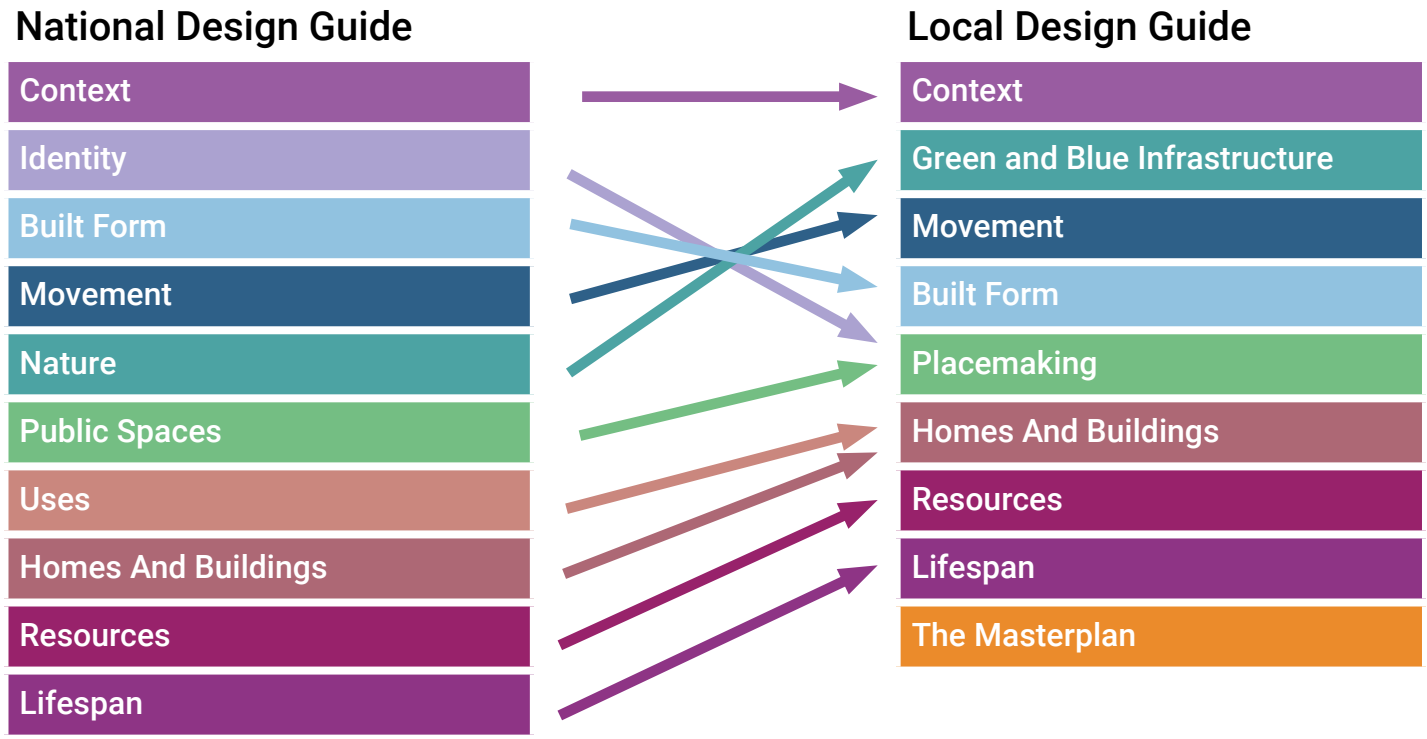
Stockton-on-Tees Local Design Guide

Design Process Overview

Stockton-on-Tees
BOROUGH COUNCIL

The Design Process

This design guide is a clear and concise design toolkit to be used throughout the whole of the design and implementation process for new developments. It has adopted and refined the ten characteristics for good placemaking identified within the National Design Guide (see adjacent). The result is an easy-to-understand design process that ensures the ultimate outcome of delivering well-designed places can be achieved through a layered and collaborative process which culminates in the development of 'The Masterplan' for the chosen site.



Appoint a Design Team

Seek pre-application advice and agree scope of baseline assessments

Context

Understand the site and its context
Development a vision and concept

Engagement

Design Review

Develop and Refine Design

The Masterplan

Engagement

Design Review

Finalise Design

Submit Planning Application

Application Determination

Use the Design Process Checklist to demonstrate how the scheme has been amended based on engagement and design review

Context

Key Design Driver Respond to its setting and fully integrate with its surroundings

Analysis and appraisal must be supported by appropriate baseline assessments

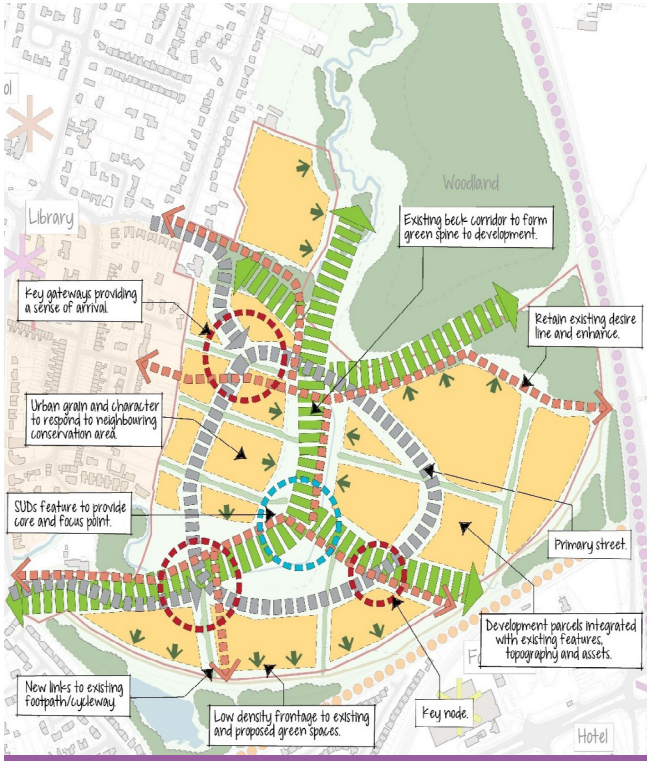
Things to consider

- existing network of natural features
- existing buildings and heritage assets
- topography
- landforms
- drainage patterns and flood risk
- access and connectivity
- views in and out of the site
- sun orientation and any potential overshadowing
- potential constraints

Undertake a **contextual analysis** to understand the wider local context. This can be presented as a context plan

Undertake a **site appraisal** to assess and understand existing features. A combined plan with the context plan can be presented

Respond to and enhance existing features and resources	Respond to the site appraisal and context when shaping your framework plan for the site.



Develop a **framework plan** (or concept plan) Which is informed by the following which will have been identified for the site:

- Placemaking principles
- Vision / development objectives
- Fixes and flexes

✔ **We recommend…**

- understanding the settlement history
- identifying key features, facilities and constraints
- undertaking a comprehensive set of baseline studies and agreeing their scope
- consideration is given to how natural features can inform and be incorporated within your design
- engagement and design review at this important stage
- early engagement with relevant stakeholders

✘ **We recommend that you avoid…**

- restricting analysis to within the site boundary
- overlooking consideration of existing and potential future connections
- disregarding flood risk and how good SuDS design can be embedded within the proposal
- developing a framework plan without having understood the site and its context
- developing site layouts without having undertaken this crucial stage

Green & Blue Infrastructure

Key Design Driver An effective surface water management strategy embeds SuDS within green and blue infrastructure

A surface water management strategy should embed Sustainable urban Drainage Systems (SuDS) within a sites green and blue infrastructure mimicking the response of the existing catchment and its surfaces (with some betterment), and any increased off-site flood risk avoided.

