Castleton Sidings, Rochdale

DESIGN & ACCESS STATEMENT & DESIGN CODE | April 2023

KELLEN HOMES

e*SCAPE urbanists 10 years 2009 - 2019

Quality Checked*	
Document: **22/016/001/RevB/DAS&CODE**	
Compiled by: **RJL**	
Reviewed by: **DL**	
Date: **April 2023**	

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1 | INTRODUCTION

This Design and Access Statement and Design Code has been produced by eSCAPE Urbanists Ltd on behalf of Kellen Homes, in support of a hybrid planning application for 191 homes on the land south of Fairway, Castleton, Rochdale.

This document explains how the current proposals have emerged from analysis of the Site and its context, outlining the design process followed and the technical considerations that have informed the final layout. It also sets out details of the consultation process and how this has informed the design outcome.

The Statement explains how the Site will be accessed and includes a description of key design elements including layout, street hierarchy, scale and massing, building design and appearance, building materials palette and landscape strategy.

The description of the development is as follows:

“Full planning application for residential development, including access, car parking, landscaping, open space and associated engineering and infrastructure including an electric substation and foul water pump station.

Outline planning permission with all matters reserved for the principle of development to facilitate the East Lancashire Railway (ELR) extension”.

This DAS/Code should be read in conjunction with the range of documents and plans which have been submitted in support of the planning application.

Background

The application site is an Allocated Site in Places for Everyone (Policy JP Allocation 20 – Castleton Sidings).

The Policy sets out a number of design related principles that proposals will be required to address, including the meed to:

- Deliver around 125 high quality homes including higher value housing;
- Built development will be limited to the eastern half of the site to minimise encroachment of built development into the Green Belt with the western part of the site being redeveloped as an area of open space or nature conservation area and retained within the Green Belt;
- The north east of the site will accommodate a temporary rail halt and associated parking to facilitate the extension of the East Lancashire Railway (ELR);
- Achieve excellent design and sustainability through masterplanning and the use of design codes for the whole site to ensure comprehensive development;
- make provision for appropriate access by Network Rail and ELR to undertake maintennance and improvements related to the extended ELR when required;
- Address the risk of surface water flooding through an appropriate sustainable drainage strategy;
- Provide good quality pedestrian and cycling routes through the site to facilitate safe and convenient links to the centre of Castleton and the Castleton Bee Network scheme, the nearby railway station, and westwards to employment locations around Heywood;
- Provide appropriate access to electric vehicle charging infrastructure and cycle storage;
- Incorporate high quality landscaping, multi-functional green and blue infrastructure and acoustic attenuation to mitigate the potential visual and noise impact of the railway side of the land and provide appropriate boundary treatment in relation to the retained Green Belt.

The Site

The application site extends to approximately 10.93 hecatres and is located south-west of the centre of Castleton at the southern end of the Fairway.

The site was previously occupied mostly by Baggs Yard Railway Sidings although it is now vacant. The site comprises a disused railway siding associated with Castleton North, East and South Junction. An area of woodland is located along the northern and southern boundary. Castleton Hawk Golf Club defines the north west boundary of the site, with residential housing associated with Fairway defining the north east of the site. An active railway is located adjacent to the south of the site. Arable fields lined by hedgerows with associated ponds extend further south of the site. The M62 is located approximately 270 m south of the site, at its closest point.

The western part of the site is within the Green Belt but the eastern part of the site closest to Castleton is within the urban area and is available and deliverable. The site is located within an urban area and well placed to utilise existing community facilities and social infrastructure.

The site is currently accessed via Heywood Road, north east of the site.

The development of the site is important to facilitate the extension of the East Lancashire Railway (ELR) from Heywood to Castleton. The delivery of this extension is identified in the ELR 2020 Development Strategy and will assist in the wider regeneration of Castleton local centre. It also offers further potential connectivity given that it provides a convenient link between the heritage line to mainline passenger services at Castleton station.

The western part of the site will be redeveloped as a high quality area of open space or nature conservation area and retained within the Green Belt.

The north east of the site will accommodate a temporary rail halt and associated parking to facilitate the extension of the ELR from Heywood to Castleton and potentially a tram-train trail project if progressed in this location.

Summary

The development comprises:

- 191 residential units (Use Class C3) including a mix of 2, 3 and 4 bed houses.
- Pedestrian, cycle and vehicle routes.
- Parking.
- Open space and landscaping - including a Local Equipped Area of Play (LEAP) and Trim Trail.
- Sustainable Urban Drainage infrastructure.
- Application site access via two extensions to existing cul-de-sacs on Fairway along the site’s northern boundary.

Fig 1:1 | Application Boundary

Key

Application Boundary

Rochdale Mayfield Rugby Club

Castle Hawk Golf Club

St Edwards C.E. Primary School

Hanover Street

Manchester Road

Heywood Road

Heywood Road

Elton Street

Heape Street

Fairway

Castleton Station

Queensway (A664)

Rochdale Canal

Manchester Road

St Martins Church

St Gabriels R.C. Primary School

M62

M62

n*ORTH

0m 50m 100m 200m 300m

Scale 1:5,000 (@A3)

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1 | INTRODUCTION

Vision

A unique vision has been created for the site which encapsulates the development principles set out in Policy GM Allocation 21 and recognises the constraints and opportunities presented by the site.

A key theme underpinning the proposed vision for the site is the concept of rewilding a former brownfield site and referencing its former use a railway sidings through imaginative landscape design.

The development will place a strong focus on biodiversity and nature conservation with the creation of a large Ecopark at the western end of the site. This will be a multi-functional space comprising a series of natural habitats, network of pedestrian and cycle routes and naturalsitic attenuation basins.







STREET SCENE C-C



STREET SCENE D-D

Vision

"Castleton Siding's location creates an opportunity to develop a site that brings homes and rail heritage into the heart of the settlement. This new neighborhood will create a mixed-use development with a new rail heritage station as part of the East Lancashire Railway and family homes in a highly sustainable location.

Castleton Sidings shall draw on it's railway heritage to inform the structure, layout and detailing of the proposed development.
It shall also reference the local context by using the landmark of St Martin's gothic architecture as a design cue in the steep-pitched gables of the homes. The materials palette shall also draw on the local vernacular.

The current railway sidings have been invaded by pioneer species of Birch and Buddleia which have brought nature back into the industrial landscape and this theme of nature taking over a man-made environment shall be used in the landscape design of the site's green spaces.

The proposed new development shall be a positive asset for Castleton and wider Rochdale with a high-quality design bringing the natural environment into people's homes."

2 | CONTEXT

The Site

The application site is located south-west of the centre of Castleton at the southern end of the Fairway.

The site extends to approximately 10.93ha and was previously occupied mostly by Baggs Yard Railway Sidings although it is now vacant. The site includes a former railway sidings associated with Castleton North, East and South Junction. It comprises several disused railway lines with associated areas of railway ballast, hardstanding, bare ground and scattered scrub with smaller areas of broadleaved woodland located along the boundary of the site.

An area of woodland is located along the northern and southern boundary. Castleton Hawk Golf Club defines the north west boundary of the site, with residential housing associated with Fairway defining the north east of the site. An active railway is located adjacent to the south of the site. Arable fields lined by hedgerows with associated ponds extend further south of the site. The M62 is located approximately 270 m south of the site, at its closest point.

The site is currently accessed via Heywood Road, north east of the site.

The western part of the site is within the Green Belt but the eastern part of the site closest to Castleton is within the urban area of Castleton.













Fig 2:1 | Site Photography

2 | CONTEXT



Sub-Regional Context

The site is located on the south-western edge of Castleton in the borough of Rochdale, Greater Manchester.

Rochdale Town Centre is located approximately 2.5km to the north-east. Manchester City Centre lies approximately 13km to the south-west. Huddersfield, Bradford, Halifax, Preston are located approximately 27km, 36km, 26km, and 39km away respectively.

Access to the regional and national motorway network can be gained via junction 20 of the M62 (1.8km to the east).

PRESTON
BLACKBURN
BURNLEY
BRADFORD
HALIFAX
HUDDERSFIELD
LITTLEBOROUGH
ROCHDALE
RAMSBOTTOM
BURY
BOLTON
WIGAN
MANCHESTER
STOCKPORT
M61
M66
M62
M60
M56
Application Site

Fig 2:2| Sub-Regional Context Plan

2 | CONTEXT

Local Context

The application site is located south-west of the centre of Castleton at the southern end of the Fairway.

The surrounding area has a mixed character with a variety of different land uses. To the north west of the site is Castle Hawk Golf Club beyond which lies open countryside.

Residential uses can be found to the north-east within the residential suburb of Castleton Moor, centered around Fairway, Heywood Road and adjoining streets.

An active railway is located adjacent to the south of the site with arable fields and associated ponds beyond.

The Rochdale Canal lies to the east beyond which lies further areas of housing, including a new housing development west of Manchester Road.

Castleton South Conservation area boundary runs along Blomley Street, close to the far northern end of the site but is outside the application boundary.

Services & Facilities

The site has good access to a range of local services and facilities.

Foodstores in the local area include a Co-op store on Grosvenor street. There are also two smaller convenience stores on Manchester Road which are within reasonable walking distance of the site.

The nearest primary school is St Edwards Church of England Primary School on Hanover Street which is located less than 800m from the site. St Gabriel's Primary School on Vicarage Road south is located approximately 1km to the east. The nearest secondary school is Matthew Moss High School, approximately 1.5km to the north.

Other nearby facilities within 1km of the site include a post office, health and leisure centre, day nursery and pharmacy.

A number of opportunities for outdoor leisure and recreation can be found within the local area. Castle Hawk Golf Club abuts the site's northern boundary and Manchester Golf Club is located a short distance away to the south of the M62. The Rochdale Canal can be accessed from Manchester Road to the north of the site. Royle Bowling and Billiards Club on Charlton Street lies a short distance to the east, accessed via Manchester Road.

Accessibility

The site benefits from excellent access to the local and national road network. Fairway connects with Heywood Road approximately 400m to the north of the site from where access to the A664 Manchester Road can be gained. The A664 Manchester Road runs to the east of the site and provides links to Rochdale Town Centre in the north and Middleton in the south.

Access to the regional and national motorway network can be gained via junction 20 of the M62 (1.8km to the east).

National cycle route 66, starts north of Rochdale where is runs south into the city centre where it meets National Cycle Route 92. This route also starts north of Rochdale where is also runs ends in the centre of Rochdale. Both routes are both on and off national cycle route, 66 is located approximately 380 metres from the site, whereas 92 is located 4.8 kilometres from the site.

There is an extensive footway network in the vicinity of the site connecting the site to the remainder of the Castleton area and notably the 'day to day' amenities close by, such as, shops, schools, healthcare facilities and employment opportunities.

The nearest bus stops to the site are located approximately 800 metres to the east on Manchester Road, around a 10 minute walk from the site. Additional bus stops are located further along Queensway. The nearest bus stops to the site provides access to the number 17 service that operates throughout the day, weekday evenings and at weekends to destinations such as Rochdale, Middleton, Blackley and Manchester. Rochdale town centre is an approximate 10-minute bus journey from the site and Middleton is a 16-minute bus journey.

Castleton station is the closest railway station to the site. It can be accessed via a short 8-9 minute walk as the station is 700 metres from the centre of the site. The station is managed by Northern and has 2 platforms, offering 3 services per hour to destinations such as Leeds and Manchester city centre.

Fig 2:3 | Local Context Plan

Housing Density/Mix

- Predominantly Terraced
- Predominantly Semi-Detached
- Predominantly Detached
- Mixed - Detached and Semi-detached

Rochdale Mayfield Rugby Club

Castle Hawk Golf Club

St Edwards C.E. Primary School

Hanover Street

Manchester Road

Castleton Station

Queensway (A664)

Heywood Road

Heywood Road

Elton Street

Heape Street

Fairway

Rochdale Canal

Co-op Store

ELR Land

Views to St Martins Church

Manchester Road

St Martins Church

St Gabriels R.C. Primary School

Green Belt Land

Network Rail Land

M62

M62

Key

- Application Boundary
- Train Station/ Railway Line
- Green Belt
- Schools
- PROW
- Track
- Changeline Bridge (Lock 52) Grade II Listed
- Church
- Foodstores
- Bus Stops
- ELR Land
- Castleton South Conservation Area
- Proposed Site Access
- Proposed Pedestrian/Cycle Access
- Railway Station & LIne

n*ORTH

0m 50m 100m 200m 300m

Scale 1:5,000 (@A3)

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Project Title
Castleton Sidings, Rochdale

e*SCAPE Job No.
022-016

Client
Kellen Homes

Drawing Number
022-016-P005

Revision
REV B

Drawing Title
Local Context Plan

Scale
1:5,000 @ A3

Date
April'23

2 | CONTEXT

Local Vernacular

The images over the following pages illustrate some of the housing typologies, architectural styles, detailing and materials that can be found within existing residential suburbs surrounding the site.

A broad mix of housing styles and ages can be found locally, reflecting different periods in the growth of Castleton. The housing mix includes examples of recent infill development, notbaly along Charlton Street to the east of the canal.

The predominant style of housing along Fairway is 1960s dormer bungalows and two storey semi-detached houses in buff brick. Further north, beyond Heywood Road, are areas of older terraced housing stock.

Simple detailing is characteristic of much of the older housing stock, particular on the Victorian terraced housing. Typical details include chimneys, recessed arched entranceways, stone cills and simple brick banding. More ornate detailing can be found on the larger detached and semi-detached Victorian houses and includes use of corbals, bay windows and gable fronts.

Red brick is the most common material for exterior walls although examples of houses finished in render and stone can also be found locally. The new homes shall utilise a red multi brick which is similar in colour and texture to the local brick found in the surrounding neighbourhoods.

The study of local vernacular study indiactes that terraced cottages typically have a plain doorway as part of the main elevation's fenestration with no porch, whilst higher status dwellings still didn't use a porch but instead framed the doorway with detailing to the heads and jambs. This hierarchical approach to entrances shall be applied to the dwellings at The Site with the use or Artstone surrounds to doorways or open flat-roofed porches to semi and detached properties.













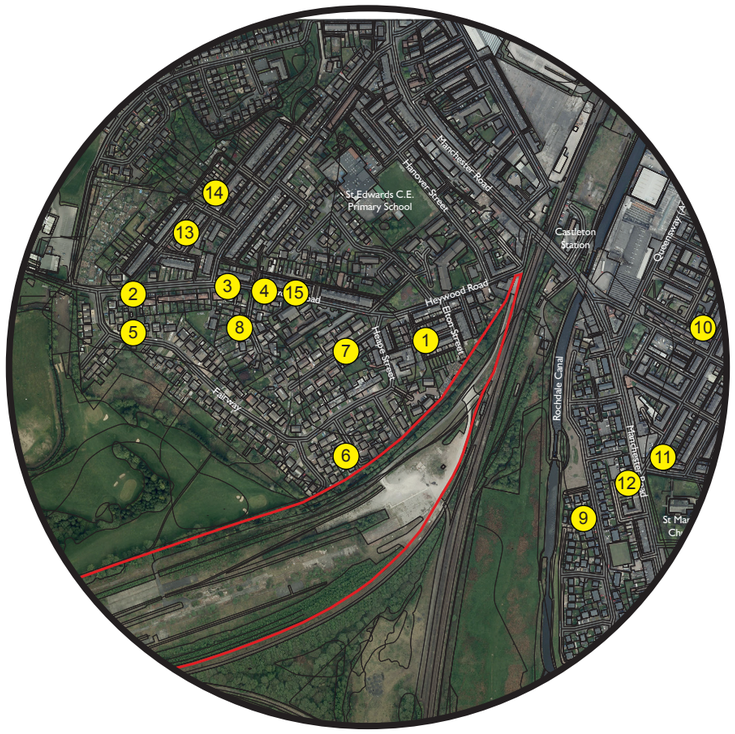








2 | CONTEXT









Row of Victorian terraces along Heywood Road with decorative teracotta tile detailing









Pair of large semi-detached houses on Vicarage Road North with corbal detailing, finials and stone mullion windows.

2 | CONTEXT

Planning Context

The August 2021 version of the joint development plan document for Greater Manchester '**Places for Everyone**' allocated Castleton Sidings for development under Policy JP Allocation 20 and required the following elements to be delivered:

- Deliver around 125 homes;
- Built development will be limited to eastern half of the site with west developed as open space and nature conservation area;
- North eastern part of site to accommodate East Lancashire Railway (ELR) development and potential tram-train trial;
- Achieve excellent design and sustainability;
- Retain/accommodate access by Network Rail & ELR for maintenance & improvement;
- Develop SuDS Scheme
- Provide pedestrian/cycle routes to Castleton, railway station & west toward Heywood employment locations;
- Electric charging & cycle storage;
- Financial contributions to local highway improvements;
- Habitats Regulation Assessment required;
- High quality landscaping, green & blue infrastructure & noise attenuation (for Green Belt boundaries & railway); and
- Education contributions.

In addition to the above allocation requirements Rochdale Borough Council have also produced **Castleton Sidings SPD** in March 2022 of which the Area Framework is illustrated in Figure 2:4.

The SPD establishes the principles and parameters to guide future development and infrastructure investment within the Castleton area over a minimum of 20 years and beyond. The overarching principle is the creation of thriving, vibrant, sustainable communities in Castleton. The SPD will seek to efficiently use land, provide a better quality and variety of housing by type and tenure, good and environmentally sensitive design, improvement to public open space and public realm and access to employment and job opportunities, community facilities and local services.

In order to make Castleton a desirable and sustainable place to live and work, the SPD places strong emphasis on the following:

- Introduce new residential uses that provides for a mix of types and densities
- Clearly define the existing local centre
- Support the existing employment areas and provide opportunities for investment
- Create a more integrated community both for existing and future residents
- The removal/reduction in the number of HGVs through the town centre
- Create more legible and public open space, high-quality public realm design comprising quality boundary treatments, attractive street furniture, quality surface materials, lighting and signage etc, including links to the Rochdale canal
- Rationalisation of car parking provision to provide a balance between the needs for commuters, shoppers, visitors/tourists linked to the ELR, and existing and future residents.

The allocation requirements and the SPD have both been taken into account during the development of the proposals for this site, as well as the need to ensure the site connects into the proposed **BEE Network** which will create a London-style integrated transport network for Greater Manchester.

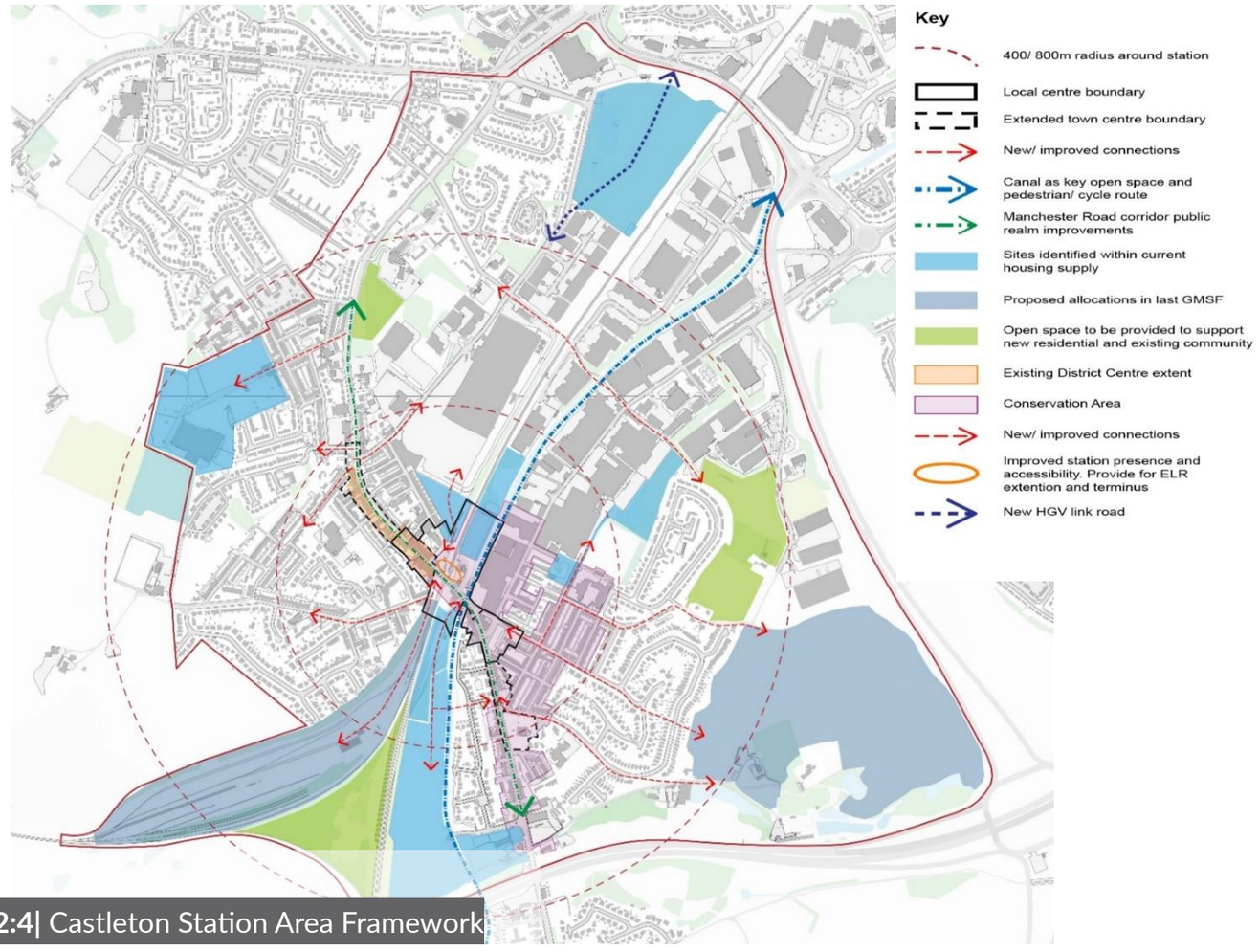


Fig 2:4| Castleton Station Area Framework

2 | CONTEXT

Historical & Heritage Context

The site was previously occupied mostly by Baggs Yard Railway Sidings although it is now vacant. The site includes a former railway sidings associated with Castleton North, East and South Junction. It comprises several disused railway lines with associated areas of railway ballast, hardstanding, bare ground and scattered scrub with smaller areas of broadleaved woodland located along the boundary of the site.

