

Quality information



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	24/11/2022	Research, site visit, drawings	Stela Kontogianni	Senior Urban Designer
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Executive Summary

This document has been prepared by AECOM Limited ('AECOM') in accordance with its contract with Locality (the 'Client').

Through the Department for Levelling Up, Housing and Communities (DLUHC) Programme led by Locality, AECOM was commissioned to provide design support to Calne Town and Calne Without Parish Councils.

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 Design¹) 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.

Therefore, this document provides guidance regarding design of future development appropriate to the Calne Area.

The general consensus of the local community is that there has been considerable development in the area much of which has been of mediocre design and that any further development should preserve the current character areas and be of a high standard of design.

Chapter 1 sets the scene by explaining the importance of good design and the purpose of the design guidelines and codes, followed by a brief summary of the scope and purpose of this report as well as the steps that were followed in its preparation (Final Report). The policy context is also set by presenting a series of policy documents that should be used as reference for this document and future development.

Chapter 2 provides an analysis of Calne area regarding the movement networks, historic evolution and settlement pattern, followed by a review of the different character areas across the Neighbourhood Area.

Chapter 3 presents a set of Design Guidelines and Codes that have been informed and shaped by the local character and landscape of Calne area. These should be followed throughout the whole of Calne area to ensure cohesion through the design and placemaking.

Chapter 4 explains why this report is a valuable tool in securing context-driven, high-quality development in Calne area and offers recommendations of various ways that this document could be used by each actor in the planning and development process.

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

 $^{1. \}underline{https://www.designcouncil.org.uk/sites/default/files/asset/\underline{document/the-value-of-good-design.pdf}$

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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 for Calne area.

1.1 The importance of good design

As the National Planning Policy Framework (NPPF 2021) (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 Design¹) 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.

Following the analysis of the Neighbourhood Area, a set of architectural and design qualities have been identified. These combined with good design practice will form the design principles that any development within Calne area should follow in order to comply with this Design Guidelines and Codes document.

1.2 What is a design code

The Governments 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..."

1.3 The purpose of this document

The NPPF 2021, paragraphs 127-128 states that:

'Plans should... 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 plans can play an important role in identifying the special qualities of each area and explaining how this should be reflected in development...'

'To provide maximum clarity about design expectations at an early stage, plans ... should use visual tools such as design guides and codes. These provide a framework for creating distinctive places, with a consistent and high-quality standard of design. However their level of detail and degree of prescription should be tailored to

^{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.

the circumstances in each place, and should allow a suitable degree of variety where this would be justified.'

The Government is placing significant importance on the development of design codes in order to set standards for design upfront and provide firm guidance on how sites should be developed.

The Wiltshire Core Strategy Development Plan Document ('the plan') was formally adopted on 20 January 2015. The Wiltshire Core Strategy (and saved policies from district local plans) is now under the 'Local Plan review' which will set out a positive vision for the future of Wiltshire for the period to 2036 and a framework for addressing housing needs and other economic, social and environmental priorities.

Over the plan period (2021 to 2036), approximately 1,605 homes will be provided, of which about 1,440 should occur in Calne and approximately 165 homes will be provided in the rest of the Community Area. At the time of writing this report 1,250

homes out of 1,605 requirement have been delivered through completions and commitments³.

Thus, this design guidelines and codes report will aim to help shape the design of at least 360 more homes in the Neighbourhood Area, and any other future development, by establishing a set of design principles that reflect the local character of Calne area and ensure that any design proposal within the area contributes to a distinctive place with a consistent and high-quality standard of design.

1.4 Preparing the report

The following steps were agreed with the Neighbourhood Plan Steering Group to produce this report, which draws upon policy development and engagement work undertaken by the Group:

STEP 1

Initial meeting between AECOM and the Calne Neighbourhood Planning Group followed by a site visit

STEP 2

Review of existing baseline documents

STEP 3

Urban design and local character analysis

STEP 4

Preparation of the design guidelines and codes

STEP 5

Draft report with the design guidelines and codes

STEP 6

Submission of the final report

³ Wiltshire Council Local Plan Looking to the future - Planning for Calne (2021): https://www.wiltshire.gov.uk/media/5631/Planning-for-Calne/pdf/WLP_Market_Town_Planning_for_Calne_FINAL.pdf?m=637459644494200000

1.5 National planning policy and guidance

This section outlines some key policy and design guidance that should be considered in future development in Calne Neighbourhood Area. The following design guidelines and codes have been produced at national, district and local level.

2021 - National Planning Policy Framework

Department for Levelling Up, Housing and Communities (DLUHC)

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 DLUHC

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.

2019 - National Design Guide DLUHC

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

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.



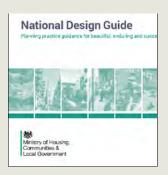




National Planning Policy Framework

2007 - Manual for StreetsDepartment 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 and place the needs of pedestrians and cyclists first.





DISTRICT LEVEL

2022 - Wiltshire Local Plan Review

Wiltshire Council

The review of the Local Plan is ongoing but the work undertaken so far includes consultation of key components to inform the updated Local Plan. This includes proposals for the scale and distribution of housing and employment growth across Wiltshire as well as adaption and mitigations for climate change. The emerging Local Plan has a requirement of 1,610 homes to be built within the Neighbourhood Area and to date 1,250 of the 1,610 homes have been delivered through completions and commitments.

2017 - Swindon and Wiltshire Joint Spatial Framework

Swindon Borough Council and Wiltshire Council

This document aims to guide the overall pattern of development across the wider area of the two councils, setting out the distribution of new jobs, homes and infrastructure.

2015-Wiltshire Core Strategy

Wiltshire Council

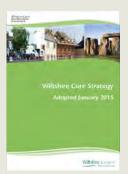
The Local Plan provides a flexible overarching planning policy framework for

Wiltshire up to 2026. It sets out the council's spatial vision, key objectives and overall principles for development in the county.

The principle of sustainability is at the heart of delivering viable and vibrant communities. This sustainable spatial strategy includes:

- Key principles for development;
- The location of strategic sites for new housing and employment development;
- Policies with which planning applications will be assessed; and
- A key diagram displaying the spatial aspects of the core strategy.





2018 - Calne Community

Neighbourhood Plan

Calne Town Council and Calne Without Area Council

The Made Neighbourhood Plan was adopted in 2018 with the aim of empowering the local community to influence and deliver sustainable development in the local area.

Since the Made Plan, the steering group has reformed and examined existing policies and reviewed the planning applications that have been decided since the Made Plan was adopted.

This Design Guidance and Codes will be used as evidence to underpin existing policies in the Neighbourhood Plan around local distinctiveness, landscape, heritage assets and setting.





1.6 Area of study

The Calne Neighbourhood Plan area comprises the market town of Calne and the surrounding area, forming a total area of 48.4 km² (Calne Town being 5.4km² and Calne Without being 43km²).

The town (population 19,074¹) is set in the valley of the river Marden where the A4 (the former London – Bristol coach road) crosses the river. The central part of the town is a Conservation Area. Saint Mary's church was founded in the C12 and the surrounding street pattern, and some buildings are from the late medieval to Georgian period when Calne was a centre for wool weaving. Some of the mills along the river Marden, now converted to residential use, remain part of the townscape.

The Conservation Area has over 140 Listed Buildings, including one dating from 1450. In C19 the town became a centre for pork processing and large factories were constructed in the centre of the town; this business closed in 1983, and a redevelopment of the centre of the town was undertaken. The factories were demolished to make way for car parks, residential and retail development as well as a noticeable library (opened in 2001). These developments continue to contribute to the present character of the town centre.

Outside the centre of the town workers cottages and larger 'villas' were constructed in the Victorian and Edwardian periods, mainly from the local limestone so that the town is largely stone build with few brick structures until recently. Calne saw considerable expansion, first with basic postwar housing and then (for its size) some large housing developments in the 1990s.

This trend continues today, expanding the town particularly to the north and east. These developments have been made with varying degrees of design consideration. Despite the development of a small industrial estate to the northeast of the town employment has not kept pace with residential expansion and the town has to some extent become a dormitory town

with residents commuting to Chippenham, Swindon, Newbury, Bath, and Bristol. As a small market town, it has a mix of retail facilities, a hotel, and restaurants and three secondary schools. However, it is not a 'true' centre for the surrounding region, as it has limited retail facilities and has recently lost its last bank branch.

The town sits at the intersection of the A4 (east-west) and the A3102 (north-south). As both roads merge as they go through the town, the result is often traffic congestion and air pollution at peak periods.

While the town is undeniably urban in character it is very close to the countryside – notably Castlefields Park which reaches into the central area of the town and leads quickly to riverside walks past farmland. The riverside also provides an important feature in the town including a green space (Beach Terrace) and the Horsebrook nature trail.

The surrounding area of Calne Without (population 3,391) is an area of 79 km² and, in contrast with the town, is

^{1 2021} Census Data

the communities of Old Derry Hill, part of Ratford, High Penn, Lower Compton, Calstone, Blackland, Stockley, Mile Elm, Sandy Lane, Derry Hill and Studley.

The south east of the planning area lies within the North Wessex Downs AONB. It includes two Conservation Areas at Derry Hill and at Sandy Lane. Each of these Conservation Areas has several Listed Buildings and has a distinct character, notably Sandy Lane which has thatched cottages built of local ironstone and even a thatched church. The western part of Derry Hill, including the Golden Gates entrance to Bowood, lies in the Conservation Area.

The central part of the Bowood Estate forms a triangular area of approximately 8km² between Derry Hill, Sandy Lane, and Pillars Lodge. This estate was designed by Capability Brown in the 1760s the estate contains a number of Listed Buildings including Grade I listings. The estate contains a golf course, a spa and hotel. It is also an important facility for local residents as these are a number of well-maintained public footpaths through the estate.

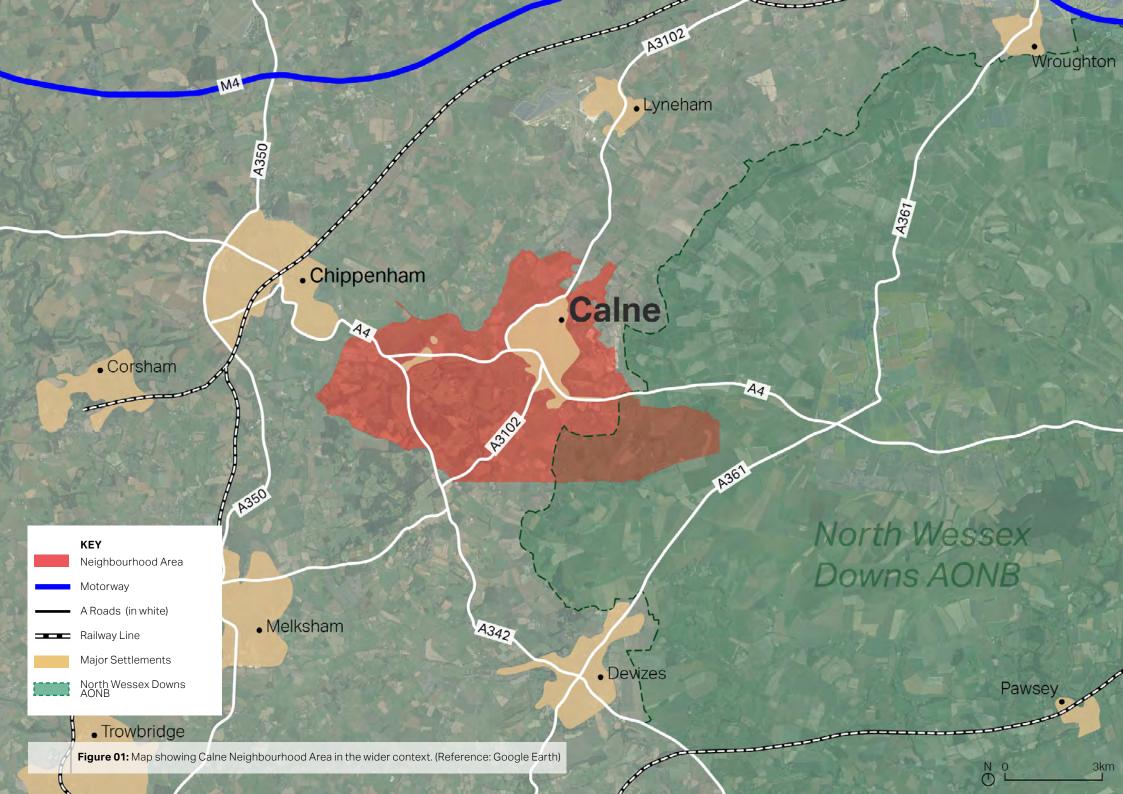
Most of the communities within the area are small villages or hamlets originally housing agricultural workers. One exception is Lower Compton: this is the site of the former RAF station RAF Compton Bassett and was used to house staff until the 1980s when the housing was sold.

As can be imagined, the characteristic of this area is typical of RAF housing of the period. It is surrounded by countryside that forms an important separation from Calne and Cherhill.

In the past Calne was also connected to the railway network, via a branch line to Chippenham. This route has since closed and now forms part of the well used and locally valuable Sustrans 403 cycle route to Chippenham. Furthermore, Calne historically benefited from access to a strategic canal network, via a spur connection to the Wilts & Berks canal. Whilst it is fairly small, the River Marden was also of great importance and features large number of mills, approximately 10, along its length.

Much of Calne's prosperity in the past came from its strategic position on the coaching route and its access to the canal and rail networks to get woolen and meat products from the town to its customers.

The object of this design guide is to inform future developments on appropriate design and placemaking standards for the area.





2. Neighbourhood area context analysis

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

2.1 Access and movement

Vehicular and pedestrian movement within Calne area is organised through a network of A-roads, secondary, tertiary and local roads, as well as a sustainable transport and active travel network. Across the Calne area, there is a clear hierarchy of roads providing good accessibility across the town and surrounding settlements.

 A-roads. There are three A-roads through the Calne Area: The east-west A4, which is a historical coaching route from London to Bristol; the north-south A3102 taking traffic from the Swindon direction towards Melksham, Devizes and beyond; and the A342 which is a corridor connecting Devizes to Chippenham going through Sandy Lane and Old Derry Hill. The character of the A4 varies as it runs through the countryside and then the town, adapting to the surrounding environment. For most of its length is a single-carriageway road with no pavements on either side, permitting two way travel. However, where it reaches Calne town centre, the road is fitted with wide pavements on one side allowing for safer pedestrian access. As the road leads out of Calne town centre towards Derry Hill and Studley, it reverts back to single-carriageway characteristics allowing for two-way travel with narrow or no pavements.

The A4 also serves as a local lorry route which brings traffic into Calne's industrial estate to the north. Heavy freight traffic is expected along the road which can sometimes cause congestion and additional noise/air pollution. As an effort to tackle noise and air pollution along these major routes, there are currently two Air Quality Management Areas, at Curzon Street and New Road where high concentrations of nitrogen dioxide exist, as well as Noise Action Planning areas in



Figure 02: View of the A4 (looking towards High Street) - a primary route that serves as the spine of Calne town, fitted with wide pavement and street furniture.



Figure 03: Tree-lined footpath and footbridge along River Marden.

the centre of the Calne area, Old Derry Hill and along the A4 at the top of Black Dog Hill.

The A3102 enters Calne from the southwest bringing traffic northwards into Calne town centre, as well as forming an edge for some of the edge of town residential neighbourhoods to the south. The A3102 eventually meets with London Road and New Road/A4, and continues along the north eastern edge of Calne town, leading out of the area.

- Secondary roads. There is a network of secondary roads running in Calne area, mainly within the town, offering immediate connections to the A4, the A3102, Calne's historical core and residential neighbourhoods. All roads are singlecarriageways, with pavements on either side or both sides, permitting two-way travel.
- Tertiary roads and cul-de-sacs. The rest of the road network consists of narrower tertiary roads, which are mostly residential streets. These tend to be gently meandering, which allow for changing

- views along streetscapes to maintain visual interest for road users. Most of the local roads within the built environment are cul-de-sac streets, however, there are also perimeter blocks at places. These are usually offer a quieter and more tranquil environment compared to busier secondary and primary roads. The Calne area is also characterised by a network of narrower village roads that provide access to areas such as Old Derry Hill and Sandy Lane, such as Back Lane which bridges between A3102 and A342.
- Cycle routes. Part of National Cycle Route 403 runs through Calne westwards from the south-western part of Calne town through Castlefields Canal and River Park, and into Calne Without via Black Dog Hill and along the River Marden. This strategic route crosses the North Wessex Downs and Savernake Forest, linking Chippenham to Marlborough and the Kennet and Avon Canal. Part of the footpath along the A3102 along the north-eastern edge of Calne Town also serves as a local cycle route, which terminates at the roundabout just before the industrial estate.
- Public Rights of Way. There is an extensive Public Right of Way (PRoW) network which links the town with the villages and surrounding landscape of Calne Without. There is also a network of PRoWs within Calne Town, and towards Blackland, Mile Elm, Derry Hill and Studley. These routes are important to promote active travel and pedestrian priority across Calne.
- Bus services. Key bus services provide connections throughout the Calne area and towards nearby centres, such as Chippernham and Swindon. The No. 55 is the most frequent service and is critical for overall access to public transport. It runs regularly between Chippenham and Swindon via Calne Town Centre. The No.40 runs to Tesco, Sainsburys, and the Post Office, while the No.42 towards Malborough via Calne town centre and Quemerford. The No.43 is a circular service that runs from Sainsburys via Calne town centre and southwards towards Stockley and Mile Elm before looping back along Quemerford to the town centre.

The Faresaver X76 service links the Town and Derry Hill to Bath and Malborough, via Melksham. The X10 runs between Cherhill and Chippenham via Calne town centre and Derry Hill. However, both of these services only run once daily in each direction. Furthermore, the No. 33 runs to Devizes every 2 hours. There are currently no bus services connecting to the County Town of Trowbridge.



Figure 04: Narrow rural lane lined with hedgerows and trees found in the countryside of Calne Without, providing access to more remote parts of the Calne area.

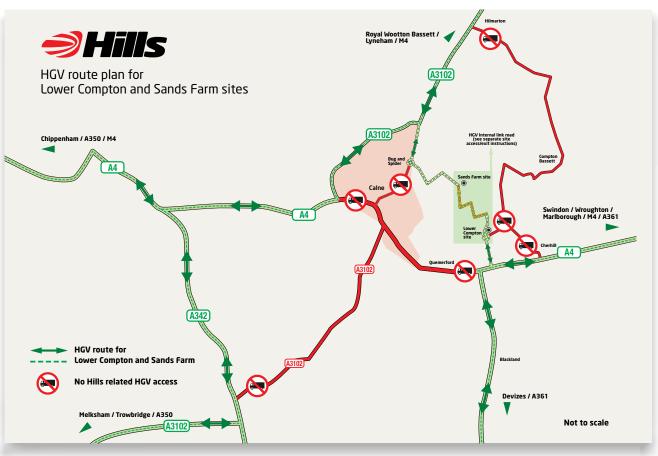


Figure 05: Map showing the HGV route plan for the Lower Compton and Sands Farm waste and recycling plants in the east of Calne, with dedicated internal link road for Hills HGVs access only shown in green box. (Source: Hills Group - https://www.hills-group.co.uk/wp-content/uploads/2020/01/SandFarmDriverMapWideArea.pdf)



Figure 06: Access and movement within Calne area.

2.2 History and heritage

The Calne area is home to a wealth of heritage assets. This includes three designated Conservation Areas, a number of Listed Buildings and structures of local historical importance that contribute to Calne's character and are deemed valuable to local residents.

 Conservation Areas and Listed **Buildings.** The three conservation areas include - Calne Town Conservation Area. Derry Hill Conservation Area, and Sandy Lane Conservation Area. There are over 140 Listed Buildings across Calne Town, most of which are concentrated within the Calne Town Conservation Area. This Conservation Area contains much of Calne's historical core and some of many key listed structures include the Grade I listed St Mary's Church and the Grade II listed 17th Century Alms houses. Derry Hill Conservation Area has a more rural setting and covers an area of the village centre around the junction of Church Road, Devizes Road and Old Derry Hill. Much of the Listed Buildings here are

cottages, Derry Hill Christ Church, as well as the Golden Gates that leads to the Bowood Estate, whilst Sandy Lane Conservation Area follows a stretch of the linear Devizes Road in the south of Calne Without.

- Scheduled Monuments. There are 5 Scheduled Monuments located across Calne area. These are the medieval rural settlement at Quemerford, Lower Beversbrook Farm, the moated site and fishpond at Pinhills Farm, Nuthills Roman Villa and Oldbury Hillfort area.
- Registered Parks & Gardens. The bespoke Bowood Estate is a Registered Park and Garden located in the countryside of Calne Without, with Derry Hill and Studley to its north and Sandy Lane to the south. The estate consists of gardens, pleasure ground, park and stretched of woodlands surrounding Bowood Lake, carrying significant biodiversity value. The main Bowood House was originally built with service courts and the old Orangery. With the main house demolished in the 1950s, these are the only structures remaining to date and are Grade I listed.

Bowood estate style farmhouses are located across the estate grounds and cross Calne Neighbourhood Area, further reflecting the importance and influence the Bowood Estate has to the built character of the Calne area. The estate also serves as a hotel and golf resort, whilst the main house and gardens are open to public visits. Along with its range of facilities and events on offer, the Bowood Estate is a popular destination and nature attraction locally and for other nearby centres.



Figure 07: Grade I listed St Mary's Church.



Figure 08: Typical narrow street within the Calne Town Conservation Area characteristed by characterised by medieval street pattern.



Figure 09: View of Calne from higher grounds and the open countryside at Bowood Estate.



Figure 10: Calne Town Hall, a Grade II listed structure located on Curzon Street.



Figure 11: Calstone Church, a Grade II listed church and local landmark for the Calstone Wellington area.

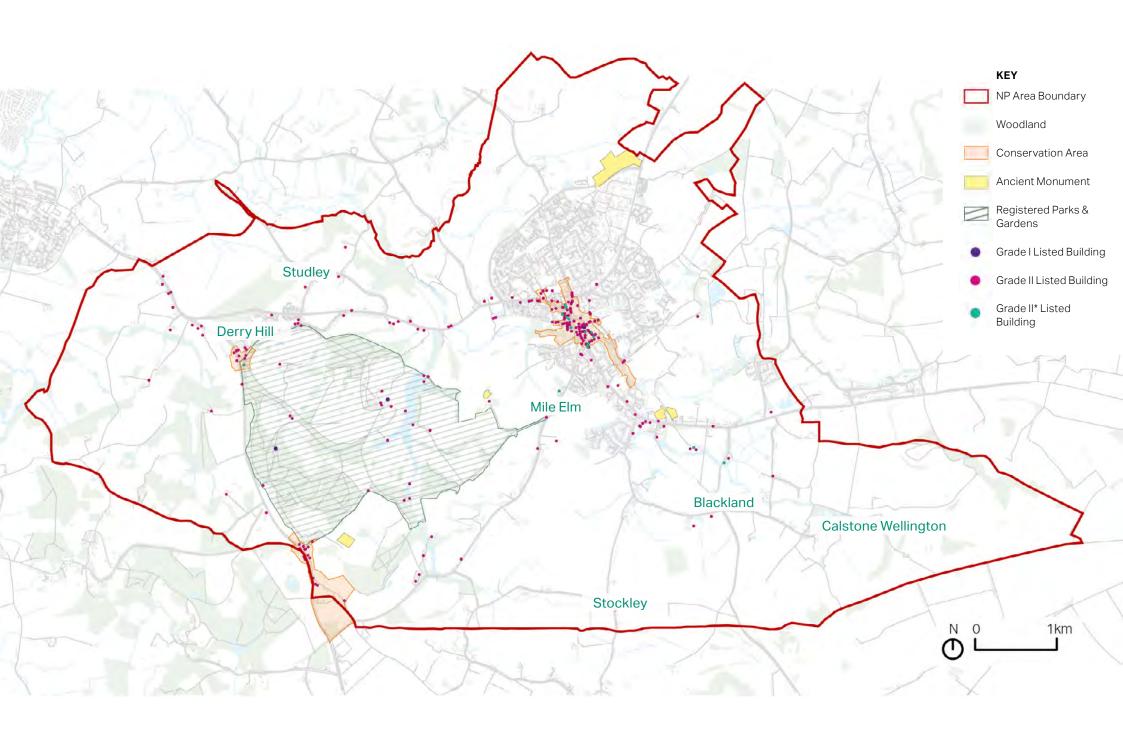


Figure 12: Heritage assets within Calne area.

2.3 Landscape context and green and blue infrastructure

The Calne area's green infrastructure network is made up of many different features including recreational spaces, allotments and parks, together with the public footpaths and woodlands that span the area.

Recreational/leisure spaces. There is a great number of recreational spaces within the Calne area including accessible natural green spaces such as Bentley Woods, Horsebrook nature trail, Castlefields Canal & river park, amenity green spaces such as Calne Recreation Ground and a collection of play areas. There are also 4 leisure centres - Calne Community Campus, Blackland Heath Club, Beverbrooks Sports & Community Facility and St Mary's Calne Sports Club. The latter two benefit from outdoor sports pitches. An allotment is located to the north of Calne and along A3102. Blackland Lakes campsite is also located to the south of Calne Town centre, a public health and fitness centre is also located here. Calne area is also characterised by a large number of allotments, offering 144 plots in Calne Town, 94 at Beversbrook allotments, 26 at Newcroft allotment and 24 at Cherhill View allotment. A full list of the designated local green spaces in Calne area is provided in Policy NE1 of the 2018 Calne Community Neighbourhood Plan.