Development of the surface water management strategy will have begun at the context stage as will early engagement with the Lead Local Flood Authority (LLFA) and Northumbrian Water to agree the approach to and adoption of SuDS. The detailed design will then be developed and agreement reached on technical aspects of the design.

Key principles are:

- Treating surface water runoff as close to source as possible through the implementation of a management train

Prevention	Source Control	Site Control	Regional Control
Design to reduce runoff	Green roofs / permeable paving	Swales / detention basins	Retention ponds and wetlands

- Ensuring SuDS deliver on the four areas of good SuDS design

Quantity	Amenity	Quality	Biodiversity

Existing and new natural feature should be integrated into developments	High quality green open spaces should be accessible to all and accommodate multiple activities	An integrated system of landscape, biodiversity and drainage should deliver wider environmental benefits

Natural and designed landscapes are a core element of well-designed places. This can include water bodies / courses, trees, shrub beds, woodlands, meadows, areas of open space, green roofs and walls, gardens, areas for food production and SuDS features.

Through an understanding of 'context' much will have been understood about the site and the surrounding area (including the presence of protected habitats and species). From this it will be possible to not only take account of existing natural features but begin to integrate nature and enhance biodiversity within and beyond the site.

Maintaining and enhancing ecological connectivity through the site will integrate the site with the wider natural environment.

Appropriate buffers will be required to watercourses to deliver or maintain riparian habitat and provide access for maintenance.

All of this will achieve net gains in biodiversity in a manner which will be designed with future management and maintenance in mind both in relation to habitats and any formal hard and soft landscaping.

Well-designed nature-rich spaces can significantly enhance quality of life and contribute to people's health and wellbeing. It is important that natural and designed landscapes are attractive and can be used and enjoyed by everyone. A network of connected greenspaces should be delivered being informed by the sites context and the movement framework. This will facilitate public use and enjoyment and encourage sustainable travel.

This network of greenspaces must have a variety of spaces and features to accommodate a diverse range of uses. Whilst this variety will depend on the scale and nature of any given development (and existing provision within the locality) there is need to ensure they are accessible, multifunctional, promote social interaction, integrate into the environment, promote biodiversity and will be adaptable to change over time.

Where dedicated spaces (such as play areas or other activities) are required, they should be integrated into the network rather than being rigidly separated.

Where a new developments requires on-site amenity open space based on local standards. This space should be provided as a whole piece of land (of 0.6ha) in an arrangement which supports a range of recreational uses. This will not include linear strips of land such as highway verges but it may be possible for SuDS basins to contribute. For SuDS basins to contribute slopes must not exceed 1 in 5, they must have a relatively low flooding frequency (such as 1-5 year return period), contain appropriate signage to ensure it is understood they are part of the drainage system, and in all other regards be usable for its proposed function.

Safety and security are key considerations when designing open spaces with the guiding principles being the achievement of natural surveillance, use of effective lighting on footpaths and cycleways, and ensuring landscaping or other features do not create opportunities for hiding.

For further advice see our technical standards and guidance for landscaping, trees, and play areas.

As demonstrated in our example site, the central green space makes the most of the existing environment, following the path of an existing water course, which in turn connects to the existing woodland to the north of the site. Areas for play are positioned within this central area, being placed logically along routes that provide direct pedestrian and cycle connections through the green spaces and beyond.

We recommend…

- a surface water management strategy begins to be developed at the outset of the design process which is embedded within the sites green and blue infrastructure and meets all key areas of good SuDS design
- early engagement with the Lead Local Flood Authority
- identifying and incorporating existing natural features
- providing and enhancing riparian buffers to watercourses
- ensuring green spaces are designed for all and meet the needs of prospective users
- achieving connectivity, multi-functionality and increasing biodiversity value in the design of green space
- green infrastructure delivers environmental benefits within and beyond the development
- robust management and maintenance plans are prepared

