6 Quality Places

The purposes of this Chapter are to:

- Describe how the place function of streets may be understood and approached
- Stress the importance and value of urban design as a framework within which streets are set out and detailed
- Introduce expectations relating to street dimensions, the use of buildings at junctions, the treatment of streets as social spaces and other layout considerations, as well as more detailed design features including those relating to clutter and local distinctiveness

The key recommendation contained in this Chapter is that:

- A multiple of objectives, just one of which is the safe and convenient movement of vehicles, dictate the layout and design of streets

6.1 INTRODUCTION

6.1.1 The previous chapter covered how the Manual for Streets has an important role to play in achieving what we call sustainable communities, covering concepts such as connected layouts, mixed uses and walkable neighbourhoods. This chapter takes those themes further, by outlining the importance of visual quality and introducing concepts of three-dimensional urban design.

6.2 WHAT IS URBAN DESIGN AND WHY IS IT IMPORTANT?

KEY ASPECTS OF URBAN DESIGN

"Urban design draws together the many strands of place-making – environmental responsibility, social equity and economic viability, for example – into the creation of places of beauty and distinct identity. Urban design is derived from but transcends matters such as planning and transportation policy, architectural design, development economics, landscape and engineering". The Urban Design Compendium[1]

6.2.1 But what does this mean in practice? We can all agree on the desirability of places of beauty and distinct identity, but how can they be achieved?

6.2.2 The Urban Design Compendium, which is required introductory reading on the subject, states that key aspects of urban design include:

[1] Llewelyn Davies for English Partnerships and the Housing Corporation (2000) The Urban Design Compendium. For an introduction to the principles of urban design, see also DETR and CABE (2000), By Design: urban design in the planning system: towards better practice.

Places for People

For places to be well-used and well-loved, they must be safe, comfortable, varied and attractive. They also need to be distinctive, and offer variety, choice and fun. Vibrant places offer opportunities for meeting people, playing in the street and watching the world go by.

Enrich the Existing

New development should enrich the qualities of existing urban places. This means encouraging a distinctive response that arises from and complements it's setting. This applies at every scale - the region, the city, the town, the neighbourhood, and the street.

Make Connections

Places need to be easy to get to and be integrated physically and visually with their surroundings. This requires attention to how to get around by foot, bicycle, public transport and the car - and in that order.

Work with the Landscape

Places that strike a balance between the natural and man made environment and utilise each site's intrinsic resources - the climate, landform, landscape and ecology -to maximise energy conservation and amenity.

Mix Uses and Forms

Stimulating, enjoyable and convenient places meet a variety of demands from the widest possible range of users, amenities and social groups. They also weave together different building forms, uses, tenures and densities.

Manage the Investment

For projects to be developable and well cared for they must be economically viable, well managed and maintained. This means understanding the market considerations of developers, ensuring long-term commitment from the community and the local authority, defining appropriate delivery mechanisms and seeing this as part of the design process.

Design for Change

New development needs to be flexible enough to respond to future changes in use, lifestyle and demography. This means designing for energy and resource efficiency; creating flexibility in the use of property, public spaces and the service infrastructure and introducing new approaches to transport, traffic management and parking.

6.2.3 These basics of urban design, however, are not being realised. All too often, new development is unremarkable and lacks sense of place. In these cases, it lets down residents and works against the aims of the sustainable communities agenda.

6.2.4 And frequently, as is demonstrated by some of the case studies, it is the interaction of the design and layout of homes and the design and layout of roads where attempts to create quality places break down[2]. Urban designers complain that their schemes are compromised when rigid highways standards are applied to them.

[2] This was also a key finding of CABE (2005) Housing audit: Assessing the design quality of new homes in the North East, North West and Yorkshire & Humber

Highway engineers claim that urban designers are pushing for developments that are potentially unsafe for pedestrians and drivers. The remainder of this chapter maps out a set of expectations, from an urban design perspective, that can provide the basis of an understanding between both professions.

THE VALUE OF GOOD DESIGN

6.2.5 Good design is at the heart of planning policy. As Planning Policy Statement 1 emphasises, "good design ensures attractive, usable, durable and adaptable places and is a key element in achieving sustainable development. Good design is indivisible from good planning".

6.2.6 The Government does not want to see good design simply for design's sake, although a public space, development or building that lifts the spirits can have incalculable benefits. Beyond this, we are gaining a clearer understanding of the economic, social and environmental benefits of good urban design, forming a persuasive argument that cannot be ignored by responsible practitioners.

