9. BOROUGH-WIDE DESIGN PRINCIPLES

The following chapter identifies a series of common design opportunities and challenges facing new development across Newham. A series of design themes and priniples are set out which include relevant guidance on how to enhance character and amenity in the borough.

BOROUGH-WIDE DESIGN PRINCIPLES

This chapter focuses on guidance on delivering high-quality place-specific development, and guidance on how existing best practice and London Plan Supplementary Planning Guidance (SPGs) or London Plan Guidance (LPGs) may be translated to the Newham context. Where further Supplementary Planning Documents or design codes may be developed, the guidance serves as a starting point from which to develop more detailed, area-specific standards.

Design principles for Newham

From the legacy of the Olympics to the ongoing transformation of the Royal Docks, the London Borough of Newham has undergone profound change and growth over the past decade. Over the expected 15-year life of the emerging revised Local Plan, the population of Newham is expected to continue to increase by more than 30% providing major opportunities but also requiring a robust framework to manage and distribute the benefits of growth equitably across the borough.

The following chapter sets out a number of strategic design priorities for enhancing local character in Newham, organised under a number of themed Borough-Wide Design Principles. These principles provide flexible design guidance that can be applied to all sites that come forward across Newham, regardless of scale or location (but consistent with the 'conserve', 'enhance' and 'transform' approach set out in Chapter 7). They need to be read in conjunction with the tall buildings guidance (see Chapter 7) and the Neighbourhood-Wide Design Principles (see Chapter 8); providing detailed guidance on how development should come forward at a local scale in line with the relevant Neighbourhood Vision.

Recommendations and guidance are set out alongside best-practice examples which reflect Newham's local context without being prescriptive, maximising utility of the guidance and enabling it to be interpreted and applied across different contexts, so that a wide variety of high-quality development that reflects the borough's character can come forward.

Structure and content

The design principles are structured around the following themes, identified by the Council, which reflect the key challenges and opportunities specific to Newham:

1. Enabling cohesion and celebrating diversity
   How development can come forward which supports and reflects the exceptionally diverse communities within Newham.
2. Imaginative street activation
   How development can come forward which supports active, engaging and inclusive streets that contribute to local character and foster a sense of community.
3. Living well with high density
   How high density development, including tall buildings, can come forward in ways that reflect Newham's diverse needs and cultures and promote environmental, social and economically sustainable neighbourhoods.
4. Managing industrial and residential relationships
   How employment and residential can co-exist while respecting the unique requirements of both uses.
5. Environmental quality
   How air and noise pollution can be mitigated in dense urban environments adjacent busy vehicular routes.
6. Safeguarding and enhancing Newham's Built heritage
   How designated and non-designated heritage assets can be celebrated through the sensitive design of new development.
7. Unlocking small sites in residential neighbourhoods
   How gentle intensification of Newham's residential neighbourhoods can provide appropriately designed new dwellings in constrained settings.

Who this guidance is for

This guidance has been developed to help inform and evaluate design proposals during the early stages of projects to ensure that they help 'conserve', 'enhance' or 'transform' character and reflect the relevant Neighbourhood Vision. It is intended for use by Newham Council and a range of partners including but not limited to:

- Council plan-making officers - as a reference when developing Local Plan policies and Supplementary Planning Documents/Supplementary Plans.

- Council Development Management officers - as a tool to review early stage proposals during the pre-application process and to evaluate planning applications as they come forward.
- Neighbourhood Forums – when developing Neighbourhood Plans
- Developer and design teams - to understand Newham's aspirations and as high-level metrics to test early design proposals.
- The Newham Design Review Panel - to aid the evaluation of major applications that it considers.
- Local people – who can use the document to understand the design principles which planners use to assess schemes, aiding Newham's residents and businesses to help shape new policies and planning applications.

How to use this guidance

Guidance has been set out according to the hierarchy below to be easy to navigate and apply at different levels of detail. Additional diagrams are provided to help illustrate specific guidance and are indicative only. Where appropriate, precedents have been include that provide best-practice examples of how development could come forward to support the design principles.

These should be seen as one successful way in which development can come forward and are not intended to set out a prescriptive approach. The emphasis is on the designer to consider the design principles and how they could be applied to their site and scheme. They should be considered at the earliest opportunity to shape the brief and objectives for the proposal. Useful references of headline policies and guidance are set out alongside each principle, with a full index included in the appendix.

9.X Foster ownership of the public realm

Create welcoming and comfortable public spaces that encourage and support social interaction.

Public spaces fulfil many important roles within cities. They provide places for social gathering, recreation and play, waiting or dwelling and opportunities for people of different backgrounds to interact.

Guidance and recommendations

- Incorporate public open spaces with a variety of scales and characters that can support a range of organised and informal activities.

Refer also to design principles:
9.2.1 Engagement and participatory design
9.2.2 Diversity in the public realm

Headline useful references

- Newham's Parks and Open Spaces Design Guide
- Newham's Draft Streetscape Design Guidance

← Each design principle is set out as a clear and concise objective to respond to.

← Rationale for each principle is provided to help designers, applicants and planners understand why its important and relevance to Newham's context.

← Specific guidance and recommendations that can be used to inform and evaluate design proposals.

← How design principles are interrelated and should be cross-referenced when using this guidance.

← Headline policies and guidance used to inform the development of design principles and should be reviewed alongside. **A full index of references are set out in the appendix.**

1. ENABLING COHESION AND CELEBRATING DIVERSITY

OVERVIEW

The London Borough of Newham has one the most diverse populations of any local authority in the country, with nine of the 20 most diverse wards in the country found in the borough (ONS, 2011). This diversity is one of the borough's greatest assets and presents tremendous cultural, social and economic opportunities. However, inequality and dis-proportionality continue to pose challenges and must be addressed in all areas of future development.

Existing residents have not always felt the benefits of growth and investment that development has brought to the borough. Many areas have undergone impressive transformation including Stratford, the Olympic Legacy neighbourhoods, and the Royal Docks. However, communities have not always felt included in new schemes or effectively engaged in shaping the identity of these places.

The London Borough of Newham has been addressing these challenges and working to become the most inclusive borough in London. It is the first borough to use livelihood, well-being and happiness as its prime measure of economic success, shifting away from the traditional focus on GDP. Since 2022, Newham has introduced London's first Standing Assembly, made up of a wide cross-section of residents, to input on key issues and help shape the borough's future. Newham's Community Wealth Building Agenda and Social Integration Strategy provide guidance and strategies for building community resilience, cohesion and celebrating and supporting Newham's diverse community.

Useful references

- Social Integration Strategy (2020)
- Newham's Community Wealth Building Agenda
- Towards a Better Newham: Covid-19 Recovery Strategy

Why inclusive design?

Cities belong to us all, but not everyone has equal access to public space, nature, social infrastructure or uses necessary for daily life. While 15-minute city principles, set out in the vision - neighbourhood design principles section of this report, are about plugging gaps in terms of accessibility and proximity, an equally important aspect is the level of ownership and belonging that residents and communities feel for these spaces.

Inclusive design starts from the basis that everyone not only has equal access to but feels comfortable using streets, public spaces and facilities and participating in the communities in which they live. Streets and public spaces in Newham do not always represent the diversity or cater to the social and cultural needs of residents. While there are many social and economic factors that impact the nature of public space that fall outside of the scope of this guidance, design can play a significant role in the development of inclusive spaces.

Design principles and guidance

The principles and guidance in this section seek to build on the ambitious work already being progressed throughout the borough by setting out clear strategies and metrics for how development can:

1. Deliver inclusive spaces shaped by and for entire communities: how the design of public realm can contribute to promoting cohesion and celebrating Newham's diverse communities.
2. Incorporate inclusive design processes: ensuring schemes engage early and comprehensibly across the wider community.

9.1.1. Meanwhile uses

In areas undergoing more substantial transformation, facilitate meanwhile or temporary uses that help support continuity and build identity of existing and new neighbourhoods and support the local economy.

Meanwhile uses are temporary in nature, although some may become embedded into the community long-term. They are intended to provide a means of activating and engaging with spaces that might otherwise have been left under-used or unattractive, for example an empty building on a high-street intended for redevelopment or a later plot in a wider masterplan development. Meanwhile uses can support early development of neighbourhood character and provide spaces for testing ideas and uses that can contribute to building social value. They can also provide a link between new development and the existing community or to help foster community cohesion in existing neighbourhoods undergoing transformation.

Caranvanserai was a 5-year occupation of a site in Canning Town, Newham. The project was built incrementally with volunteer labour and recycled materials into a vibrant village of market stalls, playgrounds, food and beverage, performance spaces. It helped to bring activity and interest and provide community spaces on an empty waste ground. At the end of the project's life it was dismantled and now forms part of Canning Town's new town centre.

Guidance and recommendations

- All regeneration projects that include unused buildings and vacant land should include a meanwhile uses strategy that aims to activate the site, establish connections with the wider community and build the identity of new neighbourhoods.
- Appropriate meanwhile uses should be identified through engagement with the local community and future residents through participatory and co-design approaches so they reflect local needs.
- Meanwhile uses should foster long-term social value by building on existing community initiatives and supporting job-creation, skills, and training of the local community.
- Any temporary structures should be designed for disassembly and reuse to support circular economy principles.

Refer also to design principles:

9.2.1 Engagement and participatory design
9.2.7 Embedding and monitoring long-term social value

Useful references

- Meanwhile Use London
- Newham Community Wealth Building Strategy

9.1.2. Diversity of open spaces

Developments should recognise the importance of a clear space hierarchy and delineate these spaces through good design. Each development should demonstrate the principles of designing new or responding to existing public spaces, whilst creating specific private outdoor space for dwellings and shared semi-private communal space for residents.

Public realm is often described as the spaces between buildings and but this definition can be extended to include spaces open and accessible to the public. The London Plan Policy D8 recognises that '*the public realm is made up of a wide range of spaces and places. In addition to our streets, squares and parks, some internal or elevated spaces can also be considered to be part of the public realm, such as shopping malls, museums or station courses, as well as sky gardens or viewing platforms. Such forms of public realm can be particularly relevant in areas of higher density.*'

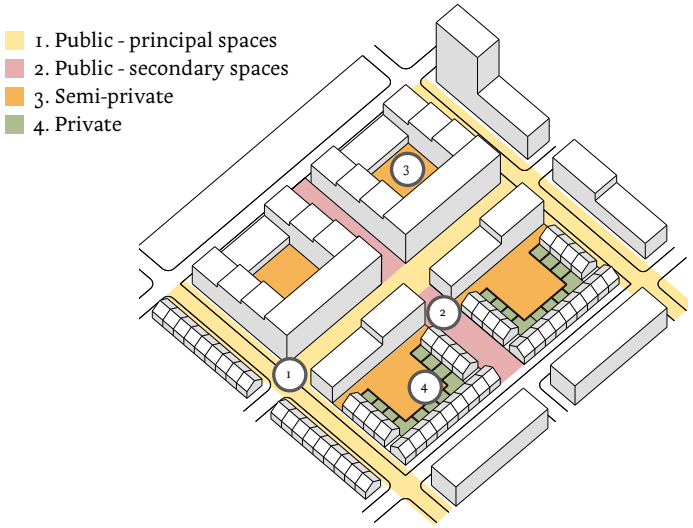
<u>Guidance and recommendations</u>

Open spaces comprise of the four categories of space set out below, based on their level of public access. All developments should seek to introduce a public realm net gain, in other words, add to the quantity and quality of public realm available. Major developments should demonstrate how their proposals contribute to public realm net gain across the spectrum set out below, whilst minor applications should focus on the creation of quality private and semi-private space.

Public - principal spaces

Ensure the development has a public space elements that are inviting and well overlooked.

- This space should be well-connected to the surrounding public space environment, through the creation of safe, overlooked streets and spaces.
- This should be accessible to the public, designed without physical barrier or time restrictions, for easy and welcoming use by all members of society.
- Streets and spaces are generous in their scale and proportions with street wide enough to accommodate multiple segregated modes, street trees, lighting, ground floor spill out space etc.
- They should be directly overlooked through building frontage and active ground floor uses, defining strong edges and framing the street or space they abut.



- Active ground floors should be concentrated along these frontages. Commercial and social infrastructure uses may be accommodated where they meet planning policy locational criteria.
- Where mixed-use developments include residential, access to dwellings should be defined as separate to the commercial access.
- Building heights may exceed street width, reinforcing legibility and hierarchy of place, defining it as a principal street or space in the network.
- Incorporate incidental and formal play areas, seating, water fountains, public art, and local wayfinding.
- Include free and accessible public toilets (including 'Changing Places' toilets) in large areas of public realm.

Public - secondary spaces

This includes local streets between buildings and are generally narrower and more intimate in their scale and function e.g. secondary frontage.

- Low traffic areas designed to make vehicles a guest, using a change in surface material plus the layout and placement of planters, furniture and lighting to emphasise a pedestrian-centric environment.
- The street generally services the surrounding residential units, without being a thoroughfare for the wider area. Quieter spaces, they can include outside bicycle storage and street furniture as places to dwell.
- Depending on building orientation, this can include building frontage with ground floor access e.g. front doors to maisonettes, or side elevations with overlooking from windows and balconies to establish a direct relationship to the street.
- Shallow thresholds should create space between the street and the home, allowing space for personalisation by communities e.g. planting strips, plant pots, play equipment, bicycles etc.

Larger green spaces like Royal Victoria Gardens, North Woolwich work when complemented by a network of smaller spaces that meet local need for public open space, such as neighbourhood squares and pocket parks. Photo credit: Kleon3, CC BY-SA 4.0, via Wikimedia Commons.

Clockwise from top left: a wide public street with tall building frontage; a semi-public street with a changed surface and strip planting; a semi-private courtyard with soft, playable landscape design; and a private dwelling back with rear patio and gated access.

- Thresholds can be denoted through boundary treatments such as a low wall, privet hedge or changes in surface texture, colour, materiality, buffering the space before reaching a front door.
- Well designed servicing, waste recycling and bicycle storage areas can be concentrated here when well integrated with ground floor frontage.
- Building heights can exceed in parts or be equal to street width, communicating a step down the movement network hierarchy to a more local place.

Semi-Private

This includes shared communal space for residents of the buildings, forming a street, garden or courtyard.

- A secure boundary is needed between the public / semi-public and the semi-private for residential access only. Direct access from the street should be secured by a gated fence, indirect access (to a podium courtyard) via a secure residential lobby / stair core.
- Representing the interior of a perimeter block, space is defined by its edges which can include a combination of secure fronts and backs. Natural surveillance encompasses the space with frontage on all sides, including balconies on upper floors.
- Ground floors provide secondary access to apartments; access to servicing, waste recycling and bicycle storage; or backs of maisonettes defined by rear private amenity space e.g. secure patios or gardens.
- Soft landscape design and play space can work well, distinguishing it from the typically harder treatment of the public or semi-public street.
- Building heights can vary around the perimeter but should create a sense of enclosure and use scale and mass to create a pleasant micro-climate.
- Where spaces perform public roles e.g. amenity space associated with a place of worship, public access should be separate from residential access points and boundaries secure (though attractive) to preserve sense of safety and amenity of residents.

Private

This includes private back gardens, balcony or terrace.

- Boundary treatments are needed at ground floor to define the semi-private from the private.
- Backs of dwellings can use low walls or hedges to define rear gardens or patio areas, with gates allowing secondary access to the communal semi-private space.
- Fronts benefit from a shallow threshold, defined through a change in surface texture and building lines softened through climbing planting.
- Kitchens, living rooms or utility rooms should be concentrated at ground floor to preserve privacy and reduce overlooking into bedrooms or bathrooms.

Refer also to design principles:

9.2.3 Foster ownership of the public realm
9.2.4 Accessible playspace

Useful references

- GLA's Expanding London's Public Realm Guidance
- Newham's Parks and Open Spaces Design Guide
- Newham's Draft Streetscape Design Guidance
- Tfl's Healthy Streets Approach

9.1.3. Foster ownership of the public realm

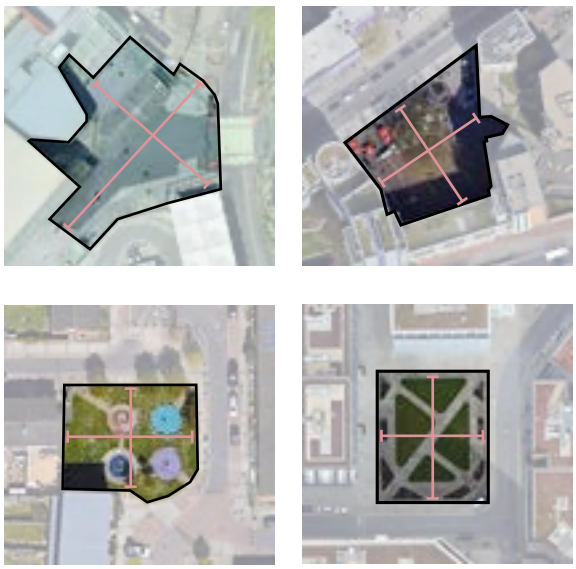
Create welcoming and comfortable public spaces that encourage and support social interaction.

Public spaces fulfil many important roles within cities. They provide places for social gathering, recreation and play, waiting or dwelling and opportunities for people of different backgrounds to interact. Considered placement of public spaces also supports the wider active travel network through the borough by providing attractive places to rest and dwell as a part of attractive, pleasant and comfortable active travel corridors.

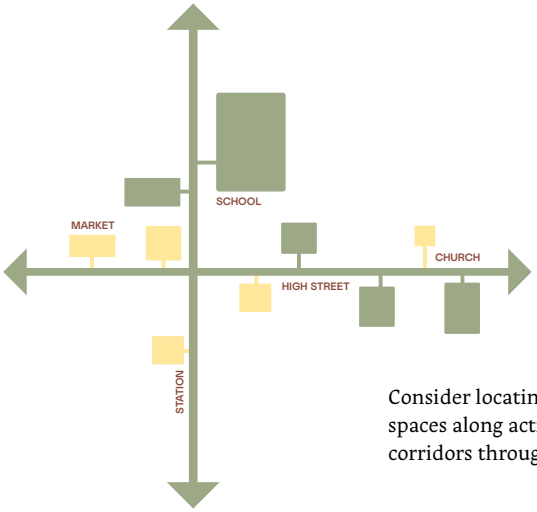
Places to wait and meet outside Stratford Station, Newham. A successful example of an arrival space provided outside key a public transport node that gives people sheltered, attractive places to meet, wait and sit.