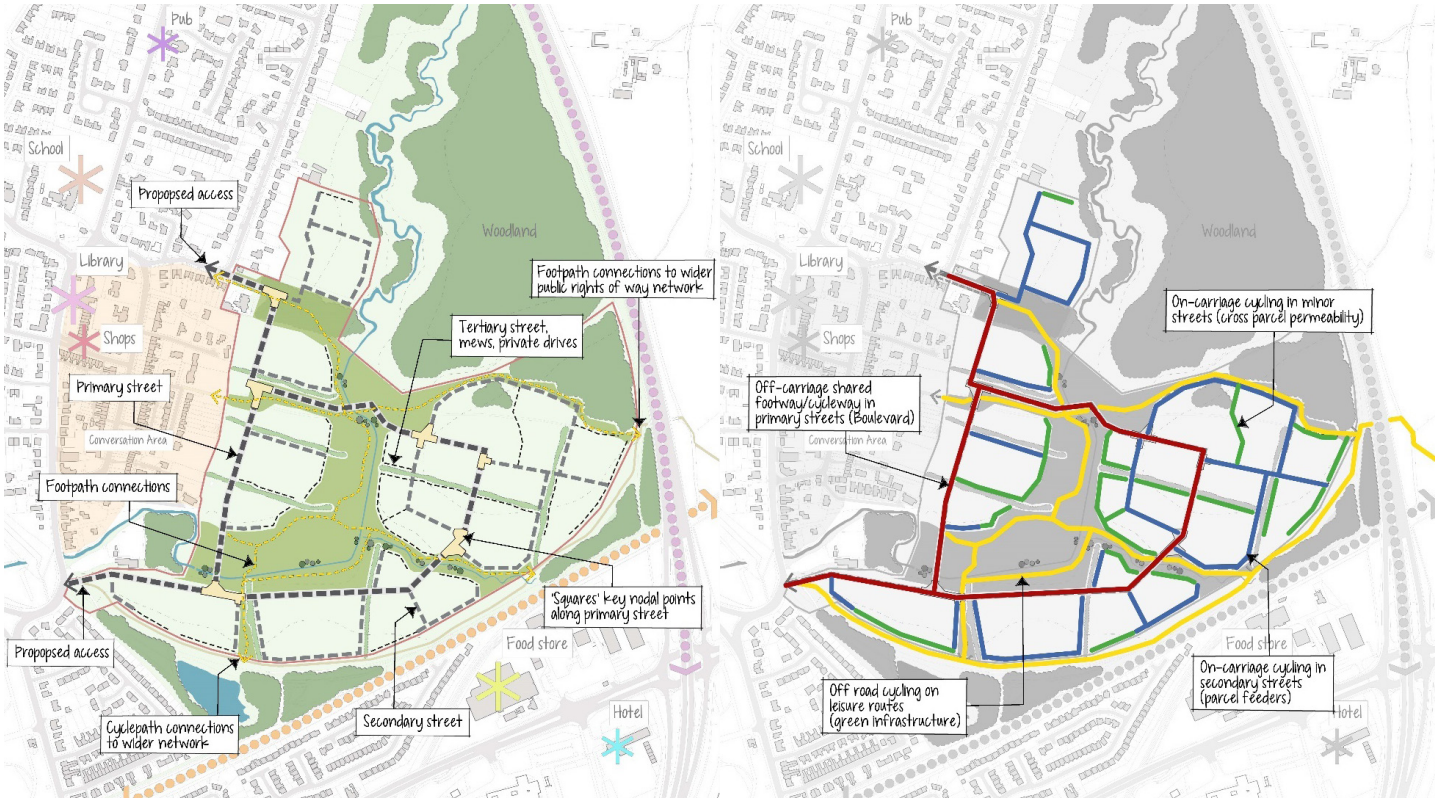
We recommend that you avoid…

- not treating surface water close to source
- considering surface water management later in the design process
- not taking opportunities to maximise the environmental and wider benefits SuDS can bring
- thinking about the site in isolation of the wider natural environment
- considering the site as a 'blank canvas' in terms of biodiversity
- designing spaces which do not foster social interaction
- thinking about the site and spaces in isolation of the wider green and blue infrastructure network
- viewing surface water management as an isolated issue
- considering biodiversity as a standalone matter and not recognising the wider ecosystem services it provides

Movement

Key Design Driver Provide a connected network of streets and spaces within and through the development

Develop a **hierarchy of streets** which delivers a **network of connected streets** which reduces walking distances and supports a series of permeable spaces that work for all users.



Allied to the hierarchy of streets a **comprehensive network of routes for pedestrians and cyclists** should be delivered. For our example site this includes leisure routes through a network of green infrastructure and both on and off-road solutions.

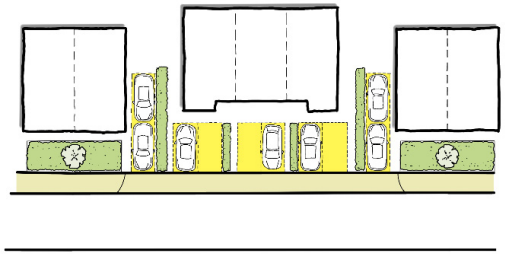
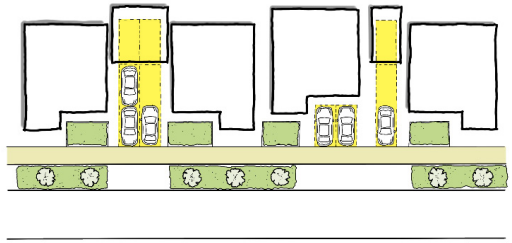
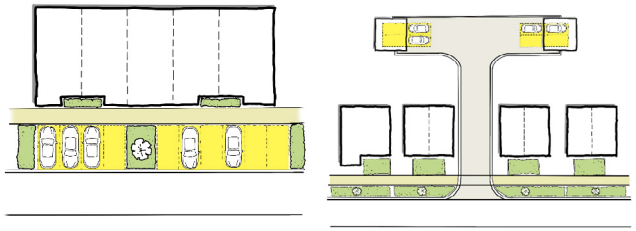
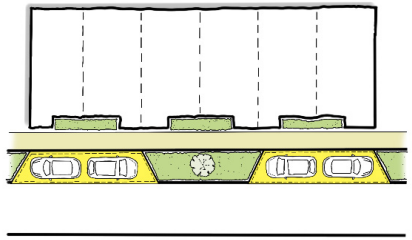
Provide a comprehensive network of routes for pedestrians and cyclists	Provide a holistic approach to parking, servicing and street scene.

Parking strategies for a development should provide a holistic solution to parking and street scene.

This will require consideration of:

- parking demand in conjunction with public transport availability.
- impact of different parking typologies on the streetscape.
- solutions that prevent anti-social parking such as parking on grass verges and street corners.

It will be important to ensued sufficient visitor bays and on street parking is provided (and is equally distributed across a site) to meet the demands of visitors and delivery / service vehicles.

In curtilage (between & in-front of dwellings)	Detached garages
	
Courtyard (to rear of dwellings)	**On street**
	

Typical street typologies (not exhaustive):

Primary Street

Carriageway widths: 5.5-6.7m (subject to public transport needs)

Street planting and greenery: wide green verges with tree planting and sustainable drainage opportunities.

Pedestrian and cycles: minimum of 2m wide pedestrian routes connecting into wider networks beyond the site boundaries. Segregated cycle lanes incorporated in line with LTN 1/20.

Parking access: driveways should be minimised on primary streets to retain stretches of verge planting. Some on street parking may be accommodated off carriageway within bays to prevent unwanted verge parking.

Look and feel: tarmac carriageways will indicate a major vehicle route with formal pedestrian crossing points. Pedestrian and cycleways to be demarcated clearly. Buildings should provide an active frontage and will typically be at a higher density and scale along the primary route to provide a strong streetscape.

Secondary Street

Carriageway widths: 4.8-5.5m

Street planting and greenery: properties should be offset to allow for private front gardens. Selective feature tree planting should be used within these spaces and located to create focal points.

Pedestrian and cycles: 2m paths are generally expected on either side of the carriageway unless an open space forms one side of the street. Paths should be connected to form loops linking to the wider network.

Parking: private driveways and parking courts may be taken directly from secondary streets. In curtilage frontage parking should be minimised to allow for frontage planting. Some off carriageway parking bays should be considered.

Look and feel: they should encourage pedestrian priority and provide green links. Materiality of the carriageway can signal a change from the primary street to a more domestic level through paving or coloured tarmac in key areas, as well as other traffic calming measures such as raised tables. Loop roads should be utilised to increase connectivity.

Typical street typologies (not exhaustive):

Tertiary Street

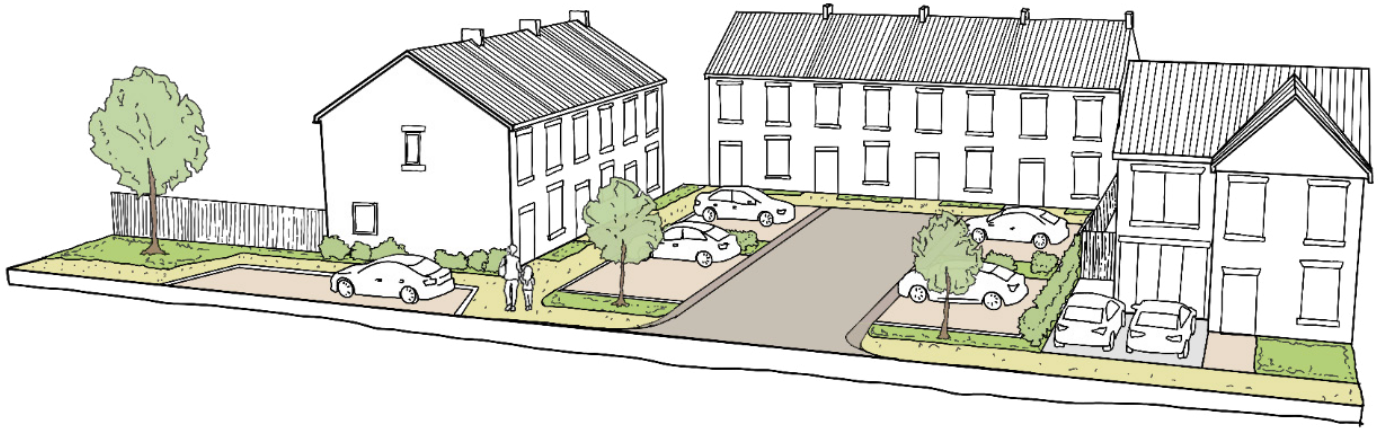
Carriageway widths: typical carriageway (4.8m-5.5m with 2m footpath), shared surfaces (6m with 0.5m service strip to either side) and shared private drives (3.7m)

Street planting and greenery: incidental planting areas should be utilised to break up areas of parking and used as screening for boundaries to homes and pathways.

