

PLACEMAKING IN NORTH SOLIHULL

PRIMARY DESIGN CODE DOCUMENT



FOREWORD

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The Vision

“Our Vision is of a Solihull where there is no gap of inequality and where everyone has equality of access to education, health, employment, housing and other services.”
(Solihull Metropolitan Borough Council)

PART 1: THE BACKGROUND

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1.0 INTRODUCTION

1.1 NORTH SOLIHULL REGENERATION

1.2 DESIGN CODE PROCESS

1.1 NORTH SOLIHULL REGENERATION

A partnership between private consortium 'North Solihull InPartnership' and Solihull Metropolitan Borough Council was formed in May 2005 to deliver the regeneration programme.

The regeneration of North Solihull is an exciting yet demanding project which has been developed to transform the lifestyle and opportunities for the communities of Chelmsley Wood, Fordbridge, Kingshurst and Smith's Wood. The objective is to deliver long term and sustainable benefits for the residents of North Solihull by creating a high quality facilities restructuring the housing market and strengthening existing communities within the area improving the quality of the public realm , open space and biodiversity, schools, community facilities, retail leisure and employment opportunities.

The protection and enhancement of green spaces in the regeneration zone is an important objective as the Council's policies recognise the green space, sport, recreational and cultural activity underpin people's quality of life.

The programme is an important component in the regeneration of the West Midlands, building on the area's existing assets and the proximity to the Solihull Centre, Birmingham City Centre, the National Exhibition Centre Birmingham International Airport, Birmingham Business Park and the motorway network.

The Strategic Framework was prepared following extensive consultation with local communities and key stakeholders. Following the production of the first neighbourhood plans in 2005 further consultation has taken place and will continue throughout the development process as detailed application are made for each site. The design codes have been prepared as an integral part of this statutory process.

Design codes have been developed within the context of

national, regional and local planning guidance and should be read alongside them. They have been prepared at a time when new procedures are being implemented in accordance with the Planning and Compensation Act 2004.

Diagram showing Policy Context.

1.2 DESIGN CODE PROCESS

The Design Code is a document that provides guidance to developers and planners on the future development in North Solihull. The Code represents work started at a Design Symposium held in North Solihull in June 2006. The code adds to the information contained in the Strategic Framework which was adopted as Supplementary Planning Guidance (SPG) by Solihull Metropolitan Borough Council in February 2005.

The Design Code will be used by the Design Champion and SMBC planners to ensure that planning applications meet Urban Design and Building Design principles. It is envisaged that following the publication of a site brief, the Design Champion will worked with developers to ensure compliance with the codes to avoid delays at the planning application stage. The Design Code will also govern pre application discussions between all prospective developers and SMBC. The Design Champion will report to the North Solihull Partnership Board on how proposals respond and meet the codes. The process of using the Design Code in the planning process is outlined in the adjacent diagram.

The Design Code principles will apply to all planning applications submitted in the regeneration area with the codes a key part of the planning process and not an end to themselves. The Design Code will not ensure good design, but it will enable good designers to quickly appreciate the principles that apply in North Solihull allowing them to respond in a creative manner. The Design Code does not seek to duplicate or replace the other key principles that need to be met including Road Safety and the Strategic Transport Framework.

The Design Code is intended to be a document that whilst robust, is updated throughout the course of the regeneration programme.



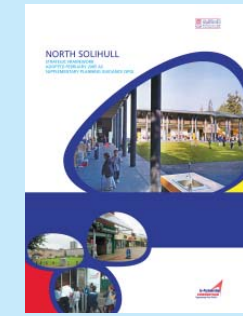
Design Code process Diagram

2.0 REGENERATION BACKGROUND

2.1 REGENERATION CONTEXT

2.2 STRATEGIC FRAMEWORK

2.3 PLANNING FRAMEWORK



2.1 REGENERATION CONTEXT

The requirement for large scale regeneration and the context for the Strategic Framework for North Solihull has been identified by regional government and its agencies.

Regeneration Zone - North Solihull is identified in both Regional Planning Guidance (RPG11) and by Advantage West Midlands (AWM) as one of six Regeneration Zones in the West Midlands. This is further supported by Solihull's Unitary Development Plan adopted in 2006.

- Housing Market Renewal (HMR) – North Solihull falls within HMR's designation as the 'Eastern Corridor (of Birmingham) Pathfinder'.
- High Technology Corridor – Advantage West Midlands' (AWM) High Technology Corridor Coventry-Solihull-Warwickshire includes the Regeneration Zone.
- Strategic Transport Framework prepared by SMBC and Arup in September 2006.

North Solihull is well positioned for regeneration being an integral part of the East Birmingham Corridor Initiative. On the boundaries are major employment sites and the opportunities offered by the airport, NEC and Birmingham Business Park.

2.2 STRATEGIC FRAMEWORK

A comprehensive Baseline Report was prepared in consultation with Solihull Metropolitan Borough Council (SMBC) and other relevant agencies to inform the North Solihull Strategic Framework. It examined the following topic areas to provide information on the existing situation, programmes and initiatives and identified needs. This information was used to inform the preparation of the Framework.

- Planning Context
- Population & Demographics
- Education, Skills & Training
- Employment & Economic Activity
- Health
- Community Services
- Crime & Disorder
- Housing
- Landscape & Urban Character
- Transport

The Strategic Framework sets out a spatial strategy for North Solihull, outlining key interventions in the location of roads, paths, village centres as well as identifying key areas of intervention.

2.3 PLANNING CONTEXT

REGIONAL ROLE

The Regional Planning Guidance (RPG11) (2004) identified four Major Urban Areas (MUAs) within the West Midlands. North Solihull falls within the Birmingham/Solihull MUA. The aim of the regeneration strategy is to reverse the movement of people away from the area and to create balanced and stable communities, reversing decline and ensuring greater accessibility to opportunities and services for all. This will include:

- Supporting market renewal of residential areas;
- Tackling deprivation and creating employment opportunities in Regeneration Zones;
- Protecting and enhancing the quality of the urban environment;
- Creating a balanced network of vibrant town and city centres as the strategic focus for major retail, office and leisure development;
- Resisting peripheral expansion for housing; and
- Improving the quality of transport networks.