There are no recorded built heritage assets on the Site and it is unlikely that the architectural and historic interests of the surface vestiges of railway infrastructure would be of sufficient moment to qualify them as built heritage assets. Nevertheless, railway features, amongst other past land uses, may be considered to have some archaeological interest.

The United Reformed Church (Listed Building) on Heywood Road is c. 250m to the north of the Site, but is situated in a densely developed residential area and also has no conceptual link to the Site and draws nothing of its significance from the Site.

The Listed Buildings of the Rochdale Canal Lock 52 and Towpath Bridge and the Rochdale Canal Lock 53 are c. 100m and 200m respectively from the Site and share both a visual connection and historic theme (transport solutions) with the Site.

The canal-side Listed Buildings may be considered to draw some element of their significance from the Site as the railway lines which once extended through the Site and the canal traverse though a historic line of communication.

The Listed Building of St. Martin's Church is c. 285m to the east of the Site and separated from it by residential estates to the west of the A664 Manchester Road and the scrub land to the west of the Rochdale Canal. There is no functional relationship between the Site and the Church, but the Church is on a high spot and its spire acts as a visual anchor in the landscape and is visible from considerable distances in all directions.

The Castleton South Conservation Area, at its closest point, is c. 50m from the Site boundary. The development of the railway network in the mid-19th century was critical to the development and expansion of Castleton and, as part of that network, the Site, historically has some resonance with the Conservation Area.



2 | CONTEXT

Constraints & Opportunities

The proposed development has been informed by a detailed physical analysis of the Application Site and surrounding area.

Figure 2.4 illustrates the main physical characteristics of the site and identifies the key development constraints and opportunities. It also examines the Site's relationship with its immediate surroundings and adjacent land-uses and draws on the findings of a range of supporting surveys and studies submitted as part of this application. This has included an investigation into ecology, trees, topography, flooding, air and noise, traffic impact and access.

This analysis has informed the spatial framework underlying the masterplan for the Site.



Opportunities

- Site located wholly within Flood Zone 1, defined as having a low risk of fluvial flooding.
- The site is generally flat with a gradual decline towards the south and the central strip of the site. The site has a high point at the north east and falls towards the low point at the south west with a central lower strip throughout the site.
- Potential for new Ecopark on retained Green Belt land at the western end of the site.
- Potential to create new pedestrian links connecting the site with existing Public Rights of Way along the northern boundary.
- Potential to create two vehicular access points into the site off existing cul-de-sacs off Fairway along the north-east boundary.
- Opportunity to retain existing mature trees and woodland belts along northern and southern boundaries.
- Potential to reference the site's former use through imaginative landscape design to create a neighbourhood rooted in a strong sense of place.
- Views towards Gothic spire of St Martins Church.

Constraints

- The site lies within the Impact Risk Zone of Rochdale Canal, Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI), located approximately 65 m east of the site.
- Potential noise sources from road traffic associated with the M62 motorway and the passing of trains along the multiple lines bounding the site.
- Existing sewer crosses north-south across the central part of the site.
- Sensitive interface with existing residential uses adjacent to the north-east corner of the site.
- Localised deep layers of organic/granular fill.

Fig 2.4 |Site Constraints & Opportunities

Castle Hawk Golf Club

Fairway

Fairway

Heape Street

Queensway

Rochdale Canal

Manchester Road

Site for East Lancashire Railway temporary Rail Halt & associated Car Parking

Potential future pedestrian connectivity with adjoining site & beyond

Views to Church Spire

Views to Church Spire

St Martins Church

Potential pedestrian link to PRoW

Potential pedestrian access to Ecology Park

Potential pedestrian link to PRoW

M62

Key

- Application Boundary
- East Lancashire Railway Land
- Proposed Green Belt Boundary
- Sensitive Residential Interface
- Sensitive Interface with Railway Lines
- Existing Trees/ Woodland Belts
- Potential Site Access Points (Muti-modal)
- Pedestrian Connections
- Public Rights of Way
- Organic/Granular Fill greater than 0.5m depth
- Key Views
- Sewer Easement

n*ORTH

0m 20m 40m 60m 80m 100m

Scale 1:2,500 (@A3)

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3 | **CODING** SPATIAL PARAMETERS

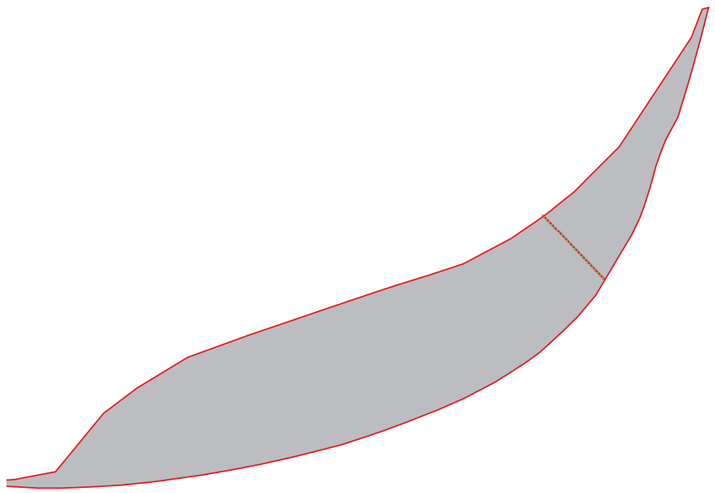
Design Principles

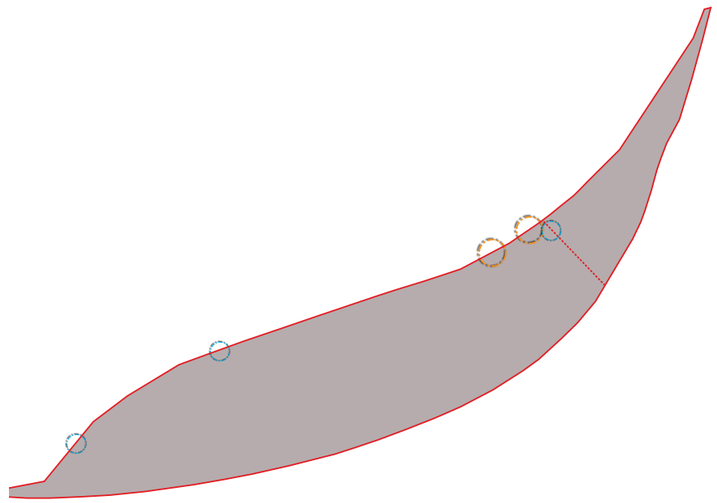
This section illustrates the proposed spatial framework which underpins the detailed design. The urban design framework is illustrated through a series of images which represent different 'layers of urbanism' which together have informed and provide the structure around which the detailed design has evolved.

The spatial framework presented here has been informed by the analysis of constraints and opportunities presented in the previous chapter and encapsulates the development principles set out in the allocation policy.

The layers of urbanism include:

- Site Boundaries
- Access
- Primary Movement Network
- Movement Hierarchy
- Green & Blue Infrastructure
- Block Forms & Urban Grain





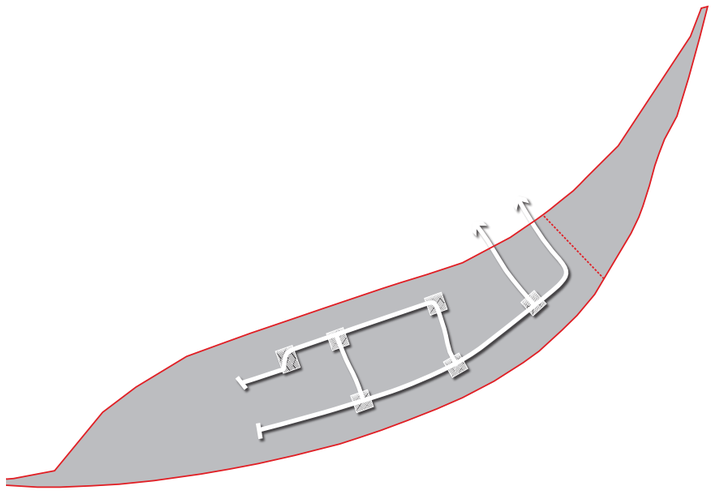
Site Boundaries

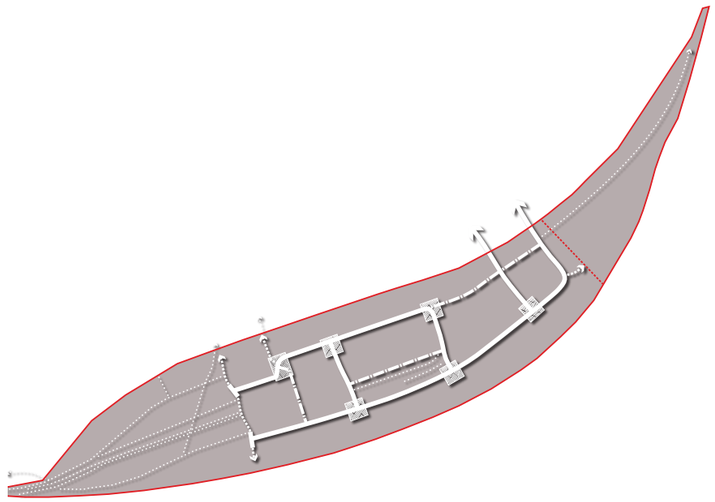
- Site area extends to approximately 10.93 ha (gross).
- An area of woodland defines the northern and southern boundaries of the site.
- An active railway extends long the southern boundary beyond which lies agricultural fields lined by hedgerows with associated ponds.
- Built development will be limited to the eastern half of the site to minimise encroachment into the Green Belt.
- The north east of the site will accommodate a temporary rail halt and associated parking to facilitate the extension of the ELR from Heywood to Castleton and potentially a tram-train trail project if progressed in this location.

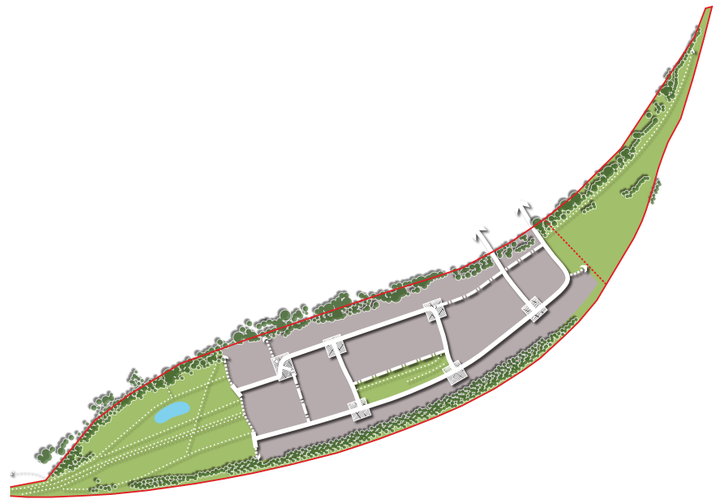
Access & Gateways

- Vehicular access to be taken from two extensions to the existing cul-de-sacs on Fairway along the site's northern boundary.
- Two pedestrian connections along the northern boundary connecting with the existing Public Right of Way.
- Pedestrian connection along eastern boundary connects the site with the site of the proposed East Lancashire Railway temporary rail halt.

3 | **CODING** SPATIAL PARAMETERS







Primary Movement Network

- Network of traditional streets provide primary circulation through the site.
- Primary routes inter-connect to form internal loop roads that aid legibility and ease of movement through the site.
- Series of focal spaces located at key intersections in the movement hierarchy where raised tables will assist in slowing vehicle speeds.

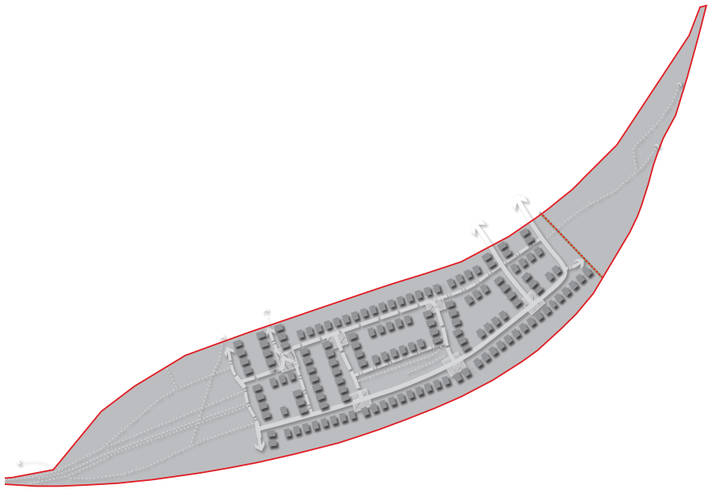
Movement Hierarchy

- Simple and legible route hierarchy comprising series of inter-connected streets, lanes and shared private drives.
- Shared-surface lanes designed as secondary routes serving smaller numbers houses and provide a choice of routes through the site, improving legibility and connectivity.
- A shared-surface lane along the northern edge of the central greenspace provides a softer, informal interface with the proposed greenspace.
- Movement hierarchy defines a series of human-scale development parcels.
- Layout ensures double fronted streets where possible.
- Series of footpath/cycle links connect houses with the development's open space and provide convenient access points onto existing Public Rights of Way.

Green & Blue Infrastructure

- Development concentrated in central part of the site.
- Proposed Ecopark located towards the western end of the site containing an ecological wetland and trim trail.
- The western part of the site will be redeveloped as a high quality area of open space or nature conservation area and retained within the Green Belt.
- Central green located for ease of access by residents and contains a locally equipped play area (LEAP) and seating.
- Land to the east is reserved for the proposed East Lancashire Railway temporary rail halt, with an area of open space at the boundary with the development site
- Surrounding homes provide natural surveillance.
- Existing trees will be retained around the edges of the Site.
- Pedestrian routes through the open space provide connectivity through and out of the Site.

3 | **CODING** SPATIAL PARAMETERS





Block Form & Urban Grain

- Fine urban grain with small development parcels and regular street connections creating a highly permeable layout.
- Variation in block shape and size helps to create character.
- Active frontages onto streets.
- Outward-facing development with houses fronting onto open spaces and surrounding areas.
- Houses back on to southern boundary.
- Streets are well defined and enclosed by the surrounding built form.

Key

- Application Boundary
- Green Infrastructure
- Residential Development Parcels
- Retained Trees/ Woodland Belts
- Public Rights of Way
- Gateways (Vehicular & Pedestrian)
- Street (5.5m carriageway)
- Lane (4.8m carriageway)
- Shared Drive (4.5m unadopted carriageway)
- Shared Space Square or Mews
- Focal/Header Building
- Amenity & Leisure Paths

Fairway

Fairway

Heape Street

Iron Street

Rochdale Canal

Site for East Lancashire Railway temporary Rail Halt & associated Car Parking

Development Interface

Wildlife Corridor

Garden Square

LEAP

Attenuation Basin

EcoPark

Wildlife Corridor

Fig 3:1 | Spatial Parameters Plan

4 | **CODING** CHARACTER & IDENTITY

Character & Identity

A suite of house types has been developed that will complement the character of the local area being sympathetic in terms of scale, design, detailing and materiality.

A classic contemporary aesthetic is employed which sits comfortably alongside the range of styles and ages of properties found in the surrounding area. The mix includes detached homes, semi-detached and townhouses which are all represented locally.

The material palette has been chosen to complement materials found on existing houses in the local area which include red brick and buff brick. Smooth buff brick will be used on heads and cills.

Three different facing bricks will be used across the development to create areas of different character, create visual interest and identify feature plots. This will include two red bricks and one buff brick type.

Grey concrete roof tiles will be used on all house types.

Simple architectural detailing is used to add visual interest to primary elevations including contrasting brick cill and heads, contemporary flat roof porch canopies and modern door designs.

All house types have simple pitched roofs.

Front gables are a feature of several house types. A number of 2.5 storey houses are included in the mix as focal/header buildings. The steep pitches (50°) on these house types and some of the 2 storey homes draw their inspiration from the Gothic spire of St. Martins Church.







Fig 4.1 | Building Materials & Detailing



Grey Roof Tiles



Contemporary Flat Roof Porch Canopy



Gable Fronted Properties



GRC Stone Door Surrounds to Feature Properties











Warm Red Facing Brick



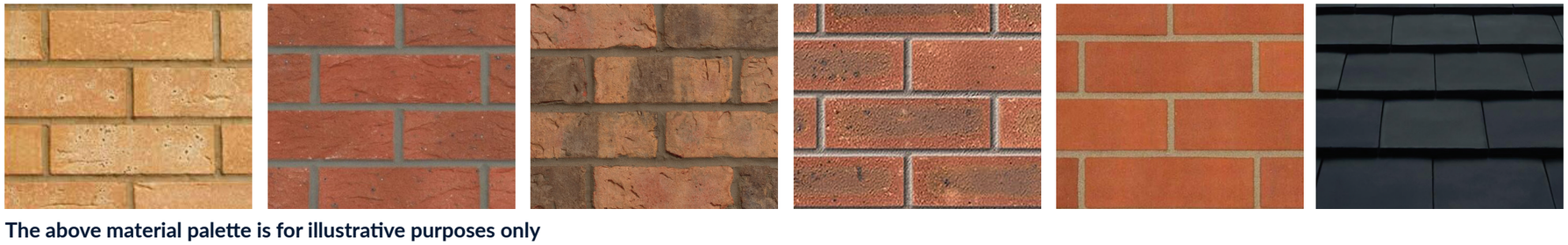
Balanced, well Proportioned Fenestration



Simple Cill & Lintels Details to Windows



Buff Facing Brick



The above material palette is for illustrative purposes only

4 | **CODING** CHARACTER & IDENTITY

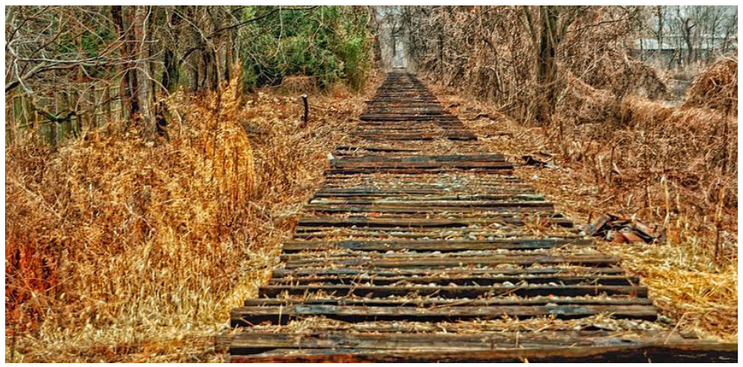
Building on the Site's History - Exploring the Railway Theme

The Landscape strategy for the site will draw inspiration on the site's former use as railway sidings. The railway theme will be applied to the new Ecology Park at the western end of the site as well as other smaller green spaces within the development.

Remnant sections of railway line will be retained with the space between planted with trees, shrubs, grassland and wildflowers.

New footpath and cycleways will be created through areas of public open space, following the routes of the railway lines.

A palette of street furniture (lighting, seating, cycle stands etc) will be selected with a railway theme.



Timber sleepers will be embedded within the landscape and areas of public open space as features and visual cues to the site's former use.



New tree planting and soft landscaping will be introduced in the spaces between the railway sidings



Aerial photograph of the site with the former railway sidings highlighted



The proposed site layout will have a strong rectilinear form, with streets and other routes following the alignment of the former sidings



Footpath and cycle links through the proposed Ecology Park will either follow or run alongside the retained/remnant sections of railway line



The routes of the former railway sidings will form the structure around which new footpath and cycle connections through the proposed Ecology Park are located.

5 | **CODING** LAND USE

Land Use

The application boundary covers an area of 10.93 hectares, with 5.35 hectares (net) or 49% of the site will be developed for residential use and includes 191 residential dwellings with associated access, servicing and green infrastructure.

An area of the site has been set aside for use by ELR with a parcel size of 1.62 hectares (15% of the site). Some of the ELR site will undoubtedly provide additional green infrastructure as part of proposals coming forward.

The remainder of the site being used as part of the Green Infrastructure network covering 3.96 hectares or 36% of the site which will include a variety of functions such as:

- Public Open Space,
- Play Areas,
- Retained and new native trees,
- Retained and new wetland habitat, and
- Retained and new meadow habitats.



Fig 4:1 | Land Use Plan

6 | **CODING** GREEN & BLUE INFRASTRUCTURE

Introduction

Castleton Sidings incorporates a strong green infrastructure network that is an integral part of the proposals. Nature is central to the creation of beautiful places and the green infrastructure network not only retains existing natural features such as the trees, but also introduces new features drawing on the concept of 'Nature Taking Over'. Nature and the environment is fully integrated into the development providing spaces for wildlife, exercise, interaction, mindfulness and a beautiful green setting to the homes. The natural environment is good for health, biodiversity, carbon capture, shading, cooling, noise mitigation, air quality and to ameliorate flood risk, all of which contributes to tackling the climate emergency.

What is Green Infrastructure?

The Landscape Institute, in its Position Statement; Green Infrastructure, An integrated approach to land use, defines Green Infrastructure as *"GI is the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions. When appropriately planned, designed and managed, the assets and functions have the potential to deliver a wide range of benefits – from providing sustainable transport links to mitigating and adapting the effects of climate change.".*

It is therefore clear that the term "Green Infrastructure" is an over arching term for all 'Green Assets' within an area.

The aim of the proposed development, in terms of GI, is to retain key existing assets, restore and enhance existing habitats and create new ones of value whilst also performing the functions of creating public open spaces for the community to enjoy with a sustainable drainage (SuDS) network that efficiently drains the development by managing water on site, before safely discharging it at agreed greenfield run-off rates to the surrounding network of streams and rivers.

What is also made clear in the aforementioned document by the Landscape Institute is what GI Assets are and what the clear functions of GI is holistically. The document contains a series of case studies which illustrate various relevant points in terms of what constitutes GI and also includes a useful schematic which illustrates all the elements that can be considered to form the GI Assets and GI Functions (Pages 4 and 5 of the Position Statement) and reproduced opposite in Figure 06:01 for ease of reference.

