Whissendine

Design Guidelines and Codes

Final Report

June 2022

Delivering a better world

Quality information

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Revision History

Issue no.	Issue date	Details	Issued by	Position
6	28/06/22	Review	Annabel Osborne	Locality
5	10/06/22	Review	Kevin Thomas	Whissendine Neighbourhood Plan Steering Group
4	21/03/22	Review	Ben Castell	Director
1	21/02/22	Research, site visit, drawings	Giuseppe Verdone	Principal Urban Designer
0	21/02/22	Research, site visit, drawings	Daniel Mather	Graduate Urban Designer

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Introduction

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1. Introduction

Through the Department for Levelling Up, Housing and Communities (DLUHC) Programme led by Locality, AECOM was commissioned to provide design support to Whissendine Parish Council.

1.1 The importance of good design

As the National Planning Policy Framework (NPPF; paragraph 126) notes, 'good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities'.

Research, such as for the Government's Commission for Architecture and the Built Environment (now part of the Design Council; see, for example, The Value of Good Design[1]) has shown that good design of buildings and places can improve health and well-being, increase civic pride and cultural activity, reduce crime and anti-social behaviour and reduce pollution.

This document seeks to harness an understanding of how good design can make future development as endearingly popular as the best of what has been done before.

Following an analysis of the Parish and good practice, those elements of good design are set out clearly as design principles which any development within Whissendine Neighbourhood Area should follow in order to comply with this Design Guidelines and Codes document.

1.2 What is a design code

The Government's Planning Policy Guidance defines design codes as:

'… a set of illustrated design requirements that provide specific, detailed parameters for the physical development of a site or area. The graphic and written components of the code should be proportionate and build upon a design vision, such as a masterplan or other design and development framework for a site or area. Their content should also be informed by the 10 characteristics of good places set out in the National Design Guide. They can be …appended to a Neighbourhood Plan…'.[2]

1. https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-good-design.pdf

2. Paragraph: 008 Reference ID: 26-008-20191001 - Revision date: 01 10 2019.

1.3 The purpose of this document

The NPPF 2021, paragraphs 127-128 states that:

'*Plans should, at the most appropriate level, set out a clear design vision and expectations, so that applicants have as much certainty as possible about what is likely to be acceptable. Design policies should be developed with local communities so they reflect local aspirations, and are grounded in an understanding and evaluation of each area's defining characteristics. Neighbourhood planning groups can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development, both through their own plans and by engaging in the production of design policy, guidance and codes by local planning authorities and developers…*'

'To provide maximum clarity about design expectations at an early stage, all local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide and National Model Design Code, and which reflect local character and design preferences. Design guides and codes provide a local framework for creating beautiful and distinctive places with a consistent and high quality standard of design. Their geographic coverage, level of detail and degree of prescription should be tailored to the circumstances and scale of change in each place, and should allow a suitable degree of variety.'

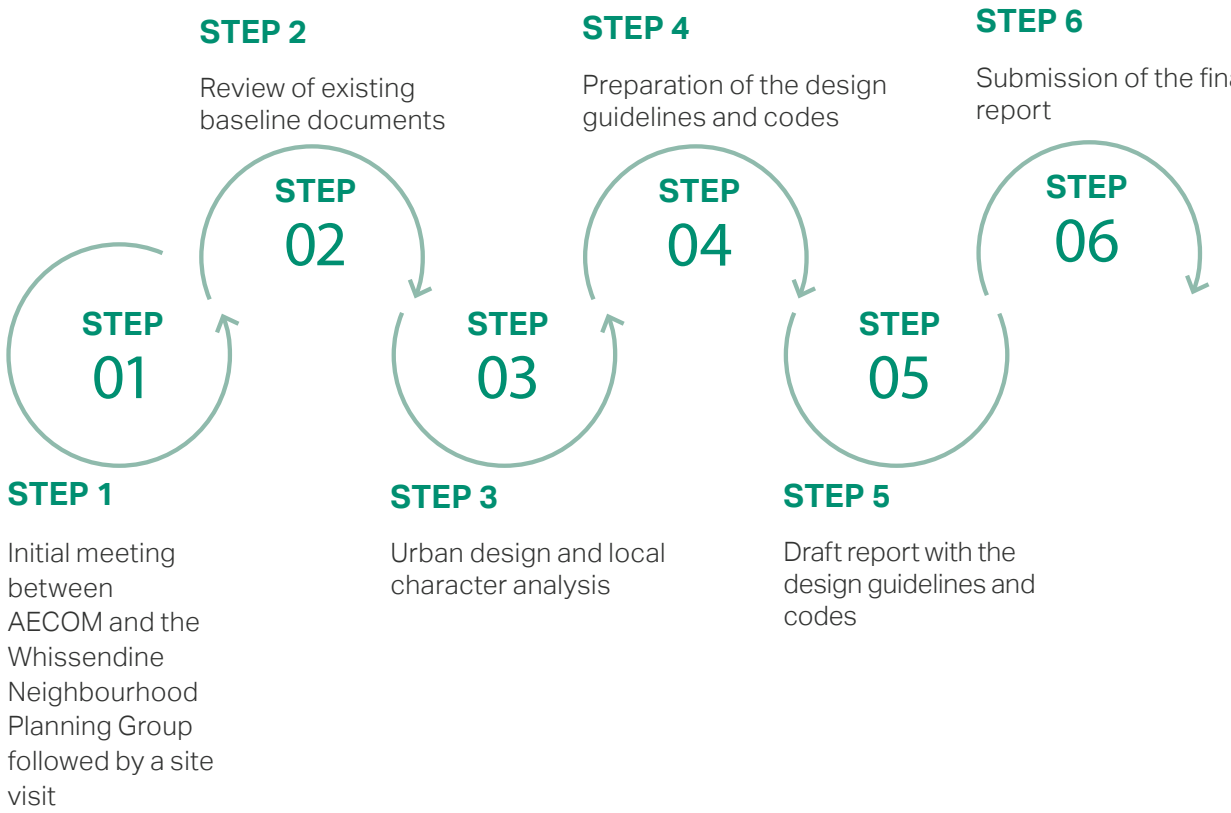
The emerging Rutland County Council Local Plan 2018-2036 (withdrawn in 2021) proposed 2 site allocations to fulfil the housing requirement of 37 homes. The general design guidance and codes are intended to inform the design of potential future homes on these sites (if they will come forward) as well as through any speculative proposals.

Thus, this Design Guidelines and Codes report will provide an additional and more detailed framework to make sure any design proposal contributes to a distinctive place with a consistent and high quality standard of design.

It is intended that the Design Guidelines and Codes report becomes an integral part of the Neighbourhood Plan and be given weight in the planning process.

1.4 Preparing the design code

Following an inception meeting and a site visit with a member of the Neighbourhood Plan Steering Group, the following steps were agreed with the Group to produce this report:



1.5 Policy and design guidance

The following documents have informed this document. Some of these guidelines have been produced at national, district or parish level.

Any new development application should be familiar with these documents and make explicit reference to how each of them is taken into account in the design proposals.

NATIONAL LEVEL

2021 - National Planning Policy Framework

MHCLG

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally-prepared plans for housing and other development can be produced.

2021 National Model Design Code

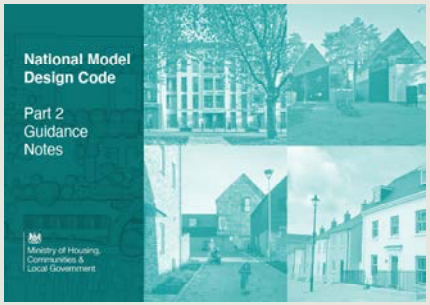
MHCLG

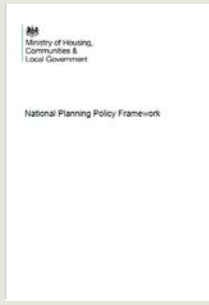
This report provides detailed guidance on the production of design codes, guides and policies to promote successful design. It expands on 10 characteristics of good design set out in the National Design Guide.

2020 - Building for a Healthy Life

Homes England

Building for a Healthy Life (BHL) is the new (2020) name for Building for Life, the government-endorsed industry standard for well-designed homes and neighbourhoods. The BHL toolkit sets out principles to help guide discussions on planning applications and to help local planning authorities to assess the quality of proposed (and completed) developments, but can also provide useful prompts and questions for planning applicants to consider during the different stages of the design process.





NATIONAL LEVEL

2019 - National Design Guide
MHCLG

The National Design Guide illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

2007 - Manual for Streets
Department for Transport

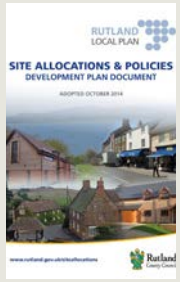
Development is expected to respond positively to the Manual for Streets, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets. It promotes streets and wider development that avoid car dominated layouts but that do place the needs of pedestrians and cyclists first.

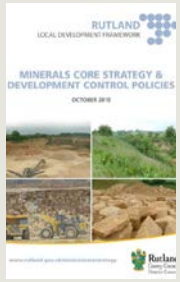
DISTRICT LEVEL

2011 Rutland Local Development Framework

The adopted Development Plan Documents (DPD) in Rutland that guides growth and development up to 2026 consists of:

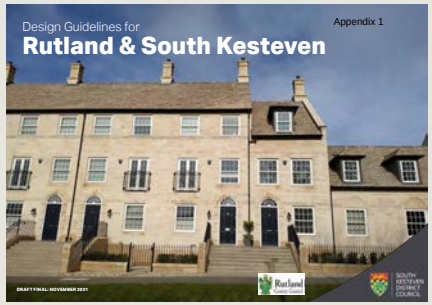
- Core Strategy Development Plan Document (DPD)
- Site Allocations and Policies Development Plan Document (DPD)
- Minerals Core Strategy and Development Control Policies Development Plan Document (DPD).





2021 Design Guidelines for Rutland & South Kesteven

Rutland County Council and South Kesteven District Council have jointly produced this Supplementary Planning Document (SPD) to assist and inform anyone with an interest in the design and development process in the area, with a particular focus on ensuring that applicants for planning permission have applied the necessary consideration to their proposals.



1.6 Area of study

Whissendine is a village and civil parish located in the Rutland with the nearest cities being Leicester and Peterborough. Both of these places provide wider connections to larger cities such as London, Birmingham and Manchester. The primary automobile routes that link the parish with Peterborough and Leicester are the A606, A1 and A47.

With regard to public transport, the nearest railway statios are Oakham (5 miles) and Melton Mowbray (6 Miles). Here there are frequent cross-country trains calling at Birmingham, Cambridge, Leicester, Peterborough and Stansted Airport as well as a few EMR liners which go towards Norwich and London St Pancras. The village itself is served by 3 different bus routes linking the community with Melton Mowbray and Oakham which are the two nearest towns that the local community go to for goods and services.

Both Melton Mowbray and Oakham have a variety of amenities such as supermarkets, schools, colleges, gyms, bars and cafes. As well as this, the village itself contains several smaller services including a Mace store and the White Lion Inn pub. St Andrew's Church is another community asset and one of the oldest buildings in the village. It is one of 18 listed buildings scattered throughout the village.

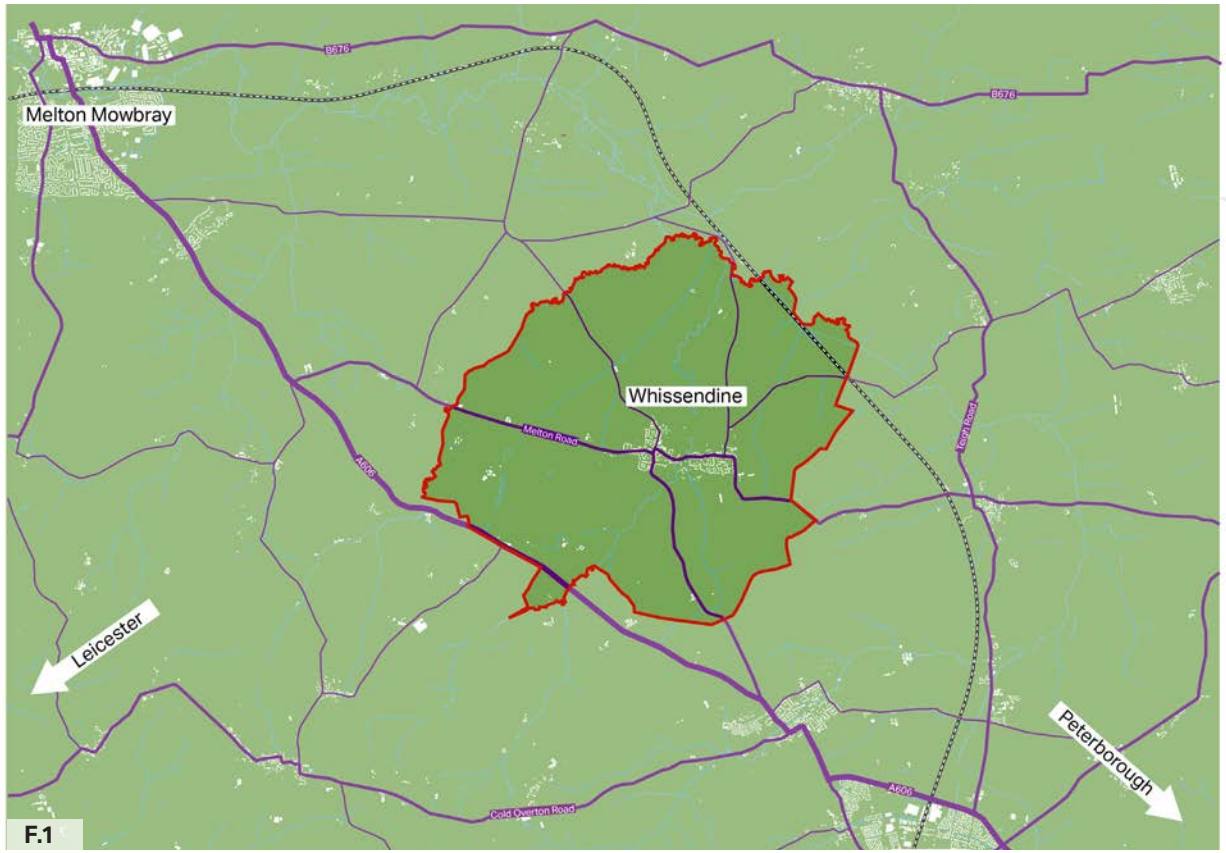


Figure 01: Whissendine Parish in the wider context.

Local character analysis

02

2. Local character analysis

This chapter describes the local context and key characteristics of Whissendine Parish related to heritage, built environment, streetscape, views, landscape and topography.

2.1 Parish structure

Whissendine is located in the middle of agricultural land that has been farmed on for many centuries, with development dating back towards the 10th century.

The village itself is at the centre of the parish with a scatterings of small farm buildings in the outer regions of the neighbourhood plan area.

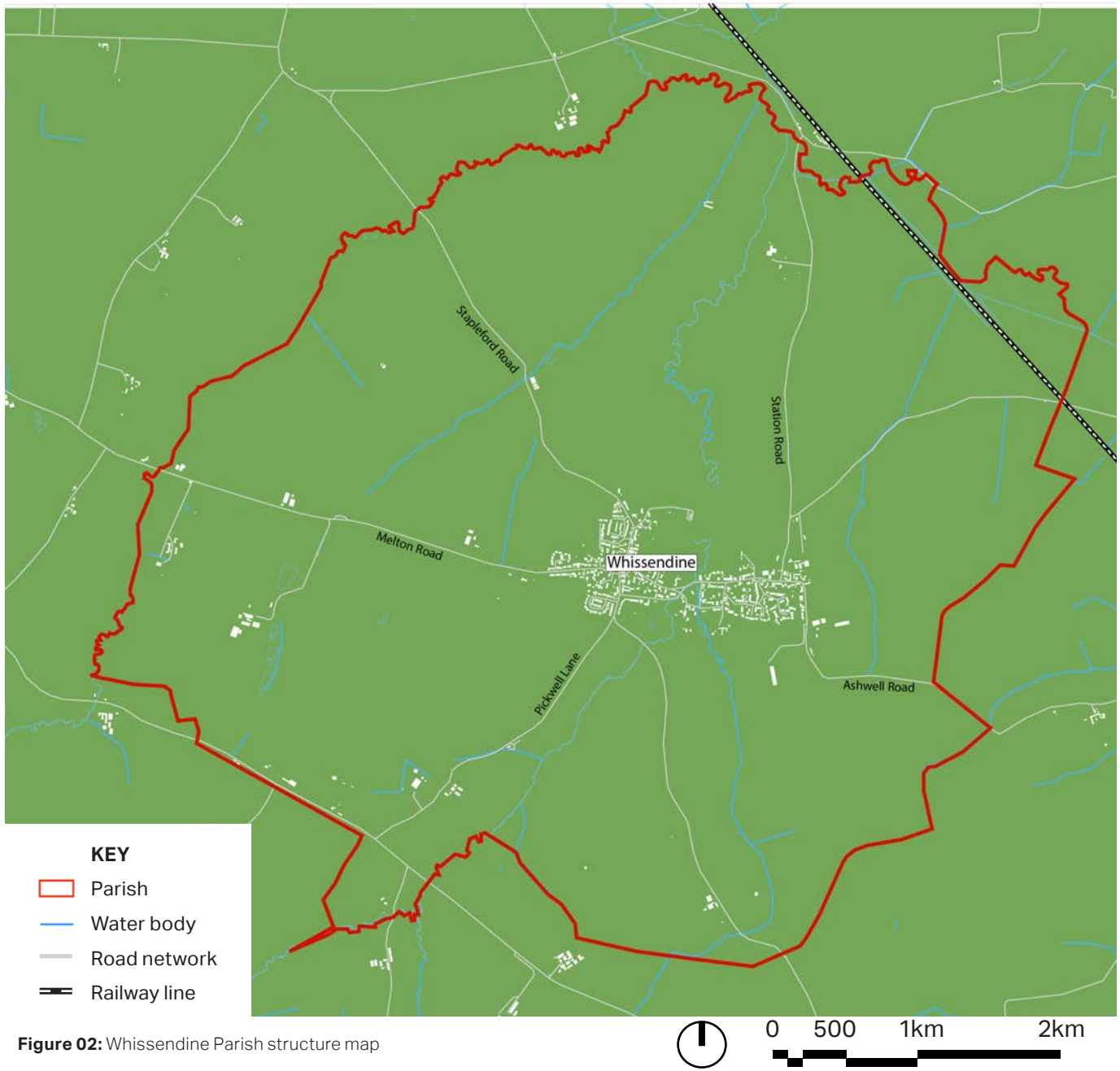


Figure 02: Whissendine Parish structure map

2.2 Heritage

Whissendine is a village and civil parish which is rich in history. The oldest building in the village is St Andrew's Church which was built in the 13th century. Today it is a grade 1 listed building. Another locally important building is the Whissendine Windmill. Built in 1809, the windmill returned to milling in September 2006. It is a Grade II* listed building and is said to be the tallest stone windmill in the country. These are 2 of the 18 listed buildings throughout the village.

