Block dimensions

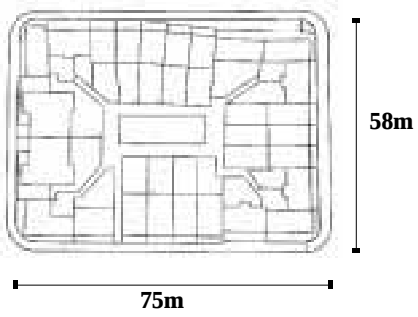
There are no hard and fast rules in terms of the optimum dimensions of a perimeter block; indeed a variety of different block lengths is important in adding richness to a neighbourhood. The case studies highlight a number of key considerations including:

- balancing land efficiency with the need to provide convenient pedestrian routes through an area and to important local facilities;
- traffic management in terms of controlling vehicle speeds and discouraging rat-running (see Chapter 3);
- the spatial needs of activities which are to be accommodated within the block.

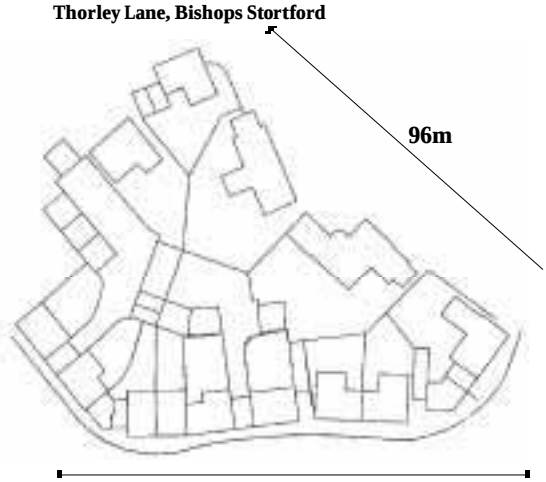
The historic 'long grid' often achieved land efficiency at the expense of convenient pedestrian movement and this explains why long residential blocks were often orientated along the main pedestrian desire lines. The Rolls Crescent scheme at Hulme represents the opposite extreme with very short (70 x 80 metres) square blocks providing a very high degree of pedestrian permeability through the area. Between these two extremes, a block length of between 100 and 150 metres would represent a general rule-of-thumb.

Decisions about the use of space within the block are also a significant factor in determining appropriate block dimensions. At Rolls Crescent, for example, the objective to provide a secure sitting out and play area for use by immediate neighbours has resulted in a small and intimate urban block. By contrast, at Thorley Lane, Bishops Stortford and Poundbury, Dorchester the decision to accommodate car parking *within* the block has resulted in much larger blocks.

Rolls Crescent, Hulme

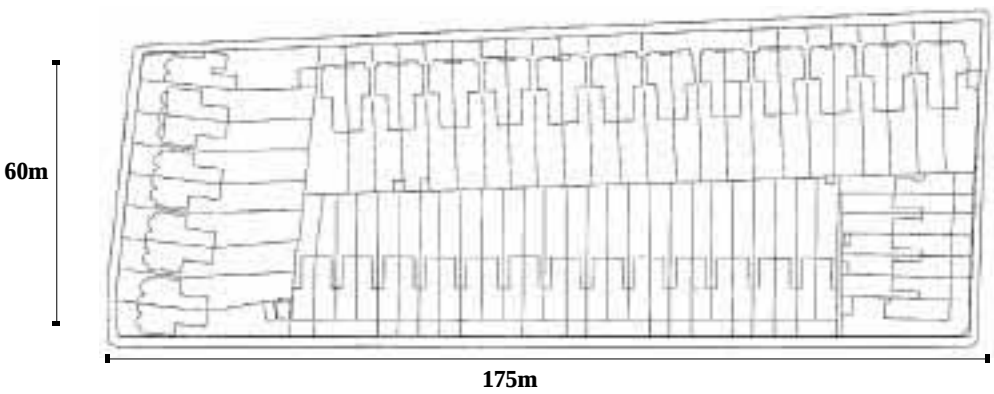


Thorley Lane, Bishops Stortford



Poundbury, Dorchester

Stanstead,Lewisham



Access to back of block areas

A key consideration in the design of residential blocks is the degree of public access provided to areas within the block. It is here that some of the significant choices and trade-offs need to be made between competing objectives. Principal among these is the tension between the arrangements for servicing (including car parking) and the security of dwellings and garden areas.