The focus for economic development is directed to six Regeneration Zones and three High Technology Corridors, North Solihull falls within both of these designations.

LOCAL CONTEXT

The Solihull UDP 2006 sets out the key local issues and includes two new housing allocations in North Solihull but most new housing will involve redevelopment within existing urban areas.

Densities of 30 - 50 dwellings per hectare are sought and over 50 dwellings per hectare in locations with good transport accessibility. A range of size and type of dwelling will be

provided.

The UDP contains the following key principles:

- Protecting and maintaining the Green Belt;
- Ensuring development is located to minimise the need to travel and to promote public transport, walking and cycling;
- Enhancing the role of centres;
- Providing a range of housing;
- Promoting opportunities for sport, recreation, leisure and the arts in accessible locations;
- Strengthening important public transport routes between those areas with a high concentration of unemployed and areas of new employment;
- Protecting Sites of Importance for Nature Conservation (SINCs); ENV10
- Protecting Local Nature Reserves (LNRs);
- Protecting biodiversity ENV11
- Protecting trees and woodlands ENV14
- Protecting Landscape Quality C8
- Protecting Environmental Corridors ENV 11/4
- Protecting of the capacity of floodplains with built development permitted only in very exceptional circumstances; and
- Protecting playing fields, parks and open space.
- Extension of the Project Kingfisher ENV 11/5 area to include land adjacent to the Kingshurst, Hatchford and Low Brooks. (UDP policy)

The Local Biodiversity Action Plan for Warwickshire, Coventry and Solihull (2006) (LBAP) outlines how landowners, land-managers and policy makers will protect the characteristic wildlife and landscapes of our sub-region. The plan contains twenty six Species Action Plans for our threatened plants and animals and twenty-four Habitat Action Plans.

The UDP is supported by Supplementary Planning Documents on Affordable Housing and New Housing in Context.

3.0 VISION

3.1 THE VISION

3.2 THE PRINCIPLES



3.1 THE VISION

North Solihull has many positive attributes on which to build sustainable change. The strategic framework creates a vision for North Solihull as a desirable, high quality and attractive place to live which will improve the opportunities for existing residents and attract new people and investment.

The North Solihull Strategic Framework is underpinned by a number of principles that have been agreed by Solihull MBC and which define the approach to regeneration.

“Our Vision is of a Solihull where there is no gap of inequality and where everyone has equality of access to education, health, employment, housing and other services.”

(Solihull Metropolitan Borough Council)

3.2 THE PRINCIPLES

The principles underpinning the Design Code are:

- Create a distinctive and sustainable neighbourhood in which people are proud to live;
- Increase the quality and choice of housing;
- Create attractive, people-friendly streets based on traditional layouts;
- Improve the quality of the public realm and access to public parks, green spaces and squares;
- The protection and enhancement of green spaces in order to conserve wildlife, maintain community asset, protect local distinctiveness and support economic regeneration;
- Provide a vibrant new high streets at the heart of neighbourhoods;
- Promote sustainable development in practice;
- Ameliorate climate change; and
- Value Public Art as an aid to legibility, public realm quality and community pride.

Each neighbourhood will have its own characteristics the intent being to focus through the master plans on individual site plans, revitalise the neighbourhood retail and civic/community buildings, improve choice and quality of the housing offer, and improve the design and management of open space, streets and the public realm.

PART 2:

DESIGN CODE PRINCIPLES

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4.0 URBAN FORM

- 4.1 BLOCK LAYOUT, SIZE, TYPE AND SHAPE
- 4.2 DENSITY
- 4.3 ENCLOSURE
- 4.4 FRONTAGE

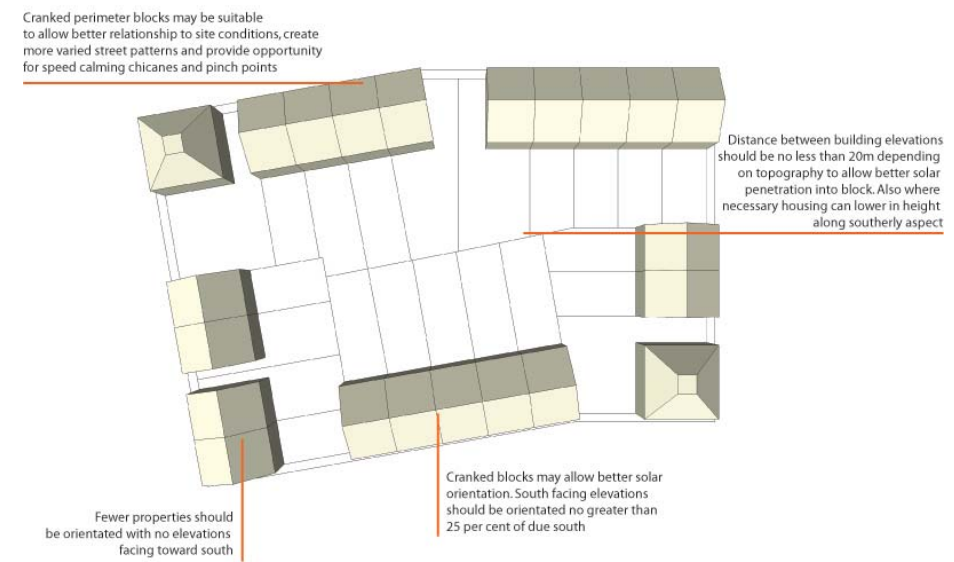
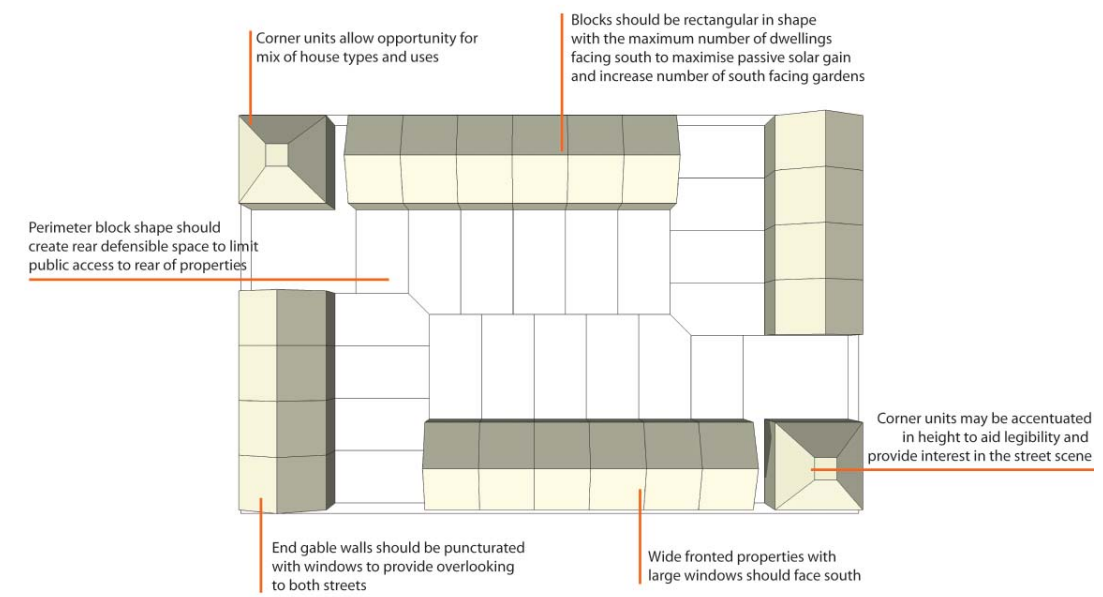
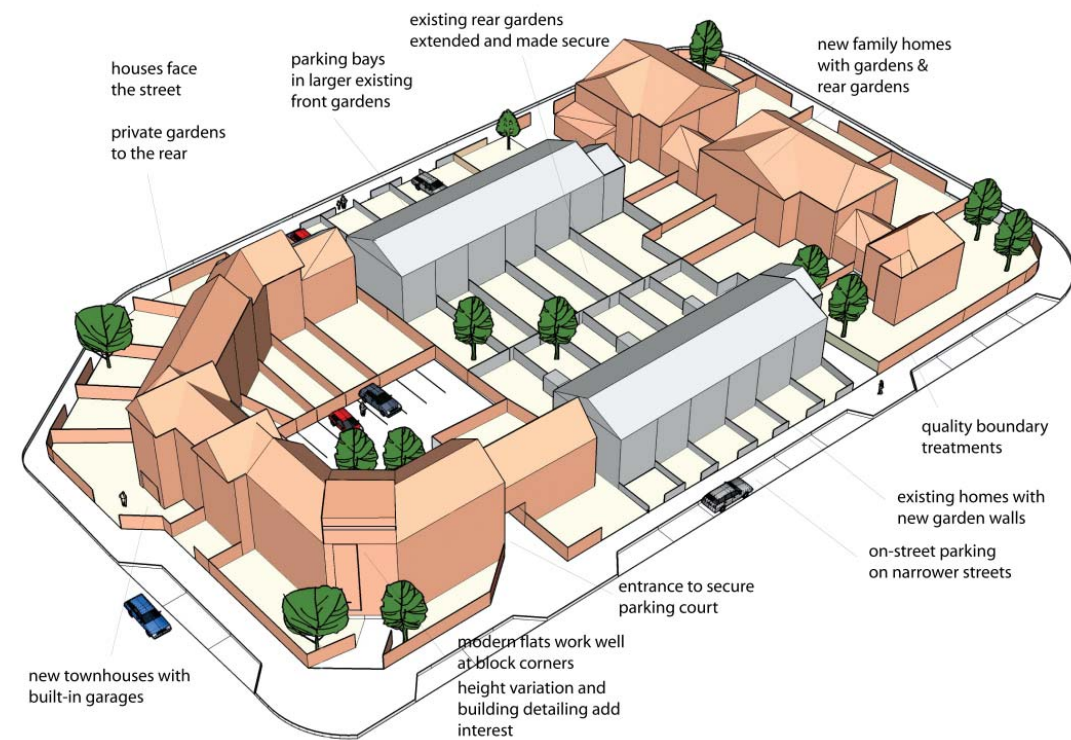
4.1 BLOCK LAYOUT, SIZE, TYPE AND SHAPE

The 'Block Principles' set out in this section are the basic building blocks of good urban design in North Solihull. The principles are applicable to both new and re-configured sites with illustrated examples of both scenarios.

When designing blocks it is imperative that the streets are designed at the same time having regard to the principles outlined in section 5. In creating high quality environments the design of streets should be based on guidance in section 5 and the Manual for Streets.

BLOCK LAYOUT

The scenario below illustrates the block principles of a de-radburnised layout. The scenarios opposite sets out the principles for a new build block.

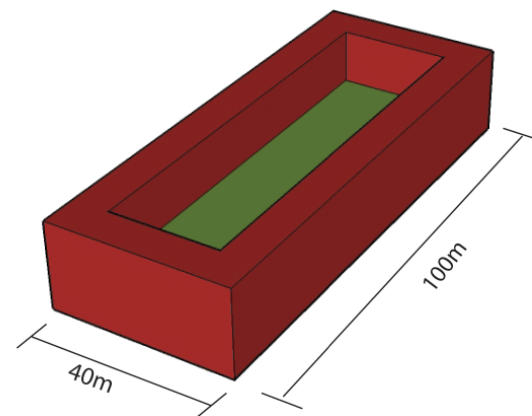
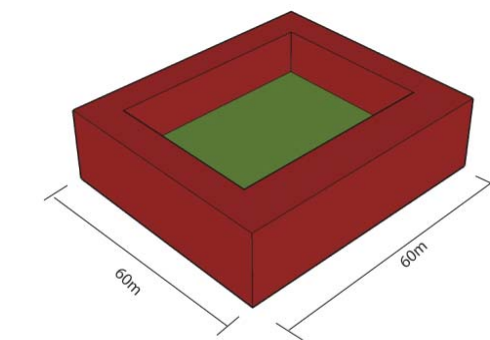
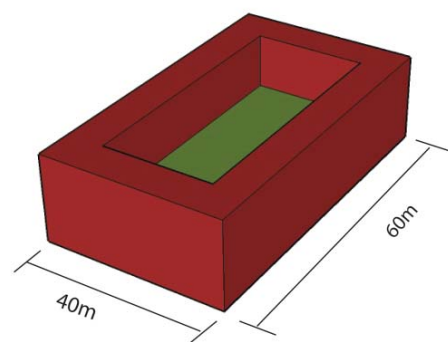




BLOCK SIZE

Block size is important in that it helps give a place character and ensure good permeability. If a block is too large, permeability is restricted as people have to walk extended distances to key facilities and destinations such as shops and bus stops. Many of the existing blocks in North Solihull are based on the Radburn principle with many be relatively small. This has created a very permeable network of footpaths and routes that can create problems with security of both the paths and surrounding housing. There may be opportunities to consolidate smaller blocks into a larger block as long as it falls within the overall threshold.