While the village itself does not have a conservation area this does not mean that there are not areas where the historic character has embedded itself into the streetscape. One such example of this is along Oakham Road and the top of Main Street where the buildings are tightly packed Georgian style houses and retrofitted farm buildings.

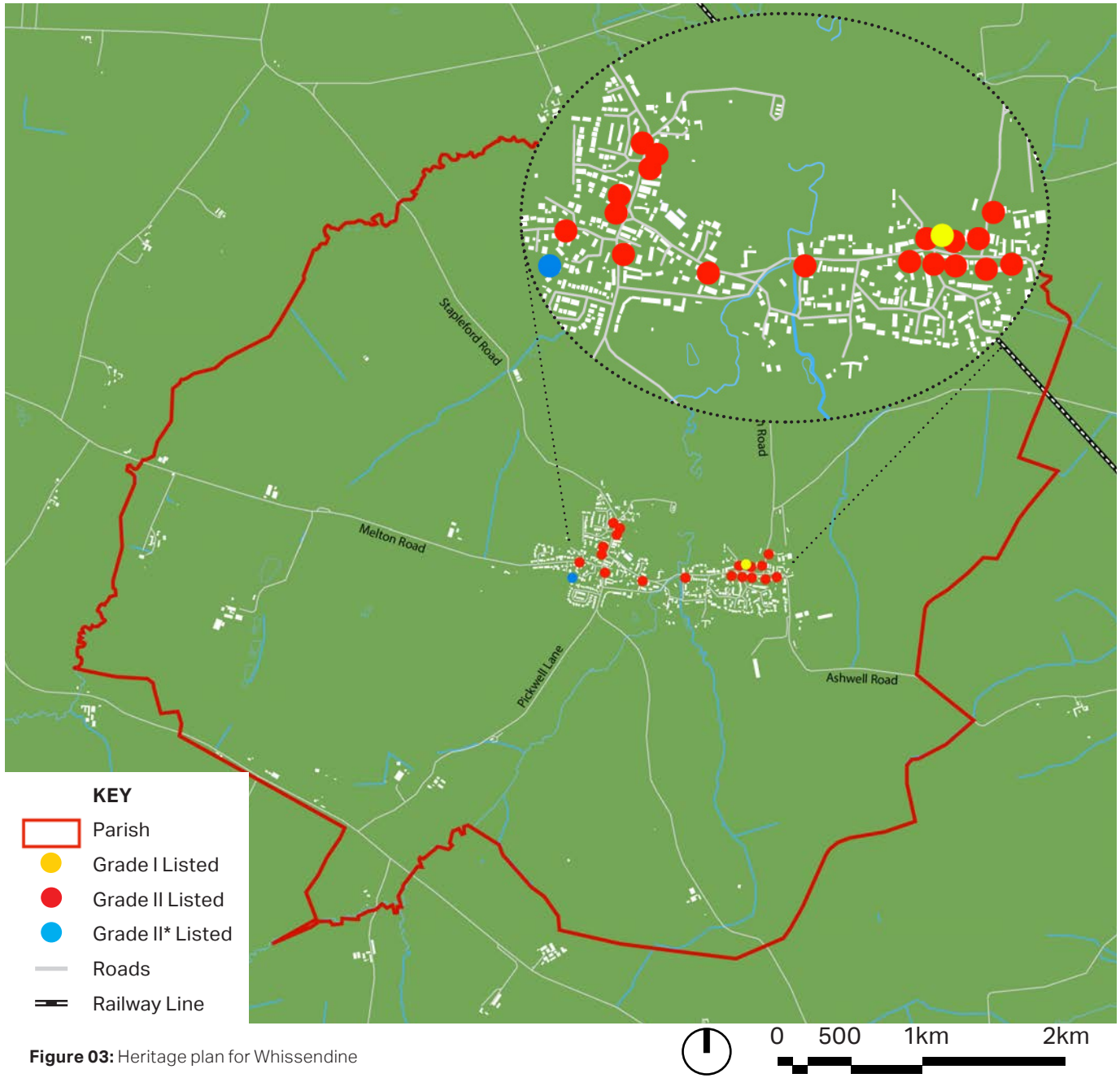


Figure 03: Heritage plan for Whissendine

2.3 Land-based designations

Whissendine is located in the rolling hills of the Rutland making it an attractive landscape for anyone to live in. Much of the land surrounding the village is arable farming land belonging to the working farms within the parish. Other than this there is also areas of woodland which typically surround the various streams throughout the parish.

There are scatterings of deciduous woodland in the parish. These are areas of woodland with trees with broad leaves, such as oak, beech and elm. They occur in places with high rainfall, warm summers and cooler winters and lose their leaves in winter. As well as this there are Woodland Improvement Areas, which are areas of land that have been identified by the Forestry Commission as a priority for enhancement of woodland habitats[1].

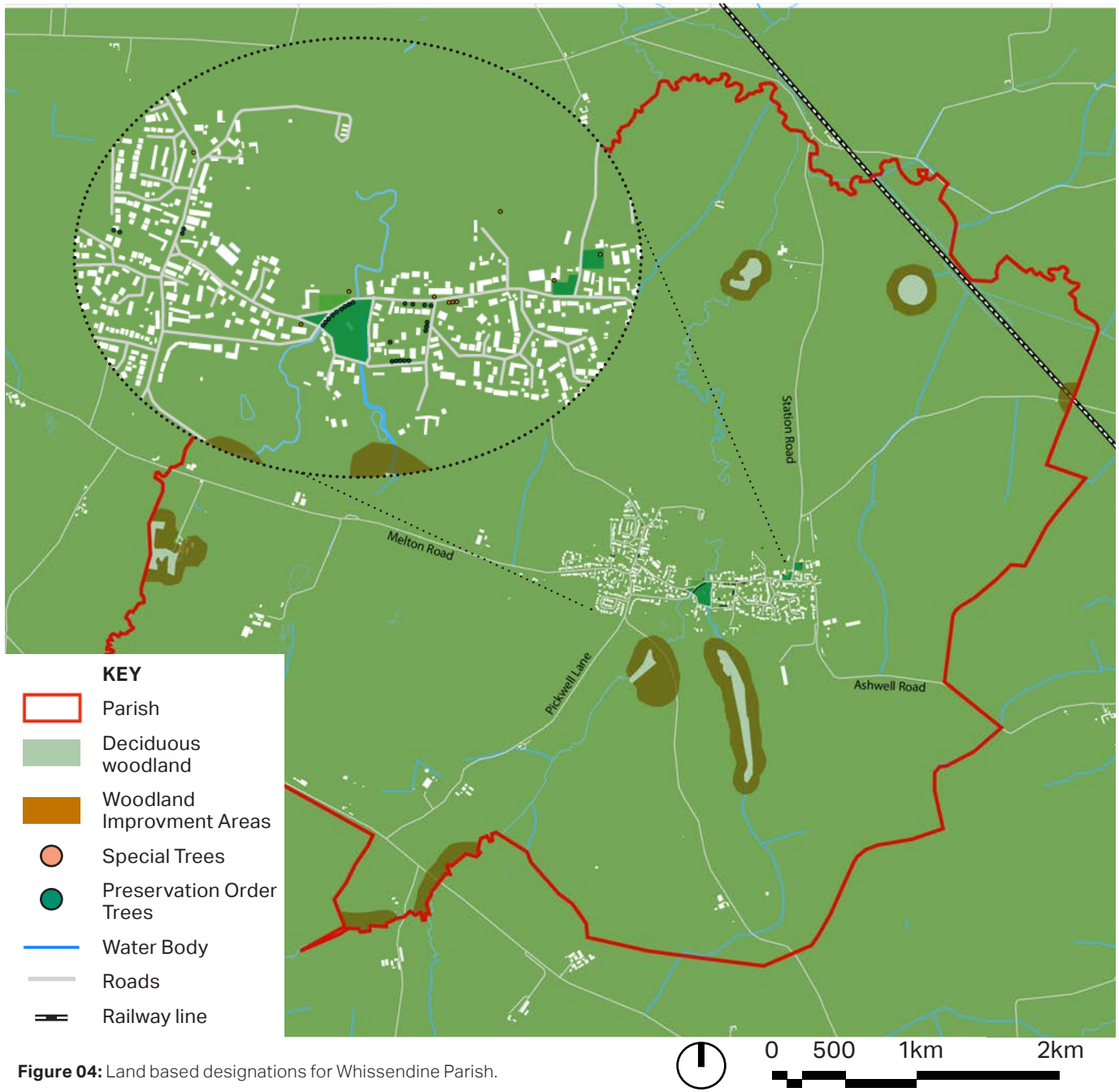


Figure 04: Land based designations for Whissendine Parish.

1 Source: https://magic.defra.gov.uk/

2.4 Building typologies

The parish has developed over hundreds of years, and this is reflected in the wide mix of building typologies. Semi detached, detached and farm buildings can all be found within the neighbourhood plan area.

The village is made up of mostly detached housing which has stemmed off Main Road, Oakham Road and Stapleford Road. The village is host to many substantial properties which create the place identity. While it is important to respect the character of the village it is also important to recognise the need for smaller properties which are more ideal for both first time buyers and the older generations of the parish.

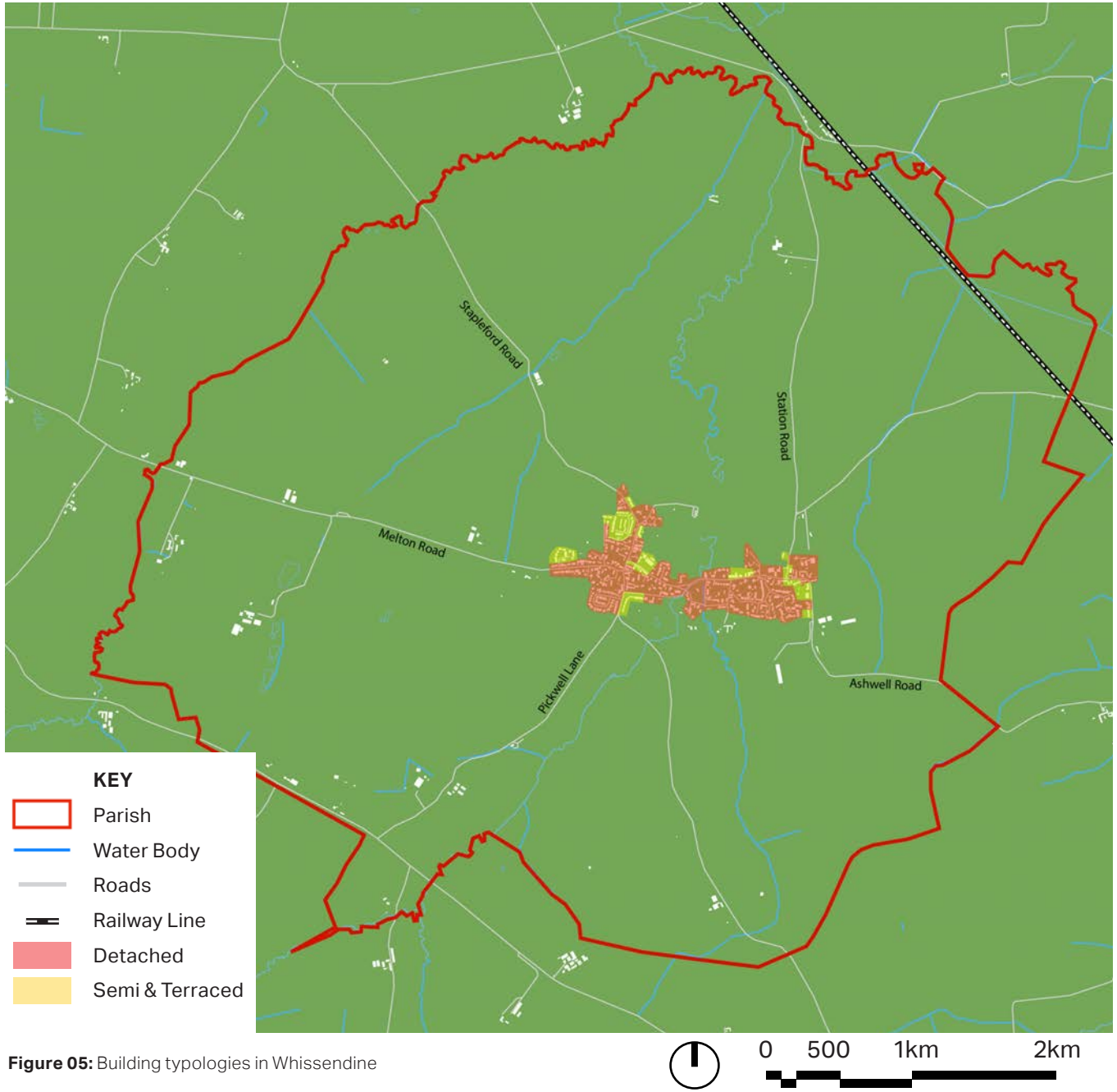


Figure 05: Building typologies in Whissendine

2.5 Flood risk mapping

Given the topography of the area, flooding is a very real threat to the village of Whissendine and its community. The Whissendine Brook flows through the centre of the village cutting across The Nook and Main Street. All this area is in Flood Risk Zone 3 and floods between 5 and 10 times a year. The existing properties that are at the most risk are at the bottom of Cow Lane and The Nook.

There is also a flood plain to the north of the village making it important for any new development to do a flood impact assessment in the early stages of planning to make sure that the suitable sites are chosen, and adequate mitigation measures are put in place.

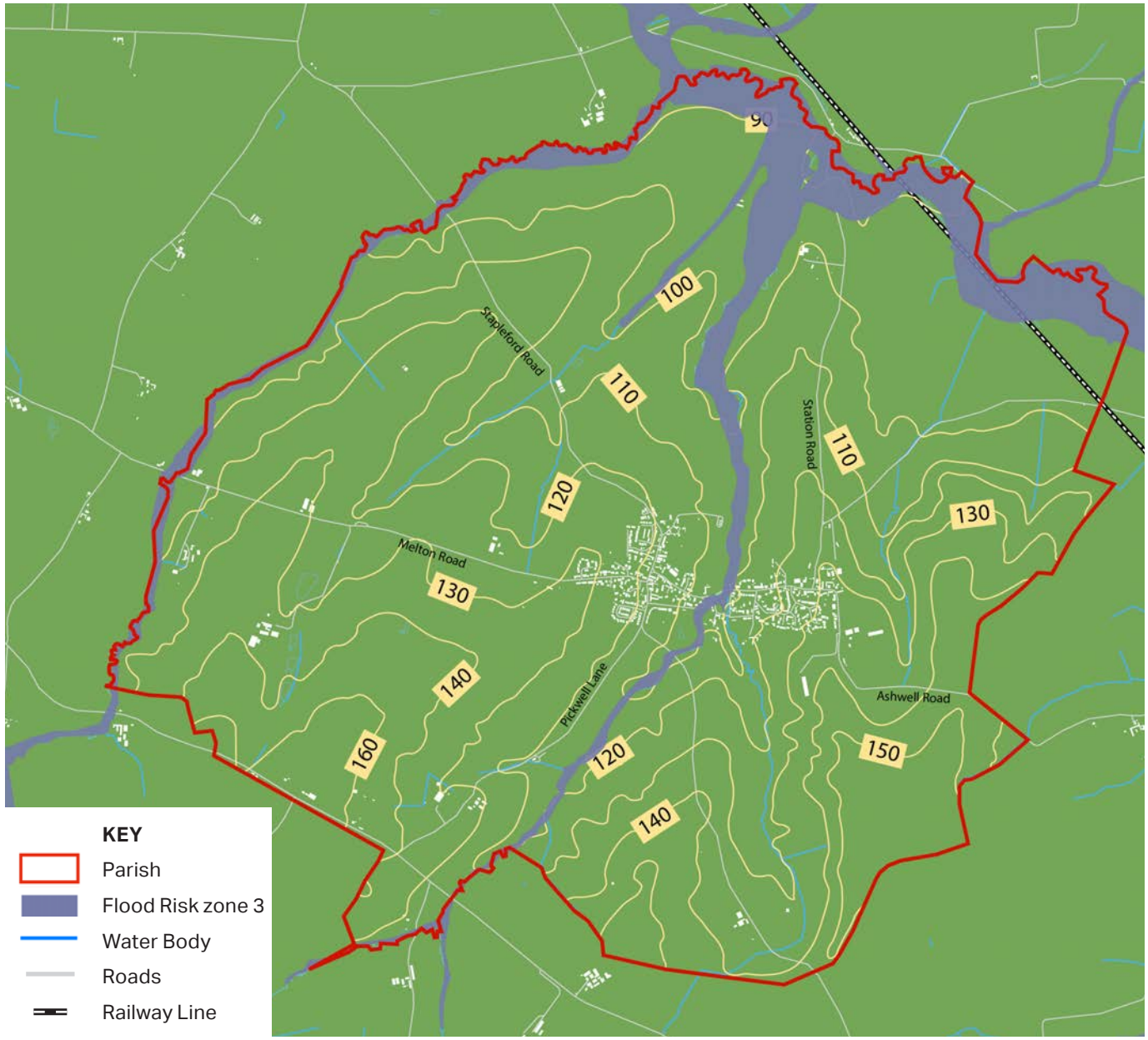


Figure 06: Flood Risk Mapping for Whissendine Parish

2.6 Topography and views

The village is sited on two hills and stretches through the valley in between. As a result of this, in distant views the village looks like two settlements with St Andrew's Church tower to the East and the Windmill to the West. As well as this, views from a distance show that the village has good tree cover from within.

