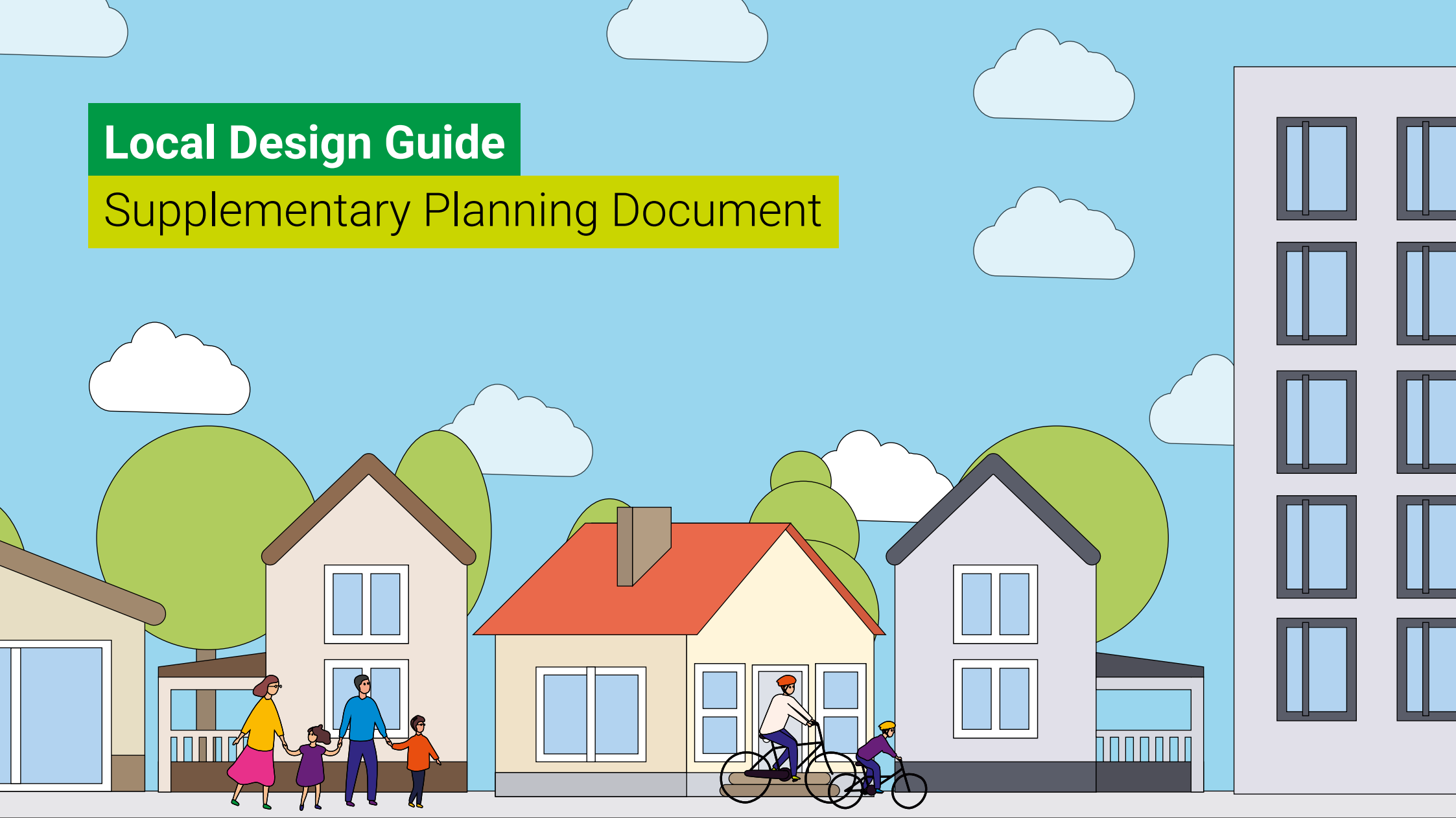


Local Design Guide

Supplementary Planning Document



Stockton-on-Tees
BOROUGH COUNCIL

Contents

1	Introduction	3	4	Appendices	89
1.1	Introduction	4	4.1	Glossary	90
1.2	What we want to achieve and why	5	4.2	Wider reading	98
1.3	Policy and Guidance	6	5	Technical Guidance and Standards Appendices – separate documents covering:	
1.4	Confused by the terminology?	7			
2	Character of the Borough	8		• Landscaping and trees	
3	The Design Process	12		• Play provision	
3.1	Context	17		• Shop front design and advertisements	
3.2	Green & Blue Infrastructure	25			
3.3	Movement	33			
3.4	Built form	46			
3.5	Placemaking	55			
3.6	Homes and buildings	68			
3.7	Resources	78			
3.8	Lifespan	82			
3.9	The masterplan	85			

1 Introduction

1.1 Introduction

This Local Design Guide Supplementary Planning Document (SPD) is part of a suite of guidance documents which expand on policies within the Stockton-on-Tees Local Plan. This design guide is for applicants and agents, including architects, developers, and landowners. Whilst focused on residential development many of the principles identified can be translated to commercial and town centre developments at a large or small scale.

Design is not just about the buildings in a development, it is also about the spaces in and around them, the quality of the relationships between the development and surrounding areas, and the appropriateness of the role and function of the buildings in the context of the area. The Council is committed to ensuring high quality design for all developments and endeavours to maintain positive, proactive discussions at the earliest possible stage with all applicants and agents.

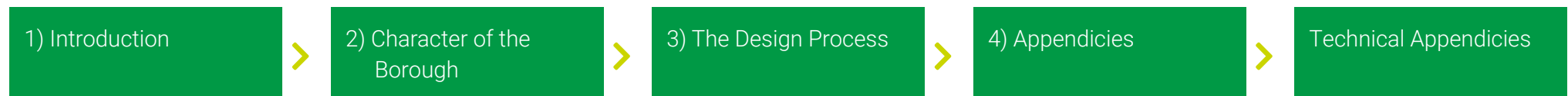
This design guide is a clear and concise design toolkit to be used throughout the whole of the design and implementation process for new developments. It is to be read alongside national and local planning policy as well as other good practice guidance. As a locally prepared design guide the document sets out specific guidance on the design process for Stockton-on-Tees.

This guidance will assist throughout the lifecycle of the design process and allow a common understanding between all stakeholders of what constitutes good design. Therefore, when planning a development, it is extremely important that this document is adhered to at the earliest stage in the process, ideally before any pre-application enquiries are made to the Council for consideration.

Fundamental to the SPD is the 'The Design Process' which is a layered and collaborative process. All planning applications for new development will be assessed against this guidance which will be captured within a 'Design Process Checklist'. This checklist will be submitted alongside planning applications to demonstrate how the proposal has evolved and how the final proposal aligns with guidance (and justifies any instances where it does not). Proposals that do not comply with this guidance and fail to provide justification and evidence may be refused.

Supporting the main report are a series of technical documents which provide detailed guidance on play areas, shop fronts and advertisements, and trees and landscaping.

The SPD is structured as detailed below:



1.2 What we want to achieve and why

Placemaking is a multi-faceted approach to the planning, design and management of places. We want to ensure true placemaking is achieved to deliver quality places that people want to live, work, play and learn in. There is demonstrated link between good design and improved quality of life, equality of opportunity and economic growth. Alongside these social and economic values, the embedding of environmental values within design is essential. This design guide illustrates how successful placemaking and quality design can be achieved which is sustainable and long lasting for current and future users.

Good design doesn't necessarily cost. It can, if implemented at an early stage, reduce costs during the design and construction process. By investing in the right team of experts and following the design process advocated within this document good design will be embedded from the outset. This will alleviate issues of trying to fix problems later which causes delays and costs. Value engineering should

form part of the design process rather than an afterthought to ensure that the whole life cycle cost is reduced whilst achieving the highest standards of design.

The achievement of variety and choice should be the aim of all new development. This will be achieved through steering away from creating 'clone housing estates' and concentrating on providing communities that are attractive and distinctive, giving the place an identity that separates them from the standard kit (identikit) approach to modern mass house building.

Successful places evolve over time, sometimes organically growing from a central point and expanding over time whilst adapting to the needs of the purpose they serve. Neighbourhoods and communities evolve in the same way and to ensure that a new suburban/urban extension is integrated into its surroundings, it needs to take the best of what has gone before and build on that to meet the demands of the future community.

Good Design achieves places that

are inviting and work for everyone

provide character and distinctiveness

provide successful public realm and open space

are easy to get to and move through

respond to context

capitalise on existing features

offer variety and choice

are able to adapt well

intergrate with nature and enhance biodiversity

are efficient and resilient

clearly define public and private spaces

1.3 What we want to achieve and why

The quality of design in the planning process has become far more prominent in recent years and the National Planning Policy Framework (NPPF) emphasises the importance of good design and clearly states that permission should be refused for development of poor design quality.



Both the NPPF and NPPG are clear that the National Design Guide (NDG) and National Model Design Code (NMDC) are important tools for addressing and improving design quality. They also highlight the importance of developing design guides, design codes and masterplans at a local level as they reflect local character and design preferences.

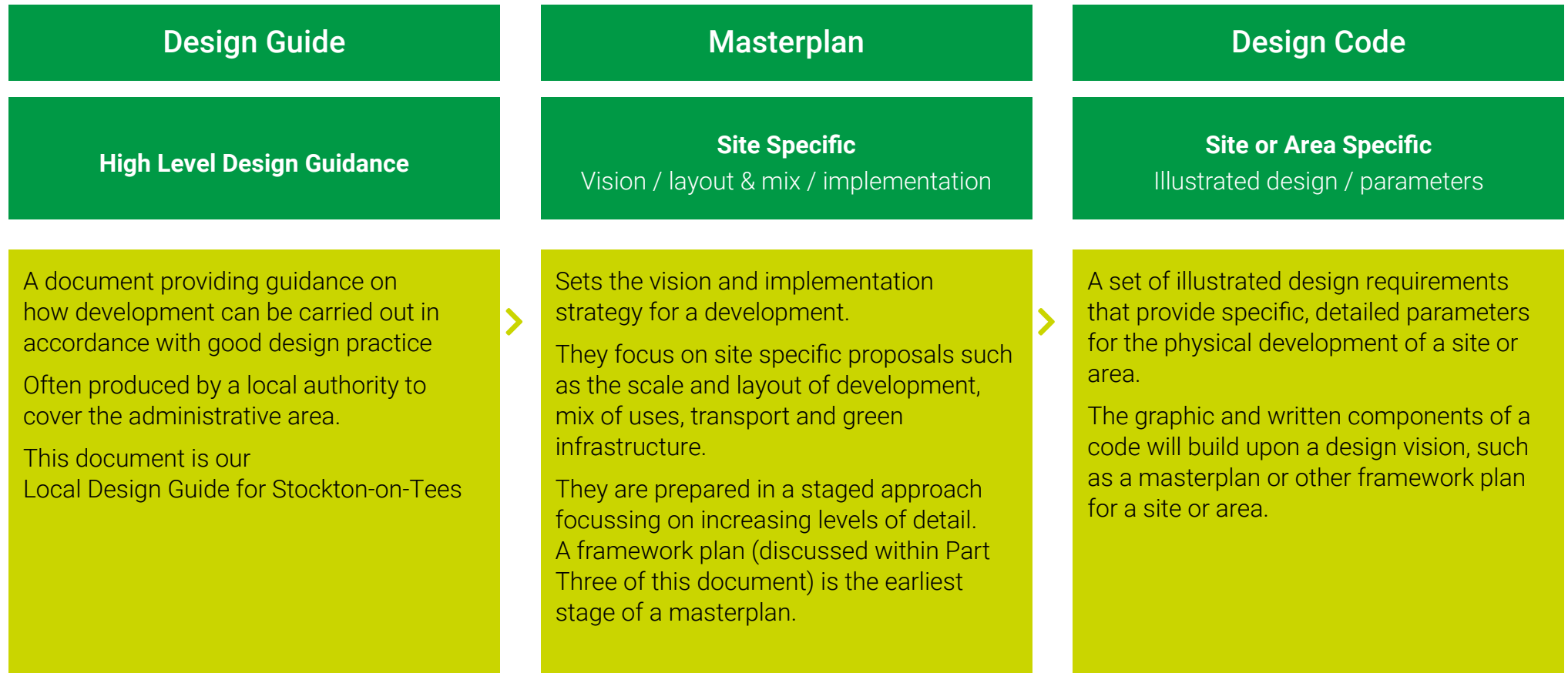
The Stockton-on-Tees Local Plan was adopted in 2019 setting out policies and

proposals to guide planning decisions and establishes a framework for sustainable economic growth and development in the Borough up until 2032. This Local Design Guide SPD is part of a suite of guidance documents which expand on policies within the Stockton-on-Tees Local Plan. The overarching design policy within the Local Plan is Policy SD8 – ‘Sustainable Design Principles’ and will be the starting point

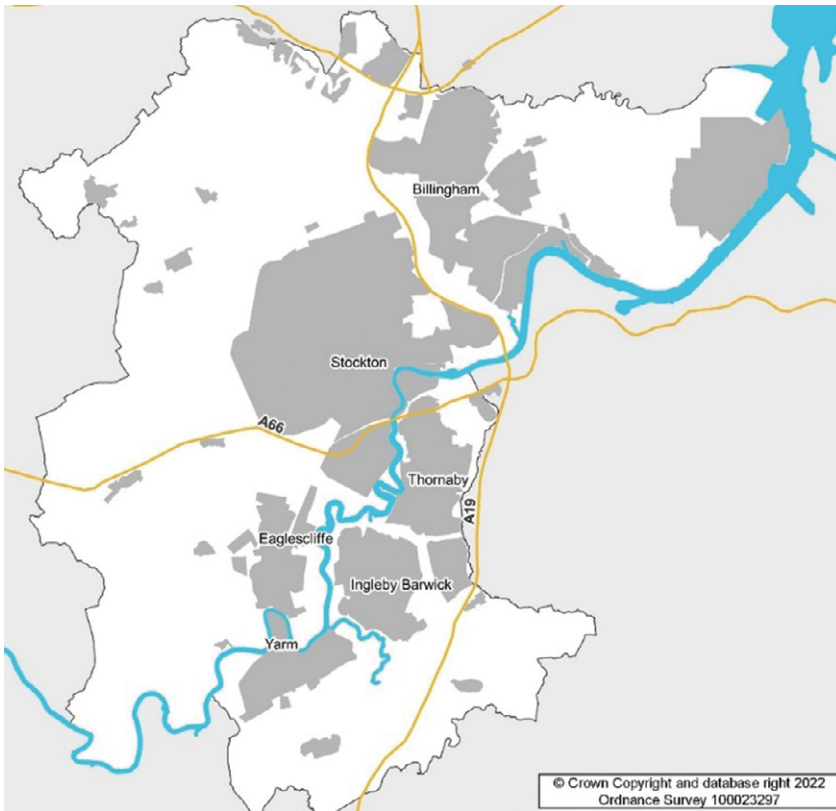
for considering applications in relation to design. This Local Design Guide SPD provides detailed advice and guidance on how this and other policies within the Local Plan can be implemented through development proposals. Policies of the Local Plan which each theme of ‘The Design Process (section 3) are providing advice and guidance on are outlined within the ‘wider reading’ appendices (section 4).

1.4 Confused by the terminology?

Terminology can be confusing and whilst we have attempted to make this document as easy to understand as possible there will always be some terminology which will need to be explained. For this reason, a 'glossary' is provided within Part Four and the following diagram sets out the purpose and relationship between design guides (this document), masterplans and design codes.



2 Character of the Borough

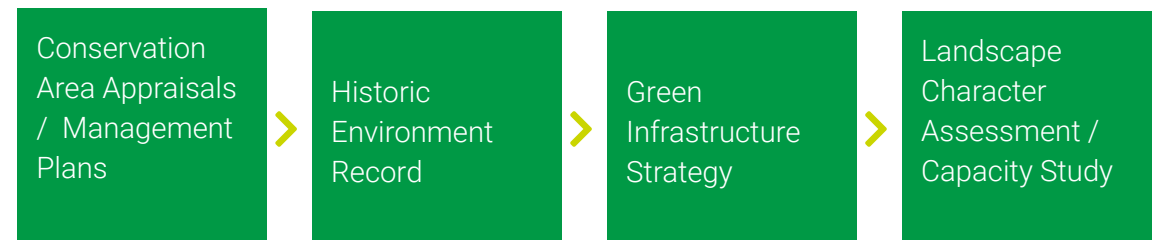


Located in the centre of the Tees Valley in the North East of England, Stockton-on-Tees is a Borough of wide contrasts with a mixture of busy town centres, urban residential areas, rural villages, beautiful countryside and environmental assets. The majority of residents live within the main settlements of Stockton, Billingham, Thornaby, Ingleby Barwick, Eaglescliffe and Yarm which are separated by natural valleys and their associated watercourses.

Unlike many places, there is no single 'Stockton style' as the historic growth of the borough has left a varied pattern of development from different periods. This is demonstrated best through the intensive house building in the 1950's to 1970's which saw

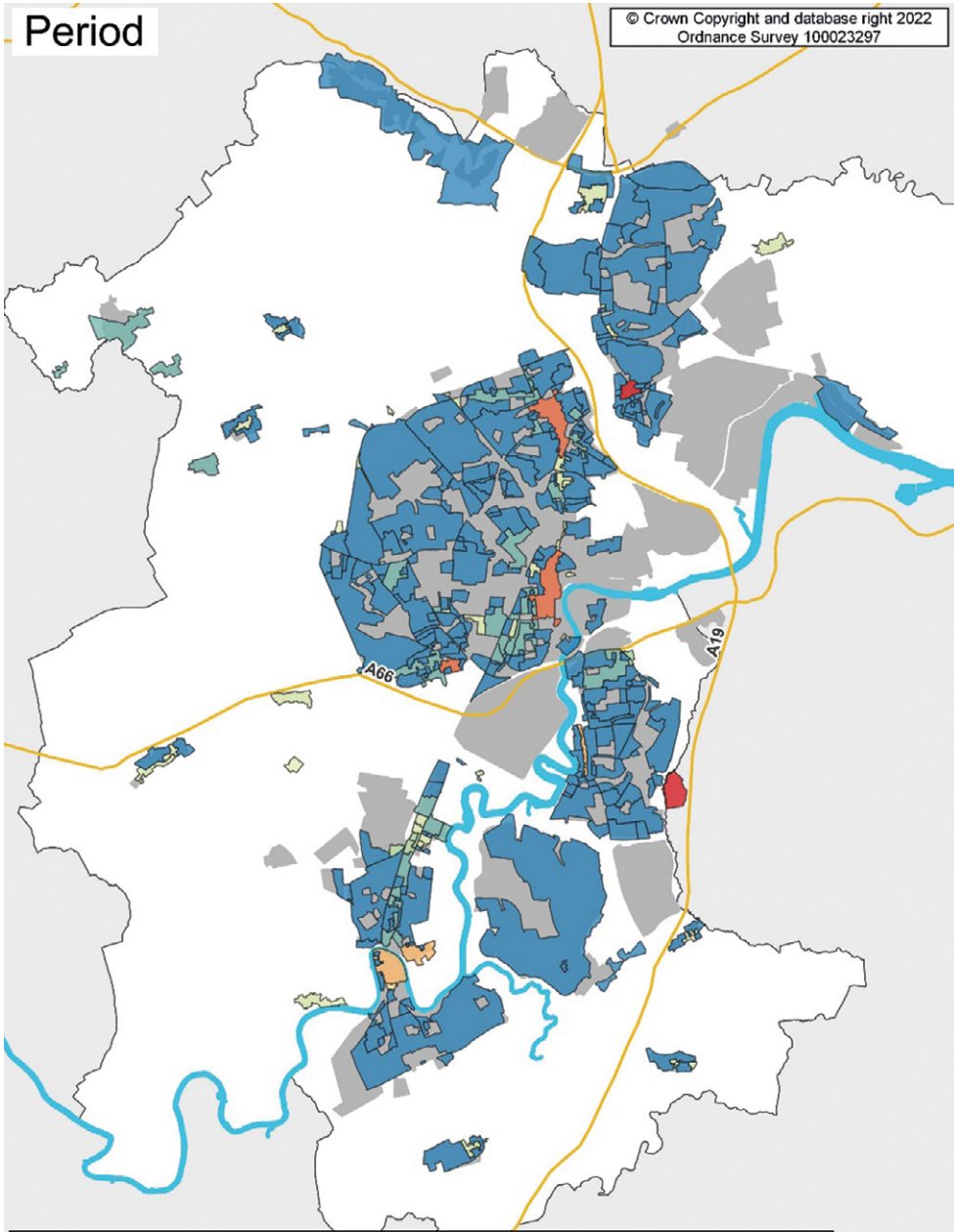
some of our main settlements grown and swallow what were the villages of Hartburn, Norton and Egglecliffe. This pattern of development has led to areas demonstrating architecture, materials, built form and street patterns of the period they were build. Owing to this varied development pattern an understanding of 'context' (see 3.1 Context) is essential to ensure proposals respect the character of the area responding to the scale and materials of the surrounding buildings, dominant features of the area and distinctive local street patterns.