Block size should vary between 40m and 60m in depth and 60m and 100m in length.



BLOCK SHAPE

The shape of the urban block should respond to the existing urban fabric where applicable. In new development the shape of the block should respond to the new street network, responding to the slope, orientation (see 7.3) and location in relation to village centres, open space etc. Where possible the blocks should be square or rectangular ensuring good permeability and an efficient use of land.

4.2 DENSITY

New development in North Solihull should respond to the existing character whilst recognising the need to make the best use of land. Densities should be based on location within North Solihull and within the neighbourhood with densities generally being higher closer to Chelmsley Wood Town Centre, Village Centres and key public transport routes.

Density is a measure of the number of dwellings which can be accommodated on a site or in an area. PPS3 states that the density of existing development should not dictate that of new housing by stifling change or requiring replication of existing style or form. If done well, imaginative design and layout of new development can lead to a more efficient use of land without compromising the quality of the local environment. Reference should also be made to the 'New Housing in Context' SPD produced by Solihull MBC.

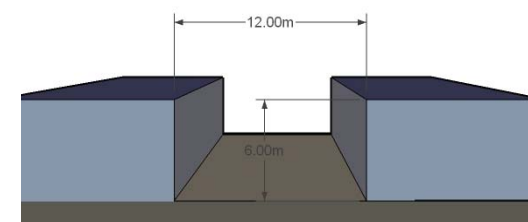
The following density ranges will apply to North Solihull with the neighbourhood plans identifying the category of a development site. Category A sites are those site that are the most accessible sites in terms of access to services and public transport, e.g. Town Centre and Village Centres. Category B sites are generally those sites within walking distance of the Town Centre and Village Centres and those within walking distance of a quality bus service. If a site is not contained in an approved neighbourhood plan, liaison with the Local Planning Authority and the Design Champion will be necessary to determine the most appropriate category. The density categories are:

- Category A: Town and Village Centres: 60+ dph
- Category B: Highly Accessible Residential Area: 40-60 dph
- Category C: Other Residential: 30-50 dph

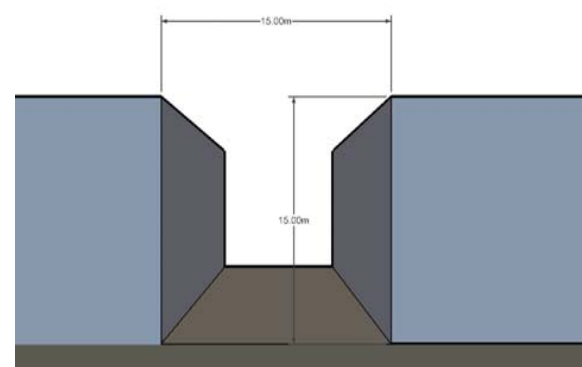


4.3 ENCLOSURE

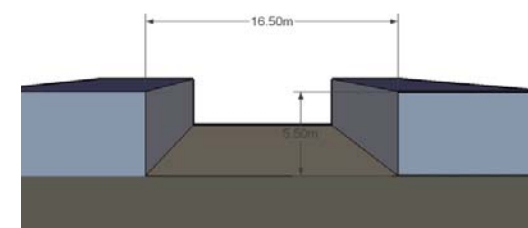
Enclosure is a key determinant of placemaking helping to define the character of a place. Enclosure is achieved through a combination of street widths and building heights. In the town centre the ratio can extend to 3:1 as shown opposite. Village Centre and High Street development should look to achieve a ratio of 1:1, with streets in the core residential areas achieving a ratio of 1:2 and streets in residential areas achieving ratio's of 1:3. When developing residential boulevards, developers should look to use street trees to create visual enclosure of the space of around a ratio of 1:2.



1:2 ratio



1:1 ratio



1:3 ratio

4.4 FRONTAGE

A key basic principle of the block is that development should front the street and open space. The extent of frontage will determine the character of an area with a strong continuous frontage providing a more urban character than one that is more punctuated. By fronting the street the public realm is overlooked by housing creating a safer environment for those using the space. Corner units in particular can overlook more than one street/space and housing should be designed to do this.

A consistent building line should be achieved along most of the length of a frontage with the majority of properties having the same setback.



Active Frontage enables good natural surveillance of the street



Active Frontage gives a strong sense of place to a street

5.0 SPATIAL STRUCTURE

- 5.1 ROAD HIERARCHY AND STREET DESIGN
- 5.2 PARKING
- 5.3 PUBLIC SPACE
- 5.4 PRIVATE SPACE
- 5.5 PUBLIC ART



5.1 ROAD HIERARCHY AND STREET DESIGN

The Design Codes supports the North Solihull Strategic Transport Strategy (ARUP) by introducing a hierarchy of streets. The streets range from High Streets to Homezones, the locations of which will be determined by the neighbourhood plans as they emerge.

The new network of major highways and streets will improve access to jobs, facilities and leisure for local people on foot, by bus, car, and bike, together with improved access to wildlife and recreation opportunities. The long footpaths [a failure of the existing "Radburn Layouts"] where they are no longer required will be closed, creating safe streets connected to the village centres. Pedestrian safety is of paramount importance.

The existing road hierarchy is based on a series of short routes and cul-de-sacs that are served by local collector roads, which in turn are served by strategic collector roads. This Design Code sets out the need for a street hierarchy based on the design of the street as a place as well as the function of the road in transport movement terms.

Four street types have been identified:

- High Street;
- Residential Boulevard;
- Residential Access Street; and
- Homezones.

