. These make an important contribution to placemaking and are highly valued by local residents. **Preserving and enhancing** the borough's historic assets, and their settings, to ensure that they remain used and valued is a key urban design objective.

5.11. Applicants should provide a detailed **Heritage Statement** describing the significance of any heritage assets impacted by development proposals, including the contribution made to their setting. The level of detail should be proportionate to the assets' importance in order for an informed assessment to be made. Heritage Statements should also take account of Archaeological Priority Areas; applicants should refer to the guidance provided on the Council's website[17].

[17] https://www.bromley.gov.uk/local-history-heritage/archaeology-bromley

Figure 7 – Timekeepers Square, Salford: *Reintroduces the historic street pattern of the area, while responding to the height, massing and rhythm of existing Georgian terraces. The new housing creates a positive setting for several Grade II listed buildings.*

Figure 8 – The Bourne Estate, Camden: *A sensitive contextual approach introduces two new blocks within an existing Grade II listed estate to complete the original layout. The buildings respond to the form and scale of the original architecture with fine brick detailing and a high-quality finish.*

DG2: Preserving and Enhancing Heritage Assets

All development proposals should seek to preserve and enhance the significance of existing heritage assets. Where a proposal will cause harm to a heritage asset, clear and convincing justification should be provided. Development proposals should address paragraphs 199 to 203 of the NPPF (July 2021) and ensure that public benefits are provided to outweigh the harm or loss, commensurate with the scale of any harm or loss and the significance of the heritage asset. New development proposals should:

a) Demonstrate an understanding of the significance of heritage assets, setting and place, including their evidential, historical, aesthetic and communal value. A strong evidence base is required in order to fully understand the impact or consequences of proposed change.

b) Demonstrate how the architectural approach responds to local context and character and respects the significance and setting of existing heritage assets, i.e. the architectural and historic significance of listed buildings and the character and appearance of conservation areas.

c) Respond sensitively to the siting and settings of heritage assets by adopting a considered approach to building heights, scale and massing, to minimise harm and to ensure that existing assets are not overwhelmed or obscured by inappropriate development. Townscape presence, key views, and heritage value should be protected and reinforced rather than eroded or diminished.

d) Seek to sensitively restore, conserve and adapt heritage assets wherever possible, aspiring to a high quality of design and execution that will endure over time by carefully considering materiality and detailing, scale and proportion, hierarchy and juxtaposition (between the old and the new), legibility, authenticity and integrity.

e) Ensure that interventions involving listed buildings/structures/landscapes do not prejudice alternative solutions in the future by adopting a flexible, adaptable, reversible and sustainable architectural approach where feasible.

f) Consider the potential for archaeological impacts and demonstrate a clear understanding of how these impacts may influence the design strategy.

Relevant policy and guidance includes:

Local Plan – policies 4, 37, 38, 39, 40, 41, 42 and 123

London Plan – objectives GG1 andGG2, and policies D3, D4 and HC1

NPPF – sections 11,12 and 16

Responsive

Layout

5.12. Layout refers to the **arrangement** of streets, blocks and plots; it provides the structure on which all other aspects of the form and uses of a development depend. The **relationship** between buildings and spaces is fundamental to the success of any development.

5.13. Layout can be categorised as **urban structure** (large scale) or **urban grain** (small scale). Urban structure refers to the framework of routes and spaces and how they relate to one another. Urban grain refers to the pattern or arrangement of blocks, plots and buildings. An area's pattern of blocks and plot subdivisions may be respectively small and frequent (fine grain), or large and infrequent (coarse grain).

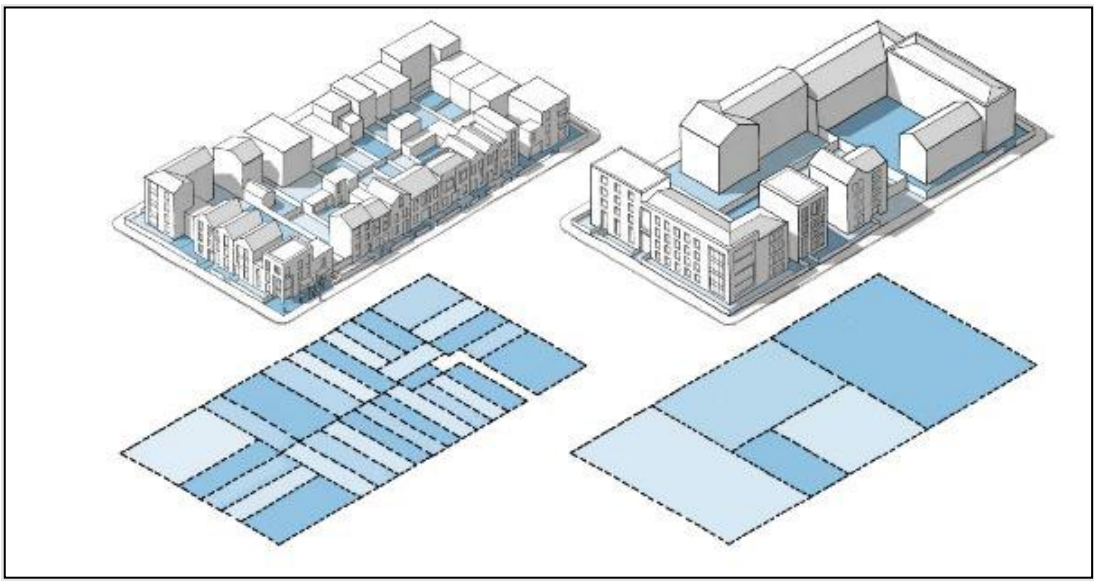


Figure 9 – *Examples of fine and course urban grain*

5.14. The NDG highlights the importance of the interrelationship between blocks, streets, buildings and spaces in creating coherent well-designed places which have **compact forms of development** that are walkable, legible and sustainable.

5.15. **Continuity and enclosure** is a key aspect of successful urban spaces; the continuity of street frontages and the enclosure of space by buildings and landscape creates spaces that are well overlooked, safe, legible and more pleasant to use. The relationship between **fronts and backs** (orientation and aspect) is also important; successful streets are characterised by buildings overlooking and animating the public realm with active frontages at ground level.

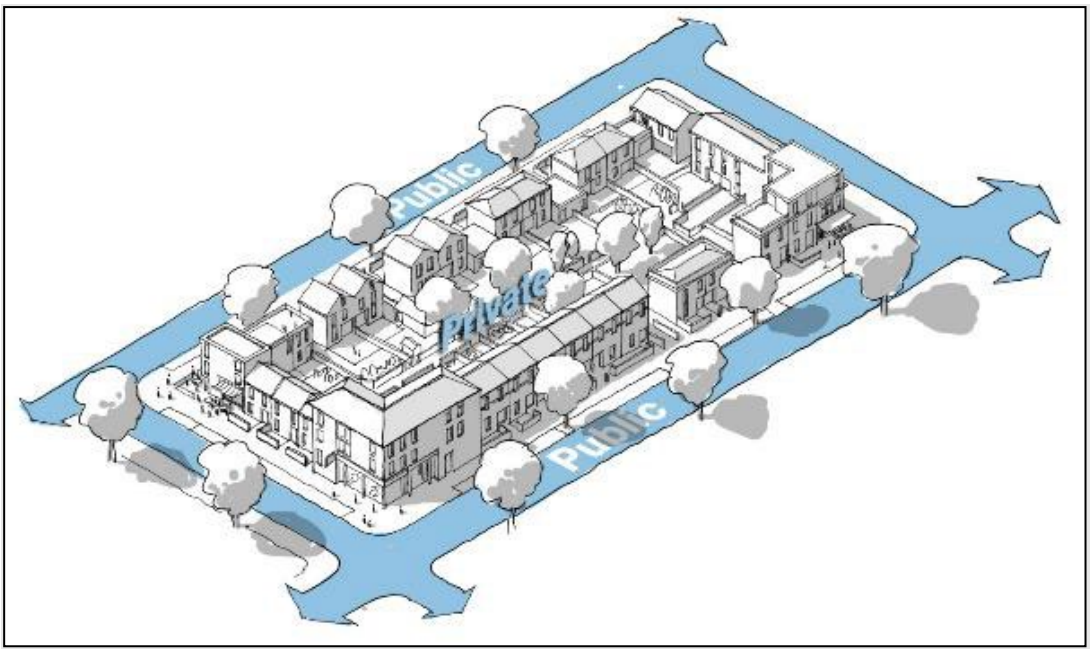


Figure 10 – *Perimeter blocks create a clear distinction between the public fronts of buildings and the private backs*

5.16. Bromley has a mix of urban, suburban and rural settings; the more densely populated parts of the borough benefit from a strong **street based** urban fabric which new development should seek to reinforce. Buildings should relate to existing **building lines** to reinforce and define the street; **public and private spaces** should be clearly defined.

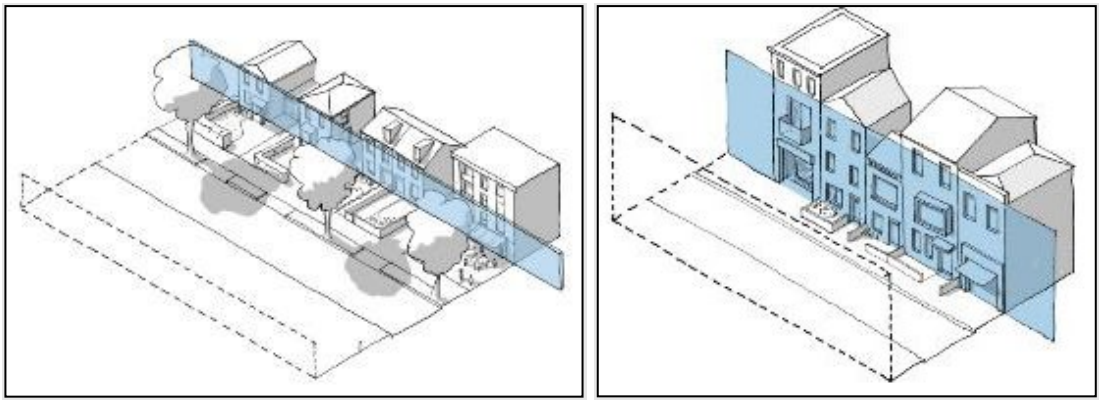


Figure 11 – *The nature and position of building lines in relation to the street contributes to the character and identity of a place*

5.17. Development proposals should establish a **clear hierarchy** of streets and spaces. Pedestrian movement should be a key driver in determining the optimum site layout which should reflect desire lines and movement patterns based on both the existing and emerging context.

Figure 12 – The Malings, Ouseburn: *An alternative street-based approach to conventional flatted blocks. New streets run down a sloping site towards the river, optimising views and following desire lines to connect surrounding neighbourhoods. The Malings blends traditional street typologies with a combination of courtyard dwellings, back-to-backs, and taller townhouses.*

Figure 13 – Goldsmith Street, Norwich: *A fine grain street based approach in response to the surrounding context; a series of terrace blocks with reduced distances between properties (14 metres) creates a low-rise, high-density development with strong frontages and neatly framed communal amenity spaces.*

DG3: Continuity and Enclosure

All development proposals should seek to create a coherent pattern of development recognising that every building is part of a greater whole. Development proposals should:

a) Be consistent with, and appropriate to, the existing urban grain. Existing fine grain and narrow plot widths should be respected and maintained wherever possible.

b) Respond to existing building lines and seek to continue established street patterns and frontages where it is an integral part of local character. Permeable routes and connections should be preserved and enhanced.

c) Contribute positively to the legibility of the area providing a clear distinction between 'fronts and backs' and public and private space. The creation of ambiguous spaces should be avoided.

d) Ensure the provision of good pedestrian routes with clear sightlines, active frontages, defensible space, and natural surveillance. Blank walls and dead frontages should be avoided. Buildings should be directly accessed from the street.

e) Ensure appropriate building height in relation to street width in order to retain a human scale and to create a sense of enclosure. Setbacks and projections at upper floor can both support and detract from the public realm.

f) Utilise where appropriate the benefits of perimeter blocks to ensure a clear distinction between public and private space, i.e. providing an active building frontage facing the street (well-overlooked public space) and secure private amenity space to the rear (enclosed private space)

Relevant policy and guidance includes:

Local Plan – policies 4 and 37

London Plan – objectives GG1 and GG2, and policies D3 and D4

NPPF – sections 11 and 12

Scale and Massing

5.18. **Scale** refers to the **size** of a building or the parts of a building in relation to its surroundings. **Massing** refers to the **combined effect** of the arrangement, volume and form of a building or group of buildings in relation to other buildings and spaces. The scale of a development is often referred to in terms of building height.

5.19. As set out in the NDG, well-designed places use the right mix of **building types, forms and scale of buildings** and public spaces for the context and the proposed density, to create a coherent form of development that people enjoy. Building heights influence the character and identity of a place and the quality of the environment.

5.20. **Townscape character** is dependent upon how well individual buildings relate with, and respond to, the scale of their neighbours. Respecting the scale of existing buildings helps to maintain the **continuity** of the built fabric as well as retaining local distinctiveness and townscape merit.

5.21. In order to safeguard local **character and identity** the scale, massing and height of a proposed development should be considered in relation to its surrounding context, including adjoining buildings, the general pattern of heights in the area, streetscape and urban grain, topography, and the impact on local views, vistas, and landmarks.

5.22. The scale of larger footprint buildings should be broken up into smaller component parts with stepped massing and/or indents/visual breaks within the principal elevations. Consideration should be given the scale of the individual parts of a building as well as its whole, and how these are perceived or ‘read’ at ground level – as experienced close-up. Equal consideration should be given to the different dimensions that make up scale; depth, width, height, with an emphasis on how development relates to **human scale**.

5.23. Bromley has a predominantly low-rise suburban character with a varied topography. Relating new development to the general pattern of building heights should not preclude variations in scale where conditions allow; however, retaining the continuity and respecting the qualities of local townscape character is a fundamental requirement.

Figure 14 – Camden Courtyards, Camden: *The scale and massing is moderated to respond to the surrounding townscape and broken down through materiality and detailing which reflects the industrial heritage of the site. The scheme achieves high density with a maximum height of seven storeys.*

Figure 15 – St Andrews, Bromley-by-Bow: *Brickwork facades with a rich mix of bonds and colours, deep window reveals, generous balconies, and a variation in storey heights break up the scale of the blocks which form part of a high density residential-led scheme.*

Figure 16 – Savoy Circus, Wembley, Brent: *Influenced by the local context, architectural details include corbelled brick corners, reconstituted stone window surrounds and glazed brickwork providing articulation and visual interest to break up the massing of the building. The design sits sympathetically within a Conservation Area setting.*

Tall Buildings

5.24. Tall buildings are those that exceed the general height of their surroundings and cause a significant change to the skyline. As set out in the London Plan, this may vary in different parts of London but should not be less than six storeys or 18 metres measured from ground to the floor level of the uppermost storey.

5.25. The Council will seek to identify suitable locations for tall buildings as part of the Local Plan review; in the interim London Plan policies D3 and D9, and Local Plan policies 37, 47 and 48 apply, in terms of assessing applications for tall buildings.

5.26. Well-located and well-designed tall buildings can provide important **urban landmarks** and much needed homes and commercial space at increased densities. They can also facilitate wider regeneration benefits and more efficient use of land. However, due to their scale and prominence, tall buildings have the potential to significantly alter local character and impact on the setting of heritage assets and conservation areas, and impact negatively on local environmental conditions and amenity (micro-climate effects).

Location

5.27. The existing prevailing heights in an area are particularly important in determining suitable heights for new development proposals. However, it is important to note that the presence of an existing tall building does not in itself provide adequate justification for the siting of a new tall building nearby. Tall buildings require a strong **townscape justification** which usually includes visual emphasis, marking thresholds of land use. New development should *acknowledge* and respond to local context but should not be *competing* with existing townscape markers in terms of their height and scale. Understanding **context** and **impact** should take priority over attaining specific heights and commercial incentives.

5.28. It is essential that proposals for tall buildings respond appropriately in terms of their height, scale and massing to both the **immediate context** (relationship with neighbouring buildings/impact on amenity) and the **wider context** (townscape/skyline). Tall buildings should not be seen as architectural ‘objects’ where the focus is solely on the skyline, the relationship with the street/public realm is an equally important design consideration. Understanding place (character and context) is key.

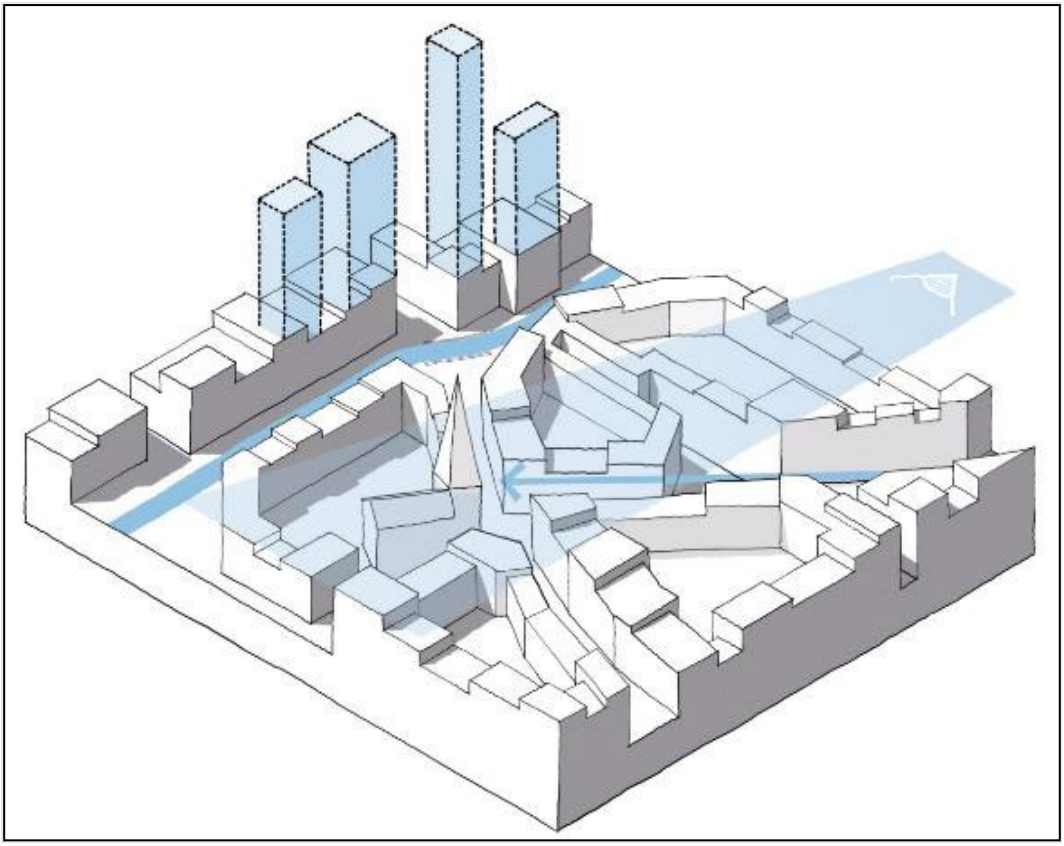


Figure 17 – Tall building principles: *Topography, heritage assets, local character, conservation areas, transport accessibility, skylines, sensitive local views vistas and gateways*

5.29. Much of the borough is not considered appropriate for tall buildings due to its low-rise suburban character. However, potential may exist in **metropolitan and major town centre** locations which benefit from good public transport and an existing urban character.

Impact

5.30. In accordance with London Plan policy D9, development proposals should address the **visual, functional, environmental** and **cumulative** impact.

5.31. All development proposals for tall buildings are required to consider the impact on the setting including **key views** and heritage assets. Immediate, mid-range, and long range-range views should be carefully considered and included within a comprehensive Heritage and Townscape Visual Impact Assessment.

5.32. Proposals for tall and large buildings should be of the highest **architectural quality** and demonstrate an understanding of place. Tall buildings should be grounded in their context, they require **articulation** and a **clear narrative** informed by local character and identity which should be reflected within the architecture, materiality and detailing - particularly those which form part of an established built-form frontage, as opposed to stand-alone buildings which may, where appropriate, convey a different identity. All tall buildings should have a clearly defined ‘top’, ‘middle’ and ‘base’ responding positively to both the skyline and the street.

5.33. **Servicing, maintenance, building management arrangements** and **safety** should be considered at the start of the design process. It must be demonstrated that the

capacity of the local area and its transport network is capable of accommodating the functional impacts from the quantum of development proposed. The setting and the surrounding area must be able to absorb the impact (on local services and the public realm) from the increased activity patterns generated.

5.34. Wind, daylight, sunlight penetration and temperature conditions around the building(s) must be carefully considered and should not compromise comfort and the enjoyment of open spaces. **Daylight and sunlight** (overshadowing buildings and spaces), **temperature** (wind chill, shade and overheating), and **cumulative** impact (amenity spaces and Urban Heat Island effect) should all be carefully considered. It is important to recognise that the **human experience** can often differ from numerical data which may not reflect the true extent of the impact.

Figure 18 – Elephant Park, London: *Creates a distinctive neighbourhood comprising of townhouses, mansion blocks and a 16-storey tower; executed in blends of five different bricks creating a playful, decorative effect which breaks down the volume of the large-scale blocks.*

Figure 19 – Blackfriars Circus, London: *Introduces a 28-storey tower with a slender facade and pre-cast sills at every other level to create a strong vertical emphasis, a variety of stock and glazed bricks are used to enhance key elements of the building including a colonnaded base. The selection and application of materials helps to differentiate and establish a unique identity.*

DG4: Tall Buildings

Development proposals for tall buildings will be required to make a positive contribution to the townscape ensuring that their scale, massing and layout responds to and enhances the character of the surrounding area. All development proposals should:

a) Consider the visual, functional, environmental, and cumulative impact on both the immediate setting and the wider surrounding context in accordance with Policy D9 of the London Plan.

b) Be of the highest architectural design quality with a clear base, middle, and top strategy; the tops of tall buildings should make a positive contribution to the skyline, the base should engage with the street frontage and frame the public realm. The relationship with the street should be a key consideration.

c) Seek to achieve an appropriate transition in scale by considering a variety of design forms including stepped shoulder elements, expressing a vertical emphasis/horizontal banding to break up the appearance of mass and/or creating slender elegant proportions to avoid a dominant and overbearing appearance.

d) Acknowledge and respond to existing and emerging development without competing with neighbouring landmark buildings in terms of height and scale. Proposals for 'marker' or 'gateway' buildings will require a strong evidence-based townscape justification.

e) Consider the impact of microclimate effects particularly wind and overshadowing; mitigation measures should be designed in as integral features from the outset to avoid the need for post-planning retrofit solutions. The design of individual facades should be influenced by their particular orientation responding to solar gain, noise mitigation, and/or key views.