There are numerous documents and resources which will support in understanding the character of Stockton-on-Tees. Whilst this is not an exhaustive list these include:



Period

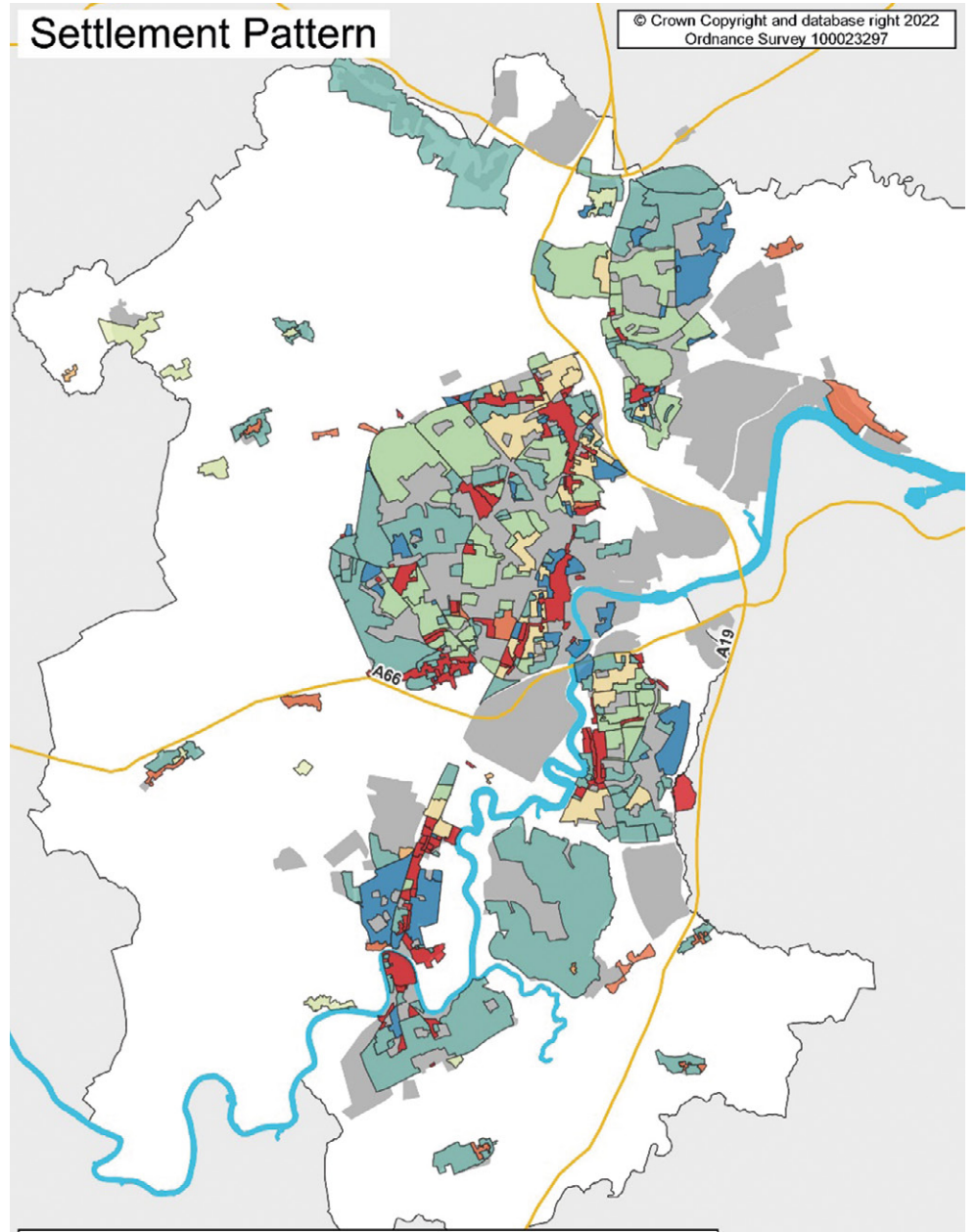
© Crown Copyright and database right 2022
Ordnance Survey 100023297



- | | | |
|---------------------------|--------------------------|-------------------------|
| Medieval | Medieval to Modern | Post Medieval to Modern |
| Medieval to Post Medieval | Post Medieval | Modern |
| Medieval to Unknown | Post Medieval to Unknown | |

Settlement Pattern

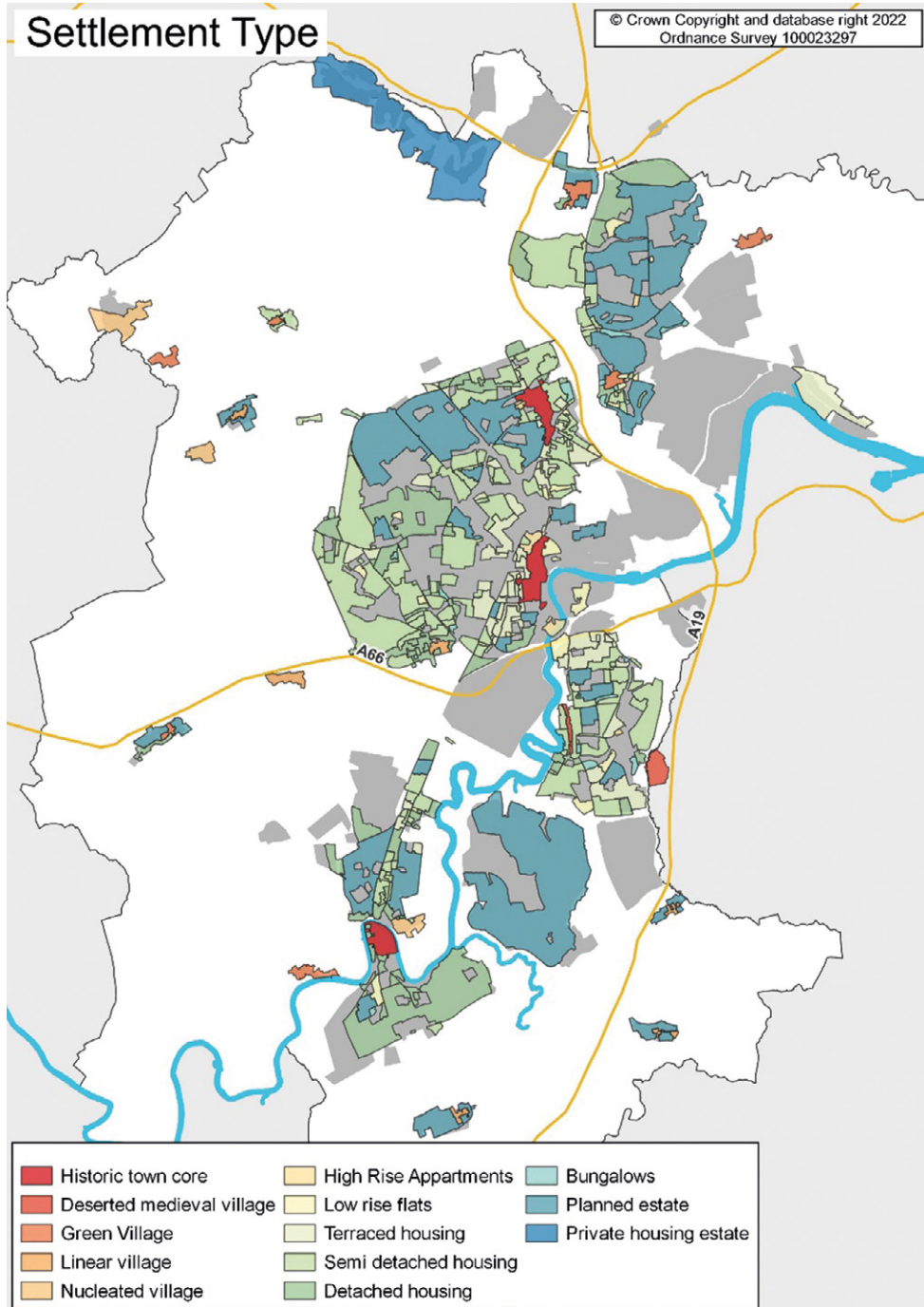
© Crown Copyright and database right 2022
Ordnance Survey 100023297



- | | | |
|--|-------------|----------------|
| Linear plots perpendicular to the road | Grid system | Cul de sac |
| Linear | Nucleated | Other patterns |
| Farm complex | Geometric | |

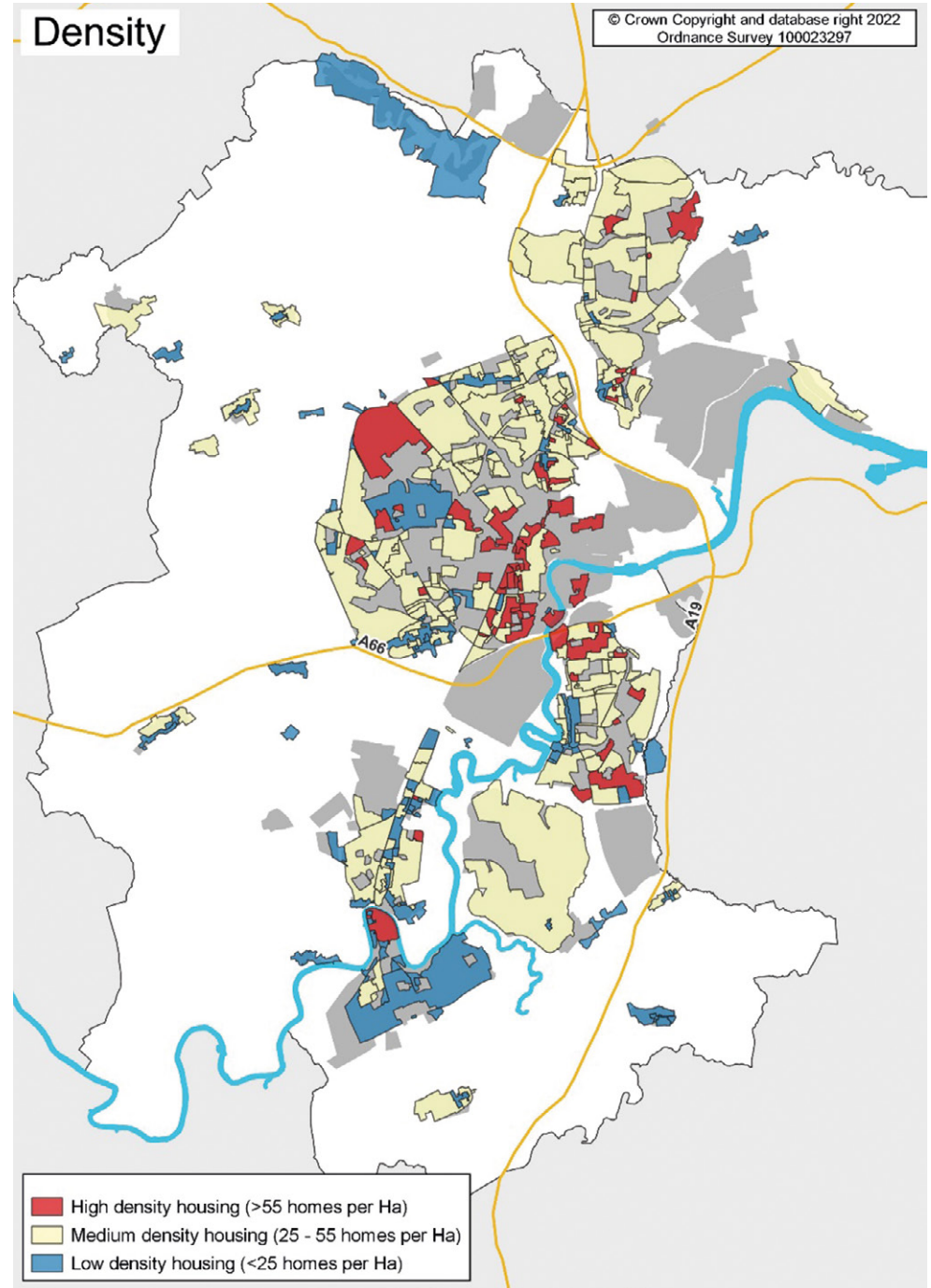
Settlement Type

© Crown Copyright and database right 2022
Ordnance Survey 100023297



Density

© Crown Copyright and database right 2022
Ordnance Survey 100023297



3 The Design Process

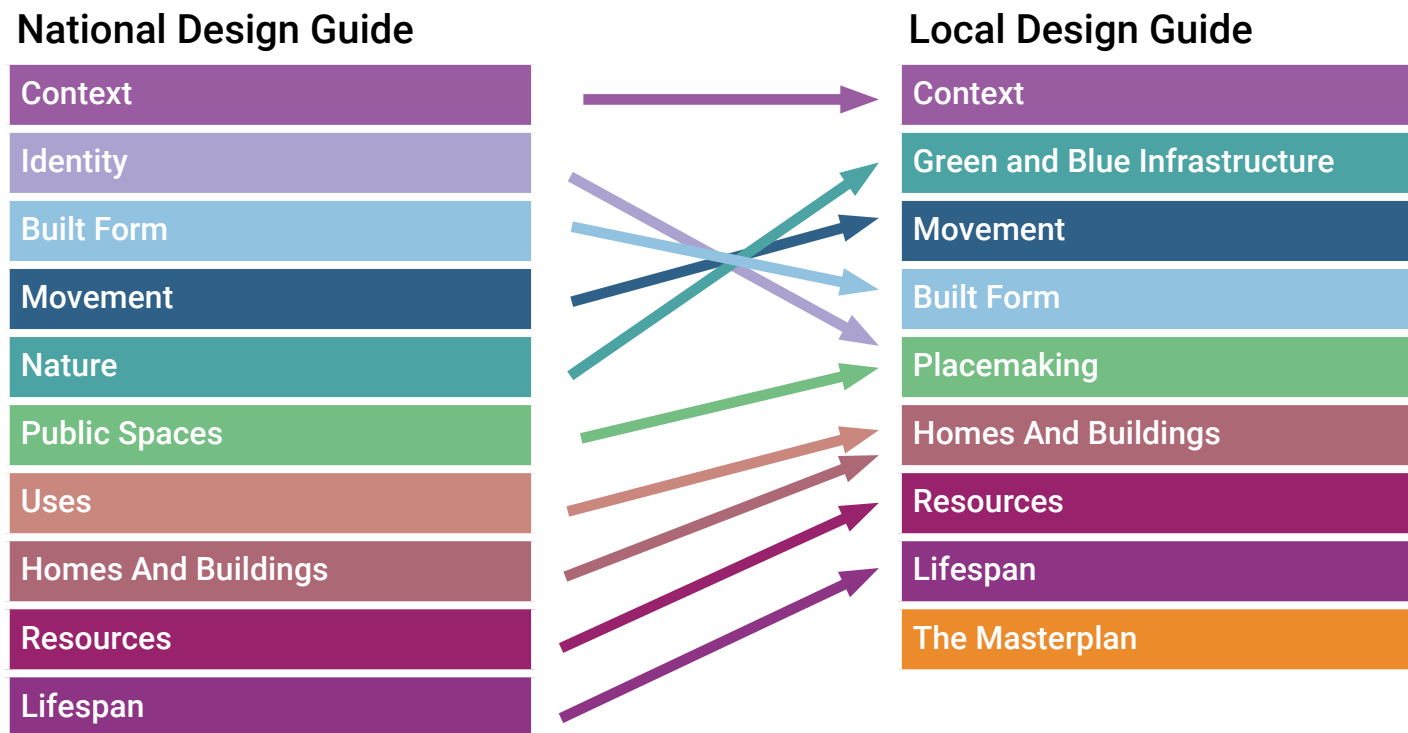
“Well-designed places have individual characteristics which work together to create its physical Character. The ten characteristics help to nurture and sustain a sense of Community. They work to positively address environmental issues affecting Climate. They all contribute towards the cross-cutting themes for good design set out in the National Planning Policy Framework”

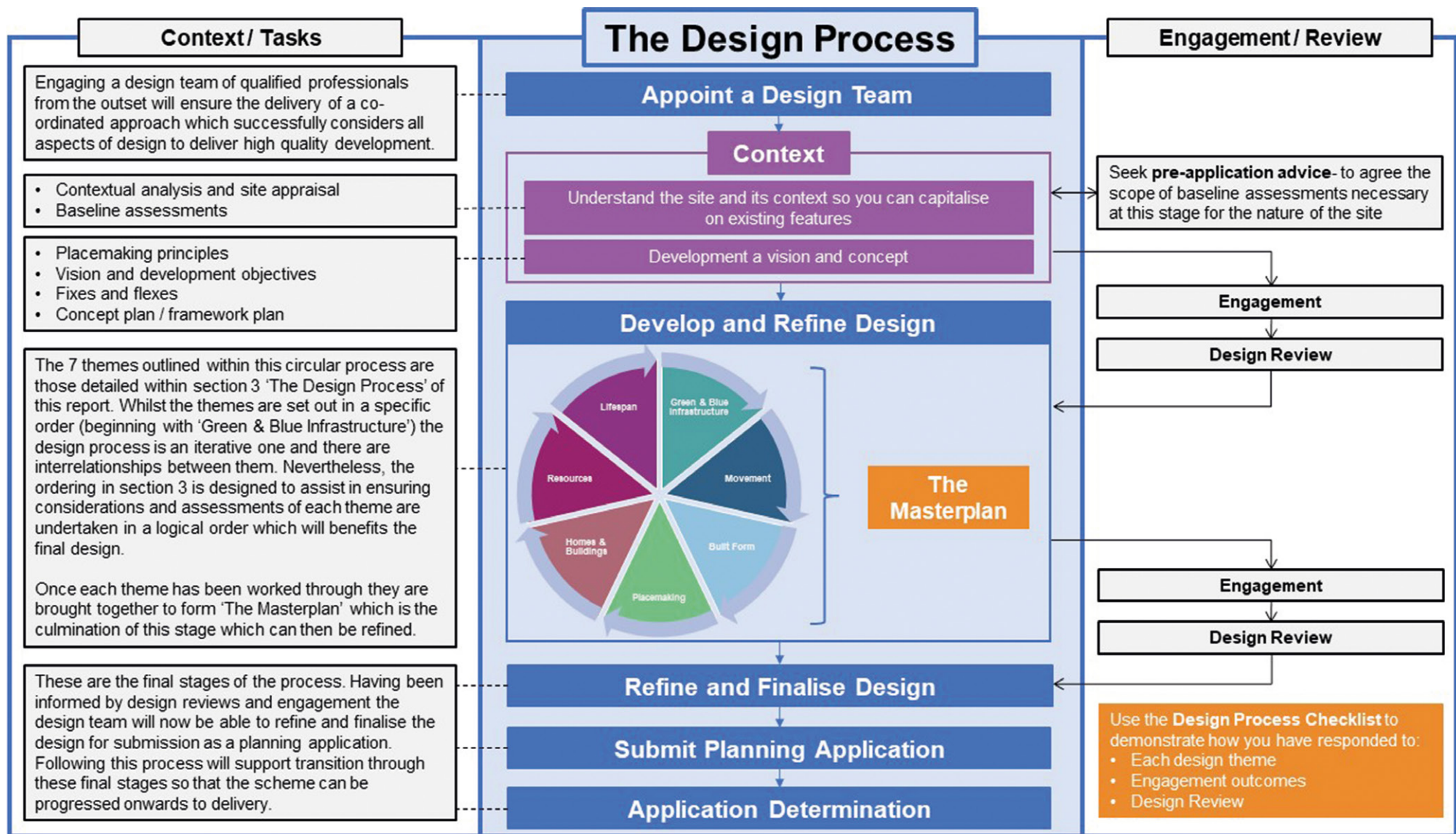
Pg 8, National Design Guide

This Local Design Guide has adopted and refined the ten characteristics for good placemaking identified within the NDG. The result is an easy-to-understand design process that ensures the ultimate outcome of delivering well-designed places can be achieved.

The adjacent image details how the ten NDG placemaking characteristics have been adopted and refined to the themes contained within The Design Process of this Local Design Guide.

The Design Process is articulated in detail overleaf being a layered collaborative process which culminates in the development of ‘The Masterplan’ for the chosen site which encapsulates all stages leading to it.