Each street type is illustrated by a dimensioned drawing and intersections between street types are illustrated to show how junctions are to be treated. The street design parameters for carriage ways, foot ways, verges, parking and the public and private realm, and includes proposed speed limits. A materials palette relevant to each street type has been produced.

The individual neighbourhood plans define the designated

street hierarchy within each area.

Streets are the principal public spaces that people experience everyday and should be designed for people as well as vehicles. In addition to meeting the technical highway requirements it is imperative that the streets are designed as complete public spaces with consideration given to the entirety of the street including roads, parking, pavements, property boundaries, public space and even the facades of the buildings fronting onto the streets.

Street Design should respond to its role in the street hierarchy and its position within the urban form, responding to the for public spaces and linking spaces and destinations ensuring that each street is fit for purpose for pedestrians and cyclists as well as cars.

Streets will become the principle means of movement for all modes of transport. Streets connect people, places and communities. Safe streets create safe connections. The principles outlined in section 4 will ensure that streets are overlooked and connect places in a legible way.

The Strategic Transport Strategy for North Solihull sets out the road hierarchy based on the function of the road. The Strategic Transport Strategy hierarchy relates to the Design Code hierarchy as follows:

- Strategic Regional Routes - Not covered in the Code.
- Primary Local Distributors and Secondary Local Distributors = Residential Boulevard
- High Street = High Street
- Tertiary Access Road = Residential Streets

Where Strategic Regional Routes have development adjacent to the road then these should be designed as Residential Boulevard (four lane boulevards will be permitted in certain circumstances but should not exceed 3.65m lane width).

HIGH STREET

The High Street is a traditional form that allows a mix of uses to be located in close proximity to each other. The success of the High Street in North Solihull will be dependent upon a range of uses and a good level of transport sharing the space. As such

the High Street should enable bus travel whilst creating a safe and enjoyable environment for the pedestrian.

Key points	
Maximum Speed 30mph	
Accommodates cars, buses, pedestrians and cyclists	
Pavements will be a maximum width of 4m adjacent to retail activity, 2 m. adjacent to residential accommodation	
Parking bays to be provided for short stay use, parallel to the street, set within the public realm strip	
Mature street trees – root barriers, quality hard landscape materials good street lighting and furniture, including public art.	
Criteria	Provision
Speed Limit	30 mph
Carriageway width	7.3m
Junction spacing	40m on opposite sides, 70m on same side.
Sightlines (x/y)	2.4m /33m
Forward visibility	33 m
Junction radii	6 m (see below)
Other dimensions	Swept paths sufficient to accommodate retail delivery vehicles and refuse collection on own side of road (possibly using over-run strips at junctions in order to avoid excessive kerb radii).
Gradients	Generally 1:20 maximum to accommodate access for disabled users.
Parking bays	Formal short stay parking bays adjacent to carriageway and within village squares. 2.4m bay width, to be set back 20m from junctions.
Footway	4.0m alongside retail / service areas, 2.0m alongside residential.
Pedestrian crossings	Flush kerbs with tactile paving, use of build outs and/or table tops to provide informal crossing points near parking bays and at junctions.
Cycle provision	Use of carriageway by cyclists but segregated off-carriageway entrances to schools. Clusters of cycle stands at community buildings and retail. Secure access long stay parking within residential, workplace and schools developments.
Public Transport	Access required. High quality waiting areas with shelter, seating and bus boarder kerbs for accessibility.
Statutory Services	Combined trench in footway



RESIDENTIAL BOULEVARD

Residential Boulevards will form the main movement network through North Solihull, providing the primary routes between home, work, shopping and leisure within North Solihull.

Key points	
Maximum speed 30mph	
Existing road widths to be maintained although edge strips and borders to be reviewed on a street by street basis, to accommodate on-street parking and improve quality of both hard and soft landscape treatments, lighting and traffic calming measures	
Street trees (root barriers) to be considered along total length of boulevards.	
Introduction of cycle lanes should be part of any redesign	
Criteria	Provision
Speed Limit	30 mph
Carriageway width	7.3m typical local standard (but varies on existing roads). New build to be determined on site specific basis through transport assessments.
Junction spacing	40m on opposite sides, 70m on same side.
Sightlines (x/y)	as existing – may wish to reduce in places to support speed control measures.
Forward visibility	as existing
Junction radii	15 m
Other dimensions	Swept paths sufficient to accommodate retail delivery vehicles and refuse collection on own side of road (possibly using over-run strips at junctions in order to avoid excessive kerb radii).
Gradients	1:20 maximum on new build desirable to accommodate access for disabled users, as existing elsewhere.
Parking bays	Some formal parking bays adjacent to carriageway and within existing verges. 2.4m bay width, to be set back 20m from junctions.
Footway	As existing.
Pedestrian crossings	Flush kerbs with tactile paving, use of build outs and refuges to provide informal crossing points. Use of signal controlled crossings and zebra crossings near key journey attractors. Enhancement of existing grade separated crossings to tie into off-road cycle and pedestrian route networks.
Cycle provision	Cycle lanes – 1.2m minimum width. Advanced stop lines at signalised junctions. Clusters of cycle stands at community buildings and retail. Secure access long stay parking within residential, workplace and schools developments.
Public Transport	Access required. High quality waiting areas with shelter, seating and bus boarder kerbs for accessibility.
Statutory Services	Combined trench in footway

RESIDENTIAL STREETS

Residential streets are the most common street type in any area, providing access to housing as well as providing car parking for residents and visitors.