The latter is particularly striking from the bottom of Main Street. The residents of village have outlined in the Whissendine Design Statement that any new development over 2 storeys would detract from the pleasing tree filled skyline and impede views of the Windmill and Church.

View 1 - View from Stapleford Road across the open fields with the top of St Andrew's Church Tower visible

View 2 - View from Pickwell Lane showing the soft transition of the built form to the open countryside, with the two main visual landmarks (The Windmill and St Andrew's Church) clearly visible.

View 3 - View from Station Rd across the open fields showing the village surrounded by trees which help the transition from the Village to the countryside. The Windmill is visible in the background.

View 4 - View from St Andrew's Church showing the continuation of the historic built form on Main Street

View 5 - View on the Main Street towards St Andrew's Church showing a pleasing tree-filled skyline and a constat building line

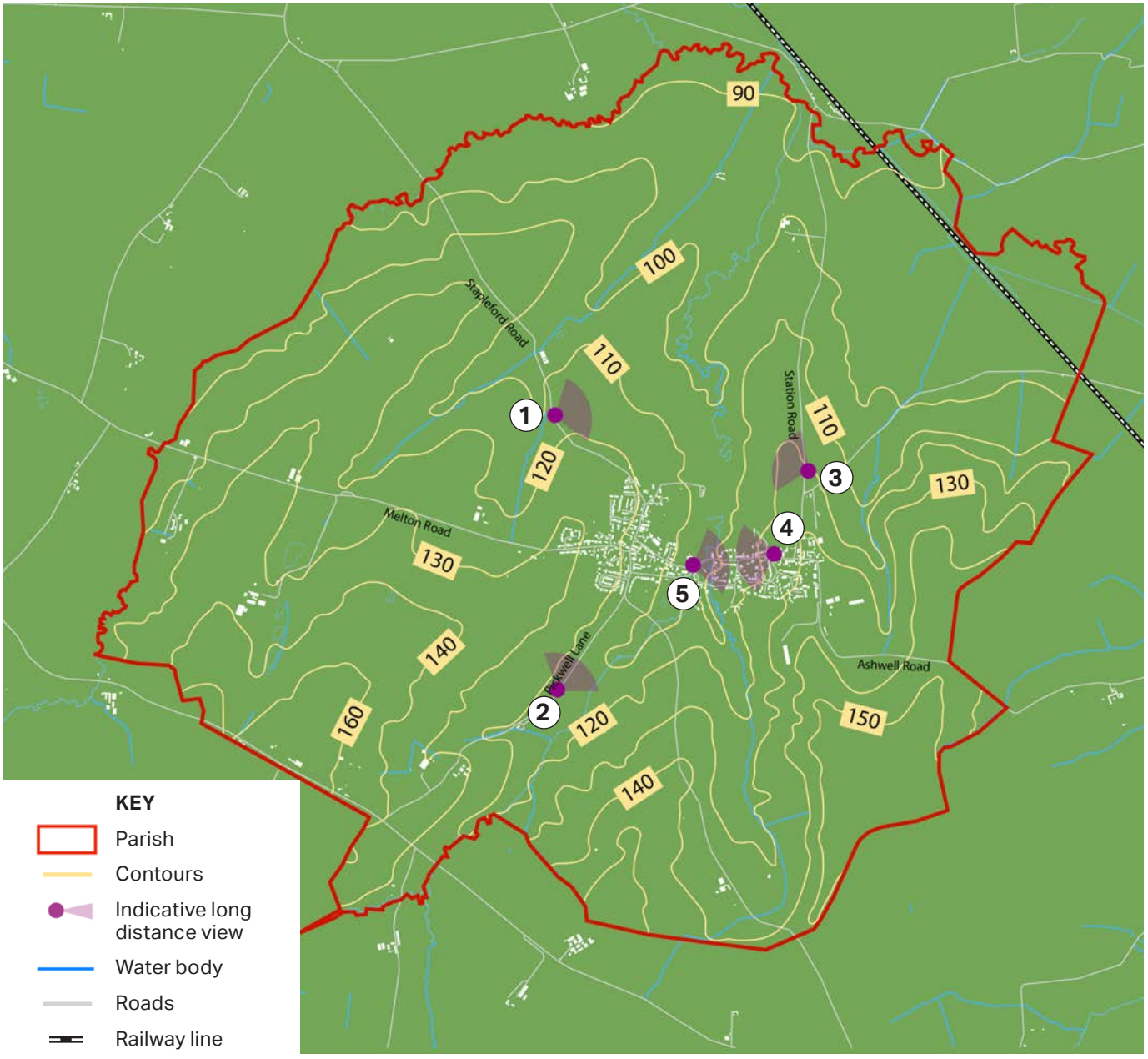


Figure 07: Topography and views map of Whissendine

Design guidelines & codes

03

3. Design guidelines and codes

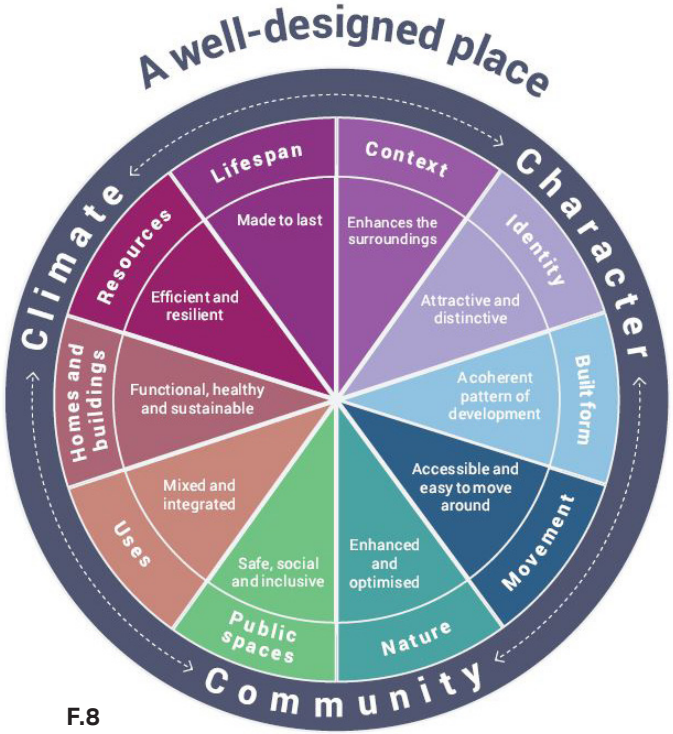
This chapter provides guidance on the design of development, setting out the expectations that applicants for planning permission in the Parish will be expected to follow.

3.1 Place making

What urban designers and planners call 'placemaking' is about creating the physical conditions that residents and users find attractive and safe, with good levels of social interaction and layouts that are easily understood.

The placemaking principles set out in the following pages should be used to assess the design quality of future development or regeneration proposals.

These key principles should be considered in all cases of future development as they reflect positive place-making and draw on the principles set out in many national urban design best practice documents.



F.8

Figure 08: The 10 characteristics of well-designed places. (Source: National Design Guide, page 8).

3.2 General principles and guidelines

The design guidelines and codes, with reference to Whissendine Neighbourhood Areas, will follow a brief introduction of the general design principles.

The guidelines and codes developed in the document focus on residential environments including new housing development in Whissendine.

In any case, considerations of design and layout must be informed by the wider context, considering not only the immediate neighbouring buildings, but also the landscape and rural character of the wider locality. The local pattern of streets and spaces, building traditions, materials and natural environment should all help to determine the character and identity of a development.

It is important that full account is taken of the local context and that the new design embodies the 'sense of place' and also meets the aspirations of people already living in that area. Therefore, some design principles that should be present in any design proposal are:

- Respect the existing pattern of the village and the surrounding hamlets to preserve the local character;
- Respect the heritage, landscape and key views, if any, identified in the Parish;
- Aim for high quality design that reflects and respects the local vernacular;
- Integrate with existing paths, streets, circulation networks and reinforce or enhance the established character of streets, greens and other spaces;
- Harmonise and enhance existing village and hamlets in terms of physical form, architecture and land use;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Incorporate necessary services and enhance infrastructure without causing unacceptable harm to retained features; and
- Aim for innovative design and eco-friendly buildings while respecting the architectural heritage and tradition of the area.

3.3 Whissendine design guidelines and codes

This section introduces a set of design principles that are specific to Whissendine. These are based on:

- Baseline analysis of the area in Chapter 2;
- Understanding national design documents such as National Design Guide, National Model Design Code and Building for Healthy Life 12 documents which informed the principles and design codes; and
- Discussion with members of the Neighbourhood Plan Steering Group informed by their engagement with the wider community.

The codes are divided into **5 sections**, shown on the next two pages, each one with a different number of subsections. Each section and subsection is numbered (e.g DC.01) to facilitate its reading and consultation.

Design Codes for Whissendine village

Theme	Code	Title
DC.01 In keeping with local character	1	Heritage, views and landmarks
	2	Development affecting heritage assets
	3	Set in rural landscape/ development edges
	4	Patterns of growth within the rural landscape
	5	Infill development and building extensions
DC.02 Access and movement	6	Accessible and attractive footpath network / access to the countryside
	7	Prioritise walking and cycling
	8	People friendly streets
	9	Parking and servicing
	10	Cycle parking
DC.03 Landscape, nature and open space	11	Create a green network
	12	Biodiversity
	13	Water management
	14	Trees
	15	Open spaces

Theme	Code	Title
DC.04 Built form	16	Development layout
	17	Building heights
	18	Density
	19	Housing mix
	20	Continuity and enclosure
	21	Legibility and wayfinding
	22	Boundary lines, boundary treatment & corner treatment
	23	Views and vistas
	24	Materials and architectural details
	25	Windows
	26	Door
	27	Chimneys
	28	Roofscape
	29	Hard landscaping, materials and street furniture
DC.05 Sustainability	30	Minimising energy use
	31	Lifetime and adaptability
	32	Minimising construction waste
	33	Recycling materials and buildings
	34	Electric vehicle charging points
	35	Storage and slow release
	36	Permeable paving

Design Codes for Whissendine

Code.1 Heritage, views and landmarks

Whissendine Parish has a rich heritage in terms of historic buildings and structures, landscape, views and landscape features. Any new development needs to respect the historic built form and stimulate ways in which heritage assets could be further promoted and protected. Design guidelines include:

- Continuation of the historic built form on Main Street; buildings should be modest in scale and front directly onto the pavement or be set back behind narrow courts with low boundary walls.
- Retention of countryside views which contribute to historic rural character. Development density should allow for open spaces between buildings to preserve views of countryside setting and maintain the perceived openness of the hamlet.
- Enable open views and vistas to landmark assets such as The Windmill and St Andrew's Church, by protecting gaps in the built form from infill development.

Figure 09: Buildings fronting directly onto the pavement.

Figure 10: Modest scale buildings set back behind narrow courts with low boundary walls.

Figure 11: Continuation of the historic built form on Main Street

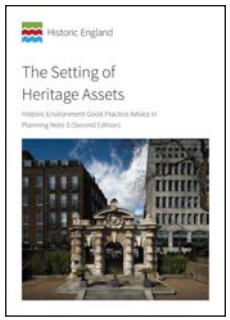
Figure 12: Open view of The Windmill, in Melton road.

Figure 13: Open view of St Andrew's Church.

Code.2 Development affecting heritage assets

Step 1. Identify heritage assets and the effect on their setting

All developments should identify and consider heritage assets and their settings within the initial design stage. Both built heritage and archaeological assets have a setting. The setting of a heritage asset is considered to be 'the surroundings in which a heritage asset is experienced'. In the case of landmark assets such as the Windmill and St Andrew's Church, the setting of the asset is extensive and includes the visual relationship with the Parish.



The Setting of Heritage Assets. Historic Environment: Good Practice Advice in Planning.

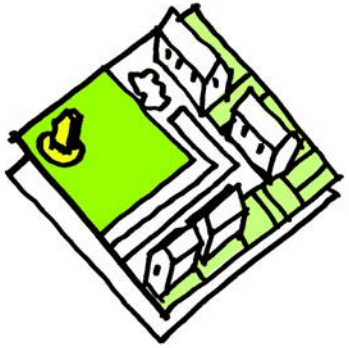
Historic England

2017

The codes in this section have been elaborated following the guidance on the The Setting of Heritage Assets. Historic Environment Good Practice Advice in Planning. Note 3 (Second Edition)

Local authority involvement

At pre-application stage, it is advisable to inquire the local authority so it can indicate whether it considers that a proposed development has the potential to affect the setting of a heritage asset. The local authority can specify an 'area of search' around the proposed development within which it is reasonable to consider setting effects

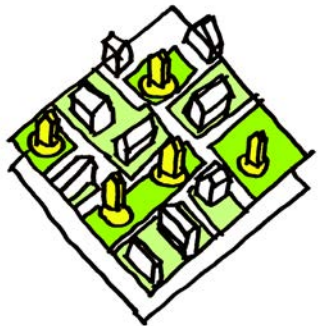


Immediate surroundings

For developments that are not likely to be prominent or intrusive, the assessment of effects on setting may often be limited to the immediate surroundings, while taking account of the possibility that setting may change as a result of the removal of impermanent landscape or townscape features

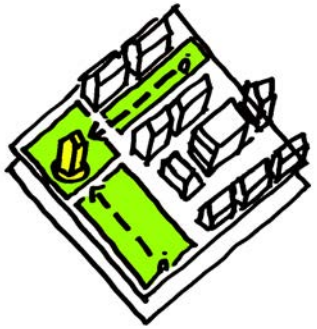
Assessment of large developments

The area of assessment for a large or prominent development can often extend for a distance of several kilometres. In these circumstances, while a proposed development may affect the setting of numerous heritage assets, it is advisable that local planning authorities work with applicants in order to minimise the need for detailed analysis



Large number of heritage assets

Where assessments of large numbers of heritage assets are required, Historic England recommends that local planning authorities give consideration to the practicalities of gathering and representing community interests and opinions on changes affecting settings



Viewing points

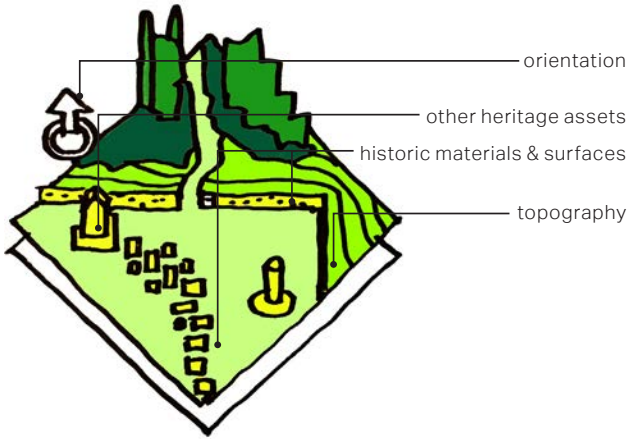
Where the development proposal affects views that affect the significance of an asset to be appreciated, it is often necessary to identify viewing points for assessment. An explanation why a particular viewing point has been selected will be needed

Step 2. Assess the role of settings in significance of heritage assets

The second stage in analysing the potential impact of development on heritage assets is to understand how setting contributes to the significance of the asset. In the example of St Andrew's Church, the wider setting of the Parish is of central importance in understanding the assets historic administrative and religious functions, as well as providing a context to appreciate the asset for its architectural status and prominence in the landscape.

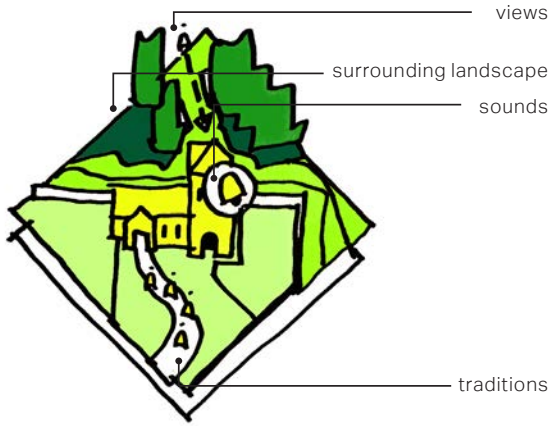
The following aspects should be considered:

- The physical surroundings of the asset, including its relationship with other heritage assets;
- The asset's intangible associations with its surroundings, and patterns of use;
- The contribution made by noises, smells, etc to the significance of the asset; and
- Consider the way views allow the significance of the asset to be appreciated.



Physical surroundings of the asset

- Topography
- Other heritage assets (including buildings, structures, landscapes, areas or archaeological remains)
- Definition, scale and 'grain' of surrounding streetscape, landscape and spaces
- Formal design eg hierarchy, layout
- Orientation and aspect
- Historic materials and surfaces
- Green space, trees and vegetation
- Openness, enclosure and boundaries
- Functional relationships and communications
- History and degree of change over time



Experience of the asset

- Surrounding landscape or townscape character
- Views from, towards, through, across and including the asset
- Intentional intervisibility with other historic and natural features
- Visual dominance, prominence or role as focal point
- Noise, vibration and other nuisances
- Tranquillity, remoteness, 'wildness'
- Busyness, bustle, movement and activity
- Scents and smells
- Diurnal changes
- Sense of enclosure, seclusion, intimacy or privacy
- Land use
- Accessibility, permeability and patterns of movement
- Degree of interpretation or promotion to the public
- Rarity of comparable survivals of setting
- Cultural associations
- Celebrated artistic representations / traditions

Step 3. Assess the potential effects of the development on the significance of the heritage asset

In assessing the effects of a development, the following should be addressed:

- Location of the site of proposed development in relation to the asset
- Form and appearance of the proposed development
- Permanence of the development in the landscape.