Servicing dwellings from within the block (such as at Jesmond, Poundbury and Thorley Lane) can improve the appearance of the streetscape in terms of car parking and refuse collection and enable residents to have access to the rear of gardens. However, these advantages need to be carefully balanced against other concerns. In particular:

- rear servicing can undermine the security of dwellings by allowing strangers access to the rear of dwellings;
- without very careful attention to detailed design, rear parking courts and alleyways can become unpleasant and even hostile places;
- rear courtyard parking can reduce the area available for back gardens and the coming and going of cars can detract from the tranquility of garden areas.

The design of Poundbury successfully overcomes some of these concerns by incorporating dwellings into the rear courtyards to provide surveillance and to create an attractive public space. Yet care needs to be taken in replicating this model, both in ensuring that the design principles are carried through as rigorously as at Poundbury, Dorchester and in taking account of the density of development and the character of the surrounding area.

The Stanstead Road, Lewisham and Rolls Crescent, Hulme case study areas both achieve complete enclosure of the back of block area. This helps to make the rear of dwellings secure and the arrangement of rear garden to rear garden (as at Stanstead) provides the opportunity for substantial landscaped areas within the block. However, it requires dwellings to be serviced from the front and cars to be parked on the street. A particular issue in respect of terraced houses can be the need to carry garden equipment and waste through the house, unless a shared and gated front access to back yards and gardens is provided. The same point applies to building maintenance and to any future building work at the back of the house.

Enclosed backs give security to the rear of dwellings and provide space for more generous gardens, but parking and servicing must be accommodated in the front. Stanstead Road, Lewisham

Rear service alleys provide convenient access to rear gardens and can remove bin storage and clutter from the street. However, they raise serious issues in terms of safety and security. Here bins in the alley also pr ovide a platform for burglars to scale the rear wall and gain access to the back of the home. Jesmond, Newcastle

Parking in courts within the block can improve the quality of the street scene, but this can have implications in terms of the size,security and tranquility of gardens.Thorley Lane, Bishops Stortford

Placing dwellings within the parking courts can help t o improve natural surveillance. Here the design creates a public space which has cars parked in it, rather than a car park. Poundbury, Dorchester

Extent of public access

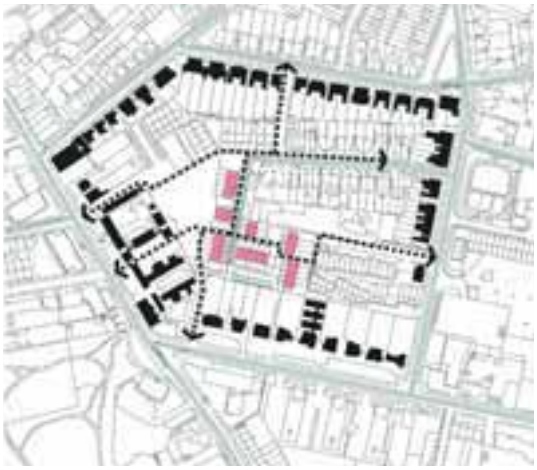
Other block structures

Until recently, perimeter blocks were the most common and robust form of housing layout, but there are situations where a different form of layout is appropriate. These can include constrained sites or those where a 'setpiece' development is required, such as one overlooking an important civic space.

Equally, perimeter blocks can accommodate a variety of layout forms within them. Specifically, cul-de-sac forms can work very well within a wider block structure. This can add interest and diversity as well as making good use of backland areas within large development blocks.

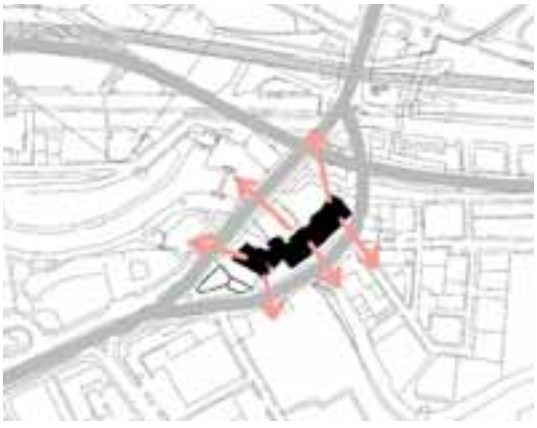
Highsett, Cambridge shows how a secluded and intimate residential area with good pedestrian links into the surrounding area can be created within a larger block. Where such opportunities are taken it is important that the scale and massing of development within the block respect that of the buildings forming the main block and take account of the existing orientation of fronts and backs.

