

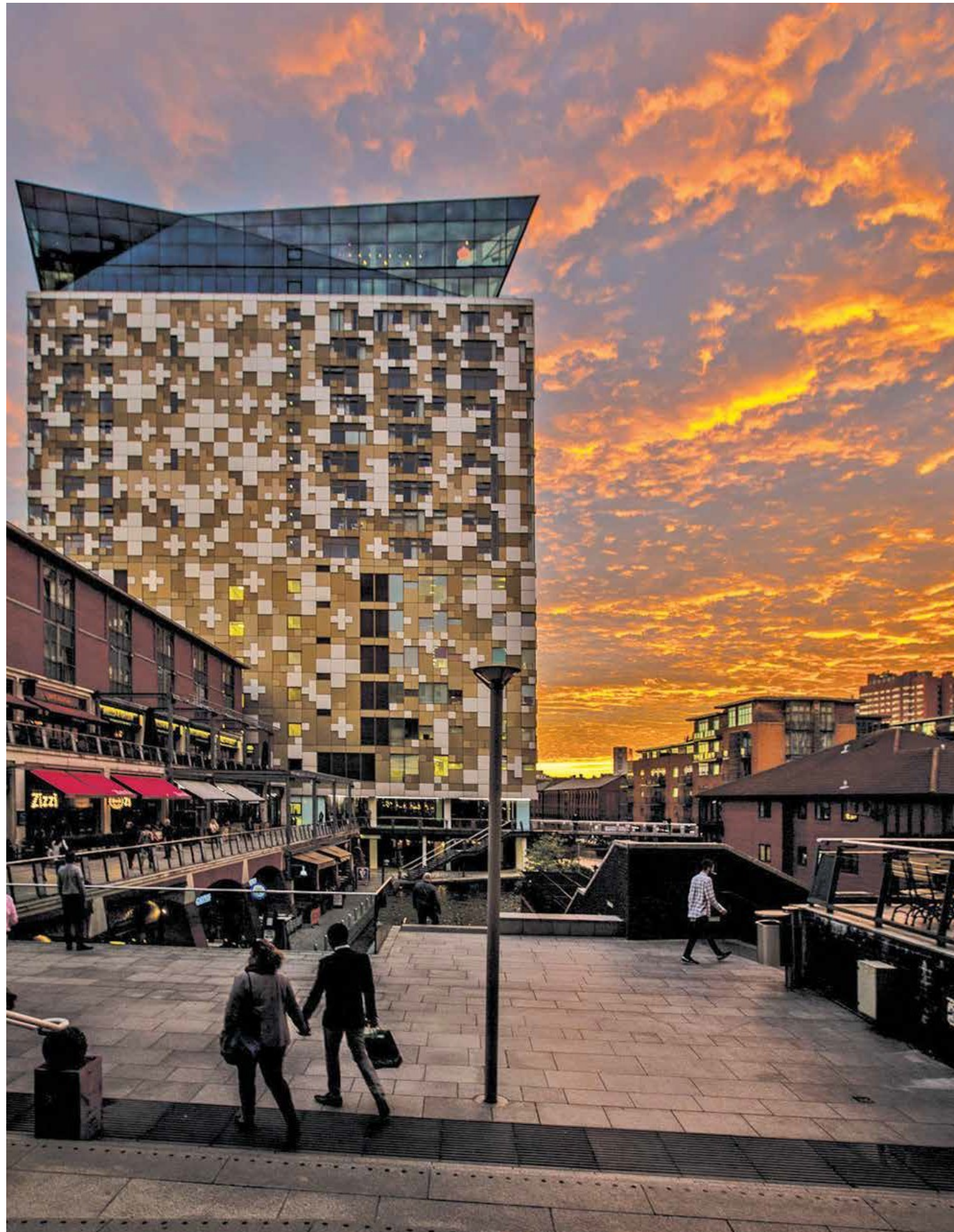
# Birmingham Design Guide

Healthy Living and Working Places City Manual

September 2022







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# 1 Neighbourhoods

## RETAINING QUALITY AT HIGHER DENSITIES

1.1 In successfully integrating higher density proposals into an area, designs will require a clear understanding of surrounding character area, with a considered, bespoke architectural response that increases densities whilst protecting (where relevant) and enhancing the established character. In certain areas, such as the city's mature suburbs or certain conservation areas, achieving this balance may present a particular design challenge, due to the primary role plot proportions, landscape, setting and building size play in defining character. In these locations, innovative design will be key.

1.2 Where high density proposals (in line with BDP Policy TP30) are promoted or supported by the City Council, designs should utilise these opportunities to enhance areas of the city; and deliver quality living and working environments.

1.3 Where increases in scale and density leads to an accepted alteration in character, developers must consider the role their site may have within any wider character change that may occur. Using existing urban grain, topography and landscape features to help guide proposal, applicants should demonstrate the contribution their site could play in wider character change; and that their design is appropriate within this potential future context.

## CITY NOTE LW-1

Layouts and architectural response

1.4 Architecture must be used to successfully balance the most efficient use of land, whilst creating innovative public and private spaces that support health and well-being.

1.5 If proposals seek to reduce the City Council's privacy distances and/or the size of private outdoor amenity space to achieve this, the architectural solution should present an internal and external environment that is not diminished as a result of this, with biophilic design at its core.

1.6 Solutions may consider enhancing internal environments as a means to compensate for any reduction. Use of steps in the building form or projections may enable a number of smaller outdoor spaces to be created. Creating recessed balconies may enable primary living spaces to be set back, reducing amenity impact from a reduced separation distance. Innovative, non-standard layouts and orientations may offer solutions, but these must be clearly demonstrated and architecturally led, with occupier's health and well-being at the heart of any design.



Leamington Grand Union, Glenn Howells Architects.  
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## CITY NOTE LW-2

### Street environment - street width/building heights

1.7 Beyond private spaces within higher density proposals, designs need to consider the relationship between the height of buildings and the width of the surrounding street; and how this may influence the quality of the surrounding environment.

1.8 Where development seeks to substantially alter an existing relationship/ratio, designs must consider adjacent public realm and how people wish to use these spaces with development supporting and allowing these functions to continue. Any shortfalls in privacy distances (City Note LW-3) will need to be justified.

1.9 Whilst increasing densities can help enhance the intimacy and human scale of spaces, the relationship between the building and street environments needs to be appropriately balanced. Levels of natural light, over-shadowing and micro-climate will be the primary indicators in assessing whether a relationship/ratio work appropriately together, to create the external environments desired.

1.10 Existing environments may alter as a result of higher density development, which could be positive or negative. It is the role of the designer to effectively demonstrate their proposal will create positive environments for all users.

1.11 Where proposals fail to successfully achieve this, the City Council may require the implementation of its minimum privacy distance requirements (City Note LW-3) to help achieve it.

## PROTECTING RESIDENT AMENITY

### CITY NOTE LW-3

#### Residential privacy and overlooking

1.12 The City Council will require the application of minimum privacy distances where it is considered necessary to retain or

enhance the character of an existing area, and/or to effectively protect resident amenity and privacy. The standards should be applied to all new development adjacent to an existing residential use; and within new housing schemes.

1.13 The weight given to these standards may be influenced by the location of the development; and the scale of surrounding properties. Within the city centre the standards will be applied more flexibility. But, all exceptions to these distances will be considered on a case by case scenario.

#### Standards:

- 21m between building faces for 2 storey dwellings and 27.5m for 3 storeys and above; and/or where main living room/kitchen windows above ground level overlook existing conventional dwellings. The separation distance should be increased by 2m for every 1m rise in ground level between new and existing dwellings. This standard will be more strictly applied at the rear rather than the front.
- Single storey development may not be so critical in terms of overlooking from upper storeys, but any reduction in standards will be assessed on a site by site basis.
- 5m setback per (residential equivalent (3m)) storey\* where primary windows (habitable rooms for residential development from main areas of activity and shared circulation space for non-residential) overlooking existing private space is proposed. This applies independently of the minimum spatial separation requirement.
- 12.5m minimum distance between elevations with habitable room windows and opposing 1 and 2 storey residential flank walls. An additional 3m for every flank wall storey over 2. Where a flank wall will be situated at a higher level than a windowed elevation, the separation distance should be increased by 1m for every 1m change in ground level.
- The erection of a screen wall or fencing, of at least 1.8m in height on the appropriate boundary, unless adequate mature screening or fencing already exists.

**\*Explanatory Note:** "To be properly interpreted as meaning 5m setback per storey for residential development, or 5m setback per 3m in height for non-residential development"



CITY NOTE LW-4

45 Degree Code

Allied with privacy distances, the City Council will also utilise the 45 Degree Code (the Code) to reduce the impact of oblique overshadowing and overlooking from properties or sites located to the side of existing properties.

1.14 The application of the Code will primarily relate to all household extensions (including conservatories), but it may also be applied to any development proposal that will impact on the privacy and amenity of existing residential, such as bungalows, houses and out-of-centre low-rise flats up to 4 storeys. Application of the Code outside of these circumstances will be dependent upon the context and character of the application site.

1.15 The Code is based on a 45 degree (imaginary) line taken from the nearest primary habitable room\* window (front or rear facing) to the proposed development. The Code will not generally be applied from side windows, unless they are the primary source of light/outlook from a primary living space. The trajectory of the measurement should create a clear line of sight, which any development proposal must not break, or interrupt. Proposals that exceed this trajectory will not be supported.

\* Habitable rooms include living rooms, bedrooms, kitchens and conservatories. They do not include rooms such as bathrooms, utility rooms, halls, landings or garages.

Point of measurement

1.16 The scale of development proposed will guide the point from which the 45 degree measurement should be taken:

- For a single storey development - from the mid-point of the nearest ground floor habitable window.
- For a 2+ storey development - from the quarter point of the nearest ground floor habitable window. This will also apply to any additions to an existing single storey extension.
- If there is no habitable ground floor window, or if a first floor window is nearer (and so more likely to be affected), the line should be taken the mid-point of the nearest first floor window.
- For open-plan habitable rooms/spaces - from the mid-point of the principal source of light (largest opening) if more than one opening.

Existing extension

1.17 If the nearest habitable room window is within an extension, the measurement should be taken from it. Once both properties (proposal and neighbours) have been extended, any further extensions will be assessed on their merits.

Existing conservatory

1.18 If the nearest elevation has a fully glazed conservatory, the point should be taken from the habitable room window from which the conservatory is attached.

Measurements from bay windows

1.19 Where the nearest habitable room window is a bay window, the point should be taken from a set back position in line with the outside wall from which the bay projects. If the bay has non-glazed sides, the measurement should be taken from the window.

Joint development with neighbours

1.20 If neighbours submit joint planning applications for extensions/developments of the same size and built at the same time (must be confirmed in writing), flexibility in the Code may be allowed between these two properties. However, the Code will be applied to any other neighbouring properties affected by the proposal.

Side extensions

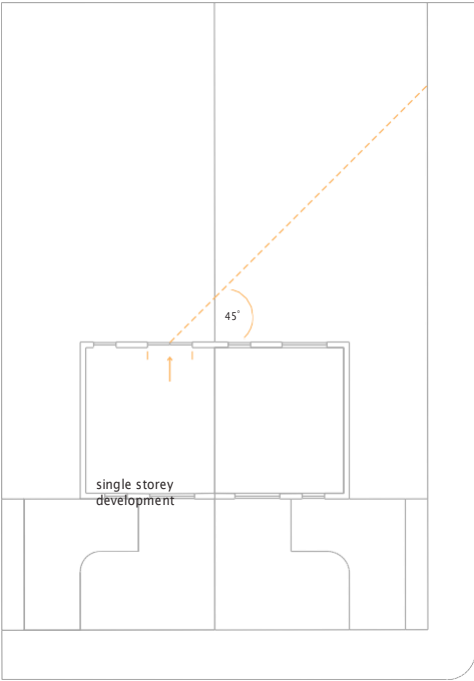
1.21 The Code will be applied to side extensions on existing properties, where the proposal projects beyond the front or rear elevation of the neighbouring house. This may arise in cases where houses are built on a staggered building line. In these scenarios, each case will be assessed on a site by site basis, considering whether habitable rooms will be effected; and the extent of amenity impact.

Extension to historic terraced properties with rear wings

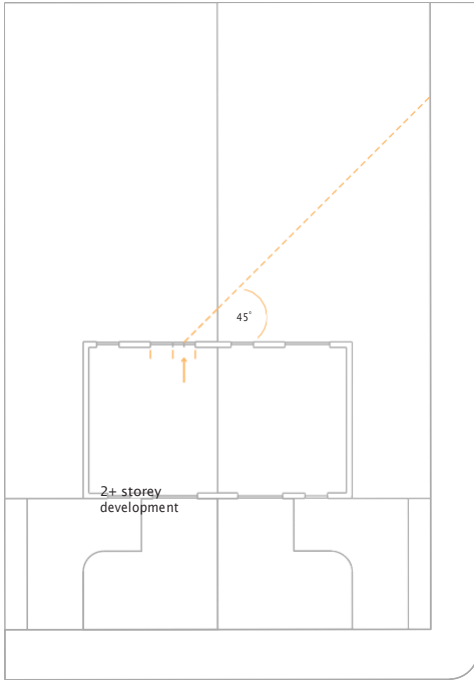
1.22 The Code will be applied to any proposed extension. However, assessed on a case-by-case basis, it may be acceptable to apply a single storey extension to an existing wing (which would exceed the Code). Issues such as outdoor amenity space and the siting of adjacent properties may influence the acceptability of proposals.

1.23 The Code will be applied consistently by the City Council to help guide the appropriateness of new development adjacent to existing residential uses. However, there may be cases where a greater setback will be required due to the scale of development proposed; and/or level changes that would enhance overlooking or shadowing. Conversely there may be scenarios where level changes or existing structures (of an equal scale) may justify the proposals breaching the Code line. The distance between the new building/extension and the neighbouring property may also be taken into account. The greater the distance, the less potential impact on neighbouring outlook and light.