Guidance and recommendations

- Incorporate public open spaces with a variety of scales and characters that can support a range of organised and informal activities including:
    - **Arrival spaces:** should be provided outside of main public transport locations with sheltered and well-overlooked places for meeting and waiting.
    - **Neighbourhood squares:** each neighbourhood should include at least one primary public space as the focal point and heart of the community. Neighbourhood squares should be robustly designed and capable of hosting events such as markets or community events.
    - **Local squares:** smaller, local squares should be provided outside of key public uses including places of worship, education buildings and clusters of commercial and social infrastructure uses e.g. child care facilities, health care centres. Local square should be compact and enclosed on a minimum of 2 sides with buildings aligned to back-of-pavement and animated by active uses.
    - **Green spaces:** Green spaces are critical to amenity, leisure and ecology. In residential areas they should incorporate play areas, sports facilities and informal gathering spaces, varying in size from pocket parks (<0.4 ha) to small open spaces (<2 ha) as per London Plan (2021) Policy G4. Green spaces in general should be delivered across the borough in different settings, such as within or on the edge of town and local centres, helping support vibrancy and vitality; and industrial locations to support biodiversity and climate resilience.
- Public open space networks should be temporally and seasonally robust, with different spaces able to accommodate different user demands through the day, evening and night time. Activity zoning can accommodate such uses by carefully locating play, leisure and respite areas to avoid conflict.
- In some cases a strategic approach can enable these roles to be achieved across a complementary distribution and hierarchy of spaces i.e. public space network and strategy for a masterplan.
- Multi-functional green and blue infrastructure should be integrated into all public realm proposals, able to facilitate biodiversity, climate and amenity functions e.g. a rain garden acting as urban drainage, urban cooling, habitat creation and playspace.
- Spaces should all benefit from building frontage and active ground floors, with commercial, cultural or civic uses particularly successful at animating the edges of spaces with life and activity, as well establishing natural surveillance and sense of safety.
- Spaces should be framed through development to establish a positive sense of enclosure (without negatively impacting micro-climate) and using consistent building lines along edges to reinforce the boundary between public and private space.
- Clear sight lines should be established across public spaces and between buildings and spaces, as well as to surrounding streets to enable easy access and circulation of spaces.
- The location and design of lighting, planting and street furniture can establish a sense of comfort and safety, particularly at night. This is best achieved when integrated into the overall landscape design



Clockwise from top left: Station Square, Stratford, 55m x 65m - arrival space; Rathbone Market Square, Canning Town, 45m x 55m - neighbourhood square; Corinthian Square, Royal Wharf, 32m x 40m - local square; Chadd Green Park, Upton Park, 21m x 25m - local square and green space. Images not to scale.



Consider locating new public spaces along active travel corridors through the borough.

such as single pieces of furniture, reducing visual clutter and barriers for events set up or servicing.

- Use of lighting should be appropriate to the intended use of a space and should avoid casting shadows or creating glare. Over-lighting should be avoided to reduce negative impact on any neighbouring residential amenity and privacy.
- A diversity of uses vertically and horizontally mixed in buildings framing a space can maintain a level of activity throughout the day and into the night.
- The public realm should be fully inclusive and accessible, with easy and comfortable use for everyone regardless of age, ability or background. Taking steps to accord with a "universal design" ethos can include design measures such as integrating steps and gradual ramps with one another; wheelchair bays integrated with seating; a choice of continuous paths and even surfaces; tactile surfaces at crossings; Braille signage, induction loops and visual cues; and well spaced street furniture to enable easy passing through etc.
- New development should generate new public space(s), with the amount and type of space relative to the scale and quanta of the proposals. Analysis should be demonstrated in application material e.g. Design and Access Statement. As a minimum, this study recommends at least one local square or green space should be located within 400 metres / 5 minutes' walk of all homes. At least one neighbourhood square or arrival space should be within 800 metres / 10 minutes' walk of all homes.
- The location of neighbourhood squares, local squares and green spaces should be developed in collaboration with the local community and delivered in the early phases of major projects.
- Consider linking public spaces with existing community uses to encourage regular use and programming by civic society e.g. faith-related open day, community growing spaces etc.
- Art can add meaning and significance to spaces and should be carefully integrated into the public realm, particularly in arrival spaces or neighbourhood squares. Art that reflects local characteristics and is prepared in collaboration with communities can be particularly successful. See Shape Newham as an example of best practice.
- Improve connections and use of existing public spaces by removing barriers, such as fences, and providing different types of seating and activity zones.
- Manage public realm areas in accordance with the Mayor of London's Public London Charter.

Refer also to design principles:

9.2.1 Engagement and participatory design
9.2.2 Diversity in the public realm
9.2.4 Accessible play space
9.4.1 Streetscapes along busy corridors
9.4.6 Playspace in high-density environments

Useful references

- London Plan (2021) Policy G4
- Newham's Parks and Open Spaces Design Guide
- Newham's Draft Streetscape Design Guidance

9.1.4. Accessible playspace

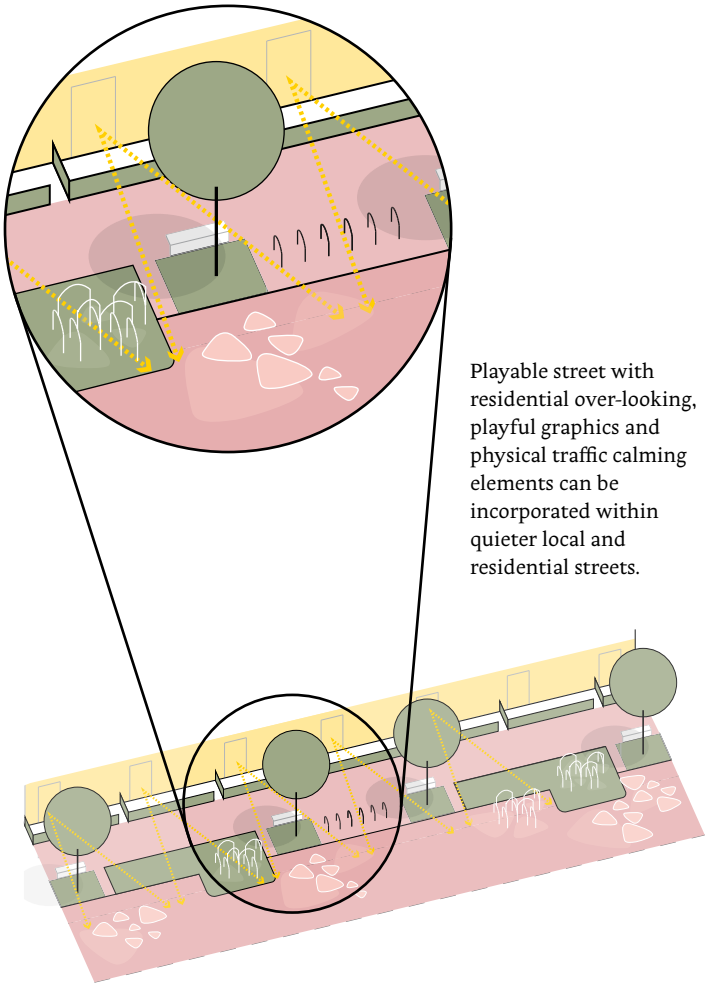
Play provision should be made easily available and near to where all children live.

Play spaces not only contribute to play activities but are community spaces that contribute to friendly and resilient neighbourhoods. Access to safe and stimulating play is an essential component of children's welfare and development, with London Plan (2021) Policy SP4 requiring development proposals to increase opportunities for play and informal recreation. However, it can be challenging to deliver adequate provision in densely populated areas like many areas coming forward for redevelopment within Newham. Many children still do not have access to adequate play spaces and provision should be made to incorporate formal and informal opportunities for play within new and existing public and semi-public spaces.

St Andrews development in Tower Hamlets provides a range of playspaces that are well-overlooked and easily accessible by neighbouring homes. It direct sunlight for a large portion of the day, is sheltered and has clearly defined boundaries.

Guidance and recommendations

- Minimum playspace requirements of 10m² / child should be provided in line with the GLA's Child-Yield Calculator which provides a benchmark for assessing play provision in development projects.
- Locate doorstep play within 100m of homes in well-overlooked locations, physically segregated from vehicles with places for carer to sit.
- Playspace should be provided in areas that achieve a minimum of 2h of direct sunlight each solstice, have safe and accessible routes and clearly defined boundaries to ensure they are secure.
- New development should address any deficiency in access to playspace in the public realm, to address existing need alongside uplift in demand related to increased residential densities. Analysis should be demonstrated in application material e.g. DAS.
- Minimum formal playspace requirements for over 5s should provide a range of equipment accessible to all children and be located in the public realm. Additional play opportunities can be incorporated in semi-private locations like internal courtyards.
- Integrate a range of playspace that include opportunities for formal and informal play. Consider incorporating informal play areas within landscape design and street elements.



Playable street with residential over-looking, playful graphics and physical traffic calming elements can be incorporated within quieter local and residential streets.

Drapers Field, Leyton where a sports pavilion and cafe are set adjacent to the road and front a high quality playspace. Bold signage defines the building entrance and clear and sight lines across the space make it comfortable and safe to use. Photo credit - Kinnear Landscape Architects / Land8.

- Larger playspaces (>400 sq.m) should be co-located alongside other complementary uses such as MUGAs and skate parks, as well as buildings accommodating community-focused uses such as cafés, health centres, primary schools etc. to create a hub of social activity and natural surveillance.
- Buildings accommodating such community-focused activities should front the playspace and where possible open out onto it. Seating, sheltered places to rest and accessible public toilets should be concentrated here, if not already provided in the playspace design.
- Buildings should be located adjacent to the street network, providing easy access and servicing areas that are concentrated away from the playspace to reduce safety risk. Playspace should be located away from the street or if parallel, a hedge or gated boundary treatment should separate them.
- Buildings should have dual frontage and clear signage so they are welcoming and easy to enter from both the street and the playspace.
- Provision should be made for spaces that appeal to girls as well as boys by including better lighting, more swings, circular paths, small, sub-divided sports areas, seating arranged in groups. See Make Space for Girls as an example of best practice.
- Ensure that residents of different types and tenures of housing share communal open spaces and play spaces wherever possible and are designed as to not become spatially segregated.

Refer also to design principles:

9.45 Private and shared amenity spaces

Useful references

- London Plan (2021) Policy SP4
- GLA's Playspace Calculator
- Shaping Neighbourhoods: Play and Informal Recreation SPG
- Fields in Trust Guidance for Outdoor Sport and Play
- Newham's emerging Streetscape Design Guidance

9.1.5. Flexible and adaptable living spaces

Housing mix in the borough should provide real choice, designed to be flexible and adaptable in order to respond to the needs of Newham's diverse community, now and in the future.

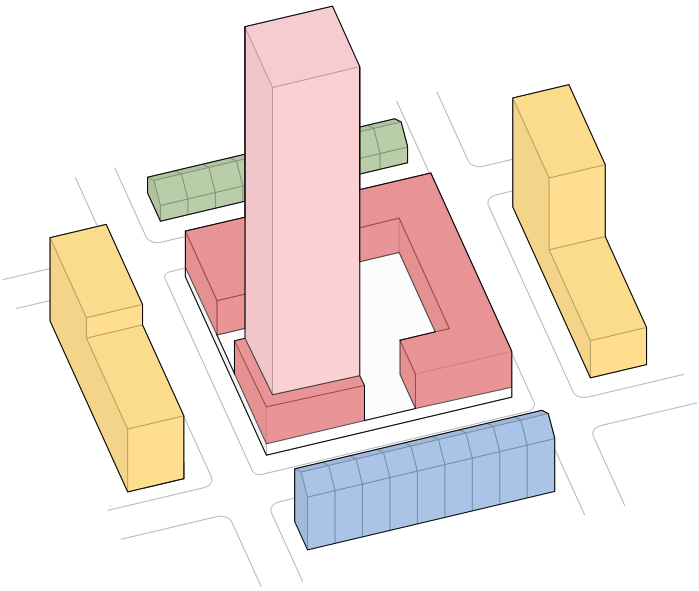
A variety of housing types and sizes should be offered within developments and neighbourhoods that attract a wide-mix of residents and support a diverse community. Homes should be flexible and adaptable, allowing them to remain relevant and accommodate different and changing lifestyles; including multi-generational living and other culturally representative housing standards.

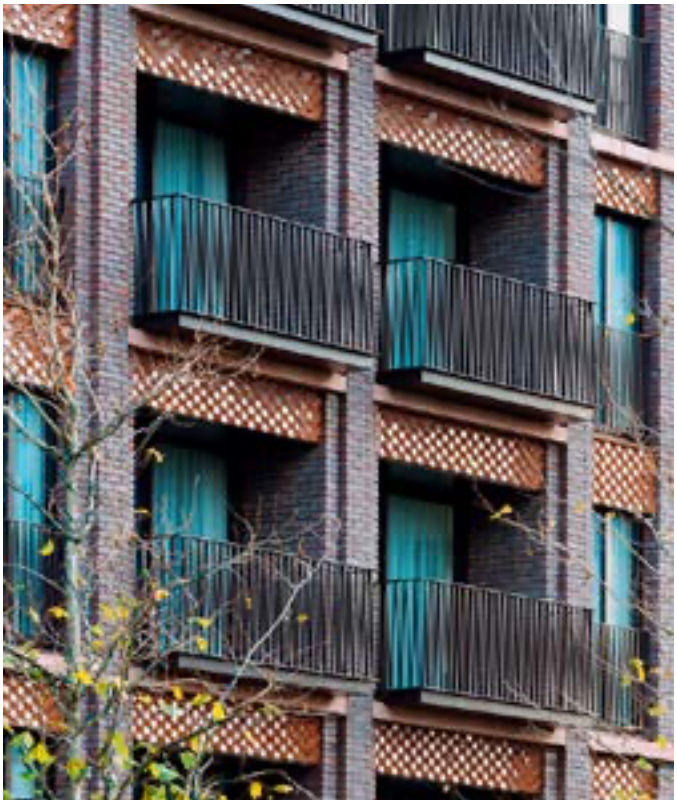
Properties at Marmalade Lane range from one-bedroom flats to five-bedroom houses. Residents were involved in the design process of this community-led, co-housing development, giving them greater choices on layouts of their individual units as well as communal amenity spaces including event space, allotments and a car-free lane.

Guidance and recommendations

- All new homes should be accessible and adaptable, with 90% of new dwellings designed to Part M4(2) to meet requirements of older or less-able residents. 10% of new homes should be wheelchair user dwellings, meeting Part M4(3) and responding to local need in terms of size, tenure and demand - to be determined through engagement with LBN.
- These requirements extend from the dwelling itself to the design of outdoor spaces, car and bicycle parking, communal facilities, internal circulation spaces e.g. hallways and lobbies. Planning application drawings should demonstrate this.
- Different dwelling types should be evenly distributed across proposals and within buildings, giving real choice of floor, aspect and orientation to residents.
- All habitable rooms should be designed with the potential use as bedrooms in mind. This includes all windows designed with an unobstructed openable area of at least 0.33m² and a minimum of 450mm high and wide.
- Houses or maisonettes are most suitable for accommodating the needs of multi-generational living. Ground floors can accommodate bedrooms and bathrooms for less able and older family members, as well as direct access to gardens or courtyard spaces for amenity and children's playspace.
- Ground floor bedrooms should be concentrated at the rear of the dwelling, with living rooms or kitchens at the front; establishing overlooking of the public realm whilst respecting the need for privacy at the back.
- Ground floors accommodating bedrooms should consider toilets and/or bathrooms at the same level, enabling easy use by those less able, such as older family members.
- Homes designed with multi-generational living in mind should target exceeding minimum space standards, building in flexibility for different living arrangements and furniture placement.
- Circulation areas such as hallways, stair wells and landings should be wide enough to accommodate active use, such as a play area or desk space for studying; without affecting circulation and means of escape requirements. Window placement should bring natural light and ventilation into these spaces.
- In developments with a high density of family dwellings, community space should be provided that acts as an extension of the home. This space should be multifunctional allowing use as a workspace, child care or socialising.
- Proposals should demonstrate how homes are flexible and easily adaptable to adjust to changes in lifestyles over time. Dimensions and proportions of rooms and spaces should be justified using drawings that illustrate suitable furniture arrangements that do not compromise circulation or views out. Examples include:
    - Internal layouts that are adequately sized and flexible, allowing for multiple alternative layouts e.g. a room that can change easily from an office to a bedroom to accommodate an ageing relative

Different residential typologies should be incorporated into larger developments with houses and maisonettes preferably located at street level with access to gardens or courtyard spaces.





Semi-recessed balconies that provide passive surveillance of the public realm, as well as a shelter and privacy to the resident, enabling year-round use for a number of functions.

- Internal layouts that are functional, facilitating different use over the course of a day without major modification e.g. a living room that can accommodate studying in the morning, child play in the afternoon and exercise in the evening.
- Roof pitch to eaves heights which allow loft conversion and creation of habitable space for expanding households.
- Carefully locate structural elements and maximise non-load bearing walls, to enable internal re-configuration and sub-division with partition walls. Avoid irregular geometries that limit re-configuration of internal layouts.
- Intelligent placement of windows, doors, internal lighting and utilities can place flexibility in the hands of the occupiers e.g. cable ducts rather than skirting boards enable easy access to electrics and placement of sockets where convenient.
- Gardens, balconies and terraces that are proportioned to be easily used e.g. outside dinner with guests, drying laundry, play space etc.
- Semi-recessed balconies offer natural surveillance, natural light, shelter, privacy and year-round use.
- Generous floor to ceiling heights e.g. in excess of 2.5 metres and large window sizes that brings natural light deep into the building plan.
- On-plot parking layouts that are easily adapted to gardens, courtyards or allotments; reclaiming space that would otherwise be unused should residents choose to not own a car.

