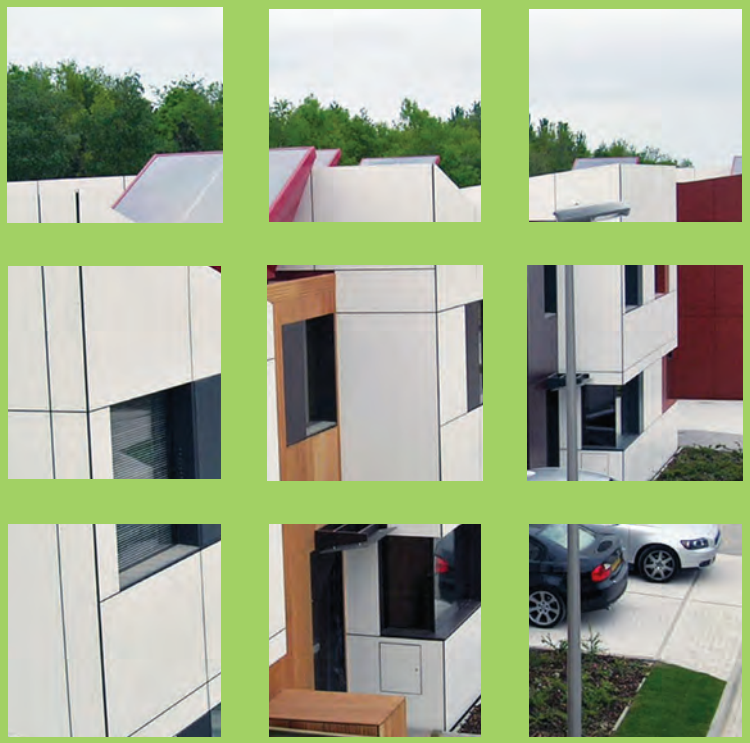
Urban Design & Landscape Architecture

MILTON KEYNES COUNCIL

New Residential Development Design Guide

Supplementary Planning Document

Adopted April 2012



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MILTON KEYNES COUNCIL

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Executive Summary

This Design Guide for New Residential Development in Milton Keynes is intended to ensure a high quality of development for the future growth and regeneration of Milton Keynes. This is especially pertinent for Milton Keynes with its large growth forecast and commitment to regenerating its deprived estates.

The Guide will have relevance for the entire borough, both for large greenfield sites as well as small infill sites. It is intended to both serve as a Development Management tool for assessing planning applications and reserved matters, as well as provide clarity to developers about what the Council expects in terms of the quality of new residential development.

The Design Guide is intended to be specific to the Milton Keynes context and will build on those elements of a neighbourhood that are popular with residents. It is not another generic design guide, although it acknowledges best practice in urban design as a given that must be respected. In this respect its guidance has been informed by two elements which form the content of the Guide:

1. The character of Milton Keynes and what have been its positive defining features since its growth commenced over 40 years ago. The design guide builds on this.
2. The regular occurring issues/problems that come up at pre-application discussion that affect the quality of new residential development in Milton Keynes. This document will provide guidance on these issues.

Appreciating the Context: Character of Milton Keynes

Milton Keynes is defined by the following positive design characteristics which should act as a design cue for the future:

- A strategic grid road network with associated landscaped grid road reserves
- A flood attenuation system which doubles as a strategic linear open space network
- Extensive planting within streets and public spaces
- Innovative and architectural interest and variety of early estates built and managed by the Development Corporation
- Innovative low energy housing and other projects designed to raise energy efficiency.

Section 2 establishes how these can be interpreted in the 21st century Milton Keynes and in the context of the sustainability agenda.

The Design Guide includes tabled criteria which require a developer to assess the local context which will result in the positive features of the site and the surrounding area being reflected in the new development.

Building a Place

Section 3 of the Design Guide focuses on guidance around the structuring elements that make up a large development in particular. This includes the movement network, block structure and how to accommodate the car.

Detailing the Place

Section 4 is focussed on the provision of design guidance at the scale of the individual dwelling and the relationship it has to the street and adjacent dwellings. It includes amongst other guidance setbacks, boundary treatment, frontage conditions and design appearance of buildings. Together these all have an important impact on the overall character of a development and the streetscape in particular.

Regarding detailed design appearance of buildings, the Design Guide does not advocate a particular style of architecture but as a new town with a history of innovation it does not support poor quality pastiche types that do not add to the character or identity of a development.

Design Quality Assurance

Section 5 focusses on Design Quality Assurance and includes a Design Checklist, as well as other methods of ensuring high quality residential developments in Milton Keynes..

Section 1 : Introduction

The way places and buildings are planned and designed matters to us in many ways. The built environment can be a source of everyday joy or misery. Its quality is an important influence on crime, health, community cohesion and prosperity. It also has a major impact on climate change.

1.1 Purpose of the Design Guide

1.1.1 This Design Guide has been prepared by Milton Keynes Council (MKC) to help ensure high quality residential developments are achieved in Milton Keynes. The Guide will:

- Be used by the Council in the determination of planning applications and reserved matters;
- Help developers understand what the local planning authority will expect from them particularly in terms of the design, layout and landscaping of new residential developments in growth areas as well as areas of regeneration and hence assist with the preparation of planning applications.

1.1.2 The Design Guide promotes best practice in urban design while at the same time reflecting and building on those elements of a neighbourhood that have proved successful in Milton Keynes. In this respect, Appendix A outlines case studies of various places in Milton Keynes that people like to live in and reflect many best practice urban design objectives.

1.1.3 The Design Guide will also serve as an important informant for the production of strategic masterplans, site specific development briefs and design codes in terms of general layout and design principles.

1.2 Scope of the Design Guide

1.2.1 The Design Guide will apply to the whole of the borough for all sizes of residential development. While urban design principles are still applicable, it is likely to be of less relevance to Central Milton Keynes (CMK) where requirements for key elements such as parking and density for example, are different to suburban residential development. There is in addition already detailed site specific design guidance covering CMK.

1.2.2 The Local Plan and Revised Proposed Submission Version of the Core Strategy contain a number of design policies for new development. The purpose of this Design Guide is to interpret the policies as they relate to residential development and to provide the level of detail required to assist both developers and the local planning authority.

1.2.3 The Design Guide provides requirements, practical advice and solutions, based on best practice, for many of the common design issues in Milton Keynes that Development Control officers are facing on a regular basis through pre-application discussions. These include:

- The character/identity of new developments (large ones in particular);
- The requirement to accommodate the car in the most appropriate way;
- The movement network;
- Development blocks;
- The detailed design appearance of buildings.

1.2.4 Investing in good urban design has been shown to add value to residential developments. However, design requirements should not be so onerous as to impact on the viability and/or deliverability of schemes.

1.2.5 Often designers of housing schemes will have to balance a number of design requirements. It will not always be possible to satisfy every requirement. If developers feel they are unable to comply with any aspects of the Design Guide, they should raise it with the Council as part of pre-application discussions.

What the Design Guide does not cover

1.2.6 The Design Guide is not providing guidance regarding urban design related issues that aren't typically discussed at pre-application meetings or in the preparation of masterplans and design codes. This therefore includes:

- An assessment of success and failures of the urban and landscape structure of Milton Keynes;
- New forms of structures for the city as it grows;
- Guidance relating to sustainable construction as this is covered by an existing SPD entitled "Sustainable Construction SPD".

1.3 Status of the Design Guide

1.3.1 The Design Guide has been prepared as a Supplementary Planning Document (SPD) under the Local Development Framework (LDF) system. It will be used by Development Control officers in the determination of planning applications.

1.3.2 The guide accords with and reinforces government guidance, as well as Local Plan policy and the submission version of the Core Strategy. The key local policies which are relevant to the Design Guide are included at Appendix B.'

1.3.3 The National Planning Policy Framework (NPPF), published in March 2012, sets out the Government's planning policies for England. These policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

1.3.4 The NPPF states that:

> *The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.*

Neighbourhood Plans

1.3.5 The Localism Act 2011 introduces a new right for communities to draw up a neighbourhood plan. Neighbourhood plans will, once adopted, form part of the Development Plan.'

1.4 Lifespan Of Design Guide

1.4.1 The performance of the Design Guide will be monitored to establish whether it needs to be reviewed. A full review of the document will take place within at least five years after its adoption. However, it may be reviewed earlier if there are changes to policy or best practice guidance, which have a significant impact on the contents of the Design Guide.

1.5 Relationship of SPD to Existing Planning Consents, Briefs and Design Codes

1.5.1 Extant planning permissions and reserved matters approved prior to the adoption of this SPD, can be implemented as approved. The council would however always entertain re-submitted applications that accord more closely with the principles and guidance contained within this new SPD.

1.5.2 For some sites, planning permission has been granted subject to legal agreements and planning conditions which require developers to submit future reserved matters applications in accordance with approved pre-existing design codes. Where applications for reserved matters come forward in these areas, the Council will expect developers to follow the requirement of those pre-existing design codes but acknowledge that in submitting reserved matters applications, they may wish to incorporate the principles and guidance contained in this new SPD where they conflict with the content of the approved pre-existing design codes. Where the reserved matters application is supportive of the content of the SPD, the Council will not refuse the application solely on the basis that it varies from any of the pre-existing approved design codes, especially when the application is seeking to incorporate the principles contained in this SPD.

1.5.3 Planning Applications, Reserved Matters Applications (not linked to a legal agreement or conditional upon adherence to a design code) and other forms of design guidance (e.g. design codes) submitted after the adoption of this SPD will need to have been prepared, wherever possible and/or appropriate, in accordance with the content of this SPD. All planning applications and other forms of design guidance submitted after the adoption of this SPD will be considered against the content of this SPD.

1.5.4 The above does not negate the need for formal consents or variations to existing legal agreements.

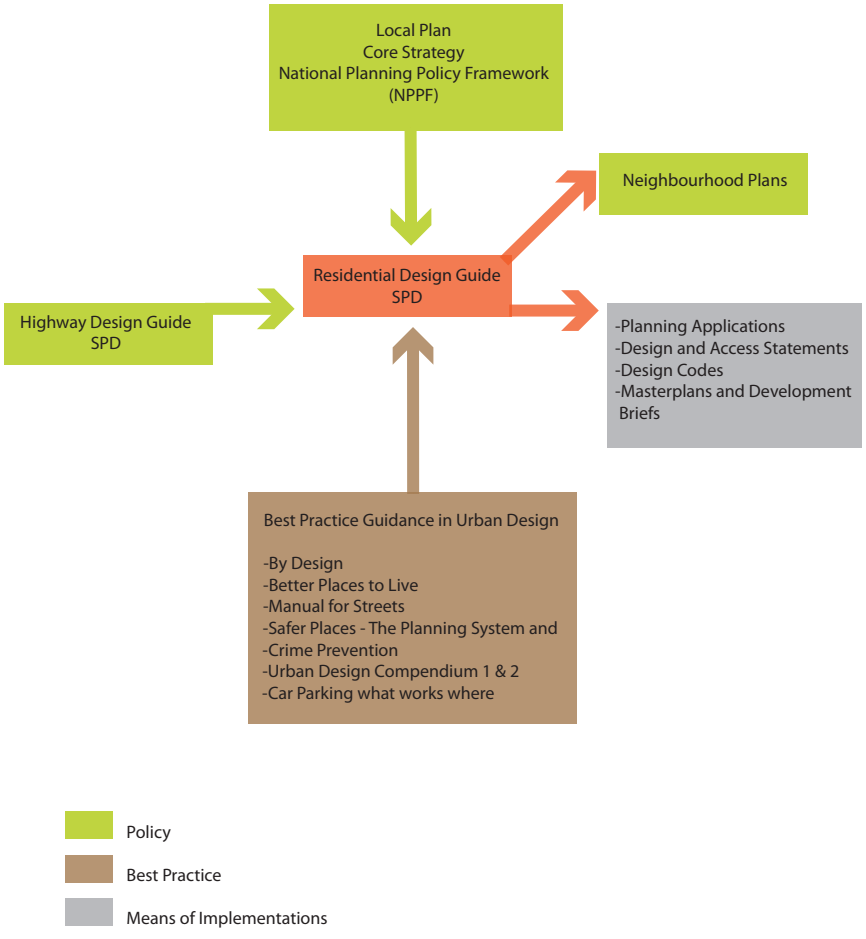
1.6 Planning Policy and Best Practice Design Guidance Context

1.6.1 The diagram below reflects firstly the key policy and design guidance that all new developments must reflect and secondly, it identifies the (same) policy and guidance that has informed the production of the Design Guide. The best practice design guidance is not repeated in this Design Guide, but must, wherever possible, be taken into account by developers.

1.6.2 The diagram also identifies how the Design Guide influences various means of implementation.

1.6.3 The Design Guide includes highway design guidance where the latter has urban design implications. Detailed technical highway engineering requirements and standards will be covered by a separate document – the Highway Design Guide SPD.

Relationship between Residential Design Guide, Planning Policy, Best Practice and Means of Implementation



1.7 Structure of the Design Guide

The content of the Design Guide has been structured such that it follows the sequence of steps that should be taken in the development process in so far as the 'urban design process' is concerned.

Section 1 sets out the purpose, scope and content of the Design Guide together with the relevant planning policy context.

Section 2 sets out guidance for appraising the context and then establishes at a city-wide scale what the key existing character of Milton Keynes is and how this can be used at a strategic level to inform the character and identity for new development in the city.

Section 3 is entitled 'Building the Place' and outlines the strategic elements that are involved in preparing a masterplan and site layout and lists requirements and practical advice and solutions on how to implement them.

Section 4 is entitled 'Detailing the Place' and provides practical advice, solutions and, where applicable, requirements on how to deliver high quality proposals for elements pertaining to the more local scale of the individual street and the environment around the home.

Section 5 focuses on Design Quality Assurance and includes a Design Checklist as well as other methods of ensuring high quality residential developments in Milton Keynes.

1.8 How the Design Guide relates to Design Principles

1.8.1 A workshop was held in July 2011 on the subject of the layout of residential estates. The workshop included members from the Development Control Committee, developers and their agents (architects), as well as officers from the urban design, planning and highway teams, and the Council's Crime prevention Design Advisor. The object of the workshop was to help understand what the important principles are that underpin the layout of residential neighbourhoods. A number of key design principles were agreed for incorporation into the Design Guide.

1.8.2 The table below shows how the contents of the Design Guide relate to:

- the design principles agreed at the Residential Estates layout workshop;
- the seven Urban Design Objectives outlined in the DTLR Publication 'By Design'. (2000)

Chapter	Neighbourhood Layout Workshop Design Principle	'By Design' Urban Design Principle
1. Introduction	n/a	n/a
2. Appreciating the Context	- Sense of community/identity - Variety of experience - Part of MK identity (landscaping) - Develop a mixed community Mix of people (age, gender, culture) Mix of buildings (styles and sizes) Mix of shops (shops, leisure, health)	Character Diversity

3. Building the Place	- Sense of community/identity - Easy to access other places. - Maximise the use of non-vehicular routes. - Access to facilities - Feel safe - Know where you are - Develop a mixed community Mix of people (age, gender, culture) Mix of buildings (styles and sizes) Mix of shops (shops, leisure, health) - An attractive well-maintained environment - Management of parking levels. - Appropriate permeability - Vibrant and safe local centre	Character Ease of Movement Continuity of Frontage Legibility Diversity Quality of Public Realm Adaptability
4. Detailing the Place	- Sense of community/identity - Easy to access other places. - Maximise the use of non-vehicular routes. - Access to facilities - Feel safe - Know where you are - Develop a mixed community Mix of people (age, gender, culture) Mix of buildings (styles and sizes) Mix of shops (shops, leisure, health) - An attractive well-maintained environment - Management of parking levels. - Appropriate permeability - Vibrant and safe local centre	Continuity of frontage Character Diversity Quality of Public Realm Adaptability
5. Design Quality Assurance	n/a	n/a

Table 1: Contents of design guide - relationship to design principles

Section 2 : Appreciating the Context

2.1 Introduction

2.1.1 Understanding the context of the site is the first step in the design process. This analysis will inform a wide range of subsequent design decisions, including the layout, scale and massing of development, detailed design appearance and mix of uses.

2.1.2 In addition to the contextual appraisal for the site itself and surrounding area, it is important to determine what are, for Milton Keynes as a whole, the dominant character and defining features. This will add another layer of contextual information to inform the design of the site itself. Section 2.3 will address this.

2.2 Context Appraisal

2.2.1 Developers should consider the context at a number of different levels, from the site itself, through its immediate surroundings, to the wider local area. At the site level, (see Appendix C, Table C1) developers should identify the key existing features, including its landscape and ecology, buildings, routes and land uses.

2.2.2 The site's relationship to its immediate surroundings should be analysed, including important views into and out of the site, existing routes and access points, and the character of adjoining development. At the local area level, developers should identify the availability and location of facilities and employment opportunities.

2.2.3 The character of the new development should also be developed from an understanding of the context of the surrounding built and natural forms. A mix of high quality materials and a contemporary approach to architectural design and detailing which draws upon a history of innovation within Milton Keynes should be utilised. The positive features of the surrounding local area that help create an identity or character for the development should be used as design cues to be interpreted in the new development.

2.2.4 The Design Guide includes an appraisal template for the surrounding area (see Appendix C, Table C2). It will be used to establish the context of the surrounding area to identify the positive features to be used as layout and design cues. The Council will encourage applicants to complete the appraisal tables to help establish a suitable character for the new development. It will be used to establish the local context and to identify the positive features to be used as design cues.

2.2.5 A neighbourhood or village design statement is an informal mechanism by which local communities can identify the distinctive character of their village or neighbourhood. Where these have been prepared, developers can utilise them as part of their contextual appraisal of the site.

2.2.6 Once the contextual character appraisal has been undertaken, the developer will need to determine which of the predominant features of the area are positive and have reinforced the character of the area. These elements should then be used to help determine the character of the new development alongside other factors, such as policy requirements (e.g. relating to sustainability, density, open space) and those derived from an appraisal of the site context (e.g. existing landscape and other features, views into and out of the site, routes to key destinations).

2.3 The MK Context and Character– What is it?

2.3.1 While the previous contextual analysis will inform the character based on the immediate site and surrounds area, it is important for the Design Guide to briefly analyse what some of the dominant character/identity and defining features/elements for Milton Keynes as a whole are as this will add another layer of contextual information to inform the design of the site itself.

2.3.2 The network of grid roads and associated roundabouts and reserves as well as the city's linear parks are undeniably the features that most strongly define the character of Milton Keynes. The Council has resolved to not only maintain the grid road structure but also to extend grid roads and reserves, if required, into any major urban extensions of Milton Keynes. The extension of linear parks is also a well established and accepted principle.

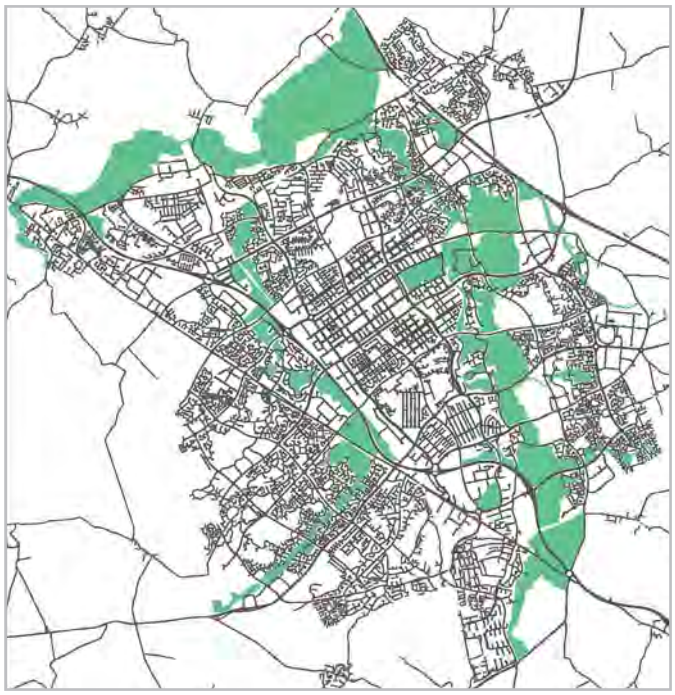
Grid road

Variety and Sense of Place

2.3.3 A study of the Milton Keynes Planning Manual, produced by the Milton Keynes Development Corporation (MKDC) in 1992, identified Variety as a key defining feature of the city. The MK Planning Manual states *"The overriding aims for residential areas are environmental quality, variety and a sense of place."* This is evidenced by what is visible on the ground today. This variety can be examined in five primary ways:

1. Layout

2.3.4 The masterplan for Milton Keynes as produced by the MKDC deliberately did not provide firm guidelines on street layout or patterns of development in residential areas and, as a result, the city has a great variety of residential layout (MK Planning Manual p23). The early parts of the city became a pepper pot of different structuring ideas which in turn had an impact on the sense of place or identity created.



Linear Park System

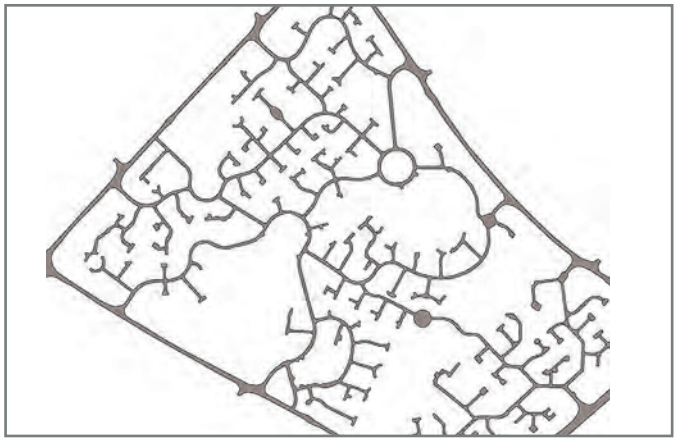
2.3.5 Many early estates had an overall structure based around various forms of a rectilinear grid comprising both a connected grid as well as culs-de-sac, while later estates started taking on a more curvilinear approach which over time has included two forms, initially a circuitous structure of spine and culs-de-sac and more recently, in accordance with best practice guidance from publications such as Manual for Streets, a more fine grained curvilinear pattern of perimeter blocks. The curvilinear approach to estate structure was to firstly, reduce vehicle speeds, and secondly, to discourage rat-run movements.

Plan of Coffee Hall, Beanhill and Netherfield showing grid and straight streets

2. Densities

2.3.6 While the masterplan established the principle for a low density city, there was to be wide local variation to provide a choice of living environments with some places expected to be hard and urban in character.

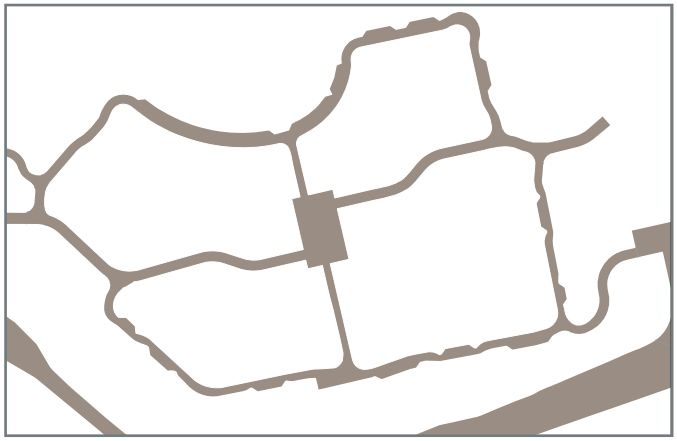
2.3.7 In reality however, the choice of living environments envisaged in the original masterplan has been lost to a rather uniform density across the city with very little density variation within grid squares, as development intensity has rarely responded to local features such as local centres (City Structure, MKDC, 1980).



Plan of Emerson Valley showing spine and cul-de-sac

2.3.8 With the adoption of PPG3 (Housing) in the 1990s, net densities of new development have increased, particularly around local centres and along public transport routes.

2.3.9 Gross densities across Milton Keynes are however generally still low, largely because of the extension of linear parks and other strategic open space incorporated as part of new developments across the city. This is however a defining feature of MK and what makes Milton Keynes so desirable for its residents.



Plan of a part of Ashland showing curvilinear perimeter block

3. Buildings: Massing

2.3.10 The original masterplan identified that no buildings (other than CMK) were to be taller than three storeys. While some taller buildings have recently been used to highlight gateways and key corners in Milton Keynes, a key feature of Milton Keynes is the fairly uniform building height of three storeys and below.

4. Detailed Building Design Appearance

2.3.11 While the designated new town boundary of Milton Keynes did include eleven existing villages and four small towns, which needed to be respected and preserved as the city grew, the new development of the city occurred entirely on greenfields with very little context.

Pattinson Lane, Woolstone

Bradwell Common

Downhead Park

2.3.12 As with residential layout, there was very little guidance given on architecture. Variety in design was sought. Architects were given in effect a 'blank sheet of paper', with little need to be concerned by the surrounding context as each estate was separated from the next by grid roads and associated swathes of landscaping. The result was substantial innovation - Milton Keynes was seen as a test bed for architecture - and a great variety of architecture with no predominant style and appearance resulted.

2.3.13 Some estates, such as Great Linford, were subdivided into parcels for a number of different architects to work on, with the result that there is great architectural variety within the estate. The variety in building appearance between estates however does not visually clash as each estate is separated by extensive and mature landscaping, comprising the grid road reserves.

2.3.14 In terms of building appearance there was hence no one identifiable character across the early estates. It could be argued therefore that Milton Keynes in its early years in terms of architectural appearance had a "patchwork" character. The patchwork was generally created per grid square rather than within grid squares – clash of building appearance across streets did not generally therefore happen.

2.3.15 Some more recent interesting and contemporary buildings have also been as varied as in early estates. The detailed design appearance of these developments has helped create identity for the development (see adjacent photos).

Oxley Woods

Broughton Gate

Ashland

2.3.16 There have however been instances in Milton Keynes in the past 10-15 years, particularly on the greenfield flanks, where the detailed design appearance of new housing has been such that it has not helped create a sense of identity for a development and has not added to the creativity, ambition and innovation which was evident in many early estates. In these cases, the building appearance for each estate is very similar resulting in an unidentifiable character for each estate. This contradicts the patchwork character and variety that was prevalent in earlier estates.

2.3.17 Identity in many early estates was established through the use of a common building material. For example, in the 'doughnut estates' ringing Central Milton Keynes the use of large amounts of buff brick gave an identity to these estates.

Grange Farm - detailed elevation design has not added to the character of the development

Conniburrrow - the use of one dominant material helps to provide an identity for the estate

5. Landscaping

Existing landscape structure and features

2.3.18 The retention and inclusion of existing landscape features (woodland, trees, hedges, ponds etc.) has been widely used to structure new development and create opportunities for open space.

2.3.19 The landscape structure furthermore provided a framework for development to occur, differentiating one area from another, accentuating point of interest, framing views, screening incompatible uses and providing open space for activities.

Landscaped Boulevards and 'Main Local Routes'

2.3.20 Planting along "main local routes" was a key aspect of developments as it not only provided a significant character element within the development, and differentiated main and minor local routes, but also helped to link open spaces together and provide wildlife corridors.

Existing structural planting in Oakhill

Main local route in Shenley Brook End

Existing structural planting in Shenley Church End

Conniburrow Boulevard

Streetscape Design

2.3.21 Much attention was focussed on streetscape design, with planting, hard and soft treatments, special features and building frontages combined to create a sense of place, particularly along main local routes. Significant hedge planting in some estates along front boundaries served to help provide a unifying character to the development.

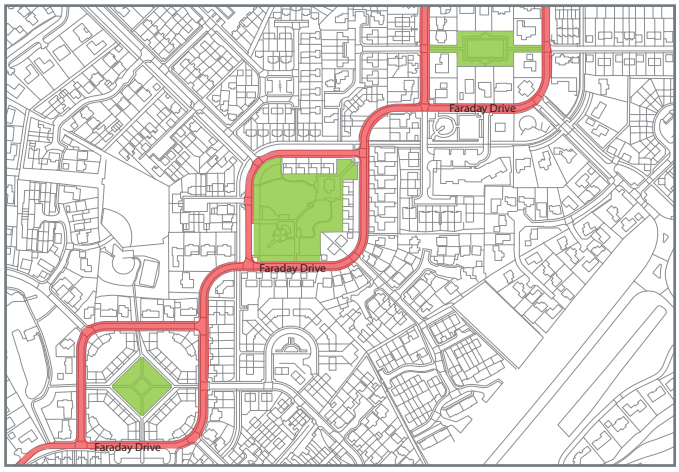
Hedges help create a unifying character to Colesbourne Drive in Downhead Park

Other Key Features of Milton Keynes

Innovation

2.3.22 The layout of residential development and design of buildings was particularly in the days of the Development Corporation driven by innovation.

2.3.23 The layout of a part of Shenley Lodge for example, contained a linked system of squares while a part of Pennyland was designed with east-west aligned streets and houses all with south-facing gardens to capture solar gain.



The squares along Faraday Drive, Shenley Lodge

2.3.24 Milton Keynes has led the way in low energy housing and other projects designed to raise energy efficiency. Architects were attracted to Milton Keynes as a city where it was possible to test innovative ideas for low energy and sustainable homes.

2.3.25 Early experiments focused on gaining free energy from the sun. These homes also included much higher levels of insulation than were normal in Britain at the time. Although many were in small developments, some tested ideas and set standards that were later adopted across the new city and the UK as a whole.

Florin Close, Leopard Drive, Noble Close in Pennyland - buildings positioned to capture solar gain

2.3.26 The work on low energy housing since the early 1970s, and most notably in Shenley Lodge during the late 1980s, has given rise to a wealth of experience upon which central government has based its ongoing work on Part L building regulations. The work also led to the adoption of national standards 'beyond the regs' by HCA. It's important that Milton Keynes maintains this momentum and continues to provide exemplar housing during the run-up to zero carbon homes nationally in 2016.

2.3.27 Other examples of innovative energy efficient housing schemes include Future World at Kents Hill, 'Homeworld' in Bradwell Common, and more recently Oxley Woods in Oxley Park.

2.3.28 Recent development in Stantonbury Park has shown how accommodation can be innovatively arranged. In this instance, accommodation that would normally be arranged within an apartment block has been built as a townhouse at affordable prices.

Shenley Lodge (Energy World)

Bradwell Common (Homeworld)

What would normally be a 2 bed room apartment represents a 3 storey 'townhouse' with terrace garden

2.4 Development within Rural Villages, Conservation Areas and Listed Buildings

Rural villages

2.4.1 In addition to the main built-up area of Milton Keynes, the administrative area of Milton Keynes Council includes a significant area of countryside within which are set a number of villages. These rural villages have their own locally distinctive vernacular character. Any new development within these villages should respect the existing character of the settlement.

Conservation Areas

2.4.2 The Planning (Listed Buildings and Conservation Areas) Act 1990 gives Local Planning Authorities the power to designate Conservation Areas. These are areas that are 'of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance'. There are 27 conservation areas in the Borough, ranging from towns such as Wolverton, Stony Stratford and Olney to small rural villages like Clifton Reynes and Newton Blossomville. The location and boundaries of these conservation areas can be obtained from the Council's website or from the Council's Conservation and Archaeology Team.

