



Quality information

Prepared by	Checked by	Approved by
Simona Palmieri Associate Urban Designer	Ben Castell Director	Ben Castell Director
Holly MacMahon Consultant Urban Designer		

Revision History

Issue no.	Issue date	Details	Issued by	Position
3	21.07.2025	Final version and sign off	Annabel Osborne	Locality
2	14.04.2025	Second Draft	Simona Palmieri	Associate Urban Designer
1	04.04.2025	Crudwell Neighbourhood Plan Steering Group review	Roy Lambley	Chairman
0	20.03.2025	First Draft	Simona Palmieri	Associate Urban Designer

This document has been prepared by AECOM Limited ("AECOM") in accordance with its contract with Locality (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. AECOM shall have no liability to any third party that makes use of or relies upon this document.

Contents

1	1. Introduction	5
1	1.1 Background and purpose	5
	1.2 Area of study	6
	1.3 The planning context	8
	1.4 Neighbourhood Plan vision and relationship to design quality	10
	1.5 How to use this document	11
	1.6 Process and engagement	12
	1.7 Summary of engagement	13
7	2. Neighbourhood Area Context Analysis	15
	2.1 Access and movement	15
	2.2 Heritage	17
	2.3 Landscape and local facilities	19
2	3. Design Guidance and Codes	23
J	3.1 Introduction	23
	3.2 Built form	24
	3.3 Public Realm	34
	3.4 Business Park	38
	3.5 Sustainability	40
	3.6 Code for development within and in close proximity to Conservation Area	47
4	4. Case studies	49



1. Introduction

The aim of the Neighbourhood Plan Design Guidance and Codes document is to empower the local community to influence the design and character of the Crudwell Neighbourhood Area and to help deliver suitable, sustainable development that meets the needs of local people. The report cannot influence the quantum, location or type of development; other tools in the Neighbourhood Plan and Local Plan can cover these.

Consultants AECOM prepared this report between January 2025 and April 2025, in conjunction with key members of the Neighbourhood Plan Steering Group (NPSG).

1.1 Background and purpose

Through the Ministry for Housing,
Communities and Local Government
(MHCLG) Neighbourhood Planning
Programme led by Locality, AECOM has
been appointed to provide design support
to the Crudwell Neighbourhood Plan
Steering Group by preparing this Design
Guidance and Codes.

The purpose of this document is to gather information on the opportunities and issues faced in the delivery of quality design in the context of the neighbourhood. The aims of the document are to:

- Positively influence the character and design of new development within the Neighbourhood Area;
- Set out clear analysis of the local context, focusing on topics where improvement is most needed; and
- Benchmark how these opportunities should be delivered, such that they are factored into considerations at site procurement, and the downstream design response.

1.2 Area of study

The Crudwell Neighbourhood Area (NA) was designated in March 2015 and follows the Crudwell Parish boundary. The NA is within the unitary authority area of Wiltshire and borders Cotswold District to the north and west. The area encompasses the village of Crudwell and the hamlets of Chedglow, Chelworth, Eastcourt, Murcott and West Crudwell. Crudwell is identified as a Large Village in the Wiltshire Core Strategy, whilst the hamlets are outside the defined limits of development. Therefore the Neighbourhood Plan and this Design Guidance and Codes report focus on Crudwell village.

Wider connections to the village include the nearest train station at Kemble which serves the South Western Railway on the London Paddington to Cheltenham Spa trainline. There are limited public transport options in the village and most journeys are made by car. The nearest towns to the village are Tetbury, 8 km and 12-minute drive west, and Malmesbury, 7 km and 8-minute drive south. The larger, market town of Cirencester is 14.5 km and a 17-minute drive north-east and the major town of Swindon is 30 km and 35-minute drive east. The village lies on the A429 which connects south directly to the M4 at junction 17.

Additionally, Cotswold Airport is located on the northern boundary of the NA. The airport is used for private flights and general aviation flights to destinations in Britain and Ireland.



1.3 The planning context

National planning policy and design guidance

National Planning Policy & Guidance (NPPF) (revised December 2024) 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 can provide for housing and other development in a sustainable manner. Preparing and maintaining up-to-date plans should be seen as a priority in meeting this objective."

Paragraph 131 states that: "The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. 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. Being clear about design expectations, and how these will be tested, is essential for achieving this. So too is effective engagement between applicants, communities, local planning authorities and other interests throughout the process."

National Design Guide (2021) MHCLG

The National Design Guide (NDG) sets the 10 characteristics of a well-designed place and demonstrates what good design is in practice. It supports the ambitions of the NPPF and the creation of high-quality places.

National Model Design Code (2021)

The National Model Design Code (NMDC) sets a baseline standard of quality and practice. The NMDC provides detailed guidance on the production of design codes and the outlining of character areas. It expands on 10 characteristics of good design set out in the NDG.

Manual for Streets (2007)

Department for Transport

Development is expected to respond positively to the Manual for Streets (MfS), the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets.

Building for a Healthy Life (2020)

Homes England

Building for a Healthy Life (BHL) is 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 design.

Future Homes Standard (2025)

MHCLG

The Future Homes Standard will require new build homes to be future-proofed with low carbon heating and world-leading levels of energy efficiency; it will be introduced by 2025.

County-wide and neighbourhood-wide planning documents

Wiltshire Core Strategy (2015)

Wiltshire Council

This plan outlines strategic policies for development across Wiltshire up to 2026 along with the Wiltshire Housing Site Allocations Plan, adopted in February 2020. It serves as a framework for decision-making on planning applications and includes policies on housing, economic growth, and environmental protection.

Wiltshire Design Guide (2024)

Wiltshire Council

This document aims to support the Wiltshire Core Strategy by providing a comprehensive guide to support the delivery of high-quality design. It draws from the 10 characteristics of design as recognised in the National Design Guide and was produced primarily to address major housing and mixed-use developments. Additionally, three 'golden threads' inform the main themes of the design guide: health, wellbeing and community; sustainability and climate resilience; and the right homes in the right places.

Supporting documents (Wiltshire Council):

- North Wiltshire Landscape Character Assessment (2004)
- A Green & Blue Infrastructure Strategy for Wiltshire (2022)

1.4 Neighbourhood Plan vision and relationship to design quality

The overarching aim of this document is to protect and enhance the character of Crudwell in line with the Neighbourhood Plan vision. The draft vision to be included in the Reg 14 draft Neighbourhood Plan is included below:

The National Planning Policy Framework (December 2024) states... "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".

The focus of the guidance and coding prepared in this document is based on the elements of design quality and characteristics that have been identified based on the diagnostics, the site visit, discussions with the Neighbourhood Plan Steering Group and feedback from the engagement event with local residents.

Crudwell Vision:

"In 2040, the Parish of Crudwell will remain a vibrant, inclusive, rural community, which is home to residents of all generations.

The parish will have sought to ensure that facilities and infrastructure are in place to enable the community to remain vibrant and inclusive, and that the school, church, local businesses, village hall and recreation facilities will have been protected and enhanced where possible.

New residential development will have sought to meet the needs of those within the Parish, with a focus on enabling young adults to remain and to meet the needs of applicants for self build schemes. Any development will have taken into account the views of the local community and will be sensitively designed to harmonise with the attractive rural location and to protect the conservation area.

The parish will have sought to improve public transport connections to Malmesbury and Kemble station, as well as the safety of road users around the parish."

1.5 How to use this document

This document will be used differently by different people in the planning and development process, as summarised in the adjacent table.

A valuable way codes and guidance can be used is as part of a process of codesign and involvement that seeks to understand and takes account of local preferences for design quality. As such the codes and guidance can help to facilitate conversations to help align expectations, aid understanding, and identify key local issues.

The resulting design codes and guidance can then set out how to adequately respond to these issues in future development.

Design codes and guidance alone will not automatically secure quality design outcomes, but they will help to prevent poor outcomes by creating a rigorous process that establishes expectations for design quality.

Potential users	How they will use the design guidance and codes	
Applicants, developers, & landowners	As a guide to the community's and the Local Planning Authority's expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.	
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The guidance 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 guidance and codes are complied with.	
Community groups & local residents		
Statutory Consultees	As a reference point when commenting on planning applications.	

1.6 Process and engagement

This document has resulted from a collaborative effort between the Crudwell Neighbourhood Plan Steering Group and AECOM, incorporating the initial views of residents. The design coding process follows the steps set out on this page.