The Design Team	Pre-application Advice and Design Review	Who to engage/consult?				
<p>Designing new developments requires the engagement of qualified professionals from a wide range of disciplines. Good design can only be achieved where professionals are brought together as a team from the outset. This will ensure the collaborative and co-ordinated approach to design advocated within this document can be achieved. A design team approach fosters the sharing of ideas and leads to better outcomes.</p> <p>Urban design helps bring subjects together to achieve better placemaking. A design team may include the following disciplines/individuals although this is not an exhaustive list, and the makeup of a team will vary by the nature and scale of the development proposed.</p> <ul style="list-style-type: none"> • Developer/agent • Architect • Town Planner • Urban Designer • Landscape Architect • Archaeologist/Heritage expert • Engineers (structural, highway, drainage, lighting) • Ecologist • Arboriculturist • Experts in development economics, housing, sustainability, accessibility, and crime prevention 	<p>The Council provides a pre-application advice service to those looking to submit a planning application. All pre-application enquiries are confidential and will not be shared with the public. Enquiries will be considered by the Local Planning Authority, and they will share it with relevant officers to help give you the best possible advice and guidance.</p> <p>Design review is an established way of improving the quality of design. It involves the assessment of a development proposal by a panel of multidisciplinary professionals and experts. We advocate the use of the Council’s Design review panel but equally support an independent assessment undertaken through another independent panel.</p> <p>Design review should be proportionate to the scale and nature of development. Accordingly, the number and expertise of members will be guided by these considerations. Design review undertaken by the Council will be completed using the ‘Design Process Checklist’ which will assist applicants and their design team to respond effectively.</p> <p>This checklist will also be used by applicants to communicate their design and demonstrate how comments received have informed their design. It will provide an audit trail of the design evolution which can be submitted alongside a planning application (ideally within the Design and Access Statement).</p>	<p>To ensure design is well informed and achieves the aspirations of local communities’ effective engagement / consultation prior to formal submission forms an essential part of the design process.</p> <p>Engagement will be appropriate for most developments, but it should be proportionate to the scale and nature of the proposal. Engagement will be undertaken with relevant Council officers through pre-application advice and design review, but we support discussion outside of these formal processes where appropriate.</p> <p>The design team should engage with statutory authorities and organisations throughout the design process as appropriate. This could include:</p> <table border="1" data-bbox="1491 815 2134 1273"> <thead> <tr> <th data-bbox="1491 815 1812 871">Local</th> <th data-bbox="1816 815 2134 871">National</th> </tr> </thead> <tbody> <tr> <td data-bbox="1491 874 1812 1273"> <ul style="list-style-type: none"> • Local communities • Town/parish councils • Local interest groups • Police/fire services • Tees Valley Clinical Commissioning Group • Tees Valley Nature Partnership • Tees Archaeology • Utility companies </td> <td data-bbox="1816 874 2134 1273"> <ul style="list-style-type: none"> • Natural England • Historic England • Highways England • Environment Agency • Sport England • Network Rail </td> </tr> </tbody> </table> <p>At an early stage it is important to understand and catalogue the main stakeholders you need to engage.</p>	Local	National	<ul style="list-style-type: none"> • Local communities • Town/parish councils • Local interest groups • Police/fire services • Tees Valley Clinical Commissioning Group • Tees Valley Nature Partnership • Tees Archaeology • Utility companies 	<ul style="list-style-type: none"> • Natural England • Historic England • Highways England • Environment Agency • Sport England • Network Rail
Local	National					
<ul style="list-style-type: none"> • Local communities • Town/parish councils • Local interest groups • Police/fire services • Tees Valley Clinical Commissioning Group • Tees Valley Nature Partnership • Tees Archaeology • Utility companies 	<ul style="list-style-type: none"> • Natural England • Historic England • Highways England • Environment Agency • Sport England • Network Rail 					

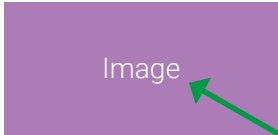
Each theme within Part Three is designed in the format shown below to aid the reader and we have utilised our example site to demonstrate how guidance and principles can be used in practice.

Section title

Key Design Driver
 tem rest, cupatata cusam expe pelesti antorepudam qui ut mollia culpato illicue ducias debis non remporia cus



Solorect enditat iosaerae serate pellendae ipicabor simil is elesernat optatur, utemod que num sus eosam illico temoluptaspe vel ipid et vitatis prere laut quidemperis aut liam net, sima volupti cori volupta quiaspe rspedit asperum nobis eos voluptisini beatem volecea quidem si ipsam, sitis ari tem qui berumque solupti busciam ut porerehenis doluptatem ut min nosam, ut eos anis et pa dolorepeles et voloremporum sam apietusda...
 Hento errum et quasper ibusdam ate prateni squaspis dolorrovit pa voloreperum alicat.
 Aspudicenis aborepedi alit eaque eos alique conse dignist aut quatem reneris cusanditi ut pliquae lat doloratecto mincta poria cullo ea



- ✓ **We recommend...**
 - Solorect enditat iosaerae serate pellendae ipicabor simil is
 - elesernat optatur, utemod que num sus eosam illico temoluptaspe vel ipid et vitatis prere laut quidemperis aut liam net, sima
 - volupti cori volupta quiaspe rspedit asperum nobis eos voluptisini
- ✗ **We recommend that you avoid...**
 - Solorect enditat iosaerae serate pellendae ipicabor simil is
 - elesernat optatur, utemod que num sus eosam illico

Key Design Driver

short message illustrating what we are trying to achieve under the sub-heading

Plan/diagram

illustrating visually the design response for the chosen example site. Other design responses will be appropriate based on the site in question

Section Text

detailing in concise terms what should be achieved/ considered within the given topic

Illustrations /Photographs

illustrations are used to demonstrate concepts and design choices whilst photographs are used to provide examples of good practice

'We recommend...' and 'We recommend that you avoid'

bullet points lists denoted by a ✓ and ✗ respectively to collate the key points from this section into a condensed and clear format to be a quick reference point.

3.1 Context

- Understanding the site and its context
- Capitalising on existing features
- Developing a vision and concept

Understanding the site and its context

Key Design Driver

Respond to its setting and fully integrate with its surroundings



Before a design concept is considered for any development, the first step in the design process is to understand how the development site can respond to its setting and fully integrate with its surroundings.

This means thinking beyond the site boundary using a **contextual analysis** to understand the wider local context. This analysis should consider (but not be limited to): the history, culture, and heritage of the wider settlement; the landscape character; topography and geography; biodiversity and ecology; views inwards and outwards; green and blue infrastructure (including flood risk); any sustainable transport connections, streets and public spaces; built form; and any nearby facilities.

This contextual analysis can be presented in the form of **context plan** as shown adjacent for our example site. To assist in shaping the concept and in conjunction with the next stage of the design process some technical baseline studies may be required. They should be proportionate depending on the nature of the site, its location and the size of development proposed. It is essential that this work is undertaken at the earliest possible stage and that their scope is agreed with the local authority.

This first step establishes a sound basis, which when combined with the **site appraisal** (discussed later in this theme), will provide an evidenced platform from which to create a **design concept** for the development.

✓ We recommend...

- thinking beyond the site boundary
- understanding the settlement history
- identifying key features and facilities
- agreeing the scope of baseline assessments

✗ We recommend that you avoid...

- restricting analysis to within the red line boundary
- leaving baseline studies until later in the design process

Capitalising on existing features

Key Design
Driver

Respond to and enhance existing features and resources

To demonstrate an understanding of features (both in natural and built form) a full **site appraisal** should be carried out prior to developing a **design concept**. The identification and assessment of existing features should be undertaken at the earliest opportunity to inform the concept design and allow existing natural features to be capitalised upon as far as possible. It can be very challenging and potentially costly to incorporate or retrofit such features later in the design and planning process.

The **site appraisal** and **context plan** can be provided as a **composite plan** (as shown on the next page for our example site) to enable the reader to understand the synergy between features that exist within and beyond the site boundary. It is advised that the site appraisal should provide a greater level of detail with the following considered as a minimum with the full content varying dependant on the nature of the site:

- **Existing network of natural features**, including trees, hedgerows, field patterns, water courses, public rights of way and habitats.

- **Existing buildings and heritage assets** including listed building, buildings of local importance and those of archaeological interest.
- **Topography, landforms, drainage patterns and flood risk.**
- **Access and connectivity** including, existing public transport stops/hubs, main vehicular access points, existing and potential future connections for all modes.
- **Views in and out of the site, sun orientation and any potential overshadowing.**
- **Potential constraints**, including overground and underground utilities, railways lines, land contamination, offsite and onsite overland flow paths, and Tree Preservation Orders.

A simplified analysis plan may be appropriate for small scale proposals, however baseline studies covering a wide range of topics are likely to be required for larger scale developments.

Site Appraisal

Existing network of natural features

Topography, land forms drainage and flood risk

Views inwards and outwards

Existing buildings and heritage assets

Access and connectivity

Constraints



Sustainable Drainage Systems (SuDS) are key to all major developments. They should mimic the natural management of surface water runoff and not be limited to end of pipe storage solutions.

It is important to consider the approach to surface water management from the outset as this can have implications for the layout of a development and the number of homes which can be achieved. A surface water management strategy will be required for most developments (being essential for major developments) and should begin to be developed at this early stage.

At this concept stage this will entail the documenting and evaluating of existing site conditions, features (that could be protected or incorporated into the design) and natural flow paths (blue routes). The identification of these will assist in developing a concept which would allow SuDS to be embedded within the sites green and blue infrastructure, ensuring new buildings are located away from flood risk. It will also ensure that existing properties and neighbouring land will not be put at a greater flood risk.

✓ We recommend...

- key features and constraints are identified at the earliest opportunity being presented within a site appraisal
- a comprehensive set of baseline studies is undertaken
- consideration is given to how natural features can inform and be incorporated within your design

✗ We recommend that you avoid...

- overlooking consideration of existing and potential future connections
- disregarding flood risk and how good SuDS design can be embedded within the proposal
- ignoring the historic context of the site and its surroundings

Developing a vision and concept

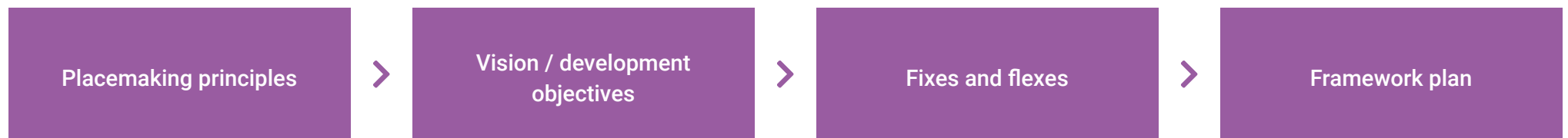
Key Design Driver

Respond to the site appraisal and context when shaping your framework plan for the site.

Now that the site's constraints and opportunities have been identified, it is time to develop a design rationale for the scheme. This part of the process should seek to deliver a set of interlinked themes or **placemaking principles** presented in concept form to communicate the spatial components of the scheme design. This initial scheme design is sometimes referred to as a concept plan or framework plan. The following provides an overview of the stages in developing the vision and concept for a site.

Firstly, it is important at this stage to develop a set of overarching **placemaking principles** for the site. These principles can be defined as qualities that the scheme should be seeking to promote such as connectivity, legibility (ease of movement), green infrastructure enhancement, sense of place, sustainability, and health and wellbeing etc. To assist, several typical urban design principles are shown on the following page which can be utilised to develop the **vision** and **development objectives** for your site. You are not limited to these, and each development will vary depending on its nature and scale. The outcomes here will be utilised throughout the design process.

A set of '**fixes and flexes**' can then be established which will be utilised as the design develops towards the masterplan for the site. 'Fixes' are those elements of the design that can't be varied whilst 'flexes' are the elements where there is some flexibility in how they are interpreted. An example of this on our example site is that existing features (such as the watercourse through the site), highway access points and principles of a street hierarchy are fixes whilst flexes may be the precise form of development parcels and alignment of elements of the street hierarchy within the internal arrangement.



Placemaking principles can be defined as:

Design Quality	Good design should sustain and enhance economic, environmental, and social values within the built environment
Health and Wellbeing	Developments should seek to 'design for health and wellbeing' with a particular focus on reducing the chances of fuel poverty
Local character and identity	Developments should seek to enhance the neighbouring setting by providing design solutions that respond to scale and massing, architectural styles, public realm, and land use
Legibility	Development should provide a clear and welcoming image and be easy to understand by all users. Visitors should be able to orientate themselves and establish a clear direction
Connectivity	Developments should be easy to get to, and easy to move through. Usage priority within public space will need to raise the quality of the pedestrian experience and reduce the perception of vehicular dominance where possible
Sustainability	Development should strive to achieve the most efficient use of resources in construction and future operation, utilising local materials, minimising energy consumption and waste production, whilst exploiting opportunities for sustainable energy production
Longevity	Development should demonstrate a sustainable use of materials that are easy to repair or replace. A clear maintenance strategy should be put in place so that the development continues to be attractive and services its original purpose
Flexibility	Development should build in future adaptability through clever and innovative design solutions. Buildings and spaces should be flexible to allow owners or users to adapt to them over time to suit their growing or decreasing needs

The **framework plan** (as shown on the following page for our example site) will be the conclusion of previous context and site appraisal stages, combined with the aspects identified within this 'vision and concept' stage. The framework plan is to be presented in plan/map form and should communicate the proposed design, layout, character and appearance of the scheme.

There are numerous ways in which this the framework plan can be communicated depending on the nature of the site, however the following headings are recommended as they provide clarity between the differing but interrelated aspects of the design at this scale:

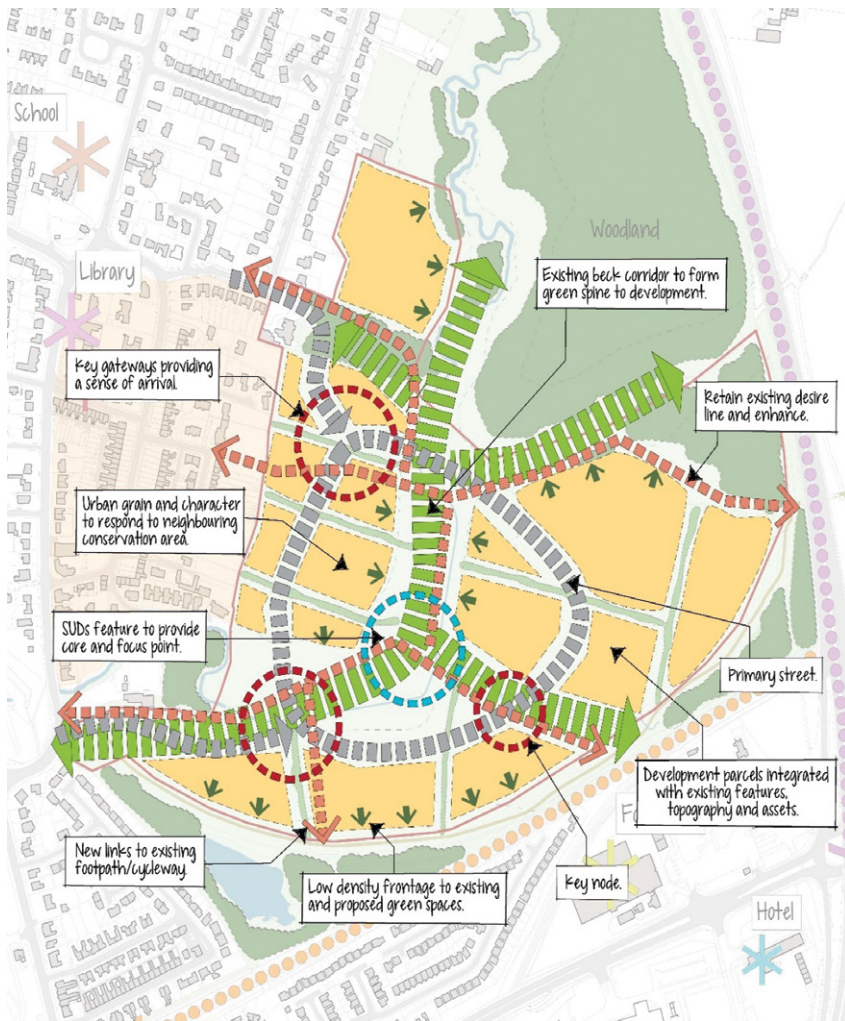
Land use	Including character areas, community facilities, schools, and development parcels
Green & Blue Infrastructure	Including green corridors, trees, and hedges to be retained, open space, play provision, and potential locations for SUDs
Movement	Including primary and secondary vehicular and pedestrian routes, feature streets, cycle routes, and public transport hubs/stops
Placemaking	Including gateways, nodes, squares, active frontages, landmarks, and protected views. Users to adapt to them over time to suit their growing or decreasing needs

Concluding this initial stage of the design process is essential and should not be rushed as it will form the foundations for designing a well thought-out, imaginative, and workable design response which can be developed in more detail through the remainder of the 'design process'.

Engagement will have likely occurred during the development of the framework plan, and

we recommend that upon its conclusion more formalised engagement and design review are undertaken. The opportunity for design review will allow relevant Council officers the opportunity to consider and comment on the fundamentals of the concept presented. When entering the design review process, it will be important that all information collated (including baseline assessments)

are presented as a combined package which clearly articulates how the concept has been arrived at. Establishing buy-in at this crucial stage will ensure a smooth transition to later stages of the 'design process' and limit the scope for extensive retrofitting or re-design at a later stage.



Our Concept Plan has sought to incorporate SuDS within a central green infrastructure corridor as the context of the site means this was the most appropriate location. It is important that larger developments consider various elements of treatment prevention, source control, site control and regional control (see Green & Blue Infrastructure 3.2). Where a proposal forms part of a larger development site, with multiple developers and phases, it is necessary for the surface water management strategy to highlight the critical surface water drainage infrastructure that will be required to support each separate phase of the overall development.

At this early-stage engagement with should take place with the Lead Local Flood Authority (LLFA) so a clear understanding of requirements is obtained, and agreement is reached on the principles for the surface water management strategy.

Delivery of SuDS to an adoptable standard is supported and whilst this would be demonstrated at detailed design stage now is the appropriate time to begin to explore opportunities for them to be adopted by Northumbrian Water. We support joint engagement between all parties.

✓ We recommend...

- following the identified process which culminates in the development of a Framework Plan for the site
- engagement and design review at this important stage
- early engagement with the LLFA and Northumbrian Water

✗ We recommend that you avoid...

- developing a Framework Plan without having understood the site and its context
- developing site layouts without having undertaken this crucial stage

3.2 Green & Blue Infrastructure

- Understanding the site and its context
- Capitalising on existing features
- Developing a vision and concept

Sustainable urban drainage systems

Key Design Driver

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

As areas are developed, impervious surfaces create increased amounts of surface water runoff during 'flash' rainfall events disrupting the natural hydrological cycle. Where possible impervious surfaces should be minimised but as they cannot avoid a surface water management strategy is critical to protect combined sewers and surface water infrastructure. This will also help maintaining and enhancing the environment.

A surface water management strategy should embed 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. Surface water runoff should be treated as close to source as possible, be seamlessly integrated into the proposed landscape architecture, and focused on the four areas of good SuDS design (shown below).

Good SuDS Design	
Quantity (Manage Flood Risk)	Amenity (Visual and Community)
Quality (Water Quality Management)	Biodiversity (Wildlife Habitats)

The most appropriate method to manage surface water is to implement a management train within the strategy which follows the sequential principles shown below:

- **Prevention:** Good housekeeping and site design to reduce /manage runoff and pollution
- **Source Control:** Management as close to source as possible e.g. green roofs, permeable paving and filter drains
- **Site Control:** Management of water in a local area e.g. swales and detention basins
- **Regional Control:** Management of runoff from a whole site / catchment e.g. retention ponds and wetlands

Consideration must be given to the Ofwat-approved Sewerage Sector Guidance, Non-statutory technical standards, CIRIA SuDS Guidance Manual, Tees Valley Design Guide & Local Standards, and any other appropriate technical standards. Understanding these standards will ensure schemes can be designed and constructed to an adoptable standard. Our Flood Risk Management team fulfil the function of Lead Local Flood Authority (LLFA) being the point of contact in relation to development proposals and proposed surface water management strategies.

Soak-a-ways as a primary source of surface water disposal will not generally be appropriate owing to the prevailing ground conditions within the Borough. They can be utilised as part of the treatment train particularly when surface water drainage discharges to a watercourse.

Buried concrete structures designed to store and discharge surface water at a specified rate should only be used when other options have been discounted. Whilst these can be designed to address water quantity control, they do not address issues of quality control (water treatment), amenity benefits and biodiversity value.



Development of the surface water management will have begun at the context stage as will early engagement with the LLFA and Northumbrian Water to agree the approach to the surface water management strategy and adoption of SuDS respectively.

As the detailed design of the scheme progresses the surface water management strategy will evolve with required modelling being undertaken to allow the design and capacity of SuDS provision to be detailed. It is at this stage where further engagement will be required with the LLFA and Northumbrian Water so that agreement can be sought upon technical aspects of the design and plans for adoption progressed. It will be necessary to demonstrate, as appropriate, how proposals align with guidance and adoptable standards, and how multiple benefits of good SuDS design have been achieved.

Whilst CIRIA guidance states the gradient of side slopes for a SuDS basin can be 1 in 3, we advocate that the gradient should be determined by the SuDS intended use. Where the basin is to be accessible to the public, they should not exceed 1 in 5. SuDS features should enhance the overall appearance of a development they should complement the appearance and provide.

The final design of a sites surface water management will be required to demonstrate that in the event the surface water system fails, or rainfall exceeds the system design capacity, that flows will be routed to maintain public safety and avoid property damage. This can be documented through a site catchment plan detailing where excess flows will be routed and where flood conditions or ponding is expected to occur.

It is important to ensure that SuDS continue to function as intended and the potential for offsite environmental impacts is limited.

Therefore, management and maintenance plans will be required through the planning system to ensure owners check their systems regularly to determine maintenance needs. Routine inspection and maintenance can help keep overall maintenance costs low by detecting problems early and avoiding large repair or replacement costs.



We recommend...

- a surface water management strategy is developed at the outset of the design process embedding solutions that meets all key areas of good SuDS design
- early engagement with the Lead Local Flood Authority (LLFA) on the surface water management strategy
- robust management and maintenance plans are prepared



We recommend that you avoid...

- developing a Framework Plan without having understood the site and its context
- developing site layouts without having undertaken this crucial stage

Integrating nature & enhancing biodiversity

Key Design Driver

Existing and new natural feature should be integrated into developments

Natural and designed landscapes and features 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 features which form green sustainable drainage systems such as swales and rain gardens.

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) meaning 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. Identifying and understanding existing habitats and features within the site will be an important step but much more can be achieved through truly understanding existing (and planned) habitats beyond the site. Through this understanding it is possible to maintain and enhance ecological connectivity through the site and integrate with the wider natural environment which will increase the viability of species by maintaining networks and aiding recovery. In addition, the delivery of ecological connectivity helps to support natural food

chains and, in many cases, measures to improve habitat connectivity will create an enhanced landscape setting for the new development.