2.4.3 Any development which takes place within a conservation area is required to preserve or enhance the character and appearance of the area. This requirement will also apply to any development outside of the conservation area which would affect its setting, including views within, into or out of the area. Discussion should be held with the Conservation and Archaeology Team prior to the submission of any application.

2.4.4 For sites in or near a conservation area, a more detailed appraisal would be required.

Listed Buildings

2.4.5 Listed Buildings are buildings of national significance that are entered on the statutory list of Buildings of Special Architectural or Historic Interest. These buildings are afforded statutory protection making it a criminal offence to alter them in a way that affects their character without first obtaining listed building consent.

2.4.6 Where sites include listed buildings there will be a strong presumption for their retention. Only very rarely and in exceptional circumstances is a listed building allowed to be demolished. Where a building is in need of repair to ensure its long term preservation, development on the remainder of the site will be expected to secure such works, completing them at an appropriate stage to be agreed with the local planning authority. Where a new use is required, the local planning authority will expect the applicant to follow national guidance on securing uses that are compatible with the character and special interest of the building.

2.4.7 Some sites may not actually include listed buildings but may be within their setting. If this is the case, the setting of the listed building(s) must be preserved. The extent of setting will vary from building to building and will ultimately depend up on the type of building and the nature of its surroundings. Where setting is likely to be affected, in drawing up initial proposals the applicant should demonstrate how the following has been considered:

- The current setting of the building(s);
- Whether it is desirable to preserve this setting (e.g. whether there are harmful features that may be removed)
- Principles as how best to preserve (or improve) this setting;
- How the proposal achieves the preservation of the setting.

2.5 Small-scale Infill Development

2.5.1 Much of the guidance within this Design Guidance relates to larger scale development involving the creation of new street networks and block structures. However, the principles of good urban design are just as relevant to small-scale infill development.

2.5.2 The immediate context of the site is critical in the design of small-scale residential schemes, particularly where development infills within an existing streetscene. The 'area character appraisal template' (see Appendix C, Table C2) should be used to assess the character of development adjoining the site. In particular, account should be taken of the existing:

- Building line and setbacks;
- Building heights, scale and massing;
- Building types;
- Continuity of frontage;
- Materials;
- Roof form
- Materials;
- Fenestration;
- Front boundary treatments.

2.5.3 The analysis of the immediate area should identify what aspects of the context are important to reflect in the new development. It may be that there is a uniform use of materials, a consistent building line, or predominant building type.

2.6 Character and Identity for the Future of MK – Lessons from the MK Context

Design Aspirations / Vision

- The character of new development must be developed from an understanding of the positive attributes of the site itself and surrounding natural and built forms;
- Where this is absent, as may be common in Milton Keynes, the challenge will be to create new distinctive places with their own identity;
- The elements of a development that a developer can use to create and affect character or identity of a place are primary street layout, densities, massing, detailed design appearance and landscaping and public realm;
- Across the city as a whole, a **variety** in terms of density, street layout, landscaping and design appearance is encouraged. The ability of a specific site to reinforce this variety will depend on the nature of the site and surrounding context (for example a site adjacent to a grid road and its reserve could reflect for example a different character to the adjacent estate) as well as the size of the development. Small infill sites might need to respond very closely to the existing development within which it sits, while larger greenfield developments in particular may need to generate a larger variety in terms of layout and design appearance;

The use of render and light tones helps establish an identity for Ashland

Dominant use of buff brick and red roofs has helped establish an identity for this part of Downhead Park

TABLE 2: FEATURES THAT INFLUENCE THE CHARACTER OF A STREETSCAPE

STREET ELEMENTS
Street surfacing materials
Shared surface or pavement/carriageway
Street trees and other planting
Car parking, e.g. on street, off street, on plot etc.
Street geometry, e.g. straight, curved
Street furniture and lighting
EDGE CONDITIONS
Enclosure (height to width ratios)
Continuity of built frontage
Building forms, e.g. detached, semi-detached, terraced etc.
Building heights
Setback/ defensible private spaces
Boundary treatments
Appearance of buildings

- For a large development the 'unit' of character should be the street. So by definition the character of a street should be uniform in terms of visual distinctiveness. Other streets, and buildings that line them, within a large development or new neighbourhood can have varying features but there should be some common elements throughout the scheme (e.g. a landscaping feature, street structure or building material) so that the development or neighbourhood as a whole has a feeling of a common identity;

- With respect to the potential for design appearance (or architecture) to influence the character of, in particular large greenfield developments, a careful balance needs to be struck between too much variety in terms of building appearance, which may give the impression of an architectural "zoo" and hence undermine a coherent identity for the development from being created and not enough variety which could lead to an overly monotonous character. As a general rule, a limited palette of materials is believed to lead to the creation of a stronger character for a development. Development briefs and/ or design codes should specify what the requirements are regarding the design appearance of the development with a view to creating a strong character for the development;

- Character and identity is principally established and perceived in the most public areas of a development, most notably the streets as well as the buildings that enclose them. These areas require the most careful attention with respect to design;

- This makes the features that comprise the streetscape fundamental in influencing the character of the development. Table 2 outlines those features that will vary according to street type and how the designer chooses to use /design them.

- The landscape framework must provide a structuring element and framework for the entire development;

- For larger developments the presence of local facilities such as shops, schools, open spaces and play areas must be located and designed to contribute to the character of the development;

- The requirement for improved sustainability standards should be exploited and seen as a positive way of influencing the character of a development with respect to layout, landscaping and detailed design appearance;

- While Milton Keynes should continue to be characterised by low rise buildings of 3 storeys and lower, taller buildings should be used to highlight key gateways and corners and assist with wayfinding as well as vary character across a site.

Section 3:
Building a Place

3.1 Introduction

3.1.1 This section provides guidance, advice and solutions regarding the "structure" of a place, which refers to the pattern or arrangement of development blocks, streets, buildings, open space and landscaping. It's the interrelationship between all these elements, rather than their particular characteristics that bond together to make a place.

3.1.2 The overall urban and landscape structure of a place or development is informed by the context appraisal outlined in the previous chapter as well as the requirement to accommodate the intended development components. Together they should inform a vision and concept which when underpinned by best practice urban design principles influences the masterplan and detailed layout.

3.1.3 The following principles reflect a summary of what is required when approaching the overall urban/landscape structure or masterplanning stage of a large development in particular.

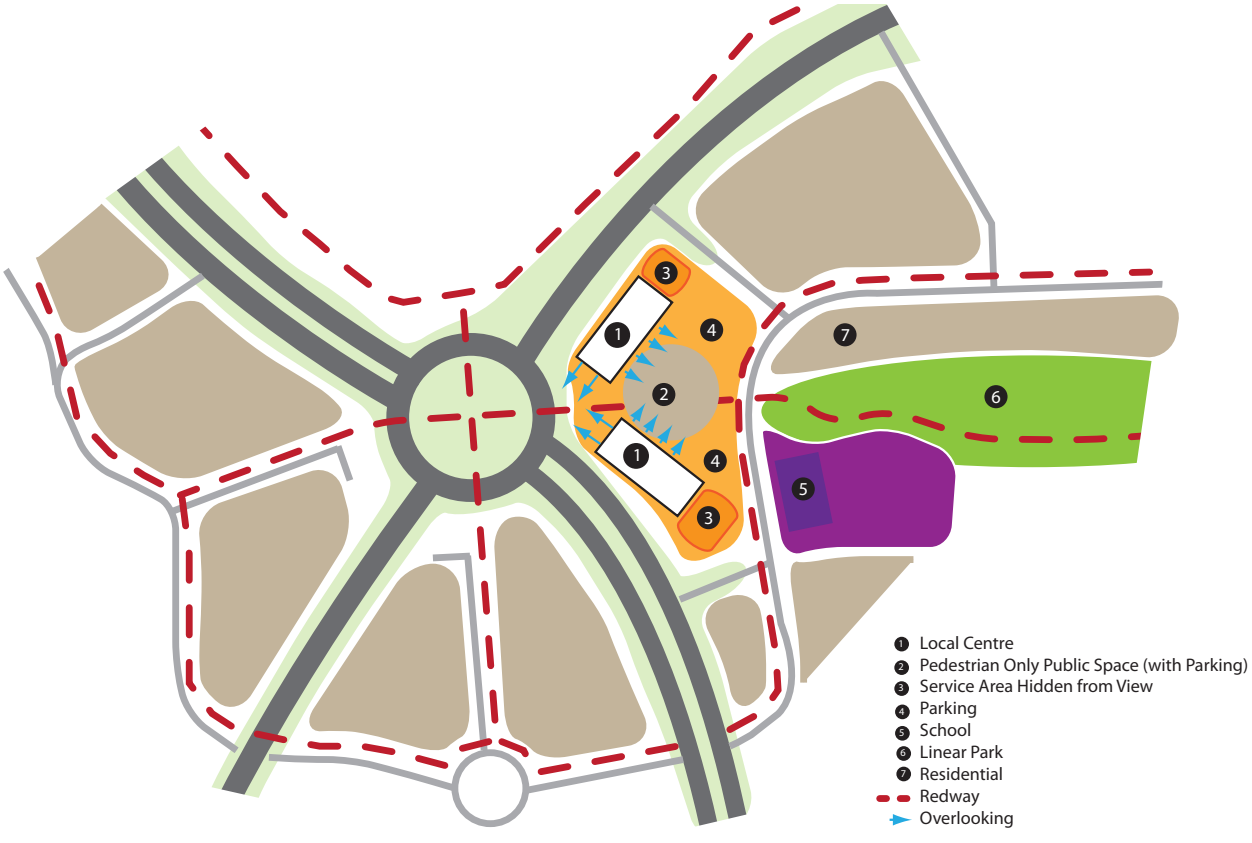
Design Principles

- Existing positive site features should be used to structure the entire development (established as part of the context appraisal);
- Development should be based on a permeable movement framework, which builds on pedestrian desire lines and is connected, where possible and appropriate, with adjacent street networks;
- At the masterplanning stage, the movement network must be designed and laid out such that pedestrians are considered first, followed by cyclists, public transport users, service delivery vehicles and finally cars;
- The movement network should be arranged so as to maximise passive solar gain capture;
- Non-residential uses such as schools, local centres and open spaces should be overlain onto the movement network in the most accessible places;
- A hierarchy of street types should be established with different characters based on their importance with regard to their role as a place and as part of the movement network;
- Schools, shops, and other community uses, should be co-located to, amongst other benefits, reduce the amount of parking required. The surrounding street network should be masterplanned to minimise walk distances to these community facilities;
- A range of densities should be included that are contextually appropriate and take into account the site's size and its level of accessibility to public transport, facilities, shops, employment opportunities, open space and the rural edge. A range of densities will encourage a range of housetypes to be provided that suit a range of needs;
- Buildings in general to be arranged in perimeter block format with private backs and public fronts;
- Wherever possible allow for direct access to plots and / on street parking - this implies locating a street to the front;
- Clearly demarcate public and private space, as well as required service access;
- Layouts should be such so as to allow as much parking as possible to be on plot and on street - so long as all other best practice urban design principles can be achieved;;
- Where appropriate (e.g. to mark gateways and key corners, help with wayfinding, reinforce street hierarchy and vary character) taller buildings should be used.

3.2 Local Centres

3.2.1 If a development is of such a size and/or is in a location that it requires a local centre, the following principles should be adhered to with respect to the location and design of the local centre:

- The local centre should be located in the most accessible location for pedestrians and cyclists, as well as cars. It should therefore be located at a junction of the highest order streets within the development;
- Local centres will be major local attractors over one or more neighbourhoods, so the movement network should provide the shortest possible pedestrian and cycle routes from housing;
- Local centres must be designed as areas of social gathering and hence must have a high quality public realm. In this respect careful consideration needs to be given the location of servicing so that it does not undermine the quality of the public realm and the pedestrian experience;
- In this respect there should be a clear distinction/definition between that part of the local centre where users arrive (both by car and foot) and that part which requires servicing.



Concept plan for local centre showing relationship between various elements

3.3 Community Safety – Strategic Issues

3.3.1 A key requirement of "sustainable communities" is "neighbourhoods which are designed to minimise crime and anti–social behaviour". The layout of a residential area can have a significant impact on crime against property, cars and pedestrians as well as anti-social behaviour. Developers should therefore discuss their proposals with the Crime Prevention Design Advisor at the earliest opportunity, as they will generally be expected to achieve the Secured by Design accreditation given by Thames Valley Police. "Secured by Design" is the Police initiative supporting the principles of "designing out crime".

3.3.2 National guidance on community safety is provided by "Safer Places: The Planning System and Crime Prevention" (ODPM, 2004). The guidance identifies seven attributes of safe, sustainable places. Achievement of the first five attributes are very much concerned with the strategic layout of a development.

3.4 A Place that is Accessible for All

3.4.1 The CABE publication "The Principles of Inclusive Design" contains guidance that will make a place more accessible for all, and in particular, for the elderly, people with a disability and families with small children.

Access and movement -
places with well-defined routes, spaces and entrances that provide for convenient movement without compromising security;

Structure -
places that are structured so that different uses do not cause conflict;

Surveillance -
places where all publicly accessible spaces are overlooked;

Ownership -
places that promote a sense of ownership, respect, territorial responsibility and community;

Activity -
places where the level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times;

Physical protection -
places that include necessary, well-designed security features;

Management and maintenance -
places that are designed with management and maintenance in mind, to discourage crime in the present and the future.

Seven attributes of safe, sustainable places

3.4.2 The following principles, based on the CABE guidance, represent good practice and will help in the development of an accessible neighbourhood:

- Involving people in design of neighbourhoods - community organisations like the Centre for Integrated Living in Milton Keynes can help ensure the participation of people from the disability community and the older residents (contact details: www.mkweb.co.uk/mk_disability/);
- Places without barriers - making Milton Keynes barrier free for the elderly, people with a disability and families with small children reduces the barriers for everyone;
- Make reasonable adjustments - in particular considering the multi-users of environments; including motorised-wheelchair users, the needs of those with a sensory disability in signage, the need for dropped kerbs and lighting.

3.5 Landscape, Public Space and Biodiversity

General Principles

3.5.1 Public space (also often referred to as "public realm") is made up of the green spaces, parks, streets, squares and other outdoor places that we use or pass through in our everyday lives.

3.5.2 Good quality public realm, which is attractive, inviting, safe and well-maintained, must be the aim of any new development since it is a key element of the character and perception of a place. Open space in all its forms has a major influence on the well being of the whole community and that value should be fully recognised as integral to the quality of the development as a whole.

3.5.3 Landscape quality and management of public space is a central theme of overall design and should be considered and designed in early in at masterplan stage. It should be used to structure and articulate the entire development. The inherent landscape assets should be used and integrated within the open space infrastructure and help form and guide the development.

3.5.4 Public green space associated directly with residential areas should be easily accessible for all the community. Opportunities to co-locate open space with other public amenities, community buildings, schools and shops should be sought.

3.5.5 Residential open space should normally be fronted by development to exploit the mutual benefits of that design relationship. Some categories of green space, for example: District Parks, Linear Parks, Country Parks and some Local Parks would not be expected to conform

Public open space integrated into and fronted by development

universally to the "front on" concept. It is however essential to ensure the principles of good access, passive surveillance, quality design and management and local "ownership" are built into the delivery and management of all categories of open space.

3.5.6 New play areas are to be included according to current requirements (see Appendix B) and the following locational/design principles should be applied:

- Need to be designed into the overall layout of the new development from the outset;
- Must be located in an accessible location, so along a redway or other pedestrian desire line;
- They should feel safe and hence should be overlooked by development;
- A street should occur to the front of the houses that overlook the play area to provide a defensible buffer between the two, as well as improve surveillance through increased passers-by;
- Larger play areas for older children and related sports facilities (such as skate parks) that may generate greater levels of noise may be better located within larger open spaces, such as linear parks where overlooking development might be less of a contributing factor towards achieving safety. Surveillance could still be achieved by locating it adjacent to a key pedestrian desire line such as a redway, where regular passers will help to make the play area feel safer.

3.5.7 Residential layouts must avoid "**left over space**" which typically provides little benefit or relevance to the residential area. The test of relevance should focus on the positive contribution a space makes to the neighbourhood. A space which does not make a positive contribution, such as behind rear gardens, inaccessible corners, over-enclosed corridors must be avoided. The costs of maintenance are not balanced by the benefits, they are frequently under-used and may become prone to anti-social behaviour and fly tipping. Appropriately designed and integrated open space would eliminate "left over space" and optimise resources for the provision of good quality open spaces.

Left over space behind rear gardens can become prone to fly-tipping

These sort of 'left over' spaces with no function should be avoided

The Milton Keynes Context

3.5.8 A key aspect of Milton Keynes, much appreciated by residents is the green environment. Consultation on the Community Strategy identified this as the most important influence on the quality of life. Consequently, any new development should reinforce the existing 'green' character of the city and seek opportunities to support the established principles. The Milton Keynes Open Space Strategy supports and guides the Authority's approach to open space.

3.5.9 The importance of green space in the city's growth does not mean however that future development will be provided in the same way as in the past. The provision and management of open space in the future needs to balance differing needs not least of which are issues of crime, fear of crime and ongoing maintenance costs. A key point to recognise however, is that open space is delivered largely through development and the character of the city is reflected through both existing and new residential developments. It should be further recognised that higher housing density and increased pressure on land generally requires that open space "performs" a multifunctional role. Open space can deliver the optimum multifunctional benefits through the following:

- The masterplanning of new developments particularly on the periphery of the city must ensure that where appropriate and achievable, existing linear open space corridors are extended into new developments. Where these do not occur, large new developments in particular should be structured around open space corridors that serve to integrate development rather than divide them and that accommodate the multifunctional uses required of modern development;
- The retention and use of existing landscape assets as part of new developments should be a guiding principle. This not only enhances the biodiversity where the long established features are often the richest assets, but provides a sense of maturity to developments. Using elements of former landscape character and land use helps to integrate new development within their locality;
- Good landscape design can help legibility, create focal and reference points, enhance biodiversity and enhance the overall quality of the external environment. The form, texture and colour of plant material can compliment and enhance new and existing building materials. To help establish identity for a new neighbourhood, a palette of tree species which are predominantly native or of local provenance should be established at the design code stage of the process. Non-native species, where used, should be selected for known wildlife value;

- Developers should integrate landscape within the built development, rather than viewing it as a separate entity confined solely to areas of public open space. The green character of the city can be reinforced in a variety of other ways, including street trees, verges, green front gardens, green roofs and green walls;
- Green roofs can provide a number of environmental benefits including insulation and cooling of buildings, significantly reducing rainwater runoff from roofs, improving air quality and promoting biodiversity. They can also provide outdoor private amenity space, particularly within apartment developments where the demands on available space are at premium. Consideration should be given to including domestic fruit trees or other appropriately sized trees within rear gardens;
- Consideration should be given to incorporating community food growing opportunities as part of public open space, e.g. allotments, community gardens/orchards, planting fruit trees.

3.5.10 The Milton Keynes Green Infrastructure Plan (Feb 2008) is an important document to draw upon. It should be used to help inform connectivity of green space and biodiversity with surrounding natural green space and target areas. This plan identifies the natural assets and how these can be linked with the urban environment within and surrounding developments.

3.5.11 The Open Space Strategy provides guidance on the landscape infrastructure with a primary focus on the City area.

3.5.12 Policy L3 of the Local Plan requires that new development meets minimum standards for the provision of public open space which are set out in Appendix L3 of the Local Plan.

3.5.13 The Parks Trust plays an important role in the management and maintenance of open space in the city, including the strategic open space network of the linear parks and landscaping along Transportation Corridors. When developing adjacent to these existing areas, developers should liaise with the Parks Trust to ensure that their proposals do not unacceptably impact on existing landscaped areas, by causing damage to the existing landscape or creating future maintenance difficulties for the Trust.'

Biodiversity

3.5.14 The design and layout of new residential development should protect and enhance biodiversity on the site, and enhance connections between ecological features within and across the site. Existing areas and features of biodiversity value should be incorporated into the design and layout and wherever possible enhanced.

3.5.15 Biodiversity features which might be incorporated in the design and layout of new developments could include:

(1) Sustainable Urban Drainage Systems (SUDS);

(2) Green roofs and green walls;

(3) new pond and other water features;

(4) a varied structure of wildlife friendly trees, shrubs and flower rich meadows;

(5) bat or bird boxes and crevices."

3.5.16 A biodiversity report will be required for all applications to create 5 or more dwellings, or where there is evidence of a protected species or a strong likelihood of a protected species being present. The report should include: (1) a desk study of the site and surrounding area to identify designated wildlife sites, statutory or non-statutory (Local Plan policy NE1); (2) on-site surveys to record habitats and identify protected or priority species (Policy NE2); (3) impact assessment and mitigation (Policies NE1, NE2); (4) proposals for overall biodiversity enhancement (Policy NE3).

Soft Landscaping

3.5.17 "Soft" landscaping refers to natural features, which provide screening, shade, habitat, texture, form and colour as well as privacy, security and a recreational environment. The Open Space Strategy outlines the hierarchy of open spaces in Milton Keynes and the range of use each is expected to provide.

3.5.18 Careful consideration should be given to the types and species of new planting used within spaces to accord with their functions. A further important consideration is the need to design in and specify for "low maintenance".

3.5.19 Tree planting has substantial benefits in a residential area, providing shade, visual interest, cooling, habitat, carbon and pollution capture. Consideration should be given to the choice and location of species to ensure the trees are able to deliver the benefits without the problems of obstructing movement, light/solar gain losses, water loss and damage to pipes, highways, or buildings. The emphasis should be to design holistically, where landscape and particularly trees and built elements exist in a positive and complementary relationship.

The use of particular tree forms or species can aid legibility

3.5.20 The appropriate choice of trees, bearing in mind not only their intrinsic qualities but likely size and root systems is paramount. Tree planting along a street can add definition and enclosure to a street, provide shade, increase biodiversity and help frame important views and vistas. Attention should be given to the local environment and its capacity to accommodate trees as they mature (see Highway Design Guide which includes details of street trees and species).

Hard Landscaping

3.5.21 "Hard" landscaping refers to the man-made elements of a landscape scheme including paving, walls and fencing, tree grilles, street furniture (seating, litter bins, bollards, railings and lighting) and public art.

3.5.22 Street furniture, road markings and signs should not over-dominate spaces or result in visual clutter and be integrated into the overall appearance of the street.

3.5.23 Materials and street furniture need to be aesthetically pleasing structurally robust, resistant to vandalism, have good weathering characteristics and only require simple maintenance. When choosing materials and street furniture, consideration should be given to the availability of replacement products, particularly when more bespoke designs are used.

3.5.24 Where a development is phased, street furniture should be compatible with other phases of the development.

3.5.25 A varying palette of surface materials can be used to emphasise a hierarchy of streets and to add interest and variety to the street. The surface materials chosen should complement the building.

Maintenance

3.5.26 Developers are required to identify the public and private external spaces within their development. They must identify the size of each of these spaces, highlight them clearly on a plan as well as identify the specification for the spaces. Proposed ownership and management responsibility for different areas should be clearly set out at the start of the planning process.

Public Art

3.5.27 Public Art can add to local identity and sense of place, and aid wayfinding. Opportunities for art to be incorporated into the streetscape through bespoke design of street furniture (such as seats, railings or other elements) should be taken. It should be specifically designed as part of the development. Developers should discuss their proposals with the Council's Public Arts Projects Officer at an early stage in the design process.

Landscape Adoption Process/Requirements

3.5.28 The process is supported by the recommendations of the Audit Review on Open Space and Highway Adoption (2009).

3.5.29 Milton Keynes Council has an established process for the adoption of open spaces which is based on the following key stages:-

Pre-Submission

1] Developer contacts the Council's Open Space Adoptions Officer at pre-application stage to discuss design principles and open space requirements for the proposed development. [This is in liaison with the Development Control case officer who is responsible for coordination of activities to Application stage];

2] 'Open Space Adoptions Officer provides guidance on open space for the proposed development in accordance with Local Plan requirements and SPD, and in consultation with colleagues in landscape architecture, arboriculture, ecology, etc;

Post-Submission

3] Developer submits draft open space design with Application. Open Space Adoptions Officer advises Planning and provides stage 1 approval;

4] Developer submits design details/ specs and layout for approval. Open Space Adoptions Officer advises Planning and provides stage 2 approval;

Post-Determination

5] Developer implements open space in accordance with stage 2 agreement;

6] Open Space Adoptions Officer and Developer liaise during implementation to Practical Completion Certification;

7] Open Space Adoptions Officer provides Final Completion Certification after 12 months or agreed establishment/defects liability period;

8] Open Space Adoptions Officer instructs legal adoption and freehold transfer to MKC;

9] Open Space Adoptions Officer accepts adoption/transfer from Developer and instructs Landscape Maintenance to undertake ongoing maintenance responsibilities on behalf of MKC.

A full step by step version of the Open Space Adoption Procedure is available from the Open Space Adoptions Officer.

For further guidance : The Open Space/ Highways Adoption website provides further detail, guidance and site adoption status.

http://www.milton-keynes.gov.uk/ landscape-roads/

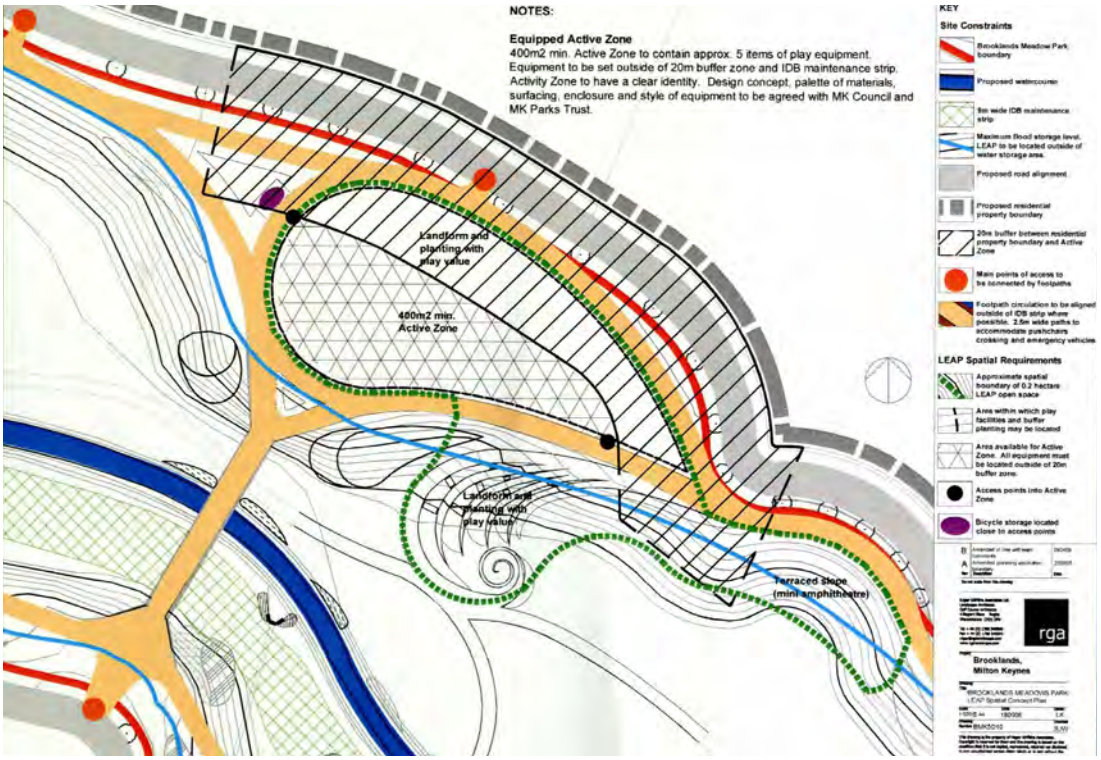
Landscape Quality Assurance – the required process

3.5.30 Milton Keynes Council expects suitably qualified ecologists and landscape architects to be employed to advise on all biodiversity and landscape matters.

3.5.31 The following provides guidance on how the Council expect developers to appraise the existing landscape and open space character of their sites and surroundings:

- Typically, developers/applicants should employ Landscape Architects to address these issues with the Council relying heavily on the Landscape Architect's competence to assess the landscape character and context. With large scale developments, typically within the expansion areas, the overall landscape infrastructure will have been established within a Development Framework document and supported by Design Codes. This provides the "master plan" from which individual site related designs can be prepared to suit the character and scale of the development. Notwithstanding this, each respective planning application must be supported by a Design & Access Statement (DAS), to demonstrate how the proposed landscape approach addresses the wider landscape character, framework, codes and local needs. Infrastructure, drainage strategies etc, must be included as part of the design process and may offer further design opportunities, such as working with sustainable drainage systems [SUDS];
- The principle also applies for smaller applications/proposals with the requirement for landscape principles to be covered within the planning DAS, a landscape master plan and then finally details. If required, MKC can request landscape character and visual impact assessments to help inform of the suitability of proposals, particularly within a sensitive context;
- If applications fall within the category that requires an Environmental Impact Assessment, there may be a requirement to provide a much more detailed and analytical landscape approach that would almost certainly include a comprehensive landscape/ environmental evaluation including visual, ecological and character assessment;

- The use of concepts/narratives/ catalysts to drive a design, are welcomed. An example of the approach to be taken is shown adjacent with respect to the play area designs in Brooklands in which a number of agencies have evolved the designs and a clear design methodology was created. More frequently however, a request from MKC to the applicant (or Landscape Architect) would be the route through which a design would be brought forward and developed in liaison with the applicant, using the Open Space Adoption process as the driver;
- MKC expect landscape design, on all levels to adhere to good practice, including national guidance, local guidance, [Open Space Strategy, Local Plans, Supplementary Guidance / Planning Documents, CMK Handbook and all other recognised good design guides, such as British Standards, Building Regulations etc;
- Pre-application discussions are essential to highlight open space expectations and ensure an appropriate landscape approach is adopted. It is the responsibility of the DC case officer to set up pre-application discussion among MKC interested officers and the applicant or agent, in accordance with the Open Space & Highways Audit Review recommendations.



Landscape design for play area in Brooklands

Flood Risk Management

3.5.32 Strategic and integrated flood risk management infrastructure has an important role to play in the amelioration of flood risk of a development as well as the potential to contribute to the overall quality of a development.

3.5.33 The Milton Keynes open space hierarchy includes a number of linear parklands with lakes within floodplains which have accommodated the flood run-off. This innovative, strategic and integrated flood management infrastructure that has become an important part of the City green infrastructure as linear parklands that are a known characteristic of Milton Keynes.

3.5.34 The use of SUDS is intended to ameliorate flood risk within a development rather than transfer the problem "downstream". The design of SUDS should not only consider flood risk but enable a substantial contribution to the open space infrastructure of an area and a range of related benefits, including biodiversity. Applicants should take note of the Council's SUDS brochure that sets out emerging legal requirements, as well as guidance on SUDS principles and standards.

3.5.35 Strategic and integrated drainage infrastructure requirements (rather than piecemeal proposals) must be included at the onset of design consideration of large new developments to ensure that it can be constructed and maintained effectively, alongside the other elements of the development, such as residential areas and movement networks. It is also vital that all strategic and integrated drainage infrastructure is designed to allow access for maintenance, often this means access for machinery. Without this, drainage assets will deteriorate and fail to deliver their design standard of service. This will cause flooding.