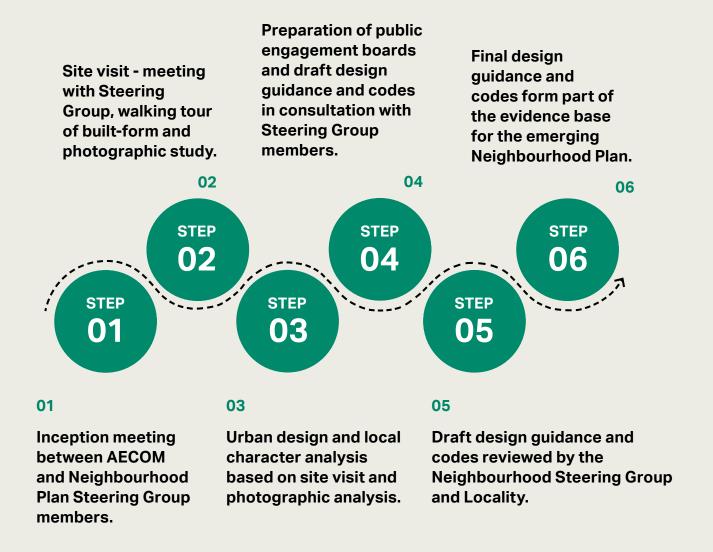


Figure 02: A brief chronological breakdown of the key elements and milestones used throughout the duration of the production of this document.

1.7 Summary of engagement

On 22nd April 2025, a community engagement session was held in Crudwell to seek views and opinions of the local residents concerning design related matters across different parts of Crudwell, together with content within the Crudwell Design Codes that they would like to see covered. An online platform was also set up for residents to express their views.

Residents were prompted to consider the following design themes:

- Built Form
- Public Realm

- Business Park
- Sustainability
- Conservation Area

16 residents participated in the events in person and 4 uploaded their answers online. The most significant comments are summarised in the bubble diagram below.

In summary, residents expressed a preference for retaining the character of Crudwell's built environment and for incorporating sustainable elements that respect the local vernacular.

What people would like to see in Crudwell

Traditional stone colour, appropriate (lower) roof height and roof pitch

> Play areas, green spaces allotments

Local vanacular, materials and walls.

> Sash or casement in hardwood or composit of appropriate appearance

Meadows and hedgerows. Mature trees. Banks of streams and ponds

Solar panels, SUDS, rainwater harvesting, electric car charging points Streets with off road parking and contiguous footways.
Space for mature trees.

Mix of tenures, affordable and accessible housing



2. Neighbourhood Area context analysis

This section outlines the broad physical, historic and contextual characteristics of the Neighbourhood Area.

2.1 Access and movement

2.1.1 Road network

The A429 is the main road which runs north-south through the NA and through Crudwell village. The A429 connects south to the M4 and also provides access to nearby towns and villages including Corston and Malmesbury. North, the A road leads into the neighbouring parish of the Cotswold and connects to Kemble and Cirencester. Secondary roads in the NA primarily form east-west connections along rural roads. Within the village, with the exception of the A road, roads are rural in character with little to no road markings.

2.1.2 Public transport

Public transport in Crudwell is very limited. There are 3 bus services, the 93, 93A and C62 which run from Malmesbury to Circencester and Yate to Cirencester. The nearest train station is about 6.5 km (7-minutes drive) away from Crudwell village centre in Kemble.

2.1.3 Pedestrian and cycling

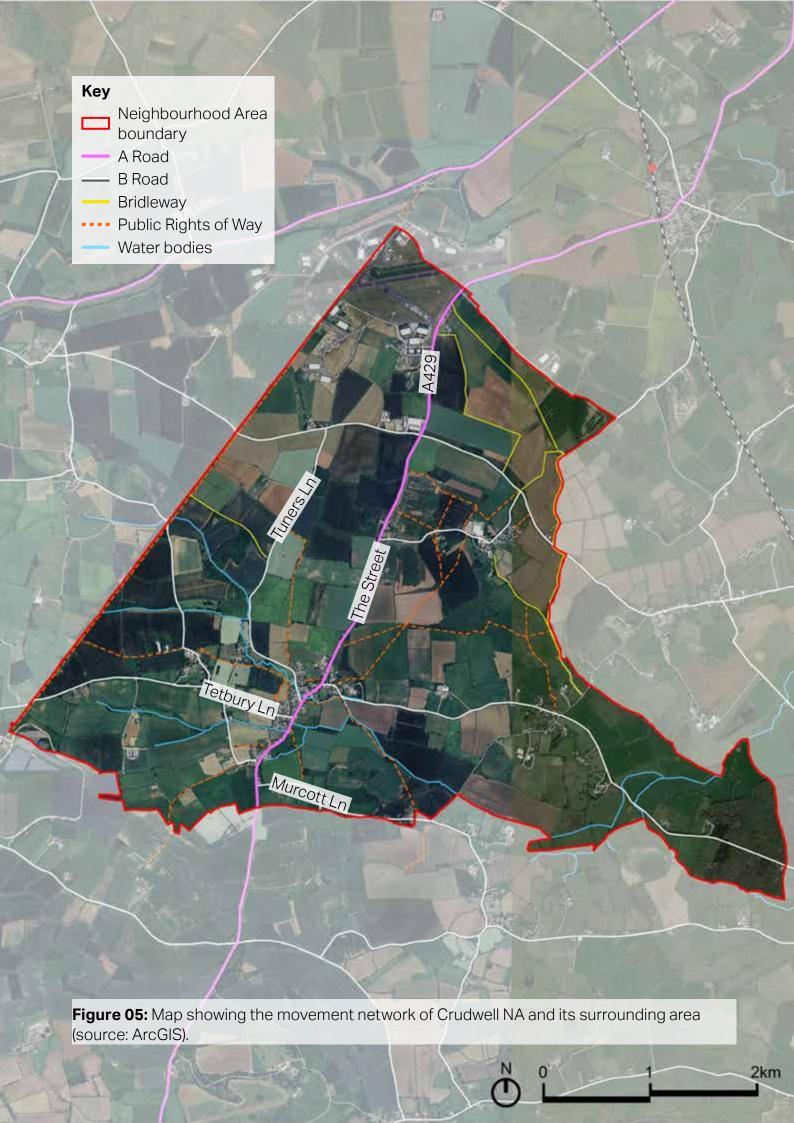
There is a good network of public rights of way in the NA with both footpaths and bridleways connecting from the village into the surrounding countryside. Walking routes into the countryside are highly valued by residents.



Figure 03: The Street, A429, through the village of Crudwell.



Figure 04: Footpath leading from the village into the surrounding countryside.



2.2 Heritage

2.2.1 History and heritage assets

The oldest part of Crudwell village is in the north-eastern corner, where All Saints' Church, the primary school, and the Rectory Hotel sit, as well as the Village Green.

There is a total of 42 Listed buildings in the NA with 19 within Crudwell village. These lie within the Conservation Area which covers a large amount of the village stretching from the north to south along the Street. The oldest part of the village is in the north eastern corner. Here, there are significant listed buildings including:

- Grade I Listed Church of All Saints
- Grade II* Listed barn to the south west of Manor Farmhouse
- Grade II Listed Manor Farmhouse
- Grade II Listed Crudwell House
- Grade II Listed School House and School Cottage
- Grade II Listed Crudwell Court (Rectory Hotel)

Another heritage asset in the NA is the Roman Road which runs along the western boundary and is now a Byway.