Pedestrian and cycles: will generally be shared surfaces creating shared priority between vehicles and pedestrians.

Parking: may be small groups of allocated bays in parking courts near dwellings or in curtilage driveways.

Look and feel: the most informal street type with pedestrian priority and low traffic speeds. Look and materiality of carriageways and planting areas help achieve this. Dwellings may have a reduced offset, creating tighter courtyard or mews style. Greenery can be provided in pockets, utilised to elevate corners and increase screening to properties.



Understand the location of **public transport stops/hubs** and how they can be accessed by sustainable means. This should include analysis against the below recommended walking distances to bus stops based on actual walking distances (including barriers to movement). Where additional provision is needed it may be provided through additional stops on appropriate existing or planned streets.

Situation	Maximum recommended walking distance
Core bus corridor with two or more high frequency services	500 metres
Single high-frequency routes (every 12 minutes or better)	400 metres
Less frequent routes	300 metres
Town/city centres	250 metres

We aspire to the creation of neighbourhoods where **streets are for people**, where children can play, and residents can circulate comfortably. It is possible within residential areas to use design (geometry and layout) so that vehicle speeds do not exceed 20mph without applying engineered traffic calming. To facilitate this, streets should be:

- designed to encourage cars to be driven slower and more carefully
- free from engineered traffic calming measures unless considered essential
- straight and naturally calmed streets (rather than those which have been curved and curled to reduce speed)

Careful consideration will be required in the design of junctions and other points of transition with the carriageway must consider the needs of pedestrians and cyclists with the principles of safety, coherence and ease of movement being primary considerations. The design of routes and junctions should be in accordance with guidance within LTN1/20 Cycle Infrastructure Design.

Cycle storage can be through internal storage (as part of a non-habitable room), within a garage, or a purpose-built cycle store. It should be provided in a location safe and convenient for both residents and visitors.

Bin storage and collection points need careful consideration as part of the design process. Minimising distances for moving bins should be a key aim alongside ensuring, where ever possible bins do not need to be taken through a dwelling. We recommend, particularly for terraced houses and homes with stepped access, front bin/cycle stores which are designed into the façade or front garden / porch of the property (see image to below).

We recommend…

- responding to distinctive street patterns in the local area
- reinforcing existing connections and creating new ones
- delivering a hierarchy of streets and spaces to aid legibility and define character
- consider connectivity to wider facilities, services and amenities
- promote walkable neighbourhoods and sustainable transport
- ease of movement within and through the development is provided for both pedestrians and cyclists
- streets include a combination of off-road and on-road solutions as appropriate to their place within the hierarchy
- routes for cyclists should accord with LTN1/20 Cycle Infrastructure Design
- using a range of parking solutions
- parking solutions which consider context, character areas and property types, street scene and neighbour interface
- preventing the potential for anti-social parking
- delivering distributed parking for visitors and delivery/service vehicles

We recommend that you avoid…

- over engineered highways solutions based solely on traffic movement
- streets that lead to 'nowhere'
- a one size fits all approach to the design of streets
- cul-de-sac's or turning heads which restrict the free movement of pedestrians and cyclists
- not maximising connectivity to the wider network of footpaths and cycleways
- relying on a single parking treatment.
- large and poorly designed rear parking courts
- not balancing the amount of parking in front of plots with soft landscaping.

Built Form

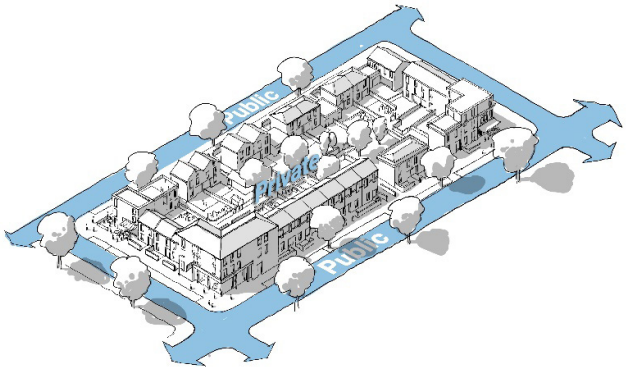
Key Design Driver Develop urban grain that responds to context, promotes distinctiveness and enhances connectivity

As the design framework begins to form, parcels of development land will emerge. These parcels or **blocks** of development form the basis for detailed design and should follow a principle of **public front and private back**. A clear pattern of perimeter blocks should be developed where built form follows a continuous building line around a street block which then contain private gardens or communal spaces.

Urban grain relates to the pattern of development parcels or blocks, and the streets and spaces within a new development and the interaction between them. The urban grain of a new development should respond to and seek to enhance the sites context. Historically more central and urban areas will consist of a 'tight' or **'fine' grain** whereas more suburban and edge of town areas may incorporate more 'coarse' or **'loose' grain**.

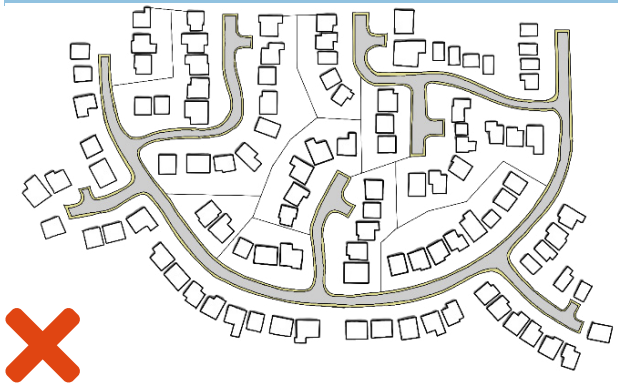
In all circumstances designs should achieve a **compact form of development** with patterns of movement which form a connected grid thus promoting walkable neighbourhoods

Perimeter Block



Fine Grain / Organic Block / Connected Streets

Loose Grain / Streets that lead to nowhere

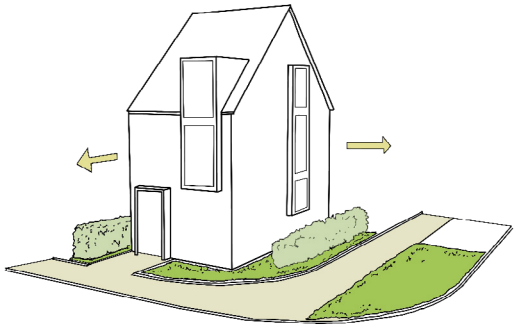


Provide a development which maximises active frontages	Developments should respond to local topography and existing townscape	Provide a development which is distinctive in character and contributes to sense of place

An **active frontage** is a street frontage where there is an active engagement between street life and uses on the ground floor of buildings fronting that street. Front doors and windows of primary living spaces should face out onto the streets and spaces as much as possible.