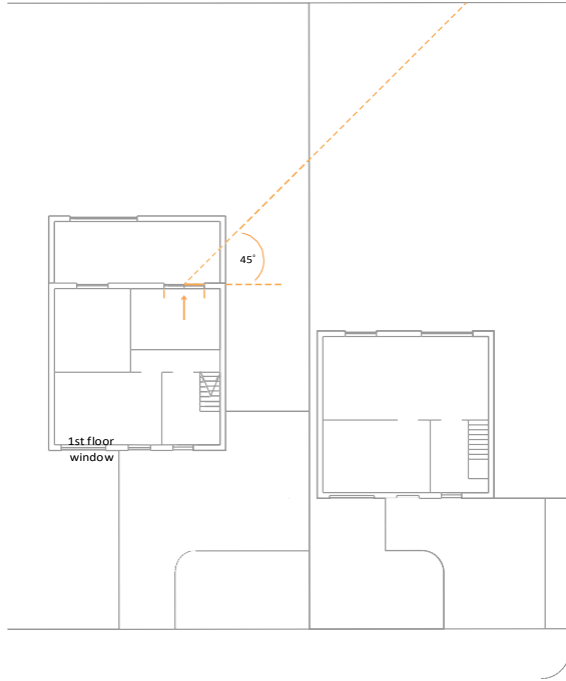
1.24 The need for an increased setback, or the acceptability of a reduction, will be assessed on a site by site basis by the City Council.



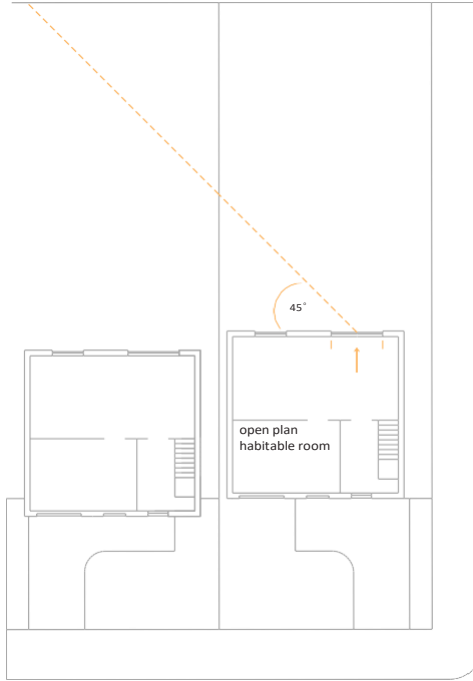
Single storey development



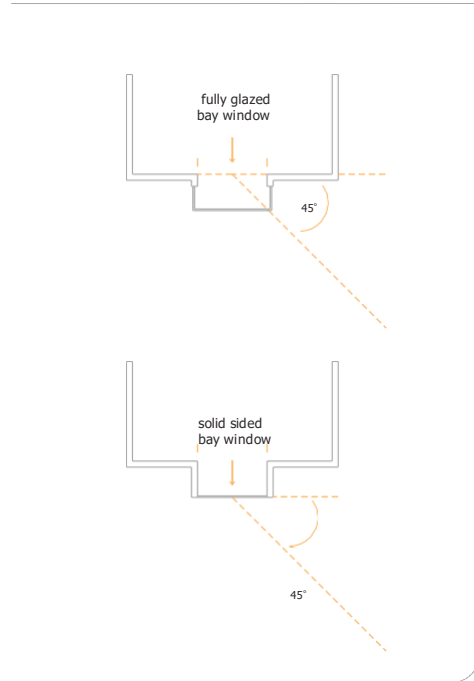
2+ storey development



1st floor window



Shared living space



Bay windows

## 2 Buildings and their uses

### ARCHITECTURAL COHESION AND QUALITY

2.1 Birmingham's architecture is fundamental to its continued growth and evolution, providing inspiring, functional and viable buildings that enhance their surroundings and fulfil the needs of occupants and users.

2.2 The external appearance of the building is a key component of quality architecture, taking design cues from existing character and effectively translating this into modern buildings that attract users, create delight and innovate. Where appropriate, given location or use, this may extend into the creation of landmarks that have a distinct architectural character and role. Whilst not every building needs to create a visual landmark, it must be well composed and balanced to help deliver quality.

2.3 Coupled with an aesthetic quality, buildings must function effectively and deliver internal environments that support the health and well-being of all occupants and users. In their design, consideration must be given to how people will want to use the space, ensuring layouts function effectively and deliver high levels of amenity.

2.4 In helping to create their buildings, architects and designers must balance the following elements in composing their design:

### CITY NOTE LW-5

#### Integrating biophilic design principles

2.5 The City Council believes health and well-being must be at the core of development, with biophilic design (relating to human inborn desire to connect to nature) playing a key role in achieving this. The Covid 19 pandemic has highlighted the importance of nature and green assets where people can connect and associate with the natural environment for physical and mental health. This inherent connection to nature must be a fundamental element of our city as it continues to develop and evolve.

2.6 As detailed within Design Principle 5, landscape must be an integral element of any development. Equally building(s) must respond to landscape created (or present), ensuring internal environments and their occupants gain direct benefit from this element of a design. At its core, occupants should be able to (at least) view the natural surroundings from all the primary spaces in the building.

2.7 To help create biophilic informed building designs, proposals must consider:

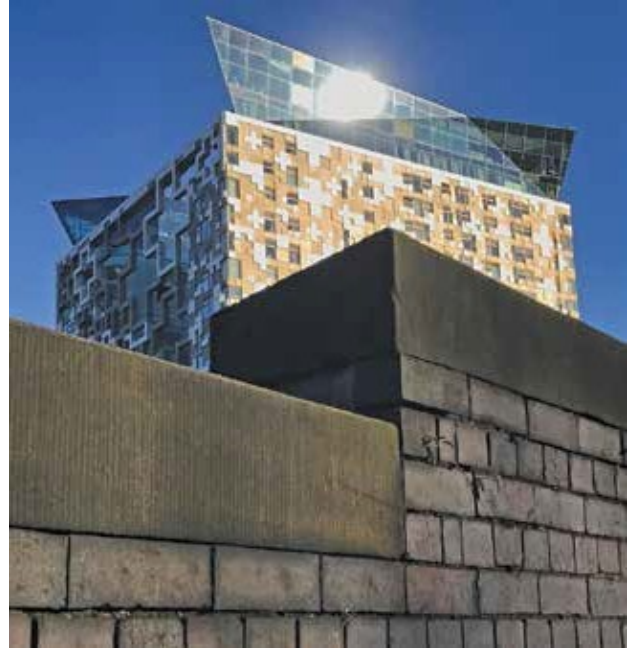
- **Orientation** - seek to maximise levels of natural light, reduce shading over the landscape, ensure the building and landscape are not detached, use the landscape as the focal point;
- **Block and building form** - design for maximum outlook and engagement of the surrounding landscape;
- **Internal layouts** - site primary spaces to maximise views and engagement with the landscape and natural surroundings, ensuring main living spaces and work spaces such as staff rest areas, canteens, break-out spaces have views over landscape, benefit from natural light and enable direct access (where possible) to outdoor environments. Provide space for plants to be located within buildings;
- **Large glazing and floor to ceiling heights** - use generous ceiling heights and large glazing (doors and windows) to make the most of views to the outside. Where solar gain is an issue, apply shading systems, not smaller glazing units;
- **Rooflights** - use rooflights to provide views of the sky and aid levels of natural light. In spaces where there is no or limited opportunity for visual connection to green assets, the sky can provide a biophilic resource;

- **Green elements on buildings** - use living roofs and walls to create additional green assets or where landscape provision is scarce;
- **Borrowed landscape** - consider how views of existing green assets in the surrounding area can be used to provide a biophilic resource; and
- **Natural products and forms** - utilise natural materials (stone, brick, timber) and consider the use of organic forms in internal environments and/or external forms, where this works with local character.

2.8 Whilst largely beyond the scope of planning, interior design plays a key element in achieving biophilic designs and the City Council encourages proposals to create internal spaces led by biophilic design principles. The health and well-being benefits can be particularly beneficial for the interiors of places of work, education, health and community uses.

2.9 The City Council encourages the application and certification of WELL Building Standards ([www.wellcertified.com](http://www.wellcertified.com)) particularly for workplace environments. The standards 'comprehensively address not only the design and operations of buildings, but also how they impact and influence human behaviours related to health and well-being'.





**CITY NOTE LW-6**

**Strong concept**

2.10 The concept behind a building should be drawn from the creativity of the architect, whilst pulling and utilising appropriate elements of the surrounding character area to help the building knit into and positively add to its surroundings.

2.11 In presenting the concept behind a design, designers and applicants are encouraged to explain the 'story' of what informed and inspired the design submitted; and how it will add to the surrounding context.

2.12 The City Council welcomes considered architecture that seeks to challenge and innovate. But this does not mean every proposal must strive to be a landmark or bold statement. Whilst there is a place for such statements in appropriate locations, on the majority of sites it is unlikely to be the desired approach.

2.13 The 'challenge or innovation' may merely be a contemporary interpretation of an existing character or architectural style. The importance is to ensure the design has a strong concept/rationale that delivers good, cohesive architecture.

2.14 This ethos should be applied to all building types, including those that utilise stock book building types. Whilst the City Council recognises these stock book types can play a role in achieving viable development; to be effective, these must be flexible, enabling architects to adapt and evolve them to effectively respond to and enhance their surroundings. The nature of the place specific adaptation will relate to the site, but there should be flexibility in materials and façade detailing; the location orientation and entrance areas; and the overall scale and/or mass.

**CITY NOTE LW-7**

**Form, mass and scale**

2.15 The form, mass and scale of the building should generally have been informed by the character of the surrounding area and appropriate adjacent buildings. Whilst a modern interpretation may not need to follow an historic form, the scale and mass should align with its surroundings, unless there is a clear design justification for deviating from this. Where large multi-building proposals are being developed, the topography, streets and spaces hierarchy, and adjacent sites should help inform an appropriate scale and mass for blocks/plots, from which specific forms can be developed. In developing the form of buildings consideration should be given to how steps, setbacks, breaking blocks, roof orientation and typology can be used to help add interest to a form, and may help reduce the visual mass and scale where desired.



**CITY NOTE LW-8**

**Façade composition and detailing**

2.16 The building’s façade, allied with its form, will play an instrumental role in delivering coherent architecture. The nature of the building’s use and location may dictate how bold or contemporary an approach is. Whatever the architectural style, buildings must display a coherent architectural approach, with well-proportioned, balanced facades that have attractive, considered detailing and a limited palette of quality materials.

2.17 The façade and internal layout are intrinsically linked and must work together to create a well composed façade, with interest and articulation. The internal layout must not dominate and lead to a visually monotonous façade that hinders the quality of the design.

2.18 Whilst repetition within a façade can aid rhythm, symmetry and balance, the singular repetition of elements (such as one window size in a large façade), without appropriate articulation and detailing, can create lifeless elements. In composing facades proposals must consider the visual relationship between the different elements, and how collectively this composition achieves balance, rhythm, variety, interest and order.

2.19 Well composed facades are likely to contain a degree of projecting and recessed features to aid interest and articulation, utilising the design of doors and windows (with their surrounds), and in appropriate locations, features such as bays, gables, eaves, chimneys; or via materials, through physical change, or variation in pattern/arrangement. Such details can be further enhanced at night, with the use of appropriately sited architectural lighting to punctuate selective elements.

2.20 Doors and windows have a big impact on the balance and composition of the facade and the quality of internal spaces. They must reflect the scale, proportions and style of the building (so that larger buildings will also have larger front doors and more glazing) and be arranged in a logical hierarchy and rhythm (normally helping to express a vertical or horizontal façade emphasis). Specific consideration must be given to the design and detailing of windows. These must seek to minimise the use of caps, mullions, transoms etc, to enable the glazing span to complement the

wider façade. Where such detail is applied, they must align with the façade in terms of proportions and orientation. Any conflicts that cannot be resolved with a different system must be effectively masked with the use of frameless systems.

2.21 Front doors and entrance areas should be clearly defined, welcoming and generally open on to street frontages. As with the windows, the doors and their associated glazing system must effectively complement the wider façade in their stature and design.

2.22 Things to avoid include: an incompatible mix of architectural styles or features; an apparently random mix of window positions, sizes and styles; applying too many materials; buildings with undersized doors and windows; adding vents and other utilitarian features at the end of the design process; bland, flat building facades, especially facing the public realm; (non-authentic) mimicking of existing historic features and architectural styles; and trying to enliven a dull building by ‘sticking on’ features, decorative brickwork or random finishes such as patches of render.