3.5.36 It is the role of tender brief documentation and site specific masterplans to identify specific contextually appropriate design criteria for the on-site flood risk management facilities.

3.5.37 Applicants should take note of the following design-related flood risk management guidance:

- Flood & Water Management Act 2010;
- National Planning Policy Framework (2012);
- Milton Keynes Drainage Strategy – Development and Flood Risk Supplementary Planning Guidance (2004);
- BS8533: Code of Practice for Assessing Flood Risk in Development (2011);
- Best practice examples from DEFRA, EA, CIRIA, Bedford Group of IDBs

3.6 Layout for Passive Solar Gain Capture

3.6.1 Typical energy savings of 8-10% can be made from passive solar houses within a passive solar layout.

3.6.2 The two key factors in passive solar residential layout are the orientation of houses (which is closely aligned to the road layout) and the degree to which south-facing glazing is free from overshadowing (implications for internal layout will be covered in section 4).

Street Layout

3.6.3 Because a good principle of urban design is for houses to front onto streets the street layout is a major factor in determining the orientation of housing within a scheme. For optimum orientation of house plots, roads should preferably be aligned east-west. East-west streets can cause issues at sunrise/sunset with the sun being low in the sky causing glare or directly affecting the driver's ability to view the road ahead. They need careful design to ensure that these issues are addressed.

3.6.4 Orientating as many houses as possible so that the elevation with the most glazing faces within 30 degrees of south will maximise solar gain, as well as the opportunity to fit photovoltaic panels to roofs.

3.6.5 For north-south aligned streets there are a number of ways in which houses can be given southerly orientation:

- Placing larger detached houses one plot deep along the street
- Arranging houses around front parking courts or short culs-de-sac that at right angles to north-south streets

3.6.6 For diagonally aligned roads, living room elevations can be made to face within 30 degrees of south by skewing the plots in relation to the street or by skewing the houses within the plots.

Overshadowing

3.6.7 If full advantage is to be taken of a southerly orientation, the site layout should ensure that the south facing elevations are not obstructed by other buildings or planting. Complete freedom from overshadowing is rarely possible, but it can be minimised by:

- Locating taller buildings to the north of the site or to the south of the road intersections or open space such as car parking which need less or no sun;
- Locating low rise buildings such as bungalows on the south side of the site;
- Locating semi-detached and detached housing to the south of the site to allow some penetration of sunlight between houses;
- Using low pitched and hipped roofs or constructing the first floor as part of the roof space;
- Designing planting with appropriate species and heights in mind. If trees and tall evergreen shrubs are positioned so that they overshadow the south facing elevations of houses, many of the benefits of a passive solar layout will be negated. Trees that will eventually grow above the 'shadow line' such as larger specimen trees should preferably be deciduous.

3.7 Movement Framework

3.7.1 In designing the movement network in a new residential development, the following user hierarchy should be followed:

Consider first

Pedestrians

Cyclists

Public transport users

Specialist service vehicles (e.g. emergency services, waste, etc.)

Other motor traffic

Consider last

3.7.2 The hierarchy does not mean that it is always more important to provide for pedestrians. However, they should be considered first.

Overall Network

3.7.3 All developments within the city of Milton Keynes will be placed within and (depending on their size) have either direct or indirect access to the Milton Keynes grid road network or rural main roads. Indeed very large developments might even require new grid roads as part of their development.

3.7.4 The masterplanning of growth areas, as well as infill sites should be based on a connected and permeable movement network, because it:

- promotes pedestrian and cycle movement;
- makes it easier to find one's way around;
- spreads traffic more evenly, so avoiding the need for distributor roads with no frontage development; and
- eases access for refuse and emergency vehicles.

3.7.5 New streets required for development, within the existing urban area in particular, should be connected into the established movement network, to ensure that new housing has good access to existing facilities.

3.7.6 Streets that are likely to be used by public transport should be identified at an early stage in the design process, so that they can be designed to be as direct as possible. Careful consideration must be given to the location of on-street parking on streets which are to be bus routes to ensure parked cars don't obstruct the free flow of buses. Parking along bus routes must be carefully designed into designated parking bays.

3.7.7 The street network must be designed so that, wherever possible, direct access onto plots and on-street parking is allowed. This not only promotes a more active frontage but also reduces reliance on rear parking courts.

Design Layout for Pedestrians/Cyclists

3.7.8 The layout of new developments should be such that it encourages people to walk or cycle to local facilities. Walk distances to schools, shops and open space should therefore be minimised, through these routes being as direct as possible, legible and matching desire lines. The routes in order to be used, must feel safe and hence be overlooked.

3.7.9 Particularly with regard to the design of the environment around schools, early discussion should take place with the Council's Road Safety team regarding drop-off parking, sight lines, crossing points and planting all of which affect the safety and hence prospects of children walking to school.

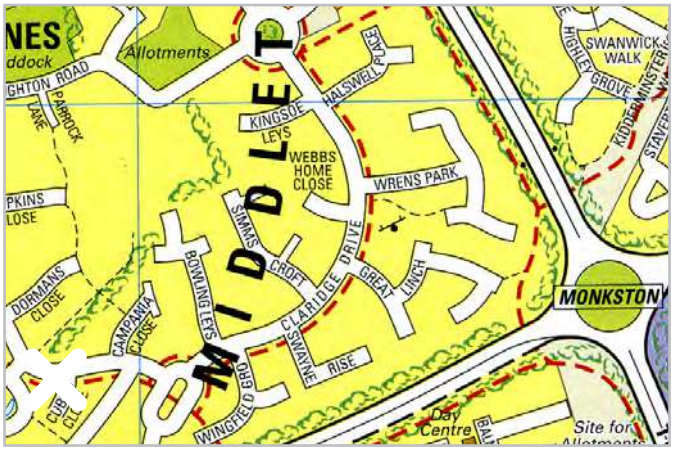
3.7.10 In Milton Keynes cycling/walking trips usually involve a mixture of residential streets, and redways. These provide the essential routes between residential areas and play areas, parks playing fields, and allotments as well as to schools, colleges, shops and work. This movement is encouraged by the linear parks, which provide continuous cross-city routes for cyclists and walkers. It is important, therefore, that new residential development continues to follow this principle and not block off long established links to the surrounding countryside.

Redways and/or footpaths should generally follow streets

Segregated pedestrian and cycle routes provide no natural surveillance and should be omitted from schemes

3.7.11 Pedestrian routes should generally follow streets and are overlooked by housing rather than on routes segregated from vehicular traffic and not overlooked by housing unless they are wide, short and overlooked (exceptions of course apply to those routes located within linear and district parks). This is a requirement in "Safer Places" and is required because:

- Pedestrians and cyclists are afforded a greater sense of security from being seen by drivers;
- Accommodating pedestrians within the street network reinforces the perimeter block form and ensures that the rear and sides of properties are more secure.



Claridge Drive, Middleton showing local redway following carriageway in order to provide a lively street scene.

Redways

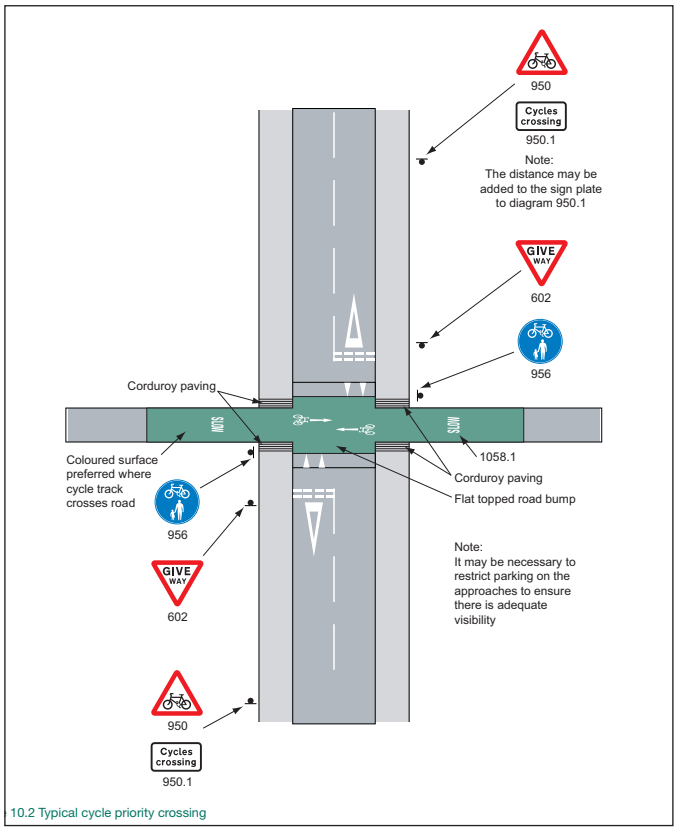
3.7.12 The Council will be seeking a network of redways within new developments.

3.7.13 There are three locations within which redways will be provided, all of which may be required depending on the size of the development. All three enable surveillance from either passers-by in cars or from adjacent properties and hence should feel safe for all users:

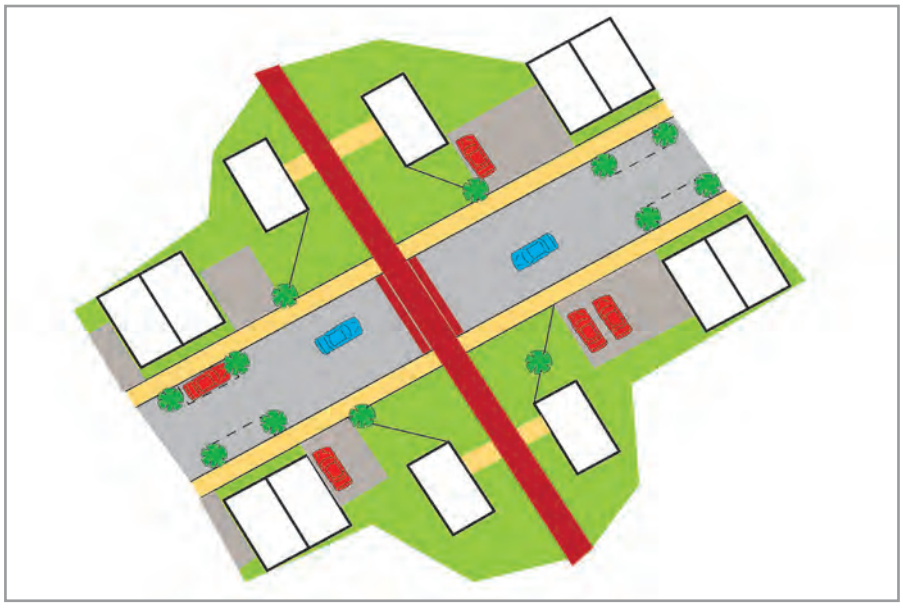
1. Adjacent to Avenues and Boulevards

- In new developments, main local routes are to be viewed as the equivalent of boulevards and avenues (see paras 3.7.36 – 3.7.42) and are the most important and connected routes within a development – ones that are public transport routes and link up with shops and facilities. It is along these routes that redways are to be included;
- Where new redways included as part of future residential developments cross streets, and hence the appropriate safety/ visibility requirements at this junction can be designed into the development, priority should be given to redway users i.e. cyclists and pedestrians (see diagram from Local Transport Note on Cycle Infrastructure overleaf);

- This priority can be emphasised through the inclusion of a raised table over which the redway runs or a change in surface material where the redway crosses the street;
- Typical of many existing estates where redways follow streets internal to them, it is permissible for driveways to cross the redway. Care needs to be taken however that cars, cyclists and pedestrians leaving houses located adjacent to redways have good visibility over redways to the front to avoid accidents with cyclists in particular. To ensure appropriate visibility there must be a 2m strip of adoptable highway between the redway and the property boundary. Front boundary treatment in these cases should be no more than 1m in height.



Redway crossing a street: Diagram from Local Transport Note on Cycle Infrastructure



Redway crossing a street: conceptual layout showing priority for redway users with sufficient visibility splays

3.7.14 The second and third locations of redways to be included in new developments are for cyclists who want to travel greater distances at increased speeds with less interruptions from crossing streets (and no crossings by private driveways):

2. Redways that follow grid roads – they are afforded safety from passing cars on grid roads. Redways should be included alongside all grid roads.

3. Redways through linear parks – they are afforded surveillance from users of the linear park and adjacent properties. A key requirement is that they are kept relatively direct.

3.7.15 Redways should normally be 3 metres wide. Where they are located adjacent to parallel car parking spaces, there should be a 1 metre 'wobble strip' to avoid car doors opening over the redway. No building or wall should be within 500mm of the edge of a redway. No shrubbery with a mature height of 300mm should be located within 1.5m of the edge of a redway.

Furzton - a good example of a redway through a linear park

Redway alongside grid road

Redway within linear park overlooked by adjacent development

Bridleways

3.7.16 Bridleways currently criss-cross Milton Keynes. They should be included in large new developments so as to extend their network. As currently exists they should generally relate to the redway network, where they pass through linear parks in particular.

3.7.17 Where bridleways cross streets, crossing areas should be designed in line with recommendations from the British Horse Association and within the Design Manual for Roads and Bridges such as TA 90/05.

Bridleway next to redway

Underpasses

3.7.18 Underpasses will be required where pedestrian and cycle routes need to cross grid roads. They should be provided on important desire lines to ensure frequent use and natural surveillance. The design of underpasses should consider the following:

- Routes should be straight and as short as possible;
- There should be enough distance allowed for so that the entire underpass can remain as a straight/ direct alignment;
- Underpasses should be of sufficient width to allow good visibility into and from the underpass;
- Housing should be located facing the underpass to provide natural surveillance into the underpass;
- Where they cross dual carriageways, provision should be made to allow daylight from the central reservation area;
- High quality robust lighting should be provided;
- Landscaping around the approach to the underpass to be low level to ensure good visibility;
- The needs of people with mobility problems should be taken into account with regard to path gradients;
- Walls to be graffiti-proofed. Consideration to be given to public art on underpass walls.

Good surveillance of underpass from neighbouring housing

Bus Stops

3.7.19 All houses within a new development should be located no more than 400m from a bus stop. Bus stops should be easily accessed on foot. Pedestrian routes to bus stops should be direct and well-surveilled.

3.7.20 Where bus stops are located on grid roads, development should be designed to ensure that pedestrian routes and bus stops are well surveilled. Layouts should be designed with housing overlooking the pedestrian route and the bus stop, and grid road reserve planting reduced to maximise visibility.

Two possible layouts to achieve safe pedestrian access to a bus stop

Geometry

3.7.21 Straight streets are efficient in the use of land. They maximise connections between places and they can better serve the needs of pedestrians who prefer direct routes. However, overly long straight streets can be monotonous and lead to higher traffic speeds. More irregular street patterns (deformed or irregular grid) add variety and can act as a traffic-calming measure without excessively increasing walk distances for pedestrians. However, layouts that use gratuitous curves, for no contextual reason, should be avoided as they increase walking distances which can serve to encourage car travel. They also can make on street parking difficult and reduce visibility. Building form should dictate the street layout, not the other way around.

3.7.22 Staggered junctions reduce vehicle conflict compared with crossroads, and therefore are generally preferred. However, in low speed and low volume environments, where cross-traffic is minimal, crossroads can be considered. In these circumstances, crossroads may be appropriate where it is important to maintain the directness of a pedestrian route.

3.7.23 It is important that streets are designed to reflect the needs of waste and emergency vehicles. Detailed guidance on street geometry matters such as carriageway widths, junctions, and visibility will be provided in the Highway Design Guide. It is crucial however that these matters are designed in from the outset and incorporated within the overall street design and character for that particular street.

Streets with frontage access

3.7.24 Wherever possible, direct access to properties by vehicles should be allowed from the street. In the past this has often been restricted where traffic flow is high or more recently where dedicated bus lanes have been included. The consequence has been a requirement for rear parking courts and associated less pedestrian activity along the street (less active frontages).

3.7.25 The Highway Design Guide will provide details of where frontage access is to be allowed. In these cases, on-street parking must be an integral part of the design of the street to ensure the free-flowing movement of traffic. Where direct access is not allowed, parking will be provided either through the use of service lanes or rear courts.

Streets to the front of buildings

3.7.26 Buildings should generally have streets to the front of them rather than just segregated footpaths and/or open space. The benefit of having a street to the front is that it:

- Allows for on plot and on-street parking;
- Removes need for rear parking courts;
- Provides ease of access for waste, emergency and delivery vehicles;
- Can reduce the need for large turning heads;
- Makes for more secure backs;
- Improves pedestrian activity to the front of houses;
- Improves access to public open space;
- Improves the public ownership of the green space to the front;
- Provides additional defensible space to the front of properties.

These houses have no street to the front and therefore rely on rear parking court

Buildings front street

Landscaping within streets

3.7.27 Greenery within streetscapes is considered one of the most important aspects contributing to the neighbourhoods that residents like to live in. Greenery generally comprises verges, street trees and setbacks/ private defensible space (the latter covered in section 4.6). These need to be carefully considered in all new developments.

3.7.28 Grass verges are important on certain streets to help create a character for the street and emphasise the street hierarchy. Grass verges or low maintenance planting are expected in Avenue/Boulevard and some Residential Streets (covering street types 5,6,7,8,9). Level surface streets won't have grass verges but will still have street trees and/or planters. Highway requirements normally for clear visibility splays restrict the height of this planting to 300 - 400mm. Appropriate species include:

- Cotoneaster 'Coral Beauty';
- Euonymus fortunei (normally the variegated species);
- Lavendula 'Hidcote';
- Lonicera pileata;
- Symphoricarpus chenaultii 'Hancock'.

3.7.29 Where housing fronts onto verges and on-street parking is included, in order to allow residents to access the footpath or redway via a hard surface, the verge must either be only 2.5m wide or if it is wider then a section (the length of the on street parking spaces) of hardstanding should be incorporated between the edge of the parking spaces and the footway/redway. In all instances, where housing faces the verge,the verge should be narrower than 3m or wider than 5m. This is to avoid cars blocking the footway by parking indiscriminately across the 'link' between the driveway and street.

Verges, street trees and hedges contribute to a pleasant street scene

3.7.30 Street trees can help create character for a street and a development. They are easiest to include in verges but many streets particularly those lower down the hierarchy do not have verges. Where numerous driveways join the street, it is more challenging to accommodate trees. For streets at the bottom end of the hierarchy, such as level surface streets, trees can be located within the carriageway. For streets with higher volumes of traffic, they can occur within a footway of 2m wide so long as there is close co-ordination between the design of utilities and landscaping proposals and in particular street trees. Consideration needs to be given to the use of root protection barriers, to avoid problems of damage to highways, buildings or pipes.

3.7.31 Selection of trees species should be based upon trees being reliable, requiring minimum maintenance and being capable of withstanding the abuses of highway activity. While appropriate species will vary according to the type of street, proximity of buildings and soil conditions a selection of appropriate species include:

Avenue/boulevard

- Acer platanoides 'Emerald Queen'. Norway Maple species.
- Tilia cordata 'Green Spire'. Lime species.
- Carpinus betulus 'Frans Fontaine'. Hornbeam species.
- Pyrus calleryana 'Chanticleer'. Ornamental Pear species

Residential Street

- Fraxinus angustifolia 'Raywood'. Claret Ash.
- Tilia tomentosa 'Brabant'. Lime species.
- Prunus avium 'Plena'. Cherry species.
- Betula pendula. Silver Birch.

Lanes/Mews

- Acer campestre 'Streetwise'. Field Maple species.
- Prunus x schmittii. Cherry species.
- Sorbus aucuparia 'Sheerwater Seedling'. Mountain Ash species
- Crataegus x laveallei. Hawthorn species.

Specimens/Special Places.

- Betula utalis 'Jacquemontii'. Himalayan Birch.
- Liquidambar straciflua. Sweet Gum.

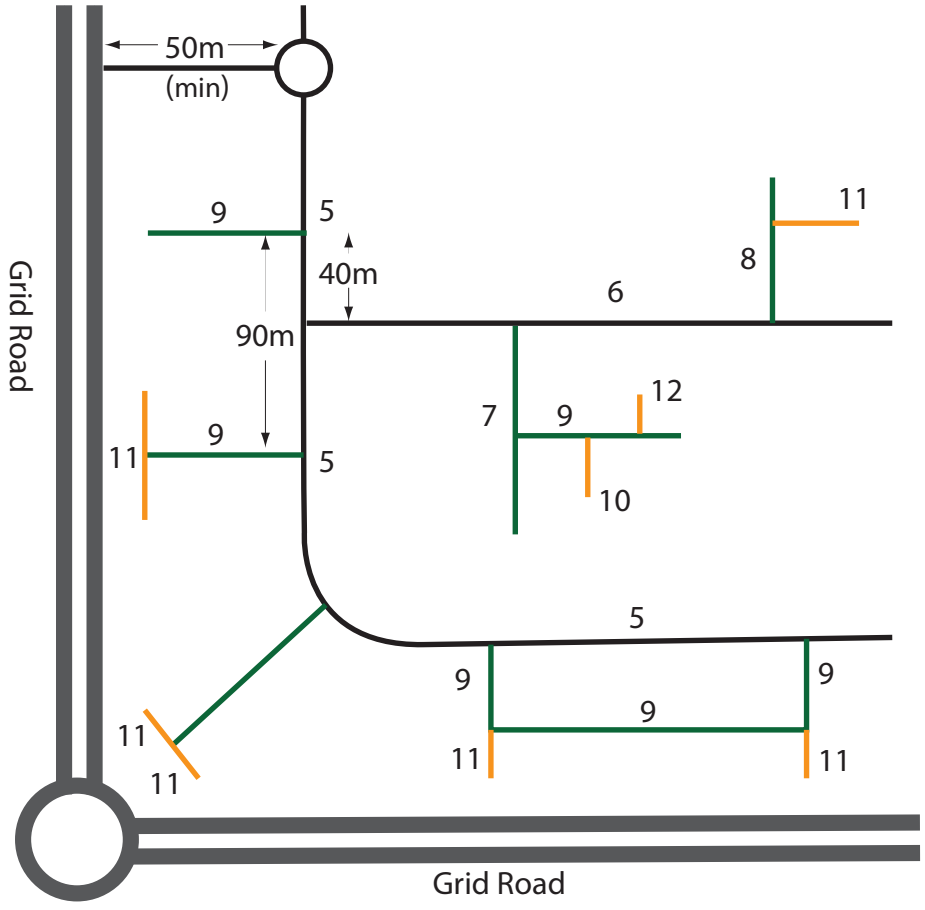
Root protection barrier detail

Street Hierarchy

3.7.32 The Guide cannot and does not provide detail on each street type within a development's hierarchy as this will vary according to the context. However, it does provide guidance on some of the key residential street types that would be in a development depending on its size. In particular, detailed guidance is provided on level surface streets, as these are a frequent point of discussion at pre-application meetings with much confusion about their design.

3.7.33 The street hierarchy (see street hierarchy diagram below and Design Table overleaf) should be designed to ensure that a network is created that:

- is easy to understand and navigate;
- is connected;
- includes a variety of street types; &
- encourages through traffic to use the higher level streets.



Conceptual plan showing street hierarchy -see table below

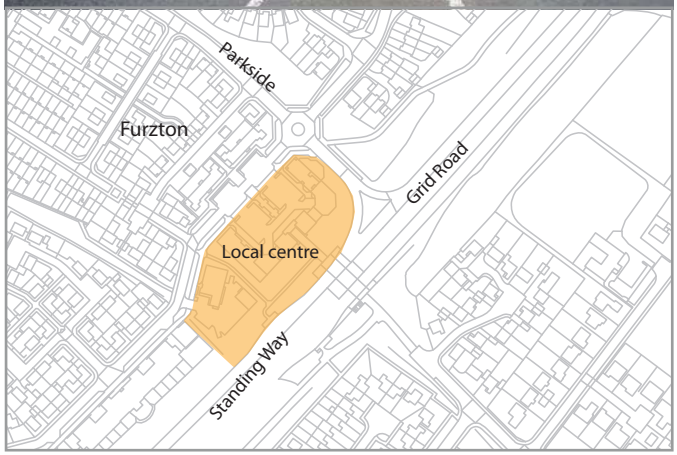
Street Design Table

TYPE	NAME	SERVES	WIDTH (m)	FOOTWAY	VERGE[3]	DESIGN SPEED mph (kph)	JUNCTION SPACING[1] (m)		ACCESS	
							ADJ	OPP	FROM	TO
ROADS										
1	Primary Distributor	N/A	Refer to the Design Manual for Roads and Bridges							
2	District Distributor	N/A	Refer to the Design Manual for Roads and Bridges							
5	Local Distributor	300+ Dwellings	6.75	2 x 2m	2 x 1m	30 (50)	90	40	1, 2	6-9
RESIDENTIAL STREETS										
6	Principal Street	100-300 Dwellings	5.5[4]	2 x 2m	None	25 (40)	50	25	2, 5	7-11
7	Major Street	50 to 100 Dwellings	5.5	2 x 2m	None	25 (40)	30	15	5, 6	8-12
8	Street	25 to 50 Dwellings	4.8	1 x 2m	1 x 1.2m	20 (32)	30	15	5-7	9-12
9	Minor Street	Up to 25 Dwellings	4.8	1 x 2m	1 x 1.2m	20 (32)	20	5	5-8	10-12
LEVEL SURFACE STREETS										
10	Level Surface Street	Up to 25 Dwellings	Min 3.2	Integrated	Min 0.5m[2]	<15 (24)	N/A	N/A	6-9	11-12
11[6]	Shared Drive	3 to 5 Dwellings	3.2 to 4.1	Integrated	2 x 1.2m[5]	<10 (16)	N/A	N/A	6-10	N/A
12[6]	Shared Crossover	2 or 3 Dwellings	3.2	Integrated	None	N/A	N/A	N/A	7-10	N/A

1. Measured Centreline to Centreline. The minimum distance to the first junction on a road/street is 50m for types 1-6 or as per the relevant adjacent “ADJ” distance for types 7-9.
2. To be determined in conjunction with statutory undertakers and the Council’s Highway Adoptions team.
3. This is a minimum requirement for highway purposes. Wider verges will be acceptable where they meet urban design objectives.
4. Where the road is part of a bus route the width should be increased to 6.2m.
5. Verges are required for adoptable Shared Drives. On private Shared Drives verges are not required.
6. These street types are not adoptable.

3.7.34 In order to create a suitable and safe environment for all users in that part of a neighbourhood or new development where the boulevard/avenue joins the grid road the following principles should be adhered to:

- There should be a minimum distance of 50m between the grid road and the first side access street. Furthermore no private driveways will be allowed access to the spine roads within this 50m distance ;
- A roundabout should be used to slow traffic down as it exits the grid road and enters the residential neighbourhood. The roundabout should be located at the end of the 50m 'zone' ;
- The sort of uses that would be encouraged within this 50m 'zone' would include allotments and local centres (or other uses) which don't require access onto the boulevard/ avenue within this 50m zone.



Furzton - roundabout used to slow down traffic as it exits grid road. Local centre located within 50m zone between grid road and first side access street.

3.7.35 In addition to grid roads and their reserves, the following street types need to be included, the range and inclusion of which will depend on the size of the development.

Avenue and Boulevard

(Street type 5 ,6)

3.7.36 These street character types will be at the top of the street hierarchy, and will tend to carry the highest volumes of traffic within a neighbourhood including through-traffic. In addition to footways, they require a 2.5 metre (minimum) wide reservation on each side to accommodate a combination of verge and on-street parking (except where they pass through a local centre or other non-residential fronting development where the requirements will be specific to the context). This will help give an "avenue" effect which was a key feature of many earlier estates in Milton Keynes (e.g. Emerson Valley, Great Linford, Shenley Church End, Two Mile Ash, Middleton) and will help maintain a legible street hierarchy.

3.7.37 One problem with some of the verges in the above mentioned estates is that the verges were frequently too wide – and when they are in excess of 2.5 metres the extension of the private driveway between carriageway and footpath typically becomes used as a parking space. This results not only in cars overrunning the footpaths but also in an untidy and cluttered street scene which is to be avoided.

Low maintenance groundcover planting is an alternative to grass and is less likely to be parked on

Verges between 3 and 5 metres wide should be avoided to discourage indiscriminate parking

3.7.38 These streets should avoid being excessively curved because firstly they will have redways running adjacent to them and secondly they will accommodate buses. The Highway Design Guide will provide further information on necessary street widths to accommodate buses. The design of these streets should be such that on-street parking is accommodated without narrowing the street below the width required to allow two buses to pass easily. In specific points they can be narrowed down further to accommodate redway or other dedicated pedestrian crossing points. They can also include raised tables where redways cross over them.

3.7.39 The highest densities of the development will tend to be along this street type, especially if it is a bus route and/or contains local facilities.

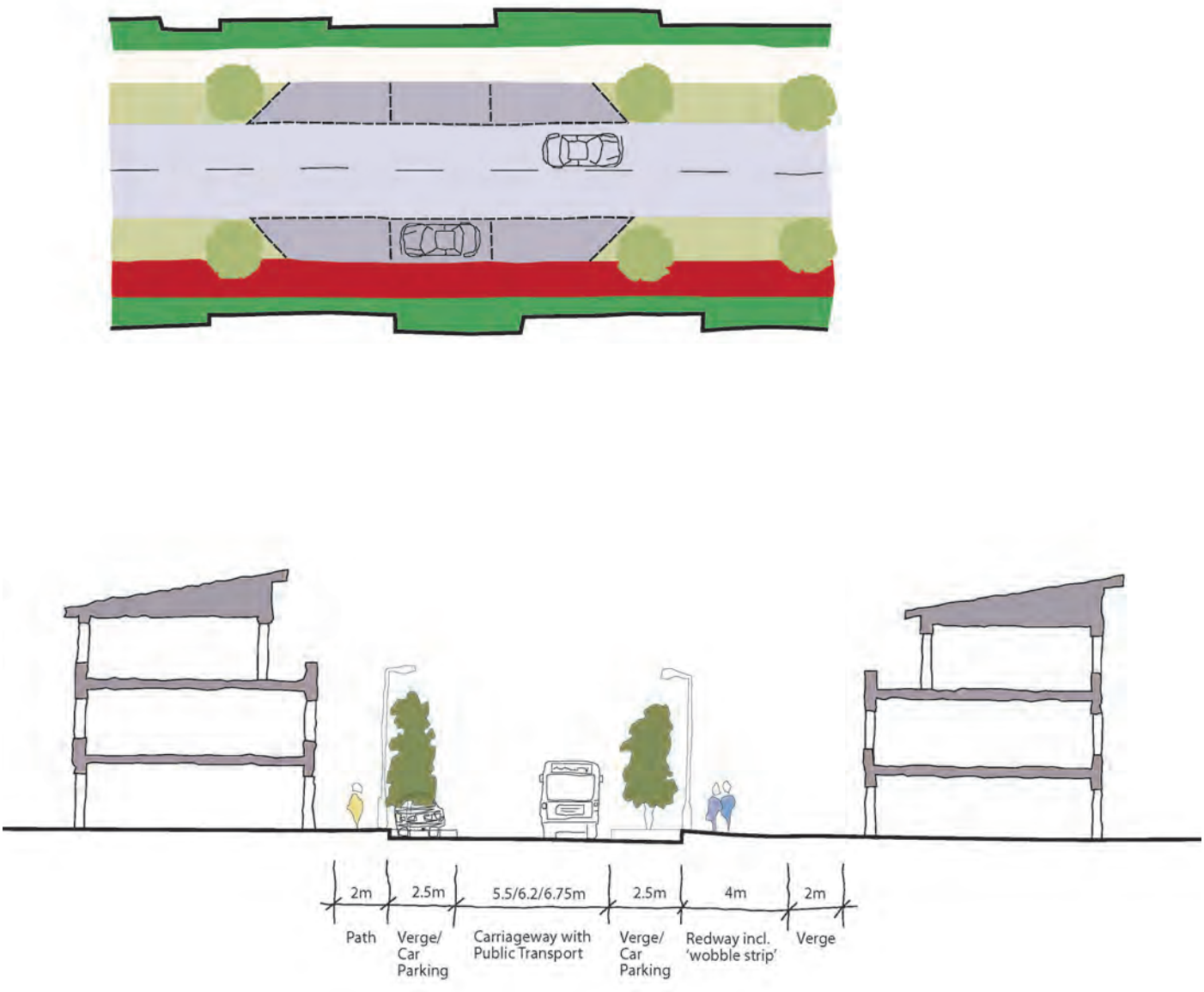
3.7.40 In order to signify their importance in terms of movement and place and reinforce the avenue effect of these streets setbacks should be more generous than some other street types and should be a minimum of 3 metres from the back of the redway or footpath (other than where it passes through or non-residential frontage where it will vary according to the specific context).