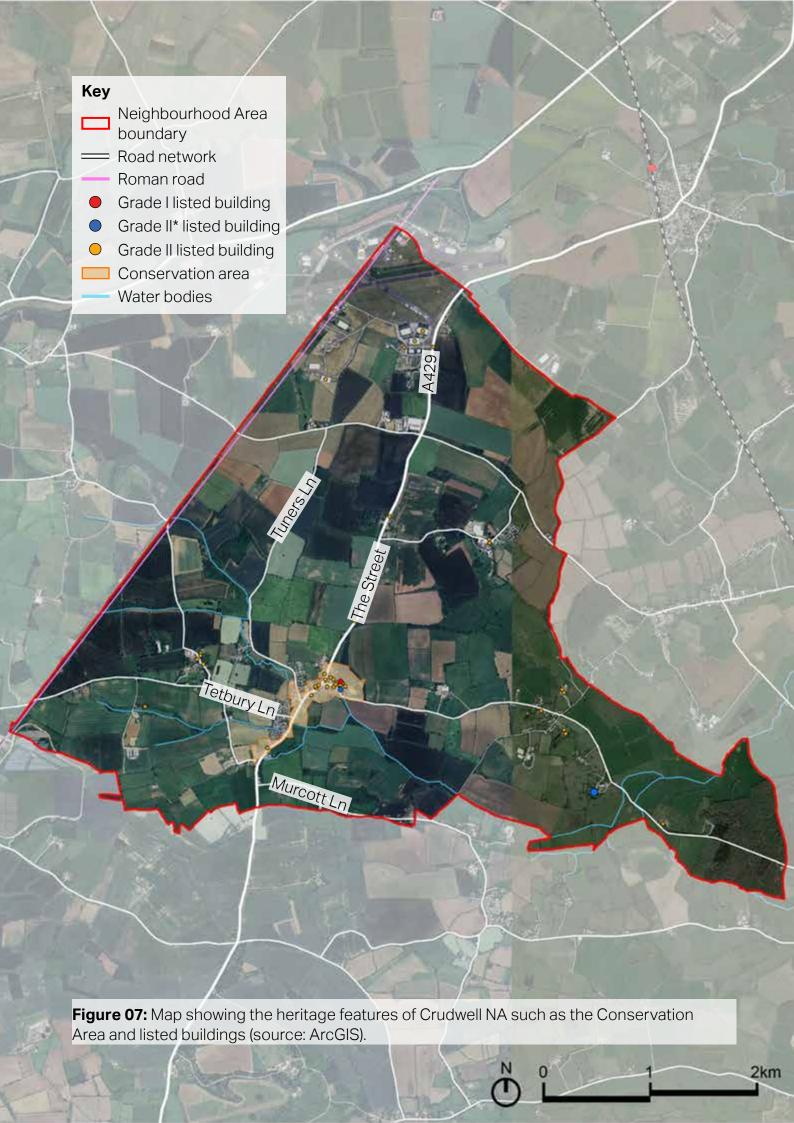
Key

=== Road network

- Grade I listed building
- Grade II* listed building
- Grade II listed building
- Conservation Area
 - Water bodies



Figure 06: Map of the Conservation Area showing the location of listed buildings in the village.



2.3 Landscape and local facilities

2.3.1 Landscape features

Crudwell lies in the National Character Area 107 Cotswolds. In the North Wiltshire Landscape Character Assessment the NA lies in the Character type: Lowland Limestone (Forest Marble) Farmland and character area: Sherston Dipslode Lowland. Key characteristics of the landscape include:

- Gently, undulating lowland farmland underlain by limestone;
- Open landscape with broad low hills and shallow river valleys;
- Broad panoramas and distant views;
- Continuity of hedgerows and veteran trees.

There are areas of priority habitat scattered around the NA which are associated with high quality areas of deciduous woodland important to conserve.

2.3.2 Green spaces in the village

Green spaces in the village include:

- The recreation ground with children's play area located on Tetbury Lane;
- The Village Green off The Street opposite Crudwell C of E Primary School;
- All Saints Church cemetery;
- Informal green spaces with trees between The Street and Tuners Lane.

2.3.3 Flood risk

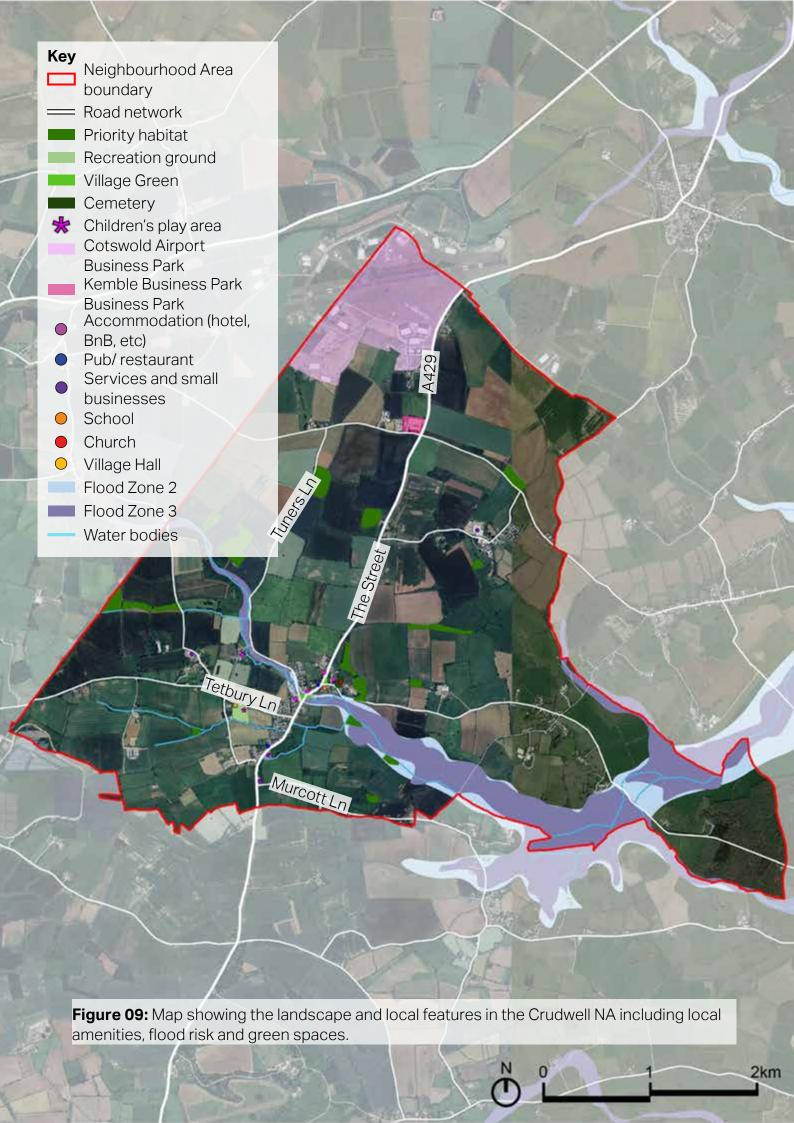
There are significant areas of flood risk with both Flood Risk Zone 2 and Zone 3 covering parts of the village. The flooding is primarily associated with the Swill Brook, which runs east-west through the village. These flood risk zones are shown on the map on the following page.

2.3.4 Uses

The majority of the NA consists of arable farmland, with residential development as the primary land use within the village. Community amenities include the church, school, village hall, three pubs, and hotels. There are also individual services and businesses, alongside those at Kemble Business Park in the northern part of the NA. Additionally, the NA partially covers the Cotswolds Airport to the north.



Figure 08: Village Green off The Street with green space, trees and a bench.



Key

- == Road network
- Priority habitat
- Recreation ground
- Village Green
- Cemetery
- thildren's play area
- Accommodation (hotel, BnB etc)
- Pub/ restaurantServices/ businesses
- (independent car garages, Kemble business park etc.)
- School
- Church
- Village Hall
- Flood Zone 2
- Flood Zone 3
- Water bodies



Figure 10: Map illustrating the local amenities, flood risk and green spaces in Crudwell village.



Figure 11: All Saints Church.



Figure 12: The Potting Shed Pub.



3. Design guidance and codes

This chapter presents a series of area-wide design guidance, applicable to future development within the Crudwell Neighbourhood Area. Where possible, local images are used to exemplify the design guidance and codes. Where these images are not available, best practice examples from elsewhere are used.

3.1 Introduction

This section supports developers and other applicants when producing or reviewing planning applications within the Crudwell Neighbourhood Area. The guidance presented apply to the whole NA, including any future allocated sites, infill development, and windfall development. Where applicable and relevant the design guidance and codes in this report reference and build upon some of the design guidance written into the Crudwell Neighbourhood Plan 2019-2026.

The guidance focuses primarily on residential developments. New housing development and modifications should not be viewed in isolation; rather, considerations of design and layout must be informed by the wider context. The local pattern of roads and spaces, building traditions, materials and the natural environment should all help shape the character and identity of a development. It is important with any proposal that full account is taken of the local context and that the new design embodies the 'sense of place'.

Reference to context means drawing inspiration from what is around, shown in Chapter 2, as inspiration and influence.

Sensibility to the context should by no means restrict architectural innovation; in fact, the solution could be a contemporary design that harmonises with the surroundings. Proposals should also take account the individual characteristics of the immediate local context and seek to enhance any existing distinctive features.

The design guidance and codes are grouped into four overarching themes as well as a section specifically focused on development near the Conservation Area. These themes have been generated based on the site visit, discussions with members of the NPSG and the Neighbourhood Area context analysis in Chapter 2 of this report, as well as good design practice. The themes are as follows:

- Built form;
- Public realm;
- Employment;
- Sustainability.

Please note:

Both design codes and guidance are contained within this document.

Design codes: Design codes are mandatory requirements for design issues and are expressed with the word **MUST**.