Refer also to design principles:

9.2.3 Foster ownership of the public realm

9.2.1 Engagement and participatory design

Useful references

- Emerging Good Quality Homes for All Londoners
- Approved Document M: Access to and use of buildings Volume 1: Dwellings
- Approved Document B: Fire Safety Volume 1: Dwellings

2. IMAGINATIVE FORMS OF LOCAL STREET ACTIVATION

OVERVIEW

Streets are one of cities greatest public, social assets and account for 80% of London's public space. Yet often they are dominated by cars and physical and perceived barriers that discourage people from walking, cycling and using public transport. Newham already has one of the lowest levels of car ownership (ONS, 2011) in London with much of the vehicular traffic originating from outside the borough. Yet more can be done at the local level to reduce the impact of vehicles and improve the quality of streetscapes through activation of streets and spaces.

As defined in the London Borough of Newham's emerging Streetscape Design Guide, streets can typically be classified into one of the four following spatial typologies, with some streets falling into multiple typologies along their length. Specific guidance in this section will refer to these typologies where relevant.

1. Arterial: Primary 'A roads' focussing on moving people and vehicles across the borough and wider area.
2. Local: Secondary routes that connect arterial routes and centres with residential areas.
3. Destination: Hubs of activity along local or arterial routes typically contributing to existing centres.
4. Residential: Connecting streets within residential areas.

The design principles and guidance in this section are focussed largely on improving local and residential street typologies across the borough and should be read in connection with the emerging Streetscape Design Guide. Local and residential street networks in particular should be welcoming places for everyone to walk, dwell and engage in community life. Increasing activation of these streets contributes to local identity, promotes healthier lifestyles by encouraging shorter journeys to be made on foot or by bike and creates more attractive and desirable neighbourhoods.

Useful references

- Small Change, Big Impact
- Healthy Streets for London
- Towards a Better Newham: Covid-19 Recovery Strategy
- Newham's Draft Streetscape Design Guide
- Conservation areas in Newham

What are active streets and spaces?

Active streets and public spaces are those that provide high concentrations of experiences and interactions; places to visit, things to see, activities to do that make the experience as a pedestrian or cyclist interesting and stimulating. This can take many forms including:

- other people
- buildings
- planting
- public art
- views
- informal play
- active ground floor uses like cafés or businesses (when clustered, these form the basis of destination streets)

Within local and residential areas, there may be less opportunities for active commercial ground floor uses and non-residential buildings to provide a varied and active streetscape. Indeed, commercial ground floors outside of destinations can often struggle to be vibrant, occupied places. They are therefore best concentrated existing or planned town and local centres.

This section sets out principles, guidance and supporting references for achieving activation at the local, neighbourhood level along these street typologies.

Promoting healthy lifestyles and active travel

Lack of physical activity is a big threat to public health, with 53% of Newham adults not achieving the recommended levels of physical activity per week. Children in particular require more physical activity to stay healthy and ensuring adequate opportunities to play outdoor or walk or cycle contributes to meeting the minimum levels of activity required to stay healthy.

Safety concerns are the primary reason that people list for not cycling and being unwilling to let their children walk unaccompanied. All streets should be pleasant, safe and attractive and the experience of local and residential streets often determine whether people choose to walk, cycle, play and use public transport.

The design and layout of these streets and public spaces is an important consideration for whether people adopt active travel modes. The guidance in this sections aims to contribute to Newham's ambition that 'every resident lives in an accessible and inclusive neighbourhood'. (Towards a Better Newham, Pillar 5).

9.2.1 Provide local uses that support 15-minute neighbourhoods

Enhance existing town and local centres and shopping parades to contribute to creating neighbourhoods where all residents can access essential goods and services within a 15 minute walking distance.

Local community and commercial uses should be available within a 15-minute walking distance of every residential development. These could provide essential services and supplies for daily living, for example convenience shopping, without detracting from the more comprehensive Town Centre offer in protected town and local centres. The vision - neighbourhood design principles section (Chapter 8) provides a comprehensive 15-minute gap-analysis of where shortfall exists and where additional uplift in commercial and social infrastructure should be encouraged. See Chapter 3 and 6 for more information explaining the 15-minute neighbourhood concept and analysis. Supplementary guidance in this sections provides qualitative recommendations on how to bring forward positive local commercial and community hubs in areas where evidence supports the need for an appropriate mix of commercial and community uses.

Elephant Park development provided low-cost commercial spaces to promote small businesses and active ground floor uses across the development.

Key components of Newham's 15 minute neighbourhoods

Guidance and recommendations

- If establishing new or reinforcing existing destination streets (in accordance with relevant strategic policy) cluster uses together to increase potential draw and commercial viability.
- Shopping parades of between 5-10 units tend to be more successful than smaller runs and new commercial and social uses should typically be provided around existing hubs of activity.
- Cluster entrances focusing on primary frontages with the greatest footfall.
- Align buildings to back of pavement to create a consistent building line and legible urban form.
- Enlarged pavement for 'spill-out' space in front of commercial uses such as cafés or community facilities such as libraries, encouraging social activity. A 1.5-2m zone, the area required for a standard 2-4 person comfortable seating arrangement, is recommended.
- Create dynamic yet ordered and uncluttered frontages through large windows, lighting, signage and high quality materials.
- Corners should be addressed effectively and offer overlooking on both sides.
- A unified visual identity via landscape and public realm design e.g. lighting, paving, seating, planting etc.
- New commercial units should be supported by a robust commercial strategy and designed with likely occupier fit out needs and security requirements from the onset. This avoids later retrofit solutions that may affect the quality of design.
- Consider security requirements at the outset of the design avoiding unsightly additions such as external shutter boxes later.

Refer also to design principles:

9.2.5 Meanwhile uses

Useful references

- Newham's Infrastructure Delivery Plan
- Newham's Town Centre Evidence Base
- Newham's Town Centre and Retail Strategy

9.2.2 Active residential ground floors

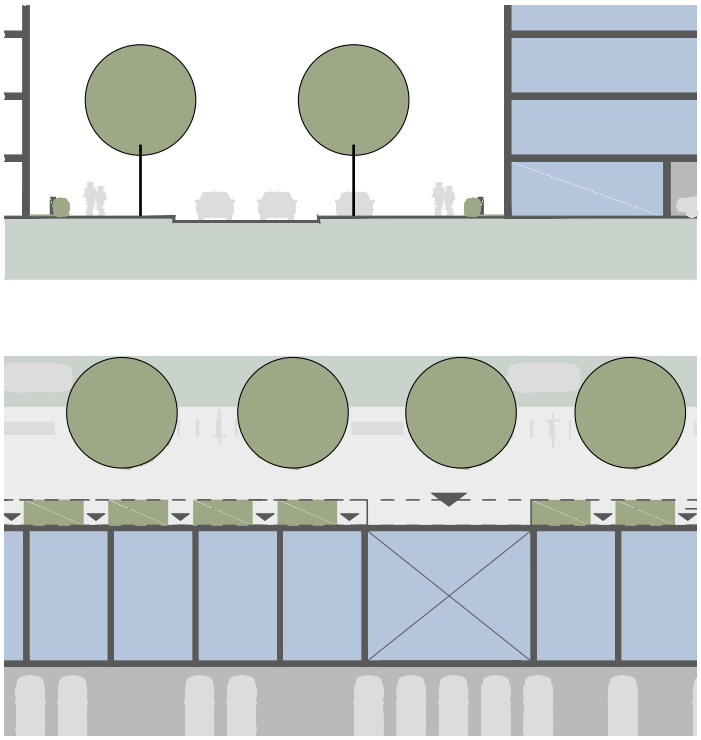
Residential ground floor homes should positively engage with the street and provide animation and visual interest while giving residents a sense of privacy and security.

Through considered design, residential streets can be lively, active places that are pleasant and engaging environments to walk and cycle. This should be balanced with providing residents a sense of privacy and security through private and semi-private spaces that contribute to a sense of ownership and incorporate places to dwell. Well-designed residential streets encourage interaction between neighbourhoods and foster healthier communities by promoting active travel and providing safe, overlooked playspace.

Clear separation between public and private spaces. Accordia, Cambridge

Guidance and recommendations

- All streets and spaces should be actively fronted with frequent doors and windows to homes. Each ground floor home should be provided with its own front door located on primary frontage.
- Entrances are celebrated, clearly recognisable and protected from the elements for example through the use of architectural elements like canopies and porches.
- Ground floors should be designed with a finer level of architectural detailing for example through a change in materiality or detailing.
- A defensible zone should be incorporated in between the building line and the pavement to create a transition between private and public spaces. They should be defined by a boundary treatment of planting, low fences or walls but not form a barricade to the street.
- Zones can vary in depth but should be designed in with the boundary treatment in accordance with the overarching character of the proposals.
- All should allow some level of personalisation by residents, with window boxes, seating, pots and planters fostering a sense of ownership by each household.
- In some cases defensible zones are not always needed, such as in mews housing fronting semi-public shared surface street, where a recessed porch and boundary treatment of climbing plants can be appropriate. However, in general a minimum depth of 1.5-2 metres from the building line is recommended.



Provide entrances directly from street with well designed boundary treatments and appropriately sized defensible zones.

- Ground floor uses should be positioned to provide passive surveillance of the street, with living rooms and kitchens ideal functions. This design choice should be taken in combination with the window size, placement and design, as well as boundary treatment and defensible zone design.

A terraced house with recessed porch, integrated storage, large ground floor window with deep reveals; and hard landscape boundary and defensible zone. Photo credit: Tim Crocker

A terraced house with projecting bay window, first floor balcony and soft landscape boundary and defensible zone. Photo credit: Will Wiesner

A well lit and semi-recessed communal entrance to high density apartment block, with no defensible zone needed. Photo credit: Tim Crocker

A terraced mews house on a semi-public street with ground floor kitchen, modest sized window, recessed porch and planting strip boundary treatment. Photo credit: Tim Crocker

- Where generous ground floor windows are positioned along main frontages, this should be balanced with preserving the privacy and amenity of ground floors. This can be achieved through:
  - Fenestration and facade design including bay windows, deep window reveals, first floor balconies with sides that frame windows / entrances below.
  - Defensible zones at least 1.5m in depth and boundary treatments including a low wall, fence or hedge.
- Along busier streets and in flood zone areas, kitchen and dining areas should be incorporated on the ground floor with bedrooms and living spaces above.
- In excessively high noise and air pollution areas, dwellings and residential frontages should be concentrated away from sources of pollution. See Monitoring for Air Quality section.
- Where ground floor windows are smaller, such as in kitchens or offices, ground floors can still be activated with front doors, recessed porches, integrated waste and / or bicycle storage.
- Balconies or projecting oriel windows at first floor can provide additional activation and overlooking to the public realm.
- In high density residential typologies with communal entrances, often no defensible zone is necessary. They are suited to recessed porches or projecting canopies that are well defined, overlooked by windows and balconies, well-lit and have a strong visual relationship with the internal lobby space.

Refer also to design principles:

9.2.3 Foster ownership of the public realm
9.2.4 Accessible playspace

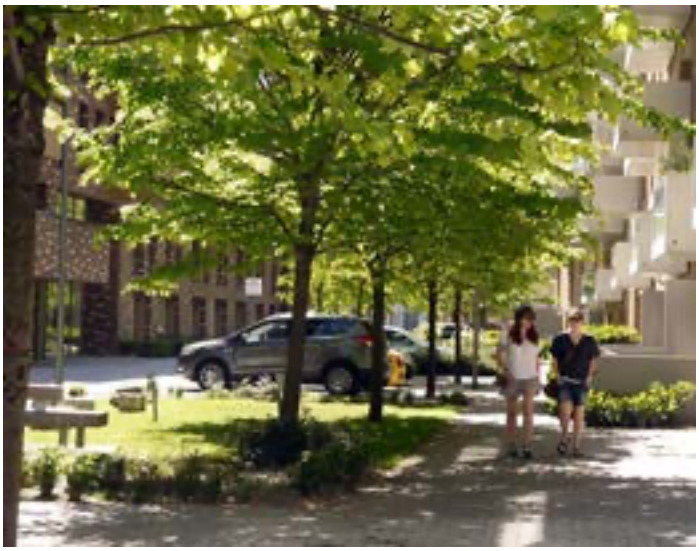
Useful references

- Newham's Draft Streetscape Design Guide
- Healthy Streets for London

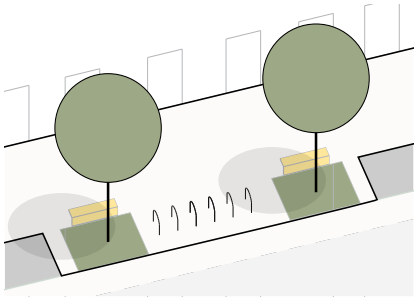
9.2.3 Car parking in the public realm

Create solutions to integrate car parking into the design of public realm to minimise visual impacts so that parking does not dominate the street.

All streets should be prioritised for pedestrian and cyclist movement and residential developments should seek to minimise parking, with only disabled bays provided, in line with the London Plan standards. However, even in car-free developments, some on-street parking provision may be required for accessibility and servicing. Where parking is provided, it should follow the standards set out in Newham's emerging Streetscape Design Guide. The following guidance provides additional strategies for integrated parking, if required, into residential streetscapes to reduce its visual and environmental impact.



On-street car parking provided on one-side of the street only and integrated with the public realm alongside planting and playspace. St. Andrews, Tower Hamlets



Short runs of car parking (max 3no. spaces), integrated into the public realm alongside planting and public realm design.

Guidance and recommendations

- A key principle is the overarching priority to design the car out of dominating the public realm and street scene; it should be considered early in the design process and well integrated into a cohesive public realm design.
- On-street parking should form part of the wider urban design strategy so that it is integrated with other street infrastructure including planting, SUDS, cycling parking, public transport, and wayfinding.
- On-street parking should be integrated with the broader public realm material palette, used to increase the perceived footway width and reinforce pedestrian priority in any space.
- Where possible, on-street parking should only be provided on one side of the street, to maximise a comfortable sense of enclosure.
- Aligning car parking parallel with the carriageway is the preference, though where traffic volumes and speeds are low, angled and perpendicular parking can sometimes be appropriate. In these cases, this arrangement should be considered as a means of freeing up additional space for planting and public realms rather than incorporating additional parking.
- On-street parking should be provided in short rows of up to 3no. spaces, interspersed with trees, so as not to dominate the street or form a barrier to the pavement.
- Consider incorporating car-sharing opportunities within larger developments.
- Within larger developments where car parking is consolidated into podium structures, entrances should be discreet in size and located away from primary frontages, minimising inactive / blank façades. Footways should be continuous across parking entrances to priorities pedestrian movement.
- Where surface car parking is provided close to public spaces or commercial uses, this should be designed as a place, not as a car park. Planting and public realm will be necessary to screen vehicles and create a positive streetscape, whilst public realm materials should be durable to heavy and frequent vehicular movements.
- Where required, electric vehicle charging posts should be integrated into the streetscape design and should not obstruct pedestrian movement. Ideally, charging points should be integrated within light columns or street furniture to minimise street clutter.

Refer also to design principles:

9.1.2 Diversity in the public realm

Useful references

- Newham's Draft Streetscape Design Guide
- London Plan Policy T6 Parking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3. LIVING WELL WITH INCREASED DENSITY

OVERVIEW

Across Newham development interest has and will continue to increase alongside land values. As a result, high density development is coming forward both in areas undergoing substantial transformation, like the Royal Docks, and in neighbourhoods which have historically been characterised by lower-density typologies like terraced housing. New development can provide much-needed housing, employment and investment opportunities and contribute to the vitality of existing and new centres. However, growth should be carefully managed so that it delivers high quality homes that cater to all Newham's residents and contributes positively to the character of places.

High density development has a role in building sustainable communities, but needs to be integrated successfully into the urban fabric alongside adequate social infrastructure and public realm. This section sets out design principles and accompanying guidance so that high-density development contributes positively to streets, public realm, and a diverse residential offer that reflects Newham's community.

Useful references

- Draft Good Quality Homes for All Londoners SPG
- Newham's Tall Buildings Evidence Base
- LLDC Density Study
- Newham's Health and Well-being Strategy
- Conservation areas in Newham

Tall buildings

The majority of Newham is characterised by lower density development of 2-3 storey residential development set within a largely flat topography. While it is possible to provide high density development within a 4-6 storey, mid-rise scale, tall buildings can play a role in optimising site capacity, meeting Newham's housing targets and providing landmarks and contributing to a dynamic skyline.

The London Plan Policy D9 requires local planning authorities to determine a relative definition of tall for specific localities, whilst acknowledging this definition

"*should not be less than 6 storeys or 18 metres measured from ground to the floor level of the uppermost storey*".

Indeed, this study has determined the following definitions:

Tall Building

Tall buildings in Newham are defined as those over 21 metres measured from the ground to the principal top of the building; usually a parapet. This broadly equates to any building 7 storeys or taller. In areas identified as appropriate for tall buildings, this study defines a series of tiered categories, with different ranges appropriate for different settings. These categories include:

- 21 metres to 32 metres (7 to 10 storeys)
- 33 metres to 40 metres (11 to 13 storeys)
- 41 metres to 50 metres (14 to 16 storeys)
- 51 metres to 60 metres (17 to 21 storeys)
- 61 metres to 100 metres (21 to 33 storeys)
- Up to 100 metres (33 storeys)

Taller Elements

Taller elements are components of a building that exceed the established shoulder height of the principal urban form. For example, where the corner of a courtyard block apartment building steps up to 8 storeys and the remainder of the building is at 6 storeys.

Mid-rise Building

Mid-rise buildings are classified as buildings between 4 and 6 storeys e.g. between 12 and 18 metres.

Low-rise Building

Low-rise buildings are classified as buildings up to and including 3 storeys e.g. up to 9 metres.

Within Newham, high density development should typically concentrated in areas that benefit from good access to services and amenities, such as shops, schools, public transport and open space. Chapters 7 and 8 provide an assessment and guidance on appropriate locations and heights for tall buildings at the local level.