- North Wessex Downs AONB. Parts
 of the North Wessex Downs AONB
 are found to the eastern part of Calne
 Without. The AONB consists mostly of
 ancient woodlands and chalk downlands,
 which constitute the largest tracts in
 southern England.
- Ancient and deciduous woodlands.
 There is a good number of ancient and deciduous woodlands and most of these are concentrated to the west of Calne Without. Some of the woodlands include Pilpot Wood, Close Wood, Searchers Wood and Tacklemore Wood/Hazel

Copse.

- Sites of Special Scientific Interest
 (SSSI). The Calstone and Cherhill Downs
 SSSI is located along the eastern border
 of Calne Without area, best known for its
 orchids, butterflies and top quality chalk
 grassland and wildflowers.
- Registered Parks and Gardens.
 Bowood House and Gardens is an important green asset and amenity to Calne area, as its extensive network of woodlands and gardens contribute significantly to the area's biodiversity. The estate also serves an important role by providing public rights of way throughout its grounds connecting with the rest of Calne area.
- water features and flood risk. The main water feature within the Calne area is the River Marden which is directly connected to the Wilts and Berks Canal. The areas that are immediately located in close proximity to those features are susceptible to medium flooding risks (mainly zone 3). Bowood Lake within Bowood House and Gardens is another

large water body in Calne Without. While no longer functional the Calstone Reservoir on the eastern edge of the Calne area serves as a key blue asset.

Nature reserves. There are two nature reserves within the Calne area - Penn Wood to the north east of Calne Town. and Morgan's Hill which is located to the south east of Calne in Calstone Wellington between Calne and Devizes. Penn Wood was previously a sand quarry until the 1950s and has since been restored to pasture for livestock grazing. Managed by the Hills Group and local communities, Penn Wood is home to unique hibernation mounds and heat traps which serve as habitats for slow worms, as well as a couple of ponds for frogs and tadpoles. Strategically located on higher grounds, Morgan's Hill offers impressive views towards Cherhill Downs and the plains to north Wiltshire. It is an SSSI and home to three of the UK's native conifer trees - Scots pine, Juniper and Yew, as well as different species of wildflowers and wildlife, all contributing to Calne area's biodiversity.



Figure 13: Beech Terrace and the River Marden



Figure 14: View towards the town from the Castlefields Park.



Figure 15: Calstone Reservoir - an important blue infrastructure intervention for the Calne area.

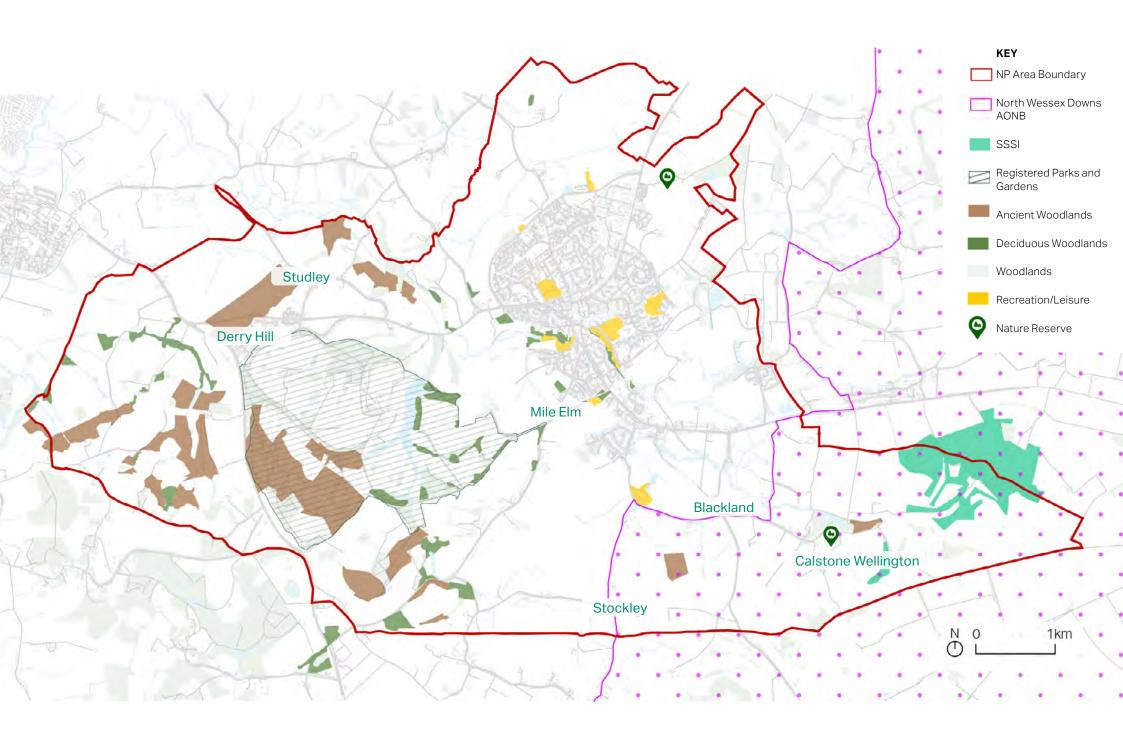


Figure 16: Landscape and green infrastructure within Calne area.

2.4 Character areas

Following on from the analysis set out previously, this section focuses on the different character areas within the Calne area.

The Calne area's character and identity are not defined by only one style. There is a mixture of architectural styles, details, settlement patterns and building layouts that together contribute to the unique character of the town and surrounding rural settlements.

The design guidelines and codes, presented in the next chapter, will highlight the variety of characteristics and become a useful guide for any future development in the area.

The character areas identified within the Calne area and shown on the next page, are:

- Calne town Conservation Area:
- Derry Hill & Sandy Lane Conservation Areas
- Early Urban Expansion:
- Interwar & Postwar Developments:
- Quemerford Gateway;
- Curzon Park:
- Recent Expansion of Calne area1;
- Rural Settlements (villages & hamlets);
- Lower Compton;
- Industrial Estate, other Light Industries & Light Industrial Units;
- Education Institutes; and
- Bowood Estate & Gardens².

on plan and current OS mapping versions.

These areas are characterised by variations

in the north east of Calne, however, these are yet to be reflected

in land use, patterns of growth, layout of buildings, street patterns, car arrangements, building heights, density, public realm and landscape setting.

The next pages will present an analysis for each character area accompanied by photos and maps.

An important note is that while some of the character areas have clearly defined boundaries, this is not the case for all of them. Thus, there are often overlaps and an element of mixing between the character areas, particularly in terms of the time periods some developments were constructed.

Also, in the event of any new development coming forward, a further, more detailed, assessment will need to be taken to offer a deeper understanding of the spatial qualities and characteristics of the area where it sits.

^{1.} In recent years, more new developments have come forward

^{2.} Bowood estate and gardens is identified as a character area for its Registered Parks and Gardens designation, which has been covered in Section 3.2. Hence, detailed analysis will not be covered in this section, but the character area will be mentioned again in the design guidelines and codes section to follow

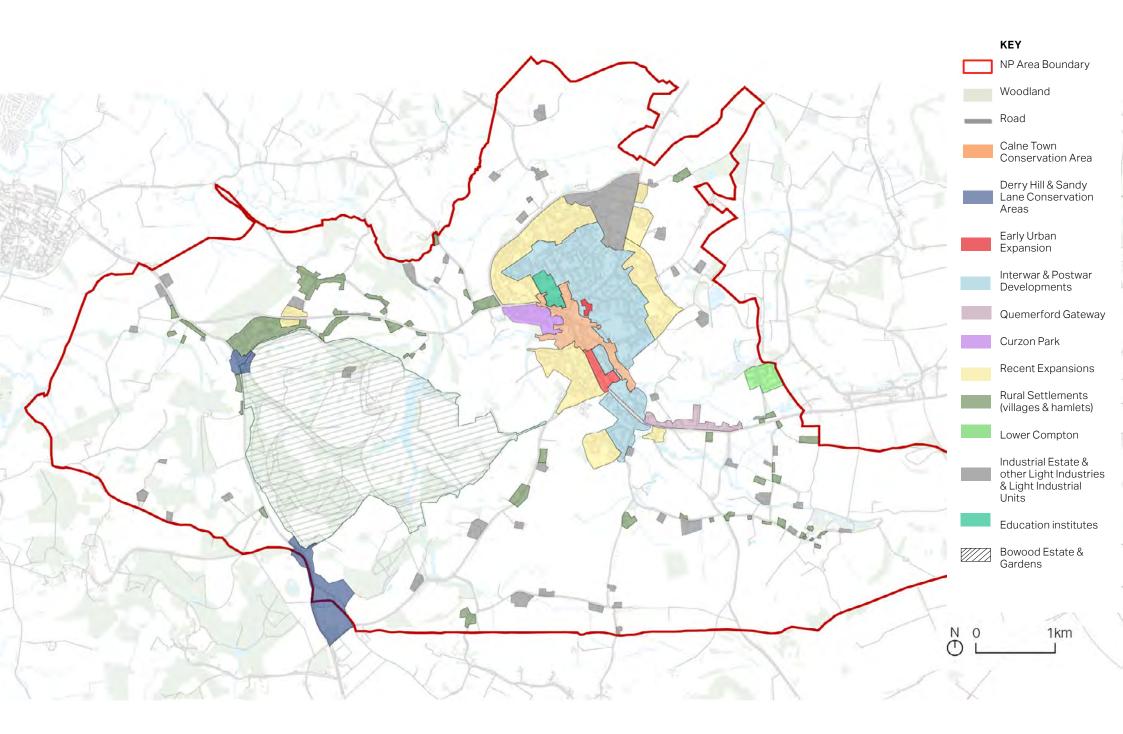


Figure 17: Character typologies within Calne.

2.4.0.1 Calne Town Conservation Area

This character area includes the designated Calne Town Conservation Area.

There are many distinctive architectural styles, historical layouts and use of materials across the Conservation Area that significantly contribute to the local vernacular and character of Calne town.

Access and movement

Calne Town Conservation Area largely covers the town centre, central market place and the commercial heart of Calne and thus, it is accessed via the Curzon Street. It stretches towards the north and southeast along North Street and Anchor Road respectively. Bus services are running along Curzon Road, whilst there are a number of footpaths in close proximity that offer connections to the countryside to the west via Castlefields Park.

Land uses

Historically, much of the area of the Calne Town Conservation Area also served as the main commercial and retail core of Calne, and continues to do so to date, with a range of shops and services serving the needs of local residents. In the late 1990s, parts of the Conservation Area underwent redevelopment following the demolition of large factories. This made way for a mix of residential, retail and civic buildings (Calne Town Library) being constructed. The river was also redirected at this time, accompanied by the construction of the river-fronting Beach Terrace and Bank Row. Refurbishment of the St. Mary's Church Courtyard also took place during this period.

Today, a wide variety of uses and facilities including restaurants, pubs, retail, services and community facilities can be found in Calne town. Residential uses are distributed throughout Conservation Area.



Figure 18: View towards the Grade I listed St Mary's Church, framed by C17 Almshouses along Kingsbury Street.



Figure 19: Beach Terrace - a mixed-use development fronting onto the river and Church Street, built during the 1990s redevelopment of Calne Town.

Patterns of growth and layout of buildings

As described in the Calne Conservation Area Statement, the Conservation Area could be split into sub sections, each one displaying different characteristics regarding the settlement pattern. However, for the purposes of this report a more holistic approach will be taken grouping those characteristics together.

The main characteristic of the building layouts in the Conservation Area is the continuous frontages that the adjoining building typologies generate along the streetscape. Those hard edges have buildings fronting directly either onto the pavement or pedestrianised streets / carriageways. This generates clear views and perspectives along the streets whilst creating strong levels of enclosure. Examples can be seen on Castle Street, North Street, The Square, and Cox's Hill.

Variations in plot sizes and widths resulting from an organic growth over the years reinforce the historic quality of the Conservation Area. There are no front or

back gardens within the town centre, as the ground floor is given to other uses to create active façades and an attractive retail and commercial heart. However, more back gardens are found as one moves from the town centre along North Street, The Green, Horsebook or Castle Street, where uses are mainly residential. In general, residential properties usually front directly onto the pavement or carriageway.

New Road offers a different feel along the streetscape as it opens out onto a large roundabout with views beyond to the river, Marden House and the Wharf itself. The buildings to the east of the road are set back from the street, allowing small-sized front gardens characterised with minimum gaps between them to retain a level of continuity similar to the town centre.

Around The Green, a different feel is created again as the levels of enclosure are lower compared to the town centre, with a grassed triangular area bounded by the road and overlooked by buildings. Most of the buildings follow the adjoining typology retaining the continuous frontage.

However, other typologies are also found, like detached and semi-detached houses which are slightly set back from the road, thus allowing for small-sized front gardens or green verges. This characteristic offers some visual interest along the streetscape as well as some long-distance views towards St. Mary's Church.

Topography substantially contributes to the character of the Conservation Area, generating pleasant short- and long-distance views towards the built and natural environment. For example, along High Street the land falls to the south towards the river with attractive long views southwards over the town. Along Castle Street, Cox's Hill and Market Hill the land rises to the west with long easterly views to the downs.

In general, the character of central Calne is derived from its function as a river crossing and market town. The basic street pattern has remained in place through the centuries, whilst the River Marden and the old Wilts and Berks Canal remain important features within the Conservation Area and are visible in the heart of the town.



Figure 20: A strong level of enclosure is created along the narrow street due to the adjoining building typology, consistent building lines, and continuous frontage.



Figure 21: The hilly topography creates visual interest along the streetscape and pleasant evolving views and perspectives.

Boundary treatments & public realm

Calne Town Conservation Area is characterised by the prevalence of hard surfaces over soft ones. The lack of front gardens and the continuous building frontages contribute to this condition. However, due to the proximity to the river and Castlefields Park, the town centre offers routes towards green spaces, blue assets and the open countryside. In addition, topography plays a significant role in bringing some countryside into the town thanks to some long-distance views to the backdrop vegetation and the river. Lastly, the existing Trees Preservation Orders and Hedgerow Regulations (1997) that apply within the Calne Town Conservation Area have managed to retain some green features, for example along Curzon Street and New Road.

Regarding the public realm, most of the streets in the town centre are bordered with relatively narrow pavements, for example along Wood Street and The Square. This characteristic, combined with the traffic from heavy goods vehicles, creates a more car dominated place. However, pedestrianised

streets like High Street and Phelps Parade provide convenient pedestrian movement within the town centre. Towards the south, along New Road, pavements become wider at places: on street corners, sitting areas, cycle stands and green features are added to improve the aesthetics. Also, flower boxes have been placed along the public realm to improve the environment and add soft landscaping along the streetscape.



Figure 22: Although hard surfaces prevail within the town centre, softer elements can also be found, such as along the River Mardon, which break up hard landscaping.

Nevertheless, there are many cherished pocket green spaces within the Calne Town Conservation Area that are used for a wide range of community events across the years, contributing positively to Calne Town's sense of community.

Building heights and density

Residential building heights within the Calne Town Conservation Area range between 1 and 3.5 storeys. The roofline is generally continuous due to the continuous frontages that adjoining typologies create. In addition, the topography, the decorative features on the roofs like chimneys and dormers, the large trees along the streetscape and the backdrop vegetation, all together contribute to a visually interesting roofline. The prevailing roof types are gabled, cross gabled, hipped roofs; however, flat roofs are found in some places within the town centre.

Local vernacular

The Calne Town Conservation Area includes a great number of listed buildings that contribute to the local vernacular of the town. However, there are also examples of later additions which have no reference to the character of Calne. These will be





Figure 23: Pocket park in the Calne Town Conservation Area, well-utilised by local residents for leisure and a range of community events such as summer and winter fairs, Bike Meet and Duck Race.



Figure 24: Building heights go up to 3.5 storeys within the town centre, whilst the roofline shows variations due to height differences and topography.

mentioned in the <u>table on page 32</u>, whilst the current section will only focus on the positive qualities of the local vernacular.

Roofs are generally of slate, however there are also examples of clay tiles and stone roofs. Stone chimneys and dormers that decorate the roofs add more interest to the roofscape.

The materials used on the façades are mainly colour wash, ashlar, exposed rubble stone, limestone rubble, with occasional brick and rendered limestone. This variety improves the public realm and adds visual interest along the streetscape.

During the period of town centre redevelopment in the late 1990s, a series of new developments were constructed in the core of the Conservation Area. There is some consistency in design and effort made to remain in-keeping with the traditional vernacular and style, with many built with limestone façades, circular columns and brick rears. Variety is also achieved through variations in the roofline, as seen in the roofline of Bank Row. Some variations in building forms can also be seen in buildings constructed during this time.



Roof with grey slates and red brick chimneys



Flat roof with limestone ashlar on façade



Rendered façade



Exposed rubble stone



Gabled roof with red clay tiles and stone chimney



Exposed rubble on façade



Rendered façades



Off-white render and limestone finishings



Issues in the character area	Relevance to design guidelines and codes
Narrow pavements within the Conservation Area impede pedestrian movement and undermine pedestrian safety	2a, 2b
Little vegetation and boundary treatments along streets, due to the tight-knit layout of adjoining buildings along most roads result in predominantly hard spaces.	1b, 4b, 4g
Examples of recent developments that do not take into account the local vernacular, as well as designs and materials that do not match the surrounding context	1a, 4f
Examples of recent developments that fail to be sensitive to surrounding building density and the existing context of the Conservation Area	1a, 4a, 4c
Unattractive examples of shop frontages where red brick façades prevail over the use of local materials like limestone	4f, 4g

Opportunities in the character area	Relevance to design guidelines and codes
The rich local vernacular on listed or historically important buildings should be respected by any new development and used as reference	1a, 1d, 4f
Historic organic plot patterns characterised by long and narrow burgage plots should be preserved	1a, 1b, 1d
The linear and adjoining typologies are prevalent characteristics of the Conservation Area, and they should be used as a reference in new development	1a, 1b, 4a
The limited opportunities for infill development must respect the surrounding context in terms of massing, density, patterns, setbacks and materials	4a, 4f, 4e
The topography creates interesting perspectives along streets as well as evolving short and long distance views	1a, 1c

2.4.0.2 Derry Hill and Sandy Lane Conservation Areas

This character area includes the designated Conservation Areas of Derry Hill and Sandy Lane, located to the east of Calne Town.

Access and movement

The Derry Hill Conservation Area is located to the south-west of the village at the Old Derry Hill and Church Road junction. It offers immediate connections to the village itself, as well as Sandy Lane village to the south and other smaller settlements to the north of the Neighbourhood Area. Bus services are running along both roads, whilst public footpaths offer connections to the west and east into Bowood Park.

The Sandy Lane Conservation Area covers almost the entire settlement which is set along the A342 and Back Lane. Bus services run along the A342, whilst a public footpath offer connections to the east into Bowood Park.

Land uses

The Derry Hill and Sandy Lane Conservation Areas are mainly residential. Nevertheless, there are some non-residential uses, such as Lansdowne Arms and The George Inn, as well as St Mary & St Nicholas' Church and Lansdowne Hall.

Patterns of growth and layout of buildings

The patterns and layouts of buildings in the two character areas are similar to the ones in the Rural Settlements character area. In particular, buildings within the Derry Hill Conservation Area are either set back from the street allowing for well-sized front gardens and rich vegetation or directly front onto the narrow pavement. Due to the low density, gaps between buildings are large, whilst plot sizes and widths show some variations, but in general their large size reinforces the feel of openness in the area.

The combination between the rich vegetation and the narrow countryside lanes with pavements on one side only creates strong levels of enclosure. However,

the A342 and the Church Road junction offer a contrast to the otherwise enclosed area, since the setting celebrates openness. More specifically, the Lansdowne Arms pub to the northern end, the open space for sitting opposite to the pub and the large green space to the south with the emblematic entrance to the Bowood Estate



Figure 26: Properties are mostly set with a backdrop of the rural countryside in the Sandy Lane Conservation Area.

create a focal point.

The Sandy Lane Conservation Area, on the other hand, stretches along the A342 where the properties are organised in a linear form. Similar to Derry Hill village, density is relatively low, whilst plot sizes and widths are large with subtle variations reinforcing the rural character of the settlement. Buildings are set back from the road allowing for front gardens, whilst the building lines are relatively inconsistent due to the variations in building setbacks and rotations.

Towards the south where the A342 meets Back Lane, the buildings are concentrated around the junction, creating a focal point for the village.

Boundary treatments & public realm

The Derry Hill and Sandy Lane Conservation Areas are substantially greener compared to Calne Town Conservation Area. In particular, boundary treatments include hedges, hedgerows, bushes, trees, whilst there are also some examples



Figure 27: Derry Hill Conservation Area is characterised with lack of continuity in rooflines, due to lower densities, and larger gaps between properties.



Figure 28: Houses with traditional ironstone façade and thatched roof found in Sandy Lane Conservation Area.

of timber fencing. In addition, buildings fronting directly onto the street or narrow pavement also act as boundary treatments contributing to the street character.

Building heights and density

Building heights in these two Conservation Areas range between 1-2 storeys, reinforcing the rural context of those settlements. The roofline is generally noncontinuous due to the large gaps between buildings and prevailing rich vegetation. However, at places where there are clusters of buildings, like A342 and Church Lane junction and A342 and Back Lane junction, the roofline shows some continuity. The prevailing roof types are gabled, cross gabled and hipped roofs.

Local vernacular

In both villages, the Conservation Areas include a range of architectural details and materials.

In Sandy Lane, the prevailing roof material is thatch, however, other materials like red clay tiles, red slate, as well as darker shades, grey slates can be found. In addition, the façades are mainly built with stones of various shades and techniques, including ironstone, whilst there are also example of rendered stone façades or stone façades combined with red brick dressing.

In Derry Hill, dark red slates and red clay tiles are used on the roofs. The chimneys that decorate the roofs are unique to Derry Hill and add to the local vernacular of the area. Similar to Sandy Lane, stone façades are often seen, including some that employ Bath stone.

In both areas, boundary treatments mainly include low height stone walls, as well as timber fencing or natural boundary treatments.



Cross-gabled roof with dark red slate



Gabled roof with grey slate tile



Gabled roof with red slate and gabled dormer with hung tiles



Local stone on façade



Gabled porch with dark coloured slate and black weatherboarding at the front



Low height stone wall



Chimney detail



Issues in the character area	Relevance to design guidelines and codes
The Sandy Lane Conservation Area is located along the A342, a key route which forms part of the HGV route which diverts heavy goods traffic from Calne Town Centre despite its narrow road and characterful, rural setting.	2a, 2b
Narrow pavements within the Sandy Lane Conservation Area impede pedestrian movement and undermine pedestrian safety	2a, 2b
Examples of recent developments that do not take into account the surrounding building density and designs that are not entirely sensitive to the local context of the Conservation Areas	1a, 4a, 4c

Opportunities in the character area	Relevance to design guidelines and codes
The rich local vernacular on listed or historically important buildings should be respected by any new development and used as reference	1a, 1d, 4f
Historic organic plot patterns characterised by long and narrow burgage plots should be preserved	1a, 1b, 1d
Views towards the open countryside through large gaps between buildings contribute positively to the rural character of the Conservation Areas and should be preserved	1a, 1c
The use of soft boundary treatments, such as hedgerows, bushes and trees reinforces the rural setting of the Conservation Areas. Future developments must maximise the use of such boundary treatments	1a, 3a, 4b

Early Urban Expansions

2.4.0.3 Early Urban Expansions

This character area is considered to be the oldest part of the town besides the Conservation Area, and includes the linear neighbourhood to the south of Calne town Conservation Area along London Road. Other examples of development in the character area vary from modest workers cottages to later and larger 'villas', such as those on The Pippin, Lansdowne Row and Shelburne Road.

The built form in this area is rich in heritage value and representative of Calne's historic growth and development.

Access and movement

This character area stretches along London Road, therefore it can be accessed via Quemerford to the south and New Road to the north.

The southern end of this character area is connected to bridleways that enable access to Bentley Woods to the west, as well as footpaths via Holy Trinity C of E Academy that offer connections to the river and open countryside to the east.

Bus services are running along the main road offering connections to the north and south of Calne and to surrounding settlements.

Land uses

This character area, being adjacent to the Calne Town Conservation Area, is mainly residential, however other land uses including two pubs and some retail. In addition, the Holy Trinity Church, the Holy Trinity C of E Academy, and Calne Leisure Centre are located to the southern end.

Pattern of growth and layout of buildings

This character area retains some qualities and characteristics of the Calne Town Conservation Area in terms of the local vernacular as well as the building layouts and typologies. In particular, it is characterised by a majority of terraced houses which are set on a relatively consistent building line creating a continuous frontage along the streetscape. In addition, there are also groups of buildings towards the south that are set back, allowing for small front gardens. This creates visual interest along the street

scene whilst also offering different levels of enclosure for pedestrians and vehicles.

Many of these were built by local building firms, usually in the form of terraced blocks with modest plot sizes. Plot sizes are predominantly wider to the northern part, of this character area (with some notable exceptions), whilst to the south, they are reduced by around a half.