Relevant policy and guidance includes:

Local Plan – policies 4, 37, 47 and 48

London Plan – objectives GG1, GG2 and GG3, and policies D3, D4, D5, D9 and D12

NPPF – sections 11 and 12

Architectural Design

5.35. Good design is central to delivering sustainable homes and communities. Design quality is not just about the aesthetics of a building or a particular architectural style; well-designed places consider the **aesthetic** (visual), **functional** (physical), and **sustainable** (social and environmental) qualities of **place**. Good architecture should make a positive contribution to its setting, connect people and place, and seek to evoke a sense of joy and delight.

5.36. As set out in the NDG, well-designed development proposals are shaped by an understanding of the existing **context** including the architecture prevalent in the area, the local vernacular and other precedents that contribute to **local character**, to inform the form, scale, appearance, details and materials of new development. Development should seek to positively **respond** to context and character through an appropriate architectural approach.

Architectural Approach

5.37. The principle of assessing local character and responding appropriately forms a key part of the design-led approach. There are 3 broad architectural approaches which can be adopted in response to local character and context. These can be categorised as:

- **Restore - 'sympathetic and faithful'** – proposals which closely relate to the existing surrounding typologies by pursuing a similar form, style, materials and detailing (typically suitable for more sensitive areas i.e. Conservation Areas and ASRCs)
- **Re-imagine 'contemporary reinterpretation'** – a contemporary but respectful reinvention of traditional forms/features/materials to create a design language that responds to local character
- **Replace 'innovative and original'** – unique solutions through the contemporary use of form, materiality and detailing (typically more appropriate in areas of an inconsistent character)

5.38. A comprehensive character assessment should be undertaken by applicants to help inform and justify why a particular design approach has been adopted.

Figure 20 – Sympathetic and faithful

Figure 21 – Contemporary reinterpretation

Figure 22 – Innovative and original

Form

5.39. There are several recognisable residential/mixed-use building typologies, including terrace, linear block, villa block, and tower; each have their own characteristics, qualities and limitations. These can be combined in different urban arrangements for different purposes, i.e. creating a continuous street frontage, framing courtyard spaces, marking prominent junctions and corners, increasing densities, and/or unlocking highly constrained sites. The selection and combination of building forms and arrangements should be carefully considered, **contextually appropriate**, and enable **efficient** and appropriate use of land.

Figure 23 – Goldsmith Street, Norwich: *A quiet, modest character based on a traditional suburban street with simple building forms creating a clear, legible identity informed by the surrounding context.*

Figure 24 – Horsted Park, Chatham: *A series of housing typologies arranged and designed to reference the local rural vernacular creating familiar forms with a contemporary appearance expressed through materiality and detailing.*

Rhythm, Scale, and Proportions

5.40. Many of the more densely populated parts of Bromley are characterised by traditional suburban residential streets comprising of characterful Victorian and Edwardian properties. These typically have a strong and distinct **rhythm** (vertical and horizontal) and a prevalence of unifying features, materials and detailing.

5.41. **Proportion** is the relationship in scale between different building elements, such as walls and window openings (solids and voids), which help in-part to define character. A building's solid-to-void ratio (the proportion of wall to windows/doors) and how the openings are arranged can determine its impact and help to harmonise new development (traditional and contemporary) with existing buildings.

5.42. Development proposals should seek to reflect and respond to the prevailing rhythm, scale, proportion and detailing of existing buildings, **referencing** and reinforcing distinctive/attractive elements rather than directly **replicating** architectural styles in order to avoid pastiche design.

Figure 25 – South Gardens, Elephant Park, London: *A contemporary interpretation of the Victorian bay window referencing an existing terrace on the opposite side of the street.*

Roofscape

5.43. The majority of areas within the borough are characterised by pitched roofs, including hipped, gable, and crown roofs. Roof forms should be proportionate to the mass of the building and be integral to its design. Roof forms should be designed to minimise the visual impact, and positively respond to the character of the area.

5.44. In areas where flat roofs are appropriate, buildings should seek to minimise the visual impact from street level by setting back upper floor elements to reduce the appearance of bulk. Set-back top floor elements should relate to the character/form of the building and should typically adopt a more lightweight appearance whilst not appearing as a separate entity.

5.45. Caution should be applied to prominent projecting/cantilevered elements which can create an overcomplicated external appearance, an uncomfortable relationship with neighbouring buildings, and/or have a negative impact on the streetscene/public realm.

5.46. Rooflines should reflect the **rhythm, harmony** and **scale** of the street frontage, particularly in areas where a consistent roofline contributes to local character. Stepped and sculptured rooflines can appear monolithic particularly when the shape and form is unrelated to the existing context. Stepped rooflines may however be appropriate in response to changes in scale, the safeguarding of key views, and/or in response to existing streetscape conditions/topography.

5.47. On larger developments, functional elements such as roof mounted plant/enclosures, lift overruns, maintenance gantries and safety balustrades should form an integral part of the overall building form and be designed to minimise visual impact from street level.

Figure 26 – St Chad's, Tilbury: *Traditional pitched roof forms with high quality materials and detailing create a familiar but contemporary feel.*

Figure 27 – Accordia, Cambridge: *Adapting a traditional housing typology with a distinctive asymmetrical roof form, optimising light, ventilation, and internal connectivity whilst maintaining a terrace-like urban form to the street.*

DG5: Architectural Design

All development proposals including extensions to existing buildings, will be expected to be of a high quality design. Development proposals should:

a) Identify and respond to the characteristics of the area and follow one of the three broad approaches outlined in paragraph 5.37 of this guide. Applicants should justify why a particular approach has been chosen and demonstrate how local character assessment and wider contextual analysis has informed the design.

b) Carefully consider the selection and/or combination of building forms and typologies to ensure they are contextually appropriate and enable efficient and appropriate use of land.

c) Reflect and respond to the prevailing rhythm, scale, proportion and detailing of existing buildings/elements, referencing and reinforcing distinctive/attractive elements through a traditional, contemporary re-interpretation, or innovative design approach.

d) Ensure that roof forms relate to the character/form of the building, are proportionate in size and appear integral to its design. Roof forms should be designed to minimise the visual impact on the street and positively respond to the character of the area.

e) Consider both the site and its surroundings; rooflines should reflect the rhythm, harmony and scale of the street frontage particularly in areas where a consistent roofline/form contributes to local character. Overly prominent elements which appear detached from, and/or unrelated to, the existing context are unlikely to be considered acceptable.

f) Extensions and alterations to existing dwellings should respond to character (by adopting an appropriate design approach) and appear subservient in scale to avoid uncharacteristically large additions which can significantly change the appearance of a property and have a detrimental impact on character and amenity. Careful consideration should be given to form, fenestration, materials and detailing.

Relevant policy and guidance includes:

Local Plan – policies 4 and 37

London Plan – objective GG1, and policies D3 and D4

NPPF – sections 11 and 12

Materials and Detailing

5.48. Good design introduces visual **richness** through the use of materials and detailing. Richness refers to the composition and detailing of elements to provide articulation and interest which contributes to the character and appearance of an area.

5.49. The choice and treatment of materials impacts on both the appearance of buildings and spaces and the way in which they function. The texture, colour, and pattern of materials (aesthetic qualities) influence how buildings and spaces relate to their surroundings and how they are perceived and experienced. The durability, life-span, and technical performance of materials (functional qualities) impacts on the environmental sustainability of new development.

5.50. Materials should be of a high quality, practical, durable, and attractive. The choice of materials should be integral to the architectural approach and **respond** to the character and context of the site and its surroundings.

Figure 28 – The Avenue, Saffron Walden: *Sympathetically designed to reflect the character of the surrounding area with a mixed palette of materials and crisp contemporary design detailing.*

5.51. Bromley has a range of architectural styles reflecting different eras. Early Victorian/Edwardian suburbs are characterised by natural slate tiles, stock brick and timber with attractive bay windows and door cases. Later suburbs are typified by clay tile and red brick with a greater variety of architectural treatments. Interwar housing features English, Georgian and mock-Tudor styles, while post-war housing features a range of modern building materials resulting in a very different character.

5.52. Brick is the most widely used material in Bromley's built environment and is the unifying feature across the various styles of architecture. Brick is robust and durable with excellent weathering properties. The quality of brick, colour, texture, bond, mortar

and pointing is key to achieving a high-quality brickwork finish. Brick slips are less durable, their longevity is often compromised by inadequate adhesives/fixings and will therefore not be accepted in most cases.

5.53. The use of render, metal cladding, and timber cladding can weather poorly creating visually unappealing discolouration and deterioration. Development proposals that seek to use external render and/or metal/timber cladding will only be acceptable as part of a compelling architectural approach and where detailed design and maintenance considerations (including water run-off from roofs) can be demonstrated.

5.54. In areas where there is a strong sense of character through the particular use of materials, new development should be based on a similar palette. Careful consideration should be given to colour, texture and form particularly for larger more prominent buildings where bright colours and highly reflective materials can create glare. A subtle, neutral palette is considered more appropriate for much of the borough. In Conservation Areas in particular, it is important that the materiality respects the historic and architectural interests of its surroundings.

Figure 29 – Timekeepers Square, Salford: *A limited materials palette is used throughout the scheme; predominantly a light brick in response to the sandstone of the nearby Grade II listed church. The materiality and architectural detailing is simple and restrained.*

5.55. In less sensitive areas there may be scope to introduce more contemporary materials which can offer a 'lighter' elegant contrast to the more 'solid' appearance of traditional materials even in historic environments. However, it is important to retain a sense of **harmony** and **continuity** between new and existing buildings; compatibility of materials (colour, texture, scale of use) and quality of architecture is key.

5.56. The choice of materials should also be influenced by the wider **environmental impacts**; careful consideration should be given to whole life cycle costs, embodied

energy, thermal performance and energy efficiency. Consideration should be given to the durability, robustness, and weathering properties of materials, with maintenance requirements considered at an early stage in the design process.

5.57. **Detailing** refers to the individual **components** or parts of a building and how they fit together, these include junctions, openings, entrances, balconies, facade treatments, decorative features, ironmongery, lighting, rainwater gutters and pipes.

5.58. These elements contribute towards both the appearance and functionality of a building affecting how it is experienced and how well it weathers and lasts over time. Successful developments are often determined by the quality of **detailed design** (material specification, craftsmanship, construction and maintenance) and the level of thought and care applied throughout each stage of the design process.

5.59. Materials and detailing are intrinsically linked; detailing can add **depth** and **character** to buildings and spaces providing added visual interest and contextual meaning and help to mask/integrate less appealing functional requirements such as bin stores and plant.

5.60. Attention to detail should be applied to each of the component parts identified above for all development regardless of scale. The detailed design of individual elements directly impacts on the quality of a scheme as a whole.

Junctions

5.61. The treatment of **junctions** between new and existing buildings requires careful consideration in terms of materiality and detailed design. This ensures a coherent interface between buildings and a clear distinction between 'existing' and 'new', particularly where there is a distinct contrast in architectural styles and/or where development directly impacts on heritage assets.

5.62. In the case of heritage assets consideration should be given to the following factors:

- **Proportion and hierarchy** - creating subservient or more prominent additions.
- **Rhythm and juxtaposition** - credibility of new buildings/additions whilst retaining the presence/prominence of existing original structures.
- **Complementing or contrasting** - choice of architectural design approach.
- **Readability and honesty** - materials and quality of finish.
- **Junctions and transitions** - between the old and the new; spaces and voids, contrasting materials, recesses/projections, shadow gaps, changes of level.

Figure 30 – The Granary, Barking: *A new bronze clad extension takes its cue from the gabled form of the original building and is attached via the vertical circulation core and a high level bridge link. The contemporary design clearly distinguishes the 'old' from the 'new' whilst respecting the existing 19th Century building.*

Openings

5.63. Windows and doors are key components within a facade; their size and placement should be carefully considered. Generously sized window openings can help to break down the scale and mass of building frontages and provide visual relief to street facing elevations. The style and proportions of windows and doors can also be a key characteristic of an area.

5.64. A contextual analysis should be the starting point to inform window and door proportions and positioning. The decision to replicate or depart from existing consistent patterns of openings should be carefully considered and justified as part of the overall architectural approach. For infill developments, referencing the size and proportions of openings in existing neighbouring buildings is key to retaining a sense of rhythm and harmony, particularly where there are contrasting architectural styles or materials.

5.65. The proportions and position of windows can influence how the height and scale of a building is perceived. The scale of tall or wide buildings can be broken down by emphasising either vertical or horizontal proportions within the expression of the facade.

Figure 31 – Park View Mansions, Chobham Manor: *Generously sized openings help to break up the mass of the three-storey townhouses, the positioning adds rhythm to the facade animating the elevation.*

5.66. Structural depth and interest can be created by employing deep window reveals. Recessed windows on larger scale buildings in particular help to avoid the creation of 'flat' featureless facades, providing contrasts of light and shade (aesthetically) as well as aiding cooling from solar gain (functionally).

Figure 32 – Ely Court, Brent: *A rhythmic composition of recessed windows, front porticoes, upper porticos and recessed balconies creates a highly articulated street facade.*

5.67. Orientation and passive design principles should be key considerations in relation to the size and placement of windows; a high proportion of glazing on south facing facades may require mitigation measures to control the risk of overheating.

5.68. Front entrances to buildings should be prominent, clearly identifiable and of a scale that responds to the scale of the building. Entrances should be well overlooked and directly accessed from the street.

Balconies

5.69. Balconies can appear particularly prominent features within a development. The design should be an integral part of the scheme both visually and functionally; in animating facades and providing valuable private amenity space.

5.70. Recessed balconies reduce the visual impact on the streetscene and are typically more appropriate in areas where projecting balconies would be out of character and on elevations which front busy roads where noise and air pollution would deter use.

5.71. Cantilevered balconies are more prominent and should be carefully integrated into the design of the building, preferably forming part of the design narrative; they should not appear as unrelated or generic 'bolt on' features.

5.72. Balconies provide an opportunity to positively enhance the appearance of a building, careful consideration should therefore be given to the detailed design. Solid, enclosed balconies can appear overly 'heavy' particularly on large scale blocks; open

balustrades can appear ‘lighter’ providing a greater visual contrast and relief from brick facades.

5.73. Metal balustrades should be finely detailed and respond to the materials of the building envelope (style and colour). Glass balustrades can appear generic and overly commercial in nature often jarring with the character of a traditional suburban setting and will therefore not be accepted in most cases. Glazed balustrades are typically more suited to large scale developments which seek to establish their own separate identity.

5.74. Balconies and terraces should feel sufficiently private in order to function as usable space; the balustrade design will determine the degree of privacy provided. It is important to achieve a balance between outlook (views out) and overlooking (views in). Perforated patterned metal balustrade designs can be used to create an attractive screen to address direct or indirect overlooking. Part solid/part open balustrades (front and side ends) can also be used to create a suitable balance between privacy and outlook.

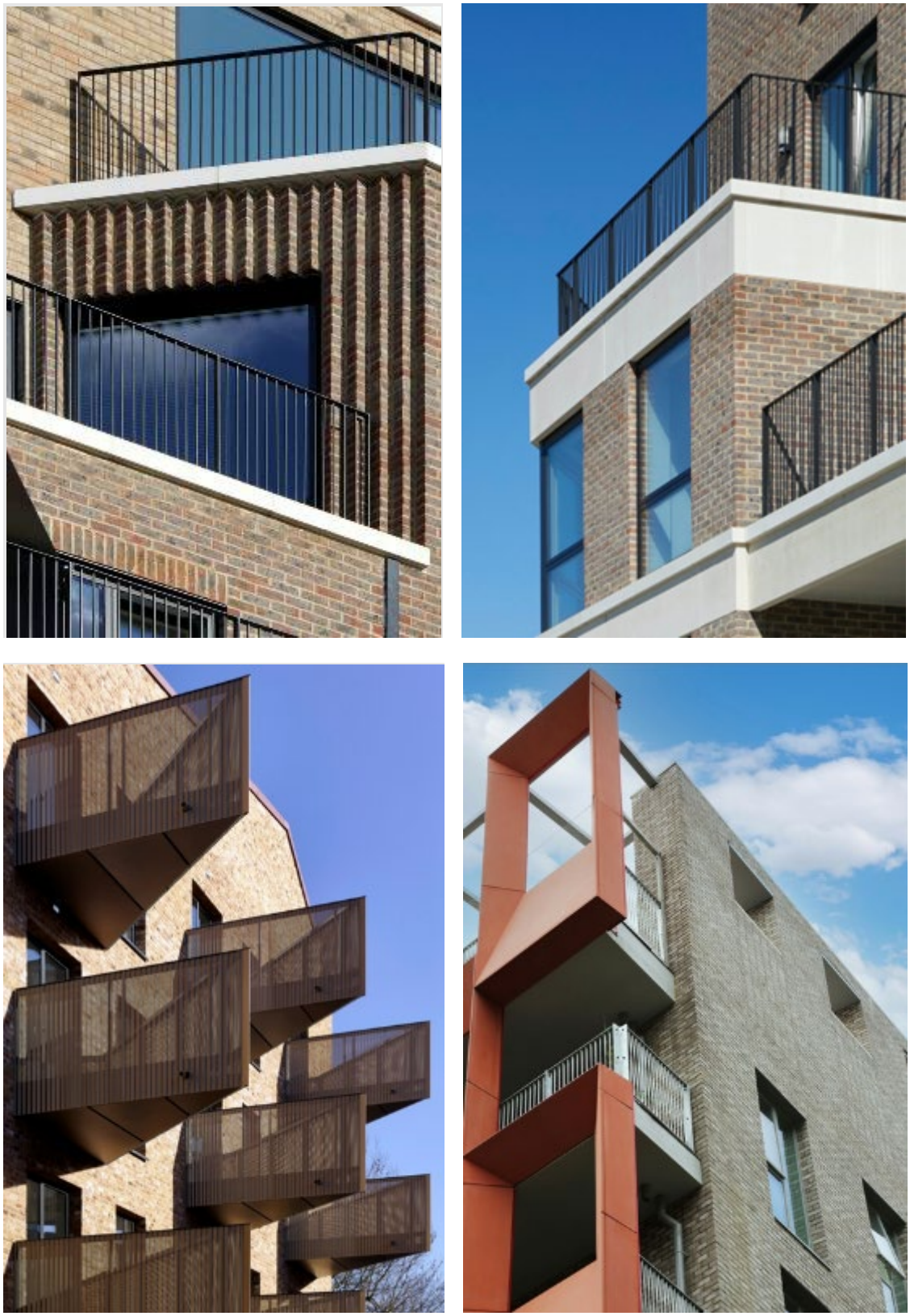


Figure 33 – *Balcony design can form an integral part of a building's composition, character and identity*

Figure 34 – *Decorative patterned balustrade designs add visual interest animating facades*

5.75. Balconies and winter gardens can play an important role in articulating elevations. On larger developments the arrangement of balconies can be key. Symmetrical arrangements can contribute to the structural order of a building, but equally the continuous repetition can appear monotonous. Staggered arrangements can create interest and 'movement' across the facade but may disrupt the composition of the building. The careful grouping of balconies into 'blocks' (vertically across floors and horizontally spaced at regular intervals) can help to achieve a suitable balance between enhancing the facade and contributing to the rhythm of the street frontage.

Facade Treatment

5.76. The effective use of high-quality materials and well considered detailing to express different elements of the facade and add visual interest can significantly improve the overall quality of a scheme.

5.77. The depth and quality of architectural expression and the extent to which this is informed by local context is key. There are several ways to animate prominent elevations and/or highlight entrances and cores, these include:

- Projecting/patterned brick (chequerboard, diaper, corbelled, banded, sawtooth);
- String and soldier course brickwork detailing;
- Stone coping/banding (parapets, sills);
- Aluminium panelling/metalwork;
- Full height glazed elements (visual breaks/links); and
- Bespoke balcony/balustrade/brise soleil design.

