West of Loughborough SUE

Phases 1&2

Development Framework Plan Document

February 2019

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PERSIMMON
Together, we make a home

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Chapter 1.0

Introduction

Introduction and Purpose

This Development Framework Plan Document (DFPD) has been prepared by FPCR Environment and Design on behalf of Persimmon Homes and William Davis. The purpose of the document is to serve as the 'Regulating Plan' for the future Phase 1 and 2 reserved matters applications for the West of Loughborough Sustainable Urban Extension (SUE) in accordance with Condition 11 of outline planning permission 10/0216/OUT.

A reserved matters application for Phase 1 will be submitted by Persimmon Homes whilst Phase 2 will be submitted by William Davis. The Phase 1 and 2 areas are highlighted on the adjacent figure.

The production of this DFPD has been a collaborative process with input from the developer team, local authority officers and stakeholders. The overall aim of the document is to ensure that the initial phases of West of Loughborough establish a cohesive, locally distinctive and high quality design precedent for future phases of the scheme.

The DFPD has been prepared in accordance with the following approved plans and documents:

- ***Design and Access Statement (DAS);***
- ***Land Use Parameter Plan;***
- ***Density and Building Heights Parameters Plan;***
- ***Access Parameters Plan;***
- ***Green Infrastructure Parameters Plan;***
- ***Green Infrastructure and Biodiversity Management Plan (GIBMP);***
- ***West of Loughborough Recreation Strategy.***

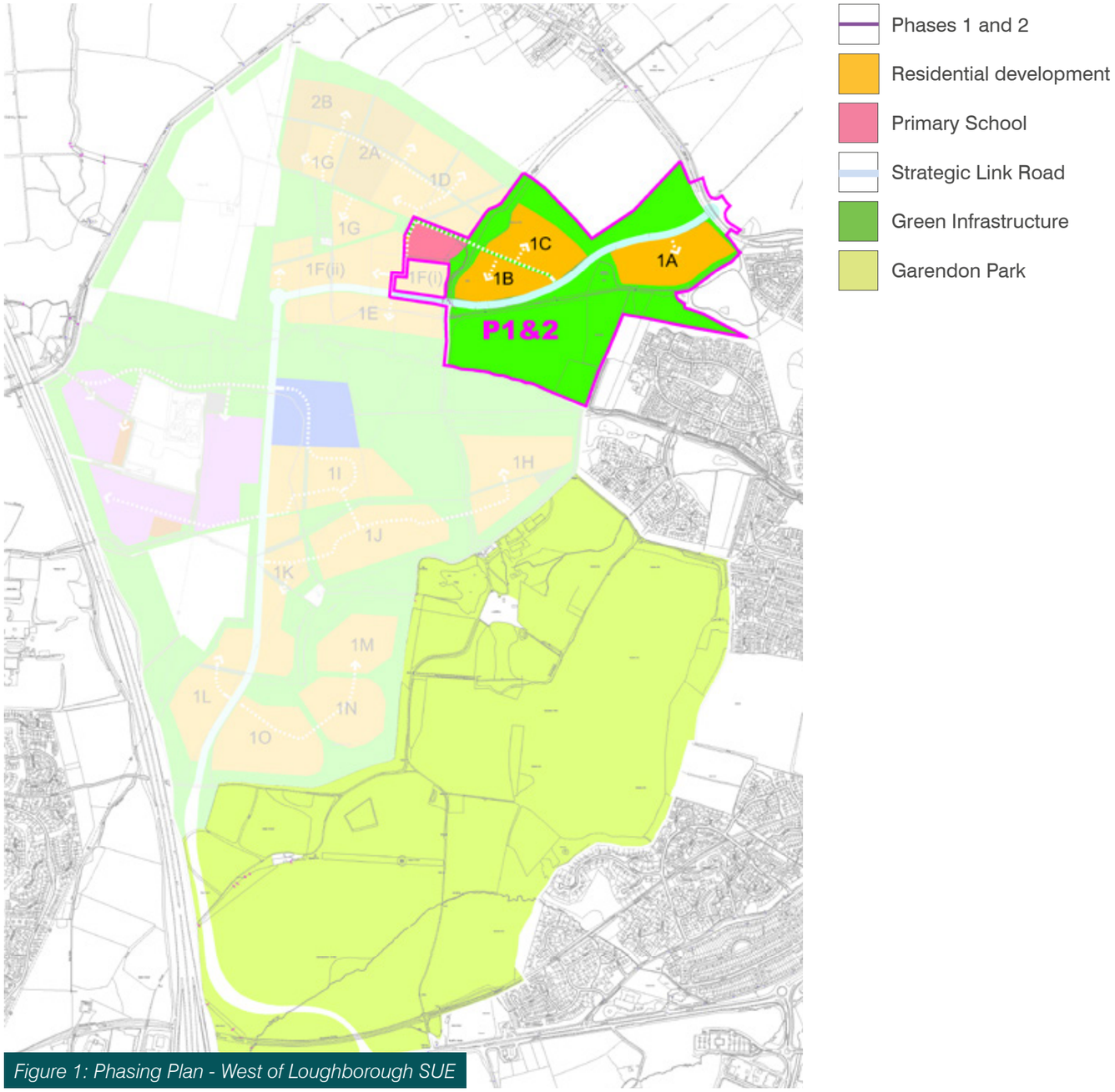

Figure 1: Phasing Plan - West of Loughborough SUE

Introduction

Background

In February 2015 Persimmon Homes and William Davies submitted an outline planning application to Charnwood Borough Council (CBC) for mixed use development of up to 3200 dwellings, community facilities, public open space and employment uses at land West of Loughborough [CBC ref 10/0216/OUT]. Planning permission was granted by CBC in June 2018.

The outline planning permission includes Condition 11 requires the submission and approval of a 'Development Framework Plan' prior to the submission of any the first reserved matters applications for each sub area/development parcel. This plan will serve as the regulating plan for any associated design work within that sub area/development parcel. Condition 11 states that the plan should include:

- Housing and other land use distribution and disposal;
- Transition Zones;
- The character, mix of uses and density;
- Structure of public spaces;
- Access;
- Movement corridors (including strategic and principal, primary, secondary roads, public transport corridors, pedestrian and cycle routes, greenways);
- Street hierarchy, including street types and typical street cross-sections;
- Block principles to establish use, density and building typology. In addition design principles including primary frontages, pedestrian access points, front and back and perimeter of building definition;
- Housing mix, type and tenure
- Key groupings and other key buildings to include information about height, scale, form, level of enclosure, building materials and design features;
- Green and public open spaces;
- Key infrastructure (including SuDS and significant utility provision);
- The conceptual design and approach to green open space and the public realm to include hard and soft landscaping, lighting and public art;
- Measures to demonstrate how opportunities to maximise resource efficiency and climate change adaption in the design of the development will be achieved through external, passive means such as landscaping, orientation, massing and external building features;
- Details of measures to minimise opportunities for crime;
- Details of the approach to vehicle parking and cycle parking across the sub-area.

Structure

The DFPD has been prepared with the requirements of officers at Charwood Borough Council in mind and provides a concise and practical design manual for Phase 1 and 2 reserved matters applications.

The DFPD is structured around a 'Regulating Plan' (see Section 2.0) and an accompanying set of design principles and guidance under the following key headings:

Use and Amount

Green Infrastructure

Streets and Character

Urban Form

The Regulating Plan is underpinned by the approved Parameter Plans, Design and Access Statement (DAS), Green Infrastructure and Biodiversity Management Plan (GIBMP) and Recreation Strategy for West of Loughborough SUE.

The DFPD aims to achieve a balance between the need to ensure high quality design and an appropriate degree of flexibility to respond to potential changes during the development period. Design Principles therefore avoid unnecessary description and detail and concentrate on guiding the overall scale, density, massing, height, landscape, layout, materials and access of new development.

The context for development is well understood and covered in depth by the DAS. The DFPD therefore references this information where necessary but does not include any additional material in relation to appraisal of context.

Chapter 2.0

Regulating Plan

REGULATING PLAN

The Regulating Plan illustrates the key design principles for the distribution of land uses, green infrastructure, streets and character and urban form approved as part of the outline consent and on which this DFPD is based.

Rather than artificially sub-divide the development into a series of character areas, the DFPD adopts a landscape-led approach with new green infrastructure designed in response to the varied and unique character of the site and its surroundings such as Garendon Park, Black Brook and Hathern Hill. Proposed green and public open spaces will create areas of distinctive character in combination with a clearly defined hierarchy of street types. Residential and other proposed uses are to be developed with a traditional style which complements the site and its surroundings.

Use and Amount

Residential Development	DP1: Land Use & Mix	p8
	DP2: Density and Scale	p9
Primary School		

Green Infrastructure

Informal open space	DP3: GI Concept	p10
Existing vegetation	DP4: Garrendon Gateway	p12
Proposed structural Planting	DP5: Bellevue Greens	p13
Formal amenity space	DP6: Black Brook	p14
Greenway Lighting	DP7: Greenways	p15
Avenue planting		
Indicative hedgerow tree planting		
Public Art Gateway Feature		
Retained agricultural land		
Youth and children's play	DP8: Play	p16
Sustainable Drainage Systems	DP9: SuDS	p17
Proposed swales		

Streets and Character

Strategic Link Road (SLR)	DP10: Street Hierarchy	p18
Primary Street	DP13: SLR	p20
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Existing Public Right of Way		
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Proposed off-road cycle trail		
Public car park to serve Garendon Park	DP12: Public Transport	p18
Bus stop (indicative location)		

Urban Form

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	DP20: Parking	p30
Secondary Frontage	DP21: Secure by Design	p31
	DP22: Sustainability	p31
Transition zones	DP23: Transition zones	p32