**CITY NOTE LW-9**

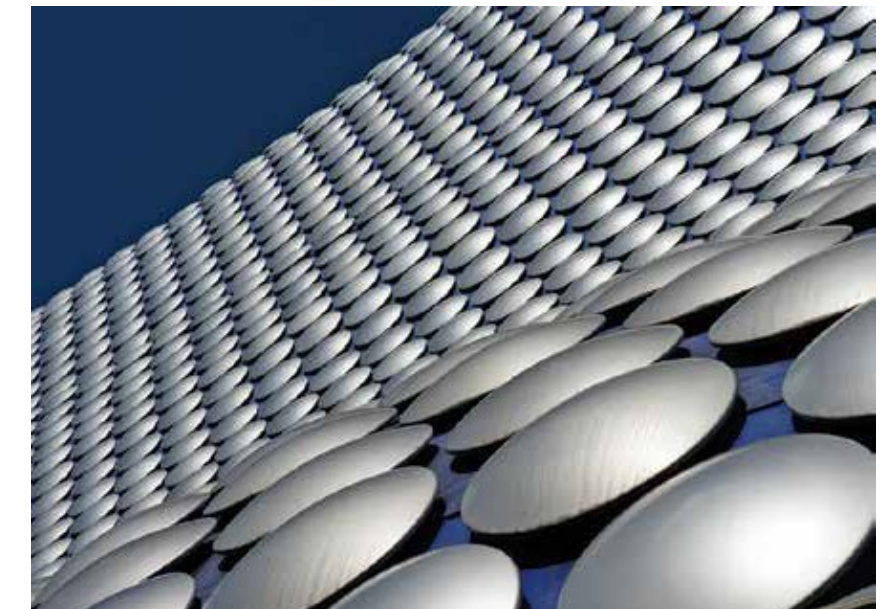
**Utilitarian infrastructure**

2.23 Utilitarian features should be integral to a building’s design, not an afterthought. Rainwater downpipes should work with, not against, the façade’s appearance and rhythm. Mechanical plant, utility boxes, vents and other unattractive features should be discreetly positioned away from building frontages and masked/integrated appropriately into roofscapes or other elements of the building so that they do not detract from the streetscape or skyline. The external materials, detailing and finish of such components should complement and align with the other façade detailing of the building (such as windows and doors, door furniture, fascia boards). Poorly detailed and located, these elements can severely impact on the quality of the finished building.

2.24 The location and potential impact of externally located plant must be appropriately considered during the design process. Where it is to be located on the roof space or other prominent areas of the buildings, architects must treat these areas as ‘fifth elevations’, with equal consideration given to their materiality and visual impact.



*Bramall Music Building, Glenn Howells Architects.  
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**DESIGNING HIGH QUALITY HOMES**

**CITY NOTE LW-10**

**Contemporary architecture**

2.25 Allied with an appreciation of surrounding character, the City Council supports the introduction of contemporary residential architecture that challenges the pastiche norms prevalent across residential developments. In doing so, architects must design considered, spacious living environments for the 21st century, which fulfil and reflect the modern needs of residents.

**CITY NOTE LW-11**

**Internal space**

2.26 To aid the creation of functional, well-proportioned homes, the City Council seeks the application of the Nationally Described Space Standard (NDSS) as detailed in the Development Management in Birmingham Development Plan Document Policy DM10. Beyond merely aligning with these standards, architects should think carefully about how space can best serve the needs of residents and support their well-being. These may vary with the types and mix of homes being designed, and the demographic of residents; with designs responding appropriately to these variants. But the single binding element across all house types should be the design of functional, efficient layouts that minimise circulation space and devote sufficient space to primary living areas.

2.27 This may require architects to create tailored layouts and designs to deliver living environments that successfully meet these needs, giving space to rooms and areas where it will be most beneficial; and consider the siting of internal walls, doors and

entrances. These bespoke, considered layouts can help create better living environments for every household scenario, from aiding residents with restricted movement, to supporting community and social cohesion in shared and multi-unit residencies; and ensuring families have sufficient room for collective and individual needs.

2.28 In designing layouts, architects must ensure the following elements and considerations have been successfully integrated into a design to help create a functional home:

**Adequate storage space**

2.29 Sufficient internal space (free of boilers and other infrastructure) should be provided to store every day and occasions items. As a minimum, this should enable the storage of items such as a vacuum cleaner, ironing board, dirty laundry, cleaning products, coats and suitcases. Consideration should also be given to how sports equipment (particularly in a flat) can be stored.

**Functional kitchen space**

2.30 Kitchen areas must have sufficient space to accommodate kitchen appliances, appropriate levels of storage, waste and recycling provision and adequate space to prepare food. If the kitchen is to house the washing machine, this must also be accommodated without compromising the kitchen function.

2.31 If a kitchen is to also serve as dining space, layouts must clearly demonstrate there is sufficient space to enable this dual function.

**Adaptability**

2.32 Does the layout and space provision allow for potential changes to people’s lives, through its current layout or simple adaptation? Could it accommodate or support people with specific health or care needs? Could the function of rooms be altered? Does circulation cut through primary living space, effecting potential adaptation? Is there scope to extend the house?

**Functional living spaces**

2.33 Primary living spaces beyond the kitchen (living rooms, dining areas and bedrooms), must effectively fulfil the needs of all residents and allow flexibility in the furniture and its layout within the room (can a double bedroom become a twin?). This should ensure all occupants can comfortably gather in the living room and dining room. Consideration should also be given to how these rooms and spaces could function with guests and friends.

**Communal space**

2.34 Within multi-unit schemes such as apartments, student schemes and elderly accommodation, communal spaces should be provided that enable people to interact with one another; to help support a sense of community. This should include formal areas such as lounges, exercise spaces, gyms, amenity space or shared dining space; and informal spaces such as generous stairwells, 2m+ wide corridors, lobbies or laundry areas.

**Communal circulation space**

2.35 Internal and external circulation space should be fed by natural light; and be of a sufficient width to allow furniture to be easily moved and residents to engage if desired, whilst not restricting movement. To enable this to occur, a minimum of 2m wide corridors should be used.

**Private space and homeworking**

2.36 Allied with appropriate communal and primary living spaces, layouts must also ensure each resident has access to private space, whether for homeworking or private activities. Appropriately sized bedrooms (accommodating appropriate sized bed, wardrobe, desk and circulation space) can often fulfil this function; but within a multi-person home, it may be appropriate to provide a space for play and/or home working and study.

**Noise mitigation**

2.37 Layouts must consider potential for noise disturbance within a home and between homes. Within a home, architects should consider how noise from living and dining areas may impact on bedrooms and private areas, and apply layouts that help mitigate this. Use storage space, circulation or bathrooms as buffers. Don’t locate the smaller bedrooms (children’s) above or next to living rooms. Is the kitchen the best location for a washing machine, within an open plan living space?

2.38 Schemes should consider potential noise from neighbours. In designing layouts, consideration should be given to the siting of adjacent rooms (where attached), together with how communal circulation space, stairwells and lifts may create noise disturbance.

2.39 This wider noise consideration should also extend externally, considering how any adjacent uses may generate noise that may impact on resident amenity; with a proposed layout responding appropriately.

**Washing and drying facilities**

2.40 Residents must have the ability to effectively wash and dry laundry. Within apartment schemes, architects should consider how residents will be able to effectively undertake this, without having to resort to makeshift washing lines on balconies; or using internal heating systems that result in condensation and damp issues. To help prevent this, the City Council recommends the creation of communal laundry facilities.



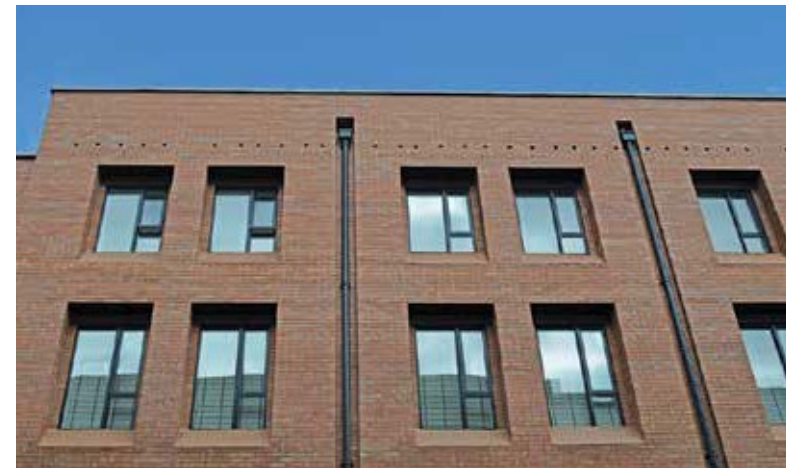
Brick House Port Loop, Glenn Howells Architects.  
© Greg Holmes.



The Press Shop, JAV81, Javelin Block.



Photo of new apartments Derwent Works, JAV77, Javelin Block.



Triangle Swindon, Glenn Howells Architects.  
© Paul Miller.



Illustrators Botanical House, Intervention Architecture.



High Cobtrast House, Intervention Architecture.







Bungalow, JAV20, Javelin Block.

**CITY NOTE LW-12**

**Natural light and solar gain**

2.41 Allied with functional, efficient layouts, designs must maximise levels of natural light and solar gain to create comfortable, naturally lit environments. This should be achieved through a considered orientation and layout, coupled with the appropriate placement of large windows and generous floor to ceiling heights that enhance levels and periods of natural light. To help achieve this, proposals must seek to:

- Accommodate glazing into habitable rooms that is at least 20% the size of the rooms' floor area;
- Create living, kitchen and dining spaces that benefit from direct sunlight for at least part of the day; and
- Apply minimum finished floor to ceiling heights of at least 2.6m (particularly in ground floors).

2.42 Where natural light is limited by orientation or adjacent overshadowing, proposals must compensate by ensuring ceiling heights and large windows are maximised; and features such as roof lights, angled bays and lightwells are used to draw light where possible and appropriate.

2.43 With increased levels of natural light and solar gain comes the potential for internal heating, which may need to be effectively managed to prevent overheating during certain periods of the year. Where this will occur, designs should successfully manage this through shading systems, ventilation and/or soft landscaping. It should not be used as a rationale for accepting the creation of low quality internal environments.

2.44 Effectively harnessing natural light can aid the efficiency of the buildings, support health and well-being, and positively contribute to the architectural form. Within the street scape, large windows (coupled with setbacks and defensible space at ground floor) will help enhance natural surveillance and help activate elevations and spaces.

2.45 The City Council encourages all new residential developments to maximise natural light, particularly single aspect apartments.

Note: this guidance does not seek to supersede or conflict with Building Regulations. Where potential conflicts arise, these must be discussed with the City Council.

**CITY NOTE LW-13**

**Outdoor amenity space for residents**

2.46 All residents should be able to access private outdoor amenity space, of sufficient size and quality to serve the occupants of the

dwelling. As a minimum, the following requirements must be provided:

- 70sq.m minimum for a family home (3+ bed).
- 52sq.m for 2 bed houses.
- 42sq.m for a 1 bed house.
- Balconies a minimum of 1.5m in depth.
- For each apartment: 5sq.m (1 bed flat), 7sq.m (2 bed flat) and 9sq.m (3 bed flat).
- 10sq.m per resident for C2 Uses, sui-generis shared residential and HMOs.

\*Amenity space requirements for apartments, C2 and HMOs can be provided communally, for individual units or a combination of both.

2.47 Apartments, carehomes, HMOs, shared housing and student accommodation should seek to incorporate provision into their design, through balconies, roof terraces and/or communal courtyards and gardens. Communal spaces must be private landscaped gardens/spaces that allow multiple use and not left over areas of grassed land adjacent to parking.

2.48 If proposals are seeking to gain support for amenity space below the City Council's minimum standards, designs must clearly demonstrate how this reduction will not impact on the delivery of quality amenity space. This may form part of an innovative architectural design that creates a number of smaller spaces (garden, roof terraces, balconies and/or courtyards) that provide variety; benefit from sunlight at different hours of the day; and enable different residents to have private space. Will the design and content of the smaller space create a more useable, engaging space that residents and wildlife can interact with? Is the reduction a result of providing a greater proportion of private space over communal?

2.49 Where proposals are set back from the footway, enabling defensible space or gardens to be created, these spaces should positively add to the street and residential environment, through appropriate landscaping that helps connect the building with its surroundings.

2.50 Rear gardens should be directly accessible from street frontages. Terraced houses should generally have 'tunnel' accesses between pairs of properties, rather than long paths that run between rear garden fences.

**Balconies**

2.51 Balconies and juliette balconies must form part of a cohesive design and not dominate facades or appear as an afterthought. In their siting, consideration must be given to the potential impact on existing residential amenity.



#### CITY NOTE LW-14

##### Adaptable and accessible homes

2.52 In addition to those developments aligning with the Part M4(2) requirements of Policy DM10 of the Development Management in Birmingham Development Plan Document, all proposals should seek to create flexible and adaptable homes that appeal to a range of potential occupiers now and in the future. This allows spaces to be laid out and used in different ways e.g. for sleeping, working or studying, or to be modified to accommodate different access or health needs. Modern methods of construction can promote this by using non-load bearing internal walls, careful positioning of sockets and service ducts positioned within floor/ceiling spaces.

2.53 Consideration should also be given to the layout and circulation of the building at design stage, to aid accessibility into and within the building, reducing any future modification burden. Measures such as wider ground floor doorways, at-grade primary entrance points and direct movement paths between ground floor rooms can aid access and movement of wheelchairs and pushchairs. Consider the location and height of essential controls and facilities. Where specialist housing is to be provided, proposals should ensure enhanced or specific accessibility requirements are appropriately integrated to increase the quality of the living environment provided.

#### CITY NOTE LW-15

##### Consideration of adjacent uses

2.54 Where residential uses are proposed to be introduced adjacent to non-residential uses, consideration needs to be given to the impact these uses may have on residential amenity. Conversely, the potential impact residential uses may have on the operation of existing uses must also be considered and successfully mitigated (if possible).

2.55 The compatibility of residential and non-residential uses will be assessed on a site by site basis, with the city's Regulatory Services being a primary consultee. There may be cases where the introduction of residential uses may not be considered acceptable, due to the nature of existing uses and potential for future conflict.

2.56 Where mitigation measures could be introduced by the residential proposal to aid compatibility, these must not compromise the design and/or residential amenity.





Illustrators Botanical House, Intervention Architecture.



Illustrators Botanical House, Intervention Architecture.

Choir Singer's House, Intervention Architecture.



High Contrast House, Intervention Architecture.

**DESIGN OF RESIDENTIAL EXTENSIONS**

**INITIAL CONSIDERATIONS**

2.57 To help inform the design, size and location of an extension, homeowners and designers must be aware of any influencing factors:

2.58 Neighbours - how will your proposal impact on neighbouring properties. Is the proposal to involve a shared boundary (if so you must comply with the Party Wall Act)? Will any of the extension extend beyond your boundary (including gutters overhangs and foundations)? Will you need construction access from a neighbouring property?