Location and sitting of development

- Proximity to asset
- Position in relation to relevant topography and watercourses
- Position in relation to key views to, from and across
- Orientation
- Degree to which location will physically or visually isolate the asset

Wider effects of development

- Change to built surroundings and spaces
- Change to skyline, silhouette
- Noise, odour, vibration, dust, etc
- Lighting effects and 'light spill'
- Change to general character (i.e: urbanising or industrialising)
- Changes to public access, use or amenity
- Changes to land use, land cover, tree cover
- Changes to communications/accessibility/permeability, including traffic, road junctions and car-parking, etc
- Changes to ownership arrangements (fragmentation/ permitted development/etc)
- Economic viability

Form and appearance of development

- Prominence, dominance, or conspicuousness
- Competition with or distraction from the asset
- Dimensions, scale and massing
- Proportions
- Visual permeability (extent to which it can be seen through)
- Materials (texture, colour, reflectiveness, etc)
- Architectural and landscape style and/or design
- Introduction of movement or activity
- Diurnal or seasonal change

Permanence of development

- Anticipated lifetime/temporariness
- Recurrence
- Reversibility

Step 4. Maximise benefits and minimise harm to the heritage asset

In order to maximise the benefits and minimise potential harm experienced by heritage assets and their settings, the potential effects of development need to be considered from the project's outset. Opportunities to maximise benefit include:

- Removing or re-modelling intrusive buildings or features;
- Replacement of a detrimental feature with a new and more harmonious one;
- Restoring or revealing a lost historic feature or view;
- Introducing a wholly new feature that adds to the public appreciation of the asset;
- Introducing new views and vistas that add to the public experience of the asset;
- Improving public access and interpretation of the asset and setting.

Measures to reduce harm include:

- Repositioning of the development;
- Changes to design;
- Creation of effective visual or acoustic screening;

Reduction of harm and maximisation of benefits can be secured by stipulations in planning conditions or legal agreements.

Design quality is an important consideration in determining the balance of harm and benefit. Where attributes of a development affect setting and cause some harm to significance cannot be adjusted, screening may be used to reduce intrusion. However, any proposed screening must be sensitively designed in harmony with the setting so that it mitigates impact rather than amplifying the effect of the development. Screening ought never to be regarded as a substitute for well-designed developments within the setting of heritage assets.

Code.3 Set in rural landscape/ development edges

Whissendine Parish has a strong rural landscape which should not be undermined by new development. Some design guidelines on how new development should treat development edges are:

- Development adjoining public open spaces and important gaps should either face onto them to improve natural surveillance or have a soft landscaped edge;
- New development should conserve existing native trees and shrubs along the lanes as well as incorporating any green asset within design.
- Abrupt edges to development with little vegetation or landscape on the edge of the development should be avoided;
- Ensure that small and isolated woodlands in the parish are linked to larger green areas nearby to protect connectivity of habitats and biodiversity;
- Landscape schemes should be designed and integrated with the open fields to avoid coalescence with other neighbouring settlements; and
- Edges must be designed to link rather than segregate existing and new neighbourhoods. Green corridors can provide additional pedestrian and cycle links that will contribute to the successful integration with the Parish.

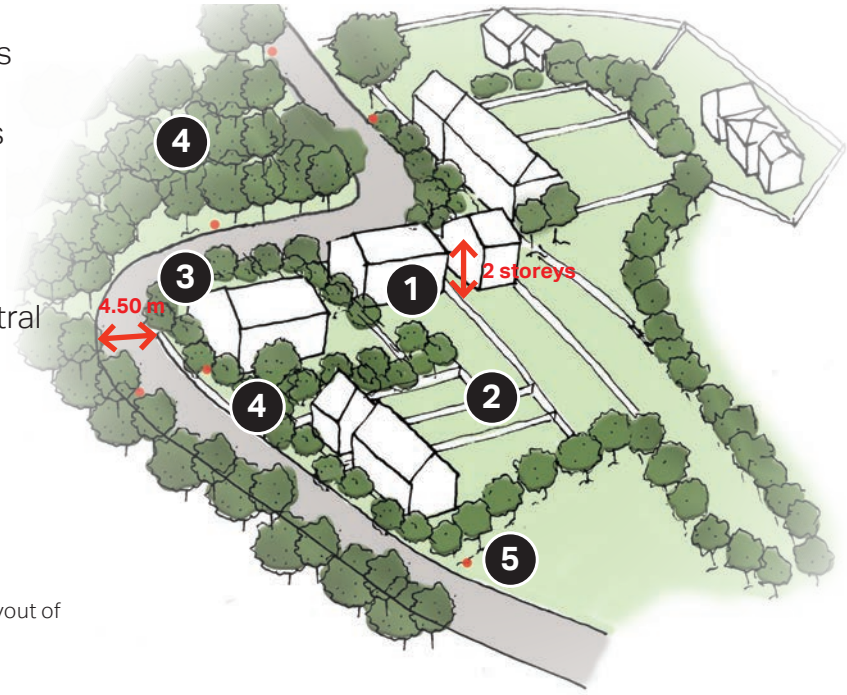
Figure 14: Example of an edge lane, where buildings front the landscaped area, Ashwell Road, Whissendine.

Figure 15: The rural character of Stapleford Road offers a gradual transition from the urban environment to the rural countryside.

Code.4 Patterns of growth within the rural landscape

The Parish owes much of its character to the historic pattern and layout of the roads and buildings as well as its close relationship with the surrounding countryside.
Some design guidelines for small scale development within Whissendine village are:

- New development should preserve the landscape setting of Whissendine village and the transition between the settlement fringe and the open countryside;
- New development in close proximity to designated and non-designated heritage assets must propose green screenings to mitigate any unpleasant visual impact, while also preserving key views;
- New development must demonstrate a good understanding of the scale, building orientation and enclosure of the surrounding built environment (no.1);
- Development densities should reflect the character of the village;
- The size of plots and their pattern should be varied to contribute to the rural character (no.2);
- New development should create a diversified building line to shape short and long-distance views (no.3);
- Any proposal that would adversely affect the physical appearance of a rural lane, or give rise to an unacceptable increase in the amount of traffic, noise, or disturbance must be avoided.
- Existing hedges, hedgerows and trees should be integrated into design, whilst more planting and vegetation is encouraged to form part of the green network strategy (no.4); and
- Appropriate signage should be incorporated along the road or in central 'village greens' to indicate the low speed limits or provide navigation (no.5).
- The layout of any new development should have affordable homes integrated with private dwellings to reflect existing dwellings in the village and promote a sense of community.



F.16

Figure 16: Illustrative plan for a rural edge development highlighting design elements, related to the pattern and layout of buildings.

Code.5 Infill development and building extensions

Infill development is generally accepted within the Parish, because it helps preserve the pattern of growth and building lines. However, proposed designs should be appropriate and sensitive to the rural setting and therefore, some design guidelines are needed and presented below:

- Infill development should complement the street scene into which it will be inserted. It needs to reflect the materials, scale, massing and layout of the surrounding properties;
- The above elements also need to be considered in relation to topography, views, vistas and landmarks.
- New building lines should be reasonably consistent along a street with existing buildings.

Figure 17: Positive example of infill development in Whissendine village that fits nicely into the local context in terms of scale, massing, architectural styles and details.

Figure 18: Positive examples of infill development in Whissendine village that complement the local context through the use of local architectural styles, scale and massing, physical boundary treatments.

Extensions to dwellings can have a significant impact not only on the character and appearance of the building, but also on the street scene within which it sits.

A well-designed extension should enhance the appearance of its street, whereas an unsympathetic extension can create problems for neighbouring residents and affect the overall character of the area. Therefore, some design guidelines on housing extensions are needed and presented below:

Side extensions

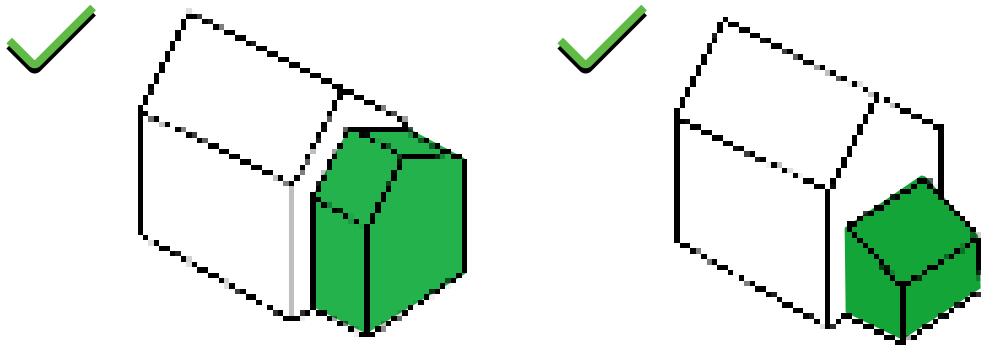
- Side extensions should not detract from the appearance of the building, its surroundings and the wider rural setting;
- Single-storey and double storey side extensions should be set back from the main building and complement the materials and detailing of the original building;
- The roof of the extension should harmonise with that of the original building; flat roofs should be avoided; and
- Side windows should also be avoided unless it can be demonstrated that they would not result in overlooking of neighbouring properties.

Rear extensions

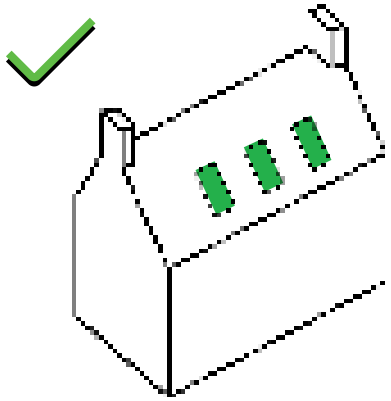
- The extension should be set below any first-floor windows and designed to minimise any effects of neighbouring properties, such as blocking day light; and
- A flat roof is generally acceptable for a single storey rear extension.

Figure 19: Positive example of side extension, Whissendine

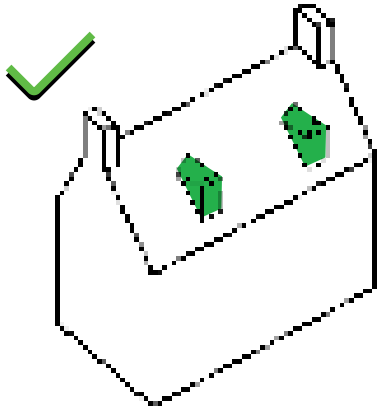
Figure 20: Positive example of side extension, The Nook



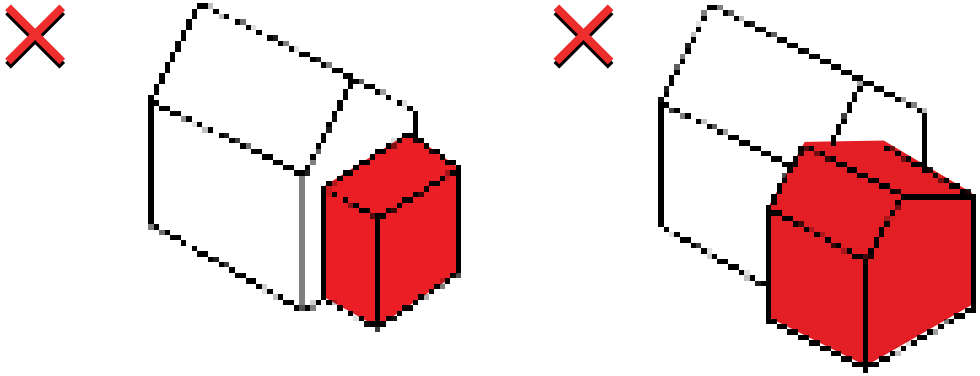
Good examples for side extensions, respecting existing building scale, massing and building line.



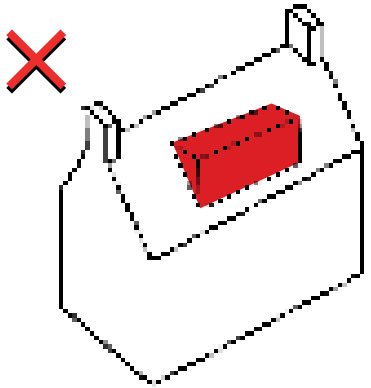
Loft conversion incorporating skylights.



Loft conversion incorporating gabled dormers.



Both extensions present a negative approach when considering how it fits to the existing buildings. Major issues regarding roofline and building line.



Loft conversion incorporating a long shed dormer which is out of scale with the original building.

Code.6 Accessible and attractive footpath network/ access to the countryside

There is a number of footpaths within Whissendine which link the village to the surrounding countryside, while also providing scenic walks. Footpaths allow people to get closer to nature, enjoy a tranquil environment and do physical exercise by walking. Therefore, protection, improvement and design of new footpaths should be considered in new developments and some design guidelines are:

- Where possible, newly developed areas must retain or provide direct and attractive footpaths between neighbouring streets and local facilities. Establishing a robust pedestrian network across new developments and among new and existing development is key in achieving good levels of connectivity and promoting walking and cycling;
- Where possible, new proposed footpaths should link up green spaces and woodlands to create a network of green walking routes and promote biodiversity.
- Design features such as gates or barriers to footpaths must be kept at a minimum and the latter must be avoided;
- Strategically placed signposts can assist pedestrians and cyclists with orientation and increase awareness of publicly accessible paths beyond the parish. However, new signposts must respect the rural character of the parish and avoid creating visual clutter; and
- Footpath network needs to be in place before first occupation of houses on the site.

F.21

Figure 21: Signage to indicating the footpath within the Village

F.22

Figure 22: Appropriate signage to indicate the footpath/cycle lane within a rural landscape, elsewhere in UK.

Code.7 Prioritise walking and cycling

New developments should introduce well connected and attractive pedestrian and cycling routes to encourage residents to walk and cycle. Some guidelines for future development are:

- Varied links should be enabled and created to favour pedestrian and cycle movement. These routes should be always overlooked by properties to create natural surveillance and offer good sightlines and unrestricted views to make people feel safer;
- Design features such as barriers to vehicle movement, gates to new developments, or footpaths between high fences must be avoided; and
- All newly developed areas must provide direct and attractive footpaths between neighbouring streets and local facilities. Streets must be designed to prioritise the needs of pedestrians and cyclists.

Figure 23: Edge of a settlement fronting a landscaped area, with footpaths/cycle lanes, grass areas, street furniture and trees, encouraging walking and cycling, elsewhere in UK.

Figure 24: Footpath integrated within residential development offering alternative walking and cycling routes to people, Great Kneighton, Cambridge.

Figure 25: Example of a green link (source: https://www.sustrans.org.uk/our-blog/opinion/2020/august/how-does-the-uk-government-s-gear-change-relate-to-the-national-cycle-network).

Code.8 People-friendly streets

It is essential that the design of new development includes streets and junctions that incorporate the needs of pedestrians and cyclists. Some guidelines for future development are:

- Streets must meet the technical highways requirements, as well as being considered a 'place' to be used by all. It is essential that the design of new development includes streets and junctions that incorporate the needs of pedestrians and cyclists;
- Within the development boundaries, streets should not be built to maximise vehicle speed or capacity. A range of traffic calming measures could be introduced by design;
- New streets should be linear with gentle meandering, while also providing evolving views to the surrounding countryside;
- Routes should be laid out in a permeable pattern, allowing for multiple choices of routes, particularly on foot. Any cul-de-sacs should be relatively short and provide onward pedestrian links;
- Streets must respect the existing vegetation, while also incorporating new opportunities for landscaping, green infrastructure, and sustainable drainage; and
- Any new development should provide well-connected streets of varied character. A legible street hierarchy should include primary, secondary, tertiary roads and edge lanes. The next pages present illustrations examples of those street typologies.

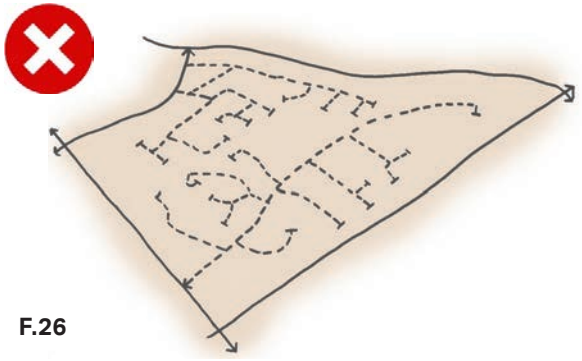


Figure 26: A layout dominated by cul-de-sacs encourages reliance on the car for even local journeys.