Regulating Plan

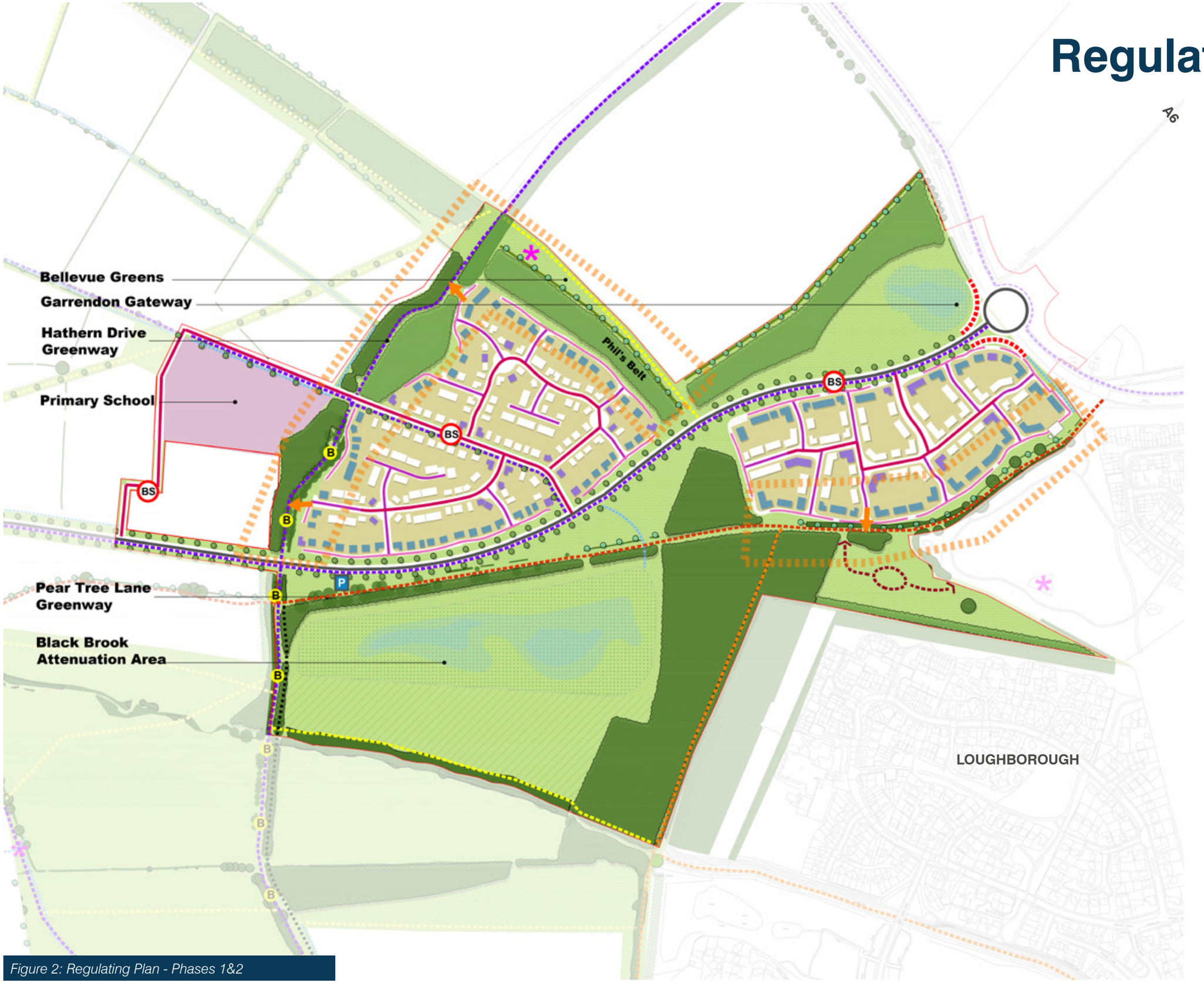


Figure 2: Regulating Plan - Phases 1&2

Chapter 3.0

Use and Amount

DESIGN PRINCIPLE 1
LAND USES & MIX

Phase 1 and 2 land uses include residential areas, a primary school, extensive green infrastructure and the northern section of the Strategic Link Road (SLR).

Use	Description	Area
Residential	Phases 1 and 2 would provide 450 dwellings, with a broad mix of house types including 1-2 bedroom apartments, and 1-4+ bedroom houses market houses. The housing mix will include 25% affordable housing, comprising approximately 25% intermediate and 75% social rented housing.	c13 Ha
Primary School	A 1.6 FE primary school to meet the needs of the development and surrounding community	c1.9 Ha
Green Infrastructure	A range of provision including sustainable drainage features, semi-natural greenspace, amenity greenspace, recreational facilities and retained agricultural land	c30 Ha
Strategic Link Road & Primary Streets	The Strategic link road, primary streets, public transport and pedestrian access route into the site from the A6	c4 Ha

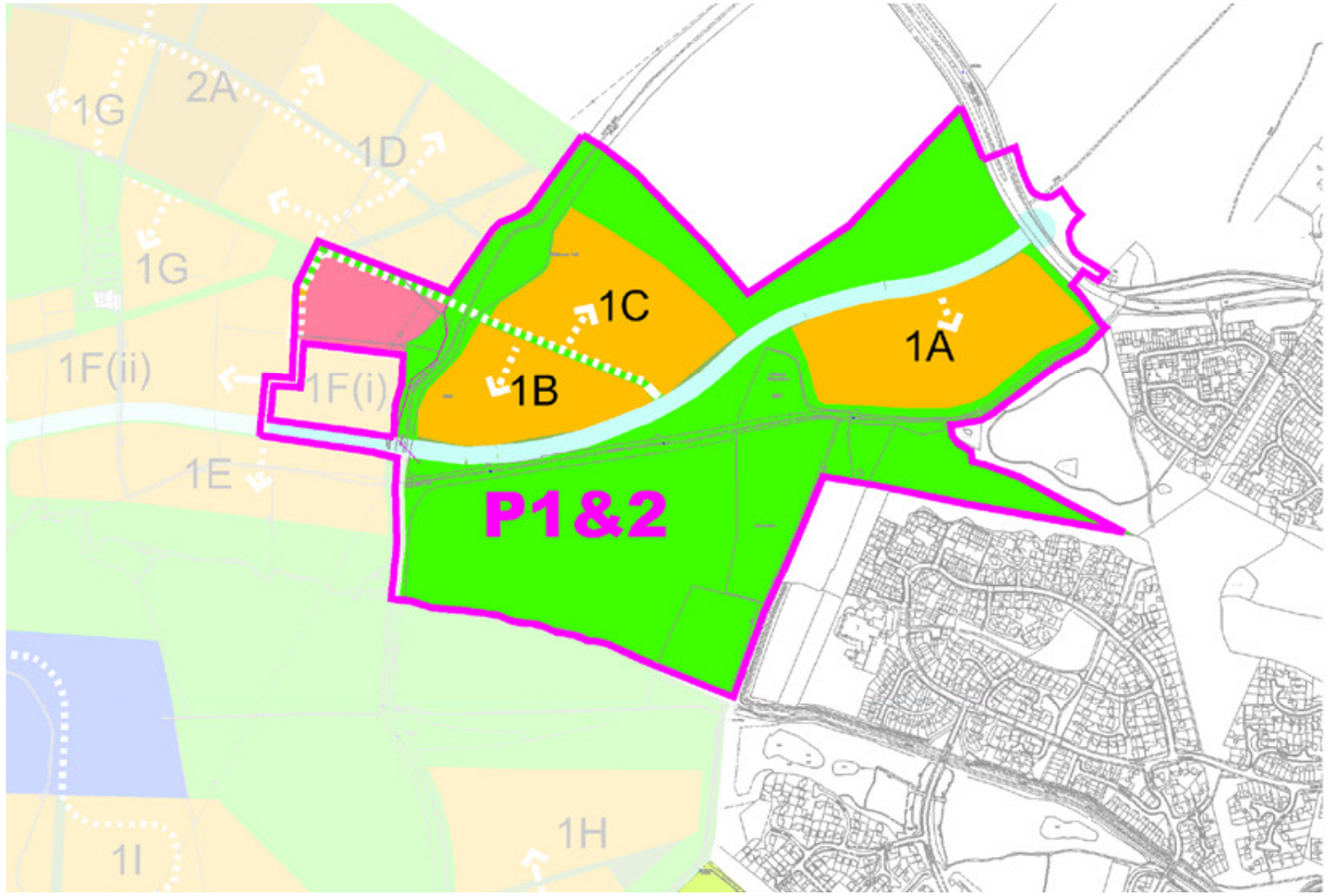


Figure 3: Land Uses

Residential development

Strategic Link Road

Primary School

Green Infrastructure

DESIGN PRINCIPLE 2
DENSITY AND SCALE

Residential development will be designed to provide a range of densities across the site in accordance with the DAS and approved Parameter Plans. The broad range of densities is shown on the adjacent Figure.

The majority of dwellings will be 2 storeys in height with some 2.5 storey dwellings used within the layout to define gateways, aid legibility and provide variety in the roofscape. The maximum building height for 2 -2.5 storey dwellings will be 10.0m from ground to ridge level excluding any point features.

Higher density areas such as the Garendon Way SLR will benefit from the occasional use of 3 storey dwellings. Combined with formal avenue tree planting, taller buildings will reinforce the status of these primary routes within the street hierarchy. The maximum building height for 3 storey dwellings will be 13.0m from ground to ridge level excluding any point features.

Lower density arrangements of dwellings that front directly onto areas of open space and countryside should be 2 storey dwellings with a smaller proportion of taller key buildings.

Figure 4: Density

Low-Medium Density: 28-32dph

Medium-High Density: 33-37dph

Chapter 4.0

Green Infrastructure

DESIGN PRINCIPLE 3
GREEN INFRASTRUCTURE CONCEPT

The Green Infrastructure Biodiversity Management Plan (GIBMP) establishes a robust Green Infrastructure network for the West of Loughborough SUE, and will deliver a range of environmental enhancements. This will be achieved through the implementation of emerging site wide Green Infrastructure Biodiversity Management Strategy (GIBMS) which has been prepared to ensure the successful establishment and evolution of West of Loughborough and its setting.

The existing network of watercourses, hedgerows and small woodlands provides the building blocks for a substantially enhanced and interconnected series of green corridors. New broadleaved woodland, trees, hedgerows, areas of amenity, wildflower and conservation grassland and varied wetland habitats will significantly reinforce existing landscape features. This approach will enhance landscape character, habitat provision and connectivity. It will also help to integrate built development within its surroundings and provide an appropriate transition from the proposed urban areas to the surrounding landscape.

The landscape of Phases 1 and 2 is broken down into areas that each have their own unique and distinct characteristics. These areas also inform the character of built development that they adjoin (see Figure 5).

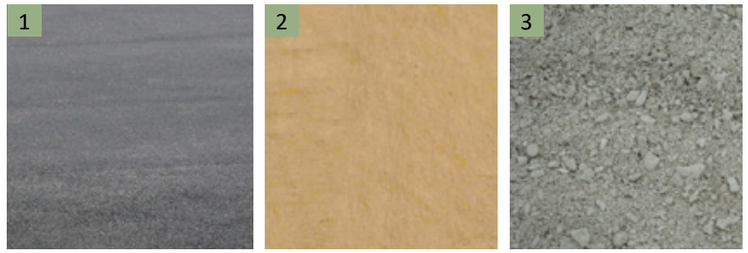
1. Garendon Gateway
2. Bellevue Greens
3. Black Brook Attenuation Area
4. Pear Tree Lane Greenway
5. Hathern Drive Greenway
6. Equipped Areas for Play

In terms of accessibility it is of note that all areas noted above are to be designed to promote accessibility for all wherever possible. In particular all surfaces are not to exceed 1:21. Drop kerbs are to be used at all road crossing points in conjunction with tactile paving and all bollards are to be fitted with visibility strips for the visually impaired.

DESIGN AND MATERIALS: LANDSCAPE

Although each area has its own design language, a consistent and coherent palette of materials and street furniture is to be across the landscape scheme. The following images provide a guide:

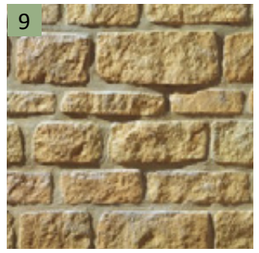
Pedestrian/Cycle Routes



Social Spaces

Street Furniture

Walls



1. Black asphalt; 2. Hoggin; 3. Compacted limestone; 4. Castleyard/Brindle Pavers; 5. Charcoal/Grey pavers; 6. Ball finial railings; 7. Chunky timber furniture; 8. Estate Railing; 9. Reconstituted stone

Shrubs

Trees

1. Prunus laurocerasus; 2. Cornus alba; 3. Cornus sanguinea; 4. Tilia spp; 5. Malus spp; 6. Prunus spp; 7. Quercus spp; 8. Acer spp; 9. Quercus robur; 10. Salix spp; 11. Alnus glutinosa.