Based on this analysis the development should be able to effectively plan to deliver net gains in biodiversity by protecting valuable features and creating an enhanced network of habitats to support a diverse range of plant and animal species. In designing any scheme careful consideration needs to be given to future management and maintenance, both in relation to habitats and any formal hard and soft landscaping. The biodiversity value of many natural habitats and features increases over time so long-term planning is essential.

Where existing watercourses are identified a buffer will be required, where appropriate, from the top of the bank to deliver or maintain existing riparian habitat and provide access for maintenance. We recommend a minimum distance of 8m for this buffer. It is within and adjacent to the areas where SuDS can be effectively utilised to manage flood risk and enhance biodiversity.

Our Green Infrastructure Strategy provides a strategic overview of the Borough's green infrastructure and a framework for its future

development and management. Tees Valley Nature Partnership have undertaken a Natural Networks & Opportunity mapping exercise which has been utilised to identify strategic priorities for biodiversity enhancement across the Tees Valley alongside a series of Biodiversity Opportunity Areas (BOAs). These documents will form an important evidence base when seeking to integrate nature and enhancing biodiversity within and adjacent to new developments as will the emerging Tees Valley Local Nature Recovery Strategy (LNRS).

Nesting and roosting boxes incorporated within the fabric of a building assist in supporting biodiversity whether within a urban or rural environment. As a guideline it is recommended that the total number of nest/roost boxes provided is equal to the number of properties within the development. The distribution of nest/roost boxes should be informed by the most suitable location for them to be used. Other biodiversity considerations associated with residential plots include the incorporation of aspects such as hedgehog highways.



✓ We recommend...

- Identifying and incorporating existing natural features
- increasing biodiversity value and connectivity
- providing and enhancing riparian buffers to watercourses
- planning for the long-term

✗ We recommend that you avoid...

- thinking about the site in isolation of the wider natural environment
- considering the site as a 'blank canvas' in terms of biodiversity

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. Through an understanding of the site (see 3.1 'Context') and use of existing information (such as our Green Infrastructure Strategy) it will be possible to ensure spaces are connected both within the site and externally to wider green space networks, footpaths, and cycle routes. This will facilitate public use and enjoyment and encourage sustainable travel (see 3.3 'Movement').

Greenspaces need to be easily accessible, and a variety of spaces and features should be included to accommodate a diverse range of uses. The quantity and types of greenspaces, and associated facilities and infrastructure, will depend to some extent on the scale and nature of any given development as well as existing provision within the locality. However, in planning for green spaces, consideration should be given to how everyone will be able access these areas and how they can be used for recreation, exercise, informal play and promote social interaction. Consideration

needs to be given to how these spaces incorporate natural features and promote biodiversity, be adaptable to change over time and how they will be managed and maintained in the long-term.

Dedicated spaces or areas for play, informal and formal sport, food production, outdoor events and other activities may be provided within larger developments, but designs should seek to integrate these functions rather than achieve rigid separation. Such functions may be incorporated into a formal or natural park, or integrated into the core of a development, but even in smaller developments it will be possible to design green spaces in ways which accommodate multiple uses. 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.

It is typical for new developments to require on-site amenity open space based on local

standards. This space should be provided as a whole piece of land in an arrangement which supports a range of recreational uses. Whilst linear strips of land such as highway verges and utility corridors will not contribute towards a sites amenity open space requirements it may be possible for SuDS to do so depending upon their design. For SuDS basins to contribute towards a sites amenity open space requirement slopes must not exceed 1 in 5, have a relatively low flooding frequency (such as 1-5 year return period), contain appropriate signage to ensure it is understood the site is 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 (see 3.6 'Homes and Buildings') 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.

Included within Part Five are our technical standards and guidance for landscaping, trees, and play areas.



We recommend...

- ensuring green spaces are designed for all and meet the needs of prospective users
- achieving connectivity and multi-functionality in the design of green space
- planning for the long-term



We recommend that you avoid...

- thinking about the site in isolation of the wider natural environment
- considering the site as a 'blank canvas' in terms of biodiversity

Wider environmental benefits

Key Design Driver

An integrated system of landscape, biodiversity and drainage should deliver wider environmental benefits

As well as enhancing biodiversity and creating space for people the integration of nature into new developments can have significant benefits for the wider environment. Wherever possible green infrastructure should be planned in ways which delivers a range of 'ecosystem services' such as contributing to sustainable water management and improving air quality. With more extreme weather events likely because of climate change the provision of green and blue infrastructure can play a vital role in helping to reduce flood risk and moderate temperatures in and around buildings. Equally important is ensuring landscapes are designed to be resilient to climate change (see 3.7 'Resources').

Designs should include effective use of SuDS which incorporate existing water courses and introduce new 'natural' features which could include green and brown roofs, swales, ponds and rain gardens. As well as limiting surface water run-off and reducing flood risk such measures can also improve water quality. When integrated into the wider network of green spaces SuDS should enhance the attractiveness of the site, increase biodiversity and provide places for play, recreation and relaxation.

With average temperatures due to increase due to climate change, the provision of vegetation and water bodies can help to provide a local cooling effect. Trees provide

vital shade helping to make green spaces, play areas and other public space more comfortable in very warm conditions. Trees and other vegetation can also play an important role in improving local air quality and reducing noise pollution. Integrating nature into new developments will also make a small but important contribution towards climate change mitigation. Trees and other vegetation within urban areas act as carbon sinks having the ability to absorb significant quantities of carbon dioxide.



✓ We recommend...

- sustainable water management is integrated within the sites green and blue infrastructure
- green infrastructure delivers environmental benefits within and beyond the development

✗ We recommend that you avoid...

- viewing surface water management as an isolated issue
- considering biodiversity as a standalone matter and not recognising the wider ecosystem services it provides

3.3 Movement

- Street hierarchy and connectivity
- Cycle and pedestrian network
- Parking and servicing

Street hierarchy and connectivity

Key Design Driver

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

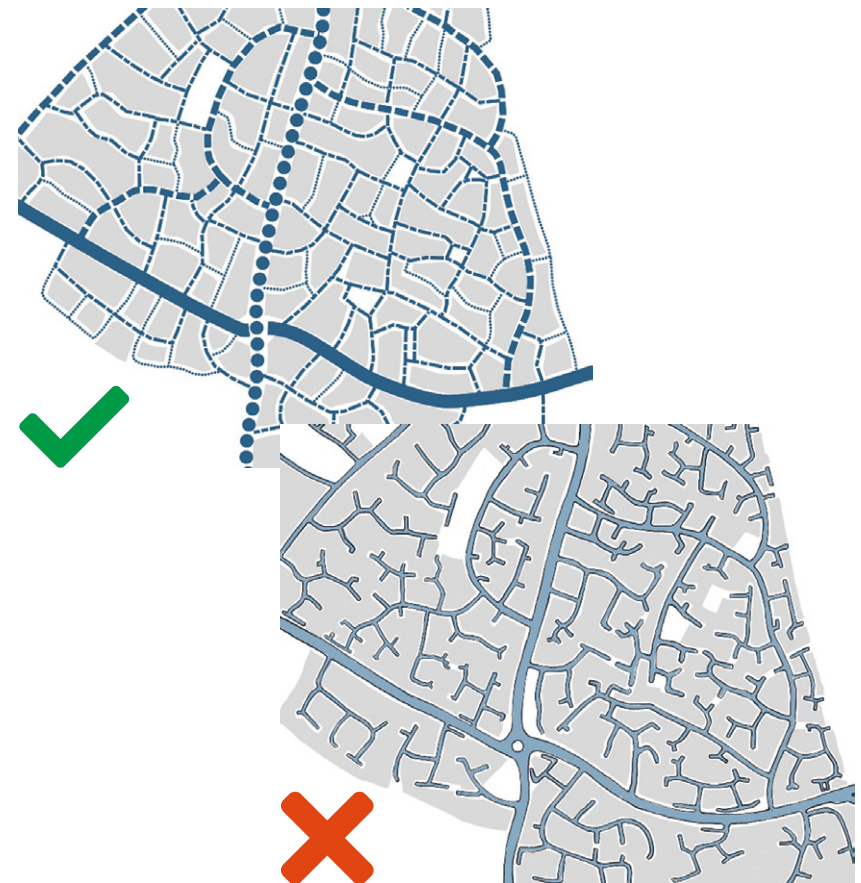
The success or failure of new developments depends on how permeable they are and how well connected they are to existing facilities, services, and amenities. The movement network should be predicated on a hierarchy of streets and spaces, initially informed by the topography and natural desire lines of the site. Designing the movement network solely upon the technical demands of traffic movement is not a supported approach as it will not achieve a well-designed place.

New developments should respond to any distinctive street patterns within the local area by reinforcing existing connections, creating new ones, and promoting sustainable travel choices. This does not necessarily mean restricting the movement of cars as this commonly results in over engineered and car dominated solutions, such as cul-de-sacs for example. The hierarchy of streets should deliver a **network of connected streets** which reduces walking

distances and supports a series of permeable spaces that work for all users.

A clearly defined street hierarchy should be developed considering enclosure, height to width ratio, and character to ensure that the development offers a hierarchy of streets and spaces which is well defined and can be easily navigated.

The plan at the end of this section demonstrates the approach to a typical street hierarchy at our example site. It highlights access points; primary and secondary streets; key node points; and connectivity to the wider cycle and footpath network. The typologies within the hierarchy of streets and spaces are described on the next page.



"Site masterplans should seek to 'tip the balance' in favour of sustainable modes, objectively tested through a proper examination of evidence from elsewhere and local circumstances. For example, any route within the development should always seek to be quicker, easier and cheaper by sustainable modes than the private car."

Pg 37, CIHT Better transport, better planning, better places

The **hierarchy of streets** can be defined as:

Primary Street	Grand, wide, green spines with active frontages, boulevard tree planting within verge and generous footway/cycleways. They should have a distinct character and different design language to other streets within the development. Primary streets are punctuated by upgraded or new public realm at squares, nodes and gateways (see 3.5 Placemaking). Depending on locality, need and scale of the development, the street may need to accommodate bus stop facilities.
Secondary Street	Relate directly to the character of the proposed residential parcels, with a guiding principle of pedestrian dominated spaces that are rich and varied in design. Selective feature tree planting should be used within these spaces being appropriately located to create focal points whilst contributing to the development's wider green infrastructure.
Tertiary Street, Mews, and Private Drive	Are spaces within which vehicles, pedestrians and cyclists share priority. They are appropriate for streets which provide access to dwellings within the centre of the development parcels or along green space character areas.

At context stage (see 3.1 'Context') an understanding of public transport stops/hubs will have been understood as well as how these can be accessed by sustainable means. Generally, people are prepared to walk further to a railway station or tram stop (10 minutes) than to a bus stop (5 minutes) which provides an indication of whether a public transport stop will be accessible from a proposed development. There are numerous factors that can influence catchment area planning for public transport such as the nature of the development, the routes frequency and destinations served.

Whilst walking distances can be considered by drawing circles to show the potential catchment area of new or existing public transport, it is important to take account of the actual walking distance which will take into consideration barriers to movement. Where additional provision is needed it may be provided through additional stops on appropriate existing or planned streets.

The following pages provide guidance for typical typologies of primary, secondary, and tertiary streets. This is not intended as an exhaustive list but provides characteristics we consider most likely to be used. The hierarchy of streets and spaces to be delivered within a site will be informed by the scale, context, and transport needs of the site. Therefore, the following typologies should be used as a guide to encourage creative and high-quality design solutions that are relevant for each individual site. The utilisation of a design code for the street hierarchy can be an important aspect in ensuring principles are established at an early stage in the design process.

We recommend the following maximum recommended walking distances to bus stops:

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

Primary street typology

The aim of the primary route is to provide connections for pedestrians, cyclists, public transport, and other vehicles through a development, providing access to residential development parcels, local centres, schools, and other use types within a development, connecting beyond the development to the wider context. The primary route should consist of dedicated pedestrian and cycle routes, separated from the carriageway using wide verges with tree planting.



Typical primary street typology guide (not exhaustive):

- **Carriageway widths:** 5.5-6.7m (subject to public transport needs)
- **Street planting and greenery:** wide green verges incorporating tree planting and sustainable drainage opportunities. Verges will separate carriageways from pedestrian and cycle routes.
- **Pedestrian and cycles:** minimum of 2m wide pedestrian routes connecting into wider networks beyond the site boundaries (see 3.1 'Context'). Segregated cycle lanes incorporated in line with LTN 1/20. The cycle lane may be on one or both sides of the street depending on the scale and context of the route.
- **Parking access:** driveways should be minimised on primary streets to retain stretches of verge planting as much as possible. Some on street parking may be accommodated off carriageway within bays, incorporating into the verge area, 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 and may be tarmacked or use another paving materiality. Buildings should provide an active frontage and overlooking onto the street. Buildings would typically be at a higher density and scale along the primary route to provide a strong streetscape.

Secondary street typology

The secondary street provides connections for the local neighbourhood network. Secondary streets are a lower tier than primary streets, providing looped connections through the development for residents, and direct access to properties for both vehicles and pedestrians. Greenery can be provided through front gardens and on street planting, used to create focal points and to inform character areas.



Secondary street typical typology (not exhaustive):

- **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 appropriately located to create focal points whilst contributing to the wider green infrastructure.
- **Pedestrian and cycles:** generally, 2m paths are expected on either side of the carriageway. However, they may only be needed on one side of the street where 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. Significant in-curtilage frontage parking can be detrimental to the street-scene as it does generally allow for adequate frontage planting.
- **Look and feel:** serving local neighbourhood traffic they should encourage pedestrian priority and provide green links. Materiality of the carriageway can be used to signal a change from the primary street to a more domestic level, such as using paving or coloured tarmac in key areas, as well as other traffic calming measures such as raised tables. Loop roads are encouraged to increase connectivity and should not end at dead ends or cul-de-sacs.

Tertiary street typology

Tertiary streets can come in many forms, such as home zones, courtyards, cul-de-sacs, and mews. Tertiary streets are the most local street typologies, serving small pockets of dwellings within the development parcels. Tertiary street typologies like courtyards can also provide secure parking areas to the rear of properties where access cannot be taken from the front (such as along primary routes).



Tertiary street typical typology (not exhaustive):

- **Carriageway widths:**
 - typical carriageway: 4.8m-5.5m with 2m footpath
 - shared surfaces: 6m with 0.5m service strip to either side
 - 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:** may provide a mixture of shared surfaces for shared priority between pedestrians and vehicles, as well as separated pedestrian routes where suitable.
- **Parking:** may be provided in small groups of allocated bays in parking courts near dwellings as well as in curtilage driveways.
- **Look and feel:** should feel more informal than the primary and secondary street typologies, giving priority to pedestrians and encouraging low traffic speeds. This can be achieved through the look and materiality of carriageways, including a mixture of surface materials and planting areas. Dwellings may have a reduced offset from the street frontage, creating tighter courtyard or mews style. Greenery should be provided in pockets where suitable and can be utilised to elevate corners and increase screening to properties



✓ 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

✗ 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

Cycle and pedestrian network

Key Design Driver

Provide a comprehensive network of routes for pedestrians and cyclists

The movement network requires a comprehensive network of routes for pedestrians and cyclists which facilitates ease of movement for all and supports leisure and recreation. This should be addressed as part of the street hierarchy and the detailed street design. Informed through an understanding of 'context' (see 3.1 'Context') opportunities should be taken to aid wider connectivity which can support active travel and close gaps in the wider network.

The plan on the next page illustrates how a comprehensive network has been applied to our example site. This considers connectivity to the wider network to provide leisure routes through a network of green infrastructure. Street design should include a combination of on and off-road solutions as appropriate; with primary streets and some secondary streets having off road cycle facilities and on-road solutions for pedestrians being limited to streets lower in the hierarchy where there is a shared priority between pedestrians, cyclists and vehicles. Cul-de-sacs or turning heads which restrict the free movement of pedestrians and cyclists should be avoided wherever possible and where they are provided be limited to tertiary streets.

It is recommended that pedestrian facilities be provided alongside routes for cyclists with appropriate segregation between. Where routes are away from roads, they should be well lit, overlooked by properties and not include features that can create hiding places. The detailed design of routes for cyclists should accord with LTN1/20 Cycle Infrastructure Design to ensure they meet the needs of their anticipated usage.

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:

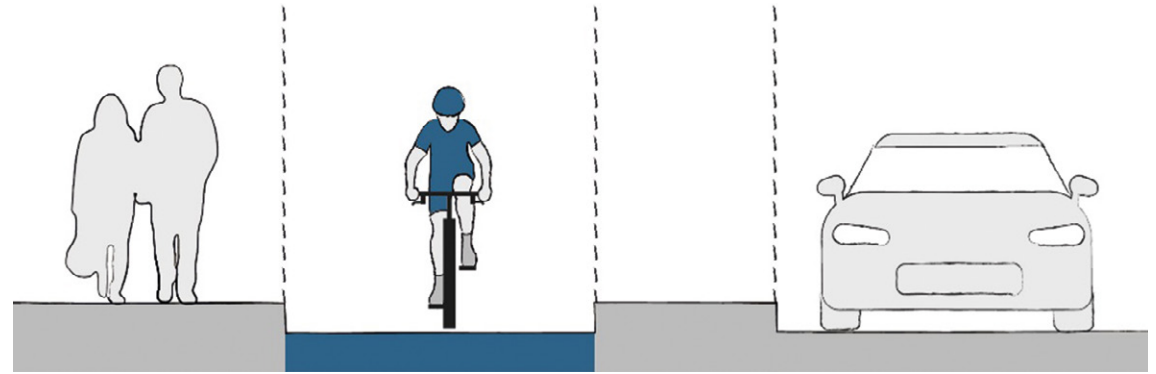
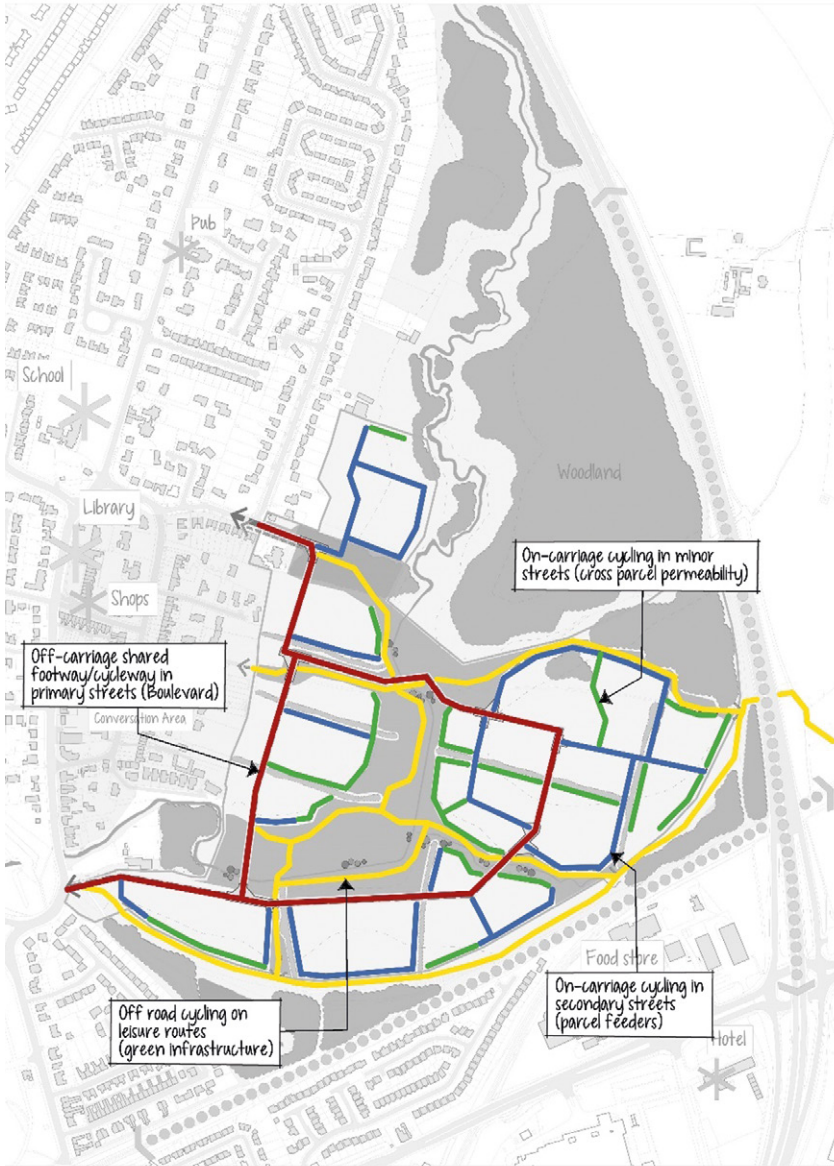
- designed to encourage cars to be driven slower and more carefully
- free from engineered traffic calming measures unless considered essential
- straight and naturally calmed streets (rather than those which have been curved and curled to reduce speed)

The introduction of low-traffic neighbourhoods is encouraged which reduces

through traffic on specific routes through the introduction temporary or permanent barriers.

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. Crossings and junctions should always prioritise pedestrians over cars in residential areas with the preferred approach being a raised pedestrian priority crossing. Where a raised pedestrian crossing is not appropriate (such as high volumes of traffic) and a more formal approach (such as zebra or puffin crossing) is necessary this should be discussed as part of the design review process and supported by relevant technical assessments.

Integrating cycle and traffic streams at junctions will typically apply where motor traffic speeds and flows are low enough for cyclists to share the carriageway, whilst separating streams at junctions will generally be appropriate at junctions along major roads when protected space for cycling is provided on the link(s). Junction design should be in accordance with guidance within LTN1/20 Cycle Infrastructure Design.