Providing quality homes for Newham's diverse community

Despite an increase in high density development coming forward, many of these projects do not provide a housing mix that reflects the diversity of Newham's residents needs. Design principles and guidance in this section outline how high density developments can provide homes that cater to Newham's specific housing needs including public and private amenity space, playspace, an attractive public realm and support the community's health and well-being.

9.3.1 Streetscapes along busy corridors

Busy streets should be designed to be ensure that users have enough space to walk comfortably in groups or stop along the streets. This should also include larger spaces along its length for rest and pause.

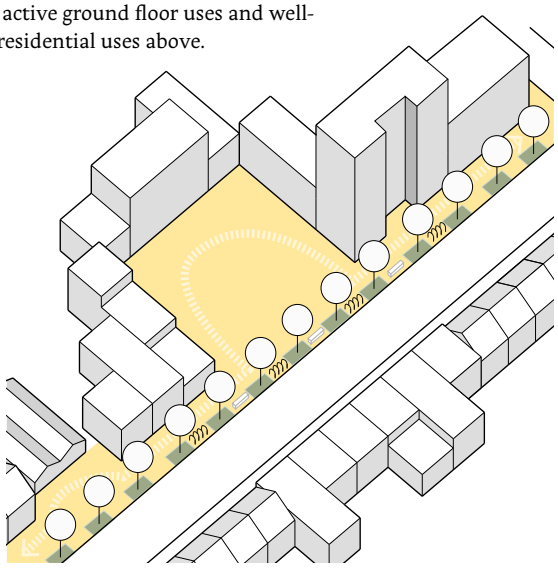
Newham's emerging Streetscape Design Guidance defines street typologies across the borough and sets out accompanying detailed guidance and recommendations. The guidance in this section is intended to complement and be read alongside the Streetscape Design Guidance and TfL's Streetscape Guidance to provided additional detail on how local and destination street typologies can accommodate high-density development and increased footfall.

Guidance and recommendations

- Local and destination street typologies will be the primary locations of high density developments. Adequate pavement widths should be determined in line with TfL's Pedestrian Comfort Guidance dependent on levels of anticipated footfall. An additional zone of 1.5-2m zone, the area required for a standard 2-4 person comfortable seating arrangement, can be provided in areas with clusters of hospitality uses for external seating.
- Ensure the pavement has some undercover elements along its length to protect users from rain. These should be provided in the form of street trees with larger canopies or integrated within the design of buildings to limit clutter and maintenance.
- Ensure there is ample seating within the pavement design for rest in line with TfL's Healthy Streets Checklist, with between 50m and 150m between resting points, with the upper end more acceptable on busier streets.
- Where residential lobbies are set-back from the main building line of the street, these should be well-lit and overlooked spaces.
- Small local squares can be appropriate along busy routes, providing meeting points, areas of respite and destinations for concentrating commercial uses and active frontage. They should include ample seating, landscape design and amenities.

Cutting Room Square in Manchester provides a local square in an emerging high-density residential neighbourhood. The square is enclosed on three sides with buildings and activated with cultural and social uses and well over-looked by residential development.

In high-density areas, it may be appropriate to provide small squares that are fronted on all sides, animated with active ground floor uses and well-overlooked by residential uses above.



Refer also to design principles:

9.2.2 Diversity in the public realm
9.2.3 Foster ownership of the public realm
9.3.2 Active residential ground floors

Useful references

- Newham's Draft Streetscape Design Guide
- Healthy Streets for London
- GLA's Expanding London's Public Realm Guidance
- TfL Streetscape Guidance
- TfL Pedestrian Comfort Guide

9.3.2 Design and placement of tall buildings

High densities and tall elements should be incorporated into well-defined, urban blocks that positively define streets and provide high quality shared and private amenity spaces.

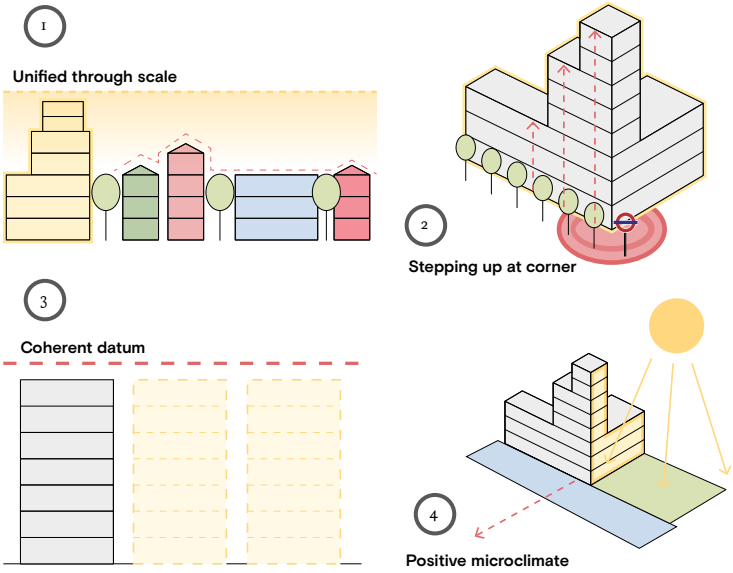
The massing strategy and facade design for Park View Mansions, Chobham Manor accommodates 6 storeys in a way that reduces visual bulk and carves out areas of private amenity use; an asset especially important for high density living. Photo credit: Haworth Tompkins.

Increases in density can be achieved through low rise, mid-rise and tall buildings, though it is the latter that Newham is facing increasing pressure for to makes best use of its available land. It's true tall buildings have a role in optimising capacity but they also play an important contribution to creating a rich and legible urban fabric. They should be exceptional in both their design and construction, particularly when exceeding a prevailing datum established through consistent urban blocks.

Guidance and recommendations

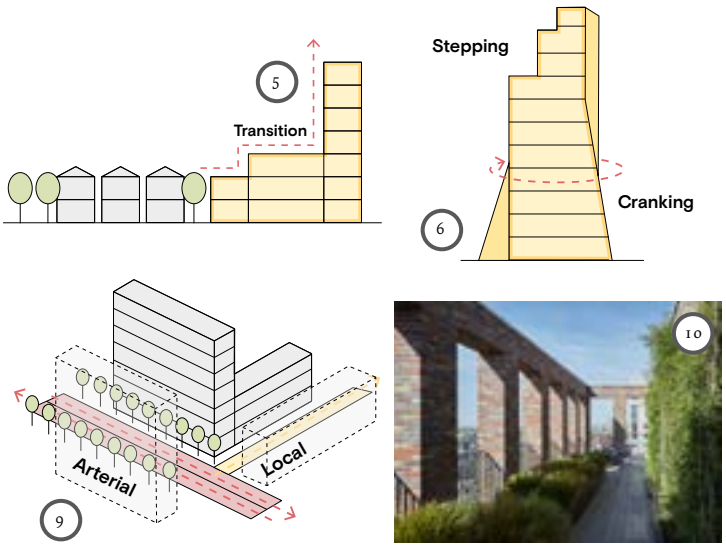
- **Scale should...**

1. be used to create urban legibility by introducing height to unify and establish order in fragmented and discordant environments;
2. establish a destination through a strongly defined urban edge or increased height at a corner;
3. create a new character and coherent sense of place through a consistent datum;
4. avoid overshadowing streets and spaces through careful location and concentration of height.



- **Massing should...**

5. transition between existing and new by gradually stepping up across a site from low to high;
6. create the "middle" to offer visual intricacy by stepping and cranking the building envelope;
7. establish unique character by responding to its particular site geometries;
8. positively influence urban wind and heat through use of set backs and articulation;
9. reinforce the movement hierarchy by using shoulder heights to create appropriate street ratios;
10. create private and shared amenity space by stepping back to form terraces and rooftops.



- **Façades should...**

11. be organised to reduce visual bulk by articulating varied mass and use of voids;
12. respond to local context through choice of fenestration, material palette and detailing;
13. avoid compromising neighbouring privacy and amenity by careful location of private amenity space, window placement and design;
14. design the "crown" to create attractive skylines by concealing rooftop equipment through use of parapets and creating shared amenity space in roof terraces.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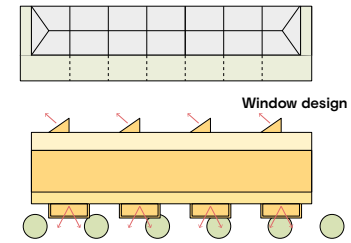

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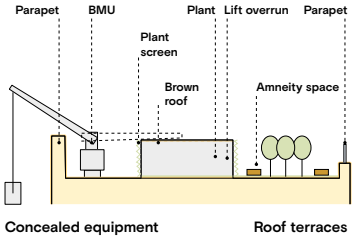

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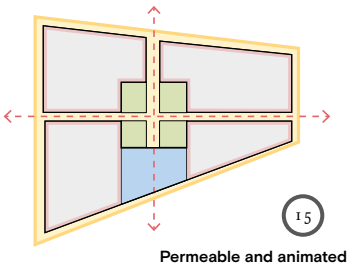
- **Public realm net gain should...**

15. create new multifunctional network of streets and spaces for movement, nature, amenity and leisure;
16. design the "base" with using edge conditions to define public and private space;
17. animate ground floors that use active (residential and non-residential) frontages and mixed uses on primary frontages;
18. create permeable environments established through a fine building grain and public access;
19. prioritise pedestrians by making use of modal filters and minimising servicing areas.



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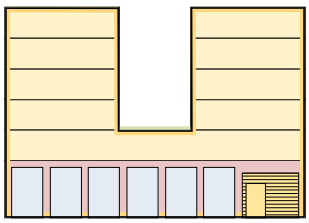

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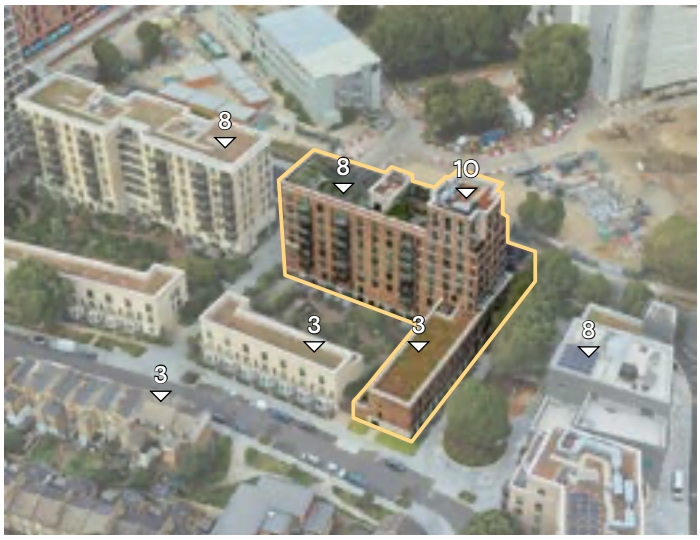


South Gardens, Elephant and Castle successfully mediates from the prevailing low rise scale of traditional Victorian townhouses, up to a new datum of 8 storeys including the tallest element at 10 storeys on the corner. This gradual transition enhances legibility, reinforcing the local and arterial streets of the movement hierarchy.

Refer also to design principles:

9.4.4 Private and shared amenity spaces

9.6.4 Optimise internal residential layouts

Useful references

- Newham's Draft Streetscape Design Guide
- Healthy Streets for London

9.3.3 Healthy, high quality homes

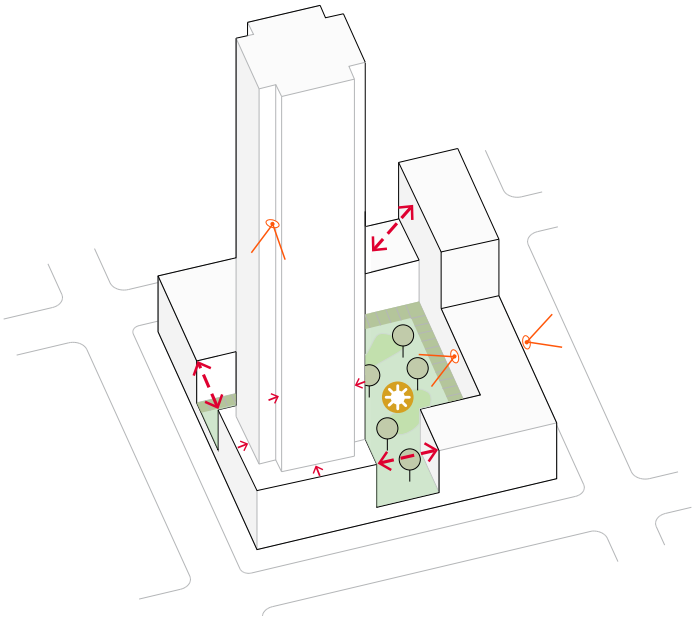
All apartments should promote health and well-being of residents by providing good environmental conditions including high-levels of natural daylight, sunlight, natural ventilation and individual climate controls.

The recent Covid-9 pandemic has highlighted the importance of the internal environments within homes and how these spaces can contribute to the well-being of communities. New homes should be designed in line with the emerging Housing Design Quality and Standards LPG which sets out minimum standards as well as guidance on how homes can provide places of retreat from the 'noise and activity of daily life in London' which is of particular importance within high-density environments.

The emerging Chobham Manor neighbourhood provides a mix of tenures and typologies that delivers medium to high-density development alongside quality public realm and communal amenity spaces.

Guidance and recommendations

- Buildings should be designed to maximise internal levels of daylight and dual-aspect homes through orientation, articulation and incorporation of breaks in massing. A minimum of two-thirds dual-aspect homes should be targeted in all new developments.
- Single-aspect, north-facing units should be avoided. Along north-facing façades typologies such as gallery-access units, maisonettes or larger through-units should be considered.
- At higher levels (above 7 storeys) external balconies and winter garden spaces are typically under-used. Consideration should be given to providing additional communal amenity spaces, for example courtyards or roof terraces, and incorporating additional areas into apartments. Design solutions to provide a positive relationship to outdoors by considering replacing balconies at high levels with bay windows, juliette balconies, large opening windows or inset balconies away from prevailing wind.
- Where poor external conditions including noise and visual amenity exist on one frontage, homes should have an alternative aspect and private external amenity spaces located on an aspect with better environmental conditions.
- Living areas and kitchen dining spaces should receive direct sunlight for at least 2h a day.



Building should be designed to maximise dual-aspect units (with no north-facing, single-aspect units), maximise views and provide good quality micro-climates within all outdoor spaces.

Refer also to design principles

9.4.4 Private and shared amenity spaces
9.6.4 Optimise internal residential layouts

Useful references

- Mayor of London's Delivering Quality Homes Handbook (Draft, November 2021)
- Emerging Good Quality Homes for All Londoners

9.3.4 Private and shared amenity spaces

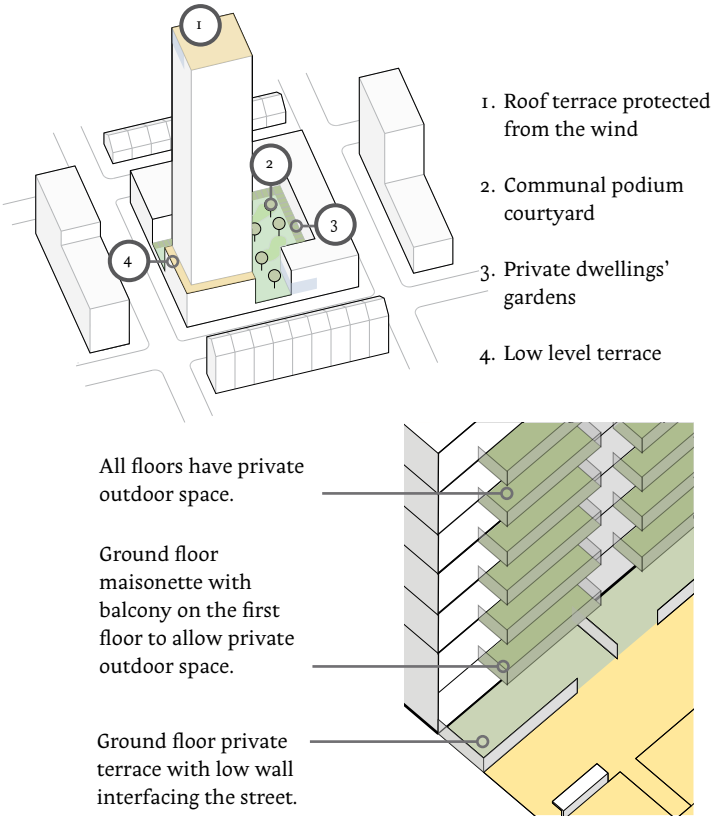
High density developments should incorporate a range of private and shared amenity spaces that foster social interaction and community.

Private and shared outdoor amenity spaces positively contribute to the health and well-being of residents, help to tackle climate change and play an important social role in fostering community, particularly in high-density environments. All dwellings should be provided with private outdoor amenity space in line with the emerging Good Quality Homes for all Londoners SPG and the following recommendations.

Guidance and recommendations

- Private outdoor amenity space can take the form of a garden, courtyard, terrace or balcony dependent on the typology and character of the scheme proposed.
- Private outdoor space should be proportioned to be easily used and a minimum of 5sq.m for 1-2 person dwellings and an extra 1sq.m for each additional occupant. See London Plan Policy D6.
- Communal amenity spaces should be easily accessible to all residents and be programmed-spaces to foster play and leisure activities. Outdoor spaces in apartment buildings should allow 50sq.m of for the first 10 dwellings and 1sq.m for each additional one. This standard is in addition to qualitative guidance within London Plan Policies S4 and D6.
- Communal courtyard spaces should provide attractive, landscaped spaces accessible to all residents and be well-overlooked. Direct access should be provided where possible between the communal courtyards and adjacent private terraces.
- Communal areas provided at higher levels should be protected from wind and the elements by providing enclosed or protected areas.
- Developments with higher proportions of studio (in exceptional circumstances only) and 1-bed apartments should consider providing additional communal spaces for working and socialising, such as dining rooms and lounges.
- In high density schemes with a high proportion of family dwellings, the emphasis should be on multifunctional, rather than mono-functional spaces.
- Opportunities for informal social interaction should be provided along circulation routes within buildings including corridors and lobbies.