1. Garendon Gateway
2. Bellevue Greens
3. Black Brook Attenuation Area
4. Greenway - Pear Tree Lane
5. Greenway - Hathern Drive
6. Bellevue Trim Trail
7. Outdoor Cycling Trail
8. Enhancements to existing play area

Figure 5: Green Infrastructure - Concept Plan

Chapter 4.0

Green Infrastructure

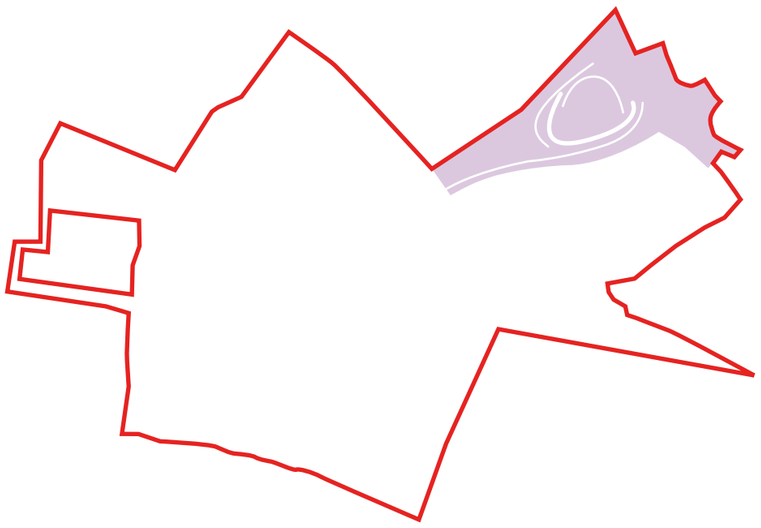
DESIGN PRINCIPLE 4
GARENDON GATEWAY

Garendon Gateway comprises an area of open space adjoining the A6 and forming part of the principal gateway into West of Loughborough and functioning as a transitional space between built development and countryside beyond.

This area of greenspace comprises a belt of native broadleaved planting along the northern boundary, which provides a landscape buffer to the countryside and Hathern village to the north. A balancing pond forming part of the SuDS for development Phase 1 would be located along the boundary with the A6 and designed to create an attractive landscape feature at the entrance to the scheme. Avenue planting would be provided along Garendon Way SLR.

Areas of grassland meadow, woodland, hedgerow, avenues trees and wetland would create and an attractive gateway and provide a variety of habitats designed to enhance opportunities for wildlife.

Potential for the Gateway to incorporate public art alongside the SLR, forming a distinctive entrance feature into the site from the A6.



Garendon Gateway - Location

Parameters	
Layout	Primary route and gateway to be set within high quality landscaped entrance space
Character	Landscape to be parkland style in character, utilising natural materials and predominantly native plant species. This provides a transition from from the site to the farmland beyond
Hard Works	Potential location for gateway features - e.g railings, walling
Soft Works	Formal avenue trees and closely mown grass verge along Garendon Way SLR contrasts with informal meadow and wetland grassland within the SuDS basin. Native broadleaved woodland planting along the northern boundary
SuDS	Balancing pond and swale to be shaped to be natural in appearance and planted with native grass and wetland species
Lighting	Road lighting columns along Garendon Way SLR
Public Art	Potential for attractive gateway feature to be introduced at site entrance. Interpretation of biodiversity/historic features


1


2


3


4

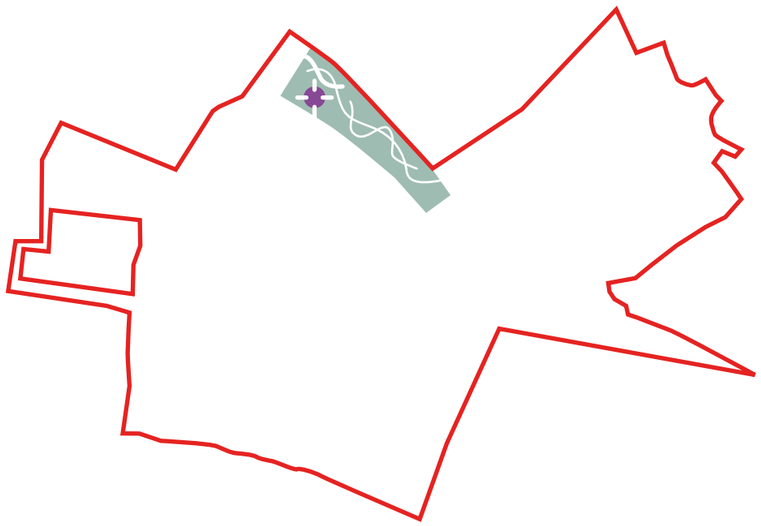

5

1. Formal avenue planting along Garendon Way SLR
2. Naturalistic meadow planting
3. Informal meadow and wet grassland within the attenuation basin
4. Walls and / or railings
5. Interpretation of landscape features

DESIGN PRINCIPLE 5
BELLEVUE GREENS

Bellevue Greens extend along the edge of the northern boundary of West of Loughborough serving as a landscape buffer to the surrounding countryside and Hathern village. The proposed GI includes extensive areas of new native broadleaved woodland planting which would, on delivery of future phases establish a wildlife corridor connecting Pear Tree Lane, Baileys Plantation, Hathern Drive and Oakleys Wood. A proposed footpath would create a link between Hathern Drive and the SLR.

Woodland will enhance the local landscape and help assimilate built development within the local landscape. Existing hedgerows would be retained and enhanced with new hedgerows along with areas of grassland and meadow.



Bellevue Greens - Location

Parameters	
Layout	A high quality setting for new development providing a landscape buffer, opportunities for recreation and pedestrian connection along the northern boundary
Character	Informal semi-natural greenspace. Wooded corridor along the ridge will create a distinctive setting to the built development
Hard Works	Proposed footpaths to be mown grass and rural in appearance (along the woodland edge) or self bound gravel (by the trim trail). Trim trail equipment to be appropriate to its setting along the ridgeline and proposed woodland
Soft Works	Native broadleaved woodland planting along the northern boundary. Amenity grassland along the development edges giving way to conservation grasslands towards the northern boundary woodland

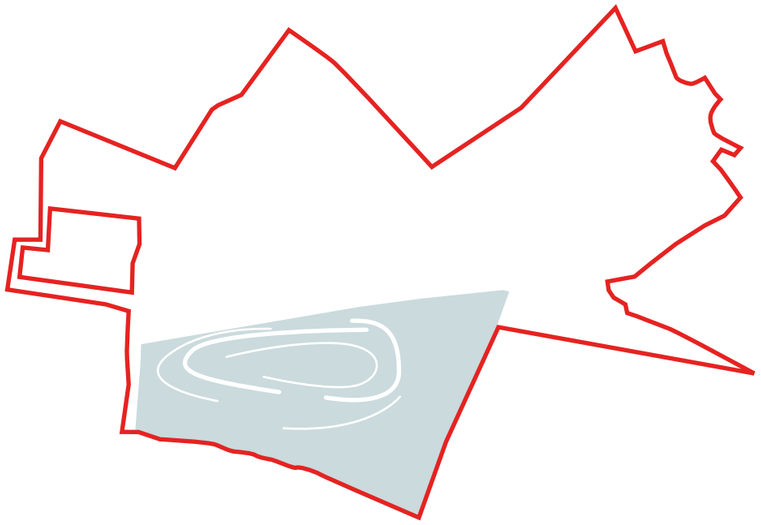
1. Structural woodland planting
2. Natural surveillance of open space
3. Informal planting

Green Infrastructure

DESIGN PRINCIPLE 6
BLACK BROOK ATTENUATION AREA

The Black Brook Attenuation Area comprises a large sustainable drainage feature set within an area of retained agricultural land bound by existing woodland along Pear Tree Lane, Bailey's Plantation and Black Brook.

Proposed public access includes an informal footpath along the Black Brook providing a link between existing routes along Hathern Drive and Bailey's Plantation. The area will be designed to enhance the biodiversity and wildlife value of existing landscape features. The SuDS basin would be designed to incorporate areas of wetland habitats, whilst floodplain along the Black Brook will be protected.



Black Brook Attenuation Area - Location

Parameters	
Layout	Forms part of the floodplain along Black Brook. Large attenuation basin surrounded by retained agricultural land, Hathern Drive, Bailey's Plantation and Pear Tree Lane
Character	Semi-natural green space retained in agricultural management. Predominantly of simple, open character Informal footpath along the Black Brook
Hard Works	NA
Soft Works	• Area retained in agricultural use • Potential areas for wet woodland, meadow, wet grassland, aquatic and marginal planting within the SuDS basin
SuDS	Drainage ponds and swales to be shaped to be natural in appearance and planted with native grass and wetland species.

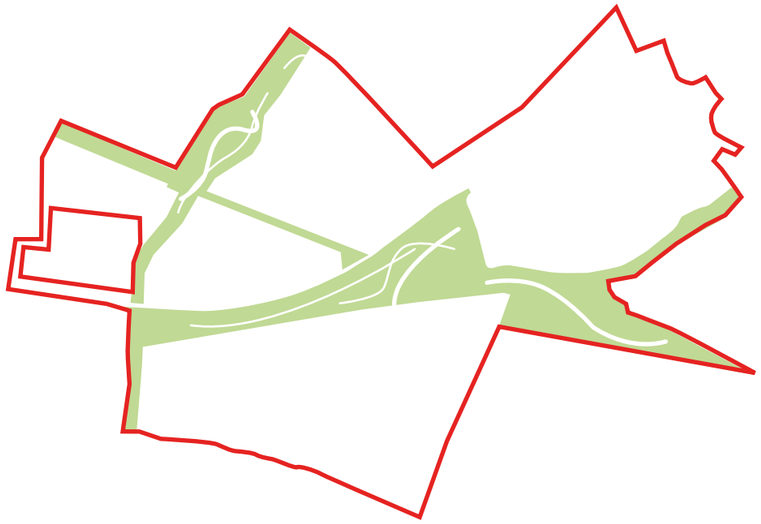
1. Black Brook
2. Informal SuDS features
3. Retained agricultural land

DESIGN PRINCIPLE 7
GREENWAYS

The Greenways provide an interconnected network of green spaces between different neighbourhoods and areas of public open space. The primary Greenways are centred along Hathern Drive and Pear tree Lane, defined by the site's existing network of hedgerows, public rights of way and woodland and tree belts.

A secondary Greenway route will establish a link between Garendon Way SLR to Hathern Drive and the Primary School site beyond. The character of this route will be defined by a primary street running between residential parcels 1B and 1C. The Greenway will include trees and grass verge along the linear street and/or within private garden frontages.

Where appropriate, existing planting will be reinforced with new native tree and hedgerow planting in order to increase their diversity and wildlife value. In addition, the Greenways allow for the provision of new trees, amenity and conservation grassland, swales/drainage ditches, pedestrian/cycle routes and informal recreation. Development will front onto and survey Greenways wherever it is practical to do so in order to encourage their safe use.