Green Infrastructure Assets & Functions

We have therefore utilised the Landscape Institutes 'Green Infrastructure – An integrated approach to land use' March 2013 which sets out clearly what GI is, the elements that make up GI (GI Assets) and the roles these assets play (GI Functions). GI assets and GI functions are explained below:

Green Infrastructure Assets range from country parks, lakes and woodlands to urban interventions such as green roofs and street trees. They can be specific sites at the local level or broader environmental features at the landscape scale within and between rural and urban areas such as wetlands, moors and mountain ranges.

Green Infrastructure Functions are the roles the assets can play if planned, designed and managed in a way that is sensitive to, and includes provision for, natural features and ecosystem services. They may have obvious primary functions, but each asset can perform different functions simultaneously – a concept known as multifunctionality. For example, street trees add aesthetic quality to an urban area, but will also reduce airborne pollution, provide shade, reduce urban heat island effects, mitigate wind chill and turbulence and increase biodiversity.

Open Space Provision

Having defined what GI is actually made up of, it is possible to set the site into this context in terms of identifying the assets which will be retained and new ones which will need to be created on site and the intended plethora of functions they shall serve within an open space network.

As stated previously the total site area extends to some 10.93 hectares with 5.35 hectares (net) or 49% of the site as development and another 1.62 hectares (15%) given over to the ELR.

Therefore the Green Infrastructure network covers 3.96 hectares or 36% of the site.

The mix of assets includes trees, hedgerows, grasslands, wetlands and areas of public open space. These assets perform a variety of functions which are listed below, along with the total areas that they will cover:

- Ecological Grassland/Woodland Edge,
- Community Orchards,
- Children's play space,
- Amenity green space,
- Ecological wetlands.

Open Space Design

As illustrated in the parameters and illustrative masterplans the site will include a network of green spaces.

These spaces will connect out to the wider rural landscape and be part of the wider strategic green infrastructure network.

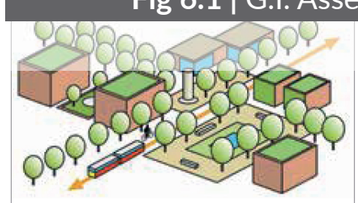
In additional to the green spaces there will be a series of more urban public spaces such as the garden and residential squares, as illustrated and described in Chapter 7. There will also be a series private spaces related to the homes. All these spaces will also contain trees, and other planting, thus adding to the 'greening' of the site.

As illustrated and described in this code trees are an integral element to the public realm, open spaces and private gardens; being used to provide shade, capture airborne particulate pollution, absorb water, provide habitats for wildlife and absorb carbon.

In addition to the open space to the western third of the site there will be a series of set piece spaces such as the Garden Square and Residential Square. The principles for those spaces have be described in detail in Chapter 7.

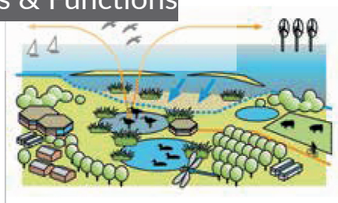
Front gardens are also described as part of the street hierarchy with landscaping illustrated in terms of boundary treatments and garden tree planting. However, tree species, hedgerow and shrub species to be used within the development are set out in the planting palettes here, along with trees which are expected to be planted in the rear gardens of each property and a native woodland mix for general landscape areas to further enhance the tree cover and biodiversity on the site.

Fig 6:1 | G.I. Assets & Functions



A Urban areas

Boulevards, plazas, green roofs and walls make attractive settings for shopping and leisure, improving the vibrancy of local economy. Street trees and green space make our settlements more liveable, provide cooling, shade and cleaner air, give us spaces for relaxation and healthy living, create distinctive places and deliver multiple economic benefits.



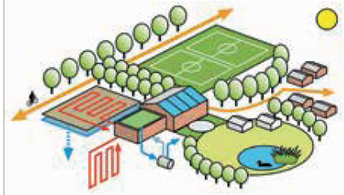
B Coastal zones

Managed coastal realignment reduces risk of flooding, provides potential sites for renewable energy and creates connected habitats for wildlife. Coastal areas provide opportunities for learning and leisure, and deliver economic benefits through the creation of distinctive places for tourism.

C Upland areas

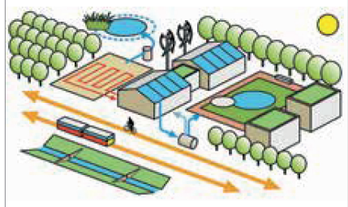
Agriculture, pasture, timber production and timber products including biomass for a local CHP plant and renewable power generation, all provide multiple economic benefits and contribute to reducing the impact of climate change. Areas set aside for extreme sports, relaxation and activities, contribute to a healthy lifestyle while protecting vulnerable wildlife habitats and retaining the essential natural character of the landscape.





D Community centre

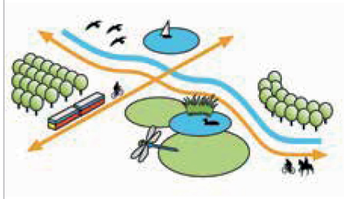
Sustainable buildings with green roofs, geothermal heating and cooling, and rainwater collection, help reduce the impact of climate change and act as a neighbourhood hub. Associated green spaces caters for healthy-living activities including sports and opportunities for learning through connecting with nature and food growing, and employment in green space management.



J Business park

Attractive settings encourage inward investment, incorporate sustainable transport, sustainable urban drainage, rainwater collection and waste-water cleansing. They create attractive and distinctive workplaces, contributing to a vibrant local economy, reducing flood risk and the impact of climate change, and creating space for nature.





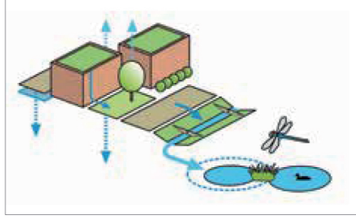
E Main green spine

Trees, green spaces, river valleys and waterways, pedestrian and cycle routes, connect places, reflect local character, enable wildlife to flourish, offer sustainable transport routes and reduce the impact of climate change.



I Suburban housing

Spaces for relaxation and healthy living encourage social interaction, neighbourhood events and food growing, building community cohesion and making settlements comfortable and liveable. These spaces also improve property values and reduce the effects of climate change through natural drainage, renewable energy use and building orientation that maximises solar gain and daylight.



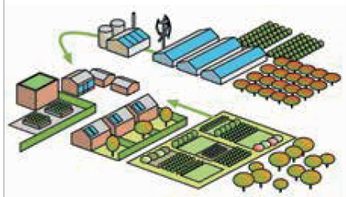
H Sustainable drainage systems (SuDS)

Attenuation ponds, swales and reed beds provide natural ways to reduce flood risk, provide temporary storage and improve water quality, while creating wetland habitats for wildlife in an attractive aquatic setting and additional potential for accessible leisure facilities.

G Country park

A range of accessible habitats and green spaces, which are managed for wildlife to flourish and people to enjoy, provide spaces for relaxation and active recreation. They also offer learning and employment opportunities through events, educational outreach and jobs as rangers and green-space managers.





F Allotments, small holdings and orchards

These areas provide space to restore locally-sourced food production and to connect urban populations with the rural economy. They also offer opportunities to learn about and gain apprenticeships in gardening, vegetable and fruit growing, bee-keeping and horticulture, as well as providing for outdoor places and activities that help bring communities together and provide an active lifestyle.

6 | **CODING** GREEN & BLUE INFRASTRUCTURE

Landscape Concept

The landscape scheme comprises mainly of two proposed public open spaces; a rectangular public open space within the middle of the residential area, and a larger western public open space that will remain part of the green belt and provide a green buffer along the western urban edge of Castleton.

Both public open spaces will draw inspiration from the site's former use as railway sidings with mainly the shape and form of remnant sections of railway line routes forming the structure of a new footpath and cycle network.

The central rectangular public open space will contain a local equipment area for play (LEAP), seating and railway themed network of linear footpaths made of hoggin gravel and timber edging. The open space will contain large shrub beds of native and ornamental shrubs, and swathes of wildflower meadow to attract bees, butterflies and invertebrates whilst also providing texture, colour, and sound. A row of formal hedging will run along the northern boundary of the open space to help partially screen and soften views of adjacent properties that will look onto the open space.

The large western public open space will also comprise of a network of railway line inspired footpaths that are made of hoggin gravel and timber edging. The landform of the open space will be elevate up to 2m high within the middle of the open space and will contain pseudo peat. The footpath network will create patchwork of large and narrow spaces covered with native planting that is tolerant of wet and acidic to neutral soil conditions. Large areas will contain native scrub with specimens of native trees and tree cultivars. Whilst three areas along the southern part of the open space will be planted with native woodland tolerant of wet conditions with an understorey of scrub to create further habitat and improve biodiversity on site. Two central paths located close together will contain a channel of native species of peatland planting to provide a natural feature within a formal and linear shape comprising heathers, cotton grass, and common rush. Main features along the footpath network will include trim trail equipment and railway themed seating. A large pond will be a key central feature to the open space containing aquatic-marginal planting along the shallow water edge and buffered by a wetland wildflower margin that provides texture, colour, sound, and important habitat creation. The northern, southern,

Sample Specimen Trees (Natives & Native Cultivars 14-16cm girth container)
Acer campestre 'Elsjrik'
Betula pendula
Carpinus betulus 'Frans Fontaine'
Crataegus laevigata 'Paul's Scarlet'
Ilex aquifolium 'Nellie R. Stevens'
Pinus sylvestris
Prunus avium
Quercus robur
Sorbus aucuparia
Tilia cordata 'Greenspire'
Sample Native Shrub Planting (5L pots)
Buxus sempervirens
Calluna vulgaris
Cornus sanguinea
Corylus avellana
Crataegus monogyna
Euonymus europeaeus
Ilex aquifolium
Juniperis communis
Ligustrum vulgare
Prunus spinosa
Rosa arvensis
Salix lanata
Viburnum opulus
Sample Mixed Native Hedgerows (Double Staggered)
Corylus avellana
Crataegus monogyna
Ilex aquifolium
Prunus spinosa
Rosa canina
Sample Native Woodland Mix Planting (Bareroot whips 60-80 cm high)
Alnus glutinosa
Betula pendula
Betula pubescens
Corylus avellana
Crataegus monogyna
Salix alba

Sample Ornamental Shrub Planting (5L pots)
Brachyglottis 'Sunshine'
Carex morrowii 'Variegata'
Ceanothus thyrsiflorus repens
Choisya 'Aztec Pearl'
Cistus 'Silver Pink'
Cotinus coggygria 'Royal Purple'
Elaeagnus x ebbingei 'Limelight'
Erica carnea 'Springwood Pink'
Escallonia rubra 'Crimson Spire'
Euonymus fortunei 'Emerald 'n' Gold'
Festuca glauca 'Elijah Blue'
Fuchsia 'Mrs Popple'
Hamamelis mollis
Hebe 'Great Orme'
Lavandula angustifolia 'Hidcote'
Lonicera pileata
Mahonia aquifolium 'Apollo'
Osmanthus x burkwoodii
Pachysandra terminalis
Photinia x fraseri 'Red Robin'
Pieris 'Forest Flame'
Potentilla fruticosa 'Goldfinger'
Prunus lusitanica
Rosmarinus officinalis 'Miss Jessopp's Upright'
Sarcococca confusa
Sarcococca hookeriana digyna
Viburnum x bodnantense 'Dawn'
Vinca major
Sample Single Species Formal Hedges (7.5 litre pots at 3 per lin.m)
Lonicera nitida 'Baggesen's Gold'
Photinia x fraseri 'Red Robin'
Prunus laurocerasus 'Otto Luyken'

6 | **CODING** GREEN & BLUE INFRASTRUCTURE

and western perimeters of the large open space will comprise of retained and managed existing trees and scrub.

Residential front gardens will contain soft landscaping that provides structure planting along street scenes. Front gardens will generally comprise of turf, formal hedging and or plant beds of both native and ornamental shrub species. Further shrub planting will be focused around square nodal points along the access roads to provide attractive nodes along the access roads of the proposed development.

The perimeter of the residential area will be softened by retained trees and scrub, whilst gaps or sections between retained trees and scrub are filled by proposed native scrub and native tree specimens. The eastern and western edge of the residential area will be bound by native hedgerow. The eastern perimeter will also be enhanced with eco species rich wildflower and specimens of native or native cultivar trees.

Blue Infrastructure

Managing water is an important element in a site design's response to nature. Water management will reduce flood risk and improve water quality whilst also providing new wetland habitats.

Working with Water

Whilst there are no wetland habitats on the site currently a new wetland will be created in the western part of the site, as part of the creation of new habitats within the area of retained Green Belt.

The wetland will draw water from the surrounding open space via the land drain system and provide a focal feature in this space as well as an haven for amphibians, insects and birds.

Sustainable Drainage

A comprehensive Sustainable Drainage System (SuDS) will be provided, set both within the green infrastructure network and development parcels creating a complete management train of interconnected attenuation and dispersal elements.

A SuDS Management Train aims to hold and safely disperse all surface and storm water collected from the site. It will ensure that there is no increase in the risk of flooding at the site and in the surrounding area.

Typically SuDS aims to deal with water at source by:

- Percolation at source, use of porous pavements, french drains and unlined swales to allow as much surface water as possible to percolate into the ground at its 'point of contact'.
- Retention of water on-site and allowing natural percolation to occur which has a much slower release rate into the surrounding watercourses.
- Slow release of water via balancing ponds/tanks - where the possibility of percolation is restricted by underlying clays and other impermeable surfaces, pools/tanks are constructed to retain storm water surges on site, and, through controlled release of the water (via weirs or brake pipes) water is released (at greenfield rates) into the surrounding watercourses.

The final form of the SuDS management train is illustrated in the drainage strategy that accompanies the planning application.

The SuDS network will be separate to the proposed wetland habitat on the site to ensure there is no cross contamination of the water sources if hydrocarbons leak into the system from the road network. However, the SuDS design should seek to filter and cleanse water before release into watercourses.

Biodiversity Net Gain

Under the Environment Act 2021 developments will be expected to achieve biodiversity net gain (BNG).

The process of achieving BNG will incorporate discussions with local stakeholders to identify how the development can be of most benefit to the local habitats and species.

The BNG will be based upon creating replacement habitats to those lost, as well as creating new habitats on site. As part of the over arching vision for the site the theme of 'nature taking over' will be brought out in the approach to on site habitat creation and landscaping with the development of new native woodlands, woodland edge and grassland habitats within the open spaces.

Biodiversity will be brought into the development through the front gardens, open spaces and street trees. These provide benefits to people (including reducing flooding and cooling the streetscape) as well as to wildlife.

Planning for Biodiversity

The development will follow the mitigation hierarchy to provide the maximum benefit for biodiversity. Where a feature of the development is identified as likely to harm local ecology this should first be avoided through changing the design or removing the feature which caused the harm. If this is not possible then the harm should be mitigated.

Street Trees

Street trees provide a range of ecosystem services, including providing islands of habitat for wildlife, shading the streetscape and improving the air quality. They are aesthetically pleasing, breaking up hard landscaping and introduce green structure to urban centres.

The street trees will incorporate a variety of species, reducing the risk of mass mortality from pests or disease as well as providing different qualities, including having:

- Year-round foliage;
- flowers and fruit depending on the location;
- tolerance to drought/flooding; and
- shallower roots where underground services run.

The street trees set out earlier in the chapter within the planting palettes have been chosen using the guidance in the Forestry Commission's Urban Tree Manual.

Management specifications will need to be drawn up including consideration of the requirements for watering each tree, how it will be guarded before it is established and measures to avoid compaction of the roots to ensure its survival into the long term.

7 | **CODING** MOVEMENT & PUBLIC REALM

Introduction

Castleton Sidings is intended to be accessible to all and easy to find your way around. This can only be achieved by creating a legible and permeable neighbourhood. To do this the masterplan already illustrates a network of streets, lanes, footpaths, squares and green spaces which provides and promotes the use of public transport, walking and cycling through a pleasant and green setting. It is of paramount importance that we accept that the car will also need to be accommodated and designed into the layouts.

The car will not dominate the streetscenes or take away from the quality of the streetscape proposed. Streets must be physically and perceptually safe with good overlooking of the public realm by the enclosing built form.

Well Connected

A connected network of hierarchical routes for all forms of transport, creating a strong circulatory system is key to the sustainability and safety of the neighbourhood and its interconnectivity out to the surrounding settlement as illustrated in Figure 7:1 opposite.

This proposed new neighbourhood will therefore be able to plug into a number of existing roads and footpaths as well as pub,lic transport via the proposed 'BEE Network' which will enhance the site's connectivity via walking, cycling and public transport.

The street and public realm network is a crucial element in the delivery of the neighbourhood as it is long lasting and, as with historic towns will far outlast the buildings that will enclose it.

The street network, as illustrated in Figure 7:2 over page provides a variety and choice of routes for moving around the neighbourhood. Routes are direct ensuring people can make efficient journeys. Direct, well designed and legible routes make walking and cycling more attractive and with increased activity comes a greater perception of safety.

The neighbourhood as highlighted in Figure 7:2 has a fine-grain route network where streets are connected one to the other.

Public Transport

Access to public transport is a key requirement of any sustainable neighbourhood. Provision of the infrastructure to access public transport has been at the heart of the scheme and Figure 7:1 illustrates the location of the bus stops and local railway station.

The network of footpaths across the site provide direct links between the proposed new neighbourhood, shops on Manchetser Road, surrounding neighbourhoods and adjoining countryside.

All of these connections will plug directly into the BEE Network to create a London-style transport system.

Street Hierarchy

The public realm incorporates the streets and squares in which the community and visitors will interact. The quality of the public realm is governed by the quality of the built form that encloses and overlooks them as well as the quality of design of the streets and spaces themselves. That quality of design should not be restricted to the open spaces, but also brought out into the streets, lanes and footpaths.

To this end the street hierarchy as illustrated in Plan 7:2 is described in more detail in the coding over page with the design traits and characteristics set out in the accompanying tables.

Active Travel

Walking and cycling is a key element in creating sustainable neighbourhoods, as advocated by 'New Urbanism' whose roots are in the Garden City movement. Indeed, walkable and cycleable neighbourhoods have been at the forefront of post pandemic urban design.

The aim of the movement network is to ensure that walking and cycling is the preferred choice for short journeys of 5km or less between the site and surrounding areas.

The proposed network is relatively direct and associated with anticipated desire lines and Public Rights of Way and will be designed to be attractive and safe with good overlooking from the surrounding development parcels.

The streets, lanes and shared drives incorporate shared space principles within them or include areas of public realm with pedestrians prioritised and vehicles drive at slow speeds. This chapter goes on to set out the coding of streets and spaces.

Service & Utilities

Electricity sub and water pumping stations, on many occasions end up being an afterthought in the design of new neighbourhood. Sub and pumping stations need to be located for ease of access from the adopted highway and are usually erected on an open space frontage, on a key sight line. The design of utilities and their locations must be considered at the start of the design process and properly integrated into the layout with the other built forms of the development.

Access for emergency vehicles must be considered in the design and layout of the neighbourhood. The street hierarchy coding below has considered the need of emergency vehicles in terms of access, manoeuvring and indeed in the space required for fire tenders to drop stabilising feet etc.

The street hierarchy has also taken into account refuse vehicles in terms of both movement and collection of bins. This coding also considers the location and storage of bins for individual residential properties, apartments and other communal uses, along with the design of 'bin day' collection points within the streetscape. All solutions must not be retrofitted to the layout and must be an integral part of the design process.

Fig 7:1 | Movement Context

Rochdale Mayfield Rugby Club

Castle Hawk Golf Club

St Edwards C.E. Primary School

Hanover Street

Manchester Road

Castleton Station

Queensway (A664)

400 metres /5 minute walking distance

Heywood Road

Heywood Road

Elton Street

Hesps Street

Fairway

Rochdale Canal

Manchester Road

St Martins Church

St Gabriels R.C. Primary School

Network Rail Land

M62

800 metres / 10 minute walking distance

EcoPark

Key

- Application Boundary
- Straight Line Walking Distances
- Railway Station & LIne
- PRoWs & Paths
- Schools
- Church
- Foodstores
- Proposed Site Access
- Proposed Pedestrian &/or Cycle Access
- Bus Stops

n*ORTH

0m 50m 100m 200m 300m

Scale 1:5,000 (@A3)

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7 | **CODING** MOVEMENT & PUBLIC REALM

Public Realm

Streets & Spaces

The sense of place of Castleton Sidings will stand or fall on the quality of the streets and spaces created within it. The public realm cannot be divorced from the built form, they work hand in hand and the enclosure of the public spaces is part of how well they perform and feel.

The following coding relates to the street and space hierarchy as illustrated opposite in Figure 7:2.

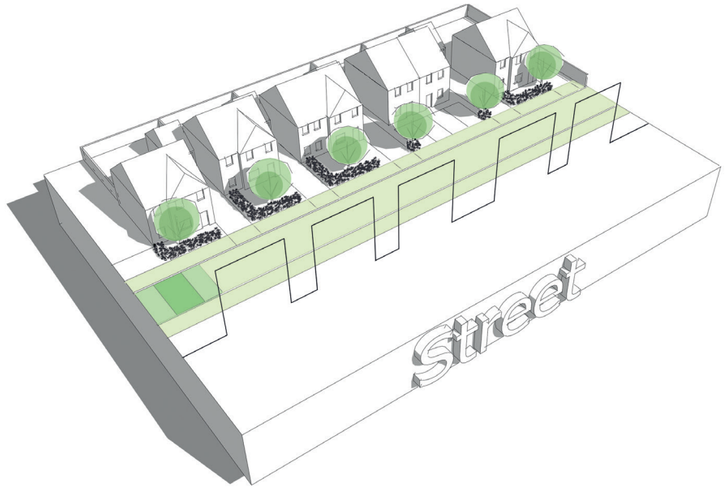
The coding covers scale and proportion, movement, hard and soft landscaping.