Figure 30: Terrace houses on Shelburne Road with bathstone facade and red brick decorative features.

Early Urban Expansions

Boundary treatments & public realm

Similarly to the Calne Town Conservation Area, the Heritage Quarter is characterised by the prevalence of hard surfaces over soft ones. However, some 'green breaks' occur where trees appear from the gardens of the properties.

The long-distance views along London Road towards the south are screened with trees and rich vegetation bordering the Holy Trinity Church. In addition, the entrance to Bentley Woods to the south of the Heritage Quarter opens up a vast area of green and blue assets.

Regarding the public realm, London Road is bordered with pavements of relatively narrow widths. To the north, on the eastern side of the road, the pavement is raised, due to topography, adding positively to the streetscape.





Figure 31: Photos taken along London Road showing both the consistent building lines and occasional building setbacks that allow for small-sized front gardens.

Building heights and density

Buildings tend to have little or no setback from the pavement and are mainly terraced blocks of two- or three-storey buildings.

The prevailing roof types are gabled and hipped roofs, however, cross-gabled roofs are also found in places. Dormers and chimneys that decorate the roofs create additional interest in the roofline.

The roofline shows variations due to the decorative features on the roofs and height differences, however it is mainly continuous due to the prevailing terraced typology.

Local vernacular

This character area significantly contributes to the local vernacular of Calne Town as it includes a variety of architectural styles and materials. Although these buildings show considerable variation of style, they are generally all faced with the locally quarried limestone (sometimes in later periods with rear brick walls), and have slate or tile roofs.

Heritage Quarter and Early Urban Expansions

Rooflines are continuous due to the linear layout of the buildings and the terraced typology. Roof materials range between grey slates, red clay tiles of varying shades. Red brick chimneys and occasional gabled and hipped dormers create additional interest.

The materials used on façades range between exposed rubble stone, limestone rubble, and renders in multiple colours. Buildings may combine render on the front façade with red brick on the side façade. The occasional dormers are dressed with hung tiles and black weatherboarding.

Boundary treatments include timber fencing, low height stone walls, whilst a great number of buildings face directly onto the pavement.



Gabled roof with grey slate tiles



Cross-gabled roof with red clay tiles



Hipped roof with grey slate and red clay ridges as well as red brick on the façade



Exposed rubble



Rendered façades



Beige render with Bath stone dressing and red brick on the side



White-painted timber fencing



Low height stone wall with vertical coping stones



Early Urban Expansions

Issues in the character area	Relevance to design guidelines and codes
Terraced typologies result in on-street parking which can tend to dominate the streetscape	2b
Narrow pavements impede pedestrian movement and undermine pedestrian safety	2a, 2b
Modern infill examples do not use local materials on the façades, creating a less sympathetic aesthetic	4e, 4f
Terraced typologies result in on-street parking and thus, the creation of a more car-dominated streetscape	2b

Opportunities in the character area	Relevance to design guidelines and codes
The rich local vernacular on buildings should be used as reference in any new development. Innovative and modern design is welcome, however cues from Calne's rich heritage and past should to be picked up too	4f
The linear pattern of development and terraced typologies define the historical character of this area; these should be preserved and new developments should be in keeping with this pattern of development	1a, 1b

2.4.0.4 Interwar and Postwar Developments

This character area includes the neighbourhoods to the north and east of the Calne Town Conservation Area, as well as some neighbourhoods to the south along Quemerford Road. The inter-war period in Calne was a time of somewhat limited growth and many buildings were built by local firms. Housing development grew in response to the need for housing in the Postwar period and many of these were delivered by Calne Town Council. Some of these estates include the Newcroft Farm development along streets to the northwest of Oxford Road, and Coleman's Farm to the north of Calne Recreation Ground.

From the 1950s onwards, estate developments, small-scale and infill developments became more prevalent. These served mostly as single-family dwellings. The overall impression is a lack of variety with multiple copies of very few designs or of a single design. Considering the length of time (1950 to 2020) and changes in construction methods and materials, some of the layouts and designs

changed remarkably little in external appearance; this is, however, in contrast to the marked internal design changes in these buildings over this period.

Access and movement

The access to these neighbourhoods is via main roads like Oxford Road, Curzon Street, London Road and Quemerford, as well as via secondary and tertiary streets that offer immediate connections to neighbouring areas.

There is a number of designated footpaths, mainly to the centre of this character area and east of the town centre. They offer connections to neighbourhoods to the north, to the open fields to the east and west, as well as to the south and to Bentley Woods. However, the northern part of the town is less connected compared to the central and southern parts, creating issues to the locals.

Bus services are running along the main roads as well as along some secondary roads to the northern neighbourhoods like Bryans Close Road, Rochdale Avenue, Newcroft Road and Braemor Road.



Figure 32: View along Oxford Road showing the linear layout of the buildings and the backdrop vegetation that add positively to the street scene.



Figure 33: View of Priestley Primary School.

Land uses

This character area is mainly residential, however there are a number of secondary land uses that meet the needs of the locals. A nursery and Calne Town Football Club are found in the north, along with some pubs, petrol stations, a Care Home, Saint Edmunds Catholic Primary School, Marden Vale CE Academy and St Edmund's Church. Other uses like Priestley Primary School, Calne Recreation Ground, Holy Trinity Church, Holy Trinity C of E Academy and Kingsbury Green Academy are found in the south.

Pattern of growth and layout of buildings

There are three prevailing patterns of growth in this character area which generate different levels of enclosure and 'feel' along the streetscape. Many postwar developments were built in the form of terraced or semi-detached houses. The buildings set in a linear form along Oxford Road, Lickhill Road and Wessington Avenue and Quemerford act as gateways to the town centre. Building lines are relatively

regular compared to the ones in the rural settlements, however, there is still a level of irregularity allowing for subtle variations in the building setbacks. Plot sizes and widths show some variations especially on the rear gardens which tend to be well-sized. In addition, gaps between buildings are small, generating high levels of enclosure.

The rest of the neighbourhoods are organised in either permeable patterns or cul-de-sac layouts. Regarding the permeable layouts, buildings lines are relatively regular with subtle variations in building setbacks, whilst plot sizes and widths are consistent. Some variations in these layouts are found where other land uses are included like pubs, churches or schools.

Cul-de-sac layouts are mainly found in the centre of this character area, east of the town centre. These are either short, branching out from tertiary streets, like Newcroft Road, set within permeable blocks or long, branching out from secondary streets like Prince Charles Drive. Plot sizes and widths are consistent but smaller



Figure 34: Typical example of terraced housing found within the character area, forming continuous frontages along streets.



Figure 35: Houses laid out in clusters around the cul-de-sac of Woodroffe Square within the Coleman's Farm estate - another commonly recurring layout across this character area.

compared to the ones in the linear and permeable layouts. Building lines are less regular compared to the ones found in the rest of the neighbourhood in this character area, with variations in building setbacks and rotations.

Post-1950s small residential developments, such as Wessington Park, Churchill Close, Horsebrook Park and Orchard Close, tend to be 2-storeys terraced and semi-detached dwellings set back from the road with front and rear gardens. Plot and dwelling sizes are varied, likewise for levels of density.

Boundary treatments & public realm

There is a combination of boundary treatments in this character area which generates a different feel along some streets.

Along the main streets that act as gateways, there is a combination of hard surfaces, including low height brick and stone walls and occasional railings bordering the front gardens, and soft surfaces, including flower beds, bushes, trees and hedges.

The neighbourhoods organised in permeable layouts offer more green coverage as they are often set along green verges or green patches, whilst the front gardens are bigger and are mainly bordered with natural boundary treatments. The levels of enclosure are lower compared to the ones found along the gateways, especially in cases where buildings overlook open spaces, or they are adjacent to green verges. This is especially evident in the post-1950s developments like Wessington Park, where the layout of the estates start to incorporate car parking spaces and green spaces.

Cul-de-sac layouts generate a completely different feel as there are usually no boundaries separating public from private space along the street. In most cases, the grass areas define the front garden and thus the private space, and they often accommodate flower beds, bushes or small trees. The level of enclosure in these neighbourhoods is lower, whilst the general feel promotes a 'shared' environment.

Building heights and density

The average residential building height within this character area is 2-storeys, whilst there are some examples of 1-storey properties. Postwar developments, such as the Coleman's Farm development mainly north of the Abberd Brook, provide a mix of small one-storey units as well as six four-storey blocks of flats; this is considered very high density for the Calne area.

The prevailing roof types are gabled and hipped roofs, however, cross-gabled roofs and Dutch roofs are also found at places. Dormers and chimneys tend to decorate the roofs, creating additional interest in the roofline.

The roofline shows variations due to the decorative features on the roofs or height differences, as well as due to the variety of building typologies which range between detached, semi-detached, bungalows and terraced housing. The roofline is usually continuous throughout this character area due to the narrow gaps between the buildings.

Local vernacular

This character area includes a mix of different roof styles, façades materials, and boundary treatments compared to the rest of the character areas where there is a prevailing style combined with other materials.

Roof materials range between red and darker shades of clay tiles and grey slate, whilst the variety in roof types and the use of dormers and chimneys as decorative features create an interesting roofline.

The materials used on the façades range between coloured renders, mainly off-white ones, exposed rubble and limestone rubble, half black weatherboarding and half off-white render, red brick, and darker shades. Yellow brick and hung tiles are also used occasionally. Overall, many of the postwar developments have grey/pale brick façades, and the impression they give is one of bland, congested and low-quality use of materials. Some later C20 developments in this area lack variety with a homogeneity of designs



Figure 36: View along a residential road bordered with pavements on both sides, whilst buildings are set back allowing for well-planted front gardens.



Figure 37: View along a cul-de-sac street which creates a feel of shared space as there are no boundary treatments clearly separating private from public space.

replicated throughout. Brick is commonly used in these developments, alongside some stone façades.

Boundary treatments include timber fencing, low height stone walls and brick walls combined with green features like trees, hedges and hedgerows as well as railings.



Hipped roof with red clay tiles and off-white render on the façade



Gabled roof with grey slate and exposed rubble on the façade



Dutch roof with grey slate and half black weatherboarding and half white render on façade



Hipped roof with red brick chimney and white render on façade



Coloured, rendered, façades



Limestone rubble



Exposed rubble



Low height stone wall with vertical coping stones



AECOM coping stones 45

Issues in the character area	Relevance to design guidelines and codes
Traffic congestion due to on street parking and vans making local deliveries.	1e, 2b
Noise and air pollution due to the large amount of lorries coming through the main roads in this character area	1e, 2b
Inadequate sustainable transport connections exist between the northern area and facilities in the south (e.g. Kingsbury Green Academy, Calne Community Hub and Castlefields Park).	2a, 2b

Opportunities in the character area	Relevance to design guidelines and codes
Proximity to a good amount of open green spaces within the neighbourhood	3a, 3b
Variety of patterns of growth including linear layouts, cul-de-sacs and perimeter plots	1a, 1b
Proximity to the countryside via footpaths	2a, 2b, 3a
Properties overlooking the open countryside and long-distance views	1c, 2a

2.4.0.5 Recent Expansion of Calne area

This character area consists of more recently built estates in Calne area. These are large-scale developments mainly to the north and east of Calne town and they have significantly grown the housing stock in the town. These have been built by national development firms. Some earlier examples include the Chilvester Farm development and Landsowne Park - both built in the 1990s. More recent developments are The Oaks and Steeple Chase (built 2011-2012), High Penn Park (2016) and most recently Weston Meadows - built in 2019. Some of these estates can also be found adjacent to Derry Hill in the eastern part of the NP area, such as Studley Gardens and Chapel Street.

In recent years, more new developments have come forward in Calne area. These have predominatly been built outside the town boundary on greenfield sites in rural areas and are yet to be reflected on plan and current OS mapping versions.

Access and movement

Recent developments along the outskirts of Calne Town Centre can be accessed via the main roads, such as the A3102 and Sand Pit Road/Spitfire Way. These branch out to a network of quieter secondary and tertiary streets, as well as some cul-de-sacs.

Recent developments in Studley Garden and Chapel Street are accessible via the A4/New Road and Studley Lane. Some of the properties in Studley Gardens that front onto the A4 could be experiencing more noise disruptions, especially due to the fact that this road also serve as a local route for HGVs.

Many of these estates are not well-connected to Calne's local footpath network, with only a handful providing walkable connections towards Calne Town Centre and the surrounding countryside.

Bus services reaching the modern estates are only running along some of the main roads to the east and south, such as the A4/ New Road, the A3102 and Oxford Road.



Figure 38: Properties set along a relatively wide street with generous front gardens and buffered with natural boundary treatments in the form of low hedges and shrubs.



Figure 39: Positive example of a recent development - building line following the gently meandering road, green verges and vegetation along road soften the hardscape-dominated environment.

Land uses

This character area is predominantly residential, interspersed with other uses such as Fynamore Primary School, retail outlets including a convenience store and a takeaway along School Road to the north west of Calne. There is also another convenience store on James Avenue to the east of the town.

Pattern of growth and layout of buildings

Many of the new estates share similar layouts and patterns of development across Calne area, creating rather permeable street patterns. Properties and building lines generally follow roads that are gently meandering, which are effective in maintaining visual interest along streets for pedestrians and other road users. Properties laid out along these roads have clearly defined back-to-back gardens and front directly onto the road to create active frontages and maintain a sense of enclosure. However, some of the narrower residential streets with on-street parking,

such as Buzzard Road, have resulted in congestion and larger servicing vehicles are experiencing difficulties to navigate. Pedestrian safety is undermined along some of these streets, especially where footpaths are also narrow.

Recent developments along York Road, Comet Crescent, Anson Avenue and Dakota Drive follow a perimeter block layout. Houses are arranged back-to-back and along a consistent building line. Front and back gardens tend to be more generously sized compared to other parts of the character area. Some houses along York Road are directly fronting onto the pavement, whilst others tend to have a slight degree of setback from the road and pavement.

Cul-de-sacs are also commonly featured across this character area type where buildings tend to be arranged in clusters, such as Honeysuckle Close to the north east and Magnolia Rise/Jasmine Close to the south. There tends to be more variation in building lines and subtle changes in layouts and rotation of houses to create



Figure 40: Local example of a recent developments with good-quality pavements, enhancing pedestrian safety. These are encouraged in future developments.



Figure 41: Typical example of properties within the character area, set back from the road with front on-plot parking.

interesting streetscapes. Building plots for recent developments arranged along culde-sacs tend to be smaller with less sized front and back gardens compared to other parts of the area, with the exception of Wenhill Heights and Marden Way. Properties often front directly onto pavements with very little to no setback, such as those seen on Chapel Street and Newbury Avenue.

Boundary treatments & public realm

There is a variety of boundary treatments featured across this character area, ranging from low brick walls, wooden fences and hedgerows. Most of these recent developments, however, tend to be dominated by hardscape elements and hard surfaces compared to other parts of the area.

Low height brick and stone walls paired with iron railings are common boundary treatments around front gardens, which consist of bushes, trees and hedges. Low hedgerows are also commonly seen across the character area as a boundary treatment. On other cul-des-sacs and streets where

properties have little to no setback from the pavement or road, these tend to only have small green verges or small planters, or no boundary treatment at all. This results in a heightened sense of enclosure and a hardscape-dominated environment as well as a rather abrupt transition between public and private spaces. This is exacerbated by the narrow road width across most recent developments, especially in the case of Peregrine Court and Buzzard Road, where on-street parking has created a pinch point for congestion and led to difficulty for service vehicles to access the area.

On longer, meandering streets such as Fynamore Gardens and Wenhill Heights where buildings are arranged along a linear building line, there is greater presence of vegetation used as boundary treatments, such as green verges or green patches along the edges of pavements and roads. Properties here tend to have larger front gardens with softscape surfaces such as green lawns and shrubs. As a result, there is a lower level of enclosure on these streets compared to the more hardscape-

dominated cul-de-sacs. This is especially the case where properties are facing larger areas of open space, such as along Fynamore Gardens, Newbury Avenue, Anson Avenue, Comet Crescent and York



Figure 42: The most recent developments are dominated by hardscaping, some incorporate soft boundary treatment elements to soften the impact - such as grass verges, hedgerows and small trees

Road. Properties along these roads can also offer natural surveillance for these open spaces they overlook.

Building heights and density

Many recent developments vary considerably in quality and appearance; however, their common factor is their scale and near-uniform appearance throughout the development. The average residential building height within this character area is 2.5 storeys. There are also some examples of 3-storeys flats fronting onto School Road and Amberley Close. These form a gateway into Harriet Close, where a small neighbourhood centre with shops and services is located. 3-storey flats can also be found along Station Road. Much of the densities of developments across this character area are considered too high for the context of Calne area.

The prevailing roof types are gabled and hipped roofs, however, cross-gabled roofs can also be found. Dormer windows and chimneys are commonly seen added to properties and roofs to add to the visual interest and variation of rooflines.

There are subtle variations in building heights and a variety of building typologies, ranging between bungalows, detached, semi-detached, terraced housing and flats. The roofline is usually continuous and linear throughout this character area, apart from some culde-sacs where houses are arranged in clusters.

Local vernacular

There is a range of different roof styles, façade materials and boundary treatments across the recent developments, with some reflecting the traditional materials palette of Calne area and others failing to do so.

Roof materials range between red and darker shades of clay tiles and grey slate. The addition of dormers and chimneys contributes towards an interesting roofline.

There was a tendency for façades to be in stone or stone-like colours, but more recent developments have been predominately of red brick.



Figure 43: Hardscape-dominated streetscapes with little vegetation and boundary treatments between properties and roads should be avoided in future developments.



Figure 44: Narrower streets in recent developments with on-street parking can cause traffic pinch points, leading to congestion and difficulty for larger service vehicles to access - these must be avoided and better designed in future developments.

White render and buff brick also feature in many recent developments. However, variety in materials should be applied appropriately within context to avoid disruptions to the overall cohesiveness of streetscapes. For instance, a less positive example are the properties on Barbel Close, where there is an unsympathetic mix of stone, redbrick and white rendered façades side by side. In addition, red brick façades, such as those seen on Travers Close should be avoided in future developments, due to it not being considered a local material.



Gabled roof with red clay pantiles and local Bath stone on the façade



Cross gabled grey clay tile roof with local Bath stone façade



Red clay pantile gabled roof with chimney, local Bath stone façade with red brick dressing



Hipped roof with white render and red brick on façade



Double gabled roof with white render and buff brick façade



Gabled roof with dormer windows and buff brick façade



Grey slate roof with white-rendered façade and dormer porch



Grey slate roof with solar panels, buff brick façade

Materials & Colour Palette

Issues in the character area	Relevance to design guidelines and codes
Insensitive and inappropriate use of material for some housing results in incoherent steetscapes and loss of character.	1a, 4f
Narrow road widths and inappropriate on-street parking arrangements result in traffic congestion pinch points and impede access for large service vehicles	2b
Heavy traffic flows along the A4 due to its role as a local lorry route can cause disruptions to adjoining neighbourhoods and undermine pedestrian safety such as along Spitfire Road and Sandpit Road.	2a, 2b
Noise and air pollution as a result of heavy HGV flows	2b
Hardscape-dominated public realm and boundary treatments conflict with Calne's characater, especially neighbourhoods located on the settlement fringe, and can increase flood risks due to impermeable surfaces	1a, 3c

Opportunities in the character area	Relevance to design guidelines and codes
Cul-de-sac layouts mean that residential streets are quieter and can discourage disturbance from unnecessary traffic	1a, 1b, 2a, 2b
Infill developments tend to mimic the scale and massing of adjoining neighbourhoods	1a, 1b, 4a, 4e
While currently few properties have solar panels, positive eco-design features that are encouraged for all new developments	4h
Some recent developments (e.g. Morgan Road) are designed with good-quality open spaces and play areas that are overlooked by surrounding properties	3b
A variety of housing types are incorporated into most recent developments	1a, 1b, 4a

2.4.0.6 Quemerford Gateway

This character area includes linear developments along Quemerford and it is located to the south of the area. The character area serves as a gateway into Calne Town.

Access and movement

This character area can be accessed via the primary roads of Quemerford/A4, which cater for local and external traffic coming from surrounding villages and towns.

Quemerford is connected to Wessington Avenue and London Road, which provide access towards Calne Town Centre. Culde-sacs such as Eadreds Hyde, Fir Grove, Wren Court and The Willows branch out from Quemerford for properties to the north. A couple of country lanes also lead from Quemerford towards larger farmhouse estates and agricultural estates to the north.

Bus services are available along Quemerford offering connections towards the Calne town centre, and nearby villages and centres. There are several public footpaths leading off from Quemerford to provide connections to the surrounding open fields, Blackland St. Peter's Church to the south, as well as to Calne town centre and surrounding neighbourhoods. However, Quemerford/A4 serves as a local lorry route which brings HGV traffic into Calne's industrial estates which can bring additional noise and air pollution to residents in Quemerford gateway.

Land uses

This character area is almost exclusively residential, with the exception of Quemerford Post Office and a new convenience store under construction along London Road.



Figure 45: Row of terrace houses built with local stone and red brick dressing fronting onto Quemerford.



Figure 46: Convenience store under construction. A good example of sensitive development within the character area.

Pattern of growth and layout of buildings

The layout of properties in this character area is generally linear along the northern edge of Quemerford. Building lines are consistent and resemble those of ribbon developments. Plot sizes are larger compared to other character areas across Calne area. A distinctive feature of this area is the long front gardens, particularly those to the east. Most properties have long linear back gardens, apart from those located on cul-de-sacs that are arranged mostly in clusters around the road and have smaller gardens.

Most properties have large gaps between them, allowing for views towards the open countryside backdrop, and room for trees and vegetation to act as buffers between properties.

Boundary treatments & public realm

Soft boundary treatments are more commonly used than hard ones throughout the character area. Front gardens are planted with trees, hedgerows, and green verges to maintain a clear delineation between public and private space. Low brick walls and low wooden fences also feature as boundary treatments.

In terms of public realm, pavements are only along one side of the road. Long lines of thick hedgerow border the other side of the road, which forms an edge for a stretch of woodlands to the south of Quemerford. Houses along The Crescent front onto views of open fields bordered by low hedgerows. A large green verge buffers between The Crescent and Quemerford, offering greater setback for properties from the main road.

Building heights and density

The average residential building height within this character area is 2.5 storeys. Bungalows are also commonly featured and some are fitted with extensions. Other housing typologies include detached, semidetached and terraces.

The prevailing roof types are gabled and hipped roofs, with some examples of crossgabled roofs. Dormers and chimneys also add to the visual interest of rooflines. There is a consistent roofline along Quemerford,

given the linear pattern of development. Rooflines tend to be more varied in cul-desacs where properties are rotated to cluster around the road.



Figure 47: Cul-de-sacs such as Fir Grove are a common layout, forming clusters along Quemerford.



Figure 48: View of open fields from The Crescent.

Local vernacular

A variety of façade and roofing materials are featured across this character area, all of which is seen in other parts of Calne area.

Façade materials include white renders, red and buff bricks, as well as Bath stones. White-rendered façades are sometimes paired with black timber frame decorative features.

Prevailing roof styles are gabled roofs and hipped roofs, with some cross-gabled roofs. Materials commonly used are red and grey clay tiles, and grey slates. Most houses have chimney stacks made of red brick. Some houses have solar panels installed on roofs and skylights. Dormer windows also feature on some houses.

Boundary treatments include hedgerows of various heights, large shrubs, as well as wooden fences and low brick walls.



Gabled grey slate roofs on terraces, with local Bath stone façade and climbing plants



Grey slate tile gabled roof with white-rendered façade



Double gabled roof with clay tiles and skylights, white-rendered façade with black timber frame



Grey slate hipped roof with stone façade



Gabled red clay pantile roof with exposed rubble façade and dormer window



Clay tile hipped roof with red brick and hung tiles façade



Solar panels installed on grey slate roof with red brick chimney



Hedgerows and wooden fencing as typical boundary treatments



Issues	in the character area	Relevance to design guidelines and codes
Pavements are only available along a major rou	te with busy and fast moving traffic and few safe	2a, 2b
crossingplaces, impacting pedestrian safety		20, 20

Opportunities in the character area	Relevance to design guidelines and codes
Plot sizes are larger, allowing for room for planting	1a, 1b, 4b
Housing layouts, scale and massing help to create a smooth transition from urban to rural	1a, 1b, 4a
The use of materials is reflective of the Calne materials palette and style	1a, 4f
Generous back gardens opening up to views of Calne's picturesque landscape setting	1c
Character area is well connected to surrounding countryside via footpaths	2a

2.4.0.7 Curzon Park

This character area is a neighbourhood to the south of Curzon Street, and to the immediate east of Calne's Conservation Area. It is characterised by California ranch style bungalows with open fronted nature, built between the 1960s and 1980s, that are deemed locally important to Calne area's character.