Greenways - Location

Parameters	
Layout	Publicly accessible green corridors connecting neighbourhoods and existing public rights of way. Key ecological and movement corridors
Character	Semi-natural character with more formal treatment along the edges of development parcels
Hard Works	Hathern Drive and Pear Tree Lane Greenways will incorporate the retained public rights of way along their present routes. Routes will be maintained with a durable finish as appropriate Bollards/barriers to control access onto Greenways from the residential edge as appropriate
Soft Works	Existing vegetation reinforced with native tree and hedgerow planting Tree planting along edges of development parcels Avenue planting along the Greenway route to the Primary School
SuDS	Potential for swales to be located within Greenways designed to provide interest and benefits to wildlife
Lighting	Bollard lighting along part of Hathern Drive Additional lighting at key junctions with roads and other movement corridors
Public Art	Potential for signage/interpretation boards to be integrated within the scheme

1. Enhancements to existing public rights of way
2. Proposed footpaths/cycleways
3. Columns or bollard lighting to key routes

Green Infrastructure

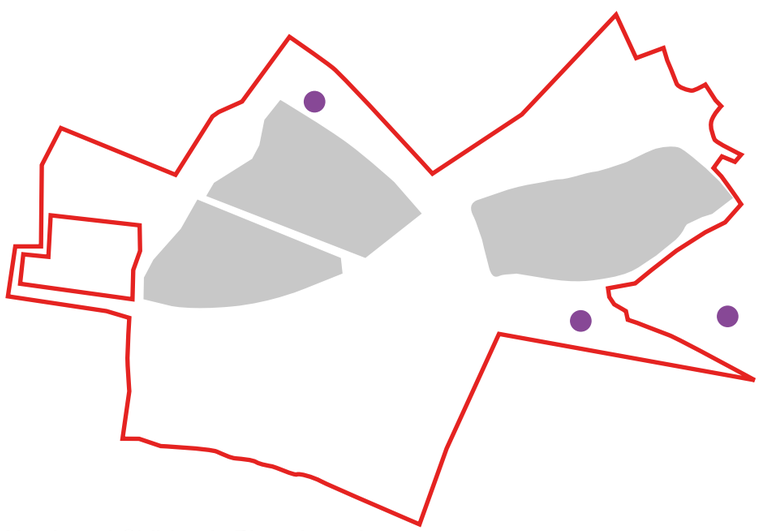
DESIGN PRINCIPLE 8
YOUTH AND CHILDREN'S PLAY

The proposed development provides a significant amount of open space for natural play, sport and informal recreation along with the provision of equipped play.

As part of Phases 1&2, it is proposed to enhance the existing an equipped children's play area, which is set within an area of public open space south of Pear Tree Lane. The facility is located within walking distance of the south-eastern development parcel. Enhancements would be focused upon extending the range of equipment to increase recreational opportunities for children and young people.

Along the northern edge of the site a wide green corridor is proposed which includes the Bellevue Trim Trail. Facilities will be challenging equipment aimed at adventure and being active, catering for all age groups. The materials and equipment used will reflect its location at the edge of the residential development along the wooded ridgeline.

Other proposed recreational facilities include an off-road cycling trail. It would be located within an existing area of woodland and designed to include features in keeping with its surroundings. Further details are provided by the site wide Childrens and Young Persons Facilities Strategy.



Youth and Children's Play - Location

BELLEVUE TRIM TRAIL

Key Characteristics

- Rural informal character;
- Equipment constructed predominantly from timber;
- Passive surveillance from dwellings to the south and adjacent pedestrian footpath;
- Relates to surrounding structural landscape and grassland which offer further opportunities for imaginative play.



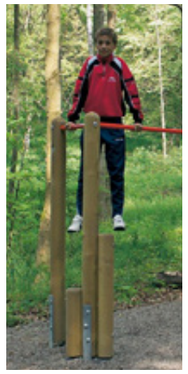


EXISTING PLAY AREA

Key Characteristics

- Informal character influenced by existing landscape setting;
- Equipment associated with a range of energy levels;
- Play equipment constructed from metal and timber;
- To include rustic play equipment of a more adventurous character;
- Creation of low grassed mounds for informal play;
- Passive surveillance from existing dwellings to the south and west.





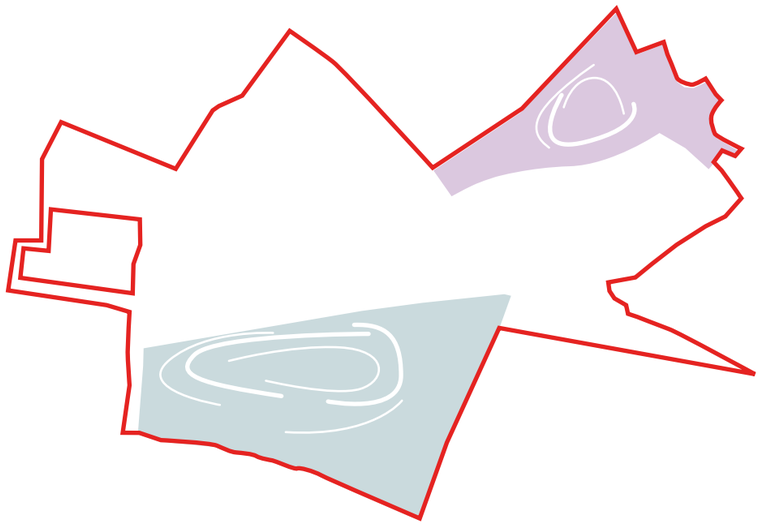


DESIGN PRINCIPLE 9
SUSTAINABLE DRAINAGE SYSTEMS

The SuDS will attenuate surface water run off and discharge that arises from the development. In summary, the SuDS includes the creation of 'attenuation' basins, a network of swales and the use of permeable paving.

The two primary attenuation basins will be located at low points to the north-east and south-west of the site within areas of greenspace as described above. The basins themselves will create a strong landscape feature. Within the corridors of greenspace, swale features would be designed to connect and convey run off to the detention basins.

As well as providing a drainage function, the basins and swales form an important part of the development's Green Infrastructure strategy. These features will be designed so that they create opportunities for habitat creation and wildlife. Black Brook is located along the southern boundary of the Phase 1&2 development parcel and would be protected and conserved.



Attenuation Areas - Location

Design Principle 8: SuDS	
Layout	Basin and swale profiles to be constructed to be natural in appearance and as an integral component of green space
Character	SUDS basins will be designed to be natural in appearance and to provide a positive landscape and ecological feature whilst satisfying sustainable drainage requirements Swale designs will vary depending on ground levels, topography, soil conditions, orientation, aspect and proximity to other landscape features and buildings Swales should have an appropriate scale and form to suit the surrounding landscape character. In green open spaces they should have a natural feel with soft edges and forms that flow into the surrounding area. In urban settings straight lines and formal designs may be appropriate
Planting	Potential areas for wet woodland, trees, meadow, wet grassland, aquatic and marginal planting within the SuDS basins

1. Swales
2. Naturalistic planting of SuDS features
3. Integration of SuDS with existing and proposed landscape features to create a mosaic of habitats
4. Biodiversity enhancements

Chapter 5.0

Streets and Character

DESIGN PRINCIPLE 10 STREET HIERARCHY

The development will be based on four street character types, which are shown indicatively on the Development Framework Plan. Garendon Way will run through the site providing a Strategic Link Road (SLR) from the A6 to the A512. Along its route there will be key junctions leading to primary streets, which in turn lead to secondary streets and lanes. This will create a hierarchy of streets that will generate a legible environment.

Street types will give the development character and identity and provide a sense of place. Street types will have different design characteristics, in terms of: function, width, building form, landscape, and frontage details. The Primary Streets for example are the principal street within the development parcels, providing continuous routes through the central parts of the built development. In contrast the Lanes are the most minor routes within the layout, and will provide access to a limited number of dwellings typically at the outer edges of development parcels.

DESIGN PRINCIPLE 11 PEDESTRIANS AND CYCLISTS

Phases 1&2 will enable an extensive network of routes for walking and cycling which connect with and extend existing public rights of way and roads. The key design principles are set out below.

Key Characteristics

- Convenient and attractive direct routes will be provided to areas of public open space, existing public rights of way, the primary school and adjoining neighbourhoods
- Routes through Garendon Park will be publicly accessible
- Routes will be safe, overlooked and free from obstacles such as unnecessary street furniture and signage
- Where feasible use of consistent surface treatment, materials and street furniture will be utilised to increase the legibility of footways and cycleways
- Signage and waymarkers at key junctions / nodes will be provided to assist users and maximise recreational opportunities.

DESIGN PRINCIPLE 12 PUBLIC TRANSPORT

A public transport strategy has been prepared (Refer to WYG Report for details). The key principles relating to Phase 1 & 2 are set out below:

Key Characteristics

- Bus route along Garendon Way SLR
- Bus stops conveniently located along Garendon Way SLR within 400m walking distance of dwellings
- A proposed car park facility to serve Garendon Park has the potential to provide a temporary bus turning facility along Garendon Way SLR

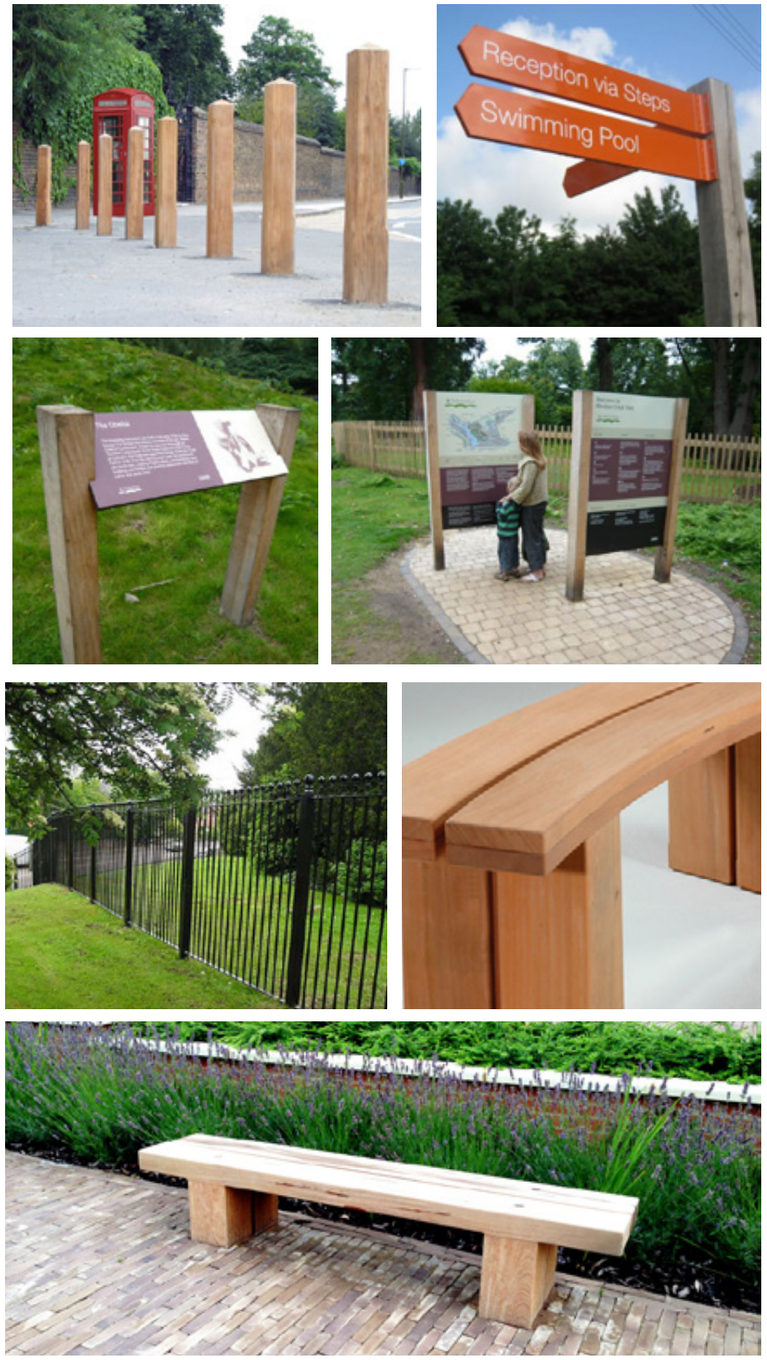
Key street character types

DESIGN AND MATERIALS: PUBLIC REALM

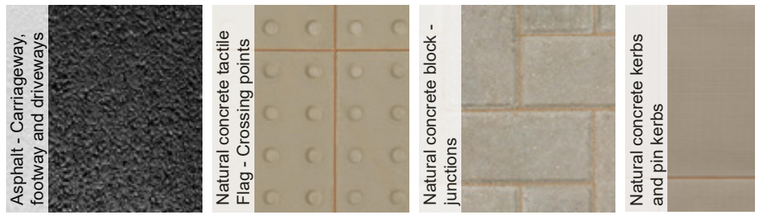
Street furniture is to accord with the following themes:

- Simple contemporary form in keeping with the 21st century aspiration of the wider development
- Timber elements of furniture to have natural finish and be of a chunky, robust aesthetic
- Metal elements of furniture to be unfussy with a black gloss finish
- Railings to be estate railings or of simple design (black) with ball finials
- Lighting columns, bollards and signage to be of a simple, contemporary design either in wood or in metal with black gloss finish

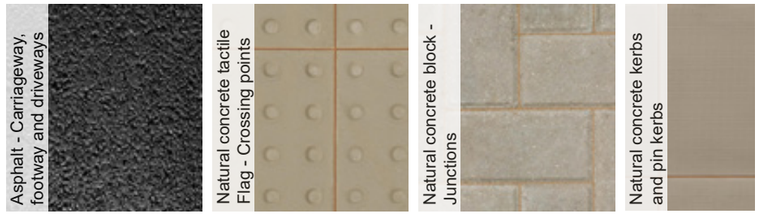
Example street furniture is shown opposite. Specification of materials for highways and surfacing should accord with the following example images shown opposite.