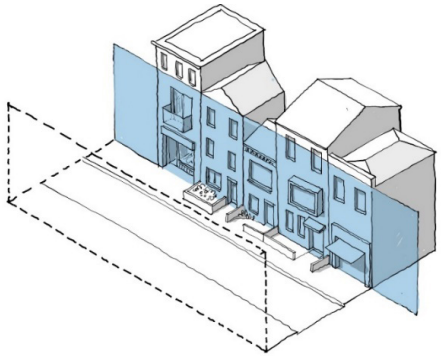
Care should be provided when designing **corner buildings** as they can provide visual landmarks and aid legibility. Gable ends should include windows facing out onto the street providing dual aspect onto the corner.

Dual aspect corner property

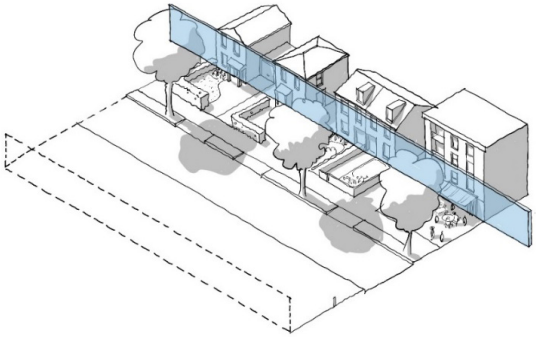


Building lines refer to the offset distance between buildings and the street. They should vary across a site linked to context and in the creation of character rather than being dictated by parking standards or standard house typologies.

Urban Street / Short Offset



Urban Street / Large Offset

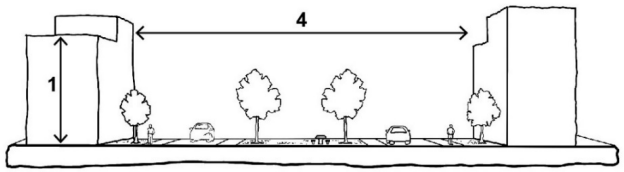


Design should consider scale and massing in response to local topography and existing townscape. In determining the correct response it will be important to assess views, work with existing topography and use a range of techniques to understand impacts.

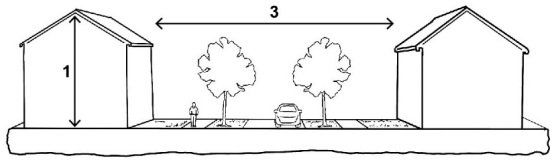
Enclosure of streets and spaces is defined by their width relative to the height of buildings. It is important as it affects how pleasant and welcoming and area feels and how they function. The scale of buildings should relate to the width of the street and spaces and have regard to the potential for overlooking and overshadowing. Generally accepted ratio's are shown adjacent but there is no magic formula and it will be a matter of design judgement.

Character areas should be developed based on the sites context and through a careful selection and combination of different dwelling types, building heights, setbacks, materials, parking types, boundary types, balance of hard and soft landscape, and the amount and character of open space. The number of character areas will be based on the developments scale with the aim being to create distinctive areas which are complimentary to one another and produce a cohesive scheme overall.

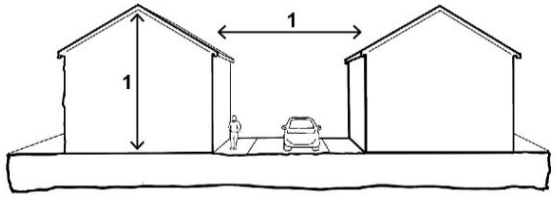
Square Ratio



General Street Ratio

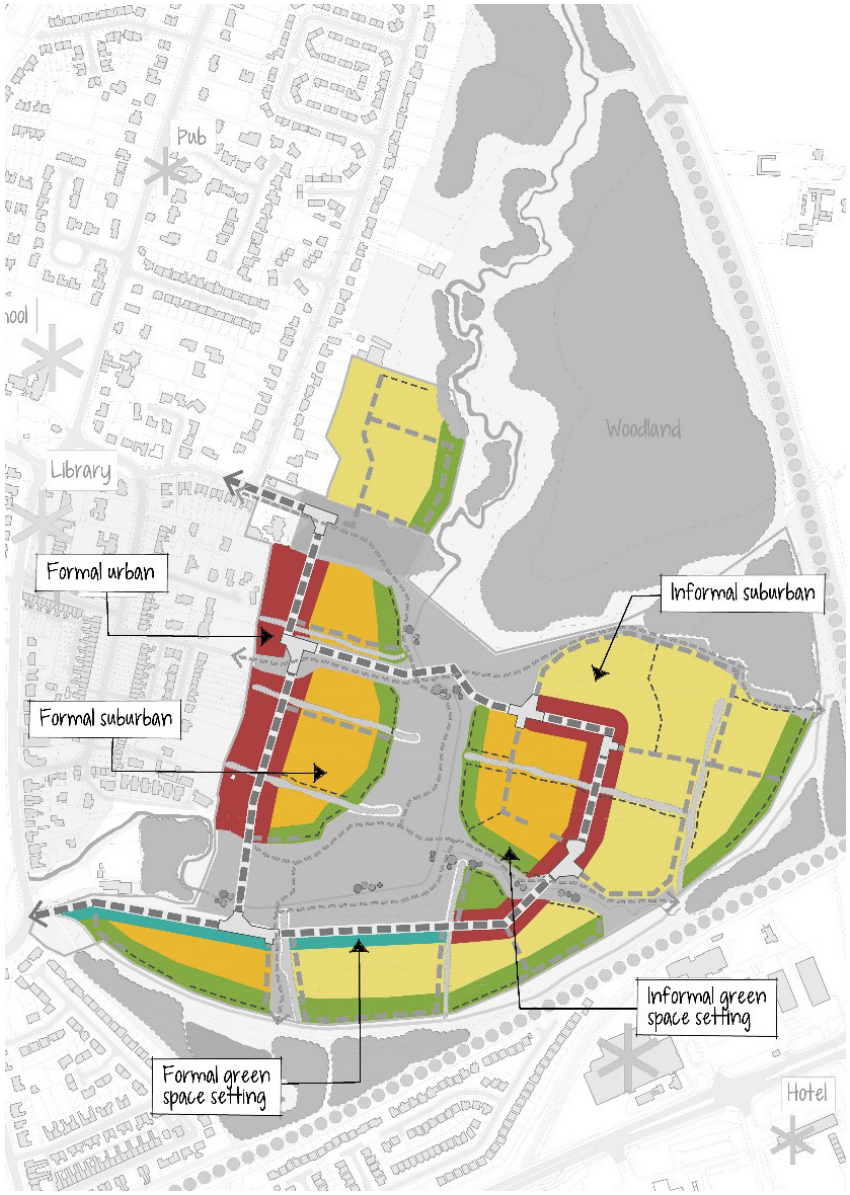


Mews Ratio



The **character areas** detailed below were developed for our example site:

- **Formal urban** - responds to the tight urban grain of the neighbouring conservation area. Terraces, townhouses, and apartments to provide a strong continuous frontage. Primarily 3 storeys.
- **Formal suburban** - terraces and semi-detached dwellings. Consistent setbacks to create formal frontages to streets and spaces. Up to 3 storeys.
- **Informal Suburban** - detached and semi-detached dwellings. Courts and shared surface streets provide a series of defined community spaces. 2 - 2.5 storeys, with three storey elements in prominent locations.
- **Formal green space setting** - grand dwellings set at consistent spacings and setbacks to create order and formality. Soft landscape boundaries with hedges and railings to integrate into the green space setting.
- **Informal green space setting** - typically, detached, or semi-detached dwellings set in generous landscaped plots. Planting in front gardens such as hedgerow and trees to help the residential plot 'bleed' into the wider contextual landscape.