Unwin and Parker's plan for Letchworth (1907),based on a perimeter block structure but with enclosed layouts within larger blocks and buildings on special sites



Buildings forming wider urban block
Third Phase of development at Highsett enclosed by wider block
Pedestrian routes

Enclosed housing layout relying on a wider block structure which maintains continuity of frontage to the principal routes around the block, Highsett,Cambridge



A pavilion building is 'civic' on all sides. Here the attributes of the perimeter block form are condensed into a single building. Deansgate Quay, Manchester

'Local planning authorities should adopt policies which . . . focus on the quality of the places and living environments being created and give priority to the needs of pedestrians rather than the movement and parking of vehicles.'

PPG3: Housing paragraph 56

Street widths and enclosure

Designing residential streets around the functional requirements of cars, service vehicles and utilities, with inadequate attention being paid to other important amenity requirements, has been one of the greatest failings of much recent development. In comparison to the best historic residential environments, the consequences have included:

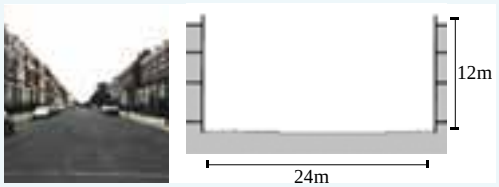
- a loss of local identity through the widespread application of the same standards;
- an incoherent relationship of dwellings to the street and to each other;
- a lack of any sense of enclosure;
- the loss of front garden areas to hardstandings for off–street car parking;
- the loss of boundary treatments, such as walls and well-managed hedges, which define public and private space and articulate the boundaries between dwellings;
- often an absence of street trees.

This street has a very good sense of enclosure. Street width and building heights are well related and the tall building at the end of the street terminates the view. Greenland Passage, Southwark

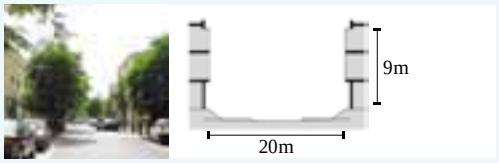
There are no hard and fast rules. Indeed the case studies show that streets can work at widths as varied as nine metres (Rolls Crescent, Hulme) and 24 metres (Canning Street,Liverpool). What is important is that the space between the buildings is considered in relation to the scale of dwellings and the activities taking place in the street. For example, Canning Street works well with a very wide separation because the street is framed by 12 -14 metre high buildings. In other cases landscaping can help create a sense of enclosure where wider spacing is required between dwellings, such as along principal movement routes.

It follows from this that the design of streets needs to be tailored to the particular needs of the place and its physical and social context and considered in three dimensions.

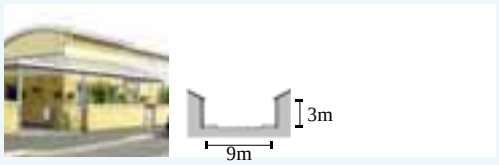
Varying ratios of street width to building height



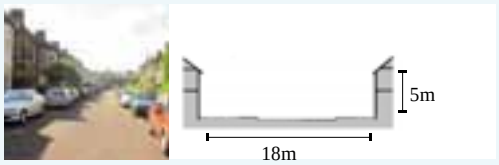
1:2 ratio, Canning Street,Liverpool



1:2.2 ratio, Isledon Village, Islington



1:3 ratio, Halston Street, Hulme



1:3.6 ratio, Cavendish Place, Jesmond

In looking at the degree of enclosure achieved in the case study areas, it is also important to remember that the historic case study areas feature higher floor-to-ceiling heights than would be the norm today. Hence,creating the same sense of enclosure with the same number of building-storeys would require a reduced separation distance between facing dwellings, for example as at Poundbury, Thorley Lane and Rolls Crescent. By contrast, at Isledon Road, monopitch roofs have been used to lend a larger scale to the street elevations.