6.2.7 The evidence base collated by CABE[3] includes the following:

- Compact neighbourhoods that integrate parking and transport infrastructure encourage walking and cycling – resulting in 43 per cent less fuel consumption;
- Properties adjacent to good-quality park have a 5 to 7 per cent premium compared to identical properties in the same area outside the vicinity of the park; and
- Benefits of better designed commercial developments include higher rental levels, lower maintenance costs, enhanced regeneration and increased public support for the development.

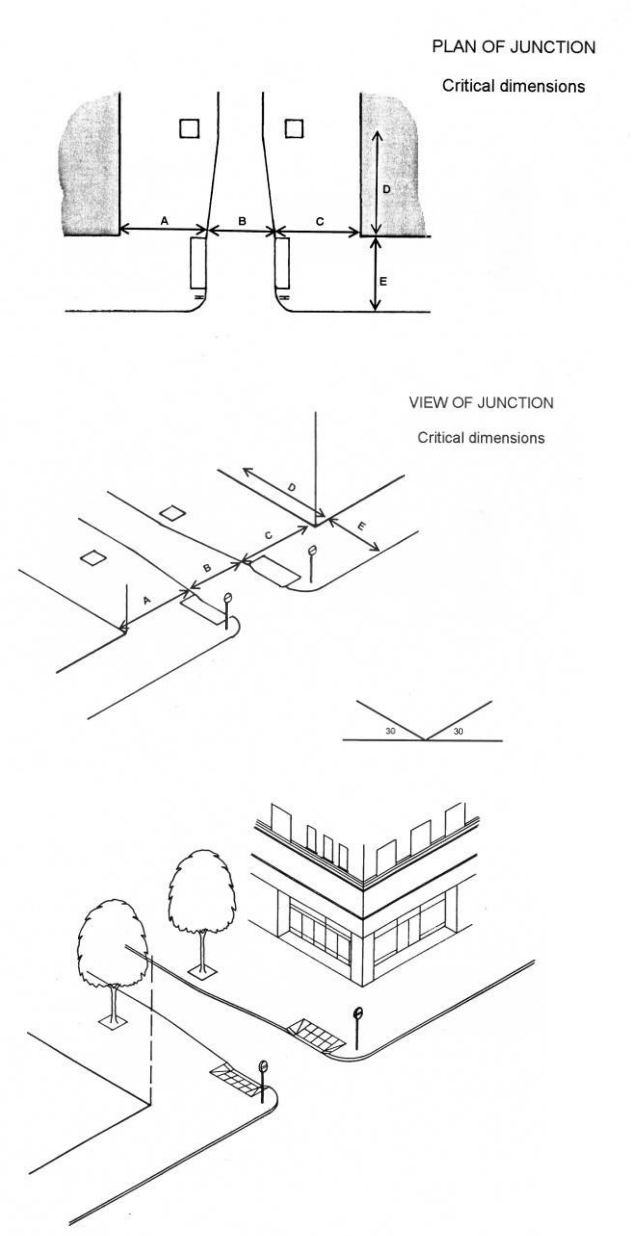
Newhall, Harlow: a master plan-led approach with bespoke housing design

6.3 THE NEED FOR DESIGNING IN THREE DIMENSIONS

6.3.1 Designs and layouts presented in three, rather than two, dimensions provide an important way for engineering and urban design considerations to be addressed together.

[3] See, for example, CABE (2002) The value of good design, or CABE (2005) Buildings and spaces: why design matters

6.3.2 Street profiles should be developed as well as plans and even clearer expression of design intentions is provided by perspective or axonometric drawings. The latter have not traditionally been part of engineering training, but with modern computer techniques they no longer require special investment of skill resources or time. They are now easily produced by engineers and their colleagues on a Design Team. For important schemes, computer animated “walk-through” presentations can be a powerful tool in conveying design issues and resolutions.



Example of 3 dimensional presentations (images courtesy of Colin Davis)

6.3.3 Three dimensional presentation enables street furniture, lighting, utility equipment and landscaping to be more clearly expressed. It also brings life to regular layouts that in two dimensions can appear monotonous, whilst acting as a reality check for more complex or elaborate patterns.

6.3.4 Large-scale plans can also be useful for detailing public realm. For example, footways can be dimensioned according to specified paving dimensions, rather than the area being left for interpretation by contractors. Building to plan should be the norm, so that the quality of details is not left to chance, and also so that the local authority has a clear benchmark of quality to work to when auditing for adoption purposes. Sloppy building can be avoided, or rectified at the developer's expense, if the expectations are clearly set down.