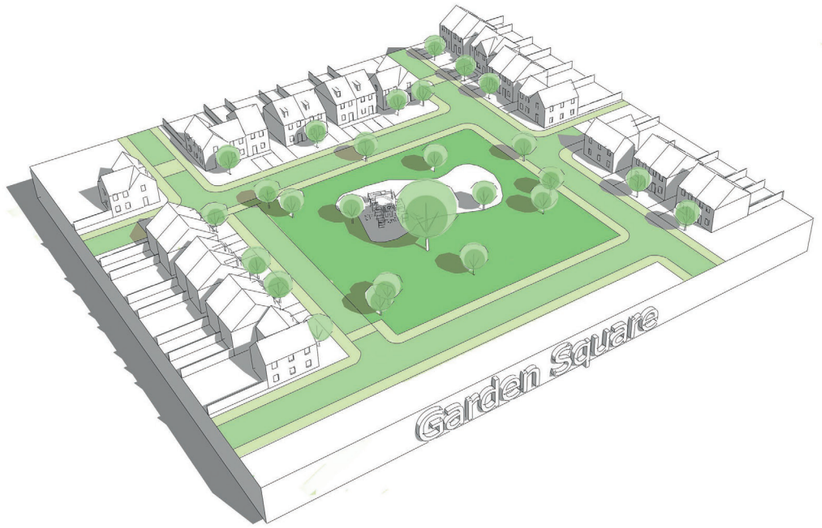
As stated in the National Model Design Code guidance notes streets and roads make up three-quarters of all public space. Those streets will therefore have a significant impact on people's lives. It is no coincidence that the street hierarchy also takes public spaces into account, they are one in the same.

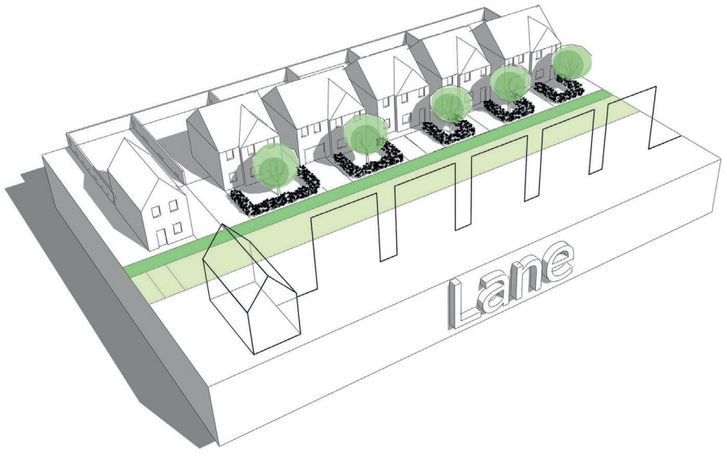
One only has to look at film footage from towns and cities at the turn of the 19th Century to see that the street was a very different place to what it is now. Pedestrians ruled the street space and trams, horse drawn carts and the emerging motor vehicle were subservient to the thronging masses of pedestrians.

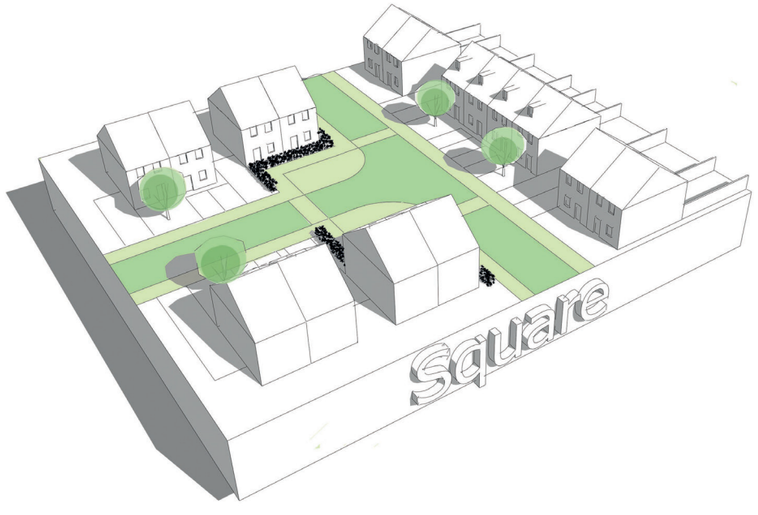
Whilst we're not anticipating such a level of pedestrian use in the streetscape, part of our aim for this development will be the creation of a walkable neighbourhood which is well connected internally and out to the surrounding settlement to encourage and promote walking and cycling.

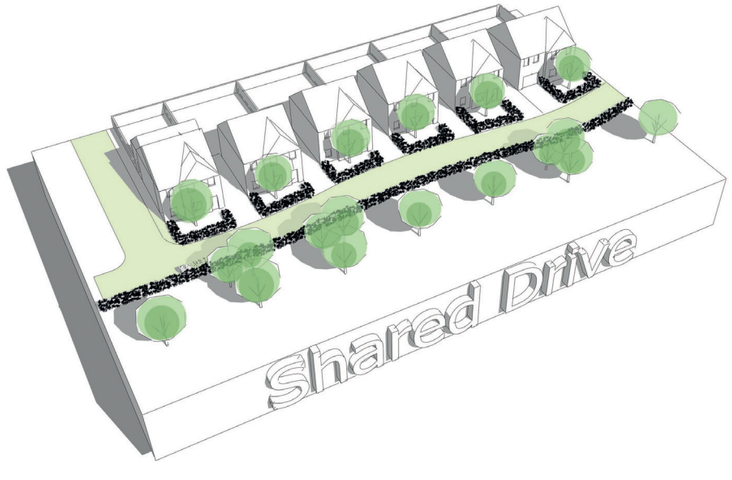
The street and space hierarchy is detailed to suit the specific needs of this neighbourhood.











Key (Movement)

- Street (5.5m carriageway)
- Lane (4.8m carriageway)
- Shared Drive (4.5m unadopted carriageway)
- Shared Space Square or Mews
- Focal/Header Building
- Amenity & Leisure Paths
- Public Rights of Way

Heywood Road
Heywood Road
Elton Street
Heape Street
Fairway
Fairway
Queensway (A664)
Rochdale Canal
Manchester Road
Site for East Lancashire Railway temporary Rail Halt & associated Car Parking
Development Interface
Wildlife Corridor
Garden Square
LEAP
Attenuation Basin
EcoPark
Wildlife Corridor

Fig 7:2 | Street & Public Realm Hierarchy

7 | **CODING** MOVEMENT & PUBLIC REALM

Street & Space Hierarchy

Streets

Enclosure: Streets will be enclosed by semi's and detached properties.

Frontage: Buildings shall front on to the street, taking their main access from it. Building on corners adjacent to junctions may take their access from the side road so as to reduce conflicts between users.

Surveillance: Homes shall have their primary elevations onto the street to ensure natural surveillance from enclosing properties.

Setbacks: The building lines along the street shall be setback behind front gardens, apart from where the street enters a square or other public realm space and then the buildings will step forward to create pinch points and thresholds into that space.

Footways/Cycleways: Footpaths to both sides with cycling on carriageway.

Servicing: Deliveries and refuse collection on street. Bin collection points designed and integrated into streetscape. Access to rear gardens via drives or footpaths to bin store locations and garden sheds.

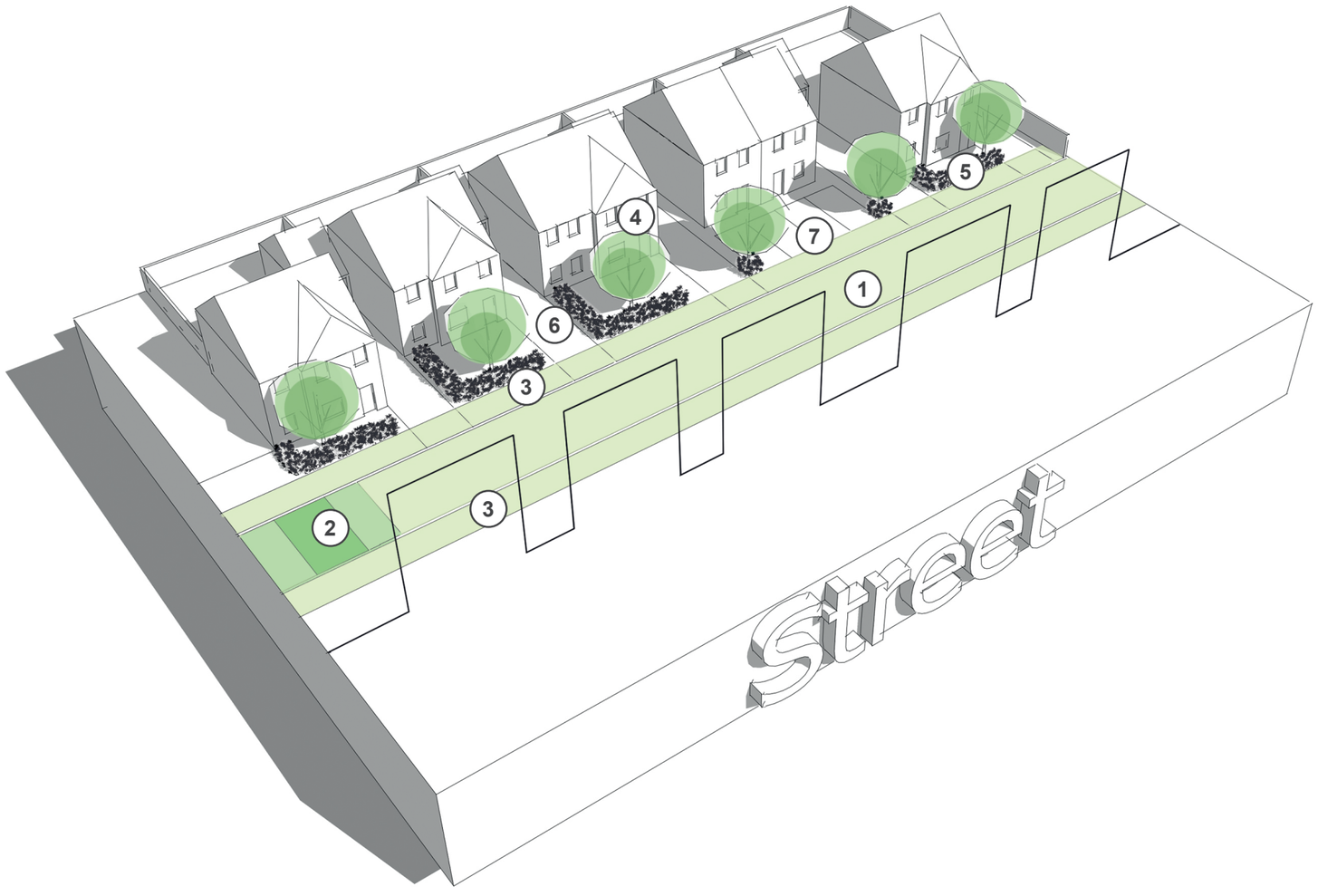
On-Street Parking: The street width allows on-street parking.

Green Infrastructure: Garden trees and hedgerows to front gardens provides the green assets within the streets.

Carriageway: Single lane in each direction.

Dimensions & Character	
Carriageway Width :	**5.5 metres**
Footways:	**2 metre footpath to both sides of carriageway**
Verge :	**N/a**
Junction Spacing:	**25-60 metres adjacent/10-40 metres opposite**
Service Strip:	**2 metres within footpath**
Frontage to Frontage Distance:	**Circa 18 to 21 metres with pinch points no less than 12 metres**
Setback:	**1 to 6 metres from back of footpath**
Max no. of Dwellings served:	**Up to 400 homes**
Design Speed:	
Target Speed:	**20mph**
Street Trees:	
Layout:	**Medium to small sized garden trees in boundary hedgerows and gardens**
Character:	**Informal front gardens set behind footways**
Spacing :	**Random spacing to garden trees**
Design Details:	
On Street Parking :	**Allow for on-street visitor parking**
Plot Access:	**Direct from street, some may be shared or from side street**
Junction Radius :	**6 metres**
Traffic Calming :	**Created by thresholds at key junctions**
Plot Boundary Treatment:	**Hedgerow to front garden and high close boarded fences to rear gardens where they front streets**
Productive Landscape:	**Include fruiting trees in front gardens and hedgerows for blossom in spring and fruit in autumn**
Materials:	
Footway Surfacing:	Bitmac wearing course
Carriageway :	Hot Rolled Bitmac wearing course
Thresholds:	Hot Rolled Bitmac wearing course (Buff aggregate)
Private Drives:	Bitmac wearing course

Fig 7:3 | Streets



Materials & Detailing:



Footpaths, Carriageways & Drives: Bitmac



Thresholds: Buff Aggregate Bitmac

1. **Carriageway**
2. **Thresholds**
3. **Footway**
4. **Garden Trees**
5. **Garden Hedges**
6. **Private Drives**
7. **Limited Frontage Parking**

7 | **CODING** MOVEMENT & PUBLIC REALM

Lanes

Enclosure: The lanes will be fronted by primarily semi-detached and detached homes of 2 storeys in height set behind small front garden spaces or immediately to back of shared space.

Frontage: Buildings shall front on to the lanes taking their main access from it. Buildings on corners may take their access from the side road so as to reduce conflicts between users.

Surveillance: Homes shall have their primary elevations onto the lane to ensure natural surveillance.

Setbacks: The lanes are informal in character and so buildings shall step back and forth with some having longer front gardens and others being closer to back of footway.

Footways/Cycleways: Footpaths to one side with cycling on carriageway.

Servicing: Deliveries and refuse collection on carriageway. Bin collection points designed into streetscape. Access to rear gardens via drives or footpaths to bin store locations and garden sheds.

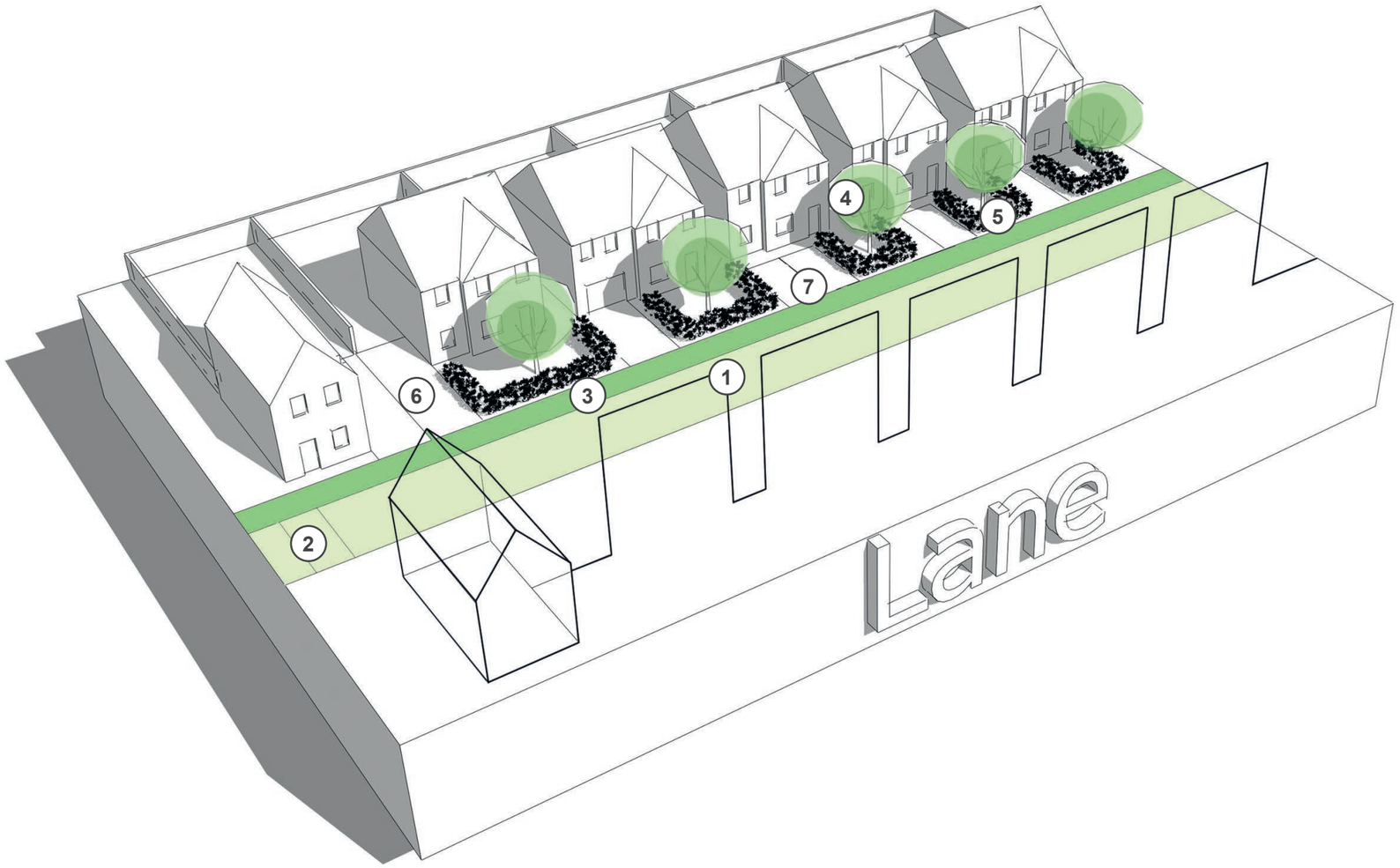
On-Street Parking: Carriageway width does not allow for on street parking within swept path of vehicles.

Green Infrastructure: Garden trees and hedgerows to front gardens provides the green assets within the lanes, where space allows.

Carriageway: Single lane in each direction.

Dimensions & Character	
Carriageway Width :	**4.8m width**
Footways:	**2m width to one side of carriageway**
Verge :	**N/a**
Junction Spacing:	**25-60 metres adjacent/10-40 metres opposite**
Service Strip:	**2 metres within footpath**
Frontage to Frontage Distance:	**Circa 18 metres with pinch points no less than 12 metres**
Setback:	**0-6 metres from back of footpath/service strip**
Max no. of Dwellings served:	**Up to 50 homes**
Design Speed:	
Target Speed:	**15-20mph**
Street Trees:	
Layout:	**Small sized garden trees in boundary hedgerows and gardens**
Character:	**Intimate varied streetscenes with a stepping building line and intermittent informal front gardens**
Spacing :	**Random spacing to garden trees**
Design Details:	
On Street Parking :	**N/a**
Plot Access:	**Direct from lane, some may be shared or from side street**
Junction Radius :	**6 metres**
Traffic Calming :	**Created by thresholds at entrances to lane**
Plot Boundary Treatment:	**Hedgerow to front garden and high close boarded fences to rear gardens where they front streets**
Productive Landscape:	**Include fruiting trees in front gardens and hedgerows for blossom in spring and fruit in autumn**
Materials:	
Footway Surfacing:	Bitmac wearing course (Red aggregate)
Carriageway :	Hot Rolled Bitmac wearing course (Red aggregate)
Thresholds:	Hot Rolled Bitmac wearing course (Buff aggregate)
Private Drives:	Bitmac wearing course

Fig 7:4 | Lanes



Materials & Detailing:



Footpaths & Carriageways: Red Aggregate Bitmac



Thresholds: Buff Aggregate Bitmac



Drives: Bitmac

1. Carriageway
2. Thresholds
3. Footway
4. Garden Trees
5. Garden Hedges
6. Private Drives
7. Limited Frontage Parking

7 | **CODING** MOVEMENT & PUBLIC REALM

Shared Drive

Enclosure: Interface with open spaces. The green lane creates the boundary between built form and primary green infrastructure. The houses will be primarily detached homes. The spaces between buildings are as important as the buildings themselves in creating a soft transition from a suburban to rural character.

Frontage: Buildings shall front on to the green lanes on one side only taking their main access from it. Buildings on corners may take their access from the adjoining road.

Surveillance: Homes shall have their primary elevations onto the lane to ensure natural surveillance of the lane and adjoining open space.

Setbacks: The green lanes are informal and green in character and so buildings shall be set back behind front gardens.

Footways/Cycleways: The green lane is a shared space private drive with no demarcated footway. There may be parallel amenity paths within the adjacent open spaces.

Servicing: Deliveries and refuse collection on carriageway from adopted road network. Bin collection points designed into streetscape at adopted road boundary. Access to rear gardens via drives or footpaths to bin store locations and garden sheds.

On-Street Parking: On street parking bays or localised widening in key locations. Carriageway width does not allow for on street parking.

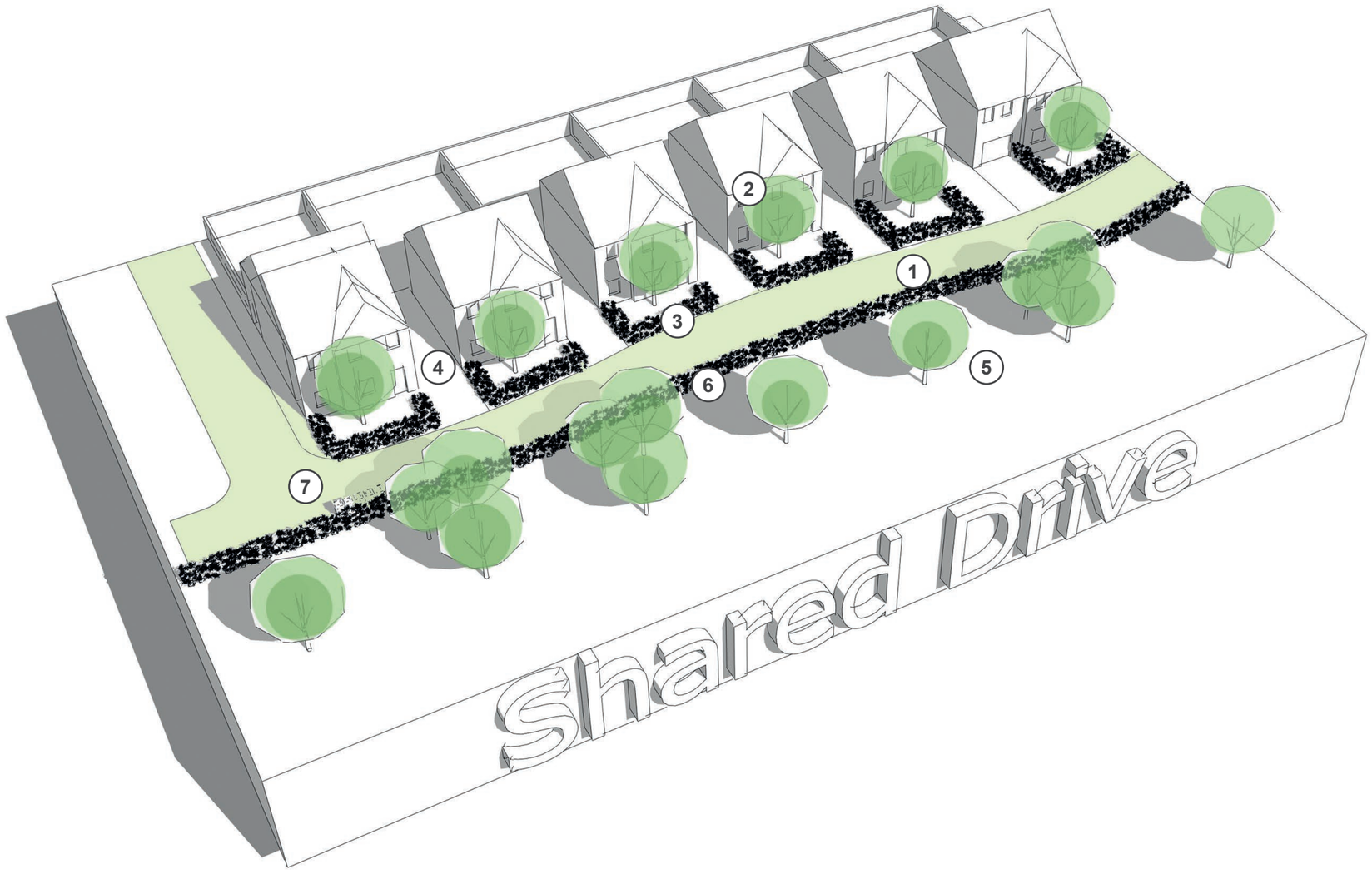
Verges: N/a.