Indicative Street Furniture



Primary Streets



Secondary Streets

Lanes/Mews

Private Driveways

Streets and Character

DESIGN PRINCIPLE 13
STRATEGIC LINK ROAD (SLR)

Garendon Way SLR serves as the primary route into the development from the A6 and, on completion of future phases, will provide a link through the West of Loughborough to the A512 for public transport, vehicular and pedestrian movement. The key characteristics of the SLR are as follows:

- Provides the primary vehicular and pedestrian gateway into the site from the A6;
- Bus route and bus stops;
- Wide carriageway;
- Grassed verge with estate railing and strong line of avenue tree planting;
- Footpath/cyclepath on opposite sides;
- Street lighting sensitive to setting;
- 2-2.5 storey dwellings set back from the SLR served by internal roads;
- Landmark buildings and trees at gateway and junctions of development parcels.

Figure 6: Illustrative Sketch - Strategic Link Road

1. **Carriageway**
2. **Junction with Primary Street**
3. **3.0m footway/cycleway**
4. **Avenue planting**
5. **Dwellings front onto SLR**
6. **Bus Route**
7. **Estate railing**

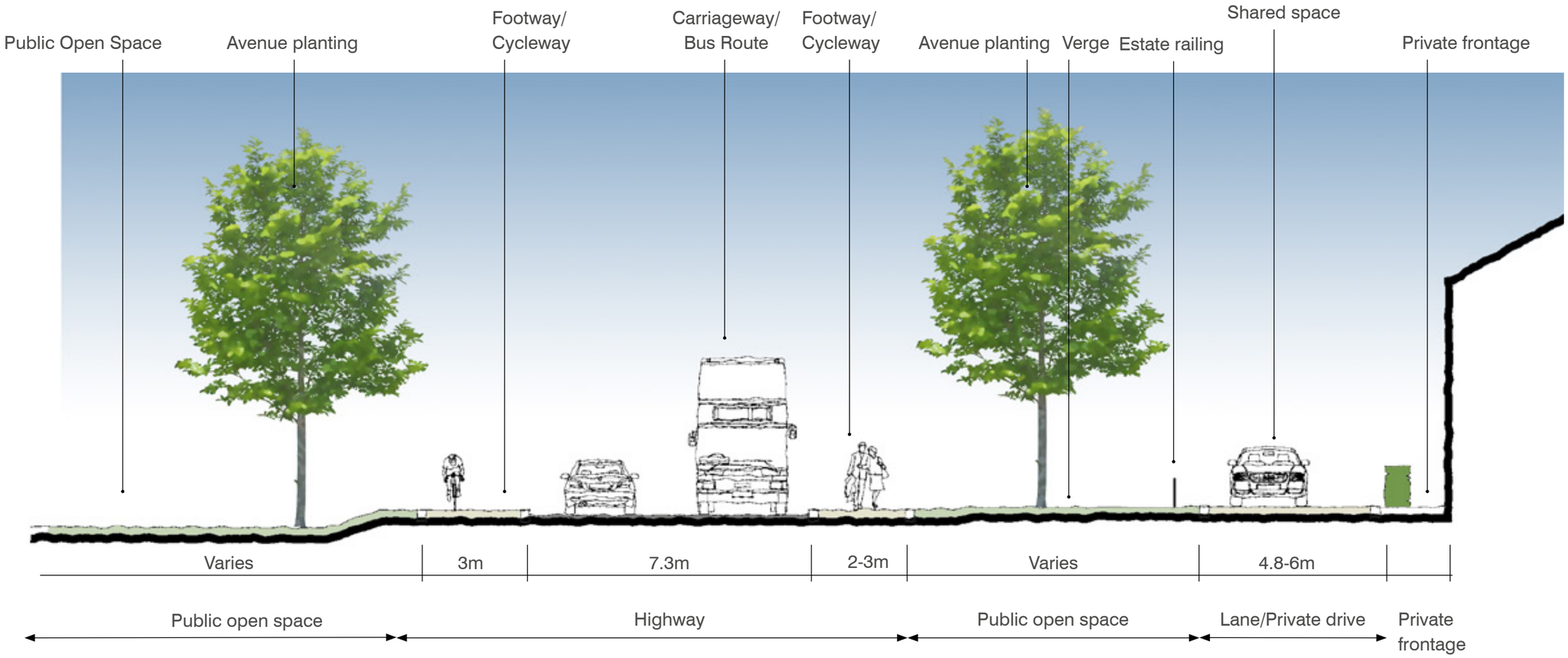


Figure 7: Indicative Section - Strategic Link Road

PARAMETERS					
Carraigeway width	**Enclosure**	**Building Height**	**Set back**	**Boundary treatment**	**Parking**
Typically 7.3m	Enclosed by residential development to one side of the SLR through Phases 1&2 Further enclosure provided by avenue tree planting.	Predominately up to 2-2.5 storey Occasional 3 storey dwellings	Buildings set back from SLR and accessed by Lanes/Private Drives	Formal avenue tree planting defines the SLR route	Parking typically within curtilage on plot Detached garages and some frontage parking

Streets and Character

DESIGN PRINCIPLE 14
PRIMARY STREET

The Primary Streets provide key routes through development parcels and neighbourhood areas. These routes are accessed via the SLR and provide connections to the secondary streets and lanes. The key characteristics of the Primary Streets are as follows:

- Provides the main vehicular access route into development parcels from the SLR;
- Wide carriageway;
- Pull in on-street parking and access to some garages;
- Avenue tree planting and semi-ornamental planting;
- 2m footpath on both sides;
- Attractive and varied street scenes with a mix of detached, semi-detached and terraced forms;
- 2-2.5 storey dwellings;
- Minimal frontages with dwellings actively facing the street and open spaces;
- Focal buildings and trees at key corners/junctions and terminating vistas;
- Shared surface areas with pedestrian priority providing informal crossing points flanked by feature and key note buildings to aid legibility.

Figure 8: Illustrative Sketch - Primary Street

1. **Carriageway**
2. **Garages and private driveways**
3. **Avenue tree planting**
4. **Incidental greenspace**
5. **Changes in surface treatment**
6. **Planting breaks up parking bays**

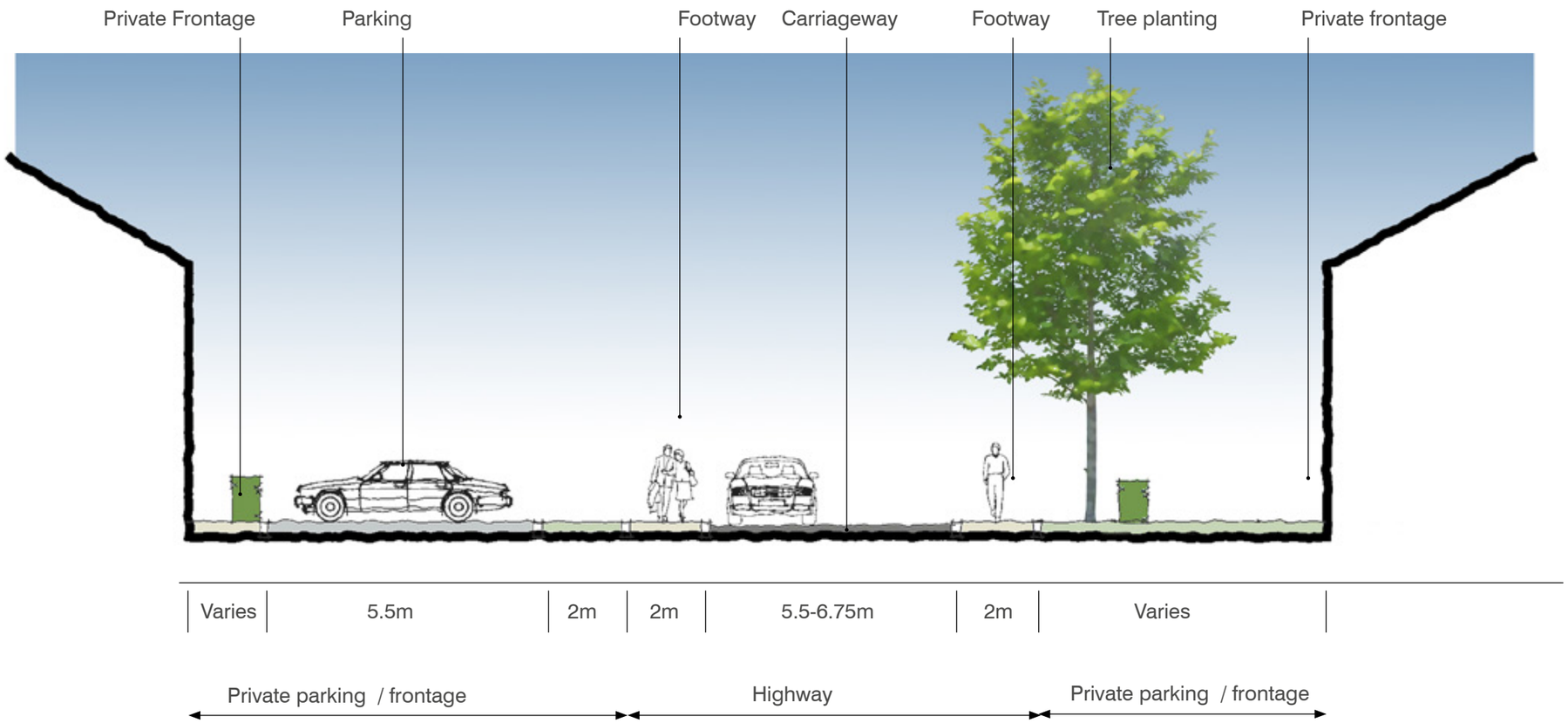


Figure 9: Indicative Section - Primary Street

PARAMETERS					
Carraigeway width	**Building Type**	**Building Height**	**Set back**	**Boundary treatment**	**Parking**
Typically 5.5 - 6.75m Localised widening to create interest in the street scene 2.0m footway either side of carriageway	Sense of enclosure provided by semi-continuous building line and tree planting Varied building line including a mix of apartments, terrace, detached and semi-detached properties	Up to 2-2.5 storey Occasional use of 3 storey dwellings	Variable frontages: • Small front gardens along with parking bays or drives (minimum 5.5m); • Wider where supporting tree planting within front gardens (i.e. route to school for examples)	Private frontages defined by: • Clipped hedgerows / planting areas within front gardens • Railings and/or walls where adjoining buildings or garages	Well integrated within the design and include a variety of options within the properties curtilage

Streets and Character

DESIGN PRINCIPLE 15
SECONDARY STREET

These are secondary routes leading from the Primary Street. The streets will be designed to maintain a sense of enclosure and to reduce vehicle speeds. Well-defined boundary treatments will help to distinguish between private and public space. Key characteristics of the secondary streets include the following:

- Parking on plot with driveways and garages;
- Intermittent avenue / street tree planting and incidental open space at key junction / nodes;
- 2m footpath on one side of the carriageway;
- Street lighting;
- 2 storey buildings with occasional 2.5;
- Varied building line with a mix of building types, and deeper setbacks where required to accommodate frontage parking;
- More informal in character compared to the Primary Street;
- Focal buildings and trees;
- Some buildings located with gable ends onto the street;
- Detached dwellings located towards the edge of development parcels.