Access and movement

This character area is connected to the rest. of Calne town via Curzon Street/A4, which is a primary route that leads west towards Quemerford and east towards Blackdog Hill and Derry Hill. This The primary street, Savernake Drive branches out southwards to a network of residential streets, such as Wansdyke Drive and Long Barrow Road, as well as cul-de-sacs such as Avebury Close, Curzon Close. Yew Street Close and Lime Tree Close. Castle Walk is a footpath located on the southern edge of the character area that provides pedestrian access towards Castle Street and Calne Conservation Area, as well as Castlefields Park, Other pedestrian links connect Curzon Close

and Wansdyke Drive with the A4/ Curzon Street and link with pedestrian crossing points and bus stops. Bus services are available along A4 Curzon Street, offering connections towards the Calne town centre, nearby villages, Chippenham and Swindon. However, similar to Quemerford, Curzon Street is also part of the local lorry route bringing HGV traffic into Calne's industrial estates. Properties backing onto Curzon Street could be affected by noise and air pollution due to heavier freight traffic.

Land uses

This character area is only residential, however its proximity to Calne town centre means that a range of services and facilities are within walking distance.

Pattern of growth and layout of buildings

Properties are predominantly bungalows and do not front onto Curzon Street marking a change from the older housing of the Conservation Area. The access road has a wide and open junction with Curzon Street bounded by large open gardens.



Figure 49: Bungalows are commonly seen following the gently meandering streets to form sinuous building lines.



Figure 50: Streets located along the southern edge of Curzon Park back onto woodlands backdrop, which gives it a rather green feel compared to other character areas.

The area was developed in phases and distinct layouts are seen in different parts.

Properties are laid out in a perimeter block pattern formed by Wansdyke Drive, Oldbury Way, Downland Road and Silbury Road.
Later development within cul-de-sacs, buildings tend to be rotated to clusters around the end of the cul-de-sac. Plots are moderately sized in Curzon Park and most properties tend not to have large back gardens but front gardens are generously sized and do not feature boundary wall or fences.

Development at Oak Close is a later addition to the character area built in the 2010's and is a development of affordable housing that is predominantly 2 storey, which was considered acceptable due to the sloping topography of the site.

Properties along Keevil Avenue, Silbury Road and Oak Close back onto the open countryside to the south. Due to the topography of the site and the predominantly low rise bungalow housing typology, views towards the open countryside are generally visible and unobstructed between gaps of buildings.

Boundary treatments & public realm

There is a combination of hard and soft boundary treatments used throughout the character area. Most front gardens are planted with vibrant species of trees, hedgerows, and green verges, whilst others are erected with low brick walls or paved with gravel to form effective buffers between properties and streets. The predominate character is one of openness.

Pavements are fitted only both sides of most streets. A long line of hedgerow borders the eastern edge of Curzon Street, where houses are backing onto the street and turned towards cul-de-sacs. All houses are appropriately setback from the roads, and together with low rise nature of the character area, there is a low level of enclosure throughout Curzon Park - giving it a generally open and spacious feel.

Building heights and density

The average, residential building height within this character area is 1-storey, with a majority of houses being bungalows. However, there are also 2-storey semidetached and terraces located along Curzon Close.



Figure 51: Bungalows with generous setback and a variety of soft boundary treatments are commonly featured across Curzon Park.

The only roof type featured in Curzon Park is gabled roof. Rooflines are generally consistent but tend to be more varied in cul-de-sacs where properties are rotated to cluster around the road.

Local vernacular

The bungalows of Curzon Park were built by one landowner/developer over a period of years in a Californian style. A wide variety of façade and roofing materials are featured across Curzon Park, all of which are seen in other parts of Calne area.

Dominant façade materials are whiterendered façades and stone. It is common to find houses fitted with a combination of façade materials, some popular combinations include white or painted render with different patterns of local stone or timber frame.

The only roof style seen across Curzon Park is gabled roof. However, materials tend to vary between red and grey clay tiles. A striking feature of the area is many houses are fitted with stone side chimneys attached to the side façade of the properties, which is a feature unique to this character area in Calne area. The houses on Curzon Close and Oak Close have chimney stacks that are pitched on top of roofs.

Boundary treatments include decorative hedgerows of various heights, large shrubs, as well as wooden fences facing onto the A4/Curzon Street and low brick walls. Large setbacks, and lack of boundary planting between front gardens are also common features of the area.



White render combined with local stone façade, gabled clay tile roof



Stone façade with gabled tile roof and dormer windows



Painted façade with stone quoins and stone chimney on top of a gabled roof



Grass verges, low shrubs and trees as boundary treatments



White rendered façade with stone side chimney and local stone bordered doorway



House with decorative stone façade and white render, paired with windows with timber shutters



White-rendered façade with local stone and a variety of attractive planting on the front garden



Front lawns laid with gravel and planted with flowers



Issues in the character area	Relevance to design guidelines and codes
Heavy traffic along Curzon Street/A4 (local lorry corridor) could cause disturbance for properties fronting or backing onto the road, and undermines pedestrian safety	2a, 2b
Noise and air pollution along Curzon Street/A4 (local lorry corridor)	2a
On-street parking for some narrower roads/cul-de-sacs could cause congestion	2b, 2d
Additional storey extensions which are out of character with the surrounding area leading to a potentially negative impact on the streetscape	4d

Opportunities in the character area	Relevance to design guidelines and codes
Thick landscape screening acts as a buffer between Curzon Road and houses and at the settlement fringe meeting with the surrounding countryside	1a, 4b
The scale and massing of bungalows, together with the use of materials maintain coherence across the character area	1a, 4a, 4f
Attractive and well-maintained front gardens, including a variety of landscaping elements, add to the visual quality and biodiversity value in the neighbourhood	3a, 3b, 4b
Many examples of good corner treatment, where properties front both streets and corners are framed by landscaping to guide pedestrians around them	4b
Buildings are appropriately set back from roads and front gardens are clearly delineated by boundary treatments	4b, 4c

2.4.0.8 Industrial Estate & other Light Industries & Light Industrial Units

This character area includes the large industrial area to the north-east of Calne Town, Porte Marsh. It also includes light industries and farm buildings that are still in operation across Calne Without, for example in Studley, Forest Gate and Stockley.

Access and movement

Porte Marsh is a large industrial area to the north-east of the town is bordered by the A3102 to the north and Oxford Road to the east and south-east, offering immediate access to the main road network whilst acting as borders between this area and the surrounding countryside. A secondary access is also possible from William Street which is a residential road and acts as a direct connection to the industrial area from the town, apart from Oxford Road which runs from the north-east to south reaching the town centre.

Bus services are available along Oxford Road servicing the industrial area, as well as the adjacent residencies. There is a good level of permeability within the industrial area, with permeable streets and almost no cul-de-sacs, servicing the daily operations.

Other light industrial units in Calne Without, such as Forest Gate, Vastern Timber and Broad's Green are setback from the rural lanes with driveways leading to them.

Bus services are only available along the main road network and thus, the main forms of access are either cars or farm vehicles.

Pattern of growth and layout of buildings

The structures in Porte Marsh are of various sizes suited to a variety of services and functions offered in the area. Each unit is equipped with a car parking area, the capacity of which varies as well. In addition, there is a good amount of 'soft' surfaces as well as patches of vegetation or green verges. This arrangement, combined with the fact that the majority of building heights is up to 3-storeys, helps improve the aesthetics of the environment, mitigates the visual impact and retains a relatively consistent roofline. However, there are also building heights of 4-4.5 storeys.

In general, the large footprints and massing of warehouses in Porte Marsh lacks consideration of their context for being in close proximity to residential neighbourhoods to the west and south, as well as to recent developments to the east of Oxford Road. Contrastingly, light industrial units across Calne Without are much more sympathetically designed to fit with the rural context. The units are either set along the road, like Vastern Timber in Studley, adjacent to residential properties, or entirely setback from the road network, like the ones along the A3102.

Boundary treatments & public realm

The large industrial area are more hardscaped compared to other neighbourhoods in Calne area. However, the area is bordered with rich vegetation along the A3102 and Oxford Road, whilst buildings are setback from the street mitigating any visual impact towards the surrounding properties and countryside. In addition, where the industrial land meets the residential uses to the west and south, the interaction is addressed either naturally, by placing green buffers or architecturally,

by choosing low-height buildings next to the residential properties, and by using bricks on the façades to achieve a more 'residential' feel.

Regarding the rest of the light industrial units in Calne Without, those are either bordered with rich vegetation or they back onto vegetation and open fields.

Building heights and density

The average building height within the large industrial area ranges from 1 - 4.5 storeys. However, the generous setbacks of the buildings along the edges and the rich vegetation along the building lines allow the area to sit relatively sensitively in the surroundings. In addition, where the industrial area meets the residential neighbourhood to the south, the building heights drop to match the surrounding context. In terms of roof types, these range between gabled and curved roofs, whilst there are also some examples of flat roofs. The roofline is generally consistent, but there are variations at places where building heights differ. In addition, the roofline is often broken up by trees or large gaps between the industrial units.

Light industrial units in Calne Without range between one and 3-storeys with different angle ridges. The prevailing roof type is gabled, but there are also examples of mansard roofs. Industrial units located in Calne Without tend to be dispersed across the rural countryside and many of these have out buildings attached, resulting in fragmented rooflines.

It is worth noting that new employment units are generally encouraged across Calne area, provided that they are sympathetic and complementary to the area in which they are to be located. In particular, new small-scale light industrial areas should be designed in a similar way to Forest Gate in terms of massing and layout. However, some commercial and light industrial uses, may exacerbate noise, light and air pollution within the local area. This is especially concerning in close proximity to residential areas and should be avoided where possible.



Figure 52: View along Oxford Road showing the green screening that borders the industrial estate offering some pleasant views to the neighbouring properties and a gradual transition to the surrounding countryside.



Figure 53: View along Stanier Road where industrial buildings are setback allowing for large green verges, hedgerows and street trees.

Local vernacular

Across Porte Marsh, apart from the typical paneling that is used for most of the buildings in different colours (red, white, green), there are also examples where red brick is used, either for the entire façade or half of it. This material is mainly used where the industrial estate neighbours residential properties, like along Porte Marsh Road. In addition, examples of half black paneling and half red brick can also be found creating a pleasant reference to the black weatherboarding of farm buildings in the countryside of Calne Without.

Materials used for the industrial units in Calne Without are far more sympathetic towards the rural context they are set in. These range between off-white render, yellow stone and black weatherboarding for buildings and off-white, green and grey paneling for the warehouses.



Red brick



Half off-white paneling and half red brick



Paneling



Half black paneling and half red brick



Local stone on façade



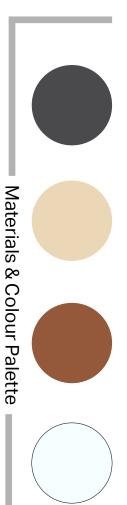
Black weatherboarding



Gabled roof, off-white paneling



Gabled roof with red clay tiles and yellow stone and red brick



Issues in the character area	Relevance to design guidelines and codes
Calne Town: Traffic congestion and noise pollution involving mainly lorries going through residential neighbourhoods	1e, 2b
Calne Town: Challenging interaction between industrial estate and residential neighbourhoods	1e
Porte Marsh and the associated pollution is very close to residential buildings	1a, 1e, 4b

Opportunities in the character area	Relevance to design guidelines and codes
Calne Town: Green screening in places between industrial estate and residential properties to mitigate unpleasant views	1e, 3a, 3b
Industrial buildings within Calne Town and the rural environment are set back from the main road to mitigate unpleasant views for pedestrians and drivers	1e, 4b
Calne Town: Use of red brick or white render where industrial buildings meet residential properties to create a smooth transition from one character area to the other	1e, 4f
Calne Without: Positive examples of converted farm buildings, within the rural environment, where massing, materials and scale respect the surrounding rural context	1e, 4a
Design of industrial buildings should meet their commercial need and function while being contextually sensitive to the surrounding area.	1a, 1e

Education Institutes

2.4.0.9 Education Institutes

This character area includes the independent primary and secondary schools of St Margaret's and St Mary's, and the special educational school Springfields Academy. The area lies to the north of the A4/Curzon Street immediately to the north and west of the Conservation Area.

Access and movement

The character area is connected to the rest of the town via the A4/Curzon Street and through links to North End and Lickhill Road. Within the character area roads provide private access only for staff, employees, and pupils. Pedestrian links are onto the A4/Curzon Street and through Alma Terrace and North End on to Lickhill Road and the town centre. The sites do not contain any public rights of way.

Bus services are available along the A4/ Curzon Street offering connections locally and to Chippenham and Swindon. The A4 is part of the local lorry route and so HGV traffic could cause noise and air pollution. Part of the area abuts the air pollution zone at Curzon Street.

I and uses

The area is used for residential and day educational and includes sports facilities that are open to members.

Pattern of growth and layout of buildings

St Mary's school moved to its current site from The Green in 1907 where it acquired more land including that of the Calne Workhouse. The assembly hall, dining room and kitchen built in 1935 are constructed from stones reclaimed from the old workhouse. Two workhouse buildings remain on the site and are listed; one is used as the school shop. The brick building that houses St Margaret's school was built in the 1970s.

The Springfields Academy was opened in 1983 in The Grange as a school for maladjusted boys aged over 11, the school now specialises in education for autistic young people aged 5 to 19.

The schools are arranged over a number of historic, modern and contemporary buildings including some Listed Buildings with large green spaces providing extensive



Figure 54: St Margaret's School



Figure 55: St Mary's School

Education Institutes

sports and recreational facilities. There are a number of boarding houses and communal buildings plus a sports centre which was refurbished and enlarged in 2019. Accesses off the A4/Curzon Street are to buildings set well back off the roads behind trees and hedge topped stone walls. The school complexes are largely hidden from view.

The schools have added buildings over the years to provide both boarding and educational accommodation, sports and cultural facilities. The buildings vary in height according to the topography within the site, developments have included new threestorey residential buildings and 2-storey and 1-storey additions to existing buildings.

Large green spaces remain an important feature of the character area, whether they be playing fields or general park and recreational space.

Local Vernacular

The buildings within the character area are a mix of the original buildings, some of which are listed including an old Lime Kiln. Those which were first occupied by the schools are

of traditional stone and brick construction. The later additions across the 1970s to present day feature brick construction and the most recent modern 6th form block at St Marys is totally timber-clad. There are few views into or across the sites, with building heights limited and trees and planting providing screening.



Gabled roof with clay tiles, red brick façade



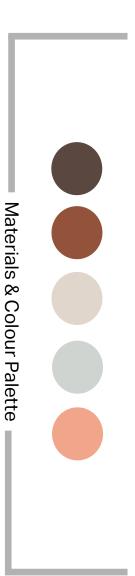
Clay tile gabled roof with decorative chimney and white-rendered façade



Gabled roof with clay tiles, stone façade



Boundary treatments of stone walls topped with hedges



Education Institutes

Issues in the character area	Relevance to design guidelines and codes
Few car-free footpaths or public rights of way in the area that is located in the heart of Calne Town Centre	
where there are busy traffic flows. This can undermine the safety of school students getting to and from	2a, 2b
school.	

Opportunities in the character area	Relevance to design guidelines and codes
If new educational buildings were to come forward, they should use the existing educational structures are reference.	1a, 1b, 1d, 4b, 4f
Listed buildings of significant historical value in the character area, such as the old Llme Kiln, must be protected and preserved.	1a, 1d
Positive boundary treatments in the form of hedgerows and stone walls topped with high hedges, should be protected to maintain privacy for the schools.	4b

2.4.0.10 Lower Compton

This character area includes the Lower Compton development located to the south-east of Calne town, north of the A4.

Access and movement

This character area is accessed via a countryside lane with branches out of the A4 and continues to the north-east offering connections to other settlements like Compton Bassett.

The proximity to the main road network is immediate, whilst bus services are running through the access road.

There are no footpaths branching out from this character area, however, there are a number of Public Rights of Way in close proximity that offer access to the countryside to the south, Calne Town to the west and settlements like Cherhill to the east.

Land uses

This character area is residential with no other land uses. Houses were built in the 1940s and 50s to serve the RAF bases at Compton Bassett, Cherhill and Yatesbury.

Pattern of growth and layout of buildings

There are three patterns of growth found in Lower Compton that contribute to its character.

Most of the properties are organised in permeable blocks where buildings setback from the street allow for well-sized front gardens. Building lines are relatively regular along the main roads, whilst tertiary roads like Embry Close and Dowding Drive show a subtle meandering character affecting the building lines and rotations. Plot sizes and widths show some variations depending on the building typology or whether or not the particular permeable block also includes a cul-de-sac street. In the latter case, plot sizes tend to be relatively smaller compared to the rest of the plots. Houses on the western side were built for RAF officers and families, hence, these are larger and tend to have more green space around them.

Cul-de-sac layouts are also part of the character of Lower Compton and they are short, allowing access to a small number of properties. The character of the street differs from the one along the main roads and creates a feel of a shared space rather than that of a formal road. Building lines along the cul-de-sacs are less regular compared to the permeable blocks and plot sizes are smaller.

Lastly, some roads are characterised by linear formats allowing for clear long-distance views towards the built environment or the surrounding countryside. For example, the views towards the countryside to the east can be appreciated along Atcherly Road. In addition, building lines are relatively regular compared to the rest of the patterns found in the area, whilst buildings are set back allowing for well-sized front gardens. This regularity is also enhanced along some streets due to the terraced typology, for instance along Whittle Avenue.

What differentiates the western from the eastern sides of Lower Compton is the density and the character of the streets. More specifically, the density within the western side is lower, resulting in larger plot sizes. In addition, the streets on the eastern side are bordered with large green verges on both sides, which also accommodate parking, pavements and small front gardens, whilst the western side includes streets that are bordered directly with the large front gardens of the properties.



Figure 56: The linear format of the buildings along Atcherly Road allows for clear long-distance views towards the countryside to the east.

Boundary treatments & public realm

The green coverage in Lower Compton is high. The large green verges that characterise the eastern side, the large street trees and the well-sized front gardens in the western side, all together contribute to the countryside feel of the area. Where the area borders the countryside lane, which facilitates access to the A4, hedgerows and vegetation create a pleasant green buffer for both sides. Within the neighbourhoods, a feel of openness is created since the front gardens are decorated with grass areas, flower beds, bushes and some trees. The feel of openness is also enhanced by the fact that the estate is being surrounded by green fields on the west, east and south, and by the Hills waste management facility to the north. The open nature of the western part of the estate should be protected.



Figure 57: The large trees in the front gardens of the properties interrupt the roofline and reinforce the countryside feel of the area, Windsor Road.



Figure 58: The natural boundary treatments along Boyle Avenue create a green buffer between the properties and the countryside lane which offers immediate access to the A4.

Building heights and density

The average building height is relatively low, 2 storeys.

The prevailing roof type is gabled roof, however, cross-gabled roofs are also found at places.

The roofline shows subtle variations, whilst it is generally non continuous as it gets interrupted due to the large street trees.

Local vernacular

Roof materials include slates and red clay tiles, whilst brick chimneys do not appear often on the roofs.

The main materials used on the façades are red brick and yellow brick. There are also examples of half render half red and limestone rubble combined with red brick dressing.

Soft surfaces prevail over the hard ones, including green verges, street trees, grass areas and flower beds, whilst there are some examples of low brick walls.



Gabled roof



Gabled roof with red clay tiles



Cross-gabled roof with red clay tiles Yellow brick





Half render and half brick



Limestone rubble with red brick dressing



Red brick



Issues in the character area	Relevance to design guidelines and codes
Remoteness from the rest of the town settlement exacerbated by a lack of nearby services and facilities	2a
Lack of variety in the local vernacular	4f

Opportunities in the character area	Relevance to design guidelines and codes
Countryside feel due to generous green verges	2a, 3a
Street typologies including green verges, pavement and small front gardens create a more community feel in the area	2b
Variety of patterns of growth including permeable blocks, cul-de-sacs and linear layouts	1a, 1b
Rich natural boundary treatments decorating the front gardens improving the aesthetics of the streetscape	4b

Rural Settlements (villages & hamlets)

2.4.0.11 Rural Settlements (villages & hamlets)

This character area includes all the rural settlements, either villages or hamlets, within the Neighbourhood Area, excluding the Conservation Areas of both Derry Hill and Sandy Lane which are analysed as a separate character area.

Access and movement

Most of the villages and hamlets are located to the west and south of Calne Town and are therefore, serviced by Black Dog Hill, New Road, Church Road, the A342, the A3102 and other tertiary countryside lanes. Villages to the east include Calstone and Lower Compton which are serviced by the A4.

A good network of footpaths offers connections towards the town, the surrounding countryside, as well as nearby villages like Derry Hill and Studley and Bowood House and Gardens. However, there is high dependence on cars for daily commuting. Bus services also serve Derry Hill, Stockley, Lower Compton, Sandy Lane and New Road offering connections to the town, Chippenham and nearby villages.

Land uses

The rural settlements are mainly residential, however, there are other uses found like churches, schools and pubs. Some examples are Studley Methodist Church, a Baptist Chapel and a timber yard along Studley Lane, Derry Hill Christ Church and primary school along Church Road, Lansdowne Hall and the Lansdowne Arms pub along the A342. In addition, there is a public green space in Derry Hill and the churchyard next to the Derry Hill Christ Church. Much of the land outside of Calne is agricultural.

The villages and hamlets still support a thriving farming sector with a mixture of arable, dairy, sheep grazing and pig farming. Many of the farms are actively diversifying to bring in additional revenue streams by converting unused farm buildings into light industrial use, providing horse livery, pheasant shooting and running a pre-school nursery. The Wellington Barn events venue is another key example of farm diversification.

Pattern of growth and layout of buildings

The patterns that characterise the rural settlements are informal compared to the patterns found in the town.

Some villages are organised in linear patterns along slightly meandering roads like the ones along Norley Road, Old Road, Studley Lane, Church Road and Devizes Road. Building setbacks vary generating irregular building lines, whilst there are cases where building rotations also show variations. Plot sizes and widths generally vary, reinforcing the rural character of the settlement.

In Derry Hill and Studley villages, other patterns are also found apart from linear layouts. More specifically, cul-de-sac layouts branch out from Church Road, Studley Lane and Studley Hill. The cul-desac developments in Studley offer a more informal feel compared to the ones in Derry Hill, characterised with narrow countryside lanes bordered with rich vegetation. On the other hand, Derry Hill is characterised with longer cul-de-sac streets with pavements on both sides bordered with the front gardens of properties and less vegetation compared to the cul-de-sac lanes in Studley. In addition, the plot sizes and widths are smaller and more consistent in Derry Hill, whilst building lines remain irregular with variations on building rotations.

Lastly, there are also examples of hamlets spread around the rural environment in a more informal setting compared to the villages. In particular, hamlets or groups of housing set along Chilvester Hill, the A3102, Stockley Lane and other countryside lanes are either setback allowing for well-sized front gardens or they are set closer to the street, but still allowing for front gardens.

Another characteristic of this character area is the open views to the countryside, at places, for example along Norley Lane, on one hand and the enclosed feel along the lanes, due to rich vegetation, on the other. This combination of different levels of enclosure creates visual interest.

Boundary treatments & public realm

Natural boundary treatments in the form of trees, vegetation, hedges, hedgerows and bushes prevail over the hard surfaces, reinforcing the rurality of this character area.

There are two types of natural boundary treatments found in the area. For example, in Studley village or in the linear settlements along the rural lanes and the hamlets that are

spread around, the properties are bordered with rich vegetation, 'wild' and unshaped in nature. In addition, the lanes are relatively narrow with no pavements.

However, other streets, like the cul-de-sac developments that branch out from Church Road, create a more 'formal', but still rural feel, with roads accommodating pavements on both sides and the front gardens being decorated with bushes or various sizes, some trees and flowerbeds. Along these cul-de-sacs, the views to the backdrop vegetation prevail.

Building heights and density

The average building height within the rural settlements is relatively low, up to 2.5 storeys, whilst there are some examples of one-storey properties.

The prevailing roof types are gabled and cross-gabled roof, however, thatched, hipped, mansard and cat-slide roofs are also found along the lanes. Dormers tend to decorate the roofs, creating an additional interest in the roofline.



Figure 59: View along a rural countryside lane where buildings are setback from the street bordered with hedges, hedgerows and rich vegetation.



Figure 60: View along a slightly meandering countryside lane bordered with rich vegetation allowing for evolving views towards properties or the open countryside.

The roofline shows variations due to the decorative features on the roofs or height differences, as well as due to the rich vegetation that interrupts it at places. In particular, the roofline appears to be relatively continuous within the cul-de-sac developments north of Church Road due to the smaller gaps between the properties, whilst in Studley and other linear settlements and hamlets the roofline often gets interrupted with vegetation.



Figure 61: Rooflines within the rural environment are generally non-continuous as they are usually interrupted with vegetation.



Figure 62: The topography, at places, allows for long-distance views towards the open countryside and woodlands.

Local vernacular

The rural environment includes a rich local vernacular that contributes to the character of the villages and surrounding hamlets.

Roof materials include thatched, grey slates and red clay tiles, whilst there are cases where materials are combined, for example thatched roofs with red clay lower roofs. Red brick chimneys usually decorate the roofs, adding interest on the roofline.

There is also a great range in materials used for the façades including exposed rubble stone, limestone rubble, whilst there are also examples of red brick and off-white render. In addition, some combinations in materials are also found, for example yellow stone with red brick dressing adding visual interest along the street scene.

Natural boundary treatments prevail, however, timber fencing and low height stone walls or yellow stone walls (usually combined with railings), can also be found in the rural settlements.