Design guidance: Guidelines set out aspirations for design that is expected to be delivered and are expressed with one of two words:

SHOULD reflects design principles that are strongly encouraged.

COULD reflects design principles that are suggestions.

3.2 Built form

3.2.1 Village layout

Building line, set back and plot ratios

- Building line **should** be congruous with the existing building line to ensure new development integrates seamlessly into the local context.
- Buildings **should** generally sit towards the front of plots to reflect the historic

- street pattern in the village that is characterised by short building setbacks.
- Plots must allow for appropriate sized garden space. Garden space helps maintain the rural character and avoids new development looking too suburban or urban which would detract from the character of the village. Acceptable plot coverage ratios are shown below.

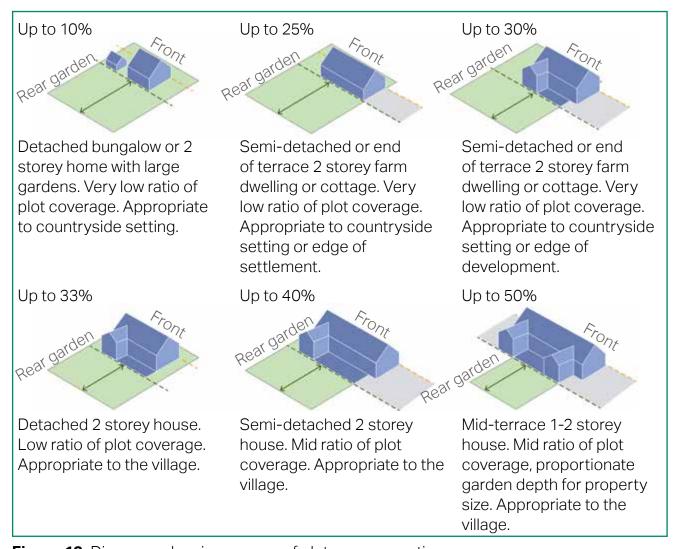


Figure 13: Diagrams showing a range of plot coverage ratios.

Typologies

 Typologies vary in the village and include terraced, semi-detached and detached. New development of multiple houses **should** consider the local mix. A combination of typologies **could** be used to avoid uniformity.

Height, scale and massing

- Building heights must reflect local context of 1-2 storeys in height.
- To maintain the village character and ensure any new development is sensitive to historic built form massing is important to consider. The design of new development **must** consider how massing of buildings can be sympathetic to historic massing.
- Modern standards such as increased room size and building depth can result in roof planes which are overbearing. To reduce the visual dominance of the roof multi-roof surfaces such as an 'M' roof or rear gables **could** be used.
- Barn styles seen in Crudwell could be used in new development to maintain and contribute to the agricultural character of the village.



Figure 14: Varying low roofline of informal development in the Conservation Area.

New home with deeper plan and large, over-Local vernacular. bearing roof.



Use of 'M' roof to accommodate deeper plan building.



Use of double, rear gable to accommodate deeper plan building.





Figure 15: Diagrams showing how roof forms can be designed to produce massing which is more in keeping with the local vernacular whilst still accommodating modern standards.



Figure 16: One and two storey roofline.

Plot arrangement

- Any cul-de-sac development must be carefully considered and well-integrated into the movement network, keeping it short in length and with onward pedestrian and cycle connections.
- Future development within the village boundary must retain appropriate unbuilt gaps between buildings, protecting short views, as the loss of this would compromise the natural and rural setting of the village.
- Buildings generally **should** be orientated towards the street. There are areas of more informal building arrangement in the village; therefore orientation **could** be slightly varied where this may best benefit from solar gain.

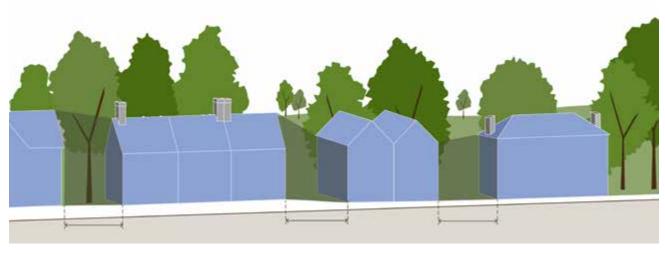


Figure 17: Diagram illustrating green gaps between buildings which allow for views and green space.

3.2.2 Architectural vernacular and materiality

Parish-wide material palette

There is a distinct, traditional material palette seen in the Conservation Area which reflects use of locally sourced materials. The dominant building material is locally-quarried limestone. Roofs are predominantly ragged-edge mottled stone slates, with some use of double Roman clay tiles and a small number of properties with dark bluegrey Welsh slates.

- Within the Conservation Area, the traditional material palette **should** be used.
- Outside of the Conservation Area use of the traditional material palette is encouraged; where other materials are used these **must** be sensitive to the local vernacular.

Materials from the local vernacular are shown on page 29. Some design codes and guidance for traditional materials are as follows:

- Natural stone walling should be laid in lime mortar. Cement mortar should not be used;
- A minimum 150mm bed **should** be used for natural stone walling;
- Render, particularly rough-cast could be used in modest quantities, for example rear walls;
- If used, timber cladding **should** ideally be untreated oak, allowed to go silver-grey naturally.

Fenestration

In Crudwell, fenestration plays a key role in the traditional vernacular. Historic buildings feature recessed, painted hardwood windows and doors. However, newer developments often use window frames flush with the building envelope and uPVC, which do not align with the local character. Therefore, design codes and guidance for fenestration are as follows:

- Fenestration proportions and materials must be sensitive to the local context;
- Windows and doors should use painted hardwood;
- Windows and doors **should** be recessed into walls, ideally by 100mm;
- uPVC windows and doors could be used when they do not visually detract from the property.

Roofscape

Traditional roofscape in Crudwell features low-height pitched roofs, punctuated with chimneys and occasional dormer windows. Design codes and guidance for roofs are as follows:

- Roof planes must avoid overwhelming the overall massing, ensuring they align with the proportions of historical styles;
- Roofline should reflect surrounding roof styles. These are predominantly pitched. Dormer windows, cross-gabled roofs, and lower-height roofs on parts of buildings break up the roofscape and could be used in new development to avoid monotony and reduce visual presence of the roofs;

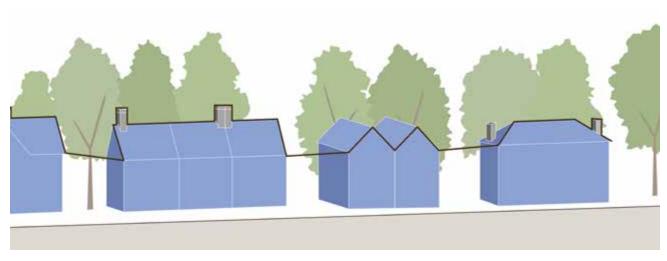


Figure 18: Diagram illustrating how variety can be introduced in the roofscape.

- Roofline should vary to reflect the informal, rural character whilst still maintaining one- to two-storey heights.
 Figure 18 shows use of different roof forms and varying ridge heights and eaves can produce variety in roofscape of buildings of the same height;
- Roof-pitch should typically be 42.5 to 52.5 degrees within the Conservation Area. Shallower roof pitches could be acceptable elsewhere. Flat roofs must not be used;
- For a two storey building roof ridge height **should** be in the region of 6m and the eaves height of 4m, with an eavesheight to ridge-height ratio of 2:3.

Contemporary design

 Green and alternative technology materials (especially when using locally based materials) are encouraged. supported by appropriate data, descriptions and details. The use of materials outside the local material and colour palette **must** be carefully considered. While innovation and excellent design are encouraged, contemporary designs and materials are only appropriate if they are of high quality, environmentally sustainable, and contribute to the overall character. Proposals **must** demonstrate that proper account has been taken of the characteristics of the local context, including the landscape setting.

Local vernacular and material palette

Wall materials



Figure 19: Limestone.



Figure 20: Stone with render on one wall.



Figure 21: Roughcast render.

Roof materials



Figure 22: Mottled stone slates.



Figure 23: Double Roman clay tiles.



Figure 24: Dark blue-grey Welsh slates.

Fenestration

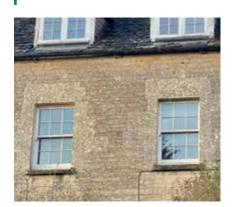


Figure 25: Recessed sash windows.
AECOM



Figure 26: Recessed timber door.



Figure 27: Modern recessed windows.

3.2.3 Accessible homes

The Local Plan requires new developments to be accessible and inclusive.