Figure 10: Illustrative Sketch - Secondary Streets

1. **Carriageway**
2. **Pedestrian footway**
3. **Garages and private driveways**
4. **Street tree planting**

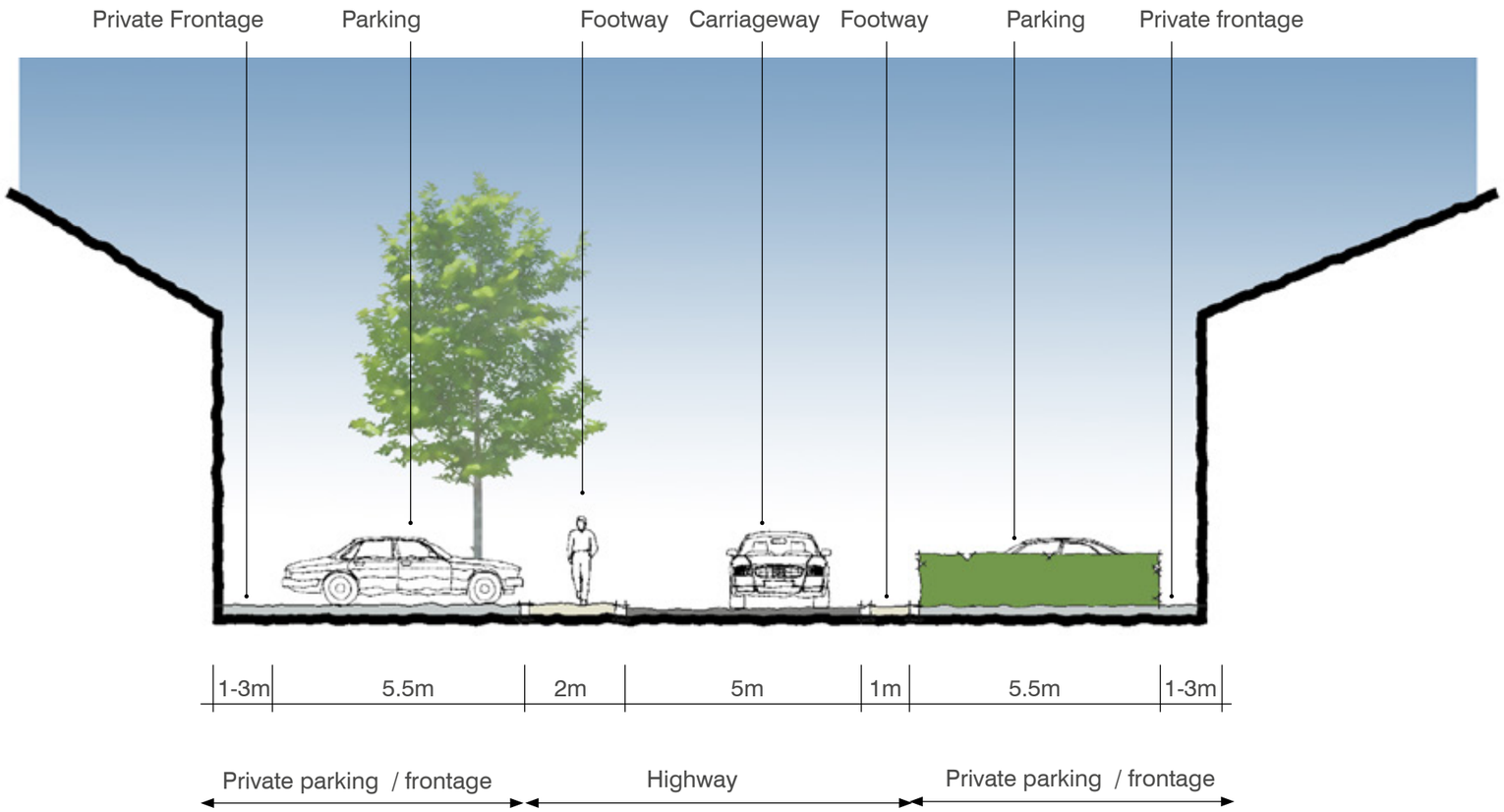


Figure 11: Section - Secondary Street

PARAMETERS					
Carraigeway width	**Building Type**	**Building Height**	**Set back**	**Boundary treatment**	**Parking**
Typically 5.0m 2.0m footway on one side of carriageway. Reduced width on opposing side	Sense of enclosure provided by semi-continuous building line Units typically terraced / semi-detached but with some detached	Up to 2-2.5 storey	Nominal frontages - a mix of: • Small front gardens (1m - 3m) where parking is to the side of dwellings • Small front gardens (1m - 3m) along with parking bays or drives (minimum 5.5m)	Private frontages enclosed by mixed ornamental shrub planting with some clipped hedgerows, railings or walls. Limited planting in public realm	Well integrated within the design and include a variety of options within the properties curtilage

Streets and Character

DESIGN PRINCIPLE 16
LANES

These routes provide access for a limited number of properties, typically up to five dwellings. Lanes are located at the outer edges of development parcels, with properties fronting onto public open spaces and Greenways. The main purpose of these minor routes is to provide access for residents. The key characteristics of the lanes are as follows:

- Provide connectivity to the Greenways and public open spaces that they front onto;
- Semi-private in character;
- Shared surface treatment;
- Parking on driveways and garages on plot;
- Deeper private frontages but no formal boundary treatment;
- Predominantly detached and semi-detached dwellings;
- 2 storey except for occasional 2.5 storey focal buildings;
- Localised widening to provide spaces for passing and bin collections etc;
- Clear demarcation of services via a service strip which will typically sit within an adjacent grassed area.

Figure 12: Illustrative Sketch - Lanes

1. **Turning head**
2. **Private driveway and/or garage**
3. **Planting at entrance to Lane**
4. **Tree planting within public open space**
5. **Footpath connection to Greenways**
6. **Pear Tree Lane**

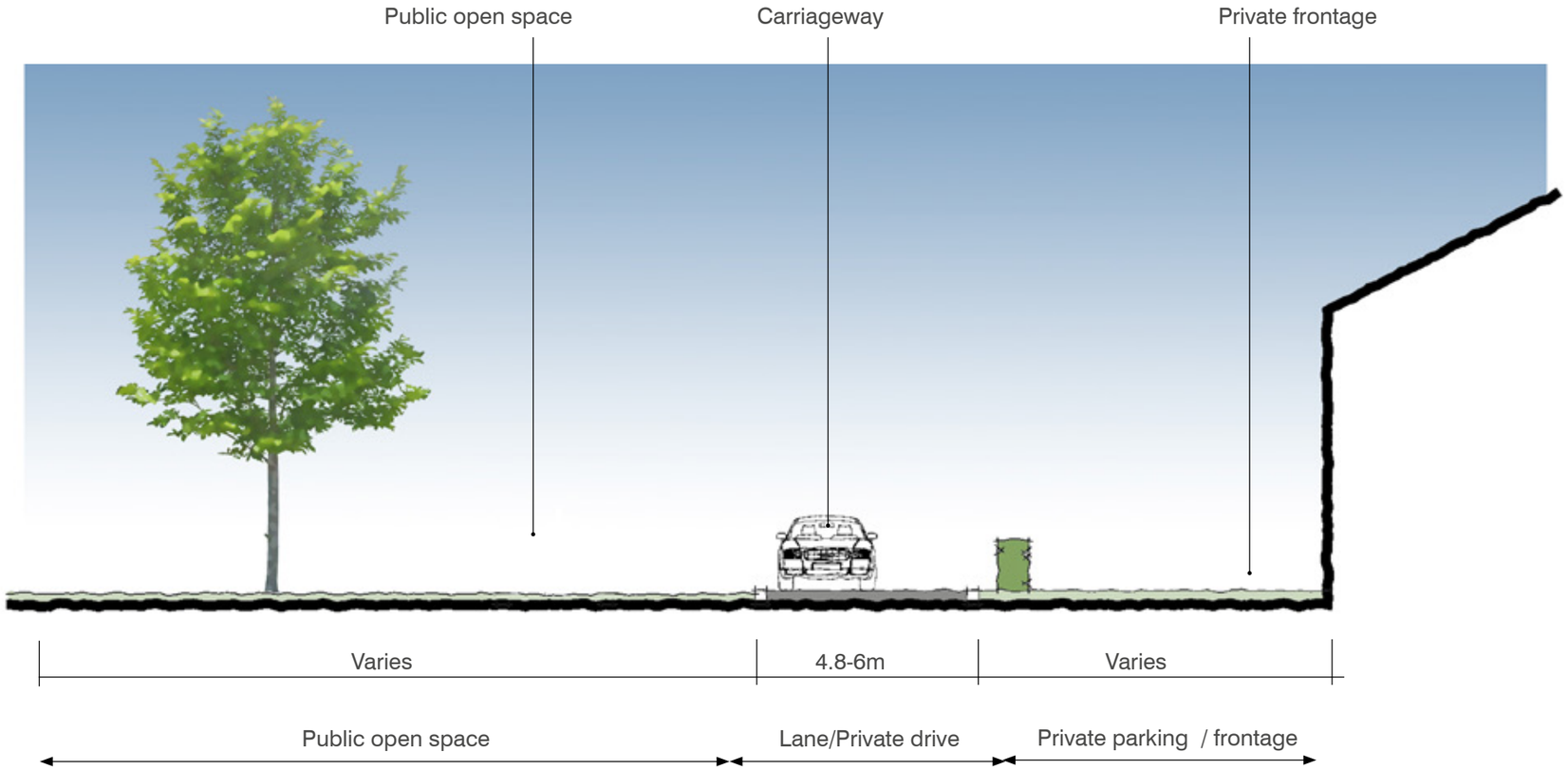


Figure 13: Section - Lanes

PARAMETERS					
Carriageway width	**Building Type**	**Building Height**	**Set back**	**Boundary treatment**	**Parking**
Typically 4.8-6.0m at grade shared surface for all Access to lane for refuse and emergency vehicles	Predominately detached and semi-detached dwellings	Predominantly 2 storey Occasional 2.5 storey at key locations such as junctions with secondary streets	Variation in set-back to accommodate deeper front gardens	Larger private frontages enclosed by mixed ornamental shrub planting with some clipped hedgerows and estate railings	Well integrated within the design and include a variety of options within the properties curtilage

Chapter 6.0

Urban Form

DESIGN PRINCIPLE 17
BLOCK STRUCTURE

All streets and spaces will be designed to allow ease of movement and connectivity. The use of closed housing blocks will be the preferred approach. Blocks will vary subtly in terms of the level enclosure that they create but will be designed to ensure they consistently provide a clear distinction between public and private spaces. Building groups will become looser in character and more organic in form towards the edges of the development, especially overlooking the greenways.