3.7.41 The increased setbacks will allow buildings to be taller along these streets helping signify the place in the street hierarchy that it occupies.

Primary streets that are bus routes should generally be straight and feel like more significant streets

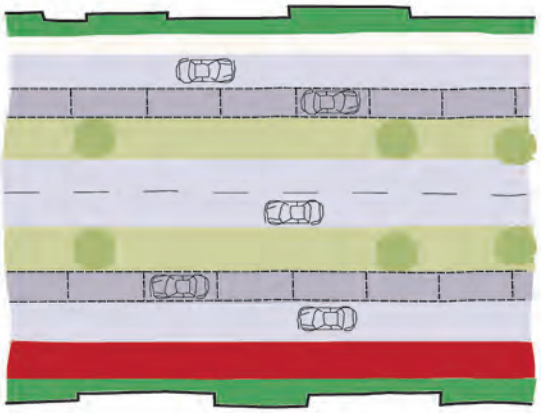
Tree lined primary street.

This primary street bends too much, is not green enough and does not give the impression of being at the top of the development's street hierarchy

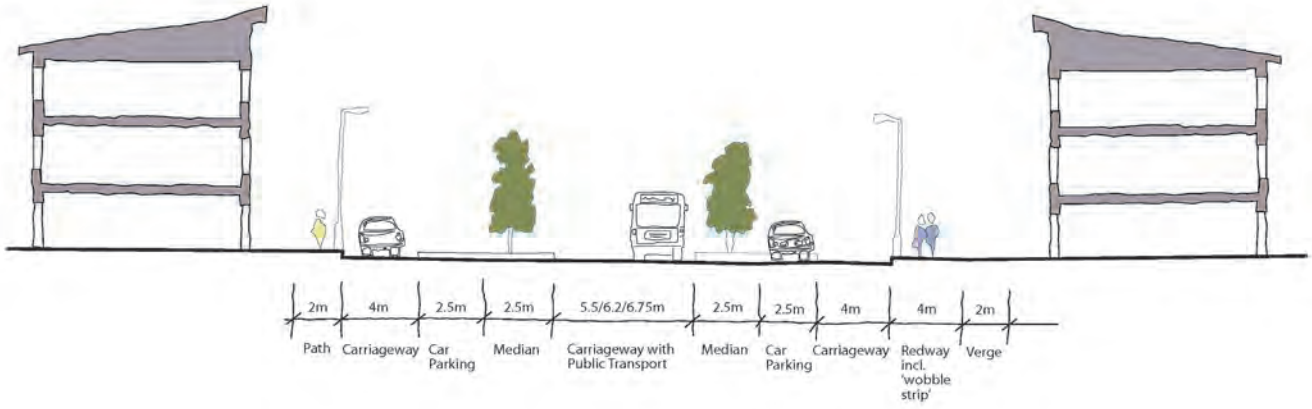


Illustrative plan and section of an avenue

3.7.42 An alternative form of street to the avenue is the boulevard. This street type has a central roadway for through traffic, together with access roads serving frontage properties. The central roadway is separated from the access roads by a planted median. On-street parking is provided along the access road. This street type is particularly appropriate where the volume of traffic would normally preclude frontage access to buildings.



Conniburrow Boulevard



Illustrative plan and section of a boulevard

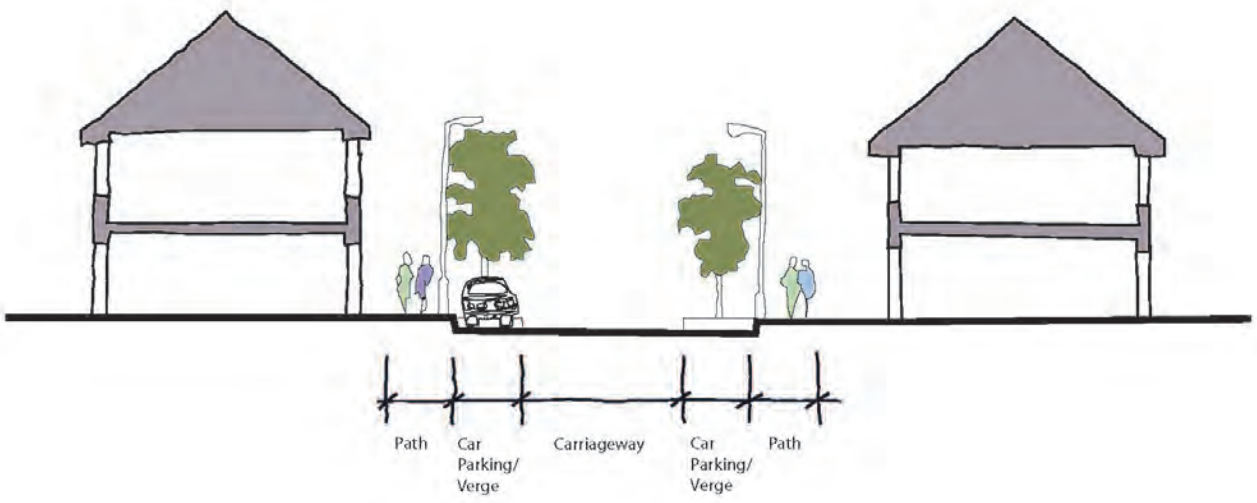
Residential Street

(Street types 6,7,8,9)

3.7.43 A 'residential street' is designed to serve residential properties and is not intended to carry through traffic, including buses. It will be characterised by a carriageway and footways (on either side of the street for streets with homes on both sides).

Grange Farm - example of a residential street

Example of a residential street



Level Surface Streets

(Street type 10)

3.7.44 Level surface streets are defined as "A street surface with no level difference to segregate pedestrians from vehicular traffic"(DfT Local Transport Note 1/11, October 2011).

3.7.45 In an appropriate setting, the benefit of level surface streets is that firstly, they provide for a better quality pedestrian environment by giving over a greater part of the street for the use of pedestrians, and secondly, it allows for a variety of character to occur across a development.

3.7.46 Level surface streets have not however always been seen as successful environments to live on in Milton Keynes for the following reasons:

- No areas of the level surface street have been set aside for pedestrians who do not feel safe using the carriageway (e.g. young children, the elderly, disabled and partially sighted);
- Streets without a combination of footways and required design features have been labelled shared streets without achieving an appropriate shared space environment;
- Too much through traffic because inappropriate street selected as level surface street (too connected, too long and serving too many houses);
- Lack of adequate defensible space to the front of properties;
- No clear delineation for cars to park and hence parking in inappropriate places has occurred;
- Too narrow which has been exacerbated by lack of 'designed-in' on street parking that together have not allowed easy access through for emergency and waste vehicles;
- Lack of speed restraint measures.

Level surface street too narrow, with poorly defined and overly sinuous edges resulting in vehicles overrunning the carriageway and being unable to pass through when cars are parked in the street.

Key Design Principles

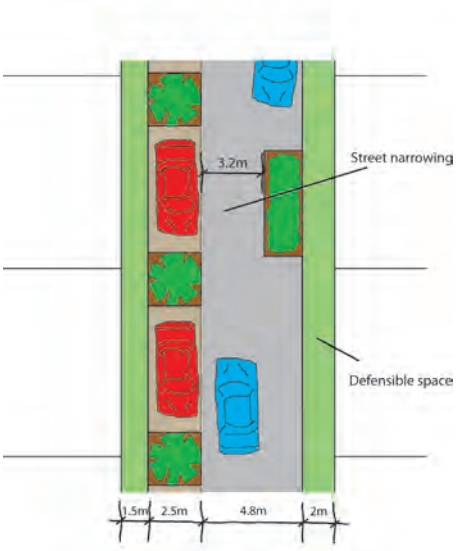
3.7.47 Level surface streets as part of new residential developments will therefore only be acceptable in Milton Keynes if the following criteria and design guidance are adhered to. These have been informed by national policy, lessons learnt as well as surveys of residents who live on level surface streets:

Location and Design Speed

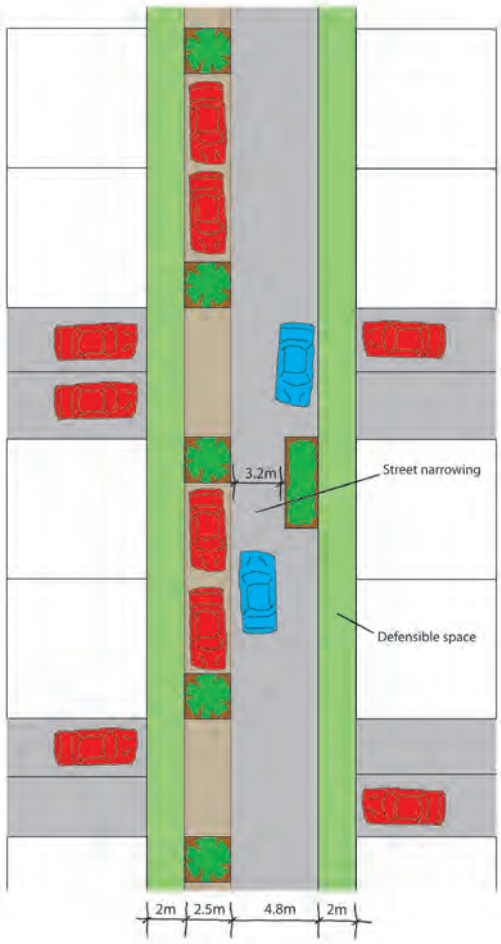
- They are most appropriate for streets at the lowest end of the hierarchy and should not be subject to vehicle flows greater than 20 vehicular movements per hour (which equates to a street serving a maximum of 25 houses);
- They must not occur off higher level streets such as primary streets (street types 1,2,5). They should rather occur off secondary (residential) streets (street types 6-9);
- They are designed to a maximum 15mph speed and hence the layout must be such to ensure that this speed limit is adhered to.

Defensible Space

- Where parking occurs to the side of the property, there should be a minimum private defensible space of 2m to the front of the property;
- Where terrace housing occurs and hence where there is no parking to the side, there should be at least 1.5m defensible space to the front of the property;
- Anything located within the defensible space should be a maximum of 0.6m high to provide sufficient visibility for small children..



Illustrative layout of level surface street showing designated parking areas



On-street Parking

- Parking spaces must be designed into the street to minimise the opportunity for inappropriate parking and be clearly delineated through contrasting colour paving material;
- On-street parking (as in all cases) will be unallocated if placed within the adoptable highway.

Level surface street with planting and places to park

Width

- The level surface street must be sufficiently wide that it can at the very minimum accommodate on street parking (where appropriate) and a clear route for large vehicles areas to pass through unimpeded. A swept path analysis must be undertaken to ensure that this can occur. Appropriate visibility splays must also be achieved;
- As a general minimum, all level surface streets should allow for 2 way traffic with a minimum carriageway width of 4.8m;
- The location and design of utilities must be discussed at an early stage with the Council.

Variations in carriageway width occur primarily because of 2 factors:

- The additional inclusion of right angled parking which requires 6.0m for reversing;
- Narrowings. In order to improve the overall environment of the street for the pedestrian as well as slowing traffic down, the 4.8m carriageway can be narrowed for short stretches to a single lane that still allows for the largest required vehicles to pass through. This should not occur for stretches longer than 5m. Pinch points can typically occur through planters, trees, kerbed islands or bollards.

Good quality level surface street - New Hall, Harlow

Drainage Channels

- Drainage channels should be located so as to avoid unintentionally demarcating either footways or parking, neither intended for that purpose.

Drainage channels leading to confusion as to whether parts of the level surface are for parked cars or footpaths

Speed Restraint Measures

- In order to improve the overall environment of the street for the pedestrian, various speed restraint measures should be included in the design to slow traffic down to maximum speeds of 15mph. There are various ways of achieving this:

  1. Designing the layout of development to ensure streets including building lines have significant variation in horizontal alignment (i.e. creating bends in the street)
  2. Where the building line remains predominantly straight, horizontal deflection of the carriageway can be caused by (in preferential order):
     - Enclosure of the street
     - Trees and Planting
     - Planters
     - Other street furniture such as bollards and lighting
     - Narrowings
     - 'Designed-in' car parking spaces at different angles with different surface material (to create chicane effects)

  Given the required design speeds vertical traffic calming measures would not normally be acceptable.

Wide level surface street that accommodates on street parking, street trees and space for through traffic

Materials

- In order to emphasise their difference from conventional streets and thus help to vary the character across a development, level surface streets must be surfaced in block paving rather than blacktop asphalt. Research undertaken for Manual for Streets has furthermore shown that block paving rather than asphalt surfaces helps reduce traffic speeds.

Level surface streets frequently include highway verges. In this example it would have been better for the soft verge to have been a continuation of the block paving to make a wider carriageway.

Speed Restraint

3.7.48 In new residential developments speed restraint should be achieved by the horizontal alignment of the carriageway and by incorporating changes in direction and/or priority. In addition to this, the location of buildings or other vertical features close to the carriageway, as well as the careful use of materials and landscaping can further reduce the ability or temptation to drive at inappropriate speeds.

3.7.49 Features such as build-outs, islands, false roundabouts, pedestrian refuges, road narrows (pinch points), chicanes, gateways, table junctions, traffic islands, overrun areas, mini roundabouts and small radius bends can all be used as part of speed restraint proposals. Some of these features can also be used for traffic calming schemes on existing roads.

3.7.50 On-street parking in a variety of forms can also usefully traffic calm streets.

Right-angled parking can serve as a traffic-calming feature

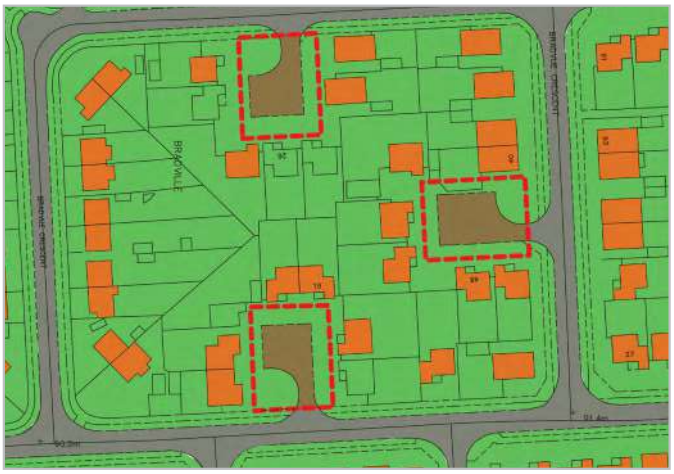
Culs-de-sac

3.7.51 Many older estates and developments built up until the late 1990s in particular in Milton Keynes are characterised by numerous culs-de-sac and they represent environments many people choose to live in.

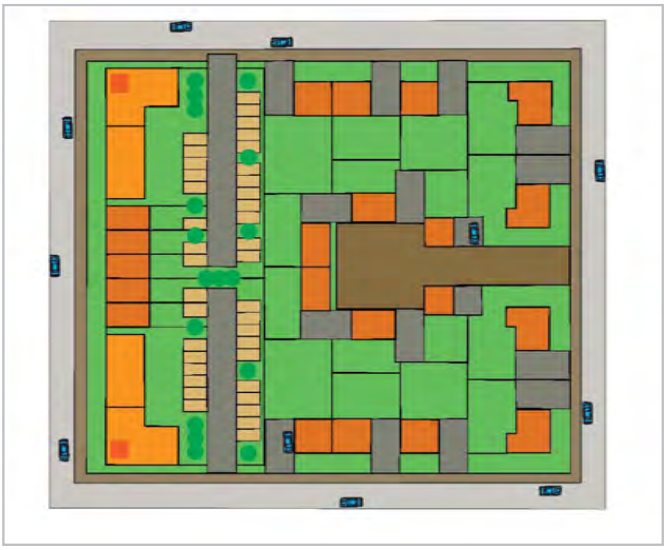
3.7.52 They are useful where through routes aren't allowed, where larger blocks are desirable or where there are any topographical, physical features or boundaries that prevent streets connecting up. They may also be used in low density areas where they can help accentuate the quiet nature of the area.

3.7.53 For culs-de-sac to complement the overall movement network and neighbourhood / development they should adhere to the following principles:

- They should be located within a wider connected movement network for ease and choice of access across the wider development;
- They should be arranged and designed such that they don't overly concentrate traffic impact on a small number of dwellings (those at the end of the cul-de-sac that joins the wider connected network);
- They should not be arranged and designed such that they reduce legibility and wayfinding across a development;



Culs-de-sac have been used to break up a larger block of approx 110m x 110m in Bradville

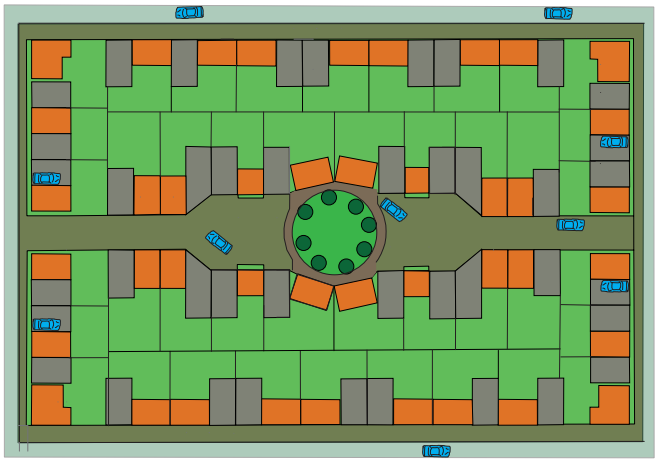


Single, short and direct cul-de-sacs are permissible to break up large blocks. They are also useful where through routes are not possible

- Pedestrian routes off culs-de-sac will be acceptable where the public space that the route passes through is designed into the overall layout of the development such that it feels safe and comprises an unambiguous public route that is short, straight/direct and overlooked by housing (including where the cul-de-sac or the short, direct overlooked pedestrian route opens into parkland or play areas etc);
- Culs-de-sac, with pedestrian routes off them as described above (whether comprising a non-car link between one cul-de-sac and another, or a non-car link between one cul-de-sac and a through street) will be encouraged where they create a shorter route to a destination by foot/cycle than by car;
- Other forms of pedestrian route out of cul-de-sacs that do not meet the above criteria will not be acceptable, in the interest of crime prevention;
- Where the footpath link off the cul-de-sac provides access to a local centre, school or other community facility, the cul-de-sac should have a footway on at least one side of the street;
- Careful consideration needs to be given to how large vehicles will turn at the end of culs-de-sac. Turning areas could for example be designed around an attractive open space or a parking court.

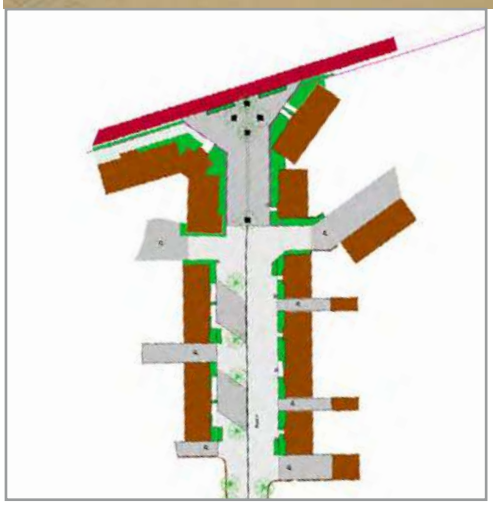
Not a good example of a footpath connecting two culs-de-sac - it passes right in front of someone's front door, not feeling very public

Upminster Close - short linked cul-de-sac with good natural surveillance of pedestrian link



Open space designed into layout to provide safe pedestrian link between two culs-de-sac

Cul-de-sac with turning area designed around a parking court - Greenleys



Greenway - short linked cul-de-sac with good natural surveillance of pedestrian link

Courtyard designed as a cul-de-sac

Servicing & Manoeuvring

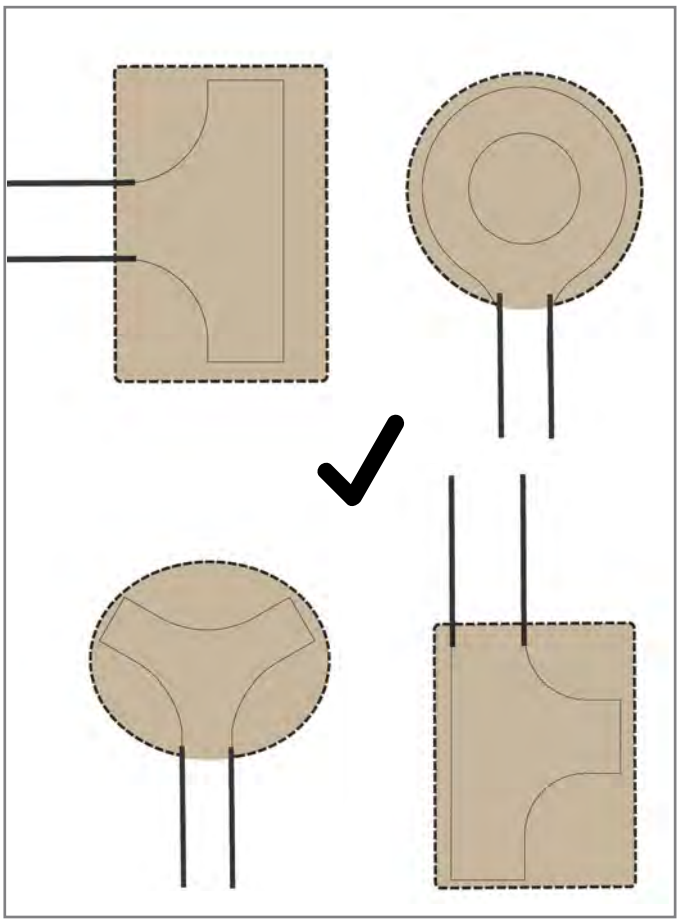
3.7.54 Residential developments sometimes require servicing by large vehicles for things such as refuse collections, deliveries of mail, milk, parcels and larger items including removal lorries. The design of road layouts should take into account these servicing needs; however provided that the road layout has been carefully designed they can all be accommodated.

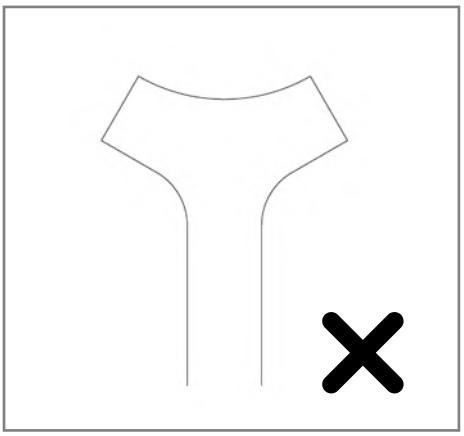
3.7.55 Residential roads and streets should provide adequate access for emergency vehicles and in particular should permit access for fire appliances to within 45m of all points (the 'footprint') of all dwellings. An increase in this distance to no more that 90m may be acceptable, provided there is suitable provision of compensating features such as automatic fire suppression sprinkler systems and in consultation with the local Protection Officer at Buckinghamshire Fire & Rescue Service.

3.7.56 Access for refuse collection vehicles should be provided to within 25m of collection points for houses and within 9m of grouped stores for flats or apartments.

3.7.57 To assist the movement of larger vehicles, all new culs-de-sac should terminate with either loops or turning areas, which allow these vehicles to perform a 3-point turn.

3.7.58 The location, layout and availability of turning areas will determine how well used they are. For this reason the layout of residential developments should discourage inappropriate parking within, or close to, the turning area. The most effective way of preventing parking within turning areas is to locate accesses or separate visitor parking spaces adjacent to them and to provide adequate parking to nearby dwellings.





3.7.59 The turning space provided should relate to its environment, not specifically to vehicle movement (see diagrams above).

3.8 Block Principles

3.8.1 Buildings must be arranged whereby they face outwards with a public front and private back. This typically takes the form of a perimeter block with buildings fronting a public street and their backs secured by other private space.

3.8.2 This arrangement also meets the needs of 'Safer Places' which states that *"access to the rear of dwellings from public spaces, including alleys should be avoided - A block layout with gardens in the middle is a good way of delivering this."*

3.8.3 A perimeter block can take on a variety of forms; the key point is that whatever layout is proposed it must provide for a clear public front and secure private back. Sites must be masterplanned so that their block and movement network accommodates these two principles.

3.8.4 As a rule, if a block is divided by a through-route (i.e. has two entrances), it must be designed as a clear public route with active frontages on both sides – there must be no ambiguity as to whether it is a public or private space. If active frontages can't be achieved on both sides it would be better to turn this route into two culs-de-sac which by definition are more private.

A poor example of a public street in Broughton (see photo of same street below)

Poor example of a public street - with no ground floor active frontages

Blocks with one side that have no permitted front access for vehicles

3.8.5 In Milton Keynes there have been streets within new developments that have not permitted any access for vehicles from the front. This has been for reasons of the strategic importance of the route, the volume of traffic and/or the inclusion of bus lanes. In this case, parking must be accessed from the rear. In order to create active frontages to all sides of the block and attractive streets, the following solutions can be explored:

- Dual aspect housing types;
- Parking for frontage dwellings provided within cul-de-sac;
- Parking for frontage dwellings accessed off street fronted by "flats over garages (FOGs)" or "flats over parking (FOPs)".

Parking for frontage dwellings provided within cul-de-sac

3.8.6 If it is anticipated that cars will park on the street to the front, parking should be designed into the streetscape so as to avoid parked cars impacting negatively on the strategic nature of the vehicular route.

Accordia dual aspect type unit

Block with FOG/FOPs fronting street at back

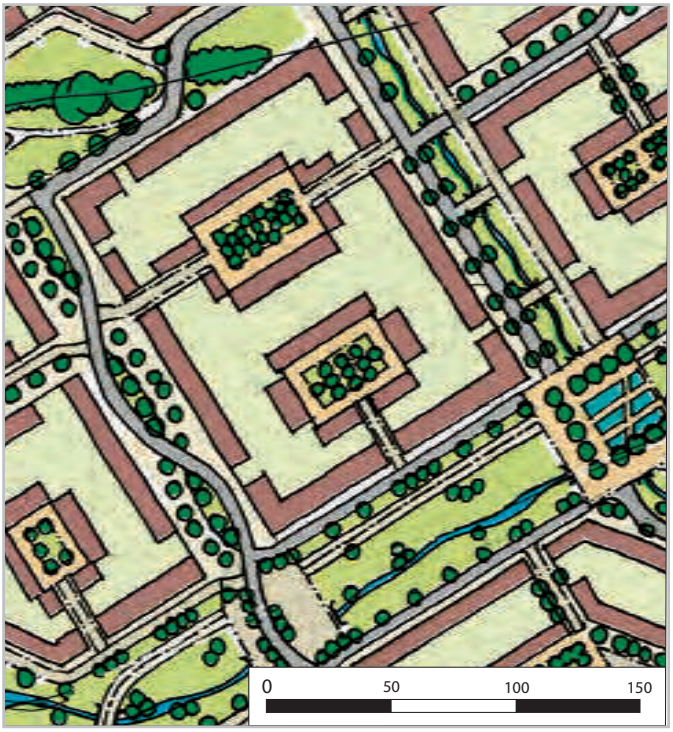
3.8.7 Block dimensions can and should vary in size as this is a good means of creating variety, interest and character across large sites in particular and should therefore be thought about at the overall masterplan level. Block width is the important dimension and should generally be in the range of 35-110m (while length should be between 60-110m).

3.8.8 Small blocks provide good pedestrian permeability and provide more locations for on street parking and are thus more appropriate in higher density areas close to shops, facilities and public transport which also coincides with a predominance of terraced units. Larger blocks (at the upper end of the above ranges) are more appropriate in lower density areas.

3.8.9 Thin blocks (approximately 35-40m in width) are largely achievable in traditional layouts where private rear gardens back directly onto each other. Care should however be taken to avoid numerous thin blocks in a row as this can result in little active frontage along the side street especially if corner buildings do not sufficiently turn the corner.

3.8.10 Larger, square blocks can be achieved through the incorporation of short, direct culs-de-sac or a variation of this being housing proposed around a front parking square.

Numerous thin blocks can create inactive frontages along side streets and should be avoided



Conceptual drawing showing large blocks with culs-de-sac designed around front parking courts or open spaces

3.9 Housing Typologies

3.9.1 Most housing in new residential developments can utilise 5 different forms:

- Narrow frontage types;
- Wide frontage types;
- L – shaped types;
- Dual aspect types;
- Bungalows;
- Flats.

The narrow and wide frontage housetypes can be arranged in detached, semi-detached and terraced forms.

3.9.2 Depending on which type is used it will have an important impact on the following elements which contribute to the layout, quality and identity for a development:

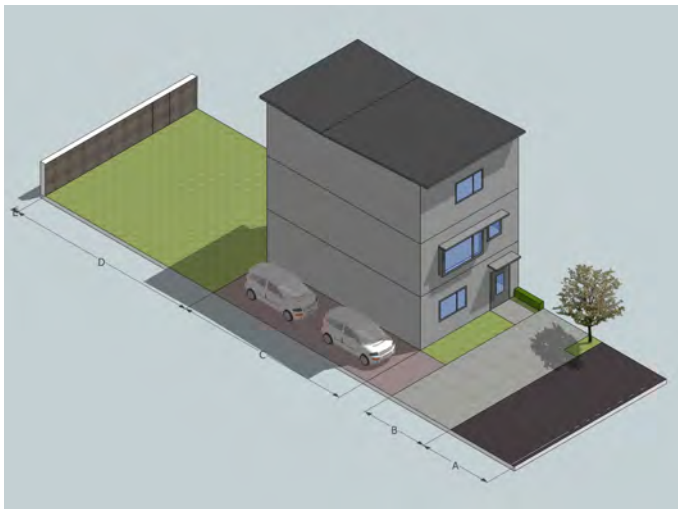
- On street parking and quality streetscape;
- Allocated parking and ease of use;
- Quality of housing frontage (in terms of the extent to which firstly the front garden/ defensible space is dominated by hardstanding and or cars and secondly, the extent to which the house is setback from the street and the relationship it therefore can have with the street);
- Continuity of built form along the street and hence enclosure.