Mansard thatched roof



Gabled roof with grey slate



Gabled roof with red clay tiles



Thatched roof combined with a lower roof with red clay tiles



Cat-slide roof with grey tiles



Red brick



Off-white render



Rubble stone with red brick dressing



Exposed rubble



Limestone rubble



Exposed rubble



Exposed rubble with red brick dressing



Low height stone wall

AECOM



Low height yellow stone wall combined with railings



Low height stone wall with vertical coping stones



Materials &

Colour Palette

Issues/threats in the character area	Relevance to design guidelines and codes
Recent developments are characterised with significantly higher densities compared to the building densities within the rural settlements	1a, 4a
Recent developments lack natural boundary treatments and show a prevalence of hard surfaces. These include backland developments in back gardens, reducing plot sizes	4b
Design and material palettes of recent developments lack consistency with existing character	4f
Conversion of detatched and/or semi-detached units into single units impacts the availability of smaller, more affordable homes, particularly for younger people	4a, 4d

Opportunities in the character area	Relevance to design guidelines and codes
The rich local vernacular should be respected by any new development and used as reference	4f
Natural boundary treatments prevail over hard surfaces	3a, 4b
Long-distance views, in places, towards the open countryside and of Calne's townscape, including views of key landmarks such as St Mary's church from Blackland Down	1c
The topography and landscape play a key role in the general setting	1a



3. General design guidance & codes

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

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.

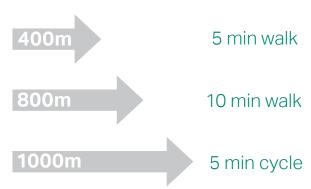


Figure 63: The 10 characteristics of well-designed places. (Source: National Design Guide, page 8).

3.2 Walkable places

Creating new walking routes which are well connected to the existing network should be a prerequisite for any new development in Calne area to improve walkability within the town as well as access to the surrounding countryside and open fields.

The success of a place is influenced by how walkable it is. It is good practice to plan new homes within a 400 metres walking distance (= 5 minutes) of bus stops and within 800 metres (= 10 minutes) of convenience stores or community buildings.



3.3 General principles and guidelines

The design guidelines and codes, with reference to the Calne Neighbourhood Area, 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, as well as any potential infill or small scale development.

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 local character of the wider town and rural settlements. 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.

The general consensus of the local community is that there has been considerable development in the area, much of which has been of mediocre design. Any further development should preserve the current character areas and be of a high standard of design.

Some design principles that should be present in any design proposal are:

- Respect the existing pattern of the town and rural settlements to preserve the local character:
- Respect the heritage, landscape and key views identified in the Neighbourhood Area;

- Aim for high-quality design that reflects and respects the local vernacular;
- Integrate with existing paths, streets, circulation networks and improve the established character of streets, greens and other spaces;
- Harmonise and enhance the existing town and rural settlements 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 drainage infrastructure without causing unacceptable harm to retained features;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Provide adequate open space for the development in terms of both quantity and quality;

- Preserve views towards the open countryside as well as views from the countryside towards the town and rural settlements:
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- 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.



3.4 Calne area design guidelines and codes

This section introduces a set of design guidelines and codes that are specific to Calne area. 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, Manual for Streets, and Building for Healthy Life which informed the principles and design codes; and
- Discussions with members of the Neighbourhood Plan Steering Group.

The design guidelines and codes are divided into **4 sections**, shown on this page, each one with a different number of subsections. Each section and subsection is numbered (e.g. DC.01 and 1a) to facilitate its reading and consultation.

The design guidelines and codes are mainly applicable to medium and large developments within the Neighbourhood Area, however there is also design guidance for smaller developments, for instance infill schemes or building extensions and conversions.

Theme	Number	Title
DC.01 In keeping with local character	1a	Consider the context
	1b	Patterns of growth
	1c	Important views and legibility
	1d	Development affecting heritage assets
	1e	Development in close proximity to industrial units
DC.02 Access and movement	2a	Prioritise walking and cycling and access to the countryside
	2b	People-friendly streets
	2c	Lighting
	2d	Parking and servicing
DC.03 Landscape and sustainability	3a	Create a green network (for biodiversity and amenity)
	3b	Promote biodiversity and provide open spaces in developments
	3c	Water management
DC.04 Built form	4a	Building heights, density and housing mix
	4b	Boundary lines, boundary treatments and corner treatment
	4c	Continuity and enclosure
	4d	Housing extensions and conversions
	4e	Infill development
	4f	Materials and architectural details
	4g	Shop fronts and public realm
	4h	Eco-design

1a. Consider the context.

The Calne Neighbourhood Area boasts high-quality natural areas. More specifically, the AONB, water elements, Public Rights of Way, woodlands, ancient woodlands, scheduled monuments and listed buildings are some characteristics of the landscape that need to be taken into consideration in the design process. Thus, some design guidelines for future development are:

New development must have a good understanding of the existing character areas within Calne area, as analysed in Section 2.4, and reference the variety of qualities and styles in the new design. Existing road layouts, development patterns, densities, boundary treatments, massing and materials within Calne Town and the rural settlements must be carefully analysed to make sure that new developments, of any scale, sit sensitively within the local context and next to existing properties;

- New development must have a good understanding of the existing topography of the entire Neighbourhood Area and propose design that takes advantage of it to produce short or long-distance views and pleasant perspectives. For example, there are many short-distance views generated due to topography within the town, along Castle Street, Curzon Street or The Green, whilst other neighbourhoods like Curzon Park offer long-distance views towards the open countryside, as well as townscape views from rural areas. Three important protected key views identified by the NP Steering Group are:
 - Lansdowne Monument from Calne and countryside to the west:
 - 2. St Mary's church in Calne from adjacent streets and from the countryside e.g. from Blackland Down and Wenhill; and
 - 3. Bowood Gates from the north and A4 into Chippenham.

- New development, either large or small, must respect the existing heritage and make sure actions are taken to mitigate any impact. For example, should any new development takes place in close proximity to a heritage asset, then careful consideration needs to be taken in terms of views, landmarks, massing, density, enclosure and architectural details.
 Please see 1c and 1d for more details on how to protect heritage assets and views;
- New development needs to respect and retain the existing green assets of any form of ancient woodlands, deciduous woodlands, trees, hedges and hedgerows within Calne Town and the rural settlements, whilst also proposing new green links to enhance the existing network and improve biodiversity.
 For example, the existing river that goes through the town offers many opportunities for connections with the surrounding countryside and open fields. In general, all green assets should be integrated into the design process and shape the design outcome. Please see

<u>3a and 3b</u> for more details on proposals for green networks and their benefits within built environments;

- New development should enhance connections with the surrounding countryside and rural settlements within the Neighbourhood Area by improving the existing links or creating new ones. In edge locations, it is important to connect all streets to the network of footpaths and cycle paths. Please see <u>2a</u> for more details on how to prioritise walking and improve access to the countryside; and
- New development could benefit from an area-wide drainage plan to mitigate against risk of flooding, mainly along the river and brooks. In addition to this, new developments located in flood risk zones should incorporate green buffer zones or Sustainable Urban Drainage Systems (SuDS) as measures to protect against potential flood risks. Please see <u>3c</u> for more details on water management.

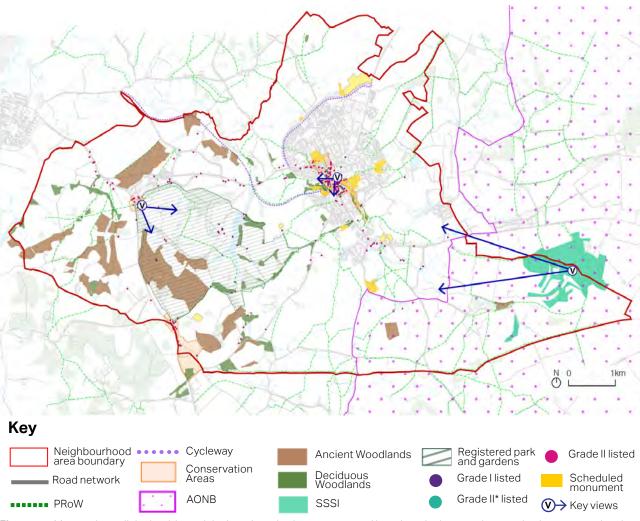


Figure 64: Map to show all the land-based designations, heritage assets and key views in the area that need to be protected and taken into account in new development.

1b. Patterns of growth

Calne area owes much of its character to the historic pattern and layout of the roads and buildings within the town centre, the countryside lanes of the rural settlements, as well as its close relationship with the surrounding countryside, the river and Bowood Estate and Gardens. Thus, any new development of any scale needs to relate to the existing patterns and layouts of built form to preserve the local character of the area. Nevertheless, good-quality, well-designed and innovative modern buildings are also welcome in appropriate places.

As analysed in Section 2.4, the Calne area consists of the town settlement, which is split into character areas including the industrial estate, as well as the rural environment which includes villages, hamlets and light industrial units. All these different character areas offer a variety of settlement forms and patterns of growth which must be used as reference for new developments, of any scale. Thus, some design guidelines and codes will be given for both the town settlement and the rural environs drawing on the earlier analysis:

Calne Town

- New development must propose
 design that enhances the existing
 settlement forms found in the town.
 More specifically, the linear layouts
 along main roads and the permeable
 blocks or cul-de-sac layouts in the inner
 neighbourhoods are the main patterns
 of development in Calne town. Thus, new
 design should match the surrounding
 context to help preserve the local
 character;
- Within the town centre, any proposal for infill development must take into consideration the surrounding context to preserve the local character. For example, the town centre is characterised by linear properties, a prevailing terraced typology along the streets, continuous frontages and small or no front gardens. This characteristic should be retained and form the baseline for new developments within the town centre;

- New development within the town should propose designs that allow for relatively regular building lines with subtle variations on setbacks to create visual interest along the streetscape. Plot sizes and widths should also allow for subtle variations to reinforce the countryside feel of the area:
- New development should gain a good understanding of the topography and the existing green elements, of any form, and integrate them into new design as part of the landscape;
- New development needs to propose design that respects the surrounding density of the town. More specifically, density is highest around residential much of the post-war residential development, Calne Town Centre and also Lower Compton, with peripharal areas and rural villages and hamlets being more sparsely populated.



Figure 65: Church Street - a compact linear street with continuous frontages formed by historic adjoining buildings.

Figure 66: Structure of Church street on plan view, showing a compact linear development pattern with continuous frontages.



Figure 67: Oxford Road, a linear street lined with street trees and houses with front gardens.

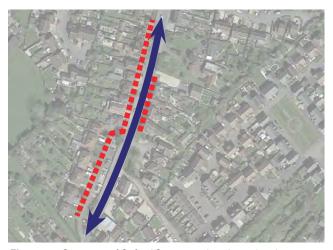


Figure 68: Structure of Oxford Street on plan view - developments following the gently meandering street, forming consistent building lines along the street.



Figure 69: The 1-storey properties allow views to the background vegetation, whilst boundary treatments create clear delineations between public and private spaces, Walter Sutton Close.

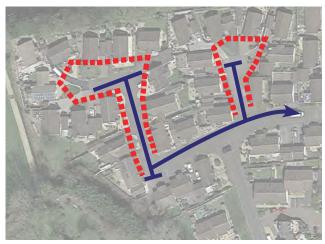


Figure 70: Example of a cul-de-sac layout where building plots and widths are smaller compared to the ones in the linear layouts resulting in higher densities, Walter Sutton Close/Yew Tree Close.

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Rural settlements

- New development must propose designs that enhance the existing settlement forms of the villages or hamlets. For example, the rural settlements are organised in both linear layouts, along main roads, and cul-de-sac layouts, whilst the meandering character of the lanes adds to the rural character of the area:
- New development should preserve the existing green elements of any form, and propose design that integrates them as part of the landscape to reinforce the village feel. Any design that promotes hard surfaces over soft ones should be avoided;

- New development should propose designs that allow for a variety of building setbacks and rotations to reinforce the local character of the rural environment.
 Regular building lines with no variations should be avoided as they will detract from the surrounding local character;
- New development needs to propose designs that allow for subtle variations in plot sizes and widths to match the surrounding local context. Identical building plots placed side by side should be avoided:
- New development should propose designs that respect the surrounding density of the rural settlements to ensure that gaps between the properties are appropriate to allow for views towards the countryside and movement of species.
 Please see <u>4a</u> for more details on how to protect heritage assets and views; and

- Where new development of any scale is located in close proximity to a conservation area or listed building, then the design should allow for a generous setback to avoid obstructing any views towards the historic asset.
- New development must utilise materials sensitive to the character of each area and not deviate from the existing vernacular.



Figure 71: Church Road in Derry Hill, a linear street with varied building setbacks forming an irregular building line. The rotation of buildings forms gaps to provide views of trees and planting.



Figure 72: Church Road on plan view, highlighting a linear country road with irregular building lines formed by larger properties with varied setback from the road.



Figure 73: Landsowne Crescent, a meandering residential street with views to background vegetation and soft boundary treatments, creating a feel of a shared environment.



Figure 74: Landsowne Crescent on plan view. Buildings are rotated to follow the gently meandering road. Narrower roads mean that there is a heightened sense of enclosure.



Figure 75: Light industrial units on Clark Avenue. The plot layout is characterised by long driveways and larger setbacks from the main road.



Figure 76: Example of a light industrial estate where buildings have large footprints and are set back further from the road. Long driveways allow large vehicles to offload and park, Clark Avenue.

1c. Important views and legibility

Legible place is where the a place where people can orientate themselves easily and find their way around. To this, a number of elements can contribute like short and long distance views, landmark buildings, different street characters etc.

Due to the distinctive landscape throughout the Neighbourhood Area, Calne area offers a good number of short and long-distance views that enable appreciation and experience of the town centre and the tranquility of the natural environment. In addition, landmarks within the built environment help people navigate their way around the built environment.

Therefore, any new development needs to be aware of those views and landmarks and stimulate ways in which they could be further promoted and protected. Some design guidelines and codes are:

 Scenic values and the tranquillity of countryside views should be retained and enhanced in future development. In particular, some important views towards the countryside from within the town

- and from the rural settlements should be protected. In addition, in case of large scale proposals, a further investigation of long-distance views needs to be conducted to make sure that their key attributes, such as important open land and aspects, as well as views towards ancient or deciduous woodlands and open fields will remain protected;
- In particular, 3 important key views have been identified for protection: Lansdowne Monument from Calne and countryside to the wes; St Mary's church in Calne from adjacent streets and from the countryside e.g. from Blackland Down and Wenhill; and Bowood Gates from the north and A4 into Chippenham. Any new development should respect these views and should not obstruct them.
- Topography plays a key role in the generation of both short- and long-distance views and thus, new development should take topography into consideration when designing the landscape, roofline and streetscape;

- Short-distance views, mainly within the town but also within the rural settlements, towards landmark buildings, listed buildings or non-designated buildings of historic importance that act as focal points, should not be blocked by new development. For that reason, the proposed scale and massing of any new building or development need to make sure they preserve those important views:
- New development should aim to create both short- and long-distance views apart from preserving the existing ones. Short-distance views broken by buildings, trees or landmarks create memorable routes and help people navigate around, whilst long-distance views and vistas allows to visually link places and admire the surrounding countryside and woodlands; and
- Within the rural settlements and the settlement edges of the town, development densities should allow for spaces between buildings to preserve the views towards the countryside

setting and maintain the perceived feel of openness. A variation in the height of buildings is also recommended to help preserve the countryside setting. Any proposal that is visually intrusive and out of scale compared with the surrounding context must be avoided.

Legibility and signage

- Buildings located at corners, crossroads or along a main road can play a significant role in navigation. For that reason, the architectural style of those buildings should be slightly differentiated from the rest to help them stand out whilst respecting the local vernacular. For example, the Community Hub and library, shown in Figure 77, act as a landmark for the town centre, whilst the use of limestone ashlar on the façade contributes to the local vernacular:
- Landmarks could be also be other elements within the townscape, for example a public art, a large street tree, a blue asset or a historic element. For instance, the river next to Calne Town Hall

- or the emblematic entrance to Bowood Estate and Gardens on Church Road act as landmarks for the surrounding environment navigating people around;
- New signage must be designed to be easy to read. Elements like languages, fonts, text sizes, colours and symbols should be clear and concise, and avoid confusion. For example, markings on the public realm, as shown in <u>Figure 78</u>, can improve legibility as well as the aesthetics of the environment;
- Signage must be strategically located within the town centre and neighbourhoods to signalise the location of local assets or other important destinations, for instance, the town centre, local amenities, the industrial estate, Castlefields Park, open spaces, recreation grounds, sports clubs;
- Signage within the town could be of the form of signposts as well as interactive signage and QR codes that would provide information about important destinations, nearby car parking, the weather forecast, weekly events and festivals;



Figure 77: The Community Hub and Library building located at the corner of the junction acts as a landmark for the town centre, due to its form which is different from the surrounding buildings. The materials used on the façade, however, create a consistent result along the streetscape and reinforce the local character and vernacular of the town.



Figure 78: The choice of different paving materials along the public realm improves the quality of the streetscape and serves as wayfinding. This feature is an example of public artwork promoted throughout the town.

- Signage should be also placed strategically along walking and cycling routes within the rural environment to signalise the location of local assets or other important destinations, for instance, the distance to surrounding villages and hamlets, Sandy Lane, Derry Hill and Studley, Bowood Estate and Gardens, Castlefields Park, and the town centre; and
- Applicants are encouraged to use timber, hand-painted and non-illuminated signage, avoiding the use of garish or day-glow colours. Overall, the signage must be sensitive to the rural environment and blend with the existing rich vegetation.



Figure 79: Local example of a well-designed sign providing information about the area, Calne Town.



Figure 81: Interactive signage totem with information about upcoming events and important destinations placed in appropriate areas such as Phelps Parade. .



Figure 80: Local example of signage providing information and knowledge on Calne's landscape and wildlife.



Figure 82: Example of a wooden sign post which would be well suited to the surrounding rural environment of Calne.



Figure 83: Example of a sign post indicating the location of public footpaths, whilst the wooden material fits perfectly into the surrounding rural context.



Figure 84: Example of signage that could be implemented along footpaths within the open countryside to navigate people towards important destinations.

1d. Development affecting heritage assets

There are several elements of historic significance in Calne area which make a positive contribution to the character of the area. In particular, grade I, II and II* listed buildings are mainly concentrated within the Calne Town, Derry Hill and Sandy Lane Conservation Areas; the rest are scattered around the rest of the Neighbourhood Area.

Additionally, landscape elements form part of Calne area's heritage and include one designated Ancient Monument, Historic Park and Gardens, woodlands, rural lanes, veteran trees and historic farmsteads.

Therefore, design guidelines should be in place to guide development in close proximity to the above assets. These guidelines are:

 New development in close proximity to designated and non-designated heritage assets must acknowledge the nature of those assets, their setting in relationship to the street and vegetation and draw the qualities that could inform new development. For example, new development should respect the surrounding building setbacks and boundary treatments and propose design that sits sensitively next to them without being visually intrusive;

- New development should retain existing open spaces, vegetation and trees to preserve the historic form and pattern of development in the Calne area. New development should also be sensitively designed to avoid negative impact upon the existing network of streets;
- The scale and massing of new development should be sensitive to the surrounding heritage assets and avoid blocking views towards and from those heritage assets. For instance, the massing of the properties surrounding St Mary's Church allows for clear views to the church across every lane;
- New development should take into account the topography of the area and suggest designs that maintain the existing roofline along the streetscape;
- Within rural environs, new developments should suggest density that respects the surrounding context and allows

for general gaps between buildings to preserve open views and vistas and aim to demonstrate the significance of the asset. In particular, the Bowood Style cottages built around the area of Bowood Estate in the 1800s are considered a locally valued architecture style. New developments should seek to incorporate such design features;

- New development should propose architectural details and materials that are sensitive to the ones used in the surrounding heritage assets to preserve and respect the local vernacular. For example, whilst limestone rubble and exposed rubble are mainly used within the town centre, there are examples of buildings with red brick façades, like the ones at the corner of Phelps Parade, which detract from the general character of the town centre; and
- The Neighbourhood Plan Steering Group's Heritage Asset List will supplement Conservation Areas and Listed Buildings. New developments should refer to this list when assessing impact on heritage assets.



Figure 85: View towards St Mary's Church from The Green. The topography of the area and the surrounding building heights and massing allow for unobstructed views towards this historic asset.



Figure 86: Historic meandering streets within the town centre offer evolving views towards St Mary's Church.





Figure 87: Positive example of edge treatments in a recent infill development (photo below) next to the historic asset (photo above), elsewhere in rural UK. The infill property is set back from the main street allowing for a generous gap between itself and the neighbouring Listed Building which faces directly onto the pavement. As a result, the recent addition is discrete and not visually intrusive, as it is also surrounded with rich vegetation and large trees, respecting the scale and massing of the Listed Building.



Figure 88: The red brick façades used at the corner buildings that lead to Phelps Parade create a less attractive street compared to the surrounding buildings. This is considered a poor design locally and should not be a model for future development in the area.

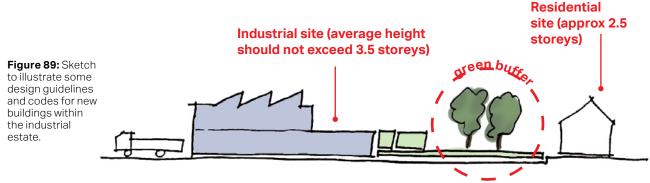
1e. Development in close proximity to industrial units

There is a large industrial estate to the north-east of Calne Town, whilst light industrial units are also spread within the rural environment and villages.

Where industrial units are in close proximity to residential areas, design guidelines and codes should be in place to mitigate any visual impact. Some design guidelines and codes are the ones presented below:

- The road network should be laid out in a way to facilitate circulation and traffic.
 For example, permeable road network is recommended as opposed to cul-desac streets. However, in the case of light industrial units set in the rural landscape, long driveways are recommended leading to industrial units;
- Pedestrian and cycle connections between the industrial estate and the neighbouring residential properties should be prioritised over vehicular connections to mitigate traffic coming through the residential areas;

- Proposals for additional access points into the industrial estate need to ensure that they do not create any conflict with the surrounding residential areas. Any proposal that could potentially give rise to high levels of traffic will not be accepted;
- The road network within the industrial estate should be bordered with green verges and street trees to add a 'countryside' feel in the area and increase the green coverage in an otherwise relatively hard surfaced setting;
- Parking lots should not dominate the area and should be screened with vegetation and mature trees and, where possible, be located to the rear of buildings.
 Permeable paving materials are also recommended:
- Building heights and massing should not create abrupt changes in proximity to existing residential areas, but should be integrated within the surrounding context. For example, the residential properties surrounding the industrial estate have a 2.5-storey average height, whilst some recent developments to the western side include 3-storey flats. Thus, any industrial unit in close proximity to the residential neighbourhoods should not exceed the 3.5-storeys. In addition, new small scale light industrial areas should be designed in a similar way to Forest Gate;
- Landscape buffer zones need to be provided between the residential and the industrial estate or light industrial units to soften the visual impact of the new developments;



- Buildings within the industrial estate
 or light industrial units within the rural
 environment should be well set back from
 main roads to provide opportunity for
 landscape planting to improve the visual
 quality of the streetscape; and
- A common material palette needs to be adopted and used throughout the industrial estate and light industrial units within the rural environment to provide a unified and identifiable image of the industrial area. However, the chosen material palette should, at the same time, be sensible to the local character and surroundings. For example, within Calne town centre where industrial buildings neighbour residential properties, the façades are dressed with red brick. Where light industrial units neighbour residential properties within the rural settlements, the façades should either be rendered or dressed with a combination of red brick and black weatherboarding.



Figure 90: View along Oxford Road, where the industrial buildings are set back from the main road and screened with a landscape buffer. This buffer screens the industrial buildings offering pleasant views to the surrounding residential properties as well as reinforce the green feel of the area which is located in close proximity to the countryside. Hedgerow screening as shown demonstrates how industrial buildings are concealed from view in close proximity to residential areas.



Figure 91: Positive examples of industrial units that sit sensitively next to residential properties in terms of scale and materials.



Figure 92: Positive examples of industrial units that use black panels and red brick on the façades contributing to the countryside feel of the surrounding area.

2a. Prioritise walking and cycling and access to the countryside

The Calne Neighbourhood Area includes a good number of footpaths within the town and the surrounding rural environment allowing for multiple connections and long-distance views to the open fields. The routes within the countryside, in particular, have a distinctive character with an often idiosyncratic geometry that responds to topography.

However, there are some accessibility issues, especially to the north and east of the town, as some residential neighbourhoods are less connected than others. This could undermine the safety of children getting to and from school between these neighbourhoods and further south in Calne Town. Furthermore, more connections can be created along the river and Castlefields Park, as well as enhanced access via Low Lane and paths to Pillars Lodge.