"Planning for people will result in places for people; planning for cars will result in places dominated by cars."

Pg 37, CIHT Better transport, better planning, better places

✓ We recommend...

- 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

✗ We recommend that you avoid...

- 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

Parking and servicing

Key Design Driver

Provide a holistic approach to parking, servicing and streetscene.

Car parking

Where and how vehicles are parked has a significant impact on how a place looks, feels and functions. We recommend using a range of parking solutions appropriate to site context (see 3.1 'Context'), character areas (see 3.4 'Urban Form') and property types proposed. The scale and situation of our example site will call for a flexible approach to car parking with a strategy which looks to utilise various parking methods. Provided overleaf are some examples of car parking solutions available.

Parking strategies for a development should provide a holistic solution to parking and street scene; this will require consideration of the parking demand required across the development in conjunction with public transport availability and the impact of parking options on the streetscape. There needs to be a balance between providing sufficient parking in terms of numbers without it having a negative impact on the streetscape. Whilst it is understood parking provision must meet the needs of the homeowner in terms of locality and distance (from car to front door), it is also essential

that the placement of provision is considered in the wider context of street design, plot layout and neighbour interface. For example, parking to the side of detached and semi-detached properties on a proposed primary street could ensure additional spacing of plots providing an elevated grandeur to the streetscape whilst also provide longer stretches of verge suitable for boulevard tree planting.

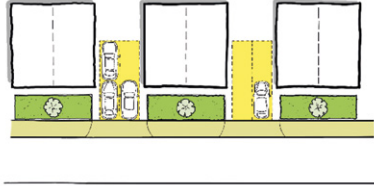
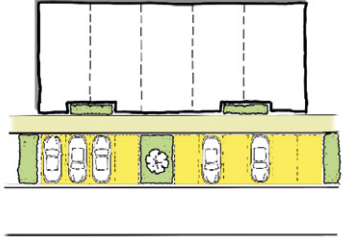
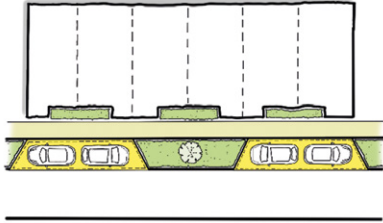
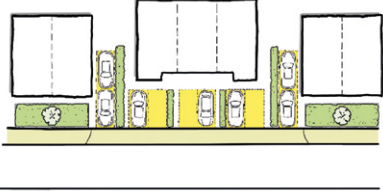
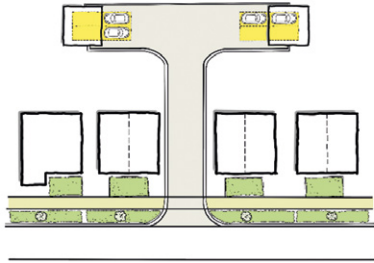
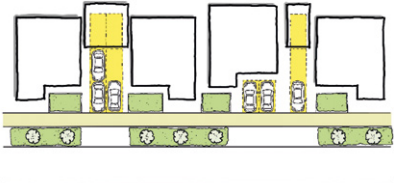
Car parking spaces will be required to meet minimum required standards and provide adequate space to allow vehicles to manoeuvre in and out without difficulty. Appropriate approach routes to dwellings should be provided which are continuous from the adopted highway to the entrance of the property.

Should garages be proposed as part of a development, they will be required to meet minimum required internal dimension standards to be considered as a car parking space. Parking spaces that are located at the rear of garden boundaries will only be supported where there is a direct gated access with suitable pathway connections

provided to the garden space and rear entrance of the house. This reduces the need for homeowners to travel unnecessary distances to their home and supports the use of designated car parking spaces.

Developments should propose solutions that prevent anti-social parking such as parking on grass verges, on street corners, and within bus stops. Part of the solution to this will be the provision of sufficient visitor bays and on street parking which is equally distributed across a site to meet the demands of visitors and delivery/service vehicles.

The number of spaces (including those for cycles, visitors, and delivery/services vehicles) for different types of development will be informed by local and national guidance and standards. Where clear and compelling justification is provided variations from standards may be considered.

<p>In curtilage (between dwellings)</p> <p>Car parking between dwellings enables in curtilage driveway parking that retains front gardens and avoids creating an overly car dominant street scene as cars are positioned between houses.</p> 	<p>Courtyard (to front of dwellings)</p> <p>Courtyard style parking arrangements provide off plot solutions typically in tight grained settings and tertiary streets. Parking may be allocated or unallocated being grouped together with boundary planting to soften the streetscene.</p> 
<p>On street</p> <p>On street parking within bays is useful for unallocated and visitor parking to avoid unwanted, antisocial parking such as on verges and paths. On street bays should be positioned within the green verge where possible.</p> 	<p>In curtilage (in front of dwellings)</p> <p>In curtilage frontage parking is useful within tight grain urban settings, particularly for terraced house typologies, however this should be mixed within a varied offer of parking typologies where possible to avoid creating overly car dominated streetscapes. Boundary planting can also be used to soften the impact.</p> 
<p>Courtyard (to rear of dwellings)</p> <p>Courtyard parking to the rear of dwellings enables cars to be removed from the street scene entirely, which is useful for maintaining verge planting, and creating pedestrian priority environments. Safety and security of rear parking courts should be considered within the design as well as how dwellings will be accessed.</p> 	<p>Detached garages</p> <p>Detached and internal garages with driveways provide in curtilage parking which are typically found in lower density settings. The plot design should ensure opportunity for front gardens, and where possible parking should be grouped to retain longer stretches of verge planting, avoiding the creation of multiple access points that break up the street scene.</p> 

Cycle storage and servicing

Cycle storage must be considered at an early stage and should be incorporated in all new developments. This can be through internal storage as part of a non-habitable room, within a garage, or a purpose-built cycle store. Cycle storage will not be acceptable within general storage areas, bin stores, circulation areas, or on balconies. Secure cycle storage should be provided in a location that is convenient for both residents and visitors (ideally at the entrance to premises on busy movement routes) and have a good level of natural surveillance. The preferred and most common form of cycle parking is a tubular metal stand anchored into the ground at two points, commonly known as a **'Sheffield stand'**.

Access for servicing (refuse collection and delivery/service vehicles) should be integrated into the street hierarchy. Servicing for bin stores and cycle stores must be considered within the design and layout of the development ensuring that high quality and useable facilities for residents are delivered which ensures:

- Bin and cycle stores should be carefully integrated into the street scene
- Waste does not need to be carried further than 30m from dwelling to storage containers

- a waste collection point within the adopted highway is within 25m of storage containers
- Storage containers should be sensibly located between dwelling and street collection point to avoid being taken through the dwelling, unless specific site circumstances make this unavoidable.



Integrated cycle and bin stores

Homes incorporating cycle and bin stores to the front of properties alongside frontage parking. This reduces street clutter and need for rear access for bin stores reducing bin pull distances



We recommend...

- 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...

- 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

Urban grain and block principles

Key Design Driver

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

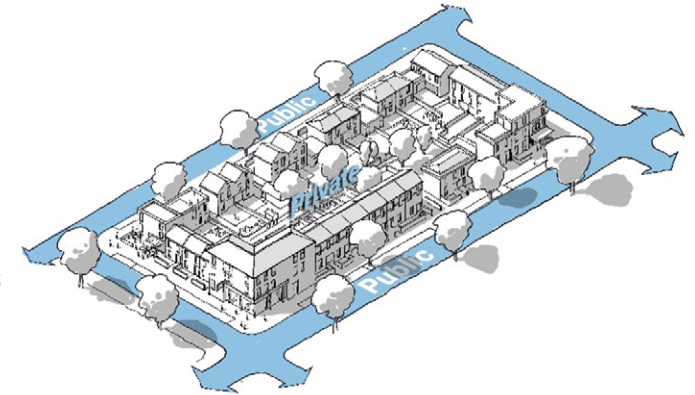
As the design framework begins to form for a site, parcels of development land will emerge. These parcels or **blocks** of development form the basis for the detailed design and should follow a principle of **public front and private backs**. This helps to provide continuity and enclosure to ensure that public and private spaces are clearly distinguished. Developments should seek to develop a clear pattern of perimeter blocks where built form follows a continuous building line around a street block which then contain private gardens or communal spaces. Perimeter blocks can be developed at a range of densities and can work at any scale.

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 'context' (see 3.1 'Context') of the development.

The type of urban grain the development consists of will depend on its location, type of development and other built form considerations such as density, form, and scale of the proposed development.

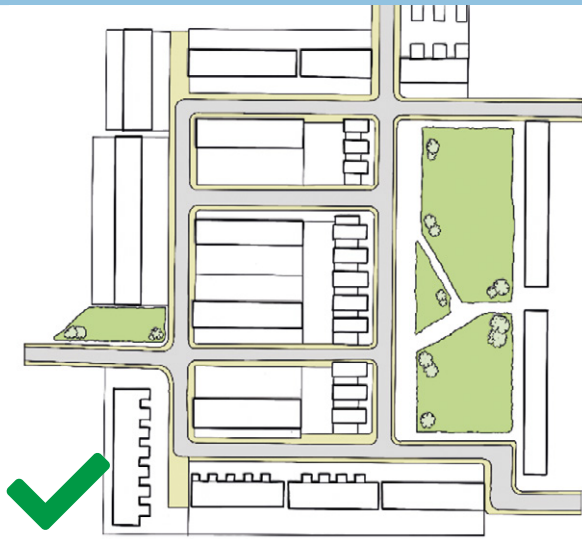
Historically more central and urban areas will consist of a 'tight' or 'fine' grain whereas more suburban and edge of town areas may incorporate more 'coarse' or 'loose' grain.

- **Fine urban grain** is typified by compact development blocks made up of narrow plots and intersected by connected streets and spaces in a grid pattern. The grid pattern can be regular or organic in shape depending on the design and context, with the aim to create a more permeable environment - meaning walkable neighbourhoods where all pathways and roads are connected. This arrangement supports a greater variety of uses which forms within the blocks and achieves active frontages onto the streets. The increased permeability also creates a more sociable environment by providing multiple routes and opportunities for interaction.
- **Coarse urban grain** consists of larger plots formed loosely around long wide streets, often using cul-de-sac arrangements, branching from a central road which don't connect to each other. This type of development tends to sever the site from the surrounding context, limits permeability and increases reliance on cars.



There will be a variation in how development addresses grain and block principles depending on the type of development, scale, and local context. However, in all circumstances designs should achieve a compact form of development with patterns of movement which form a connected grid thus promoting walkable neighbourhoods and reducing the reliance on cars. Designs which deliver streets and spaces that lead to nowhere will be discouraged.

Fine Grain / Regular Block



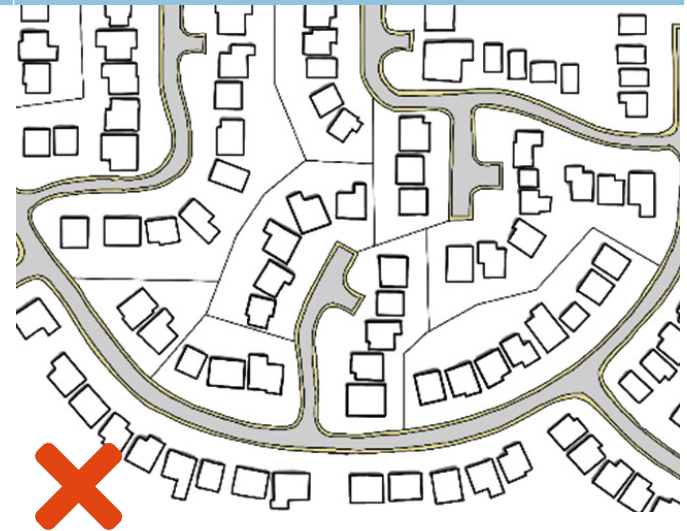
Connected streets

Fine Grain / Organic Block



Connected streets

Coarse Grain



Streets that lead nowhere

In the context of our example site, the surrounding urban grain varies from a tight and well-connected layout of the conservation area which demonstrates a 'fine urban grain', to the 1990's residential layout which demonstrates a 'coarse urban grain'. The 'course urban grain' of the 1990's layout reduces the opportunity for social interaction and connectivity (through a cul-de-sac arrangement and single site access) so this has not been replicated within our example site which provides a finer urban grain to deliver a more compact form offering more frequent connections. Such a layout also provides opportunities for distinctive streets and spaces as outlined within the remainder of this section.

✓ We recommend...

- urban grain responds to the existing settlement
- compact layouts which offer greater connectivity
- blocks are provided to deliver continuity and enclosure

✗ We recommend that you avoid...

- irregular placement of built form and streets which create a disjointed grain and poor legibility
- streets or footpaths that lead to nowhere

Frontages

Key Design Driver

Provide a development which maximises active frontages

Frontages are how we create the 'street edge' in towns and cities. This often means how the height and width of buildings and the gaps between them relate to the width of the street or space in front of them.

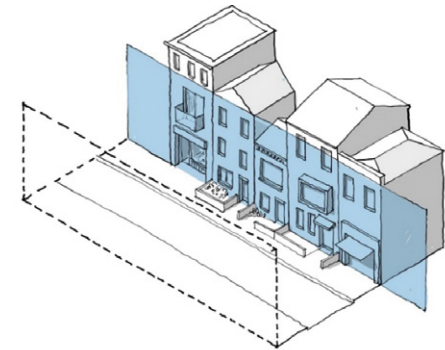
An **active frontage** is a street frontage where there is an active engagement between street life and uses on the ground floor of buildings fronting that street. In the context of residential layout design, buildings should be orientated so that they directly interface with routes and spaces. The principle of **public front and private back** should be adopted (following block principles). This means front doors and windows of primary living spaces should face out onto the streets and spaces as much as possible as this provides natural surveillance, opportunities for activity and social interactions, and visual interest to the street. Dead ground floor uses, rear garden fences and blank elevations largely devoid of windows and architectural detailing must be avoided where they face, or are clearly visible from, the public realm.

It is essential care is provided when designing **corner buildings** as they can provide visual landmarks and can be influential in aiding

legibility. Further guidance is provided within the diagram overleaf.

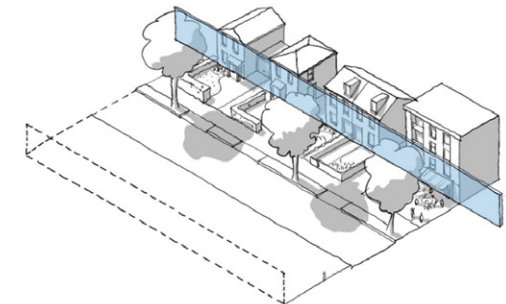
Building line characteristics should be considered to understand how the development addresses the street scene. Building lines refer to the offset distance between buildings and the street. More urban settings and mixed-use streets may have a shorter offset from the street, creating a tighter grained development, often with direct access onto the street for shops and cafes. Positioning buildings further back from the street enables properties to have front gardens and more privacy to the ground floor, typically found in more suburban and lower density environments.

Within a development, building lines should vary and will be dependant of the look and feel of the development in line with the surrounding context of the scheme. Building lines and frontages should be considered in the creation of the developments' character, rather than dictated by parking standards or standard house typologies.



Urban Street Short Offset

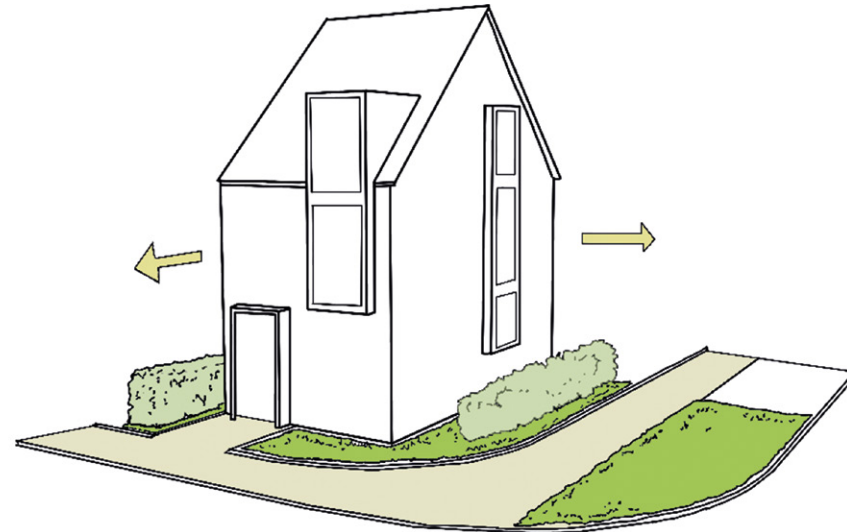
Example of an urban street utilising a shorter offset between building line and street.



Urban Street Large Offset

Example of an urban street utilising a shorter offset between building line and street.

Dual aspect corner property



Corner properties can provide a visual landmark within the site using taller scale, uplifted materiality, and architectural detailing such as windows and porch design. Gable ends should include windows facing out onto the street providing dual aspect onto the corner.

✓ We recommend...

- buildings be orientated so that they interface with streets and spaces
- the principle of 'public front and private back' be adopted
- dual fronted and enhanced design of buildings on corners

✗ We recommend that you avoid...

- dead ground floor uses, rear garden fences or blank elevations where they face, or are clearly visible from, the public realm
- staggered and haphazard building lines as they create disjointed grain



Understanding scale

Key Design Driver

Developments should respond to local topography and existing townscape

It is important that the design considers the scale and massing in response to local topography and existing townscape. This process will include assessing views into the site to establish the general pattern of building heights.

Site topography should have been thoroughly explored during the context stage (see 3.1 'Context') of the design process, and the design proposal should seek to work with the existing topography. This will minimise the implementation or excessive use of retaining walls and structures as they can become overbearing within a streetscape. Designs should be considered using 3D modelling, sections and elevation to illustrate impacts more accurately.

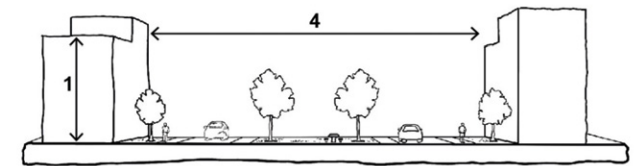
Proposed developments on sloping sites need to consider both views from the site and into the site from surrounding areas. From this understanding, development should be arranged and be of a scale to provide visual interest and complementary roofscapes whilst ensuring the proposed development is not overbearing on its surroundings. A flat site provides the opportunity to utilise a palette

of building heights and feature roof details to create a layered roofscape pattern that is distinctive in the landscape and positively enhances existing context.

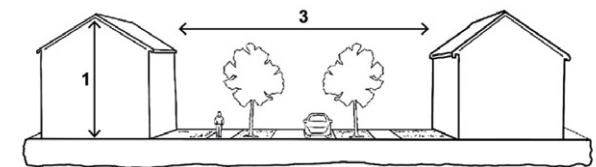
Enclosure of streets and spaces is defined by their width relative to the height of buildings at their edges. Enclosure is important in residential developments as it affects how pleasant and welcoming, they feel, and how easy they are to move around. The scale of buildings should relate to the width of the street and spaces on which they stand and should also have regard to the potential for overlooking and overshadowing of neighbouring properties.

It is generally considered that a successful balance between height and width on a residential development is a ratio of 1:4 for a square, 1:3 for general streets, and 1:1 for a mews. However, there is no magic formula for this ratio, and it will be a matter of design judgement for different character areas and street types. It will be important to ensure canyons and overly imposing buildings are not introduced as these will be detrimental to the overall design.

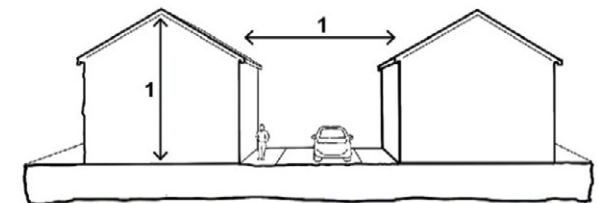
Square Ratio



General Street Ratio



Mews Ratio



The use of scale across a development site will provide interest and aid legibility. The image above provides so overarching principles which can be utilised. Using scale appropriately will address issues of overlooking, ensure street and spaces are locations where people want to dwell, provide visual interest, and aid legibility.

Within a scheme design, it is encouraged that building heights are utilised creatively in the formation of character areas (discussed in the next section of this theme), relating to the street hierarchy and relative to gateways and nodes. Building scales should not be limited to the same heights across the scheme, particularly where the site is flat as this limits the visual interest across the streetscape. For example, taller buildings may be used at site gateways to create a grander arrival to the site, and smaller dwellings may be positioned within development parcels to minimise overlooking. There are many ways scale can be utilised, and this should be justified within the design coding of the site.

Using scale within a development



✓ We recommend...

- scale and massing respond to topography and townscape
- schemes are considered in the third dimension and not restricted to a two-dimensional plan
- the scale of buildings relates to the width of the street

✗ We recommend that you avoid...

- 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

Residential character areas

Key Design Driver

Provide a development which is distinctive in character and contributes to sense of place

Understanding the surrounding urban grain, developing block principles, and identifying a strategy for building frontages provides the composition for the residential character of your development site.

Unlike many places, there is no single 'Stockton style' to adopt, however new developments should respect the character of the area surrounding the site and any site-specific circumstances. Developers are not required to recreate historic buildings or to copy the style of the surrounding architecture unless the context of the site supports this. Instead, the residential design should respond to the scale and materials of the surrounding buildings and should interpret the dominant features of the area. Contemporary buildings that complement or enhance the area are encouraged. The use of standard stock house types within new residential developments shall be discouraged, as they do not respect local architectural styles, materials, or create distinctive or characterful places. Where standard type housing stock are proposed, designs should seek to vary material palettes and architectural detailing to ensure a distinctive development is delivered. Part of this will be about ensuring the appropriate treatments are used at key locations within

a development as discussed within the placemaking section.