We recommend…

- urban grain responds to the existing settlement
- blocks are provided to deliver continuity and enclosure
- the principle of 'public front and private back' be adopted
- dual fronted and enhanced design of buildings on corners
- scale and massing responds to topography and townscape
- schemes are considered in the third dimension
- the scale of buildings relates to the width of the street
- character areas are developed which respond surrounding character and its distinctive qualities

We recommend that you avoid…

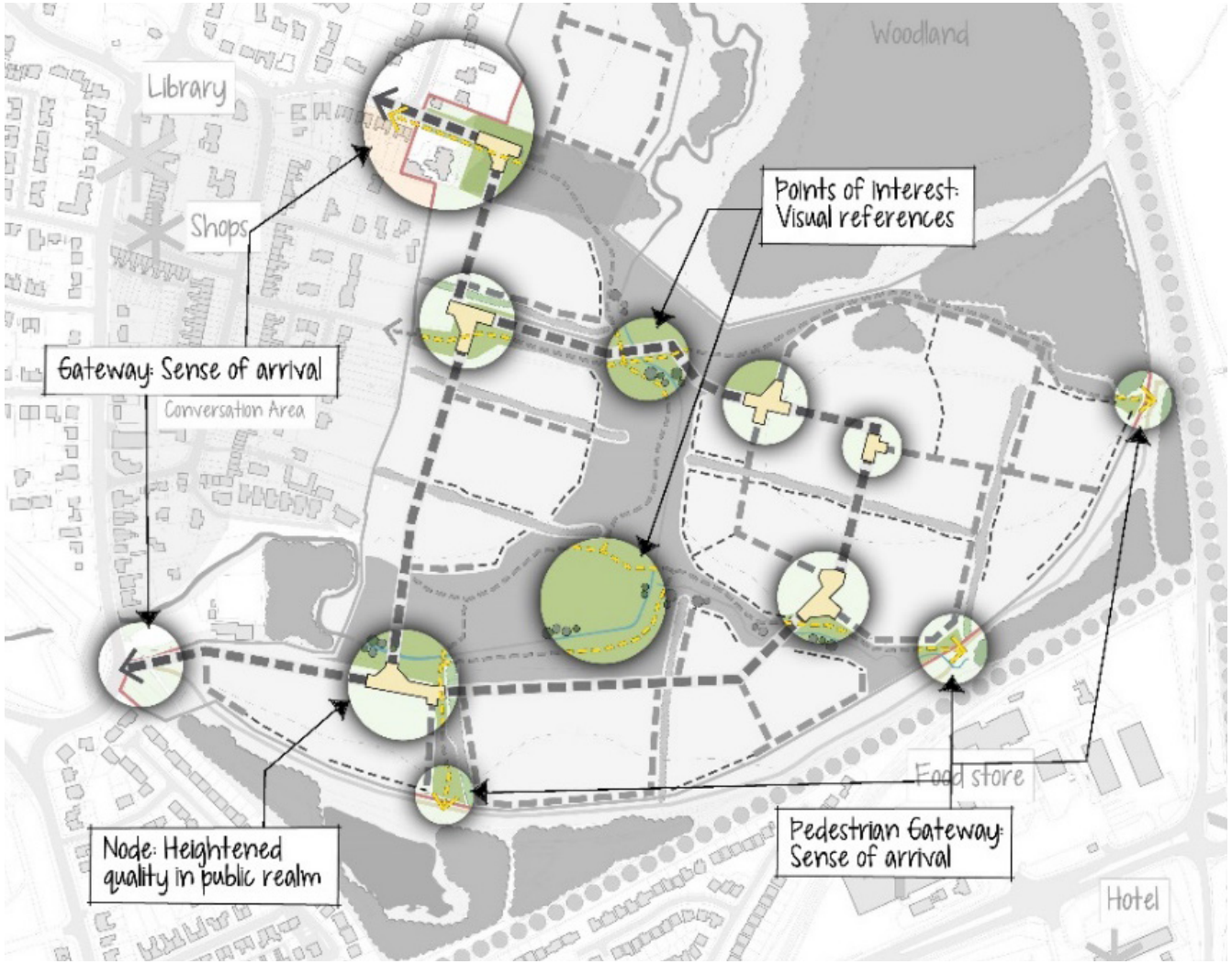
- dead ground floor uses, rear garden fences and blank elevations where they face, or are clearly visible from, the public realm
- staggered and haphazard building lines are avoided as they create disjointed grain
- designing schemes which don't respond to topography or townscape
- limiting building scales to the same heights across the site (particularly where the site is flat)
- excessive use of retaining walls and structures.
- proposing standard stock housing types rather than interpreting the dominant features of the area
- limiting character area implementation to just building embellishments such as feature chimneys or rendered facades.

Placemaking

Key Design Driver An easily navigated place with a 'sense of arrival' and features that assist people to create a 'mental map'

Build upon the hierarchy of streets and character zones to deliver a legible environment through a range of placemaking principles. This may include:

- landscaping, building design and boundaries types linked to character zones
- gateways, squares, and nodes at the intersection of routes.
- built or natural landmarks such as a distinctive building, street furniture or feature trees



High quality streets and spaces which provide welcoming and safe environments	Informed and inspired by predominant materials and crafts to enhance the distinctiveness of a place	Design in quality from the outset and focus enhanced quality in the right places

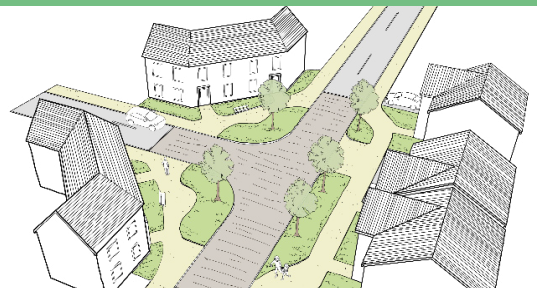
Gateway

Are arrival points to the site that create an early impression to visitors and are an important aspect of creating legible urban environments. The design of gateways will be linked to the nature of the gateway in the hierarchy. On a larger development the main entrance will form a 'Primary Gateway' being of a grander scale and design quality reflecting its place within the hierarchy.