Key points	
Maximum speed 20mph and allow parking bays and street trees (root barriers)	
Street widths may be reduced to slow traffic	
Wide enough to accommodate traffic for a small number of properties (6m maximum)	
Straight sections to be limited to 70m in length.	
Criteria	Provision
Speed Limit	20 mph
Carriageway width	5.0 - 6.0m typical maximum.
Junction spacing	40m on opposite sides, 70m on same side.
Sightlines (x/y)	as existing – may wish to reduce in places to support speed control measures.
Forward visibility	as existing
Junction radii	6 m
Other dimensions	Swept paths sufficient to accommodate refuse collection.
Gradients	1:20 maximum on new build desirable to accommodate access for disabled users, as existing elsewhere.
Parking bays	In curtilage parking, on street parking carriageway to be 6.0m wide (one sided) or 9.5 at double sided. Possible use of alternate bays for horizontal traffic calming.
Footway	Typically 1.8m - 2.5m.
Pedestrian crossings	Table top crossing at junction entry from higher order street.
Cycle provision	use of shared carriageway and off-road routes. Secure access long stay parking within residential developments.
Public Transport	No access required.
Statutory Services	Combined trench in footway



HOMEZONES

Definition

Home Zones are residential streets in which the road space is shared between drivers of motor vehicles and other road users, with the wider needs of residents (including people who walk and cycle, and children) in mind. The aim is to change the way that streets are used and to improve the quality of life in residential streets by making them places for people, not just for traffic. Changes to the layout of the street should emphasise this change of use, so that motorists perceive that they should give informal priority to other road users.

Key points

Turns streets into valued public spaces

Maximum speed 10mph

Homezone entrance marked by a change in road surface and/or level

Informal arrangement of street furniture, planting, parking bays and public art

Play equipment and public seating should be considered.

Good quality lighting designed to reflect use of the spaces.

Landscape design

5.2 PARKING

RESIDENTIAL PARKING

Parking for new housing will be at an average ratio of 1.5 spaces per dwelling. The parking ratio to be applied to each new development will be dependent upon the mix of housing.

Car parking will be provided in a combination of the following:

- Courtyard Parking
- Homezone Parking
- In-curtilage Parking
- On-street parking.

IN-CURTILAGE PARKING

In-curtilage parking is the aspiration of many existing residents. Where in-curtilage parking is proposed it should not be to the detriment of the street scene with preference given to either integral garages or to the side of larger properties and landscaping and greenspace remaining dominant in views.

COURTYARD PARKING

The following principles will apply to the application of courtyard parking:

- Courtyards will be accessed from residential streets only (see Street Hierarchy).
- Courtyards will form part of the urban block.
- Courtyards should be secure and accessible only to residents of the block.
- There should be either dedicated parking in the courtyard or where possible in curtilage parking accessed from the courtyard.
- Rear access to each property will be provided through the parking courtyard
- Courtyard design must accommodate vehicular and pedestrian movement in a secure manner with larger courtyards exploring the potential for private communal

space.

- Non-dedicated visitor parking shall be provided within the street not in the courtyard.
- Courtyards should be managed as private space and secured with gates.

HOMEZONE PARKING

The following principles will apply to the application of new parking:

- Homezone parking should be limited in number with emphasis on the street scene
- Parking should be overlooked by surrounding housing providing natural surveillance
- Parking should be designed as an integral part of the landscape of the Homezone

ON-STREET PARKING

On-street parking is applicable for all street types and should meet the following principles:

- Car parking spaces will be in the form of bays either parallel or perpendicular to the street.
- Perpendicular parking will only be permitted in Residential streets and Homezones with a maximum of four spaces in a row.

CYCLE PARKING

Cycle Parking should be provided in all new development. In Apartment development this should be in a secure location with preference for the facility to be provided within the building. Where this is not possible the facility should be provided within a secure courtyard. New housing should look to accommodate cycle parking within either the dwelling or out buildings.



5.3 PUBLIC SPACE

The green spaces within North Solihull are a major defining feature of the area. Green Spaces serve a range of functions from providing spaces for play and recreation to areas of ancient woodland and environmental quality. Each residential community will be linked to the green spaces through a series of well defined safe streets, incorporating pedestrian friendly routes and cycle ways. These open spaces will be accessible to all, secure and provide quality leisure and amenity facilities.

There will be opportunities for enhancements to the existing open space network and the introduction of new spaces. The following key principles apply to the design of public space:

- Public spaces should be overlooked by development with larger spaces having clear access points.
- The function of the space should respond to the size of the space, minimising conflicts with neighbouring properties.
- All new play equipment should be positioned to respond to the National Playing Fields Association Codes. The following minimum distances from housing shall be implemented.
- LAP = 5m, LEAP = 10m, NEAP = 30m (distances are measured from property frontage).

The appropriate function of a space will be informed by the Green Space Strategy Action Plan and neighbourhood plans.

The Biodiversity of North Solihull should be enhanced through the regeneration progress. In the preparation of masterplans and planning applications there is a need to:

- Conserve, enhance, and where possible restore, the quality, diversity and distinctiveness of the landscape's character throughout the Regeneration area by protecting and, where possible, enhancing natural, man-made and historic features that contribute to the character of the landscape and townscape, and local distinctiveness.

- Support good quality, sustainable development that respects and, where possible, enhances local distinctiveness and the intrinsic qualities of the landscape and the continued protection of local species, wildlife habitats and natural resources for the benefit of all. With the highest level of protection for our most valued landscapes and environmental resources.
- Conserve and enhance biodiversity throughout the zone, including its rivers and other natural corridors, sites and features that form part of the wildlife network and habitats identified in the Warwickshire Local Biodiversity Action Plan. Proposals should aim to maximise the potential for habitat creation and enhancement and maintain networks of natural habitats by avoiding or repairing the fragmentation and isolation of natural habitats through policies in plans.

A materials palette and performance specification will be developed and form a separate part 3 of the Design Code. This will set out the expectations of the quality of materials expected in North Solihull.

5.4 PRIVATE SPACE

Private space will principally be in the form of private gardens and shared gardens. In each instance the following principles should be observed:

- The space should be accessible only that property(s) that own the space.
- The space should be overlooked by that property(s) that use the space with building forms responding to this need.

Where larger blocks are proposed there may be opportunities to develop communal private space as part of the development block. Where this is implemented the management and maintenance of the space should rest with the residents of the block.

Where private space abuts the public realm, security and safety is important. However, the boundary treatment should not be to the detriment of the street and space.



6.0 ARCHITECTURAL FORM

6.1 SCALE AND BUILDING HEIGHTS

6.2 MATERIALS

6.3 DOORS AND WINDOWS

5.5 PUBLIC ART

Public Art is welcomed within developments in North Solihull, particularly when integrated into the overall design approach.

The Council is committed to public art which contributes to:

- The development of a cultural, social and historical narrative for the Borough;
- Promotes community involvement and encourages learning and interaction with the environment;
- Enhances the quality of life by contributing to safety and security and which reflects a Borough that is inclusive and community focused, respecting difference and diversity.