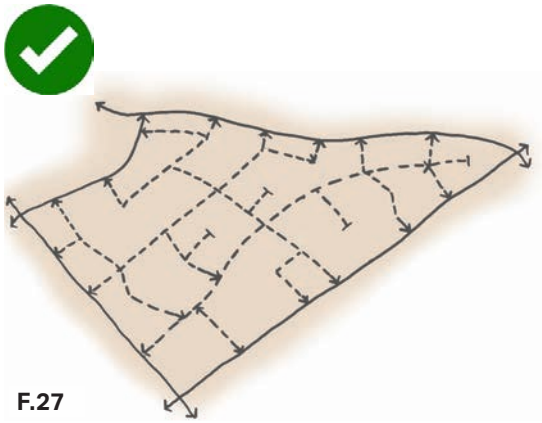


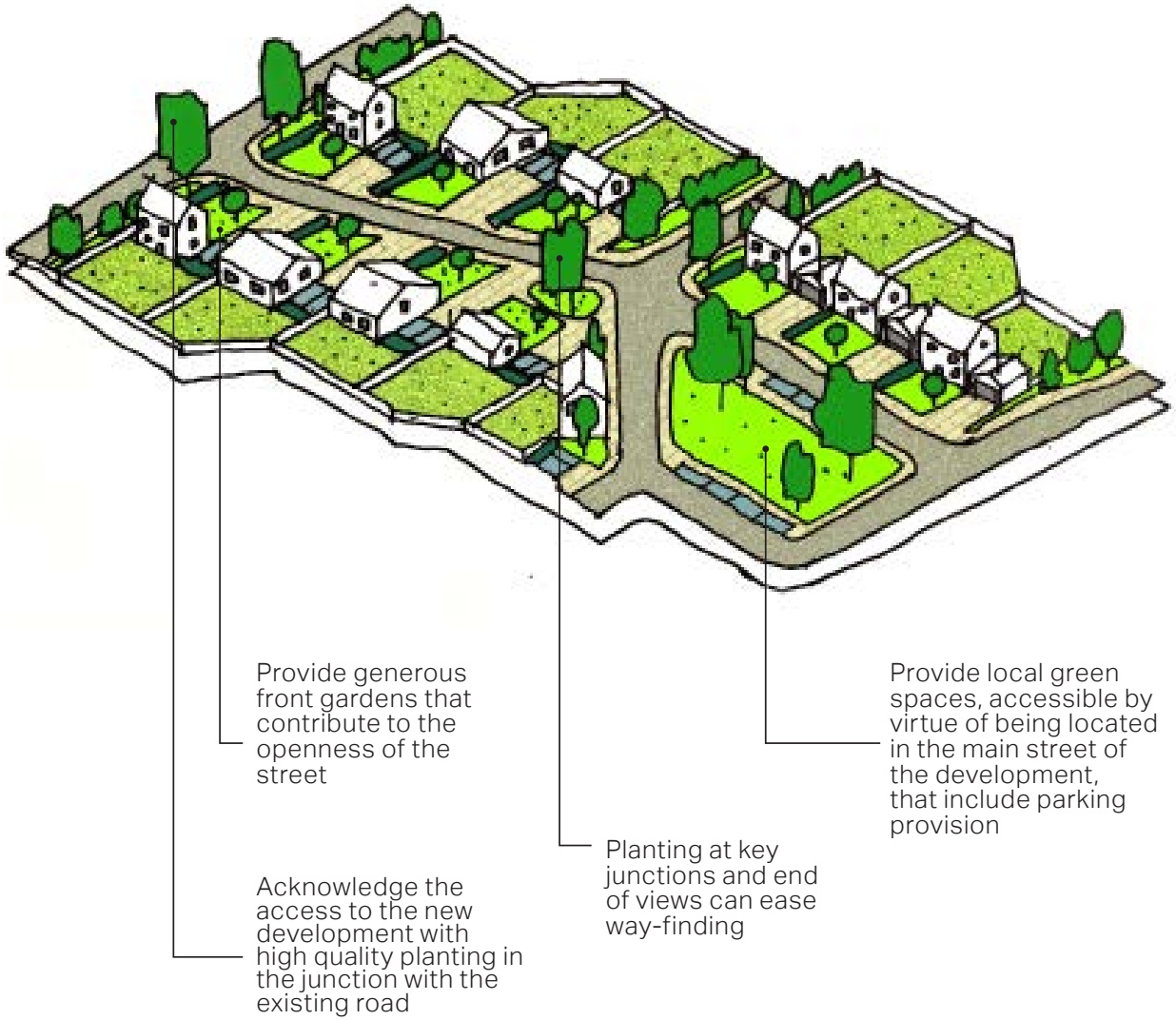
Figure 27: A connected layout, with some cul-de-sacs, balances sustainability and security aims in a walkable neighbourhood.

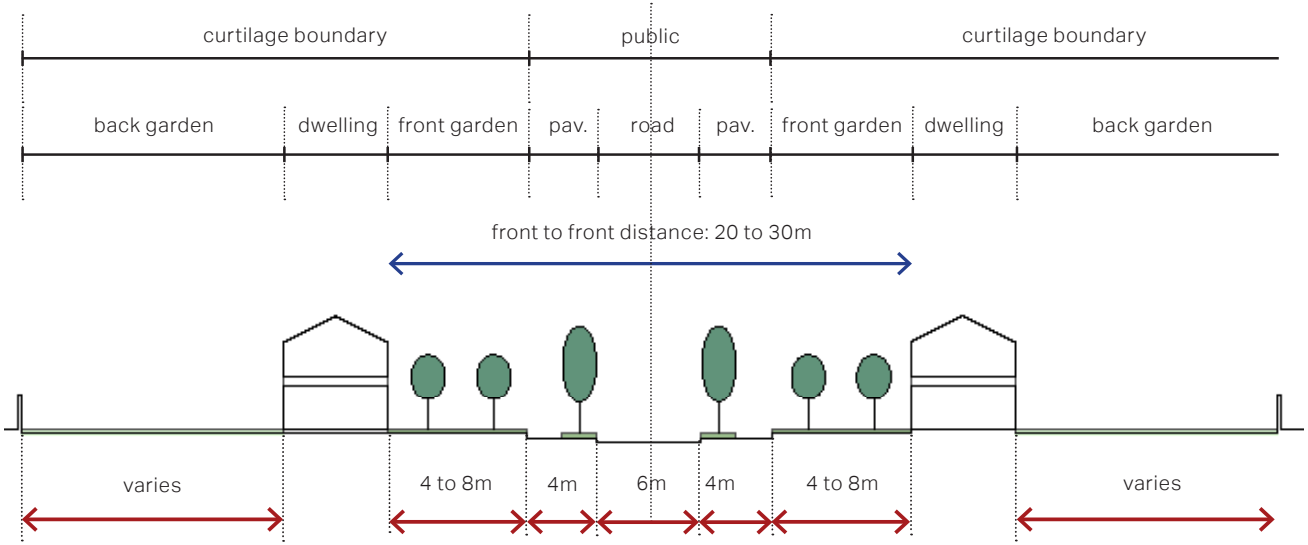
Access street

This street provides the main access spine of an area or a new development. It connects the development to the rest of the settlement.

Main features:

- Provide generous front gardens and street planting that contribute to the general feeling of openness.
- Locate parking to the side of properties and consider using garages to mitigate the impact of cars on the streetscape.
- Main street serves as the access to the new development and that can be acknowledged by providing planting in the junction with the existing road. Buildings in the access and ending can have special features to provide interest to the main spine.
- Local open spaces can ease way-finding as planting in corners, intersections with other streets and end of views, but also as separate open spaces in their own right. Provide those local green spaces, that are made accessible by being on the main structuring spine of the development.





Sherrard Close. Example of a local access street

Access street dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on the main access street.

- Building height: maximum building height is 2 levels + pitch roof.
- Pavements: a generally acceptable width of pavements is 2m. An additional 2m is provided for street planting if required.
- Front gardens: minimum depth of front gardens is 8m. Tree planting is encouraged.
- Back gardens: minimum depth of back gardens is 15m.
- Front-to-front distance: the resulting street corridor width is in the range of 30m, contributing to the openness of the streetscape.

Examples

Sherrard Close, to the left, is a local example of an access street.

Residential street

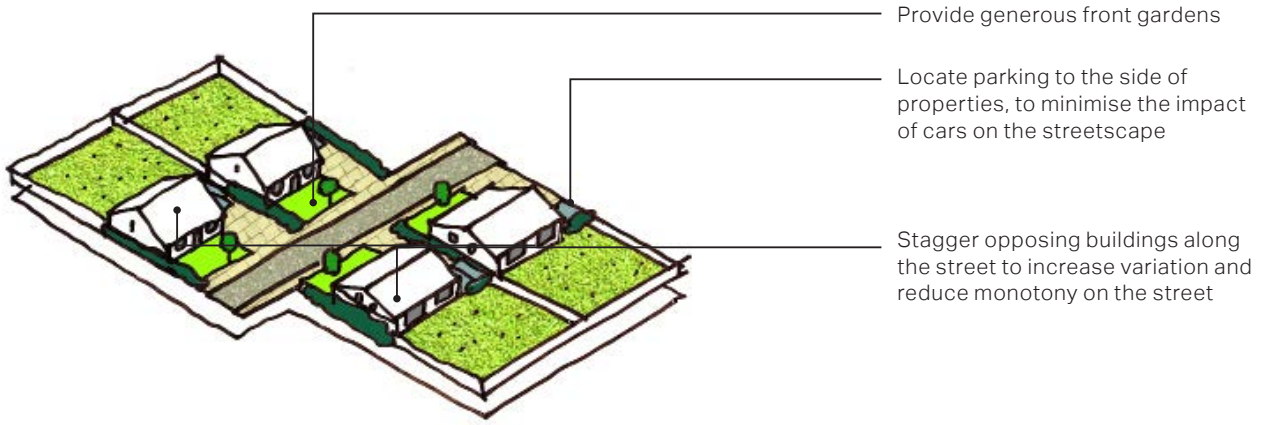
Main features:

- Provide generous front gardens that contribute to the general feeling of openness.
- Locate parking to the side of the property to mitigate the impact of cars on the streetscape.
- Residential streets branch out from the main street, it is good practice to stager branching streets organically to avoid excessive long views.
- It is also advisable to stagger opposing buildings along the street so they are not directly facing each other, and therefore reduce the monotony along the streetscape.

Cul-de-sac street

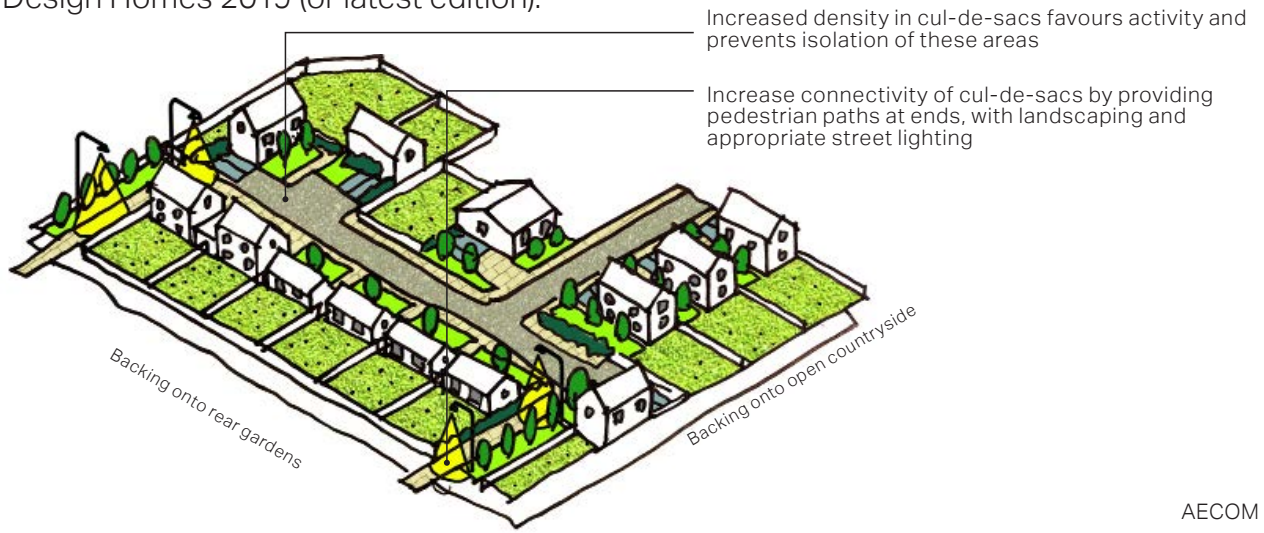
Main features:

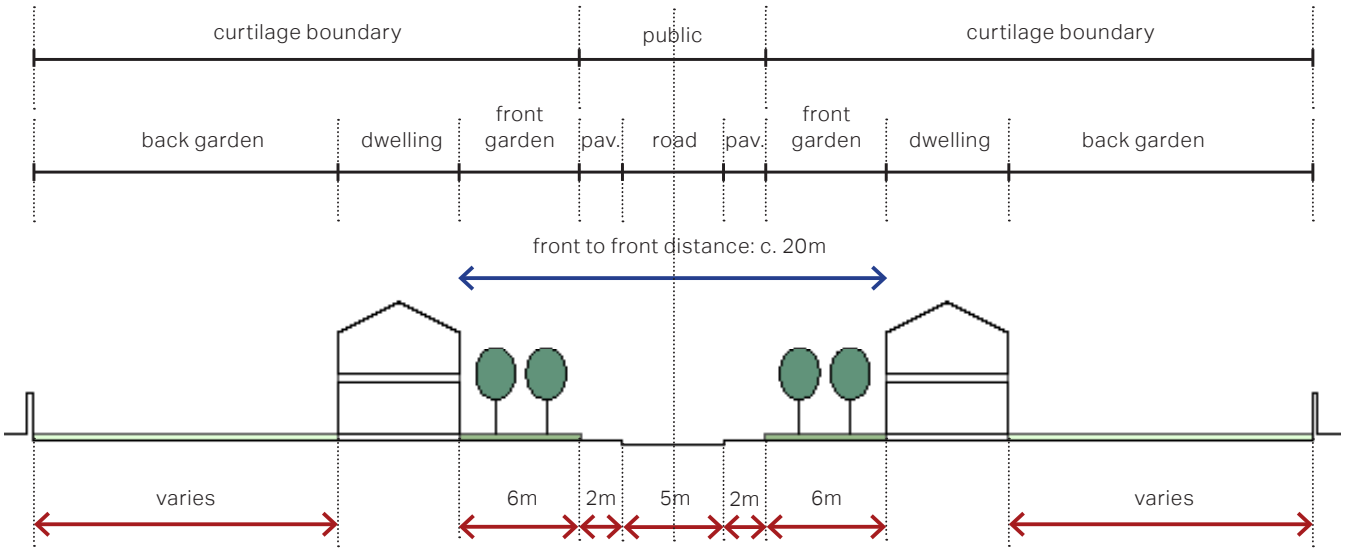
- It is generally acceptable to increase the density and decrease the spacing of buildings in cul-de-sacs to favour activity and prevent them from becoming isolated, parking can be at the front of properties in this case. Garages separate from dwellings are not acceptable and neither are parking courtyards.



- Cul-de-sacs should have pedestrian paths that connect them to surrounding areas and increase their connectivity access and overlooking. Careful consideration should be given to the landscaping and lighting of these paths to increase their safety. Follow Secure by Design principles included in Secure by Design Homes 2019 (or latest edition).

- Cul-de-sacs are typically backing onto the open land in the area. This is generally not advisable. It is generally advisable to back onto gardens of other properties. A side dwelling typology is suggested here as an alternative when properties back onto the open countryside. It provides distant views to the open land..





Harborough Close. Example of a local residential street

Residential street key dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on both residential and cul-de-sac streets.

- Building height: maximum building height is 2 levels + pitch roof.
- Pavements: a generally acceptable width of pavements is 2m. An additional 2m is provided for street planting if required.
- Front gardens: minimum depth of front gardens is 6m. Tree planting is encouraged.
- Back gardens: minimum depth of back gardens is 12m.
- Front-to-front distance: the resulting street corridor width is in the range of 20m, contributing to the general openness of the streetscape.

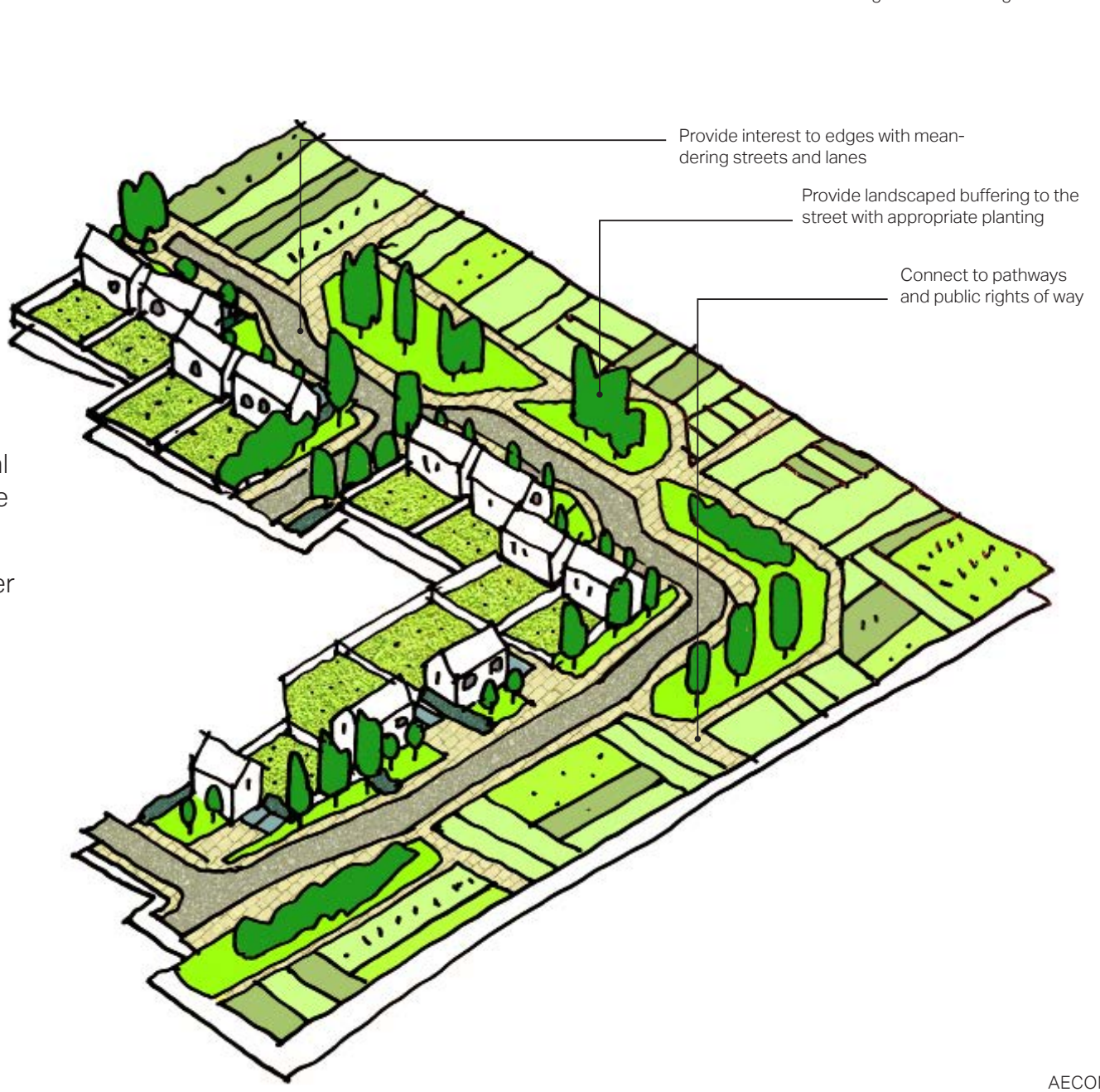
Examples

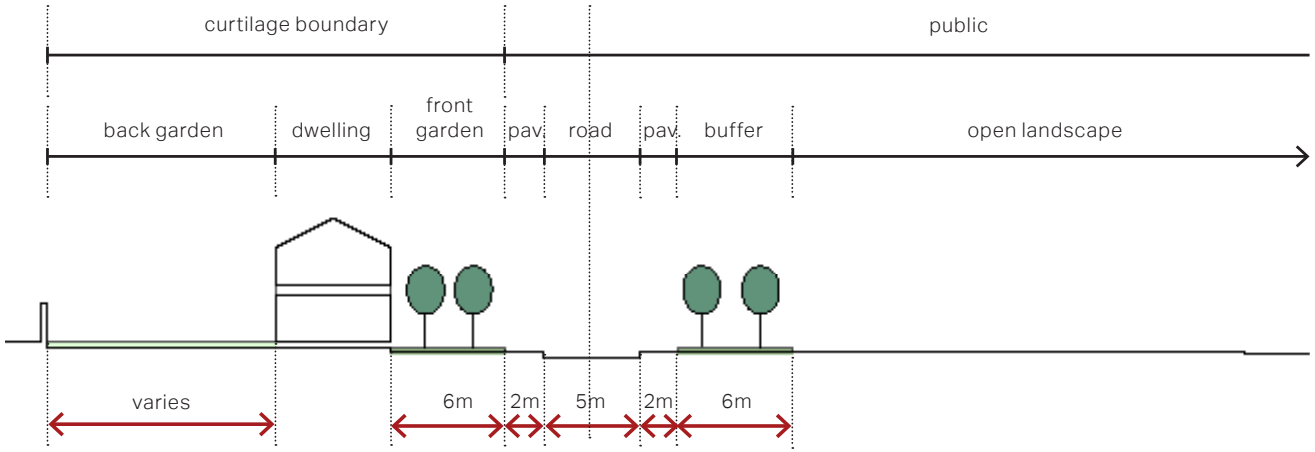
Harborough Close, to the left, is a local example of residential street that is well overlooked and includes some landscape.