- New homes **should** ensure long-term sustainability by being accessible and inclusive to people of all ages and abilities;
- The interior design of homes must be suitable to accommodate the needs of people with mobility limitations;
- The street and footpath network should be accessible to all users and connect to the wider movement network.

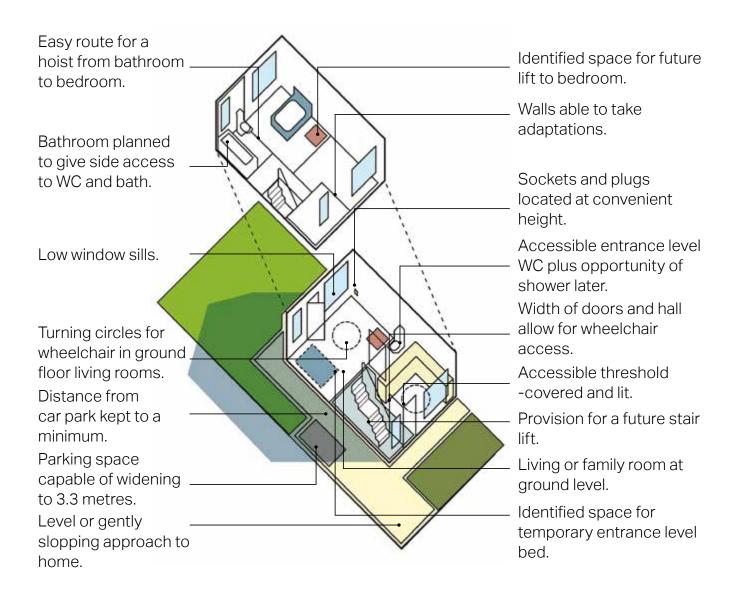


Figure 28: Illustrative diagram of accessible features in a home.

3.2.4 Infill development

Small scale infill sites can integrate with existing grain and help to achieve more organic development of the village.

- Infill development can influence the layout, density, views and cohesion of the village, and therefore **must** be designed with consideration of the surround context and the wider village setting.
- Infill set to the rear of the existing building line (tandem infill) must respond sensitively to the scale, density, massing and architectural style of the streetfronting dwellings in the immediate surrounding context.
- Infill development should not detract from the existing rhythm and pattern of development and views out to the surrounding landscape. For example, maintaining low boundary heights and gaps between buildings can help preserve existing long views. Such gaps must also provide adequate separation distances between facing windows of a minimum 15 metres to ensure privacy from overlooking is maintained.
- The building typology of any infill development must respect the existing surrounding typologies. Development should ensure diversity and variety in scale and bulk, informed by these building typologies. Refer to guidance on typology and massing in Section 3.2.1.

3.2.5 Extensions and conversions

- The newly built extension must be subordinate the main building from any given viewpoint. The original building should remain the dominant element of the property regardless of the scale or number of extensions.
- Extensions **should** not cause a significant reduction in the private amenity area of the dwelling or its neighbours.
- In the case of rear extensions, the new part **should** not have a harmful effect on neighbouring properties in terms of overshadowing, overlooking or privacy issues.
- The pitch and form of the roof contribute to the building's character, and extensions **should** respond to the existing structure appropriately.
- Extensions should consider the materials, architectural features, window sizes and proportions of the existing building and respect these elements to design an extension that matches and complements the existing building.
- For side extensions, the new section should be set back from the front of the main building. This ensures the visual impact of the junction between the existing and new parts is minimised.
- Where possible, reuse as much of the original materials as possible, or alternatively, use like-for-like materials.
 Any new materials **should** be sustainable and applied to less prominent areas of the building.

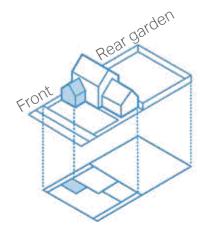


Figure 29: An example of a front extension.

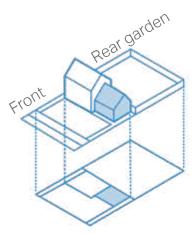


Figure 30: An example of a side extension.

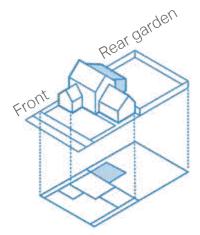


Figure 31: An example of a rear extension.

3.2.6 Development at the settlement edge

- When new development faces onto the surrounding open fields, it **should** blend harmoniously into the surroundings and views towards the settlement. For that reason, the massing, boundary treatments, rooflines and materials **must** be sensitive to the surrounding landscape.
- Edge of settlement development should gradually transition to the surrounding landscape by utilising comprehensive landscape buffering, or 'green curtains', implemented along the edge of development. Abrupt edges to development with little vegetation or landscaping on the edge of the settlement should be avoided.
- Where building elevations along the settlement's edge are visible from the surrounding countryside, they **should** present an attractive, positive frontage through careful fenestration placement, material choices, boundary treatments, and sensitively designed extensions.
- Long stretches of blank (windowless)
 walls must be avoided, including on
 side elevations, except where this is
 in keeping with the character (e.g.,
 farmyard-type buildings).
- If a gateway plot is developed with a group of buildings, the corner of the site should act as the key landmark. The corner building could be slightly taller or display a notable built element, signalling its importance within the grouping.

- Gateway buildings and features should, however, reflect local character and respond to existing development and landscaping on the opposite side of the main route into the settlement.
- In the case of boundary treatments for back gardens or perimeter walls, the quality of the materials is key as this will have a major impact on long views.

Perimeter walls **should** be under 1.5m to retain views. The rear boundaries of properties onto open countryside **should** either follow existing hedgerow boundaries or be planted to form new hedgerows. Vernacular boundaries, such as low stone walls, **could** be appropriate if they do not obscure views. Panel fencing **should** be avoided.

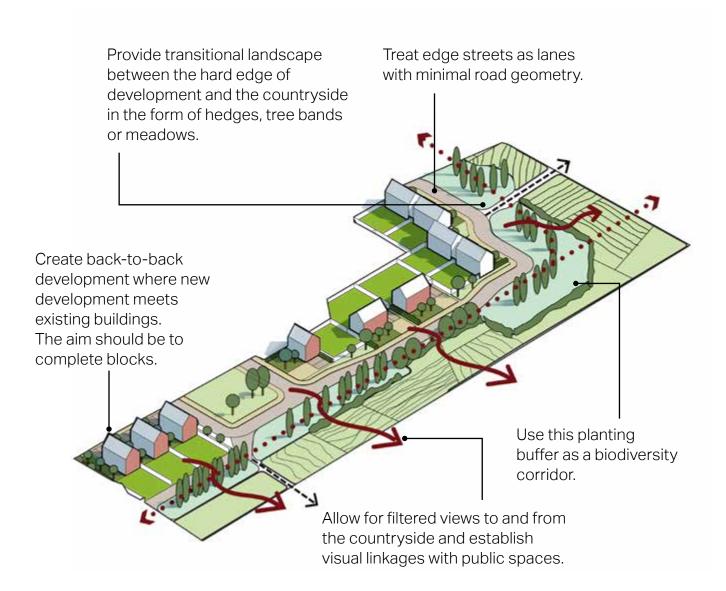


Figure 32: Diagram illustrating strategies for a well-designed settlement edge.

3.3 Public Realm 3.3.1 Streetscape

- Proposed boundary treatments should reflect locally distinctive forms and materials, such as open fronted low stone, open timber fencing and agricultural style gates or well-defined green boundaries, such as hedges.
- Tall, impermeable boundaries that create a sterile and monotonous street scene must be avoided.
- Original boundary treatments of traditional building plots **should** be left intact, and not chopped through or significantly reduced for access.
- All boundary walls should remain under 1.5m in height to retain visual connections. Boundary treatment could be used to screen parking, and could combine walls with soft (green) landscaping to achieve this.
- Native plants, trees and hedgerows should not be replaced by ornamental planting, as doing so would diminish the area's character.

- Development **should** refer to the boundary treatment examples below, which outlines positive examples found within the parish.
- Front gardens **should** be enclosed by an appropriate boundary treatment when there is appropriate space for it; front garden should provide security and privacy to the private property.
- Front gardens could vary in size, however, all dwellings should have a clear separation between private and public realm purposely designed.
- Front gardens must not be dominated by car parking, cycle parking, storage, refuse and recycling storage.
- Careful consideration should be given to purposely designed refuse storage and cycling parking when allocated to the front of the building. These should be mindful of the street scene and avoid creating clutter and dominating the streetscene.
- Green boundaries must be well-defined and should avoid being too high so as to not infringe onto the public realm and disrupt safe and active travel.