New developments should consider character areas at an early stage. The variation in character should be achieved 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.

Depending on the scale of the development proposed, a scheme may have a couple or multiple character areas. The aim of creating character areas is to produce distinctive areas within a development that have their own identity and feel, although the character areas should be complimentary to produce a cohesive scheme overall. For example, a site may contain multiple character areas where the building heights, setbacks and parking arrangements are varied, but use a complementary palette of materials across all dwellings to tie the character areas to each other. In the context of our example site, the character area principles adjacent have been applied to illustrate how the site has responded to the surrounding context whilst providing the themes for residential parcels.

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.



Formal Urban



Corner properties can provide a visual landmark within the site using taller scale, uplifted materiality, and architectural detailing such as windows and porch design. Gable ends should include windows facing out onto the street providing dual aspect onto the corner.

Formal Green Space Setting



An example of a formal green space setting where large semi and detached plots are fronted with generous offsets and screened by soft landscaping hedges and street trees. The stone materiality is of a high quality to create a distinctive frontage.

✓ We recommend...

- establishing a good understanding of and response to the surrounding character and its distinctive qualities
- character areas are considered as early as possible in the design process

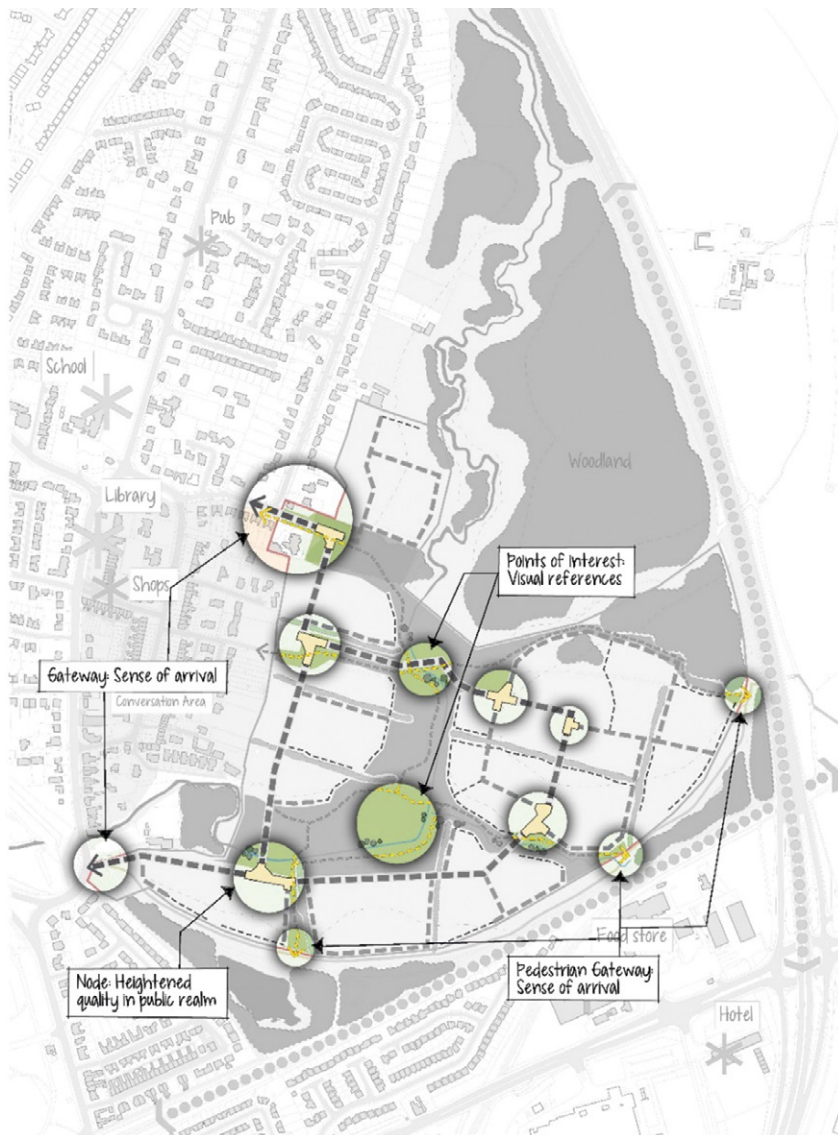
✗ We recommend that you avoid...

- 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

Legibility

Key Design Driver

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



Legibility is created through the design process beginning when the **framework plan** for the site is established. At this point, all access points both vehicular and pedestrian will have been identified and a movement framework established.

The creation of a hierarchy of streets and spaces within the movement framework aids legibility for people and this can be further enhanced through the landscape strategy, building design and boundaries. This will be developed through the creation of character zones across a site which helps people to understand where they are within the site and how they can navigate through it.

Landmark points aid legibility by assisting people to create a **mental**

map of an area. Landmark points are distinctive features that are recognisable and unique to the area and serve as sign points for people navigating a development. Landmarks may be actual signposts but should also be built or natural features that are recognisable such as a distinctive building (including corner buildings), street furniture or feature trees.

Legibility and wayfinding should be considered in the creation of placemaking elements such as gateways, squares, and nodes. For example, a small green space with a feature tree would be best positioned at an intersection of key routes, creating a recognisable legibility marker and incidental meeting point for people traveling along those routes.

✓ We recommend...

- a hierarchical approach to key spaces within the development to aid legibility and provide distinctive transitions between character areas
- the use of scale, form, materials, and furniture at appropriate locations to aid legibility

✗ We recommend that you avoid...

- a standard approach to design at gateways, squares, and node points
- a lack of street hierarchy and character formation

Streets and spaces are where people move and interact with one another. Within these areas it is important that people can navigate their way through them but also that they are welcoming and safe environments which promote social interaction. Many of the principles for creating a place have been established though this design guide such as providing a hierarchy of streets, use of scale, block principles and creation of character areas. This section seeks to provide further guidance on the approach to designing gateways, squares and nodes as well as integrating street trees and ensuring street lighting is appropriately planned.

Gateways, Squares and Nodes

Gateways, squares, and nodes are points of interaction within a scheme. They are typically found at a convergence of routes, such as site entrances and changes in the street hierarchy. They serve as locations for concentrated activity, social interaction and as landmarks for legibility. Gateways, squares, and nodal points are opportunities to uplift the public realm and create distinctive identities for character areas.

These areas can be developed as a hierarchy although it is generally considered that a similar palette of materials will be used. The

design and scale of gateways, squares and nodes will be linked to their position within a hierarchy of spaces.

The following pages provide guidance on each typology of space to demonstrate options for how they could be designed. The approach to spaces will be considered based on their context within the site and that of the surrounding area. The use of design codes can be useful for articulating the design ethos of spaces within a site.

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.

Gateways

“Gateways 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 larger sites the top of the hierarchy would be a primary gateway which would be the main access to the development. Such a gateway should provide a **sense of arrival** to the development being informed by context (see 3.1 ‘Context’). This will be delivered through scale and high-quality public realm or landscape forms. In most circumstances, multiple gateways within a development should mirror each other through use of consistent materials and furniture to provide coherence. Buildings at gateway locations should be of scale which address the street and provide interesting forms of architectural design. To provide coherence these focal buildings will traditionally be delivered as pairs separated by the primary street entering the development.

Our example primary gateway indicates how tree planting alongside, elevated public realm / landscaping and a focal building of scale provide this ‘sense of arrival’ to a new development.

Gateways lower within the hierarchy could be secondary accesses to the site or where pedestrian / cycleway connections are being made into the site. They should follow similar principles proving a ‘sense of arrival’ but be of a reduced scale / design.

Primary Gateway

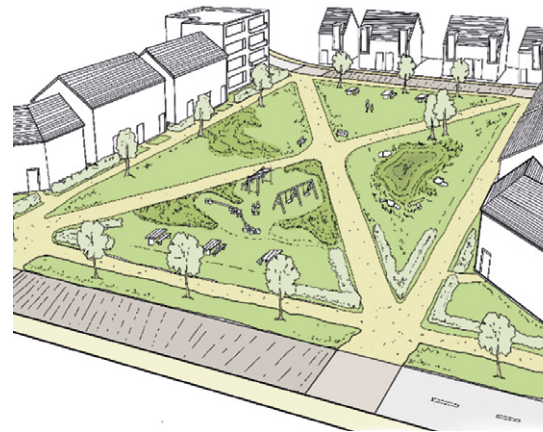


Providing a grand entrance to the site the public realm is enlarged through the set back of landmark buildings creating an opportunity for enhanced public realm which creates opportunities for social interaction. The landmark buildings is of a scale to mark this important arrival point and provide a dual aspect as is required given they are on corner plots. Within the public realm an upgrade in design quality is evident through the use of hard and soft landscaping and public art.

Squares

"Squares are 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."

We would recommend that squares are best located where streets converge as this provides a focal point within the development where community interaction is likely to occur and can be positively encouraged. These areas will generally have a more formal arrangement providing refuge from the streets for which they are associated. The following illustrations provide examples of how these areas could be designed. As with gateways it will be important for squares to be designed based on their status within an identified hierarchy. These locations may have focal buildings in key locations to support legibility.



Larger Green

More likely to be appropriate within higher density inner urban locations where an urban block arrangement is prevalent. Such locations are likely to be larger scale providing a focal point within the development for formal play provision and supporting community interaction.

Residential Landscaped

These are areas within a development offering a more modest but equally important offering. They are more likely to be found in a suburban setting. With defined boundaries, welcoming landscaping and shelter these areas provide locations to dwell and support community interaction.

Nodes

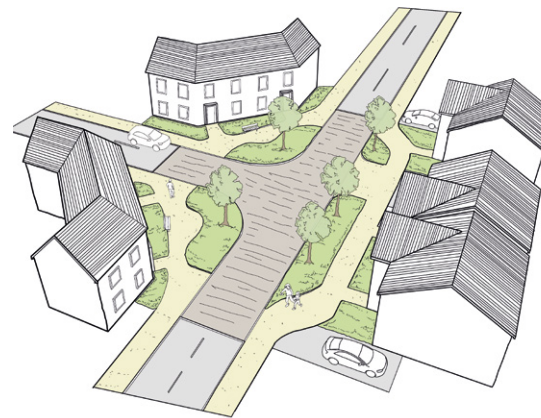
Nodes are points of uplifted public realm or incidental stopping points, often formed at a grouping of features or convergence of key routes, providing a natural dwell or meeting point within an area. Nodes are informal in character and should seek to enhance legibility through the site.

Whilst not as formalised as squares they represent an important aspect of the developments placemaking and legibility framework. Traditionally located at the convergence of routes these spaces will be designed in accordance with their place within a hierarchy. Owing to this hierarchical approach there is no singular defined example for how nodes should be designed. Although the creation of a focal point and provision of visual interest within the street scene are fundamental principles which should be maintained regardless of the nodes position within a hierarchy. The following provides examples of how nodes could be delivered at varying levels of the hierarchy.



Primary Node

The example shown is a major node point within a development where numerous routes converge meaning a high number of pedestrians will pass through. It forms a transition between built development and the sites green infrastructure. The node created provides a welcome environment to dwell and utilise associated features (seating and play).



Secondary/ Tertiary Nodes

The example presented is a nodal point at a convergence of streets. As a more modest node it does not offer opportunities to dwell but provides enhanced landscaping to soften the urban environment and offers an important contribution to the site's legibility in part through the elevated materials and use of feature buildings.

Street Trees

The importance of incorporating trees (both existing and new) within development sites is articulated throughout this local design guide. Alongside other landscape features within the streetscape, street trees provide habitat, shading, cooling, air quality improvements and carbon sequestration, as well as being a vital component of attractive places. Their importance is specifically referenced within the NPPF which requires new streets to be **tree-lined**.

When designing a new development, the adjacent street tree design principles should be utilised. The nature and placement of provision should be considered alongside the street hierarchy and character areas being created.

The quantum of trees within a development and the achievement of tree-lined streets should be considered through the design process and relevant technical assessments. The inclusion of a significant quantum of trees within private land (including front gardens) will not be considered adequate as there is no simple way to protect them in the long term. A range of options should be

utilised given consideration to our suggested locations (provided on the next page) which are likely to be the most appropriate locations within the street scene.

We recommend early engagement with the local planning authority, highways and tree officers to ensure the right trees are planted in the right places, and solutions are found that are compatible with highways standards. Street trees within the adopted highway

will only be adopted by the Council where agreement has been reached that appropriate root protection has been achieved (such as a tree pit). Commuted sums will be required where new trees are to be adopted by the Council to secure their long-term maintenance. Further guidance of the installation, management and maintenance of trees is available within the Urban Tree Manual as well as within Part Five of this document (see 'Landscaping and trees').

Species	It is useful to select a palette of species to be used across a site taking into consideration context, climate, and the need to support biodiversity. The palette should support character area types across the site.
Position	Whether allowing space for existing trees or positioning new trees appropriately. Trees should not disturb property, infrastructure, or junction sightlines. The positioning of trees should be considered alongside the lighting strategy to avoid conflicts.
Function	Street trees and associated green infrastructure should provide for a range of functions and benefits such as improving air quality and reducing street noise
Services	Early co-ordination is essential to ensure street trees do not interfere with underground services
Specification	The approach to ensuring the survival prospects of a tree will be determined by ensuring it is not located somewhere it won't survive and is adequately protected and maintained.

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 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.

Boulevard tree planting



Feature tree utilised within a node



Street lighting

The incorporation of appropriate street lighting within a development ensures highway safety, creates safe places, and supports adoption. Street lighting should be considered alongside the landscaping proposals for a site to ensure species selection and positioning of trees does not lead to conflicts in the future. It will be appropriate at planning application stage to provide plans detailing the location of street lighting alongside landscape proposals which detail the canopy cover of selected species at maturity. The location of columns must not obstruct footways/footpaths, vehicular accesses or be sited in potentially hazardous positions (an option can be to attaching lighting units to buildings to reduce street clutter) but it should ensure all the necessary areas are illuminated and stray light is avoided.

Lighting needs to be considered in the context of any impacts it may have on landscape and biodiversity. Careful consideration is needed in relation to the specification of lighting proposals and existing and planned landscaping.



We recommend...

- a hierarchy of spaces linked to the movement framework
- ensuring spaces foster social interaction and aid legibility
- opportunities to incorporate trees within streets and spaces are maximised



We recommend that you avoid...

- only delivering street trees within front gardens
- failing to consider street lighting alongside landscaping proposals

Distinctiveness

Key Design Driver

Informed and inspired by predominant materials and crafts to enhance the distinctiveness of a place

Distinctiveness is what creates a place that is unique, recognisable, and characterful. It is vital that new developments are distinctive to avoid creating anonymous places that could be replicated anywhere. Building design and placemaking is fundamental in creating distinctive places and this needs to be considered throughout the development of the masterplan and into the detailed design of individual buildings and streets.

New developments should respect and enhance the local character in which they are set by incorporating local vernacular, such as materials and art and craft traditions into the development proposal where appropriate. This should be part of the design process and not seen as an afterthought.

Local vernacular is expressed in predominant features such as brickwork, masonry, ironwork, walling, slate, and wood craft. Elements of architectural detailing such as porches, recessed garages, bay windows and other simple details can add a third dimension to otherwise flat-fronted dwellings, and chimneys may also be used to articulate roof lines. Contemporary approaches that reference and enhance existing local vernacular are encouraged rather than pastiche replication. Form should follow

function and details should not be used where they will serve little or no purpose other than aesthetic. The use of stock housing types within new residential developments is discouraged as they do not respect local architectural styles, materials, and character. Where standard type housing stock is used, designs should still seek to vary material palettes and architectural detailing to maximise the distinctiveness and character of the development proposal.”

Distinctiveness should not be restricted to just buildings as the whole street scene including paving, street furniture, landscaping, street lighting, and public art can contribute to the identity of a place.

Unlike many places, there is no single ‘Stockton style’ to adopt. Therefore, new development should respect the character of the area surrounding the site and any site-specific circumstances.

Where a development is to incorporate affordable housing, the same attention should be afforded to its design and detailing to ensure tenure neutrality is achieved.

Where new developments emerge without a strong existing local vernacular, developers are encouraged to use creative design

develop a new identity and character within the new development.

As discussed in the previous sections, design quality should be uplifted at key points throughout the scheme, such as gateways, nodes, and squares. Distinctive features within the building design, streetscape and public realm are most integral at these locations.

Integrating predominant local features



Creating distinctiveness



Shop fronts and advertisements

Shop fronts and advertisements play a key part in our perception of shopping streets because they are at eye level. Shop fronts help to create a sense of place and should enhance the overall character of the building and wider street scene. It is important to consider the scale and proportions of the property, neighbouring buildings, and shop frontages to emphasise differences between them, creating a more vibrant and locally distinctive place.

Advertisements have a clear purpose and play an important role in attracting custom, providing information, and giving direction. The location of any signage will be of prime importance in attracting business, as well as the design and scale of the sign in its context. It is also important to consider which materials will relate to the architectural style of the building, the shop front and street scene. The colours of the signage should be in harmony with the building and not be overly dominant within the street scene.

The Council recognises that some retailers and commercial operators may have a specific 'brand' or corporate image that incorporates a specific format including a set design, palette of materials and logos. This standard type of approach generally does not reflect the specific characteristics of a building or the context of the wider street.

Therefore, designers are encouraged to adopt a more flexible approach, tailoring corporate brands with the individual characteristics of a building to achieve more successfully designed shop frontages, especially in more sensitive locations, such as conservation areas.

More specific guidance for shop fronts and advertisements can be found in Part Five of this document.



✓ We recommend...

- understanding local character and prominent architectural features that make the surrounding place distinctive
- integrating local vernacular including materials and, art and craft traditions
- building a palette of design components to inform the characteristic layers of the place you are seeking to create

✗ We recommend that you avoid...

- apply a 'one-size' fits all approach to house types and architectural form to avoid the creation of 'clone towns'
- considering distinctive design qualities as an afterthought

Design quality

Key Design Driver

Design in quality from the outset and focus enhanced quality in the right places

The character, distinctiveness and viability of an area often lies in the quality of its built environment and public realm. High quality design of buildings, places and spaces can create attractive environments that set a positive context for the development of successful places and sustainable communities. Design is not just about how a development looks, but how it works, and how well it meets the needs of users. Design quality isn't necessarily about spending more but acknowledging poor design can end up costing more over time and that elevating design quality in the right areas can add value.

Design quality is something that needs to be considered at all scales and therefore permeates all themes contained within this design guide. Following the design process will ensure design quality is embedded from the outset and is appropriately focused. This greatly limits the need to address issues and/or retrofit later in the design process which can lead to delays and additional costs.

Design quality was first introduced within this design process when developing a vision and concept for a site (see 3.1 Context). In developing this vision and concept for a site a set of overarching placemaking principles are established to define the qualities that the scheme should be seeking to promote. The first principle advocated within this document is 'design quality' which recognises that good design can sustain and enhance economic, environmental, and social values within a scheme. From here design quality is about embedding the principles advocated within subsequent design stages which flow from this to create a development which looks and functions well for all users.

The quality of finishes and detailing on buildings and within the public realm can have a huge impact on their feel. Poor quality finishing within spaces and buildings can undermine the quality of the proposal and cause future maintenance issues as they may need to be replaced or repaired more frequently. Better quality and durable materials will ensure a longer lasting and uplifted scheme.

We advocate the use of elevated materials (both hard and soft) within specific areas of a development. Whilst the use of tarmac is the standard material utilised within the adopted highway there are locations, such as gateways, squares, and nodes and elements of the street hierarchy where their use will aid placemaking, character and/or legibility.

The design quality within the space between the back of pavement and the face of the building often has a significant impact on the quality of a place. This includes building offsets, front gardens, porch, and window designs, which if design with care, can all uplift the design quality of a scheme and improve the identity and character of place

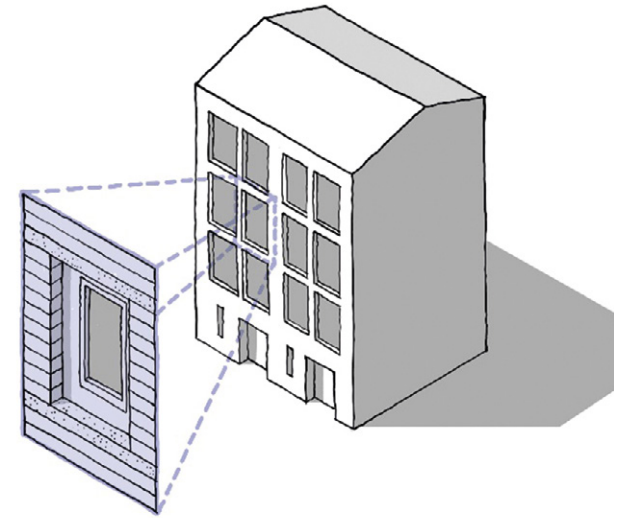
"The underlying purpose for design quality and the quality of new development at all scales is to create well-designed and well-built places that benefit people and communities."