3.9.3 The 5 housetypes and impacts on these above elements are illustrated and explained below. It is not intended as a set of rules to enable 'rubber stamping' of compliance, but rather as guidance to enable balanced and valued judgements.

	Narrow frontage	Wide frontage	L-shaped corner units	Dual aspect types	Bungalows
On street parking	No on street parking if part of terrace. Individual bays can be accommodated if allocated parking occurs to side of house (semi-detached units).	Yes	Yes, if sufficient spacing between units.	Yes	Yes, if allocated parking to the side of house.
Allocated parking	Either to the front or to the side.. Front parking courts.	Either to the front or to the side.	To the front of the house.	In car port to the rear underneath accommodation	Either to the front or to the side.
Quality/greenery of housing frontage	Very limited unless parking located to the side of house (very difficult as part of terraces)	Can still be achieved	Can still be achieved	Can still be achieved	Can still be achieved
Setback	At least 5-6m if part of terrace so fairly poor street enclosure. Better enclosure if parking occurs to the side.	At least 5-6m if part of terrace so fairly poor street enclosure. Better enclosure if parking occurs to the side.	Part of building can protrude forward of parking, so reduced setback and better enclosure.	Choice of setbacks and hence enclosure can be delivered.	By definition bungalows create reduced enclosure.
Continuity of frontage (and hence enclosure) along the street	Poor if parking only occurs to the side	Poor if parking only occurs to the side	More continuous built form created. Has potential to provide active frontage to two streets, when located on corner plot.	More continuous built form can be delivered	Poor if parking only occurs to the side

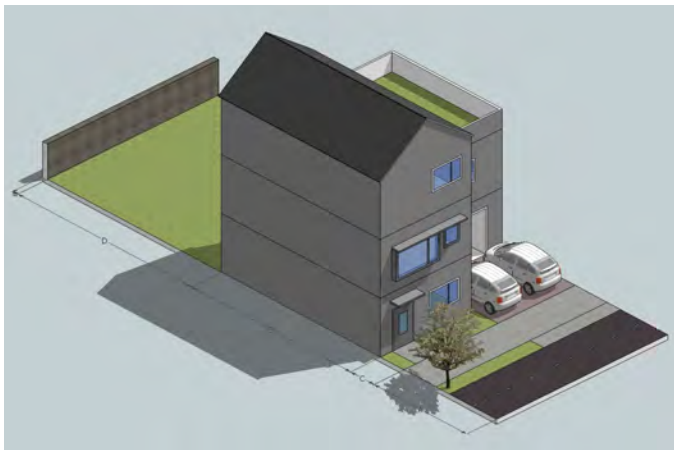
Table: Housing Typologies

Note: Flats is another housing typology. However, there are too many variables relating to the design of flats to include them within the table.

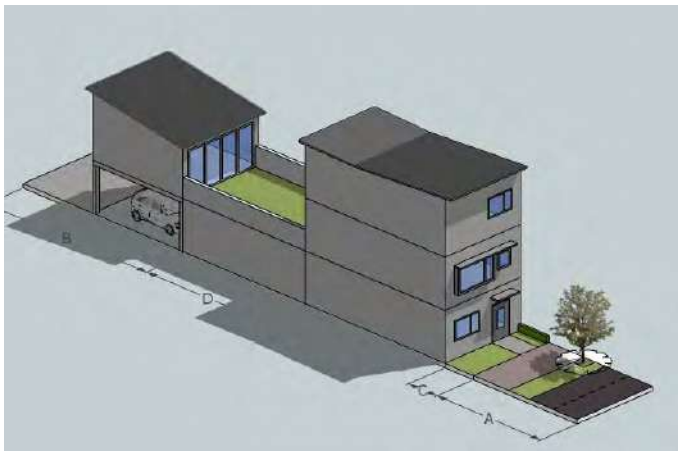


Narrow frontage

Wide frontage



L-shaped corner unit



Dual aspect type

Bungalow

3.10 Parking

Parking Standards

3.10.1 The Council's requirements for parking for residential development are provided by the Addendum to Parking Standards adopted in 2009. An extract from the Addendum is included at Appendix F. The parking standards for Houses in Multiple Occupation (HiMO) are contained within the HiMO SPD. Please note the following points in addition to the information set out in Appendix F:

- These standards show the minimum requirement for parking provision;
- Garages do not count as parking spaces;
- Garages are an important design feature of residential developments, which if well designed can provide useful additional space for dwellings. Garages with minimum internal dimensions of 3 x 7 metres are considered large enough for the average sized family car and cycles, as well as some storage space;
- Detached homes with 5+ bedrooms will generally be expected to have at least 2 on-plot, independently accessible parking spaces.

  For smaller homes (i.e. 4 bedrooms or fewer), independently accessible on-plot parking spaces are preferred but tandem parking (including any similar layout where the spaces are not independently accessible) will be acceptable, provided that:

  - The unallocated (on-street) provision is visible from and in close proximity (within 15m from the front of the property) to those homes that have tandem parking (or any similar layout where the spaces are not accessed independently).
  - The on-street provision does not encroach into the carriageways on bus routes and other primary residential streets (types 5-7) so as to allow for the movement of free flowing traffic, including service delivery vehicles.
- There is no maximum requirement;
- Parking for flats should be clearly and suitably signed from all approaches.

Car Parking Locations

3.10.2 The location of car parking has an important influence on block structure and is therefore included in this section on "Building a Place". It has a fundamental influence on the quality of a development, the streetscape in particular, and is a significant factor in the desirability of a place to live. Location of parking is one of the most prominent issues in pre-application discussions.

3.10.3 The National Planning Policy Framework has given local authorities increased autonomy to establish their own parking standards according to its own context and particular circumstances.

3.10.4 In Milton Keynes, an increasingly common problem associated with new developments (and in particular terraces) is cars parked on verges, on pavements and on streets that are not designed to accommodate parked cars. This is partly because car ownership is higher than average in Milton Keynes. More importantly, however, rear courts, which have to date generally been the chosen form of allocated parking (particularly for terraces), have not been well used by residents. This is due to a number of factors:

1. Parking spaces are too remote from the front door;
2. Rear parking court feels unsafe/ insecure;
3. Rear gate of garden is not lockable from both sides (hence is often not practical possible to use);
4. No footpath through rear garden further discourages use;
5. Surveillance of the rear parking area blocked by garden fences.

3.10.5 The result of parking on verges, on pavements and on streets that are not designed for on-street parking is:

1. Bin lorries and emergency vehicles cannot get through;
2. Unsafe streets are created because, for example, sightlines are blocked;
3. Cluttered and "untidy" street scenes;
4. Verges becoming unsightly which further undermines the streetscape;
5. Footpaths become impassable.

3.10.6 Opportunities for inappropriate parking should be designed out of schemes, as far as possible. Providing sufficient designated on-street parking spaces in the right locations will assist in reducing the instances where residents feel the need to park on pavements or verges. However, inappropriate parking should also be prevented through the design of the street. A range of street elements, such as carriageway widths, street furniture and planting, (including trees and groundcover planting), can be manipulated to constrain or direct parking.

Hierarchy of Preference

3.10.7 For these above reasons, the following hierarchy of preference should be adhered to when providing car parking for new residential developments:

1. On plot, located at the front or side of the dwelling;
2. On street to the front of dwellings;
3. If 1 and 2 above can't be achieved alternate methods of providing parking should be discussed at an early stage with the Council.

3.10.8 The following sections provide guidance and solutions on how to accommodate parking.

On Plot Parking

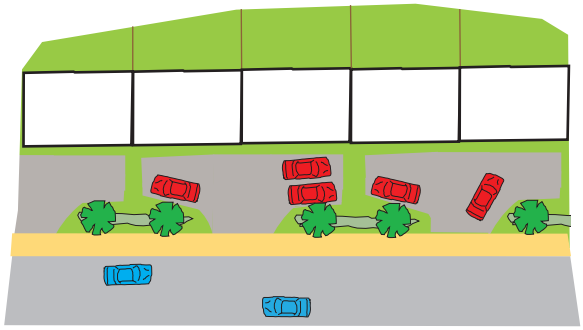
3.10.9 On-plot parking can be provided:

- to the side of dwellings (in front of garage or on hardstanding);
- as a "drive through" to hardstanding within the rear garden; or
- to the front as right-angled, or parallel parking.

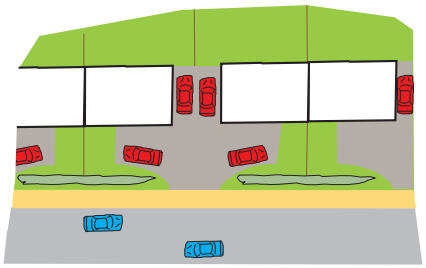
3.10.10 This is a very common and acceptable way of accommodating parking for detached and semi-detached housing.

"Drive Throughs"

3.10.11 These are in effect car ports but are open at the back to allow parking either within the building and/or within the rear garden. The advantage of "drive throughs" to hardstanding



On plot parking at the side and front of dwellings



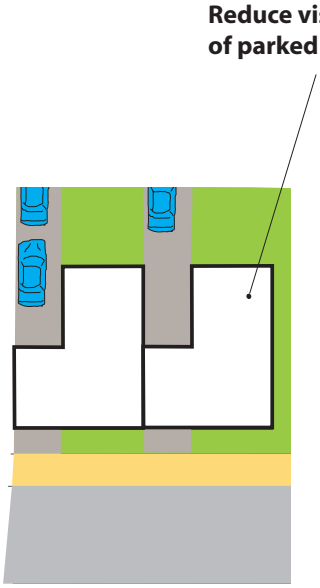
On plot parking at the side and front of dwellings

Independently accessible on plot parking spaces

or garages in the rear garden is that continuity of frontage can be maintained whilst retaining on-plot parking. 1.8 metre high fencing or walling is required around the parking to provide security to the rear garden. Minimum width should be 3.5m.

3.10.12 "Drive throughs" to hard standing within the rear garden can create blank frontages and make ground floor internal layouts less practical, and therefore need to be designed with care. They are best incorporated within wide frontage dwellings, which enables "active rooms", such as living rooms and kitchens, to still be provided fronting the street at ground floor level.

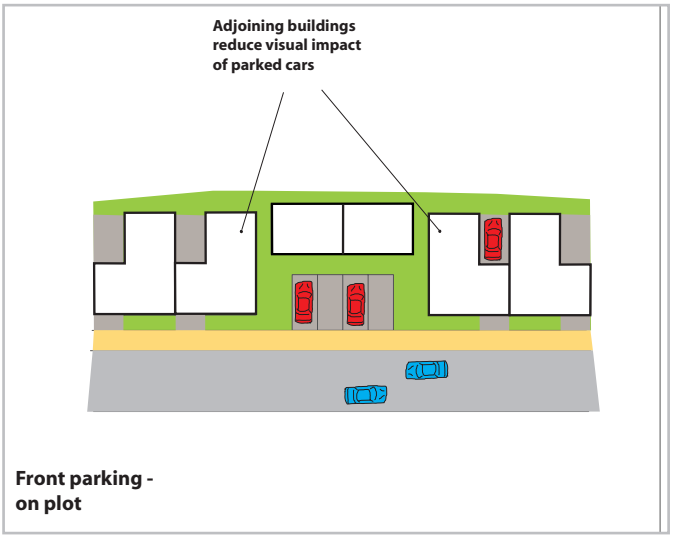
Drive-through parking within rear garden

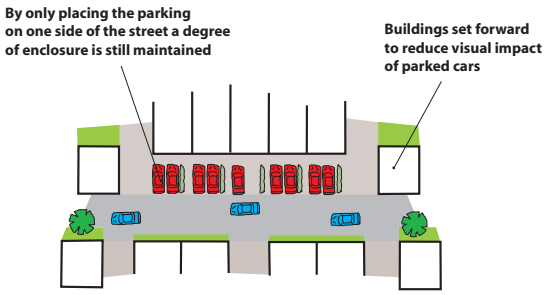


Drive-through on plot parking accessed from the front

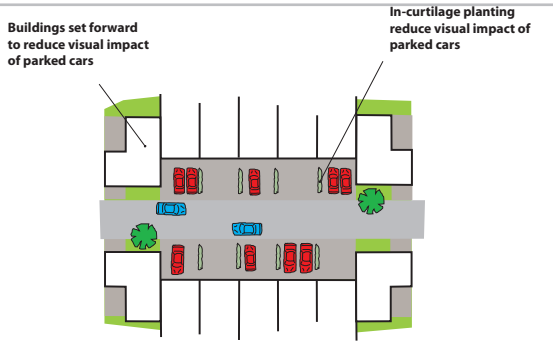
3.10.13 Where "drive throughs" are incorporated in narrow frontage dwellings, balconies or bays at first floor level are one useful means of creating interest and activating the frontage. They must have active ground floor frontages on the other side of the street to provide overlooking of the drive through.

On-plot parking to the front

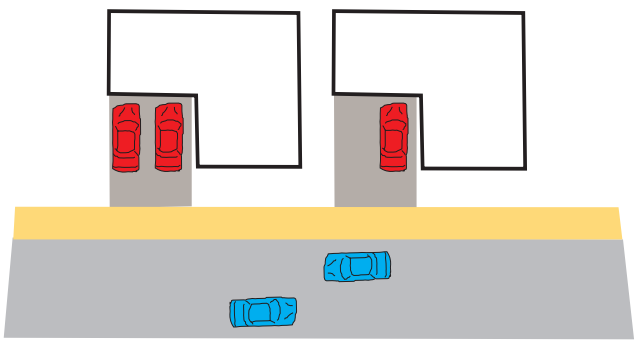




Right Angle parking - on plot



Right Angle parking - on plot



Where integral garages are also feasible is in L-shaped types where the parked car is largely hidden behind the front of the house

Right-angled Parking to the Front

3.10.14 A variation of the on-plot parking solution is the provision of right-angled parking to the front of the dwelling. In the examples opposite, the cars are parked within the curtilage of the properties and therefore constitute allocated spaces. It is important to note the annotations on each of the sketches as they hold important design information. Right-angled parking could include an integral garage but then wider frontage types (9-11 metres) are encouraged.

On Street Parking

3.10.15 On-street parking has a number of benefits, including:

- assisting with speed restraint as part of an overall package of elements that together affect driver behaviour;
- adding vitality to the street;
- acting as a buffer to pedestrians on the pavement from passing traffic;
- making efficient use of land, as the street provides the means of access and parking spaces are shared.

3.10.16 On-street parking should be built into the layout design and should be clearly defined, through use of different surfacing materials, kerbs, street furniture and/or planting.

3.10.17 Where possible, parking should be provided in groups of 3-5 bays. If there are more than 5 bays in a row they should be broken up by landscaping.

3.10.18 Visitor parking must always be provided on-street.

3.10.19 On-street parking can be provided in two different configurations: **echelon or parallel.**

3.10.20 Where echelon or right angled parking is used on higher level streets, buildings need to be taller to compensate for the wider street. Landscaping should also be used to break up the possible visual dominance of the cars.

3.10.21 Parallel parking can either occur adjacent to the carriageway or within the carriageway. When they are located within the carriageway, they can assist with speed restraint. Some form of planting is required at each end of the parking to ensure that the speed restraint effect remains when the car is absent.

3.10.22 Wide frontage housing (9-11m) allows a greater percentage of on-street parking to be provided and is an important consideration when designing layout and housetypes (see section 3.8 on housing typologies).

3.10.23 Streets with single-sided development, facing open space, provide opportunities to accommodate on-street parking. Spaces can be provided on the other side of the street, where there are no driveway crossovers. This is particularly useful where on-plot parking for housing is provided in the form of tandem parking.

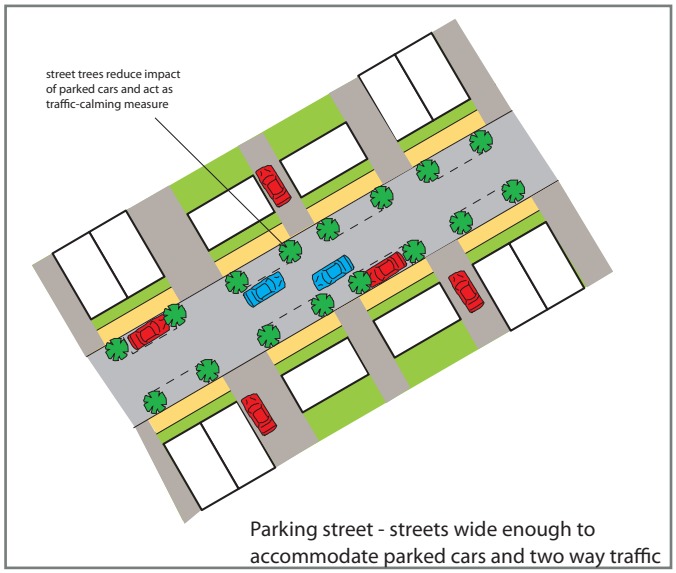
3.10.24 In order to try and encourage more on-street parking and reflect where Milton Keynes residents like to park, the Design Guide outlines three more innovative, less conventional, ways of providing parking on street which it is hoped developers will build into their layouts.

Parallel parking within the carriageway -Woburn Sands

"Parking Streets"

3.10.25 Developments should include carriageways wide enough to allow parallel parking on both sides with space between for two cars to pass. Street trees within the pavement will reduce the visual impact of parked cars.

3.10.26 It has often been a challenge to fit in on street parking spaces when numerous detached and semi-detached houses are included in a layout because of the requirement to accommodate and keep open private drives onto the carriageway. Individual parking bays are generally not supported where the footpath diverts its alignment continually to get around them. The sketch opposite however shows that where wider 'Parking Streets' are incorporated into a development, individual parking bays can be incorporated between driveways with the footpath remaining on its existing alignment. Two designs can result, either a tree can be included at the front and back of each parking space or the parking spaces can be delineated with a different material. In both cases, but particularly the former, the features still result in traffic calming if the cars are absent.



Parking street - streets wide enough to accommodate parked cars and two way traffic

Public Squares

3.10.27 Public squares have the benefit of incorporating parking within a space which can also provide townscape and recreational benefits. The square can be used to provide parking for residents within an adjacent busier street. In more formal layouts, parallel parking can be arranged around a landscaped central space, which could be in the form of a square or circus. In more informal layouts, parking can be provided within a predominantly hard-surfaced space.

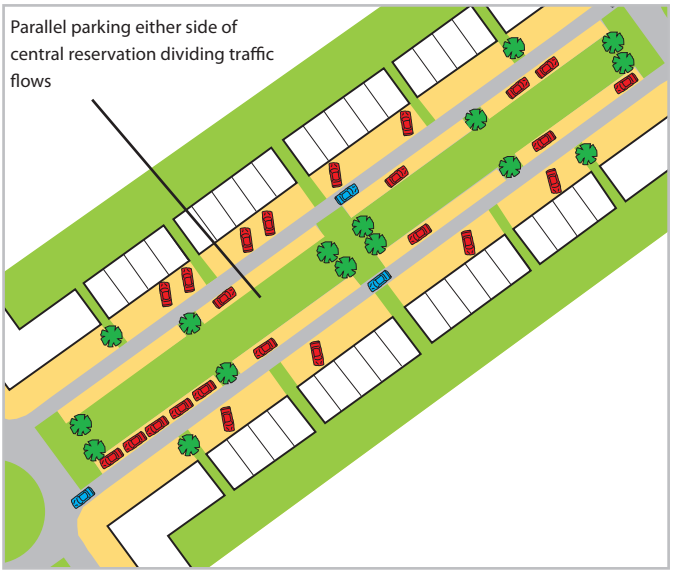
3.10.28 Public squares must be designed into the layout at the masterplanning stage – it is not advisable to try and retrofit them into a layout at a later stage.

Central Reservations

3.10.29 Parking can be provided within a central reservation with cars arranged both sides of a strip dividing traffic flows. Landscaping should be provided to reduce visual impact.

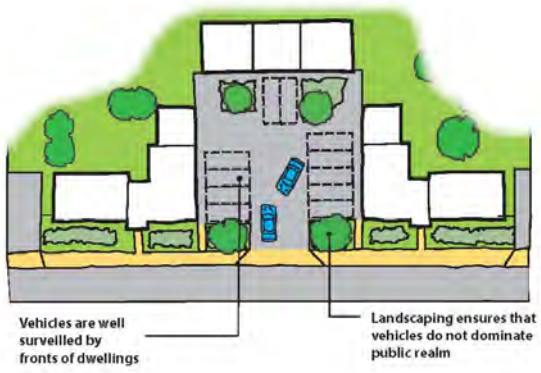
Example of formal public square layout accommodating parking around its edge

Parking in the central reservation - Oxley Park



Front Parking Courts

3.10.30 These are in effect rear parking courts located at the front where people like to park and where parking can be overlooked and be close to front doors.



Rear Parking Courts

3.10.31 Rear parking courts have proved unpopular as parking choices for residents and are therefore not supported as a parking option in Milton Keynes. It is however accepted that for certain streets, frontage access for vehicles from the street can't be achieved or is not permitted. In these cases small private and secure rear parking courts may therefore be required. The Design Guide does therefore in Appendix D outline guidance on what makes for a good quality rear parking court.

Car Ports

3.10.32 Unlike garages, carports can be counted as on-plot car parking because they are unlikely to be used for storage. However, there are concerns where they are accessed from the public realm as they provide gathering spaces for youths, and are often poorly surveilled. Car ports are required to be open on two faces and to have minimum internal dimensions of 3.0m x 5.0m per space. Where the car port is located to the side of the house, any fence or wall provided to secure the rear garden should be at least 1 metre from the end of the car port.

Parking for Leisure Uses

3.10.33 Where no dedicated parking is provided for a leisure attractor (e.g. a skatepark) located in a linear park or other open space, it is suggested that the streets closest to the facility (normally those lining the linear park) include additional on-street parking to cater for those users arriving by car.

Size of Parking Space

3.10.34 Parking spaces should normally be a minimum of 5 metres by 2.5 metres (diagram 1). Where the parking space adjoins a wall/ fence (diagram 2) or dwelling (diagrams 3 & 4) additional space should be provided. Dwellings designed to meet Lifetime Homes standards will have to provide larger car parking spaces (see section 4.2 of the Design Guide). Details of the requirements can be found on the following website: www.lifetimehomes.org.uk.

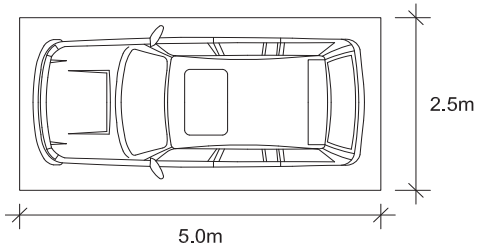


Diagram 1:Parking space

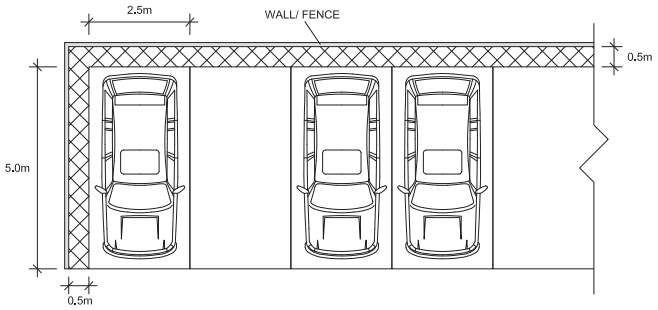
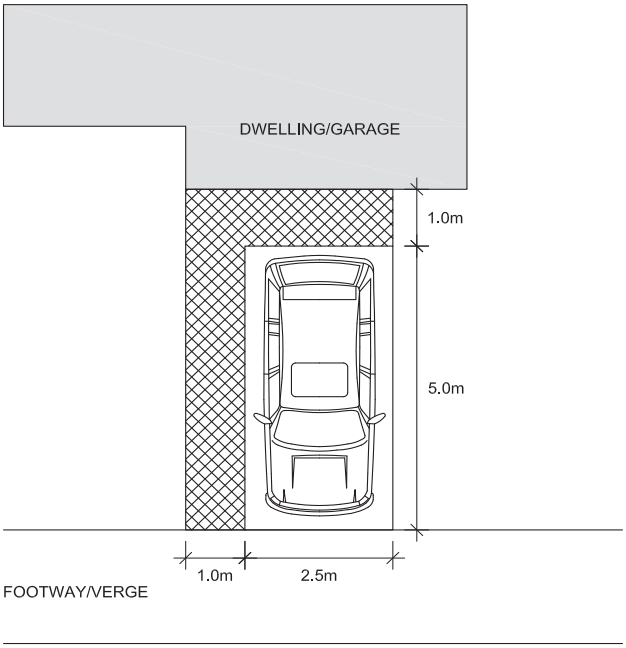
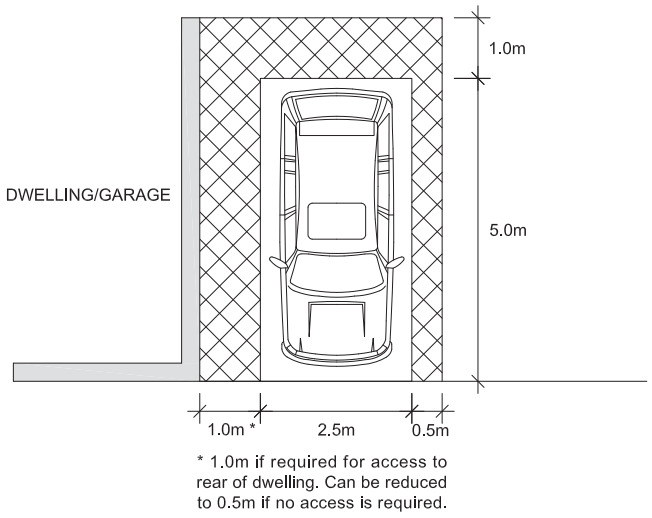


Diagram 2: Parking spaces adjoining a wall or fence



Diagrams 4:Parking space adjoining a dwelling/garage



Diagrams 3 :Parking space adjoining a dwelling/garage

Cycle Parking

3.10.35 Providing enough convenient and secure cycle parking at people's homes for both residents and visitors is critical to increasing the use of cycles. Cycle parking needs to be considered at the outset and should be within a covered, lockable enclosure. For individual houses, this could be in the form of a shed or garage. For flats, either individual lockers or cycle stands within a lockable, covered enclosure are required. The cycle parking should be secure, easily accessible and convenient to use.

3.11 Landmarks, Vistas and Focal Points

3.11.1 Key focal points and gateways can be marked by buildings, public art or distinctive landscaping. Landmarks help to emphasis the hierarchy of a place, with the most important buildings being located at the main centres of activity. They also make it easier for people to navigate their way through an area by acting as markers.

3.11.2 Corners and public squares are particularly appropriate locations for landmarks.

3.11.3 Landmark buildings should be designed to stand out from neighbouring buildings. Their landmark status may be articulated through:

- the building's use;
- its form and appearance (varying roofstyle and bold coloured render, for example); and/or
- an increase in scale or height in relation to adjacent buildings.

3.11.4 The layout of a development can be arranged in two ways in so far as vistas are concerned:

- Streets can be orientated to focus on landmark buildings, in order to close vistas and to aid legibility. Offsetting the landmark building at the end of the vista helps to lead people through the space and increase their sense of surprise;
- In higher density areas in particular, streets can be arranged so that vistas are kept open –this is especially useful if there is an attractive landscape feature within the vista. The inclusion of this openness and greenery in the vista has the effect of making high density 'feel' like low density.

Landmark buildings help people to navigate their way through an area

Section 4 – Detailing the Place

4.1 Introduction

4.1.1 This section discusses and provides guidance on the important elements in and around the home and street that impact on the creation of a high quality environment.

4.2 Flexible Homes

4.2.1 A key requirement of "sustainable communities" is "an urban fabric and individual buildings which can meet different needs over time". Places need to be adaptable at different levels from the neighbourhood down to the individual home. Developments should be accessible to and inclusive for all potential users.

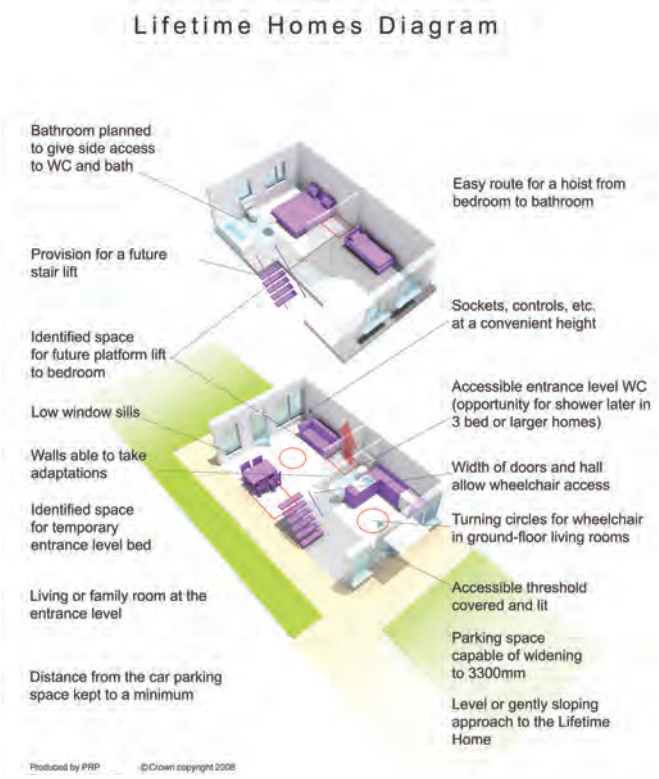
4.2.2 Within appropriate locations, such as high streets, public squares and corners of busy streets, consideration should be given to designing buildings which are capable of conversion to commercial use. Floor-to-ceiling heights and the scope for enabling independent access to upper floors should be considered to ensure flexibility for conversion to other uses at a later date. Potential future commercial servicing and parking requirements should also be taken into account.

4.2.3 Flexible homes provide the opportunity to cater for a variety of different housing needs and lifestyles within the same building form. They would allow a householder to live in a home for longer periods of time, perhaps over their entire lifetimes, with the dwelling being easily adaptable to changing circumstances. In turn, this will help to promote strong and stable communities. Examples include people choosing to work from home, and growing families, with several generations living together.

4.2.4 There are a number of ways in which flexibility can be built into new homes, including:

- buildings designed to provide additional future floor space through conversion or extension;
- buildings with capacity for internal flexibility or adaptation;
- unallocated space, which could be used as multifunctional space or for a variety of different uses over time. Such unallocated space might include a room above a garage, basements, or a courtyard that can be converted from amenity to internal space.