Therefore, new development should aim to improve the existing pedestrian and cycle networks and provide safe routes for both users. Some guidelines and codes are:

- Newly developed areas, within the town or villages, should retain or provide direct and attractive footpaths between neighbouring streets and local facilities and amenities. 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. For instance, there is a local desire to better connect the northern neighbourhoods of the town with the town centre and southern neighbourhoods, where many local facilities are located¹. This initiative would encourage more students to safely walk to the school:
- Footpath networks need to be in place before first occupation of houses on the sites and walking/ cycle routes within new communities should be the primary network and first consideration, whilst roads should be secondary;

- Pedestrian and cycle links within residential communities should always be overlooked by properties to create natural surveillance and offer good sight lines and unrestricted views to make people feel safer;
- In case of cul-de-sac layouts, those should always be connected to footpaths to avoid blocking pedestrian and cycle flow;
- Barriers to movement, such as gates to new developments, or footpaths between high fences must be avoided;
- Paving used along the pedestrian and cycle links should, in principle, be permeable to help absorb surface water and mitigate flooding. Thus, any kind of impermeable paving, as shown in Figure 94, must be avoided. Materials can vary depending on the context, however, an overall earthy palette is recommended to fit with the rural surroundings. For example, different colours and shapes of stones can be used within the built

¹ A map with a full list of community facilities across the Calne Area can be accessed via this link: https://www.google.com/maps/d/u/0/edit?mid=1|YmlOxU2DUZkf4FdBwsUfgBva9y7MYvZ&ll=51.43163614789047%2C-2.012000899999986&z=13

- environment, whilst edge lanes or footpaths within the countryside can have a less formal character using mainly gravel, as shown in <u>Figure 93</u>;
- It is important that the distinctive characters of the routes within the rural environment are retained and that new routes readily respond to the landscape and topography, and are not changed to standard layouts. This will help preserve local character and add interest along the streetscape;







Figure 93: Positive examples of permeable paving. The top and middle photos show examples of paving that could be used within the built environment, whilst the bottom photo is an example of an edge lane that uses gravel, in earthy palette, which could also be used in footpaths within the countryside.





Figure 94: Examples of impermeable paving within rural settlements.

- Cycle parking should be provided in both private or public spaces, next to amenities or even along cycle lanes within the countryside, to encourage cycling in Calne area. Figures 95 and 97 are indicative examples of cycle parking that could be placed along the footpaths in the countryside, whilst Figure 96 shows indicative examples of cycle parking in open spaces within residential neighbourhoods. Please see 2d for more information on private cycle parking;
- A robust network of accessible foot and cycle paths should encourage regular active journeys on a daily basis. For this purpose, signage can play a significant role in informing people about important destinations, nearby settlements, as mentioned in <u>1c</u> in more details; and



Figure 95: Example of local cycle rack in the Calne area.



Figure 96: Example of cycle parking in an open space within a residential neighbourhood.



Figure 97: Example of cycle parking in an open space within a residential neighbourhood.

- The width of any accessible foot and cycle paths can vary depending on the context. They should be a minimum of 2m if located within residential developments in the town or rural settlements. They can go over 2m if located in the open countryside or if they are integrated into the road in the form of a shared lane. Shared lanes are recommended within the residential developments. For wider networks and connections, however, dedicated cycleways are preferred, in their own right, to encourage people to use them as they are proven to be safer for cyclists.

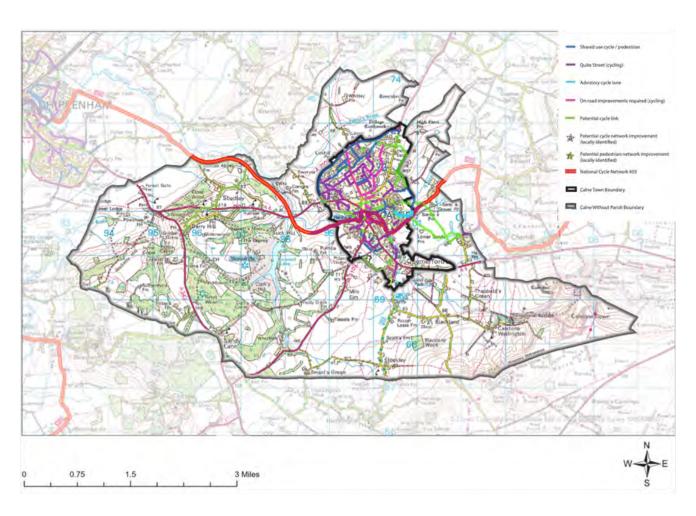


Figure 98: Opportunities for new or improved green links around the area aiming to encourage walking and cycling between the settlements and the surrounding towns as well as to green spaces and the river (Source: Calne Neighbourhood Plan Steering Group).

2b. People-friendly streets

It is essential that the design of new development includes streets that incorporate the needs of pedestrians, cyclists, as well as public transport users. It is also important that streets are designed to fit with the more urban and suburban traffic needs of Calne Town, whilst maximising connectivity with the more rural outskirts of Calne Without where new developments continue to be anticipated. Some design guidelines and codes for future development are:

- Streets must meet the technical highways requirements incorporating the needs of pedestrians, cyclists, and if applicable, public transport users. For example, access to new developments should be done in a way that the safety of all users is ensured:
- Streets must be considered a 'place' to be and contribute to the local character of the area. Thus, a good understanding of the existing street typologies and characteristics, widths and enclosure, is needed so that any new design reflects the existing rural character;

- A gentle meandering character, where appropriate, is welcomed to offer evolving views either along the streetscape, built environment or surrounding countryside. However, as this is a characteristic of historic growth in the area, this should not be done in an artificial way in new developments, but more naturally, as mentioned in 1c;
- Within the development boundaries, streets should have a secondary role, giving priority to the pedestrian and cycle network. They should not be built to maximise vehicle speed or capacity and should discourage rat-running which is an issue within the area, such as along Church Road, Derry Hill, and Anchor Road. For that reason, traffic calming measures, shown in Figures 99 and 100, like speed cushions and bumps, speed tables or appropriate signage to indicate the speed limits should be implemented;
- Although the prevailing parking typology is on-plot parking, it is important that where on-street parking is introduced, it does not impede the access for pedestrians and other vehicles (as is the at The Green and around schools at peak



Figure 99: Example of an interactive signage to indicate speed limits within a residential area, Stockley.



Figure 100: Example of a speed cushion.

periods) and it is well-planted to retain the rural character; and

 Routes should be laid out in a permeable pattern, allowing for multiple choices of routes, particularly on foot and bike. Any cul-de-sacs should be relatively short and provide onward pedestrian links.

Access to new development for all users

Access to new developments should be done in a way that the safety of all users is ensured.

- Pedestrians. Routes should form a coherent network with appropriate widths, as shown in the following sections, to create a safe environment. In addition, pedestrian crossings should be in place, along busy roads, to facilitate pedestrian movement. Green features and street furniture are welcome, however, they should not obstruct movement or impair visibility. Furthermore, these routes should be accessible for people with disabilities, with shopping trollies and pushchairs.
- Cyclists. In areas of low to medium traffic volumes and speeds, cyclists could be accommodated on the carriageway.
 However, on higher traffic conditions additional measures need to be taken to make on-street cycling satisfactory and encourage corteous driving. This may include, for example, short corner

- radii which tends to encourage lower speeds for vehicles. In addition, on main busy roads, the option for segratated cycle lanes could also be considered (the input of access officers and consultation groups is important in the decision-making process).
- Vehicles (all types). Streets need to be designed to accommodate a range of vehicles from private cars, to larger vehicles and public transport without impeding pedestrian and cyclist movement. Pedestrian crossings should be in place, whilst the roads that are designed to be shared by large vehicles and HGV's should be wider with pavements on both sides. Green verges and street planting are also recommended to improve the environment and mitigate any visual impact.

Having a hierarchy of streets within a new development helps create well-connected streets of varied character that filter traffic and speed. The suggested street hierarchy is based on the existing street typologies

in the area, whilst some new ones, related to rural environs, are also suggested. This page and the next ones present illustrated examples of these street typologies.

Residential street 1 (Primary & secondary roads)

- The width of the carriageway must reflect the context of the street. For instance, it should be approximately 4.8m if it serves only a cluster of houses, whilst if it connects neighbourhoods or carries public transport traffic it should be approximately 5.5m. On-street parking may be on-plot or accommodated on the street or inset into green verges;
- Carriageways should be designed to be shared between motor vehicles and cyclists. Vertical traffic calming features such as raised tables may be introduced; and
- Where possible, those streets should be tree-lined on both sides to create enclosure. The level of enclosure should be decided depending on the surrounding context.

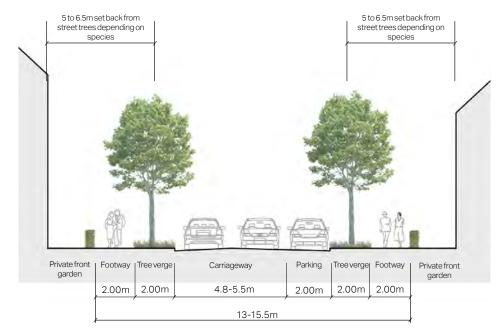


Figure 101: Cross-section to illustrate some dimensions for residential streets 1.

Residential streets 2 (tertiary & cul-desacs)

- Residential streets should be designed for low traffic volumes and low speeds, ideally 20 mph;
- These streets should be designed for cyclists to mix with motor vehicles. Traffic calming features such as raised tables can be used to prevent speeding;
- Residential streets should be formed with a high degree of built form enclosure, with consistent building lines and setbacks; and
- Street trees should be provided with suitable gaps, wherever possible.

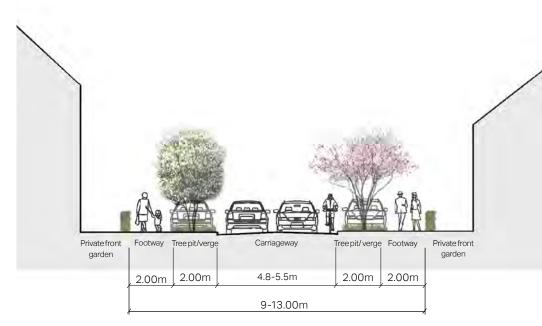


Figure 102: Cross-section to illustrate some guidelines for residential streets 2.

Edge lanes

- All the edges of new development areas should be served by continuous edge lanes to provide high level of connectivity;
- Edge lanes are low-speed streets that front houses with gardens on one side and a green space on the other.
 Carriageways typically consist of a single lane of traffic in either direction, and are shared with cyclists. For wider connections within the area, the cycle lanes will be segregated; and
- Variations in paving materials and textures can be used instead of kerbs or road markings, which need to follow specific standards as mention in 4g.

Green links

- Green links should be located within minimum 7.5m wide corridor adjacent to retained green assets;
- Shared or segregated footpath and cycleway, depending on the context, to be provided within corridor and to be minimum of 3.0m; and
- Where required, sustainable urban drainage (SuDs) features to be incorporated into corridor beside the surface of shared footpath and cycleway.



Figure 103: Cross-section to illustrate some dimensions for edge lanes.

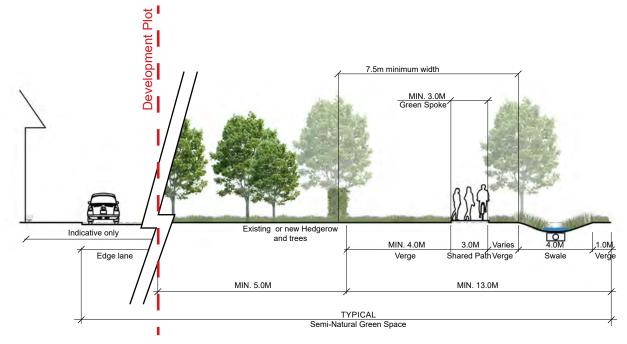


Figure 104: Section to illustrate some dimensions for green links.

Design guidelines and codes for street planting

Street trees are a distinctive characteristic of main roads that lead out of Calne Town into the countryside of Calne Without and its rural lanes, contributing to the sense of enclosure along these routes.

New street planting street planting helps maintain visual consistency along the public realm or the rural character along countryside lanes, whilst it offers other benefits like better mental health and wellbeing by reducing stress, lessening heat islands, and providing protection from natural elements such as wind and rain. They also serve the important functions of providing shade and improving air quality.

For all the above mentioned reasons, existing trees must be preserved in new development, whilst new ones need to be proposed. Some guidelines are:

 New development should aim to preserve existing mature trees and hedges by incorporating them in the new landscape

- design, particularly trees protected by Tree Preservation Orders (TPOs) throughout the area. This should also include mature trees which should be preserved in new development;
- Tree planting should be a primary consideration in the new design and not an afterthought. More specifically, tree planting must be carefully planned in conjunction with parking, buildings and street lighting. For example, the suggested deepening for green verges and front gardens should be decided based on the size of the tree. Adequate space should be provided to ensure there is enough space for medium and large growing species;
- The size of the tree can also play an important role in wayfinding, marking reference points and signifying edges of development, since it can act as a landmark for an area that can be seen from distance. Thus, any decision on the size of the tree must be made in conjunction with the overall design proposal;

- To ensure resilience and increase visual interest, a variety of native tree species is preferred over a single one. This variety must be decided based on the existing tree species across Calne area;
- Flower beds, bushes and shrubs are welcomed in new developments, since they contribute to the livelihood of the streetscape and create visual interest and colour to their surroundings. In particular, planting of wildflowers and native species are favoured; and
- 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; and
- The "<u>Topic Paper on Trees and Hedgerows Calne Community Neighbourhood Plan</u>" should be referenced by all new developments.

2c. Lighting

As mentioned, street planting must be considered in conjunction with, amongst other elements, street lighting. Street lighting can be harmful to adjacent trees, as it can alter a plant's normal growth pattern by exposing the tree to more light than it needs. In addition to this, if not done appropriately, the trees tend to grow and cover the street light requiring regular pruning which is not efficient.

It is also important to note that due to the strong rural context of Neighbourhood Area, any potential lighting will only be proposed within the built environment. Thus, some design guidelines to help prevent those conflicts are:

- Trees, depending on their growing size, should be placed at a specific distance from the light source. For example:
 - If the light is less than 4.5m away from the tree and shorter than 6m, then large-maturing trees must

- be trained to grow over it, allowing the light to shine beneath the canopy. Long-term management will be needed to secure early pruning. Medium sized trees are not recommended near low lights as they will block the light;
- If the light is less than 4.5m away from the tree and between 7-12m tall, then large or medium trees may not be suited for planting, as their branches will grow into and block the light;
- If the light is less than 4.5m away from the tree and more than 12m tall, small and medium-sized trees are well suited for planting, as their canopies will not grow into and block the light; and
- If the light is over 12m away from the tree, then almost any tree is suited for planting.
- Apart from the conventional lighting columns, there are other innovative ways to light up the outside space with careful consideration to light pollution and

preserving dark skies in the area. Those include up-lighting, down-lighting, path lighting and back-lighting. Those lighting techniques offer efficient direction in movement signalising access points and paths around the properties, security, usability allowing the outdoor spaces to be used at night as an extension of the inside as well as improving the aesthetics. Those lighting techniques should be part of the design process from early on, rather than an afterthought.

Up-lighting. Focus light and attention on an object or tree from a low fixed location.



Figure 105: Example of up-lighting which is used to illuminate the trees within a property.

Path lighting. Use of low fixtures which direct illumination downward and outward.



Figure 107: Example of path lighting where all lights are directed downwards, whilst the light sources are obscured.

Back-lighting. Fixtures placed at the back of an object to create a 'glowing' effect.



Figure 108: Example of backlighting used at the back of a bush to create a glowing effect.

Cat's-eye lighting. This technique can be used along footpaths and cycleways.



Figure 109: Example of a foot/cycle path which is lit by solar cat's-eye providing some light for pedestrian and cyclists without creating any disturbance to the nearby properties or unacceptable levels of light pollution.

Down-lighting. Bullet type fixture placed well above eye level on an object or tree.



Figure 106: Example of down lighting which was used to illuminate the pathway.

Additional design guidelines for street lighting

The Neighbourhood Area, particularly Calne Without, has a strong rural character and thus, dark skies is one of its characteristics as well. Therefore, although artificial light provides valuable benefits and it makes areas feel more welcoming at night-time, it is important for new development to minimise any potential impact of street lighting or house lighting on natural habitats and light pollution. The following guidelines aim to ensure there is enough consideration given at the design stage of new developments:

 Lighting schemes should be part of a strategic approach where all light sources, including columns, bollards, switch off, PIR, porch lights, solar cat's eyes, up-lighting, path lighting, backlighting and downlighting, are put in an hierarchical order based on their use. This order will define the light levels and switch off times;

- Light sources should be less than 3000K to ensure appropriate levels of light spill and glare. Light shields can also be used at light sources for additional protection over glare and light spill and thus dark skies;
- The choice of lighting should be energyefficient and sustainable. The installation
 of carefully directed motion sensors
 should be encouraged. All street lighting
 must be LED (solar powered ones are
 encouraged) and be directed downwards
 to minimise light pollution. These should
 also be dimmable and/or able to be
 turned off between set hours:
- Lighting schemes should be directed downward to avoid reducing dark skies or disturb neighbours or passers by, as shown in Figures 105-108 and
- Foot/cycle path light must be in harmony with surrounding rural landscape. Lighting such as solar cat's-eye lighting, reflective paint and ground-based lighting could be introduced, as shown in <u>Figure 109</u>.

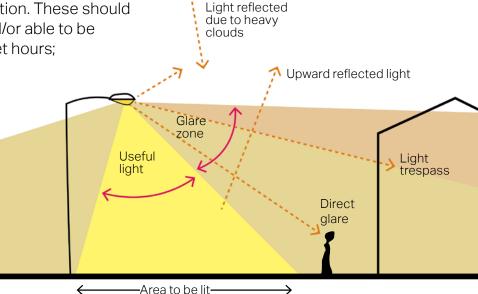


Figure 110: Diagram to illustrate the different components of light pollution and what 'good' lighting means.

2d. Parking and servicing

Although, the aim to create a good network of walking and cycling routes across Calne and Calne Without is a priority, the demand for private cars remains high, and therefore car parking has to be carefully integrated into the design. In addition, energy efficiency is also an important consideration and the need for more electric car charging points is rising.

Wiltshire Local Transport Plan 2011-2026 includes strategies for vehicles, public transport, road safety, accessibility, cycling and car parking.

The dominant car parking typology found in the Neighbourhood Area is on-plot and on-street parking; however, there are also cases of on-plot garage parking and parking courts. Therefore, the design guidelines on the next pages will focus on the above mentioned typologies.

Guidelines for on-plot or on front car parking

- Parking must be well integrated into design so as not to dominate the public realm (see Wiltshire Local Transport Plan 2011-2026 for further details);
- 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 area;
- Hard standing and driveways should be constructed from porous materials, to minimise surface water run-off and therefore, help mitigate potential flooding; and
- In terms of electric vehicles charging points, 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. These should avoid cluttering elevations, especially main façades and front elevations.

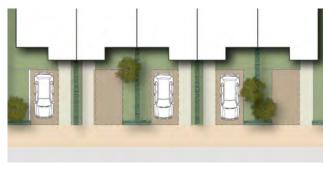


Figure 111: Illustrative diagram showing an indicative layout of on-plot front parking.



Figure 112: Positive example of on-plot garage parking with vegetation, street trees and permeable paving, Cambridge.

Guidelines for on-street car parking

- The streetscape must 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 should not impede the flow and movement of pedestrians, cyclists and other vehicles;
- On-street parking should be widened to allow each bay to be able to charge electric vehicles;
- Car charging points should always be provided adjacent to open public spaces.
 Street trees and vegetation should be provided to minimise any visual contact with the charging points;
- Where charging points are located on the footpath, a clear foot-way 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 vehicle.



Figure 114: Example of on-street parking with parking bays and street trees to mitigate the impact of the cars on the streetscape, Poundbury.

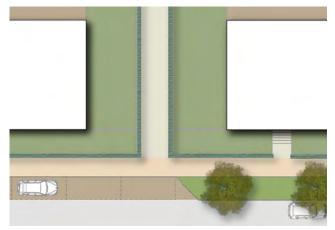


Figure 113: Illustrative diagram showing an indicative layout of on-street inset parking.



Figure 115: Example of on-street electric vehicle charging points.

Guidelines for parking courts

- Parking courts should be acceptable for small building clusters and permeable paving should be used where possible;
- Parking courts should be overlooked by properties to increase natural surveillance; and
- Planting and vegetation should be integrated into design to soften the presence of cars and preserve the rural character of the area.

Figure 117: A courtyard with informal perpendicular and garage parking in Poundbury, Dorchester.

Guidelines for garages

- Garages should not dominate the appearance of dwellings and impact the number of windows and doors:
- They should provide a 4m x 7m internal space to park a car and provide space for storage to avoid the garage to be used for storage purposes only;
- Garages should include power outlets for electric vehicle charging points;
- Garages should be retained and must not be converted into living spaces by future owners.



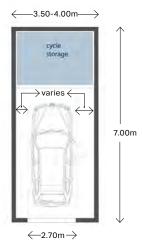


Figure 116: Indicative layout of a garage with a cycle storage area.



Figure 119: Positive local example of a well-sized garage which blends in with the facade design of the house, Lower Compton, Calne.

Servicing

With modern requirements for waste separation and recycling, the number and size of household bins has increased posing a problem with the aesthetics of the property and the management of the bins. Therefore, some guidelines for new development are:

- When dealing with waste storage, servicing arrangements and site conditions should be taken into account; in some cases waste management should be from the front of the building and in others, from the rear. It is recommended that bins are located away from areas used as amenity space;
- A specific enclosure of sufficient size must be created for all the necessary bins:
- Bins should be placed as close to the dwelling's boundary and the public highway, such as against a wall, fence, hedge but not in a way as to obstruct the shared surface for pedestrian and vehicle movements:

- Bins should be placed within easy access from the street and, where possible, with the ability to open on the pavement side to ease retrieval;
- For the case of Calne area, households will have up to 5 bins (recycling, nonrecycling, glass/paper, garden waste and food waste).
- Wheelie bin storages are recommended to improve the aesthetics of the environment; and
- Bin storage could be combined with cycle storage.



Figure 120: Example of wheelie bin storage for front gardens that include a green element to improve the aesthetics.



Figure 121: Example of bin storage surrounded by flowers and plants improving the surroundings and enhancing biodiversity.



Figure 122: Local example where the bins are stored under the shed, whilst the side wall is decorated with flowers and plants to improve the environment. This arrangement combined with the particular permeable paving contributes to the rural feel of the village.

Cycle parking

Cycling, either for commuting or recreation, is encouraged as a form of active transport across the area. Therefore, provision for cycle parking should be an integrated part in the design for new developments.

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 should 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

- 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 should be removed easily without having to move the vehicle.



Figure 123: Example of cycle parking for houses without garages, Cambridge.

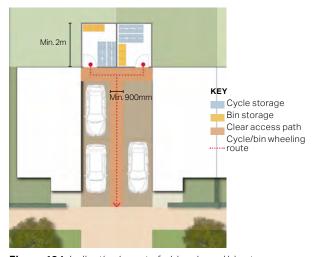


Figure 124: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.



Figure 125: Example of compact bike storage installed at the side of the property for ease of access.

3a. Creating a green network (for biodiversity and amenity)

The Calne Neighbourhood Area is home to a wide variety of green and blue infrastructure for recreational purposes, whilst it also serves as a vital wildlife corridor. Key habitats include Ancient and Deciduous Woodlands, canals, streams (and ditches) corridors, and hedgerows. The eastern portion of the Neighbourhood Area falls within the North Wessex Downs AONB; this is also where the Calstone and Cherhill Downs are located. The Grade I Bowood Park (Registered Park and Garden) is located to the west of the NP Area in Calne Without.

Well-connected green networks should be created throughout new developments to connect people with the countryside and to link habitats. Opportunities should be sought to introduce green assets into design and contribute to biodiversity. Some design guidelines and codes for green networks are:

 Biodiversity, Ancient and Deciduous Woodlands, TPOs and green verges should be protected and enhanced where possible. For example, the preservation of the variety of Ancient and Deciduous Woodlands could benefit the natural environment, as well as the built environment into which they will be integrated;

 New development should ensure that small and isolated woodlands in the area are linked to larger green areas nearby to protect connectivity of habitats and biodiversity. For instance, isolated

Low key interventions

Open green spaces

woodlands could be linked with existing footpaths, or larger woodlands and the AONB area to allow for the movement of species;

- New development is required to propose green links which enhance the quality of pedestrian and cycle movement within the area. This will will enhance connectivity between new and existing residential neighbourhoods, nearby open space and surrounding settlements, as shown in Figure 126;
- New development should propose strategic signage located along walking and cycling routes to signalise the location of local assets or other important destinations;
- New development should propose street trees, green verges, front and rear

Front & rear gardens

New developmer street trees, gree

Open fields & blue assets

Figure 126: Diagram to illustrate the green assets that can play an important role as wildlife corridors.

gardens, open spaces and habitat sites, where possible, to enhance the green network within the built environment, boost biodiversity and strengthen the connections with the surrounding countryside and water elements;

- New development should front onto green assets and access should be granted for all groups of people;
- Where space is limited, new development should aim to provide hedges, verges and street trees, bushes and shrubs to maintain a continuity of "greenness";
- Street trees and planting are encouraged within the Air Quality Management Areas and Noise Action Planning areas within Calne (see <u>Figure 5</u>) as a means to alleviate air and noise pollution across the Calne area;
- SuDS should be introduced, where possible, and incorporated into design of the green network to mitigate any flooding issue; and
- Green corridors could encourage walking and cycling over driving,

including the 13 specific green and blue corridors identified in the topic paper on "Biodiversity, Calne Community Neighbourhood Plan" - these should be referenced for any new developments. However, since car users still represent a major group in the area, car parking should be well incorporated into the public realm to minimise the presence of cars, for example with parking bays with green verges and street trees. For further information about car parking please see the principles that are listed in Building for a Healthy Life and Manual for Streets documents in pages 8 and 9.