Square

Formal green or hard landscaped public spaces at key locations within the development parcels. These areas should provide an uplift in public realm quality and seek to generate activity and community engagement to create positive social spaces with buildings that address the space with active frontages.

Node



Nodes are points of uplifted public realm or incidental stopping points, often formed at a grouping of features or convergence of key routes, providing a natural dwell or meeting point within an area. Nodes are informal in character and should seek to enhance legibility through the site.

The importance of incorporating trees is articulated throughout our local design guide. New developments should:

- Use the tree design principles (below).
- Deliver tree-lined streets as required by the NPPF. A range of options should be used for the incorporation of street trees given consideration to the locations suggested.

Tree design principles

Species- Select a palette of species taking into consideration context, character, climate, and the need to support biodiversity

Position- Allow space for existing trees and position new trees appropriately. They should not disturb property, infrastructure, or junction sightlines.

Function- Street trees and associated green infrastructure should provide a range of functions (including air quality and noise reduction)

Services- Early co-ordination is essential to ensure street trees do not interfere with underground services.

Specification- Ensuring the survival prospects of a tree by positioning and adequate protection and maintenance.

Boulevard trees

Feature tree

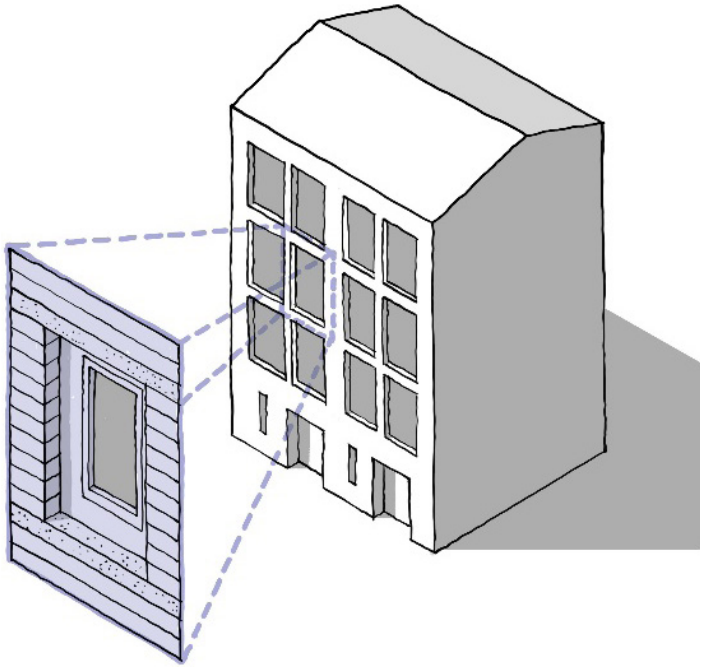
Gateways, Squares and Nodes	Alongside, the provision of feature trees these locations provide opportunities to increase the quantum of trees within a development's street hierarchy. As areas for social interaction or happenings the provision of trees assists in supporting the uplift in public realm and making them comfortable places to dwell.
Verge Planting	Verges will generally be provided higher up within the street hierarchy providing opportunities for boulevard planting along the street. Such provision provides grandeur in these locations supporting the prevailing street character.
Open Spaces Adjoining Streets	Where areas of green and blue infrastructure adjoin a street, they provide an opportunity to integrate trees within the street either to compliment other trees within the street or to introduce greening to the street which would otherwise be devoid of trees.
Within Hard Landscapes	Hard landscapes are often found in locations such as local shopping parades or wide footpaths. These locations provide opportunities deliver tree planting within a hard landscape setting. Opportunities should be maximised in these locations.
Parking Areas	Parking areas that are at 90 degrees to the street (such as courtyard parking areas) provide the ideal opportunity to create planting zones to support tree planting. This helps soften the visual impact within the street scene.
Within Front Gardens	Tree planting can be provided within front gardens to aid privacy and support the street scene. However, this should not be the singular or dominant approach across a development as it is much harder to control the loss of trees by homeowners.
Feature Trees	The incorporation of feature trees can be used in specific gateway, square or node locations to assist in supporting legibility and defining a sense of place. This may be designing around existing trees or carefully located new ones in prominent locations.

The incorporation of appropriate street lighting within a development ensures highway safety, creates safe places, and supports adoption. Street lighting should be considered alongside landscaping proposals to ensure species selection and positioning of trees does not lead to conflicts in the future (including at maturity of trees). The location of columns must not obstruct footways/ footpaths, vehicular accesses or be sited in potentially hazardous positions.

Building materials, construction methods, and architectural detailed will play a major role in reinforcing and enhancing local distinctiveness.

Development should attempt to integrate local vernacular including materials and, art and craft traditions. This can include predominant features such as brickwork, masonry, ironwork, walling, slate and wood craft. Porches, recessed garages, bay windows and other simple details can add a third dimension to otherwise flat-fronted dwellings. Chimneys may also be used to articulate rooflines. Whilst such details will add architectural interest they should not be used where they will serve little or no purpose other than aesthetic. Contemporary approaches that respect the existing local vernacular are encouraged.

The use of sections, elevations, and axonometric drawings can be used to demonstrate key detailing and design elements. These drawings could be focused on a specific element or more broadly across the building depending on what needs to be shown. The purpose of these drawings is to ensure that the approach to design quality is demonstrated and can be safeguarded through such drawings being approved documents as part of the planning application.



Integrating predominant local features

Creating distinctiveness

We recommend…

- a hierarchical approach to key spaces, linked to the movement framework, to aid legibility and provide distinctive transitions between character areas
- using scale, form, materials, and furniture at appropriate locations to aid legibility
- ensuring spaces foster social interaction and aid legibility
- maximising opportunities for street trees
- integrating local vernacular including materials and, art and craft traditions
- considering design quality across all scales
- using drawings to demonstrate key detailing and design elements

We recommend that you avoid…

- only delivering street trees within front gardens
- failing to consider street lighting alongside landscaping proposals
- applying a 'one-size' fits all approach to house types and architectural form
- considering distinctive design qualities as an afterthought
- poor quality materials and finishing
- ignoring the area between the back of the pavement and the face of the building

Homes and Buildings

Key Design Driver Creation of a development which is inviting and works for everybody

Inclusive design relates to the creation of environments that work for everybody. Individuals have equal access, opportunity, and dignity in the use of the built environment. It's about the development as a whole and not just about the design of the individual homes and buildings. An inclusive approach to planning, design and management is an opportunity to use creativity to make places that reflect the diversity of people who will use them.Buildings provide the basis of everyday activity, and high-quality design can facilitate better places to work, live and socialise by providing environments that are comfortable, practical, and promote healthy lifestyles. Key considerations are:

- **Building orientation and fenestration** - maximise sun light into gardens and regulate solar gain into homes
- **Internal room sizes and layouts** - are logical, adequate and functional for their intended use
- **Quality building fabric** - in terms of building material choices and heating/ ventilation strategies.
- **Private amenity space** - is provided to all homes regardless of dwelling type or tenure

Many issues of privacy and amenity can be overcome through adhering to block principles, delivering continuous building lines and understanding scale. However, when designing homes and incorporating them within a site layout it is important due consideration is given to ensure no unreasonable issues of privacy and amenity are caused. There are numerous interventions which can assist in enhancing privacy and amenity.