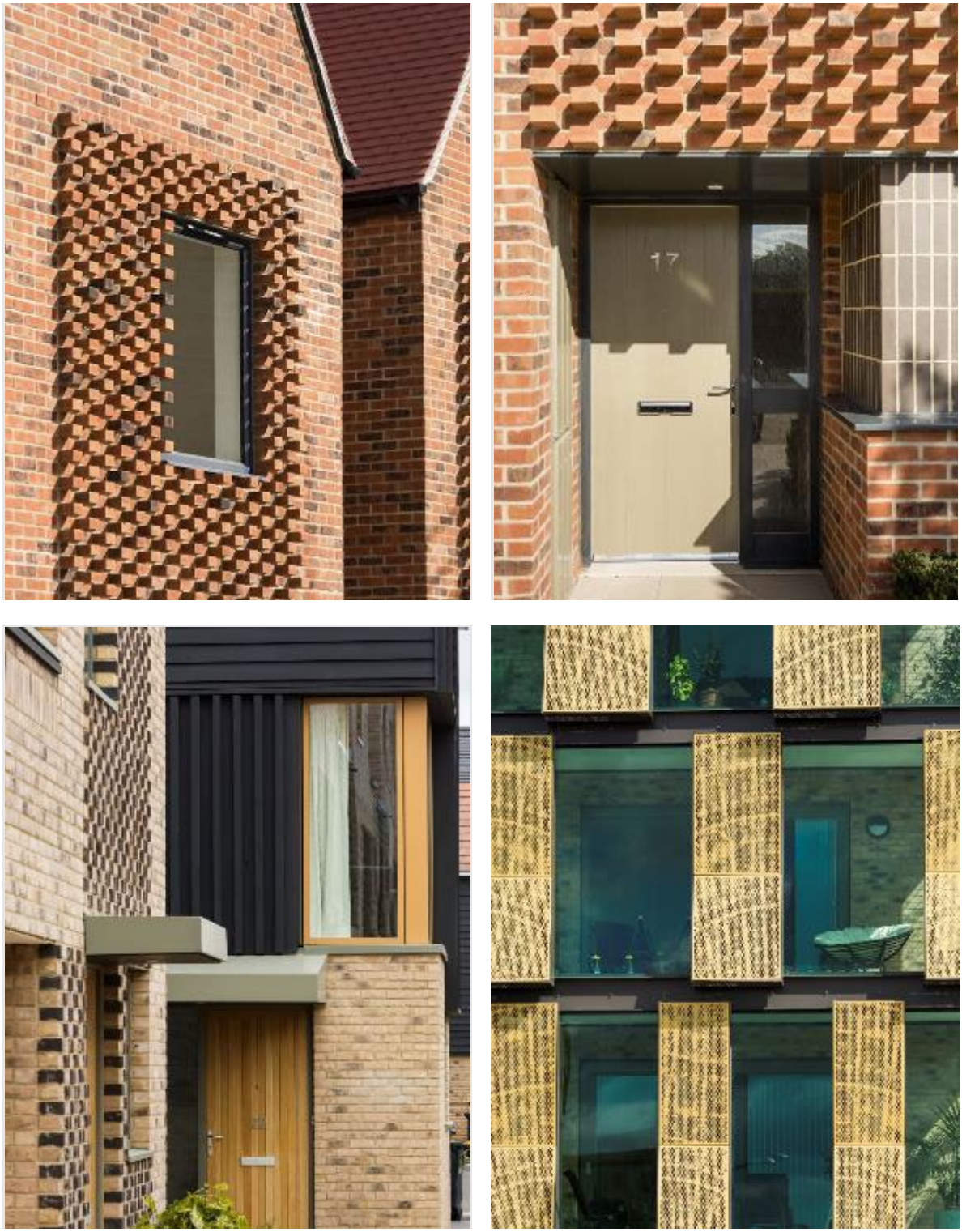


Figure 35 – *Examples of facade treatments providing depth and quality of architectural expression*

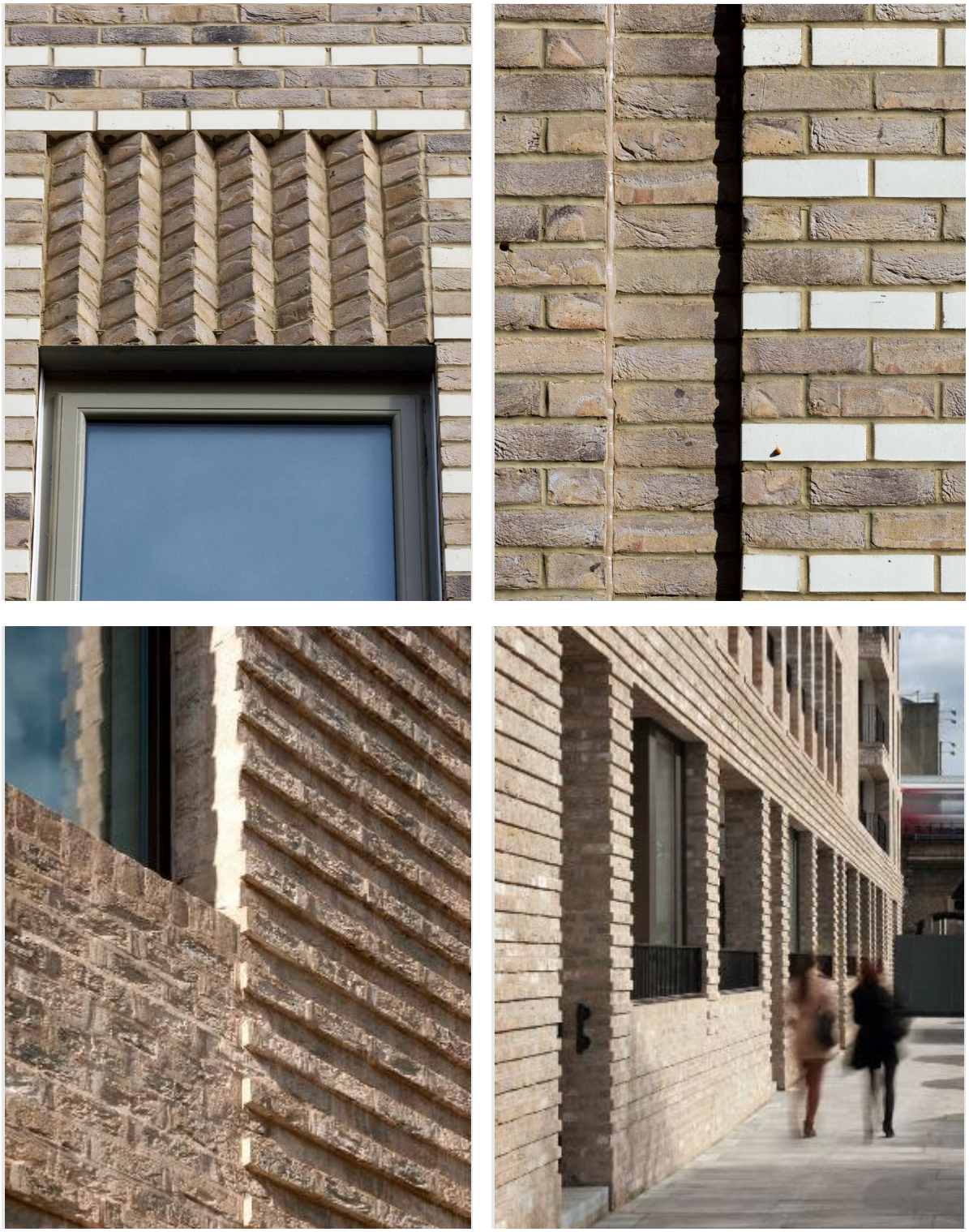


Figure 36 – *Examples of facade treatments providing depth and quality of architectural expression*

Figure 37 – *Examples of facade treatments providing depth and quality of architectural expression*

5.78. Facades can be further articulated by employing recesses and projections which can help to clearly articulate the separate volumes/elements of a building, particularly in the case of larger blocks where the appearance of an unbroken mass can be too great. Similarly, on a smaller scale, repeating projecting bay windows and recessed front entrances can help to accentuate plot widths and houses.

5.79. The opportunity for the articulation of facades to provide functional benefits in addition to aesthetic qualities should also be considered. The design of vertical louvred and horizontal brise soleil elements can significantly improve the thermal comfort of a building.

Ancillary Elements

5.80. Careful consideration should be given to the exterior detailing of ancillary elements. Drainpipes, gutters and meter boxes should be integrated into the design so as not to diminish the appearance of the building. Servicing items should be discreetly located away from prominent elevations and where possible within the building envelope. Solar panels should be integrated into the design at an early stage and should not appear as an overly prominent feature from street level. In sensitive areas in particular, consideration should be given the visual impact on both the host building and its surroundings.

5.81. Solar tiles provide an alternative option to PV panels, they are visually more attractive and discreet than conventional PV panels as they form part of the existing roof structure (replacing standard tiles) rather than being installed as a separate visually prominent entity. Solar tiles can be designed to resemble the appearance of traditional slate or ceramic tiles, they are particularly advantageous in Conservation Areas or Areas of Special Residential Character. The use of solar tiles will be encouraged in more sensitive areas of the borough in order to minimise visual impact.

DG6: Materials and Detailing

The choice of materials should form an integral part of the architectural approach and should be shaped by an understanding of local context. All development should:

a) Ensure that new materials are sensitive to the immediate site context and sympathetic to the surrounding area so as not to undermine local character and identity. Materiality and detailing should respond positively to the setting and the wider townscape.

b) Ensure that materials relate well to the architectural style and ethos of the scheme, i.e. traditional materials for a local vernacular approach, new materials for a more modern approach/methods of construction. The use of high-quality, durable materials is an essential requirement for all development proposals.

c) Ensure that the right contrast is provided between different materials avoiding chaotic compositions and consider alternative applications of the same material in order to retain a sense of harmony and coherence within the design itself and between new and existing buildings.

d) Provide depth, articulation and visual interest through the use of high-quality materials and detailing which should reference rather than replicate existing details to avoid pastiche design. The detailed design of junctions, openings, entrances, balconies, facade treatments, decorative features, lighting, and ancillary elements should be carefully considered.

e) Consider both the aesthetic and functional qualities of materials and whether they are appropriate for the way in which they are to be used in terms of visual impact, durability, life-span, and technical performance. Development should be designed to minimise maintenance and repair costs.

f) Consider the wider environmental impacts of chosen materials in relation to whole life cycle costs, embodied energy, thermal performance and energy efficiency.

Relevant policy and guidance includes:

Local Plan – policies 4, 37 and 47

London Plan – objective GG3, and policies D3, D4, D9 and D12

NPPF – sections 11 and 12

Housing Design

5.82. The Local Plan and the London Plan set out an aim to deliver thousands of new homes in Bromley over the next decade. It is crucial that new housing is delivered to a high standard providing **comfortable**, **safe**, **accessible**, and **environmentally sustainable** homes to accommodate the changing needs of residents throughout their lifetimes.

5.83. As set out in the NDG, well-designed homes and buildings provide good quality internal and external environments for their users, promoting health and well-being. They relate positively to the spaces around them and allow for easy operation and servicing. Where different tenures are provided, they should be well-integrated and designed to the same high quality to create **tenure neutral** homes and spaces. All development proposals should seek to create homes with **identity** and a sense of **well-being** with access to **open space**. The aim should be to create efficient spaces without sacrificing comfort, character, or design quality.

5.84. Creating a sense of **community** and **belonging** is key. It is important to understand the relationship between 'quality of life' and 'place', i.e. creating integrated social environments which enable people to feel **connected** to their neighbours. Applicants will therefore be expected to prioritise people (health and well-being) and place (character an identity) in creating **places** over architectural statements and visions, or economic return. The Council will seek to embed key design principles from the start to avoid the risk of value engineering later in the design process.

Key Principles

5.85. Good quality housing does not need to be expensive and/or overly complicated; delivery is largely dependent upon the application of sound design principles:

- Character and identity (responding to site/context - not replicating pre-conceived ideas)
- Privacy and relationship to neighbours (creating 'quiet enjoyment')
- Space and flexible layouts (not just 'size' of space but how flexible and adaptable the space is)
- Natural light, ventilation, and outlook (orientation, aspect, cross-ventilation)
- Low energy and environmentally sustainable (energy performance)
- Outdoor space, private and shared (generous, functional, and accessible)
- Practical servicing and maintenance (waste storage/management and utilities)
- A sense of community (social interaction and inclusion)

5.86. It should be noted that **compliance** with minimum standards (space, ceiling heights, daylight and sunlight etc.) does not necessarily equate to **quality**. All development proposals should seek to exceed minimum standards wherever possible in order to deliver a high standard of accommodation for future occupants.

Aspects of Quality

5.87. Quality can be measured by considering three key aspects (pillars); **aesthetic** (visual), **functional** (physical), and **sustainable** (collective) design qualities.

- *Aesthetic quality:*
    - Context - relationship with surroundings (natural and physical)
    - Materials and facades (creating/responding to 'place')

- *Functional quality:*
    - User experience (accessibility and livability)
    - Health and well-being (healthy homes/buildings/spaces)
    - Durability/longevity (materials and construction)

- *Sustainable quality:*
    - Environmental impact (life cycle/low energy)
    - Social sustainability (community focused/inclusive design)

5.88. The Council will encourage all applicants to plan for the long term, to think beyond the red line boundary, and to adopt an **outcome focused** approach. The aim is to **lock-in quality** early in the design process in accordance with the Council's overarching design principles (performance indicators) to deliver housing quality.

Typologies

Semi-detached

5.89. Synonymous with suburban life, much of the borough is characterised by semi-detached houses. Semi-detached housing enables conventional front-to-front and back-to-back layouts, a generous frontage, greater opportunities for additional privacy, daylight/sunlight, ventilation, and future adaptation/extension than the terrace. Proposals may however require justification in terms of efficient land use on larger sites.

Figure 38 – Horsted Park, Chatham: *Pairs of semi-detached houses with recessed entrances and expressed gables provide a strong rhythm to the streetscape. Projecting chequerboard brickwork patterning provides a visual identity and sense of character.*

Terraces

5.90. The traditional terrace forms a familiar part of our urban fabric; it can maintain front-to-front and back-to-back relationships, clearly defines public and private realms, and makes good use of land. The simplicity of the terrace provides added flexibility (accommodating flats and single dwellings). The width of the frontage and ceiling heights are key to daylight and ventilation, the treatment of the unbroken facade is key to establishing/influencing the character of the streetscene.

Figure 39 – Anne Mews, Barking: *Traditional terraced houses focusing on the simple application of high quality materials and a generosity of scale, featuring large window openings, recessed entrances and integrated bin storage. The scheme creates a strong street frontage and a welcoming streetscape.*

Figure 40 – Hammond Court, Waltham Forest*: Carefully crafted architecture with an emphasis on quality of place; terraced houses, maisonettes and flats enclose a south facing courtyard with shared and private amenity spaces. Homes are dual aspect with generous space standards designed for longevity and flexibility*.

Flats (linear/urban villa blocks and towers)

5.91. The form and arrangement of flatted blocks and internal spaces determine residents experience of ‘home’ and a ‘sense of place’. The relationship between the street and home is key; prominent, generously sized, well-lit entrance lobbies with a strong visual connection should be provided along with naturally lit/ventilated corridors and circulation spaces. Long hotel-like internal corridors serving single aspect flats should be avoided. The provision of dual aspect homes, private outside space, and shared communal spaces/facilities are important requirements.

Figure 41 – Silchester Estate, Kensington and Chelsea: *A mix of housing typologies combined to create a legible human scale urban block enclosing a shared garden. Openings have a vertical emphasis with regular repeated proportions creating a rhythm to the streetscene. All homes are dual aspect providing good levels of daylight and cross-ventilation with access to private amenity space.*

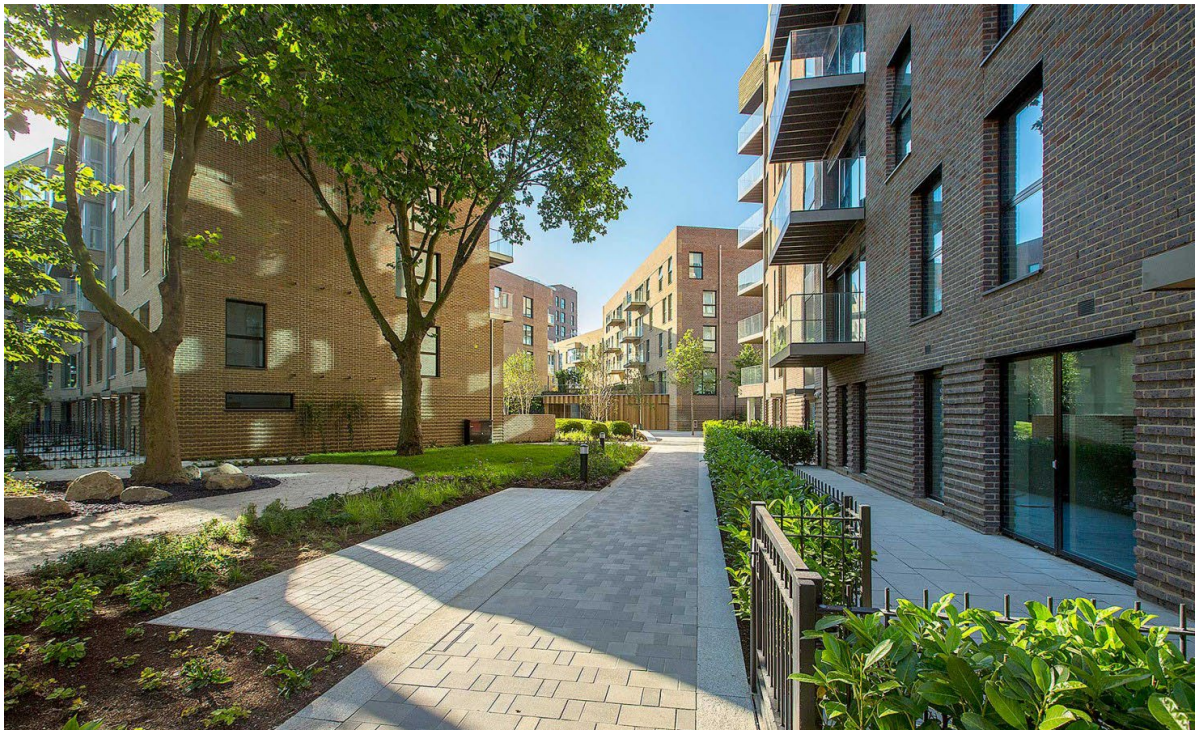


Figure 42 – Trafalgar Place, Southwark: *Comprising of linear blocks, villa blocks and a tower, the scheme reconnects previously fractured surrounding neighbourhoods, creating a pedestrian link and an internal courtyard space. The design features simple building forms prioritising interior space and spaces between buildings. Different shades of brickwork are used to define key elements giving each building a slightly different character.*

Maisonettes

5.92. The maisonette is a flexible hybrid typology which combines the benefits of both a terraced house and a flat, typically located at ground and first floor level with independent access to the street they can provide family housing in higher density developments. Variations and innovations (duplex/triplex/stacked) should be a bespoke response to context, aspect, and outlook (street, podium edge, courtyard). Flexibility, dual aspect, cross-ventilation, and private/shared amenity space are important elements regardless of form/application.

Figure 43 – Vaudeville Court, Islington: *The design features a mix of maisonettes on the ground and first floors, and two-bedroom flats above. Arranged in two terraces, with private gardens between them, the scheme references the scale of neighbouring buildings and reinstates the street frontage. The family homes are dual aspect with open plan living space and a private courtyard garden. Garden rooms give families extra amenity and storage space.*

DG7: Housing Design

All development should seek to deliver a high standard of housing design quality in accordance with London Plan and Local Plan policies in order to meet the needs of a diverse range of users. Development proposals should:

a) Ensure that new homes have character and identity informed by local context with a strong sense of community, place, and place attachment for existing and future occupants. All elements of elevational design should be tenure blind.

b) Have a positive and considered relationship with neighbouring buildings and spaces, providing privacy, safety, and comfort, these 3 components (essential for well-being) should be built in at the design stage.

c) Provide a good standard and quality of internal space, including room sizes, floor-to-ceiling heights, internal and external storage. Spaces should be accessible, flexible and adaptable to meet the changing needs of individuals and families.

d) Create healthy living environments by providing adequate levels of natural lighting and sunlight, and good ventilation, avoiding the risk of overheating and/or noise/air pollution. Dual aspect homes (particularly on north facing plots/flatted blocks) should be provided.

e) Be energy efficient and cost effective to run using passive design measures to harness solar gain, natural light and ventilation reducing the need for mechanical ventilation. Energy efficient materials/technology should form part of the external fabric and internal functions of the building(s).

f) Provide access to generously sized, appealing and functional, private and/or shared amenity space; private gardens and balconies should provide a degree of privacy (striking a balance between views 'into' and 'out of'), shared terraces and courtyard spaces should be designed to encourage social interaction.

g) Consider day-to-day operational requirements, applying attention to detail to waste storage and management, cycle storage, servicing and utilities, and ease of maintenance. The functional requirements should be designed-in at an early stage for ease of access and convenience and to minimise visual/environmental impact.

Relevant policy and guidance includes:

Local Plan – policies 4, 37 and 47

London Plan – objectives GG1, GG2, GG3 and GG4, and policies D3, D4, D5 and D6

NPPF – sections 11 and 12

Mixed-Use Development

5.93. Successful places require a mix of compatible **uses and activities** to provide **diversity**, **variety**, and **choice**. A mix of uses may be appropriate at a variety of scales: within a village, town/city, neighbourhood, street, or a particular building and can determine how active and vibrant a place is in supporting economic and social activity.

5.94. As set out in the NDG, successful communities require a range of local services and facilities to serve local needs and support everyday life. The correct balance of uses will help increase activity throughout the day, reduce overall travel, encourage sustainable travel, and support shops and services with a critical mass of people.

5.95. Mixed-use development is typically suited to urban locations and larger scale developments and can assist in achieving higher densities and intensive activity at locations which are easily accessible and have good access to public transport.

5.96. The benefits of mixed-use development include:

- Improving the vitality of an area with increased activity levels and street life at different times of the day/evening
- Providing a feeling of increased safety through natural surveillance resulting from greater and more prolonged activity
- Providing greater opportunity for social interaction/exchange
- Creating a variety of buildings and spaces to engage visual interest and satisfy everyday functional needs – convenience and choice
- Reducing the need to travel by providing a range of facilities in one place – providing a more sustainable pattern of development
- Potential for greater energy efficiency and more efficient use of buildings and spaces
- Introducing new uses/life into redundant buildings and spaces – providing greater resilience to change

5.97. Different uses have different needs, not all mixes are appropriate, the aim should be to **maximise synergy** and **minimise conflict**. Different uses need to be **compatible** in order to work well together and positively complement each other; they should be located in the right places with consideration given to **patterns of usage** and **movement**. How the different uses are serviced and supported is particularly important, where potential conflicts exist (access/noise/environmental impacts) careful consideration should be given to how these can be managed or designed out.

5.98. In the majority of mixed-use schemes, housing provision (and quality) remains the key priority. However, the growth of the innovation/tech economy, digitalisation, and the integration of services now provides greater opportunity for industry and housing to coexist. This change is reflected in the broadening of planning use classes to provide greater **flexibility**. Changing trends in retail (the creation of hybrid spaces and the experiential focus of retailers) will also influence the layout/structure of mixed-used buildings and their relationship with the street. The arrangement of different requirements (**spatial**, **structura**l, and **functional**) is fundamental to the development of successful mixed-use typologies.