Edge lane

Main features:

- Edge lanes are a suitable way of fronting the surrounding countryside making it accessible to most users.
- These streets can have gentle meandering, providing interest and evolving views while helping with orientation.
- Carefully consider landscaping as a buffer between development and the open countryside. This buffer future proofs the development against potential development that might front to the edge lane in the future.
- Connect the edge lane to paths and other public rights of way.





Ashwell Road. Example of a local access street

Edge lane key dimensions

The nominal dimensions on the diagrams to the left are a guidance on the key elements and proportions to be provided on the main access street.

- Building height: maximum building height is 2 levels + pitch roof.
- Pavements: a generally acceptable width of pavements is 2m.
- Front gardens: minimum width of front gardens is 6m. Tree planting is encouraged.
- Back gardens: minimum width of back gardens is 12m.
- Buffer landscaping: this buffer guarantees separation from the open countryside, and from potential new developments that might come forward beyond the boundary of the current site. A minimum buffer distance of 6m is represented in this diagram.

Examples

Ashwell Road, to the left, is a local example of an edge lane connected to the surrounding via pathways and landscape.

Code.9 Parking and servicing

The demand for private cars within the Village still remains high, at the time of writing, and therefore car parking has to be carefully integrated into the design.

The car parking typologies found in the Parish are mainly on-plot parking; however, there are also cases of on-plot garage parking and on-street parking.

Therefore, the design guidelines one the next pages will focus on the above mentioned typologies.

Guidelines for on-plot or on front car parking

- Parking should be well integrated into design so as not to dominate the public realm;
- High-quality and well-designed soft landscaping, hedges, hedgerows, and trees, should be used to increase the visual attractiveness of the parking and enhance the rural character of the Parish; and
- Hard standing and driveways must be constructed from porous materials, to minimise surface water run-off and therefore, help mitigate potential flooding.

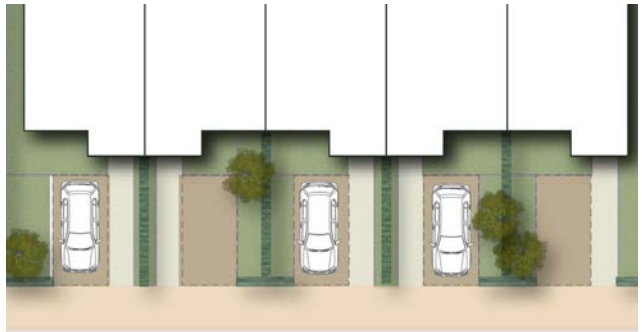


Figure 28: Illustrative diagram showing an indicative layout of on-plot front parking.

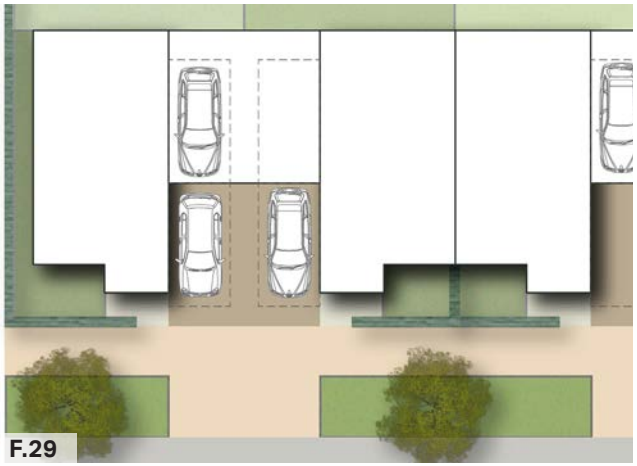


Figure 29: Illustrative diagram showing an indicative layout of on-plot side parking.

Guidelines for on-street car parking

- The streetscape should not be dominated by continuous on-street parking spaces. Where possible, tree planting and grass areas can be incorporated between parking bays to improve aesthetics;
- On-street parking can be parallel, perpendicular, or echelon in relation with the traffic speed and the traffic volume;
- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists and other vehicles; and
- On-street parking should be wired to allow each bay to be able to charge electric vehicles.

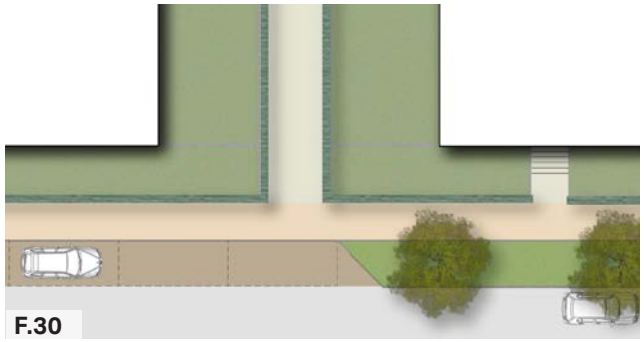


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Figure 30: Illustrative diagram showing an indicative layout of on-street inset parking.

F.31

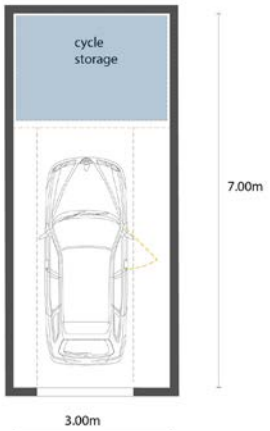
Figure 31: Example of on-street parking with parking bays and street trees to mitigate the impact of the cars on the streetscape, Poundbury.

F.32

Figure 32: Example of on-plot garage parking, Whissendine.

Guidelines for garages

- Garages must not dominate the appearance of dwellings and must not reduce the amount of active frontage to the street; and
- They should provide minimum 3m x 7m internal space to park a car and provide space for storage to avoid the garage to be used for storage purposes only.



F.33

Figure 33: Indicative layout of a garage with a cycle storage area.

Code.10 Cycle parking

Houses without garages

- For residential units, where there is no on-plot garage, covered and secured cycle parking should be provided within the domestic curtilage;
- Cycle storage must be provided at a convenient location with an easy access;
- When provided within the footprint of the dwelling or as a free standing shed, cycle parking should be accessed by means of a door at least 900mm and the structure should be at least 2m deep; and
- The use of planting and smaller trees alongside cycle parking can be used.

Houses with garages

- The minimum garage size should be 7m x 3m to allow space for cycle storage;
- Where possible, cycle parking should be accessed form the front of the building either in a specially constructed enclosure or easily accessible garage;
- The design of any enclosure should integrate well with the surroundings; and
- The bicycle must be removed easily without having to move the vehicle.

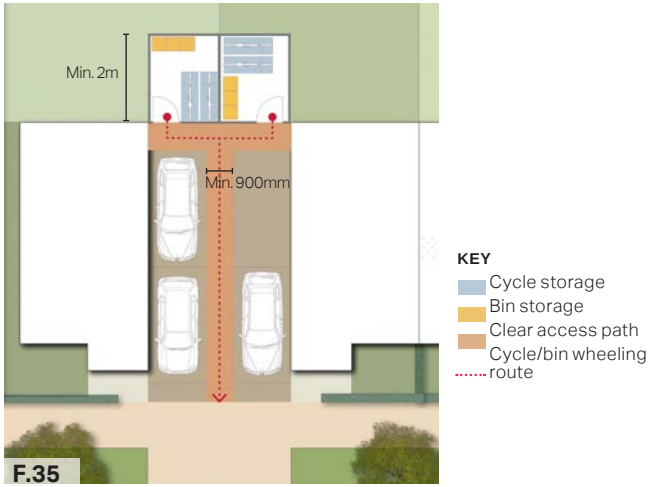


Figure 35: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.

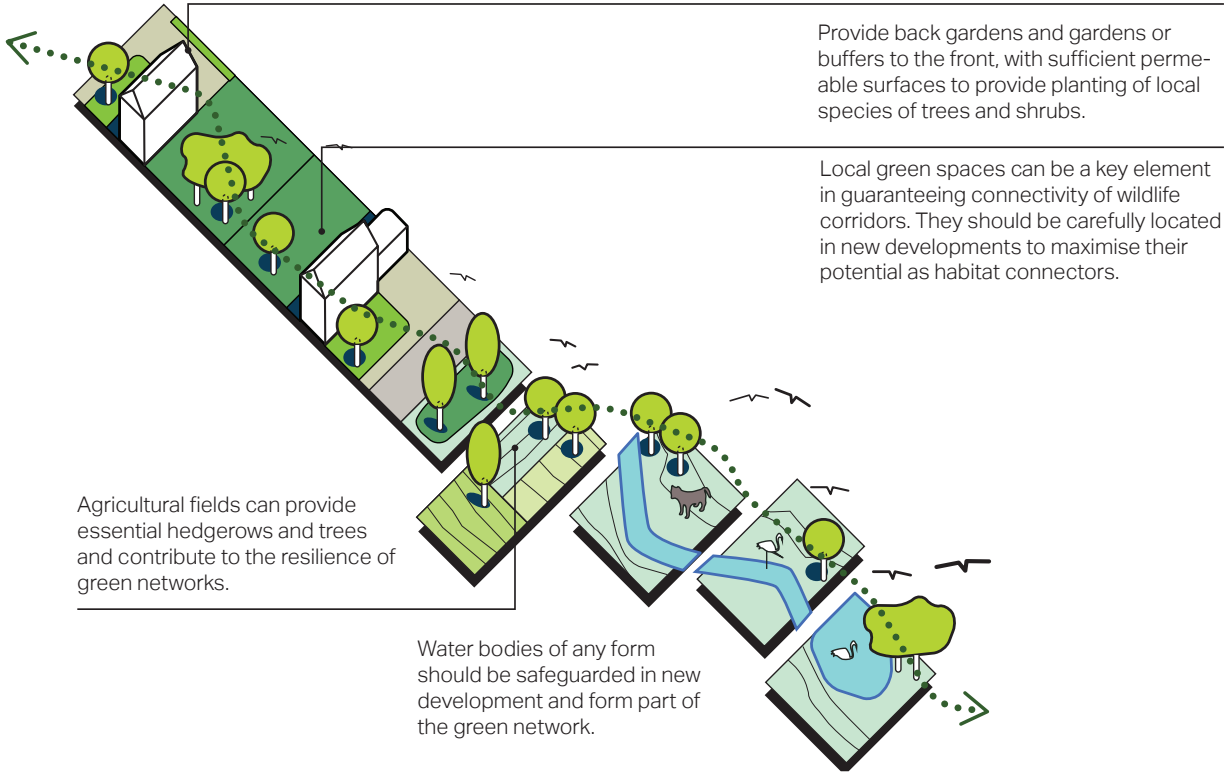
Figure 34: Provide racking spaces on public open spaces.

Figure 36: Provide secured storage space for bikes within the domestic curtilage.

Code.11 Create a green network

A well connected green network should be created throughout the new developments to provide links to the countryside for people as well as habitats. Opportunities should be sought to introduce green assets into design and contribute to biodiversity. Some design guidelines on green networks are:

- Green networks should link existing and newly proposed street trees, green verges, open spaces, villages and the countryside together;
- SuDS should be introduced, where possible, and incorporated into design of the green network to mitigate any flooding issue;
- New development should front onto green assets and access should be granted for all groups of people;
- The proposed wildlife corridors and landscape gap could also taken into account when designing for a green network; and
- Green networks could contain some formal provision, such as a Neighbourhood Equipped Area of Play (NEAP), playing fields and an area for active recreation. Their many benefits include the improvement of the health and well-being of individuals and promotion of the development of inclusive communities.



F.37

Figure 37: Diagram to illustrate the green assets that can play an important role as wildlife corridors.

Code.12 Biodiversity

There are many green assets within the Parish like rich vegetation, trees, farmland, open fields, drainage ditches and green spaces that all together enhance biodiversity and the natural environment. New development should prioritise biodiversity enhancement through design. Some design guidelines are:

- New development should protect and enhance the existing habitats and biodiversity corridors through an accurate Biodiversity Net Gain report. This should include full details on the number of units gained, and the method and assumptions;
- Biodiversity and woodlands should be protected and enhanced where possible;
- New development proposals should aim for the creation of new habitats and wildlife corridors, e.g. by aligning back and front gardens or installing bird boxes or bricks in walls;
- Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. For that reason, rich vegetation and plantation is suggested;
- Blue assets can also contribute to biodiversity connectivity. Therefore, the existing ditches should be considered in design proposals when planning for wildlife corridors;
- The biodiversity Net Gain, including habitat, hedgerows and river biodiversity units, especially around Whissendine Brook, should be increased for any proposed development; and
- All areas of biodiversity that require further planting/ enhancement should be planted before start of construction.

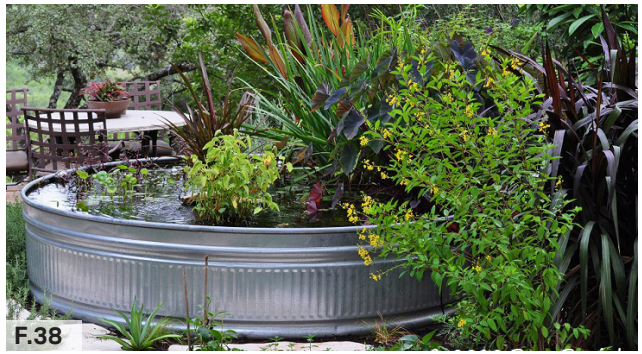


Figure 38: Incorporate water and wildlife friendly ponds in gardens.

Figure 39: Example of a birdbox located on Whissendine Brook.

Figure 40: Allotments can have positive impact on the landscape and community

Code.13 Water management (SuDS)

Due to the presence of a good number of ditches throughout the Parish, there are areas that sit within flood risk zones. Therefore, the use of sustainable drainage systems, known as SuDS, is needed to manage water, reduce flood risk and improve water quality.

The most effective type or design of SuDS would depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. However, a number of overarching principles that could be applied in new development are:

- Manage surface water as close to where it originates as possible;
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down, so that it does not overwhelm water courses or the sewer network;
- Improve water quality by filtering pollutants to help avoid environmental contamination;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- SuDS are often also important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream;
- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water, whilst increasing the biodiversity value of the area;
- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water; and
- SuDS should be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.

Figure 41: Example of swales check dam integrated with a crossing point elsewhere in uk.

Figure 42: Example of SuD designed as a public amenity and filly integrated into the design of the public realm, Stockholm.

Code.14 Trees

New street planting helps maintain visual consistency along the public realm. It is associated with better mental health and well-being by reducing stress, lessening heat islands, and providing protection from natural elements such as wind and rain. Some guidelines for new development are:

- Aim to preserve existing mature trees and hedges by incorporating them in the new landscape design;
- To ensure resilience and increase visual interest, a variety of native tree species is preferred over a single one;
- Flower beds, bushes and shrubs should be welcomed in new developments, since they contribute to the livelihood of the streetscape and create visual interest and colour to their surroundings;
- Hedgerows can be planted in front of bare boundary walls to ease their visual presence or they can be used to conceal on-plot car parking and driveways within curtilages;
- Native trees can normally be used to mark reference points and as feature elements in the streetscape;
- Native trees should also be present in any public open space, green or play area to generate environmental and wildlife benefits; and
- The success of tree planting is more likely to be achieved when it has been carefully planned to work in conjunction with all parts of the new development, parking, buildings, street lights etc.