Pg 3, National Design Guide

Demonstrating and safeguarding design quality

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

Elements which may be captured within such drawings may include key boundary treatments, balustrades, window details (heads, sills and reveals), parapets, and the incorporation of services and meter boxes. More detailed drawings might be utilised for elements such as entrances providing details of the component parts at a more detailed scale



- ✓ **We recommend...**
 - considered design quality across all scales
 - using elevated materials within specific areas of the development to aid placemaking, character and/or legibility
 - using sections, elevations, and axonometric drawings to demonstrate key detailing and design elements
- ✗ **We recommend that you avoid...**
 - poor quality materials and finishing
 - ignoring the area between the back of the pavement and the face of the building

3.6 Homes and buildings

- Inclusive design
- Healthy, comfortable and practical
- Privacy and amenity
- Security and safety

Inclusive Design

Key Design Driver

Creation of a development which is inviting and works for everybody

Inclusive design relates to the creation of sustainable environments that work for everybody ensuring 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.

It is important to engage the correct user groups effectively in the design process with this being tailored to the nature of the proposal. Inclusion of relevant personnel within the design team can greatly assist in ensuring appropriate engagement and inclusive design considerations are embedded within the design process.

Inclusive design will avoid features that create actual or perceived barriers or contribute to segregation. The impact of features will be different depending on the user but can include matters such as topography, materials, and safety.

Social inclusion is promoted through an appropriate mix of uses with a development, including local services, facilities and residential typologies. The range of services and facilities to be delivered on a site will be identified at concept stage being related to the scale of the site, surrounding provision, and needs and aspirations of the community.

The design and location of planned local services and facilities is vital to ensure a development is accessible for all in the community. Accessibility and inclusivity should be considered at all stages of the design process, to promote social integration, and ensure a consistent level of design quality.

New higher density flatted development should be in a sustainable location which is close to services and facilities, and accessible by a choice of means of transport.

Public realm spaces should be designed with variety, accessibility and flexibility in mind, to create places that allow people to feel comfortable to relax and dwell, support social interaction and combat social isolation. Public spaces and movement routes need to be legible and welcoming environments to encourage use. This includes incorporating accessible design elements such as signage, lighting and street furniture like benches at regular intervals to allow for rests. It is important accessible measures are incorporated within the movement network and throughout the development of place making.

Inclusive communal garden



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

✓ We recommend...

- considering inclusive design within all aspects of the design process; from the strategic principles down to the design of the buildings and spaces themselves
- including experts within your design team and engaging effectively with appropriate user groups

✗ We recommend that you avoid...

- features that create actual or perceived barriers or contribute to segregation
- failing to take opportunities to promote social interaction
- placing community uses in locations which are not easily accessible

Healthy, comfortable, and practical

Key Design Driver

Homes and buildings designed to meet the needs of users

Homes and buildings should be designed in a user-centred approach to meet the needs of all intended users. 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. Although there will be specific design needs for buildings depending on the intended function, there are some overarching design principles that should be adhered to.

Private amenity space

It is vital that homes have access to external private amenity spaces as well as public ones, regardless of dwelling type or tenure. This is usually in the form of a private enclosed rear gardens, but can also consist of patios, balconies, and terraces. In more urban and dense environments semi-private amenity spaces such as communal gardens can provide additional amenity space for residents. Developments are encouraged to explore creative approaches.

Private amenity spaces should be an adequate size, shape, and orientation to maximise useability and incorporate block principles to ensure spaces are enclosed and secure. The use of sun path analysis will ensure they receive an adequate level of sunlight. Instances where gardens are north facing and heavily shadowed should be avoided or demonstrate appropriate design measures to mitigate against shadowing. Inset balconies and covered terraces allow for external spaces to be used all year round as they are sheltered from adverse weather. Dwelling design should ensure direct access is provided from the living spaces to private amenity spaces, regardless of type.

For higher density developments and conversions into flats, communal amenity space provided for the exclusive use of residents of the development may be acceptable provided its location, size, shape, aspect, and management enable it to be accessible and enjoyed by each dwelling.

Communal gardens



The Malings, Ouseburn encourages community cohesion through a communal residents garden, accessed from private patio gardens to the rear of properties, creating more useable spaces within a tight grained, urban setting.

Balconies and roof terraces



Tadpole garden village, Swindon demonstrates how to maximise useable space by creating a roof terrace above the flat roof garages and incorporates balconies into the frontage to maximise views.

Terraced gardens



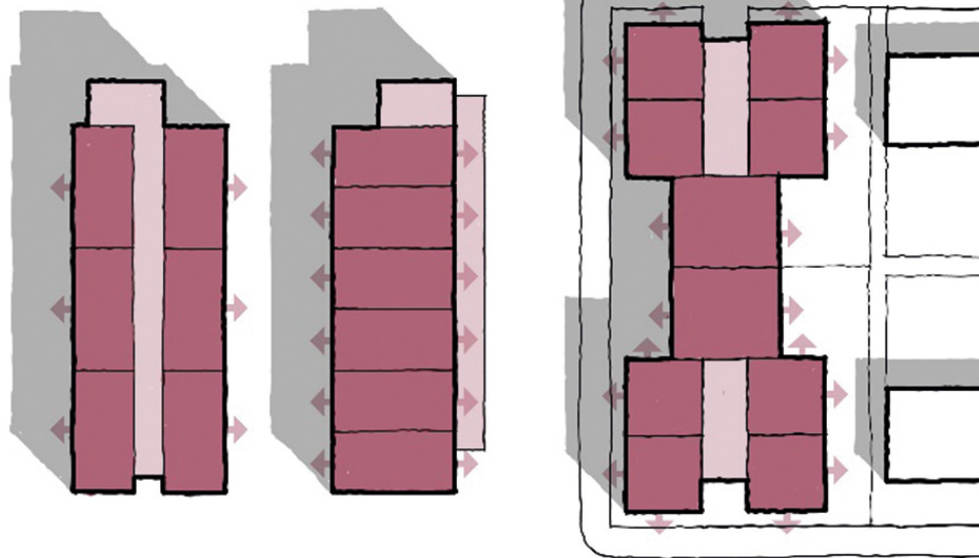
Northshore, Stockton on Tees maximises the private amenity spaces for residents and views onto the river by creating a garden on the ground floor and terrace to the first floor above

Building orientation and fenestration

The design of homes and buildings should be informed by the site topography, surrounding scale and sun path analysis to ensure the sites potential can be maximised. Building design should utilise sun path analysis, considering surrounding building scales and existing trees to maximise sun light into gardens and regulate solar gain into homes where possible using fenestration patterns and shading (see 3.7 'Resources').

Dual aspect is desirable for new housing as it provides a good distribution of natural light, allows cross ventilation and for windows to be opened by residents on the quieter side of a home. Careful consideration will be required within apartments to achieve the benefits of the dual aspect approach as internal circulation can limit its achievement.

Approach to apartments



Left: Single aspect flats should not face north as natural light and solar gain will be limited.

Middle: Apartments accessed from a balcony have two aspects.

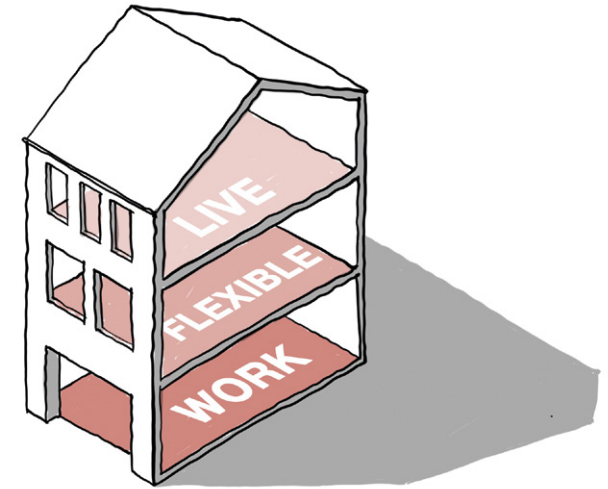
Right: Walk-up apartments can be designed to be dual aspect.

Internal room sizes and layout

Creating spaces that are comfortable, practical, and healthy to live and work means ensuring buildings have functional and logical layouts, and room sizes are adequate to function for their intended use. This is particularly important within home design, to ensure homes can meet the needs of the intended inhabitants and support them to live a comfortable and healthy life. Residential layouts are encouraged to follow Technical Housing Standards - nationally described space standards (NDSS) to deliver internal spaces and storage which are of an adequate size. Illustrated floor plans submitted through the planing process can help demonstrate use-ability and detail conformity with NDSS. Buildings and their layouts should also be adabtable to the changing needs of residents and evolving technologies (see 3.8 'Lifespan').

Quality building fabric

Internal temperatures and air quality within homes and buildings are influenced through the choice of building materials, as well as heating and ventilation strategies. This is important to consider within the design process to ensure internal environments are warm, dry and comfortable for intended users. Section 3.7 'Resources' expands on energy efficiencies in further detail



✓ We recommend...

- building orientation and fenestration is considered holistically alongside the use of sun path analysis
- priority is afforded to the provision of building which are dual aspect

✗ We recommend that you avoid...

- providing dwelling layouts, rooms and private amenity spaces which are not of sufficient size and do not meet the needs of the resident
- delivering private amenity spaces which are not enclosed and secure

Privacy and amenity

Key Design Driver

Occupants and future users are provided with appropriate levels of privacy and amenity

Homes and buildings should deliver good quality internal and external environments for their users. A critical aspect of this for new homes (regardless of their type) is the provision of adequate privacy and amenity. Well-designed homes and buildings will relate well to the public spaces which is achieved, in part, through ensuring the interface between them is carefully designed with privacy and amenity in mind.

Many issues of privacy and amenity can be overcome through adhering to block principles, delivering continuous building lines and understanding scale (see 3.4 'Built Form'). However, when designing homes and incorporating them within a site layout it is important to take additional steps to ensure no unreasonable issues of privacy and amenity are caused. The use of a sun path analysis will be an important consideration in the process; being particularly relevant where tall and or larger scale (bulky) buildings are proposed or are located adjacent to the proposed development.

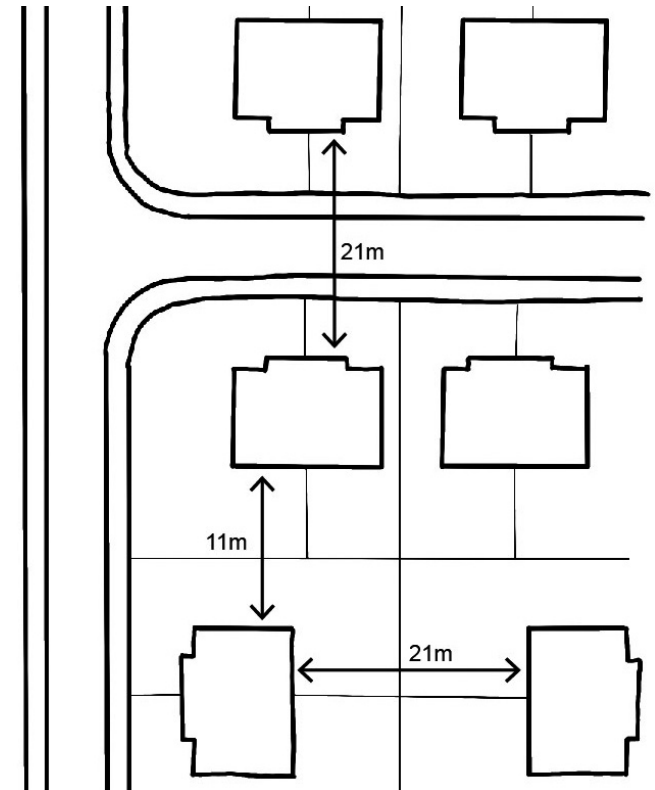
Private amenity space not only provides amenity but can be utilised to provide an additional degree of privacy and separation for living areas from adjoining properties and public spaces. The use of small trees within rear gardens can aid privacy and screening between gardens, and the use of planting within front gardens such as hedges along the perimeter can help delineate public and private spaces to deliver added privacy whilst also assisting to green the street scene.



We are supportive of innovative housetype designs and creativity in terms of how external and internal layouts and treatments can be applied to achieve satisfactory levels of privacy. The table and diagram adjacent represents guideline separation distances to ensure privacy and amenity between dwellings.

These distances will increase if there is a variation in ground levels between the properties or a difference in the number of stories as detailed on the next page. There may be instances where the recommended separation distances cannot be achieved or would compromise the site, such as infill sites within urban locations where the local context supports tighter grained streets. Such developments should seek to demonstrate specific design solutions to achieve and maintain acceptable levels of privacy using a reduced offset distance. Developments are encouraged to use creative solutions where necessary.

Circumstance	Separation distance
Between habitable room windows of properties	21 meters
Between habitable room windows and elevations without habitable room windows	11 meters



✓ **We recommend...**

- achieving minimum separation distances
- using landscaping and tree planting to achieve added privacy and amenity
- considering overshadowing through a sun path analysis

✗ **We recommend that you avoid...**

- seeking to achieve more homes than the site can accommodate
- ignoring the impact building scale and topography can have on privacy and amenity

Security and safety

Key Design Driver

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 to create the right conditions for people to feel safe and reduce the necessity for additional security measures. Crime prevention and public safety need to be considered throughout the design process using Secure by Design and the involvement of local communities, as appropriate.

Proposals should avoid awkward/vulnerable corners, ambiguity of ownership, areas to hide and locations that could promote antisocial behaviour (such as expanses of rear garden fencing adjacent to open spaces). Building regulations provide building fabric related standards which are not replicated within this document. The following points will assist in supporting considerations of safety and security:

Natural Surveillance	Natural surveillance should be maximised through designing buildings to front onto streets, spaces and pathways following block principles. When formulating the movement framework and outlining development blocks it will be possible to design out areas devoid of natural surveillance.
Effective Lighting	Effective lighting should be used to improve security and limit opportunities for antisocial behaviour. It should be concentrated at specific locations such as footpaths, cycleways, and other locations of social interaction. The design must limit light pollution and be considered alongside the landscape strategy.
Primary Building Access	The primary access to a building should always be taken from the street being clearly visible. A building access which is located to the side of a property creates opportunities for hiding and increases the feeling of insecurity amongst users.
Defining Public & Private Places	Adequate spacing and distinction between public and private spaces can be achieved through appropriately sized front garden areas and a physical barrier will provide privacy alongside extra security for residents. The nature of the physical barrier will be dictated by the prevailing residential character
Soft Landscaping	Soft landscaping proposals 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 Areas	These areas must be designed with care ensuring natural surveillance and effective lighting are achieved. Access from the highway should be designed so they appear private and where appropriate provide controlled access.



We recommend...

- maximising natural surveillance
- the use of appropriate lighting in the right places
- public and private spaces are clearly defined



We recommend that you avoid...

- creating awkward/vulnerable corners and areas to hide
- placing building accesses in locations which can't be seen from the street

3.7 Resources

- Efficiency
- Resilience

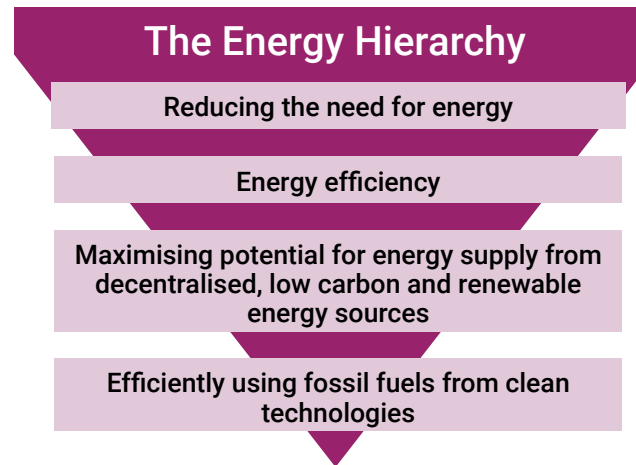
Security and efficiency

Key Design Driver

Conserve natural resources through use of the energy hierarchy, material choices and construction techniques

Climate change is recognised as one of the greatest long-term threats to our lives, health and well-being, the economy and natural environment. It is important that an integrated approach is taken at all levels of design to ensure places and buildings conserve natural resources and respond to the impacts of climate change. The necessity to deliver efficiency is a fundamental aspect of reducing the impact of human activity on the climate system which is primarily achieved through reducing greenhouse gas emissions. This is achieved through applying the 'energy hierarchy' through the design process.

At a strategic level the delivery of walkable neighbourhoods which deliver an appropriate mix of uses and facilities will assist with the aim to 'tipping the balance' in favour of sustainable transport modes. This will assist in ensuring there is a reduced need to travel by unsustainable means and consequently a reduction in greenhouse gas emissions. The necessity to deliver a mix of uses and community facilities will be identified at 'concept stage' through an analysis of the site and its surroundings whilst consideration of movement will also have been undertaken to ensure connectivity is achieved both within and through the site.



Whilst delivering walkable neighbourhoods is an important aspect it is essential that efficiency is considered throughout the design process using the energy hierarchy and embedding a 'fabric first' approach being critical.

The following explores considerations for key stages within the energy hierarchy:

- **Reducing the need for energy** - through 'smart' heating/lighting, behavioural change, and passive design measures such as:
 - **Orientation** - aiming to provide east/west orientations where the sun path corresponds with daily activities. North-facing habitable rooms should be avoided wherever possible as should overuse of north facing glazing

- **Air tightness** - achieving air tightness of windows, door surrounds, and roofing should be maximised to minimise heat loss
- **Daylight** - striking a balance between maximising daylight, minimising heat loss and excluding excessive solar heat gain
- **Solar shading** - delivering shading on the south (ideally via natural means) can reduce overheating in summer months
- **Passive ventilation** - optimising natural ventilation through having openable windows
- **Thermal mass** - through the use of heavy materials to even out temperature swings in a space by absorbing heat through the day and releasing at night
- **Energy efficiency** - generally achieved by using better insulation (such as super-high insulation) and higher specification glazing.

- **Maximising potential for energy for energy supply from decentralised**, low carbon and renewable energy sources- our preference is the use of renewable energy in the first instance:
 - **Renewable** - such as photovoltaics, wind turbines and geothermal.
 - **Low Carbon** - such as heat pumps heat recovery ventilation and combined heat and power (CHP).

Decentralised energy is generated and consumed off the main grid ranging from micro renewables to large scale heating and cooling. It can refer to energy from waste plants, combined heat and power (CHP), district heat and power networks, as well as geothermal, biomass or solar energy.

The use of green roofs and walls is a technique with straddles many themes within this document as they can increase the lifespan of a roof and reduce energy use. However, they also assist in making areas more resilient (see next section within this theme) by reducing surface run-off and delivering wider biodiversity benefits.

The whole lifecycle of a development should be considered from the processes linked with the production of a development to the appropriate use of materials and other strategies to make buildings and places more efficient throughout the lifecycle of a development. Processes linked to the production of a building include sourcing materials, manufacturing, transport, and product delivery.

Alongside these processes we support their consideration of new construction techniques which can deliver efficiencies. Whilst materials can assist in delivering energy efficiencies this should not be the only consideration as efficiencies can also be delivered using durable and adaptable materials which limit the need for repairs and replacement. Alongside this, strategies to reduce water usage should also be considered and implemented

 **We recommend...**

- considering efficiently in a holistic manner
- following the energy hierarchy
- detailing considerations and adopted approach to within an energy statement

 **We recommend that you avoid...**

- ignoring the feasibility and benefits of decentralised energy generation within major developments
- disregarding the efficiencies that can be achieved within the production / construction phases of development

Resilience is about ensuring buildings and places delivered within Stockton-on-Tees are robust over their lifetime considering current and forecast environmental conditions. To achieve resilience many of the considerations previously identified within this local design guide will be of relevance to ensure the potential effects of extreme weather conditions (whether temperature or rainfall) are addressed.

Buildings

Strategies to minimise overheating and achieving internal comfort are the main considerations. This involves thought around passive design and energy efficiency measures. Buildings should also incorporate flood resistance and resilience measures where necessary with this being assessed through the flood risk assessments and surface water strategies.

Water usage forms an important aspect of 'efficiency' with minimum standards being established within Building Regulations, but it is also a consideration of 'resilience'. We support the exceedance of minimum standards to conserve water which can be achieved in numerous ways such as internal changes to fittings but also through rainwater harvesting (and/or grey water) which can then be re-used on-site.

Places

The incorporation of landscape features (including planting and water) within open spaces and the public realm provides multiple benefits to people and the environment including reducing temperatures (the 'heat island' effect) and improving air quality (see 3.2 'Green and Blue Infrastructure'). Forecast environmental conditions will inform landscape strategies, with planting and structures providing opportunities for people to shelter from the elements and use areas in comfort. A landscape strategy will also form part of the strategy to manage buildings solar gain.

To achieve resilient places that satisfactorily address flood risk and the management of surface water it is essential these matters are considered from the outset of the design process. Strategies for both matters should be developed which will incorporate SuDS and natural flood resilience.



We recommend...

- resilience is considered as part of a sites landscape strategy
- appropriate strategies and assessments are undertaken for flood risk and surface water management



We recommend that you avoid...

- providing dwelling layouts, rooms and private amenity spaces which are not of sufficient size and do not meet the needs of the resident
- delivering private amenity spaces which are not enclosed and secure

3.8 Lifespan

- Adaptability
- Execution and maintenance

Adaptability

Key Design Driver

Buildings and spaces are adaptable to changing needs and evolving technologies

A well-designed place is adaptable over time, reducing the need for redevelopment and unnecessary resources / waste. When considering public spaces, such as an open space within a development, the easiest way to ensure adaptability is the creation of spaces which are truly multifunctional ensuring that they can be utilised for a variety of functions likely to be required by the local community.