2.59 Trees and biodiversity - will your proposal impact on any trees within your boundary or a neighbours? Are any protected species (bats, great crested newts, etc) likely to be affected by your proposal?

2.60 Services - do you know whether your proposal will impact on any existing services (water, gas, drainage, electricity, communication); and how you propose to connect to these?

2.61 In addition, is the house:

- Within the green belt? This may impact on the size of extension acceptable.
- A listed building? A separate application for listed building consent will be needed before you can extend it. Your extension must not adversely affect the character of the existing building and historical features must not be removed.

- Within a conservation area? Proposals must preserve or enhance the historic character of the area.
- Within a village estate area? You may need to obtain consent from the Estate Trustees as well as any consent required from the Council.
- In an area that may be of archaeological importance? You may need to have an archaeological evaluation carried out by a qualified archaeologist and submitted with your application.
- Is within or adjoin a designated nature conservation site or potential site of importance (PSI).

**Do I need planning permission and/or building regulations?**

2.62 Not all household extensions require planning permission, but it is important to check before designing a scheme. Information on what extensions require planning permission is available on the Planning Portal. It is recommended you contact the Council to clarify this.

2.63 The majority of extensions will require Building Regulations approval (including those that do not require planning permission). This ensures the building/extension is constructed to a safe standard and certain levels of noise and thermal insulation are achieved.

2.64 Planning Permission and Building Regulations are separate processes and require separate applications.

2.65 Even if you do not need permission, you will get the best results with your project by following this guide.



## EXTENSION DESIGN

### CITY NOTE LW-16

Respect the appearance of your home and local area

2.66 As with any new development the design of an extension must consider the architectural style of the house being extended and character of the surrounding area; leading to a design that complements the scale and style of the house and its surroundings. To successfully achieve this, designers must consider:

- The key characteristics and styles of the host building and the surrounding area, ensuring the roof design aligns with the existing style (unless there is an architectural rationale for not); and using similar shapes, sizes and designs for windows, doors and other external details;
- The size of extension in relation to the existing house. Extensions should be smaller than the main part of the house and not dominate its appearance;
- Impact on the street and neighbouring homes. Extensions should be in scale with the width and height of existing buildings, including floor to ceiling heights. It must be set behind or align with the established building line of the host and wider street, with particular consideration given to corner plots, ensuring alignment with the building line of both streets;
- The amount of garden space to be lost;
- Boundary treatments should be in keeping with the character of the local area, particularly where visible from the street; and
- The landscape character; the role gardens, hedges and trees play in characterising the surrounding area.

2.67 Contemporary designs that complement the character of the local area, whilst improving the appearance of the property will be welcomed. Poor quality designs that negatively impact on the appearance of a property and surrounding area will not be supported.

### CITY NOTE LW-17

Extending dwellings in the green belt

2.68 Proposals for extensions to existing dwellings in the Green Belt may be allowed, provided the proposed extension would not increase the total habitable floor area of the building by more than 50% or by more than 200sq.m whichever is the greater.

2.69 Extensions approved and constructed within the 20 years preceding the application will be counted towards the 50% or 200sq.m. Garages will be included within the floor area measurement, where they are physically attached to the dwelling or sited within 5m of it.

### CITY NOTE LW-18

Location of extensions

#### Front extensions

2.70 A front extension can have a considerable impact on a home and the surrounding area, changing its visual appearance, removing original features and stepping the building beyond its existing footprint. Given this level of change, front extensions will not be acceptable unless the proposal will improve the external appearance of the house. This will be assessed on a case-by-case basis.

#### Porches

2.71 Porches can impact on the visual appearance of a house, but may be acceptable where the design is in-keeping with the appearance of the street, modest in scale and reflects the style and materials of the house.

#### Side extensions

2.72 Side extensions, particularly 2 storeys, can have a significant effect on the street scene, increasing the width of houses and reducing the spaces between them. This can lead to a change in street character with extensions to detached or semi-detached homes creating the impression of a continuous frontage (the terracing effect). To avoid this change in character occurring, side extensions must appear secondary to the house, with designs applying appropriate setbacks from the building line of the house and the side boundary:

- Ground floor elements set back by at least 500mm from the building line.
- First floor and above, set back by at least 1000mm from the building line.

2.73 Allied with appropriate setbacks, designs must also create roofscapes that do not dominate. Roof designs must align with that of the host dwelling, but have lesser proportions and a lower ridge height.

2.74 Exceptions to this requirement may be considered if there is a well-defined characteristic that justifies a reduction in the setbacks and/or roofscape design.

#### Rear extensions

2.75 Extensions at the back do not usually affect the appearance of the street. But where they will be visible from the street or other public space (including canals) greater consideration must be given to the design and its potential effect on the street.

2.76 The potential to impact on neighbouring properties is an important factor and must influence the design and location of a rear extension. To help reduce the potential impact, proposals must apply the 45 Degree Code. This requires an angle of clear sight at least 45 degrees between specified points on an extension and its neighbour's windows. An extension must not project beyond the projected lines.

2.77 Proposals that actively use this projecting line as a building line, without a clear and justified architectural rationale, will not be supported.

2.78 Proposals must not view the area within the projecting line as a 'building plot', applying splays and chamfers to constrain the projection; and in turn the architectural quality of the extension. Proposals must create a quality design, set within the plot defined by the 45 degree line.

2.79 The dense nature (close proximity) of terraced properties can result in rear extensions having a significant impact on the amenity and outlook of neighbouring properties. This must be reflected in the design, size and location of any rear extension to such properties. In addition to the application of the 45 Degree Code; proposals must not lead to overbearing extensions that enhance the feeling of enclosure, reducing the sense of separation and space.

2.80 Extensions to historic structure that exceed the 45 degree code are unlikely to be supported. Exceptions will be considered on a case by case basis, assessing the impact on neighbouring amenity and outlook.

2.81 Details of the 45 degree code can be found at City Note LW-4.

## Conservatories

2.82 Conservatories built up to the boundary, may have to use obscure glazing in side windows (for example where there is no screening, such as a high fence), to protect the privacy of neighbour's.

### Extensions on corner plots

2.83 Extensions to properties on corner plots must acknowledge and enhance the surrounding area. Blank gable ends and large areas of blank walls will not be supported, including those of garages or workshops.

2.84 Given the prominence of corner plots and how adjacent plots may work together to help highlight junctions, establish building line and help define character, extensions to any elevation must be well designed, acknowledging the established character of the surrounding area. Within this context, corner plots can play an important role in defining the building line of the streets that span from it.

2.85 Given this important character 'role', extension on corner plots that step beyond an established building line will not be supported, due to the negative impact it will have on the character of surrounding area.

### Dormer windows and roof space conversions

2.86 Dormer extensions must not dominate the roof. The design and proportions of any proposal must be in keeping with the house, with details such as the roof and windows aligning with lower floors. If dormers make a positive contribution to the surrounding area, these should be used to inform the design.

2.87 Extensions that seek to change the style of an existing roof (from hipped to gable) will not be supported, due to the impact it will have on the character of the surrounding area. Exceptions may be considered, if the applicant can demonstrate there will be no character harm; or it will enable the creation of a high quality, exemplar design.

### Sloping roof lights

2.88 Appropriately sited, roof lights can enable the use of roof space with limited impact on the character of the house and amenity of neighbouring properties. In most cases, planning permission is not required for roof lights, but checking with the City Council is recommended. Where planning permission is required, the Council encourages roof lights to be kept to the rear to reduce any potential impact on the surrounding streetscene.



**CITY NOTE LW-19**

**Roof top extensions**

2.89 Proposals that seek to introduce a roof top extension to an existing property (residential or proposal for residential conversion), must ensure the proposal does not change the character and balance of the existing building. Designs must effectively respond to the architectural style and scale of the existing building, creating a proposal that is subservient in scale, with minimum visual impact on the building.

2.90 Designs must also consider the impact it will have on the wider character area, with specific consideration given to roof scapes and forms. Proposals must ensure appropriate variety is retained, and a terracing effect of the roof scape is not created through cumulative extensions.

Note: Permitted Development Rights (PDR) allow certain existing residential and non-residential building to extend upward without requiring planning permission. Applicants are encouraged to check their PDR or contact the City Council to confirm whether planning permission needs to be obtained.

**CITY NOTE LW-20**

**Basement extensions**

2.91 Designs that seek to introduce a basement extension that extends beyond the existing building must ensure it successfully re-introduces outdoor amenity space above the structure; and provides sufficient natural light into the space created.

2.92 The topography of the garden space must be a key consideration in designing a basement extension, ensuring proposals do not substantially change existing ground levels or require the introduction of structures that extend above these. In order to be successful, basements must integrate and use the topography of the surrounding area, resulting in structures hidden/absorbed into the landscape.

2.93 The nature of basement extensions may result in minimal direct impact on adjacent properties once constructed, but during construction disturbance and potential for damage to adjacent properties and their garden areas needs to be considered and appropriately managed. To help understand this and inform neighbouring residents, detailed construction drawings and method statements should be submitted with any application. This should include a detailed understanding of services running through a site; how surface water will be appropriately managed as a result of garden loss; detailed construction methodology; and specification of any mitigation measures to be applied.

2.94 Basement extensions in close proximity to a canal must give specific consideration to the potential impact on this network during construction and by its permanent presence. Early engagement with the Canal & River Trust must be undertaken.

2.95 As heritage assets, the canal system is not always watertight and proposals must successfully account for and manage potential water ingress. In consultation with the Canal & River Trust, appropriate information must be submitted with an application to demonstrate that the structural integrity and function of the canal will be retained during and post-construction.

**CITY NOTE LW-21**

**Garages, outbuildings and parking**

2.96 Garages, outbuildings, car ports and parking areas should be in proportion to the size of the house. Their size must be incidental to the main dwelling and not stand out as prominent features, negatively impacting on the appearance of the house and the character of the area. Garage doors must not dominate the property frontage.

2.97 Property frontages should not be dominated by vehicle parking and hard landscape. An appropriate balance must be achieved between vehicle parking and landscaped front garden spaces.

2.98 The replacement of existing front gardens and their boundaries with open hard standing to create off-street parking will be resisted. Removal of these elements can negatively impact on existing character of the street and in some cases exacerbate localised flooding.

2.99 A reduction in garden/amenity space resulting in provision below the amenity space standards outlined in Design Principle 15: High Quality Homes, will not be supported.

2.100 A new dropped kerb from the highway would need approval from City Council's Highways Department and in some circumstances it would require planning permission.

**CITY NOTE LW-22**

**Garden extensions**

2.101 Planning permission will be required to extend your garden onto publicly used land, such as highway verges, as it involves a change of use. Permission will also be required to erect a fence more than 1m high to enclose the land where it is next to a road.





Small Cup of Char, Intervention Architecture.



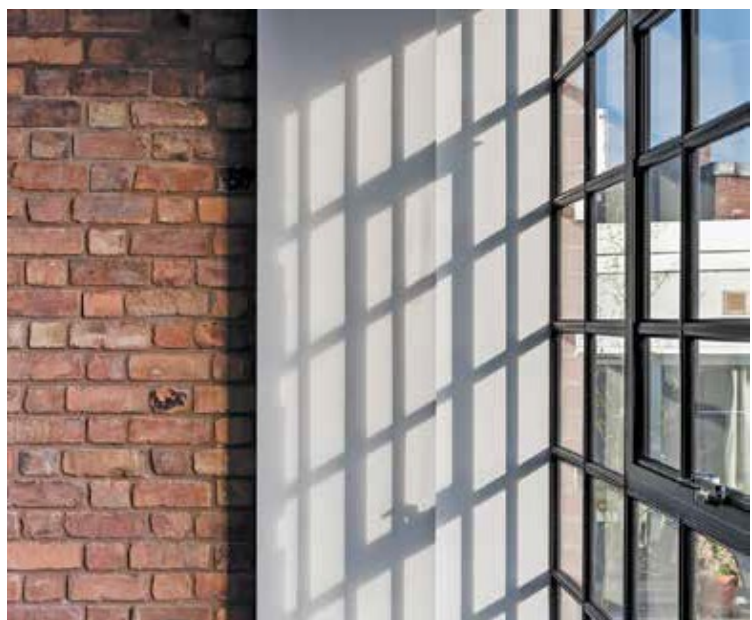
High Contrast House, Intervention Architecture.



Small Cup of Char, Intervention Architecture.



High Contrast House, Intervention Architecture.



Riffe Maker, JAV74, Javelin Block.

DESIGN DETAILS

2.102 As with any development, the detailing and materials of an extension plays an important role in creating a high quality finish and helping it visually link with the house being extended.

2.103 The architectural detailing, materials and styles may vary from house to house and the designer should ensure they mirror and respond to these appropriately. As a broad guide, the following elements must be considered and appropriately applied to an extension design.

Contemporary design

2.104 Contrary to elements of the above, the City Council supports applicants who wish to create a contemporary design, in contrast to the style of the host building. Where this distinct contrast in style is sought the City Council may be more flexible in its approach to materials, façade design and architectural detailing. However, in order to be successful, designs must be considered and have a clear architectural ethos that must be explained, justified and successfully fulfilled by the detailing proposed. Whilst contemporary, it may still be appropriate to reflect façade proportions; and its scale and form must remain subservient.

2.105 The acceptability of contemporary designs will be assessed on a site-by-site basis, considering the character of the host dwelling and the surrounding area.

CITY NOTE LW-23

Layout

Orientation of the Extension

2.106 Designing an extension to utilise and take account of its location can lead to additional benefits. Subject to neighbour privacy requirements, installing large or multiple windows will increase levels of natural light into spaces, and if south facing will aid heat gain from the sun. Consideration may also be given to installing solar panels where an appropriately orientated roof space is being created.