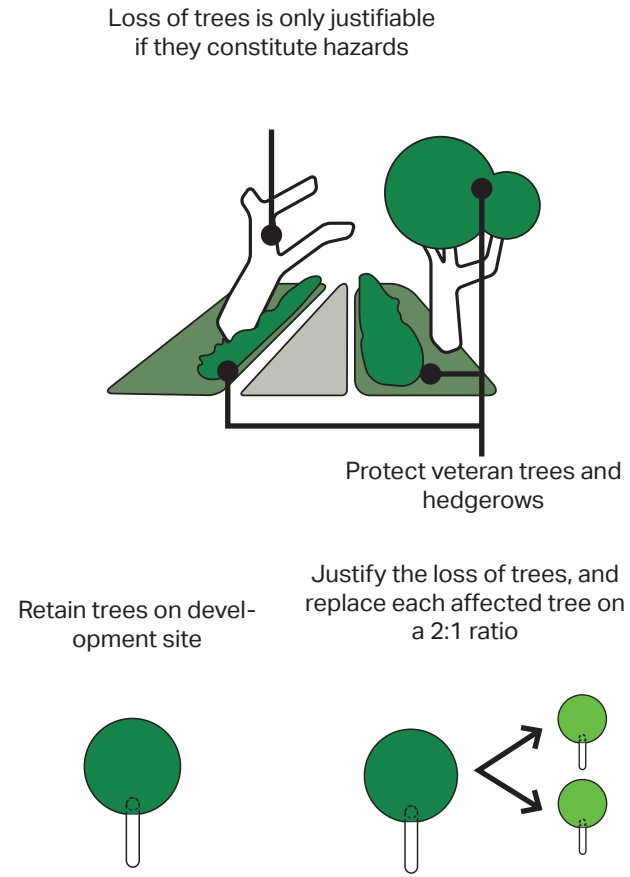


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Figure 43: Example of street planting along main road with green verges and open views to the surrounding countryside encouraging walking and cycling , Eddington.

Code.15 Open spaces

Open spaces play a vital role in creating a positive environment. These are places fostering community and gathering, thus creating lively places in neighbourhoods. Therefore, new development should prioritise the design of open spaces and some design guidelines are:

- The location of new open spaces within new development should be decided based on the location of the existing ones considering the needs of the existing population too;
- All recreational spaces should be designed to link up with each other and also link up with existing adjoining sites.
- Substantial recreational space should be provided to include woodland walks, lake walks, sport pitches and play areas;
- Surrounding buildings should overlook play areas and public spaces to encourage movement and natural surveillance;
- Open spaces should be equipped with good quality of street furniture to create pleasant seating areas, shaded spaces avoiding hidden spots; and
- The materials and style of any street furniture in the open spaces should be consistent throughout the Parish and aim to proudly represent the local character.

Figure 44: Positive example of an open space overlooked by properties including a small pond, flowers and vegetation

Figure 45: Example of good quality street furniture that accommodate the open green space offering places for gathering and resting.

Figure 46: Properties overlooking a public open space which is equipped with grass areas, large green trees and street furniture, Poundbury.

Code.17 Development layout

Any new development within the Parish should preserve its rural qualities and close relationship with the countryside, while also respecting the existing building layouts and patterns of growth. Therefore, some design guidelines are:

- New development should create a smooth transition, in terms of density and vegetation;
- Physical boundaries such as hedgerows, should enclose and define each street along the back edge of the pavement, adhering to a clear building line that can allow minor variations for each development group;
- New development should propose routes laid out in a permeable pattern, allowing for multiple connections and choice of routes, particularly on foot. Any cul-de-sacs should be relatively short and provide secure and overlooked onward pedestrian links;
- Perimeter blocks must be employed consistently throughout the new developments in Whissendine. Their sizes and shapes should respond to the uses, existing landscape features, topography and residential density. Mews and courtyards should be used within large blocks to create interesting and efficient arrangements;
- New development should create good street rhythm by addressing the roofscape and keeping regular plot widths;
- Properties should maintain a proper distance between building face to building face at the rear of dwellings to provide residential privacy. Garden sizes should reflect the local context;
- The layout of new development should optimise the benefits of daylighting, through the use of solar panels, and passive solar gains, through building orientation, as this can significantly reduce energy consumption; and
- New developments should have regard to the future climate change implications.

Figure 47: Example of a organic development where back to back properties are facing the street creating active frontages and optimising the use of rear gardens, Whissendine.

Code.18 Building heights

There is a low housing density in the Parish reinforcing the its rural character. More specifically, properties tend to be 1- or 2-storeys high with decent-sized rear gardens. The rooflines are irregular and either continuous, where there are clusters of houses, or they get interrupted with nature, where gaps between buildings are generous. Chimneys decorating the roof also interrupt the roofline offering a visual interest.

Maintaining a consistent roofline within Whissendine Parish is important to allow for long-distance views towards the surrounding countryside and respect the existing context. Therefore, some design guidelines are:

- New development should propose maximum height of 2 storeys;
- Monotonous building elevations should be avoided, therefore subtle changes in roofline should be ensured during the design process;
- Roof shapes and pitches must employ a restrained palette on a given building; overly complex roofs must be avoided; and
- Locally traditional roof detailing elements such as roofing materials, chimney stacks and edge treatments should be considered and implemented where possible in cases of new development.

Figure 48: Local example of continuous roofline, of 2-storey buildings, interrupted by chimneys.

Figure 49: Local examples of roof materials that could be used in new development, e.g. grey slate and clay pantiles.

Code.19 Density

The concept of density is important to planning and design as it affects the vitality and viability of the place. The density within the Parish is quite low which is justified by its rural character. Therefore, some guidelines for new development are needed to ensure that the existing housing density numbers are respected.

- Density should be appropriate to the location of any new development and its surroundings and enhance the character of the existing village;
- Housing densities should be reduced towards development edges and along rural edges in order to create a gradual transition towards the countryside;
- Pedestrian and cycle movement should be a priority and taken into account in larger development schemes. Housing density should support a 'human scale' development; and
- Small scale development and in-fills are encouraged, because they follow the scale and pattern of existing grain and streets and therefore, retain the character of the area.

Figure 50: Higher density development, Whissendine.

Figure 51: Example of a newer development with reduced green spaces and gaps between properties,Whissendine.

Code.20 Continuity and enclosure

Focal points and public spaces in new development should be designed in good proportions and delineated with clarity. Clearly defined spaces help create an appropriate sense of enclosure - the relationship between a given space (lane, street, square) and the vertical boundary elements at its edges (buildings, walls, trees).

Some design guidelines that should be considered for achieving satisfactory sense of enclosure are:

- When designing building setbacks, there must be an appropriate ratio between the width of the street and the building height;
- Buildings should be designed to turn corners and create attractive start and end points of a new street or frontage;
- Generally, building façades should front onto streets. Variation to the building line can be introduced to create a more informal character;
- In the case of terraced and adjoining buildings, it is recommended that a variety of plot widths, land use, building heights, and façade depth should be considered during the design process to create an attractive streetscape and break the monotony of the street wall; and
- Trees, hedges, and other landscaping features can help create a more enclosed streetscape in addition to providing shading and protection from heat, wind, and rain.

Figure 52: The relationship between the buildings, the trees and width of the footway creates a sense of enclosure for the pedestrians, Poundbury.

Code.21 Legibility and wayfinding

When places are legible and well signposted, they are easier for the public to understand, therefore likely to both function well and be pleasant to live in or visit. It is easier for people to orient themselves when the routes are direct and visual landmarks clearly emphasise the hierarchy of the place. Some design guidelines are:

- A familiar and recognisable environment makes it easier for people to find their way around. Obvious and unambiguous features should be designed in new development;
- Buildings which are located at corners, crossroads or along a main road could play a significant role in navigation. For that reason, the architectural style of those buildings could be slightly differentiated from the rest to help them stand out;
- Landmark elements could also be a public art, historic signage totem or even an old and sizeable tree;
- New signage design should be easy to read. Elements likes languages, fonts, text sizes, colours and symbols should be clear and concise, and avoid confusion;
- Signage can also help highlight existing and newly proposed footpaths and cycle lanes, encouraging people to use them more; and
- Signage could be strategically located along walking and cycling routes to signalise location of local and heritage assets and raise people's awareness.
- Provision for people with visual impairment, for instance tactile paving or tactile lettering on signs.

Figure 53: Example of signage that could be integrated along footpaths to navigate people towards important destinations, like Whissendine Windmill or St Andrew's Church, as well as provide information about habitats and other species in the area.

Figure 54: Example of signage posts within the Village to help navigate people.

Figure 55: Example of tactile paving to facilitate movement for people with visual impairment.

Code.22 Boundary lines, boundary treatments and corner treatment

Together with the creation of potential local landmarks, three more crucial aspects of a successful streetscape and urban form is the issue of corners, boundary lines and boundary treatments. Therefore, the following guidelines should be applied in new development.

- Buildings should front onto streets. The building line should have subtle variations in the form of recesses and protrusions but should generally form a unified whole;
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance from buildings. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street;
- Natural boundary treatments should reinforce the sense of continuity of the building line and help define the street, appropriate to the character of the area. They should be mainly continuous hedges and low walls, as appropriate, made of traditional materials found elsewhere in the Parish such as local bricks and tiles;
- In the case of edge lanes, natural boundary treatments can act as buffer zones between the site and the countryside and offer a level of protection to the natural environment;
- If placed at important intersections the building could be treated as a landmark and thus be slightly taller or display another built element, signalling its importance as a wayfinding cue;
- The form of corner buildings should respect the local architectural character. Doing so improves the street scene and generates local pride;
- All the façades overlooking the street or public space should be treated as primary façades; and
- Road layouts should be designed to slow traffic and advantage pedestrians over vehicles.

Figure 56: Residential road with green elements and traffic calming measures, Whissendine.

Figure 57: Positive example of a meandering edge lane where properties with well vegetated front gardens overlook the adjacent open field, Whissendine.

Code.23 Views and vistas

Landmarks, views and focal points are the tools to achieve places that are easy to read and memorise, thus helping users to easily orientate themselves. Therefore, creating short-distance views broken by buildings, trees, or landmarks helps to create memorable routes.

On the other hand, it is also important to preserve long-distance views that offer pleasant sceneries along the footpaths and roads. This allows for a visual connection between places and encourages people to walk and cycle. For that reason, new houses should be appropriately oriented to maximise the opportunities for both short and long-distance views.

In addition, development should be located away from ridge tops, upper valley slopes or prominent locations.

Planning decisions should always attempt to maintain or where possible enhance key views and vistas.

F.59

F.58

F.60

Figure 58: Preserve long distance views from St Andrew's Church

Figure 59: Allow long distance views towards the Windmill

Figure 60: Allow long distance views towards the St Andrew's Church

Code.24 Materials and architectural details

Whissendine has a wide variety of architectural styles and details that can act as references for new development. In particular, pitched roofs with either artificial slate or plain tiles and elevations where brick, render or boarding are predominant.

Some design guidelines for new development are:

- Architectural design shall reflect high quality local design references in both the natural and built environment; and
- Any new development should demonstrate that the palette of materials has been selected based on an understanding of the surrounding built environment.

Roofing

Grey/Red slate tiles

Clay pantiles

Thatched roof

Walling & building facades

Yellow brick

Red Brick

Local sandstone

Pebble dash render

Render

Windows

Casement windows

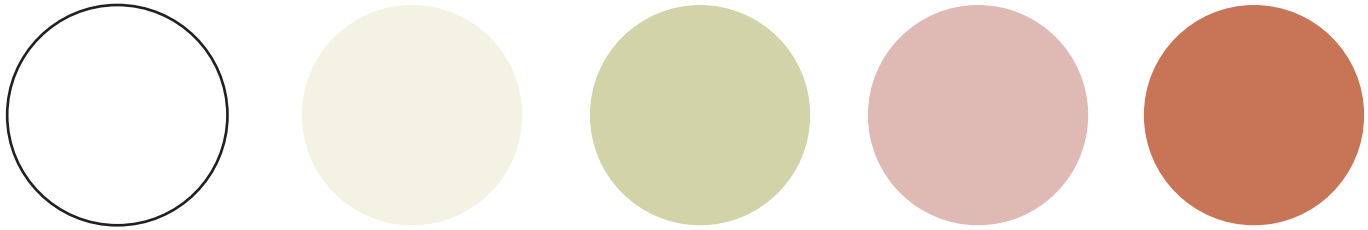
Sash window

Dark brown frame on casement window

Arched shape window

Front doors (timber and painted)

Colour palette



Code.25 Windows

The detailing, materials and fenestration of windows along building façades can inform the character of the street. Within Whissendine, there are a variety of window styles which should be used as guidance for future windows in the town.

Windows should match the general orientation, proportion and alignment of other windows in the same building as well as those on adjacent properties, reinforcing the continuity of the streetscape.

Window subdivisions should be arranged symmetrically about the horizontal and vertical areas of the openings. Large panes of glass that are not subdivided should be avoided, as they can distort the visual scale of the building.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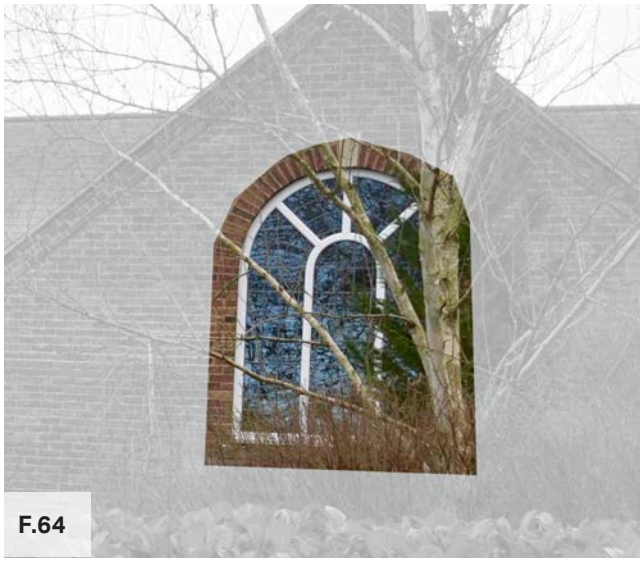

F.64

Figure 61: Arch-topped windows are a particular feature of the Whissendine vernacular

Figure 62: Casement window example in Whissendine

Figure 63: Multipane sash window example in Whissendine

Figure 64: Arched window example in Whissendine

Code.26 Doors

Different types of doors are used throughout the Village contributing to an interesting and varied streetscape.

New development could use the existing architectural styles as inspiration.

Small porches at the entrance of buildings should respect the building line of the street, particularly where a strongly defined building line is an important characteristic of a street. The roof pitch should match that of the original building to ensure it blends in with the building.

Figure 65: A protruding porch example in Whissendine

Figure 66: A rectangular Roman door style door example

Figure 67: Pitched roofed porch door style example in Whissendine

Code.27 Chimneys

Chimneys can be seen across the village in all housing types, therefore they can be placed in several locations. A modern approach should be taken to chimney design and should only be incorporated where they serve a function.

Chimneys should match the primary elevation material and be placed symmetrically to the ridge line.

Chimneys should rise above the roof and when on an end elevation should connect to the ground.

Chimneys should be positioned on the roof ridges, centrally on a gable end or against an out scale wall and should have pots.

Particular attention should be given to the bonding pattern, size, colour, and texture of bricks.

F.68

F.69

Figure 68: Chimney stack with yellow brick in the Village
Figure 69: Chimney stack with red brick in the Village

Code.28 Roofscape

The scale of a roof should be designed in proportion to the height of the elevation. Subtle changes in angle of the roof pitch provides a variety of roofscapes, avoiding monotonous building compositions.

Roofs should have a simple form and avoid shallow pitches. Ridge heights should be limited by narrowing the plan depth rather than lowering the roof pitch.

Development shall use a common palette of locally distinctive vernacular building material, comprising of slate and red clay pantiles for gable and pitched roofs.

Roof renovation should consider any existing features of interest and ensure the use of matching details and materials.

Where plain clay tiles are used, roofs must have a pitch of 50^0. Roofs with pitches in the range of 35^0-40^0 should use slates.

Figure 70: Pitched roof with pitched dormers example in Whissendine

Figure 71: Hipped roof example in Whissendine

Figure 72: Thatch roof example in Whissendine

Code.29 Hard landscaping, materials and street furniture

Streets are the most important components of public space and these are referenced in the hierarchy of movement section.

Paved areas are a major element within most developments and their design has a significant impact on the overall appearance, quality and success of a scheme. Care must be taken when choosing appropriate materials and when detailing paved areas as part of the overall design.

High quality materials such as stone, gravel and brick can provide a durable and attractive hard surface, although there is an extensive range of modern materials that can contribute positively to the quality of outdoor spaces if chosen with care. The laying pattern and materials used should make a significant contribution to the overall appearance, quality and success of a scheme. If laying patterns used random bond, broken bond, gauged width, and the European fan should be preferred .

Some overall design guidelines on good quality of public realm are:

- The public realm should provide high quality paving sensitive to the surrounding context using sustainable and durable materials;
- Permeable paving is encouraged to contribute to rain water infiltration;
- Street trees and grass verges, where appropriate, should be integrated into the design of the public realm;
- Street furniture should be added in the public realm only if they serve a purpose, whilst unnecessary features should be avoided; and
- Large unbroken areas of a particular surface material should be avoided, especially tarmac. Areas can be made distinctive by using materials of a similar colour but with different textures.

Figure 73: Examples of quality materials and visually pleasing layout patterns that could be considered for public realm surfacing.

Design Codes on sustainability for new developments in Whissendine Parish

The codes 25-31, include some design guidelines that could have a positive impact to the environment.

Code.30 Minimising energy use

Buildings contribute almost half (46%) of carbon dioxide (CO2) emissions in the UK. The government has set rigorous targets for the reduction of CO2 emissions and minimising fossil fuel energy use.

There is a good number of energy efficient technologies that could be incorporated in buildings. The use of such principles and design tools is strongly encouraged to futureproof buildings and avoid the necessity of retrofitting.

Energy efficient or eco design combines all around energy efficient appliances and lighting with commercially available renewable energy systems, such as solar electricity and/or solar/ water heating.

F.74 features an array of sustainable design features. Those on the top show the features that should be strongly encouraged in existing homes, while those on the bottom show additional features that new build homes should be encouraged to incorporate from the onset.