New buildings and their accompanying private / communal space should be designed so that they are flexible and adaptable from the outset, enabling them to respond to changing socio-economic conditions. Such buildings can adapt to changing needs and lifestyles of the occupier(s) and allow for a variety of uses over time. Buildings that can successfully adapt to changing circumstances will prove more robust over time and are less likely to require demolition. This can be achieved at a strategic level through consideration of:

- **Nature of design**

Open plan forms with a steel and concrete frame construction can create broader spans which make reconfiguration of internal space easier. Cellular forms with load-bearing internal walls tend to be less flexible

- **Enabling option(s) to extend**

Designing in the option to extend can assist in ensuring the option to extend can be achieved in a cost competitive and resource friendly manner.

Commercial developments are more likely to require conversion by successive occupiers, while dwellings commonly need to adapt to changes in the health and mobility of residents. Changes in lifestyle due to developing technologies such as use of electric vehicles and remote working can also lead to the need to adapt buildings.

Developers should design homes which are accessible, functional, and convenient for a wide range of people, including wheelchair users, people with reduced mobility and families with young children.

The way people live and work is constantly changing with highspeed digital connectivity being essential for all forms of development in the modern world as it enables the buildings occupants / users to work, learn, communicate and enjoy leisure activities. Embedding infrastructure into new development to facilitate highspeed digital connectivity is a requirement of Local Plan policies; as a minimum this should include open access ducting to industry standards from homes and premises to the public highway or other locations justified through the planning process.



We recommend...

- buildings are designed to adapt to changing needs and lifestyles
- emerging technologies are at the forefront of your thinking



We recommend that you avoid...

- considering adaptability as an afterthought
- believing the designed product will remain unaltered

Execution and maintenance

Key Design Driver

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

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. If a place has been designed with management and maintenance in mind it will be durable and easy to look after in the long-term which has the potential to reduce on-going costs. All aspects of the public realm, as well as other communal spaces such as courtyards, parking courts and internal common spaces should be given due consideration. Management will also be of relevance to waste collection; particularly for mixed use, commercial and high-density residential developments.

It has become more common for areas that are of general benefit to the development to be managed and maintained by a developer, private management company or a trust. There is potential that such spaces could be adopted by the Council via title transfer once they have been established to an

acceptable standard). Should you be considering title transfer of spaces to the Council you are encouraged to enter early engagement (identifying precisely the areas proposed for transfer) to ensure design / detailing is satisfactory, establishment of the space is planned, commuted sums can be calculated, and relevant legal agreements prepared.

Fostering a sense of community ownership can be instrumental in ensuring spaces are sustained in the long-term. People are more likely to use, value and care for spaces when they are high quality, are well overlooked, can be easily accessed, are flexible to a range of uses and are clearly defined from private spaces. Community management and maintenance can be appropriate in

numerous instances such as courtyards / shared gardens and built community spaces such as community halls, but it is important that the design is well considered, and future occupants are involved in the process.

Quality in delivery is achieved through effectively executing a design in its entirety (both buildings and spaces) when on-site. Execution is a fundamental aspect of delivering spaces that are resilient and attractive in the long term. If a design is not effectively delivered owing to poor workmanship or use of substandard materials it will not be robust, will not achieve a sense of ownership by users and will be more likely to fall into a state of disrepair.

✓ We recommend...

- you consider management and maintenance throughout the design process
- the design is well executed when delivered

✗ We recommend that you avoid...

- suggesting title transfer at an advanced design stage
- considering management and maintenance plans as an afterthought

Bringing it all together

Key Design Driver

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



This report has taken you through the 'Design Process' which begins with an understanding of site 'context' and then moves through the 7 themes outlined in a staged, but where necessary iterative, manner. It can now be brought together in the form of a 'Masterplan' or 'Development Framework' which is the culmination of the design process.

If you have followed the steps identified within the design process, including engagement and design review, you will have created a 'place' which delivers positively against the 'Key Design Drivers' within each theme to deliver a site which is likely capable of being supported by the Local Planning Authority when a planning application is submitted.

The Design Process Checklist

A 'Design Process Checklist' has been prepared to assist in demonstrating how the design process has been followed and to record how the proposed development has sought to address and respond to the 'Key Design Drivers' within each theme.

The checklist is also designed to be used for 'Design Review' where prospective applicants present emerging plans alongside the checklist to Council officers (as part of the pre-application process) for review and comment. Design review comments will be provided within the checklist so it is clear how the scheme could be improved.

Stakeholder engagement is also important in shaping proposals. The checklist therefore provides opportunity for the outcomes of engagement to be recorded alongside how they have informed the design of the development.

The completed checklist will provide a narrative and record of the design evolution, including review and engagement, which can then be submitted alongside a planning application and ideally as part of the Design and Access Statement which will communicate how the scheme accords with this local design guide and justifies instances where it does not.

The Masterplan



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 in 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

Design Process Checklist

Design Stage / Theme		Context stage				Develop and refine			Refine and finalise
		Developer documents	y / n	Engagement*	Design review	Developer analysis	Engagement*	Design review	Developer analysis
Context	responds to, integrates with and wherever possible enhances its setting and existing features	Contextual analysis							
		Site appraisal							
		Placemaking principles							
		Framework plan							
Green and blue infrastructure	provides truly multifunctional green and blue infrastructure, which is informed by the existing, delivers multiple benefits and is accessible to all								
Movement	is well-connected within and through the site, catering for all modes of transport and tips the balance is favour of sustainable modes								
Built Form	develops urban grain that responds to context and townscape, promotes active frontages, creates a distinctive character and contributes to sense of place								
Placemaking	Is easily navigable, designs in quality, and, is informed and inspired by predominant materials and crafts to enhance the distinctiveness								
Homes and buildings	works for everybody, makes people feel safe and secure, and, provides privacy and amenity								
Resources	is efficient and resilient both now and in the future								
Lifespan	Is adaptable to change and planned with management and maintenance in mind								

*Outcomes of engagement and articulation of how this has informed the design

4 Appendices

- Glossary
- Wider reading

4.1 Glossary

Terms/ Abbreviations	Description
Accessibility	The ability of people to move around an area and reach places and facilities, including older and disabled people, those with young children and those carrying luggage or shopping.
Active Frontage	The front of a buildings with openings onto the space that generate activity and engagement between the building interior and the space outside, particularly entrances.
Affordable Housing	Housing for sale or rent, for those whose needs are not met by the market (including housing that provides a subsidised route to home ownership and/or is for essential local workers) as set out in the NPPF.
Amenity space	The outside space associated with a home or homes. It may be private or shared, depending on the building it serves.
Axonometric	planar image of a three-dimensional object
Block (perimeter)	A perimeter block is an urban form in which buildings are surrounded on all sides by public space (often streets) which in turn are defined and (enclosed) by the public fronts of the buildings. A series or network of blocks combine to form a grid.
Baseline studies	Descriptions of the conditions as existing or committed (e.g. environmental), against which changes arising from a proposed development can be predicted and assessed.
Building for a Healthy Life (BHL)	A Design Toolkit for neighbourhoods, streets, homes and public spaces
Building line	The line formed by the frontages of buildings along a street
Building Regulations	Building regulations are minimum standards for design, construction and alterations to virtually every building. The regulations are developed by the UK government and approved by Parliament.

Terms/ Abbreviations	Description
Building Research Establishment Environmental Assessment Method (BREEAM)	BREEAM is the world's leading sustainability assessment method for masterplanning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use and refurbishment.
Built form	The layout (structure and urban grain), density, scale (height and massing), appearance (materials and details) and landscape of development.
Climate change adaptation	Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities.
Climate change mitigation	Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.
Community cohesion	A sense of belonging for all communities, with connections and trust between them. Diversity is valued and people of different backgrounds have the opportunity to develop positive relationships with one another
Community management	The communal management of a shared resource or facility by an organisation controlled by the community who it benefits.
Commuted Sum	Payment of a capital sum by an individual, authority or company to the highway authority, local authority, or other body, as a contribution towards the future maintenance of the asset to be adopted, or transferred.
Compact form of development	Development that is planned with a relatively high residential density and an urban layout. Community facilities are closer to one another and their users, preserves more open landscape, and makes efficient use of land and resources.
Context	The setting of a site or area, including factors such as traffic, activities and land uses as well as landscape and built form.
Contextual analysis	An analysis undertaken to understand the wider and local context of a site. It will cover a wide range of aspects relevant to the site and surroundings.
Density	In the case of residential development, a measurement of either the number of habitable rooms per hectare or the number of dwellings per hectare.

Terms/ Abbreviations	Description
Design and Access Statement	A short report accompanying and supporting a planning application. It provides a framework for applicants to explain how a proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users.
Design Code	A set of illustrated design requirements that provide specific, detailed parameters for the physical development of a site or area. The graphic and written components of the code should build upon a design vision, such as a masterplan or other design and development framework for a site or area.
Design review	An established way of improving the quality of design being recognised in the NPPF. It involves the assessment of development proposals by a panel of multidisciplinary professionals and experts
Dual aspect	A building layout where windows on adjacent walls allow for air circulation or views in more than one direction
Drainage Strategy	A strategy to be submitted with a planning application which details how surface water will be managed over the lifetime of the development.
Ecosystem Services	The benefits people obtain from ecosystems such as, food, water, flood and disease control and recreation.
Elevation	The frontage of a building, or the drawing of that frontage.
Enclosure	The use of buildings to create a sense of defined space.
Energy Efficiency	Using less energy to perform the same task – that is, eliminating energy waste. In the context of this document it refers to using energy efficient systems (better insulation, efficient appliances and lighting etc.)
Energy Hierarchy	A classification of energy options prioritised to assist progress towards a more sustainable energy system. It is a similar approach to the waste hierarchy for minimising resource depletion and adopts a parallel sequence.
Energy Statement	A statement accompanying/required by a planning application which outlines how a scheme aims to reduce the energy usage and carbon emissions of the development.
Fenestration	The arrangement of windows on a facade.

Terms/ Abbreviations	Description
Fixes and flexes	A fundamental of the masterplan process which establishes the important elements that can't be varied (fixes) and elements where there is some flexibility in their interpretation/delivery (flexes).
Flood Risk Assessment (FRA)	An assessment of the risks of all forms of flooding to and from development, taking climate change into account and to inform the application of the sequential approach. Sequential Approach is used to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed.
Framework Plan (or concept plan)	The basic design ideas on which a proposal will be based. This is often presented as a plan and supported by a combination of words and visual material such as placemaking principles and design objectives.
Frontage	The principal front of a building, that faces on to a street or open space (also known as the 'façade' of a building)
Gateway	Gateways 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.
Green corridor	Uninterrupted network of natural features within an urban area that acts as a linkage for wildlife, and potentially for people.
Green (and Blue) infrastructure	A network of multifunctional green and blue space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.
Heritage Asset (including Designated Heritage Asset)	<p>Designated Heritage Asset – A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under the relevant legislation. Designation highlights a building, site or area's special interest and value to this and future generations and gives it protection under law or policy.</p> <p>Heritage Asset - A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing)”</p>
Historic Environment	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.

Terms/ Abbreviations	Description
Inclusion	Making sure that all individuals have equal access, opportunity and dignity in the use of the built environment.
Inclusive Design	Designing the built environment, including buildings and their surrounding spaces, to ensure that they can be accessed and used by everyone.
Infill	Development within a gap within an otherwise built-up street frontage or urban block.
In-curtilage	Within a building's site boundary, rather than on a public street or space.
Landmark	A building or structure that stands out from its background by virtue of height, size or some other aspect of design.
Legibility	How easy it is for people to understand and find their way around a place and how memorable it is.
(Lead) Local Flood Authority	Prepare and maintain a strategy for local flood risk management in their areas, coordinating views and activity with other local bodies and communities through public consultation and scrutiny, and delivery planning.
Local vernacular	An indigenous building style using local materials and traditional methods of construction and ornament, especially as distinguished from academic or historical architectural styles.
Massing	The combined effect of the arrangement, volume and shape of a building or group of buildings. Also called bulk.
Mixed use development	Provision of a mix of complementary uses, such as residential, community and leisure uses, on a site or in close proximity within a particular area.
Movement Network	The linked routes and connections for people and vehicles to go and move through places and spaces. Specific consideration is given to the needs of each of the different users of the network, including pedestrians, cyclists, public transport, cars and service vehicles.
National Design Guide (NDG)	A planning guidance document based on national policy in the NPPF. The NDG sets out the national fundamental priorities for good design using ten characteristics.

Terms/ Abbreviations	Description
National Planning Policy Framework (NPPF)	The National Planning Policy Framework sets out the Government’s planning policies for England and how these are expected to be applied.
National Planning Practice Guidance	Adds further context to the National Planning Policy Framework (“NPPF”). There are 42 pieces of guidance. Key topics include what should be included in Local Plans, Design, Ensuring the viability of town centres and Renewable and Low Carbon Energy. The guidance must be taken into account when making planning determinations.
Natural surveillance	When buildings around a space are designed with features that are likely to lead to people overlooking the space. These may be windows, balconies, front gardens or entrances.
Net gain for biodiversity	Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures. See the Natural Environment planning practice guidance for more detail.
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.
Open Space	All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity
Permeability	The degree to which an area has a variety of pleasant, convenient and safe routes through it.
Pre-application advice	A confidential advice service to those looking to submit a planning application. Enquiries are considered by a planning officer who will share it with relevant officers to help provide the best possible advice and guidance.
Public art	Permanent or temporary physical works of art visible to the general public, whether part of the building or free-standing: can include sculpture, lighting effects, street furniture, paving, railings and signs.
Public/private interface	The point at which public areas and buildings meet private ones.
Public Realm	Comprises of streets, squares, interchanges, hard and soft landscaped areas, alleys and yards where free accessible public access is provided (but does not include owned and maintained spaces).
Riparian	Relating to or situated on the banks of a river

Terms/ Abbreviations	Description
Roofscape	A view of roofs, particularly in terms of its aesthetic appeal.
Scale	The impression of a building when seen in relation to its surroundings, or the size of parts of a building or its details, particularly as experienced in relation to the size of a person. Sometimes it is the total dimensions of a building which give it its sense of scale: at other times it is the size of the elements and the way they are combined. The concept is a difficult and ambiguous one: often the word is used simply as a synonym for 'size'.
Section	Drawing showing a slice through a building or site.
Section 106 Agreement	A legal agreement under section 106 of the 1990 Town & Country Planning Act. Section 106 agreements are legal agreements between a planning authority and a developer, or undertakings offered unilaterally by a developer, that ensure that certain extra works related to a development are undertaken.
Settlement pattern	The distinctive way that the roads, paths and buildings are laid out in a particular place.
Site Appraisal	A survey and evaluation of the existing characteristics of a site and its surroundings. It should be undertaken for every development before the details of a scheme are drawn up.
Square	Squares are 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.
Street clutter	Street furniture and landscape arranged so that streets are difficult to move through, use or are unattractive.
Street furniture	Structures in and adjacent to the highway which contribute to the street scene, such as bus shelters, litter bins, seating, lighting, railings and signs.
Street scene	The appearance of all of the elements of a street, including the carriageway, pavement, street furniture, planting, and the buildings or structures along its edges, particularly the composition of buildings on each side of the street.
Supplementary Planning Document	Add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Terms/ Abbreviations	Description
Sustainable Development	At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs ¹
Sustainable Drainage Systems (SuDS)	Features designed to reduce flood risk, which are built to receive surface water run-off, such as constructed wetlands, permeable surfaces, retention ponds, green roofs and swales.
Sustainable transport mode	Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra-low emission vehicles, car sharing and public transport.
Tenure neutral	Housing where no group of residents is disadvantaged as a result of the tenure of their homes. There is no segregation or difference in quality between tenures by siting, accessibility, environmental conditions, external facade or materials. Homes of all tenures are represented in equally attractive and beneficial locations, and there is no differentiation in the positions of entrances. Shared open or play spaces are accessible to all residents around them, regardless of tenure.
Topography	A description or representation of artificial or natural features on or of the ground.
Urban Grain	The pattern of the arrangement and size of buildings and their plots in a settlement; and the degree to which an area's pattern of street-blocks and street junctions is respectively small and frequent, or large and infrequent.
Vernacular	The way in which ordinary buildings were built in a particular place, making use of local styles, techniques and materials and responding to local economic and social conditions.
Walkable Neighbourhoods	Local facilities are within walking distance, generally considered to be no more than a 10-minute walk (800m radius).

4.2 Wider reading

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Context	Understanding the site and its context	8 / 12 / 14 / 15 / 16	C1 / C2	Making the most of what's there	SD8	CAHEF / HER / SFRA / Green Infrastructure Strategy / Landscape Character Assessment and Capacity Study
	Capitalising on existing features	8 / 12 / 14 / 15 / 16	C1 / C2 / I1 / I2	Making the most of what's there	SD8	CAHEF / HER / SFRA / Green Infrastructure Strategy / Landscape Character Assessment and Capacity Study
	Developing a vision and concept	14	N2 / N3 / R3	Making the most of what's there / Green and blue infrastructure	SD5 / ENV4	Tees Valley Authorities Local Standards for Sustainable Drainage

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Green & Blue Infrastructure	Sustainable urban drainage systems	15	N1 / N2 / N3	Natural connections / Green and blue infrastructure / Making the most of what's there	SD5 / SD8 / ENV5	Green Infrastructure Strategy / Tees Valley Authorities Local Standards for Sustainable Drainage / CIRIA SuDS Manual
	Integrating nature and enhancing biodiversity	8 / 12	B3 / N1 / P1 / P2 / P3	Green and blue infrastructure	SD5 / SD8 / ENV6	Green Infrastructure Strategy
	Green spaces for people	14 / 15	N2 / N3 / R3	Green and blue infrastructure	SD5 / SD8	Landscaping, trees and play areas (see Part Five)
	Wider environmental benefits	8 / 9 / 12	M1 / M2	Natural connections / Walking, cycling and public transport / Well defined streets and spaces / Easy to find your way around / Healthy streets	SD8 / T11	Green Infrastructure Strategy
Movement	Street hierarchy and connectivity	8 / 9 / 12	M1	Natural connections / Walking, cycling and public transport / Healthy streets	SD8 / T11	Landscaping, trees and play areas (see Part Five)
	Cycle and pedestrian network	9	M3	Cycle and car parking	SD8 / T11	Tees Valley Design Guide & Specification / Tees Valley Local Cycling and Walking Infrastructure Plan
	Parking and servicing	9	M3	Cycle and car parking	SD8 / T11	Cycle infrastructure design (LTN 1/20)

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Built Form	Urban grain and block principles	8 / 9 / 11 / 12	B1 / B2	Walking, cycling and public transport / Making the most of what's there / Well defined streets and spaces	SD8	Tees Valley Design Guide & Specification / Access to and use of buildings: Approved Document M, Drainage and waste disposal: Approved Document H & Infrastructure for charging electric vehicles: Approved Document S,
	Frontage	8 / 12	B2 / P2	Facilities and services / Well defined streets and spaces / Back of pavement, front of home	SD8	Cycle infrastructure design (LTN 1/20)
	Scale and massing	12	B1 / B2	Making the most of what's there / Well defined streets and spaces	SD8	
	Residential character areas	12	I1 / I3	Making the most of what's there / A memorable character / Easy to find your way around	SD8	

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Placemaking	Legibility	8 / 9 / 12	I1 / B3 / M1 / M2 / P1 / P3	Well defined streets and spaces / Easy to find your way around	SD8	
	Streets & spaces	12	N1 / P1 / P2 / P3	Well defined streets and spaces / Easy to find your way around / Healthy streets	SD8	
	Distinctiveness	12	C2 / I1 / I2 / I3 / B3	Making the most of what's there / A memorable character	SD8	
	Design quality	8 / 9 / 12	I2 / N1 / P1	Natural connections / A memorable character / Well defined streets and spaces / Healthy streets / Green and blue infrastructure	SD8	

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Homes & Buildings	Inclusive design	5 / 8 / 12	M2 / M3 / P3 / U1 / U2 / U3 / L2	Walking, cycling and public transport / Facilities and services / Homes for everyone / Easy to find your way around / Healthy Streets / Green and blue infrastructure	SD8 / H4 / T11	Technical Housing Standards – NDSS Access to and use of buildings: Approved Document M
	Healthy, comfortable and practical	12	H1/H2	Homes for everyone / Back of pavement, front of home	SD3 / SD8 / H4	Technical Housing Standards – NDSS Overheating: Approved Document O Ventilation: Approved Document F
	Privacy and amenity	12	H1 / H2	Well defined streets and spaces / Back of pavement, front of home	SD3 / SD8	
	Security and safety	8 / 12	H1 / H2 / P2 / M3	Walking, cycling and public transport / Well defined streets and spaces / Healthy streets / Cycle and car parking / Green and blue infrastructure	SD8	Security in dwellings: Approved Document Q

		National Planning Policy Framework	National Design Guide	Building for a Healthy Life	Local Plan	Wider Reading
Resources	Efficiency	12 / 14	R1 / R2	Facilities and services	SD5 / ENV1 / ENV2 / ENV3	Conservation of fuel and power: Approved Document L
	Resilience	12 / 14	R3	Natural connections / Green and blue infrastructure	SD5 / ENV4	Resistance to sound: Approved Document E, Sanitation, hot water safety and water efficiency: Approved Document G, Overheating: Approved Document O & Ventilation: Approved Document F
Lifespan	Adaptability	12	L2	Homes for everyone / Green and blue infrastructure	SD8 / H4 / TI3	Access to and use of buildings: Approved Document M
	Execution and maintenance	12	L1 / L3	Well defined streets and spaces / Green and blue infrastructure / Back of pavement, front of home	SD8 / ENV4 / ENV6	Material and workmanship: Approved Document 7