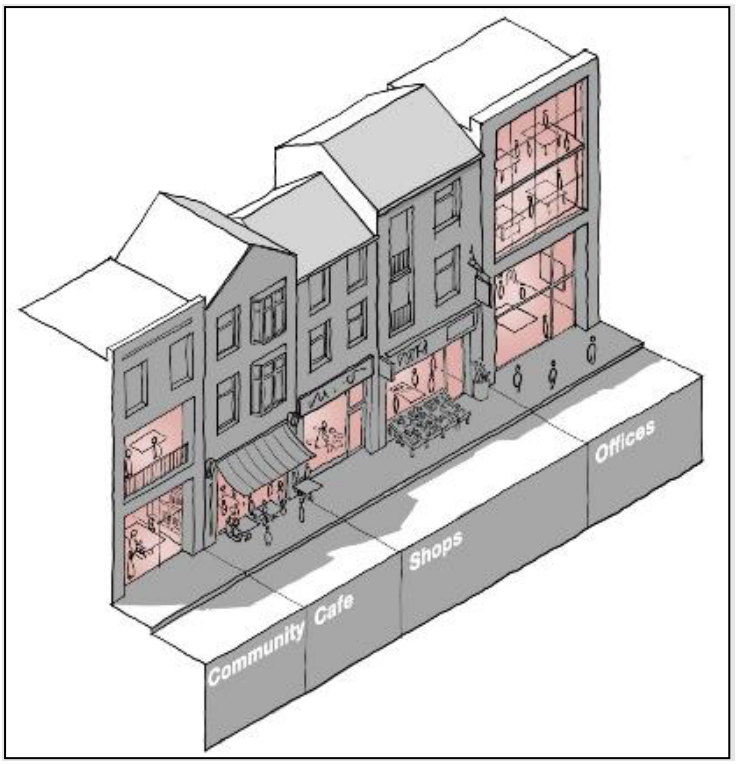


Figure 44 – Active ground floor uses: *There are a variety of uses that can create an active ground floor. Consideration should be given to both vertical and horizontal mixed-use typologies*

Figure 45 – Dickens Yard, Ealing: *A high density, mixed-use scheme clustered around a transport node with active frontages and new public space. The scheme includes residential units, retail stores, cafes and restaurants, health, leisure and community uses.*

Figure 46 – Flimwell Park, East Sussex: *A sustainable mixed-use development in a rural setting comprising of a mix of uses including workspace, education, residential, restaurant and amenities. Environmental, social and economic sustainability were at the heart of the project.*

Meanwhile Uses

5.99. Meanwhile uses and temporary 'pop up' interventions have become an important element of urban design which can contribute to the vitality and life of successful places. Temporary 'meanwhile' uses can transform empty unused spaces (vacant plots, development sites, Town Centre spaces) into opportunities for communities and businesses.

5.100. Meanwhile uses provide low-cost, low-risk opportunities for small enterprises, businesses, and community groups to engage with the local community, occupying vacant sites and/or bringing buildings back into short term use to help improve the physical and social landscape. Animating spaces through innovative design can enable conversations about the future permanent use of buildings/spaces and/or the wider redevelopment of an area to begin.

5.101. Types of meanwhile uses include food markets, workspaces, art installations and leisure activities. The council will encourage the use of temporary 'pop-ups' to function independently and/or as part of wider redevelopment proposals to stimulate interest and engagement in a particular area/parcel of land (creating 'life' between buildings).

Figure 47 – Blue House Yard, Haringey: *A redevelopment and re-imagining of a disused car park site, the project combined creative maker space with public space, creating retail and workspace opportunities bringing activity and life to the yard throughout the day and evening.*

DG8: Mixed-use development

All development should seek to achieve diversity and choice through a mix of compatible uses and activities that work together to create and support viable places. Mixed-use development proposals should:

a) Consider the appropriateness of the setting (visibility, footfall, movement routes), floorspace requirements (vertical or horizontal mixed uses), patterns of usage (daytime and evening) and compatibility of uses/amenity impact (complementary and symbiotic).

b) Avoid the creation of large areas of continuous/unrelieved single-use, unless it can be demonstrated that the use-block would not detract from the vibrancy of the area or that alternative uses are not viable.

c) Provide active ground floor uses (shops, cafes, restaurants and bars) as well as considering community uses, studios and workshops to activate the public realm, with non-footfall dependent uses located at upper floor level.

d) Consider multiple layers of mixed uses which involve different people using buildings/spaces at different times of the day/evening as well as various uses occurring in different parts of a building/space at any one time.

e) Consider how the different uses and activities will be serviced and supported and how potential conflicts can be managed or designed out.

f) Consider the amount and range of spaces required (floorplates) including the building structure (ceiling heights/volumes), and the importance of flexibility and adaptability (futureproofing) when proposing vertical/horizontal mixed-use typologies.

Relevant policy and guidance includes:

Local Plan – policies 4 and 37

London Plan – objectives GG1, GG2, and GG4, and policies D3, D4, D5, E1, E8, and E9

NPPF – sections 11 and 12

Non-Residential Development

5.102. Non-residential development refers to **industrial** and **commercial** use buildings and spaces, including warehouse storage and distribution centres, manufacturing plants and factories, research facilities, workshops and studio space, and commercial office buildings.

5.103. Industry and warehousing are important elements of the local economy, ensuring that SILs and LSISs are **retained and adapted** successfully to the changing needs of modern industry and commerce is a key objective outlined in the Local Plan. Safeguarding office accommodation for future business needs whilst encouraging improvements to existing stock and the **quality of environment** is also a key objective.

5.104. The design guidance below sets out the key principles which should be considered in relation to industrial and commercial development/re-development of existing buildings. Reference should also be made to the **contextual** and **responsive** sections of the SPD guidance in relation to context, heritage, layout, height, scale and massing, particularly in the case of finer urban grain/town centre locations.

Site layout and frontage

5.105. The layout of non-residential developments is particularly important to their function. The building footprint should be **proportionate** to the site and should address the street and public realm in a considerate and positive manner. **Active frontages** are important to the vitality of the streetscape; it is important to maximise the number of active frontages and to ensure that ground floor uses adjacent to the street have high levels of **visual permeability**.

5.106. On larger industrial area sites, building to the edge of the plot can create a more cohesive **street character**; a well-designed principal elevation can remove/reduce the need for perimeter fencing. Service yards should be located away from the street edge towards the middle or rear of the site. A continuous connection between the building and the street should be uninterrupted by large parking areas.

Movement and access

5.107. The location of pedestrian and vehicular **access points** and routes to and through the site is an important design consideration, circulation and vehicle management strategies should be designed to maximise pedestrian/cyclist safety and minimise conflicts. Access points should be clearly visible from the street with separate access for different uses/users segregating HGV vehicle movements from pedestrian/cycle routes.

Parking and servicing

5.108. Permissible levels of parking are set out in the London Plan, but car-free development should be the starting point for all development. Where parking is considered appropriate, parking areas should be located at the side or rear of the building in order to lessen the **visual impact** on the streetscape. For commercial office buildings, basement or under-croft parking should be provided whenever possible. Where parking areas are visible from the street, buffer landscaping and architectural screening features should be provided, such as tree planting, hedging, and decorative/gabion walls. Large parking areas should be broken into smaller blocks defined by landscaping.

5.109. The sharing of infrastructure, entrances and yard space should be considered in order to **optimise space** on smaller sites. The provision of shared HGV access and parking for units that only require occasional HGV access should also be considered.

Siting and design

5.110. The appropriate scale and massing of the development will depend on the **location** and existing **urban fabric** i.e. large coarse grain industrial areas, smaller self-contained industrial sites, or fine grain town centre commercial office sites.

5.111. In urban locations and mixed-use settings it is important to consider the impact on adjacent buildings particularly in relation to residential amenity. Development should be orientated to minimise overlooking of yard spaces (quality of outlook), seek to utilise roof lighting for industrial space to reduce the need for windows (overlooking), incorporate environmental protection/mitigation measures (noise/air quality), and use ancillary spaces (parking and storage areas) to provide a buffer between residential and industrial uses.

5.112. Commercial office development should seek to mitigate actual and perceived levels of overlooking and light pollution into adjacent residential properties/amenity spaces with appropriate design measures (i.e. louvred windows/facades treatments).

5.113. High quality commercial and industrial buildings can help to reduce environmental impacts when designed to the highest standards to reduce air pollution, noise and water pollution. Buildings which process or manage waste should be designed to high environmental standards and should be within a modern fully enclosed building to prevent amenity issues such as noise, odour and dust[18].

5.114. Large commercial/industrial developments are often designed in a purely functional way resulting in generic/utilitarian buildings with limited architectural merit. The aim should be to deliver buildings of high quality that improve the urban environment.

5.115. Consideration should be given to building height, massing and use of materials in order to reduce the appearance of bulk/visual impact and to improve the **architectural language**. Careful consideration should be given to creating well-designed elevations with human scale elements which contribute positively to both the immediate setting and the wider surrounding context. More expressive external facades can break up long, relentless elevations as well as aiding the legibility of larger buildings; animating corners and entrances is key. Consideration should also be given to signage and graphics which should complement the design/function of the building.

Amenity and greening

5.116. Development proposals should seek to maximise opportunities for additional landscaping and public realm enhancement. The provision of outdoor amenity areas for employees is encouraged, this can be in the form of decked structures over shared yard space or roof terraces which can also contribute to urban greening. For industrial sites particularly, it is important to avoid creating tokenistic low-quality green strips on the edge of sites which can often become neglected unadopted spaces.

[18] Details of Environmental Permitting Regulations are available from: https://www.gov.uk/guidance/waste-environmental-permits

5.117. The greening of industrial sites with soft landscaping interventions, including tree planting to screen plant facilities and service yards, and reduce the need for unsightly security fencing which can appear austere and unwelcoming, is encouraged. The inclusion of green walls to provide visual amenity and support biodiversity should also be considered.

Flexibility and futureproofing

5.118. **Adaptability** and **flexibility** should be considered holistically throughout each stage of the design process, the benefits of which are particularly important in the context of large industrial/commercial buildings which can often become obsolete/redundant over time. Flexibility in unit configuration and size will ensure that buildings are best able to respond to changing future needs, while flexible internal layouts allow for varied occupiers and future adaptation.

5.119. Buildings should be designed to be both **flexible**, designed to allow for the easy rearrangement of internal spaces; and **adaptable**, with careful consideration given to how they could be structurally altered to accommodate new uses/patterns of use to prolong their lifespan.

5.120. The following factors should be considered in order to enable future adaptation and re-use; reference should also be made to the **Sustainable Design** (adaptability and resilience) section of the SPD guidance:

- **Scenario planning** – considering from the outset how buildings can be adapted to different uses if/when required.
- **Structural solutions** – providing clear floor plates, optimum floor-to-ceiling heights, service zones, structural grids and floor loadings that can accommodate different uses.
- **Space planning** – providing flexible spaces with generous floor-to-ceiling heights with good levels of natural daylight, and provision of external space.
- **Building form** – using simple plan form to allow for the reconfiguration of internal spaces and future expansion/contraction.
- **Sustainable design** – applying the principles of design for disassembly and modular construction; enabling building elements/components to be interchangeable for increased adaptability/re-use.

Figure 48 – Industria, Barking: *Located on designated Strategic Industrial Land, Industria represents an innovative approach to design with an exemplar multi-storey industrial building in an area characterised by traditional single-storey 'sheds'. Multi-level units are arranged around landscaped deck spaces creating a community of flexible manufacturing and making facilities; vehicular access to upper floors is provided by a helical ramp. The development features a shared central service yard, generous floor spans/ceiling heights and rooftop amenity space. The external facade features a planted green wall and large wayfinding signage.*

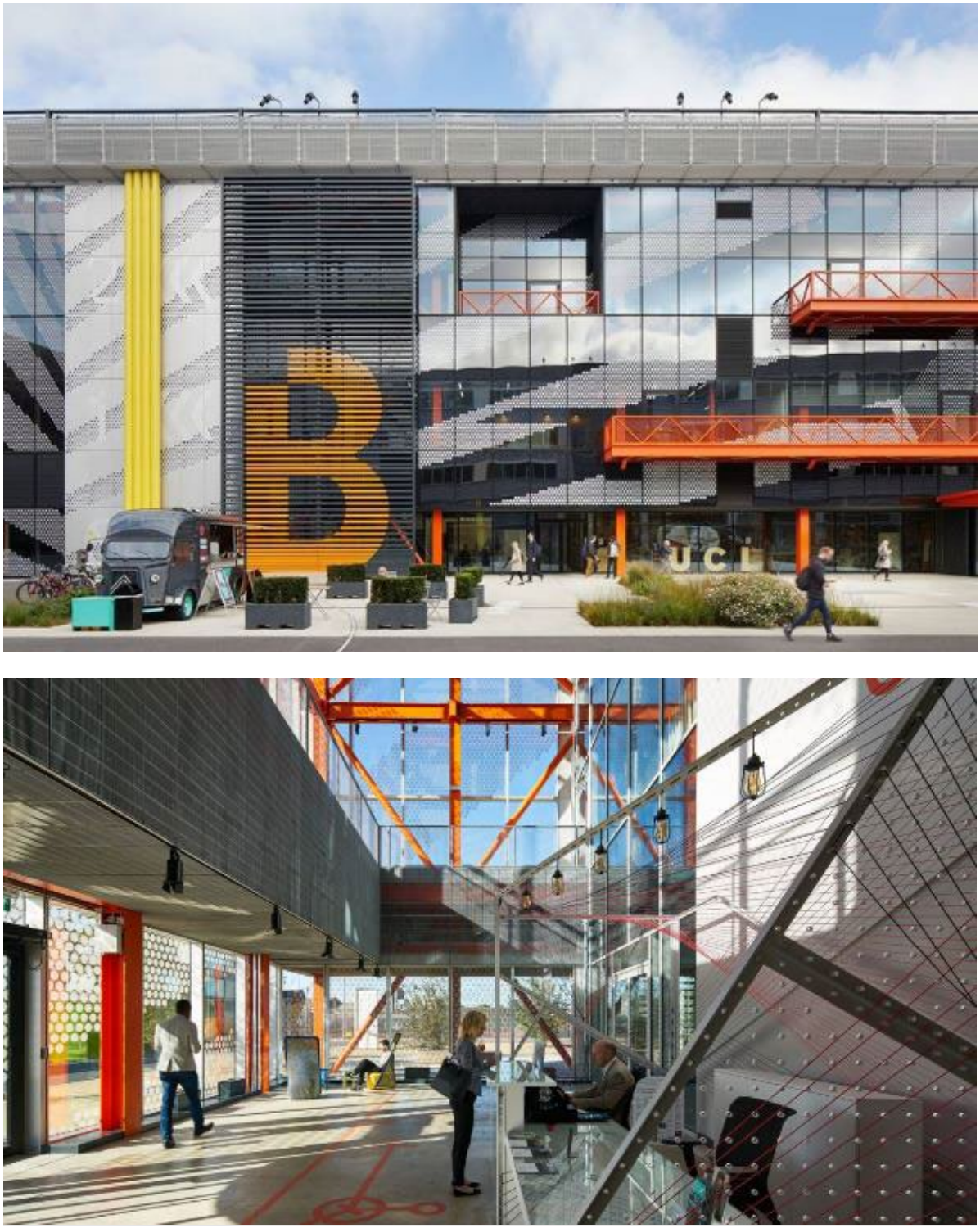


Figure 49 – Here East, Stratford: *The refit of the London 2012 Media Centre into commercial space for creative and digital industries was inspired by the light industrial factories and yards of neighbouring Hackney Wick. The aim was to make a series of huge buildings more social, dynamic and flexible with the potential to evolve. The original windowless facade was removed to create a glazed outer layer of flexible work, studio and commercial spaces around the perimeter - maximising natural daylight, ventilation and views. Education, employment and enterprise coexist behind colourful animated facades featuring projecting/inset balconies with bright orange metalwork, brise soleil, and solar dot patterned glazing. The combination of elements is effective in breaking down the scale of the building.*

DG9: Non-residential development

All development should seek to make a positive contribution to the local economy and the quality of the built environment. Non-residential development proposals should:

a) Provide a functional and efficient layout with an appropriate building footprint proportionate to the size of the plot and have a positive relationship with the street/public realm with active frontages and visual permeability

b) Establish a clear movement hierarchy and circulation strategy to reduce pedestrian/vehicle conflict. Careful consideration should be given to the location of parking areas and service yards in order to minimise the visual impact on the streetscene

c) Ensure that height, scale and massing is appropriate for the setting and the surrounding context in relation to townscape impact and the impact on neighbouring amenity/adjacent uses by considering:
   i. Orientation of buildings and ancillary spaces
   ii. Glazing/fenestration design to optimise daylight/minimise overlooking
   iii. Environmental impact mitigation measures (extraction, ventilation, internal/external fabric specification, acoustic fences etc)

d) Seek to improve the urban environment with an appropriate architectural language and well-designed elevations, facade treatment and signage

e) Maximise opportunities for additional landscaping and urban greening to provide both functional benefits and visual amenity

f) Ensure that buildings and spaces are futureproofed with an ability to adapt to different uses by considering structural elements, flexible internal spaces, building form and sustainable design principles from the outset

Relevant policy and guidance includes:

Local Plan – policies 37, 81, 82, 83, 84 and 85

London Plan – objectives GG1, GG2, and GG3, and policies D3, D4, E1, E4, E5, E6, E8, E9, T1, T5, T6 and T7

NPPF – sections 6, 11 and 12

Shopfront Design

5.121. The character and appearance of Bromley's local, district and town centre shopping streets contribute significantly to the distinctive character and identity of the borough as a whole. Shopfronts are an important element of local High Streets. Well-designed shopfronts can contribute positively to the streetscape both aesthetically and commercially, however, poorly designed shopfronts can negatively impact on the character, appearance and vitality of the street and its wider surroundings.

Key Design Considerations

5.122. It is important that traditional shopfronts with historic and/or architectural significance are retained, restored and enhanced with appropriate signage and materials. The design of modern shopfronts should be of a similar high-quality, integral to the building, and sympathetic to the setting.

5.123. It is important to consider the impact of a shopfront design on the building and adjoining buildings. The architectural character and style of the upper floors should be understood in order to ensure that the ground floor is not designed in isolation but as part of the overall composition.

5.124. It is also important to consider the impact of the design on the character and appearance of the wider streetscene. Proportions and materials should respect and maintain the rhythm and hierarchy of neighbouring buildings within the High Street.

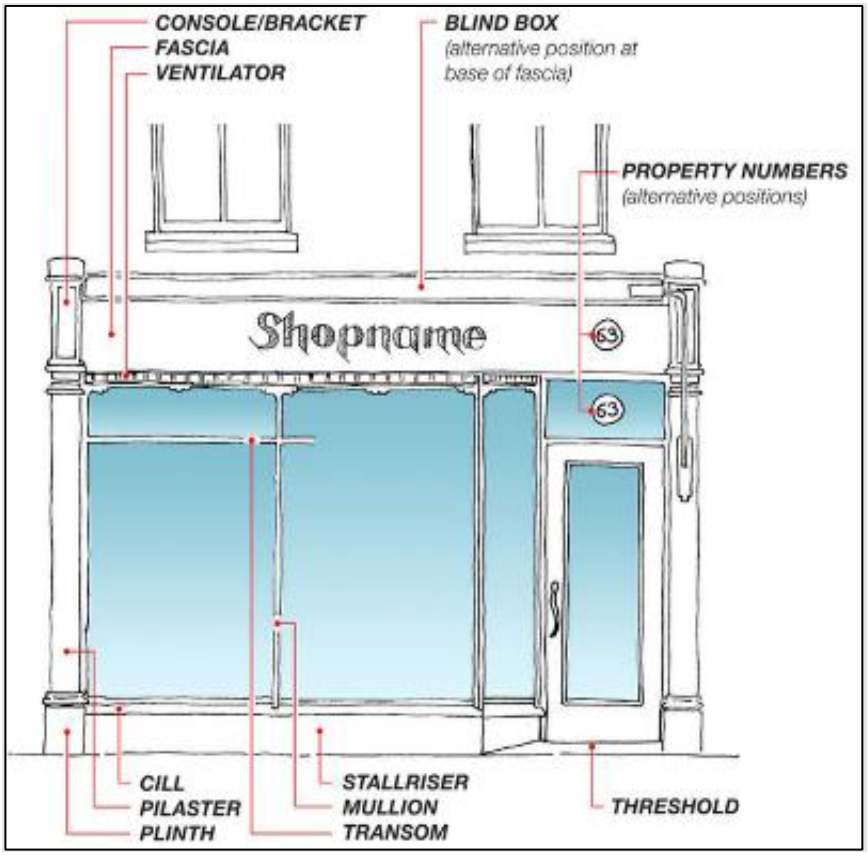


Figure 50 – *key components of a traditional shopfront*

Shopfront Types

5.125. Traditional shopfronts (mid to late 19th Century to the early 20th Century) are based on a classical design. This style was particularly successful in achieving harmony between the shopfront and the building as a whole. Traditional shopfronts are well proportioned and comprise of pilasters, cornel brackets, cornice, fascia, clerestory, and a shopwindow divided with mullion and a stallriser. Common materials used included brick, render and terracotta, and timber framed windows.

5.126. Modernist shopfront design (early to mid-20th Century) was influenced by various styles of the modernist era including Arts and Crafts, Neo-Georgian and Art Deco. A wider palette of materials was used including marble, steel, aluminium and chrome, and a more extensive use of glazing.

5.127. Modern shopfronts (late 20th Century onwards) are characterised by fully glazed aluminium framed frontages with contemporary lighting and signage. The shopfront design is often conceived in isolation with little consideration given to the relationship to the building as a whole or the wider streetscene. Their appearance is typically marred by bulky disproportionate fascias and unsightly security shutters and shutter boxes.

Retention of Original Features

5.128. The retention of architectural features of merit can help integrate a new shopfront into a building. The shopfront should not be considered as merely an insertion into the building.

5.129. Traditional features may have been removed from many shops, while others may be concealed by more recent alterations. Where original features no longer exist, it may be desirable to reinstate original features or replace with similar features. Any disfiguring later additions should be removed, damage repaired, and features reinstated with materials that are the same as, or match, the original.

5.130. The Council will resist the removal of shopfronts of architectural or historic merit. Where traditional features remain their retention and restoration will be encouraged. Existing Victorian or Edwardian pilasters, consoles and fascias should remain undisturbed, or be restored where altered.

Figure 51 – *Sympathetic design respecting the original building fabric in Beckenham High Street*

Figure 52 – *The retention of original architectural features is key to safeguarding local character*

Creating well-proportioned frontages

5.131. A well-proportioned shopfront that respects the character of the building is essential in ensuring good design is achieved. Elements such as doors, fascias and windows should be in proportion with both the building itself (including the character of the upper floors, scale, proportion and materials) and the general streetscene. This can be achieved by considering the design, scale and architectural style of the building, and by echoing the arrangement of windows, columns and upper floor facade treatment.