Canada Water, Southwark, is a mixed-use residential block that provides semi-private residential amenity space within a communal courtyard that complements private outdoor amenity spaces in the form of balconies, terraces and gardens.



Refer also to design principles:

9.1.5 Flexible and adaptable living spaces
9.4.6 Healthy, quality homes
9.6.4 Optimise internal residential layouts

Useful references

- Mayor of London's Delivering Quality Homes
- Newham Private Outdoor Amenity Space Local Plan Evidence Base
- London Plan Policy D6
- London Plan Policy S4

4. MANAGING INDUSTRIAL AND RESIDENTIAL RELATIONSHIPS

OVERVIEW

Employment uses are an essential component of any prosperous, sustainable and liveable city. However employment land, and in particular industrial uses, is often under pressure from higher-value uses like residential. Maintaining and enhancing employment uses throughout the borough and balancing these with the delivery of homes is intrinsically important to the functioning of London as a whole as well as helping secure Newham's strategic position for the growth of employment and industrial capacity.

The London Borough of Newham has a high concentration of industrial and employment uses essential to supporting a city the size of London. However following the 1844 Metropolitan Building Act, Newham often became the preferred location for heavier, dirty and noisy industry and infrastructure. As a result, many areas developed as less desirable locations and became home to a greater percentage of poorer residents less likely to complain about the environmental conditions resulting from such land uses.

Cities and neighbourhoods which support a range of uses will be more sustainable, economically successful and liveable places in the long term. Although expecting heavy industrial uses to co-exist with residential is often unrealistic and undesirable, the premise underpinning the guidance in this section is that employment uses can and should be integrated into the urban fabric alongside other uses. The design principles and guidance in this section set out strategies to manage the relationship between employment and industry and more sensitive uses, including residential, so that the quality and functions of both can be protected and enhanced.

Intensification of employment and industry

The London Plan sets out policy for the protection and enhancement of Strategic Industrial Locations (SIL) across Greater London. Newham's Local Plan further identifies Local Industrial Locations (LIL) where employment and industrial capacity should also be retained and enhanced. Newham contains a large number of SILs which are unique for their proximity and strategic connection to the City. Newham's core SIL areas are (including LLDC):

- Bow Goods Yard
- British Gas/Cody Road
- Thameside West (Thames Gateway)
- Thameside East (Thames Gateway)
- Beckton Riverside (Thames Gateway)
- London Industrial Park (Thames Gateway)

Within SILs and LSIS, industry must be protected and enhanced and should be intensified with industrial or supporting uses. Guidance in this section provides recommendations on how to achieve this intensification while managing relationships along boundary conditions.

Employment and industrial uses outside these areas are also important in helping to create a diverse and sustainable borough. New development must align with the London Plan's Agent of Change principle and mitigate the impacts from existing noise and nuisance-generating activities. Policy E7 of the London Plan provides a more comprehensive list of mitigation considerations that should be reflected. Design principles and guidance in this section sets out how new development can be brought forward in line with Agent of Change principles and how employment and industry can coexisting alongside more sensitive uses like residential so that they can be retained as land values and pressures for high density, residential development increases.

Co-location

Co-location is the practice of integrated different uses, such as residential and employment, on the same building plot. Often this can provide the most optimised and efficient use of land but it also requires the greatest care to preserve the operational and functional needs of both uses. Co-location will not be appropriate for all uses or locations. Further guidance is provided in this section on when, where and how co-location can be a tool to help deliver high-density development while retaining and increasing existing employment capacity.

The design principles in this section are intended to support the delivery of recommendations of the Employment Land Review, which will indicate the locations and consideration criteria to determine where co-location may be suitable

Useful references

- London Plan Policies E4, E5, E6, E7, D13
- GLA Industrial Intensification and Co-location through Plan-led and Masterplan Approaches
- MoL Industrial Intensification and Co-location Study
- London Borough of Newham: Employment Land Review 2017

9.4.1 Intensification of employment uses and appropriate co-location

Identify opportunities for intensification of employment uses and in which locations it is appropriate for these uses to be combined with residential or other uses.

Co-locating uses can help create efficient and attractive mixed-use urbanism. Many light industrial uses coexist comfortably with other uses, including residential. In high density areas more schemes are coming forward which demonstrate that co-location of industrial is not only possible, it can be an improvement on the existing model of segregating industrial. However, not all co-location is desirable and the following guidance sets out the ways in which residential and industrial can co-exist depending on the specific environmental and spatial needs, in accordance with Local Plan Policy J2.3.b.

Guidance and recommendations

- Consider the type, and also the potential impact/ compatibility of existing surrounding uses, of employment use and its impact on surrounding environment including safety considerations to determine which of the following strategies may be appropriate:

1. Stand-alone: employment uses and residential uses are on adjacent plots with a buffer zone between them, for example a street, open space, or lighter industrial or employment uses.
2. Horizontal mix: employment and residential uses occupy the same plot with either a clear distinction between uses or interlocked.
3. Vertical mix: employment uses and residential are stacked on top of each other, typically with employment on the ground floor and residential above.
4. Stand-alone and segregated: in cases where industrial uses generate substantial nuisance in the form of noise, smells, or heavy vehicular traffic, a segregated area with a substantial buffer zone and separate access to residential uses may be required.

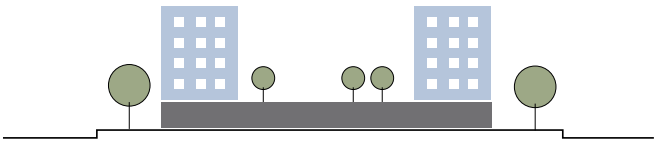
Refer also to design principles

9.6.1 Physical and green buffers
9.6.2 Co-locate uses to create buffers

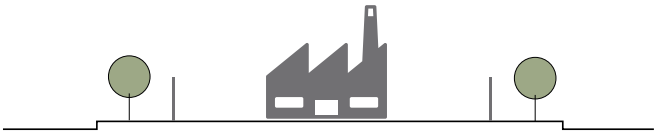
Unite Students co-located with industry, Camden

Stand-alone adjacent: suitable for industrial uses which generate some levels of nuisance, may require separate access or service yard but can create a positive and engaging street frontage.

Horizontal mix: suitable for industrial uses where noise, smells and any service yard requirements can be managed within the building footprint or a self-contained yard. May be appropriate for lighter industrial uses for example some manufacturing, creative uses, storage or distribution.



Vertical mix: suitable for industrial / employment that generate minimal nuisance that can be managed within the building envelope. Frequent heavy vehicles and 'dirty' uses would not be suitable. Appropriate uses could include storage, distribution, or information and technology.



Stand-alone segregated: where employment uses require a substantial buffer zone due to nuisance, safety considerations, pollution or access requirements for example treatment plants, waste facilities, or heavy manufacturing.

Useful references

- GLA Industrial Intensification and Co-location through Plan-led and Masterplan Approaches
- GLA Industrial Intensification and Co-location Study
- Newham Employment Land Review

9.4.2 Environmental quality and nuisance

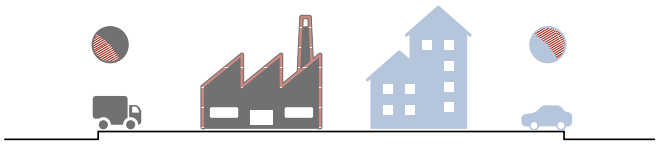
Managing nuisance and environmental quality should be balanced between industrial uses and new development in line with the Agent of Change principle.

Industrial and employment uses can generate noise, air pollution and other nuisance that has often resulted in these uses being excluded or relocated as new residential development come forward. However, these uses are essential components of the industrial operational processes for an economically and sustainably successful city and should, where feasible, be integrated into neighbourhoods. The London Plan recognises the importance of existing industry with the Agent of Change Policy D13 that places 'responsibility for mitigating the impacts from existing noise and other nuisance-generating activities on new noise-sensitive development'. The following guidance provides methods for managing environmental quality in situation where industry can co-exist or be co-located with other uses.

Guidance and recommendations

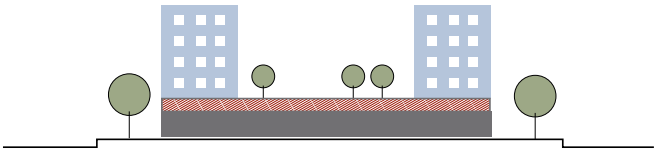
1. Stand-alone: new industrial or employment uses should contain noise and nuisance within the building plot. This may include facade treatments, a landscaped zone or using other lighter-industry as a buffer. Dirtier activities should be contained within the building envelope or a fully enclosed court. A secondary service lane should be considered where uses require frequent or heavier vehicle access.

2. Horizontal mix: where industrial and employment exist within the same plot, noise and dirtier uses should be contained within the building or a concealed service yard. Employment hours of operation should be managed, for example servicing should occur outside of peak traffic times. Separate access should be provided or where access is shared, the times and types of vehicles entering the site should be managed to minimise disturbances.

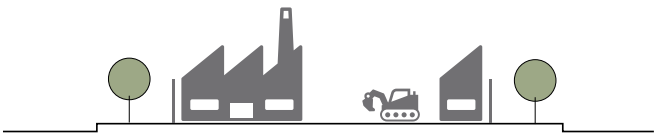


Manhattan District Garage, New York, provides internalised servicing, an attractive facade that animates the street while also mitigating noise. The garage provides accommodation for over 150 municipal vehicles, reducing travel distances and they have also become iconic and a source of neighbourhood pride.

3. Vertical mix: a buffer-floor may be appropriate in managing nuisance between vertically co-located industry and residential. Access and servicing arrangements should be managed to avoid conflict, for example from different streets or an internalised service yard. In some cases, internal service areas can be shared between industry and residential.



4. Stand-alone and segregated: a substantial buffer zone may be required around stand-alone industrial uses. However, this could include other lighter-industry, planting or barriers to reduce noise and air pollution. In some cases, safety, operational hours and environmental concerns may prohibit other uses in close proximity.



Refer also to design principles:

9.5.1 Intensification of employment uses and appropriate co-location

9.6.1 Physical and green buffers

Useful references

- London Plan Agent of Change Policy D13
- MoL Industrial Intensification and Co-location through Plan-led and Masterplan Approaches

9.4.3 Positive ground floor conditions

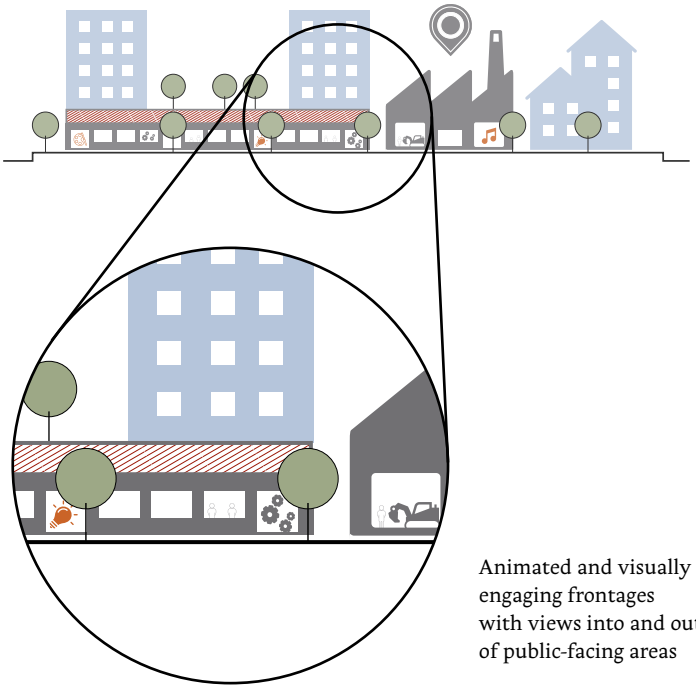
Maintain an attractive and desirable street environment by creating positive ground floor conditions and attractive façades for industry and employment uses along public frontages.

New industry and employment uses can successfully be integrated into existing and new neighbourhoods by managing environmental quality but also by creating positive frontages. How industrial uses relate to the street can serve as a 'store-front' for activities within while also acting as a buffer to any processes that may be a source of nuisance.

The Gantry animated façades provide visually attractive frontage for creative studios, Here East Hackney

Guidance and recommendations

- Optimise plots and reinforce the urban structure by aligning buildings to back-of-pavement.
- Locate pedestrian entrances to employment uses directly on the street.
- Provide animated and visually engaging frontages with a regular rhythm of windows, high-quality cladding, lighting and / or planting.
- Conceal any 'dirty' activities within private, enclosed courtyards not visible from the street or within building curtilage.
- Concentrate similar or complimentary sectors to create a critical mass of activities, increasing opportunities for synergy between businesses and strengthen the identity of the area e.g. creative and cultural industries.
- Locate public-facing activities or staff lounges/ cafeterias, including offices along primary frontages with views onto the street.
- Where industrial is interlocking with other uses, a consistent ground floor treatment can provide a unified visual identity and consistent streetscape. This may be appropriate particularly for industrial uses that include office or commercial spaces that provide activity and can be incorporated into a traditional urban block structure.
- In the case of a data centre, the building's external envelope can provide natural ventilation, with façades that prevent energy input while also contributing usefully to its active energy requirements. This can achieved by utilising cladding and façade shading systems that respond to solar orientation; enhance natural day lighting and ventilation via glazed façades, with external timber louvres.



Animated and visually engaging frontages with views into and out of public-facing areas

Refer also to design principles:

9.5.1 Intensification of employment uses and appropriate co-location

9.5.4 Access and servicing for different uses

Useful references

- London Plan Agent of Change Policy D13
- Newham's Draft Streetscape Design Guide

9.4.4 Access and servicing for different uses

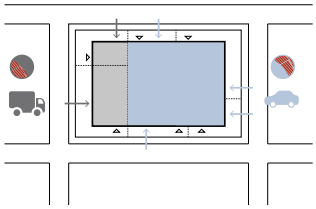
In order to minimise conflict between employment and other uses, provide separate or controlled access and servicing arrangement to plots.

Servicing of industrial uses may necessitate more frequent to access of heavier vehicles or machinery. This has the potential to generate conflict between vehicles and pedestrians, cyclists and residential parking requirements as well as safety considerations. There may be instances where access and servicing arrangements should remain entirely segregated for example with uses requirement frequent heavy vehicles (refer to design principle 9.5.1 for appropriate models of co-location).

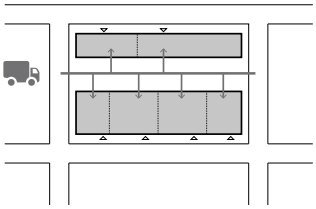
Bow Enterprise Park, Tower Hamlets: a separate access road for servicing of light industrial units segregates industrial and residential uses and creates attractive and functional streetscapes for both.

Guidance and recommendations

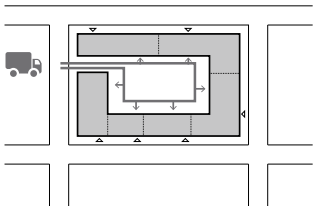
1. Stand-alone: with stand-alone industrial typologies it may be preferable to segregate traffic by providing an internal servicing lane, yard or rear servicing route. Forecourts onto primary frontages should be avoided and sufficient space for the anticipated vehicles be provided on plot to limit vehicles movements on public routes.
2. Horizontal mix: provide separate entrances if within the same building or a rear service route. Entrances to industrial uses should be located on secondary frontages. Preserve amenity spaces of residential uses through appropriate buffers and orientation.
3. Vertical mix: In co-located buildings, resolve servicing internally through internal loading bays or courtyards. Land can be optimised by stacking servicing, for example within a podium, with amenity or residential uses above. Where residential and industrial uses are co-located, it may be appropriate to provide a shared internal loading bay. Deliveries and servicing should be managed through time-controlled access or separate entrances for example for residential podium parking. However, where infrequent servicing is required for industrial uses, shared parking facilities or access can be managed through controlled timing.
4. Stand-alone and segregated: segregate access and servicing of industrial uses likely required with sufficient buffer zone to preserve amenity of other uses and public realm. Heavier vehicles should be restricted to arterial routes wherever possible.



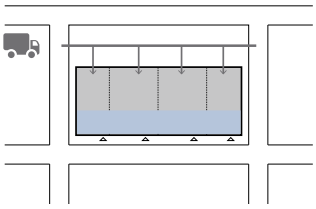
Separate entrances



Internal servicing lane



Internal servicing yard / podium



Rear servicing

- Where single point ingress / egress yards are used provide 8m road widths and allow 2-way flow and 13-25m turning circle. When two points are used reduced space is needed for vehicular manoeuvre. Egress points should have semi-recessed façades to allow clear vision of oncoming traffic.

Refer also to design principles:

9.5.1 Intensification of employment uses and appropriate co-location

9.6.1 Physical and green buffers

Useful references

- MoL Industrial Intensification and Co-location through Plan-led and Masterplan Approaches

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5. MODELLING FOR AIR QUALITY IMPROVEMENTS

OVERVIEW

Air quality is one of the greatest public health challenges facing London. Too many parts of the city, including within Newham, are suffering from poor air quality and this is having a material impact on the health and well-being of residents. With the population of Newham set to increase at a higher rate than Greater London, improving air quality and pollution will continue to require greater efforts.