Green Infrastructure: Garden trees and hedgerows to front gardens provides the green assets within the green lanes.

Carriageway: Single carriageway with localised widening for passing places.

Dimensions & Character	
Carriageway Width :	**4.5 metres generally with localised widening/bays to accommodate on-street parking/passing places**
Footways:	**N/a**
Verge :	**2 metre verge to open space side of carriageway**
Junction Spacing:	**55-75 metres**
Service Strip:	**N/a**
Frontage to Frontage Distance:	**N/a**
Setback:	**2 to 6 metres from back of carriageway**
Max no. of Dwellings served:	**Up to 5 homes off a dead end or 10 homes if connected to an adopted lane or street at either end.**
Design Speed:	
Target Speed:	**0-10mph**
Street Trees:	
Layout:	**Medium to small sized garden trees in boundary hedgerows and gardens. Larger trees in adjacent open spaces**
Character:	**Strong green frontage to development with trees breaking up built form in front of and between homes**
Spacing :	**Random spacing to garden trees and stands/copses of trees in open spaces**
Design Details:	
On Street Parking :	**Allow for localised widening of green lane (to circa 5.5 metres) and/or inclusion of parking bays to accommodate visitor parking.**
Plot Access:	**Direct from green lane, some may be from side street**
Junction Radius :	**2 metres**
Traffic Calming :	**Shared space lane**
Plot Boundary Treatment:	**Hedgerow to front garden and high close boarded fences to rear gardens where they front streets**
Productive Landscape:	**Include fruiting trees in front gardens, hedgerows and adjoining open spaces for blossom in spring and fruit in autumn**
Materials:	
Footway Surfacing:	Bitmac wearing course
Carriageway :	Hot Rolled Bitmac wearing course
Thresholds:	Hot Rolled Bitmac wearing course (Buff aggregate)
Private Drives:	Bitmac wearing course

Fig 7:5 | Shared Drive



Materials & Detailing:



Footpaths, Carriageways & Drives: Bitmac



Thresholds: Buff Aggregate Bitmac

1. Shared Surface
2. Garden Trees
3. Garden Hedgerows
4. Private Drives & Garages
5. Open Space Tree Planting
6. Hedgerow to Open Space Interface
7. Paved Bin Collection Point

7 | **CODING** MOVEMENT & PUBLIC REALM

Garden Square

Enclosure: Strongly enclosed by surrounding built form and boundary treatments.

Frontage: Buildings shall have active frontages on to the garden square and if that is a secondary elevation it must be well detailed and have a strong active fenestration. Buildings on corners may take their access from the adjoining road.

Surveillance: Homes shall have active elevations onto the space to ensure natural surveillance.

Setbacks: Defensible space of no less than 1 metre width minimum will be provided to properties fronting the square.

Footways/Cycleways: Footpaths to both sides with cycling on carriageway.

Servicing: Deliveries and refuse collection on carriageway. Bin collection points designed into space. Access to rear gardens via drives or footpaths to bin store locations and garden sheds.

On-Street Parking: The street width allows on-street parking.

Green Infrastructure: Landscape elements of the square will be designed to reflect its intended use. Trees will offer dappled shade and a green backdrop and be of a scale to suit the space.

Carriageway: Two way carriageway with swept path simply defined by kerb edging (see above).

Dimensions & Character	
Carriageway Width :	**Between 4.8 and 5.5 metres depending on street type which edges the green space within the square sN/a**
Footways:	**2 metres**
Verge :	**Verge replaces paths in certain locations where footpath not required**
Junction Spacing:	**At corners of square (dictated by size of space)**
Service Strip:	**2 metres within footpath**
Frontage to Frontage Distance:	**From 30 to 70 metres**
Setback:	**1 to 6 metres from back of carriageway**
Max no. of Dwellings served:	**See maximum numbers for adjoining streets and lanes**
Design Speed:	
Target Speed:	**5-10mph**
Street Trees:	
Layout:	**Medium to large street trees in square**
Character:	**Urban green space where trees offer green backdrop and dappled shade to users**
Spacing :	**Trees spacing dependent on size of square**
Design Details:	
On Street Parking :	**Allow for on-street visitor parking around square**
Plot Access:	**Direct or from side street**
Junction Radius :	**Allow for 6 metres swept path but may not be heavily demarcated in paving surfaces**
Traffic Calming :	**Thresholds at entraces tp space**
Plot Boundary Treatment:	**Parkland railing with Holly hedge to front gardens and high brick wall to rear gardens where they front streets**
Productive Landscape:	**Orchard trees and herb garden planters integrated into square design**
Materials:	
Footway Surfacing:	Bitmac wearing course
Carriageway :	Hot Rolled Bitmac wearing course
Thresholds:	Hot Rolled Bitmac wearing course (Buff aggregate)
Private Drives:	Bitmac wearing course

Fig 7:5 | Garden Square



Materials & Detailing:



Footpaths, Carriageways & Drives: Bitmac



Thresholds: Buff Aggregate Bitmac

1. Streets around Square
2. Shared Drive around Square
3. Street Trees
4. Central Green as part of Garden Square
5. Play Area (LEAP)
6. Open Space Tree Planting
7. Thresholds into Square

7 | **CODING** MOVEMENT & PUBLIC REALM

Residential Square

Enclosure: Strongly enclosed by surrounding built form and boundary treatments.

Frontage: Buildings shall have active frontages on to the residential square and if that is a secondary elevation it must be well detailed and have a strong active fenestration. Buildings on corners may take their access from the adjoining road.

Surveillance: Homes shall have active elevations onto the space to ensure natural surveillance.

Setbacks: Defensible space of no less than 1 metre width minimum will be provided to properties fronting the square.

Footways/Cycleways: Squares shall be developed following shared space principles. Pedestrians will require routes that provide a refuge from vehicular traffic, these will need to be defined to assist partially and unsighted users in locating them. Cyclists will share the defined vehicular routes.

Servicing: Deliveries and refuse collection on carriageway. Bin collection points designed into space. Access to rear gardens via drives or footpaths to bin store locations and garden sheds.

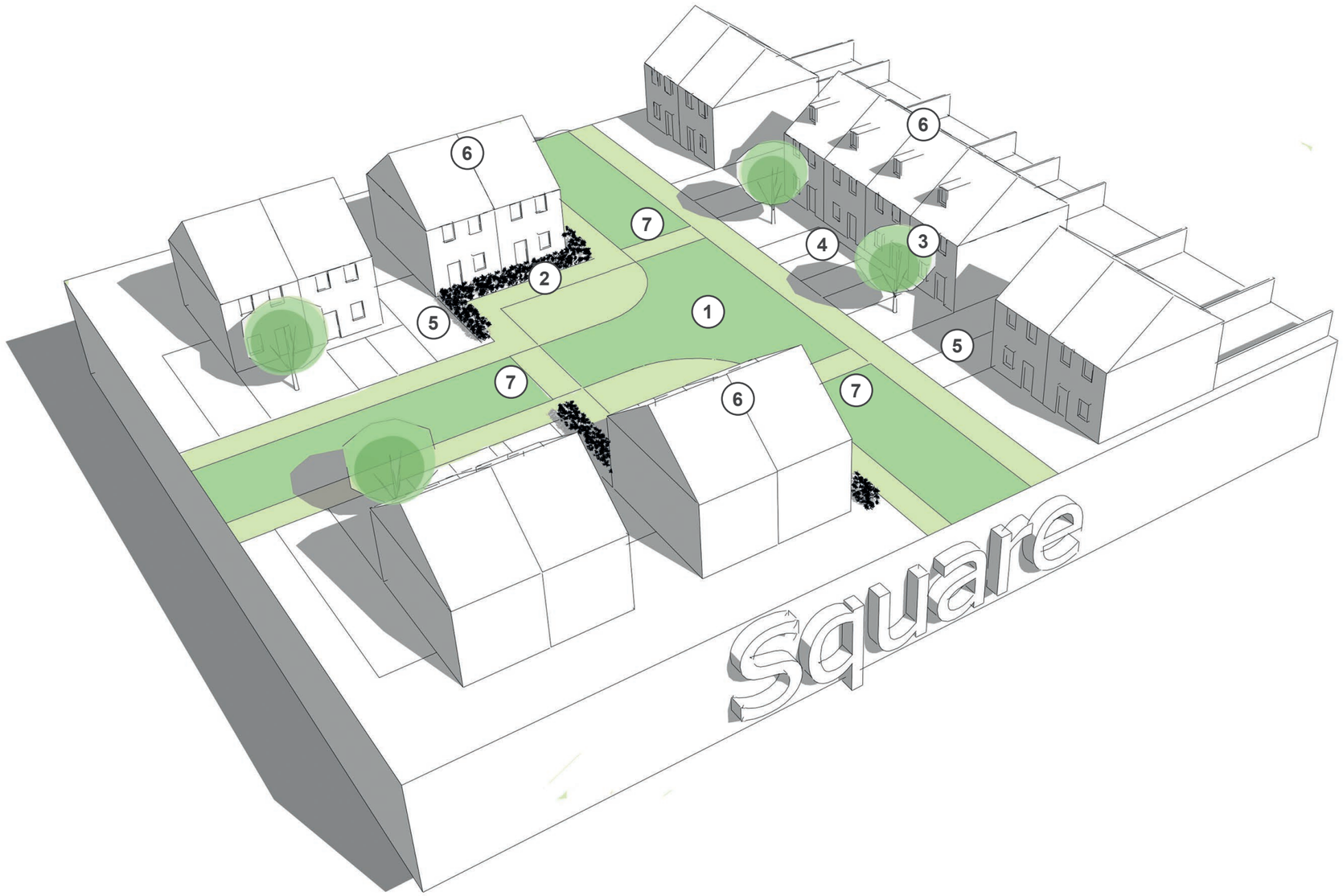
On-Street Parking: If parking required this shall be in designated bays or via drives designed into the square as part of the overall design (not an afterthought).

Green Infrastructure: Landscape elements of the square will be designed to reflect its intended use. Trees will offer dappled shade and a green backdrop/roof and be of a scale to suit the space.

Carriageway: Two way carriageway with swept path simply defined by kerb edging (see above).

Dimensions & Character	
Carriageway Width :	**Shared space with swept path denoted by kerb edging**
Footways:	**Shared space with pedestrian refuges denoted by kerb edge, footpaths and street trees/planting**
Verge :	**Verge replaces paths in certain locations where footpath not required**
Junction Spacing:	**N/a**
Service Strip:	**2 metres within pedestrian refuge zones**
Frontage to Frontage Distance:	**Circa 12 - 25 metres**
Setback:	**Circa 1 metre defensible space minimum to adjoining buildings frontages**
Max no. of Dwellings served:	**See maximum numbers for adjoining streets and lanes**
Design Speed:	
Target Speed:	**0-5mph**
Street Trees:	
Layout:	**Medium street trees in square**
Character:	**Urban green space where trees offer green backdrop and dappled shade to users**
Spacing :	**Tress spacing dependent on size of square**
Design Details:	
On Street Parking :	**Homes fronting onto the space requiring direct vehicular access shall include parking bays designed into space.**
Plot Access:	**Direct or from side street**
Junction Radius :	**Allow for 6 metres swept path but may not be heavily demarcated in paving surfaces**
Traffic Calming :	**Pedestrian priority shared space**
Plot Boundary Treatment:	**Low brick wall boundary to front gardens and high brick wall to rear gardens where they front streets**
Productive Landscape:	**Orchard trees and herb garden planters integrated into square design**
Materials:	
Footway Surfacing:	Bitmac wearing course
Carriageway :	Hot Rolled Bitmac wearing course
Thresholds:	Hot Rolled Bitmac wearing course (Red aggregate)
Private Drives:	Bitmac wearing course

Fig 7:6 | Residential Square



Materials & Detailing:



Footpaths, Carriageways & Drives: Bitmac



Thresholds: Red Aggregate Bitmac

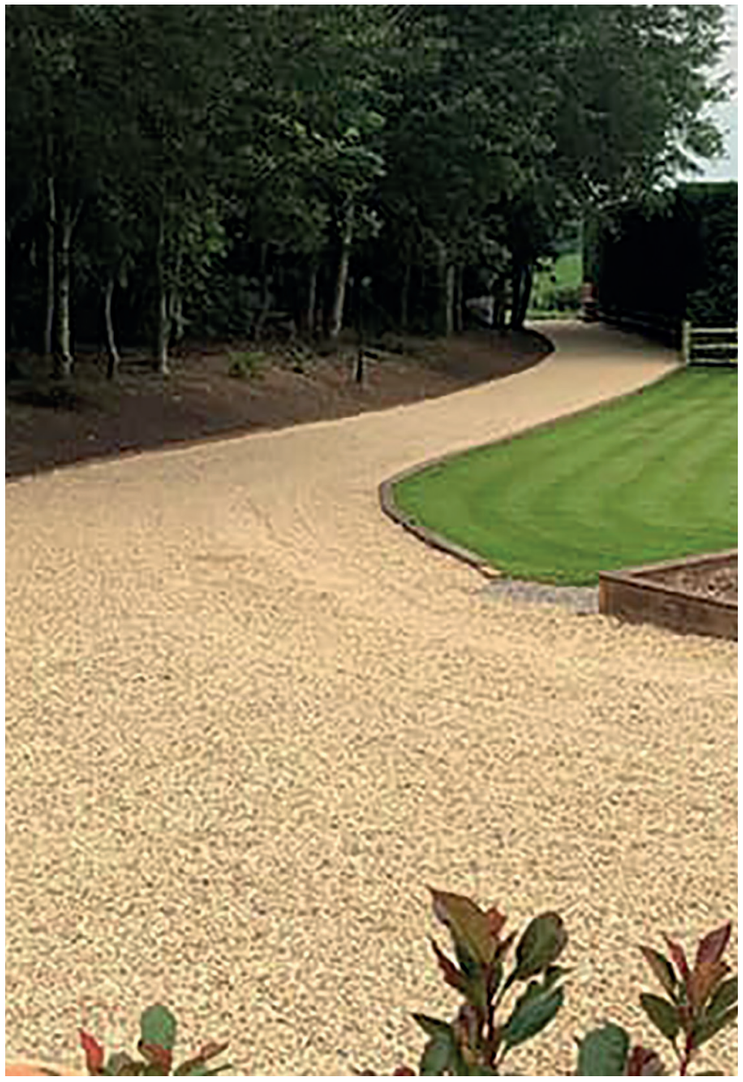
1. **Shared Surface Square**
2. **Pedestrian Refuges/Footpaths**
3. **Garden Trees**
4. **Resident Parking**
5. **Side Drives**
6. **Built Form Encloses & Overlooks Space**
7. **Thresholds**

7 | **CODING** MOVEMENT & PUBLIC REALM

The Amenity Footpath & Cycleway Network

In addition to the footpaths, cycleways and shared spaces that run alongside or on the avenues, streets, lanes and through shared spaces an amenity footpath network runs through the green infrastructure of the site and has been designed to connect out to the wider public rights of way and canal tow path network.

Figure 4.2 previously illustrates the final location of footpaths proposed.



Secured By Design

Secured by Design (SBD) is a police initiative to guide and encourage those engaged within the design, specification and building of new homes to adopt crime prevention measures.

The latest designing out crime guidance has been split into a series of separate documents relating to different forms of development and can be downloaded via the link below:

www.securedbydesign.com

Much of the SBD guidance is around good urban design and common sense covering such issues as the layout of new roads and houses. The layout should be:

- Visually open;
- direct;
- well used; and,
- retain defensible space between properties and the streets.

In addition routes should be legible within the hierarchy which is covered in chapter iii of this guide. Different routes and their public/semi private/private status should clearly be identified in the design of the streets by using features such as:

- Creating thresholds;
- using changes of road/pavement surfacing; and,
- narrowing a road visually by stepping the building line inwards, using walls and planting to emphasise a gateway.

However design teams must ensure that following Secured by Design principles is not to the detriment of good urban design. A balanced and practical approach must be adopted.

Some SBD principles around permeability restrict opportunities for pedestrian/cycle way connections due to their potential use as escape routes, anti-social behaviour or concerns over unseen access to properties.

If good urban design is followed and such routes are well overlooked and well lit, with properties fronting out onto them then the associated risks are much reduced.

SBD offers comprehensive guidance on designing out crime aimed at both the masterplanning and detailed design stages. As stated above SBD must not be delivered at the expense of good urban design practice. They are not mutually exclusive and both can be delivered where a common sense approach is adopted.

Car Parking

Local and national design guidance have long advocated the need for careful and thoughtful integration of car parking into new developments.

Whilst this new neighbourhood is considered to be a sustainable new addition to the settlement many residents will still want to own a car which provides a greater level of freedom and indeed in times of pandemics is a mode of transport which is called upon to minimise viral transmission between households. To that end parking should be provided in line with the local standards and in accordance with the coding.

Parking can be a positive element, adding vibrancy to a streetscene, as long as its well designed and integrated into the layouts, using a toolbox of parking solutions.

Figure 7:8 illustrates all the various parking solutions, as advocated by various publications including ‘Parking What Works Where’ (English Partnerships March 2006) for a suburban neighbourhood.

At Castleton Sidings the parking solutions proposed include the following arrangements:

- Side Drive Parking
- Integral Garages
- Frontage Parking (limited use and in small groupings)

Side drive parking has been used extensively and thus removes much of the street clutter caused by parked cars on street and within frontage parking bays. In addition, it creates more spaces between homes, more space for front gardens, a less dense and thus more suburban neighbourhood; in keeping with it’s settlement fringe location.

Fig 7:8 | A Balanced Approach to Parking



7 | **CODING** MOVEMENT & PUBLIC REALM

Cycle Parking

Convenient parking and storage of cycles is key to promoting their use. Good levels of secured and weatherproof bike storage related to apartments, commercial, retail and community space is required by these codes, as is on-street cycle racks in key locations around the village for visitors utilising the shops, open spaces or visiting friends within the neighbourhood.

Each individual house will require secured and weather proof cycle parking/storage. This can be located in oversized car ports/ garages, garden sheds or as standalone bike lockers.

Solutions for all forms of cycle storage are set out in the coding.