Figure 127: Pocket park in Calne Town centre which is an integral element to the Calne area's green network.



Figure 128: River Marden riverside walk - a part of green and blue corridor of the Calne area.

3b. Providing for biodiversity and open space in developments

Open spaces could play a vital role in creating a positive environment and preserving the suburban and rural character of an area like Calne. These are places that could also encourage communities to gather and engage - creating lively, harmonious and diverse neighbourhoods, for example, Calne recreation ground, leisure centres and sports clubs, allotments and pockets parks across Calne Town. However, apart from the social aspect, open spaces can also contribute to a biodiversity boost for an area. This is especially the case for developments in Calne Without which is set in the picturesque backdrop of surrounding countryside and Bowood House and Gardens, as well as the North Wessex Downs AONB. Under the wider backdrop of climate change and global warming, protection of biodiversity is becoming an important priority and should start at the local level.

Thus, open spaces and biodiversity should be an integral part of new developments in Calne. Some design guidelines and codes are:

- The location of new open spaces within new development should be decided based on the location of the existing ones and consider the needs of the existing population. In addition, the provision of small recreation spaces in denser neighbourhoods to the north-west of Calne Town should be considered¹;
- Substantial recreational space should be provided to include woodland walks, trees, green verges, habitat sites, sport pitches and play areas;

- with existing adjoining sites and footpath networks, like those that connect with Castlefields Park;
 Surrounding buildings should overlook
 - Surrounding buildings should overlook play areas and public spaces to encourage movement and natural surveillance;

- All recreational spaces should be

available for all groups of people and

designed to link up with each other and



Figure 129: Positive local example where properties with well-vegetated front gardens overlook the public realm and a grass verge area with large trees and bushes. Derry Hill.

¹ Reference the Topic Paper on "Biodiversity, Calne Community Neighbourhood Plan" for further details.

- Open spaces should be equipped with good-quality of street furniture to create pleasant seating areas, shaded spaces avoiding hidden spots;
- The materials and style of any new street furniture in open spaces should be consistent throughout the area.
 Interventions should aim to proudly represent the local character by adhering to positive local designs;
- New development should protect and enhance the existing habitats and wildlife corridors. These help increase movement between isolated wildlife populations and provide escape cover from predators and shelter during bad weather;
- Biodiversity, woodlands, hedgerows, and ditches should be protected and enhanced where possible and be an integrated part of the design process rather than an afterthought. In particular, there is a good number of woodland areas throughout the area that could be integrated into new design to not only improve biodiversity, but also the aesthetics of the environment;

- New development proposals should aim for the creation of new habitats and wildlife corridors, e.g. by aligning back and front gardens, adding pollinator gardens or installing bird boxes, bug hotels, bat boxes or hedgehog houses;
- 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 are suggested. However, other types of boundaries like timber fencing are also recommended as long as there are gaps between the panels. The large gardens within the area give access to substantial areas of private green space, with wildlife in the area including 95 species in the Wiltshire Biodiversity Action Plan and 80 priority species that are protected under section 41 of the Natural Environment and Rural Communities Act 2006.
- Blue assets can also contribute to biodiversity connectivity, for instance Wilts and Berks Canal, River Marden and other streams. Therefore, the existing ditches and streams should be considered in design proposals when planning for wildlife corridors;
- All areas of biodiversity that require further planting/ enhancement must be planted before the start of construction; and
- The choice of plants in new development must be appropriate to the setting of the proposal and its proximity to the AONB, Bowood House and Gardens and areas of Ancient and Deciduous Woodland.



Figure 130: Example of a structure used as a frog habitat corridor located in an outdoor green space.

Figure 133: Example of a bird feeder located on a grass area



Figure 131: Local example of a bug hotel and planter placed in the public realm, Calne Pocket Park.



Figure 134: Example of a pollinator garden that could be placed in a communal green space within the built environment.



Figure 132: Example of a bat box placed in the front or rear garden of a property,



Figure 135: An example of a hedgehog tunnel within a garden fence.

3c. Water management

Sustainable drainage solutions (SuDS)

The River Marden, the Wilts and Berks Canal, and other stream courses, running generally east to west, can rise in levels during periods of rainfall, causing flooding for surrounding settlements. In addition, clayed soils limit the effectiveness of SuDS and permeable paving, whilst they are often 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. Flooding is also caused by overflowing ditches and drains. Therefore, the introduction of sustainable drainage systems, known as SuDS, could be beneficial to the area in mitigating against flood risk as well as improving biodiversity. 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:

 Site new buildings well away from areas susceptible to flooding;

- Develop a flood risk management plan for any development within Calne Town and Calne Without;
- Aim to prevent any increase in runoff rates from new development, and where practical, achieve a reduction in peak runoff rates;
- Permeable paving is generally supported where it provides effective means to maintain soil permeability, notably unbound gravel, clay pavers, or stone setts;
- 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 must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.



Figure 136: Example of a small pond nicely integrated into the landscape design, somewhere in rural UK.

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 and codes 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;
- Water butts should be mandated for all new properties;
- Use attractive materials or finishing for pipes; and
- Combine landscape/planters with water capture systems.



Figure 137: Examples of water butts used for rainwater harvesting in Reach, Cambridgeshire.



Figure 138: Example of a gravity fed rainwater system for flushing a downstairs toilet or for irrigation.

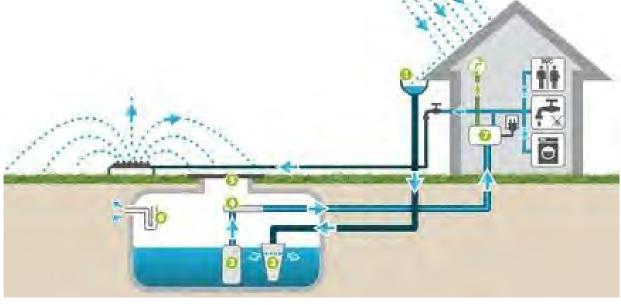


Figure 139: Diagram illustrating rainwater harvesting systems that could be integrated into open space and residential developments.

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. This is especially the case for many areas of recent development across Calne Town and the Derry Hill area, which incorporates a lot of hardscape-dominated surfaces.

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 should 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 nonstatutory technical standards for sustainable drainage systems¹.
- The SuDS Manual (C753)².
- Guidance on the Permeable Surfacing of Front Gardens³.

Figure 140: Diagram illustrating the function of a soak away



^{2.} CIRIA (2015). The SuDS Manual (C753).

^{3.} Great Britain. Ministry of Housing, Communities & Local Government (2008). Guidance on the Permeable Surfacing of Front Gardens. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/7728/pavingfrontgardens.pdf



Figure 141: Example of a permeable paving that could be used from driveways

open graded bedding

permeable paving

open graded base
open graded sub-base
drainage pipe (optional)

4a. Building heights, density and housing mix

Building heights, density and housing mix are three important parameters that should be designed and decided with careful consideration of Calne Town's sensitive urban context around the area of the Conservation Area, and at the boundary between existing and new developments. These areas are equally important at settlement fringes and within the rural context of Calne Without, where there is increasing development pressure. It is important that density and building heights are appropriately addressed to fit in with this rural context.

Buildings heights

Properties tend to be 1- or 2-storey high with decent-sized rear gardens for most character areas across the Neighbourhood Area, with the exception of some recent developments, such as along School Road where there are 3-storey flats.

Rooflines are generally consistent and are punctuated by chimneys and dormer windows. Rooflines have more variation in Derry Hill, Studley and Quemerford which are set in more of a rural context. It is important that new developments are sensitive to building heights of existing buildings to avoid the risk of looking out of place or overshadowing existing developments. Some design guidelines are:

- New development adjacent to the town settlement or the rural environs should propose maximum height of 2.5 storeys to preserve the existing context, as well as respecting the surrounding countryside and the close proximity to the boundary of the Bowood House and Gardens, North Wessex Downs AONB and the Calstone and Chernill SSSI. Examples of 3-storey buildings will only be accepted within the town centre at key locations, by exception;
- Monotonous building elevations should be avoided, therefore subtle changes in rooflines should be ensured during the design process;

- Locally traditional roof detailing elements such as roofing materials and edge treatments should be considered and implemented where possible in cases of new development. Chimney stacks could be used by exception where they are sensitive to local design; and
- Roofline should be set lower than the vegetation backdrop, avoiding hard lines of the silhouette against the sky.



Figure 142: Local example of a series of bungalows, from the Curzon Park character area, consistent in height with adjacent houses on the street.

Building density

The concept of density is important to planning and designing new developments as it affects the vitality and viability of the place. Housing density is higher within the historic core of Calne Town and in recent developments concentrated along the outskirts of the town. However, housing density levels off transitioning into the more rural Calne Without. Therefore, some guidelines for new development are needed to ensure that the existing housing density numbers are respected:

- Density must be appropriate to the location of any new development and its surroundings and enhance the character of the existing town and rural settlements. Thus, a good understanding of the local context should come prior to any design exercise;
- Housing densities should be reduced towards development edges and along rural edges in order to create a gradual transition towards the countryside.
 Densities must ideally be below 25 dph

- (dwellings per hectare) within Calne Town and below 20 dph in Calne Without;
- New developments set on the edge of Calne Town should reflect their rural location through adopting a low density of below 20dph and incorporating generous open spaces within, as a means to create a gradual urban to rural transition;
- Areas in Calne Without, in close proximity
 to the SSSI and AONB areas to the east
 and Bowood House and Gardens to
 the west of the Neighbourhood Area
 should have lower densities to match
 the existing low-density patterns. Most
 proposed developments on the east
 and south of Calne will be clearly visible
 from the North Wessex Downs AONB,
 the impact of these must be minimised
 through careful planting of vegetation,
 both within and at the boundary of
 developments; and
- Small-scale development and infills are accepted, provided they follow the scale and pattern of existing layout and streets to retain the character of the area.



Figure 143: Local example of a recent development along Morgans Road with higher densities (~46-50 dph), creating abrupt edges that offer little opportunity for green spaces and buffers along the edges to allow for a smooth transition into the countryside.



Figure 144: Local example of a low-density area in Derry Hill with an average density of ~12-20dph, Derry Hill character area.

Housing mix

It is important to ensure that there is a mix of housing types and a supply of social and affordable housing to cater for the needs of a wider group of people across the Neighbourhood Area. Therefore, a mix of new housing could attract a wide group of people and boost the local economy. Calne, and Calne Without are home to a wide variety of housing typologies across the various character areas; new developments should therefore reference these existing housing typologies in order to remain inkeeping with Calne, and Calne Without's unique character. Some design guidelines for new development are:

New development should propose a mix of housing to include a range of house types and sizes, both developer and self-built, to allow for a variety of options and bring balance to the population profile.
 The existing mix of housing in the area, including detached, semi-detached, bungalows and terraced housing, should be enhanced. There is a particular demand for single-person dwellings in the Calne area; this should be catered for by new developments;

- New development should avoid using only one housing typology along a given street, as this creates monotonous elevations and no visual interest and variations along the streetscape;
- Housing typologies should be planned along with the appropriate provision for parking and servicing. For example, the terraced typology, which is a characteristic typology in the town, creates challenges regarding the parking. Therefore, design solutions should be considered and integrated into design to create a positive outcome along the streetscape; and
- Affordable housing should be a priority in new development and its quality and architectural design should be of high standards to complement the local vernacular. In addition, they should be integrated into the layout to create tenure-blind developments¹.

Figure 145: Terrace housing within Calne Town.



Figure 146: Semi-detached houses in more recent developments of Calne Town.

¹ For more details, reference the Wiltshire Core Strategy - Core Policy 43: Providing affordable homes (https://www.wiltshire.gov.uk/media/372/Wiltshire-Core-Strategy-adopted-2015/pdf/Wcs.pdf?m=637099399373530000)

4b. Boundary lines, boundary treatments and corner treatment

Boundary lines and treatments are crucial aspects for successful streetscapes. The following guidelines should be applied in new developments:

- Buildings should front onto streets. The building line should have subtle variations in the form of recesses and protrusions, to follow the existing context of Calne. Gaps between buildings are generally encouraged to allow for views to the surrounding countryside;
- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street;
- A combination of soft and hard boundary treatments is encouraged to reinforce the existing character of the village and help define the street. They should be mainly continuous hedges and occasionally low-height walls made of

traditional materials found elsewhere in the area such as bricks and local stone. In new developments, hedges and other vegetation planted by the developer should not be removed by future owners without planning consent;

- 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 and open unobstructed views;
- 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 must be treated as primary façades; and
- Road layouts should be designed to slow traffic and advantage pedestrians over vehicles.

Buildings turning a corner have the opportunity to generate new local character, they are in In every case. visible points of the overlooking towards development, and can be the street and privacy key elements to reduce of the dwellings should monotony and improve be carefully balanced. orientation. They can feature architectural elements that underline their special conditions. Windows and other openings create street contact.

Figure 147: 3D diagram to illustrate some design principles for corner treatment.

4c. 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 in the area are:

When designing building setbacks, there must be an appropriate ratio between the width of the street and the building height. Ratios between 1:2 and 1:3 (building height/street width) will generally create spaces with a strong sense of enclosure. However, lower levels of enclosure are also acceptable within the area, in particular locations where the feel of openness should be preserved such as in the smaller settlements where housing density is lower;

- Alignment of buildings should be orientated to maximise solar gain to ensure they are designed to be sustainable. Please see <u>4h</u> for more details on building orientation;
- Careful positioning of walls, landscaping and paving can achieve visual continuity and well-defined open spaces to link buildings together and define public and private spaces;
- 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; and

 In the case of terraced and adjoining buildings, it is recommended that a variety of plot widths, land use, building heights, and façade depths should be considered during the design process to create an attractive streetscape and break the monotony.

Local examples of enclosure

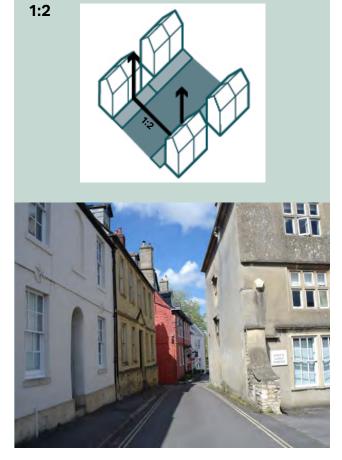


Figure 148: Local example of 1:2 enclosure, which is created by a narrow road in Calne Town's medieval core bordered by houses on both sides of the road and narrow pavements.

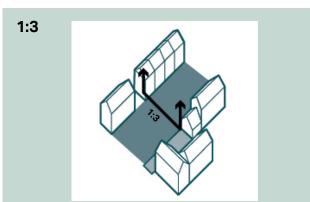




Figure 149: Local example of 1:3 enclosure, which is created by a 2-lane road in combination with varied building setbacks, small front gardens and 2-storey buildings.

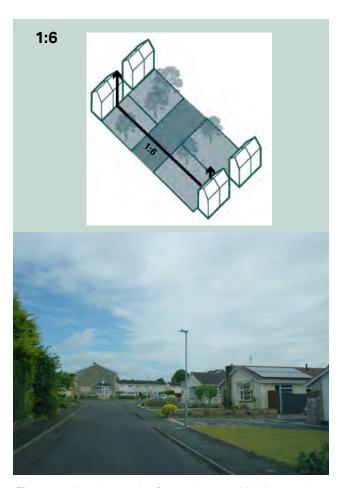


Figure 150: Local example of 1:6 enclosure, which is created by low-rise bungalows, the use of green verges between the pavement and the road in combination with front gardens, the road and buildings with varied setbacks.

4d. Housing extensions and conversions

Extensions

There are multiple ways to create extra space within a building using different types of extensions. Extensions must be designed to an appropriate scale to the original building.

The pitch and form of a building's roof forms part of its character; therefore, extensions should respond by enhancing the existing character. Extensions should consider the materials, architectural features and proportions of the original building and designed to complement these existing elements.

Many household extensions are covered by permitted development rights, meaning that they do not need planning permission. There are exceptions, though, that will be relevant here, such as Conservation Areas. Check the latest guidance here: https://www.planningportal.co.uk/info/200130/common_projects/17/extensions.

- The character of the existing building, along with its scale, form, materials and details must be taken into consideration when preparing proposals for alterations and/or extensions;
- External extensions should respect or enhance the visual appearance of the original buildings and the character of the wider street scene;
- Extensions should be subordinate in terms of scale and form and shall not be visually dominant or taller than the existing building;
- Extensions should be designed using materials and details to match the existing building or alternately, use contrasting materials and details with a contemporary design approach. However, in either case, extensions should create a harmonious composition overall and a strong degree of unity with the original building;

- Extensions should safeguard the privacy and daylight amenity of neighbouring properties;
- Extensions should retain on-site parking capacity and a viable garden area to meet the needs of future occupiers;
- Extensions of existing buildings need to reduce carbon emissions by complying with high energy efficiency standards and utilising low energy design; and
- Extensions should not have a negative effect on the local environment through the removal of trees and hedgerows.

Front extensions

These extensions are generally not acceptable. If proposed, front extensions must take the form of the existing building, mirroring the roof pitch, replicate or have lower cornice height and their ridge must be below the existing ridge height. The extension must be small in scale, appear subordinate to the main building and must not cover more than 50% of the front elevation.

Side extensions

- 1-storey and double storey side extensions must be set back from the main building and complement its materials and detailing, whilst the roof of the extension must harmonise with that of the original building; and
- Side windows must also be avoided unless it can be demonstrated that they would not result in overlooking of neighbouring properties.

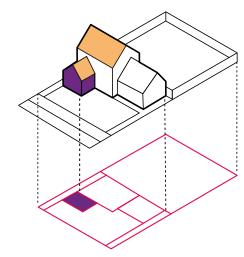


Figure 151: An example diagram of a front extension.

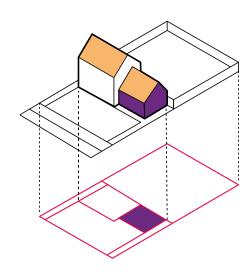


Figure 153: An example diagram of a side extension.



Figure 152: Positive local example of front extension on Jasmine Close.



Figure 154: Positive local example of a side extension that respects the existing building in terms of scale and building materials.

Rear extensions

- 1-storey rear extensions are generally
 the easiest way to extend a house and
 provide extra living space. The extension
 must be set below any first-floor windows
 and designed to minimise any effects
 of neighbouring properties, such as
 blocking day light. Gabled, hipped and flat
 roof styles are generally acceptable for a
 1-storey rear extension;
- Double storey rear extensions are becoming more common but they can affect neighbours' access to light and privacy, however, sometimes the size and style of the property allows for a twostorey extension. In these cases, the roof form and pitch must reflect the original building and sit slightly lower than the main ridge of the building.

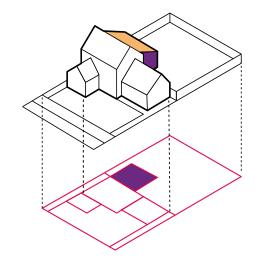


Figure 155: An example diagram of a rear extension.



Figure 156: Positive local example of rear extension.

Design treatment in case of loft conversion:



Loft conversion incorporating skylights.



Loft conversion incorporating gabled dormers.



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





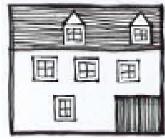




Original roofline of an existing building.



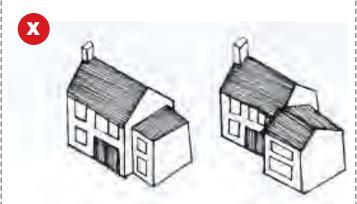
Loft conversion incorporating gabled dormers.



Loft conversion incorporating gabled dormers which are out of scale and do not consider existing window rhythm nor frequency.



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



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

Conversion of agricultural buildings into residential

There is a good number of light industrial units and agricultural buildings within the rural environment of Calne, which are a dominant feature of the area preserving the long agricultural history.

However, over time some of those working buildings fell out of use and became extinct, except for some that have been converted or refurbished. These are positive examples because there has not been any change to their historic fabric and thus, they significantly contribute to the local vernacular of the rural environment telling a story about the development of Calne's farming community. Therefore design guidance is needed to ensure that any other future conversion does not undermine the original character of the farm building. Some design guidelines are:

 Features and general layout of the building setting that are characteristics of historic working buildings need to be retained and not filled in. For instance, loose courtyard arrangements of buildings, physical boundary treatments, openings or wagon doors. New openings

- should generally be avoided and kept to a minimum when necessary;
- The use of domestic add-ons such as chimneys, porches, satellite dishes, domestic external lighting and hanging baskets need to be avoided;
- The use of weatherboarding is preferred over any other material, since this was the only material used for the farm buildings;
- Features such as dormer windows need to be avoided. If roof lights are used, they should be sited discreetly so as to not become a feature in the landscape;
- Courtyards should be surfaced in a material that reflects its rural setting.
 Farmyards should remain open and not be divided by fences or walls;
- Parking spaces should not be formally marked out; and
- Boundary brick walls should be left intact, and not chopped through or reduced for access or to create visual splays.

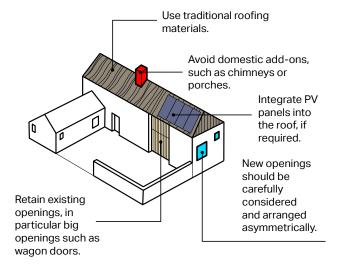


Figure 157: Diagram to illustrate some design principles for the conversion of agricultural buildings.



Figure 158: Positive example of a refurbished barn that retains all the architectural characteristics (openings, roofs, materials) of the former building enhancing the local context.

4e. Infill development

There is a fair amount of infill developments within Calne and thus, a set of design guidelines is needed to ensure that any new development is appropriate and sensitive to the surrounding context:

- Infill development must complement the street scene into which it will be inserted, either the town or the rural settlements.
 Each character area presents differences in the building density, scale, massing, typology, as well as building setbacks and boundary treatments, as shown in <u>Section 2.4</u>, and therefore, a good understanding of the surrounding context should come prior to any new design.
 The design principles of the surrounding properties need to be reflected into new developments as well;
- Any infill development in close proximity or within the Conservation Area or any building of historic significance¹ should protect the existing short-distance

- views towards any landmarks, whilst establishing a buffer between existing and new properties;
- Infill development needs to reflect the materials and architectural details of the surrounding character areas, as shown in Section 2.4;
- Infill development needs to be considered in relation to topography, views, vistas and landmarks to ensure that none of those elements are blocked. In particular, short-distance views to listed buildings, non-listed buildings of historic significance or landmark buildings need to be preserved;
- Existing green features, if any, should be preserved and form part of the natural boundary treatments within the site;
- In case of cul-de-sacs, pedestrian and cycle links should be proposed to allow for permeability for the users and offer connections with the existing footpath network;

- Infill developments should not cover large part of the available land in order to allow for well-sized front and back gardens.
 The appropriate dimensions are subject to the surrounding context and existing patterns of growth; and
- Small infill developments are encouraged provided they are in keeping with the design, plot size and materials of the local area. Infill developments which would create significantly smaller plot sizes than those in the immediate vicinity would not be supported. Furthermore, they should adequately respond to any contextual elements, including topography and views of the countryside or heritage assets and landmark buildings which would not otherwise be blocked by any new development.

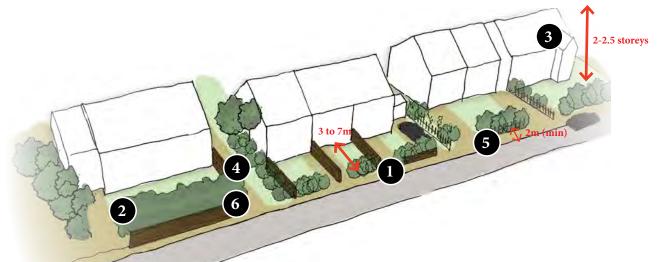
¹ Reference the Historic Assert List for Calne area for a full list, compiled by the Calne Neighbourhood Plan Steering Group.







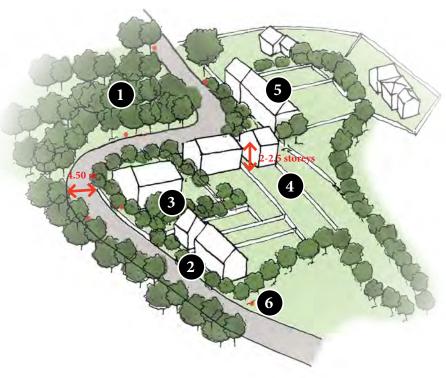
Figure 159: Positive example of modern development that respects the existing topography, patterns of growth, building setbacks as well as materials. Pleasant perspectives are generated along the meandering lanes, whilst natural boundary treatments prevail, reinforcing the countryside feel.



 Linear format of development along slightly meandering roads with variety of building setbacks (suggested range would be from 3 to 7m). Although there are also examples of buildings facing directly onto the pavement, this is not suggested for new infill developments as a proper green buffer would be required.