Communal garden designed to meet the needs of users within a development designed for older people and those with learning difficulties.

Homes and buildings designed to meet the needs of users	Occupants and future users are provided with appropriate levels of privacy and amenity	Creation of a development where people feel safe and secure

Well-designed places create safe communities and reduce the likelihood of crime and antisocial behaviour. Careful design is required with. Key considerations being:

- **Natural surveillance** - is provided by ensuring homes and buildings provide active frontages to streets and spaces
- **Effective lighting** - concentrated at specific locations such as footpaths, cycleways, and other locations of social interaction
- **Primary building accesses** - are taken from the street and are clearly visible
- **Defining public and private places** - can be achieved through appropriately sized front gardens and a physical barrier
- **Soft landscaping** - should seek to avoid creating opportunities for crime such as hiding places or access to the upper floors of buildings Remember to consider soft landscaping alongside the lighting strategy
- **Courtyard parking and service areas** - designed so they appear private and where appropriate provide controlled access

✔ **We recommend…**

- considering inclusive design within all aspects of the design process
- building orientation, fenestration and overshadowing is considered holistically alongside the use of sun path analysis
- prioritising dual aspect buildings
- using landscaping to achieve added privacy and amenity
- maximising natural surveillance and using appropriate lighting in the right places
- public and private spaces are clearly defined

✘ **We recommend that you avoid…**

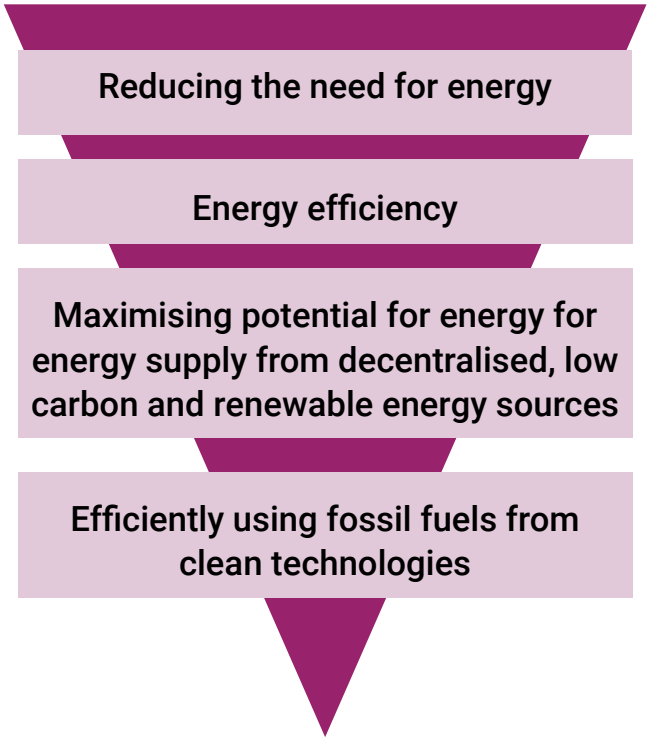
- features that create actual or perceived barriers or contribute to segregation
- placing community uses in locations which are not easily accessible
- providing dwelling layouts, rooms and private amenity spaces which do not meet the needs of residents
- delivering private amenity spaces which are not enclosed and secure
- seeking to achieve more homes than the site can accommodate
- ignoring the impact building scale and topography can have on privacy and amenity
- creating awkward / vulnerable corners and areas to hide
- placing building accesses in locations which can't be seen from the street

Resources

Key Design Driver

Buildings and spaces are adaptable to changing needs and evolving technologies

Management and maintenance considered through design which is well executed on delivery



Climate change is recognised as one of the greatest threats to lives, health, well-being, economy and environment.

An integrated approach must be taken at all levels of design to ensure places and buildings conserve natural resources and respond to the impacts of climate change.

Conserving resources is a fundamental aspect of reducing the impact of human activity which is primarily achieved through reducing greenhouse gas emissions through the applying the 'energy hierarchy'.

Resilience is about ensuring buildings and places are robust over their lifetime considering current and forecast conditions. Considerations previously identified within this local design guide will be of relevance to ensure the potential effects (whether temperature or rainfall) are addressed.

We recommend…

- considering efficiently in a holistic manner
- following the energy hierarchy
- detailing considerations and adopted approach to within an energy statement
- resilience is considered as part of a sites landscape strategy

We recommend that you avoid…

- ignoring the feasibility of decentralised energy generation within major developments
- disregarding the efficiencies within the production / construction phases of development
- not considering flood risk and surface water management at an early stage
- not considering how the layout and aspect of internal spaces can affect resilience

Lifespan

Key Design Driver

Buildings and spaces are adaptable to changing needs and evolving technologies

Management and maintenance considered through design which is well executed on delivery

A well-designed place is adaptable over time, reducing the need for redevelopment and unnecessary resources / waste. Public spaces can ensure adaptability by being delivered in a way which supports multifunctionality and can support a variety of functions.

Buildings should be designed so that they are flexible and adaptable from the outset. This can be achieved at a strategic level through consideration of the nature of design (as open plan forms with a steel and concrete frame construction can create broader spans which make reconfiguration of internal space easier) and embedding options to extend in a cost competitive and resource friendly manner within the design.

Homes should be designed to be accessible, functional, and convenient for a wide range of people with new technologies and associated infrastructure at the forefront of your thinking so appropriate design choices can be made.

Good management and maintenance help deliver places that are resilient and attractive in the long-term. Management and maintenance should be considered throughout the design process regardless of who will be undertaking it.

We recommend…

- buildings are designed to adapt to changing needs and lifestyles
- emerging technologies are at the forefront of your thinking
- you consider management and maintenance throughout the design process
- the design is well executed when delivered

We recommend that you avoid…

- considering adaptability as an afterthought
- believing the designed product will remain unaltered
- suggesting title transfer at an advanced design stage
- considering management and maintenance plans as an afterthought

The Masterplan

Key Design Driver A high quality place that is integrated with its context, provides for all users and works on all scales

Congratulations, you have reached the culmination of the design process which has been brought together in the form of a 'Masterplan' or 'Development Framework'.

If you have followed the steps correctly (including engagement and design review) you will have created a 'place' which delivers positively against the 'Key Design Drivers' within each theme.

You will have completed the Design Process Checklist which provides a narrative and record of the design evolution, including review and engagement, which should be submitted with a planning application.

responds to, integrates with and wherever possible enhances its setting and existing features

provides truly multifunctional green and blue infrastructure, which is informed by the existing, delivers multiple benefits and is accessible to all

is well-connected within and through the site, catering for all modes of transport and tips the balance is favour of sustainable modes

develops urban grain that responds to context and townscape, promotes active frontages, creates a distinctive character and contributes to sense of place

Is easily navigable, designs in quality, and, is informed and inspired by predominant materials and crafts to enhance the distinctiveness

works for everybody, makes people feel safe and secure, and, provides privacy and amenity

is efficient and resilient both now and in the future

is adaptable to change and planned with management and maintenance in mind

Stockton-on-Tees
BOROUGH COUNCIL