5.132. Fascias should be proportionate in size to that of the building facade and the shopfront. If large windows are necessary but otherwise out of scale, their impact can be reduced by subdivision. This can be achieved with mullions and transoms which can also help to relate the shopfront to existing architectural features at upper floor level.

Figure 53 – *A well-designed shopfront respecting the character of the building and the streetscene*

Maintaining Rhythm

5.133. Shopfronts spanning more than one property can disrupt the vertical emphasis of the host building(s) and the rhythm of the street frontage especially where the fascia is continuous. This can be avoided by reflecting the break between properties with pilasters.

5.134. Where buildings are similar in size and/or architectural style, complimentary designs will enhance the appearance of the street frontage by retaining a sense of continuity and coherence. Variations in the heights of fascias can detract from the rhythm of the buildings and the streetscene and should therefore be avoided.

5.135. Corner shopfronts have an important visual and functional role to play within the High Street, particular attention should therefore be given to the design of ‘dual’ aspect buildings which may relate to more than one frontage.

Figure 54 – *Double shopfronts should reflect the break between properties by retaining pilasters*

Shopfront Modelling

5.136. Unrelieved flat-fronted shopfronts can deaden streetscapes; in contrast, inset doors, bold architectural features and intricate detailing can provide depth and visual interest to the host building and the wider streetscene. Where traditional decorative thresholds and detailing already exists, these should be retained.

5.137. Windows and doors should reflect the character of the shopfront and the building itself. Shopfronts should comprise of a sizable shop window to provide animation and visual interest; large areas of opaque, frosted or mirrored glass should be avoided. Whilst large expanses of unsupported glazing may be suitable for modern shopfronts, this approach is inappropriate on traditional shopfronts and heritage assets. In most cases shop windows should be divided by mullions and transoms in response to the rhythm of the streetscape. Entrance doors including entrances to upper floors should be designed to harmonise with the overall shopfront design.

Using appropriate materials

5.138. The type of material used in a shopfront is an important element of the overall design. The choice of materials should be informed by, and reflect, the character of the building and its surroundings. Designs should not employ a large number of materials or use materials that visually clash with adjoining premises or detract from the general streetscene.

5.139. Particular care should be taken in the choice of materials for buildings within Conservation Areas in order to ensure that a sensitive and sympathetic design is achieved. Traditional materials such as brick, tile, terracotta, timber and masonry are typically more appropriate for shopfronts within Conservation Areas and on listed buildings.

5.140. In areas where modern shopfronts may be appropriate, materials should be similarly robust and of a high-quality. Synthetic materials such as anodised aluminium, acrylic, fibreglass, and UPVC are not acceptable. The use of high-quality materials is paramount irrespective of shopfront style (traditional or contemporary).

Cornices, Corbels, Pilasters and Stall Risers

5.141. A cornice should always form part of a traditional shopfront design. Existing historic cornice details should be retained or reinstated where missing. A cornice may incorporate a trough light where the projection is sufficient; this should be sited well below the upper floor window sills.

5.142. Corbels/Consoles are a feature of traditional shopfronts which help to visually terminate the top of pilasters; their design should reflect the level of detail used in other elements of the shopfront.

5.143. Pilasters are an integral part of shopfront design. Existing historic or traditional pilasters should be retained or reinstated where missing. Where pilasters form part of a new shopfront design, they should incorporate a base plinth and corbel/console bracket.

5.144. Stallrisers provide a solid base to the shopfront, reduce the dominance of glazing and help to visually balance the fascia and cornice above. In general, stallrisers should not exceed the base of pilasters or the depth of the fascia.

Figure 55 – *Examples of decorative corbels which feature on traditional shopfronts*

Figure 56 – *A traditional shopfront stallriser*

Fascias and Signage

5.145. Fascias form the dominant feature of the shopfront; they are key to advertising the business (visually) and distinguishing the ground floor of the building (functionally) from the upper floors above. The design of the fascia is an important part of the overall shopfront design and should:

- be of a scale proportionate to the rest of the building;
- not extend below the bottom of the corbel/head of the pilaster or above the perceived floor level below the first floor windows;
- not obscure windows or architectural detailing;
- not extend uninterrupted across a number of facades;
- protrude more than a depth of 0.15m to 0.25m;
- align with other fascias in the parade; and
- contain lettering that is proportionate in size to the sign dimensions.

5.146. Projecting box fascias should be avoided as they are unsympathetic to the style of most buildings in the borough due to their disproportionate size and bulk, and the materials used for their construction. Highly reflective signage on fascias should also be avoided. Non acrylic and matt finish materials should be used for fascia design on heritage assets.

Figure 57 – *Proportionate well-designed fascia signage is a key element of good shopfront design*

Projecting and Hanging Signs

5.147. Hanging signs are a traditional feature of shops which can positively contribute to the character of the High Street. However, too many hanging or projecting signs, installed at varying heights, can create a cluttered appearance and an unattractive streetscene.

5.148. Consideration should be given to the design and placement of hanging and projecting signs which should respect the character of the building and the wider setting. On traditional shopfronts and older buildings, timber or cast metal signs are particularly appropriate; individually crafted elegant modern signs, using other materials may also be acceptable.

5.149. Projecting box signs should be proportionate in size to the rest of the shopfront and be placed at fascia level; they are not appropriate in Conservation Areas or on listed buildings. As a general rule only one projecting sign per shopfront will be permitted. Projecting or hanging signs should not obscure architectural detailing.

Figure 58 – *Examples of well-crafted hanging and projecting signs*

Corporate Identities

5.150. Standardised corporate shopfront designs are often not compatible with traditional shopfronts, particularly those on listed buildings and within Conservation Areas. Retaining local distinctiveness takes precedence over commercial uniformity; in some cases the corporate ‘house style’ will need to be modified and adapted in order to retain the integrity of the building itself and to preserve local character.

Figure 59 – *Adapting corporate signage is key to preserving local character*

Lighting

5.151. Modest and subtle lighting can improve the look and feel the High Street environment, whilst poorly designed lighting can have a negative impact. The type and design of lighting should be appropriate to the shopfront, building and the location.

5.152. Internally illuminated fascia signs are typically bulky and visually obtrusive and are therefore not considered appropriate in Conservation Areas or on listed buildings. Externally illuminated signs, individual backlit lettering or halo lighting create a more subtle effect and are preferable in most circumstances. In all cases, lighting should be considered as an integral part of the overall design.

5.153. Illumination should be appropriate to the context and the general character of the street as well as being discretely sited on the building itself. External light sources should be carefully directed to minimise light pollution for residents and should not cause a distracting glare for drivers. Intermittent flashing signs are not acceptable.

Canopies and Blinds

5.154. Canopies and blinds are primarily used to provide protection from the weather for shoppers; they can be an attractive addition to the shopfront and the wider streetscene if designed as an integral part of the overall shopfront design. They should be fully retractable and when retracted be fully concealed. The accompanying blind box should be fitted flush with, or behind, the fascia.

5.155. All canopies should be no less than 2.4 metres from pavement level once extended: but should not be fixed to the building any higher than ground level. Non-retractable canopies will not be permitted in Conservation Areas or on heritage assets.

5.156. Careful consideration should be given to the size, shape, colour and materials in order to ensure they are compatible with the character of the building and complimentary to the streetscene. Care should be taken to avoid obscuring architectural details, excessive amounts of advertising, unflattering colours or reflective materials. Canopies or blinds made from plastic will be resisted. Traditional Victorian style straight canvas canopies are encouraged. Continental ‘Dutch’ style canopies or those using folding supports are not acceptable.

Figure 60 – *A fully integrated retractable canvas canopy*

Security

5.157. Shopfront security is an important consideration; however, security features, if not well designed and integrated, can have a negative impact on the appearance of the street.

5.158. External solid/perforated metal shutters appear unsightly, prevent natural surveillance and attract graffiti; they can create an unwelcoming and hostile environment and should therefore be avoided. In cases where these are used, the shutter box housing should be integrated within the shopfront or behind the fascia.

5.159. Toughened glass is an ideal solution, providing security without the use of shutters, with no detrimental impact on the appearance of the streetscene. Toughened or laminated glass can provide high levels of security and has the capacity to remain intact when broken.

5.160. Internally fitted open mesh/lattice grille shutters provide a level of transparency to and from the street retaining an ‘open’ feel and appearance. These may be suitable where toughened glass cannot be installed or is not appropriate.

5.161. Burglar alarms should be sited as unobtrusively as possible and should not conceal architectural features or detailing. Arbitrary positioning of alarms should be avoided.

Accessibility

5.162. Shops should be fully accessible to all, including people with disabilities, the elderly and less ambulant, and those with prams or pushchairs. Inclusive design should be considered from the outset in order to create a safe and fully accessible urban environment.

5.163. New shopfronts and alterations to existing shopfronts should ensure level or ramped access is provided. Entrances should comply with Part M Building Regulations which set out statutory access requirements. Glazed entrance doors should be clearly distinguishable with visible manifestation to aid those with visual impairments. Efforts should be made to exceed minimum technical specifications wherever possible, removing barriers to access and inclusion through good design.

5.164. In the case of listed buildings and heritage assets, accessibility requirements should be accommodated as far as is practical to do so; measures should be commensurate with the need to preserve the character and integrity of the building and its setting.

DG10: Shopfront Design

Proposals for new shopfronts and alterations to existing shopfronts will be required to demonstrate a high standard of design. Careful consideration should be given to:

a) The impact on the character and appearance of the host building, adjoining buildings and the wider streetscape; the style of shopfront should respect the character of the building and its setting;

b) The retention, restoration and enhancement of original architectural features with appropriate materials and signage to safeguard local character and identity;

c) Creating well-proportioned frontages which respond to the hierarchy of building and the rhythm of the streetscape in order to retain a sense of continuity and coherence;

d) Using appropriate materials which should be informed by the character of the building and its surroundings. Materials should be robust and of a high-quality, and appropriate to the setting;

e) The design of fascias and signage (size, placement, materials, lighting) which should be of a scale proportionate to the host building, and of a style/design in keeping with the shopfront, neighbouring buildings and the wider streetscene;

f) The design of blinds, canopies and security shutters which should be appropriate to the character of the shopfront and safeguard the appearance of the street; and

g) Ensuring accessible design to enable access and inclusion for all users.

Relevant policy and guidance includes:

Local Plan – policies 37, 41 and 101

London Plan – objective GG1, and policies D4, D5, E8 and E9

NPPF – section 12

Landscape

5.165. Landscape refers to the character, appearance and functional qualities of open space, including its shape, form, ecology, natural features, and/or man-made elements, and the way these combine. Understanding the **relationship** between buildings and spaces is central to good design; the quality of landscape and built-form architecture are of equal importance and should support and complement each other both **visually** and **functionally**.

5.166. Landscape design is a key component within any scheme regardless of scale or location and comprises a number of elements including structural planting, paths, drainage, boundary treatments, water features, seating, play, lighting and public art. The design of these elements can have a transformative effect. In addition to considering the merits of new interventions it is also important to recognise and retain the value of existing landscape qualities and their importance to local identity and place attachment.

5.167. Many successful schemes adopt a **landscape-led approach**; considering landscape as the **starting point** to inform the layout of buildings rather than the other way around. Key to this approach is prioritising spaces and routes for people and nature and using green infrastructure as a key structural element in how schemes are planned and designed. Understanding the existing landscape and its intrinsic characteristics will almost certainly influence the way in which a site's potential is understood – often providing greater integrity and meaning to the layout of a scheme.

5.168. For all development proposals it is important to develop a clear **landscape strategy** at an early stage in the design process, considering the intended use and function of the space(s) being created, structure and hierarchy, maintenance and management, all of which will inform the choice and treatment of individual elements (detailed design). It is important to note that the quality of landscape, its **connection**, **contribution**, and **clarity** in relation to the scheme as a whole is as important, if not more so, than the overall quantity of space provided.

Figure 61 – South Gardens, Elephant Park: *Includes a series of courtyards, communal roof gardens, and biodiverse roofs, the aim was to create a liveable, engaging, and playful landscape with intrinsic ecological value*.

Structure

5.169. The pattern of any new development should evolve from the existing topography, natural assets and ecological features of the site and its surroundings. Development proposals within/adjacent to Green Belt, Metropolitan Open Land, or within rural parts of the borough will be required to adopt a landscape-led approach in order to ensure that scheme layouts evolve from the existing environmental features and natural characteristics of Bromley. Built form should have a positive relationship with open space, i.e.by framing, fronting and/or connecting spaces.

Function

5.170. The landscape design should support the intended use and function of outdoor space(s) which will influence their scale and character, and the choice of materials used. Outdoor spaces should be designed to be high-quality, robust and adaptable over time in order to remain appealing, usable and fit for purpose. Variety, adaptation and flexibility are important elements of place; spaces can adapt to activities, and activities can adapt to space. It is important to enable different uses by people of different ages and at different times of the day to coexist, i.e. accommodating passive quiet spaces to relax alongside more active spaces for play and exercise. Development proposals should seek to create a range of accessible spaces of different sizes that encourage activity and promote health, well-being and social inclusion.

Figure 62 – St Andrews, Bromley by Bow: *A green network of public and semi-private open spaces creates a neighbourhood feel around a series of playable streets and communal courtyard spaces, with larger public spaces located to the west and north of the site.*

5.171. The siting of playspace should be informed by aspect and environmental conditions (influenced in-part by built form) in order to be usable, and the surrounding context to ensure that disturbance to neighbouring residents is minimised. Playspaces should be designed to inspire children of different ages: providing safe, inclusive and engaging spaces, incorporating natural landscape features to encourage both formal and informal play.

5.172. All open spaces should have a function and purpose; creating undefined areas, awkward or ‘left-over spaces’ without overlooking or a clear function or sense of ownership risk being unused and often become subject to neglect.

Figure 63 – South Gardens, Elephant Park: *Incorporating informal doorstep play along the pedestrian route.*

Figure 64 – Camden Courtyards, Camden: *Utilising communal roof terraces to provide additional playspace.*

Nature

5.173. As stated in the NDG, nature contributes to the quality of a place, and to people's quality of life, and is a critical component of well-designed places. Access to nature and green space has proven benefits for physical and mental health and well-being. Trees and planting offer more than just visual amenity; incorporating natural features including trees, planting and water contributes to quality of place supporting biodiversity, air quality, cooling and shading, and water management – providing climate change mitigation and resilience.

5.174. Development proposals should therefore seek to maximise opportunities to incorporate natural elements within the landscape design, considering both the wider and local context including existing landscape features and ecology, and the potential to contribute to a wider green infrastructure network and/or green corridors as part of an integrated, cohesive joined-up approach.

***Figure 65* – Aberfeldy Village, Tower Hamlets:** *A new linear park sits at the heart of the neighbourhood, with open lawns and varied playspaces, lined with trees and seasonal planting. The park is part of the sustainable drainage system and biodiversity strategy, which was developed with the London Wildlife Trust to ensure the new landscape fosters a broad range of species. A continual swale runs along the full length of the park with steps facing south, providing informal seating.*

Figure 66 – Cator Park, Kidbrooke Village, Greenwich: *Working in collaboration with the London Wildlife Trust a landscape-led approach supports the green infrastructure network beyond the site boundaries providing flood mitigation measures and water management. The high quality biodiverse parkland provides a natural setting for the development supplemented by a range of private and semi-private amenity spaces.*

5.175. Most development sites, even very small or constrained sites with limited scope for landscaping, can provide opportunities for biodiversity enhancement through careful and well thought out design. Landscape proposals should seek to retain, enhance and create habitats and features of ecological value wherever possible. Landscape elements can include trees, native plants, hedgerows, wildflower grassland, swales and ponds. New landscape features can help to achieve biodiversity net gains as well as contributing to existing and future Nature Recovery Networks (NRNs) for nature such as linking up tree, hedgerow and wildlife corridors on and off site.

5.176. New development will be expected to provide artificial nesting opportunities for birds and roosting/hibernating opportunities for bat species by incorporating bat bricks, swift bricks, and bird boxes where appropriate. Swift bricks provide a universal nest brick for a wide range of small bird species; they are integrated within the building design and do not require maintenance. Swift bricks should be installed in accordance with best practice guidance provided by the Chartered Institute of Ecology and Environmental Management (CIEEM). Other measures to encourage and provide habitat for important pollinator species should also be provided.

5.177. The provision of native plant species within new development helps to improve biodiversity. Native plants should be given primacy in terms of importance when considering planting schemes, particularly those adjacent to areas of important habitat. Applicants should avoid selecting cheaper or readily available landscaping plants that offer little in terms of variety and biodiversity enhancement. Planning conditions relating to landscaping in Bromley are likely to require a minimum of 30% native plant species of home grown stock and no invasive species. Further details of native species, specific enhancements and biodiversity net gain opportunities can be found in the Bromley Biodiversity Plan[19].

Figure 67 – Examples of artificial nests: *swift bricks and bee bricks can be of particular benefit in an urban context.*

[19] https://www.bromley.gov.uk/downloads/download/167/bromley-biodiversity-plan

DG11: Landscape Design

All development proposals will be expected to deliver high quality landscape design, creating attractive, functional and engaging spaces that will endure over time. Development proposals should:

a) Demonstrate a clear relationship between buildings and spaces, ensuring that the quality of landscape and built form architecture support and complement each other both visually and functionally.

b) Establish a clear landscape strategy at the beginning of the design process considering the intended use of the space(s) being created and the elements within, including structure, function, nature, management and maintenance.

c) Where appropriate, adopt a landscape-led approach, understanding and responding to existing landscape characteristics and features, using green infrastructure as a key element in site strategy, planning and design.

d) Encourage outdoor activity and social interaction through the design and layout of external spaces giving careful consideration to scale and character, choice of elements and materials used. All spaces should be robust, adaptable, inclusive and accessible to all.

e) Include a variety of spaces to enable different uses at different times of the day, accommodating passive quiet spaces and meeting places alongside more active spaces for exercise and outdoor play.

f) Maximise opportunities to incorporate natural elements, habitats and features of ecological value on-site, and explore opportunities to contribute to existing wider green infrastructure networks off-site to deliver biodiversity net gain.

Relevant policy and guidance includes:

Local Plan – policies 37, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78 and 79

London Plan – objectives GG1 and GG3, and policies D3, D4, D5, G1, G5, G6 and S4

NPPF – sections 12 and 15

Public Realm

5.178. The public realm can be defined as the space between and within buildings that is publicly accessible, including streets, squares, parks, open spaces, terraces and sky gardens. It should be seen as a series of **connected routes and spaces** that help to define the character of a place.

5.179. The public realm has both physical (space) and social (activity) dimensions, facilitating **ease of movement** and **social interaction**. A functional, safe, attractive and accessible public realm can enhance people's quality of life and perception of place.

5.180. Bromley is valued for its built and historic environment of which the public realm plays an integral part, physically, socially, and functionally. There is an opportunity to further enhance the quality of existing streets and public spaces (as well as creating new ones) at a local level and as part of a wider spatial strategy for the borough.

5.181. Development should seek to make a positive contribution to **'quality of place'** and **public life** by creating an engaging public realm that supports a variety of activities, promotes health and well-being, and encourages social interaction and civic inclusion. Public spaces should feel safe, secure, and attractive for all to use. Bromley is recognisable for its tree lined streets and green open spaces; development proposals will be expected to supplement and enhance this enduring character.

Principles for delivering high quality public realm

Legible

5.182. Legibility is key in determining if, when, and how, a piece of public realm will be used. Public spaces should be clearly delineated from private spaces, as ambiguity and uncertainty can result in spaces being avoided or underused. The use of public space should be intuitive. Public spaces which have a clear **identity** and intended use, are easily **accessible**, **well overlooked**, and **integrated** into the surrounding urban fabric are likely to be more successful. Conversely, ambiguous spaces located out of sight or adjacent to ground floor residential units in flatted developments can feel 'private' and deter use. Materials and boundary treatments are key.

Figure 68 – Jubilee Square, Leicester: *The civic space provides a gateway into the city centre as well as being a destination in its own right for recreation, festivals and events. Key pedestrian desire lines and visual axes were mapped to provide clear legible routes transforming local connectivity.*

Engaging

5.183. The design of the public realm should be planned in a strategic manner and should respond to the functional and social needs of its users. It should be **innovative** and **engaging**, generating interest and encouraging a variety of activities and uses. The uses should be appropriate for the location and the surrounding context (i.e. a busy active hub or a quieter tranquil space) complementing rather than competing with surrounding land uses. The design of public spaces should be **distinctive, attractive, user inspired** (people focused) and **context driven** (meaningful) rather than replicating a generic approach adopted elsewhere.

Figure 69 – Pancras Square, Kings Cross: *Designed to frame key views and provide respite from the surrounding city with lush planting and a cascading water feature, the layout accommodates spaces and routes that allow a range of activities for all users, providing an attractive setting with inclusive, useable sub-spaces.*

Figure 70 – Town Square, Barking: *Comprising of 4 key elements; a civic square, arboretum, folly wall, and an arcade, the eclectic mix of landscape and art encourages users to engage with the space. The civic square hosts a range of festivals and events and is connected to the main shopping street via a terrazzo tiled colonnaded arcade. An arboretum containing 40 mature trees arranged to create settings of different scales and character includes informal woodland play structures, seating, drinking fountains and ambient lighting.*

Social

5.184. Well-designed spaces create a connection between people and place; providing **meeting places** for relaxing or engaging in activities, places to ‘stop and stay’ where there is an ‘invitation to be’. When designing public spaces it is important to consider the desired experiential outcomes and how the physical framework will generate and support (rather than prevent or impede) **social interaction**.

5.185. Developing a hierarchy of different size spaces with a different character and purpose can be successful in attracting different types of users with different needs. The provision of amenities which support outdoor stays (shade, shelter, seating) and the consideration of microclimate conditions also play an important role. The siting and design of individual elements should be integral to the scheme; detailed design is key.

5.186. The interface between the built form and open space (‘exchange zones’), human scale, spatial contrasts, sequencing of spaces, and the transition between public and private space all require careful planning in order to support ‘life between buildings’.