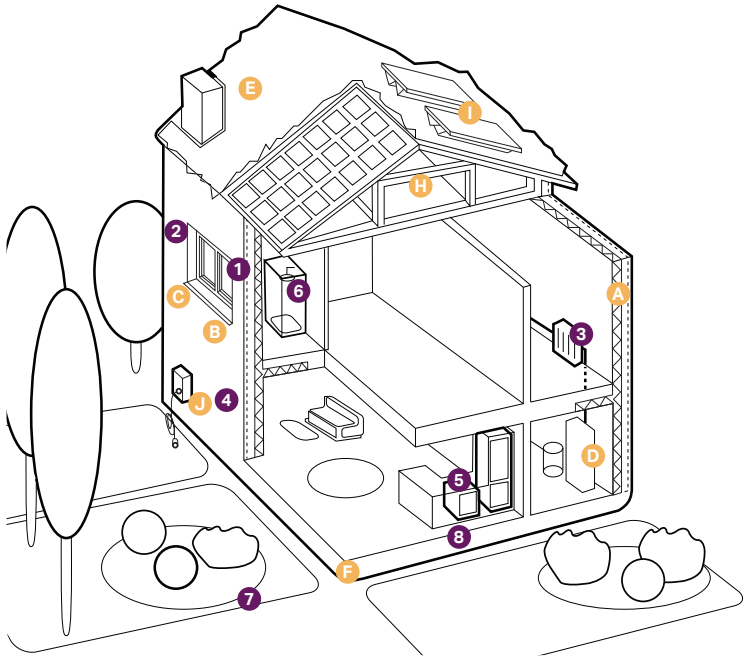
Code.31 Lifetime and adaptability

The fastest route to building a functional, supportive, neighbourly community is to build homes that people can and want to live in for most of their lives instead of having to move every time domestic circumstances change.

'Lifetime' homes means designing in the flexibility and adaptability needed to allow for easy incorporation of wheelchair accessibility, addition/removal of internal walls, and ease of extension - both vertically and horizontally. This is particularly important for the aged, infirm or expanding/ contracting families who may be dependent on nearby friends and family for emotional and physical support.

Figure 74: Use of shingle-like solar panels on a slate roof, with the design and colour of the solar panels matching those of the adjacent slate tiles.

Figure 75: Positive example of integrating solar panels at the design stage.



F.76

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)
2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)
3. **Low- carbon heating** with heat pumps or connections to district heat network
4. **Draught proofing** of floors, windows and doors
5. **Highly energy-efficient appliances** (e.g. A++ and A+++ rating)
6. **Highly waste-efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
7. **Green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors

Additional features for new build homes

A. **High levels of airtightness**

B. **More fresh air** with the mechanical ventilation and heat recovery, and passive cooling

C. **Triple glazed windows and external shading** especially on south and west faces

D. **Low-carbon heating** and no new homes on the gas grid by 2025 at the latest

E. **Water management and cooling** more ambitious water efficiency standards, green roofs, rainwater harvesting and reflective walls

F. **Flood resilience and resistance** e.g. raised electrical, concrete floors and greening your garden

H. **Construction and site planning** timber frames, sustainable transport options (such as cycling)

I. **Solar panel**

J. **Electric car charging point**

Figure 76: Diagram showing low-carbon homes in both existing and new build conditions.

Code.32 Minimising construction waste

As part of the environmental management system it is important that the waste generated during construction is minimised, reused within the site or recycled.

Developers should plan to re-use materials by detailing their intentions for waste minimisation and re-use in Site Waste Management Plans. The actions that this plan will include are:

- Before work commences, the waste volumes to be generated and the recycling and disposal of the materials will be described;
- On completion of the construction works, volumes of recycled content purchased, recycled and landfilled materials must be collated;
- Identify materials used in high volumes; and
- The workforce should be properly trained and competent to make sure storage and installation practices of the materials is done under high standards.

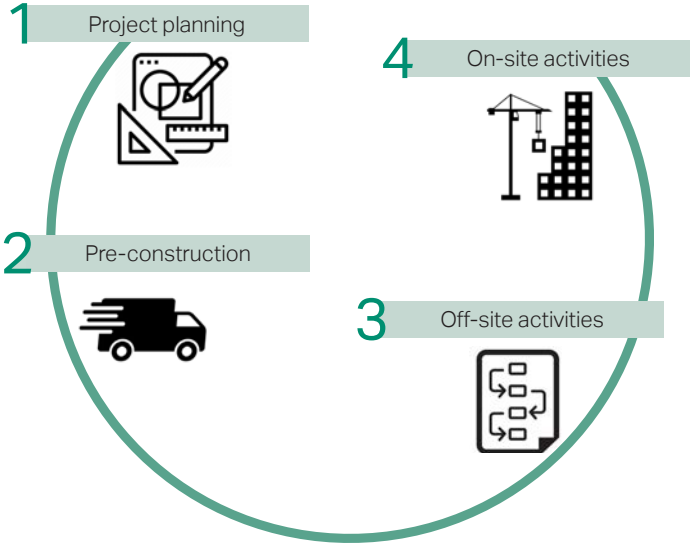


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Figure 77: Diagram to illustrate the 4 main stages where waste management practices can be implemented.

Code.33 Recycling materials and buildings

To meet the government's target of being carbon neutral by 2050, it is important to recycle and reuse materials and buildings. Some actions for new development are:

- Reusing buildings, parts of buildings or elements of buildings such as bricks, tiles, slates or large timbers all help achieve a more sustainable approach to design and construction;
- Recycling and reuse of materials can help to minimise the extraction of raw materials and the use of energy in the production and transportation of materials; and
- Development should also maximise the re-use of existing buildings (which often supports social, environmental and economic objectives as well.

Code.34 Electric vehicle charging points

Whissendine Parish strongly supports proposals for in private transport using electrically and other non fossil fuel powered vehicles. Those can be integrated both on and off street. Some design guidelines on how new development should design for electric vehicle charging points are:

On-street car parking or parking courts

- Car charging points should always be provided adjacent public open spaces. Street trees and vegetation is also supported to minimise any visual contact with the charging points;
- Where charging points are located on the footpath, a clear footway width of 1.5m is required next to the charging point to avoid obstructing pedestrian flow; and
- Car charging points within parking courts are highly supported, since they can serve more than one vehicles.

Figure 78: Example of on-street electric vehicle charging points.

Figure 79: Example of electric vehicle charging points in a parking court.

Off-street car parking

- Mounted charging points and associated services should be integrated into the design of new developments, if possible with each house that provides off-street parking; and
- Cluttering elevations, especially main façades and front elevations, should be avoided.

Figure 80: Example of off-street electric vehicle charging points.

Code.35 Storage and slow release

Rainwater harvesting refers to the systems allowing the capture and storage of rainwater as well as those enabling the reuse in-site of grey water.

Simple storage solutions, such as water butts, can help provide significant attenuation. However, other solutions can also include underground tanks or alternatively overground gravity fed rainwater systems that can have multiple application areas like toilets, washing, irrigation. In general, some design guidelines to well integrate water storage systems are:

- Consider any solution prior to design to appropriately integrate them into the vision;
- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes; and
- Combine landscape/planters with water capture systems.

Figure 81: Examples of water butts used for rainwater harvesting in Reach, Cambridgeshire.

Figure 82: Example of a gravity fed rainwater system for flushing a downstairs toilet or for irrigation.

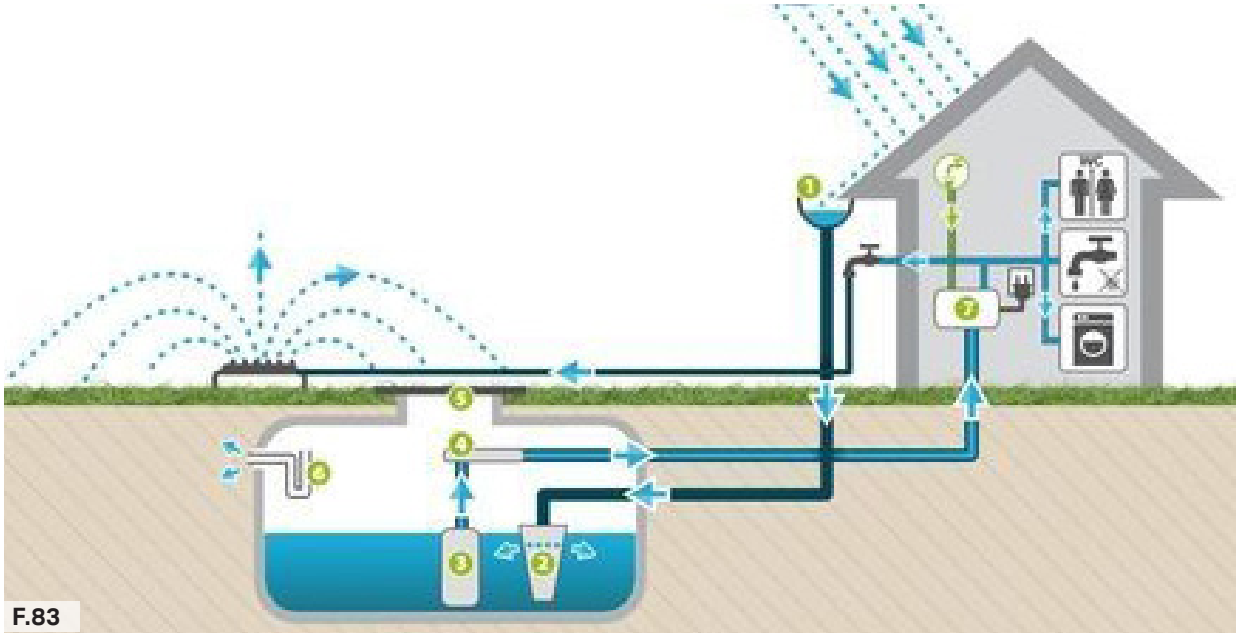

Figure 83: Diagram illustrating rainwater harvesting systems that could be integrated into open space and residential developments.

Code.36 Permeable paving

Most built-up areas, including roads and driveways, increase impervious surfaces and reduce the capacity of the ground to absorb runoff water. This in turn increases the risks of surface water flooding.

Permeable paving offers a solution to maintain soil permeability while performing the function of conventional paving. Therefore, some design guidelines for new development are:

- The choice of permeable paving units must be made depending on the local context; the units may take the form of unbound gravel, clay pavers, or stone setts; and
- Permeable paving can be used where appropriate on footpaths, private access roads, driveways, car parking spaces (including on-street parking) and private areas within the individual development boundaries.

Regulations, standards, and guidelines relevant to permeable paving and sustainable drainage are listed below:

- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems[1].
- The SuDS Manual (C753)[2].
- Guidance on the Permeable Surfacing of Front Gardens[3].

2. CIRIA (2015). The SuDS Manual (C753).

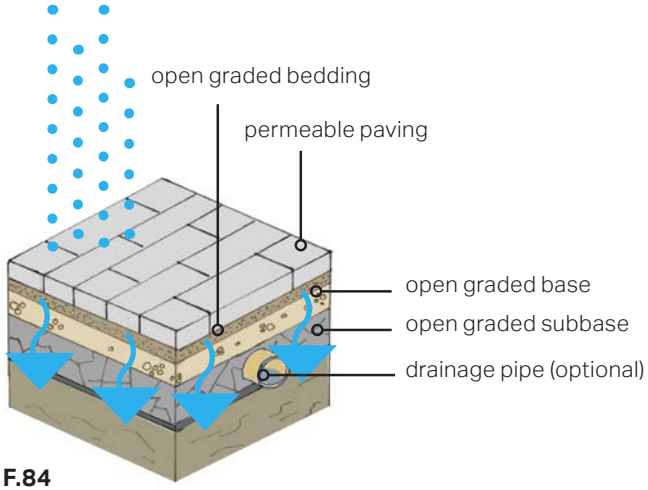

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Figure 84: Diagram illustrating the function of a soak away.

F.85

Figure 85: Example of a permeable paving.

3.4 Checklist

Because the design guidance and codes in this document cannot cover all design eventualities, this chapter provides a number of questions based on established good practice against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has considered the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in all proposals. These are listed under 'General design guidance for new development'. Following these ideas and principles, several questions are listed for more specific topics on the following pages.

1

General design guidelines for new development:

- Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the character of streets, greens, and other spaces;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Positively integrate energy efficient technologies;
- Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

Street grid and layout:

- Does it favour accessibility and connectivity? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists and those with disabilities?
- What are the essential characteristics of the existing street pattern; are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

3 (continues)

Local green spaces, views & character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?
- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

3

Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Can green space be used for natural flood prevention e.g. permeable landscaping, swales etc.?
- Can water bodies be used to provide evaporative cooling?
- Is there space to consider a ground source heat pump array, either horizontal ground loop or borehole (if excavation is required)?

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between hamlets?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

5 (continues)

Buildings layout and grouping:

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?

5

Buildings layout and grouping:

- Subject to topography and the clustering of existing buildings, are new buildings oriented to incorporate passive solar design principles, with, for example, one of the main glazed elevations within 30° due south, whilst also minimising overheating risk?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night? This is to reduce peak loads. And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

6

Building line and boundary treatment:

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Has the appropriateness of the boundary treatments been considered in the context of the site?

7

Building heights and roofline:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale?
- If a higher than average building(s) is proposed, what would be the reason for making the development higher?
- Will the roof structure be capable of supporting a photovoltaic or solar thermal array either now, or in the future?
- Will the inclusion of roof mounted renewable technologies be an issue from a visual or planning perspective? If so, can they be screened from view, being careful not to cause over shading?

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood, and does it have an adverse impact on neighbouring properties in relation to privacy, overbearing or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In case of side extensions, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?
- Does the extension offer the opportunity to retrofit energy efficiency measures to the existing building?
- Can any materials be re-used in situ to reduce waste and embodied carbon?

9

Building materials & surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

9

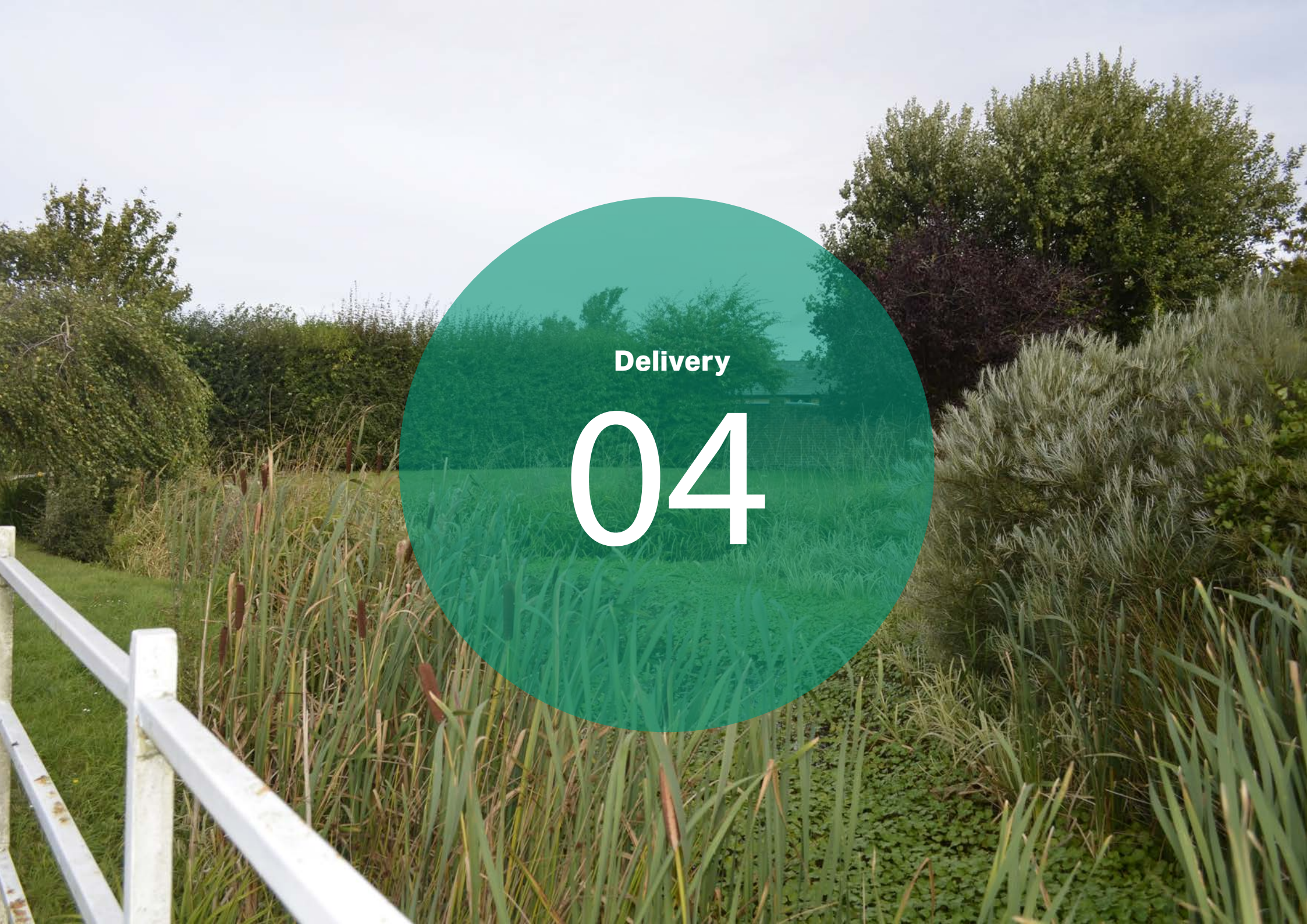
Building materials & surface treatment:

- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design? For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?
- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?


Delivery
04

4. Delivery

The Design Guidelines & Codes will be a valuable tool in securing context-driven, high quality development in Whissendine. They will be used in different ways by different actors in the planning and development process, as summarised in the table.

Actors	How they will use the design guidelines
Applicants, developers, & landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines and Codes as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines and Codes should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines and Codes are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 01: Delivery

About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of $13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at aecom.com and @AECOM.

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