- 2. Front gardens decorated with rich vegetation, bushes, hedges and trees.
- 3. Dwelling height should be up to 2 storeys. Examples of 2.5 storeys could be accepted if they do not undermine the rural setting.
- 4. Integration of footpaths where possible.
- 5. Wider pavement (minimum 2m) along main roads, on one side, to accommodate movement.
- 6. Low brick walls with vegetation to give a good visual impact to pedestrians and ensure a level of privacy for the owners. Panel fencing should be avoided.

Figure 160: Illustration to show a linear development (with reference to rural settlements) highlighting design elements, related to building heights, setbacks, gaps and boundary treatments.



- Green infrastructure (ancient woodlands, deciduous woodlands, TPOs) should be protected and enhanced where appropriate.
- Front gardens should be decorated with soft landscape elements and vegetation.
- Properties should be separated with green buffers while long brick walls should be avoided.
- 4. Well-sized front and back gardens.
- 5. Variety of building typologies and roof pitches.
- 6. Appropriate signage indicating speed limits.

Figure 161: Illustrative plan for a rural development (with reference to smaller villages and hamlets) highlighting design elements, related to building heights, setbacks, gaps and boundary treatments.

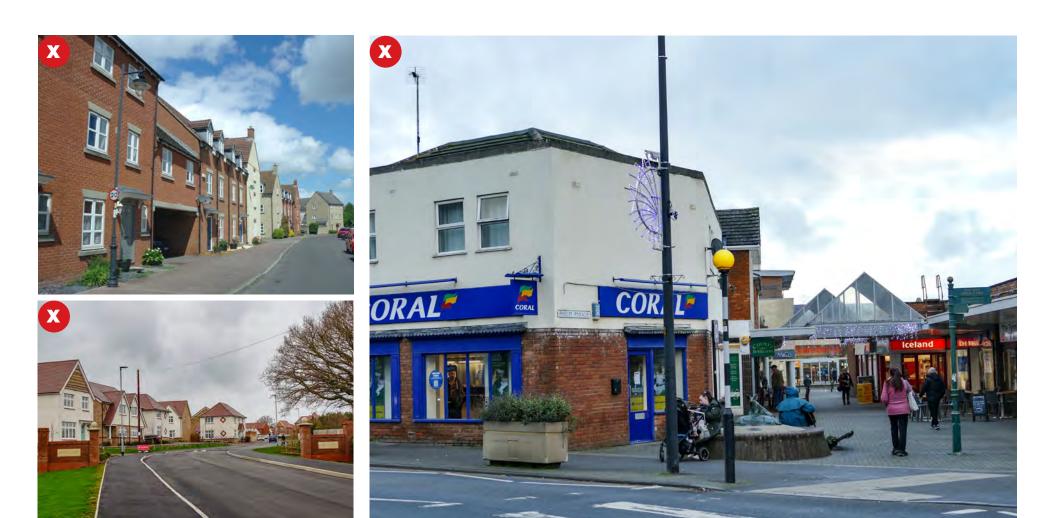


Figure 162: Examples of developments that are not very sympathetic to the surrounding local context due to an inappropriate use of materials for the façades and roofs.

4f. Materials and architectural details

Calne area has a wide variety of architectural styles and details that can act as references for new developments. New developments should be respectful of architectural styles and use of materials of surrounding housing, whilst ensuring that a mix of styles are provided that is in keeping with the Calne area palette. A summary table on the next page provides an overview of the commonly recurring materials seen across the main settlement and the rural smaller settlements, whilst more details on local vernacular can be found in character area studies in Section 2.4.

Some design guidelines for new development are:

 Architectural designs in new developments must reflect the highquality local design references in both the natural and built environment and make a valuable contribution to the rural character of the area;

- Regarding the natural environment, the number of trees in the rural environs contribute to its rural character and reinforce biodiversity. Therefore, any new development should make sure it proposes a similar level of greenery in the new design to create a consistent setting. Regarding the town settlement, green features are also welcome to decorate front and back gardens, where possible;
- Regarding the built environment, new development must use materials that respect the local vernacular. These materials could include; Bath limestone, exposed rubble, red brick, half-timbering with rendered infill, local sandstone. black and white weatherboarding, and, depending on the context, grey slates. Modern materials may also be welcome as long as they are sensitive to the surrounding context and visually pleasing. For example, the wide use of red brick, which is not considered a local material, is unacceptable in Calne as it does not match with the existing local context:
- New development should propose a combination of soft, natural, and hard boundaries to match the surrounding styles along the streetscape. In particular, there are stretches of brick walls bordering some properties in the Area combined with either trees or hedges and bushes;
- The choice of colour and finish of materials is an important design factor in reducing the impact of the buildings on the surrounding landscape. Generally very light colours, like white or cream, and large areas of intense strong colours do not blend well with the rural landscape. Thus, muted and darker tones could be a better option; and
- The use of traditional, natural and preferably locally sourced materials is generally more appropriate than manmade synthetic, pre-coloured materials, as there lack the variation on colour and texture found in natural materials.

This table summarises some of the key materials and finishes found across the village settlement and the rural smaller settlements (where materials are seen recurring in a character area, cells are marked with " \mathbf{x} "):

	Calne Town CA	Derry Hill and Sandy Lane CAs	Early Urban Expansion	Interwar and Postwar Development	Recent Expansion of Calne Town	Quemerford gateway	Curzon Park
Gabled roof	x	X	X	X	x	x	x
Hipped roof			X	X		x	
Cross gabled roof		X	X		X	X	
Cat slide roof							
Thatched roof		X					
Mansard roof							
Flat roof	х						
Grey slate	х	х	х	Х		Х	
Timber frame						· · · · · · · · · · · · · · · · · · ·	
façade feature						X	
Clay tiles (grey/ red)	x		x	x	x	x	x
Bath/local stone façade	x	x	x	x	х	х	x
Exposed/	х		x			x	
limestone rubble			^			^	
Off-white render			X	X	x	X	X
Rendered	х		X	X			
Red brick façade/					x		
feature					X		
Panelling							
Hung tiles		x				x	

	Industrial estates	Lower Compton	Rural settlements	Education institutes
Gabled roof	x	X	X	X
Hipped roof				
Cross gabled roof				
Cat slide roof			Х	
Thatched roof			Х	
Mansard roof			Х	
Flat roof				
Grey slate		Х	Х	
Timber frame				
façade feature				
Clay tiles (grey/	v	v	v	x
red)	X	X	X	
Bath/local stone	X			x
façade	^			
Exposed/		x	X	
limestone rubble		A		
Off-white render				X
Rendered		X	X	
Red brick façade/	x	X	v	x
feature	^		X	
Panelling	x			
Hung tiles				

4g. Shop fronts and public realm

The commercial core of Calne is concentrated along Curzon Street, The Square, High Street, Wood Street, Phelps Parade and The Pippin. Most shops and services are located here, hence, it is important to maintain an attractive and functional streetscape that is desirable for shoppers. Shop frontages play a vital role and can contribute positively to the streetscape of Calne Town. It is therefore important to ensure that they are designed with consistency at the façades level - in terms of colours, scale, fenestration, and labelling, and less positive examples of signage or shutters, like some found in Phelps Parade, are avoided in the future. Some useful guidelines to reference include:

 The overall proportion, form, and scale of the building's upper floors should be considered when designing new shop-fronts and alterations to shop fronts. Unnecessarily large shop-fronts or signage can detract from or even cover historically valuable architecture and, more generally, create a disjointed appearance;

- The street and historic styles should be reflected. Integrate the shop front with the established streetscape, introducing a sense of variety but responding to the overall character of the high street. This includes using the right materials, responding to a dominant scale and proportion, and following an established pattern;
- Street furniture should be considered when designing shopfronts. This will help improve the overall user experience in the town;
- Unnecessary visual clutter must be avoided. This includes reducing unnecessary advertisements, plastic foliage or other elements stuck onto the shopfront, and removing general detritus such as visible AC units, wires and intrusive roller shutter boxes:
- Traditional elements such as fascia boards, cornices, pilasters, appropriately sized uninterrupted stall risers should be incorporated and large expanses

- of unbroken glazing must be avoided. These elements create an appropriate architectural frame that results in a well proportioned shopfront; and
- The use of canopies should be encouraged to provide shade for shoppers.



Figure 163: A positive local example of a well-proportioned shop frontage that addresses the street with large windows and a clear signage on the fascia, Church Street.

Signage

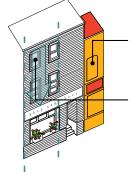
- The fascia is the most important area of a shopfront for advertising the business.
 Maintain the signage within the established proportions and confines of the fascia board. Large box signs or additional flat boards should be avoided as they create disproportionate depth and height;
- The most appropriate signage at fascia level is individual letters applied or painted directly onto the fascia board;
- Hanging signs should be appropriately sized in relation to the building and street. They should not dominate the pavement space. They should use an appropriate material, shape, and form avoiding large box signs;
- Hanging signs should be held by slender, well-designed brackets using a high-quality material; and
- In the case of corporate brands, those should be sensitive to the existing context, size and scale and use materials and textures from the local vernacular of the area.

Lighting

 Avoid using visually distinct sources of illumination that result in disproportionate signage, such as internally-illuminated box signs.

Safety

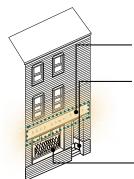
- Avoid using external roller shutters and grilles. Favour the use of internal open grilles which cover only the glazed part of the shop front; and
- Conceal alarms from the shop front façade and integrate them discretely within the shop front design or to the side of a building.



Character & Design

Integrate the shop front with the surrounding streetscape. Consider adjacent buildings and typical details in the area

Incorporate the overall proportion, form, and scale of the building's upper floors into the design of the shop front

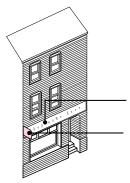


Lighting & Safety

Avoid using internally-illuminated box signs

Conceal alarms from the shop front façade and integrate them in the design

Avoid using external roller shutters and grilles. Favour the use of internal open grilles which cover only the glazed part of the shop front



Signage

Avoid unnecessary visual clutter

Signage should not be placed on upper floors

Use the fascia as the predominant position for signage

Hanging signs should be in proportion to the building and street and should not dominate pavements

Stall riser

- A stall riser should be incorporated into the design for the full width of the shopfront, except for the door opening; and
- The height of the stall riser should be between 0.3m and 1m.

Materials

 Window frames, doors, pilasters and fascias should be of timber construction with a painted finish and not a stained finish.

Panelling

 Any timber paneling used in doors, stall risers, pilasters or other elements of the shop front should comprise a constructional timber panel and must not comprise the application of timber beading to a flat timber surface, so that the result resembles traditional shop fronts.

Fascia

- The shop front design should include a full-width projecting fascia;
- The fascia should consist of a surrounding frame, creating an area for a shop-sign; and
- Fascia with lettering of between 250mm and 300mm will read well from street level and from across the road. The size of the fascia is defined by the building typology or detailing, the font size should be proportionate to the fascia.

Lighting

 If lighting is incorporated into the design of the shop front, then it should comprise projecting light to create external illumination of the shop sign area.

Shutters

 If shutters and shutter boxes are incorporated into the design, then they should be placed internally, behind the shop front. When in an open position, shutters must not block the shop window opening.



Figure 164: A local example of a well-laid out shopfront, with painted timber finished window and door frames, and clear signage positioned on fascia, Wood Street.



Figure 165: Positive local example of a shopfront with well-proportioned layouts and large windows facing onto the public realm, Church Street.

Public realm, materials and street furniture

Streets are the most important components of public space and these are referenced in the hierarchy of movement section. This is particularly important for the town centre of Calne. Key design principles, such as maintaining frontages active and natural surveillance for streets, are fundamental to creating vibrant and attractive streetscapes.

The design of paved areas also 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. Some guidelines for new developments are:

- Active frontages should be encouraged to add to the vitality and vibrancy of the streets and public realm, whilst enhancing the user experience of the town centre;
- High level of natural surveillance should be provided to create vibrancy and vitality within Calne area. Use of larger well-proportioned windows or floor to ceiling windows on the ground floors help achieve adequate overlooking; and
- Supporting public art installations is a proud tradition of Calne Town, many public art installations across the town contribute significantly to its public realm and character. Therefore, any new development that bring positive contribution to the town's public art collection is welcomed;



Figure 166: Curzon Street, with wide pavement and good quality street furniture.



Figure 167: Attractive public realm design in the centre of Calne, with seating and tables, planters, landscaping and wide pavements.

- In-out spill out spaces are encouraged across the commercial centre to create activity on streets. Businesses like restaurants, cafés, shops etc. could have seating or display on the street within well organised spaces that do not impede pedestrian movement. Those are recommended to be located on wider pavements. Street clutter shall be avoided at all times;
- The public realm must provide highquality paving that is of a cohesive design using a palette of sustainable and durable materials;
- Materials must be robust, aesthetically attractive and with excellent weathering characteristics defining a sustainable and attractive place for residents and visitors;
- The laying pattern and materials used should make a significant contribution to the overall appearance, quality and success of a scheme;

- Large unbroken areas of a particular surface material must be avoided, especially tarmac. Areas can be made distinctive by using materials of a similar colour but with different textures;
- Larger development projects with more than one developer should employ the same consistent palette of materials and designs; and
- Traffic calming measures are highly important to improve pedestrian flow in Calne's town centre. They aim to encourage safer, more responsible driving and potentially reduce traffic flow. Examples of traffic calming measures are speed bumps / humps and cushions, speed tables or raised pedestrian crossings.









Figure 168: Examples of quality materials and visually pleasing layout patterns that could be considered for public realm surfacing.

4h. Eco-design

Minimising energy use

Buildings contribute almost half (18%) 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 future-proof 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.

Figure 169 features an array of sustainable design features, where the top ones are strongly encouraged to be implemented into existing homes, while those on the bottom show additional features that new build homes should be encouraged to incorporate from the onset.

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.

The HAPPI (Housing our Ageing Population Panel for Innovation) principles, based on 10 key design criteria, should be taken into consideration in any new development. Those criteria reflect space and flexibility, daylight in the house and shared spaces, balconies and outdoor space, adaptability, natural environment, energy efficiency etc

(see Calne Area Climate Topic Paper for further details).

It is important to note that all newly built dwellings in the UK must now gain a 'pass' on their SAP calculations in order to meet current building regulations.

SAP stands for 'Standard Assessment Procedure' and is the only official, government approved system for assessing the energy rating of a new home.

Building fabric

Thermal mass

Thermal mass is a property of the mass of a building that enables it to store heat and provide inertia against temperature fluctuations.

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 can be provided, such as a trombe wall placed in front of a south facing window or concrete floor slabs that will absorb solar radiation and then slowly re-release it into the enclosed space.

Insulation

Thermal insulation can be provided 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.

Provide acoustic insulation to prevent the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom). Provide insulation and electrical insulation to prevent the passage of fire between spaces or components and to contain and separate electrical conductors.

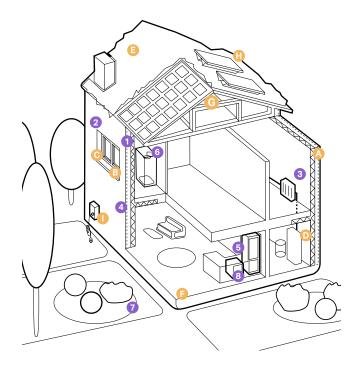


Figure 169: Diagram showing low-carbon homes in both existing and new build conditions.

Existing homes



Insulation in lofts and walls (cavity and solid)



Draught proofing of floors, windows and doors



Green space (e.g. gardens and trees) to help reduce the risks and impacts of flooding and overheating



(e.g. tinted window filr blinds, curtains and trees outside)



Highly energyefficient appliances (e.g. A++ and A+++ rating)



Flood resilience and resistance

with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors





Highly wasteefficient devices with low-flow showers and taps, insulated tanks and hot water thermostats

Additional features for new build homes



High levels of airtightness

Low-carbon

More fresh air

with mechanical ventilation and heat recovery, and passive cooling

heating



Triple glazed windows and external shading especially on south and west faces



Water management and cooling

more ambitious water efficiency standards, green roofs, rainwater harvesting and reflective walls



Construction and site planning

timber frames, sustainable transport options (such as cycling)



Solar panel



Flood resilience and resistance

e.g. raised electrical, concrete floors and greening your garden



Electric car charging point

Building orientation

The orientation of buildings within the plot, along with the site topography must be considered to maximise solar gain, while keeping a consistent frontage to the street.

In addition, living spaces within each typology should be oriented according to the expected use of each room, e.g. sun in the morning for kitchens, during the day for living areas, and in the evening for bedrooms:

In general, the design of new developments must maximise the use of energy efficiency and energy conservation fixtures, fittings and technology. Passive methods of heating and cooling and the use of renewable energy technologies such as ground source and air source heat pumps, biomass heating, photovoltaics and solar panels must be considered for new developments. Opportunities for the use of the same technologies in existing buildings, when undergoing refurbishment, will also be expected.

Appropriate materials and detailing should also be considered to minimise heat loss, whilst direct entry from the street to an interior living space should be avoided where possible.

Solar access along the south façade should be maximised and openings on the north one minimised. Appropriate shading elements and cross ventilation should be employed in new and existing buildings.

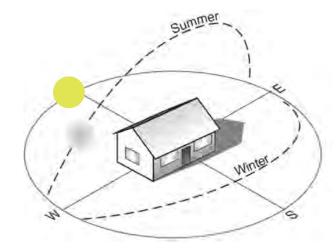


Figure 170: Illustration to show the appropriate building orientation so as to maximise solar gains. Windows should be placed mainly on the southern side whilst fewer openings should be located on the northern. A deep roof overhang can offer some shading. This can also be improved with some trees and vegetation around the house. (Source: https://nextdayinspect.com/building-orientation-for-optimum-energy/).

Heating

Heading towards a more ecological agenda, it is expected that the use of fossil fuels will be deprecated and other techniques, for instance air/ground source heat pumps¹ will be preferred over gas boilers. These draw in heat from the air or the ground around the houses and use that to warm the inside of the house, whilst they cool by pulling the warm air our of the house, rather than using energy to cool air from outside. Electric heat pumps are not only used during winter, but also during summer for cooling.

1. Please chech the planning portal for more details on the legislation for heat pumps. Link: https://www.planningportal.co.uk/permission/common-projects/heat-pumps/planning-permission-air-source-heat-pump



Figure 171: Example of an electric heat pump that is placed to the back of the house, whilst its grey colour fits nicely with the black weatherboarding of the property.

Roof solar panels

Solar panels over a rooftop can have a positive environmental impact, however their design and installation should be done carefully. Preserving the character of the village should be a priority.

Some solutions of sensitive implementation of solar roof panels are suggested as follows:

On new builds

- Solar panel features should be designed from the start, forming part of the design concept. Some attractive options are solar shingles and photovoltaic slates; and
- Solar panels should be used as a material in their own right.

On retrofits

 The proportions of the building and roof surface should be analysed in order to identify the best location and sizing of panels;

- Other tile or slate colours could be used to create a composition with the solar panel materials;
- Some contrast and boldness with proportion is recommended. There has been increased interest in black panels due to their more attractive appearance.
 Black solar panels with black mounting systems and frames can be an appealing alternative to blue panels;
- The location of solar panels on buildings within the North Wessex Downs AONB should be carefully designed, so that they do not cause visual obstruction to the countryside. It might be appropriate to introduce solar panels to areas of the building that are more concealed in order to preserve the character and appearance of more sensitive area; and
- Solar panels can be added to listed buildings, but they need to be carefully sited and consent will be required.



Figure 172: 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 173: Local example in Ellis Close of implementing solar panels since the design stage.

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 must be properly trained and competent to make sure storage and installation practices of the materials is done under high standards.

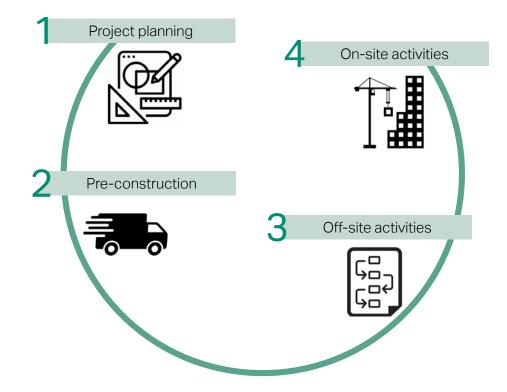


Figure 174: Diagram to illustrate the 4 main stages where waste management practices can be implemented.

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 must also maximise the re-use of existing buildings (which often supports social, environmental and economic objectives as well.

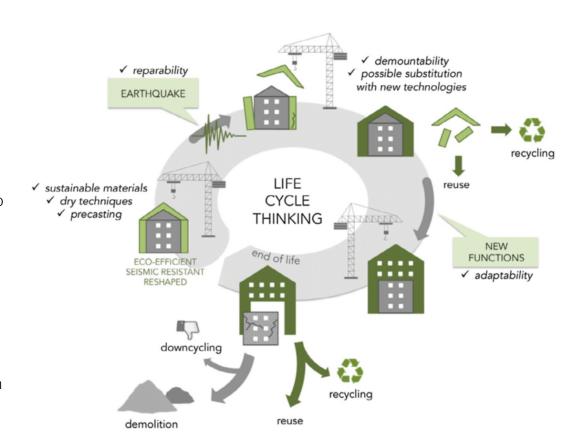


Figure 175: Diagram to illustrate the life cycle thinking for recycling materials and buildings. (Source: https://www.researchgate.net/publication/319464500 Combining seismic retrofit with energy refurbishment for the sustainable renovation of RC buildings a proof of concept)

3.5 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 for both developers and planning officers 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

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?

2

Local green spaces, views and 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?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

2 (continued

Local green spaces, views and 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)?

3

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?

4

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?

4 (continued

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?

5

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?

6

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?

7

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 it impact parking by reducing onsite parking allocation and will it create more on-street parking?

- 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?

8

Building materials and 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?
- Do proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

8 (continued)

Building materials and surface treatment:

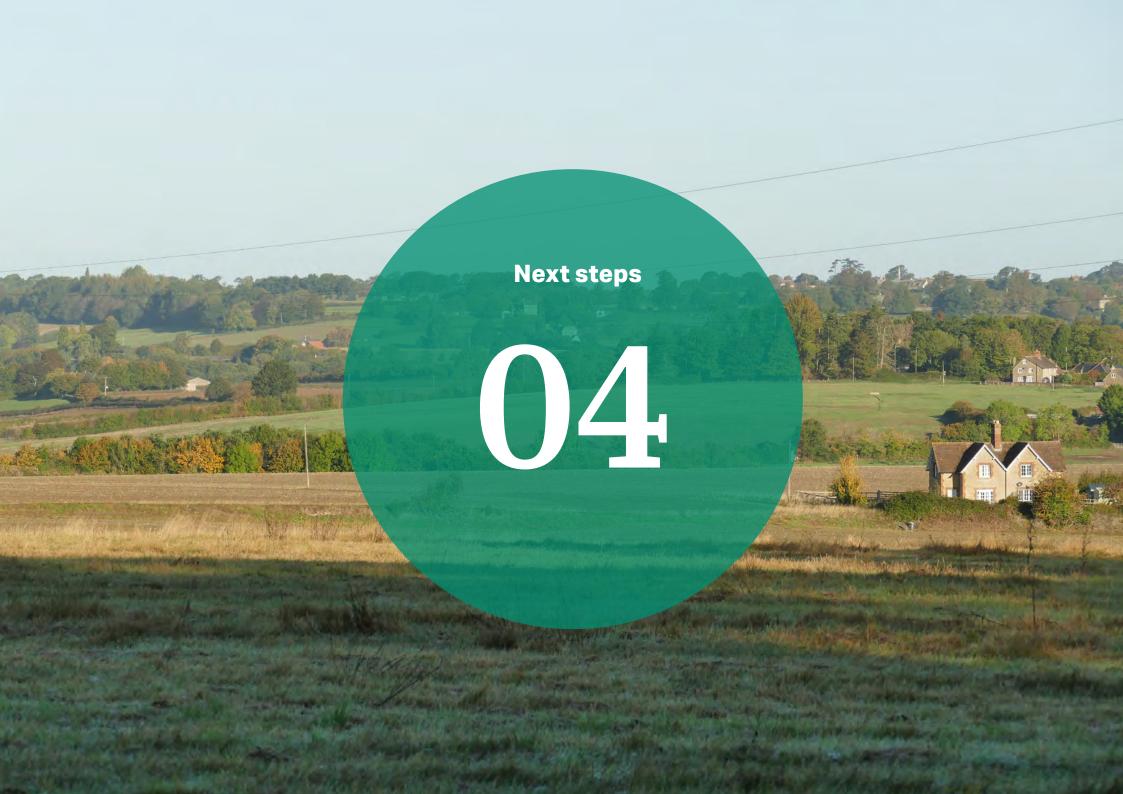
- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design?
 For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced?
 E.g. FSC timber, or certified under BES 6001,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

9

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?
- Do proposals increase on street parking?
- Has a realistic ammount of visitor parking been considered?

- 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?



4. Next steps

4.1 Delivery

The Design Guidelines & Codes will be a valuable tool in securing context-driven, high-quality development in Calne area, especially on potential sites that might come forward in the future. They will give more certainty to both developers and the community in securing developments that are designed to the aspirations of the community and potentially speed up the planning process.

The opposite table summarises the various ways that this document can be used by each actor in the planning and development process.

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.
Calne Town Council and Calne Without 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.

About AECOM

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