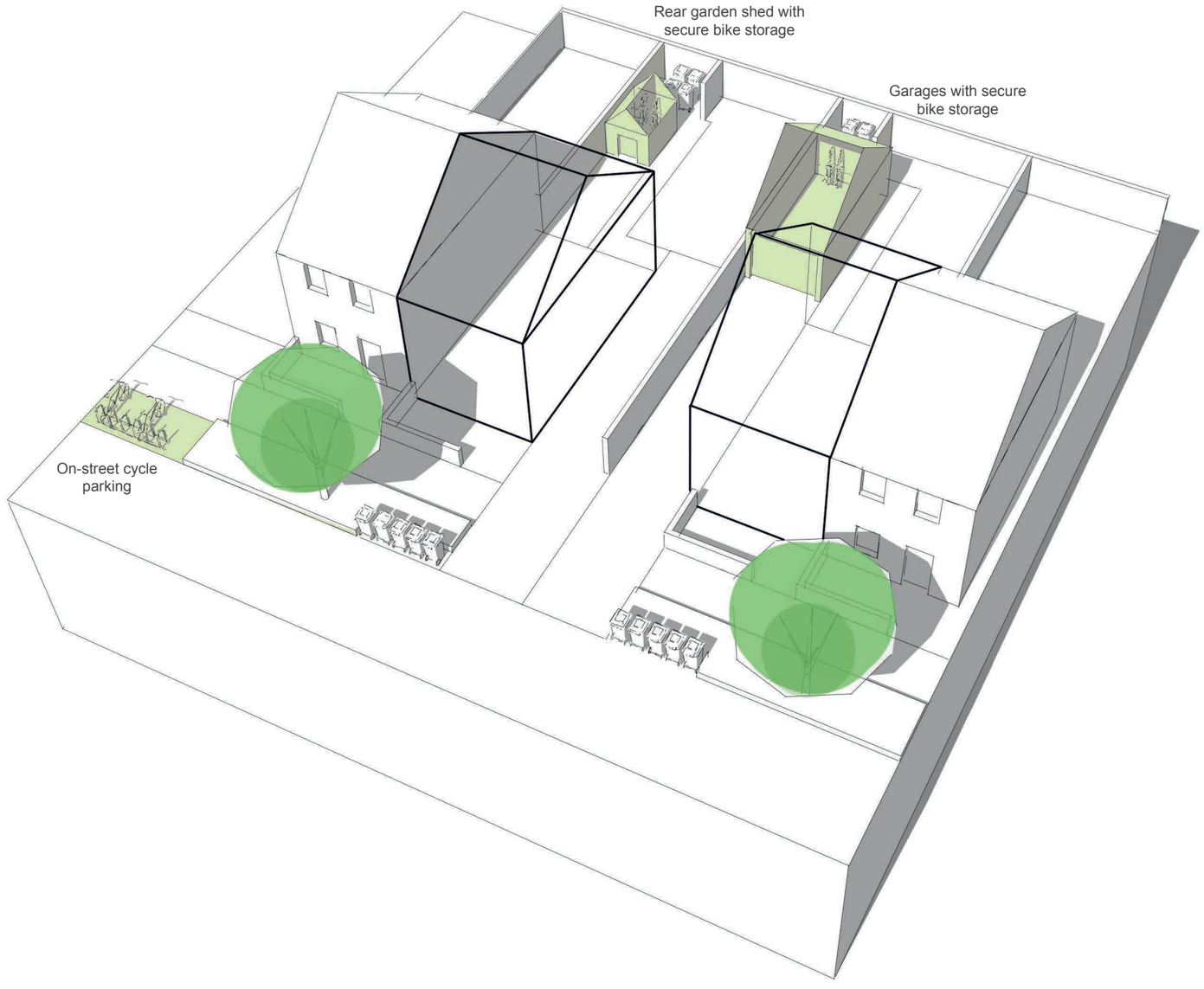


Fig 7:9 | Cycle Parking

7 | **CODING** MOVEMENT & PUBLIC REALM

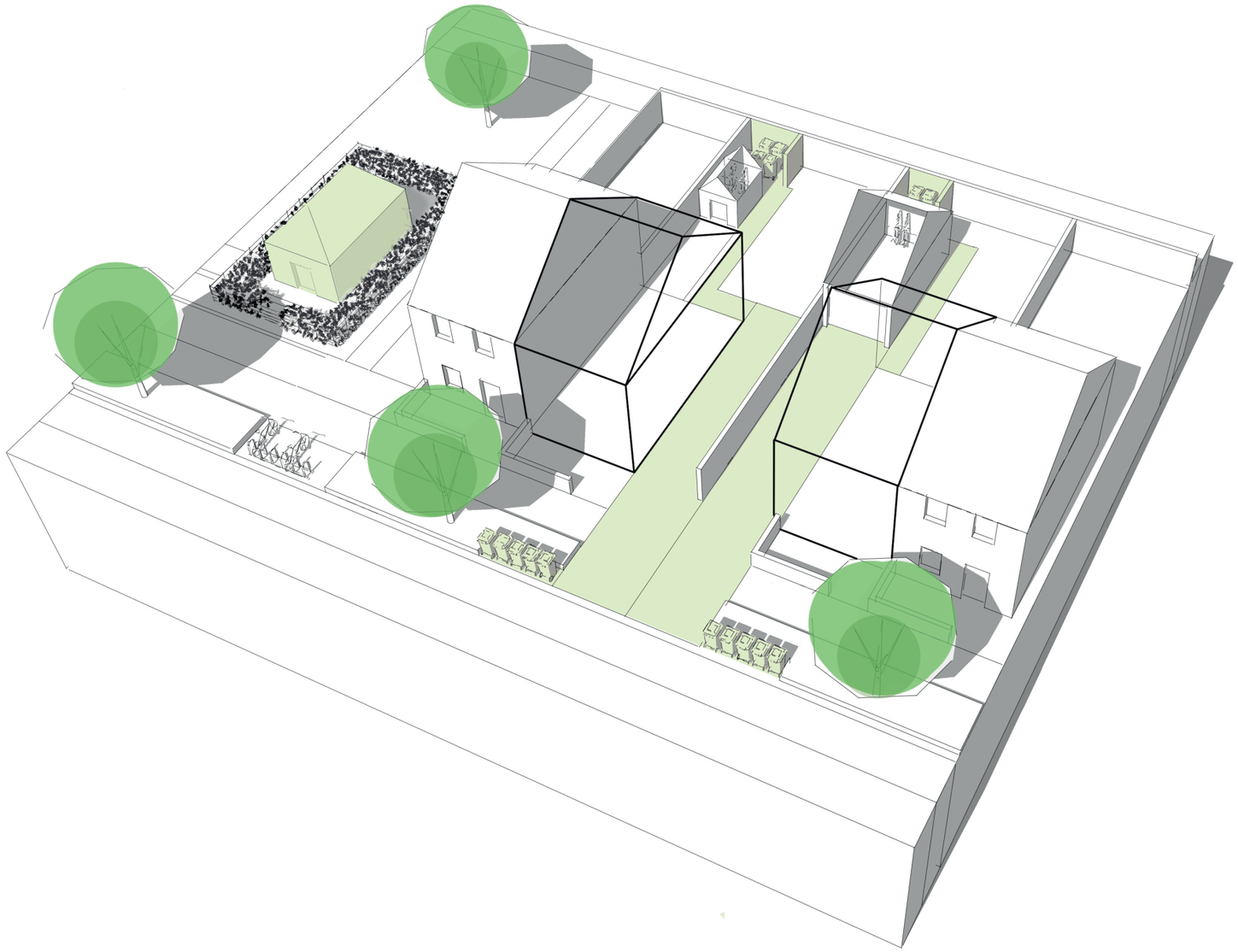


Fig 7:10 | Bin Stores & Substations

Bin Stores & Refuse Collection

Wheelie bins located in front gardens or left on the streets create a poor streetscene and take away from the visual quality of the place.

Figure 4.14 illustrates the potential arrangement of bin store locations and the access routes between bin stores and the location of the bin collection points within the public realm so that bins are not left blocking footways or obstructing the streets. The collection points should be within 50 metres of each property and so should be centrally located serving circa 3 to 5 properties.

Substations & Utilities

As stated in the introduction electricity sub and water pumping stations, on many occasions end up being an afterthought in the design of new neighbourhoods. It is accepted that sub and pumping stations need to be located for ease of access from the adopted highway but they must not be located on prominent open space frontages, or on a key sight line.

The design of utilities and their locations must be considered at the start of the design process and properly integrated into the layout with the other built forms of the development or integrated into the landscape with appropriate screening in the form of planting and walls/fences, as illustrated in Figure 7:10. The substation envelope must draw on the designs and materials used on the homes adjacent to its location if it is set within the streetscene.

8| **CODING** BUILT FORM

Introduction

Built form goes hand-in-hand with a high quality public realm to create a three-dimensional place made up of development blocks, streets, spaces and buildings. Castleton Sidings will have a development pattern governed by the palimpsest and Vision for the site using the landscape, public realm, density of development, building types and forms to create the sense of place.

In terms of the homes they should be well-designed to be functional, accessible and sustainable, supporting the health and wellbeing of their users so that they are of an adequate size, fit for purpose and adaptable over the longer term.

Compact Forms of Development

Density

The density at Castleton Sidings reflects the typical urban grain of the adjoining neighbourhoods and a traditional settlement with incremental densities radiating out from the existing urban fringe (medium density) to lower density on the fringes of the development adjoining the countryside and golf course.

Density is a key factor in creating a legible layout and informing the desired character of the site; along with other elements of built form, boundary treatments, planting, public realm and retained natural features.

Urban Grain

The character of an area is also influenced by the variety of building forms to create a rhythmical flow to the urban grain of a neighbourhood. The urban grain is derived from the size and configuration of the plots as well as the space between plots. That space between plots can be either in the form of the dwellings private front and rear gardens or areas of open space and public realm.

At Castleton Sidings the plots around the residential squares are enclosed by terraced and semi detached properties creating good enclosure and structure to these spaces at key junctions in the layout.

Built Form

Blocks

Development blocks that are established by the movement network define the edge of the public realm, create a three dimensional place and create different levels of enclosure to the street, depending on the intensity of development proposed. The residential blocks proposed at Castleton Sidings, take the form of perimeter blocks with outward facing built form that creates a clear definition between public and private space, as illustrated in Figure 8:1.

The proposed development creates a transition from the rural landscape to urban settlement and that transition is created using incremental densities.

The block forms are formal in shape, as illustrated in Figure 8:2. These forms respond to the movement network which in turn has developed out of the palimpsest in terms of the linear railway sidings that run across the site.

Building Lines

Enclosure of the streets and public realm has been referenced in previous paragraphs and that enclosure is generally defined by the frontages of the buildings that overlook them.

The building line represents the alignment of the principle elevation of a building in relation to the street or public realm and its position contributes to the intended character of the neighbourhood.

Building lines within The Site have been set out as part of the street and public real hierarchy in Chapter 7 with the ‘setback’ illustrating and stating the distance between the footpaths and building lines along each street type or within key public realm spaces. Building lines shall be generally consistent but ,buildings may be set back or forward of the standard building line location to create incidents in the street i.e. announcing arrival into a square or mews or ensuring a focal building stands out from its neighbours.

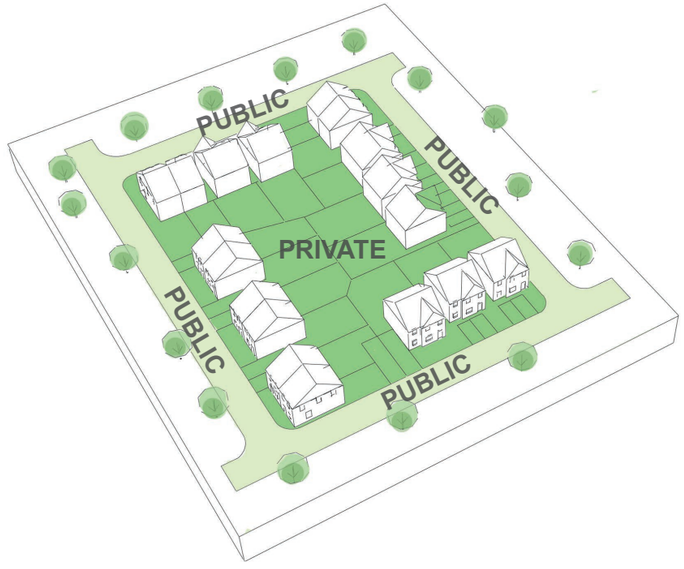


Fig 8:1 | Blocks: Definition

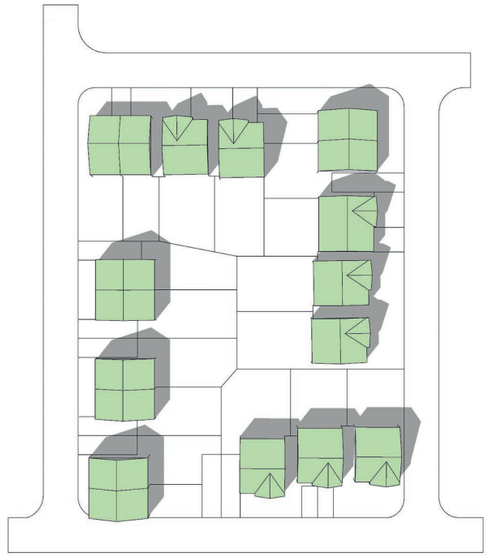


Fig 8:2 | Blocks: Formal

8 | **CODING** BUILT FORM

Height, Massing & Scale

The transition from rural to urban is not only governed by two dimensional layouts but also in the third dimension in terms of the landscape and built form. Landscape is dealt with separately in Chapter 6.

The existing built form within the settlement ranges from two and three storey terraced, semi and detached properties.

The massing will be sympathetic to the transitional nature of the site with two storey homes on the peripheries of the site where it interfaces with the wider landscape and up to two and a half storeys in the centre where it is adjacent to the squares.

Built form on the northern and western fringes of the site shall be limited to a maximum of two storeys along the most sensitive interfaces with the adjoining neighbourhood and wider rural landscape.

To preserve a more domestic and human scale within the streets and public realm building heights can be used alongside consistent building lines and increases in density to create key public realm nodes within the layout such as within the residential and garden squares without having to utilise buildings greater than two and a half storeys, as illustrated in Figure 8:3. This can also ensure such spaces are not cold and overshadowed by the surrounding buildings.

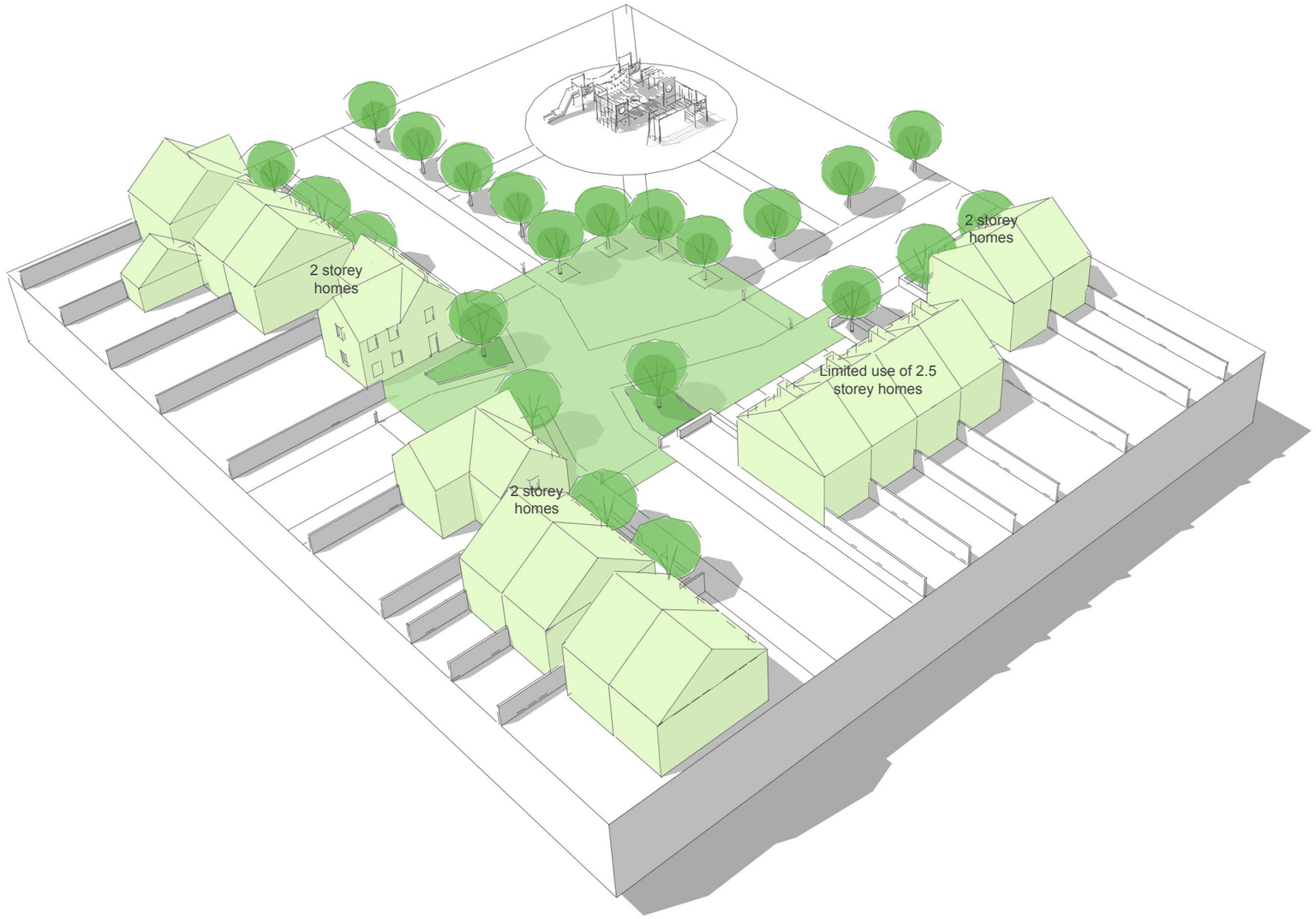


Fig 8:3 | Heights, Massing & Scale

8| **CODING** BUILT FORM

Housing Quality

Space Standards

Nationally Described Space Standards (March 2015) are a minimum requirement for internal space within new dwellings and are based on the internal gross floor area. The standards also include dimensions of key areas of the home such as bedrooms, storage and floor to ceiling heights, thus helping to ensure new homes contribute to the health and wellbeing of occupants.

Nationally Described Space Standards are set out below:

Number of Beds	Number of Bed Spaces (Persons)	1 Storey Homes	2 Storey Homes	3 Storey Homes	Built-in Storage
1b	1p	39 (37)*			1.0
	2p	50	58		1.5
2b	3p		70		2.0
	4p		79		
3b	4p		84	90	
	5p		93	99	2.5
	6p		102	108	
4b	5p		97	103	
	6p		106	112	3.0
	7p		115	121	
	8p		124	130	
5b	6p		110	116	
	7p		119	125	3.5
	8p		128	134	

Accessibility

Homes within the neighbourhood need to be easily reached, entered and used by everyone regardless of age and physical ability.

Homes also need to be flexible to meet the changing needs of individuals and families as they grow so that they can continue to be part of the community that they associate with, aiding in their physical wellbeing and the social cohesion of the area.

At the national level Building Regulations (Part M, Volume 1) specify three categories of accessibility:

M4(1) Category 1: Visitable Dwellings

M4(2) Category 2: Accessible & Adaptable Dwellings

M4(3) Category 3: Wheelchair User Dwellings

Visitable dwellings requires that reasonable provision should be made for people to gain access to and use the dwelling and its facilities.

Accessible & adaptable dwelling must also ensure the provision made is sufficient to meet the needs of occupants with differing needs such as older or disabled people and the dwelling must be adaptable to address changing needs over time.

Wheelchair user dwellings must not only meet the requirements of a Category 1 dwelling but as an **optional** requirement make sufficient provision to allow simple adaptation of the dwelling to meet the needs of occupants who use wheelchairs or already meet that need without adaptation.

All the properties within Castleton Sidings shall be designed and constructed to meet **Category 1: Visitable Dwellings**.

The **Category 2: Accessible & Adaptable Dwellings** and **M4(3) Category: Wheelchair User Dwellings** shall not apply to this site.

Tenure Blind

All house types, no matter if they are open market or discounted affordable/shared ownership homes shall use the same materials palette and incorporate the same detailing across the range.

Affordable homes must be pepper-potted in small groups across the neighbourhood which aids in their management by the Registered Social Landlord (RSL).

Health & Wellbeing

The Home Environment

A considerable amount of time is spent daily in the home and this has only increased in light of the pandemic. Internal home quality and its immediate surroundings directly affect the health of the population and especially those from more vulnerable groups.

The specific elements related to health and wellbeing in terms of the design of homes and buildings include daylight, aspect, privacy, security and access to private amenity space.

Natural Light, Aspect & Privacy

Homes should be created that have adequate levels of natural light, including direct sunlight whilst not creating oven-like conditions by employing good quality ventilation. Properties should also not be overlooked and provide privacy and personal space for the residents.

Homes shall have good internal layouts that maximise access to natural daylight including windows of adequate size to ensure good internal lighting whilst not overheating the property.

Homes should have a good outlook with views out into their gardens or the public realm rather than just the gable ends of adjoining properties.

The minimum overlooking/separation distances shall be employed as illustrated in Figure 8:5. This Code and specifically Figure 8:5 includes additional guidance on reduced separation distances in the interest of good urban design and place making:

1. Minimum front to front distances of 18m so that a legible street hierarchy can be created with street widths used as part the street identity within the street hierarchy.

2. Creation of localised pinch points with reduced front to front distances of 12m minimum to emphasise a threshold, slow traffic speeds, frame views or announce arrival as part of a gateway.

The inclusion of defensible space in the form of front gardens or privacy strips or non-habitable rooms to the front of properties provides additional privacy to rooms overlooking the public realm.

8 | **CODING** BUILT FORM

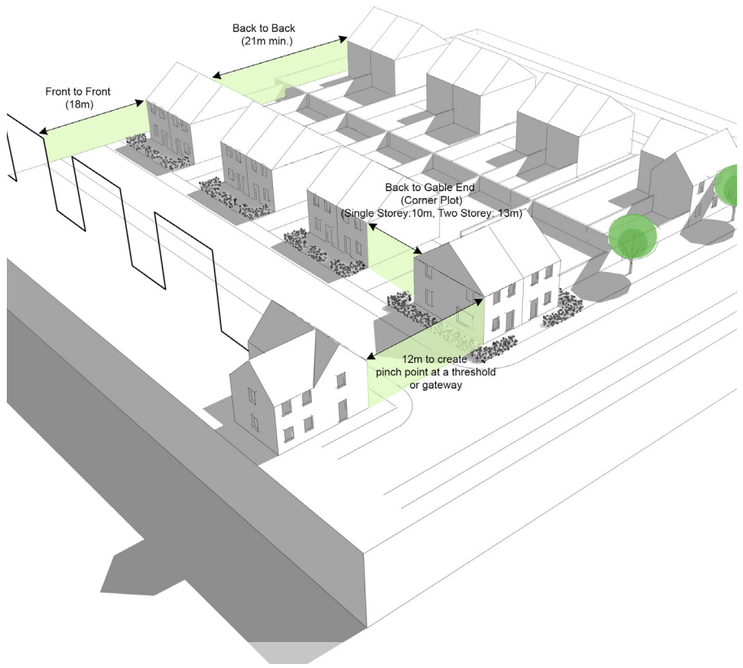


Fig 8:5 | Separation Distances

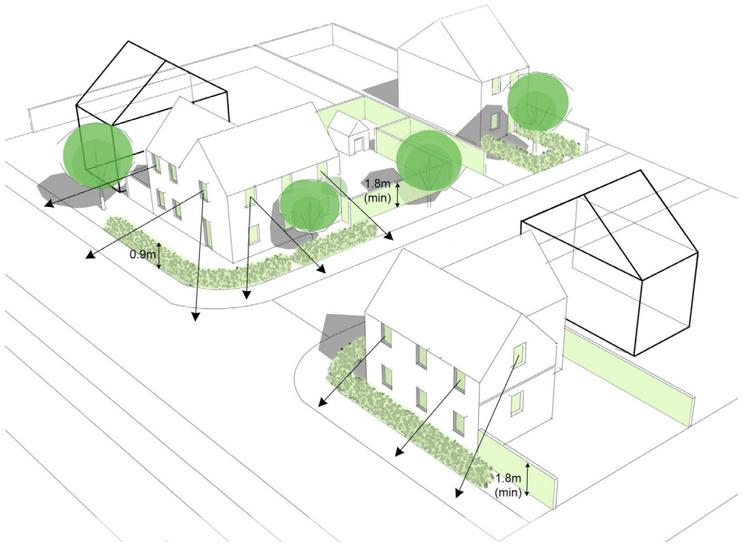


Fig 8:6 | Security & the Home

Security

Secured by Design has been dealt with in Chapter 7 previously in terms of Urban Design. Here the coding focuses on the security relating to each home.