Space between buildings and gardens

2.107 Where houses are close together, it is important to leave an appropriate gap or space between the extension and neighbouring buildings.

2.108 Usually adequate spacing and size can be achieved through careful design. But in some cases where this is not possible or appropriate, the City Council will require the application of minimum standards, as detailed at City Note LW-3.

CITY NOTE LW-24

External detailing and design

Roofs

2.109 The roof design should fit in with the type and style of roofs in the area; and be constructed of similar materials as the house being extended. The angle and design of the roof must align with the host, unless there is a clear design rationale for an alternative.

Decorative features

2.110 Original decorative features should be retained or renewed if damaged. Where appropriate, decorative features should be incorporated in the extension design.

Chimneys

2.111 Existing chimneys should be retained. They add to the character of the property and the surrounding area.

Bay windows

2.112 New bay windows should have the same general shape, proportions and appearance as original bays on your own and neighbouring homes.

Windows and doors

2.113 New windows and doors should match those on the original house, with the same size and shape openings. If this is not possible, they should at least be in proportion with other similar windows in the neighbourhood.

Materials

2.114 In most cases, materials should match the existing building. Please take care to match colours and textures. This includes windows, doors, brickwork, roofing and architectural details. Where possible, use reclaimed materials to aid this alignment.

2.115 In some cases, the City Council will condition materials, ask to see and approve samples of materials before construction begins. Where this is required, applicants should not purchase materials before approval is given by the Council.

Boundary treatments

2.116 The design, location and height of boundary treatments must align with and complement the character of the surrounding area; and not lead to the fortification of properties. High boundaries at property frontage (beyond 1.2m) will not be supported.



## DESIGNING NON-RESIDENTIAL BUILDINGS

2.117 Traditionally a number of non-residential uses (including industrial, leisure, retail and faith uses) have inward looking designs that have a greater focus on the internal use requirements, rather than the surrounding street or well-being of employees.

2.118 Whilst this style of development has become a perceived ‘norm’, it is not an approach the City Council supports. Architects should challenge this with designs that successfully serve the use, whilst supporting the street and occupants. Building and site layout will play an important role in achieving this, allied with architecture that enhances and engages. This should be achieved with a standalone building, or as part of a mixed use proposal.

### CITY NOTE LW-25

#### Accessible buildings

2.119 Buildings designed for multiple users must ensure they are accessible to all; considering and providing for a range of accessibility needs, to ensure everyone can safely and effectively enter, use and move through the building. Building Regulations provide fundamental accessibility requirements related to accessibility, but architects should ensure they are seamlessly integrated into a design; and where appropriate go beyond these regulations to provide enhanced accessibility.

#### Access ramps

2.120 The use of externally sited ramps can have a negative impact on the building it serves and the surrounding landscape, interrupting the architectural quality and character of a building; and the manner in which it engages with the surrounding environment. Within new build schemes level changes should be effectively managed by the development, without the need for external ramps. Where they have to be utilised, they should be effectively integrated into a landscape design and not diminish or dominate the building’s façade.

2.121 When reusing existing buildings, the character of the building and its surroundings must also be a key consideration in designing accessibility enhancements. Proposals must seek to resolve any ground floor to street level changes internally. But where it can be demonstrated this would have a negative impact on the character of the building, or is unviable, proposals must design solutions that effectively balance the need to create accessible buildings, with conserving the character and quality of the building and its surroundings. Retrofitting ramps rarely achieve this balance successfully and may only be considered if designs have meaningfully explored other options such as the location of

entrances and less intrusive infrastructure such as platform lifts. These options need consideration from the outset of the design process.

2.122 If a ramp is to be retrofitted to an existing building, it must be suitability located and designed to reduce its impact on the host building. This must include the use of complementary materials and detailing, unless there is a clear rationale for diverting from this. This could include glazing to reduce its visual presence/impact, or as a result of an artist led scheme/design.

2.123 Considered and effectively integrated from the outset of a design, specific accessibility requirements may offer benefits to all users and reduce the need for duplication of infrastructure or built elements.

#### Internal layout

2.124 Within the building, designers must seek to create direct routes through the building to enable movement without the excessive use of doors, changes of direction and manoeuvres to reach spaces and locations. Where movement aids are needed such as platform lifts and ramps, these must be considered and designed from the outset, ensuring they are sited in convenient and desirable locations. In specifying doors, due consideration must be given to their width and use of electric opening aids, as an accessibility benefit to all users.

#### Changing Places toilets

2.125 ‘Changing Places’ toilets provide extra features and adequate space to meet the particular needs of a disabled person and their carer. They are an extra facility, in addition to the accessible toilets for independent use.

2.126 Whilst Building Regulations provide the threshold for uses that must provide Changing Places toilets, the City Council would support developments that fall outside these thresholds that wish to provide these facilities. Uses that may wish to provide Changing Places toilets include:

- Major transport termini or interchanges.
- Sports and leisure facilities, including large hotels.
- Cultural centres such as museums, concert halls, art galleries, stadia and faith centres.
- Large commercial retail premises and shopping centres.
- Educational establishments.
- Health facilities such as health centres and community practices.
- Other visitor attractions.

2.127 The facilities within a Changing Places toilet include a height adjustable adult sized changing table, hoist, non-slip floor and large waste bin. The exact standards and specification are contained within Building Regulations Approved Document M and BS8300:2009.

2.128 To aid user information on the accessibility of development, the City Council encourages all developments to support and contribute to AccessAble<sup>1</sup>, submitting relevant information to enable detailed access guides to be created for the building.

### CITY NOTE LW-26

Community (including schools and leisure centres), cultural and faith buildings

2.129 The social value of community, cultural and faith buildings can result in them playing an important, influential role in the lives of their users; a consideration that must be acknowledged by their design.

2.130 The City Council encourages the designers of these buildings to express their social and cultural functions within their designs. This should lead to innovative, bold, modern architecture and interior designs that support and encourage users to partake and interact in their learning, community, leisure and/or faith activities. Designs are also encouraged to provide flexible space than could be used for a range of functions beyond the core use (indoor sports, events, community groups, etc).

2.131 Faith related buildings should not apply pastiche design of historic or traditional forms. Where traditional or faith related element need to form part of the building, these should be successfully integrated into a contemporary design.

2.132 Given the community function of these uses, designs and layout must be outward looking, successfully engaging with its surroundings; acknowledging its community and cultural function. In doing so, it may be appropriate to create a landmark building in design and scale, further heightening its prominence within the community.

2.133 The design of community buildings and spaces can be enhanced through the commissioning of a professional artist with a socially-engaged practice, whose creative input as part of the design team could help to deliver greater value from a pre allocated budget.

<sup>1</sup> Accessable website

2.134 Locations of community, cultural and faith buildings must consider the potential impact they may have on adjacent uses in terms of disturbance from users travelling to the venue and the activities taking place within. For large community facilities such as schools, faith buildings and leisure/sports uses, transport assessment are likely to be needed to understand, manage and mitigate any transport impact. In designing schemes, architects must ensure focus is given to supporting and encouraging sustainable forms of transport; and effectively managing and integrating vehicle parking to create safe environments for all users.

2.135 Further guidance on the design of car parking is presented by City Note SS-15 of the Street and Spaces Manual.

### CITY NOTE LW-27

#### Places of work

2.136 Aided and informed by the application of WELL standards, places of work must ensure they successfully balance the functional needs of their business, with the provision of employee environments that support health and well-being, and in turn encourage productivity.

2.137 This must lead to environments that provide sufficient break-out and rest spaces; outdoor amenity space; are well ventilated; contain noise management measures; have natural elements; maximise levels of natural light; and have layouts that encourage walking (prominently located stairs, fewer lifts and central social/ kitchen areas and washrooms).

2.138 To further support employee health and well-being, designs must incorporate accessible lockers, showers and changing space to support employees who wish to run or cycle to work; or undertake exercise during lunch break. With large scale developments, consideration should be given to providing an on-site gym/exercise space for employees, aiding employees’ ability to undertake exercise within lunch break periods or pre/post work.

2.139 To enhance connection with its surroundings, the City Council supports the introduction of mixed-use ground floors and the inclusion of public spaces and foyer/lobby areas that have a public element, such as gallery space, public routes through the building, or a cafe.

2.140 As any development, the scale, mass and architecture of places of work must be informed by character assessment as detailed at Design Principle 2.



**CITY NOTE LW-28**

Storage, distribution and industrial buildings

2.141 Designers of industrial buildings must challenge the perceived norm of creating inward looking buildings that offer little to their surrounding environment. Beyond the requirement to locate reception, office functions and staff facilities at property frontage, designs should seek to introduce glazing that provides a visual link to the industrial function of the building. Traditionally these elements are hidden from public view, but as with modern office buildings, having a visual connection/awareness of industrial activity can positively add to the street; and support employee health and wellbeing with increased levels of natural light in their working spaces. Adjacent to a canal, proposals should seek to provide surveillance over the area (balanced with noise or light spill) and use it as an amenity resource for employees, with outdoor space adjacent to it.

2.142 As detailed at Design Principle 3, this public connection could be aided by the introduction of appropriate industrial or workspace uses into mixed-use developments, where they can help activate and engage with their surroundings.

2.143 Cladding materials and roof design should articulate and add interest to facades; and be used to help create innovative architecture. Simple materials applied in a considered way and/or colour can achieve this. Service areas should be positioned behind buildings, screened from the public realm. Where it can be clearly demonstrated that this cannot be achieved, service areas must be designed to minimise their visual impact on the building and surrounding area. If sited adjacent to a canal, screens must include an element of soft landscape where possible.

2.144 Where security measures need to be incorporated, innovative solutions and designs should be sought that do not result in large blank elements. Retaining visual permeability must be a key design requirement, coupled with the effective use of landscaping to help soften any security structures. The application of art within or onto structures and infrastructure should also be considered as a means of helping to enhance the appearance of such measures.

2.145 Proposals must create buildings that read as one, with a single architectural design/language applied across all facades. Focus must not be given to a single façade, with a secondary design solution applied to other elements, unless these are not publically visible.

**CITY NOTE LW-29**

Retail and leisure

2.146 The City Council recognises national retail and leisure operators often utilise standard format store designs driven by operational needs and desires of their business. But these can often lead to inward looking developments, which offer little to their surrounding environments.

2.147 The design of retail and leisure uses must ensure they are not solely driven by the internal function of the building. Proposals must successfully balance the desires of the occupier and user, with the successful integration and enhancement of the surrounding environment. In achieving this, designs must apply a scale, mass, façade design, materiality and layout that effectively integrates into the existing urban grain and character; and not introduce buildings out of scale with its surroundings that ignore primary (road/public realm)frontage, focus on its car park or fail to integrate with the surrounding area.

**CITY NOTE LW-30**

Extensions to non-residential buildings

2.148 Extensions to non-residential buildings, as with any development, must be of a design that aligns or enhances the host building and its surroundings. Designs and their associated materials palette should align with the existing building, unless there is a justified architectural rationale for an alternative approach. The City Council will assess extension proposals in the context of the resulting building and not the extension in isolation. In this respect, the resulting scale and mass of the extended building as a whole will be considered and the relevant principles within this document applied.

2.149 Where a rooftop extension is being proposed, the design must give specific consideration to how this will alter the character and balance of the existing building. Rooftop extensions must be of an appropriate scale, design and form to ensure they read as subordinate interventions to the host building. If proposals are purposefully seeking to change the character of a building through a roof extension, this will only be supported where it will result in an enhancement to the host building and surrounding area.

2.150 Where a host building is adjacent to residential uses, proposals must align with the city’s minimum privacy distances and the 45 Degree Code as set out at City Note LW-3 to LW-4.







**SHOP FRONTS DESIGN**

2.151 Shop fronts\* and signage make an important contribution to their surroundings; and should be designed to enhance and harmonise with the building’s architecture and character of the surrounding area.

2.152 Where existing historic shop fronts and their relevant detailing is present, these must be retained, restored and re-used using appropriate materials and detailing. Where sited within a listed building or in a conservation area, the City Council will not support the removal of an historic shop front, unless it can be clearly demonstrated that repair cannot be undertaken.

*\* Shop fronts refers to retail, commercial or leisure units located within city centre, district centres, local centres or stand-alone units.*

**CITY NOTE LW-31**

**Key design principles**

2.153 The architectural period and historic use of a shop front and/or host building will have an influence on the detailing and proportions associated with a specific design; but the key components of a shop front have endured and should be appropriately integrated into any refurbishment, replacement or new shop front.

2.154 Where an existing historic shop front is present, all components and detailing should be retained and restored. If an historic shop front has previously been removed, new development should reinstate a traditional design.

**Local guidance**

2.155 If the property/site lies within an area that has a Conservation Area Appraisal and Management Plan, local design guide, neighbourhood plans or design codes adopted, relevant guidance within these documents should be used to help inform the shop front design and signage.

**CITY NOTE LW-32**

**Key components**

2.156 The below key components should work together to create a well-proportioned, balanced shop façade, that positively adds to the surrounding street environment.

2.157 The detailing and style of any new or replacement shop fronts/components must be influenced by the architectural period of the property and historic styling of an associated shop front. As with any development, undertaking a character assessment will help inform the design of any shop front or component.





### Pilaster or column

2.158 Pilasters and columns are the vertical elements, which help frame the shop front and contribute to the plot rhythm of the street.

### Corbels/Console

2.159 Element/bracket that book-end the fascia, support a projecting cornice and conclude the pilaster.

### Stallriser

2.160 The stallriser is a plinth element that helps frame the shop windows; gives protection against the pavement; and provides an area where internal display furniture can be located at an appropriate level without masking the window.

### Fascia and cornice

2.161 Fascias and their accompanying cornice detailing conclude the framing of the shop front; and provide an area to locate the use's primary signage.