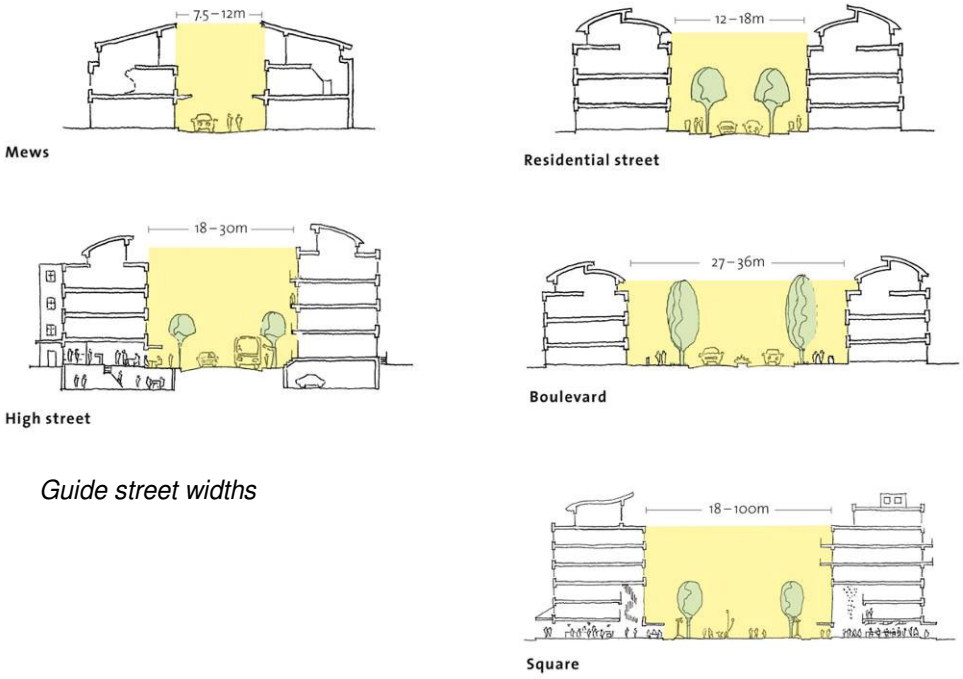
6.3.5 Drawing at 1:50 is appropriate for detailing materials and landscape, with 1:100 probably being the minimum acceptable. Local authorities should not accept submissions with plans drawn only to 1:500 as these give insufficient detail.

6.4 STREET DIMENSIONS

6.4.1 Chapter 2 of this Manual touches on the different roles and types of streets. Most neighbourhoods will include a range of street types, each with different characteristics, such as use, width and building heights. It is these characteristics that dictate how pedestrians and traffic use the street. But they in turn are dictated by the type of street and how planners anticipate it being used.

WIDTH

6.4.2 Width is a key indicator of a street's place in the movement hierarchy. The diagram shows typical widths of different street types. A typical frontage-to-frontage distance of a regular residential street ranges between 12 and 18 metres, although there are examples of widths as narrow as 9 metres working well. There are no hard and fast rules, as long as account is taken of the varied activities take place in the street and of the scale of buildings on either side.



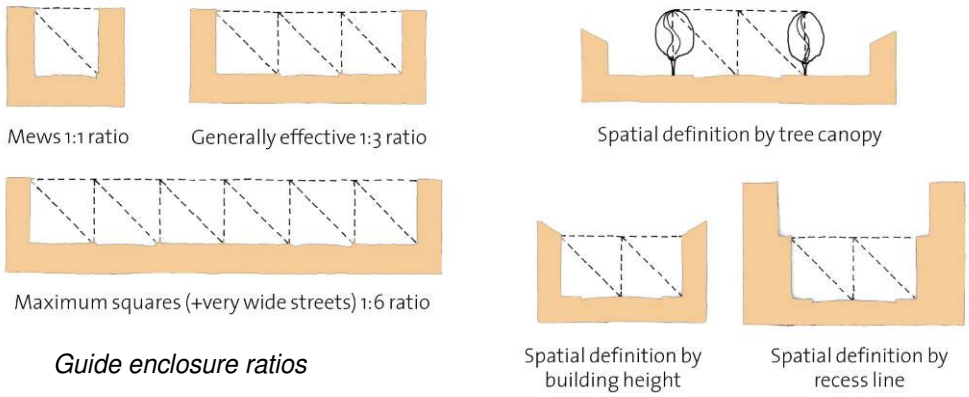
Guide street widths

HEIGHT

6.4.3 As noted above, three dimensional thinking is key, as height, as much as width, defines the public realm. Building elevations (or, on wider streets, trees) and the cross-sections of streets and public spaces should be scaled to appropriate dimensions. This

is called enclosure, and is a core urban design principle. The following height to width enclosure ratios, also illustrated, should serve as a guide to expectations:

Height to width ratios		
	Maximum	**Minimum**
Mews	1:1.5	1:1
Streets	1:3	1:1.5
Squares	1:6	1:4



Guide enclosure ratios

Adjacent streets demonstrating both ends of the enclosure range. The street on the left has a height to width ratio of approximately 1:3, enabling a pleasant living environment to be shared with functionality in the form of traffic movement and on-street parking, some of it angled. The street on the right has a height to width ratio of about 1:1.5. Again, this works well in urban design terms, but the need to accommodate on-street parking has meant that traffic is restricted to one-way movement. At the bottom of the local street hierarchy, there are almost always more pedestrians than cars moving along this street.

6.4.4 The benefits of taller buildings, such as in signifying locations of visual importance, adding variety or accommodating larger numbers of dwellings in the right locations (usually meaning central areas or those accessible by a wide range of modes), must be weighed against possible disadvantages, including an overbearing relationship with the street and the need to provide more parking. Design mitigation techniques such as building recesses and street trees should also be considered to reduce the impact of tall buildings.

USING BUILDINGS AT JUNCTIONS

6.4.5 To produce quality environments, the arrangement of the buildings and footway should be a major influence on defining the space at a junction, rather than purely vehicle movement requirements. In terms of townscape, a wide carriageway with tight, enclosed corners makes a better junction than cutback corners with a sweeping curve. This might include bringing buildings forward to the corner. Junction treatments are explored in more detail in Chapter 7.

Wide, curved junctions reduce enclosure and diminish the relationship between these homes and the amenity space provided at the centre of the circus.

BACKS AND FRONTS

6.4.6 As a rule, all movement in a neighbourhood should be along streets (as opposed to segregated footpaths and cycleways), and all streets should be fronted by buildings. And, the other side of the same coin, all homes should front onto the street. We lost sight of these basic rules in the post-War decades, resulting in Radburn layouts and tower blocks in parkland, and are struggling to right those wrongs now.

6.4.7 So streets should be engineered and designed so that backs and fronts of dwellings are treated differently. Most importantly, this treatment is relevant in terms of access and ownership. The basic rule is ‘public fronts and private backs’. Ideally, certainly in terms of crime prevention, there should be no rear access to dwellings; back gardens should adjoin other back gardens. And front doors should open onto front gardens or streets.

6.4.8 The rules of backs and fronts apply equally to roads higher up the hierarchy, like those that link or provide access to purely residential areas. Such roads should be fronted by housing (or other development). If they are lined by blank back garden

fences or hedges, security concerns are increased, drivers are encouraged to drive fast, land is inefficiently used and there is a total lack of sense of place.

Cul-de-sacs surrounded by a perimeter road that is fronted by back fences: no sense of place, no relationship with its surrounds, no quality, with streets designed purely to move traffic.

DESIGNING STREETS AS SOCIAL SPACES

6.4.9 The public realm should be designed to suit the activities that we would like to see carried out on it. If the sole role of a particular space is to carry traffic, then highway engineering imperatives should take precedence. But that is almost never the case for residential streets, where a network of spaces should be designed to accommodate a range of users, create visual interest and amenity, and encourage social interaction – in these instances the place function of streets may equal or outweigh the movement function, as described in Chapter 2. This suggests a mix of streets of various dimensions, squares and courtyards, with associates pocket parks and play spaces. The key is to think carefully about the range of uses that will occur in the public realm that is being created and to vary the design accordingly.

OTHER LAYOUT CONSIDERATIONS

6.4.10 The layout of a new housing or mixed use area will need to take account of factors other than street design and traffic provision. Other factors include:

- Climate and prevailing wind, and the impact of this on building type and orientation;
- Energy efficiency and potential for solar gain, which may call for slightly wider streets to let homes benefit from the sun's light and heat (a 14 metre-wide street loses 30-40% of annual solar radiation), single aspect buildings, or a particular compass orientation (usually an east-west street pattern);
- Noise pollution (e.g. from major highways or railways) which may demand "barrier" blocks to shield noise from other buildings;
- Providing views and vistas, landmarks, gateways and focal points to emphasis urban structure, hierarchies and connections, as well as variety and visual interest; and
- Crime prevention, including the provision of defensible private and communal space and active, overlooked streets.