The use of outward facing formal blocks provides a level of security to each property in the block by using the house itself as a boundary between the public and private realm. This also ensures that windows from each property overlook the public realm providing natural surveillance as illustrated in Figure 8:6.

Properties on the corner of blocks must be dual aspect and overlook both areas of public realm that they front onto and also create strong well fenestrated elevations to both streets they overlook as illustrated in Figure 8:7. This detailing is also required to prominent rear elevations on corner plots.

All boundary fences/walls that define the rear garden from the street must be at least 1.8 metres tall. Front garden boundaries should utilise either a 1.2 metre high railing/wall or use a thorny/ prickly hedging species that will grow to at least 0.9 metres high (see street hierarchy in Chapter 7 for frontage boundary treatments).

Parking must be on plot where possible and/or overlooked by the property or adjoining neighbours for added security.

All these aspects are illustrated in Figure 8:7.

Private Amenity Space

Access to external private space is very important for people's wellbeing, as stated in the introduction to this code.

Gardens shall be to the minimum sizes as follows:

- 45 square metres for dwellings with 2 bedrooms or less;
- 65 square metres for dwellings with 3/4 bedrooms;
- 100 square metres for dwellings with 5 bedrooms or more.

Front gardens/privacy strips shall be provided to the minimum depths indicated previously in Chapter 7, as part of the street hierarchy.

The typical approach to the provision of private amenity space is illustrated in Figure 8:8.

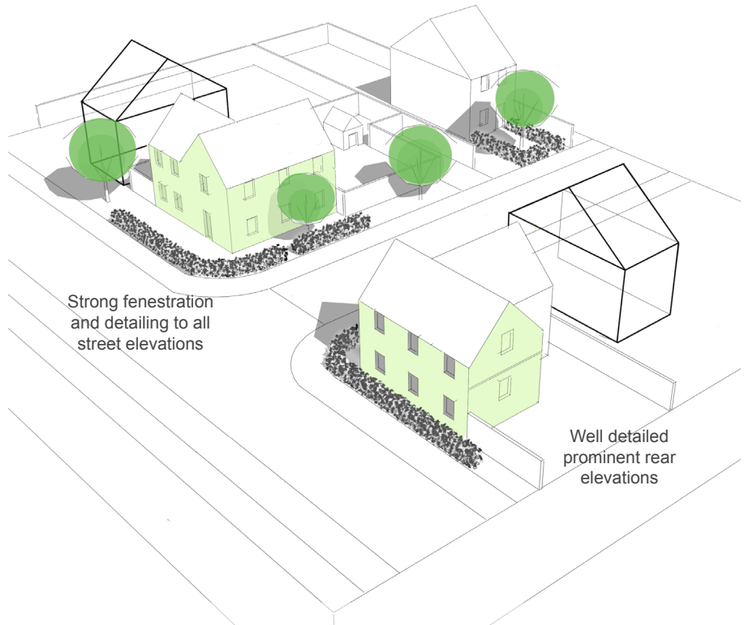


Fig 8:7 | Dual Aspect Homes

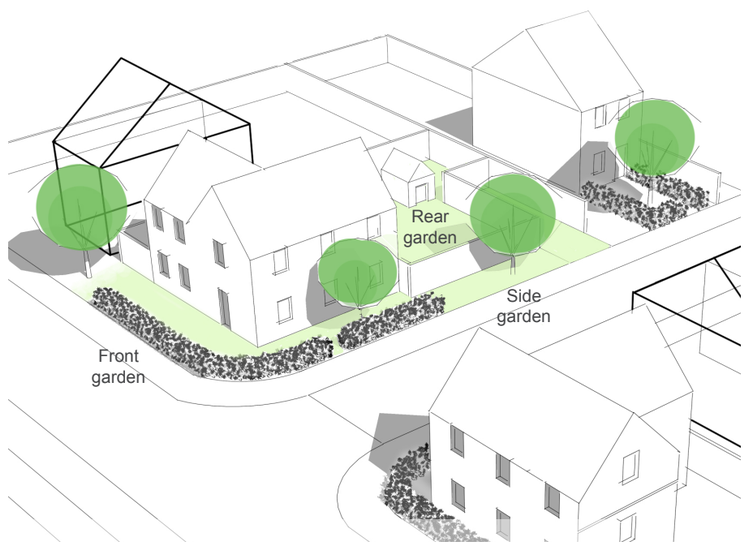


Fig 8:8 | Private Amenity Space

8| **CODING** BUILT FORM

Resource & Energy Conservation

Well designed places conserve natural resources including buildings, land, water, energy and materials. Developments must be designed to respond to climate change in terms of minimising their impact on the environment and also mitigating the effects of global warming within neighbourhoods.

New Urbanism

New Urbanism has its routes in the Garden City movement but is very much about creating compact and walkable neighbourhoods which are well related to other facilities such as jobs, shops and community facilities, thus reducing demand for energy and promoting health and wellbeing.

Compact neighbourhoods ensure land is used efficiently thus providing space for a strong green and blue infrastructure network which incorporates planting to absorb CO2, offer shading to the public realm, capture particulate pollution, sustaining or creating new ecosystems and providing the space for sustainable drainage management trains.

Passive Design

Ensuring good levels of **daylight** into a development reduces the need for artificial light with **passive solar gain** reducing the need for space heating and increasing the duration that areas of public realm can be used through the day as illustrated in Figure 8:9.

The key to optimising the solar potential of Castleton Sidings is to orientate buildings broadly south which then creates a street pattern running east to west. The spatial parameters illustrated in the code incorporate this arrangement of streets and spaces and have been continued into the more detailed design stage to create a scheme that fully exploits passive solar gain.

In addition to the layout the development blocks need to take best advantage of solar potential with habitable rooms benefiting from natural light and solar gain. Storey heights, street and garden depths all play a part in the exploitation of passive solar gain and natural light and these are explored in this coding.



Fig 8:9 | Passive Solar Gain

8 | **CODING** BUILT FORM

Active Energy Conservation Design

Energy efficiency is dealt with through the updates to Part L of the Building Regulations, but these requirements should be seen as the minima.

Once passive elements have been considered, building design should focus upon a **fabric first** approach to maximising energy efficiency. This is based on the premise that reduced resource demand will lead to more sustainable living and a smaller carbon footprint for new development.

Emerging policy dictates the need to switch to electric vehicles and thus requires residential properties to incorporate **electric vehicle charging points** into the layout of parking bays and garages.

Embodied energy is the energy consumed by the processes associated with the production of materials used in the construction of the building as well as the energy used in the actual building process itself.

Reducing embodied energy is achieved by using low energy materials, recycling, efficient use of materials, reducing waste, designing buildings that can be easily disassembled and designing buildings that are easily adaptable. All these elements must be taken into account during the design and detailing of the layout and the proposed homes.

Building Identity

The design of buildings includes their size, shape and configuration, their relationship to their surroundings as well as their internal layout. All of this is dealt with elsewhere in this code. It is also important to consider the way that all the buildings are designed, the elevations, the fenestration and how it relates to the street, the design of the roof, detailing and materiality. Much of this has been dealt with as part of the overall character in Chapter 4.

Buildings Design Principles

The proposed buildings should respond to the height and building line principles as set out earlier in this and other chapters of this code.

These primary building design principles are independent of style and fundamental to ensuring the buildings work as part of the wider vision for the neighbourhood.

Meeting the Ground: It is important to ground all the buildings into their setting and streetscape/public realm in which they sit.

In terms of domestic properties the vernacular study found that simple terraced cottages had a plain doorway as part of the main elevation's fenestration with no porch, whilst higher status dwellings still didn't use a porch but instead framed the doorway with detailing to the heads and jambs. This hierarchical approach to entrances shall be applied to the dwellings at The Site with the use or Artstone surrounds to doorways or open flat-roofed porches to semi and detached properties.

The homes shall utilise a red multi brick which is similar in colour and texture to the local brick found in the surrounding neighbourhoods.

The building set-backs from the street and front boundary treatments are dealt with in the street hierarchy in Chapter 7.

Meeting the Sky: Roofscape and skyline are important features in the townscape and streetscape and are in part governed by the use of varies storey heights of buildings which has been dealt with in various chapters of this code.

Steep pitched roofs will be used on forward pointing gables to reflect the Gothic-feel of church landmarks in the surrounding townscape.

There is no set consistent roofline or eaves line which adds to the informal character of the surrounding settlement and these principles of variety shall be applied to the residential built form at The Site.

The use of gables as touched on above also contributes to adding variety to the roofscape and skyline as part of the streetscapes in which they are set.

Composition: The facade needs to create a logical and interesting fenestration to the elevations of the buildings whilst also relating to the daylight needs of the internal spaces and their uses.

The fenestration found during the vernacular study was varied with a few examples of the classic Georgian symmetry of three storey double fronted properties. In addition, the smaller scale terraced cottages had a strong and simple repeating asymmetric fenestration. The opportunity therefore exists to create interesting elevational responses to the vernacular fenestrational forms across the neighbourhood where symmetry does not have to take precedence within the building elevations.

Windows: Elevations should have a wall to window ratio of between 15-35%. However, in ensuring enough daylight reaches habitable rooms with buildings exploiting solar gain in terms of sustainability, health and wellbeing, all buildings should look to achieve a wall to window ration closer to the upper end of the stated range.

Articulation: Many modern buildings do not have a reveal to windows and doors which is in part governed by the detailing employed to minimise cold bridging of cavities etc. However, a shadowline to doors and windows has benefits visually emphasising and articulating the fenestration and so if windows and doors can be pushed back within the building envelope to create a shadowline then this should be done. Alternatively, windows and doors can be highlighted using detailing around the window which brings the surround forward of the elevation such as using an artsone cill and head which creates the desired articulation without compromising the thermal performance of the building envelope.

Additional articulation can be created by using porches which come forward from the principle building line.

Use of the Local Vernacular

Castleton Sidings as discussed under 'Identity' in Chapter 4 shall draw its architectural identity from the adjoining townscape to aid in creating a contemporary and unique but sympathetic new neighbourhood. That local vernacular is summarised in Chapter 2 and is accompanied by as series of photos of the typical materials, form and detailing found within the adjoining neighbourhoods. The proposed house types are explored in more detail on Chapter 4.

9| DESIGN EVOLUTION

Design Evolution

The final layout illustrated in the following chapters is the product of a considered process of review and refinement over a period of many months that has resulted in a high quality design outcome that responds to the context, constraints and opportunities presented by the Site.

The concerns of the community, Places Matter design review panel and planning case officer have all been addressed where practical during the designs evolution.

The images opposite in Figure 9:1 illustrate the evolution of the scheme from initial thoughts to the final layout. The images demonstrate how feedback received during the design and consultation process has been considered and has resulted in changes to the design. Other changes have been the result of the natural design process and factoring in of technical inputs and advice from different members of the design team and other consultants as the project has developed. The main changes in relation to the site layout have included changes to:

- block structure;
- street hierarchy and materiality;
- location of pedestrian access points;
- building forms; and
- density.

The development's interface with existing houses to the north east and the need to maintain the amenity and privacy of these houses as well as the need to consider the East Lancashire Railways use of the adjoining site to the east has been key considerations throughout the design process.

Pre & Post Application Discussions

Pre-Application Community Engagement

A consultation event was held with local residents from the adjoining neighborhoods in July 2021.

Key concerns from those residents were as follows:

- The interface with the properties on Fairway immediately adjacent to the site boundary and those residents private amenity and overlooking;
- Concern on visibility of the proposals from adjoining neighbourhoods;
- The use of Fairway to access the site and concerns over increased traffic;
- Strain placed on local schools, doctors and other community facilities; and
- Potential increased flood risk;

These issues have been addressed in the revised proposals including restricting development heights to 2 storeys adjacent to existing residential properties and ensuring the correct overlooking distances are observed. Existing planting will be retained where possible and new planting proposed to ensure the visual impact of the development is minimised on adjoining neighbours.

Concern over traffic numbers have been addressed by the transport consultant's looking at traffic numbers and the development of a layout which is permeable and encourages walking and cycling to bus stops and the local railway station to reduce traffic movements.

The developer has engaged with the local authority in terms of appropriate contributions to ensure any required increased capacity in local facilities is addressed and the drainage consultants have developed a sustainable drainage strategy which ensure storm water is managed on site and only discharged to the local drainage network at agreed run-off rates with the Lead Flood Authority.

Design Review & Engagement with the Local Planning Authority

An initial pre-app was he;d with Rochdale Borough Council (RBC) on the 17th June 2021 and their response to the meeting was received on the 7th October 2021. Design comments included:

- RBC requiring development proposals to undergo a design review process prior to submission;
- Use of public open space as a buffer and gateways tot he site between existing and new residential areas;
- A better transition to the west between retained green belt and settlement edge;
- Reduced use of private driveways to the western edge;
- Create a buffer with future ELR land to allow flexibility in terms of the interface and connections;
- Better integration, pepper potting and blind tenure of affordable homes;
- Remove avenue/boulevard as there is no through connection and start with a street as the primary element in the movement hierarchy;
- Create a central public open space;
- Look to create a balanced solution to parking and not to overuse frontage parking;
- Introduce more front gardens;
- Introduce variation to the roofscape and front gables to add variety;
- More contemporary approach to the architecture of the homes with larger windows;
- Could create character areas;
- Minimise length of bin runs from rear gardens;
- Consider overshadowing of gardens by surrounding trees;
- Reference railway heritage of the site in the layout and design;

As is demonstrated within this D&AS& Code many of the above comments were taken on board in the design evolution of the site. However, rather than using character areas the character of the development has been created around the street hierarchy with each route in the hierarchy having a specific approach in terms of street widths, enclosure, boundaries, planting and materials .

Kellen Homes then took Castleton Sidings to Places Matter design review on the 25th August 2022.

The findings of the review in summary were as follows:

- The proposals require a defining idea that comes out in a Vision for the site;
- A better appreciation of the local context and heritage aspects of the site and area is required before the masterplan and layout emerges;
- Explore opportunities to bring more green space into the development by using contemporary typologies and higher densities etc; and

- Exploit the views out from the site or create new ones if it helps with connectivity and contextualisation.

Many of the panels recommendation have been taken on board and incorporated into the design process and submitted application as set-out in this combined statement and code.

However, ideas such as opening up views into the site from the surrounding area, beyond the existing key view between the church spire and site, have not been brought forward as this is in direct conflict with the local communities request that the site is screened from their neighbourhood, much as it is now.

A pre-application meeting was held between the RBC Planning Case Officer and Kellen Homes to discuss the proposals on the 25th January 2023.

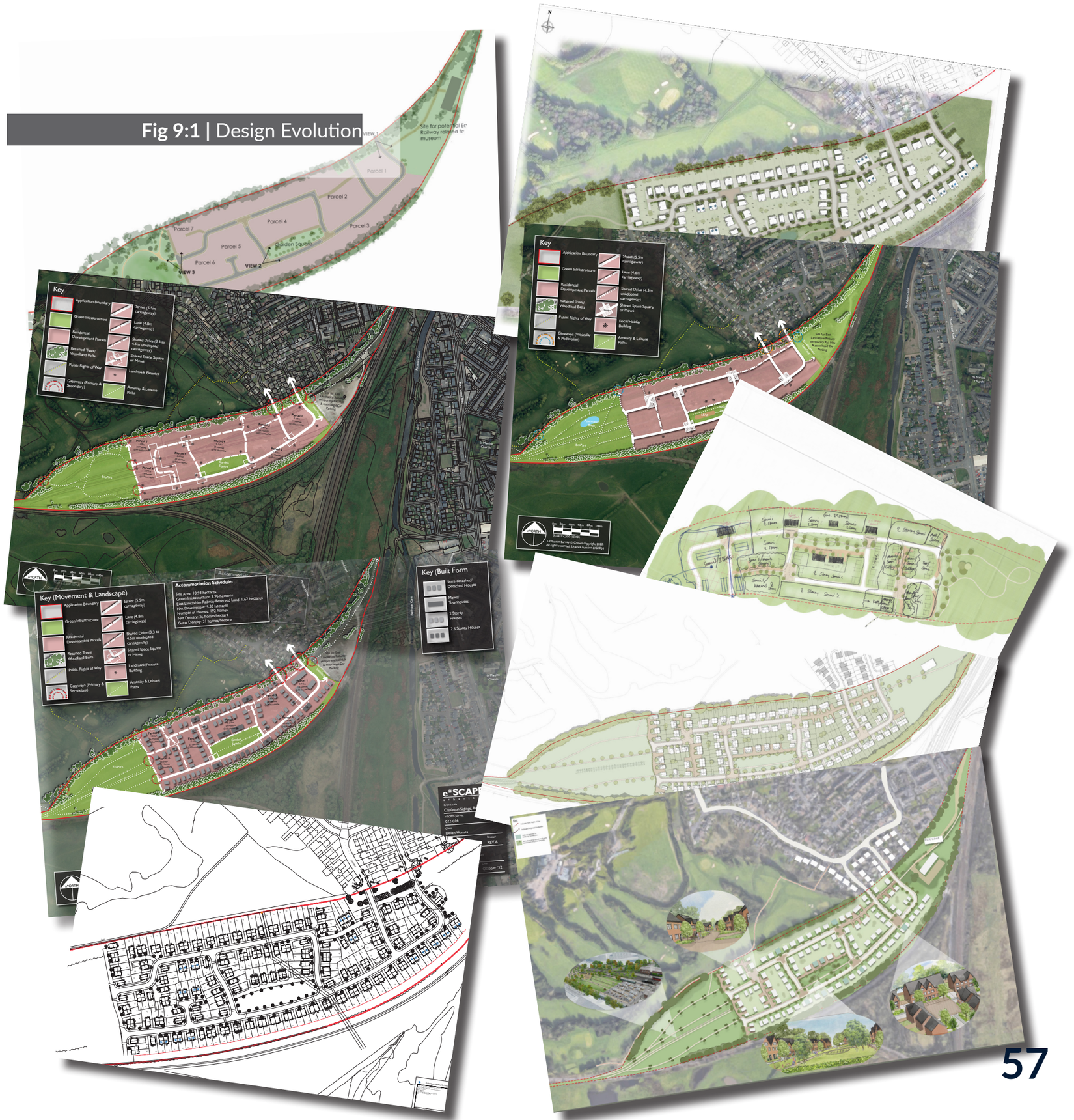
Key issues out of that meeting focussed on:

- The interface and connectivity between the residential site, the East Lancashire Railway Land and Castleton centre to the north;
- The requirement for a Play Area (LEAP) on site;
- Street Trees and other landscaping of the public/private realm;
- The transition between development and open space at the Green Belt boundary;
- House types; their materiality, detailing and roofscape;
- Sustainable drainage strategy and ecological wetlands;
- Refuse bin storage and on-street collection points; and
- The hard landscaping materials palette and what was adoptable by the local highways authority.

Throughout the application process the design has evolved as feedback has been received which has then informed the final design concept illustrated in Figure 9:1.

These changes have been incorporated into the final design.

Fig 9:1 | Design Evolution



10 | DETAILING THE PLACE

Introduction

The Presentation Planning Layout illustrated in Figure 10:1 opposite builds on the structure set by the Parameters Masterplan and Design Coding set out in previous chapters, adding a further level of detail as dictated by the codes.

It is supported by a number of additional plans which have been submitted as part of this full planning application and is described in the following narrative.

As a full application the layout demonstrates the soundness of the parameters and codes adopted and illustrates an appropriate scale and density of development for the site, taking into account the opportunities outlined previously.

Layout

An urban block structure is proposed which draws on the heritage of the site by reflecting the palimpsest created by the linear railway lines within the sidings. That linearity is also drawn out in the open spaces through the orientation of the paths, play areas/trim trail and trees through the spaces.

Homes face out onto the streets providing natural surveillance and active frontages. In this arrangement, private gardens are located to the rear providing security, privacy, and good separation between units. It also avoids the front of properties overlooking the rear of buildings.

The blocks are large enough to accommodate good sized rear gardens which provide opportunities for property extensions, alteration and conservatories.

On the western edge, properties front onto the open space and rural fringe offering passive surveillance and positive interface with the amenity space and wider rural landscape.

Green corridors run to the north and south of the site connecting the rural landscape with the green corridors associated with the railway networks.

These corridors allow the site to be screened from adjoining neighbourhoods to the north and provide a buffer from the East Lancashire Railway to the south.

They also enhance on-site biodiversity by retaining habitats and providing safe corridors for the movement of wildlife whilst helping to reduce the perceived scale and density of the development.

Any potential for unacceptable overlooking or overshadowing has been minimised with good standards of amenity provided for future occupants. The configuration and size of development blocks has been designed to enable minimum back to back distances of 21m to be achieved if not exceeded.

The layout proposes an open space at the interface with the East Lancashire Railway (ELR) land to the east to ensure that the site can interact with the ELR site once it is developed and allows flexibility for that site once their proposals are released.

As described in the coding chapters the block form starts off with a medium density layout to the north east which then lowers and becomes more open and lower density to the west as the development interacts more so with the rural fringes and retained Green Belt.

Scale & Massing

Homes will be primarily two storeys with the use of two and a half storey units limited to create landmarks or as focal points, or header buildings, providing greater encloser to squares and to aid in the legibility of the site.

The use of steeper pitched front facing gables and the taller two and half storey units adds to the variety of the roof lines and skyline by creating rises and falls in the ridge lines of the homes across the site so as not to create too much uniformity.

Use and Quantum

The application boundary covers an area of 10.93 hectares, with 5.35 hectares (net) or 49% of the site will be developed for residential use and includes 191 residential dwellings with associated access, servicing and green infrastructure.