Figure 33: Low stone wall.



Figure 34: Low stone wall.



Figure 35: Hedgerow combined with stone wall.

3.3.2 Biodiversity and local wildlife

- Development **must** avoid the loss of trees and hedgerows and **must** protect local habitats and wildlife corridors.
- Design **should** integrate and connect existing landscape features and incorporate SuDS, local trees, plants and hedgerows, to enhance biodiversity and preserve rural character. Connecting green areas creates or improves wildlife corridors, helping to increase movement between isolated populations and providing shelter from harsh weather.
- Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. For that reason, rich vegetation is suggested, instead of continuous solid fencing.
- Verges along roads should be incorporated into the design of new developments or enhanced where possible to improve the overall aesthetic and ecological value.
- Development **should** provide bat, owl and bird boxes and bat friendly lighting to maintaining foraging routes.

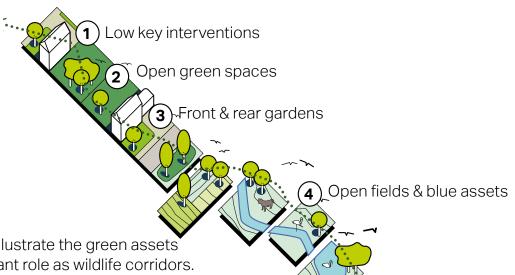


Figure 36: Diagram to illustrate the green assets that can play an important role as wildlife corridors.



Figure 37: Example of a bat box placed in the front or rear garden of a property.



Figure 38: Example of a bird feeder located on a grass area opposite a public footpath.



Figure 39: Example of a pollinator garden that could be placed in a communal green space within the built environment.

3.3.3 Active travel and connectivity

- Development beyond the scale of the single plot must provide or promote pedestrian-friendly environments that prioritise safe and accessible walking routes. Materials should be appropriate for all-weather use and accessible
- for people with buggies and mobility impairments.
- Permeable materials **should** be used for footpaths to reduce environmental impact and improve drainage.
- Developments **should** facilitate outward connections by linking to the existing PRoW network.

Connect to valuable assets and buildings within the village such as schools, churches or key amenities.

Proposing short and walkable distances, which are usually defined to be within a 10 minute walk or a five mile trip by bike. If the design proposal calls for a new lane or cycle/pedestrian link, it must connect destinations and origins.

Proposing 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 onward pedestrian links.

new lane or cycle/pedestrian link, it must connect destinations and origins.

Connect to the surrounding countryside with controlled access to paths along fields to help maintain hedgerows.

Connect to local open and green spaces within the village.

Avoid designing features that hinder pedestrian and cycle movement such as gated developments, barriers and high walls or fences.

Figure 40: Diagram illustrating built form layout to promote pedestrian and cycling connectivity.

3.3.4 Parking provision

Crudwell is a rural village situated along a key A Road, resulting in a higher reliance on cars, where sufficient parking is essential to accommodate the needs of residents. However car parking should not be unsightly or dominate the streetscene or fronts of houses. Parking provision should be undertaken as an exercise of placemaking.

- Hard standing areas and driveways must be constructed from porous materials, to minimise surface water run-off and therefore, help mitigate potential flooding.
- Electric vehicle charging points, mounted charging points and associated services must be integrated into the design of new developments. Cluttering elevations, especially main facades and front elevations must be avoided.
- Pedestrian routes to/from the parking space must be considered to ensure parking connects to adjoining footpaths.
- Car parking design must be combined with landscaping to minimise the presence of vehicles.
- Covered parking/ parking barns could be used in new development with styles to reflect the rural and agricultural character.
- Alternatively, parking **could** be integrated on-plot set behind the building line. It is advised that only 1/3 of the front garden uses hard surfacing.



Figure 41: Example of covered parking, elsewhere in the UK.

3.4 Employment

This section applies to any development of employment, business and light industrial uses in Kemble Business Park to the north of the NA. The design codes and guidance relevant to this area are focused on movement through the area, including environmental sustainability, movement and the material and layout of employment units.

3.4.1 Environmental sustainability

SuDS

- Integrated Sustainable Drainage
 Systems (SuDS) and green roofs
 could be introduced with the aim of
 achieving green field run off rates, while
 contributing to increased biodiversity
 and improving water quality of surface
 water run-off.
- Surface and rainwater harvesting could be used for employment units. The harvested water could be re-used within buildings and for the irrigation of the landscaped areas.

Eco-design features

- Any new design should prioritise green solutions, such as using high levels of insulation, passive cooling and heating, and natural ventilation. Strategies for sustainable energy generation could use waste heating, solar energy or ground source heat pumps.
- Solar panels **could** be installed on existing south-facing roof faces and/or incorporated seamlessly into any new units from the design stage.

Biodiversity

- Areas that have high ecological value must be retained. Areas of additional ecological value should be enhanced, or created where possible.
- SuDS should be designed to increase biodiversity, for example through the incorporation of wetland plant species.
- Biodiversity features, including bird boxes, bee hives and bug hotels, **should** be implemented.
- Low maintenance planting design should be used, such as wildflower verges. Grass lawns must generally be avoided as high maintenance and low biodiversity solutions.
- Tree coverage should be increased wherever possible. Trees could be planted along street edges, within the car park and as dense vegetation buffers to create pollution barriers.

3.4.2 Movement

Parking

- Electric Vehicle parking bays must be provided with suitable charging.
- Car parking **should** be screened with landscaping, which **could** include tree pits between parking bays to break up rows of cars and improve the visual and environmental quality of the space.
- Car parking surfaces **should** be made from permeable materials to reduce surface water runoff and mitigate flood risk.

 New units **could** incorporate undercroft parking to help reduce the visual dominance of cars in the business park.

Access and circulation

- HGV routes must connect to the strategic road network as efficiently as possible to reduce conflict between HGVs and other road users.
- Businesses **should** work together to consolidate deliveries where possible, to reduce HGV movements.

Pedestrians and cyclists

- Active travel **should** be promoted by providing dedicated pedestrian and cyclist routes and entrances directly from the street. Segregation of servicing and pedestrian routes helps ensure safety and convenience for all users.
- Secure cycle parking should be integrated into the parking layout.

3.4.3 Employment units

Materials

There is a strong material and colour palette in Kemble Business Park, which works to create a cohesive design across the area and features good quality materials. Materials include red brick on the ground floor with dark green panelled above and light green entrances.

- Any new units must use good quality materials and could follow the existing palette to maintain the cohesive design.
- Building heights must keep to one or two storeys. Heights greater than the existing

- employment units **should not** be acceptable due to the negative impact on surrounding landscape and views.
- Green and alternative technology materials (especially when using locally based materials) are encouraged. supported by appropriate data, descriptions and details. This could include green roofs.

Layout

 Active uses and main operating areas should be positioned at ground floor, along the street.



Figure 42: Parking with permeable paving and tree planting (Calvados-Honfleur Business Park, France).



Figure 43: Employment unit in Kemble Business Park.

3.5 Sustainability

3.5.1 Sustainable development

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, with the emerging Future Homes Standard and Part L of the UK Building Regulations.

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.

Adjacent Figure 44 features an array of sustainable design features. Features with pink icons **should** be strongly encouraged in existing homes. Features with orange icons show additional features that new

build homes **should** incorporate from the onset where possible.

Design guidance for some of the eco-design features in the diagram are detailed on the following pages.



Existing homes

- 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
- 6 Mighly energy- efficient appliances (e.g. A++ and A+++ rating)
- 6 Highly water- efficient devices with low-flow showers and taps, insulated tanks and hot water thermostats
- Green space (e.g. gardens and trees) to help reduce the risks and impacts of flooding and overheating
- Flood resilience and resistance. Where susceptible to flooding, removable air block covers, installing washing machines upstairs, waterproof flooring (avoiding wood flooring and carpets)

Existing and new build homes

- A High levels of airtightness.
- Triple glazed windows and external shading especially on south and west faces
- C Low-carbon heating and no new homes on the gas grid. Air or ideally ground source heat pumps to replace gas or oil boilers.
- More fresh air with mechanical ventilation and heat recovery, and passive cooling
- Water management and cooling more ambitious water efficiency standards, green roofs and reflective walls
- Flood resilience and resistance e.g. raised electrical, concrete floors and greening your garden
- G Construction and site planning timber frames, sustainable transport options (such as cycling)
- (H) Solar panels
- Electric car charging point

Figure 44: Diagram showing low-carbon homes in both existing and new build conditions.