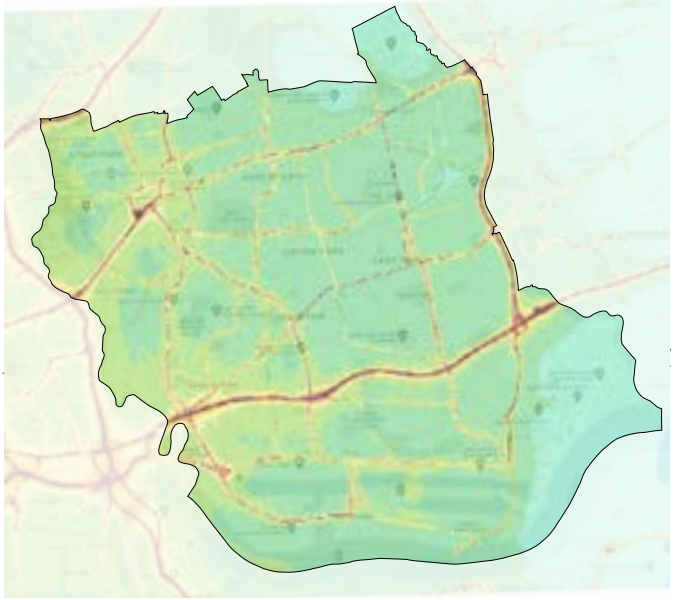
Primary sources of pollution within the borough are generated by transport, construction and employment uses (including industrial). As more development and industry comes forward, the problem of air quality and pollution will only become more acute.

Already much has been done to improve environmental quality within the borough. Newham's Air Quality Action Plan and Climate Emergency Action Plan sets out clear measures to reduce the concentration and exposure to air pollution and positively impact the health and well-being of residents. An extensive air quality monitoring systems has also been implemented across the borough, including an air quality audit extended to all schools, to track levels of pollution and the impacts of any mitigation measures.

The Air Quality Action Plan declared the whole of the borough an Air Quality Management Area (AQMA) for nitrogen dioxide and particulate matter. Five Air Quality Focus Areas have been identified by the GLA including Stratford Town Centre, A118 East (Romford Rd), A13 West (Newham Way), A1011 South (Canning Town) and A134 (Barking Road). See the air quality map in Chapter 3: Functional Character to see these locations annotated.

Newham is targeting 80% of journeys to be done by active travel modes by 2024. However, already Newham has the 4th lowest car ownership rate in the UK, with over half of households not owning a car (ONS, 2011). Much of the air pollution from road traffic is generated by journeys originating outside the borough. Creative solutions are therefore required to minimise the impact of this pollution on local residents.

Source: https://www.londonair.org.uk



Annual mean pollution across Newham (2016)

<16 16 19 22 25 28 31 34 37 40 43 46 49 51 55 >58

Fails annual mean objective Passes annual mean objective

Air quality design principles

The principles and guidance in this section seek to build on Newham's Air Quality Action Plan and Climate Emergency Action plan with clear strategies and metrics for how development can:

1. Reduce the impact of air pollution, particularly adjacent busier roads, through creative design solutions
2. Reduce the levels of air pollution by promoting active travel and reducing vehicular movements in residential areas

Air Quality Assessment

London Plan Policy SI 1 and the Mayor of London's associated draft LPG set out detailed requirements in relation to the design and assessment of proposed development.

Useful references

- London Plan Policy SI 1 (Improving air quality)
- Air Quality Neutral LPG (Consultation draft,)
- Air Quality Positive LPG (Consultation draft,)
- Newham's Air Quality Action Plan 2019-2024
- TfL's Healthy Streets Approach
- Newham's Draft Streetscape Design Guide
- Newham's Climate Emergency Action Plan
- MoL's Local Air Quality Management Policy Guidance

9.5.1 Use physical and green buffers to improve air quality locally

Between major routes and sensitive uses, provide a physical buffer that reduces air pollution and improves views and aspects.

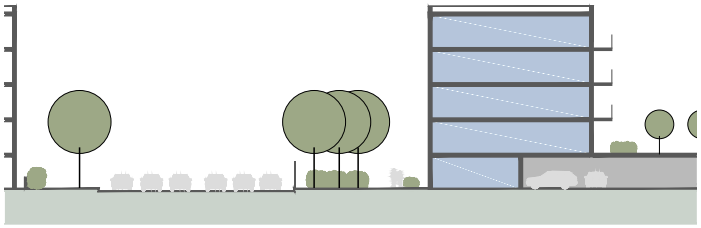
Newham is bisected by several major arterial routes, including the A13, which provide key connections through the borough and to wider London. Although the introduction of electric and low-emission vehicles may improve air and noise pollution along these routes, it is likely they will continue to be heavily trafficked. There are also environmental challenges along local and destination streets. As residential and other sensitive uses come forward in these location, consideration and appropriate mitigation measures should be incorporated to preserve the health and well-being of residents and the quality of public and semi-public spaces.

Guidance and recommendations

- Air quality monitoring should be undertaken in the initial feasibility stages of design to inform appropriate uses and their placement within sites. Residential and other sensitive uses should wherever possible not front directly onto arterial routes.
- Provide a suitable buffer that responds to the levels of noise and air pollution on the site and the proposed uses in line with the following street typologies:

1. Arterial routes: green and physical buffers will likely not have a substantial impact on air quality along the most heavily trafficked routes and should be combined with other strategies. Refer to 9.6.2-9.6.4. Employment and commercial uses are likely to be more appropriate in these locations as they will require less extensive set-backs, green and physical buffers. Physical buffers, for example attractive sound barrier walls combined with planting or green buffer zones will be most effective in these locations.
2. Local and destination routes: along these street typologies less substantial interventions are more likely to be impactful and can include: street trees, planting, segregated cycle lanes, street furniture, on-street parking and building set backs to provide more generous public realm. Certain street trees are more effective in trapping and dispersing and should be prioritised in these locations including: conifers, silver birch, yew, elder and London planes.

Developments along A13 incorporate a green buffer to protect surrounding homes, gardens and streets from poor air quality.



Along busier local and arterial routes a substantial green and physical buffer may be required to provide sufficient mitigation of air and noise pollution for residential and sensitive uses. In these locations and it may be more appropriate to locate commercial, employment or industry.

- There is no 'one size fits all' approach to successfully incorporating green infrastructure to reduce exposure to air pollution. However, a guiding principle is "right intervention, right place". For example, where priority is to protect roadside pedestrians or cyclists, a hedge or green wall can reduce exposure in their immediate wake. Where the priority is a nearby school, a combination of hedge and dense line of trees can provide a taller vegetation barrier, offering protection over a greater distance downwind.

Refer also to design principles:

9.1.21 - 9.1.23 Guidance on building orientation, layout and form to mitigate air and noise pollution
9.5.2 Environmental quality and nuisance
9.1.24 Reduce vehicular movements

Useful references

- Newham's Air Quality Action Plan 2019-2024
- Newham's Draft Streetscape Design Guide
- London Plan Policies SI1, G1 and G5
- Using Green Infrastructure to Protect People From Air Pollution (2019)

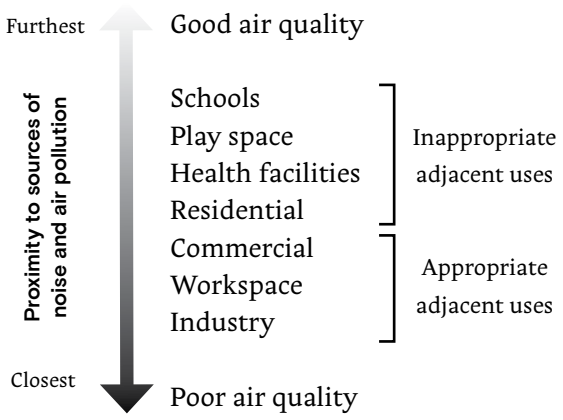
9.5.2 Co-locate uses to create buildings as buffers

In mixed-use developments, use less sensitive uses as a buffer to residential uses and outdoor amenity spaces.

Air quality levels vary across the borough and although work is being done to improve air quality throughout, the considered placement of uses should respond to the existing environmental quality of sites. Masterplans and larger developments in particular have the opportunity to locate more sensitive uses strategically away from sources of noise and air pollution.

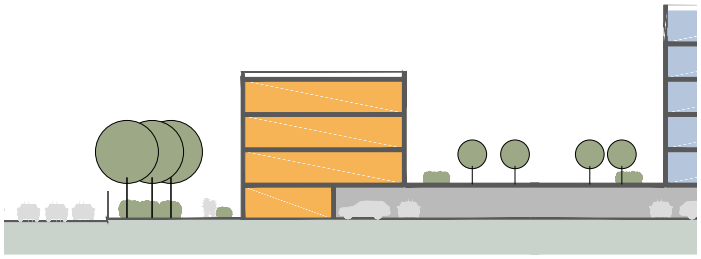
Guidance and recommendations

- Promote co-location within developments adjacent to major arterial routes and local streets with poor air quality so that less-sensitive uses can act as a buffer.
- Consider the following hierarchy in the location of uses in relation to air quality:



- Where dwellings are stacked above commercial or employment uses at ground floor, the storey at which they are introduced should be informed by the air quality impact assessment as a part of an EIA.
- Where commercial or employment buildings are acting as a buffer, applicants should demonstrate how proposals can be easily adapted to high quality alternative uses e.g. suitable building layouts and footprint depths that enable adaptation of offices to dual aspect dwellings, should air quality dramatically improve over time.
- Where land uses use exhaust flues, have these fixed at an appropriate height to expel air pollution, noise and smell away from more sensitive nearby uses.

Industrial developments act as a buffer to more sensitive residential developments. Gewerbehof Laim, Munich, Germany by Bogevischs buero architekten.



Within mixed-use urban blocks, consider locating less sensitive uses as a buffer to private external amenity spaces and residential uses.

- Orient massing of commercial/workspace/industrial buildings to maximise screening of residential and amenity spaces.
- Use semi-enclosed internal courtyards or podiums to provide outdoor amenity and playspace sheltered from air and noise pollution.
- Avoiding the creation of street canyons (which may result in an accumulation of air pollution by restricting dispersion) to encourage air flow.

Refer also to design principles:

9.1.20 - 9.1.23 Guidance on building orientation, layout and form to mitigate air and noise pollution
9.1.24 Reduce vehicular movements

Useful references

- Newham's Air Quality Action Plan 2019-2024
- London Plan Guidance Air Quality Positive
- Air Quality Neutral LPG (Consultation draft)
- Air Quality Positive LPG (Consultation draft)
- Urban Greening Factor LPG (Consultation draft)

9.5.3 Building orientation and massing of residential buildings

Along highly trafficked vehicular routes, orient buildings and massing to maximise the environmental quality of external private amenity spaces, play space and internal spaces within apartments.

High density residential development is coming forward at an increased pace across the borough, particularly around existing centres and areas with good public transport connections. Often these areas overlap with areas of high levels of vehicular traffic and lower air quality. Uptake in electric vehicles and active travel modes is likely to have a greater positive impact on air quality in local and destination streets in the future, and the following strategies should take account of the existing air quality levels as well as future transport modelling.

Stratford, Newham where the massing of residential buildings is concentrated away from the rail lines to create a spatial buffer. The building orientation is balanced by creating an alternative and more attractive prospect to look towards - mitigating impact of noise and air quality as a result of the rail lines.

Guidance and recommendations

- Develop a massing strategy proportional to the external environmental conditions of the site. Development along major arterial routes, such as the A13, requires greater consideration in comparison to heavily trafficked local and destination streets due to higher levels of noise and air pollution as well as the likelihood of sustained levels of vehicular traffic despite any future uptake of active travel modes.
- Mitigate the impact of poor air quality on residents through architectural features and design including:
    - Locate primary façades and private amenity spaces set back and buffered from arterial roads
    - Increase building set-back distances on plot
    - Set back massing at higher levels
    - Introduce blank gables or circulation adjacent to roads to minimise poor quality aspects
- Tall buildings may be acceptable on sites that are constrained by roadside air pollution.
- Using building form, such as angles and stepped façades, to improve dispersion of pollution and encourage air flow.
- Stepped massing of buildings can create a choice of prospects away from the pollution source e.g. into courtyards or terraces, rather than towards busy roads or railways.

Refer also to design principles:

9.1.20 - 9.1.23 Guidance on building orientation, layout and form to mitigate air and noise pollution
9.5.2 Environmental quality and nuisance
9.1.24 Reduce vehicular movements

Useful references

- Newham's Air Quality Action Plan 2019-2024
- Newham's Local Implementation Plan
- GLA Using Green Infrastructure to Protect People From Air Pollution

9.5.4 Optimise internal residential layouts to mitigate the impacts of poor air quality

In locations where residential uses are directly facing onto major arterial roads or heavily trafficked local and destination streets, internal layouts should be carefully considered to maximise the environmental quality in all habitable rooms and outdoor amenity spaces.

In areas with higher levels of noise and air pollution, the internal layouts of apartments greatly impacts occupant behaviour, which in turn can impact internal air quality, and residents quality of life. External glazing may be extremely effective in limiting noise pollution and ventilation systems can greatly improve indoor air quality but if residents can't open a window they may feel frustrated and unable to control their climate. Internal apartment layouts should offer flexibility and provide at least one indoor and outdoor space away from noisy, heavily trafficked routes.

Guidance and recommendations

- Wherever possible, all homes facing onto heavily trafficked routes should have a secondary aspect to allow for adequate cross-ventilation and views out.
- Within apartments, use non-sleeping rooms such as living rooms and circulation areas as a buffer to busier streets.
- Private amenity spaces should be located away from major routes and accessed from living spaces such as dining area, rather than bedrooms.
- External amenity spaces facing onto major routes will always be compromised and underused, even with screening, and should be avoided along all major arterial routes and local and destination routes with higher levels of noise and air pollution.
- Mechanical ventilation systems in buildings interfacing busy streets with either automatic or manual detectors may be utilised to determine when ventilation is needed in a space. Automated systems can be set to a timer or programmed to detect pollutants levels, such as CO_2, and are the most efficient option.

Beckton Parkside orients private amenity spaces and more sensitive internal residential uses away from the A13. Beckton, Newham.

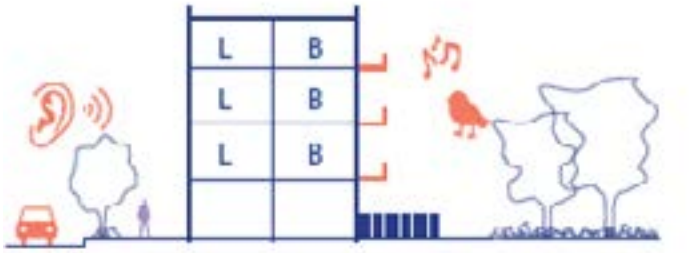


Diagram illustrating concentrating bedrooms on a rear elevation, away from the busy road - offering acoustic and visual privacy. Where provided, balconies should be on side or back façades and accessed from living spaces such as dining area, rather than bedrooms.

Refer also to design principles:
9.1.20 - 9.1.22 Guidance on building orientation, layout and form to mitigate air and noise pollution
9.1.24 Reduce vehicular movements

Useful references

- Newham's Air Quality Action Plan 2019-2024
- GLA's Air Quality Action Matrix
- London Plan Policy D6 and SI 1
- Housing SPG (March 2016)
- Housing Design Standards LPG (Consultation Draft - Feb 2022)

9.5.5 Reduce vehicular movements

All new developments should seek to reduce vehicular traffic through smart-design solutions and making active travel the easiest and most desirable option.

A large percentage of vehicular traffic within the borough is through-traffic and Newham already has one of the lowest levels of car ownership. In addition, Newham is targeting over 80% or journeys to be made by active travel modes by 2024. All new developments should contribute to this ambition by de-prioritising vehicular traffic and making active travel modes the faster, easier and safer choice.

Guidance and recommendations

- Incorporate Low Traffic Neighbourhoods and school street principles in the design of all new build neighbourhoods and developments.
- There is a continued predicted rise in vehicular movements generated from personal deliveries and ride-sharing services. Within larger developments, the opportunity to deliver consolidation hubs should be investigated to reduced multiple deliveries traffic along minor routes. New developments should also incorporate parking for cargo-bikes and smaller, electric delivery vehicles.
- Large proposals should seek to consolidate waste and servicing wherever possible. Smart-technologies should be incorporated that reduce the need for servicing. For example, underground waste storage systems can provide feedback on collection requirements.
- In highly-trafficked areas, time-based servicing strategies should be developed that minimise traffic during peak times.
- Active travel routes through neighbourhoods should have clear wayfinding and separation from vehicular traffic.
- Adequate, overlooked, on-street and private biking parking should be provided in convenient and accessible locations.
- 'Car as guest' road layouts, with pedestrians and cyclists having right of way and limitations on vehicle penetration into a development.

Example of secure, publicly accessible cargo bicycle parking. Photo credit: Mikael Colville-Andersen under CC by 2.0

Refer also to design principles:

9.6.2 - 9.6.4 Guidance on building orientation, layout and form to mitigate air and noise pollution
9.5.2 Environmental quality and nuisance
9.5.4 Access and servicing for different uses
9.1.24 Reduce vehicular movements

Useful references

- TfL's Healthy Streets Approach
- Newham's Climate Emergency Action Plan
- Low Traffic Neighbourhoods
- Newham's Draft Streetscape Design Guide
- School Street Principles
- Newham Waste Management Guidelines

6. SAFEGUARDING AND ENHANCING NEWHAM'S BUILT HERITAGE

OVERVIEW

London's built environment is the product of centuries of design and development, with eras of styles and approaches visible in its layers of streets, spaces, buildings and urban blocks. These layers of architecture and townscape offer a visual richness and in some cases hold specific significance that warrants designation as a heritage asset. In individual cases, this can take the form of a Listed Building or Scheduled Monument; whilst collectively this can form the basis of Conservation Areas and Areas of Townscape Value. In other cases, built heritage does not necessarily warrant specific designation but should be valued as a holistic asset; an intrinsic part of everyday heritage that underpins a local sense of place and character.

Comparatively, Newham has relatively few designated heritage assets afforded protection through the planning system, when considering other London boroughs. Whilst it is home to a rich fabric of historical development, such as Roman Roads and Victorian urban terraces, this everyday heritage and character can be very susceptible to incremental degradation. It is these reasons that heighten the importance of not only safeguarding but enhancing the setting of Newham's built heritage, both designated and non-designated.

Enhancing setting is often the most common tool for valuing heritage assets and character, given it relates to both immediate and distant contexts and therefore has a broad scope of influence. In cases where assets fall within the red line boundary of a development site, great opportunity exists to rejuvenate buildings and spaces with adaptive re-purposing and re-use, such as universities, galleries or marketplaces.