An area of the site has been set aside for use by ELR with a parcel size of 1.62 hectares (15% of the site). Some of the ELR site will undoubtedly provide additional green infrastructure as part of proposals coming forward.

The remainder of the site being used as part of the Green Infrastructure network covering 3.96 hectares or 36% of the site which will include a variety of functions such as:

- Public Open Space,
- Play Areas,
- Retained and new native trees,
- Retained and new wetland habitat, and
- Retained and new meadow habitats.

Access

As illustrated in the planning layout in Figure 10:1 the street and public realm hierarchy as set out within the design coding has been followed and creates a strong and permeable layout .

This encourages residents and visitor to walk and cycle through and around the development and on out to the surrounding neighbourhoods in line with the needs and requirements that have emerged during the pandemic.

Vehicles are accommodated in the layout with parking designed to be integral to the streetscape whilst not overwhelming it. Various parking solutions have been applied to ensure a high quality streetscape is created.

Vehicle speeds are kept low through the use of shared spaces and the stepping forward of building lines to create pinch points thus removing the need for more artificial speed bumps etc.

Landscape

The landscape draws on the idea of nature taking over the site, as set out in the Vision, with native planting and especially pioneer species being used to create the effect of new habitats establishing and emerging from past industrial uses.

That theme has been developed in the landscape proposals for the site, as set out in the Green and Blue Infrastructure Code chapter (Chapter 6).

A Locally Equipped Area for Play (LEAP) is proposed centrally on the site within the garden square. In addition a trim trail is also proposed alongside the ‘railway’ paths through the western open space to provide healthy activities within that space.

Fig 10:1 | Presentation Planning Layout



Rev	Date	Amend	Initials
-	-	-	

Development
CASTLETON SIDINGS

Location
ROCHDALE

Drawing Title
Colour Site Layout

Job Number	Drawing Number
KH003	**KH003-A-100**
Revision: -	Scale: 1:1000 - A1
Drawn By: BP	Date: 09.02.23
Checked by: RC	Date Checked: -

1st Floor, 103 Dalton Avenue, Birchwood Park, Warrington WA3 6YE
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KELLEN HOMES

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Fig 10:2 | Impression - View West across Garden Square



Fig 10:3 | Impression - View within Square



11 | CONCLUSIONS

Conclusion

This Design and Access Statement has been produced by eSCAPE Urbanists Ltd on behalf of Kellen Homes, in support of a reserved application for 191 homes on the land south of Fairway, Castleton, Rochdale.

This document explains how the current proposals have emerged from analysis of the Site and its context, outlining the design process followed and the technical considerations that have informed the final layout.

To that end we have included a Building for a Healthy Life Assessment (BHL) as part of this conclusion.

What is Building for a Healthy Life?

Building for a Healthy Life (BHL) is the latest edition and new name for Building for Life 12 (BfL12), it has been revised in collaboration with NHS England and is about 'Putting Health into Place'.

In essence it looks to encourage designers and developers to engage with the local planning authority and communities to create well designed healthy neighbourhoods and homes that promote walking and cycling, active use of open spaces, development of community orchards and allotments with good and direct access to the wider neighbourhoods, villages and towns in which they're located, without having to get into a car.

BfL12 was redesigned in 2012 to reflect the National Planning Policy Framework (NPPF) and the Government's commitment to build more and better homes. BfL12 comprised 12 questions arranged under three broad topics: Integrating into the neighbourhood; Creating a place and Street and Home.

BHL has re-prioritised and rewritten the 12 questions reflecting the greater emphasis on healthier and more active lifestyles. The 'questions' are now termed as 'considerations'; as good design is not about a quick response to a question but requires more time, analysis and thought.

The 12 considerations capture the areas of design and placemaking that need the most attention as part of the iterative process of design and relate to both the National Planning Policy Framework and National Design Guide.

Creating healthy, walkable and cycleable neighbourhoods is even more critical in this post pandemic world, as set out earlier in this statement and in the related character area design code.

The reworking of the considerations and renaming of the three headings under which the considerations sit are set out below:

Integrated Neighbourhoods

1 Natural connections
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Whilst BHL is emphasised as being a design process structure, rather than a scoring system it does aid in assessing how well the design process has worked through the appreciation of the site and context and applied the layers of urbanism to create a design that is well resolved and a place in which people will really want to live.

The assessment of the design process is based on a simple 'traffic light' system (red, amber and green). The more 'greens' that are achieved, the better a development is likely to be. A red light gives warning that a particular aspect of a proposed development needs to be reconsidered. A proposed development might not achieve 12 'greens' for a variety of reasons but where possible, reds should always be avoided.

BHL, combined with the use of local and national guidance in the form of the National Design Guide (NDG) and National Model Design Code (NMDC) have all been an important influence on the preparation of this planning application.

A summary BHL review is included as part of the conclusion to this combined Design and Access Statement and Design Code.

Fig 11:1 | Streetscenes



STREET SCENE A-A



STREET SCENE B-B



LOCATOR (NTS)



STREET SCENE C-C



STREET SCENE D-D

11 | CONCLUSIONS & BHL ASSESSMENT

Integrated Neighbourhoods

No	Consideration	Answer	Traffic Light
1	**Natural Connections:** Create places that are well integrated into the site and their wider natural and built surroundings. Avoid creating isolated and disconnected places that are not easy places to move through and around.	This proposed new neighbourhood is located on the south western fringes of Castleton with connections onto Fairway to the north east and pedestrian/cycle access onto a series of PROW's to the north which provides connections to Castleton and west to Heywood. Future pedestrian/cycle links will be available to the east over the area of the site to be utilised by the East Lancashire Railway (ELR). That boundary is to be landscaped in a manner that will allow flexibility as to the location of the link and can be adapted in terms of boundary treatments and landscaping once the proposals for their site have been developed and shared. The southern boundary of the site borders the ELR with no pedestrian connections available across the tracks. Access to the established residential neighbourhood that forms the current urban fringe of Castleton is to be created using the two existing road stubs off Fairway and will provide the vehicular routes into the site. This proposed new neighbourhood will therefore be able to plug into a number of existing roads and footpaths as well as the proposed 'BEE Network' which will enhance the site's connectivity via walking, cycling and public transport. The proposed new station on the ELR land, along with the potential for a tram-train trial as part of the same site would further enhance the site's connectivity. The street and public realm network is a crucial element in the neighbourhood providing a variety and choice of routes for moving around and through to adjoining neighbourhoods. Routes are direct ensuring people can make efficient journeys. Direct, well designed and legible routes make walking and cycling more attractive and with increased activity comes a greater perception of safety. This proposed route network links directly with the existing PRoWs, cycleways and roads within the wider area. The proposed neighbourhood has a fine-grain route network where streets are connected one to the other. The street network is organic in form with lower densities to the fringes to allowing the homes to interact more with the natural and rural environment and provide a feathered edge to rural interface. The Site has a number of native trees which border the site and will be retained within areas of green space for the most part, creating wildlife corridors around the site.	

No	Consideration	Answer	Traffic Light
2	**Walking, cycling & public transport:** Short trips of up to three miles can be easily made on foot or bicycle if the right infrastructure is in place, helping improve public health and air quality whilst also reducing local congestion and carbon emissions.	Walking and cycling is a key element in ensuring this neighbourhood is sustainable, indeed walkable and cycleable neighbourhoods have been at the forefront of post pandemic urban design. The aim of the movement network across the neighbourhood is to ensure that walking and cycling is the preferred choice for short journeys of 5km or less between the site and surrounding areas. The proposed network is direct and associated with anticipated desire lines and Public Rights of Way/cycleways and is designed to be attractive and safe with good overlooking from the surrounding development parcels. The streets, lanes and shared drives incorporate traffic calming measures within them with pedestrians prioritised and vehicles drive at slow speeds. Access to public transport is a key requirement and provision of routes to access public transport has been a part of proposals with easy access to existing services within a 5 to 10 minute walk. The network of footpaths and cycleways across the site provide direct links between Castleton and the surrounding rural area with access to schools, shops and other services and will form part of the wider BEE Network.	

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Integrated Neighbourhoods

No	Consideration	Answer	Traffic Light
3	**Facilities & services:** Places that offer social, leisure and recreational opportunities a short walk or cycle from their home.	As setout in this statement the site lies within a 5 to 10 minute walk of a variety of facilities including primary schools, shops and doctors surgeries. This permeability enables direct access to a wider area with bus stops, existing railway station, pubs, shops and schools being accessible within a 5 to 15 minute walk of the site. More specifically, there are a number of primary schools close by, the nearest being St Edwards C of E Primary School on Hanover Street less than 0.3 miles from the site. Castleton Primary School on Hillcrest Road is just slightly further to the east, as is St Gabriels RC Primary School. The nearest secondary school is Matthew Moss High School on Matthew Moss Lane, less than 1 miles away by road to the north of the site. A range of health facilities can be accessed locally. Castleton Health Centre is located circa 0.6 mile to the north on Trevor Street. There are two pharmacies in Castleton, one close to the medical centre and the other on Manchester Road near the junction with Queensway. A swimming pool; Castleton Baths in located on Manchester Road to the north of the site and has been refurbished recently with plans for a new hydrotherapy pool. The Baths is a community run facility. Bus stops are located on Manchester Road with services between Rochdale City Centre and Norden, Shudehill, and Trub. Additional Bus stops are located on Queensway with services between Rochdale City Centre, Buersil Head and MIddleton. There are a few green spaces within the adjoining neighborhoods with a formal children's play area located on Heywood Road about 0.5 mile to the east and other green spaces just over half a mile from the site to the north. Other recreation routes available in the local area include the Rochdale Canal towpath which can be accessed within 0.3 miles of the site. The on site open space which includes a play area (LEAP) and trim trail will not only provide facilities for the new residents but also the wider existing community. The Castle Hawk Golf Club is located immediately adjacent to the northern boundary of the site. The closest employment opportunities lie about a 0.3 miles from the site in an arc straddling Manchester Road and adjoining streets.	

No	Consideration	Answer	Traffic Light
4	**Homes for everyone:** A range of homes that meet local needs.	There is a range of private and affordable homes providing a good choice on this site for couples, young and growing families as well as older people looking to downsize and gain better access to local facilities. The mix includes a broad range of housing typologies including townhouses, semi-detached and detached homes with dwelling sizes of 2, 3 and 4 bedrooms. As a proportion of the total mix, the number of houses in each size category is as follows: • 2 bed - 30 (16%) • 3 bed - 134 (70%) • 4 bed - 27 (14%) A total of 29 (15%) affordable houses will be provided (a mix of 2 and 3 bed homes), including both social rent and intermediate housing. All affordable homes will be designed to be tenure blind and will pepper-potted throughout the development to encourage a cohesive and integrated community. All homes have access to private rear gardens of a good size for the size of home they are associated with and are not directly overlooked or fully over-shaded.	

11 | CONCLUSIONS & BHL ASSESSMENT

Distinctive Places

No	Consideration	Answer	Traffic Light
5	**Making the most of what's there:** Understand & respond.	The opportunities to retain existing landscape features and create new connections have been used to inform the development of the proposals and are illustrated in this statement and code. Existing trees, hedgerows and the rights of way have all been retained wherever possible to inform the structure and layout of the proposed new neighbourhood. The retained features also contribute to the softening of the development when viewed from the north, with the built form set back from the northern boundary behind the retained woodland belt. These existing features, when complemented with new native planting provide a buffer to reduce the impact of the development on the wider rural landscape and urban edge. The proposals create a series of green spaces which not only provide space for recreation by residents and visitors but also create or retain a series of ecological habitats which are interconnected via the retained hedgerows and trees which surround the proposed development. An ecological wetland is supplied with water from the surrounding land drainage and the proposed SuDS management train intercepts water at source from the roofs and pavements and directs the collected water into pipes and underground storage systems before discharging at agreed run-off rates into the wider network, thus not contributing to issues of flooding down stream.	
6	**A memorable character:** Create places that are memorable.	The proposed layout, the spaces within that layout, the architecture and landscape work hand in hand to create a cohesive neighbourhood which is unique to the site and wider local area. The railway palimpsest and 'nature taking over' have been key themes pulled through into the character of the site proposals The proposed architecture draws on the local vernacular in terms of detailing and materials and reinterprets it in a contemporary way with houses that are designed for 21st Century living. The landscape proposals for the site utilise a mix of native and ornamental species depending on the location in the neighbourhood. A garden square lies at the heart of the proposed new neighbourhood to act as a focal space for the new community. Hedges and shrubs are used to front the garden boundaries and garden trees add variety to the streetscenes. The planting palette deliberately overlaps with the palette proposed for residential open spaces to provide some continuity, and similar considerations concerning year round interest, compact form and bee-friendly species have influenced the selection. There will be tree and shrub planting within the public realm areas which will be predominantly native species. Areas for recreation will be managed as amenity grassland with short mown grass. Other grass areas within the development will be sown as wildflower grassland and managed with a less frequent mowing regime.	

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Distinctive Places

No	Consideration	Answer	Traffic Light
7	**Well defined streets and spaces:** **Create a network of streets and spaces that are well enclosed by buildings and/or structural landscaping, taking care to ensure that front doors and principal façades of buildings face streets and public spaces.**	The public realm incorporates the streets, squares, focal nodes and mews in which the community and visitors will interact. The street hierarchy is described in greater detail earlier in this statement creating a legible and permeable network through the neighbourhood and out to the surrounding areas. The proposed public realm and built form work hand in hand and the enclosure of the public spaces is part of how well they perform and feel to the users. The Street is at the top of the route hierarchy and provides the access into the heart of the neighbourhood with Lanes being secondary in the route hierarchy and provide the main accesses into the heart of the neighbourhood to each side of the Streets. The public realm includes Squares and Mews which straddle the streets creating communal spaces with the carriageways, pedestrian zones and green spaces defined within them. Unadopted Shared Drives are domestic in nature, designed as a simple shared surface route which provides access to only a small number of properties associated with the development edge and interface with the open spaces. Pedestrian & Cycle routes provide a choice of routes through and out of the site, increasing permeability and encouraging walking and cycling.	

No	Consideration	Answer	Traffic Light
8	**Easy to find your way around:** **Use legible features to help people find their way around a place.**	As illustrated and described in this statement the street network is well connected throughout the hierarchy, one to another. The street and public realm layout creates a strong and permeable neighbourhood. This encourages residents and visitor to walk and cycle through and around the development and on out to the surrounding neighbourhoods and countryside, in line with the needs and requirements that have emerged during the pandemic. Vehicles can be accommodated in the layout with parking designed to be integral to the streetscape whilst not overwhelming it. Various parking solutions have been applied to ensure a good quality streetscape is created. Vehicle speeds are kept low through the use of thresholds and road geometry etc. The proposed street hierarchy is clear and logical comprising a series of inter-connected streets, lanes, shared drives and footpaths. The arrangement of streets and other routes within the site is designed to ensure good connectivity with the surrounding street network, provide logical and efficient routes through and out of the development and ensure a layout which is clear and legible. The street pattern creates a grid pattern enclosed and overlooked by the built form providing access to the internal blocks. The proposals have taken account of the adjoining ELR site with the location of the pedestrian/cycle access left flexible so that once their proposals are public we can provide a link into their site and on up to Castleton's centre.	

11 | CONCLUSIONS & BHL ASSESSMENT

Streets for All

No	Consideration	Answer	Traffic Light
9	**Healthy streets:** **Streets are different to roads. Streets are places where the need to accommodate the movement of motor vehicles is balanced alongside the need for people to move along and cross streets with ease. Activity in the street is an essential part of a successful public realm.**	Walking and cycling has never quite been taken up by the general public as a form of transport, however, the pandemic appears to have brought about a shift and it is thus that Castleton Sidings has enough space to accommodate a comprehensive and balanced approach to all modes of movement. The streets and spaces are well connected having footpaths alongside them and on street cycling within them, providing direct and safe access across the neighbourhood with links to the adjoining streets connecting jobs, shops, facilities and homes together within the wider network. The site is well located to exploit the public transport network encouraging residents to walk to the local bus stop and leaving the car at home. Trees and other vegetation are being retained on site along with the planting of new trees and shrubs which aids in filtering small particulate pollution, recycling carbon dioxide and aiding mental health and wellbeing.	

No	Consideration	Answer	Traffic Light
10	**Cycle & car parking:** **Well-designed developments will make it more attractive for people to choose to walk or cycle for short trips helping to improve levels of physical activity, air quality, local congestion and the quality of the street scene. Well -designed streets will also provide sufficient and well-integrated car parking.**	Cycling not only needs to be designed into the movement strategy for the site, but also accommodated in terms of parking, both in the public realm and private curtledge of the homes. Cycle parking within the private curtledge of homes will be within garden sheds/stores in rear gardens or within garages in the form of cycle stands at floor level or vertical wall stands. Car ownership and use are two separate issues. Many nations with low car usage still have a high level of car ownership. Car parking has been designed and integrated into the neighbourhood in line with policy. Creative integration of cars into the streetscape and private curtledge of properties is required with a mix of solutions including garaged, side and bay parking. Frontage parking will not dominate the layout and a balanced approach with a mix of parking solutions has been developed within the layout.	

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Streets for All

No	Consideration	Answer	Traffic Light
11	**Green & blue infrastructure:** **Creative surface water management such as rills, brooks and ponds enrich the public realm and help improve a sense opf wellbeing and offer an interaction with nature. As the richest habitat for a range of flora and fauna, they are also a key play in achieving the net gain in biodiversity sought by the 2020 Environment Bill.**	The greenspace network will provide natural green corridors for the movement of wildlife across the site and will be laid out to enhance opportunities for wildlife wherever possible. The ecological value of existing trees and hedgerows will be protected wherever practical. Any removal of existing trees and hedgerows required to facilitate the fundamental site services, earthworks and allow safe public access will be compensated for by new planting or alternative habitat development. The development will incorporate a sustainable drainage strategy across the site. The surface water drainage strategy will be complemented by measures to reduce water consumption within the development. The development will aim to help future proof the existing water infrastructure by considering carefully water use in the development. Water saving behaviour will be encouraged by incorporating appropriate measures such as low flushing toilets and aerated taps which contribute to reducing consumption from the mains. Foul drainage will feed into the established sewerage infrastructure which will be extended as necessary to accommodate the scheme.	

No	Consideration	Answer	Traffic Light
12	**Back of pavement, front of home:** **Garden cities, towns and suburbs used hedges to define public and private spaces, helping to create characterful and biodiverse places, The space between the back of pavement and the face of buildings has a significant impact on the quality of place. Clear demarcations between public and private spaces can encourage people to personalise the front of their homes whilst also offering opportunities to integrate level changes, utility boxes and waste storage.**	The demarcation between the public realm and semi-private front gardens has been created through the use of hedgerows and shrub planting, as set-out in the landscape concept and proposed planting plans which accompany this application. The rear gardens are clearly defined as private space by using high close boarded fences as the boundary treatments. Service, meter cupboards and electric charging points are designed into the elevations of the homes so they do not spoil the primary views of the homes from the street. There are no ‘dead areas’ of external space with the site as the development blocks are outwards facing and turned to overlook all public spaces.	

11 | CONCLUSIONS & BHL ASSESSMENT

The proposed development of 191 new homes will provide significant benefits to Rochdale as a whole, providing much needed housing in a suitable and sustainable location and in a timely fashion, supporting the Council's Local Plan.

This will be a high quality development that respects the local character and successfully integrates existing landscape features into the new development.

It is intended that this new neighbourhood will become a positive asset to the town in terms of design, layout and open space. The development will create an open and inclusive neighbourhood with a mix of facilities for use by existing and new residents.

The design has been developed to take account of a post-pandemic world in which working from home, walking, cycling and inhabiting ones immediate neighbourhood becomes the 'New Normal'. Whilst creating liveable and human neighbourhoods have been important for many years Covid19 has put that need into sharp relief.

This planning application comprises the following elements:

- Two principle site access pints off Fairway to the north east.
- Good pedestrian connectivity and permeability between the adjoining neighbourhoods, the countryside and site.
- 5.35 hectares (net) of the site as residential development including 191 residential dwellings with associated access, servicing and green infrastructure.
- 1.62 hectares of the site retained for use by East Lancashire Railway.
- A Green Infrastructure network covering 3.96 hectares of the site which will include a variety of functions such as:
    - i Public Open Space,
    - ii Play Areas,
    - iii Retained and new native trees and hedgerows,
    - iv New wetland habitats,
    - v New meadow habitats,and
    - vi Connections to the Public Right of Way network which runs through and across the site.

The final proposals have emerged out of a thorough process of design development, review, testing, and revision, as described in this statement. This iterative process has ensured that the final proposals included in this Design and Access Statement and Code meets the requirements of the Local Plan Policies, the various stakeholders and wider community.

The development of the site would result in a sympathetic, sustainable and high quality development on brownfield land, with a strong Green Infrastructure network, offering improved linkages into and through the proposed neighbourhood, shared infrastructure, biodiversity, open spaces and community access.

The development will create a strong outward facing and finished edge to the wider settlement of Castleton.

A Place with Character

This proposed neighbourhood, as described in this statement and as illustrated here and in the supporting drawing pack creates a high quality environment in which residents will be able to live and enjoy the surrounding green spaces.

The Building for a Healthy Life considerations, as set out here in the conclusion to this statement, demonstrate a thorough design process has been undertaken in order to arrive at the final proposals for Castleton Sidings. Working corroboratively within a multidisciplinary design team the scheme has benefited from an iterative process of design review and refinement.

The BHL process has been redesigned to take more account of health and wellbeing which includes considerations around design for a post-pandemic world.

The scheme has achieved green traffic lights for all aspects of the development creating a place with character and space within homes, gardens and public open spaces for people to enjoy in close proximity to their homes, thus enhancing their mental wellbeing and encouraging walking and cycling to improve their physical health.

Castleton Sidings creates an exciting and unique neighbourhood set within a wider framework of neighbourhoods and open spaces that provides an outward facing and finished edge to Castleton, as well as a gateway into the town from the west approaches.

"The final proposals have emerged out of a thorough process of design development, review, testing, and revision, as described in this statement. This iterative process has ensured that the final proposals included in this Design and Access Statement and Code meets the requirements of the Local Plan Policies, the various stakeholders and wider community.

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Fig 11:2 | Impression - View East from EcoPark





Produced on behalf of Kellen Homes by:

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