6.4.11 Often satisfying one consideration will make it difficult to satisfy another consideration, and invariably a balance must be struck. This is one of the important reasons why, as Chapter 4 recommends, it is necessary to get agreed design concept objectives set out and agreed at an early stage in the design process.

6.5 ATTENTION TO DETAIL

6.5.1 In addition to the three-dimensional layout imperatives introduced above, there are a number of other crucial elements of urban design that need to be considered in all residential schemes. They are the focus of this section.

WHERE STREETS MEET BUILDINGS

6.5.2 The space between the street/pavement and the front of the house needs to be carefully managed, particularly in terms of building lines, set backs and buffers. A common building line is often preferable to provide continuity, definition and enclosure to the public realm.

6.5.3 The argument for large front gardens in new development is generally considered to have been lost. Compared to back gardens, their amenity value is low – as witnessed by many householders converting them to ugly hard standing for car parking. For buildings facing directly onto the street (as all should), though, some setback is required. A 'semi-private' strip of between 1.5 and 3 metres in urban areas and about 5 metres in suburban or village settings is useful for a number of reasons:

- Amenity space for a small garden, planting or seating;
- Functional space for rubbish collection, storage or meter reading; and
- Security space, providing a buffer between the public and the private that defines which is which and requires intruders to pass through, thus reducing opportunities for crime.

6.5.4 To maximise visual quality, any garages and parking provision should be level with or behind the main building line.

A contemporary interpretation of the terraced house, providing a proper active frontage to the street and a small semi-private buffer.

REDUCE CLUTTER

6.5.5 Clutter in the streetscape can include street furniture, signage, bins, bollards, utilities boxes and lighting, or any number of other things that can accumulate on a pavement and just get in the way. Whilst it all has a legitimate and usually useful role, the agencies that provide what can become clutter and those who manage the street scene need to think carefully whether what is being proposed is absolutely essential, or whether ways of lessening the visual impact and actual impediment to users can be found.

6.5.6 Examples of reducing the impact include:

- Mounting streetlights onto buildings or traffic lights onto existing lampposts.
- Hiding things like service inspection boxes within the pavement or the building edge.
- Where possible, bespoke designs of things like signage or bollards to be in keeping with their surrounds.

6.5.7 This aspect of placemaking is discussed in more detail in Chapters 11 (Signing) and 13 (Street Lighting).

The signposts, trees, bollards, benches and bin have the potential to clutter this residential square, but careful design means that they actually add to local amenity, as intended.

LOCAL DISTINCTIVENESS

6.5.8 There is little to be gained by rolling out residential developments that could be 'anyplace'. This approach, which is still the norm, indicates that the care and attention needed to create a quality place to live has not been invested.

6.5.9 Local identity and distinctiveness can be strengthened by:

- Relating the layout to neighbouring development (if it satisfies the basics of urban design);
- Using local materials;
- Retaining historical associations; and
- Involving the community in the design process.

The Orchard, Lechlade: new housing that responds to the Cotswolds vernacular

STANDING THE TEST OF TIME: QUALITY MATERIALS, MANAGEMENT AND MAINTENANCE

6.5.10 Places must be designed and delivered so that they both look good and work well, in the short- and long-terms. The specifications of materials and maintenance regimes must demonstrate high standards of visual attractiveness, durability and environmental performance. Materials should be selected according to the street's design speed. Maintenance should be straightforward and management regimes should ensure that there are clear lines of responsibility. These themes are covered in detail in Chapters 10 and 14.

6.6 GETTING THE RIGHT BALANCE

6.6.1 Urban design provides the context into which highways have to be engineered. The ways that streets are laid out and how they relate to the surrounding buildings and spaces have a great impact on the success or failure of neighbourhoods, both aesthetically and functionally. These areas, therefore, must be subject to a high level of consideration; get the streets wrong and the neighbourhood goes with them.

6.6.2 The convenient and safe movement of vehicles is just one of the objectives that have to be taken into account when designing residential areas. Other objectives include residential amenity, accommodating parking, community safety, reducing energy use and access for public transport. Planning and design is all about managing such competing objectives, some of which are competing and will necessitate trade-offs. What is crucial is that one objective does not dominate the others. And that place-making in our residential environments involves designing streets for people.