4.2.5 In accordance with Policy H9 of the Local Plan, developers are encouraged to meet "Lifetime Homes" standards for new dwellings. Under code for sustainable homes level 4, developers will need to meet all 16 lifetime points to achieve full credits. Lifetime Homes standards are designed to ensure that buildings are accessible, or are easily capable of future adaptation to meet the needs of mobility impaired and wheelchair users. Further information on Lifetime Homes can be found on the following website: www.lifetimehomes.org.uk .



4.3 Community Safety – Physical Protection

4.3.1 Section 3 listed the 7 attributes of safe, sustainable places as identified in Safer Places. Most of them relate to the overall layout of a development. One is however more specific and deals with the dwelling and its curtilage:

- Physical Protection – places that include necessary, well designed security features.

4.3.2 The Secured by Design Standards for new housing include a set of standards relating to the environmental design and physical security of residential developments. Environmental design standards relate to the layout and design of the development. Physical security standards relate to building construction issues, such as doors and windows of enhanced security standards, laminated glass. More information on Secured by Design Standards can be found on the following website: www.securedbydesign.com

4.4 Creating Designs that are Accessible for All

4.4.1 Detailed designs should allow a place to be accessible for all: and in particular, for the elderly, people with a disability and families with small children.

4.4.2 Developments should ensure a barrier-free path for the safety and independence of disabled people, especially the sightless. Avoid placing obstacles in designs, including:

- Obstacles and protruding elements in the path of travel;
- Low overhanging signs and foliage;
- Lack of warning signs around obstructions.

4.4.3 Accessible amenities should be designed that are convenient to all people, without obstructing the free passage of pedestrians along travel routes. Plans must consider including all reasonable adjustments that make it easier for people to use the environment and avoid practical problems due to:

- Lack of or improper design of street furniture;
- Obstructed pathways;
- Inaccessible street facilities and signs.

4.4.4 Pathways and redways should be clear, obstruction-free, level and wide for the convenience of all users, especially the sightless and people with mobility problems. They should avoid:

- Changes in level and uneven kerbs with obstacles;
- Inconvenient or dangerous interruptions in the path of travel.
- Insufficient width for all users, considering the mixture of pedestrians, cycles, disability vehicles and wheel chairs.

4.4.5 Accessible parking facilities should be provided as close as possible to the point of destination. In particular they should consider the different users of environments, which include motorised wheel chairs, the needs of those with a sensory disability in signage, and the need for dropped kerbs and lighting.

4.5 Setbacks

4.5.1 The setback of a dwelling from the street has a significant impact on the character of the street as it influences traffic speeds, and hence pedestrian amenity of the street, impact on the perception of density and the extent to which the building interacts with the public realm.

4.5.2 Generally setbacks will be smaller (1 - 2 metres) where a more urban, higher density, pedestrian friendly character with lower traffic speeds is to be created, with larger setbacks (2-6 metres) where a more open, lower density character is to be created.'

4.5.3 A setback of 1 metre should be seen as a minimum to ensure that windows do not open up over adoptable highway. Where there are no footpaths (i.e. level surface streets) setbacks should be a minimum of 1.5 metres.

4.5.4 Furthermore, within a more urban area, building lines and therefore setbacks should be more consistent, not varying along the length of a street by more than 2 metres. In lower density areas, building lines (and therefore setbacks) can vary more.

4.5.5 Setbacks greater than approximately 4 metres will allow on plot parking to the front. Sufficient planting should be provided to help soften the impact cars may have on the streetscape.

4.5.6 For south-facing housing along east-west aligned streets, there may be a case for larger setbacks and hence larger front gardens for solar gain capture.

4.5.7 Notwithstanding the benefits of solar capture large front gardens should generally not occur at the expense of small rear gardens.

Different setbacks provide different character

Larger setbacks allow for on plot parking and a softer edge to the street.

4.6 Boundary Treatment

4.6.1 The nature or type of front boundary treatment in particular can add considerably to the character and identity for a development and a street in particular.

4.6.2 It is a fundamental urban design principle to clearly demarcate public and private space and hence appropriate boundary treatments are required. All planning applications should be accompanied by details of treatments for all boundaries - front, side and rear.

4.6.3 Boundaries (particularly front boundaries) should be clearly defined, using appropriate boundary markers, such as gates and gateways, hedges, fences and walls. In some cases, it may be appropriate to mark the boundary between public and private space through a change in hard surfacing or through groundcover shrub planting. This may be particularly appropriate in courtyards, and mews where the objective is to create a more intimate enclosed space. An appropriate use of materials or planting can ensure that pedestrians and motor vehicles are kept away from ground floor windows, thereby protecting residents' privacy. Boundary treatments should respect the required vehicle and pedestrian visibility splays

4.6.4 As a general rule, low walls and/or metal railings are more appropriate as front boundary treatments in more urban areas along higher level streets, while soft planting, hedging and picket fencing is more appropriate in lower density areas which have a more rural character.

Hedges are appropriate boundary treatment in lower density areas

Railings are appropriate boundary treatment in more urban areas

Side boundary walls can be softened through planting

4.6.5 Lengths of side boundary walls/fencing onto the public realm should be kept to a minimum. Where this does occur "ivy screens" should be considered. They not only soften the wall but can add to the character of the street.

4.7 Continuity of Frontage

4.7.1 The degree of continuity of a frontage is an important factor in varying character and density across a development.

4.7.2 A building line with few breaks creates continuity of frontage, provides improved surveillance and enclosure of the street as well as a clear public-private interface. A "hard" streetscape can however result and appropriate front boundary treatment and tree planting may be required to soften the streetscape.

4.7.3 Continuous frontages are most easily achieved with terraced housing and flats, in other words in higher density areas.

4.7.4 In lower density areas where detached and semi-detached forms are more prevalent and a softer feel is more desirable, the degree of enclosure is less important and larger gaps in excess of 3m between buildings (i.e. broken frontages) are appropriate. What is vital though is that through the use of high quality walls, fences and hedging as linking elements between homes a continuous frontage is created to ensure a clear public-private interface is maintained.

4.7.5 It is likely in Milton Keynes because of the desire to have on plot parking, that building frontages will generally have larger breaks (i.e. broken frontages will be a common feature).

4.8 Active Frontages

4.8.1 The primary means of access for all dwellings should be from the street. This not only makes the street more of a social space but the comings and goings make it feel safer.

4.8.2 Frontages should be as 'active' as possible particularly at ground floor levels. Rooms such as living rooms and kitchens provide the most natural potential level of surveillance.

4.8.3 No blank gables must face onto the public realm and even gables with a single small window will generally not be supported.

4.8.4 Long lengths of blank wall, particularly in higher density areas should be avoided as they have a deadening effect on the frontage.

4.8.5 The Council has in the past received applications where garages and/or car ports have been utilised to secure perimeter blocks. This results in an inactive frontage and lack of enclosure and will generally not be allowed.

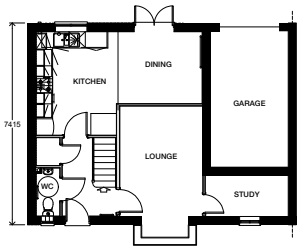
Active frontages

4.8.6 Where drive throughs or garages are included in the front elevation of a house, wide frontage (9-11 metre) housing should be used, as this minimises the impact of garages on the streetscape and still allows for active ground floors.

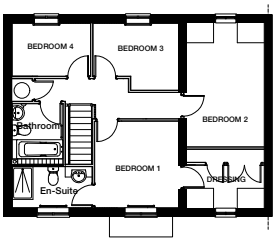
4.8.7 On streets with no permissible vehicular frontage access, garages and/or car ports have to be accessed from the rear. Potentially, this could result in the rear elevations of garages or car ports facing the street. This results in a blank frontage and will not be permitted. Some developers have addressed this problem by including a room, typically an office or study, in front of the garage to animate the street elevation (see illustrations below).

4.8.8 All ground floor apartments should, wherever possible, have separate ground floor entrances. As a minimum, there must be a front communal ground floor entrance to apartments from street level.

Dwellings with no frontage access, with garage accessed from rear



Ground Floor



First Floor

Room in front of the garage animates the street elevation

4.9 Turning Corners

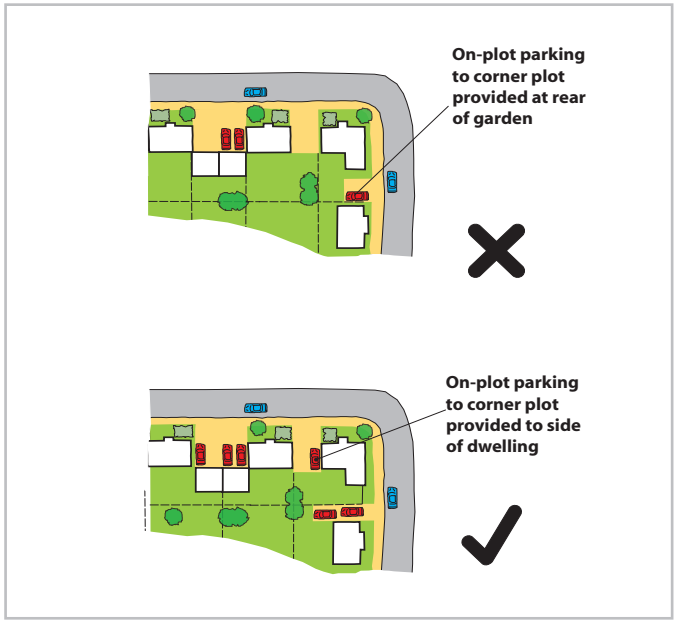
4.9.1 Where a building is on a corner, it must 'turn' the corner by providing an active frontage to both streets. The entrance to the building should be on the more important of the two streets, as established through the hierarchy of street types for the development.

4.9.2 Through the use of single aspect dwellings, corners can be turned effectively whilst still maintaining continuity of built frontage. In order to effectively turn the corner, it may be acceptable to provide a dwelling without garden provision. Corner locations are particularly appropriate for flats, or 'L' shaped buildings with short side boundaries.

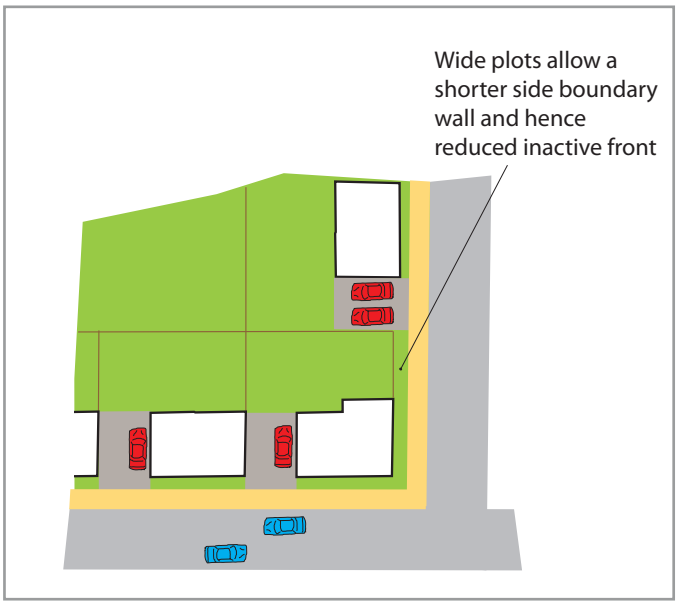
4.9.3 Deep plan buildings with long gardens should not be used on corner plots, as these result in a long length of dead frontage along the secondary street. Conversely, wide frontage houses work well on corners as a different garden configuration can allow for the same size garden yet shorter blank side boundary walls.

Building turns the corner with active frontage to both streets

4.9.4 Parking for corner plots needs careful designing. Parking should, wherever possible, be provided adjacent to the dwelling rather than to the rear of the garden, where it not only tends not to be used but also increases the length of inactive frontage.



Detached corner houses should, wherever possible, have parking located to the side/front rather than at the rear



4.10 Residential Amenity

Privacy/Back-to-back Distances

4.10.1 As a rule of thumb, for new residential developments, back-to-back privacy distances of 22 metres (measured from first floor level) should be the objective. Where housing is proposed as part of infill development, to avoid overlooking for existing houses, a minimum of 22 metres (back to back) or 13.7 metres (rear to flank) must be applied.

4.10.2 There are a number of innovative solutions that can be employed to maintain privacy including: incorporating single aspect dwellings; creating varied floor levels; staggered facing windows; using louvres or opaque glazing; and high/low level and shaped windows.

Residential Space Standards

4.10.3 In order to protect the amenity and well-being of the future occupants, each dwelling should be adequate for the family or household which is likely to occupy it. New housing is expected to be big enough to meet the needs of the occupants for living, cooking, dining, sleeping, washing and storage of household goods with convenient access to adequate residential amenity space. Developers must show that rooms are functional for their purpose and that dwellings provide sufficient room for storage.

4.10.4 Developers need to be aware that they will be required to meet residential space standards in the following circumstances:

- Any dwelling on HCA land;
- Any dwelling which will attract funding through the HCA;
- Any dwelling which will be an affordable unit managed by a Registered Social Landlord.

Daylight

4.10.5 Developers should ensure that key rooms within new dwellings and outdoor spaces have sufficient daylight to allow their comfortable use. As well as providing for the amenity of residents the provision of buildings and dwellings with good quality natural light allows opportunities for passive solar gain.

4.11 Detailed Design Appearance

4.11.1 This Design Guide is not advocating and being prescriptive on a particular style of architecture for new residential development in Milton Keynes. The Guide also does not want to constrain design skills and architectural creativity.

4.11.2 The Design Guide does however argue that (as stated in Section 2) the detailed design appearance of housing is important in so far as it can contribute to or undermine the character or identity of a development. This is in part because the external appearance of a building creates an important and visual backdrop to the public realm.

4.11.3 It also maintains that as a general principle the appearance of buildings should reflect the city's ethos of a forward thinking, innovative, modern and unique city. Policy CS13 of the Core Strategy supports this and states that:

> *"all new developments should provide a choice of contemporary, innovative and exemplar architecture that reflects Milton Keynes' reputation as an ambitious, forward thinking, innovative 21st century city."*

4.11.4 These should be particularly encouraged in prominent locations such as key frontages that represent the 'public face' of the city.

4.11.5 The over-riding principle for the appearance of the built form is that the buildings are 'of their time and place'. Poor quality pastiche types will not be supported as they do not help create an identity for a development and do not reflect the city's forward-looking ethos.

4.11.6 Good contemporary design can sit alongside traditional established development types done in a traditional manner if appropriately designed.

4.11.7 Innovation should not however be encouraged where its only merit is to be different for the sake of being different. Conversely, the Council strongly encourages the innovative design of new housing in terms of the role it can play towards the requirement for zero carbon developments.

4.11.8 The key with all buildings is good quality, honest architecture - in other words keeping it simple. Much of the guidance below provides advice on how to achieve this.

4.11.9 The remainder of this section focuses on various elements of the building envelope that contribute to the composition of the external appearance and help create character and identity for a development. It aims to provide guidance, practical advice and solutions too many of the issues discussed the regarding design appearance of housing that arise at pre-application discussion.

Well designed traditional buildings are acceptable in the right context

Proportions

4.11.10 Buildings should be well proportioned. Buildings can be proportioned in a vertical, or horizontal manner, or as a combination of the two. This can be achieved through the massing and height of the building, the positioning and shape of windows, elevational materials as well as roofscape.

4.11.11 Articulation can add interest to the building and should be provided through recesses and projections which can help create a rhythm for a frontage.

These two buildings have good symmetry and act as 'one'

Poorly proportioned building - there is too much of a gap between first floor and dormer windows

Better proportioned building

Buildings on Key Frontages

4.11.12 These are the buildings that will be seen by the most people and therefore help establish an image for an area. They primarily pertain to the avenues and boulevards as discussed in section 3 or to existing primary streets through a development and need greater attention to design detail. Elements that need to be considered include:

- Height;
- Roof Style;
- Window detailing ;
- Elevational materials (including the use of coloured render);
- Vertical proportions may want to be emphasised to give the impression of height. In this case windows should be designed so that their vertical axis is greater than the horizontal and/or dividing each panel into a series of vertically proportioned glazing panels. Sometimes horizontally proportioned windows can be given more vertical emphasis by incorporating vertically proportioned glazing panels.

4.11.13 In order to reinforce the character of a key frontage, the buildings on both sides of the street should be designed holistically with a small selection of materials so that they can be "read as one".

4.11.14 Care needs to be taken that the buildings along key frontages blend in visually with buildings in the immediate surroundings, particularly those along the same street. Positive elements of the design of buildings (that help reinforce character for that street) along key frontages should therefore be included in the neighbouring buildings.

Buildings either side of a street facing each other should not visually clash. The ground floor render in the contemporary building does however at least give some coherence to buildings on both side of the street

Windows

4.11.15 The position, shape and size of windows has a profound effect on the elevation and are important to consider:

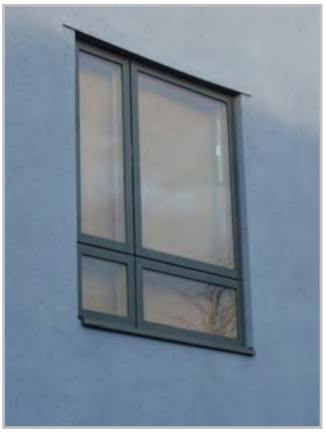
- Care needs to be taken to ensure that the windows are of an appropriate scale to the façade and that each window in the façade has some relationship to each other. Key to this is identifying the appropriate shape, position and size of the windows;
- Some elevations can be unduly monotonous because of the number of repeated windows. The risk of this is greatest in large facades, particularly when small windows are used, where they can appear lost within the elevation;
- Both vertically and horizontally aligned windows can be included on the elevation. In this instance care needs to be taken that the elevation does not end up being untidy and cluttered;
- Glazing bars are important to consider as they potentially can look cumbersome, clutter the elevation and restrict daylight entering the house if too thick;
- The positioning and colour of glazing bars can also add potential interest and character to the dwelling as a whole and are also important to consider;

Poor proportion of glazing relative to wall

Good proportion of glazing relative to wall

Over fussy glazing bars clutter the elevation

- Careful consideration must be given to window reveals – structural depth can be created by employing deep window reveals which can enliven the façade through contrasts of light and shade;
- Where a more contemporary external appearance for the dwelling is sought, consideration should be given to:
  - Full height windows (particularly on south facing elevations) ;
  - Wrap around corner windows. The latter not only help the building turn the corner and bring more sunlight into the dwelling but also create a more distinctive character to the dwelling;
  - The avoidance of visible cills and lintels;
  - Particularly for terraces and apartments, the vertical staggering of windows using alternative materials such as louvres or panels of a different material.



Position of glazing bars alters the character of the building

Vertical staggering of windows adds interest to elevation. Alternate material adjacent to window adds further interest

Window frames of different colours should be considered, as they can help create character for a building

Over predominance of glazing bars

Simple window detailing

Windows for Solar Gain Capture

4.11.16 It is not necessary for passive solar houses to have very large south-facing windows. However it is important to ensure that the glazing area is biased to the south rather than the north and that north-facing windows are no bigger than they need to be for adequate daylighting (at least 15% of a room's floor area). South-facing glazing can be avoided in the kitchen in order to minimise overheating from a combination of solar gain and internal heat gain.

Windows that turn corners can be utilised on key elevations

Materials

4.11.17 Use of different materials can help to articulate and add interest to a façade.

4.11.18 Milton Keynes does not have a traditional local building material. Most buildings are made of a variety of red and buff brick and indeed a wide variety of materials have been used through its development.

4.11.19 A development's choice of materials will in part be informed by the completion of tables C1 and C2 (Appendix C) which will help determine the dominant character in terms of materials in the surrounding area and whether this contributes to the character or identity of the street and/or area.

4.11.20 It is the role of site specific design codes or development briefs to provide a greater level of clarity on materials required.

4.11.21 A simplistic approach to materials must be taken, both in type of materials used and the extent of the palette:

- Traditional materials such as brick and render are strongly encouraged and can be used effectively in both contemporary and traditional designs;
- To retain the coherence of an elevation or street frontage (to avoid it being untidy or too busy), it is generally a good idea to restrict the number of materials and to employ the same material in different parts of the façade or frontage – generally no more than three facing materials should be used per elevation or street frontage. This is particularly important if materials are to be the key feature used to give identity to a neighbourhood.

The use of render can create a strong identity for a street: Oxley Park

Traditional materials can be used effectively in contemporary designs

Other cladding materials can also be used

4.11.22 Other materials such as timber and other cladding materials panels such as zinc, copper and lead are also encouraged particularly in prominent locations such as key frontages and on landmark buildings

4.11.23 Light and bold rendered colours should also be considered as they can be used to add character and create a sense of place for a development.

The element of timber helps group the two windows

4.11.24 Materials can be used as a framing device to group elements such as windows.

4.11.25 Consideration needs to be given to the finish of the brick i.e. whether it has smooth or rough finish and whether it is just one shade of colour or whether it has a mottled look, as this can affect the perceived character of the building.

4.11.26 There will be a preference for materials with low embodied energy.

4.11.27 Materials must be selected that wear well with age and last a long time.

4.11.28 Materials that work best together often have a contrasting grain as well as colour; for example brick, render, metal and timber

Roofs

4.11.29 The following elements need to be considered regarding roofs:

- Primary and secondary roofing materials;
- Construction form and detailing.
- Roof pitch and shape such as plain, gable, hip, flat, monopitch etc;
- Eaves, fascias, bargeboards and overhang;
- Dormers and rooflights;
- Parapets.

4.11.30 A variety of roof styles should be used across a large development . However, a limited range should be used per neighbourhood if roofs are to be the device to establish an identity for a neighbourhood.

The roof over dominates this house. The location of the dormers furthermore make for poor proportions

4.11.31 Developments should not just include the traditional pitched roof but particularly on key frontages should consider incorporating alternative styles such as mono-pitch, flat and curved as they can help create a more distinctive character.

4.11.32 Pitched roofs which over dominate the building should be avoided.

4.11.33 A series of detached or terraced houses with each individual roof turned through 90 degrees so that a gable end fronts the street

Curved roofs have helped create a distinctive character in Grange Farm

Gable ends can provide an interesting roofscape

should be considered. This not only provides for a more interesting building frontage and street scene, but it can also provide additional enclosure to a street through the extra attained height.

4.11.34 Similarly, mono-pitch roofs which have their tall side facing the street can provide verticality onto a street that requires a greater presence. Excessive use of dormer windows should be avoided as roofscapes often become cluttered. There is a preference for eaves to be full height and roof spaces, if they are used, to be integrated with floors below with windows in gables or double height bays.

4.11.35 Monopitch roofs also provide a greater roof area for the inclusion of PVs.

4.11.36 While lengthy stretches of pitched roof on terraces at the same ridge height must be avoided they must not be over complicated. The massing of roof forms can be broken by vertical protrusions through the eaves into the roof. Variations of the conventional pitch form to a projecting bay should be considered.

4.11.37 Careful consideration must be given to the use of dormers. They can clutter the roofscape and spoil the proportions of the building if they are used excessively, made too large and over-complicated in design. Conversely a well-designed dormer can add interest and quality to the building.

4.11.38 There is a preference for eaves to be full height and roofspaces, if they are used, to be integrated with floors below with windows in gables or double height bays.

Sensitive use of dormers.

Dormers over-dominate this building.

This roofline adds interest and character to the street that the buildings address

Balconies

4.11.39 Balconies can add interest to an elevation but care needs to be taken that firstly they maintain the privacy of nearby properties and secondly, to ensure they do not overly clutter the elevation. In this regard they should be recessed or cantilevered (rather than be supported by an external frame). Where external frames are used care needs to be taken that they complement the overall elevation design and are not seen as a 'bolt-on' that clutters the elevation.

4.11.40 Setbacks at top floor, particularly suitable for flat roofs, can make the elevation more interesting and help create an identity for an area. Notwithstanding other urban design considerations, the location of balconies should take account of the prevailing wind direction.

External framed balconies over clutter the elevation

Balconies should be of a usable size and preferably integrated into the building design

Integrated balconies

Other Elements

4.11.41 The quality of the building can be spoilt by poor attention to detail.

4.11.42 The building elements which require careful detail attention in detailed design include:

- Doors;
- Porches;
- Chimney / chimney pots;
- Flues and ventilation;
- Gutters, pipes and other rainwater details;
- Garage doors;
- Ironmongery and decorative features;
- Flashings.

4.12 Internal Layout for Passive Solar Capture

4.12.1 The following guidance is applicable for passive solar houses (i.e. those that face within 30 degrees of south).

4.12.2 The most heated and frequently used rooms should be placed on the south side of the dwelling (for south-facing houses this implies fronting the street while for north facing it means being located at the back of the house facing the rear garden).

4.12.3 Rooms that benefit little from sunlight such as hallways, utility rooms, and bathrooms are placed on the north side of the dwelling and have smaller windows.

4.13 Outside Spaces

Family Housing

4.13.1 Provision should be made for private gardens where family housing is proposed. Gardens for family housing should be a minimum of 10 metres in depth, although they can be shorter (say 7-8 metres) for wide frontage units. In determining the appropriate garden size, consideration should be given to the need to ensure that the privacy of the dwelling is not compromised through overlooking or overshadowing from adjoining properties. Where gardens include existing mature trees, gardens will need to be larger to provide space for trees.

4.13.2 Developments should provide a mix of different garden sizes for family houses. Wide frontage houses provide the opportunity to create larger and better shaped garden spaces.

4.13.3 Gardens should be designed to ensure that they receive afternoon sun. Consequently, north-facing gardens may need to be longer than south-facing gardens. Rear gardens should have usable space with some privacy and therefore should not be awkwardly shaped or very narrow.

4.13.4 Consideration should be given to locating dwellings that have small or no private gardens close to public open spaces, in particular play areas.

Apartments

4.13.5 Within flatted developments, each apartment must have access to private open space. This can be provided in the form of private gardens for ground floor flats, balconies, roof gardens or terraces, or private shared gardens.

4.13.6 Where possible, ground floor apartments should have their own small private rear garden.

4.13.7 A balcony for an apartment should be large enough to accommodate a small table and two chairs to allow residents to sit out comfortably.

4.13.8 Balconies should be attached to living rooms rather than bedrooms. 'Juliet' style balconies will not be acceptable as the primary provision for apartments.

4.13.9 Ground floor balconies should be designed to ensure that they are secure from external access.

4.13.10 All apartments should provide space to dry clothes either within the apartment or within a communal facility.

Private Communal Amenity Space

4.13.11 The minimum area for usable communal space is 50 square metres, plus 5 square metres per additional unit over five units.

4.13.12 Communal gardens should be enclosed by walls or buildings with no public access. They should be of sufficient size to be useable, and should incorporate seating and play areas with a combination of hard and soft landscape features, including trees.

4.13.13 The layout and design of the communal garden should offer privacy for dwellings adjoining the space.

4.13.14 Where significant numbers of children are expected to use the on-site play facilities, careful consideration should be given to layout to dissipate noise, in order to avoid conflict with surrounding households.

4.14 Services

Bin Storage

4.14.1 The location and positioning of waste and recycling bins must be considered at the outset of the design of the layout and housing. Discussions should be held with the Council's Waste Operations Manager prior to submission of any application.

4.14.2 The Council currently operates a system of sacks for dry recyclables and refuse, a blue box for glass and a green wheeled bin for food and garden waste. All new developments should be designed to cater for this arrangement of waste containers. More information can be found at www.milton-keynes.gov.uk/recycling'.

4.14.3 Residents are required to bring their refuse and recycling containers to their front property boundary, and the design of houses should help to facilitate this. There should be adequate space to place the containers within the property's boundary - residents should not place their containers on the street. If containers are not stored at the front permanently, there should be secure independent access to the front of the property from the rear garden or other storage place. A minimum of 1.75 sq m external space is required to accommodate the variety of waste containers needed by each property.

4.14.4 Flats, housing in multiple occupation and sheltered housing normally have some kind of communal refuse area. It is important that adequate refuse and recycling space is provided for the number of properties. The refuse area should be secure and unobtrusive to prevent vandalism and fire risks and be readily accessible from a road. Areas should be designed for the wheeled bins to be pushed or pulled easily to the edge of the public highway. This allows entrances to these areas to be of narrower, less dominating width (rather than wider to allow bin lorries to enter parking courts).

4.14.5 Bin storage areas can form a significant fire risk and therefore fire resistant separation should be provided between any bin storage area, accommodation and doors to accommodation or dwellings. Ventilation in particular should be carefully considered in relation to bin storage so that it meets environmental and fire safety requirements without impacting upon the potential convenience of the facility.

4.14.6 Residents may need to use the Council's bulky collection service. Consideration should be given to providing space for residents to leave bulky items for collection.

4.14.7 Further details on requirements in relation to refuse collection and recycling can be obtained from the Council's Waste Strategy Manager.

Utility Boxes

4.14.8 Utilities enclosures for meters should be discreetly located so they do not provide a dominant element on principal elevations within the street scene. Such boxes should be placed where they enable meter reading without the need to access the dwelling. Low screen walls or porch reveals can be used to make utilities boxes less obvious.

Letter Boxes

4.14.9 In apartment blocks, all flats should have separate externally accessed letter boxes.

4.14.10 For houses, letter boxes must be located at a convenient height for ease of use by postmen.

Electricity sub-stations

4.14.11 Substations must be designed to form part of the street scene. They should be of a material to match the prevailing construction materials used for dwellings in the vicinity.

4.14.12 Developers are advised to talk to statutory providers, like telecoms, early in the process to ensure that equipment is properly placed, or put underground where possible. Where this is not achievable, equipment should be designed sympathetically in order to minimise the negative impact on the public realm.

Electric Vehicle Charging Points

4.14.13 The Council's requirements with regard to electric vehicle charging points are:

- Where practicable, dwellings should be designed to enable the installation of a domestic EVCP to approved industry standards at a later date.

Superfast Broadband Infrastructure

4.14.14 The Council's requirements with regard to superfast broadband infrastructure are:

- Ducting for fibre connectivity to each dwelling or, if appropriate in terms of flats and apartments, aggregated connectivity.

Chapter 5 – Design Quality Assurance

5.1 Introduction

This Design Guide, by being adopted as a Supplementary Planning Document, will be a material consideration in assessing planning applications and therefore will help to raise design quality. However, developers need to be aware of other methods that the Council will employ in order to ensure design quality is achieved.

5.2 Design Checklist

The following points are set out to help applicants ensure that their designs cover the main points in this design guide.

Appreciating the Context

- Has the CONTEXT of the site and surrounding area been appraised considered?
- Has Table C1 (the site context) been considered and completed?
- Has Table C2 (the surrounding area context) been considered and completed?
- Has a SWOT analysis been undertaken for the site?
- Within the development has the street been used as the unit of 'character' which implies a uniform character for a particular street?

Vision and Concept Formulation

- Has the above site appraisal together with the development requirements informed a vision and concept for the site with guiding design objectives?

Building the Place

- Does the overall layout respond to the concept developed within the previous Vision and Concept Formulation stage?
- Does the layout demonstrate a coherent/ legible structure with non-residential uses such as schools, facilities shops and public transport stops located in the most accessible places?
- Has the landscaping and public realm been carefully considered and established as part of the overall layout to help establish an identity for the development?
- Has the process of achieving a high quality landscape as outlined in the Design guide been adhered to?
- Is SLOAP (Space Left Over After Planning) been avoided?
- Do pedestrian routes follow pedestrian desire lines?
- In the main, do streets occur to the front of houses thereby providing frontage access?
- Have redways been carefully considered particularly with respect to how they feel for users?