The following pages set out design guidance and recommendations for safeguarding and enhancing heritage assets and their settings in Newham.

Useful references

- Historic England's Design in the Historic Environment
- Historic England's Assessing the impact of tall buildings on the historic environment
- Newham Conservation Area Appraisal and Management Plans
- Shaping Neighbourhoods: Character and Context SPG
- Characterisation and Growth Strategy LPG

Why is built heritage important?

Built heritage forms an important part of the built environment. This can be framed leafy views towards a church spire; the occasional ghost high street signage from bygone eras; or the hypnotic rhythm of bay windows repeating along a Victorian terraced street. This everyday built heritage tells a story through time of different paradigms in architecture and urbanism. More than this, is stand as a testament to the collective memory of society that has stoically witnessed many monumental events over generations. Indeed, increasing public access to heritage buildings through public-facing uses can generate social value by improving the appreciation of local history and former ways of life.

Beyond the importance of valuing what has gone before for its aesthetic and societal meaning, built heritage also represents some of the most adaptable and resilient urban fabric in our towns and cities. For example, terraces of Victorian townhouses have successfully adapted from grand family houses, to ground floor shops and businesses lining high streets, to subdivision into multiple smaller dwellings, to vertical extensions with mansard roofs to create further residential space.

The design of our historical building stock has proved itself time and time again to be resilient and able to flex into alternative futures. This is important for the social and economic sustainability of communities but particularly so for environmental sustainability; limiting the need to demolish and rebuild parts of our cities because behaviours and demands change. This in turn reduces carbon emissions associated with new development and extends the life of embodied carbon set within existing stock.

Finally, built heritage has sustained economic value. Some of the most valuable properties in London are found in historical mansion blocks and converted warehouses. Places where heritage is prevalent tend to hold their value even in the context of extreme market cycles, as fundamentally they are attractive and livable places. Indeed, some of the most successful recent regeneration schemes in London have placed heritage at the heart of their proposals. For example, King's Cross Central Masterplan retained and repurposed a number of derelict heritage assets, including the Granary Building, now occupied by Central Saint Martins, University of the Arts London; and Coal Drops Yard, a former coal distribution warehouse now with a new lease of life as a major shopping and leisure destination, home to a number of desirable designers and brands.

9.6.1 Safeguarding and enhancing heritage assets and their settings

New development should safeguard and enhance designated and non-designated heritage assets, including their settings, integrating them successfully and delivering positive benefits that conserve and enhance the historic environment.

Built heritage plays an important role in creating legible and varied urban environments. It reinforces collective memory and sense of place, as well as providing adaptable and resilient urban fabric that has successfully withstood societal, economic and environmental changes over time. Newham has relatively few Conservation Areas, Statutory Listed Buildings and Locally Listed Buildings when compared with other London boroughs, increasing the importance of safeguarding and enhancing heritage assets and their settings. This does not also preclude future designations as what is deemed a valuable heritage asset continues to evolve over time.

A fine urban grain network of modern townhouses and landscaped streets has been introduced within the setting of the Grade II* listed St Philip's Church. A contemporary reinterpretation of the Georgian townhouse's proportions and materials complements the setting of the church. The scale and layout of buildings and streets enables multiple views of the church to be enjoyed through a rich visual composition. Timekeepers Square, Salford by Buttress architects. Photo credit: Daniel Hopkinson

Guidance and recommendations

- Proposals should demonstrate a baseline analysis of local heritage and character, identifying assets and opportunities to enhance their prominence and role through retention and re-use or proposals that positively contribute to their setting.
- Enhancing the setting of designated and non-designated assets can be achieved through a number of ways including:
    - **Views:** use new development to frame views and vistas towards important assets and landmarks, rather than blocking or interrupting them. Proposals for tall buildings should provide Townscape and Visual Impact Assessments and Landscape and Visual Impact Assessments as appropriate to demonstrate how the location and design of the scheme does not negatively impact on the setting of the asset.
    - **Scale and massing:** new development should allow 'breathing' space to assets through leaving public realm around or stepping massing away from them; reinforcing their visual prominence and avoiding cluttering their immediate setting. All proposals for public realm must have a clear function and role, working in synergy with the asset to avoid the creation of 'dead' space.
    - **Streets and spaces:** infill proposals should sit comfortably within the pattern of existing development, whilst larger developments can establish a new pattern of appropriately proportioned streets and spaces. This can be achieved by taking cues from the existing urban grain, such as the prevailing street and pavement widths; building height : street width ratios; block dimensions; and tree planting and landscape styles.
    - **Materials and methods:** new development should prepare a material palette and strategy that works in harmony with the materials of the asset itself. This can include similar sources, colours and textures, alongside traditional or contemporary methods of construction, chosen to complement or positively contrast with the asset. As a general rule, materials and methods should be as high quality as those used in the existing asset.

- **Vernacular:** designers should explore how local vernacular (and that of the asset) can inform their proposals, drawing inspiration from distinct features, architectural motifs, forms, geometries, materials and details etc. Where this approach is taken, proposals should present a contemporary reinterpretation of these features, avoiding a pastiche designs. Faithful interpretations are often only acceptable where the highest standards of quality and attention to detail can be secured from consent through to delivery.
- **Typologies:** residential developments should promote use of different typologies, particularly locally characteristic examples, that can help the new 'stitch into' the existing context and setting of the heritage asset, by way of scale, form, proportions and architecture. Key elements of traditional typologies should inform proposals, such as the pitched roof, vertical proportionality, rhythm of bay windows and choice of brickwork that comprises the core essence of an urban terrace characteristic to parts of Newham.

- Proposals should start from a basis of retaining, rather than replacing, designated and non-designated built heritage assets in schemes. These assets can provide a counter point to new development, contributing to a rich visual composition and resilient city making.
- Repurposing of assets can pave the way for heritage-led regeneration, often functioning best when maintained with public-facing, non-residential uses and activities particularly at ground floor, to encourage public enjoyment and engagement. Identifying alternative uses can also help secure the future of assets in perpetuity. Such uses can include:
  - Cultural uses: galleries, exhibition spaces, theatres, concert halls, event venues, restaurants, bars etc.
  - Civic uses: libraries, archives, schools, universities, auditoriums, government offices etc.
  - Community uses: places of worship, community halls, volunteering and time bank centres etc.
  - Commercial uses: offices, meanwhile uses, artist studios, marketplaces, food halls, hubs etc.
- When retaining and repurposing a heritage asset, any alterations should generally employ the principle of subservience, to avoid detracting from the design integrity of the original building. This can be achieved through proposals of either a lower height or articulated massing, as well as a material palette that complements and positively contrasts with the original building.

Redevelopment of the former Plaistow Hospital, including the refurbishment of five Victorian hospital buildings and a mixture of new-build flats and houses. The proposals introduced a permeable, pedestrian-centric network of buildings, streets and spaces and gave breathing space to the historical buildings. Proposals chose a material palette and typological mix that was characteristic to both the heritage assets and local context. Upton Village, Plaistow by PCKO architects. Photo credit: Robert Greshoff Photography

This scheme involved the refurbishment of the Granary building and the adjoining Malthouse with a contemporary extension, using form and materials palette to positively contrast with the original buildings. It is a truly mixed-use scheme home to a riverside café and creative industries studio space alongside new homes. Ice House Quarter, Barking by Schmidt Hammer Lassen and Pollard Thomas Edwards. Photo credit: Tim Crocker

Refer also to design principles:

9.3.2 Design and placement of tall buildings

Useful references

- Design in the Historic Environment
- Assessing the impact of tall buildings on the historic environment
- Conservation Area Appraisal and Management Plans
- Shaping Neighbourhoods: Character and Context SPG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7. UNLOCKING SMALL SITES IN RESIDENTIAL NEIGHBOURHOODS

OVERVIEW

London and indeed Newham is facing an acute housing shortage with a defined need to increase the supply of new housing across the borough. Policy H1 of the London Plan sets Newham a ten year housing target of 32,800 net new dwellings, with only the neighbouring borough of Tower Hamlets sitting with a greater target. This housing target is due to be realised through proactive Development Plans that advocate a design-led process to optimise capacity across allocated sites, windfall sites and Opportunity Areas. Of these windfall sites, small sites make up a significant source of housing delivery, with London Plan Policy H2 setting a target of 3,800 due to be delivered by 2028/29.

Small sites can be found in a number of contexts but are particularly prevalent as infill opportunities in residential neighbourhoods of terraced, semi-detached and detached properties; owing to the fine grain and loose arrangement of plots and buildings associated with this condition. These typologies are commonly found in high concentrations in parts of Beckton, Canning Town, Upton, East Ham, West Ham and Plaistow. Parts of these areas are well served by close walking distance to services and amenities including town centres and public transport, making them ideal locations for intensification and gently increased residential densities.

It is in these areas that small sites offer real opportunity to not only deliver much needed new housing, but also deliver enhancements to local character and amenity. These enhancements can include introducing elements of rich contemporary townscape, improved legibility, pocket parks, walking and cycling connectivity, as well as an improved sense of safety and local pride. Small sites are well placed to deliver these acupuncture enhancements to already well-loved neighbourhoods and these opportunities should not be overlooked.

Useful references

- London Plan (2021) Policies D3 and H2
- Small Sites Design Codes LPG (Consultation draft)
- Optimising Site Capacity: A Design-led Approach LPG
- Shaping Neighbourhoods: Character and Context SPG
- Characterisation and Growth Strategy LPG

What defines a small site and how can they be unlocked for development?

A small site is defined in the London Plan (2021) as any site below 0.25 hectares in size. They can be sub-categorised into numerous typologies based on their common conditions, opportunities and constraints; much in the same way urban morphology has been classified into built typologies in chapter 4 of this report. Classic examples can include backland (sites at the interior of an urban block with access but no street frontage), end of terrace infill (narrow sites sitting at the end of a run of terraces), street infill (sites sitting between two flank walls along a street frontage).

Small sites can be unlocked through a number of means including strategic studies that identify, categorise and quantify the number of homes or mixed uses that could be achieved on such sites. As well as understanding the broad capacity which could come forward on small sites, these studies are also useful to understand the deliverability considerations and the types of delivery models which could be appropriate for bring forward development. For instance, many small sites can be appropriate for community-led building initiatives, targeting the delivery of new affordable housing for local people within neighbourhoods.

A particularly effective tool for unlocking development includes the preparation of a suite of design codes, developed for each of the typical site typologies found within a defined area. These codes can establish a set of design-led parameters based on common opportunities and constraints associated with each site typology. Design codes can establish a basic and replicable spatial framework to set the first moves in terms of scale, massing, frontage, access, daylight, sunlight, overlooking etc. which provides certainty to prospective applicants and has opportunity to expedite the planning process. This study recommends a borough-wide housing design code is prepared for the most common small site conditions in Newham, taking account of guidance in the Mayor of London's draft Small Sites Design Codes LPG.

The following design principles in this section set out a number of priorities for small sites found in Newham, with reference to enhancing local character and amenity in residential neighbourhoods. Guidance refers to typical conditions associated with common small sites. Different principles are relevant to different types of site and therefore should not be considered cumulatively, but used where relevant to the site or condition in question.

9.7.1 Enhancing character through adaptation and alteration of houses

Adaptation and alteration of residential buildings should positively contribute to neighbourhood character by complementing or positively contrasting with the local streetscape.

Individual houses, such as detached, semi-detached and terraced typologies, provide a number of opportunities for adaptation and alteration. Typically side, rear or vertical extensions, these projects can optimise the layout and volume of habitable space in a dwelling, reducing the pressure to relocate should lifestyles and requirements change e.g. a growing family, as well as offering home owners scope for personalisation. Adaptation and alteration therefore have great influence on positively shaping the local character and streetscape of Newham's neighbourhoods.

Side extension to a semi-detached dwelling that successfully adopts the principle of subservience by stepping back the front building line and scale, as well as introducing increased volumes of glazing to reduce the visual bulk of the addition. A contemporary material choice also successfully complements the tone of the original building. Wolfram Close, Lewisham by Selencky Parsons. Photo credit: Andy Matthews.

Guidance and recommendations

- Extensions should adopt the principle of positive subservience in order to complement, rather than detract from, the design integrity of the host building; be that its original built form or architecture.
- This can generally be attained by insetting and stepping back to reduce the 'visual bulk' of the addition's mass, as well as introducing a contemporary material palette that uses colour and texture to achieve a positive contrast. The following rules apply:
    - In side extensions - step back the front building line at increments, step down in scale, introduce a positive material contrast and preserve the original roof form e.g. gable end, hipped end
    - In vertical extensions - inset the new mass back from the original building envelope, introduce a subtle but positive material contrast, grade the roof form if extending a pitched roof e.g. gable roof to mansard roof (a flat roof is acceptable if this is the same as the original roof form)
    - In rear extensions - step back massing in accordance with the 25° and 45° BRE rules, freedom to innovate by introducing an entirely new contemporary material palette - given the rear of properties have less impact on the townscape (whilst street facing extensions should be more subtle and positively contrast with the existing materials - see above)
- Whilst all extensions should be subservient in scale and massing, in some instances there can be opportunities to innovate in terms of materials, fenestration, unique form and different methods of construction. These choices are often best achieved in rear extensions, which have less impact on the townscape character of the original building, but must always form part of a well-resolved and compelling design proposal.
- In other instances, it may be more appropriate to follow a more faithful approach towards materials, form and architecture, particularly where the townscape is particularly sensitive to change. This should not be a binary rule for Conservation Areas, as often the most constrained conditions can give rise to the most compelling contemporary design responses.

Refer also to design principles:

9.7.2 Unlocking development on narrow and constrained small sites

9.7.3 Accommodating scale and massing in low rise residential neighbourhoods

Useful references

- London Plan (2021) Policies D3 and H2
- Small Sites Design Codes LPG (Consultation draft)
- Shaping Neighbourhoods: Character and Context SPG

9.7.2 Unlocking development on narrow and constrained small sites

Unlock development on narrow and constrained sites through design solutions that avoid direct overlooking of neighbouring properties and make best use of available land.

Small sites are often constrained in both their dimensions as well as the close proximity of neighbouring properties, making them tricky to unlock. Proposals need to work hard to protect and achieve privacy and positive outlook for both neighbours and new residents. Design solutions exist to overcome common issues associated with these sites that can unlock new housing across the borough.

Guidance and recommendations

- Front to front distances in residential neighbourhoods should typically achieve separation between buildings that are equal to the height of the elevations facing the street. In constrained sites this can be difficult to achieve and therefore the building line and massing of a proposal should be stepped in order to:
    - create dual aspect with outlook into private amenity space e.g. courtyard
    - achieve comfortable front to front distances at intervals, with tighter areas in between.
- Back to back distances have conventionally used distances of 18m between the rear elevations of buildings, though this again is difficult to achieve and does not optimise the capacity of small sites. Closer distances can be achieved through:
    - careful orientation and arrangement of habitable rooms to avoid direct overlooking;
    - direct overlooking into circulation spaces such as entrance halls, stair wells and utility rooms;
    - non-standard window design such as angled, oriel, high level and rooflights to design oblique (rather than direct) overlooking; and
    - position primary aspect e.g. main entrances of new buildings in backland sites away from existing neighbouring windows.
- In street facing sites such as gardens or garages, proposals should be subservient to the 'host' property and that of the neighbouring property to avoid

This mews street uses a stepped layout and massing in a backland site to maintain a sense of openness across the block. Oriel windows and frosted glass are used to animate the facade and reduce the visual bulk, whilst allowing in daylight without comprising privacy. Moray Mews, Finsbury Park by Peter Barber architects. Photo credit: Morley von Sternberg

Examples of non-standard window designs that bring sunlight and daylight into properties without compromising the privacy and amenity of proposed or existing dwellings. Photo credit left: Alan Williams. Photo credit right: doublespace photography inc.

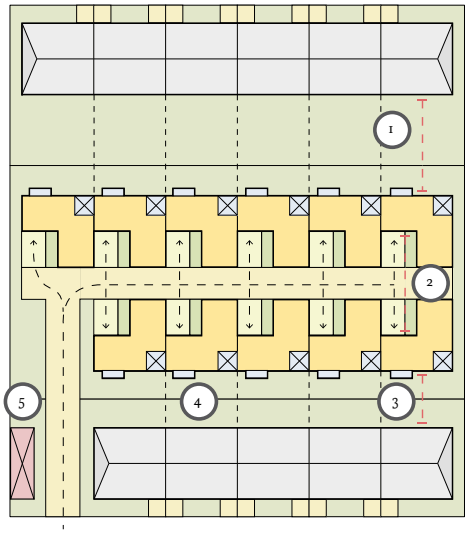
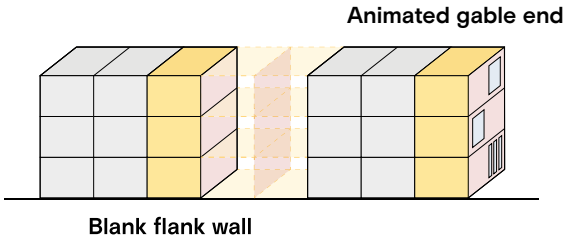


Diagram of backland development establishing appropriate front to front and back to back distances.

1. Back to back of new development to neighbouring property at c.18m.
2. Front to front of new development achieving appropriate separation distances at intervals.
3. Back to back of new development to host property at c.15m.
4. Oriel windows with frosted glass reduce visual bulk of the facade, allowing daylight and privacy.
5. Communal bin stores within 30m from the furthest new dwelling.

A new dwelling house delivered on a narrow end of terrace site. A bay window and fenestration continue the rhythm of the primary street frontage, whilst access to the dwelling is on the gable end. Massing and building line is stepped back to create subservience, whilst the material palette complements the existing terraces. Lucien Road, Wimbledon Park by Harp and Harp architects. Photo credit: Adam Scott

Below left: mid-terrace infill sites should leave flank walls blank to enable adjacent development to come forward on either vacant sites or vertical extensions on lower scale properties.



Above right: end of terrace infill sites should animate gable ends with window placement that provides passive surveillance to the street.

creating an overbearing sense of enclosure. This can be best achieved by a lower height and articulated massing; generally one storey lower, though accommodation can be provided within the roof.