2.162 Fascia can be one of the most important elements of a shop front, but designs must ensure they do not over dominate a façade or mask other elements of the building or shop front. This must be considered in the context of their size, materials and style. Internally illuminated, boxed systems will not be supported by the City.

### Windows and glazing bars

2.163 The proportions and emphasis of the shop window must align with the other shop front components and not introduce a style or size that hinders this.

2.164 The exact style and proportions will vary from different periods but where appropriate, glazing should be divided by mullions and transoms to help tie the glazing proportions to the other components. Transoms should generally align with the top of the door frame, with the mullions extending above and below.

2.165 Ornate or period specific window styles and detailing (such as bow windows, small panes, stained glass, bays) should only be applied where they form part of the historic style.

### Doors

2.166 As with the shop windows, the size and proportion of doors should be appropriate to the scale/width of the shop and be of a design that aligns with the shop front. If recessed doorways form part of the traditional style, these should be retained.

2.167 Where open fronted units are to be created, the sliding or bi-folding system utilised should provide an appropriate rhythm to the shop's façade when closed.

### Materials and colours

2.168 Traditional shop fronts should be constructed from timber; unless historically the particular style was constructed of other materials. UPVC, fibre glass or perspex will not be supported within conservation areas or historic buildings.

2.169 Where a modern shop front is to be created, alternative materials may be considered acceptable, where they help achieve a quality outcome.

2.170 Within conservation areas and in heritage assets, colours applied to the shop front should generally be muted and matt in finish.

### External lighting

2.171 Within well-lit street environments, it should not be necessary to install lighting to the fascia, hanging sign or shop front. The combination of internal and street lighting should be sufficient to present the business during evening periods.

2.172 If it can be demonstrated that external lighting is needed, this should be discreetly located and focused units. Internally illuminated fascia boxes/signage will not be supported.

2.173 If specific lighting forms part of an historic design, these should be appropriately detailed and designed.

### Merging of multiple units into a single shop

2.174 Where development seeks to merge a number of existing units to create a larger, single unit, the existing shop front proportions should be retained. This will preserve the existing character of the street, keeping the plot rhythm and balance of the street scene.

2.175 To tie the units together, single colours and consistent signage should be applied.

### Subdivision and internal layout

2.176 The internal layout of a unit must ensure the shop front remains an open and visually permeable element, with no internal walls, stairwells or racking blocking or dissecting the shop front window.

### Blinds and canopies

2.177 Retractable canopies and blinds can form an important original component of historic shop fronts, helping to provide weather protection to the use and customers. Where these are present, they should be retained/restored.

2.178 Blinds or canopies can rarely be successfully retrofitted to a property, unless it forms an integrated part of a new shop front. Any such proposals, must clearly demonstrate that it will not negatively impact on the shop front, building or character of the surrounding area.

2.179 Blinds or canopies that contain lettering, are made of reflective, fluorescent stretch fabric or are permanently open will not be supported.

### Security shutters

2.180 To aid the security of shop fronts out of operational hours laminated glass should be installed rather than shutter systems. If shutter systems are required, these must be visually permeable and internally fitted. Shutter systems will not be supported on historic shop fronts unless the need is proven; and an acceptable solution that does not negatively impact on the historic fabric and significance of the historic asset can be provided.

### Signage and advertising

2.181 Shop signage should be confined to the fascia and an appropriate hanging/projecting sign if desired.

2.182 Fascia signage should not extend vertically beyond the property's fascia, or project beyond it through the use of box fascia signage. Signage should utilise individual lettering and/or logos, painted directly to the fascia, or through the use of individual characters mounted to the fascia.

2.183 Internally illuminated and box signage systems will not be supported, unless it can be clearly demonstrated that it will not negatively impact on the building or surrounding area.

2.184 Projecting and hanging signs must acknowledge the design of the shop front and add to the character of the surrounding streetscape. They should generally be sited at fascia level, and

not obscure other building or shop front detailing. Their designs should be simple in size, style and level of information presented on them. Materials should match those of the shop front; and be mounted via a complementary system. Illuminated box signs will not generally be supported, unless the design aligns with the shop front and positively adds to the surrounding area. Where an historic sign exists, these should be re-used by the development.

2.185 Signage and advertisements should not be applied to windows, doors, shutters, railings or glass balustrades where they will have a negative effect on the streetscene, reduce active frontage (views in and out), detract from the architectural aesthetic of the building or result in visual clutter.

2.186 Signage and lettering located above the shop front, on the upper floors of a building will only be accepted where they form part of the historic character (such as those painted onto masonry).

### Totem signage

2.187 The need for a totem sign must be clearly justified by a proposal, outlining why a lower level sign will not deliver an appropriate level of awareness or presence. Where totem signs are accepted, they should be of a scale and design that sit appropriately within their surroundings and not dominate.

2.188 If the need for lighting can be justified, consideration must be given to the potential impact this may have on neighbouring uses.

### Signage strategies

2.189 Allied with the above guidance, proposals that include multiple retail units (new build or refurbishment) are encouraged to create signage strategies for the whole development. This should be used to establish a consistent format and style to be applied across all units, whatever the business type. Strategies should cover the design, size and location of signage, which should complement the architecture of the building and style of the shopfronts. Signage above fascia signs is unlikely to be supported.

2.190 Appropriately applied and integrated into lease agreements, the strategy should be used to ensure the quality and design of the wider development is not diminished by poorly designed or located signage.





### CITY NOTE LW-33

#### Services and plant infrastructure

2.191 The introduction of external infrastructure related to the operation of the business, must be effectively integrated and located to not hinder the design of the shop front. Vents or extraction systems should be sited away from street frontage. Where this is not possible, they must be sited and of a design and colour that aligns with the shop front. Where a desired method/infrastructure cannot achieve this alignment, alternative infrastructure must be explored. Externally located wiring, drainage infrastructure and service boxes (such as burglar alarms), should not be located in prominent locations or over architectural features.

### CITY NOTE LW-34

#### Modern shopfronts

2.192 As with traditional shop fronts, modern and contemporary designs must complement the architectural style of the host building and enhance the surrounding street scene.

2.193 Where shop fronts are being designed as part of a new building, this should enable the architect to create an integrated frontage that forms part of a coherent building design. The style of the primary building must inform the composition of the shop front, with traditional components utilised where appropriate. If fully glazed shop fronts are proposed, the detailing and structure must align with the wider façade. Frameless systems may offer the most appropriate solution.

2.194 If proposals are seeking to introduce a contemporary design into an historic building, the design should be guided by traditional shop front components and utilise appropriate materials, creativity and craftsmanship to create a quality outcome, which enhances the street scene. Any associated signage should integrate effectively with the design, as detailed above.

2.195 Where a contemporary shop front requires a bespoke signage system or strategy, the City Council will assess these on a case by case basis, ensuring any proposals complement the shop front design and do not have a negative impact on the surrounding street environment.

2.196 Generic shop fronts and signage that fail to positively contribute to the streetscene will not be supported.

### CITY NOTE LW-35

#### Alternative uses and conversions

2.197 Where an existing shop unit is to be converted into an alternative use, such as residential or office; the character of the historic use must be retained via the retention of the existing shop front, or through the creation of a new frontage that mirrors the form of a shop front. This will help ensure the retail character of the building and surrounding area is retained, despite the use diversification.

2.198 The design challenge will be to retain the character of the shop front, whilst creating quality internal environments (particularly for residential). Bespoke solutions should respond to the specific site, considering internal layout and the use of internal partition/secondary frontage or screens or partial opaque glazing where appropriate.

### CITY NOTE LW-36

#### Uses at upper floors

2.199 Use of space above retail premises for business or residential uses can aid security for the ground floor function; and can support sustainable communities. The City Council supports the principle of using upper floors, but their introduction must not detract from an established character or streetscene through upper floor signage or window displays. Uses that require dominant signage and/or window displays should be located in ground floor retail units.

2.200 Where businesses are located above retail units, any signage must be limited to vinyl lettering on upper floor windows and a name plate at the ground floor entrance of the business. Lettering should be of a size to ensure the internal space retains natural light. The name plate should contain key business information and be of a design that aligns with the surrounding shop fronts. Appropriately sized engraved or painted metal plates should be sufficient to fulfil this function.

2.201 The introduction of new entrances at street frontage to serve the upper floor use must not impact on the plot rhythm of the street. New development should seek to create generous entrance areas that replicate an establish plot width and shop front form; or introduce a design that effectively divides the plot, whilst retaining the visual rhythm. Where entrances cannot be appropriately integrated at street frontage, alternative locations must be sought.



**DESIGNING TALL BUILDINGS**

2.202 Tall buildings present creative opportunities for architects and the city; and as the number of tall buildings continues to grow, it is important these opportunities deliver exemplar architecture that adds to Birmingham’s evolving ID, through skyline to street enhancement.

**PRIMARY DESIGN CONSIDERATIONS**

**CITY NOTE LW-37**

Comply with Civil Aviation Authority limits

2.203 Due to the city’s proximity to Birmingham Airport and its associated flight path, tall building proposals must engage effectively with Birmingham Airport Ltd (BAL)/Civil Aviation Authority (CAA) to understand any concerns they may have relating to the height of the building, its form, the design and/or construction methods to be employed.

2.204 As key consultees on tall building proposals, it is important applicants understand and effectively respond to any concerns or objections BAL/the CAA may have. BAL and the City Council encourage applicants to engage with CAA early in their design process and before a formal planning application is submitted. This will benefit the applicant in helping to inform the design and highlight any objections early in the design process. In turn it may reduce the potential for BAL objections when formally submitted as an application.

2.205 In response to initial engagement, the CAA may request an Aerodrome Safeguarding Assessment be submitted with a planning application for their consideration.

**CITY NOTE LW-38**

Adding to the skyline

2.206 Tall buildings must positively add to Birmingham’s skyline, enhancing its distinctiveness, variety and visual appeal; whilst aiding legibility through the urban environment.

2.207 To successfully contribute to this continued growth, architects must consider and justify the role proposals will have on the skyline and how it will relate to its counterparts. Whilst all tall buildings should be elegant forms that add to the skyline, landmark creation does not always need to be achieved. Retaining the prominence of an existing landmark, whilst introducing a new form can present a greater challenge for an architect; and is something that needs to be effectively balanced as the number of tall buildings increase.

**CITY NOTE LW-39**

Landmarks and key views

2.208 Allied with their skyline setting, proposals for tall buildings must consider mid and short distance views of existing landmark buildings and cityscape; and the potential impact proposals may have on them. The role and recognition of existing landmarks will in part be derived from their prominence within the city and how people associate with them. As aids to wayfinding and contributors to identity, views and landmarks can become cherished by the city’s residents.

2.209 The development of tall buildings present opportunities for further enhancement of Birmingham’s cityscape, but appropriate consideration must be given to existing landmarks and views in the siting and design of them. In consultation with the City Council, key views and landmarks should be identified, with applicants demonstrating (through imagery and submission of a 3D model) how their proposal will sit within and change these. If a proposal is seeking to actively change a view and/or create a new landmark, the rationale and architectural response to this must be clearly justified.





**CITY NOTE LW-40****Architectural quality**

2.210 The architecture of tall buildings must be driven by a strong architectural ethos that considers the ‘street, body and crown’ of the building to create 360 degree, cohesive forms that enhance the city’s streetscape and skyline.

2.211 The method and systems selected to construct a given building will have an influence on its layout and form. As such, the rationale for those selected must be explained, with the methods effectively balancing design and viability.

**Street**

2.212 In order to effectively integrate with their surroundings and give a human scale to the building at street level; how the building ‘hits’ the ground is key.

2.213 Without becoming a stand-alone element, the base must effectively contribute to the activation of the public realm and where appropriate, have a façade scale/proportion/emphasis that acknowledge its surrounding streetscape context. Successfully considered, the base element can help manage any challenging juxtaposition, whilst effectively launching the grand scale of the building above.

2.214 The way in which the base element grounds the building architecturally will be led by the site and design, but it must contain active elements of the building such as the primary entrance and lobby, amenity space and/or ancillary active uses (café, gym, gallery, office, etc.) that provide public and private activation. Blank elements, plant and servicing functions must be sited away from primary frontage. Where they are located, their impact must be minimised by considered detailing and design that complements the wider façade. The integration of living walls must be considered in these blank areas.

**Body**

2.215 The body of the building is the primary expression of the architecture, as its most significant element. Whilst informed by the footprint and floorplan, these must be elegant 360 degree expressions, with symmetrical, well detailed façades that coupled with its form and mass lead to elegant punctuations in the skyline.

2.216 In composing the façade design, acknowledgement of the façade’s overall scale must be recognised, with façade proportions and detailing reflecting this. As with all buildings, well executed simplicity can often provide the most elegant outcomes.

**Crown**

2.217 The successful transition from the building’s body to its crown is fundamental to creating an effective conclusion to the building and façade design. A considered crown can complete the landmark status of a building (if desired); provide reference points within the city’s landscape; and help the successful integration of the building into the city’s skyline.

2.218 Balanced with these wider considerations, the crown’s primary role must be to successfully complete the building’s architectural form; and not attempt to create a stand-alone or ‘obvious statement’ feature that interrupts this. In some cases, subtle variations to the façade design and considered architectural lighting can deliver successful outcomes.

2.219 Practically the crown should be used effectively to mask/ screen any roof top plant.

**Mass**

2.220 The overall mass of the proposal must be a key consideration of any design, ensuring an appropriate balance is achieved between floorplate capacity and the form of the building. Proposals must seek to create 360 degree slim, elegant forms with scale (height) used to deliver capacity (where justified), rather than mass. The City Council will not support dominating slab blocks that impose on streets and the skyline.