- Is the layout based on a perimeter block structure with a clear public/private interface?
- Has the layout taken account of solar gain capture?
- If culs-de-sac are included, do they occur within a connected movement network?
- Are vehicle speeds controlled by built form and layout?
- Are densities appropriate to the context?
- Have the appropriate housing typologies been included so that an optimum balance of allocated and on street parking, street frontage, setbacks and continuity of built form been achieved?
- Has parking been provided in accordance with the Council's adopted parking standards?
- Is parking well integrated into the development, surveilled and convenient?
- Has the development attempted to provide all parking on plot and on street before other options are considered?
- Have landmarks, and focal points been identified and responded to appropriately?

Detailing the Place

- Have elements including setbacks, continuity of frontage, boundary treatments, privacy distances and the requirement for buildings to turn corners been considered?
- Has the detailed design appearance particularly regarding materials, windows and roofs been carefully considered with respect to the context?
- Does the detailed design appearance help contribute to the character and identity for the development?
- Has the need for energy efficient buildings helped to drive the design and appearance of the building?
- Has the requirement for the provision of services such as bin storage been integrated into the layout?

5.3 Pre-application Consultation

5.3.1 Applicants are strongly encouraged to undertake pre-application consultation with both the local authority and other interested and affected parties such as the local community.

5.3.2 Applicants should use the Design and Access Statement as the basis or format for pre-application consultation. A SWOT analysis of the site and surrounds which informs a concept for the site should be the starting point for consultation rather than consulting on completed designs produced in CAD or similar.

Consultation

5.3.3 The appraisal and concept stages of the design process should be developed through a process of consultation with the local community. The nature of the consultation will depend on the size of the development and the extent to which it is likely to affect an existing neighbourhood.

5.3.4 At a basic level, consultation might consist of a discussion of proposals with immediate neighbours prior to an application. On the larger projects, it may involve a "planning for real" event/s. Time taken to involve people in the decision making at this stage should be considered an investment which might well represent time saved compared to a poorly researched scheme with little regard for local conditions, which has to be totally redesigned after public consultation, following a planning application. Sensitive and genuine public consultation helps to anchor a development into its social context.

5.4 Design and Access Statements

5.4.1 DCLG Circular 01/2006 (updated in March 2010) makes it mandatory for design and access statements to be provided with outline and full planning applications.

5.4.2 The Council has produced a Guidance Note on how to prepare Design and Access Statements and what they should cover. A copy is included in Appendix D. All Design and Access Statements should follow this format.

5.4.3 It is believed that by following the three steps outlined in the Guidance Note in the development of design, that overall quality will be raised.

5.5 Design Codes

5.5.1 Design Codes can help deliver good quality places and the Council strongly encourages the use of them when appropriate, particularly for larger and complex sites.

5.5.2 The key features of Design Codes (from Preparing Design Codes: A Practice Manual, DCLG, 2006) are:

- They are based on and help deliver a design vision such as a masterplan or other form of design framework for a site or area;
- They are a set of graphic and written rules that are technical in nature;

- They establish with precision the design considerations of a development or area;
- They are 3-dimensional in scope and focus primarily on urban design consideration
- They focus on and establish clearly the essential and mandatory design elements and characteristics of a particular development;
- They can also include provisions which are advisory or optional.

5.5.3 The Council endorses these features and expects all Design Codes to be based around them.

5.6 Design Competitions

5.6.1 The Council will strongly encourage the use of competitions to promote design quality and innovation.

5.7 Design Personnel

5.7.1 The Council strongly believes that if a step change in design quality is to be achieved, it is essential that developers use qualified architects, urban designers and landscape architects.

5.8 Building for Life

5.8.1 "Building for Life" is a partnership between several national agencies, including Design Council CABE, the Homes and Communities Agency (HCA) and Home Builders Federation. "Building for Life" is the national standard for well-designed homes and neighbourhoods, and is based on criteria which are used to evaluate the quality of new housing developments. A "Building for Life" assessment scores the design quality of planned or completed housing developments against the 20 Building for life criteria. Further details of the Building for Life criteria can be obtained from www.buildingforlife.org.

5.8.2 The Council supports "Building for Life" and recommends that for residential planning applications, the mandatory Design and Access Statement is geared to answer the Building for Life questions (Appendix E outlines the relationship between the two documents). The Council furthermore has Building for Life accredited assessors who would be happy to provide a Building for Life Assessment of individual schemes at planning and completed stages.

5.9 Building Process

5.9.1 Building activities, including phasing, must show the highest possible consideration for residents, with the period from first occupation until full adoption (of roads and landscaping) as short as possible, and with pre-adoption care and maintenance (of highways and landscape) being as close to post-adoption levels as possible.

Glossary

Accessibility	The ability of people to move round an area and to reach places and facilities, including elderly and disabled people, those with young children and those encumbered with luggage or shopping.
Active frontages	Street elevations that are enlivened by visible activity either within or outside the building.
Adaptability	The capacity of a building or space to be changed so as to respond to changing social, technological and economic conditions.
Broken frontage	A building frontage or line with large gaps between buildings (occurs along a street with detached buildings).
Building elements	Doors, windows, cornices and other features which contribute to the overall design of a building.
Building line	The line formed by the frontages of buildings along a street.
Context	The setting of a site or area, including factors such as traffic, activities and land uses as well as landscape and built form.
Continuity of frontage	How continuos a building frontage or line is. The larger the gap between buildings the less the continuity of frontage (and vice versa).
Density	The floorspace of a building or buildings or some other unit measure in relation to a given area of land. Built density is expressed as number of units per hectare for residential development. (see also Net Dwelling Density)
Design codes	A design code is a set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area. The graphic and written components of the code are detailed and precise, and build upon a design vision such as a masterplan or other design framework for a site or area.
Design principle	An expression of one of the basic design ideas at the heart of an urban design framework, design guide, development brief or a development.
Design and access statement	Submitted with a planning application, the statement sets out the design principles that the planning applicant has adopted in relation to the site and its wider context.
Desire line	An imaginary line linking facilities or places which represents the most convenient (shortest) route for pedestrians to take. The desire line may develop into an informal path that pedestrians prefer to take to get from one location to another rather than using a sidewalk or other official route. The street network of a development should generally be arranged to reinforce pedestrian desire lines.
Development brief	A document, prepared by a local planning authority, a developer, or jointly, providing guidance on how a site of significant size or sensitivity should be developed. Site specific briefs are sometimes known as planning briefs, design briefs and development frameworks.
Elevation	The facade of a building, or the drawing of a facade.
Enclosure	The use of buildings to create a sense of defined space.
Form	The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape of development.
Landmark	A building or structure that stands out from its background by virtue of height, size or some other aspect of design.
Landscape	The character and appearance of land, including its shape, form, ecology, natural features, colours and elements and the way these components combine. In towns 'townscape' describes the same concept.
Layout	The way buildings, routes and open spaces are placed in relation to each other.

Legibility	The degree to which a place can be easily understood and traversed, i.e. how easy it is to find your way around.
Local distinctiveness	The positive features of a place and its communities which contribute to its special character and sense of place.
Massing	The combined effect of the height, bulk and silhouette of a building or group of buildings.
Mixed uses	A mix of uses within a building, on a site or within a particular area. 'Horizontal' mixed uses are side by side, usually in different buildings. 'Vertical' mixed uses are on different floors of the same building.
Movement	People and vehicles going to and passing through buildings, places and spaces.
National Planning Policy Framework	Government guidance on planning policy to be taken into account in formulating development plan policies and in making planning decisions.
Natural surveillance	The discouragement to wrong-doing by the presence of passers-by or the ability of people to be seen out of surrounding windows. Also known as passive surveillance (or supervision).
Net dwelling density	Net dwelling density is calculated by including only those site areas which will be developed for housing and directly associated uses, including access roads within the site, private garden space, car parking areas, incidental open space and landscaping and children's play areas, where these are provided.
Pepper-potting	The dispersal of affordable housing units within residential developments to promote mixed communities and minimise social exclusion.
Perimeter block	Arrangement of buildings with their fronts facing the street and their backs facing the backs of other buildings.
Permeability	The degree to which an area has a variety of pleasant, convenient and safe routes through it.
Public/private interface	The point at which public areas and buildings meet private ones.
Public realm	The parts of a village, town or city (whether publicly or privately owned) that are available, without charge, for everyone to use or see, including streets, squares and parks.
Redway	Dedicated cycle and pedestrian footpaths that run through most areas of Milton Keynes. They are physically separate from the road network.
Scale	The impression of a building when seen in relation to its surroundings, or the size of parts of a building or its details, particularly as experienced in relation to the size of a person.
Sense of place	Local characteristics which give a place identity.
Setbacks	The distance from the edge of the street to the front of the building, also known as private defensible space.
Street furniture	Structures in and adjacent to the highway which contribute to the street scene, such as bus shelters, litter bins, seating, lighting, railings and signs.
Sunspace	Highly glazed south facing amenity areas or porches incorporated into the dwelling layout to enhance passive solar gain and reduce heat loss.
Urban design	The art of making places. Urban design involves the design of buildings, groups of buildings, spaces and landscapes, in villages, towns and cities, and the establishment of frameworks and processes which facilitate successful development.
Vernacular	The way in which ordinary buildings were built in a particular place, making use of local styles, techniques and materials and responding to local economic and social conditions.

View	What is visible from a particular point. Compare 'Vista'.
Vista	An enclosed view, usually a long and narrow one.
Zero carbon	Zero net carbon emissions from new developments.

Appendix A

Case Studies

Ashland

Overview

Ashland is located in the south of Milton Keynes. Currently being built, its layout is characterised by a perimeter block structure.

The area of detailed analysis consists of four blocks, with a mixed use public square at its centre.

The site

Area of detailed analysis

N

Evaluation

The case study demonstrates the successful application of a number of urban design principles:

- Buildings front streets.
- Clear block structure provides a legible movement framework.
- Limited palette of materials helps create distinctive character.
- Buildings turn the corner with active frontages.
- Development is characterised by continuous frontages.

The development is less successful in terms of:

- Large rear parking courts.

Buildings turn corners with active frontages

Buildings provide strong sense of enclosure to public square

Limited palette of materials helps create distinctive character

Development characterised by continuous frontages

Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	2.49 ha
Number of dwellings	138
Dwelling mix	Apartments; detached
Density	
Dwellings per hectare	55
Car Parking	
Location	Mainly rear courts, some on-plot
Layout	
Setbacks	metres
Plot sizes	metres
Building Form	
Building height	3 and 4 storeys
Roof form	Flat and mono-pitched

Bradwell Common

Overview

Bradwell Common is one of the "doughnut estates" that ring Central Milton Keynes. Built in the 1980s, its layout is based on a rectilinear grid.

The area of detailed analysis consists of a number of regular blocks bounded by straight streets.

The site

Area of detailed analysis

Evaluation

The development demonstrates the successful application of a number of urban design principles:

- Buildings front streets.
- Block structure provides a legible movement framework.
- The estate is based on a connected movement structure.
- Short culs-de-sacs have been designed as courtyards. As a result, they are not dominated by a conventional hammerhead layout and have a strong sense of enclosure.
- The green character of the area is accentuated with trees planted in small roundabouts which close vistas and help to reduce traffic speeds.
- Cars are parked on plot, usually in front of the building line. Hedges are used to reduce the impact of parked cars and to reinforce the green character of the area.
- Block paving is used to create a sense of place and a more pedestrian-friendly environment.
- The use of a limited palette of building materials reinforces the identity of the estate.

The development is less successful in terms of:

- Footpaths emerging from the end of cul-de-sacs are narrow and not surveilled.
- Rear gardens back onto open space.

Short cul-de-sac designed as courtyard.

Block paving creates a sense of place and a more pedestrian-friendly environment

Green character accentuated with trees planted in small roundabouts to close vistas

Hedges are used to reduce the impact of parked cars and to reinforce the green character of the area

Limited palette of materials helps to reinforce identity of estate

Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	6.2 ha
Number of dwellings	157
Dwelling mix	Predominantly detached, & semi-detached; some terraced
Density	
Dwellings per hectare	25
Car Parking	
Location	On-plot
Layout	
Setbacks	5-10 metres
Plot sizes	7.5-8 x 25-30 metres; 12-13 x 25 metres
Building Form	
Building height	2 storeys
Roof form	Pitched

Cars are parked on-plot to the front of the dwelling

Monkston

Overview

Monkston is located in the east of Milton Keynes. Built in the 1990s, its layout is characterised by a large circular area of public open space at the centre of the grid square.

The area of detailed analysis consists of two concentric blocks with both straight and curved streets.

The site

Area of detailed analysis

Evaluation

The case study demonstrates the successful application of a number of urban design principles:

- Buildings front open space.
- Buildings front streets.
- Clear block structure provides a legible movement framework.
- More important streets have wide verges planted with trees. Local streets are narrower, with no trees.
- Cars are parked on plot, in front of the building line. Hedging is used to reduce impact of parked vehicles.
- Block paving is used on the park edge street to create a sense of place and a more pedestrian-friendly environment.
- Mix of house types.
- Secure fronts and backs.

The development is less successful in terms of:

- Houses do not turn the corner with active frontages.

Green "feel" provided by street trees, verges and planting. Importance of street emphasised by street trees and width.

Buildings front open space.

Hedges and front garden planting reduce impact of parked cars

Cars are parked on-plot to the front of the dwelling

Mix of dwelling types, including terraced housing

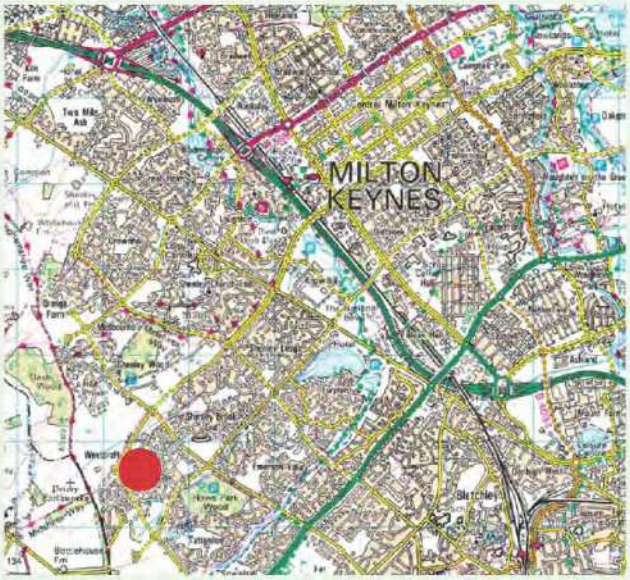
Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	2 ha
Number of dwellings	61
Dwelling mix	Predominantly detached; some semi-detached and terraced
Density	
Dwellings per hectare	30
Car Parking	
Location	On-plot
Layout	
Setbacks	5-6 metres
Plot sizes	11 x 25 metres
Building Form	
Building height	2-3 storeys
Roof form	Pitched

Westcroft

Overview

Westcroft is located in the west of Milton Keynes. Built in the 2000s, its layout is characterised by a large circular area of public open space at the centre of the grid square.

The area of detailed analysis is made up of two concentric blocks with both straight and curved streets.



The site

Area of detailed analysis

Evaluation

The development demonstrates the successful application of a number of urban design principles:

- Buildings front streets, and the block structure provides a legible movement framework.
- More important streets have wide verges. Local streets are narrower, with stronger sense of enclosure.
- Development is characterised by continuous frontages.
- Cars are parked on plot, usually set back behind the building line.
- Although culs-de-sac are incorporated, they are included within the context of a connected movement network

The development is less successful in terms of:

- Although the main streets have strong active frontages, there are some areas which suffer from blank elevations and long lengths of brick wall

Focal building at end of vista aids legibility

Buildings which "turn" the corner

Continuous frontage provides strong built edge to public open space

Ground cover planting provides clear distinction between public and private space

Parking provided on-plot in "drive-throughs"

Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	2.1 ha
Number of dwellings	59
Dwelling mix	Predominantly detached, & semi-detached; some terraced
Density	
Dwellings per hectare	28
Car Parking	
Location	On-plot
Layout	
Setbacks	2 metres
Plot sizes	9-12 x 18-25 metres
Building Form	
Building height	2/3 storeys
Roof form	Pitched

Wolverton

Overview

Wolverton is located in the north west of Milton Keynes. The town developed around the railway works during the late nineteenth and early twentieth century.

The area of detailed analysis is located within the Victorian suburbs of Wolverton, developed in a grid pattern. It is made up of a rectangular block bounded by straight streets.

The site

Area of detailed analysis

Evaluation

The development demonstrates the successful application of a number of urban design principles:

- Buildings front streets, and the block structure provides a legible movement framework
- Active frontages, with frequent doors and windows, add vitality to public realm
- Hierarchy of streets with varied character
- Development is characterised by continuous frontages, and strong sense of enclosure
- Cars are parked on street and on plot to the rear accessed from back lanes

The development is less successful in terms of:

- Accommodating on-street parking with space for two-way traffic movement
- Back lanes make rear boundaries of properties insecure

Buildings which "turn" the corner

On-street echelon parking

Back lanes provide vehicular access to rear of properties

Active frontages to the street

Street with strong sense of enclosure

Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	3.0 ha
Number of dwellings	147
Dwelling mix	Predominantly terraced
Density	
Dwellings per hectare	49
Car Parking	
Location	On-street, on-plot
Layout	
Setbacks	0-2.5 metres
Plot sizes	4.5-5.7 x 30 metres
Building Form	
Building height	2 storeys
Roof form	Pitched

Woolstone

Overview

Woolstone is located in the of Milton Keynes. Its layout is characterised by a linear form of development.

The area of detailed analysis consists of a single square block, broken up with a number of courts and cul-de-sacs.

The site

Area of detailed analysis

Evaluation

The case study demonstrates the successful application of a number of urban design principles:

- Buildings front streets.
- Limited palette of materials and strong landscaping structure helps create distinctive character.
- Buildings turn the corner with active frontages.
- Short culs-de-sacs have been designed as courtyards. As a result, they are not dominated by a conventional hammerhead layout and have a strong sense of enclosure.
- Although most houses are set in large plots, there is a mix of house types.

The development is less successful in terms of:

- Rear gardens back onto open space, providing limited surveillance of play area.

Short cul-de-sac designed as courtyard.

Landscaping provides strong sense of identity.

Hedges are used to reduce the impact of parked cars and to reinforce the green character of the area.

Limited palette of materials helps create distinctive character.

Analysis of built form components within the area of detailed analysis	
Area of detailed analysis	4 ha
Number of dwellings	71
Dwelling mix	Detached
Density	
Dwellings per hectare	18
Car Parking	
Location	On-plot
Layout	
Setbacks	Varies 5+metres
Plot sizes	Varies typically 5-9 x 24-28 metres
Building Form	
Building height	2 storeys
Roof form	Pitched

Appendix B

Planning Policy

Submission Core Strategy

Policy CS 10 (Housing) states: The Council will work with Milton Keynes Partnership (or any successor bodies), developers and registered social landlords to meet the Council's housing requirement, as set out in Policy CS 2 'Housing Land Supply'.
New and refurbished housing should meet the needs and aspirations of the existing population and of the future residents by the provision of an appropriate range of sizes, values, styles, tenures and densities. Infill development should respect the style and scale of buildings and the mix of dwelling types on the surrounding area.
Housing should meet the Council's adopted standards of energy efficiency, renewable energy generation, carbon neutrality, safety and 'lifetime homes'. Some dwellings should support 'home-based working' and all homes should have high quality ICT connectivity.
Residential neighbourhood design should encourage access by walking, cycling and other forms of non-car travel within the neighbourhood and across the city. Car parking standards should meet the projected levels of car ownership (in addition to visitor parking).
The Council will plan to meet specific housing needs across the Borough including the following: affordable housing, multiple occupancy, elderly persons, special needs, single people, religious, ethnic or lifestyle groups. These requirements will be covered in further planning and housing management guidance.

Policy CS 11 (A Well Connected Milton Keynes) states (inter alia): The Council will work with neighbouring local authorities and transport providers to meet the demand for: increased movement of people and goods, improved accessibility across the Borough, improved safety and quality of life and a reduction in the Borough's carbon footprint. Over the Core Strategy period, the measures used will include:
1. Maintaining and future-proofing the city's grid road network and extending it into new development areas whilst safeguarding the corridors for possible mass transit schemes.
2. A step change in improvements to public transport including a core public transport network, with Central Milton Keynes at its hub, serving key trip generators and to cater for specific areas and types of public transport need. New bus services will be provided to major new areas of development when sufficient buildings are occupied.
3. More sustainable transport choices for car owners and information and measures to encourage them to use non-car modes for more journeys.
4. Encouraging greater movement within the Borough by cycling and walking through improvements to the existing Redway network and other paths including more direct routes, enhanced facilities and signage, better integration with transport interchange hubs, and improved surveillance; and by extending the Redways network throughout major new development areas (including the creation of routes that are shorter than the equivalent road journey).
5. Planning the development of large housing and employment areas, health, education, leisure, sports, emergency services and other key facilities so that it is well served by public transport and easily accessible by walking and cycling. This applies particularly to Central Milton Keynes, town and district centres elsewhere in the Borough, the Eastern and Western Expansion Areas, the four Strategic Reserve Areas (SR1, SR2, SR3 and SR4), and Key Settlements in the rural area.

Policy CS 12 (Developing Successful Neighbourhoods) states: New developments and major redevelopments must be designed to support sustainable lifestyles for all. This will include:
1. Creating walkable neighbourhoods and extensions of the existing walking, cycling and key public transport networks
2. Siting key day-to-day facilities, including schools, shops, leisure and employment in locations easily accessible on foot, by bike and by public transport
3. Creating high quality open spaces in line with the MK Open Space Strategy and private amenity space for houses

4. Appropriately locating development to maintain and improve current flood risk and air quality standards
5. Separating housing from noisy/24 hour working employment uses (B2 and B8)
6. Encouraging home working
7. Achieving the highest standards of design in terms of safety and security
8. Creating diverse and flexible neighbourhoods that can respond to change overtime, allowing communities to form and grow effectively
9. Ensuring flood water management is planned at the largest appropriate scale of new development and, wherever possible, designed as public open space
10. Not precluding further expansion other than where the proposals include a permanent long-term boundary for the City

Policy CS 13 (Ensuring High Quality, Well Designed Places) states:
Character of Place
All new development must be of high design quality in terms of layout, form and appearance, and make a positive contribution to the character of the area in which it is located.
All new development must be based on a thorough site appraisal and be sensitive to its context. New housing should be of an appropriate density for the area in which it is located.
Where there is no clear character on the site or surrounding area, new development must be designed to create a distinctive sense of place by using existing site features, the layout of the development, and the appearance of buildings.
Design of Place
To ensure high design quality, all new developments should:
1. Comply with best practice urban design principles in By Design, Manual for Streets and Safer Places, or future best practice guidance
2. Champion new approaches to sustainable urban form and structure, which build on the concept of the grid, so that everyone lives within walking distance of a viable bus route, local shops and other day-to-day facilities
3. Provide a choice of contemporary, innovative, exemplar architecture that reflects Milton Keynes' reputation as an ambitious, forward-thinking, innovative 21st Century city
4. Integrate energy efficiency and solar performance in the layout and orientation of buildings and neighbourhoods
5. Provide sustainable and strategic surface water drainage as part of a network of multi-purpose open spaces
6. Provide visual landmarks to help with orientation, particularly from the grid road and redway networks
7. Provide a range of housing densities with more high density in Central Milton Keynes and close to good public transport nodes, with lower densities elsewhere, to contribute towards variety in visual appearance and create diverse, sustainable neighbourhoods
8. Effectively integrate the Council's car parking standards into the layout of new developments
9. Redways (another unique element of MK) should be built within the landscape corridor of all new grid roads, as well as elsewhere within new developments
10. Continue the green character of the city through appropriate use of planting on streets and in public open spaces, and respecting the existing landscaped grid road corridors

Waste Development Plan

Policy WCS3 (Sustainable design, construction and demolition) states: New built development should facilitate the efficient use of resources. A waste management plan should be provided with all planning applications and should consider:
a) Designs and layouts that allow the effective sorting, recycling and composting of waste;
b) Ensuring the development can be served by appropriate waste collection methods to support recycling systems;
c) Design principles and construction methods that minimise primary aggregate use and encourage the use of high quality building materials made from recycled and secondary sources;
d) Construction and demolition methods that minimise waste production and re-use/recycle materials, as far as practicable onsite;
e) Construction which reduces inert landfill disposal; and
f) Accommodating an appropriate proportion for waste management facilities for recycling, composting, recovery and treatment.

Local Plan Policies

Policy D1 (Impact of Development Proposals on Locality) states: Planning permission will be refused for development that would be harmful for any of the following reasons:

(i) Additional traffic generation which would overload the existing road network or cause undue disturbance, noise or fumes
(ii) Inadequate drainage, which would adversely affect surface water disposal, including flood control, or overload the existing foul drainage system
(iii) An unacceptable visual intrusion or loss of privacy, sunlight and daylight
(iv) Unacceptable pollution by noise, smell, light or other emission to air, water or land
(v) Physical damage to the site and neighbouring property including statutorily protected and other important built and natural features and wildlife habitats
(vi) Inadequate access to, and vehicle movement within, the site

Policy D2a (Urban Design Aspects of New Development), states: Development proposals will be refused unless they meet the following objectives:

(i) Character in townscape and landscape by identifying and reinforcing better quality and locally distinctive design elements
(ii) Continuity of street frontage and enclosure of space by clearly defining public and private areas and locating main building entrances on the street.
(iii) Quality public realm consisting of spaces and streets that are accessible, attractive, well related to and overlooked by buildings providing natural surveillance, with active ground floor uses along main streets and with parked vehicles not being visually dominant
(iv) Ease of movement by creating places that are permeable and well connected with safe, attractive, convenient routes along streets giving priority to walking, cycling and public transport
(v) Legibility by providing recognisable streets, junctions and landmarks to help people to find their way around
(vi) Adaptability of buildings and spaces, capable to use by a range of activities in response to changing conditions
(vii) Variety of layout, building form, use and tenure through the site

Policy D2 (Design of Buildings) states: Development proposals for buildings will be refused unless they:

(i) Are in scale with other buildings in the immediate vicinity in terms of their height and massing, except where a greater scale is necessary to reflect the development's function and importance
(ii) Relate well to and enhance the surrounding environment
(iii) Provide access for those with impaired mobility
(iv) Allows for visual interest through the careful use of detailing, where this is appropriate to the character of the area
(v) Include landscaping and boundary treatments that integrate with those of the surrounding area
(vi) Have regard to the need to design layout and screening in the interests of the prevention of crime and the surveillance of the public realm

The extension of existing buildings will only be permitted providing the scale of the proposed extension does not detract from the character of the original building.

Policy D4 (Sustainable Construction) states: All new development exceeding 5 dwellings (in the case of residential development) or incorporating gross floorspace in excess of 1000 sq m (in the case of other development) will be required to include the following:

(i) Energy efficiency by siting, design, layout and buildings' orientation to maximize sunlighting and daylighting, avoidance of overshadowing, passive ventilation;
(ii) Grouped building forms in order to minimize the external wall surface extent and exposure;
(iii) Landscape or planting design to optimise screening and individual buildings' thermal performance;
(iv) Renewable energy production e.g. external solar collectors, wind turbines or photovoltaic devices;
(v) Sustainable urban drainage systems, including rainwater and waste water collection and recycling;
(vi) Significant use of building materials that are renewable or recycled;
(vii) Waste reduction and recycling measures;
(viii) Carbon neutrality or financial contributions to a carbon offset fund to enable carbon emissions to be offset elsewhere.

Policy H8 (Housing Density) states: "The density of new housing development should be well related to the character and appearance of development in the surrounding area.
The Council will seek the average net densities set out below for development within each zone as defined on the accompanying plan:

Zone 1	CMK (including Campbell Park)	100 dws/ha
Zone 2	Adjoining grid squares north and south of CMK, Bletchley, Kingston, Stony Stratford, Westcroft and Wolverton	40 dws/ha
Zone 3	The rest of the City, City Expansion Areas, Newport Pagnell, Olney and Woburn Sands	35 dws/ha
Zone 4	The rest of the Borough	30 dws/ha

Policy H9 (Housing Mix) states: Development proposals that include 5 or more dwellings should incorporate a range of house sizes and types and all dwellings will be encouraged to meet the "Lifetime Homes" standards.

Policy L3 (Standards of Provision) states: New housing development will be required to provide new or improved recreational facilities in accordance with the Council's adopted standards in Appendix L3.

Appendix L3 – Standards for Recreation and Leisure Facilities

FACILITY	MINIMUM SIZE	CATCHMENT AREA OR STANDARD	CHARACTERISTICS
Local Play Areas	0.2 hectares[1] or 0.35 if surrounded by housing	300 metres	• Mainly for children up to age 8 • For unsupervised play close to home • Located at 500 metre intervals • Active zone[2] should be at least 20 metres from residential property boundaries and 30 metres from roads • Approximately 5[1] items of play equipment and small games area

FACILITY	MINIMUM SIZE	CATCHMENT AREA OR STANDARD	CHARACTERISTICS
Neighbourhood Play Areas	0.6 hectares[1]	600 metres	• For all children, but emphasis on 8+ • For unsupervised play • Located at 1,000 metre intervals • Active zone[2] should be at least 40 metres from residential property boundaries and 30 metres from roads • Approximately 8[1] items of play equipment and ball games area, goal wall, cycle area; larger more adventurous equipment • The inclusion of youth shelters, wheeled sports facilities and multi-games walls for teenagers is essential
Local Parks	1-2 hectares	600 metres 0.6 hectares per 1,000 population	• For visitors on foot, including nearby workers • Providing children's play, sitting out areas, landscaped environment, community events area, kickabout area and playing fields if the park is large enough • At least 0.4 hectares per 1,000 population for casual, informal playspace if not provided elsewhere
District Parks	20 hectares	1.2 kilometres	• For weekend and occasional visits on foot • Containing playing fields, but at least 12 hectares for other pursuits (as in Local Parks) and some car parking
Linear Parks	60 hectares	3.2 kilometres or more where the Park is appreciably larger than 60 hectares	• For weekend and occasional visits by car or public transport • Either semi-natural environment, commons, woodland etc, or formal parks providing for both active and possible recreation – e.g. boating, entertainment, etc • Containing playing fields but at least 40 hectares for other pursuits • Adequate car parking essential
Playing fields		1 hectares (net) per 1,000 population, 1.5 hectares (gross) per 1,000 population	• Gross size includes ancillary facilities such as pavilions, car parking and spectator areas
Allotments		0.25 hectares per 1,000 population	• Should have water supply and car parking • Preferably within 600 metres walking distance
Areas of wildlife interest	0.5 hectares	0.5 hectares at 1 kilometre intervals Optimum 10 hectares at 1 kilometre intervals	• Accessible semi-natural greenspace • Normally within or adjoining built-up areas

Notes:

[1] These quantities will need to be greater in areas of high density family housing

[2] Active Zone: area for play equipment and other items

Policy NE1 (Nature Conservation Sites) states:
(i) Development will not be permitted if it is likely to harm the nature conservation value of an international site (RAMSAR sites, SACs and SPAs)
(ii) Proposals for development likely to affect a National Nature Reserve or Site of Specific Scientific Interest will only be permitted if they can be subject to conditions that will prevent damaging impacts on biodiversity interests, or if other material considerations are sufficient to override nature conservation interests.
(iii) Development which would be likely to harm the biodiversity or geological conservation value of a site county-wide (RIGS, MK Wildlife sites) or local importance (Local Nature Reserves, Wildlife Corridors, local wildlife sites) will only be permitted if the importance of the development outweighs the local value of the site.