Locally specific good practice guidance is being developed whilst a national reference point is to be found at www.publicartonline.org.uk

6.1 SCALE AND BUILDINGS HEIGHTS

SCALE

The scale of North Solihull is informed by the existing development. Changes in scale can help legibility and highlighting key locations within North Solihull. In general the scale should respond to this and maintain a residential scale with occasional changes around the Town Centre and Village Centres. Where a larger scale is to be implemented this will be identified in the neighbourhood plan.

BUILDING HEIGHTS

Building Heights should not normally exceed 3 storeys except at key locations such as the Town Centre, Village Centres and at key gateway positions and frontages. Key Gateways and Frontages will be identified through in the neighbourhood plan. Exception should be clearly justified and have the support of the Design Champion.

6.2 MATERIALS

Materials strongly influence the perception and experience of place and assist in defining durability, longevity and legibility of buildings. The following issues should be considered when choosing materials:

- Design teams should consider materials which respect place and good building practice, both from construction and sustainable considerations.
- Materials should be sourced locally to minimise the environmental impact of transportation.
- Materials should be selected to enhance the character and definition of the area.

6.3 DOORS AND WINDOWS

Designs should result from consideration of function and appearance and acknowledge the importance of their contribution to the overall streetscape and public realm. Windows and doors play a major role in the identity of buildings and streets, enabling passive supervision and participation between the public and private realm.

Elements to be considered

- Proportion
- Function
- Daylight penetration and energy use
- Safety and security

All windows and doors must be designed to comply with current best practice including the needs of Disability Discrimination Act.

Fenestration should account for no less than 25% of the facade of any residential building or 40% of any mixed use building. Windows should be provided on each floor on buildings that abut or are visible from the public realm.

7.0 PERFORMANCE CRITERIA

- 7.1 SUSTAINABLE BUILDING CODE
- 7.2 LIFETIME HOMES
- 7.3 ORIENTATION
- 7.4 RENEWABLES
- 7.5 WASTE AND RECYCLING
- 7.6 SUSTAINABLE URBAN DRAINAGE



7.1 SUSTAINABLE BUILDING CODE

The environmental performance of a building will have a major impact on the sustainability of a place and its impact on the planet. All new development in North Solihull should strive towards high performing buildings, reducing the need for energy use and minimising its impact on the environment.

HOMES

National Home Energy Rating (NHER) is a measure of the energy efficiency of dwellings in terms of energy running costs. The energy used in the dwelling is calculated using a detailed model which takes into account the location of the dwelling, its design, construction and insulation, as well as the space and water heating systems, the appliances used and the factors which affect the ventilation of the dwelling. The Partnership will seek to achieve the highest possible rating in discussion and negotiation when land is sold for development.

In addition to the energy performance of a building there is a need to consider the wider environmental impact. The Building Research Establishments (BRE) Environmental Assessment Method (BREEAM) is now widely used in the industry, outlining a wide range of environmental issues within one assessment. The Code for Sustainable Homes will replace EcoHomes in April, and sets out a new National Standard and complements the system of Energy Performance Certificates. The Code covers many of the elements of EcoHomes and add's in Lifetime Homes and issues such as waste minimisation and recycling.

Although voluntary nationally, all new housing development in North Solihull will be required to achieve a Sustainable Homes rating of 3 stars (approximately equivalent to EcoHomes VERY GOOD), striving to the equivalent of Excellent. This will be

done through discussion and negotiation with developers when land is sold for development. It is expected that the standard requirement will be increased through the course of the regeneration project.

What achieving 3 stars means:

A home meeting any level of the Code will have to meet minimum standards for certain items depending on what level is desired. For Level 3 this means:

The home will have to be 25% more energy efficient than one built to the 2006 Building Regulations standards. This could be achieved by one or more of the following:

- Improving the thermal efficiency of the walls, windows, and roof as far as is practically possible (by using more insulation or better glass for example);
- Reducing air permeability to the minimum consistent with health requirements (a certain amount of air ventilation is needed in a home for health reasons);
- Installing a high efficiency condensing boiler;
- Carefully designing the fabric of the home to reduce thermal bridging (thermal bridging allows heat to easily escape between the inner walls and the outer walls of a home);
- Possibly using district heating systems or low and zero carbon technologies such as solar thermal panels or biomass boilers to help heat the hot water.

The home will have to be designed to use no more than about 105 litres of water per person per day. This could be achieved by fitting a number of items such as:

- 6/4 Dual Flush WC;
- Flow Reducing/Aerating taps throughout;
- 6-9 litres per minute shower (note that an average electric shower is about 6/7 litres per minute);
- a smaller, shaped bath – still long enough to lie down in, but less water required to fill it to a level consistent with personal comfort;
- 18ltr maximum volume dishwasher;
- 60ltr maximum volume washing machine.

Other minimum requirements are required for:

- Surface water management – this may mean the provision of soakaways and areas of porous paving;
- Materials – this means a minimum number of materials meeting at least a 'D' grade in the Building Research Establishment's Green Guide (the scale goes from A+ to E);
- Waste management – this means having a site waste management plan in place during the home's construction, and adequate space for waste storage during its use.

But to get to Level 3 you need a further 46.7 points. So the builder/developer must do other things to obtain the other points such as:

- Providing drying space (so that tumble dryers need not be used);
- Providing more energy efficient lighting (both internally and externally);
- Providing cycle storage;

- Providing a room that can be easily set up as a home office;
 - Reducing the amount of water that runs off the site into the storm drains;
 - Using much more environmentally friendly materials;
 - Providing recycling capacity either inside or outside the home;
 - Enhancing the security of the home;
 - Enhancing the sound insulation used in the home.
- (Source: Code For Sustainable Homes, DCLG, December 2006).

NON RESIDENTIAL BUILDINGS

The BRE also have environmental accreditation for non residential buildings covering the following sectors:

- Offices
- Retail
- Schools
- Hospitals

All non residential buildings in North Solihull should achieve a BREEAM rating of VERY GOOD, striving to EXCELLENT.

As this is an ever changing area of sustainability the Partnership should aim to review the targets annually to ensure that best practice is being maintained.