Wherever possible, blocks will be designed in accordance with the space standards set out in Charnwood Borough Council's 'Leading in Design' Supplementary Planning Document (2005) and any relevant subsequent revisions to this document.

Architectural rhythm will be an important consideration within the design of blocks. Patterned repetition and alteration within the built form should be used to help create legible streets and create a sense of place.

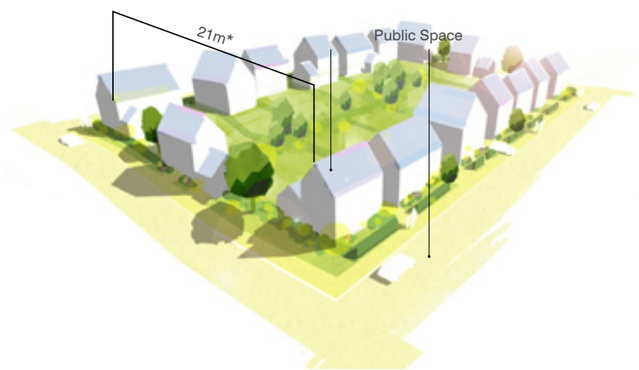
Key Design Principles

- Plots to overlook the greenways and Garendon Way SLR;
- Majority of properties fronting onto the street (occasional gables);
- Respond to variations in topography across the site ;
- Ensure a legible street hierarchy and connectivity onto the wider footpath/cycleway network;
- Provision of adequate parking, primarily on plot;
- Consideration of general mass, scale and height;
- Safe and secure plots compliant with the principles of 'Secure by Design' to reduce opportunities for crime;
- Provide space on-plot for refuse and recycling .

DESIGN AND MATERIALS - BUILT FORM

The architectural response to the development aims to create houses for the 21st Century. Simple, elegant and traditional styles are to be used in order to create a place that is both distinctive and individual without creating a pastiche of what has gone before. Architectural details are to accord with the following themes:

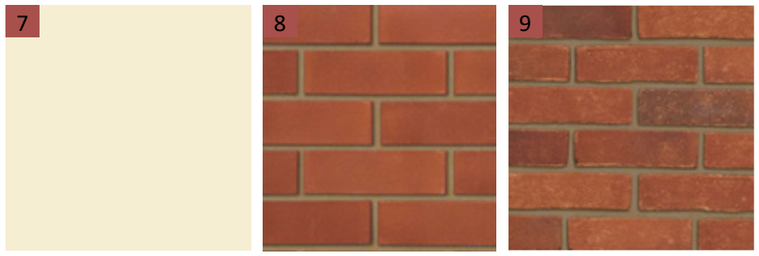
- Simple form utilising well proportioned buildings and a high quality materials palette
- A range of house types will be used across the development with variations included at key locations and adjacent to amenity open spaces
- High quality materials are to be used throughout West of Loughborough
- Details should not distinguish between market and affordable housing.



Windows and Doors

Roofs and Chimneys

Walls



1. Front door; 2. Dark Grey Windows; 3. Simple dormers; 4. Clay tiled; 5. Simple chimney details; 6. Smooth grey roof tiles; 7. Off-white render; 8. Red brick; 9. Rustic red brick.

Additional example images within the material palette for bricks and roof tiles are shown over page.

MATERIALS PALETTE - BRICKS

Facing Bricks

1. Forterra Atherstone Red Stock
2. Forterra Kimbolton Red Multi,
3. Forterra Clumber Red
4. Forterra Rannoch Red Multi
5. Brickworks Anston Red Stock

NOTE:
Materials are subject to availability and may therefore by subject to change.

1


4


2


5


3


MATERIALS PALETTE - ROOF TILES

Roof Tiles

1 Marley Ashmore – Old English Red
2 Marley Ashmore - Smooth Grey
3 Marley Duo Edgemore – Old English Dark Red
4 Marley Duo Edgemore – Smooth Grey

NOTE:
Materials are subject to availability and may therefore by subject to change.

1

3

2

4

DESIGN PRINCIPLE 18
KEY BUILDINGS

The residential built form within the development will utilise a consistent palette of standard details and materials, along with a degree of bespoke architectural detailing utilised at key locations within the scheme. For example landmark buildings will differentiate from adjacent dwellings depending upon contrasts in built form / typology, building position and landscape treatment. The use of landmarks buildings will provide identity within the layout.

The creation of focal buildings will be achieved by their actual positioning within the street, or by their scale and appearance. The following methods will be used:

Key Characteristics

- Distinctions will be achieved by the careful use of building height, mass and materials
- A projection onto the street or use of gable ends facing onto a street in an otherwise straight line of buildings
- A taller 2.5 storey building with well proportioned dormer windows
- Positive definition to the street with well defined corners established by gables with fenestration and/or corner dwellings projecting from the building line
- The subtle use of contrasting materials and colour e.g. a rendered elevation set within a row of predominantly brick dwellings to provide a contrast and point of focus
- The use of chimneys in prominent locations
- A double fronted building with principle elevations fronting both carriageways
- Vistas framed and focal points reinforced with the use of street tree planting and other landscape treatments
- Buildings at corners and junctions could become key buildings and will provide a focus for views within the layout.

DESIGN PRINCIPLE 19
PLOT ARRANGEMENTS

The plot design will be based on efficient plot depths and widths. On particular locations there may be a requirement to depart from efficient layouts to achieve a suitable layout. Buildings will follow best practice approaches of being at the front of the plot close to the footway, to encourage active well surveyed streets.

For residential properties, smaller gardens will occur to the front of the dwelling with larger gardens to the rear. Residential plot design will be guided by density and the scale and form of buildings i.e. whether it's a detached or terrace house, and by the parking arrangement for that plot. Privacy is required for residents and this should be carefully balanced with the need for visual outlook onto streets and public spaces. The scale, height and the form of new buildings will be well considered in terms of shading and privacy of neighbouring plots.

Appendix 4 of Charnwood Borough Council's 'Leading in Design' provides a set of numerical standards for separation distances between dwellings. Whilst the document is clear that careful design rather than a blanket application of numerical standards is the preferred approach, the Council do reserve the right to apply numerical standards if it is not possible to tackle amenity and other concerns purely by design. The standards are included in the table opposite for information.

The connected grid will wrap around street intersections. In these locations buildings should be arranged to maintain good enclosure of the street and to provide an active well surveyed edge. Corner arrangements should allow for variations in design but should include the use of active frontages and wide plan forms with their gable onto the street.

Primary frontages are particularly prominent and critical to the impact and appearance of the development and the public realm. Attention will need to be paid to the treatment of buildings fronting or adjacent to open spaces,to ensure that these prominent spaces have a building frontage which helps create a distinctive quality and character.

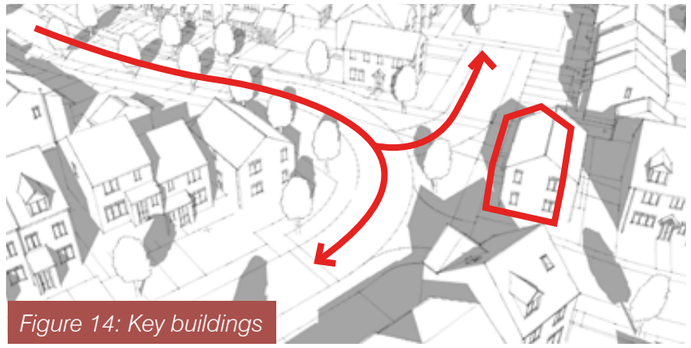


Figure 14: Key buildings

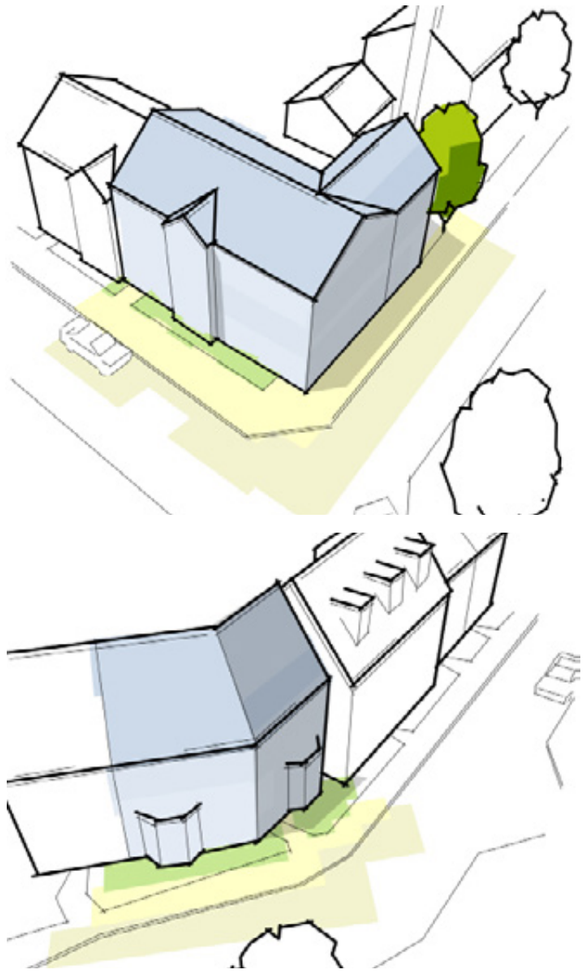


Figure 15: Corner Plot Arrangements

Urban Form

DESIGN PRINCIPLE 20
PARKING

New homes and community facilities will be designed so that they have sufficient parking spaces based on the local authority standards (Charnwood Borough Local Plan - Appendix 1 - Vehicle Parking Standards for New Development). Careful detailing in terms of the plot arrangement, frontages, landscape boundary treatments, street alignment and surface treatments and will help to sensitively integrate vehicles into the layout.

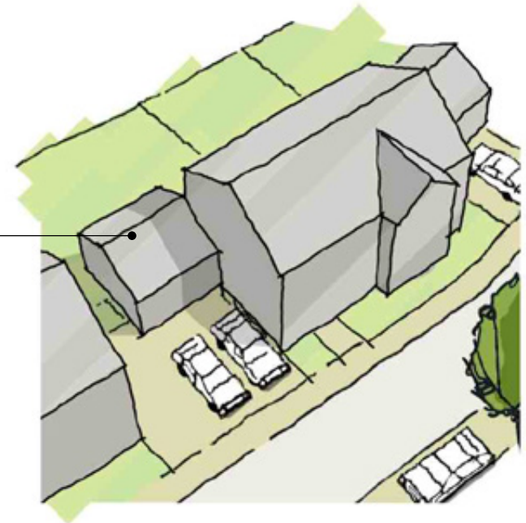
The majority of parking spaces will be provided close to the front of peoples homes. This will enable owners to readily see and access their vehicles. On Plot Parking will be well integrated within the design and include a variety of options within the properties curtilage. Spaces will be provided to allow for motorists to safely pull-in from the carriageway. Shared private drives leading to garages could also be used.

'Leading by Design' (CBC, 2005) states that secure cycle parking should be incorporated in a convenient location within developments. The Council's adopted cycle parking standards are set out in Appendix 1 of the Borough of Charnwood Local Plan, 2004. These standards are required for new development proposals, in addition to the vehicle parking standards. The provision of secure and covered cycle parking can encourage people to cycle rather than drive.