Solar panels

Solar panels over a rooftop can have a positive environmental impact, but their siting, design and installation **should** be handled sensitively, particularly on heritage assets. Preserving the character of the original building and wider setting/village **should** be a priority. It is also important to note that solar panels on listed buildings require consent.

On new builds

Solar panels **should** be designed in from the start, forming part of the design concept. Some attractive options are solar shingles and photovoltaic slates or tiles. In this way, the solar panels can be used as a roofing material in their own right.

On retrofits

Design **should** respond to the proportions of the building and roof surface in order to identify the best location and sizing of solar panels.

Colour & contrast

The colour and finish of solar panels and how they reflect light **should** be chosen to fit in with the building or surroundings. The majority of crystalline and thin film panels are dark blue or black; within these shades are a variety of finishes and tones to help make the panels unobtrusive.

Frames

Panels without frames, or black-framed panels, **should** be used where framed panels would detract from the building. Untreated or natural finished metal panel frames can look out of place and draw unnecessary attention to the panels. Many manufacturers sell panels with frames that are painted or anodised to blend in better with the building.

Size and style

Design **should** respond to the style of the building and, if possible, position the solar PV panels so they are in proportion to the building and its features. For example, they **could** resemble roofing elements such as roof lights or windows.

The way in which panels are laid out in relation to one another can make a huge difference to the appearance of the system – symmetrical installations tend to work much better. Covering the whole roof or one of its gables is also advisable.

Surroundings

Plant types and locations **should** be chosen so that plants will not grow to shade areas on the property or on neighbouring properties where solar energy systems are installed. Design and location of new structures should also not overshade these areas.

Solar PV on adjacent houses of the same type may look out of place if the approaches are very different. If neighbours use different sizes and colours of panels or position them differently in relation to the roofs, it can have a significant impact. PV design **should** consider using similar components to fit with the prevalent panel style in the area.



Figure 45: 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 46: Positive example of implementing solar panels since the design stage.

Ground source and air source heat pumps

Ground source and air source heat pumps absorb heat from the environment to use for both heating and hot water within the house. For most residential properties in Crudwell air source heat pumps are the more appropriate choice, given ground source heat pumps require large amounts of outdoor space to accommodate underground loops.

Air source heat pumps still require some outdoor space for the pump unit, though considerably less, and many back gardens in Crudwell would be large enough to accommodate one.

Therefore, some design considerations for air source heat pumps are:

- Bespoke covers and landscaping can visually screen the heat pump; for example wooden enclosures **could** be used and stained to match the colour of the building wall. However, it is important to ensure that any covers are durable and weather-resistant and that neither the cover nor any planting obstructs ventilation.
- Placement of heat pumps should not visually damage the street scene and the main, front elevation of a building and therefore, should ideally be placed to the rear of the dwelling.
- Heat pumps **should** be placed so that they are protected from heavy snowfall or flooding. They can be mounted on the wall with anti-vibration dampers, to mitigate noise impact to the interior of the property, or on anti-vibration mounts on the ground.



Figure 47: Heat pump screening at the front of a dwelling.

Thermal mass

Thermal mass describes the ability of a material to absorb, store and release heat energy. Thermal mass can be used to even out variations in internal and external conditions, absorbing heat as temperatures rise and releasing it as they fall. Thermal mass can be used to store high thermal loads by absorbing heat introduced by external conditions, such as solar radiation, or by internal sources such as appliances and lighting, to be released when conditions are cooler. This can be beneficial both during the summer and the winter.

Thermal storage in construction elements **could** be used, such as a trombe wall placed in front of a south facing window or concrete floor slabs that can absorb solar radiation and then slowly re-release it into the enclosed space. Use of thermal mass can be combined with suitable ventilation strategies.

Insulation

Thermal insulation **could** be used for any wall or roof on the exterior of a building to prevent heat loss. Particular attention **should** be paid to heat bridges around corners and openings at the design stage.

Acoustic insulation **could** be used to reduce the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom). Such insulation and electrical insulation can prevent the passage of fire between spaces or electrical components.

Airtightness

Airtight constructions can help reduce heat loss, improving comfort and protecting the building fabric. Airtightness is achieved by sealing a building to reduce infiltration-which is sometimes called uncontrolled ventilation. Simplicity is key for airtight

design. The fewer junctions the simpler and more efficient the airtightness design will be.

An airtight layer **should** be formed in the floor, walls and roof. Doors, windows and roof lights to the adjacent walls or roof **should** be sealed. Interfaces between walls and floor and between walls and roof, including around the perimeter of any intermediate floor **should** be linked. Water pipes and soil pipes, ventilation ducts, incoming water, gas, oil, electricity, data and district heating, chimneys and flues, including air supplies to wood burning stoves, connections to external services, such as entry phones, outside lights, external taps and sockets, security cameras and satellite dishes **should** be considered.

Seal penetrations through the air barrier to guarantee the air tightness of the dwelling. Provide thermal insulation to any wall or roof to the exterior to prevent heat losses.

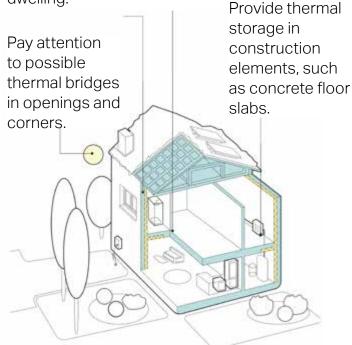


Figure 48: Diagram showing areas of concern regarding building solutions for thermal mass, insulation and air tightness.

3.5.2 Sustainable Urban Drainage Systems

Design **must** respond to the significant flooding issues within the NA, associated with the Swill Brook and its tributaries, as well as surface water flooding.

Sustainable Drainage Systems (SuDS) cover a range of approaches to manage surface water in a sustainable way to reduce flood risk and improve water quality and the overall urban environment. SuDS work by reducing the amount and rate at which surface water reaches a waterway or combined sewer system.

SuDS are often as 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. 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.

A number of overarching principles can be applied:

- Surface water **should** be managed as close to where it originates as possible;
- Runoff rates **should** be reduced by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow so that it does not overwhelm water courses or the sewer network;
- Water quality **should** be improved by filtering pollutants to help avoid environmental contamination;

- Various 'SuDS' could be linked to maximise overall efficiency of the system;
- SuDS should be integrated into development and improve amenity space through early consideration in the development process and good design practices. SuDS must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits;
- SuDS schemes could link the water cycle to make the most efficient use of water resources by reusing surface water.

One of the most sustainable SuDS options for private plots is surface water collection for reuse, such as through a water butt or rainwater harvesting system. This not only manages runoff but also reduces pressure on vital water sources. Where reuse is not possible, two alternative approaches using SuDS include:

- Infiltration allows water to percolate into the ground and eventually help restore groundwater;
- Attenuation and controlled release holds back the water and slowly releases it into the sewer network.



Figure 49: Example of swales and a dam integrated with a crossing point, elsewhere in UK.



Figure 50: Example of SuDS designed as a public amenity and filly integrated into the design of the public realm, Stockholm.

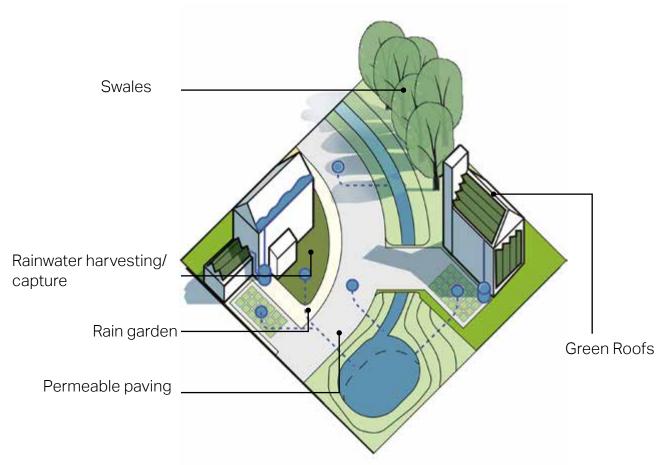


Figure 51: Illustrative diagram of sustainable urban drainage systems in a residential neighbourhood.

3.5.3 Dark skies and lighting

Careful consideration and thoughtful design of lighting schemes within properties, whether in front or back gardens, are essential in any new development in the NA. This is crucial to maintaining the rural character of Crudwell and minimising light pollution.