7.2 LIFETIME HOMES

Achieving Lifetime Homes ensures homes are robust and have longevity built-in. A Lifetime Home is created through the incorporation of 16 design features. The importance of achieving Lifetime Homes standard is that it increases the lifetime of the home for individuals and families. This increases the longevity of tenure, vital to individual and community well-being.

The 16 standards are set out in Lifetime Homes 21st Century Living: Quality, Flexibility and Choice. The 16 standards cover issues such as:

- Car parking
- Access
- Approach and entrance
- Internal movement
- Flexibility
- Internal specification.

Further information can be found at www.lifetimehomes.org.uk. The Code for Sustainable Homes will include the principles and standards of Lifetime Homes as part of the rating process. The partnership will seek to achieve Lifetime Homes through discussions and negotiations with developers when selling land for development.

7.3 ORIENTATION

Through good urban design and thoughtful building types, great benefits can be derived by responding to solar orientation. Key issues to consider when responding to solar orientation are:

- Aspect
- Slope
- Distance between buildings
- Building Design

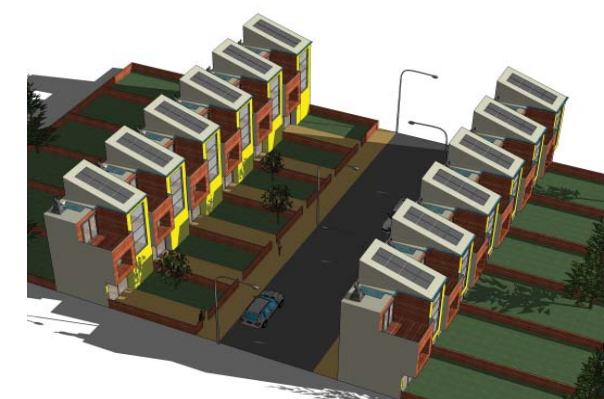
In maximising solar gain it is best to maximise the number of houses orientated to face within 25% of south/north. When developing on south facing slopes, it is possible to further maximising solar orientation without reducing densities as solar penetration is made easier.

Distance between buildings is a key factor. In order to maximise solar gain, buildings should be around 20m apart, although there is a need for flexibility to meet other design code objectives of enclosure and densities. The plans to the right illustrated a potential solution showing that even in winter properties still have good solar gain to key rooms, whilst the scale of the buildings provide a good streetscape. The plans also show how buildings themselves can be designed to maximise solar gain benefits in the form of balconies, solar panels and glazing.

New development in North Solihull shall illustrate how it has responded to solar orientation.



Summer (Noon)



Winter (Noon)



7.4 RENEWABLES

The use of renewable materials in the construction of buildings is encouraged, as is the reuse of existing materials to limited the amount of waste exported off-site. The following principles should be observed:

- Encourage the use of locally sourced materials;
- Minimise the use of imported materials;
- Use materials from sustainably managed sources; and
- Encourage the use of low energy materials, keeping high embodied energy materials to a minimum.

Renewable energy will be encouraged in new developments with the potential to integrate small scale wind and solar energy into existing and new developments. The introduction of biomass and CHP plants will be explored for larger developments. The partnership will seek to implement district heating systems as part of major developments.

New developments will be expected to provide a Renewable Energy Statement illustrating how it has integrated renewable energy into the development. The statement should also consider how the design and construction of the development has taken into account climate change. The Renewable Energy Statement should accompany each planning application.

All new developments will be expected to source/provide energy from renewable sources. The partnership will encourage the introduction and use of renewable energy sources through discussion and negotiation with developers.

7.5 WASTE AND RECYCLING

The storage and collection of rubbish and materials recycling must also be carefully considered in the design of blocks and buildings. Solihull MBC is preparing its recycling strategy and it is expected that all new developments in North Solihull will respond to and complement the approach when it is determined. The general codes for the storage and collection of rubbish and materials recycling are as follows:

- The design of materials recycling and waste storage facilities as part of block design needs to be flexible to accommodate changing priorities, technologies and extent of the recycling programme.
- For apartments, provision will be made on the ground floor of the building to store refuse bins for recycling materials and waste. The facility will be out of public view and accessible by refuse collectors from the street.
- In-home or on-plot storage will also be provided for small scale and temporary collection.
- For all homes with gardens, well designed refuse storage and materials recycling facilities will be provided in covered areas capable of accommodating refuse bins for general waste and for sorted materials for recycling collection.
- Moving the waste and recycling material to the public footpath will be the responsibility of the occupiers and this should be considered in design of the provision and access to the street.
- In all situations, refuse and materials recycling collection facilities (whether residential or commercial) will be protected from the weather and be designed as an integral part of the built form of development proposals. There should be no adverse impact on the public realm from the recycling and refuse facilities.
- The use of materials and overall design of storage should be complementary with that of the built development proposal.

7.6 SUSTAINABLE URBAN DRAINAGE

Sustainable Urban Drainage Systems (SUDS) provide a flexible approach to drainage, with a wide range of components from soakaways to large-scale basins or ponds. The individual techniques should be used in a management train that reinforces and, where possible, follows the natural pattern of drainage. The management train incorporates a hierarchy of techniques. These are:

1. Prevention – the use of good site design and housekeeping measures on individual sites to prevent runoff and pollution (examples include minimising paved areas and the use of sweeping to remove surface dust from car parks),
2. Source control – control of runoff at or very near its source (such as the use of rainwater harvesting, pervious pavements, green roofs or soakaways for individual houses).
3. Site control – management of water from several sub-catchments (including routing water from roofs and car parks to one large soakaway or infiltration basin for the whole site).
4. Regional control – management of runoff from several sites, typically in a detention pond or wetland.

Adopting a holistic approach towards surface water drainage provides the benefits of combined water quality and quantity control, as well as increased amenity value. This is accomplished by managing the increased flows and pollution from surface water runoff that can arise from development. Ideally, the system should utilise a management train and should achieve equal standing in all three of these areas. However, specific site considerations may mean that a balance of benefits is not always achieved.

All new developments in North Solihull are required to consider how the development will impact on the drainage of the development and the wider catchment area. As a means of meeting the requirements of PPS25 all new development will be expected to consider the use of SUDs as part of the drainage solution.