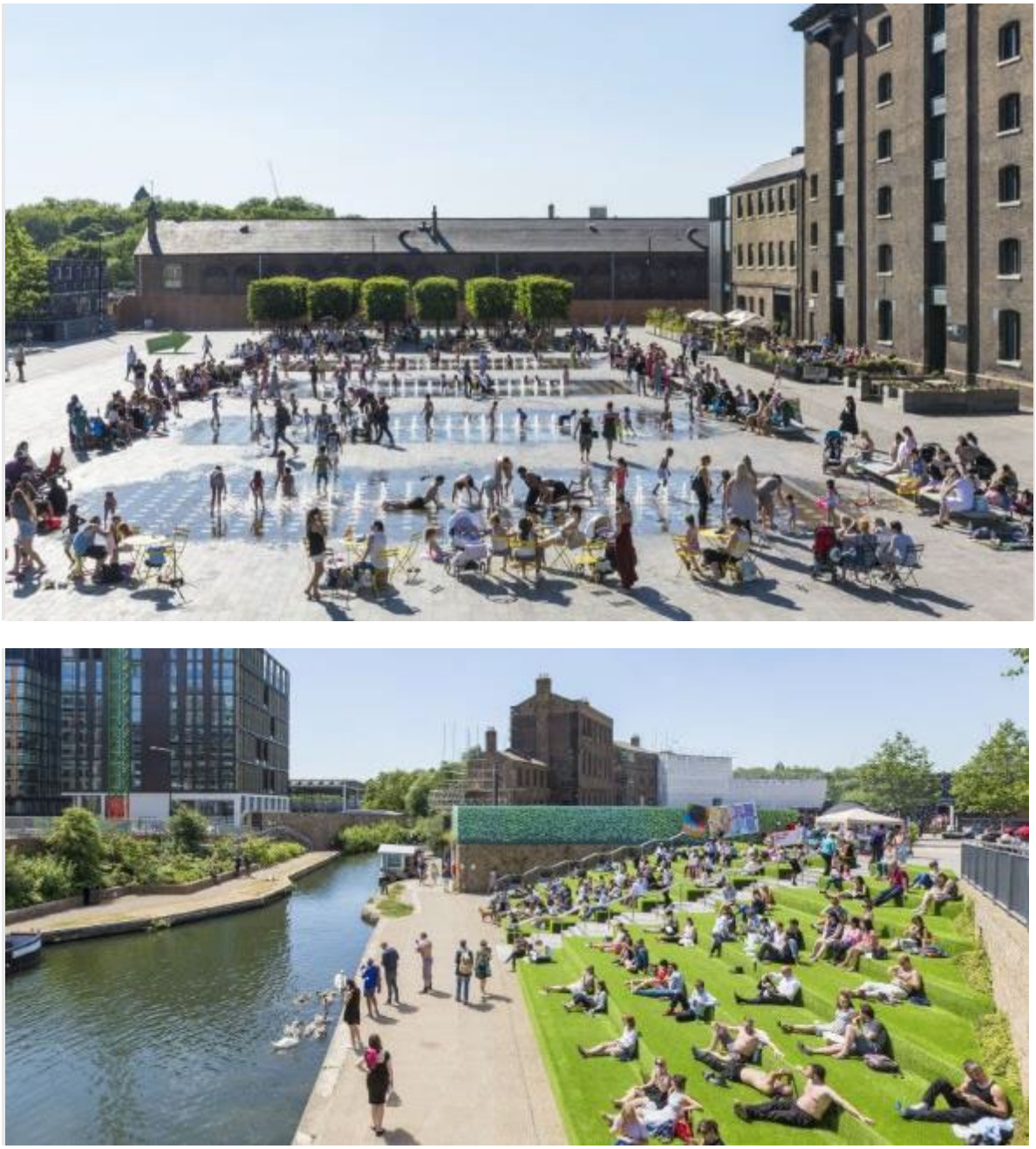


Figure 71 – Granary Square, Kings Cross: *Designed to be the active heart of the Kings Cross masterplan, the square hosts a range of arts and cultural events with a year-round programme of activities. At the centre of the square are four banks of fountains which animate the space. Sub-spaces include wide, south facing steps framing the edge of the Regent's Canal for sitting and relaxing.*

Fit for purpose

5.187. Public spaces should first and foremost be fit for purpose and suitably robust in order to accommodate the intended uses(s) and withstand the demands being placed on them. Pedestrian movement, **quality and durability of materials**, and long term **management and maintenance** requirements should be considered from the outset.

5.188. Caution should be applied when creating spaces that have to work too hard, i.e. cluttered spaces which attempt to be 'everything to everyone' with numerous competing and/or incompatible elements. The user should be the starting point for all public realm design; spaces which prioritise key functions and deliver simple objectives are often more successful than complex schemes which are over ambitious and over-designed.

Figure 72 – Church Gardens, Chipping Barnet: *A simple, robust intervention with the aim of improving local connectivity, opening up views of heritage assets and providing a green space in the heart of the town centre. The scheme features a terraced public space with Corten steel planters and an innovative seating design.*

Adaptable

5.189. Well-designed spaces are able to **adapt and change** over time, accommodating new or shared uses in response to changing demands and circumstances. Public spaces should be able to adapt to different uses and activities at different times of the day, week, month or year (i.e. street markets, programmed events, and meanwhile 'pop-ups'), with spatial elements designed to serve more than one purpose where there is scope to do so. Robust design solutions are more likely to stand the test of time providing greater **resilience** against unpredictable social, environmental and technological change.

Figure 73 – Old Market Square, Nottingham: *Designed to be fully accessible, inclusive, and robust using high quality materials, with water features and flexible performance space to encourage 24 hour use. The design has transformed the city's historic square creating a flexible and adaptable space which accommodates a range of events, markets, and community activities.*

DG12: Public Realm

The quality of public spaces across the borough contributes positively to Bromley's distinctive character and identity. Design proposals for new and existing publicly accessible spaces should:

a) Respond to existing routes, connections, and surrounding buildings; providing inclusive access, ease of movement, and active frontages to define and animate the space

b) Create an attractive and engaging public realm for people of all ages that encourages social interaction with a variety of activities and uses through the use of high-quality materials/soft landscaping and range of formal and informal spaces which relate to the local context

c) Ensure high levels of passive surveillance with well overlooked spaces with appropriate lighting to provide safe and secure environments without the need for additional security measures

d) Co-ordinate and consolidate elements of street furniture including seating, bins, bollards, cycle stands and signage to improve legibility and remove visual clutter

e) Incorporate green infrastructure (trees, planting, SUDs) to help mitigate environmental conditions and consider microclimate effects (influenced by layout, orientation, and scale of buildings) in order to create a comfortable environment which encourages rather than deters use of the space(s)

f) Consider the on-going management and maintenance of the spaces being created as part of the design strategy including the cost, durability, and sustainability of materials. Adaptability and resilience should be designed-in from the outset

Relevant policy and guidance includes:

Local Plan – policy 37

London Plan – objectives GG1 and GG3, and policies D4, D5, D8, G1, G5, G6, G7 and T2

NPPF – section 12

Public Art

5.190. Public art can make a significant contribution to public spaces with the ability to increase the **distinctiveness** of a place, transforming a previously anonymous space into a unique and memorable one. Successful public art is informed by its **context** (history, geography, or culture) resonates with residents and visitors, and reinforces **local identity** and **sense of place**.

5.191. Public art can be integrated into a new development, within a building structure or a public open space; it can take many forms including sculptures, murals, signage, lighting, street furniture, paving, sound/media and performance. It can be permanent or temporary. All public art installations, standalone interventions and/or those which form part of larger development sites, should be specific to the site and relate to the social and physical context of its surroundings and the communities they serve.

5.192. Incorporating public art provides opportunities for local artists, schools, colleges, and community groups to be involved in the design of the public realm and the elements within it. Early **engagement and collaboration** with the local community, special interest groups, and artists is key to ensuring a greater sense of connection between people and place – both visually (stimulating interest and engagement) and functionally (street furniture and landmark wayfinding). The involvement of local residents in the design and delivery of public art projects will therefore be encouraged.

Figure 74 – Folly Wall, Barking: *The folly wall frames the edge of the town square screening a supermarket. Comprising of architectural salvage, the folly is intended to mark the cycle of regeneration picking up on the historic context of Barking. Local college students were involved in the design and build of the structure.*

Figure 75 – Nelson's Ship in a Bottle, Greenwich: *A scaled down replica of HMS Victory with bright patterned sails, the artwork is intended to be a celebration of London's many cultures and ethnicities. The installation provides a focal point outside the National Maritime Museum.*

5.193. Public art is not restricted to monuments and sculpture, installations can fulfill several different functions at the same time and can play an important role in the design of public spaces by encouraging people to 'stop and stay' and use the space. Furniture installations can provide new opportunities for spontaneous meeting, social interaction and 'eyes on the street', they have the capacity to inspire and delight by challenging the way we interact and engage with the public realm.

Figure 76 – The Parklet Bench, Tooley Street, London Bridge: *A temporary installation providing a micro-green space designed to raise awareness of air pollution in London. The unique design creates a source of urban greening alongside functional seating which aims to encourage chance interactions through its innovative zig-zag design.*

5.194. Public art can also positively respond to the process of regeneration by stimulating interest and community involvement, as well as visually enhancing redundant spaces pending redevelopment or improvement.

Figure 77 – Anderston Station, Glasgow: *A temporary public artwork at the entrance to Anderston Station designed to improve pedestrian and cyclist wayfinding, and revitalise the public space ahead of the COP26 summit. Embracing art as a low-cost strategy to activate streets, pavements, and transport infrastructure – working with artists and local community groups.*

Connected

Movement

5.195. Connectivity and **ease of movement** directly influence how places function and feel. Promoting accessibility and local permeability by creating places that are easy to get to and move through is a key urban design objective.

5.196. As set out in the NDG, **patterns of movement** for people are integral to well-designed places, they include walking and cycling, access to facilities and employment, parking and the convenience of public transport. A permeable, connected network of routes for all modes of transport **integrated** into the public realm is key to creating **sustainable** neighbourhoods and healthy **connected** communities.

5.197. Bromley has good public transport accessibility in the more densely populated urban areas contrasting with poorer provision elsewhere, consistent with the rural nature of a large part of the borough. The location of new development can positively influence existing movement patterns, removing barriers and facilitating change. Development should be concentrated in sustainable locations and seek to maximise opportunities to improve local permeability and wider connectivity.

5.198. Larger scale development proposals should seek to establish a clear layout and hierarchy of streets and spaces, ensuring that new routes connect to existing, are functionally efficient, accessible to all, and contribute to local character and place. Development should prioritise pedestrian movement and promote active sustainable modes of travel. Large developments should also provide appropriate infrastructure to future proof development, for example provision of new cycle lanes[20].

[20] Further guidance on infrastructure is provided in the Planning Obligations SPD.

Streets

Street Network

5.199. Connected **street networks** form the basis of well-designed places providing a hierarchy of functional, safe and accessible routes and spaces for pedestrians, cyclists and vehicles. In a well-connected street network each street has more than one connection to another, there is permeability for different users, and walking distances are reduced. New street networks should be designed to ensure that permeability is maximised for pedestrians and cyclists, and carefully managed for motor vehicles.

5.200. The movement structure should be defined at an early concept stage as it will form the basic framework for the location of buildings and spaces. When considering the redevelopment of a site it is important to assess the street pattern beyond the site boundary, identifying key links, origins and destinations. New development should respond to and connect with the established street form.

5.201. Cul-de-sacs are a predominant feature of some parts of the borough; however, they can create introverted layouts which fail to integrate with the surrounding streets. Cul-de-sacs will only be considered acceptable if they form part of a wider well-connected network.

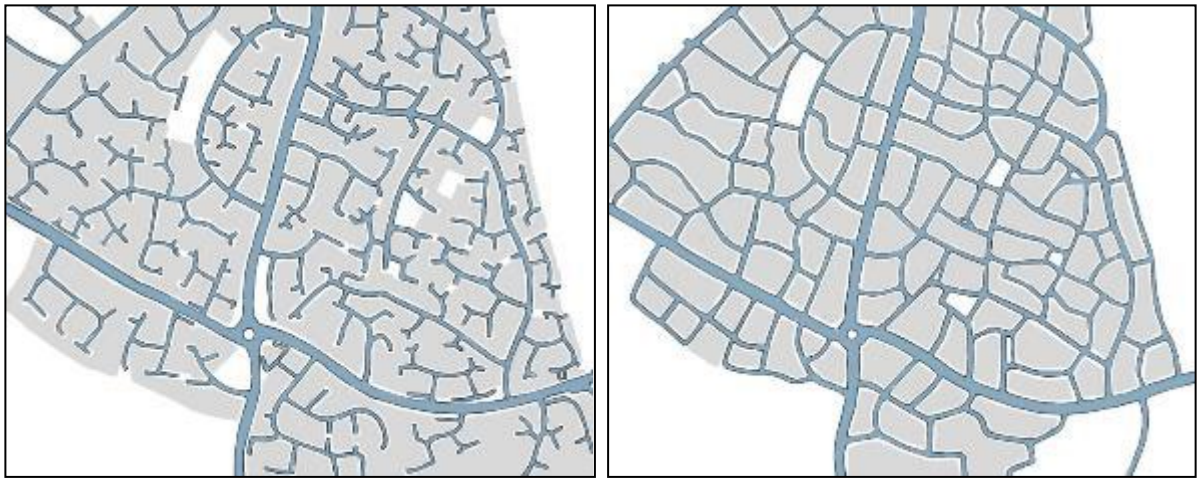


Figure 78 – Connected Street Networks: *A connected network of streets reduces walking distances*

Streets as Places

5.202. Streets make up most of the public realm and are the longest lasting of all the built form elements. Streets are how we access and experience places and are therefore key to placemaking.

5.203. As stated in Manual for Streets (2007) the **place function** of streets is essentially what distinguishes a street from a road. A street has important public realm functions beyond the movement of traffic. It is important to recognise the dual function of streets; ***highway link*** – movement corridor (design objective to save time), and ***place*** – a destination in its own right (design objective to spend time).

5.204. **Place** should not be considered subservient to **movement**; both should be considered in combination. It is only by considering both aspects that the right balance will be achieved. It is important to develop a clear understanding of context and function which will in turn reflect the character of the street, influencing the degree of user separation, choice and quality of materials, and the extent of street furniture, planting and landscape.

Figure 79 – Exhibition Road, Kensington: *A shared surface approach with a single level surface from building face to building face along the entire length of the road. Within this single surface the needs of the pedestrian, cyclist, motorcyclist, car, taxi, delivery vehicle, and bus have been carefully considered. Changes were made to the surrounding road network to reduce through traffic and enable mixing of pedestrians cyclists and vehicles. The diagonal paving pattern reflects the movement of people from one side of the street to the other.*

5.205. Development proposals should establish a clear **user hierarchy** putting pedestrians first, followed by cyclists, public transport use, and finally private motor vehicles. Attractive, well-designed streets encourage more people to walk and cycle to local destinations, improving health and well-being while reducing vehicle traffic and pollution. The provision of appropriate seating, shelter, clear signage and attractive landscaping encourages people to stop and stay, increasing social interaction and supporting local daytime and evening economies.

5.206. Streets should be designed to build and strengthen the communities they serve, meet the needs of all users by embodying the principles of inclusive design, form part of a well-connected network, and be safe and attractive with their own character and identity.

Figure 80 – Hornchurch Town Centre, Havering: *A key feature of the scheme was a focus on improving pedestrian permeability. This was achieved by removing guardrails, placing crossings on desire lines, increasing the width of the footways and implementing a continual central pedestrian crossing strip. The scheme also improved social spaces through planting, new lighting, wayfinding and street furniture. Traffic flow was also improved, bus stops were made fully accessible, and better provision for cycling was installed.*

Legibility

5.207. Legibility is a measure of the **clarity** and ease with which townscape, buildings, routes and spaces are **understood**. People feel more comfortable in places which are legible and have a clear structure making it easier to move around. Legibility relates to both the coherence of physical form (identity/image) and the influence this has on movement patterns (mental mapping/wayfinding). Formlessness creates uncertainty and confusion, whereas clear identity and meaning provide recognition and assurance.

5.208. Development at all scales should contribute to creating a legible environment by providing and reinforcing **clear layouts**, routes and connections, and enhancing **visual links** to existing landmarks, gateways, and focal points (or creating new ones)

to ensure that the relationship between the site and the wider setting is clearly understood.

5.209. Opportunities to aid **wayfinding** should be identified at an early stage and used to influence the movement network. Site topography, skyline, key views, sightlines, and landmarks (memorable buildings and landscape features) should all be considered. A clear understanding of the local context should influence the layout of streets and movement corridors, focal points should be created where they can aid legibility, typically at corners, junctions, or gateway locations to indicate access or particular use.

5.210. Development should ensure that the intended use/function of buildings and spaces (functional importance and spatial character) are easily recognised and understood including clearly visible entrances and thresholds. Development proposals should seek to reinforce **visual connections** along routes and between spaces and at landmark locations, with appropriate landscaping, lighting and signage. Incorporating memorable elements of public art and/or bespoke public realm can contribute to an area's **character and identity**.

Figure 81 – Elwick Road, Ashford: *The transformation of an existing one-way three-lane road, applying a shared space philosophy, into a two-way street. The scheme creates a more permeable link from the station and town centre to a southern expansion area. The paving design references the Stour River, it provides a 'natural' demarcation between the vehicular and pedestrian zones and creates a visual and functional link that ties the town centre to the station and further afield to the river.*

DG13: Movement and Legibility

All development should promote accessibility, legibility and ease of movement both within the site and beyond its boundaries by:

a) Establishing a clear hierarchy of streets and spaces which should prioritise pedestrian movement, respond to key origins and destinations, and reflect natural desire lines and existing movement patterns

b) Ensuring that new routes connect into existing routes as part of a coherent street network to improve local permeability and wider connectivity, and enable efficient, inclusive, interfaces between different modes of transport

c) Creating attractive legible streets and spaces which promote activity and social interaction recognising the dual function of streets: movement corridors and public realm *places* – prioritising active streets and *meeting places* over sterile transient routes

d) Enhancing local character and place with natural elements, street trees, and green infrastructure to soften the impact of car parking, improve air quality and achieve biodiversity net gain

e) Creating places that have a clear image, are memorable and easy to understand; providing legible routes and connections, reinforcing visual links to existing landmarks and focal points, and utilising opportunities to improve wayfinding for greater ease of movement and sense of place

Relevant policy and guidance includes:

Local Plan – policies 33 and 34

London Plan – objectives GG1 and GG3, and policies D5, G1, T1, T2, T5 and T6

NPPF – sections 8, 9 and 12

Inclusive

Inclusive Design

5.211. **Inclusive design** is about making places everyone can use with dignity, comfort, and choice; creating environments which avoid separation and segregation, acknowledge diversity and difference, and which enable everyone to participate **equally** and **independently** in everyday activities.

5.212. Inclusive design is integral to good design; by adopting an inclusive design approach, many of the barriers that create undue effort and hardship experienced by those with disabilities, older people, and/or families with small children can be avoided or designed out.

5.213. The principles set out below are taken from CABE best practice guidance; these principles are at the heart of inclusive design and should be followed in the planning and design of future development[21].

- **Inclusive** so everyone can use them safely, easily and with dignity.
- **Responsive** to peoples wants and needs through meaningful engagement.
- **Flexible** so different people can use spaces in different ways.
- **Convenient** ensuring ease of use without undue effort or separation.
- **Accommodating** for all; regardless of age, gender, mobility or ethnicity.
- **Welcoming** with no disabling barriers that might exclude some people.
- **Realistic** offering more than one solution to help balance people's needs and recognising that one solution may not work for all.

5.214. Inclusive also means that the planning and design of new development is informed by meaningful **public engagement**, reflecting the wants and needs of the local and wider community including hard-to-reach groups. It is important to recognise that consultation (being informed) is not the same as engagement (active participation); it is imperative that all parts of the community are actively involved in the design process in order to ensure that all needs and requirements (physical and social) are considered.

5.215. An **inclusive design approach** should form a key part of the design process and be considered from the outset to ensure that development proposals prioritise accessibility, equality, social integration, and community cohesion.

Housing Mix

5.216. As outlined in the NDG, successful neighbourhoods contain a rich mix of people, including families and the elderly, young people and students, people with physical disabilities and those with mental health needs. A **variety** of housing tenures, type, size, and construction is therefore required. Achieving the right mix will help to create **diverse, equitable** and **resilient** communities.

5.217. Development proposals should provide a mix of tenures, types and sizes and adopt a **blind tenure/tenure neutral** approach – where there is no distinction between the

[21] The Principles of Inclusive Design, CABE, 2006

visual appearance and general location of different tenures. Options for mixed tenure housing include fully mixed, pepper-potted, segmented and clustered layouts; the layout is often dependent upon the housing typology and management requirements. Applicants will be required to demonstrate a clear rationale for the chosen model.

5.218. Mixing tenures promotes **social diversity** and **inclusion**; development proposals should seek to maximise the potential for social interaction within the layout, form, and appearance of buildings and spaces, avoiding features which create actual or perceived barriers or contribute to segregation. Flatted developments should include shared entrance cores and ensure that communal facilities are available and accessible for all residents. It should be noted that mixing tenures by whole building rather than by stair cores rarely achieves an acceptable degree of mixing; visual appearance/identical facades should not be used to mask complete tenure segregation – which misses the point of integration and inclusion.

Figure 82 – Buccleuch House, Clapton: *A mixed-tenure development providing homes for three different communities: first time buyers, Orthodox Jewish families and older people who need extra care. The design creates one unified building with very little difference externally across the three tenures except for subtly different balcony types designed with the practical and cultural requirements of the residents in mind.*

Figure 83 – Kings Crescent Estate Phases 1 & 2, Hackney: *A local authority-led development involving intensive consultation with residents and local people who helped to define all aspects of the scheme including the planning of streets, internal layouts and material specifications. Three courtyard buildings combine existing and new blocks with shared amenity spaces and dual aspect entrance lobbies featuring the same level of design quality regardless of tenure.*

5.219. Design and Access Statements submitted as part of the planning process should incorporate inclusive design principles that are demonstrably based on the site conditions, public engagement, technical standards, policy, and best practice guidance. Inclusive design principles should be agreed as early as possible to ensure that they are appropriate and deliverable.