- Lighting schemes must not cause unacceptable levels of light pollution particularly in intrinsically dark areas.
- Lighting schemes that could be turned off when not needed ('part-night lighting')
 should be considered to reduce any potential adverse effects.
- Choice of lighting should be energyefficient and sustainable. The installation of carefully directed motion sensors should be encouraged.
- Lighting schemes **should** be directed downward to avoid reducing dark skies or disturb neighbours or passers-by.
- Foot/cycle path light should be in harmony with surrounding rural landscape. Lighting such as solar cat'seye lighting, reflective paint and groundbased lighting could be introduced.



Figure 52: Example of path lighting using low fixtures which direct illumination downward and outward to illuminate the pathway.



Figure 53: Example of lighting angled downwards to illuminate the pathway, which uses bullet type fixtures placed above the eye level on an object or tree.

3.6 Development within and near the Conservation Area

This section focuses on specific codes to guide development within and near the Conservation Area. The Conservation Area holds significant historic and landscape value, featuring numerous listed buildings. Its character is integral to the village's identity, making it particularly sensitive to change. As a result, new developments must adhere to more prescriptive design codes to ensure they complement and preserve the area's unique heritage.

	Topics	Specific codes
1	Building typologies	Building typologies should be appropriate for the local context and reflect the traditional typologies in the Conservation Area. This includes detached and semi-detached cottages, stone terraces and barn-style houses.
2	Height, scale and massing	Heights must be sensitive to the immediate local context and respond to those in the Conservation Area of 1-2 storeys. Massing should reflect the historic massing where possible - this could be achieved using barn-style housing, M-shaped roofs or rear gables as detailed in Section 3.2.1 .
3	Materials	Natural local materials should be used within the Conservation Area as set out in Section 3.2.2 and within the setting of listed buildings. However, for roof coverings, high-quality imitation stone may be considered acceptable.
4	Fenestration	Windows and doors should be made from painted hardwood and should be recessed into walls, ideally by 100mm. UPVC must not be used within, and in close proximity to the Conservation Area.
5	Roofscape	Roof-pitch should typically be 42.5 to 52.5 degrees. Square ridge and hip tiles should be used. Design should Include a simple clean-eave overhang of about 100mm, with the external wall coming up to meet the underside of the tiles and the same on the verge, where a 50mm overhang should be used and the tile-ends pointed with lime mortar.
6	Boundary treatment	Boundaries should reflect the use of stone walls and hedgerows in the conservation area. Where there are continuous boundaries of stone walls, for example in the area around the Church square, these must be retained with any new development.

Table 01: Specific design codes for different themes relevant to the Conservation Area.



4. Case studies

There are a few local examples of recent development in other towns and villages close to Crudwell which fit well within their context. These examples demonstrate some of the design advice within this report.

1. Southside Close, Corston

Southside Close is located in Corston, a small village south of Crudwell in the civil parish of Malmesbury. The development is on a 1.41 hectares brownfield site previously part of the farm complex of Southside Farm. Some of the successful attributes of the development are described below:

- Sensitive to local context new development is designed to respond to the character and significance of the historic stone barns on the site.
 Design draws on traditional farmstead principles. This can be seen in the form and massing of the buildings and the layout which incorporates a traditional U-shaped courtyard in the north of the site.
- Scale there is a mix of 1 1/2 sotrey barn-like structures and 2 storey cottage style properties to reflect the local context.
- Pedestrian connectivity the development incoporates a footpath along the front of the site to link to the existing footpath along Radnor Park.
- Green space the communal green space is overlooked by surrounding properties providing natural surveillance.

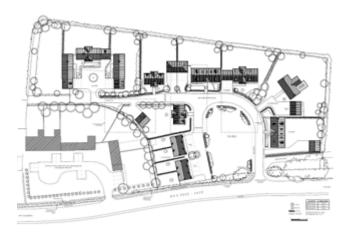


Figure 54: Site plan of Southside Close, showing the layout of the development which draws from traditional farmstead principles. (Fowler Architecture and Planning)



Figure 55: Entrance into Southside Close showing barn-style housing overlooking the communal green space.

2. Court Farm, The Street, Oaksey

Court Farm is located in Oaksey village in the neighbouring parish to Crudwell. The development is arranged on a small close off the main road and features terraced properties of one-and-a-half storeys in height. Some of the successful attributes of the development are described below:

- Materials use of stone and Roman clay tiled roofs which reflects the local material palette.
- Height and massing the development is low height of 1 to 1 1/2 storey barn-style houses reflecting traditional agricultural styles. Rear gables are used to provide for the depth of the buildings instead of increasing the pitched roof, which means roofs are not overbearing.
- Boundaries the stone walls match the existing stone walls along the Street which integrates the development well into the surrounding streetscape. The buildings at the front of the plot continue the existing building line of surrounding development.

3. Hardie Close, Cirencester Road, Tetbury

Hardie Close is located in Tetbury, a town and neighbouring parish to Crudwell. The development is a short cul-de-sac which branches off Circencester Road and features a mixture of detached, semidetached and terraced properties of two storeys. Some of the successful attributes of the development are described below:

Materials- Use of stone, roughcast

- render and slate roofing which reflects the local material palette. The colours of the stone and render fit well into the local context.
- Architecture and building style There
 is a range of typologies including
 terraces, semi-detached and detached.
 Architecture reflects traditional
 vernacular for example through use of
 recessed window frames and doors and
 stone chimney stacks.
- Building line and boundaries buildings at the front of the close face onto the street and continue the existing building line. Boundaries are stone walls with natural vegetation. This creates an attractive streetscape and also integrates well with the local character.
- Roofline Gables minimise the dominance of roofs.



Figure 56: Court Farm, The Street, Oaksey.



Figure 57: Hardie Close, Cirencester Road, Tetbury.

4. Arlington Fields, Arlington

Arlington Fields is located in Arlington, in the parish of Bibury to the north-east of Cirencester. The development is a short cul-de-sac off the B4425 at the edge of the village. Some of the successful attributes of the development are described below:

Materials - use of limestone and rough-cast off-white render and clay tiles in natural brown colour. The materials and colour-palette reflect the local character. The natural, brown colour of the roofs also fit well with the surrounding rural context as the developments sits at the edge of the settlement.

Architecture - use of detailing which reflects the local vernacular including recessed windows and doors, window headers and use of stone quoins.

Green space and gardens - trees and hedgerows which line the road in front of the site are retained and provide screening for the development. Green spaces, boundaries and trees are used throughout the development. There is a green walkway at the back of the development which allows views from the road to extend through the site to the green landscape and trees which gives a more rural feel.



Figure 58: Arlington Fields, Arlington.



Appendix: Checklist

This section sets out a general list of design considerations by topic for use as a quick reference guide in design workshops and discussions.

1

- √ Does new development integrate with existing paths, streets, circulation networks and patterns of activity to allow accessibility and connectivity?
- √ Is there an opportunity to reinforce or enhance the established settlement character of streets, greens and other spaces?
- √ Does the proposal harmonise with and enhance the existing settlement in terms of physical form, architecture and land use?
- √ Does the proposal relate well to local topography and landscape features, including prominent ridge lines and long-distance views?
- √ How can the local architecture and historic distinctiveness be reflected, respected and reinforced?
- √ Have important existing features been retained and incorporated into the development?
- √ Have surrounding buildings been respected in terms of scale, height, form and massing?
- √ Are all components e.g. buildings, landscapes, access routes, parking and open space well related to each other?

- √ Does the proposal make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation and minimisation) without adverse impact on the street scene, the local landscape or the amenities of neighbours?
- √ Has management, maintenance and the upkeep of utilities been considered by the proposal?
- √ Is there an opportunity to implement passive environmental design principles (for example, site layout being optimised for beneficial solar gain, techniques to reduce energy demands and the incorporation of renewable energy sources)?
- √ Does the proposal adopt contextually appropriate materials and details?
- √ Does the proposal incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features?

(continued)

- √ Does it favour accessibility and connectivity? If not, why?
- √ 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?

Local green spaces, views and character 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?
- Have opportunities for enhancing existing amenity spaces been explored?

- 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

Local green spaces, views and character

Local green spaces, views and character

(continued)

- √ Will any communal amenity space be created? If so, how this will 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)?

√ What is the arrival point, how is it designed?

- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

What are the typical groupings **Buildings layout and grouping** 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?
- √ 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?

AECOM

Gateway and access features

Household extensions

- √ What are the characteristics
- √ How has the building line been respected in the proposals?

of the building line?

√ Has the appropriateness of the boundary treatments been considered in the context of the site?

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?

- √ 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?

10

Car parking

- al
- √ 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?

- √ What is the distinctive material in the area?
- √ Does the proposed material harmonise with the local materials?
- √ Does the proposal use highquality materials?
- √ Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- √ Do 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?
- √ 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?