Policy NE2 (Protected Species) states: Planning permission will be refused for development if it would be likely to adversely affect animal or plant species, or their habitat, specifically protected by law.

Where necessary, planning conditions will be attached to permissions to require the developer to take steps to secure the protection of species or habitat affected by development.

Policy NE3 (Biodiversity and Geological Enhancement) states: All new development exceeding 5 dwellings (in the case of residential development) or incorporating gross floorspace in excess of 1000 sq m (in the case of other development) will be required to incorporate proposals to enhance biodiversity and geological features which are appropriate to, and where possible compensate for, impacts on the immediate area and the site characteristics.

Measures may include use of native species in landscaping schemes, or the improvement or creation of wildlife habitats or features of geological interest.

Priority will be given to woodland planting and other habitats and species identified by local Biodiversity Action Plan. Where enhancement is not possible on the site, appropriate enhancements will be sought on other land.

Policy T1 (The Transport User Hierarchy) states: Development proposals should meet the needs of transport users in the following order of priority:
(i) Pedestrians and those with impaired mobility
(ii) Cyclists
(iii) Users of public transport and taxis, and motorcyclists
(iv) Others

Policy T2 (Access for those with Impaired Mobility) states: Development proposals must be designed to meet the needs of those with impaired mobility. In particular:
(i) Specifically identified and convenient parking spaces should be provided
(ii) The layout of the external environment, including links to adjoining areas, must provide convenient, direct and safe access.

Policy T3 (Pedestrians and Cyclists) states: Development proposals must be designed to meet the needs of pedestrians and cyclists. In particular:
(i) The layout of the external environment, including links to adjoining areas should provide convenient, direct, safe, secure, and understandable pedestrian and cycle routes that are not isolated from other transport routes;
(ii) The needs of cyclists should be taken into account in traffic calming schemes;
(iii) Locations that are a deterrent to pedestrians and cyclists should be improved, including crossing points at roads;
(iv) The existing redway, footway and right of way network should be retained, improved and extended;
(v) Cycle parking should be provided that is conveniently sited, secure and sufficient to meet the Council's parking standards, together with showers and changing facilities.

Policy T5 (Public Transport) states: Development proposals must be designed to meet the needs of public transport operators and users. In particular:

(i) Road layouts must include direct, convenient and safe bus routes

(ii) Bus priority measures must be implemented, where appropriate

(iii) All houses and most other development must be no more than 400m from a bus stop

(iv) Bus stops must have suitable shelters, good pedestrian access and be open to public supervision

(v) Specific consideration must be given to the provision of public transport services in planning new development.

Policy T15 (Parking Provision) states: Development proposals should meet the following vehicle parking requirements:

(i) Car parking provision must not exceed the Council's maximum standards

(ii) On-site parking should not be reduced below the maximum standard if it would be likely to result in off-site parking causing problems that cannot be resolved by on-street parking controls.

(iii) Parking areas should be well designed in terms of safety, circulation and appearance and assist access by pedestrians and cyclists.

Policy T17 (Traffic Calming) states: Development proposals should include traffic calming measures to provide a safe environment for pedestrians, those with impaired mobility and cyclists. In new development areas traffic calming should be achieved as an integral part of the street design.

The design of such measures must take into account the need for efficient and convenient public transport operation.

The Council may seek financial contributions from developers towards the implementation of traffic calming measures.

Appendix C

Appraisal Templates

TABLE C1: SITE CONTEXT APPRAISAL TEMPLATE	
WHAT IS THE SITE CONTEXT?	
NATURAL ENVIRONMENT	
Topography	**Which way does the site slope?**
Drainage	**Is the site liable to flooding?**
Trees/hedges	**What trees and hedgerows are to be found on the site?**
Biodiversity	**Are there any wildlife habitats within the site?**
Watercourses	**Are there any watercourses crossing the site?**
BUILT ENVIRONMENT	
Easements	**Are there any easements for services that cannot be built on?**
Buildings	**Are there any buildings/structures within the site that should be retained?**
Listed Buildings	**Are there are any listed buildings within or adjoining the site?**
Contamination	**Is the site contaminated?**
Archaeology	**Are there any archaeological remains on the site?**
Adjoining Buildings	**Are there any buildings adjoining the site? What is the form, scale and layout of these buildings?**
LAND USES	
Local facilities	**What local facilities are there within walking distance of the site?**
Surrounding Land Use	**What is the use of land adjoining the site, either existing or proposed?**
Existing Land Use	**What is the existing land use of the site?**
MOVEMENT	
Rights of Way	**Are there any existing rights of way across the site?**
Movement Framework	**How does the site relate to the existing movement framework?**
Public Transport	**Where are the nearest bus routes and bus stops?**
Access	**What are the access points to the site?**
Desire lines	**What are the desire lines to local facilities?**
LEGIBILITY	
Views	**Are there any important views from the site or of the site from off-site?**
Landmarks	**Are there any important landmarks on or off site?**
AMENITY	
Neighbouring Properties	**What is the relationship of neighbouring buildings to the site? Do neighbouring properties overlook the site?**
Adjoining Uses	**Will there be any impacts such as noise from neighbouring uses?**

TABLE C2: AREA CHARACTER APPRAISAL TEMPLATE		
WHAT IS THE CHARACTER OF THE SURROUNDING AREA?		
LAYOUT		
Block structure/size	What size and shape are the blocks? Are the blocks rectilinear or irregular in shape?	Does this element make a positive contribution to the character of the area?
Street types	Is there a recognisable street hierarchy - e.g. mews, residential streets, park edges etc.?	Does this element make a positive contribution to the character of the area?
Street layout	Is there a connected street network? Are street layouts straight or irregular?	Does this element make a positive contribution to the character of the area?
Plot sizes	What size and shape are the residential plots?	Does this element make a positive contribution to the character of the area?
Relationship of building to street	Do buildings front the street? Are the buildings gable end on to the street?	Does this element make a positive contribution to the character of the area?
Continuity of frontage	Do the streets have a continuous frontage or are there gaps in the built frontage?	Does this element make a positive contribution to the character of the area?
Setbacks/building line	How far are the buildings set back from the highway?	Does this element make a positive contribution to the character of the area?
Car parking	Is parking provided on plot, on street, in front parking courts or in rear parking courts?	Does this element make a positive contribution to the character of the area?
Front boundaries	What form of front boundary treatment is there - hedges, walls, soft landscaping etc?	Does this element make a positive contribution to the character of the area?
OPEN SPACE/LANDSCAPE		
Public space	Is the street layout characterised by areas of public space - e.g. public squares, circuses, SUDs?	Does this element make a positive contribution to the character of the area?

Garden sizes	**What size and shape are the gardens?**	**Does this element make a positive contribution to the character of the area?**
Street trees/hedges	**Are the streets characterised by tree planting and/or existing hedges?**	**Does this element make a positive contribution to the character of the area?**
BUILDING FORM		
Building height	**What is the height of the buildings?**	**Does this element make a positive contribution to the character of the area?**
Building type	**Are buildings flatted, detached, semi-detached or terraced?** **Are buildings square, rectangular or L-shaped?** **Are buildings narrow or wide-frontage?**	**Does this element make a positive contribution to the character of the area?**
STYLE		
Roof form	**What is the roof type - flat,ridge,hipped etc.?** **What is the degree of slope?** **Are there dormer windows?**	**Does this element make a positive contribution to the character of the area?**
Materials	**What materials are used - brick, stone, tile, slate etc.?** **What is the typical colour?**	**Does this element make a positive contribution to the character of the area?**
Windows	**What type are they - sash, bays?** **How many are there and what are their size and shape?** **What proportion of the facade do they take up? - solid to void ratio** **What colour is the frame of the window?**	**Does this element make a positive contribution to the character of the area?**

Appendix D

Rear Parking Courts

D1. It is not just Milton Keynes Council that does not support the inclusion of rear parking courts. Both Manual for Streets and the Parking Guide "Car Parking: What Works Where" (prepared by the former EP) state that rear court parking is recommended only after parking to the front and on street have been fully considered. Rear courtyards should support on-street parking, not replace it.

D2. Where rear parking courts are included it is essential that on street parking is carefully managed. If it is not allowed then this should be suitably enforced through for example double yellow lines. If it is allowed, parking should be carefully designed into the streetscape so as to avoid indiscriminate parking on verges, pavements or indeed in the carriageway such that it prevents safe through movement of large vehicles.

Secure rear parking court

Rear parking courts must be secure and not "leaky"

D3 Rear parking courts must be made to feel as private and secure as possible. This can be achieved through:

- well designed 'bridges' between houses;
- electronic lockable gates (operated by key code so that in case of emergency, the code may be passed to emergency responders;
- as narrow an entrance as possible while still meeting highway requirements;
- accesses into rear parking courts should be located opposite to the fronts of dwellings in order to provide overlooking of the access;
- there should only be one entrance into a parking court, to be used by both vehicles and pedestrians;
- parking courts must be well lit and achieve appropriate BS standards. Ground level lighting should be provided;
- in order to aid surveillance, the boundaries of houses that abut parking courts should be a maximum 1.5 metres high with an additional 300 mm visually permeable trellis on top.

Only one entrance for vehicles/pedestrians is permitted. Unlocked alleyways will not be permitted

D4. Rear parking courts must be designed so that the resident's parking space is located on the boundary of the rear garden. In this way residents are more likely to use the parking court, rather than parking in inappropriate locations (e.g. on verges and pavements).

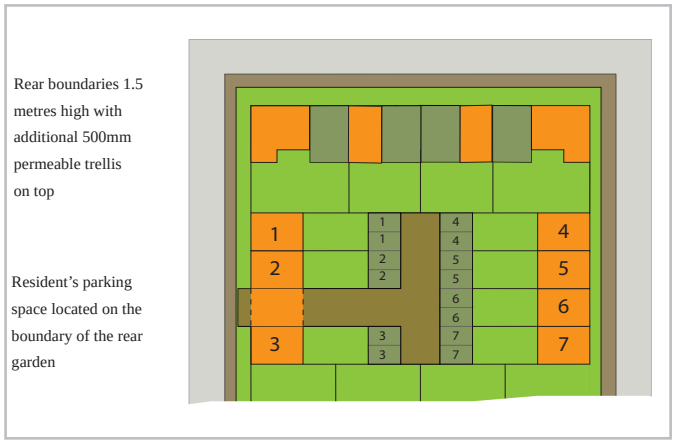
D5. Because of their higher density, apartments often need parking in the form of courts. These are not referred to as rear parking courts if front entrances and habitable rooms face the parking court. Care needs to be taken that entrances also face the street (i.e. dual frontages are created). In these cases, these parking courts are acceptable. For apartments, there is no requirement for a permeable upper 300 mm to the boundary treatment.

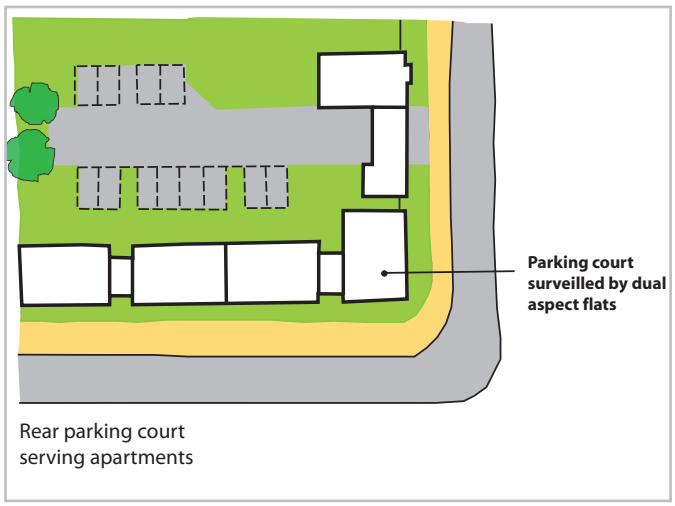
D6. All homes must be accessible from the rear through lockable gates that can be opened by means of a key from both sides. Footpaths need to be provided within rear gardens from the rear gate to rear door of the house to enable ease of access through garden when it is wet.

D7. Parking courts should generally be within the range of 6-12 spaces. Larger courts may be appropriate for apartments. Tandem parking will not be allowed, as vehicles tend to dominate the court and the amount of vehicle manoeuvring is increased.

D8. Rear parking courts should remain private and therefore visitor parking is not allowed within parking courts unless the parking court is ungated and under the control of some form of management company.

"Bridge over unit" makes a clearer definition that the rear court is private





Rear parking court serving apartments

D9. Garages and car ports should be avoided within parking courts as they block surveillance of vehicles.

D10. Parking courts should be softened with limited landscaping (limited because too much will merely increase the size of the rear parking court). Appropriate tree species should be used to ensure that views into the court are not obstructed.

D11 Where there are two rear parking courts adjoining each other, they must have a 1.8 metres solid structure (preferably brick wall) separating them.

Rear Parking Courts with Houses

D11. The Council and MKP have dealt with numerous planning applications where developers have located one or two houses within a rear parking court. This has largely been to provide some surveillance of the parking court.

D12. The problem with this design solution is that it undermines the privacy of a rear parking court, blurring the required clear distinction between public and private space. For this reason housing will not be permitted within rear parking courts. Surveillance of the parking courts can be achieved through other means.

Rear Parking Courts with Flats over Parking (FOPs)

D13. FOPs have often been included in rear parking courts to help with surveillance of the latter. They do however compromise the privacy, security and public-private interface of the parking court and are therefore not permitted.

D14. Where FOPs can be used is to screen and protect rear parking courts. They must form part of the street frontage with the FOP needing to have its front door facing the street.

Plan showing FOPs used to screen and protect rear parking courts

Appendix E

Design and Access Statement Guidance Note

MILTON KEYNES COUNCIL

Preparing Design & Access Statements

A Guide for Applicants and Agents

www.milton-keynes.gov.uk/urban-design

Both Central Government and Milton Keynes Council are committed to raising the standard of design in the city. It is now widely recognised that good urban design not only adds value by increasing the economic viability of development, but also contributes to social and environmental regeneration.

High quality design is not a luxury, it is expected. We therefore need your help in delivering good design by the submission of a Design and Access Statement in support of your planning application.

The government has legislated that most outline applications and full planning applications require an accompanying Design and Access Statement. Key exemptions include householder extensions (except those in conservation areas), changes of use and engineering or mining operations. Other exemptions can be found in the DCLG Guidance on Information Requirements and Validation (March 2010).

Design and access statements help to ensure development proposals are based on a thoughtful design process and a sustainable approach to access; they allow the applicant to explain and justify their proposals; and they help all those assessing the application to understand the design and access rationale that underpins them. Statements should improve the quality of proposals.

Milton Keynes Council will not register applications that do not include a statement at all or one that does not address the headings in Steps 1 - 3 of this Guidance Note.

What is a Design and Access Statement?

It is a report accompanying and supporting a planning application to illustrate the process that has led to the development proposal. It should explain how design decisions have been reached and justify the proposal in a structured way.

The purpose of the statement is to improve the layout of the development and the design of the exterior of new buildings and public spaces.

You should start your statement when you start your scheme, and use it to help influence the design. It should explain how the design has evolved, and be site specific (not copied from another scheme). It should not be an afterthought merely to justify a pre-determined solution nor simply a description of the proposed scheme.

Level of Detail and Presenting the Information

The level of detail required in a design and access statement will depend on the scale and complexity of the application, and the length of the statement will vary accordingly. The Design and Access Statement should use plans and illustrative materials to explain the various issues which have influenced the scheme design.

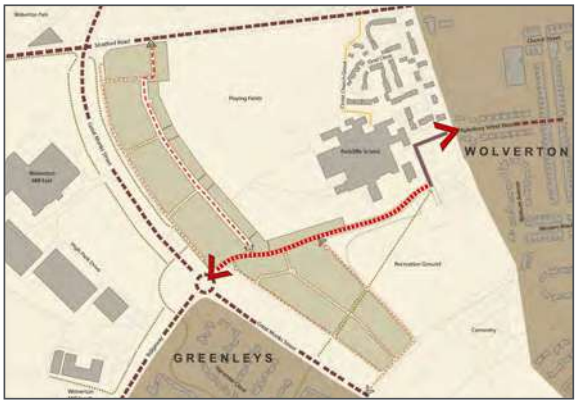


Illustration showing clear movement network

For larger or more challenging sites, the statement will probably include plans and elevations, photographs of the site and its surrounds; and any other relevant illustrations. Photographs should be included to illustrate a point and not purely as wallpaper. Consequently, they should be accompanied with a caption.

These illustrative materials must not be used as a substitute for adequate drawings submitted with the planning application. Crucially, regardless of the complexity of the planning application, the document must effectively cover all the design and access issues for the proposed development.

Understanding the context is the key to good design

Pre-application Discussions and Negotiations

PPS1 advises that pre-application discussions are critically important. Applicants, particularly for major applications, will be expected to use statements as an aid to pre-application discussions. In this way local authority officers (and other interested and affected parties) will better understand what underpins proposals and this should facilitate decision-making.

What Do I Need to Do ?

The Components of a Design and Access Statement

A design and access statement should appraise the context and explain the design principles and concepts that have been applied to particular aspects of the proposal – these are the amount, use, layout, scale, landscaping, appearance and access of the development. These can be encompassed in the following three recommended steps which will form the content of the statement:

1. Appraising the context
2. Assess development objectives
3. Working up design solutions

It should also set out the principles and concepts that will be used when the proposal is developed in the future. In particular, for outline applications applicants should demonstrate how relevant parts of the statement will be adhered to in the drawing up of future details.

Building for Life

The Council supports the use of "Building for Life" to assess housing developments (see Core Strategy 'Critical Success Factors and Monitoring Factors' objective 11, page 99 & 'Risks Actions and Contingencies'' objective 11, page 136). "Building for Life" is a national standard for well-designed homes and neighbourhoods, which assesses schemes against 20 criteria (see page opposite). It is recommended that for residential planning applications, the Design and Access Statement is geared to answer the "Building for Life" questions.

The answers to the "Building for Life" questions should be grouped under the headings in the DCLG Guidance on Information Requirements and Validation (see table below).

Design and Access Statement Headings	Relevant Building for Life Criteria
Use	1,2,3
Amount	1,2,3
Layout	6,7,8,9,10,11,12,15,16,17
Scale	6,8,17
Landscape	6,7,8,16
Appearance	6,8,17
Access	4,13,14

Some of the "Building for Life" criteria (questions 18-20) do not fit obviously into any of the Design and Access Statement headings and so should be included under other headings as appropriate.

Building for Life Questions

Environment & Community

1. Does the development provide (or is it close to) community facilities, such as a school, parks, play areas, shops, pubs or cafes?
2. Is there an accommodation mix that reflects the needs and aspirations of the local community?
3. Is there a tenure mix that reflects the needs of the local community?
4. Does the development have easy access to public transport?
5. Does the development have ant features that reduce its environmental impact?

Character

6. Is the design specific to the scheme?
7. Does the scheme exploit existing buildings, landscape or topography?
8. Does the scheme feel like a place with distinctive character?
9. Do the buildings and layout make it easy to find your way around?
10. Are streets defined by a well-structured building layout?

Streets, Parking & Pedestrianisation

11. Does the building layout take priority over the streets and car parking, so that the highways do not dominate?
12. Is the car parking well integrated and situated so it supports the street scene?
13. Are the streets pedestrian, cycle and vehicle friendly?
14. Does the scheme integrate with existing streets, paths and surrounding development?
15. Are public spaces and pedestrian routes overlooked and do they feel safe?

Design & Construction

16. Is public space well designed and does it have suitable management arrangements in place?
17. Do the buildings exhibit architectural quality?
18. Do internal spaces and layout allow for adaptation, conversion or extension?
19. Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?
20. Do buildings or spaces outperform statutory minima, such as building regulations?

Public spaces are well overlooked

Parking well integrated into street scene

Step 1:

Appraising the context

(Opportunities and Constraints)

Understanding the site is the first step in the process of good design.

"No two places are identical and there is no such thing as a blueprint for good design. Good design always arises from a thorough and caring understanding of place and context" (By Design – Urban Design in the Planning System: towards better practice)

A site analysis should not be a standard exercise. It is a factual account using writing, drawings (to scale) and/or photographs to explain the character and features of the specific site and the surrounding locality. You will need to visit the site to do this; it cannot be done as a desktop exercise. The scope of a site analysis should be tailored to the location of the site, scale of development and requirements of the planning controls.

At its most extensive, a site analysis would document the site in terms of land uses, contours and existing vegetation, buildings (any of which could be retained), views to and from the site, access and connection points, drainage and services, orientation, microclimate and noise sources, possible contamination and other notable features.

With respect to the surrounding locality, it is particularly important to understand existing access points, and land uses as well as built form, layout, heights and styles.

The site analysis identifies which particular features of the setting affect the design and why.

The character and features of the site and its setting should lead to an opportunities and constraints plan for the site, which are the key influences on the design, together with an understanding of the future character of an area.

Key landscape features to inform proposal

A thorough site analysis is vital

Step 2 :
Assess development objectives

As the applicant you will have certain development objectives, most notably pertaining to amount of development and proposed land uses. They should be assessed and justified against the opportunities and constraints identified in Step 1. Certain commercial and personal objectives, for example, may be at odds with the important features and character identified in the site analysis.

An effective assessment explains how any apparent conflict may be resolved and high quality design achieved. The Planning Authority will consider these aspects in fine detail.

Step 3 :
Working up design solutions

The statement is not simply a justification of a pre-determined design solution. It is likely that there will be several design options which may be investigated, but whichever is worked up, it must address the assessment of development objectives from Step 2 (which in turn incorporates the Context Appraisal from Step 1) and the principles of good design expressed in government guidance, that include among others:

• By Design – Urban Design in the Planning System: towards better practice;

• By Design – Better Places to Live: a companion guide to PPG3;

• Urban Design Compendium.

We would strongly advise that involvement with the local community and other professionals is undertaken when the size or complexity of the scheme justifies this. The statement should indicate and explain how the findings of any consultation have influenced the design options (and preferred options).

The following components are expected to appear in Step 3. Applicants are advised to read "Guidance on Information Requirements and Validation", in order to understand the difference in level of detail required between an outline planning application and full planning application.

Use - the use or mix of uses proposed for land and buildings. Use cannot be reserved within an outline application. Statements should explain the proposed use(s), their distribution across the site, and relationship to uses surrounding the site.

Amount - the amount of development proposed, either in terms of units (for residential) or floor space (for all other uses). Amount cannot be reserved within an outline application. Statements should explain the amount of development for each proposed use, how this is distributed across the site, and its relationship to the site's surroundings.

Layout – the way in which buildings, routes and open spaces are provided, placed and orientated in relation to each other and buildings and spaces surrounding the development. Statements must demonstrate how crime prevention measures have been considered in the design of the proposal

and how the design reflects the attributes of safe, sustainable places as set out in Safer Places – the Planning System and Crime Prevention (ODPM/Home Office, 2003).

Scale – the height, width and length of a building buildings in relation to its surroundings. The maximum and minimum sizes will need to be included in outline applications.

Landscaping – the treatment of private and public spaces to enhance or protect the amenities of the site and the area in which it is situated through hard and soft landscaping measures.

Applications must be supported with a landscape master plan / strategy drawing, considering landscape context, character and visual impact of the proposed development. All existing trees and hedges must be clearly and accurately shown. A full ecological report may be required.

Appearance – the aspect of a place or building that determines the visual impression it makes, including the external built form of the development, its architecture, materials, decoration, lighting colour and texture.

Landscaping needs to be integrated into overall design

Access – applicants should explain how the site will be linked to surrounding routes and facilities. Access arrangements will ensure that all users will have equal and convenient access to buildings, spaces and the public transport network. Applicants should include an explanation of disabled access.

Listed Buildings

Design and access statements are also required for listed building consent. They will be similar to design and access statements for planning applications, although there will be some differences because of the differing nature of the application. Where there is a planning application submitted in parallel with an application for listed building consent, a single combined statement will suffice.

Further information on design and access statements in relation to listed buildings can be obtained from the Council's Conservation and Archaeology team.

Further Information

Further information can be found at the following:

'Guidance on Information Requirements and Validation' - DCLG March 2010

• Design and Access Statements – 'How to write, read and use them' - CABE 2006, see http://www.cabe.org.uk/publications/design-and-access-statements

• Disability Rights Commission (DRC)

'Guidance for Access Statements', see www.drc-gb.org

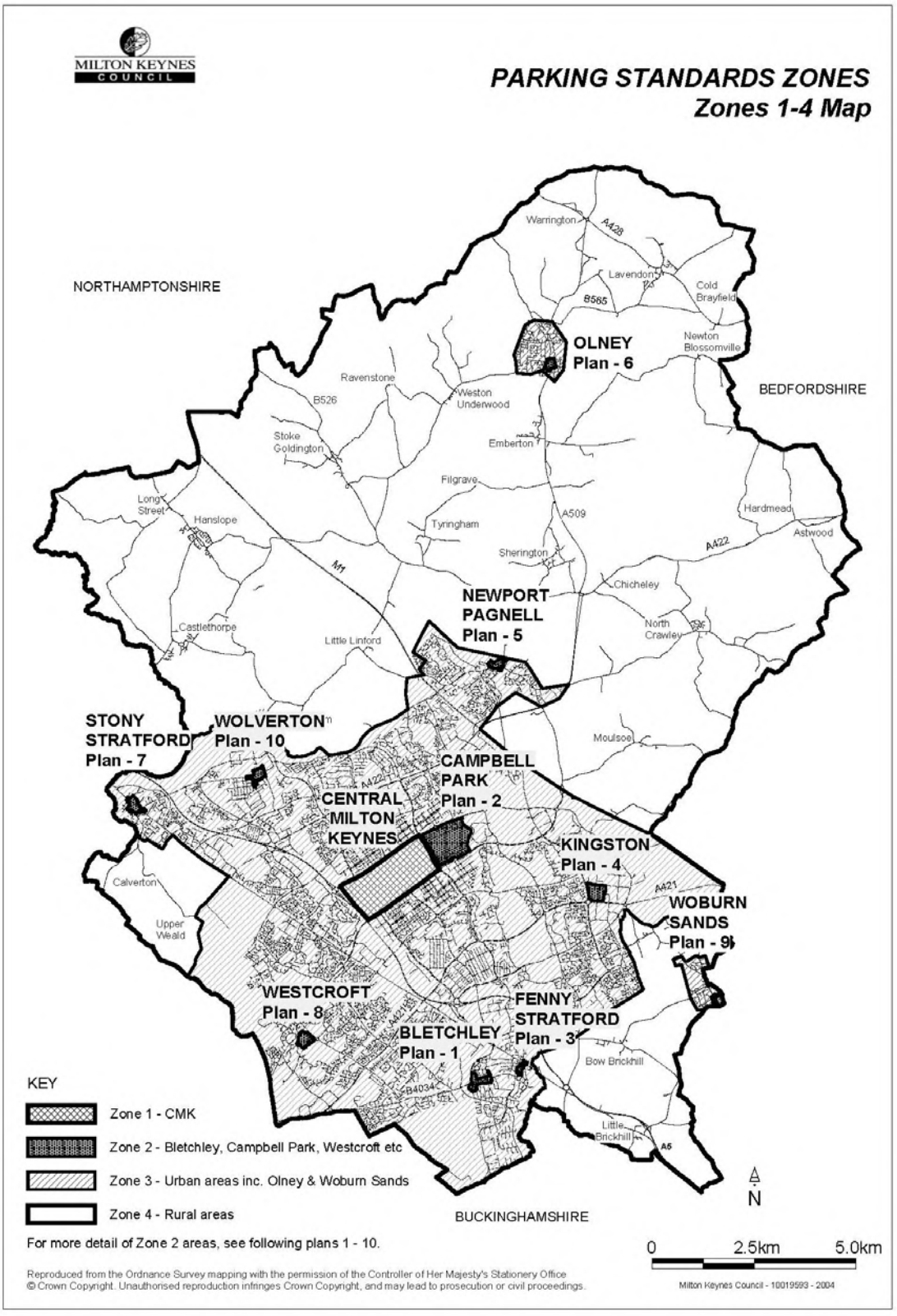
Appendix F

Residential Parking Standards

(Extract from Parking Standards Addendum 2009)

The Council's car parking standards for all dwellings are included in the"Addendum to Parking Standards", adopted in 2009.

The Council's car parking standards are currently being reviewed.



2. Changes to Standards for Dwellings

Following the review of car ownership and the review of the 2005 standards, changes to the residential car parking standards are shown in the tables below. The new standards for allocated and unallocated parking are shown in Table 1 and 2 below.

These standards supersede those shown in Table 3 in section 7 of the 2005 document. Notes 2-5 in that table, which relate to C3 accommodation, are also superseded by the new standards. However, Note 1 continues to apply; Garages are not counted as a parking space.

NB. These standards show the minimum requirement for parking provision. Parking provision in excess of the minimum will be considered on a site-by-site basis.

The figures in Table 1 show the minimum level of allocated parking required per dwelling. Allocated parking is defined as privately owned spaces that are designated for the sole use of an individual dwelling. Such spaces will normally be located on-plot, but for some developments, such as flats, they may be located in a shared parking area.

Table 1 – Standards for Allocated Parking (spaces per dwelling)

Dwelling Size (bedrooms)	Accessibility Zone			
	1	**2**	**3**	**4**
1	1	1	1	1
2 (flat)	1	1	1	2
2 (house)	1	1	2	2
3	2	2	2	2
4+	2	2	2	3

In addition to the allocated parking shown in Table 1, provision should be made for unallocated parking. Unallocated parking is defined as spaces that are for shared use by any visitors or resident. These spaces must be provided in publicly accessible locations, normally as part of the public highway.

Table 2 – Unallocated Parking Requirement (spaces per dwelling)

Dwelling Size (bedrooms)	Accessibility Zone			
	1	2	3	4
1-bed	0	0	0.25	0.25
2-bed (flat)	0	0	0.50	0.25
2-bed (house)	0	0	0.25	0.25
3-bed	0	0	0.50	0.50
4 or more	0	0	0.50	0.50

The requirement for unallocated parking can also be expressed as follows:

0.25 spaces per dwelling = 1 space per 4 dwellings

0.50 spaces per dwelling = 1 space per 2 dwellings

Where this requirement results in a partial space (0.25, 0.5 or 0.75), the provision should be rounded up to the next whole number of spaces. For small infill plots and similar applications in existing streets, where the total unallocated requirement is 1 space or less, the provision will be determined on a site-by-site basis.

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