- Backland sites can often accommodate a greater scale of development but typically should be no greater than the surrounding buildings. These proposals should employ a stepped massing to avoid a 'wall' of development, helping maintain long views and a sense of openness across the block.
- End of terrace plots can form appropriate small sites for new dwellings, though they must follow a series of rules to ensure they do not detract from the integrity of the original 'host' terrace. Rules include:
    - respect the established building line but stepping back at points can enable positive subservience in the massing;
    - if locating front doors on the flank wall, ensure the primary frontage is articulated with fenestration and massing to maintain the rhythm of the street e.g. bay window, window size and placement;
    - preserve the characteristic roof form of the terrace to avoid unbalancing the built form e.g. gable end
- In mid-terrace infill sites, proposals should avoid placing windows on flank walls which would inhibit the potential of bringing adjacent sites forward for development. In this condition flank walls should be conceived as party walls i.e. blank, abutting wall that complete an uninterrupted terrace frontage.
- Residents should carry their waste and recycling no more than 30m to a collection point, with waste operatives having to move it no more than 15m from the collection point to their vehicle; therefore generally, no development front door should be more than 45m from the highway. Bin stores should always be well resolved and integrated into the overall site layout and design.

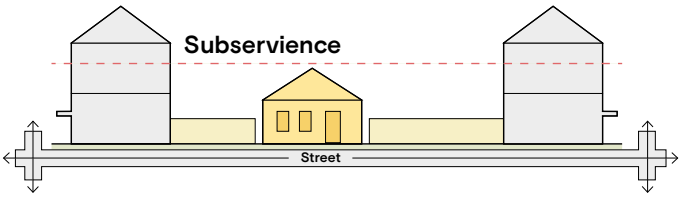


Diagram illustrating street facing development, such as a former garage site or corner plot garden, that is subservient in scale and massing to neighbouring properties.

Refer also to design principles:

9.2.2 Active residential ground floors
9.7.1 Enhancing character through adaptation and alteration of houses
9.7.3 Accommodating scale and massing in low rise residential neighbourhoods

Useful references

- London Plan (2021) Policies D3 and H2
- Small Sites Design Codes LPG (Consultation draft)
- Optimising Site Capacity: A Design-led Approach LPG

9.7.3 Accommodating scale and massing in low rise residential neighbourhoods

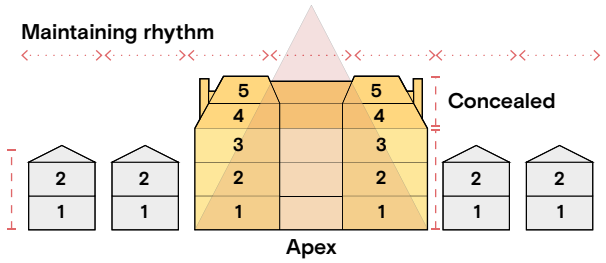
Optimise the capacity of small sites in close reach of services and amenities through sensitive use of scale and massing to step up the density of proposals in low rise residential neighbourhood contexts.

Small sites can be found in many of Newham's residential neighbourhoods, including parts of Canning Town, Upton, East Ham, West Ham and Plaistow. Associated with the loose arrangement of inter-war suburban detached and semi-detached housing, and the spacious linear arrangement of post-war walk-up flats, these typologies are characterised by low rise and low density forms of development that can be sensitive to increased height and massing of proposals. Unlocking development on such small sites presents an important opportunity to introduce new homes in areas already well served by close access to services and amenities.

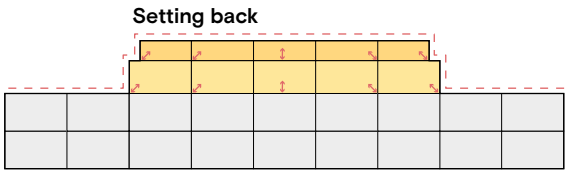
Guidance and recommendations

- The second storey (and upwards) above the prevailing height of local context should reduce visual bulk by either concealing upper levels within the roof form (if in an area characterised by pitched roofs); or by setting back massing at increments to create terraces (if in areas characterised by flat roofs).
- Accommodating upper levels within pitched roofs can be achieved through concentrating mass at the apex of a site e.g. centre of the site and gently sloping from this point. Dormer windows can be used to break the roof line and provide partial concealment.
- Architecture can be used to further reduce the visual bulk of increased mass, using fenestration, material treatment and detailing to differentiate between the mass at lower and upper levels. Typically a contrast between lighter and darker materials and richer and more sparse detailing on upper or lower levels can be successful to differentiate the two.
- Combining adjoining sites can provide opportunity to increase scale and mass, concentrating this at the apex of the site, though care should be taken to maintain the street rhythm by using a stepped form or meeting point of two sloping eaves to link between two main building forms located on each of the original plots.
- In detached and semi-detached properties, maintaining breathing space along street facing elevations is important to retain a sense of rhythm

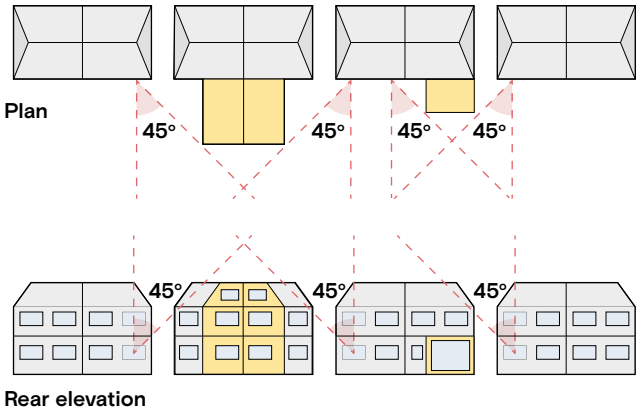
This contemporary arts and crafts style apartment block successfully accommodates its upper levels within the roof form in an area characterised by two and three storey terraces. The material choices, simple detailing and projecting gables reduce the impact of the increased scale and massing. Nunhead Green, Peckham by AOC architects. Photo credit: David Grandorge.



5 storey proposal on a combined site, maintaining the rhythm of mass and void through a link between the two main building forms. Upper levels are concealed within the pitched roof form.



Upper levels are set back from the building envelope to reduce the visual bulk and maintain a comfortable street width to building height ratio.



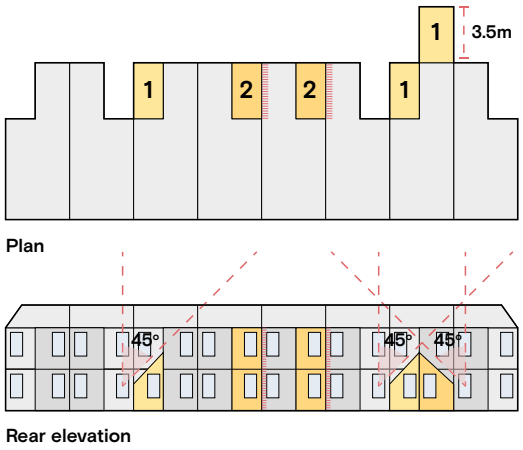
Rear extensions in semi-detached properties sitting in conformity with the BRE 45° rule for maintaining daylight and sunlight to neighbouring properties.

This corner site steps up scale improve local legibility within a low scale context. The mass is broken down by stepping down to the scale of neighbouring properties. Upper levels are successfully contained within the roof form to reduce the visual bulk of the scheme. Costa Street, Peckham by WHAT_Architecture. Photo credit: Cupra Pizarras / WHAT_ Architecture

Occupying a corner site in a suburban context, this development accommodates four storeys with the upper floor set within the roof form. A pitched roof reinforces the suburban context, with the two sloping eaves meeting to preserve a sense of rhythm of built and open space along the primary street frontage. Flora Court by Pitman Tozer architects. Photo credit: Pitman Tozer / Brick by Brick.

between built mass and open space, avoiding a 'wall' of development.

- Corner plots provide opportunity to increase scale and mass in low rise contexts, concentrating this at the corner of the site to create marker points within local townscape and improve local legibility.
- Massing should be stepped down towards lower scale neighbouring properties. Dual frontage should address both streets with no blank frontage, stepping the building line where necessary to respond to that of adjacent properties.
- Deep gardens in detached and semi-detached properties can enable extensions beyond the established rear building line but this needs to sit in conformity with the established 45° BRE rule; measured from the centre of the lowest window in a habitable room on the existing neighbouring property.
- In terraced housing rear projections often already exist. In single storey extensions, it can be possible to extend back to the depth of the existing projection, though generally this should not exceed 3.5m. Roof form should also be pitched to obey the 45° BRE rule.
- Two storey extensions are only appropriate when infilling between existing two storey rear projections is possible e.g. non-symmetrical, abutting a blank flank wall of the neighbouring property.
- In all cases rear extensions must be designed to not negatively impact the amenity and enjoyment of neighbouring properties; by avoiding overlooking and protecting daylight and sunlight access.



Rear extensions in terraced properties where single storeys do not exceed 3.5m in depth and use a pitched roof form to avoid blocking daylight and sunlight into neighbouring properties. Two storey extensions has filled gaps between two non-symmetrical rear projections, abutting a flank wall of the neighbouring property.

Refer also to design principles:

9.3.2 Design and placement of tall buildings
9.7.1 Enhancing character through adaptation and alteration of houses
9.7.2 Unlocking development on narrow and constrained small sites

Useful references

- Small Sites Design Codes LPG (Consultation draft)
- Optimising Site Capacity: A Design-led Approach LPG
- Shaping Neighbourhoods: Character and Context SPG
- BRE Site Layout and Planning for Daylight and Sunlight: A Guide to Good Practice BR209 2022 edition

9.7.4 Opportunities for mid-rise development in low rise settings to enhance local character

Specific site conditions where mid-rise development can positively contribute to enhanced local character and amenity in low rise settings.

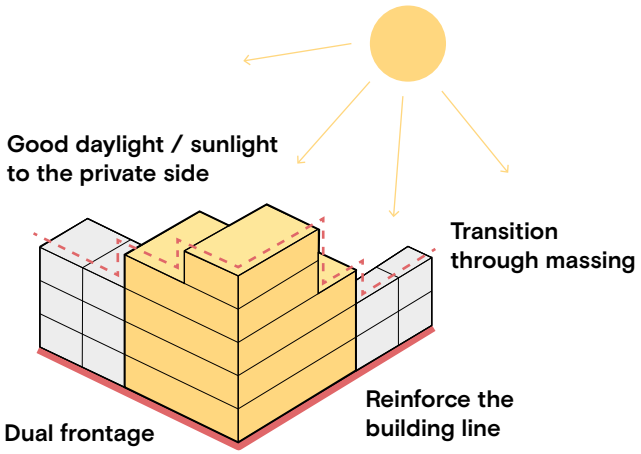
There are some typical site conditions that can be appropriate for mid-rise development i.e. between four and six storeys. Increasing scale above the prevailing low rise datum can enhance local character and amenity, as well as optimising capacity to make best use of available land. These site conditions are common across Newham borough and can offer benefits including improved local legibility, comfortable street enclosure and natural surveillance onto public spaces.

This scheme comprises three detached villas set over six storeys. This mid-rise scheme successfully facilitates a gradual transition from the seven storeys building fronting Forest Gate High Street to the three and two storey residential context further back. The uppermost storey is set back from the building line and a change in fenestration and materiality positively contrasts with the principal building mass, helping to reduce the visual bulk. Image credit: Buckley Gray Yeoman Architects.

Guidance and recommendations

Block corner

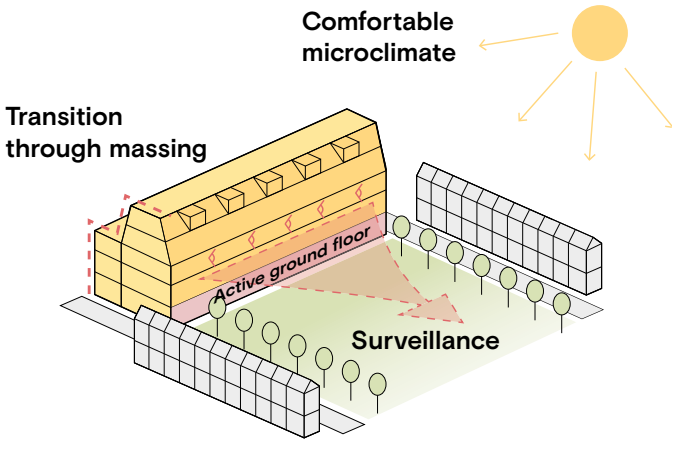
- Proposals should increase scale to mid-rise levels, creating local focal points that improve legibility within a neighbourhood.
- Proposals should provide dual frontage by 'turning the corner' and placing windows and doors on both façades, improving natural surveillance of the street.
- Proposals should secure the perimeter of the block with continuous frontage and reinforcing the established building line, as well as stepping massing down to meet building heights of adjacent buildings.
- Proposals should demonstrate how the 'private' sides of the building benefit from good quality amenity space and daylight.



Proposals on block corners can be found in residential and town centre settings. Securing the perimeter of the block can enhance security and prevent access to inside the block.

Fronting existing or new public space

- Proposals should increase scale to mid-rise levels, elevating the status of the public space within the street and open space hierarchy.
- Proposals should establish positive, continuous frontage that improves natural surveillance of the public realm.
- Where appropriate, proposals should accommodate active ground floor uses, helping activate and animate the public space and engender a sense of safety.
- Scale and massing should be designed to avoid negatively impacting the micro climate of the public space with careful consideration of sunlight and wind.



Mid-rise development can enhance the character and amenity of public spaces by creating a strong, well defined frontage that enhances the sense of safety and comfort through natural surveillance and enclosure.

Town centre

- Mid-rise proposals are appropriate where a prevailing mid-rise datum has been established, achieving a consistent building height that reinforces the coherence of the built form as a distinctive place.
- Proposals should reinforce the established building line and shoulder height, before stepping back at increments above this; creating a sense of continuity by preserving the established datum and building height : street width ratio as perceived from the street.
- Proposals should maintain the rhythm of elements that repeat along the facade, such as the proportion and placement of windows and entrances; and architectural features such as cornicing and detailing.

Edge of town centre

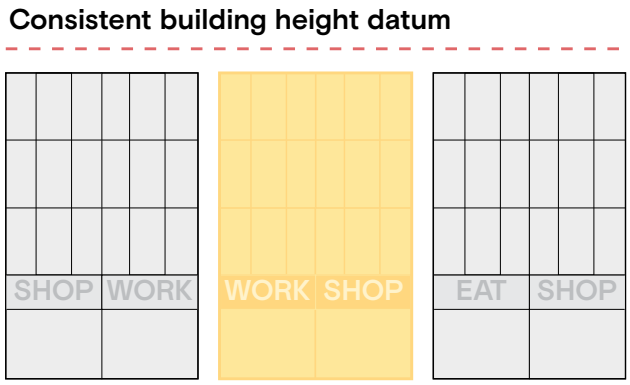
- Proposals should increase scale to mid-rise levels at the edge of town centres where this would create a comfortable transition in building heights.
- Proposals should use massing to step up and down in a way that negotiates between the tall or mid-rise scale of the town centre, and the low rise scale of the surrounding context.
- This design strategy can improve the coherence of the built form, improving local legibility by intuitively and sensitively communicating the transition from one character to another e.g. residential neighbourhood to mixed use town centre.

Reinforcing the street hierarchy

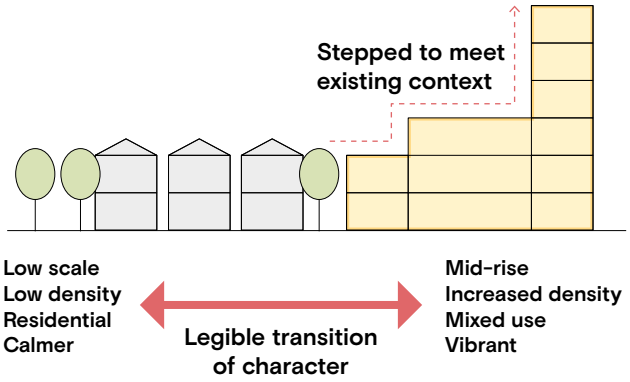
- Proposals should increase scale to mid-rise levels on wide roads where the building height to street width ratio is less than 1:1 (building height : street width), and to create wider public realm where appropriate, such as a new local square.
- This can create a more comfortable sense of enclosure at the street level as well as reinforcing the status of the street within the street hierarchy.
- Achieving a 1:1 ratio is typically appropriate, particularly when infill development is introduced to established low scale settings, though this can be greater in high density environments e.g. town centres, tall building zones and transform areas.

Refer also to design principles:

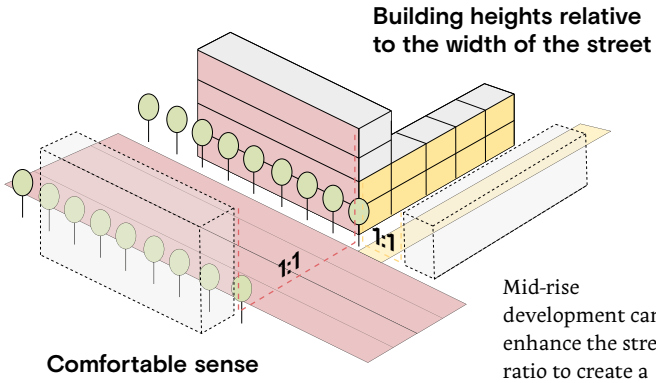
9.1.3 Foster ownership of the public realm
9.2.2 Active residential ground floors
9.3.1 Streetscapes along busy corridors
9.3.2 Design and placement of tall buildings
9.7.3 Accommodating scale and massing in low rise residential neighbourhoods



Town cetres should establish a consistent building height datum to help unify different building types and styles, harmonising often disparate features and reinforcing a dinstinctive sense of place.



Proposals should establish a positive and gradual transition at edges, providing visual cues through the built environment that one character area is changing into another.



Mid-rise development can enhance the street ratio to create a more comfortable sense of enclosure.

Useful references

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