**CITY NOTE LW-41****Ensure designs are credible**

2.221 The City Council gives great importance to delivering architecture as approved. Tall buildings are particularly important in this respect, given their visual prominence and the development costs involved. Therefore, tall building proposals should demonstrate they are deliverable, both technically and financially. It is important to be sure the architecture approved is not diluted throughout the process of procurement, detailed design and construction.

**CITY NOTE LW-42****Clusters and grouping**

2.222 Carefully grouped tall buildings will help create a unique and memorable urban environment. But conversely, an indiscriminate proliferation of tall buildings may detract from the quality, form and legibility of the city. The City Council will consider and assess how buildings singularly and collectively add to the city’s skyline and their surroundings.

2.223 Viewed in this context, designs must consider how their proposed siting, scale, form and layout relate to existing (and proposed if relevant) tall buildings. This should consider not only the relationship with these buildings, but also how it could aid ‘the street’ and human experience of the building and its surroundings.

2.224 Designed and planned within this cumulative context, clustering should enhance the skyline and create a better relationship between buildings of a similar scale. At street, clustering must not lead to character change that has a negative environmental impact. Individual proposals must ensure they engage with the street, and take opportunities (with its cohorts) to enhance the public realm. This could be via direct creation or enhancement of streets and spaces, and/or by responding to, creating or framing views and focal points from the surrounding environment.

2.225 A single tall building is insufficient on its own to justify the establishment of a cluster of tall buildings around it. Where clustering is proposed, it must be demonstrated that the character change resulting from development is acceptable; proposals will positively add to the city’s skyline; unacceptable change in micro-climate will not occur; and development will not unacceptably diminish the prominence of an existing building’s role in the skyline, if relevant.

**CITY NOTE LW-43****Shoulder elements, ancillary clusters and plinths**

2.226 Where the site extends beyond the tall building’s footprint, the introduction of shoulder buildings, lower clusters and/or plinths can be an effective way to aid viability, utilise the wider site and help proposals integrate with their surroundings.

2.227 In designing these secondary elements, architects must have a clear design rationale for them considering how they relate to the primary tower; ensuring their siting, form, scale, mass and façade design support its prominence, whilst delivering a cohesive design. The principle of applying a secondary element must not be assumed as acceptable. Their inclusion will be assessed on a site-by-site basis, balancing the desire to maximise development, with the impact on the design of the primary tower, the quality of internal space and the surrounding street environment.

2.228 Where supported in principle, their design (facade, form, mass) must enhance the character of its surroundings, helping the proposal engage and integrate with the street environment and its surroundings.

2.229 The height of shoulders and ancillary clusters must have a clear architectural rationale that ensure balance is applied across the site and wider area, ensuring the prominence of the primary tower is not compromised by overbearing secondary elements.

2.230 The height of a shoulder building must be given particular focus, as elements attached to the primary tower. Their presence will always have the potential to compromise the elegance of the tower, which any proposals must effectively resolve. The proposed height of a shoulder will play a key role in this, with heights needing to be significantly lower than the tower. The City Council believes shoulders no more than one third the height of the primary tower can achieve the balance needed. Proposals beyond these proportions must have a clear architectural rationale that does not compromise the delivery of an elegant primary building.

2.231 Where a site has the capacity to accommodate a cluster of secondary buildings, proposals must read effectively as a block; integrating with and acknowledging the surrounding context in relation to the siting of high elements, the tiering of heights across the cluster and the collective mass of the proposal. The prominence for the tall building must remain a key consideration; with any dominant secondary tall building(s) having a justified rationale. The characteristics, location and size of a site will influence the scale and form considered acceptable for the immediate cluster; as such the City Council will assess proposals on a site-by-site basis.

2.232 Podiums can be beneficial from an amenity perspective, yet challenging architecturally. As detailed below, tall buildings can have a negative impact on the surrounding environment and amenity of existing uses. Whilst a degree of change may be acceptable, podiums can be effectively utilised to divert/mitigate wind turbulence at street level created by the tall building. They may also allow flexibility in the siting of the tower (whilst retaining a strong presence at street) that could reduce shadowing and/or overlooking on adjacent environments.

2.233 From a design perspective, the challenge is to create a confident transition from the tower into the podium; and ensure the scale and mass of the podium helps the proposal integrate with its surrounding streetscape, introducing a degree of human-scale.

2.234 Whilst podiums can interrupt the ‘pure form’ desired from a tall building, their use must be considered where they could help mitigate environmental and/or amenity issues created by the tall building.





Eastside Locks, Glenn Howells Architects.  
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## SURROUNDING ENVIRONMENT

### CITY NOTE LW-44

Minimise and mitigate impacts on the local environment and microclimate

2.235 The design of tall buildings will need to consider overshadowing, wind, airflow and noise impacts in the vicinity of the proposed development. Within the context of their surroundings, designs should effectively consider and seek to mitigate any impacts on the amenity of nearby buildings, or the use and character of public or private spaces.

2.236 In order to assess any climatic or environmental impacts of a proposal, initial designs must test and model different forms, heights, layouts, orientations and block arrangements (considering prevailing winds and proximity to existing tall buildings) to help ensure any climatic impacts are reduced and managed. Evidence of this testing should be submitted with a proposal; together with detailed wind, sunlight and shadow studies.

### Wind impact

2.237 Increase in wind speeds at street level is a primary environment challenge that designers must effectively mitigate against, with tall buildings redirecting wind down their facades into the street environment.

2.238 The measures needed to align with the City (of London) Lawson Criteria will be site and building specific, but the City Council believes there is a tier of mitigation measures (allied with the above) that is likely to reflect the scale of discrepancy between a proposal and the City (of London) Lawson Criteria.

2.239 The first tier relates to the form and façade design of the building; and has the potential to create a more cohesive response (through their manipulation) and a greater reduction in wind impact at street and on the building.

2.240 These primary design considerations include:

- Softening of corners/edges - creating a more aerodynamic form or apply considered cut outs in the form and/or façade to help reduce loads and aid dispersion;
- Tapering, profile changing or setting back the building as it rises - to remove the uniformity that causes wind shedding;
- Creating permeability - having open floors will enable wind to move through the structure as well as around it (see 432 Park Avenue, New York); and/or
- Podium - can help redirect wind away from the street, subject to surrounding context, its design and siting of the tower.

2.241 The second tier of mitigation may not influence the form of the building as directly, but if utilised they must be a considered element of the design (not an afterthought) and their effectiveness demonstrated. These secondary measures include:

- The siting of fins on facades;
- Canopies at lower levels; and/or
- Colonnade base element.

2.242 Screens within the public realm can also be used as a mitigation measure, but these are unlikely to be acceptable due to their impact on the street environment. Applicants must demonstrate no other mitigation is possible before the City Council will consider this mitigation method. If this mitigation method is supported in principle by the City Council, they must integrate into the surrounding public realm; not obstruct movement; and be artist-led in their design.

2.243 The use of trees will not normally be accepted as means to mitigate wind impact. Their effectiveness varies with the seasons (evergreen species are not typically supported) and age. They are not considered permanent mitigation and climatic changes can limit their ability to grow and mature.

2.244 The City Council does not seek to prescribe the mitigation measures a proposal must apply, but the response must deliver good architecture and wind speeds in the surrounding external environment (public and private) that meet the City (of London) Lawson Criteria).



**Wind studies**

2.245 Proposals must ensure they do not result in a change in wind climate that exceeds the existing wind speeds or the City (of London) Lawson Criteria associated with the character and use of the space. This should relate to public and private realm surrounding the site; and private amenity spaces proposed by the development. Within these private spaces, proposals should ensure ‘frequent sitting’ speeds are achieved where seating areas are proposed; with ‘occasional sitting’ speeds sought across other areas where sitting and dwell may occur.

City of London Criteria Table

Category	Mean and GEM wind speed (5% exceedance)	Description
Frequent sitting	2.5m/s	Acceptable for frequent outdoor use e.g. restaurant, cafe.
Occasional sitting	4m/s	Acceptable for occasional outdoor seating, e.g. general public outdoor spaces, balconies and terraces intended for occasional use, etc.
Standing	6m/s	Acceptable for entrances, bus stops, covered walkways or passageways beneath buildings.
Walking	8m/s	Acceptable for external pavements, walkways.
Uncomfortable	>8m/s	Not comfortable for regular pedestrian access.

Source: Wind Microclimate Guidelines, City of London, August 2019.

2.246 The design of amenity space should respond to the outcome of wind studies (allied with sunlight and shadowing analysis), to help ensure spaces are useable and the appropriate planting is specified.

2.247 The City Council supports the guidance created by the City of London (Wind Microclimate Guidelines, City of London, August 2019 or as updated/replaced)<sup>2</sup>, which proposals for tall buildings within Birmingham must effectively align with and respond to (replacing London specific data with Birmingham where relevant and available (e.g. Annex A: Wind Climate Properties of City of London Guidance)).

2.248 All tall buildings (15+ storeys) within Birmingham should undertake a combination of Computational Fluid Dynamics (CFD) simulations and wind tunnel testing, relative to the height proposed:

Wind assessments

16 to 30 Storeys -  
CFD simulations and wind tunnel testing.

Above 30 Storeys -

1. Early stage massing - wind tunnel testing or CFD simulations.
2. Detailed design - wind tunnel testing and CFD simulations.

Reference source: Wind Microclimate Guidelines, City of London, August 2019.

<sup>2</sup> City of London Planning website design/Documents/city-of-london-wind-microclimate-guidelines.pdf

**Daylight, sunlight and overshadowing studies**

2.249 Designs should seek to maximise levels of natural light within proposals, for its immediate environment and to occupiers of neighbouring buildings. The Building Research Establishment (BRE) guide (Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice) is the best available tool for understanding the impact of a tall building on adjacent buildings and spaces; and proposals must use it to understand the changes resulting from their development.

2.250 However, the City Council recognises the levels reflected within the BRE guidance relate to a suburban environment, whereas tall buildings are largely located in dense urban environments where levels of daylight and sunlight can typically be below these targets. Therefore, the weight attributed to the conclusion of these studies will be balanced against the scale of the impact, character and nature of the surroundings, site constraints, policy aspirations and other material planning considerations.

**CITY NOTE LW-45**

The siting of tall buildings

2.251 In assessing the acceptability of a proposed site for a tall building(s), consideration will be given to the following factors:

- Character of the surrounding area and the potential impact the proposal may have on this;
- The role and potential role of the site within its surrounding context;
- The location and hierarchical position of the site within the street scene and urban block;
- Relationship with existing landmark buildings, presence within existing views/street scene and impact on the skyline;
- Impact on surrounding heritage assets; and
- Impact on surrounding environment and adjacent uses.

2.252 To aid this assessment, applicants must undertake a Townscape Visual Impact Assessment (TVIA) in line with the Landscape Institute’s Guidelines for Landscape and Visual Impact Assessment (GLVIA3) (or as superseded) together with a detailed site analysis to help justify why the proposed site is suitable for a tall building; and how the development proposed will be a positive addition to the surrounding area and wider cityscape.

2.253 The information and analysis provided must also be accompanied by a 3D model compatible with the City Council’s City Model.





## DEVELOPING WITH BIRMINGHAM'S WATER ASSETS

### CITY NOTE LW-46

#### Overlook, engage and activate water spaces

2.254 When designing adjacent to a water asset, architects and landscape architects should ensure the asset is one of the primary focal points; reflected in the orientation and layout of the buildings and its associated landscape.

2.255 As with any area of public realm, development adjacent to a canal, river or other water asset should positively use the asset to help create developments that enhance the water asset and their associated landscape through overlooking and surveillance; in turn linking these natural assets to occupants and users.

2.256 Beyond this visual connection, the City Council encourages appropriate uses to engage and animate spaces with entrances and use spillage that help bring day-long activity to the waterside. There may also be opportunities to safely engage directly with the water asset through leisure or transport activities that pull the animation into the water resource.

2.257 Where a boundary between the waterside and private space is desired, these must be visually permeable and constructed of high-quality materials, which acknowledge and enhance the character of the waterside.

### CITY NOTE LW-47

#### Access

2.258 Key to the successful use and animation of the water resource is access to the resource and adjacent spaces; which development should seek to enhance and create for its occupiers and the public.

2.259 Where there are existing routes and access points, these should be effectively integrated or appropriately re-sited and enhanced. If existing links are not present, designs must seek to create new routes and spaces that add to the wider route network. Where such gains are not proposed, designs must clearly demonstrate why this cannot be achieved.

2.260 In designing and enhancing routes and spaces, proposals should apply quality materials and furniture that complement their

surroundings and help support their multi-use nature. This should lead to routes and spaces that can enable health, leisure and sports uses to take place. Designs should also consider how the hard spaces may aid active use of the water for transport or leisure, such as enabling canoes or paddle boards to enter and exit the water.

2.261 To aid awareness and way-finding of a wider route network, there may be a desire to introduce way-finding signage within a landscape design. The need for such furniture should be balanced against the presence of landmarks and the legibility of the network, which may negate the need for it. Where the introduction of signage is accepted, it must be effectively integrated into the landscape design and not lead to cluttering.

2.262 Where a culverted watercourse is located within a site, development should seek to day-lighting or re-naturalise these areas (in consultation with the Environment Agency) to improve their functionality, green infrastructure contribution and create a feature within the site.

2.263 The installation of a new footbridge across the canal may provide significant access gain to a site and the wider area. Where such enhancements are proposed, developers must engage early with the Canal & River Trust (CRT) and create a design that positively adds to its surroundings.

### CITY NOTE LW-48

#### Shading and environment

2.264 In determining the location, scale, height and mass of a development adjacent to a water asset, proposals must consider any potential impacts on the asset and its environment.

2.265 Sun path and shading studies will help designers understand the degree of change resulting from a proposal; and through options testing (which should be submitted with a proposal). Proposals should seek to reduce any significant change to the environment of the asset or its waterside.