5.220. The Design and Access Statement should clearly demonstrate how the specific needs of different user groups have been integrated into the development proposal. This might include illustrating how convenient the key routes from the application site to local community facilities are, for several different user groups.

DG14: Inclusive Design

Development proposals should achieve the highest standards of accessible and inclusive design by:

a) Undertaking meaningful engagement with the local community, relevant user groups and equality groups; to inform inclusive design principles.

b) Using good practice standards and design guidance; to inform inclusive design principles.

c) Applying the inclusive design principles throughout the design development, illustrating how the inclusive design approach is incorporated into the final design by:
   i. Providing high quality people focused spaces that are designed to facilitate social interaction and inclusion.
   ii. Providing independent access without additional undue effort, separation or special treatment that convenient and welcoming with no disabling barriers.
   iii. Providing a consistent level design quality across tenures to support social integration.
   iv. Incorporating safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building.
   v. Prioritising inclusive elements of the development proposal in the maintenance and management plan, including fire evacuation procedures.

Relevant policy and guidance includes:

Local Plan – policies 4, 37 and 47

London Plan – objectives GG1 and GG3, and policies D4, D5. D6 and D7

NPPF – sections 8 and 12

Designing Out Crime

5.221. Crime and fear of crime can have a significant impact on individual and community well-being and quality of life. The design and layout of new development can directly influence levels of crime and anti-social behaviour. Successful places feel **safe and secure** for residents and visitors; conversely, poorly designed environments can negatively impact quality of life, particularly for vulnerable groups.

5.222. '**Designing out crime'** refers to the design of the physical environment in a way that positively influences the well-being of its users, i.e. by providing safe movement routes, increasing activity levels and natural surveillance, and/or creating a sense of ownership thereby reducing opportunities/incentive for crime to take place.

5.223. **'Secured by Design'** is a UK initiative endorsed by the Metropolitan Police which aims to support this overriding objective by encouraging the adoption of specific crime prevention measures in the design of new development[22]. Applicants are advised to engage with the Metropolitan Police during the pre-application stage.

5.224. **Designing out crime** and designing in **community safety** should be integral to development proposals and be considered at an early stage in the design process, with the overall aim being to reduce crime and fear of crime through good design.

5.225. The Government's 'Safer Places – The Planning System and Crime Prevention' guide outlines 7 attributes of sustainable communities that remain particularly relevant to crime prevention; these are set out below and should be considered for all major development proposals.

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

5.226. The Council considers these attributes to be key to creating safe and secure places. Planning for safer places should be considered from the earliest stages of preparing development proposals, in order to avoid retrofitting costly, unsightly or poorly considered security features at a later stage. Designing out crime from inception should be prioritised over post-planning 'scheme compliance' accreditation.

Access and movement

5.227. Movement frameworks should have legible **direct routes** that lead to where people want to go. Routes should be **necessary,** linking uses or places of activity; unnecessary, under-used, or poorly thought out 'short-cut' connections can increase opportunities for crime. Pedestrian routes should be designed to ensure that people do

[22] Further detailed information can be found at www.securedbydesign.com

not feel isolated from their surroundings with clear markers and **signage**; they should be **well-lit** and **overlooked** by surrounding buildings and activities.

Structure

5.228. A safe urban structure is central to creating a feeling of safety and discouraging criminal activity/anti-social behaviour. Layouts should be designed to maximise **active frontages**, minimise 'dead' spaces and blank facades, and provide **clearly defined** public and private spaces.

5.229. Perimeter blocks can provide a clear distinction between public 'fronts' and private 'backs' with **well-overlooked** entrances and **secure** amenity space. Cul-de-sacs can be highly secure but should be short in length and not linked by footpaths or back onto open land. Whilst cul-de-sacs benefit from **natural surveillance** and a greater **sense of ownership**, streets with higher levels of activity at different times of the day/evening can be equally as effective in reducing crime and fear of crime.

5.230. When planning mixed-use development, proposals should ensure that uses are **compatible** with the locality; careful consideration should be given to potential conflicts from a crime risk perspective. Remodelling or removing existing unused buildings and spaces which are vulnerable to crime will be encouraged, as part of new development proposals.

Surveillance

5.231. **Natural surveillance**, where people can 'see and be seen', is an important element of designing out crime; criminal activity is less likely to occur in areas which have a high degree of **visibility**, i.e. 'eyes on the street'. Buildings should provide active frontages with windows and doors facing onto the street, and at least one habitable room should be located to the front of residential properties. Larger flatted blocks and commercial buildings should provide active ground floor layouts. Open engaging public realm spaces which remove 'hiding places' and promote prolonged activity levels throughout the day/evening to deter criminal/anti-social behaviour will be supported.

Ownership

5.232. Undefined, unclaimed, or neglected 'left over' spaces can increase the risk of crime and anti-social behaviour. **Clearly defined** private, semi-private, and public space encourages residents and users to develop a **sense of ownership, responsibility** and **community** by removing ambiguity and uncertainty.

5.233. The boundaries of private spaces and communal areas should be clearly defined in a manner which is in keeping with the character of the surrounding area. Sensitive placement and appropriate selection of physical barriers such as gates, fences, walls and hedges is required, in order to create safe places which are also attractive. Higher more intensive boundary treatments should be visually permeable so as not to hinder surveillance or create an overbearing 'fortress' appearance which can inadvertently increase a perception/fear of crime.

5.234. Demarcation of space can also be achieved through the more subtle use of psychological barriers, such as the narrowing of entrances/thresholds to reduce a sense of public openness, changes to landscaping, surface levels and/or treatments to give a sense that one place is different from another and therefore different behavioural rules apply.

Physical protection

5.235. The use of physical security measures is an important aspect of crime prevention known as **'target hardening'**. Some measures are directly deliverable through the planning process; others complement what can be achieved through planning such as secure windows and doors set out by Secured by Design, which provides product quality/technical standards for building security. **Designing in** physical security measures is often more cost effective than adopting a post-planning retrofit approach.

5.236. Some security measures can adversely affect how a place looks and feels, such as security shutters, gates, and CCTV, which can appear overbearing or intimidating, increasing a perception/fear of crime. It is important to ensure that physical security measures do not negatively impact on the character and appearance of an area; particular care should be taken in more sensitive settings such as Conservation Areas. An appropriate balance is required between the benefits of 'target hardening' and the subsequent visual impacts.

Activity

5.237. **Active places** which encourage a **variety** of people to use the same space in different ways and at different times helps to create a feeling of safety and reduces the potential for crime by increasing levels of **natural surveillance**. Whilst natural surveillance increases the likelihood that crime will be seen and/or challenged, too much activity can risk anonymity which can help to facilitate other types of crime. Careful consideration should therefore be given to which levels and types of activity are appropriate in relation to the local context.

5.238. Mixed-use developments can be beneficial in reducing crime by increasing levels of activity throughout the day and evening. In residential developments it is important to encourage a **mixed community** by providing a variety of housing types and tenures accommodating people of different ages and lifestyles (i.e. working, retired people, and young families) to generate activity and natural surveillance at various times throughout the day, as well as fostering a shared sense of community.

Management and maintenance

5.239. In addition to design and layout, **management** and **maintenance** is paramount to how a place looks, feels, and functions over time. Good design helps to create a sense of place and environments that are valued by residents, encouraging a **sense of pride** and **ownership** which helps to discourage crime. However, perceptions of safety and place can be significantly compromised by poor management and maintenance. '

5.240. Consideration should be given to the **practical** management and maintenance of buildings and spaces from the outset, through good design and the use of **robust** materials that will endure over time. The Council will seek to secure the long term management of new development, including programmed cleaning and maintenance regimes through appropriate planning/legal mechanisms.

DG15: Designing Out Crime

Designing out crime and designing in community safety is key to creating safer places. All development proposals should seek to reduce crime and fear of crime by:

a) Considering measures to design out crime early in the design process, reducing opportunities for crime and anti-social behaviour in the design and layout of new development.

b) Providing safe and secure movement routes that are legible, direct, well-lit and overlooked ensuring that users feel connected to their surroundings.

c) Maximising opportunities for natural surveillance in the design of buildings and spaces where people can 'see and be seen' providing active frontages and open public realm spaces.

d) Creating clearly defined public and private spaces, avoiding ambiguity and encouraging a sense of ownership with appropriate boundary treatments marking public/private space thresholds.

e) Encouraging a level of activity which is appropriate to the location; enabling a variety of uses for public realm spaces and housing types/tenures for residential developments to maximise activity throughout the day/evening.

f) Incorporating physical security features where required without negatively impacting on the character and appearance of the area or increasing a perception/fear of crime.

g) Considering the long term management and maintenance of buildings and spaces at an early stage; schemes should be designed to ensure design quality can be retained over a long period of time with minimal management and maintenance requirements/costs.

Relevant policy and guidance includes:

Local Plan – policies 4, 37, 92, 94 and 101

London Plan – objective GG1, and policies D3, D11 and HC6

NPPF – sections 8 and 12

Healthy

5.241. The places in which we live and work affect our physical and mental health and well-being. The health and well-being objectives set out in the Local Plan highlight the Council's aspiration to produce **healthier environments** and infrastructure to support people living longer, healthier, and more sustainable lives. Placing health at the heart of the design process is key to achieving this.

5.242. New development (including the redesign of existing buildings and spaces) offers many opportunities to enhance the health and well-being of occupants and users. The Council aims to ensure that the planning and design of new development makes best use of these opportunities by ensuring that the health and well-being benefits of schemes are delivered through the use of appropriate monitoring frameworks incorporated within S106 agreements or by planning condition.

5.243. Many of the key elements required for creating healthy places are interrelated and interdependent; for the purpose of clarity these have been split into the following four sections:

- Open Green Spaces (access, amenity, contact with nature)
- Community Amenity (social interaction, sense of belonging)
- Healthy Homes (comfortable, safe, sustainable environments)
- Healthy Streets (clean air, sustainable transport)

Open Green Spaces

5.244. Open green spaces refer to spaces across a variety of scales, which play a key role and provide significant benefits in terms of leisure, health and well-being, and quality of life. Bromley has a diverse network of strategic, neighbourhood and local open green spaces. These include 168 formal parks and countryside sites, 52 leisure gardens and allotments, 21 outdoor sports facilities, 68 playgrounds, 7 cemeteries, 10 closed churchyards, and large areas of woodland.

Figure 84 – High Elms Country Park, Farnborough: *High Elms is a Site of Special Scientific Interest and a Local Nature Reserve offering 250 acres of woodland and meadow alongside a 150 acre golf course, which together form the High Elms Estate.*

5.245. The Borough also contains areas where the provision of and access to open green space could be improved (identified as areas of Public Open Space Deficiency on the Local Plan Policies Map). Development at all scales should identify existing open green space conditions and local requirements, particularly the lack of open green spaces at a neighbourhood scale (2ha+).

5.246. The way in which open green spaces are designed in new developments should be carefully considered. The design of these spaces will vary in accordance with their function/type of space provided, i.e. a Local Area of Play (LAP) or formal park being very different to a large natural open space. However, consideration should be given to each of the following key elements of open space design:

1. Boundary: Consideration needs to be given to whether the space is fenced and gated without interrupting wildlife networks.
2. Entrances: Access points and paths need to be conveniently located on desire lines for walking and cycling.

3. Surveillance: Open spaces need to be overseen form surrounding buildings, streets and public spaces.
4. Activity: Sufficient space needs to be provided for sports pitches and play areas to avoid conflict with other uses.
5. Maintenance: The design of the space needs to take account of maintenance and adoption requirements.
6. Ecology: Open Green Spaces should include areas that are nature rich.
7. Access: Open Green Spaces should be accessible and welcoming to everyone.
8. Lighting: Needs to be considered for well-used footways and play areas but should avoid light spillage that causes nuisance or harms wildlife.

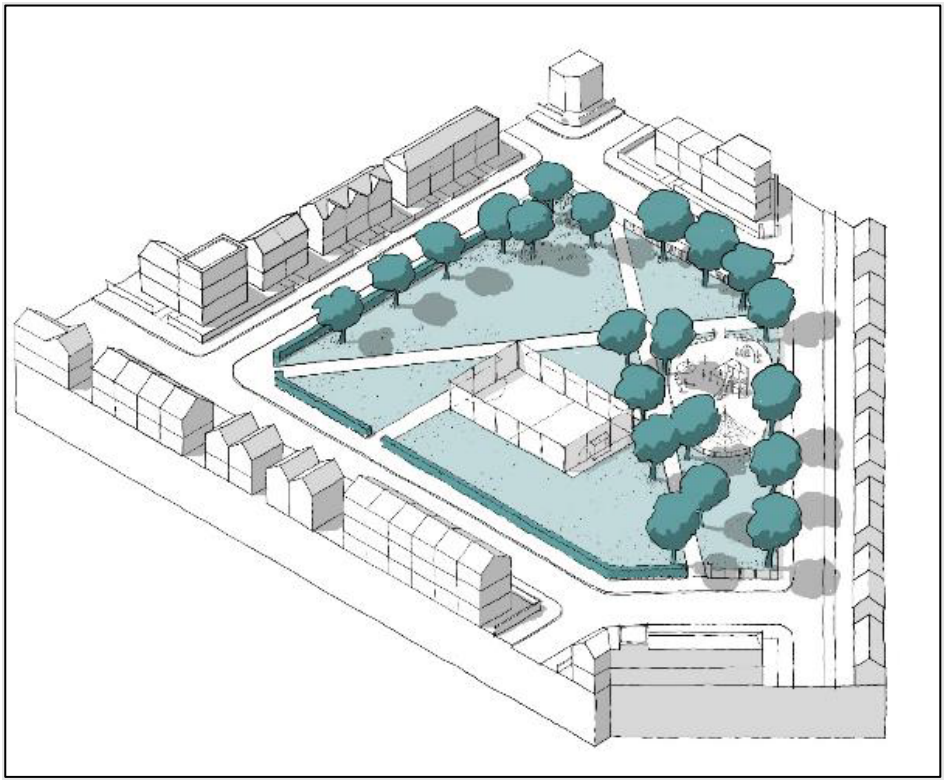


Figure 85 – key elements of open space design: *Boundary treatment, entrances, desire lines, surveillance, activity, lighting, accessibility, ecology, maintenance and management*

DG16: Open Green Space

All development proposals should contribute towards improving the access to, and the provision and quality of, local, neighbourhood and strategic open green spaces by:

a) Undertaking an audit and appraisal to identify the function, benefits and accessibility of existing open green spaces. Where development is in an area already identified as having limited access to open green space, the provision for any new open green space should seek to exceed the minimum spatial and qualitative requirements.

b) Ensuring new open green spaces are of an appropriate size and located so residents have easy and direct access to the space. For new neighbourhood scale open green space, the key elements of open space design will be important considerations.

c) Ensuring new open green spaces are designed with an appropriate function to prevent them from being unused or neglected.

d) Linking new open green spaces to Bromley's existing open green space network.

e) Identifying existing natural features of the site to ensure they are retained to inform and enhance the design of new open green space.

f) Using appropriate materials, planting, trees, and street furniture to reflect the local context.

g) Establishing suitable management and maintenance plans to ensure that the quality of space/amenity will be retained over time.

Relevant policy and guidance includes:

Local Plan – policies 56, 57, 58 and 59

London Plan – objective GG3, and policies D8, G4 and G9

NPPF – sections 8 and 12

Community Amenity

5.247. Community amenity can be defined as the **shared** activities of the wider public or specific resident groups and their interactions within a common space or spaces. They are spaces that serve a communal function where a **sense of belonging** and ownership is generated as people interact, adopt, and adapt to their surroundings.

5.248. These spaces are used because they feel **safe, accessible** and **equitable**, have a clear function and are appealing places to be. The design of amenity spaces can make them more or less conducive to social interactions of all types, where a better physical framework is created outdoor activities tend to grow in number, duration and scope. Creating life between buildings is a self-reinforcing process (people attract people).

5.249. Creating the right environment for community amenity and a sense of belonging will instil a low incidence of people moving in and out of the area, helping to retain and develop strong and active communities that can support health and well-being. Development proposals can facilitate healthier behaviours and social cohesion by considering the activities that form part of regular commutes, leisure, and play, or where the participation in physical activity and other health-promoting activities are shared in a common space.

5.250. Development proposals should also consider the benefits of community events that promote health and well-being. Some events are particularly effective for reinforcing local identity and creating a sense of place. Public art can initiate local interest and distinctiveness, as well as helping people to find their way around the neighbourhood. Public events, such as community festivals and street parties can provide shared experiences which can foster a sense of belonging. Sharing information about the local environment and its history can create stronger links to the neighbourhood forging a stronger connection between people and place.

Figure 86 – Marmalade Lane, Cambridge: *Shared spaces and communal facilities are designed to foster community spirit and sustainable living. These include extensive shared gardens as the focal space of the community, with areas for growing food, play, socialising and quiet contemplation.*

5.251. Play forms a key part of community amenity and is an essential part of the social and physical development of children and young adults. Development proposals should seek to increase opportunities for play and informal recreation. Play provision should be well-designed, safe, accessible, inclusive and stimulating for all ages. Formal playspace should integrate into the wider network of public open spaces and not be severed from the rest of the neighbourhood by physical barriers. Appropriate arrangements for management and maintenance of play and communal facilities should be provided.

Figure 87 – Cator Park, Kidbrooke Village, Greenwich: *A landscape-led approach to estate regeneration introducing a range of amenity spaces including a destination playspace featuring play trails, sculptures, and structures. A multi-use games area is provided for older children.*

DG17: Community Amenity

All development proposals should contribute towards improving community amenity by:

a) Categorising the type of spaces created within the development to establish functions and benefits that serve community amenity.

b) Supporting an appropriate balance of informal and formal social activities; creating meeting places, spaces which encourage people to stop and stay, and transient spaces which enable incidental interactions.

c) Meeting the changing and diverse needs of a wide range of occupants of different ages, backgrounds, and interests for both new and existing communities.

d) Providing activities and events that promote health and well-being by encouraging participation and social interaction.

e) Providing appropriate play opportunities for at least three stages of childhood, including older children and teenagers.

Relevant policy and guidance includes:

Local Plan – policies 20, 21, and 22

London Plan – objective GG3, and policies D4, D5, G4, G7, S4 and S5

NPPF – sections 8 and 12

Healthy homes

5.252. Healthy homes refer to homes that provide internal environments and associated external spaces that support and improve the health and well-being of their occupants. They provide **comfortable**, **safe**, **accessible** and **sustainable** living environments to accommodate the changing needs of residents throughout their lifetimes enabling them to remain independent for longer.

5.253. **Adaptability** is key to long term health and well-being, development proposals should ensure that new homes are designed to provide flexible spaces which are able to respond to changing circumstances, lifestyles, work patterns, and new technologies. The design of buildings and ancillary spaces should **enable** rather than inhibit their users.

5.254. Development proposals should promote health and well-being by ensuring that buildings have good quality and quantity of daylight/sunlight and sufficient ventilation to provide fresh air, reduce the build-up of moisture and prevent overheating. It is important to avoid designed-in obsolescence and dependence on large amounts of energy/resources. Passive design measures should be adopted in both the design and layout of new buildings to harness the benefits of solar gain, natural light and ventilation, providing warm homes through the winter months and minimising overheating during the summer months.

5.255. Whilst the functional requirements of healthy homes are important considerations, it is also important to understand the relationship between ‘quality of life’ and ‘place’ – both in terms of the aesthetic qualities of good design (creating moments of joy and delight) and the value of creating sustainable social environments where people feel **connected** to their neighbours.

5.256. Other aspects of healthy homes include giving people greater **control** over buildings and how they use them with the use of emerging technologies to improve the functionality and comfort of internal spaces, including the use of sensors to control comfort levels and predict maintenance and repairs and the provision of good digital connectivity to reduce health inequalities.

5.257. To improve the standards of living and health outcomes in Bromley, development proposals should consider the objectives for healthy homes (highlighted above) alongside the relevant technical requirements (regulations and standards) and the key principles for good quality design outlined in the Housing Design section of the SPD guidance.

Figure 88 – Officers Field, Weymouth: *Prioritising sustainable living through a fabric-first approach and a mix of home sizes and tenures each with access to private and shared open space. Benefiting from light and space the homes feature a highly insulated fabric with energy generated by an on-site biomass CHP system and PV panels.*

DG18: Healthy Homes

All development proposals should seek to create healthy internal environments and associated external spaces by:

a) Ensuring the functional needs of the home and its occupants are optimised for a range of social and quiet activities. Floor plans should be organised with generous and adaptable internal and external spaces, together with sufficient storage space.

b) Connecting residents with the local community, green spaces and nature by creating visual links from habitable rooms to the street, a private amenity space or communal outdoor spaces.

c) Utilising solar gain, natural ventilation and dynamic shading as natural sources for heating and cooling to maintain pleasant temperatures throughout the day, making health and comfort more affordable for its occupants.

d) Optimising the provision of daylight within internal spaces to maintain pleasant lighting conditions throughout the day (the internal environment should be in direct contact with the circadian rhythm of day and night).

e) Using natural ventilation to control air humidity and reduce the amount of CO2, micro dust particles and allergens within internal spaces.

f) Specifying low-toxic building processes and materials in the construction process.

g) Providing good digital connections that allow occupants to access health care and online information about local health services, community events and activities.

h) Providing information about the home and using smart devices, including monitors or meters and intuitive controls based on changes in the home such as motion, temperature and light.

Relevant policy and guidance includes:

Local Plan – policies 4, 37 and 47

London Plan – objectives GG1, GG2 and GG3, and policies D3, D4, SI 1, SI 2, SI 4, and SI 6

NPPF – section 12

Healthy streets

5.258. Healthy Streets refer to routes and spaces that play an important role in enabling people to walk and cycle around their neighbourhood. Encouraging people to walk and cycle increases regular physical activity and social interaction, whilst reducing congestion and carbon emissions improves air quality.

5.259. The **Healthy Streets Approach**, set out in policy T2 of the London Plan, uses a system of policies and strategies to deliver a healthier, more inclusive environment where people choose to walk, cycle and use public transport. The approach is based on 10 evidence-based **Healthy Streets Indicators**, each identifying an aspect of human experience which should be considered in order to provide a healthy street environment.