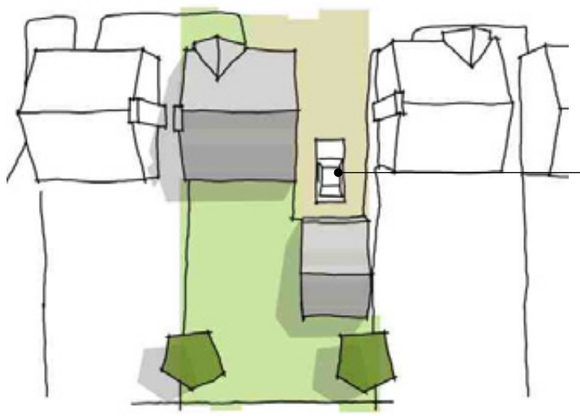
Key Design Principles

- Attractive street scenes which are not dominated by parked vehicles
- Ensure owners can see and have easy access to their vehicles and mobility for all users
- Carefull detailing of plot arrangements, frontages and landscape to help integrate parking within layout and street scene
- Rear courtyard parking to be avoided
- Garages generally to be located behind building line wherever possible and to allow for sufficient parking to front
- Minimise opportunities for parking where it is not intended
- Maximise natural surveillance and security

Front Access Private Drives
To be designed and broken up with semi-ornamental shrub and tree planting to avoid detracting from the street scene



Attached Garage
Designed to contribute to the street scene and sense of continuous frontage. To allow sufficient space for car parking infront of garage.



Detached Garage
Designed to provide sufficient space for car parking in front of garage

Figure 16: Indicative Parking Arrangements

DESIGN PRINCIPLE 21
SECURE BY DESIGN

Creating a safe place to live and play is fundamental to the scheme design. This will be achieved by the way the development is laid out and by the detailed street, block and plot design. Active frontage will face streets and public areas in order to promote 24 hour surveillance, and to encourage safer places. Public areas such as Streets, Green Space and Play Areas will be designed so that they are safe, easily accessible and attractive to use. All users will be considered as part an inclusive design approach.

Surveillance of public spaces by a number of properties and buildings is important. Barriers, blank walls and 'dead ends' will be avoided. Locating windows and doors on corners, or gable ends is a key principle, and occurs with the local context. Direct, well lit streets and routes are essential and this will be adopted. Across the whole development careful detailed attention will be paid to designing out crime through the layout, and promoting privacy and security.

This will be achieved by; high quality active streets; the position of buildings to the front of the plot; well located windows and doors that survey the public realm; clearly defining public and private space; well chosen use and location of boundary details, and a well devised landscape and public realm.

"Secured by Design", "Planning & Access for Disabled People" and "Manual for Streets" provide sources of design reference in relation to safe places and designing out crime. They will be thoroughly embraced during the detailed design stage.

Key Design Principles

- High quality, fully active streets;
- The position of buildings to overlook the streets and public spaces;
- Well located windows and doors that survey the public realm;
- Clearly defining public and private space;
- The well chosen use and location of boundary details to establish secure plots;
- A well devised landscape and public realm.

DESIGN PRINCIPLE 22
SUSTAINABILITY

It is proposed to reduce the energy consumption of the proposed development in accordance with the Energy Hierarchy (a CLG-approved best practice design approach in improving the energy performance of buildings), through integration of of passive design and energy efficiency measures.

Key Design Principles

- Orientate buildings within development plots so that where practicable principle frontages face south in order to benefit from passive solar gain;
- Position terraced/semi-detached blocks east-west roads (wherever possible) in order to maximise optimum site-wide solar orientation;
- Carefully distribute higher density, taller buildings throughout the site and position garages to the north and gardens to the south of dwellings (wherever possible), in order to minimise solar obstruction;
- Promote biodiversity enhancement throughout the developments landscape whether on plot or within public open spaces;
- Utilise best practice construction and waste management techniques and provide household recycling and composting facilities in order to ensure a low waste footprint and diversion of waste from landfill;
- Surface water strategies based on appropriate SuDS approaches, such as basins, swales along with the use of permeable surfaces and paving;
- Conservation of natural resources on site such as hedgerows and trees;
- Ground level urban greening: The use of street trees, green spaces, planting and private gardens;
- The planting of grassland and native woodland and hedgerows, which encourages biodiversity and sustainable drainage.

1. **Positioning of taller buildings to the north of the site (where possible) with provision of adaquate spacing so as not to overshadow neighbouring properties**
2. **Dwelling layouts should be optimised to ensure that where possible living rooms should face south and west and kitchens towards the north or east**
3. **Careful attention given to building spacing in order to mitigate against overshadowing**
4. **Excepting the primary vehicular access, the road layout within the site should lie within 45 degrees of an east-west orientation allowing maximisation of south-facing frontages**
5. **Wherever possible, semi-detached/terraced blocks to be located on E-W roads in order to optimise site-wide solar orientation**
6. **Gardens and open courts to be provided to the south of dwellings wherever possible to allow good access for daylight**

Figure 17: Passive design features

Urban Form

DESIGN PRINCIPLE 23
TRANSITION ZONES

The Development Framework for phases 1 and 2 includes a range of land uses including built development and green infrastructure. The key transition zones occur between the proposed built-up areas and the adjoining open green space. The context for particular transition zones falling within phases 1 and 2 are shown on Figure x and summarised below along with key design objectives. Such measures will ensure that the proposed development is well integrated within the local landscape

Figure 18: Transition Zones

Transition Zones

T1 Pear Tree Lane / Residential Development 1A

T2 Hathern Drive / Residential Development 1B & 1C

T3 Bellevue Greens / Residential Development 1B & 1C

TRANSITION ZONE 1 - PEAR TREE LANE / RESIDENTIAL DEVELOPMENT (1A)

Location Plan

TRANSITION ZONE 1 - PEAR TREE LANE / RESIDENTIAL DEVELOPMENT (1A)		
CONTEXT	PROPOSED	Corridor of semi-natural greenspace along Pear Tree Lane situated between the A6 and Baileys Plantation, and adjacent to residential development 1A. It contains: • Existing right of way, hedgerow/trees belts along Pear Tree • Woodland at Baileys Plantation • Proposed semi-natural greenspace • Proposed pumping station & associated access
	ADJOINING CHARACTER AREAS/ DEVELOPMENT	• Residential development (1A) to the north • Existing park & play area to the south • Proposed off-road cycle route to the south
VISUAL AMENITY	• Views from Pear Tree Lane, adjacent residential development (1A) and the existing park	
RECREATION	• Bridleway & footpath use along Pear Tree Lane • Informal play within Baileys Plantation • Connections from Pear Tree Lane to: - the existing park/play area and proposed off-road cycle route	
DESIGN	• Informal open space corridor defined by hedgerow / tree belts along Pear Tree Lane • Transitional landscape at the edge of residential development (1A) • Phase 1 development (adjacent to Pear Tree Lane) should ensure footpath connectivity onto Pear Tree Lane, taking into consideration the wider footpath network including connections to the existing park / play area and proposed off-road cycle route. Residential properties fronting onto Pear Tree Lane will allow informal surveillance and safe use of the greenway. Properties fronting onto green lanes / private drives provide an appropriate edge to the development alongside Pear Tree Lane. Additional tree planting along the green lane can further assist in softening the development edge. • Pumping station – avoid locating in prominent location & screen (mounding, planting, existing vegetation) where feasible	

Urban Form

TRANSITION ZONE 2 - HATHERN DRIVE / RESIDENTIAL DEVELOPMENT (1B & 1C)

Location Plan

TRANSITION ZONE 2 - HATHERN DRIVE / RESIDENTIAL DEVELOPMENT (1B & 1C)		
CONTEXT	PROPOSED	Corridor of semi-natural greenspace along Hathern Drive situated between the A6 and Garendon Way SLR. It contains: • Existing right of way, hedgerow/trees belts along Hathern Drive • Proposed semi-natural greenspace • Proposed cycleway along the existing right of way
	ADJOINING CHARACTER AREAS/DEVELOPMENT	• Residential development (1B & 1C) to the east • Primary School North to the west • Proposed road link / route to Primary School North crosses Hathern Drive • Bellevue Green public open space • Phase 3 residential development (1F) to the west • Phase 3 residential development (1D) to the west
VISUAL AMENITY	• Views from Hathern Drive, Garendon Way / Greenway crossings and adjacent residential developments	
RECREATION	• Cycleway & footpath use along Hathern Drive • Connections from Hathern Drive to: - Proposed road link / route to Primary School North crosses Hathern Drive - Primary School North - Garendon Way SLR	
DESIGN	• Informal open space corridor defined by hedgerow / tree belts along Hathern Drive • Transitional landscape at the edge of residential development (1B & 1C) • Phase 2 development (adjacent to Hathern Drive) should ensure footpath connectivity onto Hathern Drive, taking into consideration the wider footpath network including connections to the Primary School North to the west and Bellevue Green to the north. Residential properties fronting onto Hathern Drive will allow informal surveillance and safe use of the greenway. Properties fronting onto green lanes / private drives provide an appropriate edge to the development alongside Hathern Drive. Additional tree planting along the green lane can further assist in softening the development edge. • Drainage channel – if feasible accommodate grass swale along proposed road link / route to Primary School North which crosses Hathern Drive • Pumping station – avoid locating in prominent location & screen (mounding, planting, existing vegetation) where feasible	

TRANSITION ZONE 3 - BELLEVUE GREENS

Location Plan

TRANSITION ZONE 3 - BELLVUE GREENS		
CONTEXT	PROPOSED	Semi-natural Green Space between Hathern Drive and Garendon Way SLR forming part of a wider landscape corridor centred along the ridgeline by Bellevue Hill. It contains • Proposed native broadleaved woodland belt and hedgerow planting • Proposed semi-natural greenspace • Proposed informal footpath • Proposed Bellevue Trim Trail
	ADJOINING CHARACTER AREAS/DEVELOPMENT	• Hathern Drive Greenway • Garendon Way Strategic Link Road • Residential development (1C) • Agricultural land at the edge of Hathern village
VISUAL AMENITY	• Glimpsed views to this area from the adjacent Hathern Drive and Garendon Way Strategic Link Road • Views from the adjacent residential development (1C)	
RECREATION	• Informal footpath • Proposed Bellevue Trim Trail	
DESIGN	• Proposed native broadleaved woodland belt forms part of the buffer to Hathern village to the north of the site • Transitional landscape at the edge of residential development (1C) • Residential development (1C) should ensure footpath connectivity onto Bellevue Greens, taking into consideration of the wider footpath network including connections to Hathern Drive and Garendon Way SLR. Residential properties fronting onto Bellevue Greens will allow informal surveillance of adjacent open space. Properties fronting onto green lanes / private drives provide an appropriate edge to the development alongside Bellevue Greens.	

Chapter 6.0

Urban Form

In addition to the above transition zones, it is also recognised that transitions of housing styles or typologies between development parcels and phases can occur. Such transitional areas should have consideration of the following:

Key Design Principles

- Avoid architectural discord or the creation of a disparate street scene;
- Harmonisation of colours and tones to provide unity, particularly where building and architectural styles differ;
- A simple range of materials, colours and tones will assist in creating successful transitions in building typologies;
- Match building typology, proportions, scale and rhythm to allow for change in materials and colour whilst maintaining integrity of the street;
- Consistent treatment of boundaries, hard materials and planting to counter differing architectural styles;
- Ensure changes in density, height and typology are gradual and not abrupt;
- Provision of street trees within transitional areas.

Transition zones between Phase 1 and 2 development parcels will primarily be defined by areas of green and public open space