2.266 Where change to the environment does occur as a result of development, the acceptability of this change is likely to be influenced by the character and environment of the surrounding area; the wider benefits (including waterside activation) of the proposal; the extent of environmental/biodiversity impact; and/or the period and extent of increased (over the existing) direct shading.



**LIGHTING OF BUILDINGS AND PUBLIC SPACES**

**CITY NOTE LW-49**

**Architectural lighting**

2.267 In designing external lighting schemes for a building, proposals should consider the context of their surroundings; the architecture and role of the building; and the existing lighting character of the area.

2.268 Where development is seeking to create, or re-use a landmark building, lighting designs should effectively provide the building with an evening persona appropriate to its architecture and setting. Consideration must also be given to how adjacent buildings and spaces are lit, and the cumulative effect of this. For tall buildings, lighting design must effectively add to the city’s night-time skyline and its surrounding street environment.

2.269 Proposals involving or adjacent to an historic asset, must apply a lighting design appropriate to the asset, considering the architecture of the building to be illuminated and the impact this may have on the character of its surroundings.

2.270 Further guidance on the external lighting of historic buildings is provided by Historic England.<sup>3</sup>

<sup>3</sup> www.historicengland.org.uk/images-books/publications/external-lighting-for-historic-buildings/external-lighting2/

**CITY NOTE LW-50**

**Lighting of public spaces**

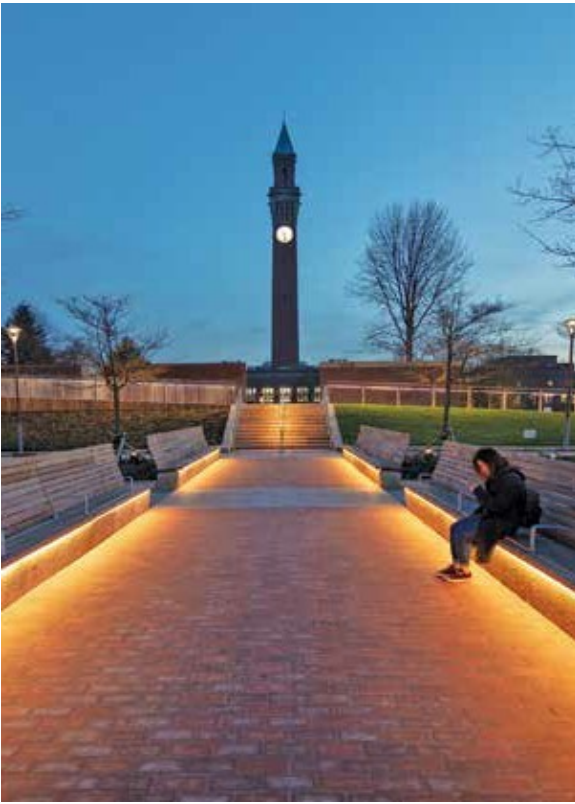
The effective lighting of public spaces is important to ensure they continue to provide safe routes and areas for pedestrians and cyclists. The specifications and requirement related to this functional lighting is provided by the City Council. Where this functional lighting is to be adopted as part of a highway, proposals must align with the City Council/PFI specifications for street lighting.<sup>4</sup>

Allied with the appropriate levels of illumination to aid user safety, public spaces and landscape elements offer the potential for feature lighting that can enhance the night-time character of spaces.

Where development offers this potential, its landscape design must effectively design for its day and night use, applying appropriate lighting to help create the night-time environment sought, including the illumination of features such as trees, water, planting or public art where appropriate. The lighting design should be an integral element of the landscape design, ensuring the night-time character of the space is considered during its design.

Allied with artistic input (City Note LW-52), where appropriate, designs should utilise new technologies to aid the user experience and sustainability of the space.

<sup>4</sup> BCC Street Lighting Document





**CITY NOTE LW-51****Quality of furniture and fittings**

The quality of lighting columns and mounting infrastructure must complement and align with the street furniture being introduced by a development; or help enhance the quality of the public realm in existing spaces. The siting of lamp columns, allied with other street furniture, must not clutter the public realm; and where possible should serve a dual function, or be integrated into other street furniture or art. The use of catenary and building mounted lighting should be considered where it will not detract from the architecture of the host building.

Where lamps and fittings are installed to illuminate building facades, they must not add clutter to the façade or detract from the architectural quality of the building. Where possible, lamps and fittings should be hidden from view.

**CITY NOTE LW-52****Artistic input into lighting schemes**

Where it is appropriate, due to the scale or location of a project, proposals should commission an artist to help create lighting schemes that deliver more than their functional requirements.

Used productively, artists should be able to deliver more creative lighting proposals with the budget available, which could help enhance (or change) the night-time character of a space or building; further enhancing the architecture; deliver public art gains; and/or create a focal point that attracts users. Working with the right artists, it can be a cost effective way of delivering a strong visual statement to the benefit of the city and development.

The nature of the artistic output should be relative to the development and character of its surroundings, but may include simple interventions such as the creative siting and tone of lighting, to sculptural forms and bespoke lighting furniture. Developers must engage with artists during the early design stages of their proposal, to aid integration with the wider scheme.

The City Council's Cultural Officer will be able to link developers with local artists.

Further guidance and examples of creative lighting proposals can be sourced at the Lighting Urban Community International website.<sup>5</sup>

<sup>5</sup> Lighting Urban Community International website

**CITY NOTE LW-53****Impact of lighting on wildlife**

Lighting designs must not damage or have an adverse impact on habitats or the night-time activities of notable species. Proposals that lie adjacent to the city's canal network, the River Rea or areas of green space, will be particularly sensitive. Engagement should take place with the City Council's Ecology Officer for any lighting proposal.

**CITY NOTE LW-54****Operational flood lighting**

Allied with application of guidance contained in the Institute of Light Professionals (ILP), 'Guidance Note 1: Guidance Note for the Reduction of Obstructive Light GN01:2021'<sup>6</sup>; the design of flood lighting schemes must adhere to the following:

- The height and size of floodlighting columns and equipment should be kept to the minimum needed for operational purposes;
- Where appropriate, landscape measures should screen the lighting installation from adjacent properties, green belt, green wedges or areas of nature conservation;
- Lighting levels adjacent to residential properties and their gardens, must not exceed the obstructive light limitation standards for environmental zones E2 at rear of properties and E3 or E4 (subject to location) to the front (as detailed in ILP GN01:2020);
- The minimum distance of habitable room windows to floodlighting columns should be 12.5m measured on a 90 degree arc from the centre of the window. Any reduction in this distance must demonstrate alignment with the obstructive light limitation standards, with a distance no less than the height of the column;
- Floodlighting must not be detrimental to the safe use of highways (including public footways and cycle routes); or the operation of railways, canals and Birmingham Airport; and
- Floodlighting adjoining or located in the green belt, green wedge, canal corridor and areas designated for nature conservation must not exceed obstructive light limitation standard E2 (as detailed in ILP GN01:2020).

Allied with the above guidance, the City Council may apply a condition to approvals restricting the times floodlights can be used, where they lie adjacent to residential uses or areas of darker landscape.

<sup>6</sup> [www.theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/](http://www.theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/)



## TELECOMMUNICATIONS INFRASTRUCTURE

### CITY NOTE LW-55

Location of telecommunications Infrastructure

#### Most sensitive locations

In the most sensitive areas within the city, telecommunications equipment will only be accepted if it can be demonstrated that there are no other suitable sites in more sensitive or less sensitive locations and if the equipment has been carefully designed to minimise its impact on the specific attributes or use of the site. Bespoke or innovative design solutions may be required to justify the installation of equipment in such areas. These locations are:

- Listed buildings, their curtilage and setting;
- Conservation areas and areas adjacent to a conservation area;
- Historic parks and gardens;
- Education and health institutions; and
- Others including sites in the green belt, Sites of Importance to Nature Conservation (SINCS), Sites of Local Importance for Nature Conservation (SLINCS), Sites of Special Scientific Interest (SSSI), Scheduled Ancient Monuments and other archaeological remains.

#### More sensitive locations

**Residential areas** - Residents may perceive telecommunications equipment to be a significant visual intrusion if it is close to and visible from within their home or garden. It can also cause residents undue concern about perceived health effects. Applications for telecommunications development in residential areas should demonstrate that no reasonable alternatives exist in less sensitive locations and account should be taken of the proximity to and visibility of the installation from nearby habitable room windows and residential gardens in order to protect residential amenity.

**High quality open spaces** - Telecommunications operators should avoid proposals in areas of open space of high quality unless it can be demonstrated that no reasonable alternatives exist in less sensitive locations. Where installations are necessary, key views should be protected. The BDP defines open space as: ‘Open space encompasses a wide range of spaces, not just traditional parks and gardens, grassed areas and woods but also cemeteries, allotments and civic spaces...’. For the purpose of this guidance, high quality open space may have attributes that distinguish it from other areas

of open space such as the quality of the maintenance regime; the contribution to the quality of life of the local community through historical or other association or through the nature and functioning of its use; or, it may form part of a larger open space network where quality improvements are proposed.

This includes canal and river corridors and curtilages where they form high quality open space. Where proposals involve development on playing fields, plans must define the extent of the playing fields and areas around the sports pitches to be affected by the development. Installations in areas of high quality open space or proposals resulting in the loss of public open space without adequate replacement are unlikely to be acceptable.

#### Less sensitive locations

Unless a site is in one of the defined most or more sensitive areas it will be in an area, usually more commercial in nature, where the installation of telecommunications equipment is more likely to be acceptable.

### CITY NOTE LW-56

Siting considerations

The most obvious way to address the visual impact of telecommunication development is to site it in such a way that it blends into or is hidden by existing landscape or cityscape. Applicants will need to demonstrate the selected location achieves this requirement, considering and responding to the following:

- The effect on the skyline or horizon;
- The site when observed from any side;
- The height of the site in relation to surrounding land;
- The site in relation to existing masts, structures or buildings;
- The existence of topographical features and natural vegetation;
- The site in relation to residential property; and/or
- The site in relation to areas designated locally for their scenic or conservation value and buildings of a historic or traditional character.

Mast and/or site sharing and the siting of equipment on existing buildings, structures or pylons should also be considered as a means of minimising the visual impact of an installation.

### CITY NOTE LW-57

Design and appearance of infrastructure

All telecommunications proposals should be designed to minimise visual impact and intrusion. The decision to propose ground based or building based masts, antennae and cabins will depend on the respective impact that the proposal will have on amenity, visual impact, local character, skyline and neighbouring uses, and on the technical constraints of the required equipment.

Ground based masts

- Make the most of existing screening and backdrops - opportunities should be taken to use existing screening or backdrops, for example in the form of buildings or trees, to reduce the impact of development.
- Street locations - Where street based masts are the only option, they should be similar in character and appearance to existing street furniture and of a slimline design. They should not be prominent in the streetscene or add to clutter.
- Landscaping and planting - landscaping and planting can make a significant contribution to reducing the impact of masts by:

1. Identifying critical viewpoints and planting at a distance from the site so that the visual intrusion of the mast is reduced. Agreements with other landowners may be needed to facilitate this; and/or
2. Planting around the base station compound to minimise visual impact closer to the site. Sufficient land should be included within the proposal to enable this to be achieved. Where landscaping and planting is carried out, adequate maintenance should be provided for and in the event of failure of shrubs or trees, these should be replaced during the next planting season.

• Cabins/cabinets - these should be of no greater size than is necessary to reflect the operational needs of the site and should be designed and use colour to match other street equipment. They should be treated and designed to reduce opportunities for vandalism and graffiti. In certain locations cabinets in their own right can appear to be particularly intrusive and preclude the site being acceptable. They must comply with City Council guidelines on the installation of street furniture.

• Compounds - these should be no larger than required for the plant and equipment needed to serve the site. They are unlikely to be located outside industrial or rural areas. Wherever they are proposed they should be unobtrusive and not have an adverse impact on the character of the area. The style and design of perimeter fencing should be appropriate to the location. In certain locations a perimeter wall or solid screen in appropriate materials

may be a better way to screen off views into the compound. If vehicular access onto the public highway is required this should be constructed such that normal highway safety standards are not compromised.

#### Installations on existing buildings and structures

Antennae and related equipment on existing buildings and structures will often be more appropriate alternatives to establishing a new ground based mast, particularly where there would be little significant effect on the appearance of the building or structure and it would not result in an unacceptable level of visual intrusion to adjoining properties.

Consideration should be given to the following:

- The height, scale and architectural style of a building or structure;
- The position and siting of the equipment which should seek to minimise its obtrusiveness against the skyline;
- The avoidance of rooftop clutter than may be visible from the street or nearby buildings; and
- The size and finish of cabins or other equipment housing to enable them to blend in with other rooftop structures.

#### Cumulative impact

In designing and locating new infrastructure, consideration must be given to the potential cumulative impact of infrastructure clustering. Where there is existing telecommunications infrastructure within, or in close proximity to the proposed location, the applicant must demonstrate there will be no greater impact to the amenity of surrounding uses or visual impact on the character of the surrounding area.

The clustering of telecommunications infrastructure is unlikely to be supported in the ‘Most Sensitive’ and ‘More Sensitive’ locations.

#### Camouflaging and disguising equipment

The use of camouflage or the disguising of equipment, so it visually reads an something less intrusive, must be a principal driver for the design of all masts or equipment. Examples of the successful concealment of antennae include features such as flagpoles, street lampposts, signs and church towers. The use of glassfibre reinforced concrete (GRC), which can be moulded into any shape, coloured appropriately, and can be used to simulate masonry and stone features such as chimneys and plinths. Masts have also been designed as trees although they need very careful design and siting to be effective. Antennae have also been incorporated in commissioned works of art.

The City Council will work with operators to explore the merits of camouflaging telecommunications equipment where the visual impact of a proposal could be mitigated to make it acceptable.



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