Figure 89 – Healthy Streets Indicators*: The 10 essential indicators for making streets work well for people.*

5.260. It is important to note that the Healthy Streets Approach is not an idealised vision for a model street; it is a long-term plan for improving London's streets, helping everyone to be more active and enjoy the health benefits of **social interaction** and **sustainable travel**.

5.261. Almost all streets can be improved against the 10 Healthy Street Indicators but how this is achieved will depend upon the type of street and its uses. The 'place' function of streets is typically defined by a street's character and catchment area, the 'movement' function is defined by the importance of the street to the wider transport network. Different streets require different solutions; new proposals/interventions should be tailored to the street and its functions (there is no 'one size fits all' solution).

5.262. The design of healthy streets should be considered and prioritised during the early stages of the design process using **health**, **inclusion**, and **active travel** as key performance indicators on which to assess development proposals.

5.263. It is important that people are walking and cycling out of choice and that active travel is the most attractive option. Movement routes and spaces should connect the site to local facilities and public transport to encourage/enable a wide range of people to use them. Access to infrastructure is directly linked to behaviour change. By facilitating shorter journeys and ensuring that they are the most accessible and convenient option for everyone will reduce the likelihood of people choosing to travel by car.

DG19: Healthy Streets

All development proposals should seek to create healthy streets and spaces by:

a) Noting the Healthy Streets Approach outlined in the London Plan using health, inclusion, and active travel as key performance indicators for assessing design quality.

b) Noting an inclusive holistic approach to the design of streets considering their 'place' and 'movement' functions whilst prioritising the quality of the street level environment for pedestrians and cyclists (access and appeal) and reducing traffic congestion, noise and pollution.

c) Identifying existing links and movement patterns including pedestrian/cycle paths to inform the location of new routes which should stitch into the wider street network and community/social infrastructure (public transport hubs, facilities and amenities).

d) Creating streets which accommodate the 3 types of pedestrian activity: necessary and functional, optional recreational, and social activities (street life).

e) Implementing measures to make streets healthier while preserving their 'movement' function including urban greening, safe crossing points, accessible footpaths, cycle parking and electric vehicle charging points.

Relevant policy and guidance includes:

Local Plan – policies 33 and 34

London Plan – objective GG3, and policies D5, T1, T2, T5 and T6

NPPF – sections 8 and 12

Sustainable

5.264. **Sustainable development** (economic, social, and environmental) can be defined as meeting the needs of the present without compromising the needs of future generations. **Sustainable design** ensures that new development contributes to economic vitality (by stimulating investment and growth), while supporting a mix of compatible uses and tenures (to create healthy communities) and considering the future impacts of climate change (by managing resources responsibly and effectively).

Resources and Efficiency

5.265. As set out in the NDG, well-designed places have a layout, form and mix of uses that reduces their resource requirements (land, energy and water), are fit for purpose and adaptable over time (reducing demolition and waste), and use materials and technologies (manufacturing and construction) to minimise their environmental impact.

5.266. Development proposals should ensure the efficient use of land by creating compact, walkable neighbourhoods with a mix of uses and facilities to reduce demand for energy (transport use) and support health and well-being (active lifestyles and community resilience). The retention and retrofitting of existing buildings, where appropriate, will be supported to reduce the environmental impact of demolition and new development.

5.267. Development proposals should reduce the need for energy through **passive design measures** by adopting a fabric first approach in relation to building layout and orientation to maximise beneficial solar gain, natural daylight, and ventilation. Glazing should be energy efficient and sized appropriately for context with consideration given to passive measures such as external shading devices to reduce reliance on mechanical ventilation. South facing single aspect homes that lead to overheating and north facing single aspect flats should be avoided.

5.268. Development proposals should seek to maximise the use of **renewable energy sources** and existing/planned infrastructures including PV arrays, heat pumps and district heating systems to reduce demand on non-sustainable energy sources.

5.269. Development proposals should also be designed to reduce water consumption and where relevant, prevent flooding by incorporating Sustainable Urban Drainage Systems (SUDs) to manage surface water and flood risk. New homes and buildings should contribute to the efficient use of water by incorporating internal **water saving measures** and external rainwater harvesting.

5.270. Appropriate provision should be made for the sustainable management and discharge of **waste**. Development proposals should incorporate facilities for the segregation, storage, and collection of recyclable and non-recyclable waste. Refuse storage and collection areas should be integrated into the design of buildings and spaces in a functional, efficient, and non-intrusive way.

5.271. The **selection of materials** and the type of **construction process** influences how energy efficient a building or place can be and how much embodied carbon it contains. Materials that are locally sourced with high thermal or solar performance properties and a long lifespan can reduce the environmental impact of new development. All

development proposals should demonstrate a responsible approach to the procurement and use/re-use of materials.

5.272. Materials should be manufactured from recycled or renewable resources wherever possible (recycled aggregates, steel, aluminum); timber should be procured from certified sustainable sources, the overuse of synthetic materials should be avoided.

Figure 90 – Derwenthorpe Phase 1, Osbaldwick, York: *An exemplar low-carbon community of energy efficient homes. A community heating system supplied by biomass boilers was chosen as the most cost effective and future-proof means of achieving low carbon emissions. Green infrastructure lies at the heart of the masterplan, with the open space shaped by flood prevention and landscaping for biodiversity.*

Figure 91 – Hanham Hall, South Gloucestershire: *187 homes built from factory made elements which minimise waste and are energy efficient to produce and build, the zero-carbon standard is achieved by using an efficient building envelope constructed using Structural Insulated Panels (SIPs) and roof-mounted PVs. The homes combine stack and cross ventilation, large openings, deep roof overhangs, balconies and shutters to avoid overheating.*

Sustainable Construction

5.273. The aim of **sustainable construction** is to create buildings using processes which are environmentally responsible and resource efficient to reduce the impact on the environment. Sustainable construction doesn't end when the construction process is complete, the design of the buildings themselves should seek to minimise the environmental impact over their lifespan.

5.274. As set out in the NDG, reducing **embodied energy** (the energy consumed by all the processes associated with building construction) can be achieved by:

- Re-using and refurbishing existing buildings where possible in preference to new construction.
- Embedding circular economy principles to reduce embodied carbon/energy/ and reduce waste.
- Re-use of materials and design for disassembly.

5.275. All development should seek to reduce waste and support the circular economy by re-using buildings/components/materials, recycling materials back into the manufacturing process, and retaining **'**value' in buildings and their components. Energy saving measures should be considered from the outset and integrated into the design rather than being seen as an optional 'add on'.

5.276. Modern methods of construction which include off-site manufacturing (modular housing) and on-site techniques which provide an alternative to traditional building methods can also contribute to the efficient use of resources. Development proposals for modular production will be subject to the same level of design scrutiny and quality benchmarks as conventional builds.

Figure 92 – Beechwood West, Basildon: *A new neighbourhood of over 250 volumetric family houses utilising factory-built modular technology offering a choice of housing typologies, layouts and external finishes, precision engineered in an efficient and sustainable way with a significant reduction in construction waste compared with traditional build methods.*

Figure 93 – Union Wharf, Greenwich: *One of the first high-rise residential projects in the UK to use volumetric off-site construction; although initially designed to be delivered traditionally, the rationalisation of design elements and a repeated floorplate enabled its conversion to modular build construction, retaining design quality while maximising the benefits of off-site design and delivery.*

Green Infrastructure

5.277. Green infrastructure (GI) refers to a **network** of urban and rural green and blue spaces and features, which can deliver a wide range of environmental and quality of life benefits for local communities. It includes parks, open spaces, woodlands, allotments, private gardens, street trees, and green roofs.

5.278. As set out in the London Plan, green infrastructure should be **planned**, **designed**, and **managed** in an **integrated** way to achieve multiple benefits which include promoting mental and physical health and well-being; adapting to the impacts of climate change and the urban heat island effect; improving air and water quality; encouraging walking, cycling, recreation and play; supporting landscape and heritage conservation; supporting food growing, and ensuring biodiversity net gain.

5.279. Bromley benefits from large swathes of designated Green Belt, MOL, and Urban Open Space, parts of which form part of the South-East London Green Chain. All development proposals should seek to preserve and enhance the borough's existing green infrastructure network.

5.280. Key objectives of green infrastructure planning/delivery should include utilising opportunities to create **multi-functional spaces/benefits** to make the most efficient use of land, identifying and enhancing existing GI assets, providing new green infrastructure and creating new links where there is scope to do so, including opportunities beyond the borough boundary.

5.281. The nature of development should determine the **priorities and opportunities** for green infrastructure on a particular site, i.e. the creation of open space with footpaths/cycle paths (encouraging active lifestyles/sustainable travel), incorporation of SUDs (to reduce flooding and deliver biodiversity net gain), tree planting (amenity, shade and climate benefits), community gardens (local food growing), and/or recreational space (health and well-being).

5.282. Applicants will be expected to acknowledge the **function**, **characteristics**, and **benefits** of existing GI (i.e. nature, water, amenity, relevance within a wider context) with the aim of **protecting** GI assets that function well, **enhancing** those that do not, and **integrating** new GI assets where appropriate.

5.283. The success of new landscape/green infrastructure interventions is not only dependent upon high quality well-considered design, but also appropriate **management and maintenance**. Inadequate provision and/or poor planning will result in unattractive/unusable elements which function poorly. All applicants will be required to provide a Management and Maintenance Plan.

Figure 94 – Barking Riverside, East London: *A 179 hectare brownfield site situated on the north bank of the River Thames with planning permission granted for over 10,000 homes. Over 40% of land is dedicated to open space including parkland linked by cycle routes and footpaths. A range of environmental measures include energy saving homes, rainwater harvesting, SUDs, green roofs, and conservation of local biodiversity.*

Figure 95 – Upton, Northampton*: Sustainable Urban Drainage Systems are incorporated throughout the masterplan (an urban extension of approximately 1350 homes) with generously sized swales contributing to the character, identity and biodiversity of the neighbourhood. The swales have both functional and aesthetic benefits; reducing flood risk by storing and infiltrating water runoff, whilst also creating attractive green corridors which soften the streets.*

Urban Greening

5.284. Urban greening covers a wide range of elements/options including, but not limited to, street trees, green roofs, green walls, and rain gardens. These can provide a range of benefits including amenity, enhanced biodiversity, mitigating the urban heat island effect, and nature-based sustainable drainage.

5.285. Green infrastructure and urban greening should be **integral** to the layout and design of new buildings and large-scale developments, it should be considered from the beginning of the design process and not seen as an optional 'add-on' towards the end.

5.286. The London Plan requires boroughs to develop an **Urban Greening Factor** (UGF) to identify the appropriate amount of urban greening required in new developments. The Urban Greening Factor is a tool that evaluates and quantifies the **amount** and **quality** of urban greening that a scheme provides.

5.287. As the Local Plan has not yet adopted an Urban Greening Factor for new developments, developments that are predominantly residential should seek to achieve a target score of 0.4, and developments that are predominantly commercial should seek to achieve a target score of 0.3 in accordance with Policy G5 of the London Plan.

5.288. In accordance with London Plan and Local Plan policies, all development should seek to incorporate **Sustainable Urban Drainage Systems (SUDs)** or demonstrate alternative approaches to the management of surface water.

5.289. Incorporating green roofs and green walls which contribute towards drainage, cooling and biodiversity will be encouraged. Green roofs/walls have several benefits but require careful planning and design; key aspects that need to be considered include orientation, light levels, irrigation, amenity, and shade.

Figure 96 – Fenchurch Street, London: *At over 700sqm this living wall contains around 52,000 plants. The wall was installed on an annex service building opposite the southern entrance providing visual amenity with urban climate mitigation and biodiversity benefits.*

Biodiversity

5.290. Biodiversity describes the variety of life on earth in all its forms, it incorporates all species and habitats, both rare and common, and includes genetic diversity. Biodiversity provides us with a wide range of vital ecosystem services, including healthy soil, pollinators, food, purification of water, clean air, climate regulation, flood management and carbon storage. Supporting biodiversity is essential for sustainable development and human health and wellbeing.

Biodiversity in Bromley

5.291. The London Borough of Bromley is important for a wide range of wildlife, having species and habitats in common with both Kent and London. It contains London's largest area of countryside, stretching south to the crest of the North Downs, and includes a good proportion of London's semi-natural habitats. In order to protect these habitats, many areas of the borough are designated in the Bromley Local Plan as **Sites of Importance for Nature Conservation (SINCs).**

5.292. These include sites important within London (Sites of Metropolitan Importance) as well as those of Borough and Local importance. In addition, Bromley's designated **Local Green Spaces**, (green and/or open spaces of particular value and significance to the local community) are also of biodiversity value. Some sites hold other designations at the local level: **Local Nature Reserves (LNRs)** or are of national importance: **Sites of Special Scientific Interest (SSSIs)**. Wildlife is not confined to open countryside; urban habitats make a significant contribution to the biodiversity of Bromley and are residents' first and most frequent points of contact with the natural world. Further detailed information and guidance in relation to local habitats and species can be found in the Bromley Biodiversity Plan[23].

Biodiversity and development

5.293. All development has the potential to impact both positively and negatively on local biodiversity and the natural environment. Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a measurably better state than it was beforehand. This includes **avoiding** any on-site loss, **mitigating** any loss if it cannot be avoided, and as a last resort, **compensating** for any loss off-site (offsetting). Development should not lead to a loss of biodiversity and should achieve a minimum Biodiversity Net Gain (BNG) of 10% in accordance with the Environment Act 2021, unless the development is exempted by this legislation.

Figure 97 – Biodiversity Mitigation Hierarchy

5.294. The **mitigation hierarchy** aims to prevent net biodiversity loss by adhering to the following principles:

[23] https://www.bromley.gov.uk/downloads/download/167/bromley-biodiversity-plan

- **Avoidance** – Significant harm should be avoided and reduced by using alternative sites and designs, retaining habitats of value for enhancement and management, and retaining species in situ
- **Mitigation** – Impacts considered unavoidable should be mitigated where the impact occurs, by replacing lost protected and priority habitats, and accommodating displaced species within the site boundary
- **Compensation** – Where on-site measures are insufficient, as a last resort, off-site measures should be implemented in proportion to the impact, by creating suitable habitat off-site and relocating species

5.295. In accordance with national, London and local policy requirements, applicants must demonstrate that development proposals follow the mitigation hierarchy; where there are no anticipated impacts, development should still secure BNG.

Planning process requirements

5.296. All development proposals should follow the key stages set out below. It is the responsibility of the applicant to ensure that each stage is appropriately addressed.

Stage 1 – Assessment of Ecological Impact

5.297. Development proposals should be informed by the best available ecological information from the start of the development process. Ecological surveys should assess habitats and species within the development site or where they are otherwise affected by the proposals, and any impacts on designated sites within or in close proximity to the development site. Surveys should assess the site's existing ecology and whether there are likely to be impacts from the proposals on-site or within a wider zone of influence of the development.

5.298. Applicants are expected to provide accurate information on the existence of habitats or biodiversity features and species present on the proposed development site. It is important to note that some sites may not have been subject to ecological surveys before, and an absence of records does not equate to an absence of species.

5.299. The baseline assessment of the site should also identify what opportunities there are for ecological enhancement and how to achieve BNG. In addition to a Phase 1 Preliminary Ecological Appraisal, a more detailed Phase 2 Ecological Impact Assessment and/or further detailed species-specific surveys may also be required to accompany a formal planning application.

Stage 2 – Design

5.300. The ecological survey information should be used to inform the design and layout of development which should seek to retain and incorporate existing key habitats and features giving priority to protected species and habitats included in the Bromley Biodiversity Plan. Development proposals should follow the mitigation hierarchy by avoiding harm to habitats and species through careful consideration of siting, scale and design, avoiding areas of biodiversity value and maintaining existing on-site/off-site ecological connectivity/wildlife corridors.

5.301. Where the retention of existing habitats or avoidance of adverse impacts is not possible, mitigation measures may include timing the development of sites to avoid breeding seasons, i.e. tree work and hedgerow removal carried out during the winter months and/or creating buffer zones between sensitive areas and development areas to reduce disturbance to habitats.

5.302. In cases where damage is unavoidable, applicants should propose steps for compensating for any loss to biodiversity by creating new replacement habitat either on-site or off-site. However, there are only limited circumstances where 'biodiversity offsetting' will be justified. As outlined in the mitigation hierarchy within the London Plan, compensation should be of an overall greater biodiversity value than that which is lost.

Stage 3 – Monitoring and Management

5.303. In order to ensure the success of biodiversity protection and enhancement measures, monitoring and management will be required. This may include the monitoring of a site during, and post construction phase to measure the impacts on notable or protected species, the appropriate management of retained and/or created habitats and features to ensure that the enhancement, mitigation and/or compensation devised in stages 1 and 2 remain appropriate and effective, and to ensure compliance with relevant legal requirements.

5.304. Planning applications should include costed maintenance specifications and monitoring proposals for habitats/ecological features and describe how these aspects would be implemented. This should include a description of the resources required, the personnel involved and a procedure for ensuring that any new owners/occupiers are aware of their responsibilities.

Adaptability and Resilience

5.305. Successful places can adapt to change (social, economic, and environmental) with the ability to accommodate new uses, changing needs and circumstances. Places need to be **adaptable** at every scale, from the layout, structure, and infrastructure of the site/wider area to the flexibility and adaptability of individual buildings and spaces.

5.306. **Resilience** refers to the ability to respond to and recover from, adverse situations, i.e., health, economic, and/or climate change challenges. All development should have a capacity to mitigate potential impacts and adapt to change (by necessity or choice).

5.307. As set out in the NDG, well designed places are designed for long-term stewardship, are robust and made to last, and are adaptable to changing needs. They have an emphasis on quality and simplicity. Design can address several factors that influence the lifespan of places.

5.308. The **layout** of streets, spaces, and block sizes play a major role in determining how adaptable a place is; connected streets, 'public' realm, and fine grain development is easier to adapt than large scale structures and privately owned streets/spaces which inhibit change. Development proposals should seek to provide a flexible layout of streets and blocks that can accommodate a range of different uses and densities over time – embedding adaptability and resilience into new communities to ensure their long-term sustainability.

5.309. Scenario planning should form a key part of the design process, i.e., considering how buildings/spaces could be used if circumstances changed – from the outset, rather than rigidly tailoring a building/space to one particular use. Designing-in some degree of **flexibility** within the form and structure of the building itself and/or the configuration of internal spaces/services will prolong the **lifespan** of a building and its components enabling rather than preventing, future conversion and re-use.

5.310. Simple, robust **building forms** allow for a greater variety of potential future uses to be accommodated – complex forms are more difficult to change, extend and adapt. Loose fit structures and simple plan forms allow for adjustment, subdivision, and reconfiguration of internal spaces. Access, floor-to-ceiling heights and building depths should also be considered.

5.311. The retention, conversion, and re-use of buildings and **heritage assets** where appropriate will be encouraged to prevent risk of dereliction and/or demolition. Historic and older buildings have an intrinsic tangible and intangible value to local communities, safeguarding the future of designated and non-designated heritage assets for current and future generations is key to local identity and good placemaking.

5.312. Adaptation to new uses can bring old buildings back to life, however, new uses should be compatible with the character, appearance, and fabric of the building and its setting. Any change of use should ideally involve as little change as possible to valued elements (external and internal). Where external alterations are required the architectural integrity of the building should not be lost, consideration should be given to scale and proportion, junctions and transitions, materiality and detailing – as referenced in the Architectural Design section of this SPD guidance.

5.313. In accordance with London Plan and Local Plan policy requirements development proposals are required to integrate circular economy principles as part of the design process. A **circular economy** is one where materials are retained in use at their highest value for as long as possible and are then re-used or recycled, leaving a minimum of residual waste.

5.314. The adoption of circular economy principles means creating a built environment where buildings are designed for **adaptation, reconstruction** and **deconstruction** to extend the useful life of buildings and allow for components and materials to be reused or recycled. Applications for major development proposals are required to submit a **Circular Economy Statement** to cover the whole life cycle of development demonstrating the measures being taken to save resources, minimise waste, and reduce carbon emissions.

5.315. At the planning application stage major development proposals must produce a clear strategy detailing how the development will minimise carbon emissions in line with the London Plan energy hierarchy, to align with the Government's legal commitment to **Net Zero Carbon** by 2050. Applications referable to the Mayor should calculate whole life-cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions.

Figure 98 – Wren House, Hatton Garden: *Originally built as a church in c.1670, it was then adapted for use as a charity school in 1696, before being reconstructed internally to provide contemporary office space. The original Grade II listed facade has been restored and retained.*

DG20: Sustainable Design

All development should seek to achieve the highest standards of sustainable design and construction in accordance with London Plan and Local Plan policies, to ensure the efficient use of resources and to mitigate the impacts of climate change by:

a) Making efficient use of land and adopting a fabric first approach to the design and layout of buildings with passive design measures to harness solar gain, natural light and ventilation reducing the need for mechanical ventilation.

b) Using energy efficient glazing and enhanced insulation to reduce heat loss and energy demand. Use of renewable energy sources including PV panels to reduce demand on non-sustainable energy sources.

c) Incorporating internal and external water consumption measures to ensure efficient use of water resources, and external Sustainable Urban Drainage Systems (SUDs) to manage surface water and flood risk.

d) Making appropriate provision for the sustainable management and discharge of waste, incorporating facilities for the segregation, storage and collection of recyclable and non-recyclable waste.

e) Selecting materials and construction methods to reduce the carbon footprint. Materials should be manufactured from recycled or renewable resources where possible, and construction waste reduced in accordance with circular economy principles.

f) Maximising opportunities to enhance existing and/or introduce new Green Infrastructure (GI) and urban greening including street trees, green roofs/walls, rain gardens and nature-based sustainable drainage measures.

g) Ensuring biodiversity net gain, following the principles of the mitigation hierarchy and planning stage requirements including the assessment of ecological impact, adoption of appropriate design strategies, and the monitoring and management of environmental impacts.

h) Creating adaptable layouts and building forms to provide greater flexibility for alternative future uses to increase the lifespan/resilience of buildings and places against social, technological and environmental change.

Relevant policy and guidance includes:

Local Plan – policies 4, 37, 68, 69, 70, 71, 72, 73, 74, 75, 77, 78, 79, 115, 116, 118 and 123

London Plan – objectives GG3 and GG6, and policies D4, D11, G1, G5, G6, S1, SI1, SI2, SI3 and SI4

NPPF – sections 12, 14 and 15